

Air Ministry  
METEOROLOGICAL OFFICE

THE  
OBSERVATORIES' YEAR BOOK  
1924

Comprising the meteorological and geophysical results obtained from autographic records and eye observations at the observatories at Lerwick, Aberdeen, Eskdalemuir, Cahirciveen (Valencia Observatory), and Richmond (Kew Observatory), and the results of soundings of the upper atmosphere by means of registering balloons.

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## PREFACE.

UP to the end of 1921, the serial statistical publications of the Meteorological Office were grouped together as though they were parts of one comprehensive book. This book, which was entitled "The British Meteorological and Magnetic Year Book," consisted of:—

|                     |    |            |    |    |   |
|---------------------|----|------------|----|----|---|
| Part I              | .. | ..         | .. | .. | The Weekly Weather Report.  |
| Part II             | .. | ..         | .. | .. | The Monthly Weather Report.   |
| Part III, Section I | .. | ..         | .. | .. | Daily Readings at Meteorological stations of the First and Second Orders.     |
|                     |    | Section II | .. | .. | Geophysical Journal, Daily Values of Meteorological and Geophysical Elements. |
| Part IV, Section I  | .. | ..         | .. | .. | Hourly Values from Autographic Records. Meteorological Section.               |
|                     |    | Section II | .. | .. | Hourly Values from Autographic Records. Geophysical Section.                  |
| Part V              | .. | ..         | .. | .. | Réseau Mondial.   |

The data for the year 1922 and subsequent years are found in the following publications, each of which is issued either as a complete and independent volume or in parts which may be bound into annual volumes:—

| New Publication from 1922.   | Corresponding parts of the British Meteorological and Magnetic Year Book until the end of 1921. |
|------------------------------|---|
| The Weekly Weather Report    | .. .. Part I.   |
| The Monthly Weather Report   | .. .. Part II.  |
| The Observatories' Year Book | .. .. { Part III, Section II.<br>Part IV, Section I.*<br>Part IV, Section II.                   |
| The Réseau Mondial           | .. .. Part V.   |

It will be noticed that Part III, Section I, of the old publication is not included in the new issues. This part contained "Daily Readings at Meteorological Stations of the First and Second Orders," and it has been decided that as the new Observatories' Year Book will contain daily values of the meteorological elements for the principal first order stations and the Daily Weather Report contains daily values for about 40 other stations, it is not necessary to revive the issue of this section, which ceased with the data for 1921.

The present volume is the third issue of the Observatories' Year Book. It contains meteorological and geophysical data for Lerwick, Aberdeen, Eskdalemuir, Valencia and Kew, and in addition an aerological section giving the results of soundings of the upper atmosphere by means of registering balloons.

For assistance in the preparation of this volume, thanks are due to Dr. C. Chree, F.R.S., who was Superintendent of Kew Observatory during the year under review and retired in April, 1925.

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\* Part IV., Section I.—Hourly Values from Autographic Records, Meteorological Section, was discontinued after the data for 1913 had been published, and it is not proposed to continue it to the end of 1921 as is the case with the other sections.

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LERWICK DECLINATION. SEE ERRATA 1962 CY.B.



## LIST OF OBSERVATORIES.

|   | Latitude. | Longitude | G.M.T.<br>of Local<br>Mean Noon |    | Height<br>above<br>M.S.L.<br>in metres. |
|---|-----------|-----------|---------------------------------|----|---|
|   | ° /       | ° /       | h                               | m  |   |
| Lerwick .. .. .                               | 60 8 N.   | 1 11 W.   | 12                              | 5  | 81·7                                    |
| Aberdeen .. .. .                              | 57 10 N.  | 2 6 W.    | 12                              | 8  | 14·0                                    |
| Eskdalemuir, Dumfries-shire .. ..             | 55 19 N.  | 3 12 W.   | 12                              | 13 | 242·0                                   |
| Valencia Observatory, Cahirciveen, Co. Kerry. | 51 56 N.  | 10 15 W.  | 12                              | 41 | 9·1                                     |
| Kew Observatory, Richmond, Surrey ..          | 51 28 N.  | 0 19 W.   | 12                              | 1  | 5·5                                     |

*Note.*—The height given is that of the site of the rain-gauge. The heights of other meteorological instruments are shown under the appropriate Tables.

## NORMAL VALUES AND MONTHLY SUMMARIES.

Monthly and annual normals of pressure, dry bulb temperature, relative humidity, wind speed and rainfall for each hour of the day and for the period of 45 years, 1871-1915, are published for the observatories Aberdeen, Cahirciveen, Richmond and Falmouth in *Hourly Values from Autographic Records, 1917* (Part IV. of the British Meteorological and Magnetic Year Book, 1917), and in previous volumes of that series. Corresponding normals of sunshine are also published there for the same observatories and for the period of 35 years, 1881-1915.

For Eskdalemuir the same publication gives hourly averages for the months and for the year, referred to the period 1911-1915.

Monthly Summaries giving additional mean values and frequencies of occurrence of various phenomena will be found for all the observatories in *The Monthly Weather Report* and its Annual Summary. The latter also contains special summaries of the tabulations of the anemographs.



## GENERAL INTRODUCTION TO THE METEOROLOGICAL TABLES.

The elements dealt with in the following meteorological tables for the Observatories at Aberdeen, Eskdalemuir, Cahirciveen and Richmond are :—barometric pressure, air temperature, humidity, rainfall, sunshine, wind speed and direction, minimum night temperature on the grass, cloud and weather, and in some cases temperature in the ground, solar radiation and level of underground water.

The positions of the Observatories and the heights of the sites are given on p. 8.

### NOTES ON THE INSTRUMENTS AND TABULATION OF THE RECORDS.

A detailed description of the barograph, thermograph, cup anemograph and Beckley rain gauge used for obtaining the records of pressure, temperature, humidity, wind speed and direction,\* and rainfall is given in the *Reports* of the Meteorological Office for the years 1867 and 1869; for a description of other instruments in use reference may be made to the *Meteorological Observer's Handbook* and to the article on Meteorological Instruments in the *Dictionary of Applied Physics*, Vol. III. The following notes are supplementary and are given partly for reference and partly as containing information necessary for the interpretation of the tables.

**Barometer.**—The record of barometric pressure is obtained photographically from a mercurial barometer.

A beam of light is passed through the space between the surface of the column of mercury and the top of the tube, and, after passing through a diaphragm which reduces the width of the beam of light to a very narrow sharp line, is focussed upon a sheet of sensitised paper (ordinary "bromide" paper is employed) carried upon a cylinder which is rotated by clockwork and makes one revolution about its vertical axis in rather more than 48 hours.

The *barogram* is therefore a continuous photograph of this narrow vertical line, and appears as a horizontal ribbon, the depth of which is constantly varying with the rise or fall of the mercury in the tube of the barometer.

The expansion of a zinc rod is utilised to compensate for the effect of temperature upon the height of the barometric column; the arrangement produces mechanically a lengthening of the beam of light at its upper end as it becomes shortened at its lower extremity by the expansion of the mercury in the tube. A time-scale is recorded upon the barogram by means of a shutter actuated by the clock. This shutter cuts off the light for the space of four minutes every two hours, thus producing interruptions which appear as narrow white spaces on the record corresponding with known points of time. Until 1918 these time-breaks occurred at the even hours, 2h, 4h, 6h, etc., but it was found that when the edge of the record was not critically sharp owing to various causes, a systematic error was introduced when measuring the records, whereby the values at the even hours were slightly in excess of those at the odd hours where no time-break existed. From 1918 onwards the clock was so arranged that the time-breaks should occur half an hour before the even hours; by this means both even and odd hour-values are measured at points on the trace which are unaffected by any systematic difference.

Control readings of a standard barometer are taken three times a day by different observers. The control readings are first corrected for index error, temperature and gravity, and then compared with the corresponding readings of the barogram. The differences between the control readings and the corresponding tabulated values are then found and a correction derived therefrom is applied to all the tabulated values. This correction, known as the "residual correction," is so applied as to run smoothly throughout the whole length of each record—a period of 48 hours—and alterations in the amount of the correction occur, where necessary, in steps not exceeding 0.1 millibar.†

\* At Eskdalemuir wind speed and direction are recorded by a Dines tube anemograph (see p. 90).

† At Kew Observatory the rule is to apply the same correction for the whole chart.

The scale value of the barograms is found from a comparison of a series of such standard and curve readings. The indications of a curve are converted into numerical values by measuring the ordinates with a tabulating instrument, graduated according to the ascertained scale value.

**Thermometers.**—The air temperature data at each Observatory are derived from records obtained photographically from two mercurial thermometers. One thermometer is used as a dry-bulb and the other as a wet-bulb thermometer.

Each thermometer has a large cylindrical bulb four inches long and a very long stem. The latter is bent twice at right angles to enable the bulb to be exposed outside the building in a louvred screen attached to the north wall of the Observatory.\* The column of mercury in the vertical portion of the stem inside the building is broken at a convenient point by a small air space which moves up or down the stem with rise or fall of temperature. The record is obtained by passing a reflected beam of light through the air space and photographing its image upon a moving sheet of "bromide" paper in the same manner as described in the case of the barometer. A base line is traced on the paper by a pencil of light passing through a small aperture in the brass frame carrying the recording thermometer. The time-scale is automatically recorded upon the curves, a time-break occurring half an hour before each even hour.

Two large standard thermometers with very open scales graduated in degrees absolute and having bulbs similar to those of the thermograph are mounted in the screen side by side and close to the thermograph bulbs. One of the thermometers is arranged as a dry-bulb, the other as a wet-bulb. Control readings of these thermometers are made three times a day for comparison with the corresponding readings obtained from the thermograms.

The scale value of the curves is found by a comparison of the readings of the standard thermometers, corrected for any errors they may have, with the corresponding measurements of the curves. The curves are measured by means of a plate of glass ruled with lines corresponding with the ascertained scale-value of the record, both for degrees and for time. The scale is graduated so as to read degrees vertically and hours horizontally.

Two alternative methods of reading the curves have been adopted.

- (a) At Kew and Valencia observatories the scale is set by the base-line and after hourly readings have been obtained for the whole record comparisons are made with the control readings. The residual correction so determined (normally the same for the whole record of 48 hours) is applied to the tabulations.
- (b) At Aberdeen and Eskdalemuir observatories, the practice is to adjust the glass scale so that the readings at the control hours on the trace are made to show general agreement with the corresponding eye-readings of the standard thermometers. The temperature equivalent of any part of the curve can then be read off. The base-line photographed on the record serves as a useful check.

**Rainfall.**—This element is recorded by a Beckley self-registering raingauge, in which the rain as it falls is collected in a receiver supported on a float in a vessel of mercury. As the rain passes into the receiver, the float gradually sinks, carrying with it a pen which records its position upon a paper stretched upon a clock-driven cylinder. The displacement of the mercury by the float is arranged so as to give a uniform scale throughout. When five millimetres (two-tenths of an inch) of rain have entered the receiver a siphon comes into action, and, by discharging its contents, causes the float to rise till the pen is brought back to the zero line, from which the record begins again.

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\* At Eskdalemuir the screen stands in the open (see p. 89).

The collecting funnel of the Beckley raingauge has an area of approximately 100 square inches. Each gauge stands on level ground and its distance from every other object is greater than twice the height of the object. A check gauge with funnel 8 inches in diameter is installed near by.

The records obtained from the Beckley self-registering raingauge are subjected to a proportional correction whereby they are brought into agreement with the amount of rainfall as recorded by the check raingauge read twice daily.

**Sunshine.**—The record of sunshine is obtained from a Campbell-Stokes recorder, in which instrument the sun's rays are focussed through a 4-inch spherical lens of crown glass upon a strip of blue card, which is scorched, or burned right through, according to the intensity of the sun's rays. Three different patterns of card are used at different seasons of the year. The cards are exposed in a metal bowl, and the focussed image of the sun leaves its mark behind it as it travels along the surface of the card with the apparent motion of the sun through the heavens. The intensity of the burn is not measured, but the record is regarded as that of "bright" sunshine whenever the card has been distinctly scorched. When measuring the duration of sunshine which is represented by intermittent burns, an allowance is made for the extension of the trace by the charring of the card.

**Wind Speed and Direction.**—Except at Eskdalemuir, the records of these elements are obtained by means of a Robinson cup-anemograph, with which a Beckley windmill-vane has been combined for giving the record of direction.

**Speed.**—The diameter of the cups for obtaining the speed of the wind is 9 inches (0.23 m.) and the length of the arms upon which they are carried is 2 feet (0.6 m.) so that the horizontal travel of a cup-centre when 7,000 revolutions of the cups have been made is, in round numbers, 88,000 feet (26,800 m.).

The revolutions of the cups are reduced by a suitable gearing of wheels so that this number of turns shall produce one complete turn of a spiral pencil, which makes a mark upon a sheet of metallic paper carried upon a clock-driven cylinder; the pencil is so arranged that when the trace reaches one extreme of the scale it recommences at the other.

Dr. Robinson concluded, as the result of a series of experiments made by him, that the rate of movement of the cup-centres was one-third of the horizontal movement of the wind current by which the cups were turned; and as the instruments were constructed in accordance with this conclusion, the 7,000 turns of the cups mentioned above were regarded as indicating the passage of 50 miles (80.4 km.) of wind.

Subsequent investigations\* into the relation between the speed of the wind and the rate of movement of the cups have led to the conclusion that Dr. Robinson's factor, 3, is too large for anemometers of the dimensions indicated above, and that the correct mean value of the factor is 2.2. The larger factor 3 was employed in deducing the wind velocities published in the preceding volumes of this series up to that for 1904; the factor 2.2 was substituted for it from the beginning of the year 1905.

If it is desired to compare the wind speeds given in the volumes previous to 1905 with those of the present year it will be necessary to reduce the former by four-fifteenths, and convert into metres per second, which may readily be done by means of a suitable conversion table. (See *Computer's Handbook*. Introduction p. 54.) If the degree of accuracy required does not exceed 2 per cent., the tabulated values in miles per hour (factor 3) may be converted into metres per second (factor 2.2) simply by dividing by 3.

The values of the hourly wind speed are means for periods of 60 minutes centred at the hours named. They have been given as recorded, no correction having been made for the effect of friction, which is of no importance except in the case of light winds, when it is doubtless different in the case of each instrument.

\* A summary of them is given by F. J. W. Whipple in "Notes on the Robinson Cup Anemometer," London, Advis. Cmtte. Aeronautics, Report No. 669.

*Direction.*—The direction of the wind is recorded by a pencil similar to that which records the speed. Each printed value represents the general direction\* for the 60 minutes centred at the hour named, as estimated from the anemogram.

Owing to the weight of some of its moving parts, the windmill-vane is undoubtedly sluggish in light airs, its records under these conditions being untrustworthy. All wind directions have, therefore, been omitted from the tables when the velocity was 1.5 metres per second or less.

*Tube Anemograph.*—At Eskdalemuir the speed and direction of the wind are obtained from a Dines' Tube Anemograph, while at each of the observatories information regarding the highest instantaneous wind speed and the frequencies of winds of varying speeds is also obtained from instruments of this type.

The vane-head of the tube anemograph consists essentially of (a) a horizontal tube mounted in the vane and open at the end which faces the wind, and (b) a vertical annular tube, forming part of the vane support, connected to the outside air by means of small circular holes drilled symmetrically in rows around the outer wall of the tube. An increase of pressure is produced in the horizontal tube of the vane, while the wind blowing across the rows of circular holes in the annular tube gives rise thereto a diminution in pressure, the "suction" effect. In the recorder a float of sheet copper, in the shape of an inverted bell, placed in water contained in a cylindrical tank, is capable of upward and downward movement under the influence of the pressure and suction effects, which are communicated from the vane-head by suitable piping to the space inside and the space above the float respectively. The geometrical form of the internal surface of the float is such that displacement of the float from its zero position is proportional to the speed of the wind. To the float is attached a vertical spindle which projects upwards through the lid of the cylindrical tank and carries a suitable pen at its upper extremity. This pen records the movements of the float, and therefore the variations in wind speed, on a ruled chart carried by a drum which rotates once in 24 hours.

**Minimum Night Temperature on the Grass.**—For determining this temperature a minimum thermometer exposed freely over the surface of the grass is used. The thermometer is enclosed in an outer glass jacket which surrounds its stem, but leaves the spirit bulb freely exposed to the air. The thermometer is supported on two small Y-shaped pieces of wood so that it lies horizontally, with its bulb about one or two inches above the ground which is covered with short grass. When snow has fallen the thermometer is supported so as to lie just above the surface of the fallen snow, but not touching it.

The thermometer is laid out at 18h each day, having been kept in an upright position, bulb downwards, inside the Stevenson Screen during the daytime so that any spirit that may have condensed in the upper part of the stem may be able to run down and join the main spirit column.

#### NOTES ON THE TABLES.

**General.**—Interpolated values are printed within brackets, ( ). Maximum and minimum values are printed in heavy type.

**Standard of Time.**—The observations are referred to *Greenwich Mean Time* except as regards sunshine, for which element *local apparent time* is used.

**Units.**—In accordance with the practice introduced in 1911, as a consequence of certain resolutions of the Gassiot Committee of the Royal Society, the values in the tables are expressed throughout in units based upon the C.G.S. System: tables for conversion to other units are given in the *British Meteorological and Magnetic Year Book (Part IV)* for 1913 and are also to be found in the *Computer's Handbook*.

\*Formerly it was the practice to take the direction at the exact hour. The present rule was adopted as from 1st May, 1915 (see also Introduction to *Hourly Values from Autographic Records*, 1913, p. xv.).

**Daily Mean Values.**—The daily means of pressure, temperature, relative humidity and wind speed are obtained by adding half the sum of the values for the initial and final midnights to the sum of the 23 intermediate hourly values and dividing by 24.

In the preparation of the tables of diurnal inequalities for individual months and for the year, it is assumed that the difference of value between the means for the initial and final midnights, which may be termed, so far as the hourly variations are concerned, the non-cyclic variation, is equally distributed over the whole 24-hour period. Thus, in a table of diurnal inequalities the entry  $d_n$  for the hour  $n$  is given by

$$d_n = x_n - \bar{x} - (n - 12) (x_{24} - x_0) / 24.$$

$x_n$  being the value of the element at hour  $n$  and  $\bar{x}$  the mean for 24 hours.

**Atmospheric Pressure.**—All pressures recorded in this volume are expressed in *millibars*, one millibar being equal to 1000 dynes per square centimetre. The following are the values of physical constants used in evaluating the data :—

Density of Mercury = 13.5955 grams per cc. at 0°C.

Intensity of Gravity at Sea Level (Lat. 45°) = 980.617 centimetres per second per second.

1 inch = 25.4000 millimetres.

Hence 1000 millibars corresponds with a reading of 750.076 millimetres, on a mercury barometer at temperature 0°C. in Lat. 45°, or 29.5306 inches under standard conditions of temperature (mercury at freezing point, scale at 62° F.) in Lat. 45°.

As a millibar is a pressure, it can only be obtained from the reading of a barometer after the latter has been suitably corrected for

- (a) index error,
- (b) temperature,
- (c) gravity.

All these corrections have therefore been applied to the barometer readings in obtaining the pressure values published in this volume. The corrections for temperature and gravity have been obtained from tables consistent with the *International Meteorological Tables*. (Gauthier-Villars, Paris, 1890.)

Unless otherwise stated all pressure values refer to the level of the observatory as given in the headings of the tables. The reduction to Mean Sea Level, if made, has been calculated from tables prepared for each observatory from the formulæ of the *International Meteorological Tables*.

The tables contain values of pressure at exact hours obtained from the photographic barograms in the manner described on p. 9; also daily, monthly and annual means of hourly values, together with the monthly and annual means of diurnal inequalities. Monthly and annual means of the hourly values after reduction to mean sea level are also given.

There is also a table showing the daily extremes of pressure, i.e. the maximum and minimum values recorded during each day.

**Temperature.**—The scale on which temperatures are recorded is such that the freezing point of water under atmospheric pressure is 273 a. precisely. Other temperatures differ by 273.0 from readings on the Centigrade scale.

The scale approximates to the absolute scale defined by Lord Kelvin, on which the temperature of the freezing point is 273.1 to the nearest tenth of a degree.\* Accordingly, to convert temperatures published in this volume to the Kelvin scale, a correction + 0.1 is to be added to each reading.

As an alternative to the application of this correction modified values may be used for the constants which enter certain formulæ. For example :—At temperature  $t$  on the scale adopted in the Year Book, the radiation according to Stefan's Law† is

$$5.709 \times 10^{-5} (t + 0.1)^4 \text{ erg.}/(\text{cm.}^2 \text{ sec. deg.}^4); \text{ or } 5.717 \times 10^{-5} t^4 \text{ erg.}/(\text{cm.}^2 \text{ sec. deg.}^4)$$

In using the modified formulæ we are virtually adopting a scale of temperature with the degrees greater than those of the Centigrade scale, in the ratio of 273.1 to 273. This is the practice of the *Computer's Handbook* of the Meteorological Office.

\* A. L. Day and R. B. Sosman, *Dictionary of Applied Physics*. Macmillan, London, 1922. Vol. I., p. 840.

† The constant 5.709 is the value which has been adopted by the International Research Council for publication in the "*International Critical Tables*."

The tables give the values of temperature at exact hours obtained from the photographic thermograms; also daily, monthly and annual means of hourly values, together with the monthly and annual means of diurnal inequalities. There is also a table showing the daily extremes of temperature.

**Humidity.**—When the temperature of the wet bulb is above 273a, values of relative humidity at exact hours are deduced from the corresponding values of dry and wet-bulb temperature obtained from the photographic thermograms, complete saturation being taken as 100. The tables employed in effecting the reductions appear in the *Computer's Handbook* (Section I). These tables are based on Glaisher's factors and make no allowance for the effect of the wind.

When the wet-bulb reading does not exceed 273a, the above method of reduction is not followed, but values of relative humidity are derived from the record of the hair hygograph. To these values are applied appropriate corrections based on a comparison between the readings of the record of that instrument and the corresponding values of humidity computed from dry and wet-bulb readings during neighbouring periods when the wet-bulb readings exceeded 273a.

Tables are printed giving the values of relative humidity at exact hours together with daily, monthly and annual means of hourly values. Means of vapour pressure computed from the corresponding mean values of temperature and relative humidity, together with monthly and annual means of diurnal inequalities of relative humidity, are also given.

**Rainfall.**—Tables are given showing for the 60 minute intervals between exact hours\* the amount of precipitation, expressed in millimetres, derived from the record of the Beckley gauge (see p. 10). Totals of amount are given for each day, and for each month; the latter totals referring both to the complete days of the month, and to each of the hours of the day. When zero rainfall is assigned to a particular hour, the entry appears as "...". Corresponding totals of duration of rainfall are also given, the duration being regarded as the number of hours during which rain falls at a rate of not less than 0.1 millimetre per hour. If slight precipitation, due to rain, snow, fog or dew, extends over some hours, and if the amounts collected in some or all of the hours are less than .1 mm., the fact is indicated by a succession of entries, each of which is enclosed within brackets, covering the period over which precipitation is known or believed to have occurred. In such cases entries of (.1) are allocated evenly among the hours concerned in such a way that their sum is equal to the aggregate fall during the period, and the remaining entries are (...), (\*), (≡:), or (☉) according as the precipitation took the form of rain, snow, fog or dew. Slight precipitation which takes other forms such as hail, sleet, hoar frost, glazed frost and rime is dealt with similarly. When it is impossible to determine the hourly amounts of precipitation, e.g. during snowfall or on occasions when the record has failed, the normal procedure is to consider each case on its merits, and to assign hourly values derived from estimates made by the observers as soon as possible after the event. Such values are also enclosed in brackets.

Annual totals of hourly amounts and duration and notes on special features of the rainfall of the year are also given.

**Sunshine.**—Tables are given showing for each of the 60-minute intervals between exact hours† according to *local apparent time*, from sunrise to sunset, the duration of bright sunshine recorded by the Campbell-Stokes instrument. The sums and means of hourly amounts are also given. For each day is shown the total duration of bright sunshine, and also the percentage this represents of the "possible" duration for the day. The "possible" for each day is computed as the period of time beginning and

\* For the years 1904 to 1920 it was the practice to tabulate rainfall for the period of 60 minutes centred at the exact hours; the reversion to the method in use for 1903 *et ante* occurred on 1st January, 1921.

† Previous to 1st January, 1921, sunshine was tabulated for the period of 60 minutes centred at exact hours.

ending at the instants when the centre of the sun is apparently on the horizon, due allowance being made for atmospheric refraction. Even on a clear day the sun, when at an altitude less than  $2\frac{1}{2}^{\circ}$  to  $3^{\circ}$  above the horizon, fails to make a scorch on the card of the Campbell-Stokes recorder.

A distinction is made in the tables between (a) sunshine not possible, and (b) sunshine possible but none recorded. If, in any hour, sunshine is not possible, the symbol “—” is used; if more than 3 minutes of “possible” sunshine falls in the 60-minute interval between exact hours according to local apparent time, and if no sunshine was recorded the symbol “...” is printed.

**Wind.**—Tables are printed giving the hourly values of wind speed and direction, together with the mean speed for each day, each hour, and for the month and year. Values of speed are expressed in metres per second (1 metre per second = 2.2369 miles per hour), those of direction are given in degrees from true north. The values of direction and speed are averages for periods of sixty minutes, centred at the exact hours of Greenwich Mean Time.

For speeds not exceeding 1.5 m/s the wind directions are regarded as indeterminate and are omitted.

The daily values of the speed and time of occurrence of the maximum gust and the monthly distribution of wind derived from records from Tube Anemographs are shown in other tables.

**Minimum Night Temperature on the Grass.**—Values are given for each day of the year together with monthly and annual mean values. The interval to which the reading refers is from 18h the previous day to 7h on the day to which it is entered. Previously the interval was 18h to 9h at Kew and Valencia observatories.

**Diary of Cloud and Weather.**—Tables are printed giving particulars of amount of cloud and of the weather at 7h, 9h, 13h, 15h, 18h, 21h daily, while cloud forms are shown for the three hours 7h, 13h, and 18h. The cloud forms are in accordance with the International classification and are indicated by the following abbreviations:—

|   |    |    |    |    |    |    |         |
|---|----|----|----|----|----|----|---------|
| Cirrus  | .. | .. | .. | .. | .. | .. | Ci.     |
| Cirro-Stratus                                     | .. | .. | .. | .. | .. | .. | Ci-St.  |
| Cirro-Cumulus                                     | .. | .. | .. | .. | .. | .. | Ci-Cu.  |
| Alto-Cumulus                                      | .. | .. | .. | .. | .. | .. | A-Cu.   |
| Alto-Stratus                                      | .. | .. | .. | .. | .. | .. | A-St.   |
| Strato-Cumulus                                    | .. | .. | .. | .. | .. | .. | St-Cu.  |
| Nimbus  | .. | .. | .. | .. | .. | .. | Nb.     |
| Cumulus   | .. | .. | .. | .. | .. | .. | Cu.     |
| Cumulo-Nimbus                                     | .. | .. | .. | .. | .. | .. | Cu-Nb.  |
| Stratus   | .. | .. | .. | .. | .. | .. | St.     |
| Stratus-cumuliformis                              | .. | .. | .. | .. | .. | .. | St-Cuf. |
| Fracto-(prefix, as in fracto-stratus)             | .. | .. | .. | .. | .. | .. | Fr-     |
| -lenticularis (affix, as in stratus-lenticularis) | .. | .. | .. | .. | .. | .. | -lent.  |
| Mammato-cumulus                                   | .. | .. | .. | .. | .. | .. | M-Cu.   |

The figure given for the amount of cloud denotes the proportion of sky covered by cloud: the numerical scale running from 0, cloudless, to 10, completely overcast. In the columns for form of cloud all the forms noted by the observer at the time of observation are printed where space permits. When the number of forms is too great to permit this, the predominating forms selected at the time of observation to give the best representation of the cloud canopy are printed. If high or medium cloud can be seen, one of the selected types is normally a high or medium cloud. The amounts of cloud given indicate, however, the total cloudiness irrespective of form. In the case of fog through which it is impossible to discern the sun or stars the cloud amount is entered as 10, but if cloud can be seen through the fog the form and amount are entered in the usual way. If the sun or stars are visible through fog and if there is no evidence of cloud above the fog the amount is entered as 0.

For the purposes of the summary of the weather for each day, contained in the “Remarks” column, it is usual to consider the day as divided into three portions,

viz., morning, afternoon and night, denoted by *a*, *p*, *n*, respectively, but it should be noted that no arrangements are made for regular eye observation of weather changes in the period 2h 30m to 6h 30m.

In the "Remarks" and "Weather" columns the entries consist very largely of international weather symbols and the letters of the Beaufort scale. These symbols and letters are as follows:—

*Beaufort Notation and International Weather Symbols.*

|    |   |     |   |
|----|---|-----|---|
| b  | blue sky. (Cloud amount 0, 1, 2, 3.)                                      | d   | drizzling rain.   |
| bc | some cloud. (Cloud amount 4, 5, 6.)                                       | r   | ● rain.   |
| c  | cloudy. (Cloud amount 7, 8.)  | s   | * snow.   |
| o  | overcast. (Cloud amount 9, 10.)   | rs  | ✱ sleet.  |
| g  | gloomy, dull appearance.  |     | ✦ drift snow.   |
| u  | ugly, threatening appearance.   |     | ☒ snow lying. (More than half the surrounding country covered with snow.) |
| v  | ( ) visibility, unusually clear atmosphere.                               | h   | ▲ hail.   |
| z  | ∞ haze.   |     | △ soft hail.  |
| m  | ≡° mist, light fog.   | t   | ⊥ thunder.  |
| f  | ≡ fog.  | l   | ⚡ lightning.  |
| fe | ≡: wet fog, i.e., fog which deposits water copiously on exposed surfaces. | tlr | ☉ thunderstorm  |
| w  | ⊥ dew.  |     | ☼ gale.   |
| x  | ⊥ hoar frost.   | q   | ☉ squalls.  |
|    | ← ice crystals in the air.  |     | ⊕ solar corona.   |
|    | ∇ rime.   |     | ⊕ solar halo.   |
|    | ~ glazed frost.   |     | ☾ lunar corona.   |
| e  | water deposited copiously on exposed surfaces, without rain falling.      |     | ☾ lunar halo.   |
| y  | dry air. (Relative humidity less than 60 per cent.)                       |     | ☾ rainbow.  |
| p  | passing showers.  |     | ☾ aurora.   |
|    |   |     | ☾ zodiacal light.   |
|    |   |     | ∞ mirage.   |

The letter *i* preceding a letter or symbol which denotes some form of precipitation indicates that the precipitation is of an "intermittent" or "occasional character.

The letter *j* preceding a letter or symbol which denotes some form of precipitation indicates that the precipitation is within sight, though not actually falling at the station.

The figure 0 written after and above a symbol indicates slight, whilst the figure 2 indicates strong or heavy; thus ●<sup>0</sup> slight rain, ●<sup>2</sup> heavy rain. The figures 0 and 2 written after and below the letters of the Beaufort notation are also used with a similar significance, thus d<sub>0</sub> slight drizzle. The gale symbol ☼ is normally used in this publication to indicate that the wind as recorded by the anemograph averaged at least 17.2 *m/s* for one or more "centred" hours. At Richmond (Kew Observatory) the symbol has been used with the word gust in brackets to indicate the occurrence of gusts reaching 17.2 *m/s*.



Air Ministry  
METEOROLOGICAL OFFICE

THE  
OBSERVATORIES' YEAR BOOK  
1924

Comprising the meteorological and geophysical results obtained from autographic records and eye observations at the observatories at Lerwick, Aberdeen, Eskdalemuir, Cahirciveen (Valencia Observatory), and Richmond (Kew Observatory), and the results of soundings of the upper atmosphere by means of registering balloons.

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LERWICK

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1927

## LERWICK OBSERVATORY.

|  |                   |                 |    |
|--|-------------------|-----------------|----|
| Latitude .. .. .                       | 60°               | 8'              | N. |
| Longitude .. .. .                      | 1°                | 11'             | W. |
| G.M.T. of Local Mean Noon .. .. .      | 12h               | 5m.             |    |
| Height of Site above Sea-Level .. .. . | From 80.5 metres. |                 |    |
|  |                   | to 90.0 metres. |    |

### INTRODUCTION.

#### GENERAL REMARKS.

In 1919 the establishment of an observatory in the Shetlands was included in the programme of the Meteorological Office. A wireless station built in 1913 by the Admiralty and transferred after the war to the Post Office, but used by that Department only in case of emergency, offered suitable accommodation in the way of offices and living quarters. It proved possible to make an arrangement under which the Air Ministry, on condition of maintenance of wireless plant, has the use of the station as an observatory and of the wireless plant for the transmission of meteorological reports and time signals.

The Observatory was opened on the 7th June, 1921, when the first instalment of the instrumental equipment arrived. Later on in the same year the construction of a magnetograph house and of huts for absolute magnetic and auroral observations was commenced. The magnetograph house is a heavy concrete structure with walls 2 feet 6 inches (76 cm.) thick, of internal dimensions 16 feet by 10 feet (4.9 m.  $\times$  3 m.), and after construction several months had to elapse before the thick concrete walls and roof could be thoroughly dried and the recording instruments placed in position. These instruments, which are described below, consist of magnetographs recording magnetic declination and horizontal and vertical force. In addition, in order to obtain a record of the more minute changes in the vertical component of terrestrial magnetic force, a line of twin cable was laid in an approximately horizontal plane round Loch Trebister, the terminals of the cable being connected to a suitable galvanometer on which could be measured the current induced in the cable by changes in the vertical component of terrestrial magnetic force. The arrangement is similar to one in use at Eskdalemuir Observatory, but no records from either have yet been included in official publications.

Other instruments installed at the Observatory included barometers, barograph, hygrograph, psychrometers, nephoscope, raingauges (ordinary and self-recording), sunshine recorder and Dines tube anemograph. But meteorological observations have been restricted, and the time of the somewhat limited staff available has been devoted chiefly to magnetic work.

The present is the second complete year of magnetic observations. Instrumental difficulties have continued to be experienced and (as for 1923) it has been decided to restrict publication to the monthly means extracted from the records, a summary of the absolute observations, and diurnal inequalities in declination and horizontal force.

The site and the work in Terrestrial Magnetism will now be described.

#### SITE.

The Observatory is situated on a ridge of high ground about a mile and a half (2.4 km.) to the south-west of Lerwick and adjoins the main road between Lerwick and Scalloway. The site slopes upward from west-north-west to east-south-east, the average height above M.S.L. being about 280 feet (85 metres). The ground to the east and south-east rises slightly for about  $\frac{1}{4}$  mile (.4 km.) then slopes sharply down to the sea. In other directions there is a downward slope for about  $\frac{1}{4}$  mile extending

to the Loch of Trebister on the south-west, Sandy Loch to north-west, and to the Burn of Sound to north-north-west ; beyond these and distant about  $\frac{3}{4}$  mile (1.2 km.) from the Observatory are small hills—Munger Hill to the south is about 320 feet (97 metres) above M.S.L., Shurton Hill to west-north-west rises to 576 feet (176 metres), and Stony Hill to the north to about 400 feet (122 metres). In clear weather it is possible to see the Outer Skerries,  $25\frac{1}{2}$  miles (41 km.) north-east by north, and Sumburgh Head, 20 miles (32 km.) south by west ; the horizon in other directions is limited to a few miles.

The average depth of soil in the vicinity is about a foot, and outcrops of sandstone occur in many places. The surrounding country is barren and desolate, the only vegetation being coarse grass, stunted heather, and moss, with occasional patches of bare black peat. The Observatory ground is of a very uneven nature, and, owing to lack of proper drainage, is frequently water-logged ; in winter it may be almost submerged for considerable periods. Views of the station are shown and the arrangement of buildings and situation of instruments are set out on a site plan in the 1923 Year Book.

### TERRESTRIAL MAGNETISM.

**Notes on Instruments.**—Declination and horizontal force are recorded by the Adie magnetographs which were in use at Falmouth until 1912 ; the vertical force is recorded by an instrument designed by the late Prof. W. Watson, F.R.S. The set had been stored for several years, but was reconditioned by the makers and tested at Kew before being installed at Lerwick in November, 1922.

The declination magnet has a unifilar suspension, and the torsion correction is negligible. The scale value is constant for all positions of the light dot on the sheet ; throughout the year it was 1 mm. of ordinate to 1.93 minutes of arc. In the horizontal force instrument the magnet is maintained in a position approximately perpendicular to the magnetic meridian by torsion of the bifilar suspension. The vertical force instrument is of similar construction to that in use at Eskdalemuir Observatory, but consists of only six magnets. Copper damping plates are fitted to each instrument and the recording mechanism is similar to that used at Eskdalemuir. The arrangement of the instruments in the magnetograph house is shown in Fig. 2 of the 1923 Year Book.

The chief instrumental defects encountered during the year were :—

- (a) A persistent tendency of the trace, in the case of the H force instrument, to drift away from its base-line.
- (b) Unsteadiness of the vertical force system.

These troubles may have been largely due to the dampness of the magnetograph house, but although different types of driers were used they were not overcome during 1924. A new suspension which was fitted to the horizontal instrument in November considerably diminished, but proved ineffectual in stopping the drift. The damping of the declination magnet was increased in December by placing copper strips inside the damping box.

Adjustments to the horizontal and vertical force instruments were made on many occasions, and in consequence determinations of the scale values had to be taken frequently ; the scale values have been assigned to periods between the discontinuities recorded, instead of for each month. The determinations are made by Broun's method, the deflecting magnet being placed in the " broadside on " position and at a distance of 55.9 cm. from the recording magnets. A larger deflection distance would render the error due to inequality of the distribution co-efficients for the H, D and V magnets less appreciable, but cannot be used owing to the restricted size of the magnetograph house. The double deflections produced are approximately 87 mm. for D, 79 mm. for H, and 34 mm. for V, giving scale values for the horizontal and vertical force instruments of about 9.17 per mm. and 207 per mm. respectively.

It is estimated that, in general, an accuracy to within 1 per cent. has been obtained in the scale values, but it has been impossible to assign scale values to a number of vertical force records owing to the erratic behaviour of the instrument.

The records of declination, horizontal force and vertical force have been tabulated hour by hour. The values are read off by means of graduated celluloid scales, a value being the mean reading for 60 minutes centering at the hour.

Base values for the records are obtained from the results of absolute observations taken twice weekly. Horizontal force and declination are determined with Unifilar No. L 3951 (Cambridge Instrument Co.) using magnets 3951A and 3951C. The magnetometer is used on the centre pillar (No. 2) of the absolute hut, the azimuth of the fixed mark being taken as  $8^{\circ} 43' 2''$  east of south. Inclination is measured with Dover Circle No. 238 placed on the East pillar (No. 3), using  $3\frac{1}{2}$  inch needles. In the deflection experiment three distances 25, 30 and 35 cm. are used, and a mean value of the correction,  $\log_{10} (1 + Pr^{-2} + Qr^{-4})$ , is derived for each month from the observations of seven cocentral months. The following table shows the values obtained for  $\log_{10} (1 + Pr^{-2} + Qr^{-4})$  at 25 cm., together with the number of observations.

| Month.        | Mean values of<br>$\log_{10} (1 + Pr^{-2} + Qr^{-4})$<br>for $r = 25$ cm. | Number of observations<br>at 25, 30, 35 cm. |
|---------------|---|---|
| January ...   | $\bar{1}.99796$   | 9   |
| February ...  | $\bar{1}.99808$   | 6   |
| March ...     | $\bar{1}.99827$   | 8   |
| April ...     | $\bar{1}.99843$   | 9   |
| May ...       | $\bar{1}.99859$   | 6   |
| June ...      | $\bar{1}.99871$   | 5   |
| July ...      | $\bar{1}.99882$   | 7   |
| August ...    | $\bar{1}.99891$   | 7   |
| September ... | $\bar{1}.99894$   | 10  |
| October ...   | $\bar{1}.99883$   | 8   |
| November ...  | $\bar{1}.99869$   | 6   |
| December ...  | $\bar{1}.99858$   | 5   |

**Aurora.**—From about September to April, a watch for aurora is maintained normally until about 23h. G.M.T. each evening, and observations—as a rule at intervals of 15 to 20 minutes—are made of the northern horizon and of general meteorological conditions. The records form what is called the auroral log, a brief summary of which is given in Table 12. When any auroral display is observed, a second observer is called and detailed observations are maintained until the display subsides. So far these detailed observations have been mainly non-instrumental and have consisted in noting and making descriptions of the phenomena seen during the display. These notes are entered in a second log reserved for records of actual auroral displays. Extracts from this latter log may be obtained by anyone requiring the detailed information.

**Notes on the Tables.**—Tables 6, 7, 8 contain the mean diurnal inequalities of Magnetic Declination for the months, year, and seasons, for "all," quiet, and disturbed days respectively. Tables 9, 10, 11 deal similarly with Horizontal Force. Tables 1, 2 and 3 contain respectively, the Ranges of the Diurnal Inequalities, the Average Departure from the Mean of the Day and the Non-Cyclic Change.

Table 4 contains the Absolute Daily Ranges of the Declination. Table 5 contains the Mean Monthly and Annual Values of Declination, Inclination, and Horizontal Force, as deduced from the results of the absolute observations; the dates on which these absolute observations were made are also given.

**Review of Results.**—*Declination.*—The quiet day ( $q$ ) diurnal inequalities for the months and seasons are very similar to those for 1923. The range in June is somewhat bigger than last year and the maximum occurs at the usual 13h and not 14h; the range in July is very considerably bigger but probably the low value in 1923 was anomalous. The most striking difference between the two sets of inequalities is in October; the morning minimum is more pronounced and occurs one hour later, the afternoon maximum is considerably higher and occurs at 14h instead of 13h and there is a gradual descent to a secondary minimum at 22h in place of the sudden check in this descent which took place at 16h in 1923.

The non-cyclic change for  $q$  days is positive in nine months and the mean is +.24' per day. For all ( $a$ ) days the change is negative in 10 months and the mean is -.11' per day. The non-cyclic change for  $q$  days is not necessarily significant but the n.c. change for  $a$  days, which is the same as the value for 1923, and is about three times what we should expect from the secular change as derived from absolute observations, may denote a small instrumental drift.

*Horizontal Force.*—The same instrumental difficulties were encountered as in 1923, notably a very big drift of the magnet which shows itself in the n.c. change. This drift was larger than in 1923, but until December was much more regular, and comparison of the monthly curves for the two years suggests that the ordinary method of dealing with n.c. changes adequately meets this exceptional case.

Considering the  $q$  day inequalities we find a close similarity between individual months of 1923 and 1924. In January and December the curves are somewhat irregular but the total range is small. In April the range is smaller, in July very much bigger, and in September bigger than in 1923. Probably the 1924 values for April and July are more typical and the September value somewhat anomalous. It is remarkable that although in October the differences in the D curves for  $q$  days are, as has already been stated, striking, the differences in the H curves are trivial.

The change from a large positive n.c. change to a negative value from November to December was caused by the dismantling of the apparatus and the fitting of a new suspension. The instrument was not working from November 24th to December 24th, and the  $q$  day inequalities given for December are for 24th, 25th, 26th, 29th and 30th, which though free from disturbance are not the five international  $q$  days selected at De Bilt. The inequality for this month is thus not directly comparable with curves from other stations. Owing to the same lack of material no disturbed day inequality for December is given.

*Comparison of the records of Eskdalemuir and Lerwick.*—In the case of  $q$  days the curves representing the diurnal inequality of D at the two places are very similar—in fact, the differences are probably no greater than might be accounted for by the errors in reading the original photographic curves.

The differences in the H curves are more obvious but appear to be of an accidental kind and probably small disturbances occur at Lerwick even on international  $q$  days; also the H instrument at Lerwick was not very sensitive (usually about 9γ to the millimetre on the photographic paper) so that very small errors in reading the original curves have considerable effects on the final inequalities. Judging from the one year's records alone it is safest to regard the two sets of curves as identical within the limits of accuracy possible in the measurements involved.

It was pointed out in this review last year that whereas quiet days represent a standard of quietness which varies only within narrow limits, disturbed days necessarily vary enormously amongst themselves as regards disturbance. They also vary from place to place. The system of electric currents causing the disturbance may be at distances large compared with the horizontal distance between Lerwick and Eskdalemuir, when the disturbances at the two places would be similar; or the currents may be presumably much nearer one place than the other when the disturbances would be different in magnitude and, perhaps, even opposite in sign. Comparison of the D and H curves at the two places on disturbed days brings out the remarkable

fact that whilst the differences in the D inequalities are in general so small that the curves can be treated to a first approximation as identical the differences in the H inequalities are in some months enormous. Thus, in January, the range of the diurnal inequality at Lerwick was 166 $\gamma$  and at Eskdalemuir was only 29 $\gamma$ .

The magnetic storm on the night of the 29th-30th January, which produced a brilliant and extensive auroral display, visible at Eskdalemuir, illustrates the differences which may occur over the British Isles. The following table gives the mean hourly values of H from 16h G.M.T. on 29th to 5h G.M.T. on the 30th at Lerwick, Eskdalemuir and Kew, expressed in each case as the differences from the mean value over this interval. The last column gives the average hourly departure.

|                 |     | Variation of H (unit 1 $\gamma$ ) night 29th-30th Jan., 1924. |     |      |      |      |      |     |      |       |      |      |     |     |     |      |
|-----------------|-----|---|-----|------|------|------|------|-----|------|-------|------|------|-----|-----|-----|------|
| G.M.T.          |     | 16  | 17  | 18   | 19   | 20   | 21   | 22  | 23   | Midt. | 1    | 2    | 3   | 4   | 5   | A.D. |
| Lerwick ...     | ... | +30   | +57 | +153 | +403 | +266 | +102 | -7  | -110 | -58   | -451 | -377 | -39 | +12 | +19 | 149  |
| Eskdalemuir ... | ... | +32   | +64 | +20  | +15  | +23  | -29  | -26 | +8   | +18   | -75  | -32  | -16 | -1  | +3  | 26   |
| Kew ...         | ... | +35   | +55 | +10  | -39  | -26  | -53  | -29 | +9   | +40   | +8   | +24  | -8  | -19 | -6  | 26   |

The H curve at Lerwick on this night resembles V at Eskdalemuir more nearly than H at Eskdalemuir, both in general form and in degree of disturbance. The actual ranges of the two cannot be measured with great accuracy as the light at extreme points went off the sheet in both cases, but the ratio of the range of H at Lerwick to the range of V at Eskdalemuir is approximately 2. The D curves on this night at the three observatories show exceptionally large differences, but even so a strong family likeness remains.

It seems reasonable to suppose that, although the actual current system causing the disturbance was certainly very complex, probably occupying with its branches a large volume, varying irregularly in sign and shifting in space, yet a considerable component of the disturbing cause could be represented by a current in the upper air almost directly above Lerwick at a height comparable with a hundred miles and flowing approximately along the lines of latitude. This current attained a maximum in one direction after 20h G.M.T., and a maximum in the opposite direction shortly before 2h on the 30th; alternatively, an already existing current at about this height would require to have been lowered to its least elevation at about 20h and raised to its greatest elevation at about 2h. The apparent proximity in this storm of the seat of the electromagnetic disturbance suggests that the case would be a suitable one for an inquiry as to a possible relation with the meteorological situation, which possessed the feature that concurrently with the magnetic storm a depression, of a depth only met with about once in two years, passed rapidly over the area immediately to the north-westward, the centre crossing Iceland at about midnight.

Table with 3 main sections: 1. Lerwick. 1924., 2. Lerwick. 1924., and 3. Lerwick. 1924. Each section shows ranges of mean diurnal inequalities and average departure of individual values from mean for each month and season.

\* The ranges are those shown in Tables 6 to 11, in the preparation of which the non-cyclic change has been eliminated.
† The non-cyclic changes shown under H. are mainly of instrumental origin. See p. 21.
§ See footnote to p. 25.

ABSOLUTE DAILY RANGES OF MAGNETIC DECLINATION.

4. Lerwick. 1924.

Table showing absolute daily ranges of magnetic declination for Lerwick in 1924, organized by month and day.

MEAN MONTHLY & ANNUAL VALUES OF MAGNETIC DECLINATION, INCLINATION AND HORIZONTAL FORCE.

Means of the results of absolute observations made on the dates shown below.

5. Lerwick. 1924.

Table showing mean monthly and annual values of magnetic declination, inclination, and horizontal force for Lerwick in 1924, including dates on which absolute observations were made.

DIURNAL INEQUALITIES OF THE MAGNETIC DECLINATION.

Departures from mean of the day adjusted for non-cyclic change.

Table 6: Declination (All Days) for Lerwick, 1924. Columns: Hour (1-24), G.M.T., and monthly/seasonal declination values.

Table 7: Declination (Quiet Days) for Lerwick, 1924. Columns: Hour (1-24), G.M.T., and monthly/seasonal declination values.

Table 8: Declination (Disturbed Days) for Lerwick, 1924. Columns: Hour (1-24), G.M.T., and monthly/seasonal declination values.



DIURNAL INEQUALITIES OF THE HORIZONTAL MAGNETIC FORCE.

Departures from mean of the day adjusted for non-cyclic change.

Table 9: HORIZONTAL FORCE (All Days except June 1, 10; July 21, 22; Nov. 25-30; Dec. 1-23). 1924. Lerwick. Columns: Hour (G.M.T.) 1-24. Rows: Month and Season (Jan-Dec, Year, Winter, Equinox, Summer).

Table 10: HORIZONTAL FORCE (Quiet Days). 1924. Lerwick. Columns: Hour (G.M.T.) 1-24. Rows: Month and Season (Jan-Dec, Year, Winter, Equinox, Summer).

Table 11: HORIZONTAL FORCE (Disturbed Days). 1924. Lerwick. Columns: Hour (G.M.T.) 1-24. Rows: Month and Season (Jan-Dec, Year, Winter, Equinox, Summer).

\* No horizontal force record was available from Nov. 25 to Dec. 23 inclusive. It is to be noted therefore that the "all" days diurnal inequality for December relates to the period December 24-31 only; the quiet day inequality relates to the days 24, 25, 26, 29 and 30; material to determine a disturbed day inequality was not available.

## AURORAL LOG.

12. Lerwick.

1924.

| Date.  | Month.            | Date.  | Month.                        | Date.  | Month.                   | Date.  | Month.                            |
|--------|-------------------|--------|-------------------------------|--------|--------------------------|--------|-----------------------------------|
|        | <b>January.</b>   |        | <b>March.</b>                 |        | <b>April.</b>            |        | <b>October.</b>                   |
| 2 ...  |                   | 11 ... | Moonlight.                    | 23 ... | Showers.                 | 23 ☰   | Aurora 1920-0100.*                |
| 3 ☰    | Aurora 1830-2100* | 12 ... |                               | 29 ... |                          | 24 ☰   | Weak aurora 2150-2225.            |
| 7 ...  |                   | 13 ☰   | Faint auroral glow 1900-1942. | 30 ... |                          | 28 ... |                                   |
| 9 ...  |                   |        |                               |        |                          | 30 ... |                                   |
| 11 ☰   | Auroral glow.     | 14 ... | Moonlight.                    |        | <b>September.</b>        | 31 ☰   | Auroral glow 2120-2220.           |
| 14 ... |                   | 15 ... | Moonlight.                    |        |                          |        |                                   |
| 16 ... |                   | 16 ... | Moonlight.                    | 3 ☰    | Weak aurora 2200-2230.   |        |                                   |
| 19 ... |                   | 17 ... | Moonlight.                    | 4 ...  |                          |        |                                   |
| 20 ... |                   | 19 ... | Moonlight.                    | 5 ...  |                          | 2 ...  | <b>November.</b>                  |
| 21 ... |                   | 21 ... |                               | 9 ...  |                          | 3 ...  | Showers.                          |
| 24 ... |                   | 23 ... |                               | 10 ... |                          | 12 ... |                                   |
| 25 ... |                   | 24 ... |                               | 13 ... |                          | 16 ... |                                   |
| 27 ... | Showers.          | 26 ... |                               | 14 ... |                          | 17 ... |                                   |
| 30 ... |                   | 28 ☰   | Faint auroral glow 2050-2145. | 18 ... |                          | 22 ☰   | Showers, faint auroral glow 1905. |
| 31 ... |                   | 30 ☰   | Weak aurora 2040-0300.        | 22 ... |                          | 28 ... |                                   |
|        | <b>February.</b>  | 31 ... |                               | 24 ... |                          |        |                                   |
| 3 ...  |                   |        |                               | 25 ☰   | Faint aurora* 1943-0100. |        |                                   |
| 5 ...  | Hail showers.     |        |                               | 27 ☰   | Aurora 1945-2130.*       | 1 ...  | <b>December.</b>                  |
| 6 ...  |                   |        | <b>April.</b>                 |        |                          | 3 ...  |                                   |
| 15 ... |                   |        |                               |        |                          | 6 ...  |                                   |
| 22 ... |                   | 2 ...  |                               |        |                          | 8 ...  | Moonlight.                        |
| 23 ... |                   | 3 ...  |                               | 6 ...  |                          | 9 ...  | Moonlight.                        |
| 24 ... |                   | 4 ...  |                               | 7 ...  | Rain.                    | 14 ... | Moonlight.                        |
| 25 ... |                   | 5 ...  |                               | 8 ...  |                          | 15 ... |                                   |
| 29 ... |                   | 7 ☰    | Faint aurora 2105-2110.       | 9 ...  | Moonlight.               | 16 ... | Moonlight.                        |
|        | <b>March.</b>     | 8 ...  |                               | 10 ... |                          | 18 ... |                                   |
| 1 ...  |                   | 9 ...  |                               | 11 ... | Moonlight.               | 21 ... |                                   |
| 2 ...  |                   | 10 ... |                               | 12 ... | Moonlight.               | 23 ... |                                   |
| 3 ...  |                   | 12 ... |                               | 16 ... |                          | 24 ... |                                   |
| 5 ...  |                   | 13 ... |                               | 17 ... |                          | 25 ... | Showers.                          |
| 6 ...  |                   | 15 ... | Rain.                         | 20 ... |                          | 27 ... |                                   |
| 8 ☰    | Auroral glow.     | 16 ... |                               | 21 ☰   | Auroral glow 1900-2145.  | 28 ... |                                   |
| 10 ... |                   | 17 ... |                               | 22 ... |                          | 30 ... | Hail showers.                     |
|        |                   | 21 ... |                               |        |                          | 31 ... |                                   |

In the interests of brevity there have been omitted from the table above all dates on which the sky throughout the evening remained completely overcast and on which, therefore, no opportunity arose of determining whether or not aurora occurred. The nights on which aurora was actually seen are indicated by the symbol ☰. The nights on which aurora was not seen, despite at least an occasional interval of more or less clear sky, are indicated by the symbol ... ; in the latter case also, remarks on the weather are added to assist the reader in judging how far the fact of no observation of aurora may be taken as indicating that there was not actual aurora. An asterisk (\*) after any date indicates that a full description is available of the auroral phenomena observed on the date in question.

Air Ministry

## METEOROLOGICAL OFFICE

THE  
OBSERVATORIES' YEAR BOOK  
1924

Comprising the meteorological and geophysical results obtained from autographic records and eye observations at the observatories at Lerwick, Aberdeen, Eskdalemuir, Cahirciveen (Valencia Observatory), and Richmond (Kew Observatory), and the results of soundings of the upper atmosphere by means of registering balloons.

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**ABERDEEN**

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Published by the authority of the  
METEOROLOGICAL COMMITTEE



LONDON

PUBLISHED BY HIS MAJESTY'S STATIONERY OFFICE.



## ABERDEEN OBSERVATORY.

|                           |    |    |    |    |    |            |  |
|---------------------------|----|----|----|----|----|------------|--|
| Latitude                  | .. | .. | .. | .. | .. | 57° 10' N. |  |
| Longitude                 | .. | .. | .. | .. | .. | 2° 6' W.   |  |
| G.M.T. of Local Mean Noon | .. | .. | .. | .. | .. | 12h. 8m.   |  |

### *Heights in metres above Sea-Level.*

|                         |    |    |    |    |    |      |  |
|-------------------------|----|----|----|----|----|------|--|
| Barometer               | .. | .. | .. | .. | .. | 26·8 |  |
| Rain-gauge              | .. | .. | .. | .. | .. | 14·0 |  |
| Robinson Cup Anemograph | .. | .. | .. | .. | .. | 37   |  |
| Dines Tube Anemograph   | .. | .. | .. | .. | .. | 21   |  |

### *Heights in metres above ground.*

|                                      |    |    |    |    |    |      |  |
|--------------------------------------|----|----|----|----|----|------|--|
| Thermometer Bulbs, North Wall Screen |    |    |    |    |    | 12·5 |  |
| Sunshine Recorder                    | .. | .. | .. | .. | .. | 20·7 |  |
| Robinson Cup Anemograph              | .. | .. | .. | .. | .. | 23   |  |
| Dines Tube Anemograph                | .. | .. | .. | .. | .. | 13   |  |

## INTRODUCTION.

### SITE.

The Observatory, which was established in 1868, is housed in the top floor of the Cromwell Tower of King's College in Old Aberdeen. The College lies on a plain gradually rising from the sea from which it is distant about 1 mile (1·6 km). There are no serious irregularities of surface in the vicinity excepting the two river valleys of the Don and the Dee. To the north, at a distance of about 1 km. the Don flows eastwards to the sea; the Dee flows into the sea at a distance of about 3 km. to the south-east of the College. Between the College and the sea is a golf course covered for the most part with grass. Westwards is the High Street of the Old Town and beyond this there is another street. Further west grass pasture extends for about one kilometre. Southward are some open spaces beyond which the modern town is reached. The enclosure in which the Stevenson screen, the Beckley and check rain-gauges and the grass minimum thermometer are exposed, lies to the north-east of the Observatory at a distance of about 50 metres. The "North-wall" screen in which the recording thermometers are exposed is erected on the wall outside the north window of the uppermost story of the Observatory. The nature of the soil and sub-soil is loam and sand.

Plans showing the position of the Observatory relative to the City of Aberdeen, and the general arrangement of the College Buildings, and also photographs will be found in the Introduction to the Observatories' Year Book 1923.

### METEOROLOGY.

The elements dealt with in the following tables are:—Atmospheric pressure, air temperature, humidity, rainfall, sunshine, wind speed and direction, earth temperature and minimum temperature on the grass, together with a diary of cloud and weather.

The instruments from which values of the above elements have been obtained and the methods of tabulating the records are described in the General Introduction to this volume. The following additional information refers especially to Aberdeen.

*Pressure and Temperature.*—The barograph, standard Kew barometer and thermograph are housed in the uppermost story of the Observatory. The pressure scale value of the barogram is 1 mm. on the paper = 0.85 mb., when the paper is at normal atmospheric humidity. In similar circumstances the time scale is 9.3 mm. = 1 hour. The records of the photobarograph are standardised by means of control readings taken from Fortin Standard Barometer M.O. 273.

The recording thermometers are placed in the North-wall screen already referred to. The scale value of the wet bulb thermograph record is 1° absolute = 3.20 millimetres on the paper; for the dry bulb thermograph the scale value varies slightly with the temperature but is approximately 1° absolute = 3.4 millimetres. The time scale is 1 hour = 9.23 millimetres. Reading of the photothermograms is done by means of glass measuring scales, the records being standardised by control readings from Standard Thermometers M.O. 1698 (dry bulb) and M.O. 1697 (wet bulb). The heights of the barometer cisterns and of the bulbs of the thermometers are given at the top of the appropriate tables.

*Rainfall.*—The recording instrument in use is Beckley rain-gauge No. 2 with an area of 101.1 square inches (653 cm<sup>2</sup>). The procedure adopted in tabulating the records is similar to that described in the General Introduction and calls for no comment. Control is by check gauge M.O. 167.

*Humidity.*—On those occasions when the temperature of the wet bulb has been 27.3a or under, the relative humidity has been obtained from the records of a hair hygograph. This instrument is accommodated in a small louvred screen which rests on top of the Stevenson screen and is securely fixed to it. The hygograph is 11.6 metres below the level of the thermograph bulbs in the North-wall screen, and in using its records an appropriate adjustment is made.

*Sunshine.*—The sunshine recorder (Campbell Stokes type) is exposed on the small circular tower on the Observatory roof on which the Robinson Cup Anemograph is erected. It is rigidly held by lead flaps soldered to the lead roof. The exposure is excellent, the only obstruction is a flagpole to the east, of angular diameter about 1°, which may obstruct 0.1 hr. record about 7h between April and September. The "possible" duration of sunshine has been computed from the mean solar declination for the four years 1849, 1850, 1851 and 1852.

*Wind Speed and Direction.*—The Robinson Cup anemograph is erected on the top of a small cylindrical tower which rises about fifteen feet (4.6 m) above the main square tower and about five feet (1.5 m.) above a smaller tower at the south-west corner of the main tower. The height of the cups above this smaller square tower (which may for the purpose be regarded as the "roof" of the building) is about 4 metres. Owing to the surrounding buildings the exposure of the instrument is a very gusty one, particularly towards south and west.

There is also in use a Dines Tube Anemograph which is mounted in a more open exposure in a field about  $\frac{1}{2}$  km. east of the Observatory. The speeds given in Tables 83-94 are those obtained from the Cup Anemograph, but the directions are taken from the records of the tube instrument, as are also the particulars of the highest gust each day and the annual table of distribution of wind speed given in Tables 95-96.

A careful analysis of simultaneous records of the two anemographs\* has shown that the directions recorded by the two instruments differ only very slightly; but the values of velocity show considerable differences. Those recorded by the tube instrument exceed those recorded by the Cup Anemograph by between 10 and 30 per cent., depending upon the direction of the wind. This fact must therefore be borne in mind in using the values entered in Table 96 giving the annual distribution of wind speed. The monthly tables of hourly values are obtained from the Cup Anemograph velocities, in order to maintain continuity with previous years' publications.

\* To be published later as a Geophysical Memoir.

*Temperature in the Ground.*—This is recorded by a thermometer (unnumbered), which is kept at a depth of 124 cm. (four feet). At Aberdeen the thermometer is carried in a slot near the end of a long bar of wood, about three inches (7.5 cm.) square in section. This bar fits closely into a wooden sleeve, sunk vertically into the earth, so that the bulb of the thermometer is at the required depth. The thermometer itself is enclosed in a glass tube, and its bulb is embedded in paraffin wax so as to render the thermometer insensible to sudden changes of temperature. This allows of its being drawn to the surface and read before the temperature of the bulb has time to change appreciably. As underground temperature changes very slowly, the loss of sensitiveness, resulting from the coating of wax, does not lead to inaccuracies in the determination of the temperature of the earth. The thermometer is read at 9h each morning.

*Minimum Temperature on the Grass.*—The grass minimum thermometer is exposed in the enclosure on two wooden pegs about 4 cm. above grass. It is set at 18h and read at 7h, the reading being entered to the day of observation.

*Cloud.*—In connection with the observations of cloud-forms it might be well to indicate the practice adopted at Aberdeen in dealing with the types Nimbus and Strato-cumulus in view of the fact that there exists among meteorologists some divergence of opinion upon these types, and also because suggestions have been made for a prospective modification in the definitions of the International Classification.

In the case of Nimbus it is the custom at Aberdeen to enter “ Nb ” on all occasions when the cloud layer from which rain is falling is obviously dense and has developed from A-St, even when no Fr-Nb is visible below it. This is done because it is not always certain to the observer whether the cloud layer is actually uniform low A -St developed as far as rain, or whether a slight mist-film exists below the ragged Fr-Nb., obscuring the latter from view, and thus giving it the appearance of a uniform featureless sheet. (It is probable that in future a suggestion will be made to extend the definition of A-St in the International Classification to include the dense rain-giving layer which develops from the normal A-St.)

On occasions when the low anticyclonic stratus degrades into drizzle or light rain, it is customary at Aberdeen to enter Nb-St. (Nimbo-stratus). The entry “ St ” is reserved for the type of cloud found generally in dry anticyclonic weather.

The entry St-Cu includes only the cloud-forms as defined under that heading in the International Classification, though some of the entries might equally well have been termed A-Cu. It does not, however, include the bases of closed-up cumulus clouds, nor groups of cumulus arranged in lines.

IDENTIFICATION NUMBERS OF INSTRUMENTS USED IN 1924.

The following were the instruments actually in use during the year 1924 :—

|                                   |    |    |      |       |
|-----------------------------------|----|----|------|-------|
| Standard Fortin Barometer         | .. | .. | M.O. | 273   |
| „ Dry Bulb Thermometer            | .. | .. | M.O. | 1698  |
| „ Wet „ „                         | .. | .. | M.O. | 1697  |
| Recording Beckley Raingauge       | .. | .. |      | 2     |
| Control Raingauge                 | .. | .. | M.O. | 167   |
| Glass for „                       | .. | .. | M.O. | 400   |
| Hair Hygograph                    | .. | .. | M.O. | 35    |
| Campbell-Stokes Sunshine Recorder | .. | .. | M.O. | 32    |
| Robinson Cup Anemograph           | .. | .. | M.O. | 50    |
| Dines Tube                        | .. | .. | M.O. | 1011  |
| Earth Thermometer                 | .. | .. | ..   | —     |
| Grass Minimum Thermometer         | .. | .. | M.O. | 17007 |

### Review of Meteorological Results.

The records for the year show a large deficiency of pressure during the summer half of the year, particularly during August and September; in the latter month pressure was nearly 9 mb. below the normal. Only in February, March, and November was pressure higher than the normal, the excess in February and November being about 4 mb. Associated with this deficiency of pressure the records of rainfall show a marked excess of precipitation during the summer half of the year (April to September). This period was noteworthy for three great "pulses" of rainfall, the months of May, July and September each yielding about twice the normal quantity of rain, while the intervening months were slightly below the normal. Over the whole year there was a net excess of 110 mm., the total rainfall being 858 mm., equal to 115 per cent. of the normal value. Of this amount 516 mm. fell during the summer half of the year, and 342 mm. during the winter half. Expressed in percentages of the average values for these two divisions of the year, the six summer months had 149 per cent. of the average, while the six winter months had only 85 per cent. March was the only month showing marked paucity of precipitation, less than half the normal quantity being recorded in that month.

Temperature was slightly above the average in the first two months of the year, but showed a sharp actual—as well as relative—fall in March, which was the coldest month of the year. In March temperature was 1.3a below that recorded in January and February, and 3.0a below that of April, the deviation from the normal being -1.4a. During the succeeding months the variations of temperature from the normal were slight, but in November there was a marked excess, and this became accentuated in December. These two months were +1.6a and +2.9a respectively above the normal values, the December excess being a somewhat exceptional abnormality.

The temperature of the ground at a depth of 4 feet (124 cm) showed characteristics very similar to those of the air temperature, a lag below the normal values being shown during the greater part of the year, but an excess in November and December.

Sunshine was much below the normal in every month except September, when, despite the heavy rainfall, an excess of 7 per cent. over the average was recorded. May, which is usually the brightest month of the year, showed the greatest percentage deficiency, amounting to 14 per cent. Altogether, taken over the whole year the sunshine recorded was 5 per cent. lower than the normal.

On the whole the year was rather less windy than usual, except in February, when the average hourly velocity, as recorded by the tube anemograph, was 6.4 m/s., and by the cup anemograph 5.4 m/s.

Summed up, therefore, the year 1924 at Aberdeen might be described as very dull, with rather less wind than usual in most months and with a very wet summer half of the year and an unusually warm winter half.



Readings in millibars at exact hours, Greenwich Mean Time.

13. Aberdeen : H<sub>b</sub> (height of barometer cistern above M.S.L.) = 26.8 metres.

January, 1924.

Table of barometric pressure readings for Aberdeen in January 1924. Columns include Day (1-31), Station Level (1-31), Mean (Station level), and Mean (Sea level). Rows show hourly readings from 1 to 24 hours for each day.

14. Aberdeen : H<sub>b</sub> = 26.8 metres.

February, 1924.

Table of barometric pressure readings for Aberdeen in February 1924. Columns include Day (1-29), Station Level (1-29), Mean (Station level), and Mean (Sea level). Rows show hourly readings from 1 to 24 hours for each day.

NOTE.—When pressure exceeds 1000 mb. the leading figure 1 is not printed, i.e., 1005.6 mb. is written 005.6. This rule does not, however, apply to monthly means.

Readings in millibars at exact hours; Greenwich Mean Time.

15. Aberdeen : H<sub>b</sub> (height of barometer cistern above M.S.L.) = 26.8 metres.

March, 1924.

Table for Aberdeen in March 1924. Columns: Day (1-31), Station Level (1-30), Mean (Station level), Mean (Sea level). Rows contain hourly barometric pressure readings in millibars.

16. Aberdeen : H<sub>b</sub> = 26.8 metres.

April, 1924.

Table for Aberdeen in April 1924. Columns: Day (1-30), Station Level (1-30), Mean (Station level), Mean (Sea level), G.M.T. (1-24, Mean). Rows contain hourly barometric pressure readings in millibars.

NOTE.—When pressure exceeds 1000 mb. the leading figure 1 is not printed, i.e., 1005.6 mb. is written 005.6. This rule does not, however, apply to monthly means.

Readings in millibars at exact hours, Greenwich Mean Time.

17. Aberdeen : H<sub>b</sub> (height of barometer cistern above M.S.L.) = 26.8 metres.

May, 1924.

Table for Aberdeen in May 1924. Columns: Day (1-31), Station Level (1-31), Mean (Station level), Mean (Sea level). Rows: 1-31. Data: Millibar readings for each hour and mean values.

18. Aberdeen : H<sub>b</sub> = 26.8 metres.

June, 1924.

Table for Aberdeen in June 1924. Columns: Day (1-30), Station Level (1-30), Mean (Station level), Mean (Sea level), G.M.T. ... (1-24, Mean). Rows: 1-30. Data: Millibar readings for each hour and mean values.

NOTE.—When pressure exceeds 1000 mb. the leading figure 1 is not printed, i.e., 1005.6 mb. is written 005.6. This rule does not, however, apply to monthly means.

Readings in millibars at exact hours, Greenwich Mean Time.

19. Aberdeen : H<sub>b</sub> (height of barometer cistern above M.S.L.) = 26.8 metres.

July, 1925.

Table with 25 columns (Day 1-24, Mean) and 31 rows (Station Level 1-31). Columns contain pressure readings in millibars. Includes a 'Station Level' indicator on the left and a 'Mean (Sea level)' row at the bottom.

20. Aberdeen : H<sub>b</sub> = 26.8 metres.

August, 1924.

Table with 25 columns (Day 1-24, Mean) and 31 rows (Station Level 1-31). Columns contain pressure readings in millibars. Includes a 'Station Level' indicator on the left and a 'Mean (Sea level)' row at the bottom.

NOTE.—When pressure exceeds 1000 mb. the leading figure 1 is not printed, i.e., 1005.6 mb. is written 005.6. This rule does not, however, apply to monthly means.

Readings in millibars at exact hours, Greenwich Mean Time.

21. Aberdeen : Hb (Height of barometer cistern above M.S.L.) = 26.8 metres.

September, 1924.

Table for Aberdeen in September 1924. Columns: Day (1-30), Station Level (1-30), Mean (Station level), Mean (Sea level). Rows contain hourly barometric readings in millibars.

22. Aberdeen : Hb = 26.8 metres.

October, 1924.

Table for Aberdeen in October 1924. Columns: Day (1-31), Station Level (1-31), Mean (Station level), Mean (Sea level), G.M.T. (1-24, Mean). Rows contain hourly barometric readings in millibars.

NOTE.—When pressure exceeds 1000 mb. the leading figure 1 is not printed, i.e., 1005.6 mb. is written 005.6. This rule does not, however, apply to monthly means.

Readings in millibars at exact hours, Greenwich Mean Time.

23. Aberdeen : H<sub>b</sub> (height of barometer cistern above M.S.L.) = 26.8 metres.

November, 1924.

Table for Aberdeen pressure readings in November 1924. Columns include Day (1-30), Station Level (1-30), Mean (Station level), Mean (Sea Level), and G.M.T. (1-24, Mean). Rows show hourly pressure readings in millibars.

24. Aberdeen : H<sub>b</sub> = 26.8 metres.

December, 1924.

Table for Aberdeen pressure readings in December 1924. Columns include Day (1-31), Station Level (1-31), Mean (Station level), Mean (Sea level), and G.M.T. (1-24, Mean). Rows show hourly pressure readings in millibars.

NOTE.—When pressure exceeds 1000 mb. the leading figure 1 is not printed, i.e., 1005.6 mb. is written 005.6. This rule does not, however, apply to monthly means.

PRESSURE AT STATION LEVEL AND AT SEA LEVEL.

ANNUAL MEANS OF HOURLY VALUES.

From readings in millibars at exact hours, Greenwich Mean Time.

25. Aberdeen : Hb = 26.8 metres.

1924.

Table with 25 columns (1-24 hours + Mean) and 2 rows (Station Level, Sea Level) showing hourly pressure readings in millibars.

PRESSURE AT STATION LEVEL ; MONTHLY MEANS AND DIURNAL INEQUALITIES.

The departures from the mean of the day are adjusted for non-cyclic change.

26. Aberdeen : Hb = 26.8 metres.

1924.

Table with 25 columns (Month, Hour 1-24) and 13 rows (Jan to Dec) showing monthly means and hourly departures from the mean.

ABSOLUTE EXTREMES OF PRESSURE AT STATION LEVEL FOR EACH DAY.

Maximum and Minimum for the interval 0h. to 24h., Greenwich Mean Time.

27. Aberdeen : Hb = 26.8 metres.

1924.

Table with 24 columns (Days 1-24) and 2 rows (Max., Min.) showing daily maximum and minimum pressure extremes.

NOTE.—When pressure exceeds 1000 mb. the leading figure is not printed, i.e., 1012.3 mb. is written 012.3. This rule does not, however, apply to monthly means.

Readings in degrees absolute at exact hours, Greenwich Mean Time.

28. Aberdeen : North Wall Screen on Tower :  $h_t$  (height of thermometer bulb above the ground) = 12.5 metres.

January, 1924.

Table with 25 columns (Day, 1-24, Mean) and 31 rows (1-31). It contains temperature readings in degrees absolute for each hour of the month.

29. Aberdeen : North Wall Screen on Tower :  $h_t$  = 12.5 metres.

February, 1924.

Table with 25 columns (Day, 1-24, Mean) and 29 rows (1-29). It contains temperature readings in degrees absolute for each hour of the month.

NOTE.—The initial 2 or 3 of the readings is omitted, i.e., 275.0 degrees absolute is written 75.0.



Readings in degrees absolute at exact hours, Greenwich Mean Time.

30. Aberdeen : North Wall Screen on Tower :  $h_t$  (height of thermometer bulb above ground) = 12.5 metres.

March, 1924.

| Day. | 1.   | 2.   | 3.   | 4.   | 5.   | 6.   | 7.   | 8.   | 9.   | 10.  | 11.  | Noon | 13.  | 14.  | 15.  | 16.  | 17.  | 18.  | 19.  | 20.  | 21.  | 22.  | 23.  | 24.  | Mean |      |
|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| 1    | 73.0 | 74.0 | 74.4 | 74.2 | 74.6 | 74.0 | 74.2 | 74.0 | 74.4 | 73.7 | 73.7 | 74.2 | 73.4 | 72.4 | 72.5 | 72.5 | 72.6 | 72.6 | 72.5 | 72.8 | 72.7 | 72.8 | 72.6 | 72.8 | 72.6 | 73.3 |
| 2    | 72.7 | 72.9 | 72.8 | 72.6 | 72.3 | 71.8 | 71.7 | 72.0 | 72.4 | 72.5 | 73.5 | 74.0 | 75.0 | 75.2 | 75.0 | 74.6 | 74.4 | 73.7 | 72.8 | 72.3 | 71.9 | 71.3 | 70.6 | 69.8 | 72.9 |      |
| 3    | 69.5 | 69.1 | 68.5 | 68.4 | 68.0 | 67.4 | 67.6 | 67.9 | 69.1 | 71.9 | 73.4 | 74.9 | 75.7 | 75.9 | 76.0 | 76.0 | 75.5 | 74.3 | 73.3 | 72.8 | 72.8 | 72.3 | 71.9 | 71.4 | 71.8 |      |
| 4    | 71.4 | 71.1 | 71.1 | 70.5 | 70.4 | 70.9 | 70.6 | 70.5 | 71.9 | 73.0 | 74.1 | 75.4 | 76.0 | 75.9 | 75.7 | 75.2 | 74.6 | 74.6 | 74.5 | 74.1 | 74.3 | 73.5 | 73.4 | 73.4 | 73.1 |      |
| 5    | 73.6 | 73.6 | 73.3 | 73.2 | 73.1 | 72.9 | 72.9 | 73.0 | 73.9 | 74.5 | 75.0 | 75.0 | 75.6 | 75.6 | 76.2 | 75.6 | 75.5 | 74.8 | 73.0 | 72.6 | 72.0 | 71.4 | 71.4 | 71.2 | 73.7 |      |
| 6    | 70.7 | 69.6 | 69.5 | 69.5 | 69.0 | 68.4 | 68.4 | 69.1 | 70.8 | 72.1 | 73.8 | 74.8 | 75.4 | 75.8 | 76.0 | 75.6 | 75.4 | 75.5 | 75.6 | 76.0 | 76.0 | 75.6 | 75.0 | 75.0 | 75.0 | 72.9 |
| 7    | 74.8 | 74.6 | 74.4 | 74.6 | 74.7 | 75.4 | 75.9 | 76.2 | 76.6 | 77.3 | 78.0 | 78.6 | 78.8 | 79.0 | 79.3 | 79.0 | 78.6 | 78.0 | 77.5 | 77.4 | 77.4 | 77.0 | 77.1 | 77.1 | 76.9 |      |
| 8    | 77.3 | 77.5 | 77.3 | 77.0 | 76.8 | 77.3 | 77.3 | 77.6 | 77.8 | 78.5 | 78.9 | 79.8 | 81.1 | 80.9 | 80.9 | 80.3 | 79.6 | 78.7 | 78.0 | 77.6 | 77.3 | 76.5 | 76.4 | 76.0 | 78.2 |      |
| 9    | 75.6 | 75.1 | 74.8 | 74.6 | 75.0 | 75.4 | 76.0 | 76.4 | 76.8 | 77.5 | 79.0 | 79.6 | 80.0 | 79.8 | 80.8 | 81.0 | 80.9 | 79.8 | 78.9 | 78.5 | 77.9 | 78.1 | 78.1 | 78.1 | 77.8 |      |
| 10   | 78.0 | 77.9 | 77.6 | 77.0 | 76.7 | 76.6 | 76.6 | 77.2 | 78.6 | 78.6 | 78.4 | 78.7 | 78.7 | 78.7 | 78.6 | 78.4 | 78.3 | 78.3 | 78.1 | 78.0 | 77.5 | 77.3 | 77.1 | 77.0 | 77.9 |      |
| 11   | 77.0 | 77.0 | 77.1 | 77.4 | 76.9 | 77.0 | 77.2 | 77.5 | 77.8 | 78.3 | 78.2 | 78.7 | 79.2 | 79.4 | 79.2 | 79.0 | 78.7 | 78.2 | 77.9 | 77.7 | 77.4 | 77.3 | 77.3 | 77.4 | 77.9 |      |
| 12   | 77.4 | 77.5 | 77.4 | 77.2 | 76.8 | 77.0 | 77.1 | 77.3 | 77.8 | 78.5 | 79.0 | 79.6 | 80.1 | 80.2 | 80.0 | 79.5 | 78.6 | 78.2 | 77.8 | 77.6 | 77.4 | 77.2 | 77.2 | 77.1 | 78.1 |      |
| 13   | 77.3 | 76.9 | 76.6 | 76.0 | 75.9 | 75.9 | 75.8 | 76.7 | 77.6 | 78.4 | 78.8 | 79.1 | 79.2 | 79.2 | 79.3 | 79.3 | 78.6 | 77.8 | 77.4 | 77.3 | 76.9 | 77.1 | 77.3 | 77.2 | 77.6 |      |
| 14   | 77.2 | 76.7 | 77.1 | 76.5 | 76.6 | 76.5 | 76.4 | 77.1 | 78.1 | 79.3 | 80.6 | 81.3 | 81.5 | 82.9 | 83.9 | 83.5 | 82.4 | 81.8 | 81.7 | 81.2 | 81.0 | 81.0 | 80.4 | 80.6 | 79.7 |      |
| 15   | 80.0 | 80.2 | 80.0 | 79.2 | 78.4 | 78.0 | 78.7 | 79.1 | 79.2 | 79.5 | 79.7 | 80.0 | 80.9 | 80.8 | 80.6 | 80.1 | 80.2 | 79.1 | 78.2 | 77.8 | 77.3 | 77.7 | 77.5 | 77.9 | 79.2 |      |
| 16   | 77.9 | 77.6 | 77.1 | 76.3 | 76.4 | 75.0 | 74.5 | 74.5 | 75.5 | 74.6 | 77.2 | 77.0 | 77.6 | 78.2 | 77.6 | 77.1 | 76.1 | 76.2 | 75.7 | 75.0 | 74.6 | 74.8 | 74.1 | 74.4 | 76.1 |      |
| 17   | 74.0 | 73.7 | 73.7 | 73.8 | 73.4 | 73.3 | 73.3 | 73.4 | 73.7 | 75.4 | 75.8 | 75.7 | 76.6 | 76.3 | 74.7 | 73.4 | 74.0 | 74.1 | 73.9 | 73.3 | 73.1 | 73.1 | 73.5 | 73.1 | 74.1 |      |
| 18   | 73.4 | 73.8 | 74.1 | 74.8 | 73.9 | 73.6 | 73.5 | 73.8 | 74.2 | 74.9 | 75.6 | 76.1 | 76.5 | 77.0 | 77.0 | 76.5 | 75.6 | 74.4 | 74.4 | 74.4 | 74.6 | 74.9 | 75.4 | 76.1 | 74.9 |      |
| 19   | 76.2 | 76.4 | 76.4 | 76.2 | 76.2 | 75.9 | 75.6 | 75.1 | 75.9 | 76.2 | 75.8 | 76.2 | 76.2 | 75.9 | 75.5 | 75.0 | 74.8 | 74.1 | 73.6 | 73.0 | 72.5 | 72.0 | 71.4 | 70.9 | 75.0 |      |
| 20   | 70.2 | 70.4 | 70.0 | 70.0 | 70.2 | 70.7 | 71.8 | 72.9 | 74.3 | 75.1 | 76.2 | 76.5 | 76.4 | 76.4 | 76.8 | 76.7 | 76.2 | 75.9 | 75.6 | 75.6 | 75.5 | 75.2 | 75.0 | 74.6 | 74.0 |      |
| 21   | 74.3 | 74.0 | 73.7 | 73.6 | 73.4 | 73.4 | 73.7 | 74.3 | 75.0 | 75.4 | 75.9 | 76.5 | 77.0 | 77.1 | 77.0 | 76.6 | 76.5 | 76.0 | 75.5 | 75.0 | 74.5 | 74.3 | 74.0 | 74.9 | 75.1 |      |
| 22   | 75.7 | 75.4 | 75.4 | 75.6 | 75.6 | 75.8 | 75.7 | 74.7 | 75.0 | 74.7 | 75.3 | 75.9 | 75.8 | 75.8 | 76.1 | 76.2 | 76.3 | 76.2 | 76.1 | 76.1 | 76.3 | 76.4 | 76.6 | 75.9 | 75.8 |      |
| 23   | 75.6 | 75.4 | 75.6 | 75.5 | 75.5 | 76.0 | 77.0 | 77.1 | 77.4 | 77.4 | 77.4 | 77.4 | 77.4 | 77.5 | 77.6 | 77.6 | 77.6 | 77.5 | 77.5 | 77.6 | 77.9 | 78.0 | 78.0 | 77.9 | 77.0 |      |
| 24   | 77.8 | 77.5 | 77.3 | 77.1 | 77.0 | 77.0 | 77.0 | 76.8 | 77.0 | 77.0 | 77.0 | 77.0 | 77.0 | 77.5 | 77.5 | 77.6 | 77.4 | 77.2 | 77.2 | 77.0 | 76.9 | 76.8 | 76.9 | 76.4 | 77.2 |      |
| 25   | 76.4 | 76.6 | 76.4 | 76.4 | 76.4 | 76.6 | 76.6 | 76.5 | 76.6 | 76.9 | 77.1 | 77.1 | 77.2 | 76.9 | 76.8 | 76.9 | 76.5 | 76.5 | 76.3 | 76.3 | 76.0 | 76.0 | 76.1 | 76.1 | 76.6 |      |
| 26   | 76.0 | 76.0 | 76.0 | 76.0 | 76.0 | 75.8 | 75.9 | 76.2 | 76.3 | 76.4 | 76.4 | 76.5 | 76.4 | 76.6 | 76.7 | 76.6 | 76.4 | 76.3 | 76.2 | 76.0 | 75.5 | 75.6 | 75.7 | 75.7 | 76.1 |      |
| 27   | 75.7 | 75.6 | 75.6 | 75.4 | 75.5 | 75.5 | 75.5 | 76.1 | 76.4 | 78.1 | 78.2 | 77.9 | 78.7 | 79.2 | 79.1 | 78.8 | 77.8 | 77.6 | 77.2 | 76.8 | 76.6 | 76.6 | 76.2 | 76.1 | 76.9 |      |
| 28   | 75.8 | 75.6 | 75.6 | 75.5 | 75.6 | 75.3 | 75.2 | 75.4 | 75.7 | 76.3 | 77.2 | 77.4 | 77.4 | 77.2 | 78.1 | 77.7 | 76.8 | 76.5 | 75.9 | 74.1 | 74.0 | 73.8 | 73.6 | 73.5 | 75.9 |      |
| 29   | 73.2 | 72.9 | 73.6 | 73.5 | 73.9 | 73.9 | 74.3 | 75.4 | 76.5 | 77.7 | 78.1 | 78.8 | 78.4 | 78.2 | 78.7 | 77.6 | 77.4 | 76.9 | 76.6 | 76.2 | 75.9 | 75.7 | 75.6 | 75.6 | 76.0 |      |
| 30   | 75.6 | 75.7 | 75.0 | 75.1 | 75.3 | 75.3 | 75.2 | 75.8 | 76.4 | 76.9 | 77.2 | 77.6 | 78.4 | 79.0 | 78.8 | 78.4 | 77.6 | 77.3 | 77.2 | 76.5 | 75.5 | 74.0 | 73.4 | 73.1 | 76.3 |      |
| 31   | 73.0 | 72.5 | 72.3 | 72.6 | 73.2 | 73.6 | 74.7 | 75.3 | 76.0 | 77.5 | 78.6 | 79.1 | 78.3 | 79.0 | 79.3 | 80.0 | 79.4 | 78.8 | 77.9 | 77.4 | 77.3 | 77.1 | 76.6 | 75.7 | 76.4 |      |
| Mean | ...  | 75.0 | 74.9 | 74.8 | 74.7 | 74.6 | 74.6 | 74.7 | 75.0 | 75.6 | 76.3 | 76.8 | 77.3 | 77.6 | 77.7 | 77.8 | 77.5 | 77.1 | 76.7 | 76.3 | 75.9 | 75.7 | 75.5 | 75.3 | 75.2 | 75.9 |

31. Aberdeen : North Wall Screen on Tower :  $h_t$  = 12.5 metres.

April, 1924.

| Day. | 1.   | 2.   | 3.   | 4.   | 5.   | 6.   | 7.   | 8.   | 9.   | 10.  | 11.  | Noon | 13.  | 14.  | 15.  | 16.  | 17.  | 18.  | 19.  | 20.  | 21.  | 22.  | 23.  | 24.  | Mean |
|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| 1    | 75.7 | 76.5 | 75.6 | 75.8 | 76.3 | 76.2 | 76.6 | 77.2 | 78.0 | 78.1 | 78.2 | 78.5 | 78.5 | 78.5 | 78.5 | 78.0 | 77.6 | 77.2 | 76.4 | 76.1 | 75.0 | 73.7 | 73.2 | 73.3 | 76.7 |
| 2    | 73.2 | 73.2 | 73.1 | 73.4 | 72.9 | 72.7 | 73.2 | 74.1 | 75.9 | 77.6 | 78.1 | 78.4 | 78.6 | 78.8 | 78.4 | 78.2 | 78.0 | 77.7 | 77.4 | 77.2 | 77.0 | 76.9 | 76.6 | 76.4 | 76.1 |
| 3    | 76.0 | 75.7 | 75.7 | 75.6 | 75.7 | 75.9 | 76.2 | 77.3 | 78.4 | 77.8 | 77.7 | 78.1 | 77.6 | 77.6 | 77.7 | 77.4 | 77.5 | 77.3 | 77.0 | 76.9 | 76.4 | 76.3 | 76.6 | 76.9 |      |
| 4    | 76.8 | 76.8 | 77.0 | 77.0 | 76.9 | 77.2 | 77.6 | 78.0 | 79.4 | 80.0 | 80.6 | 80.6 | 80.8 | 80.8 | 81.1 | 81.6 | 81.8 | 81.6 | 80.0 | 79.0 | 78.6 | 79.0 | 79.0 | 79.2 |      |
| 5    | 79.0 | 78.9 | 78.9 | 78.6 | 78.2 | 78.2 | 78.7 | 79.8 | 81.0 | 82.0 | 82.0 | 83.2 | 83.1 | 83.4 | 81.1 | 81.6 | 81.1 | 81.0 | 80.0 | 80.0 | 78.7 | 78.2 | 78.7 | 80.3 |      |
| 6    | 78.4 | 78.2 | 78.5 | 78.2 | 78.2 | 78.3 | 78.9 | 79.6 | 80.1 | 80.5 | 81.4 | 82.1 | 82.3 | 82.5 | 83.5 | 83.6 | 82.5 | 82.1 | 81.2 | 80.6 | 80.6 | 80.9 | 80.4 | 80.5 | 80.5 |
| 7    | 81.1 | 81.5 | 81.4 | 81.3 | 81.0 | 80.0 | 79.6 | 80.1 | 81.0 | 82.3 | 85.3 | 85.2 | 85.4 | 85.6 | 85.3 | 84.2 | 83.5 | 82.4 | 80.9 | 80.2 | 79.2 | 78.8 | 78.6 | 81.8 |      |
| 8    | 76.1 | 75.6 | 75.6 | 75.1 | 75.3 | 76.1 | 77.1 | 78.4 | 78.5 | 78.7 | 79.3 | 78.4 | 80.1 | 79.5 | 80.0 | 79.8 | 78.2 | 77.9 | 76.9 | 76.0 | 75.5 | 74.9 | 74.0 | 77.2 |      |
| 9    | 74.5 | 74.0 | 73.7 | 73.4 | 73.0 | 72.7 | 73.3 | 74.1 | 76.3 | 78.1 | 78.4 | 77.8 | 78.4 | 78.1 | 77.5 | 78.0 | 77.8 | 77.3 | 75.8 | 76.4 | 76.3 | 76.5 | 74.2 | 77.2 |      |
| 10   | 76.1 | 76.0 | 76.7 | 76.0 | 76.1 | 76.2 | 76.4 | 76.6 | 77.2 | 77.4 | 77.3 | 77.5 | 77.5 | 77.1 | 77.3 | 76.8 | 76.9 | 77.2 | 76.2 | 75.8 | 75.8 | 75.8 | 75.6 | 75.0 | 76.5 |
| 11   | 74.3 | 74.2 | 73.6 | 73.1 | 73.1 | 74.0 | 75.2 | 76.4 | 76.9 | 77.7 | 77.7 | 77.7 | 77.4 | 77.6 | 76.2 | 78.0 | 76.8 | 76.4 | 75.9 | 75.8 | 75.4 | 75.5 | 75.1 | 74.6 | 75.8 |
| 12   | 74.4 | 74.1 | 74.4 | 74.0 | 73.6 | 73.1 | 73.6 | 74.6 | 75.8 | 76.3 | 76.6 | 74.6 | 75.7 | 75.8 | 75.9 | 76.2 | 75.8 | 75.3 | 74.8 | 74.9 | 74.5 | 74.7 | 74.4 | 74.0 | 74.9 |
| 13   | 73.9 | 73.1 | 72.9 | 72.8 | 72.8 | 72.7 | 74.2 | 75.0 | 77.9 | 78.7 | 78.9 | 79.8 | 79.4 | 79.3 | 79.0 | 78.6 | 78.5 | 78.1 | 77.8 | 77.5 | 77.4 | 77.4 | 77.3 | 76.6 | 76.6 |
| 14   | 75.5 | 76.3 | 75.7 | 76.3 | 76.0 | 76.4 | 76.7 | 76.7 | 76.3 | 76.4 | 76.7 | 77.0 | 76.4 | 77.4 | 78.2 | 79.1 | 79.6 | 79.6 | 78.0 | 76.7 | 76.0 | 75.6 | 75.6 | 76.6 | 76.8 |
| 15   | 75.1 | 75.3 | 74.4 | 74.2 | 74.3 | 75.0 | 75.8 | 76.8 | 77.7 | 79.7 | 80.6 | 81.1 | 81.6 | 82.1 | 82.4 | 81.6 | 81.8 | 81.0 | 80.0 | 78.9 | 78.1 | 77.6 | 76.8 | 77.6 | 78.3 |
| 16   | 77.6 | 77.5 | 77.1 | 76.8 | 76.6 | 76.9 | 79.1 | 79.3 | 79.6 | 80.3 | 81.2 | 80.7 | 81.6 | 80.1 | 80.4 | 80.8 | 79.0 | 79.6 | 77.4 | 76.4 | 76.5 | 76.2 | 75.8 | 75.4 | 78.5 |
| 17   | 75.1 | 75.1 | 74.6 | 74.3 | 74.5 | 75.2 | 76.6 | 77.5 | 78.3 | 78.8 | 79.4 | 80.1 | 80.6 | 81.4 | 80.9 | 80.4 | 80.1 | 80.2 | 78.7 | 77.8 | 77.5 | 77.1 |      |      |      |

Readings in degrees absolute at exact hours, Greenwich Mean Time.

32. Aberdeen : North Wall Screen on Tower :  $h_t$  (height of thermometer bulb above ground) = 12.5 metres.

May, 1924.

| Day. | 1.   | 2.   | 3.   | 4.   | 5.   | 6.   | 7.   | 8.   | 9.   | 10.  | 11.  | Noon | 13.  | 14.  | 15.  | 16.  | 17.  | 18.  | 19.  | 20.  | 21.  | 22.  | 23.  | 24.  | Mean |
|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| 1    | 78.6 | 78.4 | 78.5 | 78.5 | 78.4 | 78.6 | 78.9 | 79.2 | 79.4 | 79.5 | 79.9 | 80.3 | 80.4 | 80.6 | 80.6 | 81.6 | 80.6 | 80.3 | 79.7 | 79.0 | 78.8 | 78.4 | 78.0 | 77.6 | 79.3 |
| 2    | 77.6 | 77.8 | 78.1 | 77.9 | 77.6 | 78.2 | 79.0 | 79.6 | 79.8 | 79.6 | 79.8 | 79.2 | 78.7 | 78.8 | 78.2 | 78.0 | 77.7 | 77.9 | 77.9 | 78.1 | 78.5 | 78.5 | 78.6 | 78.5 | 78.5 |
| 3    | 78.4 | 78.3 | 77.4 | 76.6 | 76.5 | 76.7 | 77.1 | 77.2 | 77.7 | 78.4 | 78.4 | 78.3 | 77.3 | 76.6 | 76.1 | 76.6 | 77.0 | 76.8 | 76.1 | 75.3 | 74.4 | 74.4 | 73.8 | 73.8 | 76.8 |
| 4    | 73.7 | 73.4 | 73.4 | 73.1 | 73.7 | 75.0 | 76.0 | 76.7 | 77.5 | 78.2 | 79.0 | 78.6 | 78.6 | 78.9 | 79.5 | 79.4 | 79.4 | 78.9 | 77.8 | 77.6 | 77.4 | 77.4 | 77.4 | 77.3 | 76.9 |
| 5    | 76.6 | 75.2 | 75.1 | 75.4 | 75.6 | 75.9 | 76.2 | 76.1 | 76.2 | 76.5 | 76.4 | 76.6 | 76.9 | 76.9 | 77.2 | 77.2 | 77.1 | 77.1 | 77.1 | 76.8 | 76.8 | 77.2 | 77.2 | 76.9 | 76.5 |
| 6    | 76.0 | 74.7 | 74.1 | 73.1 | 73.5 | 74.4 | 78.0 | 78.3 | 78.7 | 78.5 | 79.0 | 79.2 | 79.1 | 79.2 | 79.3 | 78.9 | 78.9 | 78.6 | 78.4 | 78.2 | 78.2 | 78.0 | 78.0 | 77.9 | 77.5 |
| 7    | 78.1 | 78.1 | 78.2 | 78.2 | 78.2 | 78.0 | 77.6 | 77.2 | 76.6 | 76.8 | 77.5 | 78.2 | 78.9 | 79.2 | 79.1 | 79.2 | 79.1 | 79.0 | 79.1 | 79.0 | 78.8 | 78.7 | 78.7 | 78.7 | 78.3 |
| 8    | 78.0 | 77.8 | 77.6 | 77.4 | 77.4 | 77.4 | 77.5 | 77.3 | 77.2 | 77.3 | 77.7 | 77.7 | 77.7 | 77.7 | 77.8 | 77.7 | 77.9 | 78.1 | 77.7 | 78.0 | 78.4 | 78.1 | 78.0 | 77.7 | 77.7 |
| 9    | 77.4 | 76.7 | 76.6 | 76.6 | 76.7 | 77.7 | 78.1 | 78.8 | 79.6 | 80.0 | 80.0 | 80.0 | 79.8 | 79.5 | 79.9 | 79.9 | 79.5 | 79.2 | 79.1 | 79.0 | 78.8 | 78.8 | 78.8 | 78.6 | 78.7 |
| 10   | 78.7 | 78.6 | 78.7 | 78.7 | 79.0 | 79.3 | 80.0 | 80.1 | 80.5 | 80.5 | 80.7 | 81.4 | 81.9 | 82.6 | 84.4 | 85.3 | 84.0 | 83.6 | 83.9 | 83.6 | 83.0 | 82.7 | 82.4 | 82.0 | 81.4 |
| 11   | 81.4 | 81.6 | 81.0 | 80.2 | 80.0 | 80.6 | 80.7 | 81.2 | 82.0 | 82.2 | 82.3 | 84.4 | 82.5 | 82.6 | 83.1 | 82.9 | 83.1 | 83.2 | 82.3 | 82.3 | 81.4 | 81.2 | 80.9 | 80.3 | 81.8 |
| 12   | 79.5 | 79.1 | 78.9 | 78.6 | 79.7 | 81.4 | 82.6 | 83.9 | 84.2 | 84.4 | 84.0 | 84.9 | 84.4 | 85.1 | 85.0 | 84.1 | 84.7 | 84.2 | 83.9 | 82.1 | 81.7 | 81.2 | 81.1 | 80.9 | 82.5 |
| 13   | 80.1 | 80.0 | 80.0 | 80.0 | 79.9 | 80.3 | 80.1 | 80.0 | 80.4 | 80.5 | 80.3 | 80.7 | 81.6 | 84.5 | 84.9 | 86.6 | 87.6 | 87.9 | 87.8 | 85.7 | 83.6 | 82.4 | 81.7 | 80.4 | 82.4 |
| 14   | 80.8 | 80.6 | 80.6 | 80.3 | 80.8 | 81.5 | 81.8 | 83.0 | 84.3 | 85.5 | 84.9 | 84.8 | 85.2 | 84.2 | 85.1 | 83.6 | 84.4 | 83.4 | 83.9 | 83.5 | 82.8 | 82.9 | 82.4 | 82.6 | 83.0 |
| 15   | 82.1 | 81.5 | 80.9 | 80.1 | 81.3 | 83.6 | 84.6 | 85.5 | 85.9 | 86.3 | 86.9 | 87.8 | 87.0 | 88.4 | 88.6 | 89.1 | 87.9 | 86.8 | 85.0 | 84.4 | 84.0 | 83.6 | 83.1 | 82.0 | 84.9 |
| 16   | 81.4 | 81.2 | 81.1 | 81.0 | 81.0 | 81.7 | 82.3 | 83.5 | 83.8 | 82.8 | 83.1 | 81.7 | 82.8 | 82.6 | 83.0 | 83.1 | 83.0 | 84.9 | 83.2 | 82.6 | 82.3 | 81.4 | 81.0 | 79.9 | 82.3 |
| 17   | 79.3 | 79.0 | 79.2 | 79.5 | 80.3 | 81.0 | 82.7 | 83.2 | 84.2 | 85.3 | 85.4 | 86.2 | 85.6 | 85.2 | 85.2 | 85.2 | 84.0 | 84.1 | 84.2 | 83.9 | 83.6 | 83.2 | 82.7 | 82.2 | 83.1 |
| 18   | 81.9 | 81.3 | 79.8 | 78.8 | 79.5 | 80.1 | 82.0 | 83.6 | 84.1 | 83.3 | 83.3 | 84.4 | 84.1 | 83.9 | 83.5 | 83.8 | 84.0 | 83.8 | 84.0 | 83.5 | 82.8 | 81.1 | 80.4 | 80.0 | 82.3 |
| 19   | 80.3 | 80.4 | 80.4 | 80.3 | 80.6 | 81.0 | 81.3 | 82.0 | 81.7 | 81.6 | 80.9 | 79.6 | 79.8 | 79.8 | 80.6 | 80.9 | 80.3 | 80.1 | 79.4 | 79.7 | 80.4 | 80.4 | 80.2 | 80.2 | 80.5 |
| 20   | 79.7 | 80.0 | 80.0 | 80.1 | 80.2 | 80.2 | 80.4 | 80.2 | 80.5 | 80.4 | 80.9 | 81.5 | 81.4 | 81.2 | 81.2 | 81.0 | 81.2 | 80.9 | 80.8 | 80.7 | 80.6 | 80.6 | 80.5 | 80.3 | 80.6 |
| 21   | 80.2 | 80.1 | 80.2 | 80.4 | 80.4 | 80.5 | 80.6 | 80.7 | 80.7 | 80.8 | 80.9 | 81.0 | 81.1 | 81.1 | 81.3 | 81.3 | 81.1 | 81.1 | 81.2 | 81.6 | 81.2 | 81.7 | 82.0 | 82.0 | 80.9 |
| 22   | 81.8 | 81.8 | 81.3 | 81.0 | 81.0 | 81.0 | 81.1 | 80.9 | 80.8 | 81.3 | 81.9 | 83.4 | 88.0 | 88.2 | 88.2 | 88.6 | 89.1 | 88.6 | 86.9 | 84.3 | 83.9 | 84.1 | 83.4 | 83.5 | 83.9 |
| 23   | 82.7 | 82.6 | 82.6 | 82.5 | 83.0 | 84.9 | 86.1 | 86.8 | 86.5 | 86.6 | 87.0 | 87.2 | 87.4 | 88.3 | 87.8 | 87.0 | 86.0 | 85.0 | 84.1 | 82.7 | 82.5 | 82.1 | 81.8 | 81.6 | 84.8 |
| 24   | 81.1 | 80.7 | 80.0 | 79.8 | 81.0 | 82.6 | 83.0 | 84.1 | 84.7 | 85.3 | 85.9 | 85.6 | 85.8 | 86.0 | 85.4 | 85.4 | 85.3 | 84.2 | 82.7 | 81.9 | 81.6 | 81.6 | 81.4 | 81.1 | 83.2 |
| 25   | 81.3 | 80.8 | 80.0 | 78.8 | 79.4 | 80.0 | 80.6 | 81.6 | 80.9 | 81.4 | 81.1 | 82.6 | 81.5 | 81.3 | 80.7 | 80.7 | 82.6 | 82.3 | 82.4 | 82.1 | 81.9 | 81.5 | 81.3 | 81.1 | 81.2 |
| 26   | 80.9 | 80.4 | 80.3 | 80.2 | 80.4 | 80.7 | 81.2 | 81.5 | 80.9 | 80.6 | 80.2 | 80.5 | 81.2 | 81.6 | 81.3 | 80.8 | 81.5 | 81.3 | 81.6 | 82.0 | 80.8 | 80.7 | 81.5 | 82.0 | 81.0 |
| 27   | 81.6 | 82.4 | 82.3 | 82.4 | 82.6 | 82.4 | 82.7 | 83.4 | 84.6 | 86.2 | 87.0 | 87.7 | 88.2 | 89.2 | 89.6 | 89.4 | 89.7 | 88.6 | 87.4 | 85.9 | 83.9 | 83.7 | 83.4 | 83.3 | 85.3 |
| 28   | 82.8 | 82.7 | 82.5 | 82.5 | 82.4 | 82.1 | 82.4 | 82.6 | 82.7 | 82.6 | 82.7 | 83.1 | 81.7 | 81.7 | 81.5 | 81.4 | 80.8 | 80.8 | 80.8 | 80.8 | 80.9 | 80.9 | 80.9 | 80.9 | 81.8 |
| 29   | 81.0 | 81.0 | 81.0 | 81.1 | 81.2 | 81.6 | 82.2 | 82.1 | 83.0 | 83.4 | 83.8 | 84.0 | 84.8 | 85.1 | 85.0 | 84.7 | 84.7 | 84.8 | 84.7 | 83.6 | 82.5 | 82.0 | 81.5 | 80.9 | 82.9 |
| 30   | 80.8 | 80.8 | 80.9 | 81.1 | 81.3 | 81.6 | 82.2 | 82.8 | 83.3 | 83.2 | 82.8 | 82.6 | 82.5 | 82.3 | 82.0 | 81.4 | 81.2 | 80.9 | 80.6 | 80.2 | 79.9 | 79.8 | 79.8 | 79.8 | 81.4 |
| 31   | 80.0 | 80.0 | 80.0 | 80.2 | 80.4 | 80.5 | 80.5 | 80.6 | 80.9 | 80.9 | 81.2 | 81.2 | 81.2 | 81.3 | 81.2 | 81.2 | 81.1 | 81.1 | 81.0 | 80.9 | 80.9 | 80.9 | 80.9 | 80.7 | 80.8 |
| Mean | 79.8 | 79.6 | 79.4 | 79.2 | 79.5 | 80.0 | 80.6 | 81.1 | 81.4 | 81.6 | 81.8 | 82.0 | 82.2 | 82.4 | 82.5 | 82.4 | 82.4 | 82.2 | 81.8 | 81.3 | 80.8 | 80.6 | 80.4 | 80.2 | 81.0 |

33. Aberdeen : North Wall Screen on Tower :  $h_t$  = 12.5 metres.

June, 1924.

| Day. | 1.   | 2.   | 3.   | 4.   | 5.   | 6.   | 7.   | 8.   | 9.   | 10.  | 11.  | Noon | 13.  | 14.  | 15.  | 16.  | 17.  | 18.  | 19.  | 20.  | 21.  | 22.  | 23.  | 24.  | Mean |
|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| 1    | 80.7 | 80.7 | 80.7 | 80.7 | 80.7 | 80.6 | 80.4 | 80.6 | 80.4 | 80.7 | 81.1 | 80.9 | 80.8 | 81.2 | 81.6 | 81.1 | 81.6 | 81.4 | 80.6 | 79.8 | 79.8 | 78.6 | 78.5 | 77.7 | 80.5 |
| 2    | 77.8 | 77.7 | 77.7 | 78.1 | 78.8 | 79.0 | 80.6 | 79.9 | 80.0 | 81.7 | 81.4 | 83.0 | 82.4 | 82.9 | 83.2 | 82.8 | 82.9 | 82.1 | 81.1 | 80.6 | 80.6 | 80.0 | 79.1 | 78.0 | 80.4 |
| 3    | 77.4 | 76.1 | 76.3 | 76.6 | 77.6 | 79.3 | 79.4 | 80.9 | 81.4 | 81.9 | 82.6 | 82.7 | 82.8 | 84.1 | 82.6 | 81.8 | 81.1 | 80.7 | 80.6 | 80.3 | 79.7 | 79.6 | 78.9 | 77.6 | 80.1 |
| 4    | 77.1 | 77.2 | 77.3 | 77.6 | 78.4 | 79.2 | 81.0 | 81.6 | 81.1 | 81.7 | 82.1 | 82.0 | 83.6 | 83.1 | 82.0 | 81.7 | 81.5 | 81.4 | 81.7 | 81.3 | 80.8 | 79.9 | 79.9 | 79.1 | 80.5 |
| 5    | 77.8 | 77.7 | 77.1 | 77.4 | 77.1 | 79.4 | 80.9 | 80.8 | 81.1 | 81.5 | 81.8 | 81.2 | 81.3 | 81.1 | 81.4 | 80.8 | 81.0 | 80.9 | 80.7 | 80.4 | 80.2 | 80.1 | 80.1 | 80.1 | 80.1 |
| 6    | 80.3 | 80.4 | 80.6 | 80.2 | 80.2 | 80.2 | 80.1 | 80.3 | 80.4 | 80.9 | 81.3 | 82.0 | 82.9 | 83.0 | 84.0 | 83.3 | 83.8 | 83.9 | 83.2 | 83.7 | 84.1 | 83.9 | 83.7 | 84.0 | 82.0 |
| 7    | 83.6 | 83.6 | 83.2 | 83.0 | 83.5 | 84.8 | 87.4 | 87.1 | 87.5 | 87.2 | 87.5 | 87.9 | 87.3 | 86.7 | 85.3 | 84.9 | 84.3 | 84.4 | 84.0 | 84.1 | 83.4 | 83.3 | 82.7 | 82.7 | 85.0 |
| 8    | 82.7 | 83.2 | 82.6 | 82.4 | 82.3 | 82.4 | 82.6 | 82.6 | 83.0 | 82.7 | 83.4 | 83.1 | 82.8 | 82.7 | 82.6 | 82.7 | 82.7 | 82.5 | 82.8 | 82.8 | 83.4 | 83.2 | 83.4 | 83.2 | 82.8 |
| 9    | 83.3 | 83.4 | 83.5 | 83.7 | 84.2 | 84.6 | 84.6 | 84.9 | 85.7 | 85.7 | 86.1 | 85.9 | 86.4 | 85.5 | 86.1 | 85.8 | 85.2 | 84.5 | 84.2 | 83.3 | 83.0 | 82.9 | 82.6 | 82.6 | 84.5 |
| 10   | 82.4 | 82.1 | 82.0 | 81.9 | 82.1 | 82.2 | 82.3 | 83.1 | 84.1 | 85.7 | 86.5 | 86.6 | 87.3 | 86.6 | 86.0 | 85.4 | 86.6 | 86.0 | 85.5 | 85.1 | 84.7 | 84.7 | 84.6 | 84.1 | 84.5 |
| 11   | 83.9 | 83.9 | 84.0 | 83.7 | 83.2 | 83.6 | 84.3 | 85.6 | 86.8 | 87.4 | 88.0 | 88.1 | 87.8 | 87.4 | 87.6 | 86.2 | 85.6 | 85.1 | 83.9 | 83.1 | 81.6 | 82.4 | 82.2 | 82.1 | 84.9 |
| 12   | 81.8 | 81.9 | 82.1 | 82.5 | 82.7 | 82.4 | 82.3 | 82.2 | 82.2 | 82.2 | 82.1 | 81.6 | 81.4 | 81.4 | 81.4 |      |      |      |      |      |      |      |      |      |      |

Readings in degrees absolute at exact hours, Greenwich Mean Time.

34. Aberdeen : North Wall Screen on Tower :  $h_t$  (height of thermometer bulb above ground) = 12.5 metres.

July, 1924.

| Day. | 1.   | 2.   | 3.   | 4.   | 5.   | 6.   | 7.   | 8.   | 9.   | 10.  | 11.  | Noon | 13.  | 14.  | 15.  | 16.  | 17.  | 18.  | 19.  | 20.  | 21.  | 22.  | 23.  | 24.  | Mean |      |
|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| 1    | 82.5 | 82.7 | 82.8 | 83.3 | 83.3 | 83.5 | 83.7 | 84.0 | 85.7 | 86.3 | 87.2 | 87.6 | 88.9 | 87.3 | 86.0 | 87.2 | 86.3 | 85.9 | 86.1 | 85.5 | 85.0 | 84.9 | 84.5 | 84.3 | 85.2 | 85.2 |
| 2    | 84.7 | 84.2 | 83.8 | 83.9 | 83.9 | 84.0 | 83.7 | 83.5 | 84.0 | 85.1 | 86.4 | 87.0 | 88.1 | 88.0 | 87.7 | 88.1 | 87.1 | 86.7 | 86.7 | 85.5 | 85.1 | 85.1 | 85.0 | 85.0 | 85.0 | 85.5 |
| 3    | 84.8 | 84.7 | 84.7 | 85.0 | 85.1 | 84.8 | 85.2 | 86.9 | 86.7 | 87.9 | 89.2 | 89.9 | 90.7 | 88.1 | 89.1 | 89.2 | 88.2 | 87.1 | 86.2 | 85.3 | 84.5 | 84.3 | 83.9 | 84.0 | 84.0 | 86.5 |
| 4    | 84.1 | 83.9 | 82.9 | 82.8 | 82.9 | 82.9 | 82.9 | 83.4 | 84.2 | 85.3 | 86.3 | 87.2 | 88.7 | 89.1 | 90.8 | 88.5 | 90.4 | 89.4 | 88.6 | 87.2 | 86.7 | 85.9 | 85.5 | 84.9 | 86.0 | 86.0 |
| 5    | 84.2 | 84.0 | 83.5 | 83.4 | 84.4 | 85.7 | 86.8 | 87.5 | 87.9 | 88.1 | 89.1 | 88.0 | 86.1 | 87.9 | 88.6 | 85.9 | 86.3 | 86.5 | 85.7 | 85.3 | 85.1 | 84.6 | 84.1 | 83.9 | 86.0 | 86.0 |
| 6    | 83.7 | 83.7 | 83.5 | 83.4 | 83.4 | 83.5 | 83.7 | 84.0 | 84.4 | 84.6 | 85.6 | 86.7 | 87.7 | 87.9 | 88.1 | 85.1 | 85.8 | 84.7 | 84.3 | 84.2 | 84.1 | 83.9 | 83.6 | 83.9 | 84.7 | 84.7 |
| 7    | 84.1 | 84.1 | 84.1 | 84.2 | 84.3 | 84.6 | 85.5 | 85.9 | 86.2 | 86.7 | 85.8 | 87.1 | 89.9 | 90.2 | 90.4 | 92.2 | 92.3 | 90.4 | 90.8 | 87.7 | 87.1 | 86.3 | 85.8 | 85.2 | 87.1 | 87.1 |
| 8    | 84.7 | 84.7 | 84.3 | 83.5 | 84.7 | 86.4 | 87.6 | 87.0 | 87.8 | 88.4 | 88.1 | 88.3 | 87.4 | 87.6 | 87.2 | 86.2 | 85.0 | 85.2 | 86.1 | 86.5 | 86.0 | 85.1 | 85.0 | 84.6 | 84.1 | 86.1 |
| 9    | 84.0 | 83.9 | 83.6 | 84.0 | 84.2 | 85.0 | 87.0 | 87.7 | 88.3 | 88.0 | 87.2 | 86.1 | 86.9 | 87.0 | 88.2 | 88.0 | 87.6 | 87.4 | 87.6 | 87.1 | 86.1 | 85.6 | 84.6 | 84.1 | 86.2 | 86.2 |
| 10   | 83.9 | 83.3 | 82.7 | 82.4 | 82.8 | 84.5 | 85.7 | 86.5 | 87.7 | 90.6 | 91.4 | 91.0 | 89.4 | 88.3 | 87.0 | 87.3 | 87.6 | 87.0 | 87.3 | 86.8 | 87.2 | 87.2 | 87.3 | 86.7 | 86.7 | 86.7 |
| 11   | 86.3 | 86.0 | 86.2 | 86.6 | 87.6 | 89.3 | 90.3 | 91.0 | 91.6 | 92.6 | 91.6 | 93.0 | 93.0 | 94.1 | 95.4 | 94.2 | 95.7 | 95.5 | 94.7 | 93.0 | 91.7 | 90.6 | 89.3 | 88.4 | 91.1 | 91.1 |
| 12   | 87.5 | 87.0 | 86.8 | 86.2 | 86.8 | 88.2 | 89.4 | 87.9 | 88.1 | 88.4 | 89.4 | 89.2 | 90.2 | 89.1 | 89.3 | 89.5 | 89.6 | 86.5 | 86.4 | 86.4 | 86.4 | 86.5 | 86.2 | 85.2 | 84.1 | 88.4 |
| 13   | 86.8 | 87.8 | 87.5 | 87.1 | 87.4 | 88.7 | 89.7 | 89.8 | 90.1 | 90.9 | 91.7 | 91.9 | 92.6 | 93.3 | 89.6 | 86.9 | 86.5 | 86.4 | 86.4 | 86.4 | 86.4 | 86.5 | 86.2 | 85.2 | 84.1 | 88.4 |
| 14   | 83.6 | 83.4 | 83.8 | 84.5 | 84.7 | 86.3 | 86.4 | 88.1 | 88.9 | 89.6 | 90.0 | 89.9 | 91.0 | 91.2 | 91.3 | 91.3 | 90.6 | 90.0 | 89.2 | 88.7 | 88.4 | 88.2 | 87.6 | 87.0 | 88.0 | 88.0 |
| 15   | 86.6 | 86.5 | 86.0 | 86.1 | 86.3 | 86.3 | 87.0 | 88.0 | 90.3 | 89.5 | 90.9 | 91.5 | 91.2 | 91.6 | 91.2 | 91.3 | 89.7 | 89.3 | 88.4 | 88.3 | 88.1 | 87.7 | 87.5 | 87.5 | 88.6 | 88.6 |
| 16   | 87.2 | 86.6 | 86.2 | 85.7 | 86.2 | 86.8 | 87.0 | 86.6 | 85.9 | 87.3 | 88.6 | 89.0 | 90.5 | 90.7 | 91.5 | 92.5 | 92.6 | 91.0 | 90.0 | 88.9 | 87.6 | 86.2 | 85.5 | 85.6 | 88.2 | 88.2 |
| 17   | 85.3 | 85.1 | 84.8 | 84.4 | 84.3 | 84.7 | 87.3 | 88.5 | 88.7 | 90.1 | 91.0 | 89.9 | 88.6 | 89.9 | 88.6 | 87.1 | 88.0 | 87.7 | 88.8 | 88.0 | 87.4 | 87.0 | 86.6 | 86.0 | 87.4 | 87.4 |
| 18   | 85.6 | 85.1 | 84.7 | 84.6 | 84.7 | 85.4 | 86.6 | 87.8 | 88.2 | 88.6 | 89.3 | 89.0 | 86.8 | 87.5 | 86.6 | 86.6 | 86.7 | 86.8 | 88.9 | 87.2 | 86.4 | 85.2 | 85.4 | 85.0 | 84.4 | 86.6 |
| 19   | 84.9 | 85.0 | 84.7 | 84.3 | 84.9 | 85.0 | 87.2 | 87.6 | 88.3 | 88.7 | 88.6 | 87.8 | 86.9 | 88.0 | 87.6 | 86.6 | 86.5 | 87.9 | 87.4 | 87.4 | 85.6 | 84.8 | 85.0 | 84.4 | 86.5 | 86.5 |
| 20   | 83.8 | 83.0 | 82.1 | 81.9 | 82.6 | 85.0 | 86.1 | 85.9 | 86.8 | 87.1 | 86.3 | 85.8 | 86.2 | 85.8 | 85.9 | 85.8 | 85.4 | 85.0 | 84.4 | 84.4 | 84.4 | 84.4 | 84.4 | 84.4 | 84.4 | 84.9 |
| 21   | 84.0 | 84.0 | 83.9 | 83.8 | 83.8 | 84.0 | 85.9 | 85.6 | 85.6 | 85.8 | 86.2 | 86.4 | 86.2 | 86.1 | 85.7 | 85.7 | 85.2 | 84.9 | 84.9 | 84.6 | 84.5 | 84.5 | 84.6 | 84.7 | 85.1 | 85.1 |
| 22   | 84.7 | 84.7 | 84.0 | 84.2 | 84.6 | 85.5 | 85.8 | 86.4 | 86.6 | 86.7 | 87.1 | 87.1 | 87.5 | 87.9 | 87.6 | 87.1 | 87.1 | 86.5 | 86.3 | 86.1 | 86.1 | 86.2 | 86.2 | 86.2 | 86.2 | 86.2 |
| 23   | 84.2 | 83.9 | 84.4 | 84.1 | 84.7 | 85.0 | 87.6 | 88.5 | 88.1 | 89.0 | 88.6 | 90.2 | 91.0 | 89.1 | 86.9 | 88.0 | 89.4 | 87.0 | 86.2 | 85.7 | 85.1 | 84.5 | 84.4 | 83.7 | 86.7 | 86.7 |
| 24   | 83.3 | 82.8 | 83.1 | 83.1 | 82.9 | 83.3 | 84.7 | 85.5 | 86.2 | 86.5 | 87.1 | 86.8 | 84.6 | 85.4 | 86.1 | 85.3 | 85.0 | 85.9 | 85.7 | 85.0 | 84.8 | 84.5 | 84.3 | 84.2 | 84.8 | 84.8 |
| 25   | 84.0 | 83.6 | 83.1 | 83.0 | 83.2 | 83.9 | 85.0 | 85.8 | 86.0 | 85.8 | 86.0 | 86.4 | 85.8 | 86.4 | 87.3 | 86.7 | 86.1 | 85.7 | 85.3 | 84.9 | 84.1 | 83.4 | 83.0 | 82.6 | 84.9 | 84.9 |
| 26   | 82.6 | 82.7 | 83.1 | 83.0 | 82.6 | 82.8 | 83.2 | 83.7 | 84.8 | 84.6 | 84.4 | 84.9 | 85.6 | 86.4 | 87.0 | 87.0 | 86.5 | 86.0 | 85.3 | 84.9 | 84.4 | 84.2 | 84.0 | 84.0 | 84.7 | 85.0 |
| 27   | 83.8 | 83.7 | 83.6 | 83.6 | 83.8 | 84.1 | 84.8 | 85.7 | 86.0 | 85.6 | 85.3 | 85.3 | 86.5 | 86.1 | 86.1 | 85.8 | 86.2 | 86.0 | 85.2 | 84.8 | 84.8 | 84.8 | 84.8 | 84.8 | 84.7 | 85.0 |
| 28   | 84.6 | 84.5 | 84.4 | 84.0 | 84.4 | 84.6 | 85.0 | 85.6 | 85.4 | 85.9 | 86.4 | 86.3 | 86.5 | 86.4 | 86.3 | 85.8 | 85.7 | 85.4 | 85.3 | 85.2 | 85.1 | 85.0 | 85.0 | 85.0 | 85.0 | 85.3 |
| 29   | 85.1 | 85.1 | 85.1 | 85.1 | 85.2 | 85.1 | 85.1 | 85.1 | 85.1 | 85.2 | 85.4 | 85.7 | 86.1 | 86.6 | 86.8 | 86.8 | 86.7 | 86.4 | 86.4 | 85.9 | 85.7 | 85.7 | 85.7 | 85.6 | 85.6 | 85.7 |
| 30   | 85.6 | 85.6 | 85.6 | 85.6 | 85.5 | 85.5 | 85.7 | 85.9 | 85.9 | 86.2 | 86.8 | 87.3 | 86.9 | 86.6 | 86.9 | 87.1 | 87.1 | 87.0 | 86.6 | 86.3 | 86.2 | 86.2 | 86.2 | 86.0 | 86.0 | 86.3 |
| 31   | 86.0 | 85.9 | 85.8 | 85.7 | 84.7 | 85.8 | 87.2 | 87.7 | 89.7 | 90.2 | 91.0 | 91.8 | 91.8 | 92.9 | 92.5 | 92.7 | 92.6 | 90.0 | 89.7 | 89.4 | 88.7 | 88.1 | 87.7 | 86.6 | 88.9 |      |
| Mean | 84.7 | 84.6 | 84.3 | 84.3 | 84.5 | 85.2 | 86.0 | 86.5 | 87.1 | 87.6 | 88.0 | 88.2 | 88.4 | 88.5 | 88.4 | 88.0 | 87.9 | 87.4 | 87.2 | 86.6 | 86.1 | 85.7 | 85.4 | 85.1 | 86.5 |      |

35. Aberdeen : North Wall Screen on Tower :  $h_t$  = 12.5 metres.

August, 1924.

| Day. | 1.   | 2.   | 3.   | 4.   | 5.   | 6.   | 7.   | 8.   | 9.   | 10.  | 11.  | 12.  | 13.  | 14.  | 15.  | 16.  | 17.  | 18.  | 19.  | 20.  | 21.  | 22.  | 23.  | 24.  | Mean |
|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| 1    | 87.2 | 87.0 | 86.6 | 86.2 | 86.2 | 87.1 | 87.6 | 87.6 | 87.4 | 87.1 | 87.8 | 86.3 | 87.4 | 87.4 | 87.9 | 88.3 | 87.7 | 86.8 | 86.7 | 86.6 | 86.6 | 86.6 | 86.6 | 86.6 | 87.0 |
| 2    | 86.4 | 86.1 | 86.1 | 86.4 | 86.4 | 86.7 | 87.1 | 88.0 | 88.7 | 89.7 | 90.4 | 89.7 | 90.6 | 90.0 | 89.0 | 88.2 | 88.0 | 87.6 | 87.2 | 86.6 | 85.0 | 84.1 | 83.5 | 83.5 | 87.3 |
| 3    | 83.6 | 83.5 | 82.8 | 82.6 | 83.2 | 85.7 | 87.3 | 87.0 | 88.0 | 87.9 | 88.1 | 88.4 | 87.6 | 87.9 | 88.5 | 88.4 | 87.8 | 86.6 | 86.1 | 86.0 | 85.9 | 85.9 | 85.9 | 85.7 | 86.2 |
| 4    | 85.8 | 85.0 | 85.2 | 85.0 | 84.3 | 85.0 | 87.7 | 88.4 | 89.7 | 90.3 | 89.5 | 90.5 | 91.4 | 91.7 | 91.5 | 91.4 | 92.8 | 91.8 | 89.8 | 88.4 | 88.0 | 87.4 | 87.0 | 86.0 | 88.5 |
| 5    | 85.4 | 85.3 | 85.1 | 85.2 | 85.2 | 85.4 | 87.3 | 88.6 | 87.7 | 88.6 | 88.7 | 88.6 | 89.0 | 88.6 | 88.5 | 88.6 | 88.3 | 88.6 | 88.2 | 87.6 | 86.6 | 86.6 | 85.7 | 85.1 | 87.2 |
| 6    | 85.2 | 84.2 | 84.2 | 84.5 | 84.4 | 85.1 | 86.0 | 86.8 | 88.0 | 88.3 | 88.6 | 89.0 | 89.0 | 87.6 | 88.4 | 88.6 | 89.1 | 89.1 | 88.1 | 86.7 | 85.6 | 84.4 | 84.0 | 83.6 | 86.6 |
| 7    | 83.4 | 83.3 | 82.9 | 83.6 | 84.1 | 85.3 | 86.1 | 85.9 | 86.5 | 87.0 | 87.0 | 86.9 | 86.5 | 87.2 | 86.4 | 87.4 | 88.0 | 87.8 | 88.0 | 86.1 | 84.1 | 84.3 | 84.0 | 84.4 | 85.7 |
| 8    | 84.8 | 84.5 | 84.2 | 83.7 | 83.5 | 85.1 | 85.8 | 86.6 | 87.4 | 88.6 | 89.4 | 89.4 | 90.0 | 90.0 | 89.6 | 89.9 | 90.0 | 90.1 | 89.6 | 88.1 | 87.5 | 86.5 | 85.8 | 84.7 | 87.3 |
| 9    | 84.0 | 83.9 | 83.7 | 83.8 | 84.0 | 86.1 | 87.6 | 89.0 | 89.8 | 90.4 | 91.9 | 91.9 | 92.8 | 92.9 | 93.1 | 92.4 | 92.6 | 91.4 | 90.6 | 89.1 | 88.2 | 87.3 | 87.4 | 87.1 | 88.4 |
| 10   | 86.1 | 85.8 | 85.1 | 84.5 | 83.5 | 84.5 | 86.1 | 87.3 | 88.6 | 89.8 | 89.6 | 90.6 | 90.7 | 90.9 | 89.7 | 88.5 | 88.6 | 87.8 | 87.7 | 87.1 | 86.9 | 87.2 | 87.4 | 87.0 | 87.6 |
| 11   | 86.9 | 86.6 | 86.4 | 86.2 | 86.7 | 86.9 | 87.2 | 87.4 | 88.6 | 89.4 | 88.3 |      |      |      |      |      |      |      |      |      |      |      |      |      |      |

Readings in degrees absolute at exact hours, Greenwich Mean Time.

36. Aberdeen : North Wall Screen on Tower :  $h_t$  (height of thermometer bulb above ground) = 12.5 metres.

September, 1924.

| Day. | 1.   | 2.   | 3.   | 4.   | 5.   | 6.   | 7.   | 8.   | 9.   | 10.  | 11.  | Noon | 13.  | 14.  | 15.  | 16.  | 17.  | 18.  | 19.  | 20.  | 21.  | 22.  | 23.  | 24.  | Mean |      |
|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| 1    | 85.7 | 85.4 | 85.2 | 85.1 | 85.3 | 85.4 | 85.8 | 87.2 | 86.9 | 88.0 | 88.4 | 89.2 | 90.0 | 90.0 | 88.2 | 87.7 | 87.9 | 88.0 | 87.3 | 87.0 | 86.5 | 86.2 | 86.2 | 86.4 | 86.4 | 87.0 |
| 2    | 86.2 | 86.3 | 85.6 | 85.0 | 85.3 | 85.6 | 86.0 | 86.1 | 86.7 | 87.7 | 87.2 | 86.5 | 87.4 | 86.7 | 86.5 | 86.2 | 86.5 | 85.4 | 85.0 | 84.9 | 85.4 | 86.1 | 86.2 | 86.2 | 86.5 | 86.1 |
| 3    | 86.2 | 86.1 | 86.0 | 85.7 | 85.7 | 85.4 | 85.1 | 85.6 | 86.9 | 86.6 | 87.1 | 88.6 | 89.0 | 88.6 | 88.0 | 87.6 | 87.7 | 87.5 | 86.6 | 85.9 | 85.3 | 84.2 | 82.5 | 81.4 | 81.4 | 86.3 |
| 4    | 80.7 | 80.3 | 80.2 | 79.5 | 79.3 | 79.1 | 80.3 | 82.6 | 85.0 | 87.0 | 87.7 | 87.7 | 87.9 | 88.0 | 88.0 | 87.7 | 87.7 | 88.0 | 86.5 | 85.2 | 84.0 | 83.1 | 83.2 | 83.9 | 84.2 | 84.2 |
| 5    | 83.6 | 83.7 | 83.7 | 83.5 | 83.6 | 83.4 | 83.2 | 83.7 | 85.5 | 87.0 | 87.5 | 87.7 | 87.7 | 87.6 | 87.2 | 87.3 | 87.0 | 86.2 | 85.8 | 85.3 | 85.8 | 86.0 | 86.1 | 86.1 | 86.1 | 85.5 |
| 6    | 86.1 | 85.9 | 85.2 | 84.9 | 84.6 | 84.9 | 85.3 | 86.2 | 87.6 | 87.9 | 87.7 | 88.9 | 88.4 | 88.2 | 87.6 | 87.7 | 87.1 | 87.0 | 86.2 | 86.2 | 86.5 | 86.5 | 86.5 | 86.5 | 86.5 | 86.6 |
| 7    | 86.4 | 86.3 | 86.3 | 86.2 | 86.2 | 86.2 | 86.3 | 86.2 | 86.7 | 87.0 | 86.5 | 86.6 | 87.0 | 87.5 | 86.7 | 86.5 | 86.2 | 86.1 | 86.0 | 85.7 | 85.7 | 86.0 | 85.8 | 85.8 | 85.8 | 86.4 |
| 8    | 85.7 | 85.7 | 85.9 | 86.0 | 86.0 | 86.0 | 86.0 | 86.4 | 85.9 | 85.9 | 86.0 | 86.2 | 86.5 | 86.8 | 86.9 | 86.8 | 86.9 | 86.6 | 86.4 | 86.2 | 86.5 | 86.6 | 86.2 | 86.1 | 86.1 | 86.2 |
| 9    | 86.0 | 85.9 | 85.0 | 84.8 | 84.7 | 84.8 | 85.1 | 84.1 | 83.6 | 83.5 | 82.9 | 83.6 | 83.7 | 83.3 | 83.3 | 83.2 | 82.5 | 81.8 | 81.1 | 80.9 | 80.0 | 80.0 | 79.8 | 79.3 | 79.3 | 83.2 |
| 10   | 79.0 | 78.5 | 78.1 | 78.0 | 78.1 | 77.8 | 78.6 | 79.9 | 79.7 | 80.5 | 81.6 | 81.9 | 80.5 | 81.5 | 81.4 | 82.1 | 82.2 | 81.1 | 80.0 | 78.5 | 78.2 | 78.0 | 78.4 | 78.4 | 78.4 | 79.7 |
| 11   | 80.2 | 81.5 | 80.8 | 81.2 | 81.7 | 82.4 | 82.7 | 83.0 | 83.5 | 84.0 | 85.9 | 87.9 | 88.1 | 87.8 | 88.5 | 88.2 | 87.4 | 85.9 | 85.0 | 84.0 | 84.1 | 83.6 | 82.9 | 82.4 | 82.4 | 84.2 |
| 12   | 82.4 | 83.6 | 83.9 | 85.2 | 85.2 | 85.5 | 85.9 | 86.4 | 86.4 | 87.2 | 87.3 | 88.4 | 88.4 | 87.5 | 87.9 | 88.4 | 87.2 | 87.0 | 85.9 | 86.2 | 86.0 | 85.6 | 85.4 | 85.7 | 85.7 | 86.2 |
| 13   | 84.7 | 84.0 | 83.8 | 83.9 | 84.9 | 84.6 | 84.4 | 85.1 | 86.3 | 86.7 | 86.9 | 87.8 | 88.4 | 88.7 | 88.8 | 88.4 | 87.0 | 86.1 | 84.6 | 84.4 | 84.0 | 83.3 | 82.6 | 81.9 | 81.9 | 85.5 |
| 14   | 82.1 | 81.1 | 80.6 | 79.5 | 80.1 | 79.8 | 81.4 | 83.2 | 84.3 | 83.9 | 84.7 | 86.2 | 87.1 | 87.6 | 87.0 | 86.4 | 85.7 | 85.1 | 84.0 | 83.4 | 82.6 | 81.9 | 81.4 | 81.7 | 81.7 | 83.4 |
| 15   | 82.1 | 82.0 | 81.9 | 81.5 | 80.9 | 80.7 | 81.7 | 83.0 | 83.4 | 83.2 | 83.9 | 84.4 | 84.8 | 84.9 | 85.6 | 85.6 | 85.3 | 84.9 | 84.7 | 84.6 | 85.2 | 84.9 | 84.9 | 84.7 | 84.7 | 83.6 |
| 16   | 84.4 | 84.0 | 84.4 | 84.6 | 83.7 | 83.9 | 84.6 | 85.4 | 86.6 | 87.5 | 88.6 | 88.7 | 88.5 | 86.4 | 85.8 | 86.4 | 85.7 | 85.2 | 85.3 | 85.6 | 85.9 | 85.8 | 85.7 | 85.5 | 85.5 | 85.7 |
| 17   | 85.2 | 83.9 | 83.9 | 83.5 | 83.9 | 83.6 | 84.1 | 84.7 | 85.3 | 86.3 | 87.4 | 88.4 | 87.1 | 89.4 | 88.5 | 88.4 | 87.2 | 85.6 | 84.4 | 84.6 | 84.2 | 83.8 | 83.6 | 83.6 | 83.6 | 85.5 |
| 18   | 83.2 | 83.6 | 83.2 | 84.2 | 84.0 | 83.8 | 84.0 | 85.0 | 85.7 | 86.2 | 86.5 | 87.5 | 87.8 | 87.7 | 87.6 | 87.0 | 86.4 | 85.4 | 84.4 | 83.5 | 83.0 | 82.2 | 82.2 | 81.8 | 81.8 | 84.9 |
| 19   | 81.5 | 80.6 | 80.5 | 80.0 | 79.9 | 80.8 | 82.3 | 83.3 | 84.0 | 86.0 | 87.4 | 87.9 | 88.0 | 87.7 | 87.1 | 86.9 | 86.3 | 85.2 | 84.5 | 84.6 | 84.7 | 84.5 | 84.1 | 83.8 | 83.8 | 84.2 |
| 20   | 83.4 | 83.0 | 82.6 | 82.2 | 81.0 | 80.3 | 80.0 | 81.4 | 83.0 | 84.3 | 85.6 | 86.2 | 86.1 | 86.6 | 86.1 | 85.6 | 84.9 | 84.5 | 84.3 | 84.1 | 84.0 | 83.9 | 83.9 | 83.9 | 83.4 | 83.8 |
| 21   | 83.3 | 83.4 | 84.1 | 84.6 | 84.2 | 83.6 | 82.9 | 82.6 | 82.8 | 83.6 | 84.7 | 85.5 | 86.7 | 86.6 | 86.4 | 86.7 | 85.8 | 84.7 | 83.0 | 81.7 | 81.2 | 80.6 | 80.4 | 79.6 | 79.6 | 83.8 |
| 22   | 79.4 | 78.8 | 78.1 | 78.0 | 77.6 | 76.1 | 76.7 | 78.6 | 81.6 | 83.4 | 83.9 | 84.0 | 84.0 | 84.4 | 84.8 | 84.2 | 83.7 | 82.7 | 81.8 | 80.0 | 79.4 | 79.2 | 79.4 | 78.2 | 78.2 | 80.8 |
| 23   | 77.9 | 76.4 | 76.6 | 76.4 | 77.6 | 76.9 | 82.8 | 83.4 | 83.3 | 81.6 | 81.2 | 81.4 | 82.0 | 82.7 | 82.2 | 83.0 | 82.8 | 82.6 | 82.0 | 81.7 | 81.0 | 80.6 | 80.4 | 80.5 | 80.5 | 80.6 |
| 24   | 80.9 | 80.7 | 80.9 | 80.6 | 80.1 | 79.6 | 80.1 | 80.6 | 80.6 | 82.5 | 83.2 | 83.4 | 83.9 | 83.4 | 84.2 | 84.0 | 82.6 | 81.9 | 81.3 | 81.0 | 80.2 | 80.4 | 79.9 | 79.6 | 79.6 | 81.5 |
| 25   | 79.6 | 79.1 | 79.0 | 78.7 | 77.6 | 77.4 | 78.0 | 80.1 | 82.4 | 83.8 | 84.7 | 85.6 | 84.7 | 85.5 | 85.0 | 84.9 | 85.0 | 83.7 | 81.6 | 80.5 | 80.4 | 80.2 | 81.7 | 81.9 | 81.9 | 81.7 |
| 26   | 81.6 | 81.5 | 82.0 | 81.9 | 81.5 | 80.7 | 80.4 | 82.0 | 83.6 | 84.6 | 84.9 | 84.7 | 84.9 | 85.0 | 84.9 | 83.4 | 82.4 | 82.2 | 81.6 | 81.6 | 81.5 | 81.5 | 80.1 | 79.4 | 79.4 | 82.5 |
| 27   | 79.3 | 78.8 | 78.5 | 77.2 | 78.1 | 78.7 | 79.4 | 81.2 | 82.4 | 84.2 | 85.3 | 86.1 | 85.9 | 86.4 | 86.4 | 86.1 | 85.7 | 85.0 | 84.6 | 84.0 | 83.9 | 83.4 | 83.6 | 83.3 | 83.3 | 82.7 |
| 28   | 82.8 | 82.3 | 81.3 | 80.5 | 80.2 | 80.8 | 81.6 | 81.9 | 83.0 | 84.4 | 84.8 | 85.2 | 85.7 | 85.7 | 85.6 | 85.1 | 84.9 | 84.7 | 84.5 | 84.7 | 85.0 | 84.9 | 84.5 | 84.4 | 84.4 | 83.7 |
| 29   | 84.6 | 84.6 | 84.7 | 84.9 | 84.8 | 84.8 | 85.0 | 85.0 | 85.4 | 85.7 | 85.7 | 85.2 | 85.4 | 85.1 | 84.9 | 85.0 | 85.1 | 85.6 | 85.3 | 85.4 | 85.2 | 85.1 | 85.3 | 85.4 | 85.4 | 85.1 |
| 30   | 85.2 | 85.5 | 85.1 | 84.2 | 84.0 | 83.9 | 84.6 | 85.0 | 85.2 | 86.6 | 86.5 | 86.3 | 87.2 | 86.4 | 86.0 | 85.6 | 85.4 | 84.3 | 83.4 | 83.4 | 83.4 | 82.6 | 82.2 | 82.1 | 82.1 | 84.9 |
| Mean | ...  | 83.0 | 82.7 | 82.6 | 82.4 | 82.3 | 82.2 | 82.8 | 83.6 | 84.5 | 85.2 | 85.8 | 86.3 | 86.4 | 86.5 | 86.2 | 86.1 | 85.6 | 85.0 | 84.3 | 83.8 | 83.6 | 83.4 | 83.2 | 83.0 | 84.2 |

37. Aberdeen : North Wall Screen on Tower :  $h_t$  = 12.5 metres.

October, 1924.

| Day. | 1.   | 2.     | 3.   | 4.   | 5.   | 6.   | 7.   | 8.   | 9.   | 10.  | 11.  | Noon | 13.  | 14.  | 15.  | 16.  | 17.  | 18.  | 19.  | 20.  | 21.  | 22.  | 23.  | 24.  | Mean |      |
|------|------|--------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| 1    | 81.9 | 81.6   | 81.4 | 81.4 | 81.4 | 81.5 | 81.7 | 82.6 | 83.7 | 84.2 | 85.0 | 84.6 | 85.0 | 84.8 | 84.7 | 84.4 | 83.8 | 84.0 | 84.0 | 84.1 | 84.1 | 83.9 | 83.6 | 83.5 | 83.5 | 83.3 |
| 2    | 83.6 | 83.9   | 84.1 | 83.9 | 83.7 | 83.4 | 83.8 | 84.3 | 84.7 | 85.1 | 85.6 | 85.5 | 85.3 | 86.0 | 86.0 | 85.7 | 85.5 | 85.0 | 84.4 | 84.1 | 83.7 | 83.3 | 83.3 | 82.6 | 82.6 | 83.5 |
| 3    | 83.0 | 83.1   | 83.3 | 83.2 | 83.1 | 82.8 | 82.7 | 82.6 | 83.2 | 84.8 | 84.8 | 85.3 | 84.0 | 83.5 | 85.8 | 84.9 | 84.6 | 84.2 | 84.9 | 84.2 | 84.1 | 84.0 | 84.0 | 84.1 | 84.1 | 84.1 |
| 4    | 84.0 | 83.6   | 83.5 | 83.3 | 83.1 | 83.0 | 83.1 | 83.1 | 83.4 | 83.6 | 84.5 | 84.8 | 85.5 | 85.1 | 85.4 | 85.2 | 84.4 | 84.0 | 83.6 | 83.2 | 83.6 | 84.0 | 84.0 | 84.0 | 84.0 | 84.0 |
| 5    | 84.1 | 84.1   | 84.1 | 84.3 | 84.3 | 84.3 | 84.1 | 84.0 | 84.3 | 84.4 | 84.6 | 84.6 | 84.5 | 84.7 | 84.7 | 84.5 | 84.4 | 84.4 | 84.4 | 84.2 | 84.3 | 83.8 | 83.9 | 83.9 | 84.3 | 84.3 |
| 6    | 83.7 | 83.6   | 82.6 | 82.4 | 82.1 | 81.6 | 81.1 | 81.2 | 81.7 | 82.3 | 83.1 | 84.5 | 84.7 | 84.4 | 84.0 | 83.4 | 83.4 | 83.1 | 83.4 | 83.0 | 82.4 | 82.1 | 82.6 | 81.5 | 81.5 | 82.9 |
| 7    | 80.2 | 79.7   | 81.0 | 79.5 | 79.0 | 79.6 | 80.2 | 80.9 | 81.4 | 82.9 | 84.1 | 83.9 | 84.3 | 84.9 | 84.8 | 84.1 | 83.2 | 82.8 | 81.6 | 80.4 | 80.1 | 79.9 | 80.0 | 79.6 | 79.6 | 80.0 |
| 8    | 77.8 | 78.0   | 77.4 | 76.6 | 76.4 | 76.1 | 76.0 | 77.7 | 79.7 | 81.0 | 81.6 | 83.3 | 84.0 | 83.5 | 84.0 | 83.5 | 82.8 | 81.6 | 80.4 | 80.1 | 79.9 | 80.0 | 79.9 | 79.6 | 80.0 |      |
| 9    | 79.3 | 79.6   | 78.2 | 77.9 | 76.9 | 77.5 | 77.0 | 78.6 | 80.7 | 82.0 | 82.9 | 83.0 | 83.4 | 84.0 | 83.5 | 83.2 | 82.8 | 83.0 | 82.7 | 82.2 | 82.4 | 82.5 | 83.0 | 82.9 | 81.1 |      |
| 10   | 82.4 | 81.5   | 81.6 | 82.5 | 81.9 | 82.1 | 82.7 | 83.1 | 83.8 | 84.5 | 85.3 | 85.9 | 85.8 | 86.6 | 85.3 | 84.6 | 84.0 | 83.3 | 82.6 | 82.0 | 82.1 | 82.3 | 82.9 | 83.2 | 83.4 | 83.4 |
| 11   | 83.9 | 83.1   | 82.1 | 81.2 | 80.5 | 80.1 | 80.0 | 81.1 | 82.4 | 83.6 | 84.0 | 85.8 | 85.7 | 85.2 | 85.1 | 84.9 | 84.7 | 84.6 | 84.1 | 83.9 | 84.0 | 84.1 | 84.1 | 84.0 | 84.0 | 83.4 |
| 12   | 83.7 | 83.8</ |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |

Readings in degrees absolute at exact hours, Greenwich Mean Time.

38. Aberdeen : North Wall Screen on Tower :  $h_t$  (height of thermometer bulb above ground) = 12.5 metres.

November, 1924.

Table with 24 columns for days (1-24) and a 'Mean' column. Each day has 24 rows of temperature readings (a. for absolute) from 1 to 24. The 'Mean' row at the bottom shows average values for each day.

39. Aberdeen : North Wall Screen on Tower :  $h_t$  = 12.5 metres.

December, 1924.

Table with 24 columns for days (1-24) and a 'Mean' column. Each day has 24 rows of temperature readings (a. for absolute) from 1 to 24. The 'Mean' row at the bottom shows average values for each day. A 'G.M.T.' row is at the very bottom.

NOTE.—The initial 2 or 3 of the readings is omitted, i.e., 275.0 degrees absolute is written 75.0.

TEMPERATURE : ANNUAL MEANS OF HOURLY VALUES.  
From readings in degrees absolute at exact hours, Greenwich Mean Time.

40. Aberdeen : North Wall Screen on Tower : ht = 12.5 metres.

1924.

| 1.    | 2.    | 3.    | 4.           | 5.    | 6.    | 7.    | 8.    | 9.    | 10.   | 11.   | Noon  | 13.   | 14.          | 15.   | 16.   | 17.   | 18.   | 19.   | 20.   | 21.   | 22.   | 23.   | 24.   | Mean  |
|-------|-------|-------|--------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|--------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| a.    | a.    | a.    | a.           | a.    | a.    | a.    | a.    | a.    | a.    | a.    | a.    | a.    | a.           | a.    | a.    | a.    | a.    | a.    | a.    | a.    | a.    | a.    | a.    | a.    |
| 80.21 | 80.10 | 80.00 | <b>79.91</b> | 79.91 | 80.11 | 80.49 | 80.86 | 81.29 | 81.73 | 82.12 | 82.43 | 82.61 | <b>82.66</b> | 82.59 | 82.36 | 82.13 | 81.84 | 81.47 | 81.13 | 80.87 | 80.69 | 80.48 | 80.34 | 81.18 |

TEMPERATURE : MONTHLY MEANS AND DIURNAL INEQUALITIES.

The departures from the mean of the day are adjusted for non-cyclic change.

41. Aberdeen : North Wall Screen on Tower : ht = 12.5 metres.

1924.

| Month. | Mean.  | Hour. | G.M.T.       | 1.    | 2.           | 3.           | 4.           | 5.           | 6.           | 7.           | 8.    | 9.    | 10.   | 11.          | Noon.        | 13.          | 14.   | 15.   | 16.   | 17.   | 18.   | 19.   | 20.   | 21.   | 22.   | 23.   | 24. |
|--------|--------|-------|--------------|-------|--------------|--------------|--------------|--------------|--------------|--------------|-------|-------|-------|--------------|--------------|--------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-----|
| Jan.   | a.     | a.    | a.           | a.    | a.           | a.           | a.           | a.           | a.           | a.           | a.    | a.    | a.    | a.           | a.           | a.           | a.    | a.    | a.    | a.    | a.    | a.    | a.    | a.    | a.    | a.    | a.  |
| Feb.   | 277.42 | -0.46 | <b>-0.54</b> | -0.53 | -0.43        | -0.50        | <b>-0.54</b> | -0.50        | -0.43        | -0.38        | -0.18 | +0.23 | +0.59 | +0.90        | <b>+1.05</b> | +1.03        | +0.70 | +0.50 | +0.35 | +0.19 | +0.01 | -0.17 | -0.15 | -0.41 | -0.41 | -0.07 |     |
| Mar.   | 277.16 | -0.06 | -0.13        | -0.19 | -0.12        | -0.19        | -0.40        | <b>-0.42</b> | <b>-0.42</b> | -0.37        | -0.18 | +0.09 | +0.48 | +0.68        | <b>+0.71</b> | +0.60        | +0.45 | +0.15 | -0.09 | -0.05 | -0.14 | -0.14 | -0.16 | -0.12 | -0.07 | -0.78 |     |
| April  | 275.95 | -0.86 | -0.97        | -1.07 | -1.22        | -1.32        | <b>-1.37</b> | -1.22        | -0.93        | -0.30        | +0.32 | +0.91 | +1.35 | +1.68        | +1.77        | <b>+1.81</b> | +1.53 | +1.13 | +0.71 | +0.28 | -0.04 | -0.28 | -0.50 | -0.67 | -0.78 | -1.55 |     |
| May    | 278.85 | -1.42 | -1.54        | -1.70 | -1.89        | <b>-1.97</b> | -1.72        | -0.88        | -0.18        | +0.63        | +1.12 | +1.60 | +1.80 | +1.84        | <b>+1.91</b> | +1.74        | +1.70 | +1.31 | +1.05 | +0.29 | -0.21 | -0.47 | -0.73 | -1.06 | -1.22 | -1.55 |     |
| June   | 281.04 | -1.20 | -1.43        | -1.63 | -1.85        | -1.57        | -1.00        | -0.40        | +0.06        | -0.37        | +0.58 | +0.72 | +0.97 | +1.12        | +1.32        | <b>+1.41</b> | +1.39 | +1.34 | +1.13 | +0.71 | +0.20 | -0.23 | -0.45 | -0.64 | -0.93 | -1.55 |     |
| July   | 284.18 | -1.85 | -2.01        | -2.14 | -2.17        | -1.84        | -0.85        | +0.02        | +0.35        | +0.81        | +1.23 | +1.47 | +1.56 | +1.65        | +1.49        | +1.59        | +1.32 | +1.54 | +1.18 | +0.57 | +0.15 | -0.50 | -0.78 | -1.16 | -1.55 | -1.55 |     |
| Aug.   | 286.48 | -1.71 | -1.88        | -2.09 | <b>-2.17</b> | -1.94        | -1.29        | -0.43        | +0.07        | +0.58        | +1.13 | +1.52 | +1.72 | +1.88        | <b>+1.98</b> | +1.87        | +1.49 | +1.41 | +0.91 | +0.71 | +0.08 | -0.38 | -0.86 | -1.14 | -1.45 | -1.45 |     |
| Sept.  | 286.27 | -1.56 | -1.66        | -1.83 | -1.87        | <b>-1.97</b> | -1.46        | -0.72        | +0.03        | +0.73        | +1.30 | +1.50 | +1.74 | <b>+1.82</b> | +1.79        | +1.74        | +1.61 | +1.39 | +1.00 | +0.48 | -0.09 | -0.55 | -0.88 | -1.20 | -1.35 | -1.35 |     |
| Oct.   | 284.19 | -1.26 | -1.49        | -1.67 | -1.85        | -1.94        | <b>-2.00</b> | -1.41        | -0.58        | +0.27        | +1.03 | +1.56 | +2.07 | +2.25        | <b>+2.28</b> | +2.06        | +1.90 | +1.44 | +0.87 | +0.11 | -0.32 | -0.51 | -0.72 | -0.98 | -1.15 | -1.15 |     |
| Nov.   | 282.02 | -0.92 | -0.95        | -1.09 | -1.16        | -1.28        | <b>-1.40</b> | -1.38        | -0.98        | -0.31        | +0.46 | +1.03 | +1.50 | +1.75        | <b>+1.93</b> | +1.81        | +1.42 | +1.02 | +0.68 | +0.25 | -0.12 | -0.39 | -0.59 | -0.63 | -0.77 | -0.77 |     |
| Dec.   | 280.61 | -0.17 | -0.27        | -0.32 | -0.51        | -0.59        | <b>-0.60</b> | -0.55        | -0.34        | +0.46        | +0.73 | +0.90 | +1.06 | +1.23        | <b>+1.32</b> | +1.13        | +0.87 | +0.53 | +0.19 | +0.09 | -0.02 | -0.12 | -0.09 | -0.24 | -0.25 | -0.25 |     |
| Year   | 280.00 | -0.25 | -0.16        | -0.03 | -0.12        | -0.21        | -0.30        | -0.39        | <b>-0.43</b> | <b>-0.43</b> | -0.22 | +0.14 | +0.43 | <b>+0.66</b> | +0.57        | +0.34        | +0.11 | 0.06  | +0.09 | +0.06 | +0.11 | +0.07 | +0.04 | -0.07 | -0.10 | -0.10 |     |
| Year   | 281.18 | -0.98 | -1.09        | -1.19 | -1.28        | <b>-1.28</b> | -1.08        | -0.69        | -0.33        | +0.11        | +0.55 | +0.94 | +1.25 | +1.43        | <b>+1.48</b> | +1.41        | +1.18 | +0.95 | +0.66 | +0.30 | -0.04 | -0.31 | -0.48 | -0.69 | -0.84 | -0.84 |     |

ABSOLUTE EXTREMES OF TEMPERATURE FOR EACH DAY.

Maximum and Minimum for the interval 0h. to 24h., Greenwich Mean Time.

42. Aberdeen : North Wall Screen on Tower : ht = 12.5 metres.

1924.

| Month | Jan.        | Feb.        | Mar.        | April.      | May.        | June.       | July.       | Aug.        | Sept.       | Oct.        | Nov.        | Dec.        |
|-------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
| Day.  | Max.        | Min.        | Max.        | Min.        | Max.        | Min.        | Max.        | Min.        | Max.        | Min.        | Max.        | Min.        |
| 1     | 83.7        | 75.4        | 80.4        | 74.4        | 74.6        | 72.2        | 79.0        | 72.9        | 81.8        | 77.6        | 82.1        | 77.7        |
| 2     | 80.1        | 75.9        | <b>84.1</b> | 79.4        | 75.3        | 60.8        | 79.0        | 72.7        | 80.1        | 77.4        | 83.6        | 77.4        |
| 3     | 77.6        | 72.3        | 83.1        | 80.3        | 76.2        | <b>67.4</b> | 78.4        | 75.6        | 78.5        | 73.8        | 84.1        | <b>75.8</b> |
| 4     | 79.8        | 72.0        | 83.2        | 79.0        | 76.4        | 70.1        | 82.2        | 76.6        | 79.8        | 72.9        | 83.6        | 77.0        |
| 5     | 80.8        | 77.5        | 83.7        | 76.3        | 76.4        | 71.2        | 83.8        | 77.8        | 77.3        | 74.7        | 81.9        | 77.0        |
| 6     | 79.9        | 76.5        | 80.2        | 75.3        | 76.5        | 67.5        | 84.0        | 78.0        | 79.5        | <b>72.8</b> | 84.1        | 80.0        |
| 7     | 78.6        | 76.4        | 81.0        | 77.0        | 79.4        | 74.3        | 85.8        | 76.2        | 79.3        | 76.2        | 88.0        | 82.6        |
| 8     | 78.3        | 73.1        | 78.8        | 77.4        | 81.2        | 75.6        | 80.9        | 73.9        | 78.7        | 77.0        | 83.6        | 82.3        |
| 9     | 73.2        | 70.0        | 78.7        | 76.9        | 81.3        | 74.4        | 78.6        | <b>72.5</b> | 80.2        | 76.2        | 86.5        | 82.4        |
| 10    | 75.0        | 72.4        | 78.8        | 76.1        | 78.8        | 76.4        | 77.7        | 75.0        | 85.5        | 78.6        | 87.3        | 81.8        |
| 11    | 76.7        | <b>68.4</b> | 76.4        | 74.5        | 79.6        | 76.6        | 78.2        | 72.9        | 84.6        | 79.9        | 88.6        | 81.6        |
| 12    | 78.0        | 75.6        | 75.4        | 74.2        | 80.3        | 76.8        | 76.6        | 73.0        | 85.6        | 78.4        | 82.7        | 80.3        |
| 13    | 80.1        | 74.5        | 75.3        | 73.8        | 79.6        | 75.8        | 79.8        | 72.6        | 88.2        | 79.9        | 84.6        | 77.3        |
| 14    | 77.1        | 73.0        | 74.5        | 72.4        | <b>84.0</b> | 76.4        | 79.7        | 75.4        | 85.9        | 79.7        | 87.4        | 76.4        |
| 15    | 79.6        | 77.0        | 77.5        | 74.0        | 81.3        | 77.1        | 82.9        | 74.1        | 89.3        | 79.9        | 90.2        | 82.5        |
| 16    | 79.4        | 77.0        | 78.3        | 75.4        | 78.2        | 74.0        | 81.9        | 75.4        | 85.1        | 79.9        | 89.0        | 81.1        |
| 17    | 77.1        | 75.2        | 81.3        | 75.7        | 77.2        | 73.0        | 81.5        | 74.1        | 86.8        | 78.6        | 84.9        | 81.9        |
| 18    | 77.9        | 74.6        | 80.4        | 74.2        | 77.2        | 73.1        | 85.3        | 76.6        | 84.8        | 78.7        | 88.8        | 82.3        |
| 19    | 79.3        | 74.3        | 78.8        | 74.1        | 77.1        | 70.6        | 86.0        | 80.3        | 82.1        | 79.3        | 87.3        | 81.1        |
| 20    | 79.3        | 73.6        | 81.6        | 76.5        | 76.8        | 69.9        | <b>90.9</b> | 82.8        | 81.9        | 79.6        | 89.3        | 81.0        |
| 21    | 79.0        | 72.4        | 80.6        | 76.2        | 77.1        | 73.3        | 85.2        | 76.2        | 82.1        | 80.1        | 89.1        | 79.7        |
| 22    | 79.4        | 78.9        | 76.6        | 74.9        | 76.6        | 74.5        | 78.8        | 74.4        | 89.7        | 80.8        | 87.7        | 80.0        |
| 23    | 79.1        | 78.0        | 81.0        | 74.5        | 78.1        | 75.3        | 81.6        | 74.8        | 88.4        | 81.6        | 87.7        | 82.0        |
| 24    | 81.1        | 75.5        | 80.8        | 76.2        | 77.9        | 76.2        | 80.0        | 73.4        | 86.1        | 79.6        | 90.8        | 84.7        |
| 25    | 81.6        | 75.4        | 77.7        | 74.6        | 77.4        | 75.8        | 85.8        | 79.9        | 82.8        | 78.7        | <b>92.2</b> | 83.7        |
| 26    | 82.7        | 76.9        | 77.6        | 74.4        | 76.9        | 75.3        | 83.0        | 79.6        | 82.1        | 80.1        | <b>92.2</b> | 87.6        |
| 27    | 79.4        | 76.0        | 79.4        | 71.3        | 79.4        | 75.3        | 84.9        | 79.0        | <b>90.0</b> | 81.5        | 88.2        | 82.8        |
| 28    | 80.4        | 78.5        | 75.5        | <b>70.3</b> | 78.2        | 73.4        | 82.0        | 77.4        | 83.3        | 80.7        | 88.2        | 81.3        |
| 29    | <b>84.7</b> | 77.8        | 77.0        | 71.4        | 79.0        | 72.6        | 80.8        | 77.5        | 85.3        | 80.7        | 92.1        | 83.1        |
| 30    | 80.1        | 75.6        | —           | —           | 79.4        | 72.9        | 79.3        | 78.2        | 83.3        | 79.7        | 89.5        | 81.8        |
| 31    | 82.1        | 75.6        | —           | —           | 80.0        | 72.1        | —           | —           | 81.4        | 79.7        | —           | —           |
| Mean  | 79.4        | 75.0        | 79.3        | 75.2        | 78.3        | 73.5        | 81.8        | 76.0        | 83.5        | 78.5        | 87.2        | 80.9        |

NOTE.—The initial 2 or 3 of the readings is omitted, i.e., 275.0 degrees absolute is written 75.0.

† Interpolated value.

Percentages at exact hours Greenwich Mean Time. Determined as explained on page 14.

**43. Aberdeen : North Wall Screen on Tower : ht (height of thermometer bulbs above the ground) = 12.5 metres. January, 1924.**

| Day.             | 1.      | 2.      | 3.      | 4.      | 5.      | 6.      | 7.      | 8.      | 9.      | 10.     | 11.     | Noon.   | 13.     | 14.     | 15.     | 16.     | 17.     | 18.     | 19.     | 20.     | 21.     | 22.     | 23.     | 24.     | Mean.   | Vapour Pressure.* |     |
|------------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|-------------------|-----|
| 1                | 93      | 93      | 96      | 90      | 93      | 95      | 96      | 91      | 89      | 86      | 82      | 81      | 78      | 79      | 83      | 86      | 90      | 93      | 94      | 95      | 95      | 95      | 95      | 92      | 90.1    | 9.5               |     |
| 2                | 89      | 89      | 94      | 92      | 87      | 90      | 90      | 93      | 94      | 97      | 96      | 94      | 96      | 94      | 90      | 97      | 97      | 95      | 92      | 92      | 93      | 94      | 95      | 87      | 92.0    | 8.3               |     |
| 3                | 91      | 89      | 88      | 90      | 87      | 87      | 87      | 80      | 84      | 81      | 80      | 76      | 77      | 77      | 77      | 80      | 81      | 84      | 85      | 88      | 91      | 89      | 86      | 84      | 84.2    | 6.1               |     |
| 4                | 84      | 86      | 84      | 84      | 86      | 85      | 84      | 86      | 86      | 85      | 84      | 87      | 89      | 90      | 89      | 88      | 91      | 92      | 89      | 90      | 90      | 91      | 85      | 86      | 87.1    | 6.5               |     |
| 5                | 87      | 88      | 93      | 94      | 92      | 94      | 93      | 91      | 92      | 92      | 90      | 89      | 89      | 89      | 89      | 89      | 91      | 90      | 90      | 90      | 90      | 90      | 91      | 91      | 90.3    | 8.6               |     |
| 6                | 90      | 91      | 94      | 94      | 94      | 94      | 92      | 90      | 90      | 86      | 86      | 86      | 86      | 84      | 83      | 84      | 84      | 87      | 85      | 85      | 85      | 88      | 83      | 79      | 87.7    | 7.8               |     |
| 7                | 82      | 82      | 82      | 82      | 80      | 82      | 80      | 78      | 86      | 79      | 86      | 79      | 78      | 81      | 81      | 81      | 81      | 83      | 81      | 80      | 78      | 76      | 79      | 76      | 80.1    | 6.9               |     |
| 8                | 80      | 79      | 83      | 80      | 92      | 81      | 79      | 78      | 83      | 79      | 77      | 75      | 80      | 79      | 81      | 74      | 73      | 72      | 69      | 68      | 74      | 79      | 83      | 65      | 77.9    | 6.0               |     |
| 9                | 83      | 76      | 56      | 69      | 56      | 61      | 56      | 56      | 60      | 61      | 58      | 61      | 77      | 96      | 93      | 86      | 63      | 89      | 72      | 74      | 67      | 58      | 50      | 61      | 68.4    | 3.8               |     |
| 10               | 61      | 61      | 71      | 65      | 66      | 72      | 73      | 80      | 79      | 72      | 74      | 91      | 77      | 77      | 76      | 93      | 93      | 90      | 84      | 78      | 86      | 75      | 80      | 85      | 77.0    | 4.9               |     |
| 11               | 86      | 81      | 79      | 86      | 77      | 84      | 91      | 92      | 92      | 92      | 92      | 75      | 81      | 80      | 77      | 81      | 83      | 79      | 87      | 87      | 88      | 86      | 89      | 85      | 84.6    | 4.8               |     |
| 12               | 85      | 90      | 94      | 89      | 89      | 87      | 87      | 85      | 83      | 78      | 76      | 73      | 72      | 72      | 69      | 72      | 71      | 72      | 72      | 75      | 73      | 67      | 70      | 75      | 78.6    | 6.1               |     |
| 13               | 82      | 85      | 90      | 88      | 87      | 89      | 91      | 94      | 94      | 96      | 97      | 97      | 97      | 97      | 94      | 93      | 93      | 94      | 94      | 88      | 87      | 78      | 80      | 81      | 90.1    | 7.4               |     |
| 14               | 84      | 85      | 86      | 85      | 89      | 83      | 84      | 84      | 83      | 84      | 87      | 88      | 85      | 90      | 86      | 84      | 91      | 92      | 91      | 91      | 98      | 95      | 90      | 88      | 87      | 87.6              | 6.2 |
| 15               | 87      | 85      | 85      | 87      | 92      | 91      | 94      | 97      | 94      | 94      | 94      | 94      | 93      | 92      | 93      | 95      | 95      | 94      | 94      | 93      | 92      | 93      | 93      | 93      | 92.1    | 8.4               |     |
| 16               | 94      | 94      | 93      | 93      | 93      | 92      | 88      | 87      | 87      | 83      | 83      | 84      | 82      | 84      | 84      | 84      | 81      | 79      | 79      | 80      | 79      | 74      | 78      | 79      | 85.0    | 7.6               |     |
| 17               | 77      | 78      | 74      | 73      | 72      | 74      | 74      | 74      | 70      | 74      | 74      | 70      | 71      | 67      | 72      | 72      | 72      | 71      | 72      | 71      | 72      | 76      | 76      | 76      | 73.3    | 5.5               |     |
| 18               | 77      | 85      | 78      | 71      | 72      | 73      | 72      | 84      | 90      | 91      | 94      | 91      | 97      | 92      | 97      | 92      | 92      | 93      | 95      | 95      | 97      | 97      | 97      | 97      | 87.9    | 6.7               |     |
| 19               | 98      | 98      | 98      | 97      | 96      | 94      | 88      | 87      | 85      | 87      | 87      | 86      | 85      | 83      | 86      | 86      | 88      | 89      | 89      | 92      | 92      | 94      | 91      | 93      | 90.5    | 7.6               |     |
| 20               | 95      | 95      | 91      | 85      | 90      | 89      | 85      | 82      | 82      | 73      | 71      | 70      | 69      | 69      | 70      | 71      | 72      | 73      | 80      | 77      | 74      | 71      | 74      | 79      | 78.9    | 6.2               |     |
| 21               | 80      | 82      | 77      | 80      | 80      | 83      | 81      | 86      | 85      | 88      | 92      | 88      | 87      | 90      | 90      | 91      | 93      | 95      | 95      | 94      | 95      | 98      | 98      | 98      | 88.2    | 6.9               |     |
| 22               | 98      | 100     | 100     | 99      | 99      | 99      | 99      | 99      | 99      | 99      | 99      | 99      | 99      | 99      | 99      | 99      | 99      | 99      | 99      | 99      | 99      | 99      | 100     | 100     | 99.1    | 9.3               |     |
| 23               | 98      | 98      | 98      | 100     | 100     | 100     | 100     | 100     | 100     | 99      | 98      | 98      | 98      | 98      | 97      | 97      | 95      | 95      | 94      | 94      | 96      | 93      | 93      | 91      | 97.2    | 8.8               |     |
| 24               | 91      | 91      | 93      | 94      | 91      | 91      | 93      | 91      | 93      | 90      | 90      | 90      | 90      | 82      | 80      | 80      | 78      | 74      | 71      | 74      | 73      | 73      | 82      | 81      | 85.0    | 7.8               |     |
| 25               | 80      | 81      | 81      | 81      | 85      | 86      | 87      | 90      | 87      | 85      | 90      | 87      | 83      | 86      | 90      | 90      | 92      | 81      | 89      | 88      | 84      | 84      | 85      | 84      | 85.6    | 7.5               |     |
| 26               | 84      | 80      | 79      | 77      | 76      | 77      | 76      | 76      | 78      | 80      | 81      | 83      | 82      | 81      | 81      | 81      | 82      | 81      | 79      | 74      | 78      | 76      | 95      | 92      | 80.2    | 8.5               |     |
| 27               | 90      | 81      | 76      | 68      | 69      | 71      | 71      | 72      | 73      | 70      | 72      | 67      | 68      | 67      | 72      | 70      | 73      | 75      | 77      | 78      | 75      | 75      | 77      | 96      | 73.8    | 6.3               |     |
| 28               | 77      | 80      | 83      | 81      | 83      | 91      | 83      | 89      | 86      | 86      | 86      | 81      | 79      | 77      | 76      | 77      | 81      | 82      | 82      | 81      | 87      | 91      | 93      | 93      | 83.2    | 7.9               |     |
| 29               | 93      | 92      | 94      | 92      | 90      | 90      | 81      | 87      | 85      | 82      | 80      | 78      | 83      | 82      | 84      | 85      | 88      | 90      | 84      | 84      | 89      | 93      | 93      | 92      | 87.1    | 9.5               |     |
| 30               | 94      | 92      | 91      | 89      | 89      | 80      | 82      | 80      | 79      | 83      | 77      | 77      | 76      | 78      | 81      | 87      | 82      | 86      | 84      | 86      | 87      | 88      | 89      | 91      | 84.5    | 7.3               |     |
| 31               | 87      | 87      | 90      | 91      | 86      | 83      | 85      | 85      | 83      | 85      | 84      | 85      | 85      | 81      | 67      | 67      | 71      | 72      | 67      | 74      | 81      | 77      | 77      | 78      | 80.6    | 7.6               |     |
| Mean ...         | 86.4    | 86.3    | 86.2    | 85.4    | 85.0    | 85.2    | 84.9    | 85.3    | 85.5    | 84.5    | 84.3    | 83.1    | 83.7    | 83.5    | 83.4    | 84.5    | 84.4    | 85.2    | 84.4    | 84.5    | 85.2    | 84.1    | 85.5    | 84.7    | 84.8    | 77.2              |     |
| Vapour Pressure* | mb. 7.0 | mb. 7.0 | mb. 7.0 | mb. 6.9 | mb. 6.9 | mb. 6.9 | mb. 6.9 | mb. 6.9 | mb. 7.0 | mb. 7.0 | mb. 7.1 | mb. 7.2 | mb. 7.4 | mb. 7.5 | mb. 7.4 | mb. 7.4 | mb. 7.3 | mb. 7.3 | mb. 7.1 | mb. 7.0 | mb. 7.0 | mb. 6.9 | mb. 6.9 | mb. 6.9 | mb. 6.9 | mb. 6.9           |     |

**44. Aberdeen : North Wall Screen on Tower : ht = 12.5 metres. February, 1924.**

|    | %  | %  | %  | %  | %  | %  | %  | %  | %  | %  | %  | %  | %  | %  | %  | %  | %  | %  | %  | %  | %  | %  | %  | %  | %    | mb.  |     |
|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|------|------|-----|
| 1  | 72 | 78 | 75 | 73 | 76 | 73 | 80 | 72 | 78 | 80 | 68 | 68 | 64 | 68 | 69 | 71 | 69 | 73 | 72 | 72 | 74 | 74 | 71 | 74 | 74   | 72.7 | 8.1 |
| 2  | 69 | 65 | 69 | 70 | 67 | 67 | 68 | 71 | 72 | 68 | 65 | 66 | 65 | 66 | 62 | 63 | 63 | 65 | 67 | 66 | 69 | 67 | 69 | 69 | 69   | 67.1 | 6.0 |
| 3  | 71 | 71 | 70 | 69 | 69 | 67 | 68 | 70 | 70 | 67 | 65 | 65 | 62 | 64 | 66 | 67 | 68 | 69 | 69 | 70 | 68 | 71 | 68 | 66 | 68.4 | 7.8  |     |
| 4  | 63 | 63 | 66 | 66 | 71 | 72 | 67 | 68 | 71 | 68 | 67 | 69 | 70 | 73 | 73 | 72 | 73 | 74 | 72 | 72 | 71 | 73 | 73 | 70 | 69.8 | 7.7  |     |
| 5  | 66 | 67 | 70 | 71 | 69 | 68 | 68 | 67 | 63 | 82 | 87 | 77 | 73 | 77 | 75 | 73 | 70 | 76 | 83 | 78 | 86 | 80 | 86 | 80 | 74.4 | 7.4  |     |
| 6  | 87 | 86 | 81 | 81 | 80 | 85 | 90 | 91 | 93 | 91 | 93 | 90 | 91 | 93 | 93 | 95 | 96 | 97 | 93 | 84 | 79 | 81 | 83 | 87 | 88.3 | 7.1  |     |
| 7  | 82 | 76 | 82 | 81 | 80 | 85 | 82 | 80 | 81 | 76 | 75 | 82 | 70 | 69 | 72 | 65 | 67 | 68 | 77 | 82 | 81 | 81 | 81 | 81 | 77.1 | 7.3  |     |
| 8  | 82 | 90 | 91 | 93 | 91 | 87 | 84 | 83 | 87 | 81 | 71 | 75 | 72 | 73 | 71 | 72 | 77 | 81 | 81 | 81 | 82 | 82 | 84 | 83 | 81.4 | 7.1  |     |
| 9  | 81 | 81 | 80 | 78 | 79 | 76 | 77 | 71 | 64 | 69 | 75 | 77 | 77 | 76 | 75 | 74 | 74 | 77 | 81 | 85 | 89 | 95 | 95 | 95 | 79.0 | 6.9  |     |
| 10 | 92 | 91 | 93 | 95 | 95 | 94 | 92 | 94 | 88 | 87 | 86 | 86 | 90 | 95 | 91 | 92 | 91 | 92 | 89 | 88 | 86 | 83 | 83 | 82 | 90.4 | 7.5  |     |
| 11 | 75 | 76 | 80 | 87 | 75 | 75 | 72 | 76 | 75 | 72 | 76 | 72 | 71 | 71 | 71 | 71 | 74 | 72 | 72 | 73 | 77 | 77 | 80 | 80 | 75.2 | 5.5  |     |
| 12 | 79 | 80 | 79 | 83 | 90 | 89 | 91 | 88 | 91 | 93 | 91 | 93 | 89 | 91 | 91 | 89 | 88 | 89 | 84 | 82 | 79 | 73 | 75 | 76 | 85.6 | 5.9  |     |
| 13 | 75 | 75 | 73 | 70 | 72 | 71 | 73 | 67 | 66 | 69 | 76 | 73 | 70 | 72 | 72 | 71 | 69 | 70 | 71 | 67 | 67 | 66 | 66 | 65 | 70.5 | 4.8  |     |
| 14 | 66 | 63 | 64 | 68 | 65 | 70 | 69 | 70 | 74 | 73 | 64 | 62 | 59 | 57 | 55 | 62 | 67 | 67 | 68 | 70 | 84 | 88 | 87 | 87 | 68.7 | 4.4  |     |
| 15 | 79 | 78 | 76 | 80 | 80 | 79 | 77 | 80 | 82 | 85 | 83 | 84 | 83 | 79 | 90 | 93 | 91 | 91 | 91 | 95 | 92 | 90 | 94 | 94 | 85.1 | 6.2  |     |
| 16 | 92 | 93 | 93 | 95 | 94 | 94 | 95 | 96 | 93 | 94 | 89 | 77 | 74 | 74 | 74 | 75 | 79 | 78 | 77 | 78 | 77 | 78 | 73 | 72 | 73   | 84.2 | 6.5 |
| 17 | 76 | 75 | 72 | 73 | 74 | 76 | 87 | 89 | 91 | 91 | 91 | 86 | 81 | 78 | 81 | 80 | 83 | 84 | 84 | 91 | 91 | 90 | 89 | 89 | 83.1 | 7.4  |     |
| 18 | 89 | 91 | 91 | 86 | 86 | 83 | 73 | 77 | 72 | 67 | 67 | 74 | 71 | 74 | 71 | 69 | 73 | 79 |    |    |    |    |    |    |      |      |     |

Percentages at exact hours, Greenwich Mean Time. Determined as explained on page 14.

45. Aberdeen : North Wall Screen on Tower :  $h_t$  (height of thermometer bulbs above the ground) = 12.5 metres.

March, 1924.

| Day.             | 1.      | 2.      | 3.      | 4.      | 5.      | 6.      | 7.      | 8.      | 9.      | 10.     | 11.     | Noon.   | 13.     | 14.     | 15.     | 16.     | 17.     | 18.     | 19.     | 20.     | 21.     | 22.     | 23.     | 24.     | Mean.   | Vapour Pressure.* |
|------------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|-------------------|
| 1                | 88      | 83      | 81      | 83      | 83      | 89      | 85      | 85      | 80      | 80      | 88      | 79      | 70      | 74      | 71      | 70      | 70      | 71      | 71      | 67      | 66      | 63      | 63      | 62      | 76.7    | 4.8               |
| 2                | 61      | 61      | 60      | 62      | 68      | 77      | 87      | 90      | 90      | 87      | 83      | 78      | 70      | 72      | 73      | 76      | 77      | 84      | 89      | 91      | 93      | 90      | 89      | 89      | 78.5    | 4.8               |
| 3                | 92      | 92      | 92      | 92      | 92      | 91      | 89      | 90      | 87      | 80      | 70      | 67      | 64      | 63      | 64      | 68      | 68      | 78      | 84      | 82      | 83      | 83      | 84      | 84      | 80.7    | 4.5               |
| 4                | 84      | 83      | 83      | 84      | 87      | 87      | 87      | 86      | 86      | 76      | 62      | 60      | 63      | 69      | 73      | 72      | 77      | 76      | 73      | 70      | 67      | 69      | 70      | 68      | 75.8    | 4.6               |
| 5                | 71      | 75      | 81      | 84      | 84      | 84      | 83      | 83      | 81      | 79      | 72      | 79      | 79      | 86      | 78      | 77      | 77      | 79      | 91      | 91      | 87      | 84      | 84      | 85      | 80.8    | 5.2               |
| 6                | 84      | 83      | 83      | 83      | 82      | 80      | 80      | 77      | 71      | 64      | 65      | 58      | 65      | 64      | 61      | 65      | 65      | 65      | 65      | 61      | 63      | 66      | 71      | 77      | 70.9    | 4.3               |
| 7                | 79      | 82      | 83      | 85      | 88      | 88      | 79      | 70      | 68      | 66      | 64      | 65      | 64      | 64      | 62      | 64      | 65      | 68      | 70      | 70      | 68      | 71      | 71      | 70      | 72.0    | 5.8               |
| 8                | 70      | 66      | 66      | 81      | 85      | 81      | 80      | 76      | 75      | 72      | 72      | 71      | 65      | 65      | 65      | 67      | 73      | 78      | 79      | 78      | 79      | 85      | 86      | 87      | 74.7    | 6.6               |
| 9                | 88      | 90      | 88      | 91      | 88      | 87      | 87      | 90      | 89      | 87      | 78      | 76      | 75      | 76      | 71      | 70      | 73      | 76      | 79      | 81      | 79      | 84      | 81      | 83      | 82.0    | 7.0               |
| 10               | 82      | 81      | 85      | 86      | 88      | 89      | 88      | 89      | 91      | 95      | 96      | 95      | 95      | 97      | 95      | 97      | 96      | 96      | 99      | 99      | 99      | 97      | 99      | 99      | 92.7    | 8.0               |
| 11               | 99      | 94      | 95      | 95      | 95      | 94      | 95      | 94      | 91      | 93      | 90      | 90      | 89      | 85      | 87      | 86      | 87      | 87      | 87      | 88      | 91      | 91      | 92      | 92      | 91.3    | 7.9               |
| 12               | 92      | 92      | 92      | 92      | 93      | 93      | 91      | 91      | 89      | 84      | 80      | 77      | 74      | 76      | 78      | 80      | 86      | 86      | 87      | 87      | 88      | 91      | 91      | 92      | 86.7    | 7.6               |
| 13               | 88      | 89      | 90      | 94      | 90      | 88      | 87      | 85      | 84      | 79      | 77      | 70      | 76      | 78      | 78      | 78      | 79      | 85      | 87      | 84      | 86      | 85      | 87      | 88      | 84.2    | 7.1               |
| 14               | 88      | 89      | 81      | 83      | 83      | 85      | 82      | 78      | 74      | 66      | 59      | 53      | 54      | 51      | 48      | 48      | 54      | 58      | 56      | 59      | 60      | 59      | 62      | 59      | 66.8    | 6.5               |
| 15               | 61      | 59      | 61      | 65      | 72      | 77      | 78      | 77      | 80      | 80      | 77      | 74      | 66      | 66      | 64      | 66      | 66      | 74      | 76      | 74      | 80      | 76      | 71      | 71      | 71.0    | 6.7               |
| 16               | 69      | 71      | 76      | 77      | 77      | 80      | 92      | 92      | 85      | 89      | 64      | 61      | 64      | 59      | 66      | 71      | 73      | 71      | 73      | 79      | 83      | 79      | 79      | 77      | 75.5    | 5.7               |
| 17               | 80      | 81      | 79      | 75      | 75      | 83      | 90      | 83      | 85      | 65      | 66      | 76      | 66      | 73      | 86      | 87      | 88      | 79      | 80      | 82      | 83      | 85      | 85      | 81      | 79.6    | 5.2               |
| 18               | 77      | 73      | 66      | 67      | 83      | 89      | 89      | 91      | 83      | 81      | 74      | 63      | 65      | 65      | 67      | 72      | 83      | 91      | 87      | 89      | 89      | 86      | 84      | 75      | 78.8    | 5.5               |
| 19               | 77      | 76      | 77      | 83      | 89      | 87      | 85      | 88      | 86      | 72      | 78      | 63      | 63      | 56      | 53      | 55      | 58      | 61      | 65      | 72      | 75      | 78      | 88      | 91      | 73.4    | 5.1               |
| 20               | 91      | 91      | 93      | 92      | 92      | 90      | 84      | 75      | 63      | 60      | 58      | 58      | 58      | 59      | 63      | 66      | 70      | 71      | 74      | 76      | 76      | 78      | 79      | 80      | 75.1    | 4.9               |
| 21               | 79      | 80      | 79      | 79      | 79      | 81      | 82      | 76      | 70      | 71      | 71      | 73      | 68      | 70      | 68      | 69      | 69      | 74      | 75      | 77      | 82      | 82      | 83      | 82      | 75.7    | 5.3               |
| 22               | 76      | 76      | 76      | 77      | 77      | 78      | 83      | 92      | 92      | 94      | 93      | 90      | 93      | 95      | 95      | 95      | 97      | 97      | 97      | 97      | 97      | 97      | 98      | 98      | 89.6    | 6.7               |
| 23               | 98      | 99      | 100     | 99      | 99      | 99      | 100     | 100     | 100     | 100     | 100     | 100     | 100     | 100     | 100     | 100     | 100     | 100     | 100     | 100     | 100     | 100     | 100     | 100     | 99.1    | 8.0               |
| 24               | 98      | 98      | 97      | 97      | 94      | 89      | 88      | 88      | 85      | 87      | 87      | 87      | 88      | 89      | 82      | 85      | 89      | 87      | 89      | 89      | 90      | 88      | 89      | 89      | 89.9    | 7.4               |
| 25               | 87      | 88      | 87      | 89      | 87      | 86      | 86      | 86      | 86      | 86      | 84      | 84      | 82      | 83      | 83      | 82      | 85      | 83      | 86      | 86      | 86      | 86      | 82      | 80      | 85.3    | 6.7               |
| 26               | 82      | 80      | 80      | 80      | 80      | 83      | 82      | 79      | 79      | 79      | 79      | 77      | 75      | 73      | 75      | 73      | 72      | 73      | 76      | 76      | 78      | 77      | 76      | 77      | 77.6    | 5.9               |
| 27               | 77      | 81      | 76      | 78      | 76      | 76      | 78      | 82      | 80      | 69      | 67      | 68      | 68      | 64      | 62      | 61      | 69      | 75      | 71      | 75      | 78      | 73      | 76      | 73      | 73.1    | 5.9               |
| 28               | 76      | 77      | 76      | 75      | 73      | 76      | 82      | 84      | 85      | 80      | 74      | 74      | 71      | 73      | 69      | 70      | 75      | 77      | 85      | 85      | 85      | 85      | 85      | 85      | 77.6    | 5.8               |
| 29               | 85      | 85      | 85      | 86      | 86      | 86      | 78      | 69      | 71      | 70      | 73      | 65      | 60      | 63      | 62      | 62      | 61      | 63      | 68      | 69      | 72      | 76      | 76      | 77      | 73.0    | 5.5               |
| 30               | 78      | 66      | 66      | 66      | 65      | 67      | 67      | 67      | 63      | 64      | 64      | 64      | 61      | 61      | 65      | 64      | 67      | 66      | 70      | 73      | 75      | 84      | 88      | 88      | 68.9    | 5.3               |
| 31               | 87      | 87      | 88      | 88      | 88      | 89      | 86      | 76      | 85      | 76      | 69      | 68      | 80      | 78      | 74      | 67      | 69      | 75      | 80      | 80      | 84      | 85      | 85      | 90      | 80.5    | 6.3               |
| Mean             | 82.1    | 81.5    | 81.4    | 82.8    | 83.8    | 85.1    | 84.9    | 83.6    | 81.6    | 78.3    | 75.3    | 73.2    | 72.2    | 72.3    | 72.1    | 72.8    | 75.3    | 77.5    | 79.4    | 80.2    | 81.3    | 81.7    | 82.4    | 82.2    | 79.3    | 76.0              |
| Vapour Pressure* | mb. 5.8 | mb. 5.7 | mb. 5.7 | mb. 5.7 | mb. 5.7 | mb. 5.8 | mb. 5.9 | mb. 5.9 | mb. 6.0 | mb. 6.0 | mb. 6.0 | mb. 6.0 | mb. 6.1 | mb. 6.2 | mb. 6.2 | mb. 6.1 | mb. 6.1 | mb. 6.1 | mb. 6.1 | mb. 6.0 | mb. 6.0 | mb. 6.0 | mb. 5.9 | mb. 5.9 | mb. 5.9 | mb. 5.9           |

46. Aberdeen : North Wall Screen on Tower :  $h_t$  = 12.5 metres.

April, 1924.

| Day. | 1. | 2. | 3. | 4. | 5. | 6. | 7. | 8. | 9. | 10. | 11. | Noon. | 13. | 14. | 15. | 16. | 17. | 18. | 19. | 20. | 21. | 22. | 23. | 24. | Mean. | Vapour Pressure.* |
|------|----|----|----|----|----|----|----|----|----|-----|-----|-------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-------|-------------------|
| 1    | 87 | 77 | 85 | 83 | 77 | 79 | 74 | 71 | 64 | 64  | 65  | 65    | 64  | 64  | 66  | 67  | 67  | 71  | 72  | 75  | 77  | 86  | 87  | 88  | 74.0  | 5.9               |
| 2    | 87 | 86 | 87 | 86 | 86 | 86 | 86 | 82 | 83 | 69  | 67  | 67    | 67  | 69  | 68  | 68  | 69  | 71  | 72  | 71  | 73  | 73  | 78  | 79  | 76.4  | 5.8               |
| 3    | 85 | 90 | 91 | 95 | 95 | 95 | 95 | 94 | 91 | 92  | 91  | 91    | 91  | 85  | 85  | 81  | 82  | 85  | 88  | 88  | 86  | 89  | 90  | 90  | 89.1  | 7.2               |
| 4    | 90 | 93 | 92 | 93 | 96 | 95 | 92 | 92 | 87 | 79  | 73  | 78    | 77  | 76  | 76  | 70  | 69  | 71  | 75  | 78  | 82  | 83  | 82  | 86  | 82.8  | 7.8               |
| 5    | 87 | 88 | 88 | 87 | 87 | 87 | 86 | 77 | 70 | 66  | 60  | 57    | 63  | 60  | 80  | 70  | 77  | 80  | 79  | 79  | 76  | 82  | 83  | 81  | 77.2  | 7.9               |
| 6    | 88 | 88 | 84 | 84 | 84 | 83 | 82 | 78 | 75 | 73  | 66  | 64    | 61  | 65  | 58  | 59  | 67  | 66  | 71  | 72  | 68  | 62  | 58  | 59  | 71.9  | 7.5               |
| 7    | 66 | 67 | 71 | 74 | 78 | 93 | 94 | 93 | 91 | 74  | 49  | 47    | 47  | 47  | 50  | 51  | 56  | 60  | 61  | 67  | 66  | 67  | 73  | 73  | 65.9  | 7.4               |
| 8    | 77 | 74 | 67 | 63 | 60 | 61 | 62 | 63 | 65 | 58  | 65  | 65    | 52  | 61  | 51  | 56  | 63  | 63  | 68  | 73  | 72  | 76  | 88  | 91  | 66.0  | 5.4               |
| 9    | 89 | 90 | 90 | 89 | 88 | 88 | 85 | 85 | 75 | 63  | 64  | 71    | 68  | 67  | 71  | 62  | 67  | 87  | 78  | 69  | 69  | 71  | 85  | 71  | 77.2  | 5.7               |
| 10   | 67 | 67 | 65 | 64 | 64 | 63 | 62 | 65 | 64 | 59  | 60  | 58    | 59  | 60  | 58  | 59  | 58  | 55  | 59  | 64  | 63  | 63  | 65  | 69  | 62.1  | 4.9               |
| 11   | 73 | 74 | 76 | 77 | 79 | 76 | 68 | 69 | 71 | 67  | 69  | 69    | 72  | 72  | 90  | 80  | 85  | 87  | 87  | 87  | 85  | 87  | 88  | 91  | 77.8  | 5.8               |
| 12   | 87 | 91 | 89 | 86 | 88 | 89 | 90 | 86 | 88 | 87  | 84  | 94    | 91  | 91  | 90  | 87  | 87  | 91  | 92  | 92  | 92  | 91  | 91  | 94  | 89.7  | 6.3               |
| 13   | 92 | 93 | 93 | 94 | 94 | 94 | 93 | 90 | 86 | 73  | 71  | 72    | 74  | 76  | 76  | 81  | 81  | 81  | 80  | 78  | 80  | 80  | 78  | 83  | 83.0  | 6.5               |
| 14   | 90 | 90 | 91 | 92 | 93 | 95 | 93 | 92 | 92 | 92  | 93  | 96    | 97  | 88  | 79  | 72  | 63  | 57  | 61  | 66  | 70  | 71  | 68  | 68  | 82.4  | 6.6               |
| 15   | 73 | 72 | 77 | 82 | 82 | 81 | 77 | 75 | 75 | 64  | 64  | 63    | 58  | 54  | 57  | 60  | 57  | 59  | 63  | 65  | 67  | 68  | 72  | 65  | 68.0  | 6.0               |
| 16   | 67 | 66 | 71 | 72 | 73 | 73 | 68 | 67 | 63 | 58  | 57  | 61    | 54  | 64  | 58  | 57  | 68  | 62  | 74  | 76  | 72  | 73  | 73  | 73  | 66.5  | 5.9               |
| 17   | 73 | 72 | 77 | 79 | 75 | 69 | 66 | 63 | 62 | 56  | 54  | 52    | 50  | 57  | 56  | 54  | 58  | 55  | 67  | 70  | 77  | 70  | 75  | 77  | 65.1  | 5.5               |
| 18   | 77 | 73 | 70 | 71 | 73 |    |    |    |    |     |     |       |     |     |     |     |     |     |     |     |     |     |     |     |       |                   |



Percentages at exact hours, Greenwich Mean Time. Determined as explained on page 14.

47. Aberdeen : North Wall Screen on Tower : ht (height of thermometer bulbs above the ground) =12.5 metres.

May, 1924.

Table with 26 columns (Days 1-24, Mean, Vapour Pressure\*) and 31 rows (Days 1-31, Mean, Vapour Pressure\*). Columns contain percentage values for each hour and summary statistics.

48. Aberdeen : North Wall Screen on Tower : ht =12.5 metres.

June, 1924.

Table with 26 columns (Days 1-24, Mean, Vapour Pressure\*) and 31 rows (Days 1-31, Mean, Vapour Pressure\*). Columns contain percentage values for each hour and summary statistics.

\* Computed from the mean temperature and mean relative humidity.

† Mean of the column.

‡ Mean of the row.

Percentages at exact hours, Greenwich Mean Time. Determined as explained on page 14.

49. Aberdeen : North Wall Screen on Tower : h<sub>t</sub> (height of thermometer bulbs above the ground) = 12.5 metres.

July, 1924.

Table for July 1924 showing relative humidity percentages for each hour of the month. Includes columns for days 1-31, mean, and vapour pressure.

50. Aberdeen : North Wall Screen on Tower : h<sub>t</sub> = 12.5 metres.

August, 1924.

Table for August 1924 showing relative humidity percentages for each hour of the month. Includes columns for days 1-31, mean, and vapour pressure.

\* Computed from the mean temperature and mean relative humidity.

† Mean of the column.

§ Mean of the row.

Percentages at exact hours, Greenwich Mean Time. Determined as explained on page 14.

51. Aberdeen : North Wall Screen on Tower : ht (height of thermometer bulbs above the ground) = 12.5 metres. September, 1924.

Table with 28 columns (1-24 hours, Mean, Vapour Pressure\*) and 31 rows (1-30 days, Mean, Vapour Pressure\*). Columns 1-24 show percentage values. Mean and Vapour Pressure\* columns show mean values and pressure in mb. respectively.

52. Aberdeen : North Wall Screen on Tower : ht = 12.5 metres. October, 1924.

Table with 28 columns (1-24 hours, Mean, Vapour Pressure\*) and 31 rows (1-30 days, Mean, Vapour Pressure\*). Columns 1-24 show percentage values. Mean and Vapour Pressure\* columns show mean values and pressure in mb. respectively.

\* Computed from the mean temperature and mean relative humidity. † Mean of the column. § Mean of the row.



HUMIDITY : ANNUAL MEANS OF HOURLY VALUES.

From the monthly means for exact hours, Greenwich Mean Time.

55. Aberdeen : North Wall Screen on Tower :  $h_t$  (height of thermometer bulbs above the ground) = 12.5 metres.

1924.

Table with 24 columns (hours 1-24) and 2 rows. Row 1: G.M.T., 1-24, Mean. Row 2: Relative Humidity (%), values ranging from 77.3 to 86.0. Row 3: Vapour Pressure (mb.), values ranging from 8.7 to 9.4.

RELATIVE HUMIDITY : MONTHLY MEANS AND DIURNAL INEQUALITIES.

The departures from the mean of the day are adjusted for non-cyclic change.

56. Aberdeen : North Wall Screen on Tower :  $h_t = 12.5$  metres.

1924.

Table with 25 columns (Mean, Hour 1-24) and 12 rows (Jan to Dec, Year). Rows 2-3 show monthly means and diurnal inequalities for relative humidity. Rows 4-5 show monthly means and diurnal inequalities for vapour pressure.

RAINFALL : ANNUAL TOTALS OF HOURLY VALUES.

Amounts, in millimetres ; durations, in hours, for periods of sixty minutes between the exact hours, Greenwich Mean Time.

57. Aberdeen :  $H_T = 14.0$  metres + 0.6 metres.

1924.

Table with 24 columns (hours 0-24) and 2 rows. Row 1: G.M.T., 0 to 24. Row 2: Amount (mm.), total 28.6. Row 3: Duration (hr.), total 750.8.

58. Aberdeen. NOTES ON RAINFALL. 1924.

Notable Falls of the Year.—There were two notable falls during the year ; the first being a continuous fall of 44 mm. in the 39 hours from 6h. on the 7th May till 21h. on the 8th May. It occurred during the very wet spell mentioned below. The second notable fall was that of 23rd September, when 48 mm. fell. Of this 36 mm. fell continuously, accompanied by a sharp thunderstorm, between 16h. and 23h. For the 3 hours between 17h. and 20h. rain was falling at the average rate of 8 mm. per hour, the maximum rate being 5 mm. in 20 minutes.

Dry Periods.—(Periods of 7 days or over with no rainfall, or with trifling falls.)

- Jan. 29—Feb. 4.—Period of 7 days with 0.1 mm.
Mar. 2—14.—Period of 13 days with 1.9 mm., most of which fell on 5th.
Apl. 15—21.—Period of 7 days with 0.2 mm.
June 20—26.—Period of 7 days with 0.3 mm.
Aug. 6—13.—Period of 8 days with 0.2 mm.
Oct. 11—18.—Period of 8 days (from 2h. on 11th till 24h. on 18th) with 0.1 mm. from deposition of wet fog.
Dec. 7—15.—Period of 8 days (from 4h. on 7th till 7h. on 15th) with 0.3 mm.

Wet Periods.—(With notes of the heavier rates of fall.)

- Jan. 22.—14 mm. in 24 hours.
Mar. 23.—13 mm. in 15 hours.
May 7—11.—Period of 5 days during which 71 mm. fell ; of this 44 mm. fell in 39 hours. (See under " Notable Falls " above.) May was a very wet month, 123 mm. in all fell, of which 96 mm. occurred in 11 days from 2nd to 13th.
July 4—8.—Period of 5 days yielding 44 mm. Sharp fall between 15h. and 16h. on 5th, 3 mm. falling in 10 minutes.
July 10—13.—Period of 4 days yielding 36 mm. of which 20 mm. fell in 4 hours between 15h. and 19h. on the 13th.
July 17—19.—Period of 3 days with 22 mm. during which the greatest rate of fall in the year was recorded, 7 mm. falling in 10 min. about 15h. on 17th.
July 28—30.—Period of 3 days yielding 20 mm. July was the wettest month of the year, 135 mm. in all being recorded.
Aug. 18—23.—Period of 6 days during which 36 mm. fell. In this period 4 mm. fell in 8 minutes about midnight on 21st.
Sept. 7—12.—Period of 6 days which yielded 47 mm.
Sept. 23—Very heavy rainfall during [ ] 48 mm. (see " Notable Falls " above). Sept. was a very wet month, 112 mm. in all fell.
Oct. 3—7.—Period of 5 days with 35 mm.
Nov. 26—27.—Period of 2 days with 23 mm.
Dec. 3—4.—Period of 2 days with 25 mm.
Dec. 26—27.—Period of 2 days with 32 mm.

1924 was a year with rainfall well above the normal, due to large excesses in the months of May, July, and September.



Amounts in millimetres, for periods of sixty minutes, between the exact hours, Greenwich Mean Time.

61. Aberdeen : H<sub>r</sub> (height of receiving surface above M.S.L.) = H (height of station above M.S.L.) + h<sub>r</sub> (height of receiving surface above ground) = 14.0 metres + 0.6 metres.

March, 1924.

Table with 25 columns for hourly rainfall (0-1 to 23-24) and 2 columns for duration (0-24 and 0-24). Rows include daily rainfall data for days 1-31, a summary row (Sum.), and a total duration row (Total Duration).

62. Aberdeen : H<sub>r</sub> = 14.0 metres + 0.6 metres.

April, 1924.

Table with 25 columns for hourly rainfall (0-1 to 23-24) and 2 columns for duration (0-24 and 0-24). Rows include daily rainfall data for days 1-30, a summary row (Sum.), a total duration row (Total Duration), and a G.M.T. row.







Amounts in millimetres, for periods of sixty minutes, between the exact hours, Greenwich Mean Time.

67. Aberdeen : H<sub>r</sub> (height of receiving surface above M.S.L.) = H (height of station above M.S.L.) + h<sub>r</sub> (height of receiving surface above ground) = 14.0 metres + 0.6 metres. September, 1924.

Table with 24 columns for hourly intervals (0-1 to 23-24) and 2 columns for Duration (0-24 and hr.). Rows 1-30 show rainfall amounts in mm. and durations in hr. for each hour. Summary row (Sum.) and Total Duration row are included at the bottom.

68. Aberdeen : H<sub>r</sub> = 14.0 metres + 0.6 metres.

October, 1924.

Table with 24 columns for hourly intervals (0-1 to 23-24) and 2 columns for Duration (0-24 and hr.). Rows 1-31 show rainfall amounts in mm. and durations in hr. for each hour. Summary row (Sum.) and Total Duration row are included at the bottom.

Amounts in millimetres, for periods of sixty minutes, between the exact hours, Greenwich Mean Time.

69. Aberdeen : H<sub>r</sub> (height of receiving surface above M.S.L.) = H (height of station above M.S.L.) + h<sub>r</sub> (height of receiving surface above ground) = 14.0 metres + 0.6 metres. **November, 1924.**

Table with 25 columns (0-1 to 24) and 30 rows (1 to 30). Columns represent hourly periods in mm, and rows represent days. Includes a 'Duration. 0-24' column at the end. A 'Sum.' row and a 'Total Duration.' row are at the bottom of the table.

70. Aberdeen : H<sub>r</sub> = 14.0 metres + 0.6 metres.

**December, 1924.**

Table with 25 columns (0-1 to 24) and 31 rows (1 to 31). Columns represent hourly periods in mm, and rows represent days. Includes a 'Duration. 0-24' column at the end. A 'Sum.' row, a 'Total Duration.' row, and a 'G.M.T.' row are at the bottom of the table.













DURATION OF BRIGHT SUNSHINE.

For periods of sixty minutes, between the exact hours of Local Apparent Time.

81. Aberdeen :  $h_s$  (height of recorder above ground) = 20.7 metres.

November, 1924.

| Day.  | 3 to 4. | 4 to 5. | 5 to 6. | 6 to 7. | 7 to 8. | 8 to 9. | 9 to 10. | 10 to 11. | 11 to Noon. | Noon to 13. | 13 to 14. | 14 to 15. | 15 to 16. | 16 to 17. | 17 to 18. | 18 to 19. | 19 to 20. | 20 to 21. | Total for Day. | Per cent. of Possible. |     |
|-------|---------|---------|---------|---------|---------|---------|----------|-----------|-------------|-------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|----------------|------------------------|-----|
|       | hr.     | hr.     | hr.     | hr.     | hr.     | hr.     | hr.      | hr.       | hr.         | hr.         | hr.       | hr.       | hr.       | hr.       | hr.       | hr.       | hr.       | hr.       | hr.            | hr.                    | %   |
| 1     | —       | —       | —       | —       | ...     | .1      | .9       | 1.0       | .6          | ...         | ...       | ...       | ...       | ...       | ...       | ...       | ...       | ...       | ...            | 2.6                    | 29  |
| 2     | —       | —       | —       | —       | ...     | ...     | ...      | .4        | .2          | ...         | .2        | .1        | .5        | ...       | ...       | ...       | ...       | ...       | ...            | 1.4                    | 16  |
| 3     | —       | —       | —       | —       | ...     | ...     | .2       | .2        | ...         | .1          | .3        | .2        | .7        | .5        | ...       | ...       | ...       | ...       | ...            | 2.2                    | 25  |
| 4     | —       | —       | —       | —       | ...     | ...     | ...      | .4        | ...         | .2          | ...       | .2        | .1        | ...       | ...       | ...       | ...       | ...       | ...            | 0.9                    | 10  |
| 5     | —       | —       | —       | —       | ...     | ...     | ...      | ...       | ...         | .1          | ...       | ...       | ...       | ...       | ...       | ...       | ...       | ...       | ...            | 0.1                    | 1   |
| 6     | —       | —       | —       | —       | ...     | ...     | ...      | ...       | ...         | ...         | ...       | ...       | ...       | ...       | ...       | ...       | ...       | ...       | ...            | ...                    | ... |
| 7     | —       | —       | —       | —       | ...     | ...     | ...      | ...       | ...         | ...         | ...       | ...       | ...       | ...       | ...       | ...       | ...       | ...       | ...            | ...                    | ... |
| 8     | —       | —       | —       | —       | ...     | ...     | ...      | ...       | ...         | ...         | ...       | ...       | ...       | ...       | ...       | ...       | ...       | ...       | ...            | ...                    | ... |
| 9     | —       | —       | —       | —       | ...     | ...     | ...      | ...       | ...         | ...         | ...       | ...       | ...       | ...       | ...       | ...       | ...       | ...       | ...            | ...                    | ... |
| 10    | —       | —       | —       | —       | ...     | ...     | ...      | ...       | ...         | ...         | ...       | ...       | ...       | ...       | ...       | ...       | ...       | ...       | ...            | ...                    | ... |
| 11    | —       | —       | —       | —       | ...     | ...     | ...      | ...       | ...         | ...         | ...       | ...       | ...       | ...       | ...       | ...       | ...       | ...       | ...            | ...                    | ... |
| 12    | —       | —       | —       | —       | ...     | .7      | 1.0      | 1.0       | 1.0         | 1.0         | 1.0       | 1.0       | .5        | ...       | ...       | ...       | ...       | ...       | ...            | 7.2                    | 88  |
| 13    | —       | —       | —       | —       | ...     | ...     | ...      | ...       | ...         | ...         | ...       | ...       | ...       | ...       | ...       | ...       | ...       | ...       | ...            | ...                    | ... |
| 14    | —       | —       | —       | —       | ...     | ...     | ...      | ...       | ...         | ...         | ...       | ...       | ...       | ...       | ...       | ...       | ...       | ...       | ...            | ...                    | ... |
| 15    | —       | —       | —       | —       | ...     | ...     | ...      | ...       | ...         | ...         | ...       | ...       | ...       | ...       | ...       | ...       | ...       | ...       | ...            | ...                    | ... |
| 16    | —       | —       | —       | —       | ...     | ...     | ...      | ...       | .3          | .9          | .3        | ...       | ...       | ...       | ...       | ...       | ...       | ...       | ...            | 1.5                    | 19  |
| 17    | —       | —       | —       | —       | ...     | ...     | ...      | .7        | .7          | 1.0         | .5        | ...       | ...       | ...       | ...       | ...       | ...       | ...       | ...            | 2.9                    | 37  |
| 18    | —       | —       | —       | —       | ...     | .1      | .5       | .2        | ...         | ...         | .7        | .2        | ...       | ...       | ...       | ...       | ...       | ...       | ...            | 1.7                    | 22  |
| 19    | —       | —       | —       | —       | ...     | ...     | ...      | ...       | .4          | ...         | ...       | ...       | ...       | ...       | ...       | ...       | ...       | ...       | ...            | 0.4                    | 5   |
| 20    | —       | —       | —       | —       | ...     | ...     | .8       | .5        | ...         | ...         | ...       | ...       | ...       | ...       | ...       | ...       | ...       | ...       | ...            | 1.3                    | 17  |
| 21    | —       | —       | —       | —       | ...     | ...     | .4       | .3        | ...         | ...         | ...       | ...       | ...       | ...       | ...       | ...       | ...       | ...       | ...            | 0.7                    | 9   |
| 22    | —       | —       | —       | —       | ...     | ...     | ...      | ...       | ...         | ...         | ...       | ...       | ...       | ...       | ...       | ...       | ...       | ...       | ...            | ...                    | ... |
| 23    | —       | —       | —       | —       | ...     | ...     | ...      | ...       | ...         | ...         | ...       | .1        | ...       | ...       | ...       | ...       | ...       | ...       | ...            | 0.1                    | 1   |
| 24    | —       | —       | —       | —       | ...     | ...     | .3       | 1.0       | .8          | .2          | .1        | ...       | ...       | ...       | ...       | ...       | ...       | ...       | ...            | 2.4                    | 32  |
| 25    | —       | —       | —       | —       | ...     | ...     | ...      | ...       | ...         | ...         | ...       | ...       | ...       | ...       | ...       | ...       | ...       | ...       | ...            | ...                    | ... |
| 26    | —       | —       | —       | —       | ...     | ...     | ...      | ...       | ...         | ...         | ...       | ...       | ...       | ...       | ...       | ...       | ...       | ...       | ...            | ...                    | ... |
| 27    | —       | —       | —       | —       | ...     | ...     | ...      | ...       | ...         | ...         | ...       | ...       | ...       | ...       | ...       | ...       | ...       | ...       | ...            | ...                    | ... |
| 28    | —       | —       | —       | —       | ...     | ...     | .6       | 1.0       | 1.0         | 1.0         | 1.0       | .4        | ...       | ...       | ...       | ...       | ...       | ...       | ...            | 5.0                    | 69  |
| 29    | —       | —       | —       | —       | ...     | ...     | ...      | ...       | .7          | .4          | .7        | ...       | ...       | ...       | ...       | ...       | ...       | ...       | ...            | 1.8                    | 25  |
| 30    | —       | —       | —       | —       | ...     | ...     | ...      | ...       | ...         | ...         | ...       | ...       | ...       | ...       | ...       | ...       | ...       | ...       | ...            | ...                    | ... |
| Sum.  | —       | —       | —       | —       | ...     | 1.1     | 5.1      | 6.1       | 6.0         | 4.9         | 4.9       | 2.6       | 1.5       | ...       | ...       | ...       | ...       | ...       | ...            | 32.2                   | —   |
| Mean. | —       | —       | —       | —       | ...     | .04     | .17      | .20       | .20         | .16         | .16       | .09       | .05       | ...       | ...       | ...       | ...       | ...       | ...            | 1.07                   | 13  |

82. Aberdeen :  $h_s$  = 20.7 metres.

December, 1924.

|                | hr.     | hr.     | hr.     | hr.     | hr.     | hr.     | hr.      | hr.       | hr.         | hr.         | hr.       | hr.       | hr.       | hr.       | hr.       | hr.       | hr.       | hr.       | hr.            | hr.                    | %   |
|----------------|---------|---------|---------|---------|---------|---------|----------|-----------|-------------|-------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|----------------|------------------------|-----|
| 1              | —       | —       | —       | —       | ...     | ...     | ...      | ...       | ...         | ...         | ...       | ...       | ...       | ...       | ...       | ...       | ...       | ...       | ...            | ...                    | ... |
| 2              | —       | —       | —       | —       | ...     | ...     | ...      | ...       | ...         | ...         | ...       | ...       | ...       | ...       | ...       | ...       | ...       | ...       | ...            | ...                    | ... |
| 3              | —       | —       | —       | —       | ...     | ...     | ...      | ...       | ...         | ...         | ...       | ...       | ...       | ...       | ...       | ...       | ...       | ...       | ...            | ...                    | ... |
| 4              | —       | —       | —       | —       | ...     | ...     | ...      | ...       | ...         | ...         | ...       | ...       | ...       | ...       | ...       | ...       | ...       | ...       | ...            | ...                    | ... |
| 5              | —       | —       | —       | —       | ...     | ...     | ...      | ...       | ...         | ...         | .2        | ...       | ...       | ...       | ...       | ...       | ...       | ...       | ...            | 0.2                    | 3   |
| 6              | —       | —       | —       | —       | ...     | ...     | .3       | .4        | .9          | 1.0         | .8        | ...       | ...       | ...       | ...       | ...       | ...       | ...       | ...            | 3.4                    | 49  |
| 7              | —       | —       | —       | —       | ...     | ...     | ...      | ...       | ...         | ...         | ...       | ...       | ...       | ...       | ...       | ...       | ...       | ...       | ...            | ...                    | ... |
| 8              | —       | —       | —       | —       | ...     | ...     | .5       | 1.0       | 1.0         | 1.0         | 1.0       | ...       | ...       | ...       | ...       | ...       | ...       | ...       | ...            | 4.5                    | 66  |
| 9              | —       | —       | —       | —       | ...     | ...     | ...      | .4        | .5          | .5          | .6        | ...       | ...       | ...       | ...       | ...       | ...       | ...       | ...            | 2.0                    | 30  |
| 10             | —       | —       | —       | —       | ...     | ...     | ...      | .2        | ...         | ...         | .1        | ...       | ...       | ...       | ...       | ...       | ...       | ...       | ...            | 0.3                    | 4   |
| 11             | —       | —       | —       | —       | ...     | ...     | ...      | ...       | ...         | ...         | ...       | ...       | ...       | ...       | ...       | ...       | ...       | ...       | ...            | ...                    | ... |
| 12             | —       | —       | —       | —       | ...     | ...     | ...      | ...       | ...         | ...         | ...       | ...       | ...       | ...       | ...       | ...       | ...       | ...       | ...            | ...                    | ... |
| 13             | —       | —       | —       | —       | ...     | ...     | ...      | ...       | ...         | ...         | ...       | ...       | ...       | ...       | ...       | ...       | ...       | ...       | ...            | ...                    | ... |
| 14             | —       | —       | —       | —       | ...     | ...     | ...      | .2        | .9          | .9          | .2        | .1        | ...       | ...       | ...       | ...       | ...       | ...       | ...            | 2.3                    | 35  |
| 15             | —       | —       | —       | —       | ...     | ...     | ...      | ...       | ...         | ...         | ...       | ...       | ...       | ...       | ...       | ...       | ...       | ...       | ...            | ...                    | ... |
| 16             | —       | —       | —       | —       | ...     | ...     | ...      | ...       | ...         | ...         | ...       | ...       | ...       | ...       | ...       | ...       | ...       | ...       | ...            | ...                    | ... |
| 17             | —       | —       | —       | —       | ...     | ...     | ...      | ...       | ...         | ...         | ...       | ...       | ...       | ...       | ...       | ...       | ...       | ...       | ...            | ...                    | ... |
| 18             | —       | —       | —       | —       | ...     | ...     | ...      | ...       | .1          | .9          | ...       | ...       | ...       | ...       | ...       | ...       | ...       | ...       | ...            | 1.0                    | 15  |
| 19             | —       | —       | —       | —       | ...     | ...     | ...      | 1.0       | .3          | .2          | ...       | ...       | ...       | ...       | ...       | ...       | ...       | ...       | ...            | 1.5                    | 23  |
| 20             | —       | —       | —       | —       | ...     | ...     | ...      | ...       | .3          | .7          | .1        | ...       | ...       | ...       | ...       | ...       | ...       | ...       | ...            | 1.1                    | 17  |
| 21             | —       | —       | —       | —       | ...     | ...     | ...      | .4        | .8          | 1.0         | .7        | ...       | ...       | ...       | ...       | ...       | ...       | ...       | ...            | 2.9                    | 45  |
| 22             | —       | —       | —       | —       | ...     | ...     | ...      | ...       | .1          | ...         | ...       | ...       | ...       | ...       | ...       | ...       | ...       | ...       | ...            | 0.1                    | 2   |
| 23             | —       | —       | —       | —       | ...     | ...     | ...      | .1        | 1.0         | 1.0         | ...       | ...       | ...       | ...       | ...       | ...       | ...       | ...       | ...            | 2.1                    | 32  |
| 24             | —       | —       | —       | —       | ...     | ...     | ...      | .1        | ...         | ...         | .1        | ...       | ...       | ...       | ...       | ...       | ...       | ...       | ...            | 0.2                    | 3   |
| 25             | —       | —       | —       | —       | ...     | ...     | ...      | .1        | .5          | ...         | ...       | ...       | ...       | ...       | ...       | ...       | ...       | ...       | ...            | 0.6                    | 9   |
| 26             | —       | —       | —       | —       | ...     | ...     | ...      | ...       | ...         | ...         | ...       | ...       | ...       | ...       | ...       | ...       | ...       | ...       | ...            | ...                    | ... |
| 27             | —       | —       | —       | —       | ...     | ...     | ...      | .6        | 1.0         | .9          | .1        | ...       | ...       | ...       | ...       | ...       | ...       | ...       | ...            | 2.6                    | 39  |
| 28             | —       | —       | —       | —       | ...     | ...     | ...      | .6        | ...         | .4          | ...       | ...       | ...       | ...       | ...       | ...       | ...       | ...       | ...            | 1.0                    | 15  |
| 29             | —       | —       | —       | —       | ...     | ...     | ...      | .2        | .6          | ...         | ...       | ...       | ...       | ...       | ...       | ...       | ...       | ...       | ...            | 0.8                    | 12  |
| 30             | —       | —       | —       | —       | ...     | ...     | ...      | 1.0       | 1.0         | .7          | .7        | .4        | ...       | ...       | ...       | ...       | ...       | ...       | ...            | 3.8                    | 58  |
| 31             | —       | —       | —       | —       | ...     | ...     | ...      | .1        | .4          | .8          | .4        | .6        | .4        | ...       | ...       | ...       | ...       | ...       | ...            | 2.7                    | 40  |
| Sum.           | —       | —       | —       | —       | ...     | ...     | 1.3      | 6.9       | 9.4         | 9.7         | 4.9       | 0.9       | ...       | ...       | ...       | ...       | ...       | ...       | ...            | 33.1                   | —   |
| Mean.          | —       | —       | —       | —       | ...     | ...     | .04      | .22       | .30         | .31         | .16       | .03       | ...       | ...       | ...       | ...       | ...       | ...       | ...            | 1.07                   | 16  |
| Annual Totals. | 0.6     | 10.1    | 27.2    | 45.8    | 65.1    | 81.6    | 110.4    | 121.5     | 123.9       | 125.4       | 120.9     | 100.4     | 77.3      | 63.6      | 47.8      | 29.1      | 6.1       | ...       | ...            | 1156.8                 | —   |
| Annual Mean.   | ...     | 0.03    | 0.07    | 0.13    | 0.18    | 0.22    | 0.30     | 0.33      | 0.34        | 0.34        | 0.33      | 0.27      | 0.21      | 0.17      | 0.13      | 0.08      | 0.02      | ...       | ...            | 3.16                   | 26  |
| Hour. L.A.T.   | 3 to 4. | 4 to 5. | 5 to 6. | 6 to 7. | 7 to 8. | 8 to 9. | 9 to 10. | 10 to 11. | 11 to Noon. | Noon to 13. | 13 to 14. | 14 to 15. | 15 to 16. | 16 to 17. | 17 to 18. | 18 to 19. | 19 to 20. | 20 to 21. | Total for Day. | Per cent. of Possible. |     |







Averages for periods of sixty minutes centred at the exact hours, Greenwich Mean Time.

M.S.L. + ha (height of anemograph above ground) = 14 metres + 23 metres.

March, 1924.

Table with 24 columns (13-24) and 2 rows (Mean, Day). Each column contains multiple rows of wind speed data in m/s.

April, 1924.

Table with 24 columns (13-24) and 2 rows (Mean, Day). Each column contains multiple rows of wind speed data in m/s.

WIND : DIRECTION AND SPEED.

Direction expressed in degrees from North (E = 90°, S = 180°, W = 270°, N = 360°) : Speed in metres per second.

87. Aberdeen :

H<sub>a</sub> (height of anemograph above M.S.L.) = Height of ground above

Table with 22 columns (Day, 1-11, Noon) and 2 rows per day (m/s, degrees). Contains wind speed and direction data for Aberdeen for 31 days.

88. Aberdeen : H<sub>a</sub> = 14 metres + 23 metres.

Table with 22 columns (G.M.T., 1-11, Noon) and 2 rows per day (m/s, degrees). Contains wind speed and direction data for Aberdeen at two heights (14m and 23m) for 31 days.



Direction expressed in degrees from North (E=90°, S=180°, W=270°, N=360°) : Speed in metres per second.

89. Aberdeen :

H<sub>a</sub> (Height of anemograph above M.S.L.) = Height of ground above

Table with 21 columns (Day, 1-11, Noon) and 2 rows per day (m/s, °). Rows 1-31 show daily wind data for Aberdeen. A 'Mean ...' row is at the bottom.

90. Aberdeen : H<sub>a</sub> = 14 metres + 23 metres.

Table with 21 columns (G.M.T., 1-11, Noon) and 2 rows per day (m/s, °). Rows 1-31 show daily wind data for Aberdeen at two heights. A 'Mean ...' row is at the bottom.



Averages for periods of sixty minutes centred at the exact hours, Greenwich Mean Time.

M.S.L. + h<sub>a</sub> (Height of anemograph above ground) = 14 metres + 23 metres.

July, 1924.

| 13. |      | 14. |      | 15. |      | 16. |      | 17. |      | 18. |      | 19. |      | 20. |      | 21. |      | 22. |      | 23. |      | 24. |      | Mean | Day. |   |
|-----|------|-----|------|-----|------|-----|------|-----|------|-----|------|-----|------|-----|------|-----|------|-----|------|-----|------|-----|------|------|------|---|
| °   | m/s. | °   | m/s. | °   | m/s. | °   | m/s. | °   | m/s. | °   | m/s. | °   | m/s. | °   | m/s. | °   | m/s. | °   | m/s. | °   | m/s. | °   | m/s. | m/s. |      |   |
| 280 | 3.0  | 50  | 2.3  | 100 | 3.0  | 170 | 2.0  | 140 | 1.6  | 1.3 | 180  | 2.6 | 200  | 2.3 | 190  | 2.3 | 180  | 2.6 | 190  | 2.6 | 170  | 2.6 | 170  | 2.6  | 2.7  | 1 |
| 170 | 6.2  | 170 | 6.2  | 170 | 5.9  | 170 | 4.6  | 170 | 5.6  | 180 | 5.2  | 170 | 4.9  | 180 | 4.6  | 180 | 3.6  | 190 | 3.0  | 180 | 3.6  | 180 | 3.9  | 5.0  | 2    |   |
| 190 | 5.9  | 170 | 5.2  | 180 | 5.9  | 180 | 5.9  | 170 | 4.9  | 170 | 3.6  | 170 | 2.6  | 130 | 2.3  | —   | 1.3  | —   | 1.3  | —   | 1.3  | 360 | 2.0  | 4.6  | 3    |   |
| —   | 1.0  | 280 | 2.6  | 250 | 4.6  | 240 | 5.2  | 230 | 6.9  | 230 | 4.6  | 230 | 4.9  | 220 | 2.6  | 220 | 3.0  | —   | 2.6  | 200 | 2.3  | 220 | 2.0  | 3.7  | 4    |   |
| 230 | 3.6  | 230 | 3.9  | 230 | 3.9  | 270 | 3.9  | 290 | 2.0  | —   | 1.0  | —   | 1.0  | —   | 1.0  | —   | 0.7  | —   | 0.3  | —   | 0.3  | 20  | 1.6  | 2.1  | 5    |   |
| 340 | 3.9  | 330 | 3.9  | 10  | 3.3  | 80  | 4.3  | 170 | 2.6  | 170 | 2.3  | 150 | 2.3  | 150 | 2.6  | 170 | 3.3  | 170 | 2.3  | —   | 1.3  | —   | 1.3  | 2.7  | 6    |   |
| 210 | 3.3  | 280 | 3.3  | 280 | 2.6  | 260 | 4.3  | 270 | 3.6  | 270 | 3.9  | 280 | 4.6  | 290 | 7.2  | 280 | 3.6  | 280 | 3.3  | 270 | 3.0  | 270 | 3.9  | 3.4  | 7    |   |
| 200 | 2.6  | —   | 1.3  | 170 | 2.0  | 130 | 2.3  | —   | 1.3  | —   | 1.3  | —   | 1.0  | 280 | 1.6  | —   | 1.0  | —   | 0.7  | 280 | 1.6  | 290 | 2.3  | 1.9  | 8    |   |
| 110 | 3.3  | 130 | 2.6  | 140 | 2.3  | 120 | 2.3  | 120 | 3.0  | 130 | 2.3  | 150 | 2.6  | 160 | 2.3  | 180 | 2.0  | —   | 1.0  | —   | 1.0  | —   | 1.3  | 2.2  | 9    |   |
| 210 | 4.3  | 210 | 3.0  | 180 | 2.6  | 190 | 3.6  | 200 | 3.3  | 190 | 3.6  | 200 | 3.0  | 200 | 3.3  | 200 | 2.6  | 210 | 3.0  | 200 | 1.6  | 200 | 1.6  | 2.1  | 10   |   |
| 180 | 4.3  | 170 | 3.6  | 170 | 3.6  | 170 | 3.6  | 210 | 3.3  | 200 | 3.9  | 210 | 3.3  | 220 | 2.6  | 220 | 3.3  | 190 | 2.0  | —   | 1.3  | —   | 0.7  | 2.7  | 11   |   |
| 160 | 4.9  | 130 | 4.6  | 130 | 5.6  | 140 | 6.2  | 150 | 6.9  | 150 | 3.9  | 160 | 2.6  | 180 | 5.9  | 150 | 1.6  | 140 | 2.3  | 180 | 3.0  | 190 | 3.3  | 3.2  | 12   |   |
| 200 | 2.6  | 220 | 2.6  | 300 | 3.0  | 350 | 2.3  | 340 | 2.3  | 330 | 2.6  | 310 | 1.6  | —   | 1.0  | —   | 1.0  | 270 | 2.6  | 270 | 2.0  | —   | 1.0  | 2.5  | 13   |   |
| 200 | 3.9  | 220 | 4.9  | 220 | 4.3  | 230 | 4.3  | 210 | 3.0  | 210 | 3.0  | 230 | 2.6  | 210 | 3.3  | 220 | 3.6  | 210 | 3.0  | 200 | 2.3  | 200 | 3.6  | 2.9  | 14   |   |
| 190 | 3.6  | 210 | 4.3  | 200 | 3.3  | 150 | 3.0  | 190 | 1.6  | 160 | 1.6  | 190 | 3.3  | 200 | 3.3  | 180 | 1.6  | 180 | 2.0  | 180 | 3.0  | 190 | 2.0  | 2.9  | 15   |   |
| 180 | 4.3  | 200 | 4.9  | 230 | 6.6  | 230 | 4.9  | 240 | 5.2  | 240 | 3.9  | 250 | 3.9  | 270 | 2.0  | 260 | 2.0  | 250 | 2.3  | 240 | 2.6  | 220 | 2.6  | 3.4  | 16   |   |
| 170 | 2.3  | 100 | 2.3  | 280 | 2.6  | 70  | 1.6  | 140 | 1.6  | 200 | 1.6  | —   | 1.3  | —   | 1.0  | 290 | 1.6  | —   | 0.3  | —   | 1.0  | —   | 0.7  | 2.0  | 17   |   |
| 130 | 3.0  | 150 | 2.0  | —   | 1.3  | —   | 1.0  | 180 | 1.6  | —   | 1.3  | —   | 1.3  | —   | 0.7  | —   | 0.7  | 300 | 1.6  | —   | 0.3  | —   | 1.3  | 2.1  | 18   |   |
| 160 | 2.0  | —   | 1.3  | 140 | 2.0  | 160 | 1.6  | —   | 1.0  | —   | 0.3  | —   | 0.7  | —   | 0.7  | 310 | 1.6  | 290 | 1.6  | 290 | 2.0  | —   | 1.3  | 1.9  | 19   |   |
| 150 | 2.3  | 150 | 1.6  | 180 | 1.6  | 150 | 2.0  | 130 | 2.3  | 140 | 1.6  | —   | 0.7  | —   | 1.3  | —   | 1.3  | —   | 1.0  | —   | 0.7  | —   | 0.7  | 1.7  | 20   |   |
| 170 | 2.0  | 140 | 1.6  | 150 | 2.3  | 140 | 2.3  | 130 | 1.6  | —   | 0.7  | —   | 1.0  | —   | 1.0  | —   | 1.0  | —   | 1.3  | —   | 1.0  | —   | 0.7  | 1.8  | 21   |   |
| 130 | 3.9  | 130 | 2.6  | 130 | 3.3  | 130 | 3.0  | 150 | 3.9  | 160 | 2.6  | 160 | 3.0  | 170 | 2.6  | 170 | 3.3  | 200 | 2.3  | 220 | 3.9  | 220 | 1.6  | 2.1  | 22   |   |
| 190 | 4.9  | 230 | 4.6  | 260 | 3.6  | 230 | 3.6  | 280 | 3.3  | 20  | 3.6  | —   | 1.3  | —   | 0.7  | 300 | 1.6  | 250 | 1.6  | 270 | 3.0  | 270 | 2.0  | 2.1  | 23   |   |
| 300 | 6.9  | 290 | 8.2  | 300 | 7.2  | 300 | 7.5  | 300 | 6.9  | 310 | 7.9  | 310 | 7.9  | 310 | 6.6  | 310 | 4.9  | 320 | 4.6  | 320 | 6.2  | 330 | 6.2  | 5.0  | 24   |   |
| 320 | 2.6  | 340 | 3.9  | 340 | 4.3  | 350 | 3.3  | 330 | 2.6  | 340 | 3.6  | 330 | 2.3  | 330 | 2.0  | 310 | 2.0  | 300 | 1.6  | 310 | 2.3  | 290 | 2.6  | 3.6  | 25   |   |
| 350 | 3.3  | 350 | 3.9  | 10  | 3.3  | 360 | 3.0  | 360 | 3.0  | 360 | 2.0  | 330 | 2.3  | 320 | 2.0  | 330 | 1.6  | —   | 0.7  | —   | 1.3  | —   | 1.0  | 2.8  | 26   |   |
| 190 | 2.6  | 140 | 3.0  | 140 | 3.3  | 140 | 3.9  | 150 | 3.6  | 160 | 3.3  | 170 | 3.6  | 160 | 1.6  | 160 | 1.6  | 150 | 2.0  | 140 | 3.0  | 140 | 2.6  | 2.1  | 27   |   |
| 90  | 5.9  | 90  | 6.6  | 100 | 7.9  | 90  | 6.9  | 80  | 5.2  | 80  | 5.6  | 80  | 5.2  | 80  | 5.2  | 80  | 5.2  | 90  | 5.6  | 70  | 4.6  | 70  | 5.9  | 4.8  | 28   |   |
| 60  | 3.6  | 70  | 3.3  | 70  | 3.9  | 60  | 2.6  | 60  | 2.6  | 50  | 2.3  | 50  | 2.0  | 40  | 2.3  | 50  | 2.0  | 50  | 2.0  | 60  | 2.3  | 70  | 2.0  | 4.3  | 29   |   |
| 140 | 3.9  | 150 | 3.9  | 140 | 2.6  | 140 | 3.0  | 150 | 2.6  | 150 | 3.6  | 150 | 3.0  | 150 | 2.6  | 170 | 2.6  | 180 | 1.6  | 160 | 2.0  | 180 | 1.6  | 2.5  | 30   |   |
| 240 | 4.3  | 220 | 4.6  | 210 | 4.6  | 220 | 5.2  | 200 | 4.6  | 180 | 3.0  | 190 | 3.0  | 210 | 2.3  | 210 | 3.6  | 210 | 2.6  | 210 | 1.6  | —   | 1.0  | 2.4  | 31   |   |
| —   | 3.7  | —   | 3.6  | —   | 3.8  | —   | 3.7  | —   | 3.3  | —   | 2.9  | —   | 2.8  | —   | 2.6  | —   | 2.3  | —   | 2.1  | —   | 2.2  | —   | 2.2  | 2.9  | —    |   |

August, 1924.

| 13. |      | 14. |      | 15. |      | 16. |      | 17. |      | 18. |      | 19. |      | 20. |      | 21. |      | 22. |      | 23. |      | 24. |      | Mean | Day. |     |    |
|-----|------|-----|------|-----|------|-----|------|-----|------|-----|------|-----|------|-----|------|-----|------|-----|------|-----|------|-----|------|------|------|-----|----|
| °   | m/s. | °   | m/s. | °   | m/s. | °   | m/s. | °   | m/s. | °   | m/s. | °   | m/s. | °   | m/s. | °   | m/s. | °   | m/s. | °   | m/s. | °   | m/s. | m/s. |      |     |    |
| 190 | 4.6  | 200 | 4.3  | 180 | 4.3  | 180 | 3.9  | 190 | 3.6  | 190 | 3.9  | 190 | 2.6  | 190 | 3.3  | 190 | 3.3  | 190 | 2.3  | 200 | 3.3  | 200 | 2.0  | 3.3  | 1    |     |    |
| 320 | 5.6  | 320 | 5.9  | 330 | 6.2  | 320 | 6.9  | 330 | 6.9  | 320 | 6.9  | 320 | 6.2  | 320 | 7.2  | 320 | 3.9  | 310 | 3.3  | 300 | 3.6  | 290 | 3.9  | 4.1  | 2    |     |    |
| 170 | 4.3  | 180 | 3.3  | 200 | 3.0  | 220 | 3.9  | 210 | 3.6  | 200 | 3.3  | 190 | 3.6  | 200 | 3.0  | 200 | 2.6  | 210 | 3.3  | 210 | 2.6  | 230 | 1.6  | 3.0  | 3    |     |    |
| 210 | 2.3  | 180 | 3.9  | 210 | 3.9  | 220 | 4.3  | 270 | 3.9  | 280 | 2.6  | 250 | 3.3  | 260 | 3.0  | 240 | 2.3  | 230 | 2.0  | 230 | 2.6  | 220 | 2.3  | 2.2  | 4    |     |    |
| 320 | 4.6  | 300 | 3.9  | 310 | 6.2  | 310 | 6.9  | 300 | 5.2  | 290 | 4.6  | 290 | 3.0  | 270 | 2.3  | 270 | 2.3  | 270 | 3.3  | 250 | 4.9  | 220 | 2.6  | 3.0  | 5    |     |    |
| 290 | 4.6  | 290 | 4.3  | 290 | 3.6  | 290 | 4.6  | 290 | 3.9  | 310 | 3.0  | 300 | 1.6  | 260 | 1.6  | 220 | 1.6  | 210 | 2.3  | 240 | 2.6  | 200 | 2.3  | 3.5  | 6    |     |    |
| 300 | 5.6  | 320 | 5.6  | 330 | 4.9  | 310 | 5.2  | 320 | 4.9  | 320 | 3.6  | 310 | 1.6  | —   | 1.0  | —   | 1.3  | 240 | 2.0  | —   | 1.3  | 240 | 2.6  | 3.4  | 7    |     |    |
| 160 | 3.3  | 170 | 3.0  | 180 | 3.3  | 190 | 2.6  | 190 | 3.3  | 190 | 2.6  | 200 | 2.6  | 210 | 2.6  | 230 | 2.6  | 240 | 2.3  | 230 | 2.3  | —   | 1.3  | 2.6  | 8    |     |    |
| 170 | 3.0  | 170 | 3.6  | 180 | 2.6  | 210 | 4.3  | 210 | 3.9  | 220 | 3.9  | 240 | 3.6  | 350 | 2.3  | —   | 1.0  | —   | 0.7  | —   | 1.0  | —   | 0.3  | 2.1  | 9    |     |    |
| 180 | 4.9  | 180 | 4.6  | 190 | 4.6  | 190 | 3.9  | 190 | 3.3  | 190 | 2.3  | 190 | 2.6  | 180 | 1.6  | 180 | 3.0  | 190 | 2.0  | 190 | 1.6  | 190 | 2.0  | 2.4  | 10   |     |    |
| 180 | 3.6  | 190 | 3.9  | 200 | 4.6  | 200 | 3.6  | 200 | 3.0  | 190 | 3.6  | 180 | 3.0  | 190 | 3.0  | 180 | 1.6  | 180 | 2.3  | —   | 1.3  | —   | 1.3  | 3.1  | 11   |     |    |
| 170 | 4.6  | 190 | 3.6  | 180 | 3.9  | 170 | 3.9  | 170 | 3.9  | 180 | 3.3  | 190 | 2.6  | 210 | 1.6  | —   | 1.0  | —   | 0.7  | 300 | 2.0  | 310 | 2.0  | 2.5  | 12   |     |    |
| 350 | 2.6  | 360 | 2.3  | 360 | 2.3  | 80  | 2.0  | 90  | 1.6  | 70  | 1.6  | —   | 1.0  | —   | 1.0  | —   | 1.3  | —   | 1.0  | —   | 1.0  | —   | 1.0  | 2.7  | 13   |     |    |
| 180 | 4.6  | 180 | 4.9  | 180 | 4.6  | 180 | 4.6  | 200 | 3.3  | 190 | 2.6  | 190 | 2.6  | 200 | 2.3  | —   | 1.3  | —   | 1.0  | —   | 1.0  | —   | 1.0  | 2.7  | 14   |     |    |
| 160 | 3.0  | 190 | 3.0  | 140 | 2.6  | 110 | 2.6  | 100 | 1.6  | 250 | 1.6  | —   | 1.3  | 240 | 2.6  | 230 | 2.6  | 230 | 3.6  | 220 | 2.6  | 200 | 1.6  | 2.6  | 15   |     |    |
| 150 | 5.6  | 140 | 5.2  | 140 | 5.2  | 150 | 4.6  | 160 | 3.9  | 180 | 2.6  | 160 | 2.3  | 170 | 3.3  | 160 | 3.0  | 140 | 3.6  | 180 | 2.0  | 210 | 2.0  | 3.2  | 16   |     |    |
| 120 | 3.6  | 110 | 3.0  | 90  | 3.6  | 80  | 3.6  | 70  | 2.6  | 70  | 5.2  | 50  | 3.3  | 340 | 2.6  | 340 | 2.3  | 300 | 2.0  | 300 | 3.3  | 300 | 3.3  | 2.5  | 17   |     |    |
| 310 | 7.5  | 300 | 7.5  | 300 | 6.9  | 300 | 7.9  | 300 | 7.5  | 300 | 7.2  | 300 | 7.2  | 300 | 7.2  | 300 | 7.2  | 290 | 5.2  | 300 | 4.6  | 290 | 4.6  | 6.5  | 18   |     |    |
| 280 | 4.9  | 290 | 5.2  | 310 | 5.9  | 330 | 3.3  | 320 | 2.6  | 300 | 3.0  | 300 | 2.6  | 290 | 3.6  | 290 | 3.6  | 300 | 3.6  | —   | 1.3  | 270 | 1.6  | 4.5  | 19   |     |    |
| 160 | 3.9  | 160 | 3.9  | 160 | 3.6  | 150 | 3.6  | 160 | 3.9  | 150 | 2.6  | 140 | 2.6  | 140 | 2.6  | 140 | 2.6  | 140 | 3.9  | 130 | 4.6  | 140 | 4.6  | 150  | 4.9  | 2.8 | 20 |
| 100 | 3.0  | 90  | 3.9  | 90  | 3.6  | 80  | 3.3  | 80  | 3.6  | 90  | 2.3  | 110 | 1.6  | —   | 1.0  | —   | 1.0  | —   | 1.3  | 320 | 1.6  | 310 | 2.0  | 3.1  | 21   |     |    |
| 70  | 2.0  | 70  | 2.6  | 60  | 2.6  | 50  | 3.9  | 50  | 3.9  | 50  | 3.3  | 30  | 2.3  | 360 | 2.6  | 360 | 2.3  | 350 | 3.0  | 360 | 3.0  | 360 | 3.6  | 2.8  | 22   |     |    |
| 290 | 3.9  | 300 | 4.3  | 300 | 5.6  | 300 | 4.6  | 300 | 4.9  | 310 | 6.2  | 300 | 4.9  | 310 | 4.3  |     |      |     |      |     |      |     |      |      |      |     |    |

Direction expressed in degrees from North. (E = 90°, S = 180°, W = 270°, N = 360°) : Speed in metres per second.

91. Aberdeen :

H<sub>a</sub> (height of anemograph above M.S.L.) = Height of ground above

| Day.     | 1.  |      | 2.  |      | 3.  |      | 4.  |      | 5.  |      | 6.  |      | 7.  |      | 8.  |      | 9.  |      | 10. |      | 11. |      | Noon. |      |     |
|----------|-----|------|-----|------|-----|------|-----|------|-----|------|-----|------|-----|------|-----|------|-----|------|-----|------|-----|------|-------|------|-----|
|          | °   | m/s. | °   | m/s. | °   | m/s. | °   | m/s. | °   | m/s. | °   | m/s. | °   | m/s. | °   | m/s. | °   | m/s. | °   | m/s. | °   | m/s. | °     | m/s. |     |
| 1        | —   | 0.7  | —   | 1.0  | —   | 1.0  | —   | 1.0  | —   | 1.0  | —   | 1.0  | —   | 0.7  | —   | 1.3  | —   | 1.0  | 310 | 1.6  | 300 | 3.6  | 310   | 3.9  |     |
| 2        | 300 | 3.6  | 300 | 4.3  | 310 | 3.3  | 320 | 3.0  | 330 | 2.6  | 340 | 2.0  | 360 | 2.3  | 350 | 2.0  | 350 | 2.3  | 350 | 2.0  | 70  | 3.0  | 60    | 2.0  |     |
| 3        | 200 | 1.6  | —   | 1.0  | —   | 1.3  | —   | 1.0  | —   | 1.3  | —   | 1.3  | —   | 1.0  | —   | 1.0  | —   | 1.0  | 100 | 1.6  | 100 | 1.6  | 90    | 1.6  |     |
| 4        | 300 | 3.3  | 300 | 3.0  | 290 | 3.3  | 290 | 3.0  | 290 | 3.0  | 280 | 3.0  | 290 | 3.3  | 300 | 1.6  | —   | 0.7  | —   | 1.3  | 110 | 2.3  | 110   | 2.0  |     |
| 5        | 50  | 1.6  | —   | 0.7  | 310 | 1.6  | —   | 1.3  | —   | 1.0  | —   | 1.0  | —   | 1.0  | —   | 1.0  | 330 | 1.6  | 300 | 1.6  | 60  | 2.0  | 70    | 2.3  |     |
| 6        | —   | 1.0  | 330 | 2.0  | —   | 1.3  | —   | 1.3  | 310 | 2.0  | 330 | 1.6  | 340 | 1.6  | 330 | 2.0  | 20  | 2.3  | 350 | 2.3  | 360 | 2.3  | 20    | 2.6  |     |
| 7        | —   | 1.3  | —   | 1.0  | —   | 1.0  | —   | 1.0  | —   | 0.3  | —   | 0.7  | —   | 1.0  | —   | 1.0  | —   | 1.0  | —   | 1.0  | 100 | 1.6  | 100   | 1.6  |     |
| 8        | 50  | 4.3  | 50  | 3.9  | 50  | 4.6  | 60  | 5.9  | 60  | 5.6  | 50  | 4.9  | 60  | 4.9  | 40  | 4.3  | 30  | 5.2  | 30  | 3.9  | 20  | 2.6  | 10    | 3.3  |     |
| 9        | —   | 1.3  | 360 | 2.0  | 340 | 4.6  | 340 | 4.3  | 330 | 4.6  | 320 | 4.6  | 320 | 5.2  | 320 | 7.5  | 320 | 9.2  | 320 | 9.5  | 320 | 8.9  | 330   | 6.6  |     |
| 10       | 310 | 6.6  | 310 | 7.5  | 300 | 6.9  | 290 | 5.9  | 290 | 5.6  | 280 | 3.6  | 280 | 3.9  | 300 | 7.2  | 300 | 6.9  | 300 | 6.9  | 310 | 7.2  | 310   | 6.2  |     |
| 11       | 150 | 2.0  | 170 | 3.0  | 170 | 3.0  | 160 | 4.6  | 170 | 4.6  | 180 | 3.3  | 210 | 3.3  | 210 | 3.9  | 200 | 2.6  | 230 | 2.6  | 250 | 4.6  | 250   | 5.9  |     |
| 12       | 210 | 1.6  | 200 | 2.3  | 180 | 2.6  | 200 | 2.6  | 210 | 6.6  | 210 | 5.6  | 200 | 5.2  | 200 | 6.6  | 200 | 4.3  | 200 | 5.6  | 210 | 4.9  | 210   | 3.9  |     |
| 13       | 200 | 4.9  | 200 | 4.9  | 200 | 5.9  | 190 | 4.9  | 200 | 5.6  | 210 | 4.9  | 210 | 4.3  | 200 | 5.6  | 210 | 6.6  | 210 | 7.9  | 200 | 6.9  | 210   | 6.6  |     |
| 14       | 240 | 3.6  | 240 | 2.0  | —   | 0.7  | —   | 1.3  | 230 | 2.3  | 220 | 2.6  | 220 | 2.6  | 210 | 2.6  | 200 | 2.3  | 200 | 3.6  | 210 | 3.3  | 220   | 5.6  |     |
| 15       | 240 | 4.3  | 250 | 3.6  | 250 | 3.9  | 230 | 3.3  | 220 | 2.3  | —   | 0.7  | —   | 1.3  | 200 | 2.0  | 200 | 2.3  | 200 | 2.6  | 180 | 2.6  | 200   | 2.3  |     |
| 16       | 230 | 4.6  | 230 | 3.6  | 240 | 2.6  | 250 | 3.6  | 220 | 1.6  | 230 | 5.2  | 220 | 4.9  | 230 | 4.3  | 220 | 3.9  | 230 | 4.6  | 260 | 3.6  | 230   | 5.2  |     |
| 17       | 210 | 2.3  | 200 | 2.3  | 200 | 1.6  | 210 | 3.0  | 190 | 2.6  | 190 | 3.0  | 210 | 3.6  | 200 | 3.3  | 180 | 3.3  | 190 | 3.9  | 190 | 4.3  | 180   | 5.6  |     |
| 18       | 230 | 6.6  | 230 | 6.9  | 220 | 6.6  | 240 | 8.5  | 250 | 9.8  | 250 | 10.2 | 250 | 8.2  | 260 | 7.9  | 270 | 7.9  | 280 | 9.8  | 280 | 10.2 | 280   | 9.2  |     |
| 19       | 210 | 2.3  | 200 | 2.0  | 200 | 1.6  | —   | 1.3  | 210 | 1.6  | 210 | 3.0  | 210 | 3.3  | 210 | 3.6  | 210 | 3.0  | 220 | 2.6  | 220 | 3.6  | 220   | 3.9  |     |
| 20       | 220 | 1.6  | —   | 1.3  | —   | 1.0  | —   | 0.3  | 300 | 2.0  | 300 | 1.6  | 300 | 2.3  | 310 | 2.3  | 300 | 1.6  | 300 | 3.0  | 320 | 2.3  | —     | 1.3  |     |
| 21       | 90  | 10.5 | 90  | 11.1 | 90  | 6.9  | —   | 1.0  | 290 | 2.3  | 290 | 5.6  | 310 | 8.9  | 300 | 9.8  | 300 | 8.5  | 280 | 7.9  | 280 | 6.9  | 280   | 8.5  |     |
| 22       | 220 | 2.0  | —   | 1.3  | —   | 1.3  | —   | 1.3  | —   | 0.3  | —   | 1.0  | —   | 1.3  | —   | 0.3  | —   | 0.3  | —   | 0.7  | —   | 1.0  | 140   | 2.3  |     |
| 23       | 270 | 2.3  | 280 | 2.0  | 290 | 2.6  | 290 | 2.6  | 300 | 3.6  | 300 | 2.6  | 90  | 4.9  | 90  | 7.2  | 90  | 6.9  | 100 | 6.6  | 80  | 6.6  | 60    | 7.9  |     |
| 24       | 320 | 2.3  | 300 | 2.3  | 310 | 3.0  | 310 | 3.6  | 320 | 3.9  | 310 | 3.3  | 300 | 3.9  | 300 | 5.2  | 300 | 3.6  | 310 | 4.6  | 300 | 4.9  | 290   | 5.2  |     |
| 25       | 250 | 2.0  | 220 | 2.3  | 240 | 1.6  | —   | 1.3  | —   | 1.3  | —   | 1.3  | —   | 1.0  | —   | 0.7  | —   | 240  | 1.6 | 220  | —   | 1.3  | 140   | 3.0  |     |
| 26       | 300 | 2.0  | 300 | 2.3  | —   | 1.0  | —   | 1.3  | 300 | 3.3  | —   | 1.3  | 290 | 1.6  | 300 | 2.3  | 320 | 2.3  | —   | 1.3  | 80  | 2.6  | 110   | 2.6  |     |
| 27       | —   | 1.3  | —   | 1.0  | —   | 1.3  | —   | 1.0  | —   | 1.3  | —   | 0.7  | —   | 1.3  | —   | 1.3  | —   | 290  | 2.6 | 300  | 3.9 | 290  | 4.3   | 290  | 4.6 |
| 28       | 230 | 1.6  | —   | 1.3  | —   | 1.3  | 240 | 2.3  | 230 | 2.0  | 220 | 2.3  | 200 | 1.6  | 210 | 2.0  | —   | 1.3  | 180 | 4.3  | 180 | 4.3  | 190   | 5.6  |     |
| 29       | 220 | 5.9  | 230 | 5.2  | 220 | 6.9  | 210 | 5.9  | 220 | 3.6  | 220 | 3.9  | 210 | 2.3  | 210 | 2.6  | 210 | 3.0  | 180 | 3.9  | 190 | 4.6  | 180   | 5.6  |     |
| 30       | 200 | 3.6  | 230 | 5.2  | 220 | 5.6  | 220 | 4.9  | 200 | 3.0  | 200 | 2.0  | 190 | 3.9  | 180 | 4.6  | 190 | 3.3  | 180 | 3.9  | 170 | 4.9  | 180   | 4.3  |     |
| Mean ... | —   | 3.1  | —   | 3.1  | —   | 3.0  | —   | 2.9  | —   | 3.0  | —   | 2.9  | —   | 3.2  | —   | 3.6  | —   | 3.4  | —   | 3.9  | —   | 4.1  | —     | 4.4  |     |

92. Aberdeen : H<sub>a</sub> = 14 metres + 23 metres.

|    | °   | m/s. | °   | m/s. | °   | m/s. | °   | m/s. | °   | m/s. | °   | m/s. | °   | m/s. | °   | m/s. | °   | m/s. | °   | m/s. | °   | m/s. | °   | m/s. |
|----|-----|------|-----|------|-----|------|-----|------|-----|------|-----|------|-----|------|-----|------|-----|------|-----|------|-----|------|-----|------|
| 1  | 310 | 3.3  | 310 | 2.6  | 310 | 2.0  | 290 | 3.0  | 280 | 2.3  | 270 | 3.0  | 200 | 3.0  | 180 | 2.6  | 190 | 3.0  | 200 | 4.6  | 200 | 4.6  | 210 | 4.9  |
| 2  | 180 | 3.6  | 170 | 3.9  | 180 | 3.9  | 170 | 4.3  | 190 | 3.3  | 180 | 3.9  | 190 | 3.6  | 190 | 3.3  | 170 | 4.3  | 180 | 4.9  | 170 | 5.2  | 180 | 5.9  |
| 3  | —   | 0.7  | —   | 1.0  | —   | 0.7  | 360 | 1.6  | —   | 1.0  | 30  | 2.0  | —   | 1.3  | 340 | 2.3  | 310 | 3.9  | 360 | 3.0  | 10  | 3.6  | 360 | 3.3  |
| 4  | 310 | 4.9  | 300 | 5.6  | 300 | 5.9  | 290 | 5.9  | 300 | 5.6  | 300 | 5.9  | 290 | 5.2  | 290 | 4.3  | 270 | 2.6  | 290 | 2.3  | 270 | 2.3  | —   | 1.3  |
| 5  | 150 | 1.6  | 140 | 3.6  | 140 | 3.6  | 130 | 3.6  | 130 | 4.3  | 130 | 4.3  | 140 | 3.6  | 140 | 3.0  | 150 | 3.0  | 140 | 2.6  | 130 | 1.6  | 110 | 2.3  |
| 6  | 80  | 3.3  | 60  | 2.0  | —   | 1.0  | 250 | 3.0  | 280 | 2.6  | 260 | 3.3  | 240 | 5.2  | 240 | 4.6  | 240 | 4.6  | 240 | 5.9  | 230 | 4.9  | 230 | 6.2  |
| 7  | 190 | 3.3  | 210 | 3.9  | 270 | 5.2  | 280 | 6.9  | 280 | 8.2  | 280 | 8.5  | 270 | 5.2  | 260 | 4.9  | 250 | 3.6  | 260 | 5.6  | 260 | 4.3  | 260 | 5.6  |
| 8  | 240 | 2.3  | —   | 1.3  | —   | 0.7  | —   | 0.3  | —   | 0.7  | 250 | 1.6  | —   | 1.3  | —   | 1.0  | —   | 1.3  | —   | 0.7  | —   | 1.3  | 290 | 1.6  |
| 9  | 290 | 2.3  | 290 | 3.0  | 290 | 2.3  | —   | 1.3  | —   | 1.3  | 280 | 2.0  | —   | 1.3  | 260 | 2.0  | —   | 1.6  | —   | 1.3  | 170 | 2.0  | 170 | 3.6  |
| 10 | 210 | 1.6  | —   | 1.3  | —   | 0.3  | 230 | 3.0  | 220 | 2.3  | 220 | 2.6  | 190 | 2.0  | —   | 1.3  | —   | 1.0  | —   | 0.3  | —   | 0.3  | —   | 0.7  |
| 11 | 200 | 3.3  | 220 | 3.0  | 220 | 3.0  | 220 | 3.0  | 210 | 2.3  | —   | 1.3  | 230 | 2.6  | 210 | 3.6  | 210 | 5.6  | 210 | 4.3  | 210 | 4.6  | 200 | 5.2  |
| 12 | 170 | 4.9  | 180 | 3.6  | 190 | 4.9  | 190 | 5.9  | 200 | 6.6  | 220 | 5.6  | 220 | 4.6  | 210 | 4.3  | 220 | 4.9  | 220 | 4.9  | 220 | 4.6  | 210 | 2.0  |
| 13 | —   | 1.0  | —   | 0.7  | —   | 1.0  | —   | 1.3  | —   | 1.3  | —   | 1.3  | —   | 1.3  | —   | 1.3  | —   | 1.3  | —   | 1.3  | —   | 1.0  | —   | 1.3  |
| 14 | —   | 1.0  | —   | 1.0  | 200 | 1.6  | 210 | 1.6  | 200 | 2.0  | 200 | 2.6  | 200 | 2.6  | 200 | 3.0  | 190 | 1.6  | 200 | 2.6  | 190 | 2.3  | 170 | 2.6  |
| 15 | 190 | 1.6  | 180 | 3.0  | 190 | 2.0  | 180 | 2.3  | 190 | 2.3  | 190 | 2.0  | —   | 1.3  | 180 | 3.9  | 180 | 3.9  | 180 | 5.6  | 180 | 5.6  | 190 | 4.6  |
| 16 | 180 | 5.2  | 180 | 4.3  | 180 | 4.3  | 180 | 4.6  | 190 | 4.9  | 190 | 4.9  | 180 | 4.6  | 180 | 4.3  | 190 | 3.3  | 190 | 3.6  | 200 | 3.6  | 210 | 3.3  |
| 17 | 250 | 2.0  | 240 | 3.0  | 260 | 4.6  | 260 | 3.0  | 280 | 3.6  | 280 | 3.6  | 280 | 2.3  | 290 | 3.6  | 300 | 4.3  | 300 | 7.2  | 300 | 6.6  | 310 | 6.9  |
| 18 | —   | 1.3  | —   | 1.3  | —   | 0.7  | —   | 1.0  | —   | 0.7  | —   | 1.0  | —   | 1.3  | —   | 1.0  | —   | 1.3  | 260 | 1.6  | —   | 1.3  | —   | 1.0  |
| 19 | 160 | 3.0  | 160 | 4.3  | 160 | 3.9  | 160 | 4.9  | 160 | 3.9  | 160 | 3.9  | 160 | 4.3  | 170 | 3.9  | 170 | 3.6  | 170 | 4.3  | 180 | 3.3  | 190 | 3.0  |
| 20 | —   | 0.7  | 220 | 1.6  | —   | 1.3  | —   | 1.3  | 290 | 3.0  | 270 | 2.6  | 300 | 4.9  | 290 | 5.6  | 300 | 5.9  | 310 | 5.9  | 320 | 8.2  | 320 | 7.9  |
| 21 | 310 | 3.0  | 310 | 2.3  | 310 | 2.6  | 330 | 2.0  | 340 | 2.6  | 350 | 2.3  | 350 | 2.3  | 360 | 3.6  | 10  | 3.6  | 10  | 3.6  | 20  | 3.6  | 40  | 3.6  |
| 22 | 300 | 3.3  | 290 | 3.0  | 300 | 3.0  | 290 | 3.3  | 300 | 3.6  | 300 | 3.0  | 300 | 3.0  | 300 | 3.6  | 290 | 3.0  | 290 | 2.6  | 290 | 1.6  | —   | 0.7  |
| 23 | 210 | 3.0  | 220 | 3.3  | 210 | 3.3  | 200 | 2.0  | 210 | 2.3  | 210 | 2.6  | 210 | 3.0  | 200 | 3.3  | 210 | 3.3  | 210 | 4.3  | 210 | 5.9  | 210 | 6.2  |
| 24 | 210 | 2.6  | 210 | 2.0  | 210 | 2.6  | 200 | 3.9  | 190 | 3.3  | 190 | 3.6  | 200 | 3.9  | 190 | 5.6  | 180 | 6.9  | 190 | 7.2  | 190 | 7.2  | 190 | 6.6  |
| 25 | 150 | 6.6  | 150 | 6.6  | 150 | 7.2  | 150 | 6.9  | 150 | 6.9  | 150 | 6.6  | 140 | 8.5  | 140 | 7.2  | 140 | 8.9  | 150 | 7.5  | 150 | 6.6  | 150 | 5.9  |
| 26 | —   | 1.3  | —   | 0.7  | —   | 1.0  | —   | 0.7  | —   | 1.0  | —   | 1.3  | —   | 1.3  | 220 | 2.0  | 220 | 2.0  | 200 | 1.6  | 210 | 2.0  | 210 | 2.3  |
| 27 | 310 | 3.0  | 310 | 3.0  | 310 | 2.3  | 320 | 2.3  | 320 | 3.0  | 320 | 2.3  | 320 | 3.0  | 300 | 2.3  | 300 | 2.6  | 310 | 3.3  | 300 | 4.3  | 310 | 4.9  |
| 2  |     |      |     |      |     |      |     |      |     |      |     |      |     |      |     |      |     |      |     |      |     |      |     |      |

Averages for periods of sixty minutes centred at the exact hours, Greenwich Mean Time.

M.S.L. +  $h_a$  (height of anemograph above ground) = 14 metres + 23 metres.

September, 1924.

| 13. |      | 14. |      | 15. |      | 16. |      | 17. |      | 18. |      | 19. |      | 20. |      | 21. |      | 22. |      | 23. |      | 24. |      | Mean | Day. |
|-----|------|-----|------|-----|------|-----|------|-----|------|-----|------|-----|------|-----|------|-----|------|-----|------|-----|------|-----|------|------|------|
| °   | m/s. | °   | m/s. | °   | m/s. | °   | m/s. | °   | m/s. | °   | m/s. | °   | m/s. | °   | m/s. | °   | m/s. | °   | m/s. | °   | m/s. | °   | m/s. | m/s. |      |
| 320 | 3.0  | 70  | 2.0  | 140 | 2.3  | —   | 1.3  | 290 | 2.0  | 310 | 2.6  | 310 | 2.6  | 340 | 1.6  | —   | 1.3  | 290 | 1.6  | 300 | 3.6  | 290 | 3.6  | 1.8  | 1    |
| 80  | 2.6  | 80  | 3.6  | 90  | 2.6  | 100 | 1.6  | 90  | 1.6  | 70  | 1.6  | —   | 1.0  | —   | 0.7  | —   | 0.3  | —   | 0.7  | —   | 1.0  | —   | 1.3  | 2.2  | 2    |
| 70  | 2.6  | 70  | 2.6  | 80  | 2.6  | 90  | 2.3  | 110 | 2.3  | 130 | 1.6  | 130 | 2.0  | —   | 0.7  | —   | 1.0  | —   | 1.0  | 300 | 2.0  | 300 | 3.0  | 1.6  | 3    |
| 100 | 2.0  | 90  | 2.3  | 90  | 2.0  | 90  | 2.0  | —   | 1.0  | —   | 1.0  | —   | 0.7  | 300 | 1.6  | 300 | 2.6  | 300 | 2.0  | 300 | 1.6  | —   | 1.3  | 2.1  | 4    |
| 80  | 3.0  | 90  | 2.6  | —   | 1.3  | 50  | 2.6  | 30  | 3.0  | 20  | 1.6  | 30  | 2.3  | 30  | 2.3  | 20  | 1.6  | —   | 0.3  | —   | 1.0  | —   | 1.0  | 1.7  | 5    |
| 50  | 3.9  | 50  | 4.9  | 40  | 5.6  | 30  | 3.3  | 30  | 3.0  | 10  | 2.0  | 20  | 1.6  | —   | 1.0  | —   | 1.0  | —   | 1.3  | —   | 0.7  | —   | 0.7  | 2.1  | 6    |
| 130 | 2.3  | 130 | 1.6  | 110 | 2.3  | 130 | 1.6  | 100 | 1.6  | —   | 1.3  | 80  | 2.0  | 70  | 2.6  | 60  | 2.0  | 60  | 3.0  | 70  | 3.6  | 50  | 3.3  | 1.6  | 7    |
| 10  | 1.6  | —   | 0.7  | —   | 1.3  | —   | 1.3  | —   | 1.0  | 180 | 1.6  | —   | 1.3  | 200 | 1.6  | 200 | 2.0  | 200 | 2.3  | —   | 1.0  | —   | 1.0  | 3.0  | 8    |
| 350 | 6.2  | 350 | 6.6  | 350 | 7.5  | 340 | 6.6  | 340 | 7.9  | 340 | 7.5  | 330 | 8.2  | 330 | 8.2  | 320 | 8.2  | 320 | 6.2  | 320 | 5.2  | 320 | 7.2  | 6.3  | 9    |
| 300 | 6.9  | 310 | 5.6  | 310 | 5.6  | 300 | 3.6  | 310 | 2.6  | 300 | 2.3  | 300 | 1.6  | 300 | 1.6  | 280 | 1.6  | —   | 1.3  | —   | 1.0  | —   | 0.7  | 4.7  | 10   |
| 270 | 5.6  | 280 | 6.2  | 280 | 6.9  | 280 | 6.6  | 280 | 5.2  | 280 | 3.3  | 280 | 3.9  | 250 | 2.0  | 260 | 5.6  | 270 | 5.2  | 250 | 2.3  | 230 | 1.6  | 4.1  | 11   |
| 170 | 4.3  | 190 | 4.3  | 200 | 4.9  | 200 | 3.6  | 200 | 3.3  | 200 | 2.3  | 180 | 2.0  | 190 | 3.9  | 200 | 4.3  | 200 | 4.6  | 180 | 5.2  | 210 | 4.6  | 4.1  | 12   |
| 230 | 8.5  | 230 | 8.5  | 220 | 8.2  | 240 | 4.6  | 240 | 5.9  | 230 | 4.3  | 220 | 1.6  | 220 | 3.3  | 220 | 2.3  | 230 | 2.3  | 220 | 3.0  | 240 | 3.0  | 5.2  | 13   |
| 230 | 6.6  | 230 | 6.2  | 230 | 5.9  | 230 | 5.2  | 250 | 5.6  | 280 | 3.6  | 280 | 3.0  | 250 | 3.6  | 240 | 2.6  | 240 | 3.9  | 230 | 3.0  | 230 | 3.3  | 3.5  | 14   |
| 210 | 3.9  | 190 | 3.0  | 190 | 4.9  | 190 | 4.3  | 190 | 5.9  | 190 | 6.2  | 200 | 5.6  | 200 | 6.6  | 210 | 7.2  | 210 | 5.2  | 220 | 5.2  | 220 | 4.6  | 3.9  | 15   |
| 230 | 5.2  | 220 | 4.3  | 220 | 3.6  | 210 | 4.9  | 210 | 4.6  | 200 | 4.3  | 180 | 3.6  | 190 | 3.6  | 190 | 3.6  | 200 | 2.3  | 180 | 1.6  | 210 | 2.3  | 3.9  | 16   |
| 180 | 5.6  | 240 | 5.9  | 260 | 7.2  | 250 | 8.5  | 250 | 9.2  | 250 | 8.5  | 240 | 4.9  | 230 | 8.2  | 240 | 8.2  | 230 | 8.9  | 230 | 8.9  | 240 | 8.5  | 5.3  | 17   |
| 280 | 7.9  | 280 | 7.5  | 270 | 7.2  | 280 | 5.6  | 280 | 4.9  | 280 | 3.6  | 240 | 2.6  | 200 | 2.0  | 210 | 2.6  | 230 | 2.3  | 220 | 3.6  | 230 | 3.0  | 6.6  | 18   |
| 210 | 4.3  | 220 | 4.6  | 220 | 4.3  | 220 | 4.3  | 210 | 2.6  | 190 | 2.0  | 200 | 1.6  | 200 | 2.0  | 180 | 2.3  | 200 | 2.3  | 210 | 2.6  | 210 | 2.3  | 2.8  | 19   |
| 140 | 2.6  | 170 | 3.6  | 180 | 3.3  | 180 | 3.0  | 170 | 3.0  | 170 | 3.0  | 170 | 3.3  | 150 | 3.6  | 150 | 5.9  | 130 | 5.2  | 120 | 7.9  | 110 | 8.9  | 2.9  | 20   |
| 280 | 7.5  | 280 | 6.9  | 280 | 4.9  | 270 | 6.2  | 270 | 5.2  | 260 | 4.3  | 250 | 3.6  | 250 | 2.0  | 230 | 2.3  | 220 | 2.3  | 230 | 2.0  | 230 | 2.6  | 5.9  | 21   |
| 140 | 3.3  | 180 | 3.0  | 190 | 2.3  | 250 | 1.6  | —   | 0.7  | 280 | 1.6  | 280 | 1.6  | 300 | 1.6  | 290 | 2.6  | —   | 1.3  | —   | 0.7  | 270 | 1.6  | 1.5  | 22   |
| 50  | 8.2  | 60  | 9.8  | 50  | 8.9  | 50  | 7.2  | 40  | 5.2  | 30  | 3.6  | 20  | 3.0  | 340 | 2.0  | 300 | 2.3  | 300 | 5.2  | 310 | 3.6  | —   | 1.3  | 4.8  | 23   |
| 290 | 4.9  | 270 | 3.0  | 270 | 2.6  | 300 | 2.6  | 270 | 2.0  | 240 | 2.0  | 230 | 2.0  | 250 | 2.3  | 260 | 2.6  | 240 | 2.0  | 230 | 2.0  | 230 | 2.0  | 3.1  | 24   |
| 170 | 2.3  | 190 | 2.0  | 190 | 2.0  | —   | 1.3  | —   | 1.3  | —   | 1.3  | —   | 1.3  | 300 | 2.0  | 300 | 2.3  | 300 | 2.3  | —   | 1.0  | —   | 1.0  | 1.7  | 25   |
| 110 | 2.3  | 120 | 2.0  | 130 | 3.0  | —   | 1.0  | 130 | 1.6  | —   | 1.0  | —   | 1.0  | —   | 0.3  | —   | 0.7  | —   | 0.3  | —   | 0.3  | —   | 0.7  | 1.6  | 26   |
| 310 | 3.6  | 300 | 3.9  | 300 | 3.9  | 300 | 3.9  | 270 | 2.0  | 280 | 1.6  | 280 | 2.0  | 300 | 2.3  | —   | 1.0  | —   | 1.0  | —   | 0.7  | —   | 1.0  | 2.1  | 27   |
| 190 | 6.9  | 180 | 6.2  | 210 | 6.9  | 220 | 6.2  | 220 | 3.9  | 210 | 3.3  | 200 | 3.3  | 210 | 5.9  | 220 | 9.5  | 220 | 7.5  | 210 | 7.2  | 230 | 6.2  | 4.2  | 28   |
| 180 | 5.9  | 180 | 6.9  | 180 | 6.9  | 170 | 7.2  | 180 | 6.9  | 180 | 7.2  | 180 | 6.6  | 180 | 6.6  | 180 | 7.2  | 180 | 6.6  | 180 | 7.5  | 190 | 5.9  | 5.6  | 29   |
| 180 | 4.3  | 170 | 3.0  | 170 | 2.3  | 180 | 2.3  | 170 | 2.0  | —   | 1.0  | 300 | 3.0  | 310 | 3.9  | 300 | 3.6  | 310 | 4.3  | 310 | 4.3  | 310 | 3.0  | 3.7  | 30   |
| —   | 4.6  | —   | 4.4  | —   | 4.4  | —   | 3.9  | —   | 3.6  | —   | 3.0  | —   | 2.3  | —   | 3.0  | —   | 3.3  | —   | 3.1  | —   | 3.1  | —   | 3.0  | 3.5  | —    |

October, 1924.

| 13. |      | 14. |      | 15. |      | 16. |      | 17. |      | 18. |      | 19. |      | 20. |      | 21. |      | 22. |      | 23. |      | 24. |      | Mean | Day |
|-----|------|-----|------|-----|------|-----|------|-----|------|-----|------|-----|------|-----|------|-----|------|-----|------|-----|------|-----|------|------|-----|
| °   | m/s. | °   | m/s. | °   | m/s. | °   | m/s. | °   | m/s. | °   | m/s. | °   | m/s. | °   | m/s. | °   | m/s. | °   | m/s. | °   | m/s. | °   | m/s. | m/s. |     |
| 210 | 5.9  | 220 | 4.6  | 210 | 7.5  | 200 | 8.2  | 200 | 5.9  | 210 | 5.9  | 210 | 5.9  | 200 | 3.6  | 200 | 3.6  | 190 | 3.9  | 180 | 3.9  | 180 | 4.9  | 4.3  | 1.  |
| 190 | 3.9  | 190 | 4.3  | 180 | 3.6  | 190 | 3.0  | 200 | 2.0  | —   | 1.3  | 150 | 2.6  | —   | 1.3  | —   | 1.0  | —   | 0.3  | —   | 0.3  | —   | 1.3  | 3.2  | 2   |
| 350 | 3.3  | 350 | 3.9  | 340 | 3.9  | 330 | 4.3  | 330 | 4.6  | 330 | 4.9  | 330 | 5.2  | 330 | 4.6  | 320 | 4.6  | 310 | 4.9  | 310 | 4.6  | 310 | 4.3  | 3.2  | 3   |
| —   | 0.3  | 170 | 2.3  | 170 | 3.0  | 160 | 2.3  | 170 | 2.0  | 190 | 2.3  | 200 | 2.0  | 210 | 2.3  | 200 | 1.6  | 200 | 1.6  | 210 | 1.6  | 170 | 2.0  | 3.2  | 4   |
| 100 | 4.6  | 100 | 5.2  | 100 | 5.2  | 80  | 5.6  | 80  | 5.2  | 80  | 6.9  | 80  | 7.5  | 60  | 5.9  | 50  | 5.9  | 80  | 5.9  | 110 | 4.6  | 100 | 3.9  | 4.3  | 5   |
| 220 | 6.6  | 210 | 5.9  | 210 | 5.2  | 190 | 3.9  | 180 | 3.9  | 170 | 4.3  | 160 | 4.9  | 160 | 5.6  | 130 | 6.2  | 110 | 7.2  | 100 | 6.2  | 180 | 3.6  | 4.6  | 6   |
| 260 | 4.9  | 270 | 4.3  | 260 | 4.6  | 250 | 3.3  | 260 | 3.6  | 240 | 4.3  | 240 | 2.6  | 220 | 2.0  | —   | 1.3  | 200 | 2.3  | 220 | 2.6  | 220 | 3.0  | 4.3  | 7   |
| 310 | 2.0  | —   | 1.3  | —   | 1.0  | —   | 0.7  | —   | 0.3  | —   | 0.7  | —   | 1.3  | —   | 1.0  | 300 | 1.6  | 290 | 2.0  | 290 | 1.6  | 290 | 3.0  | 1.3  | 8   |
| 170 | 3.6  | 200 | 3.3  | 200 | 3.9  | 180 | 3.3  | 170 | 3.9  | 170 | 3.6  | 180 | 3.3  | 180 | 4.3  | 170 | 4.3  | 170 | 4.3  | 180 | 3.9  | 200 | 3.0  | 2.9  | 9   |
| —   | 1.0  | 250 | 1.6  | 30  | 1.6  | 280 | 1.6  | 230 | 2.6  | 230 | 2.6  | 230 | 2.6  | 230 | 1.6  | —   | 1.0  | —   | 0.7  | 150 | 2.0  | 160 | 1.6  | 1.6  | 10  |
| 200 | 5.6  | 190 | 6.2  | 190 | 4.6  | 190 | 5.6  | 190 | 5.6  | 190 | 4.3  | 180 | 4.3  | 180 | 3.9  | 170 | 4.9  | 170 | 4.6  | 170 | 6.9  | 170 | 5.6  | 4.2  | 11  |
| 210 | 2.3  | 220 | 3.6  | 200 | 3.6  | 210 | 3.6  | 190 | 2.0  | 210 | 2.6  | —   | 1.3  | 220 | 2.3  | 210 | 2.3  | —   | 1.3  | —   | 1.3  | —   | 0.7  | 3.6  | 12  |
| —   | 0.3  | —   | 0.7  | 70  | 1.6  | —   | 0.7  | —   | 0.3  | —   | 1.0  | 310 | 2.0  | 300 | 2.0  | —   | 1.0  | —   | 0.7  | —   | 0.7  | —   | 0.3  | 1.1  | 13  |
| 170 | 2.6  | 180 | 2.3  | 190 | 3.3  | 200 | 3.0  | 210 | 2.6  | 210 | 3.0  | 200 | 1.6  | —   | 1.3  | —   | 0.7  | 200 | 1.6  | —   | 1.3  | —   | 0.3  | 2.0  | 14  |
| 180 | 4.3  | 190 | 4.3  | 170 | 4.3  | 170 | 3.9  | 180 | 4.9  | 170 | 4.6  | 170 | 4.9  | 170 | 4.6  | 180 | 5.2  | 180 | 4.6  | 180 | 4.9  | 180 | 4.9  | 3.8  | 15  |
| 210 | 4.3  | 220 | 4.9  | 210 | 4.6  | 220 | 2.0  | —   | 1.3  | 200 | 3.0  | 200 | 2.0  | 250 | 3.3  | 250 | 3.0  | 260 | 3.9  | 250 | 2.6  | 240 | 2.3  | 3.7  | 16  |
| 300 | 7.2  | 310 | 5.2  | 310 | 4.6  | 310 | 3.0  | —   | 1.0  | —   | 1.3  | —   | 1.0  | 300 | 2.3  | 290 | 2.3  | 290 | 2.0  | 290 | 2.0  | —   | 1.3  | 3.5  | 17  |
| —   | 1.3  | 170 | 2.0  | 170 | 1.6  | 190 | 1.6  | —   | 1.3  |     |      |     |      |     |      |     |      |     |      |     |      |     |      |      |     |

Direction expressed in degrees from North. (E=90°, S=180°, W=270°, N=360°) : Speed in metres per second.

93. Aberdeen :

H<sub>a</sub> (height of anemograph above M.S.L.) = Height of ground above

| Day.     | 1.  |      | 2.  |      | 3.  |      | 4.  |      | 5.  |      | 6.  |      | 7.  |      | 8.  |      | 9.  |      | 10. |      | 11. |      | Noon. |      |
|----------|-----|------|-----|------|-----|------|-----|------|-----|------|-----|------|-----|------|-----|------|-----|------|-----|------|-----|------|-------|------|
|          | °   | m/s. | °   | m/s. | °   | m/s. | °   | m/s. | °   | m/s. | °   | m/s. | °   | m/s. | °   | m/s. | °   | m/s. | °   | m/s. | °   | m/s. | °     | m/s. |
| 1        | 230 | 2.0  | 240 | 2.6  | 240 | 2.3  | —   | 0.7  | 300 | 1.6  | 300 | 2.0  | 310 | 3.6  | 320 | 5.6  | 310 | 5.9  | 310 | 5.2  | 300 | 6.9  | 300   | 4.3  |
| 2        | 300 | 2.6  | 290 | 2.6  | 270 | 1.6  | —   | 1.3  | —   | 0.7  | —   | 0.7  | —   | 1.3  | —   | 1.3  | —   | 1.0  | 310 | 2.6  | 310 | 3.3  | 340   | 3.0  |
| 3        | 290 | 6.6  | 300 | 8.9  | 300 | 7.2  | 280 | 3.9  | 290 | 5.2  | 280 | 2.6  | 290 | 4.6  | 300 | 6.9  | 310 | 6.6  | 300 | 7.5  | 300 | 6.9  | 320   | 7.2  |
| 4        | 300 | 5.6  | 300 | 2.3  | 300 | 3.9  | 290 | 2.6  | 290 | 4.9  | 290 | 4.9  | 280 | 2.3  | 280 | 3.3  | 260 | 3.3  | 250 | 3.3  | 250 | 3.9  | 240   | 3.9  |
| 5        | —   | 1.3  | 270 | 3.3  | 270 | 3.3  | 270 | 2.3  | 280 | 3.6  | 290 | 4.9  | 300 | 4.6  | 300 | 3.6  | 300 | 5.2  | 300 | 4.6  | 300 | 4.9  | 310   | 4.9  |
| 6        | 290 | 2.0  | 290 | 1.6  | 280 | 1.6  | 270 | 1.6  | 270 | 2.3  | 290 | 2.0  | 290 | 1.6  | 290 | 1.6  | 290 | 1.6  | 300 | 2.6  | 310 | 3.0  | 300   | 3.3  |
| 7        | 290 | 2.0  | 300 | 2.0  | 290 | 3.0  | 290 | 1.6  | 290 | 1.6  | 290 | 2.3  | 290 | 2.0  | —   | 1.3  | 290 | 1.6  | —   | 1.3  | 290 | 2.0  | 290   | 2.3  |
| 8        | —   | 0.3  | —   | 0.3  | —   | 0.0  | —   | 0.3  | —   | 0.7  | —   | 1.0  | —   | 1.3  | 210 | 1.6  | —   | 1.3  | 170 | 2.6  | 160 | 3.0  | 160   | 3.3  |
| 9        | 150 | 5.9  | 160 | 4.6  | 150 | 5.9  | 160 | 3.9  | 150 | 5.2  | 150 | 4.3  | 150 | 3.9  | 150 | 4.9  | 150 | 4.3  | 170 | 4.9  | 160 | 3.9  | 150   | 5.2  |
| 10       | 160 | 5.6  | 150 | 5.6  | 160 | 5.6  | 160 | 5.6  | 160 | 5.2  | 160 | 5.2  | 160 | 4.9  | 150 | 5.9  | 150 | 5.9  | 160 | 5.9  | 150 | 5.2  | 160   | 6.2  |
| 11       | 170 | 5.2  | 170 | 4.3  | 170 | 4.6  | 170 | 4.6  | 170 | 4.3  | 170 | 3.9  | 170 | 4.6  | 180 | 5.2  | 180 | 4.6  | 180 | 3.9  | 170 | 4.6  | 170   | 6.2  |
| 12       | —   | 1.3  | 280 | 1.6  | 300 | 1.6  | 270 | 2.6  | 300 | 5.2  | 300 | 4.9  | 290 | 2.6  | 290 | 2.6  | 290 | 4.6  | 290 | 4.3  | 300 | 3.9  | 310   | 4.9  |
| 13       | 300 | 3.9  | 300 | 4.3  | 300 | 3.9  | 300 | 4.6  | 300 | 3.9  | 300 | 4.3  | 300 | 3.9  | 300 | 2.6  | 300 | 2.0  | 100 | 3.0  | 110 | 7.2  | 120   | 6.9  |
| 14       | —   | 0.3  | —   | 0.3  | —   | 1.3  | —   | 1.0  | —   | 1.0  | 160 | 2.3  | 150 | 2.6  | 150 | 3.3  | 150 | 4.9  | 170 | 4.9  | 170 | 4.9  | 160   | 4.9  |
| 15       | 160 | 5.6  | 160 | 4.9  | 150 | 5.9  | 150 | 5.9  | 150 | 5.2  | 150 | 5.6  | 150 | 4.9  | 150 | 5.2  | 160 | 3.9  | 150 | 5.2  | 160 | 5.6  | 160   | 4.9  |
| 16       | 210 | 1.6  | 240 | 1.6  | 240 | 2.0  | 240 | 1.6  | 240 | 2.0  | —   | 1.3  | 230 | 1.6  | 230 | 2.6  | 230 | 2.0  | 220 | 3.3  | 220 | 3.0  | 210   | 3.3  |
| 17       | 200 | 3.0  | 210 | 2.6  | 210 | 3.9  | 210 | 2.6  | 200 | 2.6  | 210 | 2.0  | 210 | 3.3  | 220 | 3.6  | 210 | 2.0  | 230 | 2.0  | —   | 1.3  | —     | 1.3  |
| 18       | 270 | 3.9  | 270 | 3.9  | 300 | 4.3  | 310 | 3.9  | 310 | 3.9  | —   | 1.3  | 290 | 1.6  | 290 | 2.3  | 290 | 2.0  | 270 | 2.0  | 290 | 1.6  | 280   | 2.0  |
| 19       | 280 | 2.6  | 250 | 2.6  | 250 | 2.0  | —   | 1.0  | 270 | 1.6  | —   | 1.3  | 250 | 3.3  | 240 | 1.6  | —   | 1.3  | 230 | 2.3  | 220 | 1.6  | 220   | 2.0  |
| 20       | 280 | 4.9  | 270 | 3.0  | 280 | 3.0  | 260 | 1.6  | 260 | 2.6  | 220 | 1.6  | 240 | 2.0  | 200 | 1.6  | 220 | 2.3  | 220 | 3.6  | 220 | 3.3  | 220   | 2.0  |
| 21       | 210 | 2.6  | 210 | 3.3  | 220 | 4.3  | 210 | 3.3  | 210 | 2.3  | 200 | 2.3  | 200 | 2.6  | 200 | 3.6  | 200 | 4.3  | 210 | 6.2  | 200 | 4.6  | 200   | 4.3  |
| 22       | 260 | 4.6  | —   | 1.0  | 310 | 2.3  | 290 | 1.6  | —   | 0.7  | —   | 1.0  | —   | 0.3  | —   | 0.3  | —   | 0.3  | —   | 0.7  | —   | 0.0  | —     | 0.7  |
| 23       | 220 | 2.3  | 230 | 3.3  | 230 | 3.6  | 230 | 3.6  | 230 | 3.6  | 220 | 2.6  | 220 | 3.9  | 220 | 3.3  | 220 | 3.3  | 210 | 3.6  | 220 | 2.3  | 210   | 2.6  |
| 24       | 170 | 2.0  | 210 | 3.6  | 210 | 4.9  | 210 | 6.9  | 210 | 4.9  | 200 | 4.9  | 210 | 5.2  | 220 | 4.9  | 220 | 3.9  | 210 | 6.2  | 210 | 6.2  | 200   | 4.9  |
| 25       | 200 | 4.3  | 200 | 3.9  | 210 | 3.3  | 210 | 1.6  | 200 | 2.6  | 190 | 2.6  | 200 | 2.0  | 180 | 2.3  | 190 | 2.3  | 190 | 2.0  | 180 | 2.6  | 180   | 3.6  |
| 26       | 150 | 6.6  | 140 | 6.6  | 140 | 6.2  | 140 | 6.6  | 150 | 5.9  | 150 | 6.6  | 150 | 6.2  | 150 | 7.2  | 150 | 7.2  | 160 | 8.2  | 160 | 6.6  | 160   | 5.6  |
| 27       | 110 | 7.5  | 110 | 7.5  | 110 | 6.9  | 130 | 8.9  | 130 | 7.2  | 140 | 6.9  | 140 | 7.2  | 130 | 8.5  | 140 | 8.2  | 130 | 9.2  | 130 | 9.2  | 120   | 9.5  |
| 28       | 210 | 6.2  | 200 | 6.9  | 210 | 6.9  | 210 | 4.6  | 210 | 5.2  | 220 | 5.6  | 210 | 4.9  | 210 | 5.2  | 200 | 4.9  | 210 | 5.6  | 210 | 4.9  | 210   | 4.6  |
| 29       | 160 | 2.6  | 150 | 5.9  | 150 | 6.2  | 150 | 5.2  | 150 | 7.2  | 140 | 9.2  | 140 | 10.2 | 140 | 8.2  | 130 | 7.9  | 130 | 9.8  | 180 | 5.2  | 200   | 3.3  |
| 30       | 180 | 3.3  | 170 | 3.0  | 160 | 4.6  | 150 | 4.9  | 150 | 5.6  | 150 | 5.2  | 170 | 4.6  | 180 | 3.3  | 180 | 3.0  | 180 | 3.3  | 170 | 3.3  | 170   | 3.3  |
| Mean ... | —   | 3.6  | —   | 3.6  | —   | 3.9  | —   | 3.3  | —   | 3.6  | —   | 3.5  | —   | 3.6  | —   | 3.8  | —   | 3.7  | —   | 4.3  | —   | 4.2  | —     | 4.1  |

94. Aberdeen : H<sub>a</sub> = 14 metres + 23 metres.

| Day. | 1.  |      | 2.  |      | 3.  |      | 4.  |      | 5.  |      | 6.  |      | 7.  |      | 8.  |      | 9.  |      | 10. |      | 11. |      | Noon. |      |
|------|-----|------|-----|------|-----|------|-----|------|-----|------|-----|------|-----|------|-----|------|-----|------|-----|------|-----|------|-------|------|
|      | °   | m/s. | °   | m/s. | °   | m/s. | °   | m/s. | °   | m/s. | °   | m/s. | °   | m/s. | °   | m/s. | °   | m/s. | °   | m/s. | °   | m/s. | °     | m/s. |
| 1    | 230 | 2.0  | —   | 0.3  | 220 | 2.0  | 220 | 2.0  | 220 | 2.3  | 210 | 2.0  | —   | 1.3  | —   | 1.0  | —   | 1.3  | —   | 1.3  | —   | 0.3  | —     | 1.0  |
| 2    | 140 | 3.0  | 140 | 3.6  | 140 | 3.9  | 150 | 3.3  | 160 | 2.6  | 150 | 2.0  | 150 | 3.3  | 160 | 3.3  | 160 | 2.3  | 150 | 4.6  | 150 | 3.9  | 150   | 3.9  |
| 3    | 60  | 4.9  | 60  | 6.2  | 50  | 6.9  | 50  | 7.2  | 50  | 8.5  | 50  | 8.9  | 60  | 10.5 | 60  | 10.5 | 60  | 8.2  | 80  | 8.2  | 80  | 8.9  | 90    | 7.5  |
| 4    | 120 | 6.2  | 130 | 5.9  | 140 | 6.9  | 140 | 6.6  | 150 | 5.9  | 150 | 7.5  | 150 | 7.9  | 150 | 8.5  | 150 | 8.5  | 150 | 10.8 | 160 | 11.1 | 160   | 10.2 |
| 5    | 240 | 2.0  | —   | 1.0  | —   | 0.7  | 260 | 1.6  | 260 | 2.6  | 250 | 3.9  | 230 | 2.6  | 220 | 2.6  | 210 | 2.3  | 200 | 2.0  | 200 | 2.3  | 200   | 4.3  |
| 6    | 220 | 2.3  | 230 | 2.3  | 240 | 1.6  | —   | 1.3  | 260 | 1.6  | 260 | 3.0  | 270 | 3.0  | —   | 1.3  | —   | 1.3  | 250 | 3.9  | 230 | 2.6  | 230   | 2.6  |
| 7    | 210 | 3.9  | 200 | 3.0  | 220 | 6.2  | 210 | 6.2  | 210 | 6.9  | 200 | 5.9  | 180 | 5.2  | 180 | 5.2  | 180 | 6.6  | 190 | 6.2  | 200 | 5.9  | 210   | 6.2  |
| 8    | 220 | 5.2  | 200 | 3.0  | 220 | 2.6  | 220 | 3.0  | 220 | 2.6  | 210 | 2.6  | 210 | 2.6  | 230 | 2.3  | 230 | 2.6  | 240 | 2.3  | 230 | 3.0  | 200   | 1.3  |
| 9    | 200 | 4.9  | 210 | 3.6  | 250 | 2.3  | 210 | 3.9  | 220 | 2.6  | 220 | 3.9  | 230 | 2.0  | —   | 1.0  | 250 | 3.3  | 290 | 2.6  | —   | 1.3  | —     | 0.7  |
| 10   | 220 | 3.9  | 200 | 3.3  | 210 | 2.3  | 200 | 2.0  | 210 | 3.9  | 200 | 3.6  | 200 | 3.9  | 200 | 3.0  | 200 | 3.6  | 200 | 3.6  | 190 | 4.3  | 200   | 3.3  |
| 11   | —   | 1.3  | 140 | 1.6  | —   | 1.3  | —   | 1.3  | 230 | 3.3  | 220 | 3.0  | 250 | 2.3  | —   | 0.7  | —   | 1.0  | —   | 1.0  | —   | 0.7  | —     | 1.0  |
| 12   | 200 | 2.6  | 200 | 2.3  | 210 | 4.9  | 200 | 3.9  | 210 | 4.3  | 210 | 5.2  | 200 | 5.9  | 190 | 3.9  | 200 | 3.6  | 210 | 4.9  | 210 | 4.9  | 200   | 5.2  |
| 13   | 190 | 5.9  | 190 | 5.2  | 180 | 4.9  | 190 | 4.9  | 190 | 6.6  | 190 | 6.6  | 190 | 8.2  | 200 | 8.2  | 200 | 8.2  | 200 | 8.2  | 200 | 6.9  | 200   | 5.2  |
| 14   | 240 | 2.0  | 240 | 2.6  | 230 | 3.0  | 240 | 3.3  | 240 | 3.0  | —   | 1.0  | 260 | 1.6  | —   | 1.0  | 230 | 2.0  | —   | 1.3  | —   | 0.7  | —     | 1.0  |
| 15   | —   | 1.3  | —   | 1.0  | —   | 1.3  | —   | 1.3  | —   | 1.3  | —   | 1.0  | —   | 1.3  | 230 | 2.6  | 230 | 2.0  | —   | 1.0  | —   | 1.0  | 150   | 3.9  |
| 16   | 140 | 6.2  | 140 | 5.9  | 130 | 4.9  | 160 | 3.9  | 150 | 1.6  | —   | 1.3  | —   | 1.0  | —   | 1.0  | 300 | 2.6  | 300 | 1.6  | 300 | 3.0  | 290   | 2.0  |
| 17   | 220 | 1.6  | 210 | 1.6  | 200 | 2.3  | 210 | 3.6  | 200 | 3.3  | 200 | 3.9  | 210 | 4.9  | 200 | 4.6  | 200 | 3.0  | 210 | 5.9  | 220 | 5.2  | 210   | 4.6  |
| 18   | 220 | 8.2  | 220 | 8.9  | 210 | 6.9  | 220 | 5.6  | 210 | 6.9  | 230 | 5.6  | 220 | 5.9  | 220 | 7.2  | 220 | 9.8  | 220 | 5.6  | 210 | 4.3  | 220   | 6.2  |
| 19   | 210 | 5.2  | 210 | 6.6  | 210 | 8.5  | 220 | 9.8  | 230 | 6.9  | 250 | 4.9  | 240 | 6.2  | 250 | 5.9  | 270 | 5.2  | 260 | 5.9  | 240 | 3.9  | 230   | 4.3  |
| 20   | 210 | 3.9  | 220 | 4.6  | 220 | 5.2  | 230 | 4.3  | 150 | 2.3  | 190 | 3.3  | 190 | 2.3  | 150 | 2.3  | 180 | 3.9  | 160 | 3.0  | 230 | 3.3  | 230   | 3.9  |
| 21   | 210 | 3.3  | 210 | 2.3  | 200 | 2.3  | 220 | 4.3  | 220 | 3.6  | 200 | 2.6  | 200 | 2.3  | 190 | 2.6  | 190 | 2.6  | 190 | 3.3  | 200 | 2.0  | 200   | 3.6  |
| 22   | 200 | 5.9  | 200 | 4.9  | 200 | 4.9  | 190 | 4.6  | 190 | 5.6  | 200 | 5.6  | 200 | 5.6  | 210 | 3.6  | 210 | 2.0  | 200 | 3.0  | 180 | 3.9  | 170   | 4.9  |
| 23   | 200 | 4.6  | 190 | 3.0  | 190 | 4.6  | 160 | 8.5  | 160 | 8.5  | 170 | 8.2  | 170 | 8.5  | 170 | 7.2  | 180 | 7.2  | 180 | 6.2  | 210 | 6.9  | 220   | 8.9  |
| 24   | 210 | 5.9  | 200 | 3.9  | 200 | 3.3  | —   | 1.3  | —   | 1.3  | —   | 1.0  | —   | 1.3  | —   | 1.0  | —   | 1.0  | 240 | 1.6  | 230 | 2.0  | 230   | 2.3  |
| 25   | 190 | 5.6  | 200 | 6.6  | 190 | 6.6  | 200 | 6.2  | 210 | 6.6  | 230 | 6.9  | 240 | 6.9  | 250 | 7.9  | 250 | 7.5  | 230 | 5.6  | 220 | 4.6  | 220   | 3.3  |
| 26   | 300 | 2.3  | 100 | 2.6  | 110 | 4.9  | 110 | 5.2  | 110 | 6.2  | 130 | 4.3  | 110 | 3.6  | 180 | 5.6  | 1   |      |     |      |     |      |       |      |



HIGHEST INSTANTANEOUS WIND SPEED RECORDED EACH DAY BY THE DINES TUBE ANEMOGRAPH.

95. Aberdeen: Ha=8 metres+13 metres.

1924.

| Day. | Jan.            |               | Feb.            |               | Mar.            |               | April           |               | May             |               | June            |               | July            |               | Aug.            |               | Sept.           |               | Oct.            |               | Nov.            |               | Dec.            |               |
|------|-----------------|---------------|-----------------|---------------|-----------------|---------------|-----------------|---------------|-----------------|---------------|-----------------|---------------|-----------------|---------------|-----------------|---------------|-----------------|---------------|-----------------|---------------|-----------------|---------------|-----------------|---------------|
|      | Max. in a Gust. | Time of Gust. | Max. in a Gust. | Time of Gust. | Max. in a Gust. | Time of Gust. | Max. in a Gust. | Time of Gust. | Max. in a Gust. | Time of Gust. | Max. in a Gust. | Time of Gust. | Max. in a Gust. | Time of Gust. | Max. in a Gust. | Time of Gust. | Max. in a Gust. | Time of Gust. | Max. in a Gust. | Time of Gust. | Max. in a Gust. | Time of Gust. | Max. in a Gust. | Time of Gust. |
| 1    | m/s. 10         | h. m. 8 20    | m/s. 16         | h. m. 14 0    | <b>22</b>       | 7 35          | 8               | 10 20         | 7               | 13 40         | <b>18</b>       | 13 30         | 8               | 9 25          | *               | *             | 8               | 10 50         | 17              | 15 10         | 11              | 21 20         | 11              | 21 5          |
| 2    | 6               | 23 30         | 25              | 5 0           | 13              | 0 1           | 7               | 13 10         | 10              | 18 50         | 15              | 7 15          | 15              | 11 55         | 12              | 17 35         | 7               | 13 20         | 13              | 11 0          | 12              | 14 10         | 7               | 23 20         |
| 3    | 8               | 2 0           | 21              | 0 45          | 6               | 13 30         | 7               | 13 35         | 16              | 14 45         | 11              | 12 40         | 15              | 8 5           | 9               | 13 30         | 5               | 14 20         | 11              | 18 45         | 16              | 12 30         | 15              | 7 35          |
| 4    | 8               | 9 5           | 17              | 1 5           | 14              | 20 20         | 7               | 17 10         | 9               | 16 30         | 8               | 12 55         | 13              | 16 25         | 9               | 16 40         | 5               | 3 0           | 9               | 3 5           | 10              | 3 5           | 20              | 13 15         |
| 5    | 13              | 9 30          | 26              | 9 0           | 16              | 1 45          | 9               | 20 10         | 14              | 8 25          | 7               | 10 45         | 15              | 16 5          | 14              | 15 40         | 6               | 19 15         | 11              | 17 55         | 11              | 10 55         | 15              | 16 0          |
| 6    | 13              | 13 45         | 13              | 0 25          | 13              | 17 40         | 10              | 9 55          | 11              | 23 50         | 10              | 5 40          | 9               | 10 25         | 12              | 16 15         | 9               | 14 10         | 14              | 20 30         | 6               | 19 45         | 11              | 23 15         |
| 7    | 17              | 22 40         | 9               | 1 45          | 16              | 6 30          | 18              | 16 30         | 10              | 8 5           | 9               | 12 30         | 13              | 19 25         | 11              | 13 50         | 5               | 23 5          | 17              | 5 15          | 4               | 6 30          | 18              | 11 45         |
| 8    | 22              | 21 10         | 16              | 18 55         | 16              | 13 15         | <b>23</b>       | 10 10         | <b>23</b>       | 11 0          | 5               | 11 5          | 8               | 11 20         | 8               | 13 45         | 9               | 7 55          | 5               | 0 30          | 11              | 23 20         | 13              | 1 5           |
| 9    | 20              | 3 50          | 21              | 8 45          | 10              | 12 35         | 16              | 22 55         | 11              | 2 0           | 10              | 10 0          | 7               | 8 0           | 10              | 15 40         | 19              | 16 25         | 11              | 20 50         | 13              | 10 45         | 11              | 1 0           |
| 10   | 18              | 8 0           | 16              | 0 10          | 11              | 20 40         | 14              | 5 0           | 14              | 8 40          | 8               | 12 10         | 10              | 12 25         | 11              | 13 55         | 16              | 12 0          | 8               | 17 40         | 13              | 17 0          | 11              | 13 45         |
| 11   | 14              | 24 0          | 16              | 22 55         | 12              | 15 30         | 13              | 12 0          | 7               | 17 45         | 10              | 12 45         | 10              | 15 40         | 11              | 14 25         | 18              | 15 30         | 15              | 23 10         | 13              | 12 50         | 9               | 21 5          |
| 12   | <b>23</b>       | 1 25          | 18              | 21 40         | 14              | 11 25         | 9               | 18 45         | 11              | 16 45         | 17              | 12 40         | <b>16</b>       | 17 10         | 9               | 13 25         | 13              | 5 45          | 15              | 4 45          | 9               | 11 35         | 14              | 23 45         |
| 13   | 17              | 14 0          | 17              | 0 5           | 16              | 13 10         | 15              | 23 55         | 12              | 16 30         | 12              | 13 5          | 10              | 9 25          | 9               | 9 15          | 19              | 14 15         | 4               | 8 45          | 12              | 11 35         | 20              | 7 0           |
| 14   | 7               | 22 50         | 11              | 11 55         | 11              | 14 40         | 17              | 1 35          | 11              | 10 40         | 13              | 11 35         | 10              | 13 45         | 10              | 11 25         | 15              | 13 30         | 9               | 15 30         | 16              | 19 20         | 7               | 2 45          |
| 15   | 11              | 14 55         | 12              | 13 50         | 9               | 15 30         | 17              | 15 25         | 11              | 12 50         | 5               | 8 20          | 11              | 5 40          | 9               | 1 40          | 17              | 17 40         | 13              | 11 20         | 13              | 14 10         | 17              | 19 35         |
| 16   | 17              | 23 5          | 8               | 14 30         | 16              | 14 20         | 20              | 9 55          | 11              | 17 35         | 9               | 17 15         | 13              | 14 30         | 12              | 14 20         | 13              | 13 5          | 12              | 13 45         | 8               | 16 5          | 13              | 0 5           |
| 17   | 16              | 10 15         | 11              | 19 25         | 16              | 16 0          | 9               | 8 35          | 11              | 16 35         | 8               | 12 40         | 13              | 15 15         | 11              | 18 5          | 17              | 15 50         | 13              | 9 55          | 9               | 0 5           | 14              | 23 0          |
| 18   | 15              | 9 30          | 19              | 6 5           | 16              | 3 50          | 12              | 15 20         | 7               | 16 30         | 11              | 11 55         | 9               | 7 50          | 15              | 9 25          | <b>26</b>       | 10 10         | 6               | 24 0          | 10              | 3 20          | 17              | 8 55          |
| 19   | 11              | 5 0           | 12              | 2 20          | 15              | 8 30          | 8               | 9 10          | 8               | 23 0          | 8               | 17 20         | 8               | 10 0          | <b>15</b>       | 9 50          | 10              | 13 50         | 11              | 7 35          | 7               | 6 55          | 19              | 3 50          |
| 20   | 16              | 5 5           | 7               | 13 10         | 13              | 13 35         | 17              | 16 30         | 8               | 11 50         | 9               | 14 25         | 8               | 10 20         | 10              | 23 40         | 15              | 23 40         | <b>19</b>       | 16 35         | 10              | 21 10         | 12              | 16 15         |
| 21   | 16              | 21 45         | 17              | 10 55         | 11              | 9 5           | 15              | 3 40          | 8               | 2 10          | 9               | 14 35         | 5               | 11 25         | 10              | 2 30          | 18              | 8 40          | 9               | 9 0           | <b>20</b>       | 18 25         | 11              | 20 45         |
| 22   | 9               | 10 40         | 14              | 6 10          | 9               | 11 30         | 16              | 9 50          | 10              | 14 55         | 9               | 7 35          | *               | *             | 8               | 23 50         | 7               | 12 0          | 7               | 4 15          | 10              | 1 10          | <b>23</b>       | 19 35         |
| 23   | 16              | 23 20         | 18              | 13 35         | 13              | 17 15         | 9               | 12 15         | 13              | 13 0          | 11              | 11 0          | 15              | 13 30         | 11              | 17 40         | 17              | 13 15         | 15              | 13 15         | 8               | 9 10          | 20              | 6 40          |
| 24   | 15              | 4 0           | 20              | 11 15         | 11              | 4 30          | 12              | 17 0          | 11              | 14 40         | 10              | 12 30         | 15              | 11 20         | 11              | 7 40          | 10              | 11 5          | 17              | 12 10         | 14              | 17 45         | 13              | 22 10         |
| 25   | 15              | 12 20         | 15              | 10 35         | 9               | 20 40         | 12              | 12 50         | 10              | 18 0          | 11              | 13 15         | 12              | 8 10          | 8               | 12 45         | 7               | 11 40         | 16              | 9 5           | 13              | 21 45         | 15              | 6 35          |
| 26   | 22              | 3 5           | 8               | 3 5           | 9               | 10 30         | 13              | 15 55         | 9               | 23 30         | 13              | 13 10         | 9               | 9 50          | 9               | 13 30         | 6               | 15 0          | 7               | 0 5           | 16              | 8 40          | 17              | 23 5          |
| 27   | 18              | 10 25         | 17              | 11 50         | 9               | 13 50         | 10              | 11 35         | 13              | 12 40         | 17              | 7 5           | 7               | 17 30         | 6               | 14 10         | 9               | 10 30         | 9               | 13 20         | 18              | 14 25         | 23              | 3 15          |
| 28   | 13              | 3 50          | 15              | 1 10          | 11              | 15 10         | 6               | 11 25         | 6               | 12 5          | 13              | 17 20         | 10              | 15 5          | 13              | 20 0          | 19              | 20 35         | 6               | 1 30          | 16              | 1 5           | 12              | 20 55         |
| 29   | 7               | 7 10          | <b>30</b>       | 17 20         | 11              | 16 50         | 9               | 23 55         | 6               | 17 10         | 15              | 9 15          | 10              | 4 0           | 11              | 1 50          | 17              | 23 5          | 14              | 16 55         | 15              | 10 10         | 20              | 20 55         |
| 30   | 9               | 8 35          | —               | —             | 7               | 9 40          | 11              | 10 20         | 10              | 15 45         | 12              | 17 45         | 7               | 13 30         | 8               | 13 20         | 13              | 2 25          | 8               | 10 15         | 11              | 6 0           | 15              | 15 5          |
| 31   | 14              | 11 35         | —               | —             | 12              | 13 25         | —               | —             | 8               | 23 50         | —               | —             | 11              | 14 0          | 9               | 11 55         | —               | —             | 8               | 15 0          | —               | —             | 19              | 4 5           |

\* Defective Record.

DISTRIBUTION OF WIND SPEED: EXTREME VELOCITIES AS RECORDED BY THE DINES TUBE ANEMOGRAPH.

96. Aberdeen: Ha=8 metres+13 metres.

1924.

| Month.      | DISTRIBUTION OF WIND SPEED. |           |                   |           |                  |                 |                    |            | EXTREME VELOCITIES.  |         |                 |               |                    |  |
|-------------|-----------------------------|-----------|-------------------|-----------|------------------|-----------------|--------------------|------------|----------------------|---------|-----------------|---------------|--------------------|--|
|             | More than 17.1 m/s.         |           | 10.8 to 17.1 m/s. |           | 5.5 to 10.7 m/s. | 1.6 to 5.4 m/s. | Less than 1.6 m/s. | No Record. | Highest Hourly Wind. |         |                 | Highest Gust. |                    |  |
|             | Dates of Occurrence.        | Duration. | No. of Days.      | Duration. | Duration.        | Duration.       | Duration.          | Duration.  | Veer from N.         | Speed.  | Mid Time.       | Speed.        | Date.              |  |
| Jan. .. ..  | —                           | hr. 0     | 8                 | hr. 47    | hr. 264          | hr. 347         | hr. 86             | hr. 0      | 120                  | m/s. 15 | day. 8 hour. 18 | m/s. 23       | day. 12 h. 1 m. 25 |  |
| Feb. .. ..  | 29th                        | 1         | 10                | 92        | 278              | 296             | 29                 | 0          | 290                  | 18      | 29 20           | 30            | 29 17 20           |  |
| Mar. .. ..  | —                           | 0         | 1                 | 11        | 280              | 381             | 72                 | 0          | 280                  | 13      | 1 14            | 22            | 1 7 35             |  |
| April .. .. | —                           | 0         | 2                 | 3         | 209              | 455             | 53                 | 0          | 130                  | 12      | 14 2            | 23            | 8 10 10            |  |
| May .. ..   | —                           | 0         | 3                 | 24        | 149              | 469             | 102                | 0          | 20                   | 14      | 8 5             | 23            | 8 11 0             |  |
| June .. ..  | —                           | 0         | 2                 | 11        | 168              | 415             | 126                | 0          | 20                   | 12      | 1 12            | 18            | 1 13 30            |  |
| July .. ..  | —                           | 0         | 0                 | 0         | 121              | 494             | 116                | 13         | 150                  | 9       | 12 17           | 16            | 12 17 10           |  |
| Aug. .. ..  | —                           | 0         | 0                 | 0         | 116              | 552             | 76                 | 0          | 310                  | 9       | 18 9            | 15            | 19 9 50            |  |
| Sept. .. .. | —                           | 0         | 2                 | 4         | 198              | 406             | 112                | 0          | 280                  | 13      | 18 10           | 26            | 18 10 10           |  |
| Oct. .. ..  | —                           | 0         | 1                 | 3         | 207              | 427             | 107                | 0          | 140                  | 11      | 25 { 7 }<br>9   | 19            | 20 16 35           |  |
| Nov. .. ..  | —                           | 0         | 3                 | 8         | 239              | 401             | 72                 | 0          | 120                  | 13      | 27 14           | 20            | 21 18 25           |  |
| Dec. .. ..  | —                           | 0         | 7                 | 19        | 292              | 384             | 49                 | 0          | 160                  | 13      | 22 20           | 23            | 22 19 35           |  |
| Year.       | 1 day                       | 1         | 39                | 222       | 2,521            | 5,027           | 1,000              | 13         | 290                  | 18      | Feb.29 20       | 30            | Feb.29 17 20       |  |

97. Aberdeen.

Readings, in degrees absolute, at 9h, Greenwich Mean Time.

1924.

| Day. | Jan. | Feb. | Mar. | April | May  | June | July | Aug. | Sept. | Oct. | Nov. | Dec. |
|------|------|------|------|-------|------|------|------|------|-------|------|------|------|
|      | a.   | a.   | a.   | a.    | a.   | a.   | a.   | a.   | a.    | a.   | a.   | a.   |
| 1    | 77.2 | 77.4 | 77.5 | 77.4  | 79.4 | 81.4 | 83.5 | 85.0 | 85.0  | 83.7 | 82.1 | 80.9 |
| 2    | 77.2 | 77.4 | 77.4 | 77.5  | 79.6 | 81.5 | 83.6 | 85.0 | 85.1  | 83.6 | 82.1 | 80.9 |
| 3    | 77.2 | 77.4 | 77.3 | 77.6  | 79.7 | 81.6 | 83.7 | 85.0 | 85.0  | 83.7 | 82.1 | 80.8 |
| 4    | 77.2 | 77.4 | 77.2 | 77.6  | 79.8 | 81.6 | 83.7 | 85.1 | 85.0  | 83.7 | 82.0 | 80.8 |
| 5    | 77.2 | 77.5 | 77.2 | 77.7  | 79.8 | 81.5 | 83.8 | 85.2 | 85.1  | 83.7 | 81.9 | 80.8 |
| 6    | 77.2 | 77.6 | 77.1 | 77.7  | 79.8 | 81.5 | 83.8 | 85.2 | 85.2  | 83.7 | 81.7 | 80.9 |
| 7    | 77.2 | 77.7 | 77.1 | 77.9  | 79.8 | 81.6 | 83.8 | 85.2 | 85.2  | 83.7 | 81.7 | 80.8 |
| 8    | 77.2 | 77.7 | 77.0 | 78.0  | 79.7 | 81.7 | 83.9 | 85.2 | 85.2  | 83.7 | 81.6 | 80.8 |
| 9    | 77.2 | 77.7 | 76.9 | 78.1  | 79.7 | 81.7 | 83.9 | 85.2 | 85.3  | 83.7 | 81.6 | 80.7 |
| 10   | 77.3 | 77.8 | 76.8 | 78.2  | 79.6 | 81.8 | 83.9 | 85.1 | 85.3  | 83.6 | 81.4 | 80.7 |
| 11   | 77.2 | 77.8 | 76.8 | 78.3  | 79.6 | 81.9 | 83.9 | 85.1 | 85.3  | 83.4 | 81.4 | 80.7 |
| 12   | 77.2 | 77.8 | 76.8 | 78.3  | 79.6 | 82.0 | 84.0 | 85.2 | 85.2  | 83.3 | 81.4 | 80.6 |
| 13   | 77.2 | 77.8 | 76.9 | 78.4  | 79.7 | 82.2 | 84.1 | 85.2 | 85.1  | 83.3 | 81.5 | 80.6 |
| 14   | 77.2 | 77.8 | 77.0 | 78.4  | 79.8 | 82.2 | 84.2 | 85.2 | 85.1  | 83.3 | 81.4 | 80.5 |
| 15   | 77.1 | 77.7 | 77.1 | 78.3  | 79.9 | 82.2 | 84.4 | 85.2 | 85.0  | 83.2 | 81.4 | 80.6 |
| 16   | 77.0 | 77.6 | 77.1 | 78.3  | 80.0 | 82.3 | 84.4 | 85.3 | 84.9  | 83.2 | 81.4 | 80.6 |
| 17   | 76.9 | 77.6 | 77.2 | 78.3  | 80.1 | 82.4 | 84.6 | 85.4 | 84.8  | 83.1 | 81.3 | 80.5 |
| 18   | 76.9 | 77.4 | 77.2 | 78.3  | 80.1 | 82.5 | 84.7 | 85.3 | 84.7  | 83.1 | 81.3 | 80.4 |
| 19   | 76.9 | 77.4 | 77.2 | 78.4  | 80.3 | 82.6 | 84.8 | 85.3 | 84.6  | 83.1 | 81.1 | 80.3 |
| 20   | 76.9 | 77.4 | 77.2 | 78.4  | 80.4 | 82.6 | 84.8 | 85.3 | 84.6  | 83.0 | 81.1 | 80.3 |
| 21   | 76.9 | 77.4 | 77.2 | 78.5  | 80.6 | 82.8 | 84.9 | 85.2 | 84.5  | 82.9 | 80.9 | 80.3 |
| 22   | 76.9 | 77.4 | 77.2 | 78.6  | 80.7 | 82.9 | 85.0 | 85.2 | 84.4  | 82.9 | 80.9 | 80.3 |
| 23   | 76.9 | 77.4 | 77.2 | 78.8  | 80.8 | 82.9 | 85.0 | 85.2 | 84.4  | 82.8 | 80.8 | 80.2 |
| 24   | 76.9 | 77.4 | 77.2 | 78.9  | 80.9 | 83.0 | 85.0 | 85.1 | 84.3  | 82.7 | 80.8 | 80.2 |
| 25   | 77.0 | 77.5 | 77.2 | 78.9  | 81.0 | 83.1 | 85.0 | 85.2 | 84.2  | 82.6 | 80.8 | 80.2 |
| 26   | 77.2 | 77.5 | 77.2 | 78.9  | 81.1 | 83.2 | 85.0 | 85.2 | 84.0  | 82.5 | 80.8 | 80.1 |
| 27   | 77.3 | 77.6 | 77.2 | 78.9  | 81.2 | 83.3 | 85.0 | 85.2 | 83.9  | 82.3 | 80.8 | 80.0 |
| 28   | 77.3 | 77.6 | 77.3 | 79.1  | 81.2 | 83.4 | 85.0 | 85.2 | 83.8  | 82.2 | 80.8 | 79.9 |
| 29   | 77.3 | 77.6 | 77.3 | 79.2  | 81.3 | 83.4 | 84.9 | 85.1 | 83.7  | 82.2 | 80.9 | 79.9 |
| 30   | 77.3 | —    | 77.4 | 79.3  | 81.3 | 83.5 | 84.9 | 85.0 | 83.7  | 82.2 | 80.8 | 79.8 |
| 31   | 77.4 | —    | 77.4 | —     | 81.4 | —    | 85.0 | 85.0 | —     | 82.2 | —    | 79.7 |
| Mean | ..   | 77.1 | 77.2 | 78.3  | 80.3 | 82.3 | 84.4 | 85.2 | 84.7  | 83.1 | 81.3 | 80.4 |

Annual Mean at 124 cm. 28r.0.

MINIMUM TEMPERATURE "ON THE GRASS" DURING THE INTERVAL 18h to 7h. G. M. T.

98. Aberdeen.

Readings, in degrees absolute.

1924.

| Day. | Jan. | Feb. | Mar. | April | May   | June | July | Aug. | Sept. | Oct. | Nov. | Dec. |
|------|------|------|------|-------|-------|------|------|------|-------|------|------|------|
|      | a.   | a.   | a.   | a.    | a.    | a.   | a.   | a.   | a.    | a.   | a.   | a.   |
| 1    | 77.3 | 70.2 | 70.8 | 73.6  | 77.6  | 80.3 | 76.1 | 82.7 | 81.8  | 80.4 | 73.2 | 72.4 |
| 2    | 72.5 | 74.7 | 70.2 | 69.3  | 71.6  | 74.1 | 82.4 | 82.6 | 83.1  | 81.3 | 74.7 | 78.1 |
| 3    | 72.6 | 79.7 | 63.7 | 74.8  | 76.2  | 71.7 | 82.1 | 84.9 | 84.9  | 77.6 | 71.2 | 78.6 |
| 4    | 67.4 | 76.1 | 66.0 | 74.4  | 67.2  | 73.1 | 82.1 | 78.6 | 77.6  | 82.4 | 70.7 | 79.8 |
| 5    | 75.5 | 79.7 | 70.4 | 77.0  | 73.6  | 75.2 | 77.3 | 78.7 | 79.0  | 79.3 | 77.8 | 72.8 |
| 6    | 77.9 | 74.8 | 63.0 | 74.0  | 69.1  | 77.1 | 79.2 | 78.7 | 84.3  | 80.1 | 71.8 | 71.8 |
| 7    | 74.4 | 73.3 | 73.1 | 75.7  | 75.1  | 80.6 | 79.6 | 76.1 | 83.6  | 77.1 | 78.1 | 77.7 |
| 8    | 75.8 | 76.3 | 73.6 | 70.4  | 76.4  | 82.3 | 76.2 | 75.7 | 85.4  | 69.0 | 78.7 | 74.7 |
| 9    | 67.4 | 76.6 | 70.4 | 71.2  | 73.8  | 82.6 | 78.9 | 76.2 | 83.1  | 70.1 | 79.8 | 77.7 |
| 10   | 67.7 | 76.1 | 74.1 | 72.9  | 77.2  | 81.9 | 79.7 | 77.1 | 75.2  | 74.9 | 80.7 | 73.1 |
| 11   | 65.8 | 74.1 | 73.7 | 64.8  | 74.6  | 82.0 | 82.6 | 83.9 | 74.3  | 74.0 | 81.4 | 71.4 |
| 12   | 68.6 | 73.3 | 75.3 | 69.7  | 70.4  | 81.9 | 80.7 | 83.4 | 76.9  | 79.3 | 71.5 | 77.1 |
| 13   | 73.7 | 73.5 | 73.7 | 70.4  | 74.1  | 79.2 | 83.7 | 79.7 | 81.4  | 77.6 | 73.3 | 81.1 |
| 14   | 68.6 | 73.0 | 73.6 | 74.7  | 71.8  | 73.9 | 77.8 | 83.0 | 71.6  | 76.3 | 75.6 | 68.5 |
| 15   | 69.3 | 69.3 | 76.4 | 70.9  | 74.0  | 83.0 | 84.8 | 83.5 | 75.1  | 76.1 | 79.1 | 67.3 |
| 16   | 77.9 | 73.2 | 73.3 | 71.6  | 74.8  | 77.4 | 82.7 | 77.0 | 78.6  | 80.8 | 68.8 | 78.7 |
| 17   | 74.8 | 72.0 | 71.0 | 68.6  | 72.1  | 77.8 | 80.6 | 75.2 | 77.0  | 72.4 | 71.6 | 71.2 |
| 18   | 73.7 | 75.6 | 68.4 | 72.3  | 74.1  | 81.3 | 82.4 | 81.8 | 80.0  | 71.3 | 70.7 | 81.9 |
| 19   | 75.2 | 72.9 | 73.1 | 74.3  | 73.2  | 76.9 | 81.5 | 81.9 | 73.7  | 79.1 | 71.0 | 77.3 |
| 20   | 69.8 | 72.8 | 66.3 | 79.6  | 79.5  | 78.6 | 78.2 | 82.6 | 76.7  | 74.1 | 72.7 | 75.2 |
| 21   | 67.7 | 76.9 | 71.0 | 78.8  | 80.4  | 74.6 | 82.6 | 83.8 | 82.3  | 73.5 | 77.2 | 76.6 |
| 22   | 77.9 | 74.3 | 69.1 | 74.1  | 81.0  | 75.7 | 79.2 | 84.5 | 70.5  | 71.7 | 76.3 | 73.8 |
| 23   | 78.4 | 72.7 | 75.2 | 70.3  | 78.4  | 80.5 | 78.4 | 81.3 | 71.4  | 70.7 | 71.3 | 77.4 |
| 24   | 77.2 | 75.2 | 76.2 | 70.9  | 72.1  | 78.7 | 76.7 | 81.9 | 77.4  | 75.2 | 77.6 | 71.6 |
| 25   | 70.0 | 73.4 | 74.2 | 77.9  | 74.1  | 76.9 | 80.4 | 81.5 | 71.4  | 78.7 | 78.7 | 76.2 |
| 26   | 74.7 | 72.4 | 73.9 | 79.7  | 78.5  | 86.2 | 79.3 | 77.2 | 73.3  | 73.0 | 80.9 | 70.8 |
| 27   | 73.7 | 73.1 | 73.3 | 77.3  | 74.8  | 82.8 | 81.0 | 75.3 | 74.1  | 78.7 | 80.8 | 75.9 |
| 28   | 75.4 | 67.4 | 74.4 | 73.3  | 78.7  | 73.0 | 79.8 | 76.7 | 72.9  | 76.9 | 77.9 | 70.2 |
| 29   | 78.1 | 72.8 | 70.0 | 76.1  | 81.1  | 83.0 | 84.3 | 85.1 | 83.0  | 73.9 | 76.3 | 68.6 |
| 30   | 69.3 | —    | 73.2 | 74.4  | *     | 78.6 | 85.4 | 79.9 | 81.2  | 74.3 | 77.7 | 73.6 |
| 31   | 74.0 | —    | 69.6 | —     | 79.4  | —    | 83.6 | 83.2 | —     | 72.1 | —    | 71.5 |
| Mean | ..   | 73.0 | 71.6 | 73.4  | 75.2† | 78.7 | 80.6 | 80.2 | 78.0  | 75.9 | 75.6 | 74.7 |

\* Reading not available.

† Mean for 30 days only.

Annual Mean 275.9.

NOTES:—(1) The initial 2 or 3 of the readings is omitted, i.e., 275.0 degrees absolute is written 75.0.  
 (2) The minimum "on the grass" refers to the interval from 18h on the previous day to 7h on the day to which it is entered.





101. Aberdeen.

March, 1924.

| Day.            | Cloud Forms.     |                  |                  | Cloud Amount (All Forms). |                |                 |                 |                 |                 | Weather.       |                |                 |                 |                 |                 | Remarks.   |
|-----------------|------------------|------------------|------------------|---------------------------|----------------|-----------------|-----------------|-----------------|-----------------|----------------|----------------|-----------------|-----------------|-----------------|-----------------|--|
|                 | 7 <sup>h</sup>   | 13 <sup>h</sup>  | 18 <sup>h</sup>  | 7 <sup>h</sup>            | 9 <sup>h</sup> | 13 <sup>h</sup> | 15 <sup>h</sup> | 18 <sup>h</sup> | 21 <sup>h</sup> | 7 <sup>h</sup> | 9 <sup>h</sup> | 13 <sup>h</sup> | 15 <sup>h</sup> | 18 <sup>h</sup> | 21 <sup>h</sup> |  |
| 1               | Nb.              | St-Cu. : Nb-Cuf. | A-St. : St-Cu.   | 10                        | 10             | 10              | 10              | 9               | 10              | *              | *              | ...             | ...             | ...             | ...             | *q a : oq p & n : ☒ 60 mm.<br>o, p ● a : c & o p : b n : ☐ 15 mm.            |
| 2               | St-Cu.           | Ci. : St-Cu.     | A-St. : St-Cu.   | 10                        | 10             | 8               | 8               | 9               | 1               | ...            | *              | ...             | ...             | ...             | ...             | b & bc a : p & n :<br>c ≡°, b a : c p : b n :<br>b & bc a : c p : * to b n : |
| 3               | Ci. : St-Cu.     | A-St.            | A-St.            | 2                         | 5              | 6               | 5               | 3               | 0               | ...            | ...            | ...             | ...             | ...             | ...             | c ≡°, b a : c p : b n :<br>b & bc a : c p : * to b n :                       |
| 4               | A-St. : St-Cu.   | St-Cu. : Cu-Nb.  | St-Cu. : Cu-Nb.  | 7                         | 3              | 7               | 8               | 4               | 0               | ≡°             | ...            | ...             | ...             | ...             | ...             | b & bc a : c p : * to b n :  |
| 5               | Ci. : St-Cu.     | Ci. : Cu-Nb.     | St-Cu. : Cu-Nb.  | 2                         | 2              | 4               | 8               | 7               | 0               | ...            | ...            | ...             | ...             | ...             | ...             | b & bc a : c p : * to b n :  |
| 6               | Ci.              | Ci. : Ci-St.     | A-St.            | 1                         | 1              | 4               | 5               | 10              | 10              | ...            | ...            | ...             | ...             | ...             | ...             | b a : bc to o p : o n : ☒ 25 mm.   |
| 7               | A-St.            | A-Cu.            | A-St.            | 10                        | 10             | 9               | 9               | 8               | 1               | ...            | ...            | ...             | ...             | ...             | ...             | o a & p : c to b n :   |
| 8               | A-St.            | Ci-St. : Cu.     | Ci-St. : A-St.   | 7                         | 7              | 4               | 4               | 3               | 2               | ...            | ...            | ...             | ...             | ...             | ...             | bc & c & a : b p & n : ⊕ 9 <sup>h</sup>                                      |
| 9               | Nb.              | A-St.            | St-Cu.           | 10                        | 10             | 8               | 6               | 3               | 6               | ●°             | ...            | ...             | ...             | ...             | ...             | ●° to c a : bc p : bc n :  |
| 10              | St-Cu.           | St.              | St.              | 8                         | 10             | 10              | 10              | 10              | 10              | ...            | ...            | ...             | ...             | ...             | ...             | c & o a : o p & n :  |
| 11              | St.              | St-Cuf.          | —                | 10                        | 10             | 4               | 1               | 0               | 0               | ...            | ...            | ...             | ...             | ...             | ...             | o a : b & bc p : b n :   |
| 12              | St.              | Ci.              | Ci.              | 9                         | 5              | 1               | 1               | 2               | 0               | ...            | ...            | ...             | ...             | ...             | ...             | bc a : b p : b n :   |
| 13              | —                | Ci-St. : Ci-Cu.  | Ci. : A-Cu.      | 0                         | 1              | 3               | 6               | 2               | 4               | ☐              | ...            | ...             | ...             | ...             | ...             | ☐, b q a : b & bc p & n :  |
| 14              | A-St.            | A-St.            | Ci. : A-Cu.      | 4                         | 10             | 10              | 8               | 9               | 10              | ...            | ...            | ...             | ...             | ...             | ...             | bc to o a : c ⊕, ∞ p : o n : ⊕ 14 <sup>h</sup> -15 <sup>h</sup>              |
| 15              | Nb.              | St-Cu : Cu.      | Ci. : St-Cu.     | 10                        | 10             | 7               | 7               | 7               | 10              | ●°             | ...            | ...             | ...             | ...             | ...             | ●° to c a : c p : c & o n :  |
| 16              | St-Cu. : Cu-Nb.  | Cu.              | Cu. : Cu-Nb.     | 8                         | 4              | 4               | 3               | 2               | 1               | *              | ...            | ...             | ...             | ...             | ...             | * , p * , bc q a : b & bc : p * △ p & n :                                    |
| 17              | St-Cu. : Cu-Nb.  | A-Cu. : Cu-Nb.   | Cu-Nb.           | 5                         | 5              | 8               | 8               | 1               | 1               | p*             | ...            | ...             | p*°             | ...             | ...             | cp * a & p : b n : ☒ 2 mm.   |
| 18              | St-Cu. : Cu-Nb.  | St-Cu. : Cu.     | Nb.              | 8                         | 1              | 9               | 10              | 10              | 10              | p*             | ...            | ...             | ...             | ...             | ...             | cp * a : o to o * p : o n :  |
| 19              | St-Cu. : St-Cuf. | Cu.              | Ci. : Cu.        | 3                         | 9              | 1               | 1               | 2               | 1               | ...            | ...            | ...             | ...             | ...             | ...             | ●° early, b & o p * a : b q p : b n :  |
| 20              | Ci. : St-Cu.     | Ci-St. : Cu.     | A-St.            | 2                         | 2              | 5               | 8               | 9               | 5               | ...            | ...            | ⊕               | ⊕               | ...             | ...             | b to bc a : c to o p : bc n : ⊕ 13 <sup>h</sup> -15 <sup>h</sup>             |
| 21              | —                | Ci.              | Ci. : Ci-St.     | 0                         | 0              | 3               | 7               | 4               | 7               | ...            | ...            | ...             | ⊕               | ...             | ...             | b a : bc & c p : c n :   |
| 22              | St.              | Nb.              | Nb.              | 10                        | 10             | 10              | 10              | 10              | 10              | ...            | ●°             | ...             | ...             | ...             | ...             | o, o * a : ●° p & n :  |
| 23              | Nb.              | Nb.              | Nb.              | 10                        | 10             | 10              | 10              | 10              | 10              | ≡°             | ●°             | ...             | ...             | ...             | ...             | ≡° to ●° a : ●° p & n :  |
| 24              | St-Cuf.          | St.              | St.              | 10                        | 10             | 10              | 10              | 10              | 10              | ...            | ●°             | ...             | ...             | ...             | ...             | ●° early, o a : o, p ●° p : ●° n :   |
| 25              | Nb-St.           | St-Cu. : St-Cuf. | St-Cu. : St-Cuf. | 10                        | 10             | 10              | 10              | 10              | 10              | ●°             | ...            | ...             | ...             | ...             | ...             | ●°, o a : o p : op ●° n :  |
| 26              | St-Cu. : St-Cuf. | St-Cu. : St-Cuf. | St-Cu. : St.     | 10                        | 10             | 10              | 10              | 9               | 10              | ...            | ...            | ...             | ...             | ...             | ...             | p ●°, o a, p & n :   |
| 27              | St-Cu. : St.     | St-Cu. : Fr-Cu   | St-Cu. : Cu.     | 10                        | 4              | 9               | 9               | 9               | 10              | ...            | ...            | ...             | ...             | ...             | ...             | o to bc a : o p & n :  |
| 28              | St-Cu.           | St-Cu. : St-Cuf. | St-Cu. : Cu.     | 10                        | 10             | 10              | 10              | 8               | 0               | ...            | ...            | ...             | p ●°            | ...             | ...             | o a : p ●° p : b n :   |
| 29              | St-Cu. : Cu.     | St-Cu.           | St-Cu.           | 2                         | 4              | 8               | 9               | 9               | 10              | ...            | ...            | ...             | ...             | ...             | ...             | p *° early, bc a : c & o p & n :   |
| 30              | St-Cu.           | Ci. : St-Cu.     | St-Cu.           | 9                         | 10             | 6               | 7               | 9               | 6               | ...            | ...            | ...             | ...             | ...             | ...             | c & o a, p & n :   |
| 31              | St-Cu.           | Cu-Nb.           | Cu-Nb.           | 8                         | 2              | 4               | 7               | 6               | 7               | ...            | ...            | ...             | ...             | ...             | ...             | bc p *° a : cp ●, p ●▲ p : p ●° n :  |
| Mean Cloud Am't |                  |                  |                  | 6.9                       | 6.6            | 6.8             | 7.3             | 6.6             | 5.5             |                |                |                 |                 |                 |                 |  |

102. Aberdeen.

April, 1924.

| Day.            | Cloud Forms.             |                      |                 | Cloud Amount (All Forms). |                |                 |                 |                 |                 | Weather.       |                |                 |                 |                 |                 | Remarks.   |
|-----------------|--------------------------|----------------------|-----------------|---------------------------|----------------|-----------------|-----------------|-----------------|-----------------|----------------|----------------|-----------------|-----------------|-----------------|-----------------|--|
|                 | 7 <sup>h</sup>           | 13 <sup>h</sup>      | 18 <sup>h</sup> | 7 <sup>h</sup>            | 9 <sup>h</sup> | 13 <sup>h</sup> | 15 <sup>h</sup> | 18 <sup>h</sup> | 21 <sup>h</sup> | 7 <sup>h</sup> | 9 <sup>h</sup> | 13 <sup>h</sup> | 15 <sup>h</sup> | 18 <sup>h</sup> | 21 <sup>h</sup> |  |
| 1               | St-Cu.                   | St-Cu.               | Ci. : St-Cu.    | 9                         | 9              | 6               | 4               | 3               | 0               | ...            | ...            | ...             | ...             | ...             | ...             | c & o a : bc p : b n :                                       |
| 2               | St-Cu.                   | A-Cu.                | A-Cu.           | 8                         | 10             | 6               | 9               | 10              | 10              | ...            | ≡°             | ...             | ...             | ...             | ...             | c & o ≡° a : c & o p : o, ●° later n :                       |
| 3               | Nb.                      | St.                  | Ci-Cu. : A-Cu.  | 10                        | 10             | 10              | 8               | 6               | 7               | ●°             | ...            | ...             | ...             | ...             | ...             | ●° ≡°, o a : c & o p : bc & c n :                            |
| 4               | St.                      | St-Cu. : Cu-Nb.      | St-Cu.          | 9                         | 7              | 8               | 9               | 7               | 6               | ...            | ...            | ...             | ...             | ...             | ...             | ●° early, c a : c & o p : bc n :                             |
| 5               | St-Cu.                   | Ci. : Cu.            | St-Cu. : Cu.    | 8                         | 3              | 5               | 10              | 9               | 0               | ...            | ...            | ...             | ...             | ...             | ...             | b & bc a : og p : o to b n :                                 |
| 6               | St-Cu.                   | St-Cu. : Cu.         | St-Cu. : Cu.    | 10                        | 10             | 10              | 6               | 4               | 1               | ...            | ...            | ...             | ...             | ...             | ...             | p ●° early, o a : bc p : b n :                               |
| 7               | St-Cu. : St.             | A-Cu. : Cu.          | St-Cu. : Cu.    | 10                        | 8              | 2               | 3               | 4               | 0               | ...            | ...            | y               | y               | y               | ...             | ●° to by a : by p : b n :                                    |
| 8               | —                        | Cu.                  | A-Cu. : Cu-Nb.  | 0                         | 4              | 2               | 5               | 4               | 4               | ...            | ...            | y               | y               | ...             | ...             | b & bc q, p *° △° a : bc q y p : bc n :                      |
| 9               | Ci. : Cu.                | Cu-Nb.               | Cu-Nb.          | 4                         | 5              | 2               | 7               | 8               | 6               | ...            | ...            | ...             | ...             | p*° △           | ...             | bc & c, p *° *△ a, p & n :                                   |
| 10              | St-Cu.                   | Cu.                  | St-Cu. : Cu.    | 8                         | 3              | 1               | 2               | 4               | 6               | ...            | ...            | ...             | ...             | ...             | ...             | p *° △ to b a : b & bc p & n :                               |
| 11              | Ci-St. : St-Cu.          | A-St. : St.          | A-Cu. : Fr-St.  | 5                         | 8              | 10              | 4               | 7               | 5               | ⊕              | ⊕              | ...             | ...             | ...             | ...             | bc & c a : bc & o * p : c & bc n : ⊕                         |
| 12              | St-Cu.                   | Nb.                  | Nb.             | 10                        | 10             | 10              | 10              | 10              | 10              | ...            | ...            | ●°              | ...             | ...             | ...             | o, ●° * , *▲ a & p : ●°, o n :                               |
| 13              | St-Cuf.                  | Ci-St. : Cu.         | A-Cu. : Fr-St.  | 3                         | 5              | 2               | 6               | 8               | 10              | ...            | ...            | ...             | ...             | ...             | ...             | ☐, b & bc a & p : c & o, ●° n :                              |
| 14              | St.                      | Nb.                  | Cu.             | 10                        | 10             | 10              | 7               | 1               | 0               | ≡°             | ●°             | ...             | ...             | ...             | ...             | ●° early, o ≡°, ●° a : o to b p : b n :                      |
| 15              | St-Cu. : Cu.             | St-Cu. : St-Cuf.     | Cu.             | 1                         | 5              | 6               | 8               | 1               | 0               | ...            | ...            | ...             | ...             | ...             | ...             | ☐, b & bc a : bc & c p : b n :                               |
| 16              | St-Cu. : Cu.             | Cu.                  | St-Cu. : Cu.    | 4                         | 4              | 4               | 7               | 4               | 0               | ...            | ...            | y               | y               | ...             | ...             | bc q y a : c q y p : b n :                                   |
| 17              | Cu.                      | Cu.                  | —               | 1                         | 2              | 3               | 2               | 0               | 4               | ...            | ...            | y               | y               | ...             | ...             | b & by a & p : bc ☐, ☐ n :                                   |
| 18              | Ci-St. : A-St.           | A-St. : St-Cu.       | A-St. : St-Cuf. | 8                         | 9              | 9               | 10              | 9               | 9               | ...            | ...            | ...             | ...             | ...             | ...             | c ≡° to o a : o p & n : ⊕ 8 <sup>h</sup>                     |
| 19              | A-Cu.                    | St-Cu.               | St-Cu. : St-Cu. | 6                         | 8              | 10              | 10              | 10              | 10              | ...            | ...            | ...             | ...             | ...             | ...             | bc ≡° to o a : o p : ≡° n :                                  |
| 20              | St-Cu.                   | St-Cu. : Fr-Nb.      | St-Cu. : Fr-Cu. | 10                        | 9              | 10              | 10              | 8               | 9               | ...            | ...            | ...             | p ●             | ...             | ...             | o, p ●, ● a & p : c & o n :                                  |
| 21              | St.                      | Cu.                  | St-Cu.          | 10                        | 10             | 7               | 9               | 6               | 10              | ...            | ...            | ...             | ...             | ...             | ...             | o ●° a : bc & c q p : c & o n :                              |
| 22              | St-Cu.                   | Cu-Nb.               | St-Cu. : Cu.    | 1                         | 8              | 9               | 7               | 6               | 0               | ...            | ...            | ...             | ...             | ...             | ...             | cp * , *▲ a & p : b n :                                      |
| 23              | A-Cu.                    | St-Cu. : Cu.         | St-Cu. : Cu-Nb. | 1                         | 7              | 9               | 10              | 6               | 7               | ...            | ...            | ...             | ...             | ...             | ...             | b to o a : o, p ●°, ●▲ p : bc & c n :                        |
| 24              | St.                      | St-Cuf.              | Nb.             | 10                        | 10             | 10              | 10              | 10              | 10              | ...            | ...            | ...             | ...             | ...             | ...             | o, ≡°, o a : o ●° p & n :                                    |
| 25              | Cu-Nb. : St-Cu. : Fr-St. | Ci. : St-Cuf.        | A-St. : Fr-St.  | 6                         | 8              | 5               | 5               | 9               | 10              | ...            | ...            | ...             | ...             | ...             | ...             | bc & c a & p : ●° n :  |
| 26              | St.                      | St-Cu. : Fr-St.      | St.             | 10                        | 9              | 9               | 10              | 10              | 10              | ...            | ...            | ...             | ...             | ...             | ...             | c & o ●° a : o p : ●° n :                                    |
| 27              | St-Cu. : Cu.             | St-Cu. : Cu-Nb.      | St-Cu. : Cu.    | 6                         | 7              | 8               | 7               | 4               | 4               | ...            | ...            | ...             | ...             | ...             | ...             | bc & cp ●° a : bc & cp & n :                                 |
| 28              | A-St. : St.              | Ci. : A-Cu. : Cu.    | Ci-St. : Cu.    | 10                        | 10             | 5               | 7               | 4               | 8               | ...            | ...            | ...             | ...             | ...             | ...             | o to c a : bc & c p & n : ⊕ 16 <sup>h</sup> -18 <sup>h</sup> |
| 29              | St-Cu.                   | A-Cu. : St-Cu. : Cu. | Ci. : Cu.       | 5                         | 8              | 3               | 1               | 1               | 0               | ...            | ...            | ...             | ...             | ...             | ...             | p ●°, bc a : b p & n :                                       |
| 30              | St-Cu. : Cu.             | Nb.                  | Nb.             | 10                        | 10             | 10              | 10              | 10              | 10              | ...            | ...            | ...             | ...             | ...             | ...             | p ●°, o ●° a, p & n :  |
| Mean Cloud Am't |                          |                      |                 | 6.8                       | 7.5            | 6.7             | 7.1             | 6.1             | 5.5             |                |                |                 |                 |                 |                 |  |

103. Aberdeen.

May, 1924.

| Day.            | Cloud Forms.     |                  |                         | Cloud Amount (All Forms). |                |                 |                 |                 |                 | Weather.       |                |                 |                 |                 |                 | Remarks.   |
|-----------------|------------------|------------------|-------------------------|---------------------------|----------------|-----------------|-----------------|-----------------|-----------------|----------------|----------------|-----------------|-----------------|-----------------|-----------------|--|
|                 | 7 <sup>h</sup>   | 13 <sup>h</sup>  | 18 <sup>h</sup>         | 7 <sup>h</sup>            | 9 <sup>h</sup> | 13 <sup>h</sup> | 15 <sup>h</sup> | 18 <sup>h</sup> | 21 <sup>h</sup> | 7 <sup>h</sup> | 9 <sup>h</sup> | 13 <sup>h</sup> | 15 <sup>h</sup> | 18 <sup>h</sup> | 21 <sup>h</sup> |  |
| 1               | Nb.              | A-Cu : St-Cuf.   | St-Cu. : Fr-Nb.         | 10                        | 9              | 4               | 9               | 8               | 6               | ...            | ●°             | ...             | ...             | p ●°            | ...             | ●° to bc a : c & op ●° p : b n :<br>c & op ●° a : ● & ●° p & n :           |
| 2               | A-Cu. : St-Cuf.  | Nb.              | Nb.                     | 10                        | 8              | 10              | 10              | 10              | 10              | ...            | ...            | ...             | ...             | ...             | ...             | ● & ●° a & p : c p ●° n :<br>b a : b & bc p : c to o n : ⊕ 18 <sup>h</sup> |
| 3               | Nb.              | Nb.              | A-St. : Nb-Cuf.         | 10                        | 10             | 10              | 10              | 9               | 7               | ...            | ...            | ...             | ...             | ...             | ...             | ● & ●° a & p : c & o n :   |
| 4               | St-Cu.           | Cu.              | Ci-St.                  | 1                         | 1              | 7               | 5               | 4               | 10              | ...            | ...            | ...             | ...             | ...             | ...             | ● & ●° a & p : c & o n :   |
| 5               | Nb.              | Nb.              | St-Cu. : St-Cuf.        | 10                        | 10             | 10              | 10              | 9               | 7               | ...            | ...            | ...             | ...             | ...             | ...             | ● & ●° a & p : c & o n :   |
| 6               | Ci. : Cu.        | St-Cu. : Cu.     | St-Cu. : St-Cuf.        | 4                         | 8              | 4               | 6               | 9               | 8               | ...            | ...            | ...             | ...             | ...             | ...             | c, p ●° ▲ a : c & op & n :   |
| 7               | Nb.              | Nb.              | Nb.                     | 10                        | 10             | 10              | 10              | 10              | 10              | ...            | ...            | ...             | ...             | ...             | ...             | ● & ●° ≡ a, p & n :  |
| 8               | Nb.              | Nb.              | St-Cu. : Fr-Nb.         | 10                        | 10             | 10              | 10              | 8               | 9               | ...            | ...            | ...             | ...             | ...             | ...             | ● q a & p : ●, o n :   |
| 9               | St-Cu. : Cu.     | Ci. : St-Cu.     | A-St. : St-Cu. : Fr-St. | 6                         | 5              | 3               | 9               | 9               | 10              | ...            | ...            | ...             | ...             | ...             | ...             | c p ●° & bc a : c & op : o, ●° later n :                                   |
| 10              | Nb.              | Nb.              | A-St. : St-Cu.          | 10                        | 10             | 10              | 7               | 8               | 10              | ...            | ...            | ...             | ...             | ...             | ...             | ● & ●° to c a & p : o, p ●°, later n :                                     |
| 11              | Ci-St. : St-Cu.  | St-Cu. : Nb.     | St-Cu. : Nb.            | 7                         | 9              | 9               | 9               | 8               | 3               | ...            | ...            | ...             | ...             | ...             | ...             | c & o, p ●° ▲ a : ● & ●° p : b n :   |
| 12              | A-Cu.            | Cu. : Cu-Nb.     | St-Cu.                  | 1                         | 8              | 3               | 1               | 4               | 6               | ...            | ...            | ...             | ...             | ...             | ...             | b ≡, bc & c a : p ●°, b p : bc n :   |
| 13              | Nb.              | St. : Nb.        | Ci. : Cu.               | 10                        | 10             | 10              | 2               | 2               | 0               | ...            | ...            | ...             | ...             | ...             | ...             | ● ≡, ≡ a : o to by p : b n :   |
| 14              | A-St. : St-Cu.   | A-St. : St-Cu.   | A-St. : St-Cu.          | 9                         | 2              | 9               | 7               | 8               | 7               | ...            | ...            | ...             | ...             | ...             | ...             | b & o a : c & op & n :   |
| 15              | Cu.              | Cu. : Cu-Nb.     | Cu-Nb.                  | 1                         | 7              | 5               | 4               | 1               | 1               | ...            | ...            | ...             | ...             | ...             | ...             | b n, c T, p ●° ▲ a : bc y p : b n :  |
| 16              | A-St. : Cu.      | Cu-Nb.           | St-Cu. : Cu-Nb.         | 9                         | 8              | 8               | 9               | 3               | 2               | ...            | p ●°           | ...             | ...             | ...             | ...             | c p ●, ⊕ ●, ★ a & p : bc p ●° n :  |
| 17              | Ci.              | St-Cu. : Cu.     | St-Cu. : M-Cu.          | 5                         | 4              | 8               | 8               | 9               | 10              | ...            | ...            | ...             | ...             | ...             | ...             | bc a : c & op ●° p & n : ⊕ 8 <sup>h</sup> -10 <sup>h</sup>                 |
| 18              | Ci-St. : St-Cu.  | Ci-St. : St-Cu.  | Ci-St.                  | 6                         | 1              | 4               | 4               | 6               | 2               | ...            | ...            | ...             | ...             | ...             | ...             | b & bc a, p & n : ⊕ 7 <sup>h</sup> -8 <sup>h</sup>                         |
| 19              | St-Cu. : Fr-St.  | St.              | St.                     | 7                         | 2              | 10              | 10              | 10              | 10              | ...            | ...            | ...             | ...             | ...             | ...             | b & o ≡ a : o p : c & o n :  |
| 20              | St.              | St.              | St.                     | 10                        | 10             | 10              | 10              | 10              | 10              | ...            | ...            | ...             | ...             | ...             | ...             | Dull throughout.   |
| 21              | Nb.              | St.              | Nb.                     | 10                        | 10             | 10              | 10              | 10              | 10              | ...            | ...            | ...             | ...             | ...             | ...             | ● & ●°, ≡ & ≡ a & p : ≡ : ●° later n :                                     |
| 22              | St.              | Cu.              | St-Cu. : Cu. : Cu-Nb.   | 10                        | 10             | 3               | 6               | 2               | 1               | ...            | ...            | ...             | ...             | ...             | ...             | ≡ : ●° & ●° a : bc p : b n :   |
| 23              | Cu.              | St-Cu. : Cu.     | St-Cu. : Cu.            | 4                         | 2              | 5               | 3               | 9               | 6               | ...            | ...            | ...             | ...             | ...             | ...             | b & bc a & p : ●° to b n :   |
| 24              | Fr-St.           | Ci. : Cu-Nb.     | Ci.                     | 2                         | 3              | 2               | 2               | 1               | 9               | ...            | ...            | ...             | ...             | ...             | ...             | Fine all day, dull late.   |
| 25              | St.              | St-Cu. : St.     | St-Cuf.                 | 10                        | 10             | 10              | 10              | 10              | 8               | ...            | ...            | ...             | ...             | ...             | ...             | o, ≡ a : ≡ p : c & o n : T (distant) 15 <sup>h</sup>                       |
| 26              | St-Cu. : Fr-St.  | St-Cu. : St-Cuf. | St-Cu. : St-Cuf.        | 10                        | 10             | 10              | 10              | 9               | 2               | ...            | ...            | ...             | ...             | ...             | ...             | c & o, ●° a & p : o to b n :   |
| 27              | St-Cu. : St-Cuf. | A-Cu. : Cu.      | A-Cu.                   | 9                         | 9              | 6               | 6               | 9               | 10              | ...            | ...            | ...             | ...             | ...             | ...             | c & o a : bc y p : o n :   |
| 28              | St-Cu. : Nb.     | St-Cu. : Nb.     | Nb.                     | 10                        | 10             | 10              | 10              | 10              | 10              | ...            | ...            | ...             | ...             | ...             | ...             | ●°, ● & ●° a, p & n :  |
| 29              | St.              | St-Cu.           | A-Cu.                   | 10                        | 9              | 1               | 1               | 1               | 0               | ...            | ...            | ...             | ...             | ...             | ...             | o to b a : b p & n :   |
| 30              | St-Cu. : Nb.     | Nb.              | Nb-St.                  | 10                        | 10             | 10              | 10              | 10              | 10              | ...            | ...            | ...             | ...             | ...             | ...             | ● & ●° a, p & n :  |
| 31              | St.              | St.              | St.                     | 10                        | 10             | 10              | 10              | 10              | 10              | ...            | ...            | ...             | ...             | ...             | ...             | o, ●° to ≡ : a : ≡ : to o p & n :  |
| Mean Cloud Am't |                  |                  |                         | 7.8                       | 7.6            | 7.5             | 7.4             | 7.3             | 6.9             |                |                |                 |                 |                 |                 |  |

104. Aberdeen.

June, 1924.

| Day.            | Cloud Forms.          |                         |                      | Cloud Amount (All Forms). |                |                 |                 |                 |                 | Weather.       |                |                 |                 |                 |                 | Remarks.   |
|-----------------|-----------------------|-------------------------|----------------------|---------------------------|----------------|-----------------|-----------------|-----------------|-----------------|----------------|----------------|-----------------|-----------------|-----------------|-----------------|--|
|                 | 7 <sup>h</sup>        | 13 <sup>h</sup>         | 18 <sup>h</sup>      | 7 <sup>h</sup>            | 9 <sup>h</sup> | 13 <sup>h</sup> | 15 <sup>h</sup> | 18 <sup>h</sup> | 21 <sup>h</sup> | 7 <sup>h</sup> | 9 <sup>h</sup> | 13 <sup>h</sup> | 15 <sup>h</sup> | 18 <sup>h</sup> | 21 <sup>h</sup> |  |
| 1               | St-Cuf.               | A-St. : St-Cuf.         | Ci. : Ci-St. : Cu.   | 10                        | 10             | 10              | 7               | 4               | 9               | ...            | ...            | ...             | ...             | ...             | ...             | oq, a : bc & cq p : o n :  |
| 2               | A-Cu. : Cu.           | Cu-Nb.                  | St-Cu. : Cu.         | 6                         | 6              | 6               | 5               | 4               | 3               | ...            | ...            | ...             | ...             | ...             | ...             | bc p ●, ▲ a : bc p : b n :                                       |
| 3               | St-Cu. : Cu.          | Cu. : Cu-Nb.            | Cu.                  | 3                         | 6              | 8               | 9               | 8               | 8               | ...            | y              | ...             | ...             | ...             | ...             | b & bc, cp ●° a & p : c n :                                      |
| 4               | St-Cu. : Cu.          | St-Cu.                  | St-Cu. : Cu.         | 7                         | 8              | 2               | 7               | 8               | 3               | ...            | ...            | ...             | ...             | ...             | ...             | c a : bc & c p : b n :   |
| 5               | St-Cu. : Cu.          | St-Cu.                  | St-Cu.               | 8                         | 8              | 7               | 8               | 8               | 9               | ...            | ...            | ...             | ...             | ...             | ...             | Cloudy throughout.   |
| 6               | Nb.                   | Nb.                     | St-Cu. : Nb.         | 10                        | 10             | 10              | 10              | 10              | 10              | ...            | ...            | ...             | ...             | ...             | ...             | ● & ●°, ≡ a, p & n :   |
| 7               | St-Cu. : Cu.          | Cu.                     | A-St. : St-Cu.       | 7                         | 8              | 1               | 5               | 7               | 10              | ...            | ...            | ...             | ...             | ...             | ...             | c a : bc & c p : o, p ●° later n :                               |
| 8               | Nb.                   | Nb.                     | Nb.                  | 10                        | 10             | 10              | 10              | 10              | 10              | ...            | ...            | ...             | ...             | ...             | ...             | ● ≡, ≡ a : ● ≡ p : ≡ n :   |
| 9               | St.                   | St-Cu. : St-Cuf.        | St.                  | 10                        | 10             | 9               | 10              | 10              | 10              | ...            | ...            | ...             | ...             | ...             | ...             | o a & p : ● n :  |
| 10              | St.                   | A-St. : St-Cu. : Fr-Nb. | A-Cu. : St-Cu.       | 10                        | 10             | 9               | 10              | 7               | 8               | ...            | ...            | ...             | ...             | ...             | ...             | ≡ & ≡, ● & ●° a : ●° p : c, ≡ n :                                |
| 11              | St-Cu. : St.          | A-Cu. : Cu-Nb.          | A-Cu.                | 9                         | 8              | 3               | 2               | 1               | 10              | ...            | ...            | ...             | ...             | ...             | ...             | ● early, o to b a : b p : ≡ n :                                  |
| 12              | Nb.                   | Nb.                     | St-Cuf.              | 10                        | 10             | 10              | 10              | 10              | 8               | ...            | ...            | ...             | ...             | ...             | ...             | ● ≡ to ●° a : o p : c & o n :                                    |
| 13              | St-Cu. : Cu.          | St-Cu.                  | Ci. : St-Cu.         | 10                        | 10             | 8               | 4               | 3               | 2               | ...            | ...            | ...             | ...             | ...             | ...             | c & o a : bc to b p & n :  |
| 14              | Ci-St.                | Ci.                     | Ci-St. : St-Cu.      | 1                         | 2              | 2               | 5               | 8               | 10              | ...            | ...            | ...             | ...             | ...             | ...             | b, bq a : bc & c p : p ●° n : ⊕ 9 <sup>h</sup> & 18 <sup>h</sup> |
| 15              | St-Cu. : Nb.          | St-Cu. : Cu.            | St-Cu. : St.         | 9                         | 9              | 10              | 10              | 4               | 4               | ...            | ...            | ...             | ...             | ...             | ...             | op ●° a : ●° p : bc, ≡ later n :                                 |
| 16              | St-Cu. : Cu.          | St-Cu. : Cu. : Cu-Nb.   | Cu-Nb.               | 4                         | 4              | 7               | 7               | 8               | 8               | ...            | y              | ...             | ...             | ...             | ...             | bc a : cp ●° p : c n :   |
| 17              | A-St. : Fr-Nb.        | St.                     | St.                  | 10                        | 10             | 10              | 10              | 10              | 10              | ...            | ...            | ...             | ...             | ...             | ...             | ● & ●° a : o to ≡ : p : c & o ≡ n :                              |
| 18              | Cu-Nb.                | Ci-St.                  | Ci. : Ci-St.         | 8                         | 7              | 8               | 9               | 5               | 2               | ...            | ...            | ...             | ...             | ...             | ...             | ⊕, c a : c & op : b n : ⊕ 11 <sup>h</sup> -13 <sup>h</sup>       |
| 19              | St-Cu. : Fr-St.       | St-Cu.                  | Fr-Cu. : Fr-St.      | 7                         | 6              | 8               | 1               | 7               | 10              | ...            | ...            | ...             | ...             | ...             | ...             | c, ● ≡ a : bc & c p : o n :                                      |
| 20              | Ci.                   | A-Cu. : St-Cu.          | St-Cu.               | 2                         | 4              | 8               | 7               | 1               | 1               | ...            | ...            | ...             | ...             | ...             | ...             | b & c a, p & n :   |
| 21              | St-Cu.                | St-Cu.                  | St-Cu.               | 1                         | 1              | 1               | 4               | 7               | 1               | ...            | ...            | ...             | ...             | ...             | ...             | ⊕, b a : b & c p & n :   |
| 22              | Cu. : Cu-Nb.          | Cu. : Cu-Nb.            | Cu. : Cu-Nb.         | 8                         | 6              | 7               | 9               | 4               | 10              | ...            | ...            | ...             | ...             | ...             | ...             | c, o T, c & bc a : c & op & n :                                  |
| 23              | St.                   | St-Cu. : St-Cuf.        | St-Cu. : Fr-St.      | 10                        | 9              | 8               | 8               | 8               | 8               | ...            | ...            | ...             | ...             | ...             | ...             | o a : c & op & n :   |
| 24              | St-Cu. : Fr-Nb.       | Ci. : Cu.               | St-Cu. : Cu.         | 10                        | 8              | 7               | 9               | 9               | 5               | ...            | ...            | ...             | ...             | ...             | ...             | c & o ●° a : c y, o p : bc n :                                   |
| 25              | Ci. : Ci-Cu. : St-Cu. | A-Cu. : St-Cu. : Cu.    | St-Cu.               | 3                         | 9              | 4               | 7               | 8               | 9               | ...            | y              | y               | ...             | ...             | ...             | bc & o, y a : c p : c & o n :                                    |
| 26              | St-Cu.                | A-St. : St-Cu. : Cu.    | Ci-St. : St-Cu.      | 9                         | 9              | 9               | 9               | 8               | 9               | ...            | ...            | ...             | ...             | ...             | ...             | o, p ●° a : c & op & n : ⊕ 17 <sup>h</sup> -18 <sup>h</sup>      |
| 27              | St-Cu. : St-Cuf.      | St-Cu. : Cu. : Cu-Nb.   | Cu.                  | 5                         | 8              | 7               | 5               | 7               | 7               | ...            | ...            | ...             | ...             | ...             | ...             | cq, p ●° a : cp ●° p & n :                                       |
| 28              | Ci. : Ci-Cu. : St-Cu. | Nb.                     | Ci. : A-St. : Fr-Cu. | 4                         | 9              | 10              | 10              | 8               | 8               | ...            | ...            | ...             | ...             | ...             | ...             | bc to o ●° a : ●° p : c n :                                      |
| 29              | St-Cu.                | Cu-Nb.                  | Cu. : Cu-Nb.         | 7                         | 4              | 7               | 7               | 8               | 9               | ...            | ...            | ...             | ...             | ...             | ...             | bc & cp ●° a & p : c & o n :                                     |
| 30              | Ci. : Cu.             | Cu.                     | Cu. : Cu-Nb.         | 3                         | 7              | 7               | 9               | 6               | 2               | ...            | ...            | y               | ...             | ...             | ...             | bc & c y a : cp ●° p : b n :                                     |
| Mean Cloud Am't |                       |                         |                      | 7.0                       | 7.5            | 7.1             | 7.4             | 6.9             | 7.1             |                |                |                 |                 |                 |                 |  |

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July, 1924.

Table for July 1924 in Aberdeen. Columns include Day, Cloud Forms (7h, 13h, 18h), Cloud Amount (7h, 9h, 13h, 15h, 18h, 21h), Weather (7h, 9h, 13h, 15h, 18h, 21h), and Remarks. Data rows 1-31 and Mean Cloud Am't.

106. Aberdeen.

August, 1924.

Table for August 1924 in Aberdeen. Columns include Day, Cloud Forms (7h, 13h, 18h), Cloud Amount (7h, 9h, 13h, 15h, 18h, 21h), Weather (7h, 9h, 13h, 15h, 18h, 21h), and Remarks. Data rows 1-31 and Mean Cloud Am't.

Summary table for the month. Columns: Day, Cloud Forms, Cloud Amount (7h, 9h, 13h, 15h, 18h, 21h), Weather (7h, 9h, 13h, 15h, 18h, 21h), Remarks.

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| Day.            | Cloud Forms.          |                         |                      | Cloud Amount (All Forms). |                |                 |                 |                 |                 | Weather.       |                |                 |                 |                 |                 | Remarks.                                       |
|-----------------|-----------------------|-------------------------|----------------------|---------------------------|----------------|-----------------|-----------------|-----------------|-----------------|----------------|----------------|-----------------|-----------------|-----------------|-----------------|--|
|                 | 7 <sup>h</sup>        | 13 <sup>h</sup>         | 18 <sup>h</sup>      | 7 <sup>h</sup>            | 9 <sup>h</sup> | 13 <sup>h</sup> | 15 <sup>h</sup> | 18 <sup>h</sup> | 21 <sup>h</sup> | 7 <sup>h</sup> | 9 <sup>h</sup> | 13 <sup>h</sup> | 15 <sup>h</sup> | 18 <sup>h</sup> | 21 <sup>h</sup> |  |
| 1               | St-Cu.                | St-Cu. : Cu.            | St-Cu. : Cu-Nb.      | 9                         | 10             | 10              | 8               | 7               | 3               | ...            | ●°             | ...             | ...             | ...             | ...             | ●, c & o a : c & o p ● & ●° p : b n :          |
| 2               | St-Cu.                | St-Cu. : Cu.            | St. : Fog.           | 9                         | 10             | 6               | 6               | 10              | 10              | ...            | ...            | ...             | ...             | ≡:2             | ≡:3             | c & o a : bc to o ≡:2 p : ≡: n :               |
| 3               | Fog.                  | —                       | —                    | 10                        | 0              | 0               | 0               | 0               | 0               | ●°             | ...            | y               | ...             | ...             | ...             | ≡:●° to b y a : b p & n :                      |
| 4               | St.                   | —                       | —                    | 7                         | 5              | 0               | 1               | 0               | 0               | ...            | ...            | ...             | ...             | ...             | ...             | c to bc ≡ a : b p & n :                        |
| 5               | Fog.                  | Ci-Cu. : Cu.            | Ci : Fr-St.          | 10                        | 4              | 2               | 3               | 5               | 10              | ≡ p ≡:3        | ...            | ⊕               | ...             | ...             | ...             | ≡ to b a : b & bc p : o n : ⊕ 13 <sup>h</sup>  |
| 6               | St.                   | St-Cu. : Cu.            | A-Cu : Fr-St.        | 9                         | 6              | 3               | 6               | 6               | 10              | ...            | ...            | ...             | ...             | ...             | ≡               | o to b a : bc p : o ≡ n :                      |
| 7               | St. : Fog.            | St.                     | Nb.                  | 10                        | 10             | 10              | 10              | 10              | 10              | ...            | ...            | ...             | ...             | ●               | ●               | ≡ to o a : o, ● p : ● n :                      |
| 8               | Nb.                   | Nb.                     | St.                  | 10                        | 10             | 10              | 10              | 10              | 9               | ...            | ...            | ●°              | ●°              | ...             | ...             | ● & ●° all day, ≡ late.                        |
| 9               | A-St. : Nb.           | Nb.                     | Nb.                  | 9                         | 10             | 10              | 10              | 8               | 7               | ...            | ...            | ●               | ...             | p ●°            | ...             | ● & ●° q a & p : p ●, c q n :                  |
| 10              | Cu-Nb.                | Cu-Nb.                  | St-Cu. : Cu.         | 2                         | 6              | 7               | 5               | 3               | 2               | ...            | p ●°           | p ●             | ⊕               | ...             | ...             | bc p ● q a : bc, b p : b n : ⊕ 15 <sup>h</sup> |
| 11              | St-Cu. : St.          | Fr-Cu.                  | Ci-Cu : St-Cu. : Cu. | 10                        | 9              | 4               | 2               | 7               | 3               | ...            | ...            | y               | y               | ...             | ...             | ● early, o to b y a : bc p : b n :             |
| 12              | St-Cu. : Fr-St.       | St-Cu. : Cu.            | A-Cu : A-St. : Nb.   | 4                         | 4              | 6               | 8               | 10              | 8               | ...            | ...            | ...             | ...             | ●°              | ...             | bc a : c p ● p : c & o ●°, ●° n :              |
| 13              | Ci. : A-Cu. : St-Cuf. | Cu.                     | St-Cu.               | 3                         | 2              | 4               | 6               | 1               | 1               | ...            | ...            | y               | ...             | ...             | ...             | b & bc q a : bc q p : b n :                    |
| 14              | A-St.                 | St-Cu. : Cu-Nb.         | St-Cu.               | 1                         | 7              | 8               | 8               | 1               | 1               | ...            | ...            | p ●°            | ...             | ...             | ...             | ⌊, c p ●° a & p : b n :                        |
| 15              | Ci. : St-Cu.          | A-St. : Nb.             | A-St. : Nb.          | 7                         | 10             | 10              | 10              | 10              | 10              | ≡:●°           | ●°             | ●               | ...             | ...             | ...             | ≡° to ● a : ● & ●° p : o q n                   |
| 16              | St-Cu.                | Ci-St. : A-St. : St-Cu. | Nb-Cuf.              | 4                         | 1              | 7               | 8               | 10              | 5               | ...            | ...            | ...             | ...             | ●°              | ...             | bc a : c p ● p : ●° to bc n :                  |
| 17              | Ci-Cu.                | St-Cu. : St.            | —                    | 4                         | 3              | 10              | 3               | 0               | 0               | ...            | ...            | ...             | ...             | ...             | ...             | b & bc a : p ●° to b q p : b q n :             |
| 18              | St-Cu.                | Cu.                     | Ci.                  | 1                         | 1              | 1               | 2               | 1               | 1               | ...            | y              | y               | y               | ...             | ...             | Fine and squally all day.                      |
| 19              | A-St. : St-Cu.        | Ci-St. : A-Cu. : Cu.    | A-St. : St-Cu.       | 4                         | 6              | 4               | 7               | 10              | 7               | ...            | ...            | ...             | ...             | ...             | ...             | bc & c a & p : c & o n : ⊕ 11 <sup>h</sup>     |
| 20              | St-Cu.                | Ci-St. : Cu.            | St-Cu.               | 1                         | 1              | 4               | 5               | 8               | 10              | ...            | ...            | ...             | ...             | ...             | ...             | p ●° early, b & bc a & p : c to o ● n :        |
| 21              | Nb.                   | St-Cu. : Cu.            | St-Cu.               | 10                        | 8              | 2               | 2               | 1               | 0               | ...            | ●°             | ...             | ...             | ...             | ...             | ● to ●° to b q a : b y p : b n :               |
| 22              | A-Cu.                 | A-St. : Cu.             | Cu-Nb.               | 1                         | 1              | 6               | 5               | 1               | 0               | ...            | ...            | ...             | p ●°            | ...             | ...             | b ⌊ a : bc p ●° p : b n :                      |
| 23              | A-St. : St-Cuf.       | Nb.                     | Cu-Nb.               | 9                         | 10             | 10              | 10              | 10              | 10              | ...            | ...            | ●°              | ...             | ⌊ ●°            | ...             | ● q a : ⌊ ●° p : ⌊ ●° 2, ● n :                 |
| 24              | St-Cu. : St.          | A-Cu. : Cu.             | Ci. : St-Cu.         | 6                         | 5              | 8               | 8               | 6               | 1               | ...            | ...            | ...             | ...             | ...             | ...             | ●°, bc & c a : c p ●° p : b n :                |
| 25              | St-Cu.                | St-Cu. : Cu-Nb.         | St-Cu. : Cu-Nb.      | 1                         | 1              | 5               | 5               | 2               | 4               | ...            | ...            | ...             | ...             | ...             | ...             | b ⌊, bc a : bc p & n :                         |
| 26              | Cu.                   | Cu.                     | Fog.                 | 1                         | 1              | 1               | 2               | 10              | 10              | ...            | ...            | ...             | ≡               | ≡               | ≡               | b a : b ≡ p : o ≡ n :                          |
| 27              | St-Cu.                | A-Cu. : St-Cu.          | St-Cu.               | 1                         | 3              | 7               | 7               | 8               | 8               | ...            | ...            | ...             | ...             | ...             | ...             | bc to c a : c p & n :                          |
| 28              | St-Cu.                | A-Cu. : Cu.             | A-St. : St-Cu.       | 5                         | 2              | 8               | 9               | 10              | 10              | ...            | ...            | ...             | ...             | ...             | ...             | b to c a : c p : o n :                         |
| 29              | St.                   | Nb.                     | A-St. : Fr-Nb.       | 10                        | 10             | 10              | 10              | 10              | 10              | ...            | ...            | ●°              | ●°              | ●°              | ...             | o to ●° a : ●° p : o q n : [n :                |
| 30              | A-St. : St-Cu. : St.  | A-Cu. : Cu.             | St-Cuf.              | 8                         | 10             | 2               | 9               | 10              | 10              | ...            | ...            | ...             | ...             | ...             | ...             | c & o ●° a : bc & o p : p ●°, o, ●° late       |
| Mean Cloud Am't |                       |                         |                      | 5.9                       | 5.5            | 5.8             | 6.2             | 6.2             | 5.7             |                |                |                 |                 |                 |                 |  |

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| Day.            | Cloud Forms.    |                        |                       | Cloud Amount (All Forms). |                |                 |                 |                 |                 | Weather.       |                |                 |                 |                 |                 | Remarks.  |
|-----------------|-----------------|------------------------|-----------------------|---------------------------|----------------|-----------------|-----------------|-----------------|-----------------|----------------|----------------|-----------------|-----------------|-----------------|-----------------|---|
|                 | 7 <sup>h</sup>  | 13 <sup>h</sup>        | 18 <sup>h</sup>       | 7 <sup>h</sup>            | 9 <sup>h</sup> | 13 <sup>h</sup> | 15 <sup>h</sup> | 18 <sup>h</sup> | 21 <sup>h</sup> | 7 <sup>h</sup> | 9 <sup>h</sup> | 13 <sup>h</sup> | 15 <sup>h</sup> | 18 <sup>h</sup> | 21 <sup>h</sup> |   |
| 1               | St.             | A-St. : A-Cu.          | A-Cu.                 | 10                        | 5              | 6               | 10              | 5               | 10              | ...            | ...            | ...             | ...             | ...             | ...             | o to bc q a : o q p : c q to o n :  |
| 2               | St-Cu. : Fr-St. | St-Cu. : Fr-St.        | Ci-Cu : St-Cu.        | 8                         | 9              | 10              | 7               | 7               | 10              | ...            | ...            | ...             | ...             | p ●°            | ...             | c & o a, p & n :  |
| 3               | St.             | A-Cu. : St.            | Nb.                   | 10                        | 8              | 8               | 10              | 10              | 10              | ...            | ...            | ...             | ...             | ...             | ...             | c & o a : o p ●° p & n :  |
| 4               | St-Cu. : Fr-St  | St.                    | St-Cu.                | 10                        | 10             | 10              | 7               | 1               | 0               | ...            | ●°             | ...             | ...             | ...             | ...             | ● & ●° a : c p : b n :  |
| 5               | Nb.             | Nb.                    | Nb.                   | 10                        | 10             | 10              | 10              | 10              | 10              | ...            | ●°             | ●°              | ●               | ●               | ●               | ●°, ● a, p & n :  |
| 6               | Nb.             | Ci. : Cu.              | St-Cu. : Cu.          | 10                        | 10             | 4               | 1               | 8               | 8               | ...            | ●°             | ●°              | ...             | ...             | ...             | ● to bc a : b & bc p : p ●, c n :   |
| 7               | Fr-Nb.          | A-St. : St-Cu. : Cu.   | St-Cu.                | 8                         | 8              | 6               | 1               | 1               | 0               | ...            | ...            | ...             | ...             | ...             | ...             | ●, bc & c a : b v p : b n :   |
| 8               | Ci-Cu.          | Ci-Cu.                 | Ci-St. : St-Cu. : Cu. | 1                         | 1              | 1               | 3               | 7               | 7               | ...            | ⌊              | ⊕               | ⊕               | ⊕               | ⊕               | b ⌊, ≡, b a : b-c p ●° p : c n : ⊕  |
| 9               | —               | Ci.                    | A-St. : St-Cu.        | 0                         | 0              | 1               | 3               | 10              | 10              | ...            | ...            | ...             | ⊕               | ...             | ...             | ⌊, b a : b to o p : ● n : ⊕ 15 <sup>h</sup> [9 <sup>h</sup> 15 <sup>h</sup> |
| 10              | St-Cu.          | St-Cu. : Cu-Nb.        | A-Cu. : St-Cu. : Cu.  | 9                         | 9              | 8               | 8               | 6               | 3               | ...            | ...            | ●°              | ...             | ...             | ...             | c & o ●° a & p : b to ● n :   |
| 11              | Cu.             | Ci-Cu : Cu.            | Ci-St. : Cu.          | 1                         | 1              | 5               | 7               | 7               | 4               | ...            | p              | ...             | ...             | ...             | ⊕               | ⌊, b a : c & bc, q p : bc ⊕ n :   |
| 12              | Cu.             | Ci. : Cu.              | Ci. : Ci-Cu.          | 1                         | 0              | 2               | 4               | 4               | 8               | ...            | ...            | y               | ...             | ...             | ...             | b & bc a, p & n :   |
| 13              | St-Cu.          | St-Cu.                 | Ci.                   | 9                         | 8              | 7               | 3               | 1               | 10              | ...            | ...            | ...             | ∞               | ...             | ...             | c & o a : b ∞ p : b to o ≡ n :  |
| 14              | St.             | Fr-St.                 | —                     | 10                        | 10             | 1               | 8               | 0               | 10              | ...            | ...            | ...             | ...             | ≡:●°            | ≡:3             | ≡ to b a : c to b ≡ p : ≡: n :  |
| 15              | —               | St.                    | St.                   | 0                         | 10             | 10              | 10              | 10              | 10              | ...            | ≡:3            | ...             | ...             | ...             | ...             | b to o ≡: a : o p & n :   |
| 16              | St.             | A-St. : St.            | St-Cu. : St.          | 10                        | 8              | 10              | 10              | 8               | 0               | ...            | p              | ...             | ...             | ...             | ...             | c & o a & p : b n :   |
| 17              | Cu.             | Cu.                    | Ci. : St-Cu.          | 1                         | 0              | 1               | 1               | 3               | 2               | ...            | p              | ...             | y               | ...             | ≡:●°            | b a : b y p : b ≡ n :   |
| 18              | A-Cu. : St-Cu.  | A-St. : St-Cu.         | A-St. : St-Cu.        | 7                         | 10             | 8               | 9               | 10              | 10              | ...            | ...            | ...             | ...             | ...             | ...             | c & o a & p : o n :   |
| 19              | Nb.             | Nb.                    | St-Cu. : Nb.          | 10                        | 10             | 10              | 7               | 9               | 0               | ...            | ...            | ...             | ...             | ...             | ...             | ● a : c & o, ●° p : ●, o to b n :   |
| 20              | St-Cu. : St.    | St-Cu. : St.           | St-Cu.                | 8                         | 8              | 8               | 8               | 8               | 0               | ...            | ...            | ...             | ...             | ...             | ...             | c & o p ●° a & p : o to b n :   |
| 21              | Ci. : St-Cu.    | Ci-St. : St-Cu.        | A-St. : Cu.           | 3                         | 7              | 8               | 9               | 9               | 9               | ...            | ...            | ⊕               | ...             | ...             | p ●             | bc & c a : c & o p : b & o p ● n :  |
| 22              | St-Cu. : Cu-Nb. | Ci. : Cu.              | St-Cu.                | 2                         | 1              | 3               | 9               | 9               | 0               | ...            | ...            | ...             | ...             | ...             | ...             | p ● early, b a : bc & c p : b n :   |
| 23              | St-Cu.          | A-Cu. : St-Cu.         | A-Cu. : St-Cu.        | 7                         | 6              | 2               | 3               | 4               | 1               | ...            | ...            | ...             | ...             | ...             | ...             | bc & c a : b & bc p : b n :   |
| 24              | Fr-St.          | Cu.                    | Fr-St.                | 1                         | 0              | 1               | 3               | 2               | 3               | ...            | ...            | ...             | ...             | ...             | ...             | Fine and squally throughout.  |
| 25              | St-Cu. : Fr-St. | Nb.                    | Nb.                   | 9                         | 10             | 10              | 10              | 10              | 10              | ...            | ...            | ●°              | ●°              | ●°              | ...             | o q, ●° a : ●° p : ●°, o n :  |
| 26              | St.             | St-Cu.                 | St-Cu.                | 10                        | 10             | 10              | 9               | 10              | 10              | ...            | ≡:●°           | ...             | ...             | ...             | ...             | ●° early, o a & p : ● n :   |
| 27              | St.             | St-Cu. : St.           | St-Cu.                | 10                        | 10             | 8               | 9               | 10              | 10              | ...            | ...            | ...             | ...             | ...             | ...             | ● to c a : o p & n :  |
| 28              | A-St. : St-Cu.  | Ci-St. : St-Cu.        | St-Cu.                | 5                         | 6              | 7               | 7               | 10              | 10              | ...            | ...            | ⊕               | ...             | ...             | ...             | bc & c a : c & o p & n : ⊕ 10 <sup>h</sup> -14 <sup>h</sup>                 |
| 29              | St.             | Nb.                    | Nb.                   | 10                        | 10             | 10              | 10              | 10              | 10              | ...            | ...            | ●°              | ≡:●°            | ...             | ...             | o to ●° a : ●° p : ● n :  |
| 30              | St-Cu.          | Ci-St. : Cu. : St-Cuf. | Ci. : St-Cu.          | 4                         | 1              | 5               | 9               | 3               | 0               | ...            | ...            | ...             | ...             | p               | p               | ●° early to bc a : c & o p : b n :  |
| 31              | St-Cu.          | St-Cu.                 | St-Cu.                | 5                         | 7              | 8               | 6               | 4               | 10              | ...            | ...            | ...             | ...             | ...             | p ●°            | ⌊, ≡ p ● a : bc p : o p ●° n :  |
| Mean Cloud Am't |                 |                        |                       | 6.4                       | 6.5            | 6.4             | 6.8             | 6.6             | 6.3             |                |                |                 |                 |                 |                 |   |

109. Aberdeen.

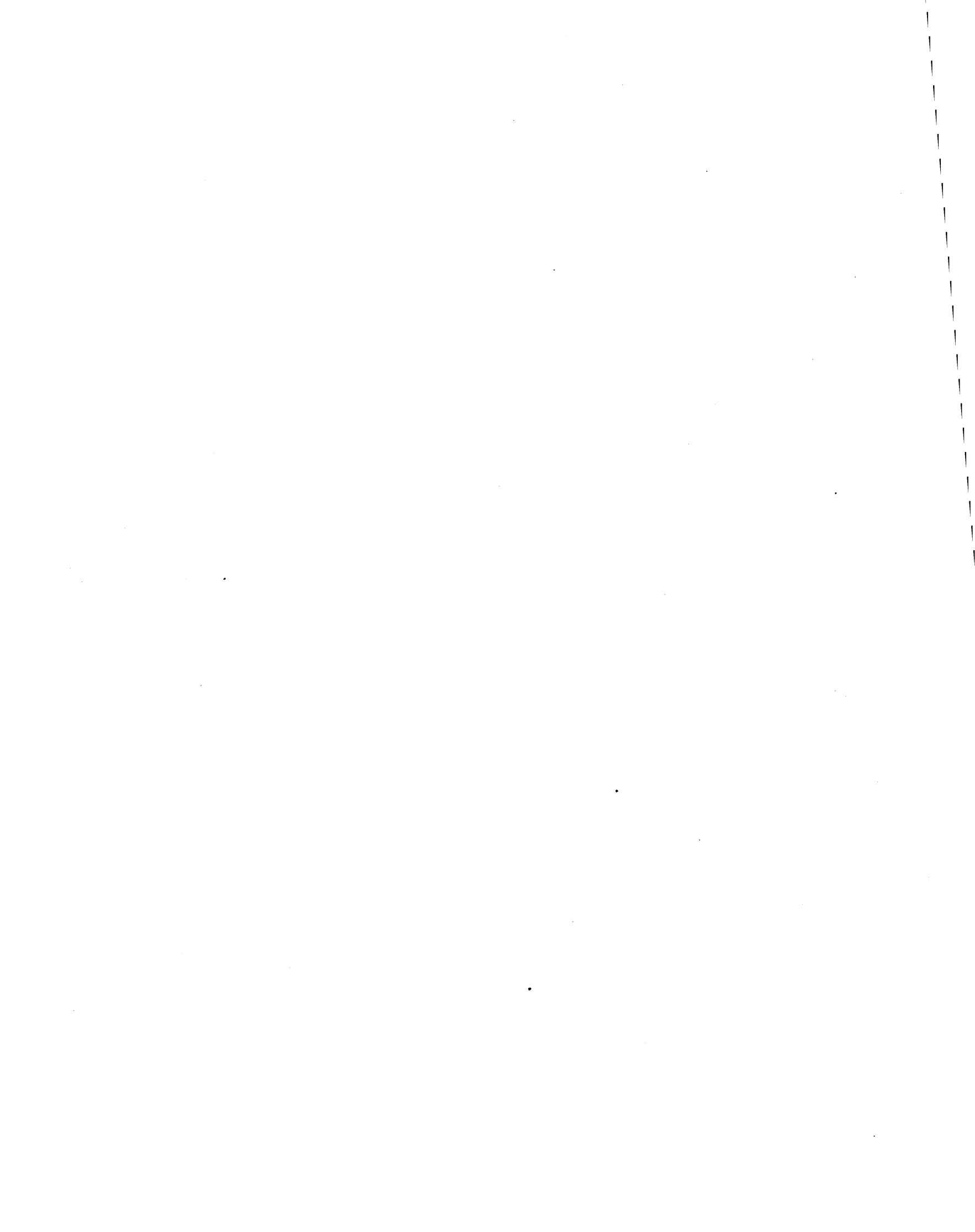
November, 1924.

Table for Aberdeen, November 1924. Columns include Day, Cloud Forms (7h, 13h, 18h), Cloud Amount (7h, 9h, 13h, 15h, 18h, 21h), Weather (7h, 9h, 13h, 15h, 18h, 21h), and Remarks. Includes mean cloud amount and annual mean cloud amount.

110. Aberdeen.

December, 1924.

Table for Aberdeen, December 1924. Columns include Day, Cloud Forms (7h, 13h, 18h), Cloud Amount (7h, 9h, 13h, 15h, 18h, 21h), Weather (7h, 9h, 13h, 15h, 18h, 21h), and Remarks. Includes mean cloud amount and annual mean cloud amount.



Air Ministry  
METEOROLOGICAL OFFICE

THE  
OBSERVATORIES' YEAR BOOK  
1924

Comprising the meteorological and geophysical results obtained from autographic records and eye observations at the observatories at Lerwick, Aberdeen, Eskdalemuir, Cahirciveen (Valencia Observatory), and Richmond (Kew Observatory), and the results of soundings of the upper atmosphere by means of registering balloons.

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ESKDALEMUIR

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Published by the authority of the  
METEOROLOGICAL COMMITTEE



LONDON

PUBLISHED BY HIS MAJESTY'S STATIONERY OFFICE.

## ESKDALEMUIR OBSERVATORY.

|                           |     |     |     |     |            |
|---------------------------|-----|-----|-----|-----|------------|
| Latitude                  | ... | ... | ... | ... | 55° 19' N. |
| Longitude                 | ... | ... | ... | ... | 3° 12' W.  |
| G.M.T. of Local Mean Noon | ... | ... | ... | ... | 12h 13m.   |

*Heights in metres above Sea-Level.*

|                       |     |     |     |     |       |
|-----------------------|-----|-----|-----|-----|-------|
| Barometer             | ... | ... | ... | ... | 237.3 |
| Rain-gauge            | ... | ... | ... | ... | 242.0 |
| Dines Tube Anemograph | ... | ... | ... | ... | 250   |

*Heights in metres above ground.*

|                       |     |     |     |     |     |
|-----------------------|-----|-----|-----|-----|-----|
| Thermometer Bulbs     | ... | ... | ... | ... | 0.9 |
| Sunshine Recorder     | ... | ... | ... | ... | 1.5 |
| Dines Tube Anemograph | ... | ... | ... | ... | 15  |

## INTRODUCTION.

## SITE.

Eskdalemuir Observatory, some  $3\frac{1}{2}$  miles ( $5\frac{1}{2}$  kilometres) north-north-west of Eskdalemuir Parish Church in the county of Dumfries-shire, is situated on a rising shoulder of moorland which is bounded on the east by the road which leads north to Ettrick and Selkirk, on the west by the small Davington Burn, and at the southern extremity by the small hamlet of Davington.

The hillside in the immediate vicinity of the Observatory slopes generally from the north-west to south-east. The mean height above sea level of the Observatory site is about 800 feet (244 metres). Cassock Hill, slightly more than a mile distant to the north-west, is 1,205 feet (367 metres), while the bench mark at Davington School,  $\frac{1}{4}$  mile (0.4 km.) to south-east, is 699 feet (213 metres) above M.S.L. To the east the ground slopes fairly rapidly to the valley bottom, the level of the Ettrick road at a point about  $\frac{1}{4}$  mile (0.4 km.) east of the Underground Magnet House being 682 feet (208 metres). The River White Esk is rather less than  $\frac{1}{2}$  mile (0.8 km.) to the east. Immediately beyond the river, and almost due east of the Observatory, Dumfedling Hill rises to a height of nearly 1,200 feet (366 metres) above M.S.L. Some 4 or 5 miles (8 km.) to the north is a high ridge, following approximately the boundary between Dumfries-shire and Selkirkshire, the highest point of which is Ettrick Pen (north-north-west) 2,200 feet (670 metres) above M.S.L. Rather more than half a mile (0.8 km.) to the west, and beyond Davington Burn, the ground rises to 1,040 feet (317 m.), and reaches nearly 1,200 feet (366 m.) half a mile (0.8 km.) further on. To the south and south-south-east the Observatory commands a view of the White Esk Valley as far as Hartmanor, 4 miles ( $6\frac{1}{2}$  km.) distant, and beyond that the upper slope of Cauldkine Hill, about 10 miles (16 km.) distant, is visible. The surrounding country is bare and wild and there are but few trees to relieve the monotony of the grass covered hills and moorland.

Within the Observatory grounds the soil is peaty and in many places is more or less boggy at all seasons. Some two feet, or less, below the surface a clay-like substance containing soft rock is encountered. The local geological formation is described as "rock of the Tarannon Llandoverly series traversed by igneous dykes."



The selection, in the early years of the century, of this isolated site for the Observatory was dictated by the desire to reduce to a minimum the possibility of artificial magnetic disturbance due to electric traction and power circuits, and in this connection it may be noted that there is no town, industrial centre, or point of railway within a radius of 9 miles ( $14\frac{1}{2}$  km.) from the Observatory.

Photographs, site plan, and a brief description of the Observatory will be found in the Introduction to *The Observatories' Year Book*, 1923.

### METEOROLOGY.

The elements dealt with in the following tables are :—Atmospheric pressure, air temperature, humidity, rainfall, sunshine, solar radiation, wind speed and direction and minimum temperature on the grass. There is also a diary of cloud and weather.

#### Notes on Instruments.

Brief descriptions of the recording instruments and of the methods of tabulating the records with notes on the information contained in the Tables are given in the General Introduction to the Tables. The following particulars, which refer specially to Eskdalemuir, are to be regarded as amplifying the information contained therein. References to full accounts of other instruments used at Eskdalemuir appear below.

*Pressure.*—The standard mercury barometer, Kew pattern, is situated in a north window embrasure on the ground floor of the main building.

The photographic mercurial barograph, having been repaired, was brought into use again on January 4, 1924. This instrument is situated in the east room of the Underground Magnet House. The daily range of temperature to which the instrument is subject is normally less than  $0.05^{\circ}\text{C}$ , the annual range being about  $4^{\circ}\text{C}$ . The scale value of the records is 1 millimetre on the paper =  $0.85$  millibar, and the time scale is  $9.1$  millimetres on the paper = 1 hour.

As in former years, records of pressure were also obtained from (a) a Dines float barograph, of which a description will be found in the Introduction for 1923, and (b) a Richard barograph, pen recording, the records of which are changed weekly.

*Temperature.*—The photographic thermograph and the standard mercurial thermometers, dry bulb and wet bulb, are situated in a wooden hut, provided with louvred sides and double roof, which is some 200 feet (60 m.) north-north-east of the Main Building. The installation is similar to that described on p. 10 except that a special enclosure is provided inside the hut to accommodate the optical and photographic arrangements.

The scale values of the thermograph records are  $1^{\circ}$  absolute =  $2.79$  millimetres and  $2.44$  millimetres on the paper for the dry and wet bulb records respectively, while the time scale is 1 hour =  $9.20$  millimetres.

As auxiliary recorders of temperature there are, in the same louvred hut :—

(a) A psychrograph, pen recording, which is in effect a bimetallic spiral thermograph with two spirals, one of which is kept dry and the other wet. The records are of 24 hours' duration.

(b) A bimetallic spiral thermograph, of which the record is changed every week. It is described in the *Meteorological Observer's Handbook*.

*Humidity.*—In addition to the dry and wet bulb thermograph described above there is a Richard hair hygograph which is situated in a Stevenson screen about midway between the louvred hut and the Main Building.

As is stated on p. 14, the records from this instrument are utilised when the wet bulb reading does not exceed 273a. On the records obtained in 1924 a change of 10 per cent. in relative humidity is represented by about  $0.8$  centimetre, the time scale being 1 hour = 3 millimetres.

*Rainfall.*—The recording instrument is a Beckley self-registering rain-gauge which is described on p. 10. The time scale of the record is 1 hour = 9.24 millimetres on the paper and the rain scale has a magnification of 3.35. The instrument has been in use at Eskdalemuir since 1908 and was originally installed at Fort William in July, 1890.

The conical part of the gauge funnel is surrounded by a cylindrical copper casing lined with asbestos on the inner side and of diameter equal to that of the funnel, viz. 11.27 inches (28.6 cm.). Within the enclosure so formed is a gas jet, and a flame of suitable dimensions is maintained, as circumstances dictate, to melt snow which may be collected.

The gauge is surrounded by a circular turf wall or dyke, the top of which is on a level with the rim of the gauge; the external and internal diameters of the dyke being 11.5 feet (3.5 m.) and 7 feet (2 m.) respectively.

A standard 8 inch (20.3 cm.) rain-gauge is situated some 24.5 feet (7.5 m.) to the east of the Beckley gauge and is surrounded by a turf dyke of similar dimensions. Readings of amounts of rain received in the 8 inch gauge are made at 7h and 18h G.M.T. It is customary to adjust the indications of the recording gauge to agree with the readings of the standard check gauge.

*Sunshine.*—The record of sunshine is obtained from a Campbell-Stokes recorder described on p. 11.

The recorder is fixed on a stone pillar and has a reasonably free exposure, the chief obstacles being hills to east and west. The elevation of hills between 70° and 110° east of south varies from 2.5° to 5°, while between 50° and 135° west of south the high ground varies in elevation from 3° to 4.4°, being generally about 3.5°. As sunshine can be recorded when the sun is 3° above the horizon only in the most favourable circumstances, it appears that the loss of record occasioned by the neighbouring high ground is of relatively small extent and is confined mainly to a possible defect of record at the beginning of the day during a few weeks centred about the equinoxes.

*Solar Radiation.*—Measurements of the intensity of radiation received from the sun by a surface which is normal to the line drawn from the instrument to the sun are effected by means of an Ångström compensating pyrliometer\*. The intensity of radiation is expressed in milliwatts per square centimetre (1mw. per sq. cm. = 0.01435 gramme calorie per sq. cm. per minute). In addition, the value is given of the function  $(p/p_0) \sec Z$ , in which  $p$  is the barometric pressure at the observatory in millibars at the time of the observation,  $p_0$  is 1000 millibars, and  $Z$  is the zenith distance of the sun. This affords a measure of the mass of atmosphere which the solar radiation has had to penetrate before reaching the earth. Entries in the column headed "Sky" are intended to show the presence or absence of haze, mist or cloud in the direct path of the solar radiation recorded.

*Wind.*—A Dines tube anemograph, furnished with direction recorder, is situated in the Main Building. The vane-head is 15 metres above a tangent plane to the slope of the hillside and approximately 7 metres above the general level of the roof of the building. A description of the speed recorder will be found on p. 12.

The records of speed and direction are obtained on the same chart. The recorder in use throughout 1924 was provided with a Munro-Rooker single-pen direction recorder. In this arrangement the lower end of a long vertical rod, rigidly attached at its upper end to the freely moving vane, is connected to the vertical axle of a short solid brass cylinder which consequently rotates with the vane. In the curved surface of the cylinder is cut a helical channel in which runs a short roller projecting from

\* For description see *The Observer's Handbook*, 1921, Ed., Meteorological Office, London; *Astro-physical Journal*, Vol. IX, 1899; *Actes de la société royale des Sciences d'Upsal*, 1893; also *Geophysical Memoirs*, No. 21 (1923), Meteorological Office, London.

the side of a pivoted pen arm. The helix forms a nearly complete turn, and the upper and lower ends are connected by a steep cam. As the recording pen reaches the upper North line on the chart it is rapidly forced by the connecting cam to the bottom North line, or conversely if the wind direction is changing from east of north to west of north. For some years prior to the introduction, in June, 1922, of the Munro-Rooker recorder a Dines twin-pen recorder was in use.

Apart from the surrounding hills, the exposure of the vane-head is tolerably free in all directions save to the west where at a distance of some 130 feet (40m.) is a rather large building, of which the height is somewhat greater than that of the Main Building. With winds from nearly due west the direction records show markedly greater turbulence than with other winds.

*Minimum Temperature on the Grass.*—The thermometer used for readings of grass minimum temperature is of the spirit type with index; and when exposed, between 18h and 7h G.M.T., is supported at a height of one or two inches (4 cm.) above close-cropped grass a few metres from the louvered thermometer hut.

#### IDENTIFICATION NUMBERS OF INSTRUMENTS IN USE IN 1924.

|                                     |    |    |    |      |       |
|-------------------------------------|----|----|----|------|-------|
| Standard Kew pattern Barometer      | .. | .. | .. | M.O. | 1320  |
| Standard Dry Bulb Thermometer       | .. | .. | .. | M.O. | 19123 |
| Standard Wet Bulb Thermometer       | .. | .. | .. | M.O. | 1695  |
| Hair Hygograph                      | .. | .. | .. | M.O. | 59    |
| Recording Beckley Raingauge         | .. | .. | .. |      | 4     |
| Control Raingauge                   | .. | .. | .. | M.O. | 391   |
| "    "    glass for                 | .. | .. | .. | M.O. | 1354  |
| Campbell Stokes Sunshine Recorder   | .. | .. | .. | M.O. | 99    |
| Ångström compensating Pyrheliometer | .. | .. | .. |      | 116   |
| Dines Tube Anemograph               | .. | .. | .. | M.O. | 1015  |
| Grass Minimum Thermometer           | .. | .. | .. | M.O. | 13    |

#### Notes on Results.

*Diurnal Variation of Atmospheric Pressure.* The values of the mean diurnal inequalities for the months and the year, 1924, are given in Table 124, p. 121. The range of the regular diurnal variation is comparatively high in February, May, September, and low in July, in which month the afternoon minimum and evening maximum were poorly developed. In January, September, October the forenoon maximum is greater than that of the evening, while in February (as also in 1922, 1923), March, May the forenoon maximum is rather unusually small in comparison with the evening maximum. The principal minimum occurs in the early morning in all months with the exception of March, April, August and November, and is very prominent in May, September and December. The inequalities for January and November are fairly close in type to the normal inequalities (1911-20), although in the latter month the afternoon minimum and the evening maximum are somewhat more pronounced than in the normal type.

The results of the harmonic analysis of the monthly and seasonal mean diurnal inequalities for 1924 are given in the accompanying table. For purposes of comparison the corresponding data (†) derived from the mean inequalities for the period 1911-20 are also given. In computing the Fourier co-efficients for the individual months of 1924 the unit employed was 0.01 mb; but for the seasons and the year the inequalities were taken to 0.001 mb, and in these cases the values of  $c_1$ , etc. are given to three decimal places. The phase angles  $\alpha_1$ , etc. given in the table below

(†) "On the Diurnal Variation of Atmospheric Pressure at Eskdalemuir and Castle O'er, Dumfriesshire," by A. Crichton Mitchell, D.Sc., *Quarterly Journal of the Royal Meteorological Society*, Vol. L., No. 210, April, 1924.

refer to Local Mean Time, whereas in the corresponding tables for 1922 and 1923 the phase angles refer to Greenwich Mean Time.

The difference between the extreme monthly values of  $c_1$  is less than for 1923, but there is considerable irregular variation in the values of  $c_1$  and  $\alpha_1$ . The values of  $c_2$  for April and July stand out as being low in comparison with the normal values, while the November value of  $c_2$  is high. The steadiness in phase of the 12-hour term throughout the year is well shown by the 1924 results, and the values of  $\alpha_2$  for the seasons approach more closely to the normals than do those for 1923. In the 8-hour term the largest amplitudes occur in the four winter months, and there is a marked change in phase near the equinoxes. The effect of this is seen in the small value of  $c_3$  for the equinox. The values of  $\alpha_3$  are fairly similar to the normal values, the greatest divergence occurring in September. There is a tolerably close resemblance between the seasonal values of  $c_4$  and  $\alpha_4$  for 1924 and those for the period 1911-20.

### HARMONIC COEFFICIENTS OF THE DIURNAL INEQUALITY OF ATMOSPHERIC PRESSURE—ESKDALEMUIR.

Values of  $c_n, \alpha_n$  in the series  $\sum c_n \sin (15nt^\circ + \alpha_n)$ ,  $t$  being Local Mean Time reckoned in hours from midnight.

| Month and Season. | $c_1$   |          | $\alpha_1$ |          | $c_2$   |          | $\alpha_2$ |          | $c_3$   |          | $\alpha_3$ |          | $c_4$   |          | $\alpha_4$ |          |
|-------------------|---------|----------|------------|----------|---------|----------|------------|----------|---------|----------|------------|----------|---------|----------|------------|----------|
|                   | 1924.   | 1911-20. | 1924.      | 1911-20. | 1924.   | 1911-20. | 1924.      | 1911-20. | 1924.   | 1911-20. | 1924.      | 1911-20. | 1924.   | 1911-20. | 1924.      | 1911-20. |
| Jan. ...          | mb. .09 | mb. .094 | ° 117      | ° 346.4  | mb. .21 | mb. .235 | ° 141      | ° 151.6  | mb. .12 | mb. .125 | ° 344      | ° 345.3  | mb. .05 | mb. .046 | ° 230      | ° 213.9  |
| Feb. ...          | .39     | .118     | 133        | 215.1    | .29     | .273     | 147        | 138.1    | .13     | .083     | 330        | 341.2    | .03     | .042     | 92         | 67.7     |
| Mar. ...          | .29     | .128     | 100        | 185.3    | .30     | .304     | 143        | 145.3    | .06     | .053     | 327        | 335.0    | .05     | .051     | 22         | 24.5     |
| Apr. ...          | .18     | .205     | 29         | 92.3     | .24     | .299     | 150        | 154.8    | .09     | .022     | 121        | 156.3    | .03     | .045     | 26         | 355.7    |
| May ...           | .29     | .225     | 160        | 52.7     | .25     | .270     | 145        | 147.4    | .08     | .075     | 145        | 160.1    | .03     | .035     | 358        | 330.1    |
| June ...          | .13     | .152     | 139        | 53.9     | .22     | .234     | 150        | 146.1    | .08     | .084     | 144        | 160.6    | .03     | .018     | 346        | 325.7    |
| July ...          | .07     | .171     | 235        | 69.4     | .15     | .211     | 152        | 141.2    | .05     | .077     | 151        | 155.8    | .03     | .023     | 308        | 300.0    |
| Aug. ...          | .22     | .114     | 78         | 114.6    | .25     | .239     | 149        | 147.7    | .06     | .057     | 173        | 157.2    | .04     | .047     | 331        | 330.8    |
| Sept. ...         | .31     | .121     | 230        | 87.7     | .33     | .313     | 147        | 151.6    | .05     | .012     | 44         | 110.7    | .04     | .050     | 2          | 344.7    |
| Oct. ...          | .25     | .110     | 291        | 76.0     | .30     | .315     | 163        | 159.5    | .04     | .060     | 24         | 8.2      | .03     | .041     | 4          | 32.9     |
| Nov. ...          | .19     | .125     | 91         | 183.5    | .35     | .242     | 155        | 168.1    | .10     | .101     | 8          | 9.2      | .01     | .015     | 202        | 146.2    |
| Dec. ...          | .28     | .137     | 188        | 97.1     | .21     | .213     | 143        | 146.9    | .12     | .124     | 341        | 4.2      | .04     | .067     | 240        | 212.8    |
| Arithmetic mean   | .22     | .142     | ...        | ...      | .26     | .262     | ...        | ...      | .08     | .073     | ...        | ...      | .03     | .040     | ...        | ...      |
| Year ...          | .100    | .085     | 138        | 90.8     | .257    | .260     | 149        | 150.1    | .026    | .020     | 2          | 41.7     | .018    | .016     | 340        | 341.9    |
| Winter ...        | .196    | .038     | 139        | 165.4    | .263    | .236     | 147        | 150.9    | .116    | .106     | 344        | 355.5    | .020    | .023     | 196        | 189.1    |
| Equinox ...       | .020    | .108     | 328        | 103.9    | .291    | .306     | 151        | 152.8    | .023    | .021     | 12         | 4.4      | .039    | .044     | 11         | 8.9      |
| Summer ...        | .123    | .153     | 137        | 67.2     | .217    | .238     | 149        | 145.8    | .064    | .074     | 152        | 158.5    | .031    | .030     | 335        | 324.3    |

NOTE.—*Winter* comprises the four months January, February, November, December.  
*Equinox* the months March, April, September, October.  
*Summer* the months May to August.

## ATMOSPHERIC ELECTRICITY.

### Notes on the Instruments.

Autographic records of atmospheric electrical potential gradient were obtained by means of an electrograph of the Kelvin water-dropper type, the potential at the water-jet being registered by a Dolezalek quadrant electrometer. In all essential details the electrograph arrangements, the method of making scale and insulation tests and the method of reducing the autographic curve readings to potential gradient in the open were as described in the *Observatories' Year Book*, 1922, pp. 75-76.

\* "On the Diurnal Variation of Atmospheric Pressure at Eskdalemuir and Castle O'er, Dumfriesshire," by A. Crichton Mitchell, D.Sc., *Quarterly Journal of the Royal Meteorological Society*, Vol. L., No. 210, April, 1924.

With a view to increasing the sensitiveness of the electrograph record, a new suspension was fitted to the needle of the Dolezalek electrometer at the end of January 1924. During the remainder of the year no further change was made in the instrumental arrangements and the scale value of the records remained at about 6 volts per millimetre.

A statement is necessary in respect of the instrument on the readings of which the values of potential gradient are based. Since 1911 a particular Wulf quartz-thread electrometer has been used in the determination of scale values of the photographic records of the potential at the water jet and in the absolute observation of potential in the open. This instrument was calibrated in 1911 by the makers and also at the National Physical Laboratory. In 1916, comparison of the Wulf electrometer with a Kelvin multicellular electrometer belonging to the Observatory resulted in a slight modification of the original calibration of the former instrument over the range 0 to 300 volts. In June, 1924, a few comparison readings were taken, in rather unfavourable circumstances, between the Wulf and the Kelvin instruments, the latter having been recently reconditioned by the makers. It was found that, according to the 1916 calibration, the Wulf instrument reading exceeded the Kelvin reading by approximately 8 volts at 140 volts. The Wulf electrometer was absent from the Observatory during the first two weeks of August, 1924. On return of this instrument it was found that the discrepancy between its indications, according to the 1916 calibration, and those of the Kelvin instrument was less than in June; the excess of the Wulf readings being approximately 2 volts at 140 volts. Also, the electrograph scale value obtained in August, after the return of the Wulf instrument was nearly 5 per cent. less than that obtained in July before the Wulf instrument was sent away. In the interval no change had been made in the Dolezalek electrometer or in the recording arrangements, and there is, therefore, no reason to suppose that the true scale value of the electrograph should alter during the first two weeks of August. As it happens, there were a number of occasions in July and in the second half of August when the voltage applied in electrograph scale tests was very nearly 140. On recomputation of the scale values for these occasions, i.e., applying corrections of  $-8$  and  $-2$  volts to the Wulf voltages in July and August, respectively, the resultant mean scale values for the two months are found to agree to within 1 per cent. It is concluded that, although the 1916 calibration of the Wulf instrument was in error, relative to the Kelvin instrument, both before and after the first half of August, the Wulf instrument had changed as a result of transportation effects during the period of absence from the Observatory. In March and April, 1925, further comparisons between the Wulf and Kelvin instruments were made, employing a battery of dry cells. A calibration of the Wulf instrument based on these comparisons has been used in deriving the electrograph scale values and for reducing the absolute observations of potential in the open throughout the period August 16th to December 31st, 1924. It has been assumed that the electrograph scale value for July was in fact the same as the August value based on the new calibration of the Wulf instrument. This involved a reduction in the originally derived July value from 6.57 to 6.16 volts per millimetre. The final scale values for the earlier months were obtained by reducing the originally derived values in the same ratio. With regard to the electrograph reduction factor, as the Wulf electrometer is used in both scale tests and in observations of potential in the open, the values obtained for the reduction factor are unaffected by the use of the faulty calibration, assuming the error of the 1916 calibration to be proportional to the potential. The factor values adopted for January to July are those which were originally derived.

As it is not possible to say when the behaviour of the Wulf instrument ceased to be in close agreement with the 1916 calibration, it must suffice to point out that in all probability the change in the instrument did not occur in 1924, and, therefore, that there is a discontinuity between the 1924 and the 1923 results.

## IDENTIFICATION NUMBERS OF INSTRUMENTS USED IN 1924.

|                                |    |    |    |    |    |    |      |
|--------------------------------|----|----|----|----|----|----|------|
| Wulf bifilar electrometer      | .. | .. | .. | .. | .. | .. | 3040 |
| Kelvin Multicellular voltmeter | .. | .. | .. | .. | .. | .. | 3180 |

**Notes on the Tables and Results.**

Table 208 contains the values of electrical potential gradient at 3h, 9h, 15h and 21h G.M.T. daily, the value for a given hour representing the mean for the period of 60 minutes centring at that hour. The reduction factors used in converting the potential at the water jet to potential gradient, in volts per metre, in the open are also given.

As far as possible an electrical character figure is assigned to each day and values of potential gradient are assigned for 3h, 9h, 15h and 21h G.M.T. on all days, while values for all hours are assigned on days classified as *oa*, *1a* or *2a*. The character figures are given in Table 210A, the significance of these symbols being as follows:—

- o, denotes a day during which from midnight to midnight no negative potential was recorded.
- 1, denotes one or more excursions of limited duration to the negative side of the scale during the same period.
- 2, denotes negative potential extending in the aggregate over three hours or more during the same period.
- a, denotes that within the 25 periods of 60 minutes for which an estimate of the mean potential gradient has to be made in the process of tabulation there was in no case a range of potential gradient in the open exceeding 1,000 volts.
- b, denotes that, during the same period, a range of 1,000 volts or more was reached in one hour at least but in fewer than six hours.
- c, denotes that, during the same period, a range of 1,000 volts or more was reached in at least six hours.

In Table 209 are given, for *oa* days, (1) the mean diurnal inequalities for the months, seasons and year, (2) particulars of the number of days and of the non-cyclic changes and (3) the corresponding mean values of potential gradient. The inequalities or the mean values for the year and seasons are the means of the inequalities or means, respectively, for the appropriate months.

It should be noted that, in these tables, *Winter* denotes the four months January, February, November, December; *Equinox* the four months March, April, September, October; and *Summer* the four months May to August.

Corresponding data for *1a* and *2a* days combined appear in Table 210.

Contrary to the practice followed in former years\* the mean values of potential gradient given in Table 208 are of two kinds, viz., (*a*) the means of all the positive values of potential in the column and (*b*) the algebraic mean derived from all days on which all four hours were represented. The mean values for the month, as derived from the (*a*) and (*b*) values respectively, are shown in the last line, and the means for the year are given at the foot of the December table. It is to be expected that the mean derived from the values at 3h, 9h, 15h and 21h, on a sufficiently large number of days will approximate closely to the mean value derived from all hourly values of all the days. As might have been anticipated the (*a*) mean exceeds the (*b*) mean in each month of the year. Moreover, in each month, with the exception of February, the mean for *oa* days exceeds the corresponding (*a*) mean. For the whole year, 1924, the mean from *oa* days was 236 v/m, that from positive values at 3h, 9h, 15h and 21h was 214 v/m, while that from the complete days of Table 194 was 157 v/m. In nine months the (*a*) mean is less than the corresponding value for 1923; and the annual mean is less than that for 1923 by 21 v/m, an amount which exceeds the possible discrepancy, due to circumstances mentioned above, between the results for the two years.

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\* *i.e.* Prior to 1923.

The following were the more noteworthy occasions when for several hours the potential remained continuously negative, excepting for a few small excursions to the positive side on three of the occasions :—

- (i) January 13d 0h 30m to 13d 10h 30m, and from 13h to 19h 30m.
- (ii) April 27d 17h to 28d 4h, during a few hours of which the potential was less than  $-2,000$  v/m.
- (iii) May 6d 21h to 7d 7h, during three or four hours of which the potential was very considerably less than  $-2,000$  v/m.
- (iv) May 9d 22h to 10d 9h, during part of which the potential was below  $-1,000$  v/m.
- (v) From December 29d 16h to 29d 20h potential was mainly negative but with some intervals of small positive excursions ; and then from 29d 20h to 30d 4h the potential was continuously negative and for a large part of the time below  $-700$  v/m.

The value of the mean potential gradient on *oa* days for 1924 is about 10 per cent. less than the mean value for 1913–23. This is largely due to the comparatively low values in the four winter months of 1924, the value for February being particularly low. The mean diurnal inequalities on *oa* days for the year and the seasons show a fairly close resemblance to the corresponding normals for the years 1913–23. In the mean diurnal inequality for summer the minimum occurs later than usual, this being due, apparently, to the inequalities for June and May, the latter month being represented by only one day. Of the winter months, the inequalities for February and December show many irregularities, but in each of the four months the principal minimum occurs in the forenoon. The inequality for September is of a type somewhat unusual for that month, but there were only four *oa* days, and a large non-cyclic correction was involved.

## TERRESTRIAL MAGNETISM.

### Notes on the Instruments.\*

The magnetographs in use are situated in the east chamber of the Underground Magnet House and are arranged so as to record changes of the three geographical components of terrestrial magnetic force, viz., the north component, N (or + X), west component, W (or – Y), and the vertically downward component, V (or + Z).

The diurnal range of temperature in the east chamber of the magnet house is normally negligible. Temperature is ascertained daily at 9h 30m by the thermometers within the instrument cases. The daily values appear in Tables 214, 218, etc. ; the monthly means of the readings so obtained during 1924, together with the mean values for the years 1911–23, were as follow :—

EXCESS OF MEAN TEMPERATURE ABOVE 280a.

| Month.             | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. | Oct. | Nov. | Dec. |
|--------------------|------|------|------|------|-----|------|------|------|-------|------|------|------|
| Mean 1924 .. ..    | 4.4  | 4.1  | 3.8  | 3.6  | 4.0 | 4.8  | 5.9  | 6.7  | 7.4   | 7.2  | 6.7  | 6.0  |
| Mean 1911–23 .. .. | 3.5  | 2.9  | 2.5  | 2.3  | 2.6 | 3.5  | 4.5  | 5.5  | 6.3   | 6.2  | 5.5  | 4.5  |

The annual range of temperature during 1924 was  $3.9^{\circ}$  C., the mean range for the previous twelve years being  $4.3^{\circ}$  C.

\* For more detailed accounts of the magnetographs, absolute instruments, and normal methods of procedure, see *The Observatories' Year Book*, 1922, pp. 77 et seq.

The north and west component instruments are of the bifilar type, by Adie. In each of these instruments the torsion of a bifilar suspension, of fine tungsten-steel wire, is utilised to bring the magnet into an azimuth approximately perpendicular to the direction of the component of which the changes are recorded. The instrument for the vertical component is a multiple magnet balance designed by the late Professor W. Watson, F.R.S. No adjustments to this instrument were made in 1924.

As a result of an adjustment made to the west instrument on August 30, 1923, the magnet was displaced in azimuth between  $9^\circ$  and  $10^\circ$  east of north. Most unfortunately this was not detected until the end of 1924 when it was found that the suspended magnet was inclined at  $9^\circ.7$  east of north. Thus, from 1923 August 30th until the end of 1924 the records obtained from the west magnetograph were not simply of changes in  $W$ , but of changes in the component  $W'$ , which is given by  $W' = W \cos \alpha + N \sin \alpha$ ;  $\alpha$  being the inclination, measured from north through east, of the magnet to the geographical meridian. The gradual easterly drift of the magnet amounted to about  $15'$  between September, 1923, and December, 1924, and therefore the value of  $\alpha$  for the period January 1st to December 31st, 1924, has been taken as  $9^\circ 35'$ . The methods which have been adopted to allow for the consequences of this error in azimuth of the west magnet are described at the end of the present section.

The constants of the magnetographs were as follow :—

|   | North.                                    | West.                    | Vertical.    |
|---|---|--------------------------|--------------|
| Time Scale .. .. . 1 hour =   | 15.5 mm.                                  | 15.5 mm.                 | 15.5 mm.     |
| Time marks .. .. .  | Every two hours, beginning at exact hour. |                          |              |
| Error of time mark .. .. .  | Not more than $\pm 1$ min.                |                          |              |
| Period of vibration, seconds .. .. .  | 14.0                                      | (11.0)                   | 7.4          |
| Logarithmic decrement* .. .. .  | .369                                      | (.639)                   | —            |
| Angular equivalent of 1 mm. on paper, radians .. .. .   | .00032                                    | .00032                   | .0003        |
| Twist of bifilar suspension .. .. .   | $60^\circ$                                | $(90^\circ \pm 5^\circ)$ | —            |
| Ratio $\frac{\text{length of bifilar suspension}}{\text{mean breadth of suspension}}$ .. .. . | 66  | (100)                    | —            |
| Temperature coefficient, per $1^\circ$ C. .. .. .   | $-9 \gamma$                               | $-2 \gamma$              | $+26 \gamma$ |
| Direction of marked pole .. .. .  | West.                                     | North.                   | —            |
| Azimuth of magnet .. .. .   | $270^\circ 28'$                           | $9^\circ 35'$            | $346^\circ$  |

\* Log. decr. =  $\text{Log}_e a_n - \text{Log}_e a_{n+1}$ ; where  $a_n, a_{n+1}$  are the amplitudes of two successive swings on the same side of the zero position.

For reasons given above, some uncertainty attaches to the bracketed constants in the above table.

The scale values of the magnetographs were determined at intervals of two weeks. In the following table are given the scale values, obtained by overlapping means, which were employed in reducing the curve readings. The values given for the west instrument are the scale values of the record of component  $W'$ , and have been obtained by multiplying by  $\cos 9^\circ 35'$  the scale values which were derived in the usual way and in the belief that the azimuth of the magnet was correct.



SCALE VALUES OF THE MAGNETOGRAPHS ( $\gamma$  per mm. on the paper).

| Month.                 | Jan. | Feb. | Mar. | Apr. | May  | June | July | Aug. | Sept. | Oct. | Nov. | Dec.            |
|------------------------|------|------|------|------|------|------|------|------|-------|------|------|-----------------|
| North Instrument ..    | 4·86 | 4·87 | 4·87 | 4·86 | 4·87 | 4·87 | 4·85 | 4·84 | 4·85  | 4·87 | 4·86 | 4·85            |
| West Instrument ..     | 5·28 | 5·28 | 5·30 | 5·31 | 5·31 | 5·29 | 5·26 | 5·25 | 5·28  | 5·29 | 5·29 | { 5·29<br>6·59* |
| Vertical Instrument .. | 4·13 | 4·08 | 4·09 | 4·10 | 4·11 | 4·12 | 4·11 | 4·11 | 4·14  | 4·15 | 4·13 | 4·12            |

\* 6·59 after December 31d 17h. (see p. 96).

Absolute observations of horizontal force, declination, and inclination were taken, usually twice weekly, in the east magnetic hut. Declination and horizontal intensity were determined by means of the Kew pattern unifilar magnetometer, placed on Pier No. 5, and determinations of inclination (dip) were made with the Schulze Inductor, placed on Pier No. 6. In the deflection experiment of the horizontal intensity determination observations were made for three distances of the collimator magnet, viz. 25, 30, 35 cm.

For 1924, the procedure in respect of the P and Q correction,  $\log_{10}(1 + P/25^2 + Q/25^4)$  which is used in the reduction of the horizontal intensity observations, differed from that which had been followed from the latter part of 1913 until 1923. Throughout the period named the value of the correction adopted for a given month was the mean derived from the observations obtained during the seven months including the given month as fourth of the seven. The monthly values so derived show considerable fluctuations, and it is improbable that P and Q actually varied to the extent implied. It was decided to use throughout 1924 a value based on the observations during the years 1917-24. From the values of  $m/H$  for the three deflection distances, during each of these years, a mean value of  $\log_{10}(1 + P/25^2 + Q/25^4)$  was computed and the mean of the eight values so obtained was used in reducing the 1924 observations. The values of P, Q, and  $\log_{10}(1 + P/25^2 + Q/25^4)$  are as follows:—

| Year. | P.     | Q.   | $\log_{10}(1 + P/25^2 + Q/25^4)$ . |
|-------|--------|------|------------------------------------|
| 1917  | +6·862 | .... | +418·9                             |
| 1918  | +7·604 | .... | + 68·6                             |
| 1919  | +9·126 | .... | -603·5                             |
| 1920  | +8·224 | .... | -216·6                             |
| 1921  | +7·978 | .... | + 25·3                             |
| 1922  | +6·607 | .... | +513·1                             |
| 1923  | +6·371 | .... | +614·3                             |
| 1924  | +7·899 | .... | -128·6                             |

The mean value of  $\log_{10}(1 + P/25^2 + Q/25^4)$  for 1917-23 is ·00534; for 1917-24, is ·00533. A variation of ·00020 in the value of the logarithm corresponds with a variation of about 4  $\gamma$  in the derived value of H.

The base line values of the magnetograph records are deduced from the results of the absolute observations, any of the latter obtained during times of considerable disturbance being excluded. The base line values finally adopted are obtained from a curve drawn smoothly through points given by the deduced values.

The results of the absolute determinations of D, I and H are summarised in the subjoined table, and the values of  $m$ , the moment of collimator magnet 60a, are also given. For each set of absolute observations are shown the deduced base line values of N, W, and V and, in brackets, the adopted base line values. Thus, the entry 15823 (18) signifies:—deduced base line value 15823, adopted base line value 15818. The adopted values were obtained as described in the foregoing, and therefore the base line values corresponding to dates between those given in the table may be obtained by interpolation. The entries in the column headed " West " are the base line values of the component W'. (see above).

ABSOLUTE DETERMINATIONS OF D, I AND H, AND BASE LINE VALUES OF N, W, AND V.

Eskdalemuir:

1924:

| Date.  | Declination. |    |    | Inclination. |            |    | Horizontal Force. |            |       | Base Line Values<br>(deduced and adopted). |            |           |            |
|--------|--------------|----|----|--------------|------------|----|-------------------|------------|-------|--|------------|-----------|------------|
|        | Mean Time.   | D. |    |              | Mean Time. | I. |                   | Mean Time. | H.    | m.   | North.     | West.     | Vertical.  |
|        | h m          | °  | '  | "            | h m        | °  | '                 | h m        | γ     |  | 15,000 γ + | 6,000 γ + | 44,000 γ + |
| Jan. 4 | 14 23        | 16 | 7  | 54           | 12 53      | 69 | 38·9              | 11 30      | 16665 | 906·4                                      | 811 (16)   | 962 (68)  | 817 (36)   |
| 8      | 14 19        | 16 | 7  | 47           | 12 53      | 69 | 38·3              | —          | —     | —  | 821 (15)   | 968 (67)  | 846 (37)   |
| 11     | 14 17        | 16 | 7  | 23           | 12 41      | 69 | 39·1              | 11 27      | 16674 | 907·0                                      | 822 (15)   | 966 (67)  | 852 (37)   |
| 16     | 14 19        | 16 | 9  | 20           | 12 29      | 69 | 39·1              | 11 51      | 16666 | 907·3                                      | 814 (14)   | 966 (66)  | 851 (38)   |
| 18     | 14 27        | 16 | 9  | 8            | 12 13      | 69 | 39·6              | 11 35      | 16662 | 906·7                                      | 806 (13)   | 965 (66)  | 823 (38)   |
| 25     | 14 21        | 16 | 10 | 5            | 12 29      | 69 | 39·8              | 11 40      | 16672 | 907·0                                      | 813 (12)   | 966 (66)  | 847 (38)   |
| 28     | —            | —  | —  | —            | 12 14      | 69 | 38·8              | —          | —     | —  | —          | —         | 838 (38)   |
| 29     | 14 29        | 16 | 18 | 15           | 12 19      | 69 | 40·4              | 11 39      | 16681 | 907·1                                      | 809 (12)   | 965 (66)  | 836 (38)   |
| Feb. 1 | 14 33        | 16 | 9  | 25           | 12 15      | 69 | 40·0              | 11 33      | 16652 | 906·9                                      | 803 (11)   | 968 (66)  | 822 (39)   |
| 5      | 14 27        | 16 | 10 | 3            | 12 21      | 69 | 38·5              | 11 43      | 16667 | 906·6                                      | 812 (11)   | 965 (66)  | 850 (40)   |
| 6      | —            | —  | —  | —            | 12 17      | 69 | 40·3              | —          | —     | —  | —          | —         | 835 (40)   |
| 7      | —            | —  | —  | —            | 14 40      | 69 | 39·9              | —          | —     | —  | —          | —         | 824 (40)   |
| 8      | 14 34        | 16 | 8  | 25           | 11 47      | 69 | 39·5              | 11 7       | 16664 | 906·8                                      | 807 (11)   | 964 (66)  | 841 (41)   |
| 12     | 14 53        | 16 | 8  | 43           | 12 24      | 69 | 38·5              | 11 43      | 16670 | 906·3                                      | 807 (10)   | 964 (66)  | 826 (42)   |
| 15     | 14 57        | 16 | 7  | 43           | 12 20      | 69 | 39·0              | 11 40      | 16679 | 906·7                                      | 813 (10)   | 968 (66)  | 844 (42)   |
| 22     | 12 11        | 16 | 7  | 7            | 11 54      | 69 | 39·8              | 11 15      | 16647 | 906·3                                      | 818 (10)   | 963 (66)  | 859 (45)   |
| 29     | 14 37        | 16 | 7  | 26           | 12 24      | 69 | 39·3              | 11 45      | 16670 | 906·7                                      | 809 (09)   | 968 (65)  | 853 (46)   |
| Mar. 4 | 14 35        | 16 | 8  | 38           | 12 5       | 69 | 39·4              | 11 24      | 16674 | 907·2                                      | 811 (09)   | 968 (65)  | 853 (47)   |
| 7      | —            | —  | —  | —            | 11 18      | 69 | 39·0              | —          | —     | —  | —          | —         | 845 (48)   |
| 10     | —            | —  | —  | —            | 14 30      | 69 | 40·0              | —          | —     | —  | —          | —         | 883 (48)   |
| 11     | 14 51        | 16 | 9  | 23           | 12 23      | 69 | 39·6              | 11 47      | 16675 | 906·1                                      | 813 (09)   | 966 (65)  | 872 (48)   |
| 14     | 14 15        | 16 | 9  | 20           | 11 29      | 69 | 40·0              | 10 55      | 16670 | 906·4                                      | 806 (09)   | 964 (64)  | 885 (49)   |
| 18     | 14 33        | 16 | 9  | 43           | 14 18      | 69 | 39·3              | 12 15      | 16666 | 906·9                                      | 808 (09)   | 964 (64)  | 858 (49)   |
| 21     | 14 33        | 16 | 7  | 33           | 12 13      | 69 | 40·1              | 11 33      | 16676 | 907·0                                      | 823 (09)   | 959 (64)  | 880 (50)   |
| 26     | 15 15        | 16 | 8  | 58           | —          | —  | —                 | 12 5       | 16673 | 907·6                                      | 813 (10)   | 964 (63)  | —          |
| 28     | 15 19        | 16 | 6  | 13           | 12 23      | 69 | 39·1              | 11 45      | 16671 | 906·6                                      | 805 (10)   | 958 (63)  | 829 (50)   |
| Apr. 1 | 14 55        | 16 | 8  | 23           | 12 20      | 69 | 39·4              | 11 41      | 16668 | 907·2                                      | 806 (10)   | 959 (63)  | 828 (50)   |
| 4      | 14 27        | 16 | 7  | 56           | 12 14      | 69 | 38·9              | 11 35      | 16678 | 907·1                                      | 812 (10)   | 961 (63)  | 846 (49)   |
| 8      | 14 51        | 16 | 8  | 10           | 12 6       | 69 | 39·3              | 11 26      | 16679 | 907·0                                      | 812 (10)   | 962 (63)  | 859 (49)   |
| 11     | 15 35        | 16 | 7  | 3            | 12 11      | 69 | 39·2              | 11 31      | 16681 | 906·7                                      | 807 (11)   | 965 (63)  | 829 (49)   |
| 15     | 14 23        | 16 | 7  | 13           | 12 36      | 69 | 39·2              | 11 57      | 16677 | 906·8                                      | 815 (11)   | 962 (63)  | 862 (48)   |
| 17     | 14 57        | 16 | 9  | 30           | 11 22      | 69 | 39·7              | 10 47      | 16681 | 906·4                                      | 813 (11)   | 968 (63)  | 842 (48)   |
| 25     | 13 47        | 16 | 5  | 25           | 11 33      | 69 | 39·3              | 10 54      | 16657 | 907·6                                      | 810 (12)   | 957 (63)  | 837 (47)   |
| 29     | 14 22        | 16 | 8  | 5            | 11 31      | 69 | 38·9              | 10 53      | 16674 | 906·9                                      | 813 (13)   | 963 (63)  | 852 (46)   |
| May 2  | 14 30        | 16 | 5  | 14           | 11 12      | 69 | 39·0              | 10 32      | 16682 | 907·1                                      | 820 (13)   | 962 (63)  | 855 (46)   |
| 6      | 14 9         | 16 | 7  | 3            | 13 53      | 69 | 38·2              | 11 7       | 16677 | 907·1                                      | 821 (14)   | 966 (63)  | 864 (44)   |
| 9      | 14 21        | 16 | 8  | 8            | 11 27      | 69 | 38·2              | 10 49      | 16692 | 906·6                                      | 823 (14)   | 966 (63)  | 848 (43)   |
| 13     | 14 11        | 16 | 3  | 45           | 11 41      | 69 | 38·1              | 11 3       | 16679 | 906·9                                      | 813 (14)   | 960 (64)  | 837 (42)   |
| 16     | 13 59        | 16 | 6  | 4            | 11 27      | 69 | 37·9              | 10 49      | 16667 | 906·4                                      | 809 (15)   | 962 (64)  | 815 (41)   |
| 20     | 14 29        | 16 | 8  | 58           | 11 33      | 69 | 40·1              | 10 54      | 16686 | 906·7                                      | 815 (15)   | 962 (64)  | 838 (39)   |
| 22     | 10 17        | 16 | 7  | 5            | —          | —  | —                 | —          | —     | —  | 813 (15)   | 967 (64)  | —          |
| 27     | 13 59        | 16 | 8  | 34           | 11 24      | 69 | 38·7              | 10 45      | 16662 | 906·8                                      | 815 (16)   | 965 (64)  | 837 (36)   |
| 30     | 11 23        | 16 | 6  | 48           | 11 5       | 69 | 38·3              | 10 27      | 16667 | 906·7                                      | 812 (17)   | 962 (64)  | 821 (34)   |
| June 3 | 13 43        | 16 | 7  | 39           | 13 26      | 69 | 38·9              | 11 3       | 16667 | 907·0                                      | 821 (17)   | 968 (64)  | 841 (32)   |
| 6      | 13 43        | 16 | 7  | 11           | 13 29      | 69 | 38·9              | 11 3       | 16667 | 906·3                                      | 817 (18)   | 965 (64)  | 844 (30)   |
| 13     | 14 1         | 16 | 5  | 8            | 13 35      | 69 | 39·4              | 11 19      | 16644 | 906·6                                      | 803 (19)   | 962 (65)  | 789 (826)  |
| 17     | 13 29        | 16 | 8  | 28           | 11 53      | 69 | 39·5              | 10 45      | 16647 | 906·7                                      | 817 (20)   | 966 (65)  | 808 (24)   |
| 24     | 14 1         | 16 | 5  | 23           | 13 35      | 69 | 37·9              | 10 51      | 16677 | 906·5                                      | 819 (21)   | 964 (65)  | 804 (21)   |
| 27     | 14 9         | 16 | 6  | 3            | 13 43      | 69 | 36·7              | 10 56      | 16689 | 906·9                                      | 818 (22)   | 963 (65)  | 796 (820)  |
| 30     | —            | —  | —  | —            | 14 11      | 69 | 39·0              | —          | —     | —  | —          | —         | 796 (820)  |

ABSOLUTE DETERMINATIONS—continued.

| Date.   | Declination. |          |       | Inclination. |       |       | Horizontal Force. |    |    | Base Line Values<br>(deduced and adopted). |           |            |
|---------|--------------|----------|-------|--------------|-------|-------|-------------------|----|----|--|-----------|------------|
|         | Mean Time.   | D.       |       | Mean Time.   | I.    |       | Mean Time.        | H. | m. | North.                                     | West.     | Vertical.  |
|         | h m          | ° ' "    | h m   | ° ' "        | h m   | γ     |                   |    |    | 15,000 γ +                                 | 6,000 γ + | 44,000 γ + |
| July 1  | 13 39        | 16 7 13  | 11 34 | 69 38.7      | 11 25 | 16672 | 906.6             |    |    | 820 (23)                                   | 962 (65)  | 778 (819)  |
| 2       | —            | —        | 15 0  | 69 37.1      | —     | —     | —                 | —  | —  | —  | —         | 799 (819)  |
| 3       | —            | —        | 13 37 | 69 38.1      | —     | —     | —                 | —  | —  | —  | —         | 784 (818)  |
| 4       | 13 39        | 16 7 20  | 11 48 | 69 38.9      | 11 10 | 16692 | 906.5             |    |    | 837 (24)                                   | 967 (66)  | 851 (18)   |
| 4 8     | —            | —        | 15 27 | 69 37.0      | —     | —     | —                 | —  | —  | —  | —         | 839 (18)   |
| 8       | —            | —        | 15 43 | 69 37.7      | —     | —     | —                 | —  | —  | —  | —         | 813 (18)   |
| 10      | 13 39        | 16 2 48  | 11 23 | 69 41.4      | 10 47 | 16669 | 906.5             |    |    | 822 (25)                                   | 963 (66)  | 821 (17)   |
| 15      | 14 11        | 16 5 30  | 11 38 | 69 40.6      | 10 59 | 16702 | 906.6             |    |    | 839 (27)                                   | 968 (67)  | 873 (16)   |
| 18      | 13 35        | 16 7 13  | 11 32 | 69 39.8      | 10 53 | 16671 | 906.6             |    |    | 839 (28)                                   | 970 (67)  | 847 (14)   |
| 22      | 14 3         | 16 5 3   | 11 29 | 69 40.2      | 10 49 | 16664 | 906.5             |    |    | 828 (29)                                   | 971 (68)  | 809 (14)   |
| 25      | 13 35        | 16 7 38  | 11 6  | 69 39.2      | 10 28 | 16702 | 906.3             |    |    | 832 (30)                                   | 971 (69)  | 829 (13)   |
| Aug. 1  | 13 57        | 16 8 40  | 11 25 | 69 40.2      | 10 45 | 16676 | 906.5             |    |    | 838 (32)                                   | 975 (70)  | 827 (12)   |
| 5       | 13 53        | 16 8 2   | 11 25 | 69 39.6      | 10 45 | 16672 | 906.8             |    |    | 835 (34)                                   | 974 (71)  | 805 (12)   |
| 8       | —            | —        | 11 35 | 69 40.2      | —     | —     | —                 | —  | —  | —  | —         | 803 (11)   |
| 12      | 14 55        | 16 1 37  | 11 34 | 69 39.0      | 10 56 | 16679 | 906.8             |    |    | 833 (37)                                   | 969 (72)  | 796 (811)  |
| 15      | 14 1         | 16 4 3   | 11 26 | 69 40.1      | 10 47 | 16675 | 906.9             |    |    | 840 (38)                                   | 967 (72)  | 823 (10)   |
| 19      | 13 53        | 16 4 8   | 11 21 | 69 40.4      | 10 41 | 16671 | 907.1             |    |    | 845 (39)                                   | 976 (72)  | 818 (10)   |
| 22      | 14 57        | 16 5 40  | 11 23 | 69 40.3      | 10 47 | 16671 | 906.3             |    |    | 828 (40)                                   | 967 (73)  | 774 (809)  |
| 26      | 14 5         | 16 3 0   | 11 26 | 69 39.3      | 10 45 | 16687 | 907.4             |    |    | 842 (41)                                   | 976 (73)  | 828 (09)   |
| 29      | 13 59        | 16 8 44  | 11 28 | 69 40.1      | 10 49 | 16693 | 905.9             |    |    | 846 (42)                                   | 978 (73)  | 835 (08)   |
| Sept. 1 | —            | —        | 11 53 | 69 39.5      | —     | —     | —                 | —  | —  | —  | —         | 767 (808)  |
| 2       | 14 19        | 16 7 13  | 11 41 | 69 41.1      | 10 55 | 16655 | 905.8             |    |    | 827 (43)                                   | 970 (73)  | 775 (808)  |
| 3       | —            | —        | 11 51 | 69 40.2      | —     | —     | —                 | —  | —  | —  | —         | 761 (808)  |
| 3       | —            | —        | 13 58 | 69 39.1      | —     | —     | —                 | —  | —  | —  | —         | 763 (808)  |
| 4       | —            | —        | 9 33  | 69 39.5      | —     | —     | —                 | —  | —  | —  | —         | 759 (807)  |
| 5       | 14 5         | 16 5 0   | 14 43 | 69 39.2      | 10 46 | 16665 | 906.2             |    |    | 831 (43)                                   | 965 (72)  | 805 (07)   |
| 9       | 14 19        | 16 4 40  | 13 55 | 69 39.2      | 10 39 | 16678 | 905.8             |    |    | 841 (43)                                   | 975 (72)  | 790 (806)  |
| 10      | —            | —        | 8 55  | 69 40.4      | —     | —     | —                 | —  | —  | —  | —         | 797 (806)  |
| 11      | —            | —        | 14 57 | 69 38.8      | —     | —     | —                 | —  | —  | —  | —         | 828 (06)   |
| 12      | 14 45        | 16 1 18  | 14 22 | 69 38.9      | 10 39 | 16666 | 905.7             |    |    | 832 (43)                                   | 974 (72)  | 774 (806)  |
| 16      | 14 3         | 16 7 5   | 13 37 | 69 38.3      | 10 36 | 16681 | 906.3             |    |    | 830 (43)                                   | 969 (71)  | 781 (805)  |
| 19      | 14 27        | 16 4 23  | 15 30 | 69 38.5      | 9 49  | 16664 | 906.1             |    |    | 826 (43)                                   | 967 (71)  | 760 (804)  |
| 23      | —            | —        | 11 53 | 69 40.5      | 11 0  | 16623 | 905.9             |    |    | 833 (43)                                   | 965 (71)  | 788 (804)  |
| 24      | 11 9         | 15 58 38 | —     | —            | —     | —     | —                 | —  | —  | —  | —         | —          |
| 26      | 15 13        | 16 3 38  | 11 55 | 69 39.9      | 11 1  | 16656 | 907.5             |    |    | 836 (42)                                   | 970 (70)  | 795 (803)  |
| 30      | 15 15        | 15 59 48 | 12 5  | 69 40.4      | 12 7  | 16671 | 906.5             |    |    | 842 (42)                                   | 969 (70)  | 812 (02)   |
| Oct. 3  | 14 56        | 16 2 28  | 11 27 | 69 40.9      | 10 36 | 16672 | 906.5             |    |    | 835 (41)                                   | 972 (71)  | 811 (02)   |
| 7       | 14 57        | 16 5 8   | 11 55 | 69 39.4      | 10 57 | 16660 | 906.5             |    |    | 832 (40)                                   | 968 (71)  | 777 (802)  |
| 10      | 14 53        | 15 59 59 | 11 43 | 69 40.3      | 10 53 | 16678 | 906.6             |    |    | 843 (40)                                   | 968 (71)  | 811 (02)   |
| 14      | 15 5         | 16 0 45  | 11 55 | 69 40.4      | 11 1  | 16689 | 906.4             |    |    | 850 (39)                                   | 974 (71)  | 835 (02)   |
| 17      | 15 19        | 15 59 20 | 11 55 | 69 40.2      | 11 5  | 16671 | 906.5             |    |    | 836 (38)                                   | 965 (71)  | 800 (02)   |
| 22      | 15 13        | 15 58 35 | 11 43 | 69 40.3      | 11 0  | 16667 | 906.5             |    |    | 840 (37)                                   | 970 (69)  | 814 (02)   |
| 23      | 14 17        | 16 0 43  | 11 50 | 69 40.2      | 10 57 | 16649 | 906.7             |    |    | 829 (37)                                   | 967 (69)  | 777 (802)  |
| 29      | 14 25        | 15 59 48 | 12 7  | 69 39.4      | 11 16 | 16646 | 905.7             |    |    | 817 (35)                                   | 961 (69)  | 742 (802)  |
| 31      | 14 33        | 15 59 33 | 11 33 | 69 39.4      | 10 43 | 16671 | 906.3             |    |    | 829 (35)                                   | 967 (69)  | 784 (802)  |
| Nov. 4  | 14 35        | 15 57 46 | 12 15 | 69 39.4      | 11 20 | 16666 | 906.5             |    |    | 831 (34)                                   | 970 (69)  | 795 (802)  |
| 7       | 14 27        | 15 58 35 | 12 22 | 69 39.3      | 11 32 | 16667 | 906.6             |    |    | 836 (33)                                   | 969 (68)  | 819 (02)   |
| 11      | 14 29        | 15 58 15 | 11 57 | 69 39.1      | 11 5  | 16672 | 906.5             |    |    | 839 (32)                                   | 971 (68)  | 785 (802)  |
| 14      | 14 45        | 15 58 53 | 11 27 | 69 38.8      | 10 38 | 16665 | 906.3             |    |    | 832 (31)                                   | 969 (68)  | 771 (802)  |
| 18      | 14 17        | 15 58 12 | 12 0  | 69 39.4      | 11 7  | 16664 | 906.4             |    |    | 823 (30)                                   | 966 (67)  | 787 (802)  |
| 21      | 14 31        | 15 57 45 | 11 59 | 69 39.0      | 11 7  | 16671 | 906.5             |    |    | 826 (30)                                   | 965 (67)  | 773 (803)  |
| 25      | 14 23        | 15 58 18 | 12 13 | 69 40.8      | 11 14 | 16651 | 906.3             |    |    | 824 (29)                                   | 966 (67)  | 791 (804)  |
| 28      | 14 15        | 15 57 43 | 12 15 | 69 39.2      | 11 25 | 16676 | 906.7             |    |    | 824 (28)                                   | 965 (66)  | 811 (04)   |

ABSOLUTE DETERMINATIONS—*continued.*

| Date.  | Declination.  |          |       | Inclination.  |       | Horizontal Force. |       |           | Base Line Values<br>(deduced and adopted). |           |            |
|--------|---------------|----------|-------|---------------|-------|-------------------|-------|-----------|--|-----------|------------|
|        | Mean<br>Time. | D.       |       | Mean<br>Time. | I.    | Mean<br>Time.     | H.    | <i>m.</i> | North.                                     | West.     | Vertical.  |
|        | h m           | ° ' "    | h m   | ° ' "         | h m   | γ                 |       |           | 15,000 γ +                                 | 6,000 γ + | 44,000 γ + |
| Dec. 3 | 14 29         | 15 55 35 | 10 59 | 69 39.0       | 11 51 | 16662             | 906.7 |           | 823 (27)                                   | 965 (65)  | 796 (805)  |
| 5      | —             | —        | 11 7  | 69 38.9       | 11 49 | 16595             | 906.1 |           | 823 (27)                                   | 964 (65)  | 800 (06)   |
| 6      | 10 23         | 15 55 46 | —     | —             | —     | —                 | —     |           | —  | —         | —          |
| 9      | 14 39         | 15 56 38 | 11 35 | 69 39.4       | 12 15 | 16672             | 905.9 |           | 826 (26)                                   | 962 (65)  | 815 (06)   |
| 16     | 14 25         | 15 56 0  | 12 26 | 69 39.1       | 11 33 | 16665             | 906.6 |           | 822 (24)                                   | 959 (64)  | 791 (809)  |
| 19     | 14 25         | 15 57 14 | —     | —             | 11 33 | 16668             | 906.6 |           | 825 (23)                                   | 964 (63)  | —          |
| 23     | 14 53         | 15 55 35 | 12 27 | 69 39.1       | 11 33 | 16657             | 905.4 |           | 819 (22)                                   | 961 (62)  | 759 (811)  |
| 27     | 11 37         | 15 55 50 | 10 18 | 69 38.7       | 10 56 | 16661             | 906.7 |           | 828 (22)                                   | 964 (62)  | 827 (14)   |
| 30     | 15 28         | 15 54 45 | —     | —             | 14 15 | 16668             | 906.4 |           | 825 (21)                                   | 964 (62)  | —          |

The hourly readings are obtained from the magnetograms, standardised as described in the foregoing, by means of a ruled glass scale. The reading for any given hour G.M.T. is that ordinate estimated to be the mean reading for 60-minutes centring at the given hour. The product of this ordinate and the scale value is added to the adopted base line value, and the sum so obtained is the hourly value printed in the tables.

In consequence of the error in the azimuth of the "west" magnet during 1924, it has been necessary to introduce modifications in certain parts of the normal procedure described above. In calculating all base line values, allowance was made for the circumstance that  $W'$ , and not  $W$ , was recorded. Hourly values of  $W'$  were tabulated, and from each such hourly value and the corresponding hourly value of  $N$  the hourly value of  $W$  was deduced, using the relation  $W = W' \sec \alpha - N \tan \alpha$ , i.e.,  $W = 1.01415 W' - 0.16884 N$ . So far as the actual hourly values are concerned, it has been possible to eliminate in this way the effects due to the displacement of the "west" magnet, and the results published may be regarded as of the normal order of accuracy; the same consideration applies to the diurnal inequalities.

The determination of daily maxima and minima and daily ranges of  $W$  is less straightforward. If  $W_0'$ ,  $N_0$ , are the base line values of the  $W'$  and  $N$  records;  $w'$ ,  $n$ , corresponding curve ordinates in millimetres;  $c'$ ,  $b$ , the scale values of the  $W'$  and  $N$  records in  $\gamma$  per mm., then

$$W = W_0' \sec \alpha - N_0 \tan \alpha + c' \sec \alpha \left\{ w' - \frac{nb}{c'} \sin \alpha \right\}.$$

For a given day  $W$  is a maximum or minimum according as  $\left\{ w' - \frac{nb}{c'} \sin \alpha \right\}$  is a maximum or minimum. In the particular case in question a typical value of  $\frac{b}{c'} \sin \alpha$  is 0.152. Theoretically it should be possible, by employing a pantagraph or similar instrument, to trace the quantity  $\left( \frac{b}{c'} \sin \alpha \right) n$  beneath the  $W'$  record with

the base line of the latter as zero, and so to select and measure the largest and smallest ordinate differences between the two traces. With the apparatus available certain practical difficulties were encountered in endeavouring to trace the  $N$  curves reduced to between one-sixth and one-seventh in ordinate, and consequently this method of achieving the object in view was abandoned. Instead, the  $W'$  trace for

each day was re-examined, in relation to the corresponding N trace and in the light of the relative effects of changes in  $w'$  and  $n$ , in order to determine (1) whether the apparent time of maximum or minimum as shown by the  $W'$  curve was or was not the true time of maximum or minimum of  $W$  for its immediate neighbourhood, and, if not, what was the true time for that neighbourhood; (2) whether there was in any other section of the  $W'$  curve a point which, when duly corrected, might possibly compete with the former local maximum or minimum. The true time of maximum or minimum having been thus ascertained, the correct value of  $W$  was computed from appropriate measurements made on the  $W'$  and  $N$  curves. It is considered that the resulting maxima and minima are very nearly of the usual order of accuracy. In nearly all cases the true time of maximum and minimum of  $W$  was found to be the same, for all practical purposes, as the apparent time shown on the  $W'$  record.

*Comparison of Instruments.*—The standard unifilar magnetometer was compared with the Kew Observatory standard through the agency of the Dover Unifilar, No. 140, which was brought to Eskdalemuir in July, 1924. Comparison of the Eskdalemuir dip inductor with the Kew Observatory standard dip circle was effected through the Eskdalemuir dip circle, which was sent to Kew in 1923 for this purpose. The resulting differences, Eskdalemuir standard—Kew standard, were as follows:—Declination (westerly),  $+0.4$ ; Horizontal Force,  $+9\gamma$ ; Inclination,  $-1.8$ . Details regarding the procedure followed in the comparison observations and of the results obtained are to be found in the publication: “*Comparison of Magnetic Standards at British Observatories, with a discussion of various instrumental questions involved,*” by Dr. C. Chree, F.R.S.—Meteorological Office, Geophysical Memoirs, No. 30.

IDENTIFICATION NUMBERS OF INSTRUMENTS IN USE IN 1924.

|   |                 |
|---|-----------------|
| Unifilar Magnetometer, Kew pattern.. .. .             | Elliott, No. 60 |
| (with collimator magnet, 60a, and mirror magnet, 60c) |                 |
| Dip Inductor .. .. .                                  | Schulze No. 103 |
| Dip Circle .. .. .                                    | Dover No. 74    |
| (with needles 74 (1 and 2), and 239 (1 and 2)).       |                 |

Notes on Tables.

The hourly values of  $N$ ,  $W$ , and  $V$ , obtained as described above, appear in three of the four monthly tables. The mean value for the day is computed according to the expression

$$x = \{ \frac{1}{2} (x_0 + x_{24}) + x_1 + x_2 + \dots + x_{23} \} / 24.$$

The letters “ $Q$ ” and “ $D$ ” denote the five quiet and the five most disturbed days as selected at De Bilt.

In the fourth table for each month are given:—

- (a) the values and times of the daily maximum and minimum and the values of the absolute daily range for each of the components  $N$ ,  $W$  and  $V$ .\*
- (b) the value of  $\Sigma R^2$ † for each day.  $\Sigma R^2$  is written for  $R_N^2 + R_W^2 + R_V^2$  where  $R_N$ ,  $R_W$ ,  $R_V$  denote the absolute ranges for a calendar day of the north, west and vertical components.
- (c) the “characteristic ratio,”  $\rho$ , which is the ratio of the value of  $\Sigma R^2$  for a given day to the mean monthly value of  $\Sigma R^2$ . This ratio is an index of the degree of disturbance or activity on a given day relatively to the other days of the same month.
- (d) the daily magnetic character figures, assigned according to the international scheme wherein “0,” “1,” “2,” respectively, denote quiet, moderately disturbed and highly disturbed conditions.
- (e) the daily values of temperature in the underground magnetograph chamber.

\* See p.100 for method of obtaining daily maxima and minima of  $W$  during 1924.

† See also p. 104.

Mean diurnal inequalities of the components N, W, V, H, D, and I on "all" days and on international quiet and disturbed days are given, for the months, seasons and year, in Tables 259 to 276. In calculating diurnal inequalities the non-cyclic change has been eliminated on the assumption that its time-rate is linear. Inequality values are first calculated to  $0.01 \gamma$  and then rounded off to  $0.1 \gamma$ . The inequalities of H, D, and I have been computed from those of N, W, and V by means of the formulae:

$$\begin{aligned}\delta D &= \frac{180 \times 60}{\pi} \left( \frac{\delta W \cos D - \delta N \sin D}{H} \right) \\ \delta H &= \delta N \cos D + \delta W \sin D \\ \delta I &= \frac{180 \times 60}{\pi} \cos I \left( \frac{\delta V \cos I - \delta H \sin I}{H} \right)\end{aligned}$$

in which  $\delta D$  and  $\delta I$  are expressed in minutes of arc, and where H, D, and I for any given month are the respective mean values for that month as published in Table 280. The values of the range of the mean diurnal inequalities of the several elements on the three different types of day are brought together in Table 277, and the values of the non-cyclic change of N, W, and V are given in Table 278.

The results of harmonic analysis of the monthly, seasonal<sup>‡</sup> and annual diurnal inequalities of N, W, and V are to be found in Tables 281 and 282, in which are given the values of  $a_n$ ,  $b_n$ ,  $c_n$ , and  $\alpha_n$ , in the two equivalent series  $\sum (a_n \cos 15nt^\circ + b_n \sin 15nt^\circ)$  and  $\sum c_n \sin (15nt^\circ + \alpha_n)$ . In the former series  $t$  is reckoned in hours from midnight G.M.T., whilst the published values of  $\alpha_n$  refer to Local Mean Time. The values of the harmonic coefficients have been computed from the unrounded values of the inequalities and have been corrected, where necessary, on account of the fact that the hourly values are not instantaneous values but are mean values. The factors by which the coefficients have to be multiplied (*vide* Report of the British Association, 1883, p. 98) are 1.00286 for  $a_1, b_1, c_1$ ; 1.01152 for  $a_2, b_2, c_2$ ; 1.02617 for  $a_3, b_3, c_3$ ; and 1.04720 for  $a_4, b_4, c_4$ . Finally, the values were rounded off to  $0.1 \gamma$ .

The mean values of the squares of the absolute daily ranges are summarised in Table 279.

In Table 280 appear for the months and year the mean values of N, W, V, D, I, H and Total Force, T. The means of the four latter elements are derived from the corresponding mean values of N, W and V, which are the means of hourly values on "all" days in the month or year.

### Review of Results of Magnetic Observations.

*Mean and Extreme Values of the Magnetic Elements, 1924*—The mean values are given on opposite page in Table I along with the corresponding values for the previous year. The values of N, W, and V have been computed from the hourly values derived from the autographic records of "all" days, standardised by means of the absolute observations; those of H, D, I, and T have been deduced from the values of N, W, and V.

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<sup>‡</sup> The seasons are defined for this purpose as follows:—*Winter*, January, February, November, December; *Equinox*, March, April, September, October; *Summer*, May, June, July, August.

TABLE I.

| Year.      | H.                | D.<br>(West).             | I.                        | N.                | W.               | V.                | T.                |
|------------|-------------------|---------------------------|---------------------------|-------------------|------------------|-------------------|-------------------|
| 1923 .. .. | $\gamma$<br>16676 | $^{\circ}$ $'$<br>16 13.8 | $^{\circ}$ $'$<br>69 38.8 | $\gamma$<br>16011 | $\gamma$<br>4661 | $\gamma$<br>44954 | $\gamma$<br>47947 |
| 1924 .. .. | 16673             | 16 1.2                    | 69 38.7                   | 16025             | 4601             | 44938             | 47931             |

The decrease in H continued, but much more gradually than during the early stages of the decrease which has been in progress since 1912. The diminution in westerly declination from 1923 is the largest change from one year to the next recorded at Eskdalemuir. There was little apparent change in inclination. The increase in N and the decrease in W were slightly greater than the changes from 1922 to 1923.

Mean values derived from (a) international quiet days and (b) international disturbed days were as follow: (a) N, 16026  $\gamma$ ; W, 4602  $\gamma$ ; V, 44938  $\gamma$ ; (b) N, 16022  $\gamma$ ; W, 4600  $\gamma$ ; V, 44938  $\gamma$ .

The extreme values of N, W and V recorded during 1924 are given in Table II.

TABLE II.

| Component.  | Maximum.          |             |    | Minimum. |        |                   | Absolute Annual Range. |                                 |    |    |                 |
|-------------|-------------------|-------------|----|----------|--------|-------------------|------------------------|---------------------------------|----|----|-----------------|
|             | Value.            | Date, 1924. |    |          | Value. | Date, 1924.       |                        |                                 |    |    |                 |
| North .. .. | $\gamma$<br>16252 | June        | d  | h        | m      | $\gamma$<br>15807 | Jan.                   | d                               | h  | m  | $\gamma$<br>445 |
| West .. ..  | 4851              | June        | 10 | 16       | 6      | 4434              | Jan.                   | 29                              | 18 | 21 | 417             |
| Vertical .. | 45216             | June        | 10 | 16       | 36     | < 44681           | Jan.                   | from<br>30 1 23<br>to<br>30 2 1 |    |    | > 535           |

The absolute annual ranges were greater in 1924 than in 1923 or 1922. In N and in W the excess of the maximum above the mean for the year was greater in 1924 than in any of the years 1921-23.

*Magnetic Character of the Year.*—As an endeavour to obtain magnetic activity estimates free from the effects of variations in personal judgment, to which the character figures assigned in accordance with the international scheme are subject, it has been the practice in recent years to tabulate for each day two quantities which are in some measure indicative of the degree of magnetic activity. These quantities

are (1)  $\Sigma R^2$ ,\* the sum of the squares of the absolute daily ranges of the three geographical components ; and (2), the mean of the hourly values of  $\Sigma r^2$ ,† the sum of the squares of the hourly ranges of these components. The magnetic character

TABLE III.

| 1924.      | Mean Value of $\Sigma r^2$<br>(Unit 100 $\gamma^2$ ). |      |      |      |      |       |      |      |       |      |      |      |  |
|------------|---|------|------|------|------|-------|------|------|-------|------|------|------|--|
|            | Jan.  | Feb. | Mar. | Apr. | May  | June  | July | Aug. | Sept. | Oct. | Nov. | Dec. |  |
| Day.       |   |      |      |      |      |       |      |      |       |      |      |      |  |
| 1 .. ..    | 0.2   | 1.6  | 0.4  | 1.0  | 1.8  | 1.6   | 2.6  | 2.0  | 12.6  | 1.5  | 4.6  | 0.5  |  |
| 2 .. ..    | 0.5   | 0.9  | 3.3  | 1.0  | 0.8  | 1.4   | 2.7  | 2.1  | 1.3   | 0.7  | 2.3  | 0.6  |  |
| 3 .. ..    | 13.4  | 2.1  | 4.5  | 3.1  | 1.2  | 0.9   | 1.5  | 2.0  | 1.9   | 0.9  | 2.3  | 0.6  |  |
| 4 .. ..    | 1.0   | 0.9  | 1.8  | 1.1  | 1.4  | 2.0   | 1.4  | 5.2  | 4.3   | 3.9  | 0.9  | 0.5  |  |
| 5 .. ..    | 0.4   | 16.4 | 3.5  | 1.0  | 1.3  | 1.4   | 1.0  | —    | 3.7   | 1.9  | 0.3  | 0.2  |  |
| 6 .. ..    | 0.6   | 6.6  | —    | 6.3  | 1.0  | 0.6   | 3.1  | —    | 4.5   | —    | 3.1  | 0.1  |  |
| 7 .. ..    | 3.6   | 5.4  | 30.9 | 4.4  | 0.9  | 1.0   | 4.0  | 2.3  | 25.5  | 3.9  | 1.9  | 1.0  |  |
| 8 .. ..    | 2.3   | 0.7  | 8.3  | 1.0  | 1.7  | 1.2   | 1.1  | 2.0  | 24.8  | 2.2  | 0.2  | 1.7  |  |
| 9 .. ..    | 1.3   | 0.6  | 8.5  | 1.2  | 2.1  | 5.6   | 17.4 | 1.0  | 4.5   | 1.1  | 3.0  | 0.6  |  |
| 10 .. ..   | 17.3  | 4.6  | 3.0  | 0.8  | 0.8  | 151.3 | 3.8  | 1.1  | 4.1   | 0.8  | 2.0  | 0.3  |  |
| 11 .. ..   | 4.1   | 4.3  | 2.5  | 1.0  | 1.7  | 42.2  | 2.8  | 0.8  | 1.1   | 0.8  | 1.5  | 2.0  |  |
| 12 .. ..   | 0.6   | 0.6  | 2.7  | 1.1  | 4.4  | 4.6   | 1.3  | 0.9  | 8.1   | 0.6  | 0.8  | 11.4 |  |
| 13 .. ..   | 0.2   | 1.3  | 0.7  | 0.6  | 2.5  | 2.4   | 1.3  | 1.5  | 5.5   | 0.8  | 3.7  | 2.0  |  |
| 14 .. ..   | 0.3   | 0.4  | 0.5  | 0.8  | 0.5  | 1.3   | 0.6  | 1.2  | 0.8   | 0.5  | 2.9  | 0.9  |  |
| 15 .. ..   | 2.1   | 0.2  | 0.8  | 1.9  | 1.1  | 2.9   | 6.5  | 1.0  | 1.9   | 2.0  | —    | 1.6  |  |
| 16 .. ..   | 2.5   | 2.3  | 2.3  | 1.6  | 5.5  | 4.9   | 2.2  | 2.0  | 1.6   | 2.5  | —    | 0.2  |  |
| 17 .. ..   | 3.0   | 2.5  | 0.7  | 1.5  | 1.8  | 2.2   | 2.6  | 12.4 | 0.9   | 1.8  | 0.4  | 1.3  |  |
| 18 .. ..   | 0.9   | 0.3  | 1.7  | 2.9  | 1.3  | 18.5  | 5.8  | 12.9 | 1.9   | 4.4  | 0.3  | 0.9  |  |
| 19 .. ..   | 1.6   | 1.2  | 3.9  | 2.9  | 1.9  | 23.1  | 3.2  | 2.1  | 2.6   | 0.6  | 7.8  | 1.1  |  |
| 20 .. ..   | 0.4   | 40.6 | 11.8 | 2.6  | 2.2  | 42.3  | 5.8  | 1.0  | 1.4   | 2.6  | 0.6  | —    |  |
| 21 .. ..   | 0.4   | 11.1 | 7.0  | 2.5  | 28.7 | 7.4   | 4.4  | 0.9  | 1.3   | 2.2  | 2.2  | 6.2  |  |
| 22 .. ..   | 9.3   | 6.0  | 11.2 | 2.0  | 73.2 | 5.1   | 1.5  | 1.1  | 1.7   | 1.9  | 0.7  | 0.6  |  |
| 23 .. ..   | 30.0  | 13.9 | 6.8  | 1.4  | 55.3 | 7.4   | 0.5  | 1.4  | 8.2   | 21.9 | 0.5  | 2.9  |  |
| 24 .. ..   | 11.3  | 4.5  | 2.2  | 2.5  | 6.5  | 1.3   | 1.2  | 1.1  | 17.7  | 35.5 | 41.0 | 1.0  |  |
| 25 .. ..   | 4.8   | 5.1  | 3.1  | 11.0 | 3.3  | 2.1   | 6.9  | 0.7  | 4.8   | 8.9  | 4.7  | 0.2  |  |
| 26 .. ..   | 4.2   | —    | 1.4  | 7.2  | 2.2  | 1.7   | 8.0  | 1.1  | 1.7   | 1.6  | 3.8  | 0.5  |  |
| 27 .. ..   | 1.5   | —    | 2.0  | 1.7  | 2.2  | 2.8   | 14.7 | 0.8  | 12.1  | 2.4  | 0.7  | 0.6  |  |
| 28 .. ..   | 1.1   | 0.6  | 0.8  | 2.2  | 18.5 | 1.9   | 2.5  | 1.3  | 4.4   | 0.9  | 1.8  | 0.6  |  |
| 29 .. ..   | 164.2   | 0.6  | 2.9  | 2.9  | 2.3  | 2.1   | 2.1  | 9.3  | 1.8   | 0.4  | 1.4  | 0.2  |  |
| 30 .. ..   | 96.4  | —    | 21.6 | 1.1  | 2.2  | 4.0   | 1.5  | 5.2  | 1.4   | 0.6  | 0.2  | 0.2  |  |
| 31 .. ..   | 2.5   | —    | 9.0  | —    | 1.1  | —     | 1.1  | 2.9  | —     | 3.6  | —    | —    |  |
| Mean .. .. | 12.3  | 5.0  | 5.3  | 2.4  | 7.5  | 11.6  | 3.7  | 2.7  | 5.6   | 3.8  | 3.4  | 1.4  |  |

figure, the value of  $\Sigma R^2$ , and the value of  $\rho^*$  (the "characteristic ratio") for each day appear in the fourth table under each month in this volume. The daily means of  $\Sigma r^2$  are given in Table III above. Owing to the error‡ in azimuth of the west

\* See p. 101.

†  $r_N, r_W, r_Z$ , denoting ranges, for the 60-minutes period centered at the exact hour G.M.T., of N, W, and V,  $\Sigma r^2$  stands for  $r_N^2 + r_W^2 + r_Z^2$ . Table III. contains the value of  $\frac{1}{24} \Sigma (\Sigma r^2)$ , where—  

$$\Sigma (\Sigma r^2) = \frac{1}{2} \{ (\Sigma r^2)_0 + (\Sigma r^2)_{24} \} + (\Sigma r^2)_1 + \dots + (\Sigma r^2)_{23}$$

‡ See pp. 100-101.



magnet during 1924, the daily means of  $\Sigma r^2$  for this year are not strictly comparable with the values, prior to August 30th, 1923, for in tabulating hourly ranges of the "west" component during the period specified no attempt was made to allow for the circumstance that the component recorded was  $W' = W \cos \alpha + N \sin \alpha$ , and not  $W$ .

The monthly distribution and the mean values of the magnetic character figures, together with the mean values of  $\Sigma R^2$  and of  $\Sigma r^2$ , are shown in Table IV.

TABLE IV.

| Month.           | Magnetic Character Figures. |                  |                  | Mean Character Figure. | Mean value of $\Sigma R^2/100$ . | Mean value of $\Sigma r^2/100$ . |
|------------------|-----------------------------|------------------|------------------|------------------------|----------------------------------|----------------------------------|
|                  | No. of "0" days.            | No. of "1" days. | No. of "2" days. |                        |                                  |                                  |
| 1924.            |                             |                  |                  |                        | $\gamma^2$                       | $\gamma^2$                       |
| January .. ..    | 15                          | 12               | 4                | 0.65                   | 201                              | 12.3                             |
| February .. ..   | 15                          | 13               | 1                | 0.52                   | *80                              | *5.0                             |
| March .. ..      | 13                          | 16               | 2                | 0.65                   | 120                              | §5.3                             |
| April .. ..      | 19                          | 11               | 0                | 0.37                   | 76                               | 2.4                              |
| May .. ..        | 16                          | 11               | 4                | 0.61                   | 189                              | 7.5                              |
| June .. ..       | 16                          | 10               | 4                | 0.60                   | 258                              | 11.6                             |
| July .. ..       | 12                          | 18               | 1                | 0.65                   | 108                              | 3.7                              |
| August .. ..     | 19                          | 12               | 0                | 0.39                   | §89                              | †2.7                             |
| September .. ..  | 12                          | 15               | 3                | 0.70                   | 135                              | 5.6                              |
| October .. ..    | 16                          | 13               | 2                | 0.55                   | 92                               | §3.8                             |
| November .. ..   | 17                          | 12               | 1                | 0.47                   | †71                              | †3.4                             |
| December .. ..   | 21                          | 10               | 0                | 0.32                   | §34                              | †1.4                             |
| Year, 1924 .. .. | 191                         | 153              | 22               | 0.54                   | 121                              | 5.4                              |
| Year, 1923 .. .. | 235                         | 111              | 19               | 0.41                   | 115                              | 5.5                              |
| Year, 1922 .. .. | 174                         | 145              | 46               | 0.65                   | 205                              | 11.3                             |

\* Mean for 27 days.    † Mean for 28 days.    ‡ Mean for 29 days.    § Mean for 30 days.

In each month, with the exception of April and December, the number of days to which the character figure 0 was assigned was less in 1924 than in 1923. The annual mean character figure and the mean value of  $\Sigma R^2$  were higher than in 1923.

Table V contains the monthly and annual mean values of  $\Sigma R^2$  and of  $\Sigma r^2$  for "0," "1," and "2" days, and also for the international quiet, Q, and disturbed, D, days. The annual means given in this table are the means of the monthly mean values shown; and therefore in the case of "2" days the annual means are the means of nine monthly means. In the majority of months the mean value of  $\Sigma R^2$  for Q and for "0" days exceeded the corresponding 1923 value, but the months in which, for these classes of day, the 1924 value of  $\Sigma r^2$  exceeded that of 1923 were decidedly in the minority. It will be noticed that for July and September the mean value of  $\Sigma R^2$  on Q days was greater than the mean value for "0" days. With regard to D days, in the months January, May, June, July, August, and November the mean values of  $\Sigma R^2$  and of  $\Sigma r^2$  exceeded the corresponding values for 1923. For "1" and "2" days the mean values  $\Sigma R^2$  and  $\Sigma r^2$  for the year 1924 are rather less than the corresponding values for 1923. If equal weight be given to individual "2" days the means of  $\Sigma R^2/100$  are 855, 914, 704, 1327, 1683, and of  $\Sigma r^2/100$  are 46.3, 53.4, 41.7, 97.3, 92.5 for 1924, 1923, 1922, 1921, 1920, respectively.

The values of  $\Sigma R^2$  and of  $\Sigma r^2$  being accepted as criteria of magnetic activity, it may be concluded that there was little difference between 1924 and 1923 in respect of average activity. The annual means of observed sunspot relative numbers for 1922, 1923, 1924 were 14.2, 5.8, 16.7 respectively.

TABLE V.

| Month.           | Q days.      |              | " 0 " days.  |              | " 1 " days.  |              | " 2 " days.  |              | D days       |              |
|------------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|
|                  | $\Sigma R^2$ | $\Sigma r^2$ | $\Sigma R^2$ | $\Sigma r^2$ | $\Sigma R^2$ | $\Sigma r^2$ | $\Sigma R^2$ | $\Sigma r^2$ | $\Sigma R^2$ | $\Sigma r^2$ |
|                  | 100          | 100          | 100          | 100          | 100          | 100          | 100          | 100          | 100          | 100          |
| 1924.            | $\gamma^2$   | $\gamma^2$   | $\gamma^2$   | $\gamma^2$   | $\gamma^2$   | $\gamma^2$   | $\gamma^2$   | $\gamma^2$   | $\gamma^2$   | $\gamma^2$   |
| January .. ..    | 11           | 0.3          | 18           | 0.7          | 80           | 5.3          | 1255         | 77.0         | 1033         | 63.4         |
| February .. ..   | 13           | 0.4          | 18           | 0.9          | 119          | 6.9          | 486          | 40.6         | 269          | 17.7         |
| March .. ..      | 25           | 0.6          | 50           | 1.6          | 130          | 5.7          | 502          | 26.3         | 302          | 16.3         |
| April .. ..      | 53           | 1.0          | 55           | 1.5          | 112          | 4.0          | —            | —            | 144          | 6.1          |
| May .. ..        | 51           | 1.0          | 52           | 1.3          | 90           | 3.1          | 1009         | 43.9         | 837          | 36.4         |
| June .. ..       | 64           | 1.0          | 74           | 1.6          | 163          | 6.2          | 1232         | 64.7         | 1067         | 55.5         |
| July .. ..       | 73           | 1.2          | 66           | 1.2          | 128          | 4.6          | 262          | 17.4         | 220          | 10.6         |
| August .. ..     | 55           | 0.9          | 60           | 1.3          | 140          | 5.5          | —            | —            | 212          | 10.0         |
| September .. ..  | 66           | 1.3          | 60           | 1.4          | 137          | 5.5          | 424          | 22.7         | 345          | 18.5         |
| October .. ..    | 35           | 0.6          | 37           | 1.0          | 89           | 3.2          | 548          | 28.7         | 305          | 14.6         |
| November .. ..   | 12           | 0.3          | 18           | 0.8          | 88           | 3.5          | 716          | 41.0         | 244          | 12.2         |
| December .. ..   | 6            | 0.2          | 13           | 0.5          | 76           | 3.3          | —            | —            | 108          | 5.6          |
| Year, 1924 .. .. | 39           | 0.7          | 43           | 1.1          | 113          | 4.7          | 715          | 40.3         | 424          | 22.2         |
| Year, 1923 .. .. | 32           | 0.8          | 42           | 1.4          | 129          | 6.1          | 776          | 44.1         | 408          | 22.3         |
| Year, 1922 .. .. | 47           | 1.5          | 64           | 2.5          | 221          | 12.5         | 720          | 43.2         | 601          | 36.1         |

TABLE VI.—MEAN DIURNAL INEQUALITIES OF  $\Sigma r^2$  ON INTERNATIONAL QUIET DAYS FOR MONTHS AND SEASONS, 1924, Unit  $1\gamma^2$ .

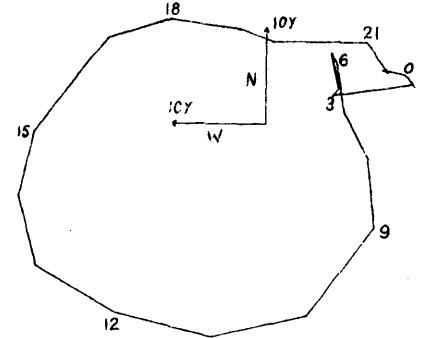
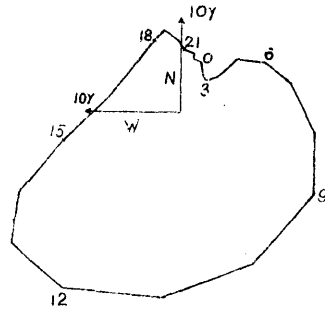
| Month and Season. | 1   | 2   | 3   | 4   | 5   | 6   | 7   | 8   | 9    | 10   | 11   | 12   | 13   | 14   | 15   | 16  | 17   | 18  | 19  | 20  | 21   | 22   | 23   | 24  | 24-0 (n.c. change). | Mean Value. |
|-------------------|-----|-----|-----|-----|-----|-----|-----|-----|------|------|------|------|------|------|------|-----|------|-----|-----|-----|------|------|------|-----|---------------------|-------------|
| Jan. ...          | +47 | -2  | -23 | -28 | -13 | -31 | -31 | -17 | -11  | -11  | -5   | +3   | +7   | +1   | 0    | +4  | -9   | -5  | -7  | +33 | +1   | -3   | +22  | +77 | -35                 | 33          |
| Feb. ...          | -28 | -31 | -33 | -15 | -29 | -43 | -33 | +4  | +7   | -4   | +65  | +34  | +8   | +73  | +40  | +6  | -14  | -12 | -22 | 18  | +9   | -12  | +17  | +29 | -15                 | 44          |
| March ...         | +39 | +26 | +19 | -18 | -19 | -40 | -15 | +2  | +25  | -1   | +60  | +60  | -8   | +26  | +51  | +31 | -31  | -35 | -37 | -12 | -50  | -43  | -33  | +7  | +60                 | 62          |
| April ...         | -83 | -73 | -59 | -26 | -67 | -63 | -55 | -16 | +38  | +36  | +128 | +183 | +136 | +115 | +36  | +8  | -39  | +14 | -46 | -37 | -42  | -29  | -37  | -23 | -34                 | 97          |
| May ...           | -62 | -76 | -83 | -81 | -40 | -70 | -61 | -4  | +42  | +27  | +103 | +177 | +13  | +39  | +51  | +16 | +103 | -5  | +3  | -5  | -61  | +37  | -17  | -45 | -38                 | 97          |
| June ...          | -61 | -52 | -56 | -47 | -42 | -27 | -1  | +69 | +100 | +143 | +269 | +51  | +13  | +21  | +67  | +6  | +19  | -43 | -67 | -90 | -62  | -81  | -65  | -63 | +58                 | 99          |
| July ...          | -99 | -86 | -99 | -60 | -57 | -28 | -4  | +42 | +16  | +140 | +277 | +264 | +30  | +30  | +59  | +31 | +67  | -50 | -32 | -60 | -92  | -88  | -108 | -92 | -6                  | 119         |
| Aug. ...          | -67 | -77 | -76 | -61 | -61 | -28 | -35 | +11 | +76  | +33  | +104 | +139 | +33  | +39  | +54  | +58 | +3   | +13 | -2  | -31 | -25  | -58  | +1   | -44 | -14                 | 85          |
| Sept. ...         | -48 | -65 | -65 | -95 | -73 | -41 | -12 | +38 | +33  | +75  | +154 | +389 | +154 | +73  | +107 | -36 | -87  | -98 | -39 | -69 | -117 | -107 | -52  | -18 | +50                 | 126         |
| Oct. ...          | -45 | -46 | -52 | -49 | -51 | -46 | -19 | +29 | +45  | +34  | +143 | +36  | +126 | +13  | +33  | -19 | -19  | -24 | -38 | +21 | -30  | -36  | +3   | -27 | +1                  | 56          |
| Nov. ...          | -31 | -8  | +21 | -15 | -14 | -17 | -12 | +30 | +31  | +13  | +7   | +25  | +10  | +46  | +21  | -1  | -16  | -20 | -7  | -9  | -8   | -8   | -19  | -20 | -10                 | 27          |
| Dec. ...          | +25 | -14 | -16 | -16 | -22 | -22 | -22 | -11 | -10  | -10  | +1   | +14  | +9   | +39  | +15  | +1  | -3   | +4  | +10 | +2  | -1   | +8   | +5   | +13 | -37                 | 19          |
| Year ...          | -34 | -42 | -43 | -43 | -41 | -38 | -25 | +15 | +33  | +40  | +109 | +115 | +44  | +43  | +45  | +9  | -2   | -22 | -24 | -23 | -40  | -35  | -24  | -17 | -17                 | 72          |
| Winter ...        | +3  | -14 | -13 | -19 | -20 | -28 | -25 | +2  | +4   | -3   | +17  | +19  | +9   | +40  | +19  | +3  | -11  | -8  | -7  | +2  | 0    | -4   | +6   | +25 | +1                  | 31          |
| Equinox ...       | -34 | -40 | -39 | -47 | -53 | -48 | -25 | +13 | +35  | +36  | +121 | +167 | +102 | +57  | +57  | -4  | -44  | -36 | -40 | -24 | -60  | -54  | -30  | -15 | -15                 | 85          |
| Summer ...        | -72 | -73 | -79 | -62 | -50 | -38 | -25 | +30 | +59  | +86  | +188 | +158 | +22  | +32  | +58  | +28 | +48  | -21 | -25 | -47 | -60  | -48  | -47  | -61 | -61                 | 100         |

VECTOR DIAGRAMS ILLUSTRATING DIURNAL VARIATION IN  
MAGNETIC FORCE ON QUIET DAYS AND DISTURBED DAYS.  
ESKDALEMUIR 1924.

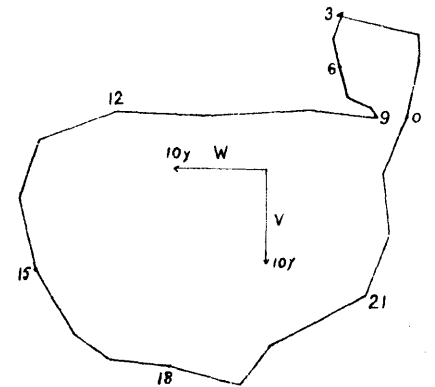
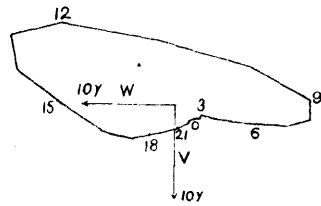
QUIET DAYS.

DISTURBED DAYS.

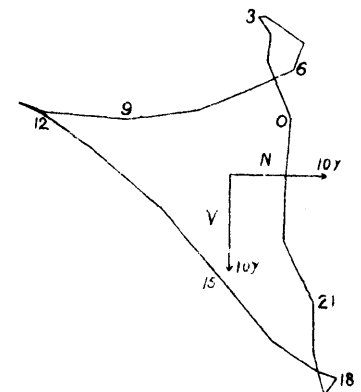
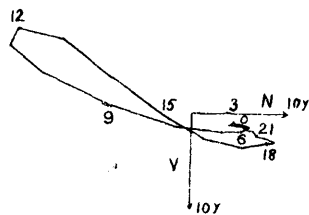
Horizontal  
Components.



Prime Vertical  
Components.



Meridian  
Components.



Scale, 0.05 ins. = 1γ.

DIURNAL VARIATION IN THE COMPONENTS OF MAGNETIC FORCE ON  
 QUIET AND DISTURBED DAYS, ESKDALEMUIR 1924.  
 (THE YEAR AND THE SEASONS.)

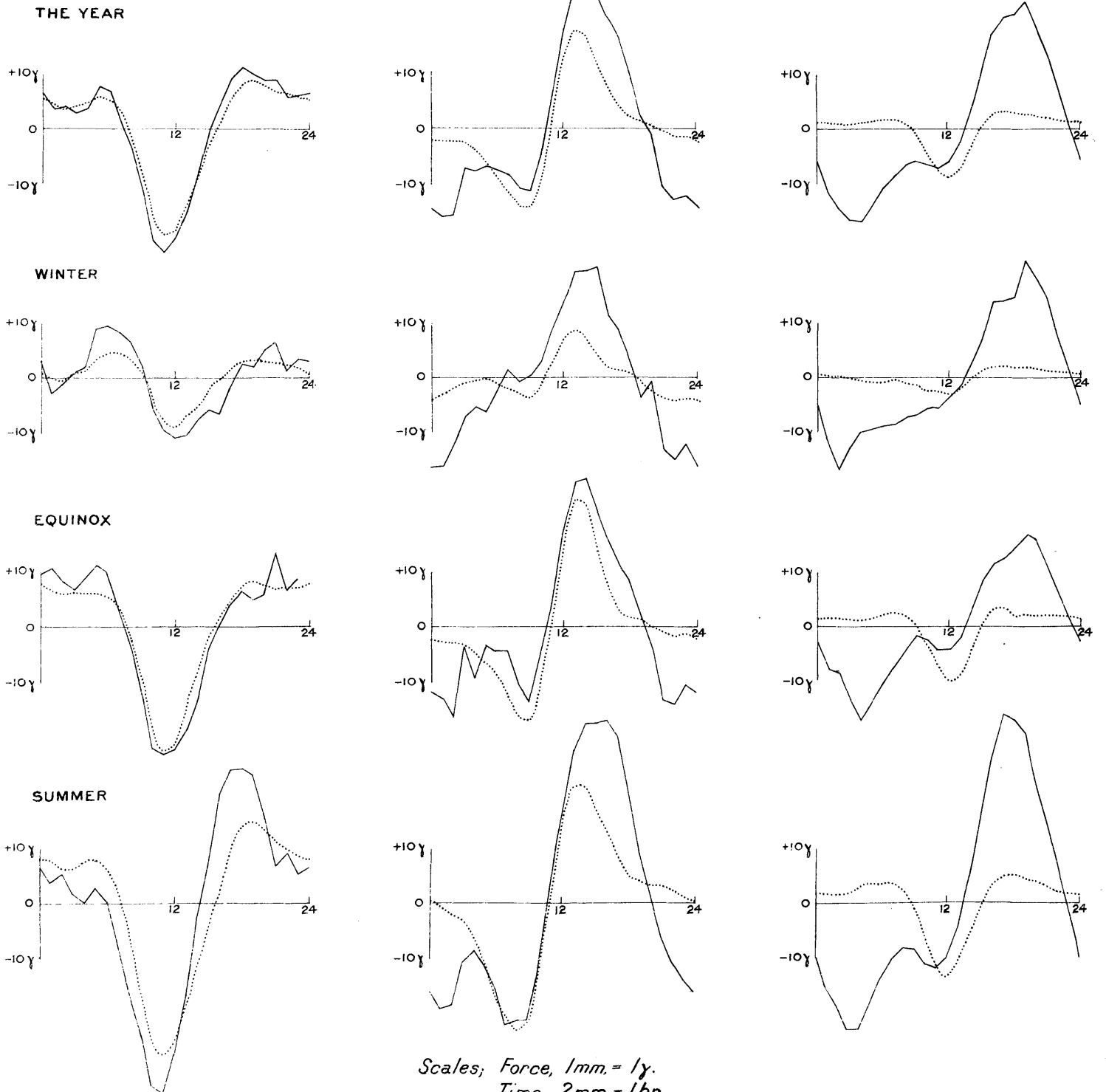
QUIET DAYS Dotted lines .....

DISTURBED DAYS Continuous lines \_\_\_\_\_

North Component.

West Component.

Vertical Component.



Scales; Force, 1mm. = 1γ.  
 Time, 2mm. = 1hr.

*Daily Variation of  $\Sigma r^2$ .*—As for the years 1920–1923 attention has been confined to the five international quiet days of each month and the mean values of  $\Sigma r^2$  have been obtained for the hour periods centred at exact hours G.M.T. The results, in the form of mean diurnal inequalities for the months, seasons and year, are shown in Table VI. The mean values of the difference between the 24h and 0h values of  $\Sigma r^2$  are also given.

The mean inequalities for the year and seasons resemble fairly closely those for 1923. For the year, winter, and summer the range of the mean inequality was greater in 1924 than in 1923.

*Diurnal Inequalities.*—The mean diurnal inequalities for “all” days, international quiet and disturbed days, for the months, seasons and the year, are given in Tables 259–276, and the corresponding inequality ranges in Table 277. The inequalities of N, W, and V for international quiet and disturbed days are shown graphically in Plates I and II, the representation in the latter plate being in the form of vector diagrams.

### (1) Ranges.

(a) All Days.—There is a general tendency for the 1924 ranges to exceed those for 1923. In the months June to September and in November the ranges for all three components exceed the corresponding values for 1923. In April and December the ranges are low, compared with the values in the corresponding months in earlier years.

(b) Quiet Days.—In every month, excepting March, the range of the mean inequality in V exceeds the corresponding value for 1923. In the case of N and W, while the tendency is for the 1924 values to exceed those in 1923, there are exceptions, e.g. in the winter months the W ranges are less than in 1923. The range of the N inequality in January and December is noticeably small.

(c) Disturbed Days.—In January, June, and November the ranges for all three components are greater than, and in March, April, and September less than, the corresponding quantities in 1923. The range in the V inequality for January is the largest for that month during the years 1915–24; the W and V ranges for December are the smallest during the years 1915–1924.

### (2) Harmonic Coefficients.

(a) All Days.—For the year and for summer the amplitudes of the 24 and 12-hour terms, for all three components, show an increase from 1923.

(b) Quiet Days.—The values of  $c_1$  and  $c_2$  for the year and the seasons are greater than in 1923, excepting in the case of W in winter. With regard to phase angles,  $\alpha_1$  and  $\alpha_2$  for N in equinox are larger than usual,  $\alpha_1$  for V in winter is less than in several former years, and for W  $\alpha_1$  and  $\alpha_2$  in all seasons are larger than in 1923.

(c) Disturbed Days.—The amplitude of the principal term is greater than in 1923 for N in equinox and summer, and for W and V in winter, summer and year. In all three components the value of  $c_2$  in summer exceeds the 1923 value. For equinox,  $c_1$  and  $c_2$  for W and V, and  $c_2$  for N, are the smallest for the period 1916–24.

*Daily Range.*—The values of mean absolute daily range for the months and seasons of the year, together with the corresponding means for 1913–1923 (1914–1923 for V), are given in Table VII; the ranges are also expressed as percentages of the mean absolute daily range for the year.

TABLE VII.—ABSOLUTE DAILY RANGE. MEAN MONTHLY VALUES.

| Month.       | Mean Absolute Daily Range. |    |    |                |    |    | Mean Daily Range expressed as Percentage of Yearly Mean. |     |     |                |     |     |
|--------------|----------------------------|----|----|----------------|----|----|--|-----|-----|----------------|-----|-----|
|              | 1924.                      |    |    | Mean 1913-23*. |    |    | 1924.  |     |     | Mean 1913-23*. |     |     |
|              | N.                         | W. | V. | N.             | W. | V. | N.   | W.  | V.  | N.             | W.  | V.  |
| January ..   | 7                          | 7  | 7  | 7              | 7  | 7  | %  | %   | %   | %              | %   | %   |
| February ..  | 55                         | 63 | 39 | 59             | 63 | 32 | 93   | 103 | 134 | 72             | 80  | 68  |
| March ..     | 49                         | 53 | 20 | 63             | 69 | 36 | 83   | 87  | 69  | 77             | 87  | 77  |
| April ..     | 64                         | 70 | 27 | 88             | 89 | 56 | 108  | 115 | 93  | 107            | 113 | 119 |
| May ..       | 55                         | 59 | 24 | 93             | 85 | 55 | 93   | 97  | 83  | 113            | 108 | 117 |
| June ..      | 73                         | 65 | 45 | 97             | 85 | 57 | 124  | 107 | 155 | 118            | 108 | 121 |
| July ..      | 88                         | 80 | 47 | 87             | 83 | 42 | 149  | 131 | 162 | 106            | 105 | 89  |
| August ..    | 67                         | 68 | 28 | 85             | 80 | 44 | 114  | 111 | 97  | 104            | 101 | 94  |
| September .. | 60                         | 62 | 27 | 98             | 87 | 57 | 102  | 102 | 93  | 120            | 110 | 121 |
| October ..   | 71                         | 73 | 34 | 93             | 87 | 59 | 120  | 120 | 117 | 113            | 110 | 125 |
| November ..  | 55                         | 59 | 22 | 90             | 88 | 57 | 93   | 97  | 76  | 110            | 111 | 121 |
| December ..  | 42                         | 49 | 20 | 65             | 67 | 37 | 71   | 80  | 69  | 79             | 85  | 79  |
| Year ..      | 31                         | 35 | 12 | 59             | 63 | 33 | 53   | 57  | 41  | 72             | 80  | 70  |
| Winter ..    | 44                         | 50 | 23 | 61             | 65 | 35 | 75   | 82  | 79  | 74             | 82  | 74  |
| Equinox ..   | 61                         | 65 | 27 | 91             | 87 | 57 | 103  | 107 | 93  | 111            | 110 | 121 |
| Summer ..    | 72                         | 69 | 37 | 92             | 84 | 50 | 122  | 113 | 128 | 112            | 106 | 106 |
| Year ..      | 59                         | 61 | 29 | 82             | 79 | 47 | —  | —   | —   | —              | —   | —   |

\* 1914-23 for V.

For each of the months January, May, June, July, August, and November the value of the mean absolute daily range in N, W, and V was greater in 1924 than in 1923, while for February, October, and December the reverse is true. The mean ranges for April, October, and December are noticeably low. For the year as a whole the mean range in each component is slightly greater than in 1923; the means for the equinoctial months being less, and those for the summer being greater, than the corresponding values in 1923.

On the days January 1st, 5th, 13th, February 15th, November 30th, December 5th, 6th, 26th, 29th, 30th, the daily range in either N or W did not exceed 20  $\gamma$ , and on only two of these days did the range in V exceed 10  $\gamma$ .

The frequency distribution of absolute daily ranges recorded in 1924 is shown in Table VIII, which also contains the percentage distribution for the period 1913-1923, or 1914-1923.

TABLE VIII.—FREQUENCY DISTRIBUTION OF ABSOLUTE DAILY RANGE.

| Range.       | Number of Cases<br>1924. |    |     | Percentage Distribution. |       |          |       |          |       |
|--------------|--------------------------|----|-----|--------------------------|-------|----------|-------|----------|-------|
|              |                          |    |     | N.                       |       | W.       |       | V.       |       |
|              | $\gamma$                 | N. | W.  | V.                       | 1924. | 1913-23. | 1924. | 1913-23. | 1924. |
| 0-9          | 0                        | 0  | 30  | 0.0                      | 0.1   | 0.0      | 0.1   | 8.3      | 5.8   |
| 10-19        | 16                       | 11 | 131 | 4.4                      | 2.5   | 3.0      | 1.5   | 36.2     | 20.0  |
| 20-29        | 36                       | 40 | 114 | 9.9                      | 5.6   | 11.0     | 5.1   | 31.5     | 24.8  |
| 30-39        | 46                       | 36 | 41  | 12.6                     | 7.6   | 9.9      | 7.7   | 11.3     | 14.2  |
| 40-49        | 64                       | 53 | 14  | 17.5                     | 10.2  | 14.5     | 11.4  | 3.9      | 8.5   |
| 50-59        | 71                       | 82 | 5   | 19.5                     | 12.9  | 22.5     | 12.6  | 1.4      | 5.1   |
| 60-69        | 46                       | 47 | 8   | 12.6                     | 13.3  | 12.9     | 13.4  | 2.2      | 4.3   |
| 70-79        | 23                       | 24 | 4   | 6.3                      | 9.8   | 6.6      | 12.5  | 1.1      | 3.3   |
| 80-89        | 18                       | 21 | 1   | 4.9                      | 8.1   | 5.8      | 7.8   | 0.3      | 2.4   |
| 90-99        | 12                       | 15 | 2   | 3.3                      | 6.2   | 4.1      | 6.9   | 0.6      | 2.1   |
| 100-109      | 8                        | 9  | 2   | 2.2                      | 5.2   | 2.5      | 4.5   | 0.6      | 1.1   |
| 110-119      | 8                        | 4  | 1   | 2.2                      | 3.5   | 1.1      | 3.2   | 0.3      | 1.2   |
| 120-129      | 2                        | 5  | 2   | 0.5                      | 3.2   | 1.4      | 2.6   | 0.6      | 0.8   |
| 130-139      | 3                        | 4  | 0   | 0.8                      | 2.4   | 1.1      | 1.9   | 0.0      | 0.8   |
| 140-149      | 4                        | 4  | 1   | 1.1                      | 1.5   | 1.1      | 2.2   | 0.3      | 0.5   |
| 150-159      | 0                        | 2  | 0   | 0.0                      | 1.3   | 0.5      | 1.1   | 0.0      | 0.6   |
| 160-169      | 1                        | 2  | 1   | 0.3                      | 1.1   | 0.5      | 0.8   | 0.3      | 0.5   |
| 170-179      | 1                        | 1  | 0   | 0.3                      | 0.8   | 0.3      | 1.0   | 0.0      | 0.4   |
| 180-189      | 1                        | 1  | 0   | 0.3                      | 0.6   | 0.3      | 0.7   | 0.0      | 0.4   |
| 190-199      | 1                        | 0  | 0   | 0.3                      | 0.5   | 0.0      | 0.6   | 0.0      | 0.2   |
| 200+         | 4                        | 4  | 5   | 1.1                      | 3.6   | 1.1      | 2.5   | 1.4      | 2.7   |
| Days omitted | 1                        | 1  | 4   | —                        | —     | —        | —     | —        | —     |

TABLE IX.—PRINCIPAL MAGNETIC DISTURBANCES RECORDED AT ESKDALEMUIR, 1924.

Where the beginning of a disturbance has been marked by a "sudden commencement," the serial number is followed by an asterisk (\*), and the time entered in the second column is that of the sudden commencement, estimated to the nearest minute. In other cases, the exact hour nearest the time at which disturbance may be regarded as having begun is entered in the second column. To the tabulated values of maximum and minimum the following have to be added:—N, 15000  $\gamma$ ; W, 4000  $\gamma$ ; V, 44000  $\gamma$ .

| No. | From          | To.        | North Component. |                   |          |                         |          | West Component. |          |          |          |          | Vertical Component. |          |          |                                 |          |
|-----|---------------|------------|------------------|-------------------|----------|-------------------------|----------|-----------------|----------|----------|----------|----------|---------------------|----------|----------|---------------------------------|----------|
|     |               |            | Max.             | Time.             | Min.     | Time.                   | Range    | Max.            | Time.    | Min.     | Time.    | Range    | Max.                | Time.    | Min.     | Time.                           | Range    |
|     |               |            | $\gamma$         | d h m             | $\gamma$ | d h m                   | $\gamma$ | $\gamma$        | d h m    | $\gamma$ | d h m    | $\gamma$ | $\gamma$            | d h m    | $\gamma$ | d h m                           | $\gamma$ |
| 1*  | Jan. 29 5 29  | Jan. 30 10 | 1104             | 29 18 5           | 807      | 30 1 43                 | 297      | 769             | 29 17 54 | 434      | 29 18 21 | 335      | 1195                | 29 20 32 | <681     | { 30 1 23 }<br>to<br>{ 30 2 1 } | >514     |
| 2   | Feb. 20 2     | Feb. 21 2  | 1074             | 20 17 27          | 961      | 20 19 5                 | 113      | 680             | 20 13 0  | 507      | 20 19 8  | 173      | 990                 | 20 17 18 | 913      | 20 5 10                         | 77       |
| 3   | Mar. 7 10     | Mar. 8 10  | 1121             | 7 20 30           | 979      | 7 21 31                 | 142      | 663             | 7 13 24  | 514      | 7 20 26  | 149      | 950                 | 7 20 10  | 899      | 7 23 3                          | 51       |
| 4   | Mar. 30 6     | Mar. 31 8  | 1097             | 30 21 13          | 966      | 30 15 32                | 131      | 685             | 30 14 46 | 502      | 30 20 58 | 183      | 972                 | 30 18 35 | 883      | 31 3 27                         | 89       |
| 5*  | Apr. 24 21 37 | Apr. 26 24 | 1083             | 25 0 36           | 953      | 26 11 23                | 130      | 666             | 26 13 34 | 571      | 25 7 8   | 95       | 974                 | 26 16 8  | 900      | 25 10 52<br>18 25               | 74       |
| 6*  | May 21 5 58   | May 24 6   | 1143             | 22 16 15          | 832      | 23 0 20                 | 311      | 705             | 22 16 19 | 483      | 23 0 31  | 222      | 1064                | 22 16 48 | 743      | 23 0 22                         | 321      |
| 7   | May 28 0      | May 29 8   | 1070             | 28 16 28          | 956      | 28 6 52                 | 114      | 700             | 28 4 32  | 567      | 29 6 11  | 133      | 986                 | 28 17 40 | 845      | 28 4 39                         | 141      |
| 8*  | June 9 14 14  | June 12 4  | 1252             | 10 16 6           | 926      | 10 20 48                | 326      | 851             | 10 16 6  | 517      | 11 22 59 | 334      | 1216                | 10 16 36 | 824      | 11 2 45                         | 392      |
| 9   | June 18 7     | June 20 22 | 1117             | 18 18 12          | 947      | 20 1 18                 | 170      | 677             | 18 16 50 | 514      | 19 21 0  | 163      | 969                 | 19 18 18 | 813      | 20 3 21                         | 156      |
| 10* | July 9 5 23   | July 11 2  | 1092             | 9 19 29           | 985      | { 9 12 40<br>10 10 53 } | 107      | 654             | 9 16 36  | 552      | 9 7 14   | 102      | 957                 | 9 19 0   | 891      | 9 12 11                         | 66       |
| 11  | July 20 10    | July 22 6  | 1092             | 20 16 40          | 959      | 21 9 5                  | 133      | 648             | 20 16 41 | 562      | 21 7 11  | 86       | 959                 | 20 19 48 | 923      | 20 12 19                        | 36       |
| 12  | July 26 8     | July 28 8  | 1070             | 26 19 0           | 969      | 26 10 15                | 101      | 666             | 26 12 59 | 534      | 27 23 22 | 132      | 973                 | 27 18 47 | 908      | 27 10 18                        | 65       |
| 13  | Aug. 17 3     | Aug. 18 8  | 1118             | 17 19 11          | 985      | 18 2 38                 | 133      | 650             | 17 19 22 | 543      | 18 1 50  | 107      | 966                 | 17 18 58 | 867      | 18 3 10                         | 99       |
| 14  | Sept. 1 1     | Sept. 1 24 | 1081             | 1 21 23           | 964      | 1 9 42                  | 117      | 648             | 1 7 30   | 550      | 1 21 3   | 98       | 984                 | 1 18 11  | 936      | 1 7 50                          | 48       |
| 15  | Sept. 7 10    | Sept. 9 6  | 1088             | 7 18 29           | 950      | 7 21 42                 | 138      | 665             | 8 3 17   | 491      | 7 20 17  | 174      | 1016                | 7 19 3   | 856      | 8 3 33                          | 160      |
| 16  | Sept. 23 12   | Sept. 24 8 | 1086             | 23 20 39          | 986      | 24 2 23                 | 100      | 631             | 24 2 48  | 520      | 24 2 11  | 111      | 969                 | 23 21 40 | 857      | 24 3 40                         | 112      |
| 17  | Oct. 22 22    | Oct. 25 10 | 1105             | 23 22 3           | 905      | 24 9 39                 | 200      | 637             | 25 5 5   | 473      | 24 22 18 | 164      | 976                 | 23 20 3  | 851      | 24 4 52                         | 125      |
| 18* | Nov. 19 10 2  | Nov. 20 4  | 1049             | 19 10 10          | 965      | 19 14 47                | 84       | 647             | 19 14 43 | 535      | 19 22 0  | 112      | 980                 | 19 16 38 | 932      | 19 12 40                        | 48       |
| 19  | Nov. 24 11    | Nov. 25 5  | 1095             | 24 23 7           | 935      | 24 23 45                | 160      | 644             | 24 15 18 | 501      | 24 23 50 | 143      | 1071                | 24 16 19 | 911      | 24 23 40                        | 160      |
| 20* | Dec. 11 22 57 | Dec. 13 8  | 1082             | 11 23 47<br>23 49 | 1000     | 12 11 0                 | 82       | 593             | 12 13 27 | 497      | 12 21 9  | 90       | 950                 | 12 21 22 | 922      | 12 0 10                         | 28       |

For N and W the interval of maximum frequency in 1924 is  $50-59\gamma$ , as compared with  $40-49\gamma$  in 1923; and for each of these components it will be noticed that on practically 50 per cent. of the days the range fell within the interval  $40-69\gamma$ . On more than one third of the days the range in V was in the interval  $10-19\gamma$  which, as in 1923, is the interval of maximum frequency. In 1924 there were 10 days on which the range of a horizontal component was  $160\gamma$  or more; the numbers of such days in 1919, 1920, 1921, 1922, 1923 being 55, 36, 27, 32, 11 respectively.

*Principal Magnetic Storms during 1924.*—Particulars of the principal magnetic storms recorded during the year are given in Table IX. The magnetograms for the most highly disturbed days are not reproduced in this volume, but photographic copies may be obtained on application to the Director, Meteorological Office, Air Ministry, Kingsway, London, W.C. 2.

### Remarks on the Autographic records for Terrestrial Magnetism, 1924.

*January.*—Conditions were very quiet on the 1st, 13th, and 14th. Fairly considerable disturbance occurred on the 3rd and the 10th. Following after two quiet days, 20th and 21st, a period of disturbance began shortly after 22d 0h and continued for about three days; the largest changes occurring during the 23rd.

A comparatively small sudden "commencement," occurring at 29d 5h 28m, initiated a storm which, in respect of absolute range, was the largest recorded at Eskdalemuir in 1924. The largest and most rapid changes were confined to the interval 29d 17h to 30d 4h. Perhaps the most striking single variation was the decrease in westerly declination by  $59'$  between 17h 55m and 18h 20m, at which times occurred the extreme values in declination during the storm. In the course of a large oscillatory movement N increased by  $272\gamma$  between 1h 40m and 2h 20m on the 30th. From 17h 30m V increased fairly rapidly, but with interruptions, to a crest centred near 19h. This was followed at 20h 32m by a peak maximum, after which V decreased to a sharp minimum which occurred between 1h 23m and 2h 1m on the 30th. The recovery from the minimum was tolerably regular. Between 17h 50m and 20h on the 29th aurora was visible from Eskdalemuir Observatory. The display was the finest observed in the locality in recent years. Vertical structure, although faint, was noticed between 17h 50m and 18h. Somewhat later the predominating features were persistent glow and arch effects. Later in the evening the aurora was obscured by low cloud but glow was still discernible between 22h and 23h. The absolute ranges recorded during this storm were N,  $297\gamma$ ; W,  $335\gamma$ ; V,  $> 514\gamma$ . Further remarks on the records obtained at the Lerwick, Eskdalemuir, and Kew observatories during this storm will be found on p. 22, (Lerwick section).

*February.*—The first disturbance worthy of mention commenced about 5d 10h, the principal movements, which were comparatively moderate in magnitude, occurring between 5d 20h and 6d 4h. Conditions remained very quiet on the 14th, 15th, and 18th. The largest disturbance of the month developed in the early hours of the 20th, the more prominent features being bay-shape movements in W, below the undisturbed value, culminating at 20d 17h 18m and 20d 19h 10m, and peaks in V at the same times. Apart from a quiet interval during the first half of the 24th, moderate disturbance persisted until the 26th.

*March.*—From the 2nd to the 12th conditions were mainly moderately disturbed. On the 7th, prominent peaks in N occurred at 20h 29m, 22h 44m, and 23h 38m. After several comparatively quiet days disturbance of a moderate but fairly continuous character persisted from the 19th to the 24th. A small "sudden commencement" at 29d 3h 36m was followed during the remainder of that day by very slight disturbance, but much larger disturbance developed on the 30th.

*April.*—Having regard to the season, the degree of disturbance was particularly small.



A "sudden commencement" which occurred at 6d 8h 10m is of somewhat different character from many of the cases of this phenomenon which have been recorded at Eskdalemuir. In N and W the initial sharp increase is followed immediately by a decrease to well below the undisturbed value, and it is not until from seven to ten minutes after the initial rise that the undisturbed value is exceeded again. The disturbance ensuing upon this "sudden commencement" was comparatively slight and subsided by 6d 24h. An example of a more common type of "sudden commencement" is that at 24d 21h 37m. This initiated a larger disturbance which, interrupted by a quiet period from 25d 18h to 26d 6h, continued until about 26d 24h.

*May.*—The degree of disturbance during the first part of this month was low, the least quiet days being the 12th and 16th.

One of the largest storms of the year began with a "sudden commencement" at 21d 5h 58m and continued for 72 hours. During the interval 8h to 12h on the 21st the values of N and W were considerably less than the undisturbed; but apart from this, and although the remainder of the first day was marked by highly irregular fluctuations in N and in W, the largest ranges of movement did not take place until after 22d 2h. In each component the maximum value fell between 16h 15m and 16h 48m on the 22nd, and the minimum between 0h 20m and 0h 31m on the 23rd. The cessation of the storm was comparatively abrupt, but there was a fair amount of irregularity in the curves for the 25th and 26th.

A moderately large disturbance developed after midnight on the 27th, the minimum in V occurring early, viz., at 4h 39m on the 28th.

*June.*—After a quiet period of several days duration a "sudden commencement" at 9d 14h 14m initiated a storm which continued until the 12th. The largest and most rapid changes occurred during the 24 hours commencing at 10d 6h. Well-marked oscillatory changes marked the interval, 15h to 18h on the 10th, in which each component attained to the maximum value. There were further but smaller oscillations, particularly in N, between 19h and 21h on the 10th. The comparatively quiet interval, 7h to 13h on the 11th, was followed by further disturbance which culminated in a prominent oscillatory movement in N and in W between 22h and 24h on the 11th; the ranges in N and W during this movement being 166γ and 135γ, respectively.

Rather considerable disturbance occurred on the 18th, 19th and 20th. The curves for the remainder of the month show no very prominent features.

*July.*—Moderate disturbance was fairly general throughout this month, but there was no really large disturbance. A "sudden commencement" occurred at 9d 5h 23m, the principal feature of the ensuing disturbance being two or three rather prominent waves in N between 14h and 18h on the 9th. The other more highly disturbed periods occurred on the 20th, 21st, and 25th to 28th.

*August.*—The chief disturbances, of moderate character in each case, occurred on 4th–5th, 17th–18th, 29th–30th. In the second, and largest, of these disturbances the most prominent changes took place between 19h and 20h on the 17th and between 2h and 4h on the 18th. Well marked minima in N and V occurred during the latter interval.

*September.*—The month was characterised by an increase in the general level of disturbance. The 1st was one of the more highly disturbed days of the month. A very moderate disturbance on the 4th began at 4d 5h 45 to 46m with a small "sudden commencement." The latter is of interest as the first in which the changes in the vertical component were recorded at Eskdalemuir by the coil and galvanometer method (\*). From the record so obtained it is concluded that the "sudden commence-

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(\*) *On the Vertical Force Changes during the "Sudden Commencement" of a Magnetic Storm*, by A. Crichton Mitchell, D.Sc., Proc. Roy. Soc., Edin., Vol. XLV., p. 297.

ment" occurred at 4d 5h 45.3m. Fairly considerable disturbance occurred between 5d 16h and 6d 10h. A storm commenced at 10h on the 7th and continued until the 9th. There were no remarkably large changes. A prominent depression in V, between 2h and 5h on the 8th, was associated with a large wave in W, the ranges in W and V during this interval being 150 $\gamma$  and 99 $\gamma$ , respectively. The third of the larger disturbances of the month occurred during the night of the 23rd-24th. The irregular wave-like or hump changes in N between 20h and 22h on the 27th and 28th are somewhat suggestive of "repetition."

*October.*—From the 1st to 21st the only disturbances were of very moderate magnitude. Very quiet conditions prevailed from the 10th to the 14th. There was a small "sudden commencement" at 17d 16h 13m, but the subsequent disturbance was of a low order. The principal disturbance of the month commenced shortly after 22d 22h. From 0h to 8h on the 23rd V was below the undisturbed value, and during this interval there were fairly considerable, but not very rapid, variations in N and W. After a quiet period lasting from 8h to 15h the major part of the disturbance developed, activity being greatest between 23d 20h and 24d 12h. In V there was no prominent maximum, and the minimum in this component did not occur until nearly 5h on the 24th. There was a further development of disturbance between 24d 21h and 25d 9h, a maximum in N and a minimum in W between 22h and 23h on the 24th being prominent features. The remainder of the month was quiet, apart from moderate disturbance between 27d 18h and 28d 3h, and after 19h on the 31st. The outstanding feature of the latter, otherwise small, disturbance occurred near the end, and consisted of a sharp smooth decrease from and recovery to approximately undisturbed value in N and W. In both components the minimum value occurred between 17 and 19 minutes after midnight, the defect from the undisturbed value being about 49 $\gamma$  in each case. The main part of the decrease and subsequent recovery in N and W occurred between 12 and 26 minutes after midnight. V increased by 7 $\gamma$  between 13 and 20 minutes after midnight and then decreased, but rather more slowly, to the approximately undisturbed value.

*November.*—"Sudden commencements" occurred at 9d 7h 15m, 19d 10h 2m, 25d 23h 56m. The first and third of these were followed by slight disturbances, but the "sudden commencement" on the 19th initiated the second largest disturbance of the month. There were no especially prominent features in this disturbance.

A moderately large storm lasted from 24d 11h to 25d 5h. During this interval N was mainly below the normal undisturbed value. Between 23h and 24h 30m there were three well marked oscillations in N and in W, the range in N during this interval being 160 $\gamma$ . In V there were two crests, viz., between 16h and 17h, and between 19h and 20h. This component fell below the undisturbed value only between 24d 23h and 25d 1h, and then by a comparatively small amount.

"Bays" in W were centred near 21d 19h 40m and 26d 21h 20m, the value of the component falling below the undisturbed in both cases.

*December.*—Conditions were quiet during the first six and the last seven days of the month.

The chief disturbance began with a "sudden commencement" at 11d 22h 57m. The larger changes occurred during the first seven hours of the disturbance and between 12d 21h and 13d 2h. In the first hour of the latter interval W fell below the undisturbed value in a prominent "bay" movement. The range in V during the disturbance was only 28 $\gamma$ .

A "sudden commencement" occurred at 17d 19h 16m, but the ensuing disturbance was comparatively small.

Moderate disturbance persisted from 20d 15h to 21d 18h. A "bay" in N was centred at 23d 10h 50m, the value of N at that time being 34 $\gamma$  below the undisturbed value.

## SEISMOLOGY.

**Notes on Instruments.**—As in previous years, the instruments in use were three Galitzin pendulums, with galvanometric registration, arranged to record earth displacements in the north, east and vertical directions. The installation is situated in ground floor rooms of the principal building of the Observatory, the pendulums being placed on massive concrete pillars which extend down to boulder clay and are independent of the floor.

For detailed descriptions of the Galitzin seismographs and for particulars of the interpretation of the records, reference may be made to *Vorlesungen über Seismometrie* by the late Prince B. Galitzin, to *Modern Seismology* by the late G. W. Walker, or to *Dictionary of Applied Physics*, Vol. III.

A partial determination of the constants of the instruments was made, in somewhat unfavourable circumstances, in 1924, but it is considered that no serious error has been introduced by using, where necessary, the values found in 1915 and 1916 (see *British Meteorological and Magnetic Year Book*, 1915). It may be stated that the Galitzin vertical pendulum is particularly sensitive to temperature changes, and as the temperature variation in the room is fairly considerable frequent adjustments of the pendulum are necessary. For this reason the records from this instrument are regarded as only qualitative in certain respects. At the same time it must be noted that the vertical record is an important factor in the determination of an epicentre from the records of an earthquake at a single station.

The situation of the Observatory is such that the effect of wind produces undesirably large disturbances on the records, and on occasions the reading of an earthquake record is rendered quite impossible by the large and more or less irregular but persistent wind disturbance.

During 1924 the clockwork recording drums gave considerable trouble and in consequence of this several records were lost or spoiled.

**Notes on Tables.**—*Earthquakes.*—The Seismological Diary, Table 283, contains the particulars of the earthquakes recorded by the Galitzin instruments. The notation employed is as follows :—

P is the time of arrival of the first phase (longitudinal waves). S is the time of arrival of the second phase (transverse waves). L is the time of arrival of the long waves (surface waves).

PR<sub>1</sub>, PR<sub>2</sub> . . . are longitudinal waves reflected once, twice . . . at the earth's surface, prior to their arrival at the station. SR<sub>1</sub>, SR<sub>2</sub> . . . similarly denote reflected transverse waves. Any times given for reflected waves refer to the beginning of the disturbance at the observatory.

M<sub>1</sub>, M<sub>2</sub> . . . are the times of successive maxima of the displacement of the ground, corrected, if necessary, for the lag of the instrument.

*i* is the sudden commencement of a phase. *i*P means a sudden commencement of the P phase. *e* means an indistinct commencement of a phase. F is the end.

T, the period in seconds, is the duration of a double oscillation (to-and-fro-movement).  $\mu$  represents a micron (0.001 mm.).

$\Delta$  is the distance in kilometres of the epicentre measured along the arc of the great circle passing through the station.  $\alpha$  is the azimuth of the epicentre (0° to 360°) measured from north through east. The distance is estimated from Klotz's *Seismological Tables* (Publication of the Dominion Observatory, Ottawa, Vol. III, No. 2), which are also used for computing the time at which the disturbance originated. This time of origination is denoted by the letter O.

A<sub>N</sub>, A<sub>Z</sub> are the amplitudes of the components of the true displacement of the ground from the position of rest, and are measured in microns. When the displacement shown by the north-south seismographs is to the north a + sign is shown; for a displacement to the south a - sign is used. Similarly + is used for displacement to the east, - for displacements to the west. When the oscillations are of a simple harmonic character no sign is prefixed to the amplitude. (For reasons mentioned in the foregoing, values of A<sub>Z</sub> are not given.)

The suffixes N, E, Z indicate that the estimates refer to the records from the north-south, east-west and vertical seismographs respectively.

*Microseisms.*—Microseisms are the small and often extremely regular tremors which are practically always in evidence on the seismograph records. The periods range to something more than 8 seconds, and the larger periods are generally associated with larger amplitude. At Eskdalemuir the amplitudes are usually confined to the range 0 to  $8\mu$ . These minute tremors attain their greatest development in the winter months, and on occasion render the interpretation of earthquake records exceedingly difficult and sometimes impossible. Microseisms of the type referred to are believed to arise from other than purely local causes, but the precise nature of their origin remains in doubt. Although their period corresponds with that of sea waves there is evidence that the breaking of the latter on coasts does not afford a complete and satisfactory explanation of the known facts with regard to microseismic movement. There is evidence of a relationship between the travel of cyclonic disturbances in eastern seas and microseismic movement in China and Japan\*, and evidence of a somewhat similar nature has been adduced in favour of a connection between microseismic movement and atmospheric pressure gradient in Europe and Canada.

In Table 284 are given the amplitude and period of the microseisms shown by the North component Galitzin seismograph on each day at 0h, 6h, 12h and 18h. The group of waves of greatest amplitude occurring in the 30 minutes centring at the hour in question is selected, and the amplitude tabulated is the mean obtained from two or three waves in that group. The period is derived from a measurement made in the same group.

In computing the mean period occasions of zero amplitude are omitted. For reasons already mentioned there were no records on a number of days.

The mean values of amplitude and period for each month of 1924 and for the year, together with the means for the years 1911–1923, are given below.

MICROSEISMS. MONTHLY AND ANNUAL MEANS.

|                    | Jan.                   | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. | Oct. | Nov. | Dec. | Year |     |
|--------------------|------------------------|------|------|------|-----|------|------|------|-------|------|------|------|------|-----|
| 1924               | Amplitude ( $\mu$ ) .. | 2.4  | 1.6  | 1.7  | 1.3 | 0.5  | 0.6  | 0.3  | 0.5   | 1.1  | 1.1  | 1.7  | 2.8  | 1.3 |
|                    | Period (secs.) ..      | 6.3  | 5.4  | 5.6  | 5.3 | 4.3  | 4.8  | 4.1  | 4.6   | 4.6  | 5.3  | 5.5  | 6.5  | 5.2 |
| 1911<br>to<br>1923 | Amplitude ( $\mu$ ) .. | 2.6  | 2.4  | 1.8  | 1.2 | 0.7  | 0.5  | 0.3  | 0.5   | 0.9  | 1.3* | 1.8* | 2.3* | 1.3 |
|                    | Period (secs.) ..      | 6.0  | 6.1  | 5.8  | 5.3 | 4.8  | 4.6  | 4.3  | 4.4   | 5.0  | 5.2* | 5.6* | 5.9* | 5.2 |

\*Mean for 12 years only.

\* E. Gherzi. *Étude sur les Microséismes.* Observatoire de Zi-ka-wei, 1924.

Readings in milibars at exact hours, Greenwich Mean Time.

111. Eskdalemuir : H<sub>b</sub> (height of barometer cistern above M.S.L.) = 237.3 metres.

January, 1924.

Table for January 1924 showing pressure readings at Eskdalemuir. Columns include Day (1-31), Station Level (1-31), Mean (Station level), Mean (Sea level), and G.M.T. (1-24, Mean). Rows show hourly pressure readings in milibars.

112. Eskdalemuir : H<sub>b</sub> = 237.3 metres.

February, 1924.

Table for February 1924 showing pressure readings at Eskdalemuir. Columns include Station Level (1-29), Mean (Station level), Mean (Sea level), and G.M.T. (1-24, Mean). Rows show hourly pressure readings in milibars.

NOTE.—When pressure exceeds 1000 mb. the leading figure 1 is not printed, i.e., 1005.6 mb. is written 005.6. This rule does not, however, apply to monthly means.

Readings in millibars at exact hours, Greenwich Mean Time.

113. Eskdalemuir : H<sub>b</sub> (height of barometer cistern above M.S.L.) = 237.3 metres.

March, 1924.

Table with 24 columns for hours of the day and 1 column for Mean. Rows represent Station Level (1-31) and Mean (Station level) and Mean (Sea level). Data values are in millibars.

114. Eskdalemuir : H<sub>b</sub> = 237.3 metres.

April, 1924.

Table with 24 columns for hours of the day and 1 column for Mean. Rows represent Station Level (1-31) and Mean (Station level) and Mean (Sea level). Data values are in millibars.

NOTE.—When pressure exceeds 1000 mb. the leading figure 1 is not printed, i.e., 1005.6 mb. is written 005.6. This rule does not, however, apply to monthly means.

Readings in millibars at exact hours, Greenwich Mean Time.

115. Eskdalemuir : H<sub>b</sub> (height of barometer cistern above M.S.L.) = 237.3 metres.

May, 1924.

Table for station 115 (Eskdalemuir) showing pressure readings in millibars for each hour of the month of May 1924. The table includes columns for Day (1-31), Station Level (1-31), and Mean (Station level) and Mean (Sea level). Values range from approximately 976.7 to 986.1 mb.

116. Eskdalemuir : H<sub>b</sub> = 237.3 metres.

June, 1924.

Table for station 116 (Eskdalemuir) showing pressure readings in millibars for each hour of the month of June 1924. The table includes columns for Day (1-30), Station Level (1-30), and Mean (Station level) and Mean (Sea level). Values range from approximately 981.2 to 989.9 mb.

NOTE.—When pressure exceeds 1000 mb. the leading figure 1 is not printed, i.e., 1005.6 mb. is written 005.6. This rule does not, however, apply to monthly means.

117. Eskdalemuir : H<sub>b</sub> (height of barometer cistern above M.S.L.) = 237.3 metres.

July, 1924.

Table for July 1924 showing pressure readings at Eskdalemuir. Columns include Day (1-31), Station Level (1-31), and Mean (Station level and Sea level). Rows show hourly pressure readings in millibars.

118. Eskdalemuir : H<sub>b</sub> = 237.3 metres.

August, 1924.

Table for August 1924 showing pressure readings at Eskdalemuir. Columns include Day (1-31), Station Level (1-31), and Mean (Station level and Sea level). Rows show hourly pressure readings in millibars.

NOTE. When pressure exceeds 1000 mb. the leading figure 1 is not printed, i.e., 1005.6 mb. is written 005.6. This rule does not, however, apply to monthly means.



Readings in millibars at exact hours, Greenwich Mean Time.

119. Eskdalemuir : H<sub>b</sub> (height of barometer cistern above M.S.L.) = 237.3 metres.

September, 1924.

Table with 25 columns (Day 1-25, Mean) and 30 rows (Station Level 1-30). Columns 1-24 contain hourly pressure readings in millibars. Mean values are provided for station and sea levels.

120. Eskdalemuir : H<sub>b</sub> = 237.3 metres.

October, 1924.

Table with 25 columns (Day 1-25, Mean) and 31 rows (Station Level 1-31). Columns 1-24 contain hourly pressure readings in millibars. Mean values are provided for station and sea levels.

NOTE.—When pressure exceeds 1000 mb. the leading figure 1 is not printed, i.e., 1005.6 mb. is written 005.6. This rule does not, however, apply to monthly means.

Readings in millibars at exact hours, Greenwich Mean Time.

121. Eskdalemuir : H<sub>b</sub> (height of barometer cistern above M.S.L.) = 237.3 metres.

November, 1924.

Table with 25 columns (Day 1-25) and 25 rows (Station Level 1-25). Includes mean values for station and sea level at the bottom.

122. Eskdalemuir : H<sub>b</sub> = 237.3 metres.

December, 1924.

Table with 25 columns (Day 1-25) and 25 rows (Station Level 1-25). Includes mean values for station and sea level at the bottom.

NOTE.—When pressure exceeds 1000 mb. the leading figure 1 is not printed, i.e., 1005.6 mb. is written 005.6. This rule does not, however, apply to monthly means.

ANNUAL MEANS OF HOURLY VALUES.

From readings in millibars at exact hours, Greenwich Mean Time.

123. Eskdalemuir :  $H_b = 237.3$  metres.

1924.

| G.M.T.        | 1.         | 2.         | 3.         | 4.         | 5.         | 6.         | 7.         | 8.         | 9.         | 10.        | 11.        | Noon.      | 13.        | 14.        | 15.        | 16.        | 17.        | 18.        | 19.        | 20.        | 21.        | 22.        | 23.        | 24.        | Mean.      |
|---------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|
| Station Level | mb. 982.13 | mb. 982.00 | mb. 981.85 | mb. 981.73 | mb. 981.70 | mb. 981.75 | mb. 981.88 | mb. 982.02 | mb. 982.13 | mb. 982.17 | mb. 982.17 | mb. 982.07 | mb. 981.97 | mb. 981.83 | mb. 981.79 | mb. 981.74 | mb. 981.77 | mn. 981.92 | mb. 982.05 | mb. 982.17 | mb. 982.28 | mb. 982.27 | mb. 982.24 | mb. 982.18 | mb. 981.99 |
| Sea Level     | 011.13     | 011.01     | 010.87     | 010.75     | 010.71     | 010.75     | 010.84     | 010.91     | 010.93     | 010.89     | 010.84     | 010.69     | 010.57     | 010.41     | 010.38     | 010.36     | 010.45     | 010.67     | 010.87     | 010.04     | 011.19     | 011.22     | 011.21     | 011.17     | 010.83     |

PRESSURE AT STATION LEVEL ; MONTHLY MEANS AND DIURNAL INEQUALITIES.

The departures from the mean of the day are adjusted for non-cyclic change.

124. Eskdalemuir :  $H_b = 237.3$  metres.

1924.

| Month. | Mean.  | Hour. 1. | G.M.T. 2. | 3.    | 4.    | 5.    | 6.    | 7.    | 8.    | 9.    | 10.   | 11.   | Noon. | 13.   | 14.   | 15.   | 16.   | 17.   | 18.   | 19.   | 20.   | 21.   | 22.   | 23.   | 24.   |
|--------|--------|----------|-----------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Jan.   | 981.53 | +0.11    | +0.09     | +0.03 | -0.07 | -0.26 | -0.32 | -0.27 | -0.09 | +0.13 | +0.25 | +0.31 | +0.08 | -0.14 | -0.25 | -0.19 | -0.23 | -0.17 | -0.02 | +0.09 | +0.14 | +0.21 | +0.25 | +0.19 | +0.15 |
| Feb.   | 987.82 | +0.30    | +0.12     | -0.09 | -0.28 | -0.40 | -0.53 | -0.55 | -0.34 | -0.15 | -0.03 | +0.03 | -0.01 | -0.18 | -0.34 | -0.36 | -0.36 | -0.16 | +0.27 | +0.49 | +0.48 | +0.53 | +0.59 | +0.52 | +0.41 |
| Mar.   | 982.27 | +0.39    | +0.26     | +0.02 | -0.19 | -0.26 | -0.30 | -0.15 | -0.10 | -0.03 | +0.03 | +0.03 | -0.05 | -0.16 | -0.33 | -0.42 | -0.49 | -0.42 | +0.08 | +0.18 | +0.30 | +0.44 | +0.49 | +0.48 | +0.47 |
| April  | 981.32 | +0.20    | +0.13     | +0.03 | -0.04 | +0.05 | +0.11 | +0.23 | +0.28 | +0.26 | +0.18 | +0.13 | +0.04 | -0.10 | -0.28 | -0.41 | -0.51 | -0.50 | -0.45 | -0.20 | 0.00  | +0.15 | +0.22 | +0.28 | +0.29 |
| May    | 980.50 | +0.11    | -0.11     | -0.38 | -0.52 | -0.46 | -0.38 | -0.23 | -0.14 | -0.03 | -0.07 | -0.06 | +0.02 | +0.03 | +0.03 | 0.00  | -0.04 | -0.02 | +0.04 | +0.14 | +0.35 | +0.52 | +0.48 | +0.45 | +0.34 |
| June   | 985.65 | +0.14    | -0.07     | -0.27 | -0.31 | -0.28 | -0.16 | +0.06 | -0.06 | +0.07 | +0.01 | +0.01 | -0.03 | +0.01 | -0.08 | -0.06 | -0.13 | -0.16 | -0.08 | 0.00  | +0.19 | +0.34 | +0.40 | +0.32 | +0.25 |
| July   | 980.95 | -0.08    | -0.16     | -0.19 | -0.28 | -0.22 | -0.13 | +0.02 | +0.09 | +0.16 | +0.14 | +0.11 | +0.07 | +0.07 | +0.09 | +0.02 | -0.07 | -0.11 | -0.10 | -0.04 | +0.06 | +0.16 | +0.15 | +0.12 | +0.03 |
| Aug.   | 978.62 | +0.24    | +0.08     | -0.02 | -0.14 | -0.14 | -0.06 | +0.05 | +0.10 | +0.04 | +0.01 | -0.01 | -0.11 | -0.16 | -0.25 | -0.29 | -0.36 | -0.41 | -0.34 | -0.08 | +0.22 | +0.36 | +0.41 | +0.42 | +0.36 |
| Sept.  | 978.29 | -0.13    | -0.35     | -0.57 | -0.64 | -0.71 | -0.43 | -0.18 | +0.10 | +0.30 | +0.41 | +0.49 | +0.39 | +0.28 | +0.16 | +0.08 | -0.02 | -0.08 | +0.03 | +0.13 | +0.19 | +0.22 | +0.15 | +0.09 | +0.01 |
| Oct.   | 981.85 | -0.17    | -0.28     | -0.36 | -0.37 | -0.29 | -0.10 | +0.19 | +0.40 | +0.55 | +0.55 | +0.49 | +0.30 | +0.19 | -0.03 | -0.17 | -0.28 | -0.26 | -0.11 | -0.07 | 0.00  | +0.05 | -0.01 | -0.07 | -0.10 |
| Nov.   | 986.69 | +0.21    | +0.12     | +0.09 | -0.24 | -0.30 | -0.27 | -0.16 | +0.08 | +0.24 | +0.30 | +0.23 | -0.04 | -0.21 | -0.46 | -0.47 | -0.46 | -0.30 | -0.03 | +0.08 | +0.20 | +0.42 | +0.38 | +0.41 | +0.40 |
| Dec.   | 978.43 | -0.11    | -0.13     | -0.17 | -0.37 | -0.53 | -0.60 | -0.40 | -0.22 | +0.01 | +0.20 | +0.29 | +0.22 | +0.10 | -0.07 | 0.00  | +0.04 | +0.11 | +0.20 | +0.29 | +0.34 | +0.35 | +0.21 | +0.19 | +0.07 |
| Year.  | 981.99 | +0.10    | -0.03     | -0.17 | -0.29 | -0.32 | -0.26 | -0.13 | +0.02 | +0.13 | +0.17 | +0.17 | +0.07 | -0.02 | -0.15 | -0.19 | -0.24 | -0.21 | -0.06 | +0.08 | +0.21 | +0.31 | +0.31 | +0.28 | +0.22 |

ABSOLUTE EXTREMES OF PRESSURE AT STATION LEVEL FOR EACH DAY.

Maximum and Minimum for the interval 0h. to 24h., Greenwich Mean Time.

125. Eskdalemuir :  $H_b = 237.3$  metres.

1924.

| Month | Jan.        | Feb.        | Mar.        | April       | May         | June        | July        | Aug.        | Sept.       | Oct.        | Nov.        | Dec.        |
|-------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
| Day.  | Max. Min.   | Max. Min.   | Max. Min.   | Max. Min.   | Max. Min.   | Max. Min.   | Max. Min.   | Max. Min.   | Max. Min.   | Max. Min.   | Max. Min.   | Max. Min.   |
| 1     | 993.3 990.1 | 999.3 995.5 | 995.9 958.9 | 952.0 999.9 | 999.2 979.6 | 976.4 985.5 | 978.6 986.1 | 974.3 980.4 | 975.4 987.2 | 975.1 978.6 | 974.1 971.2 | 959.5 971.0 |
| 2     | 990.1 982.8 | 998.4 995.4 | 959.8 956.0 | 999.9 998.1 | 978.9 971.6 | 990.4 985.4 | 974.3 962.8 | 984.5 975.3 | 998.8 987.2 | 978.1 976.1 | 973.3 956.3 | 967.2 964.5 |
| 3     | 989.1 983.4 | 999.6 993.5 | 968.1 959.8 | 999.1 996.2 | 983.1 972.0 | 990.5 987.5 | 964.0 956.4 | 984.9 978.6 | 000.4 998.8 | 981.2 978.1 | 990.7 973.3 | 977.0 965.9 |
| 4     | 992.9 989.0 | 994.2 988.8 | 980.0 968.0 | 998.4 997.0 | 986.5 980.0 | 987.5 984.9 | 969.3 958.6 | 979.6 977.6 | 999.8 991.7 | 981.0 978.8 | 994.8 990.7 | 977.2 966.3 |
| 5     | 992.5 989.2 | 988.8 978.2 | 989.9 980.0 | 998.4 992.8 | 980.0 998.4 | 992.8 980.0 | 976.1 989.0 | 987.2 975.6 | 968.1 984.8 | 972.8 991.7 | 983.3 978.8 | 963.9 999.3 |
| 6     | 989.2 980.1 | 987.5 983.2 | 998.0 989.9 | 992.8 986.2 | 978.7 973.7 | 988.6 986.8 | 980.4 970.3 | 989.2 984.7 | 983.3 980.0 | 968.5 962.2 | 006.7 999.3 | 996.5 973.2 |
| 7     | 980.1 977.2 | 987.4 982.3 | 998.2 996.2 | 986.2 973.0 | 973.7 970.3 | 987.7 981.5 | 984.2 976.5 | 997.5 989.2 | 980.0 972.4 | 976.6 961.9 | 007.0 992.6 | 996.4 988.4 |
| 8     | 977.6 967.6 | 982.3 966.2 | 996.2 992.5 | 973.1 969.3 | 985.5 970.7 | 982.3 979.4 | 986.9 984.2 | 001.8 997.5 | 972.4 964.2 | 981.5 975.6 | 002.6 990.9 | 992.1 988.7 |
| 9     | 969.1 966.4 | 966.2 954.8 | 992.8 990.0 | 970.6 969.2 | 989.4 983.7 | 983.9 981.1 | 991.6 985.9 | 001.6 997.6 | 978.3 962.4 | 984.0 977.4 | 991.0 981.6 | 997.9 989.2 |
| 10    | 966.4 958.2 | 962.4 956.5 | 993.6 990.5 | 977.2 970.2 | 983.7 978.2 | 981.1 973.1 | 991.5 988.9 | 997.6 986.1 | 983.3 977.1 | 979.9 975.1 | 984.3 980.9 | 997.3 994.7 |
| 11    | 971.5 961.3 | 972.1 962.4 | 997.7 993.5 | 977.3 971.3 | 980.6 977.2 | 973.1 968.0 | 991.8 989.2 | 986.1 974.6 | 977.1 970.3 | 982.3 975.9 | 996.7 984.1 | 994.7 992.4 |
| 12    | 975.5 960.4 | 975.0 971.6 | 998.1 996.4 | 972.4 968.4 | 984.0 980.4 | 987.3 969.6 | 991.1 977.5 | 976.0 973.0 | 974.1 969.9 | 995.3 980.2 | 005.3 996.7 | 992.4 988.2 |
| 13    | 972.4 960.7 | 990.2 975.0 | 998.0 995.8 | 974.0 968.8 | 988.1 977.0 | 996.6 987.3 | 991.5 979.8 | 980.2 975.9 | 977.5 970.0 | 001.8 995.1 | 004.0 994.7 | 988.2 976.0 |
| 14    | 973.5 968.1 | 994.8 990.2 | 997.2 992.7 | 971.3 962.7 | 987.9 983.8 | 996.8 993.9 | 994.8 991.4 | 980.0 974.5 | 984.7 977.5 | 002.8 001.4 | 994.7 991.4 | 980.3 975.4 |
| 15    | 972.1 970.2 | 998.7 992.3 | 992.7 987.4 | 978.4 971.3 | 988.2 985.6 | 993.9 988.7 | 992.9 981.6 | 979.4 976.8 | 986.2 973.4 | 002.4 997.4 | 999.1 992.3 | 980.5 967.4 |
| 16    | 977.0 971.6 | 006.2 998.7 | 991.4 986.1 | 990.3 978.4 | 993.4 983.6 | 988.7 986.8 | 981.6 976.9 | 976.9 969.7 | 976.7 971.1 | 997.4 991.5 | 005.4 999.1 | 987.3 968.7 |
| 17    | 981.5 977.0 | 005.9 989.6 | 992.1 990.0 | 996.5 990.3 | 994.9 991.1 | 987.6 980.0 | 979.1 977.6 | 970.1 959.1 | 973.4 969.6 | 998.7 992.9 | 005.0 992.0 | 988.1 985.5 |
| 18    | 979.8 963.5 | 996.3 985.8 | 990.0 983.0 | 996.6 994.3 | 991.1 981.5 | 982.1 977.4 | 981.4 978.1 | 967.5 960.8 | 989.6 973.4 | 997.1 981.4 | 005.2 990.6 | 985.5 981.8 |
| 19    | 964.3 958.1 | 996.3 995.1 | 983.0 978.7 | 002.4 995.3 | 983.7 980.9 | 984.9 980.7 | 985.0 980.8 | 967.5 965.3 | 989.5 973.7 | 981.4 972.0 | 005.7 993.5 | 994.3 982.8 |
| 20    | 985.0 964.3 | 996.5 994.5 | 982.6 979.1 | 002.2 997.6 | 983.8 980.8 | 990.0 984.9 | 988.8 985.0 | 965.3 961.8 | 973.7 953.5 | 985.3 972.6 | 003.6 990.3 | 000.3 994.0 |
| 21    | 985.2 980.6 | 999.3 992.4 | 979.3 974.0 | 998.2 990.7 | 980.8 978.7 | 990.1 988.0 | 989.4 987.8 | 967.6 961.5 | 970.1 952.2 | 989.1 985.0 | 000.6 990.3 | 000.0 994.2 |
| 22    | 983.5 977.7 | 003.9 999.3 | 974.4 969.2 | 991.1 982.0 | 979.4 976.5 | 994.3 989.9 | 987.8 982.0 | 972.5 967.6 | 973.1 967.3 | 999.3 989.1 | 980.5 982.7 | 977.0 970.0 |
| 23    | 990.3 983.5 | 004.4 996.8 | 969.2 956.0 | 982.0 976.7 | 976.6 970.6 | 994.3 989.2 | 982.1 977.9 | 979.7 979.7 | 969.9 962.2 | 001.0 998.0 | 004.0 994.7 | 988.2 976.0 |
| 24    | 990.5 982.3 | 996.8 985.9 | 964.6 956.6 | 976.7 968.7 | 970.6 965.1 | 994.6 989.8 | 983.6 977.7 | 988.1 979.7 | 975.1 964.0 | 998.0 989.1 | 976.2 971.9 | 972.9 969.4 |
| 25    | 001.3 990.5 | 996.7 988.8 | 967.0 963.5 | 972.1 969.2 | 973.3 965.2 | 995.1 993.4 | 984.5 982.6 | 989.9 987.6 | 984.3 975.1 | 989.1 978.7 | 974.4 969.9 | 979.6 968.9 |
| 26    | 001.0 987.6 | 999.3 995.8 | 974.0 967.0 | 969.5 961.5 | 979.9 973.3 | 993.5 984.6 | 988.8 984.3 | 989.2 983.3 | 991.9 984.3 | 978.8 975.0 | 969.9 958.4 | 977.0 957.9 |
| 27    | 003.9 988.7 | 999.0 987.8 | 980.6 974.0 | 966.6 961.3 | 986.6 977.1 | 989.3 982.0 | 988.8 981.4 | 985.9 982.8 | 996.0 991.9 | 975.0 972.0 | 966.0 953.3 | 957.9 943.5 |
| 28    | 003.7 998.5 | 992.7 980.2 | 984.8 980.6 | 969.2 962.8 | 989.7 986.6 | 989.2 977.4 | 981.4 969.2 | 985.6 973.1 | 995.9 981.1 | 976.5 972.5 | 973.2 966.0 | 966.3 951.6 |
| 29    | 998.5 995.5 | 980.2 953.7 | 993.9 984.8 | 972.1 969.2 | 989.6 981.1 | 977.5 973.6 | 977.9 969.1 | 973.8 971.9 | 981.1 964.2 | 976.6 962.9 | 972.1 967.2 | 976.3 959.9 |
| 30    | 995.7 993.7 | — —         | 998.0 993.9 | 976.4 968.9 | 986.1 979.9 | 986.1 974.9 | 978.6 977.0 | 976.0 973.6 | 974.1 967.1 | 963.8 957.0 | 970.5 965.7 | 965.7 958.2 |
| 31    | 995.5 989.1 | — —         | 999.7 996.5 | — —         | 986.2 982.0 | — —         | 981.2 978.4 | 975.3 972.5 | — —         | 965.5 963.0 | — —         | 966.2 960.0 |
| Mean. |             |             |             |             |             |             |             |             |             |             |             |             |

Readings in degrees absolute at exact hours, Greenwich Mean Time.

126. Eskdalemuir : Louvred Hut : ht (height of thermometer bulb above ground) = 0.9 metres.

January, 1924.

Table with 25 columns (Day, 1-24, Mean) and 31 rows (1-31). Each cell contains a temperature reading in degrees absolute. The Mean row shows values ranging from 75.3 to 75.9.

127. Eskdalemuir : Louvred Hut : ht = 0.9 metres.

February, 1924.

Table with 25 columns (Day, 1-24, Mean) and 29 rows (1-29). Each cell contains a temperature reading in degrees absolute. The Mean row shows values ranging from 75.0 to 75.5. A G.M.T. row is at the bottom.

NOTE.—The initial 2 or 3 of the readings is omitted, i.e., 275.0 degrees absolute is printed 75.0.

Readings in degrees absolute at exact hours, Greenwich Mean Time.

128. Eskdalemuir : Louvred Hut : ht (height of thermometer bulb above ground) = 0.9 metres.

March, 1924.

| Day. | 1.   | 2.   | 3.   | 4.   | 5.   | 6.   | 7.   | 8.   | 9.   | 10.  | 11.  | Noon | 13.  | 14.  | 15.  | 16.  | 17.  | 18.  | 19.  | 20.  | 21.  | 22.  | 23.  | 24.  | Mean |      |
|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
|      | a.   | a.   | a.   | a.   | a.   | a.   | a.   | a.   | a.   | a.   | a.   | a.   | a.   | a.   | a.   | a.   | a.   | a.   | a.   | a.   | a.   | a.   | a.   | a.   | a.   |      |
| 1    | 70.7 | 71.1 | 71.3 | 71.3 | 72.1 | 73.0 | 72.9 | 73.0 | 73.2 | 74.5 | 74.4 | 75.3 | 74.7 | 73.1 | 73.4 | 73.0 | 72.0 | 70.2 | 70.1 | 70.0 | 68.7 | 67.0 | 65.6 | 64.8 | 71.6 |      |
| 2    | 63.7 | 63.0 | 62.0 | 64.5 | 64.2 | 65.0 | 64.1 | 66.8 | 67.3 | 68.8 | 72.6 | 73.9 | 74.7 | 74.0 | 74.6 | 74.0 | 72.3 | 69.0 | 66.6 | 65.8 | 64.4 | 64.0 | 62.7 | 62.1 | 67.6 |      |
| 3    | 61.8 | 61.7 | 61.3 | 63.7 | 63.0 | 62.0 | 60.9 | 62.9 | 67.0 | 71.5 | 74.9 | 75.3 | 75.6 | 75.5 | 75.0 | 74.3 | 73.3 | 73.0 | 72.8 | 72.9 | 72.4 | 72.3 | 70.7 | 70.7 | 69.2 |      |
| 4    | 71.2 | 71.0 | 71.0 | 70.9 | 69.9 | 70.9 | 71.0 | 71.1 | 71.7 | 73.0 | 74.0 | 75.1 | 77.0 | 76.8 | 77.1 | 77.0 | 74.9 | 71.1 | 70.9 | 71.0 | 72.7 | 69.3 | 68.7 | 68.4 | 72.3 |      |
| 5    | 66.5 | 65.4 | 64.3 | 63.9 | 63.8 | 63.9 | 64.0 | 66.0 | 69.0 | 71.7 | 73.9 | 75.8 | 76.0 | 76.6 | 76.7 | 76.2 | 75.4 | 72.9 | 71.4 | 70.8 | 70.1 | 70.7 | 70.9 | 70.1 | 70.2 |      |
| 6    | 69.0 | 67.0 | 66.3 | 65.0 | 64.0 | 63.6 | 64.1 | 65.4 | 70.4 | 74.0 | 75.5 | 76.6 | 77.0 | 76.9 | 76.7 | 75.9 | 74.9 | 73.3 | 71.9 | 70.9 | 70.2 | 70.4 | 70.3 | 69.2 | 70.8 |      |
| 7    | 69.2 | 71.3 | 72.5 | 73.4 | 73.7 | 73.8 | 73.7 | 75.0 | 75.4 | 75.0 | 75.8 | 75.8 | 76.8 | 77.1 | 76.5 | 76.3 | 76.1 | 76.0 | 76.0 | 76.1 | 76.0 | 76.0 | 75.7 | 75.5 | 74.8 |      |
| 8    | 75.2 | 75.0 | 74.9 | 74.8 | 74.3 | 73.7 | 71.9 | 71.3 | 72.8 | 74.8 | 76.7 | 76.6 | 77.3 | 77.8 | 78.0 | 77.2 | 76.2 | 75.5 | 75.4 | 75.7 | 75.0 | 73.3 | 73.2 | 72.0 | 75.0 |      |
| 9    | 71.2 | 71.1 | 70.7 | 71.0 | 71.3 | 71.7 | 71.7 | 72.1 | 73.7 | 76.1 | 78.8 | 78.2 | 78.9 | 79.9 | 79.6 | 79.9 | 77.1 | 76.5 | 75.5 | 75.3 | 74.8 | 74.3 | 72.9 | 71.3 | 74.7 |      |
| 10   | 69.3 | 68.9 | 68.8 | 69.0 | 68.1 | 69.5 | 71.8 | 73.0 | 75.2 | 80.5 | 82.4 | 83.7 | 84.1 | 84.8 | 85.1 | 85.3 | 83.0 | 77.2 | 78.0 | 76.1 | 75.0 | 72.7 | 71.8 | 70.3 | 76.0 |      |
| 11   | 71.0 | 70.0 | 70.0 | 69.4 | 70.0 | 68.9 | 69.9 | 73.1 | 76.0 | 82.0 | 83.7 | 84.7 | 85.1 | 85.6 | 85.7 | 85.2 | 82.5 | 79.0 | 77.1 | 75.3 | 74.1 | 74.0 | 73.1 | 72.7 | 76.5 |      |
| 12   | 72.1 | 72.0 | 71.0 | 70.8 | 71.0 | 71.0 | 71.0 | 72.7 | 76.8 | 80.7 | 83.0 | 84.5 | 85.1 | 85.7 | 86.2 | 85.3 | 82.0 | 78.2 | 75.2 | 75.5 | 75.1 | 74.7 | 74.7 | 73.2 | 77.0 |      |
| 13   | 72.7 | 71.3 | 72.0 | 71.4 | 71.0 | 70.8 | 71.7 | 74.0 | 79.5 | 82.2 | 82.9 | 84.0 | 85.3 | 86.0 | 85.9 | 85.0 | 83.9 | 81.1 | 81.0 | 78.9 | 78.3 | 76.7 | 76.0 | 76.1 | 78.2 |      |
| 14   | 76.1 | 75.3 | 75.7 | 75.1 | 74.0 | 72.5 | 72.7 | 72.3 | 76.7 | 80.2 | 82.7 | 83.8 | 84.8 | 83.7 | 84.2 | 84.7 | 84.7 | 82.7 | 77.1 | 76.0 | 75.5 | 77.5 | 78.3 | 77.9 | 78.3 |      |
| 15   | 77.1 | 75.3 | 74.5 | 74.1 | 74.0 | 73.7 | 76.2 | 77.3 | 79.4 | 79.9 | 81.2 | 82.9 | 84.1 | 84.4 | 84.3 | 83.7 | 82.9 | 80.0 | 79.1 | 78.0 | 77.0 | 77.2 | 77.0 | 75.9 | 78.8 |      |
| 16   | 75.2 | 73.3 | 72.7 | 73.2 | 74.0 | 72.8 | 73.5 | 74.9 | 78.4 | 78.0 | 78.3 | 78.5 | 79.2 | 78.5 | 79.4 | 77.8 | 77.2 | 74.8 | 73.0 | 72.2 | 72.1 | 71.0 | 71.8 | 70.8 | 75.1 |      |
| 17   | 69.1 | 68.5 | 68.5 | 71.7 | 71.0 | 68.8 | 67.9 | 71.9 | 74.7 | 75.0 | 75.5 | 77.0 | 76.7 | 78.1 | 76.7 | 76.3 | 76.0 | 74.5 | 70.5 | 70.7 | 69.7 | 69.4 | 68.3 | 67.4 | 72.3 |      |
| 18   | 66.7 | 65.0 | 64.1 | 63.9 | 63.1 | 63.6 | 68.4 | 72.4 | 76.7 | 78.1 | 79.1 | 80.4 | 79.9 | 81.0 | 80.0 | 79.8 | 78.6 | 76.7 | 75.8 | 75.0 | 73.2 | 71.8 | 70.0 | 69.5 | 73.0 |      |
| 19   | 71.3 | 72.0 | 72.2 | 73.0 | 72.8 | 73.7 | 73.9 | 74.0 | 74.2 | 75.5 | 75.7 | 75.3 | 74.1 | 75.2 | 75.3 | 75.1 | 75.0 | 74.4 | 73.6 | 72.8 | 71.4 | 69.0 | 68.3 | 67.7 | 73.2 |      |
| 20   | 67.5 | 68.1 | 67.8 | 67.8 | 67.2 | 67.1 | 68.4 | 70.8 | 74.1 | 75.2 | 76.2 | 77.1 | 77.9 | 78.2 | 78.6 | 78.2 | 78.0 | 75.7 | 72.2 | 70.7 | 69.6 | 68.5 | 68.0 | 67.1 | 72.1 |      |
| 21   | 66.5 | 65.3 | 65.7 | 65.3 | 65.2 | 65.4 | 66.0 | 69.0 | 72.0 | 73.4 | 74.3 | 76.3 | 77.8 | 78.0 | 79.5 | 78.2 | 77.7 | 76.4 | 76.0 | 75.3 | 74.8 | 74.7 | 74.0 | 74.0 | 72.4 |      |
| 22   | 73.9 | 74.1 | 74.3 | 74.8 | 74.7 | 74.3 | 74.7 | 75.4 | 75.8 | 77.4 | 78.8 | 77.4 | 79.0 | 79.9 | 79.8 | 80.4 | 80.3 | 79.4 | 78.8 | 78.1 | 78.0 | 77.9 | 77.9 | 77.9 | 76.0 |      |
| 23   | 77.8 | 78.0 | 78.0 | 78.2 | 78.3 | 78.3 | 78.8 | 79.0 | 79.3 | 79.5 | 80.0 | 80.0 | 80.0 | 79.9 | 79.4 | 79.0 | 79.0 | 78.8 | 78.4 | 78.0 | 78.0 | 77.8 | 77.8 | 77.5 | 78.7 |      |
| 24   | 77.4 | 77.4 | 77.3 | 77.2 | 77.2 | 77.0 | 76.9 | 76.7 | 76.3 | 76.3 | 76.4 | 76.1 | 76.1 | 76.0 | 75.9 | 75.9 | 75.4 | 75.1 | 75.0 | 74.9 | 74.8 | 74.6 | 74.5 | 74.2 | 76.1 |      |
| 25   | 74.1 | 74.1 | 74.0 | 74.1 | 74.1 | 74.1 | 74.1 | 74.7 | 74.5 | 75.5 | 75.9 | 76.8 | 76.8 | 77.0 | 76.8 | 76.2 | 76.0 | 75.6 | 75.2 | 75.0 | 74.8 | 74.7 | 74.5 | 74.3 | 75.1 |      |
| 26   | 74.3 | 74.1 | 73.9 | 73.8 | 73.8 | 73.8 | 73.9 | 74.0 | 74.6 | 75.0 | 76.0 | 75.9 | 75.9 | 76.0 | 75.7 | 75.1 | 75.3 | 74.9 | 74.1 | 73.8 | 73.6 | 73.7 | 73.7 | 73.3 | 74.5 |      |
| 27   | 73.2 | 73.0 | 73.1 | 73.0 | 73.0 | 73.0 | 73.1 | 73.4 | 73.7 | 74.2 | 74.8 | 75.1 | 75.1 | 75.6 | 76.0 | 75.8 | 75.3 | 74.7 | 73.9 | 73.0 | 72.3 | 71.7 | 71.9 | 72.2 | 73.8 |      |
| 28   | 72.4 | 73.0 | 73.2 | 73.0 | 73.0 | 73.0 | 73.9 | 74.0 | 74.6 | 74.8 | 75.0 | 75.3 | 75.6 | 76.0 | 75.9 | 75.5 | 75.3 | 75.0 | 74.8 | 75.2 | 73.8 | 74.0 | 73.8 | 74.0 | 75.3 |      |
| 29   | 74.1 | 74.0 | 71.3 | 70.9 | 68.8 | 68.9 | 69.9 | 73.5 | 75.2 | 75.8 | 75.8 | 76.2 | 78.0 | 78.0 | 78.0 | 77.1 | 76.3 | 75.1 | 73.7 | 70.9 | 70.8 | 70.7 | 70.1 | 70.1 | 73.5 |      |
| 30   | 70.8 | 72.3 | 73.1 | 72.8 | 73.1 | 73.2 | 73.6 | 74.7 | 75.2 | 75.6 | 77.3 | 77.9 | 79.0 | 79.9 | 80.9 | 79.5 | 79.1 | 78.7 | 76.6 | 76.4 | 76.2 | 75.1 | 73.7 | 72.1 | 75.7 |      |
| 31   | 72.2 | 72.7 | 72.5 | 72.5 | 71.8 | 71.2 | 72.0 | 75.8 | 77.3 | 78.7 | 79.5 | 79.8 | 79.5 | 78.4 | 79.0 | 79.2 | 78.1 | 76.8 | 74.1 | 74.2 | 75.3 | 74.0 | 73.8 | 73.7 | 75.5 |      |
| Mean | ...  | 71.4 | 71.1 | 70.9 | 71.1 | 70.8 | 70.7 | 71.1 | 72.6 | 74.5 | 76.2 | 77.3 | 78.1 | 78.6 | 78.8 | 78.9 | 78.5 | 77.6 | 75.8 | 74.7 | 74.1 | 73.4 | 72.9 | 72.4 | 71.8 | 74.3 |

129. Eskdalemuir : Louvred Hut : ht = 0.9 metres.

April, 1924.

| Day. | 1.   | 2.   | 3.   | 4.   | 5.   | 6.   | 7.   | 8.   | 9.   | 10.  | 11.  | Noon | 13.  | 14.  | 15.  | 16.  | 17.  | 18.  | 19.  | 20.  | 21.  | 22.  | 23.  | 24.  | Mean |
|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
|      | a.   | a.   | a.   | a.   | a.   | a.   | a.   | a.   | a.   | a.   | a.   | a.   | a.   | a.   | a.   | a.   | a.   | a.   | a.   | a.   | a.   | a.   | a.   | a.   | a.   |
| 1    | 73.5 | 74.0 | 74.0 | 74.2 | 74.1 | 73.9 | 74.7 | 75.1 | 76.2 | 77.0 | 77.2 | 78.0 | 78.0 | 78.6 | 78.7 | 78.0 | 77.0 | 76.1 | 73.7 | 72.0 | 71.3 | 71.3 | 71.0 | 70.8 | 74.9 |
| 2    | 70.4 | 69.8 | 69.8 | 70.8 | 72.9 | 73.0 | 73.6 | 74.0 | 74.9 | 76.0 | 77.0 | 78.0 | 78.3 | 78.6 | 78.9 | 78.6 | 77.6 | 75.4 | 72.0 | 71.0 | 70.8 | 70.0 | 69.9 | 69.8 | 73.8 |
| 3    | 69.5 | 68.1 | 68.2 | 67.8 | 67.5 | 69.2 | 69.4 | 73.0 | 75.0 | 76.2 | 77.9 | 79.4 | 80.0 | 80.3 | 80.2 | 78.7 | 77.3 | 75.0 | 74.4 | 73.6 | 73.6 | 74.3 | 74.1 | 73.9 | 73.9 |
| 4    | 73.2 | 73.0 | 72.1 | 71.9 | 71.9 | 73.5 | 76.0 | 77.1 | 77.1 | 77.6 | 79.9 | 80.0 | 80.0 | 80.0 | 79.6 | 79.2 | 79.8 | 78.3 | 75.5 | 74.2 | 74.3 | 74.1 | 73.7 | 71.9 | 75.7 |
| 5    | 71.5 | 70.9 | 71.7 | 72.4 | 73.1 | 73.4 | 74.0 | 75.7 | 78.0 | 80.9 | 81.2 | 81.1 | 82.0 | 83.0 | 83.8 | 82.8 | 82.5 | 81.3 | 77.9 | 77.9 | 77.6 | 78.7 | 78.1 | 77.2 | 77.7 |
| 6    | 76.0 | 76.1 | 74.0 | 73.0 | 73.2 | 74.0 | 75.0 | 76.8 | 79.5 | 81.2 | 81.7 | 81.5 | 82.3 | 83.0 | 82.7 | 82.3 | 81.9 | 81.5 | 80.0 | 77.0 | 76.6 | 76.6 | 75.5 | 76.1 | 78.3 |
| 7    | 75.6 | 77.0 | 77.6 | 77.2 | 77.0 | 77.0 | 78.9 | 78.8 | 79.2 | 79.6 | 79.9 | 80.5 | 80.0 | 80.0 | 80.0 | 80.0 | 79.8 | 78.6 | 78.3 | 77.8 | 77.5 | 76.6 | 76.3 | 78.4 |      |
| 8    | 76.3 | 75.4 | 75.5 | 75.0 | 74.8 | 74.9 | 74.1 | 75.8 | 76.0 | 77.4 | 79.5 | 77.0 | 80.0 | 80.0 | 80.0 | 78.5 | 77.1 | 76.8 | 75.7 | 74.9 | 74.2 | 74.5 | 73.2 | 72.7 | 76.1 |
| 9    | 73.0 | 72.3 | 72.6 | 72.2 | 72.6 | 72.7 | 74.0 | 76.0 | 77.1 | 77.5 | 78.0 | 78.0 | 78.6 | 77.9 | 76.9 | 76.0 | 77.7 | 76.6 | 75.0 | 74.2 | 72.5 | 70.4 | 69.5 | 71.0 | 74.7 |
| 10   | 71.3 | 71.9 | 71.4 | 71.9 | 71.9 | 72.0 | 73.1 | 74.7 | 74.0 | 73.6 | 75.6 | 76.0 | 78.2 | 77.2 | 76.5 | 76.2 | 75.8 | 74.2 | 73.0 | 71.6 | 70.7 | 69.1 | 69.9 | 73.5 |      |
| 11   | 68.5 | 67.8 | 68.0 | 66.7 | 66.4 | 67.0 | 68.6 | 71.5 | 73.7 | 77.1 | 76.6 | 77.1 | 78.1 | 78.0 | 77.6 | 76.1 | 76.0 | 76.0 | 74.9 | 73.5 | 72.5 | 70.7 | 69.8 | 69.0 | 72.6 |
| 12   | 71.3 | 71.5 | 71.5 | 71.1 | 70.0 | 70.4 | 71.8 | 73.1 | 73.8 | 75.1 | 75.2 | 75.2 | 76.9 | 75.9 | 77.9 | 76.8 | 77.4 | 75.7 | 74.6 | 74.0 | 73.7 | 72.3 | 71.8 | 72.2 | 73.7 |
| 13   | 72.6 | 72.5 | 71.2 | 66.4 | 69.6 | 68.7 | 70.8 | 73.8 | 77.1 | 77.5 | 78.0 | 75.2 | 76.6 | 75.9 | 76.2 | 73.8 | 73.7 | 73.5 | 73.9 | 73.8 | 74.2 | 74.2 | 74.1 | 74.0 | 73.6 |
| 14   | 73.6 | 72.4 | 72.9 | 72.4 | 73.0 | 73.1 | 73.2 | 73.5 | 74.2 | 74.8 | 76.0 | 77.0 | 78.7 | 78.3 | 78.8 | 79.0 | 78.5 | 77.4 | 75.0 | 74.0 | 73.2 | 71.2 | 71.0 | 70.1 | 74.7 |
| 15   | 69.2 | 72.9 | 72.7 | 70.7 | 72.2 | 73.9 | 74.4 | 76.0 | 77.1 | 78.4 | 78.7 | 79.4 | 81.1 | 82.9 | 82.9 | 82.8 | 82.4 | 78.5 | 77.9 | 77.1 | 75.4 | 74.9 | 75.6 | 75.0 | 76.0 |
| 16   | 74.0 | 75.0 | 75.0 | 75.4 | 75.4 | 76.5 | 77.6 | 79.4 | 80.5 | 81.2 | 81.2 | 82.0 |      |      |      |      |      |      |      |      |      |      |      |      |      |

Readings in degrees absolute at exact hours, Greenwich Mean Time.

130. Eskdalemuir : Louvred Hut :  $h_t$  (height of thermometer bulb above ground) = 0.9 metres.

May, 1924.

| Day. | 1.   | 2.   | 3.   | 4.   | 5.   | 6.   | 7.   | 8.   | 9.   | 10.  | 11.  | Noon | 13.  | 14.  | 15.  | 16.  | 17.  | 18.  | 19.  | 20.  | 21.  | 22.  | 23.  | 24.  | Mean |
|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| 1    | 77.0 | 77.0 | 77.2 | 77.3 | 77.4 | 77.6 | 78.0 | 78.8 | 80.0 | 80.6 | 81.4 | 82.6 | 82.9 | 83.0 | 82.5 | 81.4 | 81.0 | 80.5 | 79.9 | 79.7 | 78.7 | 78.1 | 78.1 | 78.4 | 79.5 |
| 2    | 78.5 | 78.5 | 78.5 | 78.4 | 78.3 | 78.5 | 78.9 | 79.4 | 80.9 | 81.9 | 82.0 | 82.0 | 82.0 | 82.5 | 81.2 | 80.9 | 79.7 | 79.7 | 79.7 | 79.2 | 79.4 | 79.0 | 78.8 | 78.2 | 79.8 |
| 3    | 78.1 | 78.3 | 78.1 | 78.0 | 78.7 | 77.5 | 77.6 | 77.5 | 77.5 | 77.7 | 77.8 | 78.1 | 78.5 | 78.2 | 78.2 | 78.9 | 78.9 | 77.4 | 76.2 | 75.6 | 75.2 | 74.8 | 74.8 | 74.7 | 77.4 |
| 4    | 74.6 | 74.7 | 74.6 | 74.5 | 74.4 | 74.7 | 75.7 | 76.2 | 77.0 | 78.2 | 78.0 | 78.4 | 77.3 | 78.0 | 77.5 | 76.9 | 75.3 | 74.1 | 73.8 | 73.9 | 73.9 | 74.2 | 74.6 | 74.8 | 75.6 |
| 5    | 74.9 | 75.0 | 74.4 | 73.7 | 73.8 | 74.0 | 74.4 | 75.0 | 76.0 | 76.2 | 78.6 | 80.0 | 78.3 | 79.7 | 82.0 | 79.0 | 76.9 | 78.5 | 77.2 | 76.2 | 76.2 | 76.1 | 76.0 | 76.1 | 76.6 |
| 6    | 75.7 | 75.4 | 74.9 | 74.0 | 72.9 | 74.0 | 75.2 | 76.7 | 77.3 | 78.1 | 79.5 | 79.7 | 79.9 | 80.5 | 80.4 | 81.1 | 80.7 | 80.2 | 80.0 | 78.5 | 77.8 | 77.8 | 77.8 | 77.7 | 77.7 |
| 7    | 77.7 | 77.3 | 77.3 | 77.4 | 77.3 | 76.9 | 76.9 | 78.3 | 79.1 | 78.0 | 81.2 | 81.5 | 81.7 | 81.3 | 82.5 | 80.5 | 79.6 | 78.2 | 79.2 | 79.0 | 77.3 | 77.1 | 77.0 | 76.8 | 78.7 |
| 8    | 76.7 | 76.9 | 77.2 | 77.2 | 76.2 | 75.1 | 75.9 | 76.5 | 77.3 | 78.3 | 78.4 | 78.3 | 79.2 | 79.3 | 79.2 | 79.1 | 78.7 | 78.7 | 78.2 | 77.2 | 76.2 | 75.9 | 75.0 | 74.8 | 77.4 |
| 9    | 74.5 | 75.7 | 75.5 | 73.5 | 73.0 | 75.0 | 77.1 | 79.0 | 80.2 | 81.0 | 81.0 | 81.6 | 82.3 | 81.7 | 82.1 | 81.2 | 80.0 | 80.1 | 78.5 | 78.6 | 79.5 | 79.0 | 79.1 | 79.7 | 78.6 |
| 10   | 80.1 | 80.5 | 81.0 | 81.5 | 82.1 | 82.0 | 81.8 | 81.7 | 82.0 | 82.7 | 82.9 | 83.1 | 83.0 | 83.2 | 82.5 | 82.6 | 81.8 | 81.6 | 81.0 | 80.5 | 80.0 | 80.3 | 80.8 | 80.2 | 81.6 |
| 11   | 79.9 | 79.9 | 79.8 | 79.7 | 79.8 | 79.8 | 80.0 | 80.5 | 80.8 | 81.9 | 83.7 | 82.5 | 82.6 | 83.1 | 83.4 | 83.1 | 82.0 | 81.5 | 80.5 | 79.5 | 78.2 | 77.0 | 77.2 | 78.0 | 80.6 |
| 12   | 79.0 | 79.2 | 79.1 | 79.0 | 79.1 | 79.6 | 80.4 | 81.0 | 80.7 | 82.2 | 82.4 | 84.4 | 85.0 | 85.7 | 85.8 | 85.1 | 85.0 | 84.3 | 83.0 | 80.1 | 77.9 | 75.5 | 75.3 | 75.5 | 81.1 |
| 13   | 77.3 | 78.4 | 79.1 | 79.0 | 79.5 | 79.0 | 80.5 | 81.5 | 82.3 | 82.8 | 82.9 | 83.6 | 83.1 | 84.9 | 85.7 | 85.5 | 86.0 | 83.8 | 83.0 | 80.5 | 79.6 | 79.3 | 79.7 | 79.0 | 81.4 |
| 14   | 78.2 | 78.4 | 78.3 | 78.5 | 79.0 | 80.0 | 81.5 | 83.0 | 83.0 | 84.4 | 84.1 | 83.3 | 83.2 | 84.0 | 84.5 | 83.9 | 83.4 | 83.1 | 82.5 | 81.7 | 81.1 | 81.0 | 81.0 | 81.0 | 81.7 |
| 15   | 81.1 | 81.0 | 81.0 | 80.7 | 80.6 | 80.7 | 81.0 | 82.6 | 83.3 | 83.1 | 84.0 | 84.9 | 84.9 | 85.0 | 85.0 | 84.6 | 83.9 | 83.6 | 82.4 | 80.7 | 80.5 | 81.1 | 80.9 | 80.9 | 82.4 |
| 16   | 80.6 | 80.2 | 80.1 | 79.5 | 79.8 | 79.9 | 80.2 | 79.7 | 79.7 | 83.0 | 83.4 | 83.7 | 83.8 | 83.1 | 83.5 | 84.8 | 83.4 | 83.3 | 81.6 | 80.7 | 78.5 | 78.0 | 77.4 | 76.3 | 81.1 |
| 17   | 77.2 | 76.5 | 76.8 | 77.2 | 78.0 | 79.6 | 81.3 | 82.5 | 83.5 | 83.7 | 83.5 | 84.0 | 85.1 | 85.8 | 85.0 | 85.0 | 84.7 | 84.5 | 83.7 | 81.2 | 79.0 | 76.0 | 75.0 | 74.9 | 81.0 |
| 18   | 75.3 | 75.3 | 73.2 | 72.4 | 72.2 | 75.1 | 81.1 | 84.0 | 87.5 | 88.0 | 88.6 | 89.4 | 89.9 | 90.2 | 91.0 | 88.9 | 87.9 | 86.6 | 85.1 | 84.0 | 82.6 | 82.0 | 81.4 | 81.4 | 83.1 |
| 19   | 81.1 | 80.7 | 81.0 | 81.0 | 81.1 | 81.7 | 82.1 | 82.2 | 83.2 | 83.5 | 84.2 | 84.4 | 85.3 | 84.7 | 85.9 | 85.6 | 85.1 | 84.0 | 82.1 | 81.0 | 80.3 | 79.7 | 79.1 | 79.0 | 82.5 |
| 20   | 79.0 | 78.9 | 78.6 | 78.6 | 78.7 | 79.0 | 79.3 | 79.8 | 79.8 | 80.5 | 81.0 | 81.9 | 82.6 | 82.6 | 83.0 | 82.5 | 82.4 | 81.9 | 81.2 | 80.8 | 80.5 | 80.5 | 80.5 | 80.6 | 80.6 |
| 21   | 80.7 | 81.0 | 81.5 | 81.7 | 81.8 | 81.9 | 82.1 | 83.0 | 83.7 | 85.3 | 86.3 | 87.9 | 87.9 | 85.9 | 86.3 | 87.2 | 87.1 | 86.4 | 85.9 | 85.0 | 84.6 | 84.1 | 84.1 | 84.1 | 84.3 |
| 22   | 84.3 | 84.8 | 84.8 | 84.9 | 84.5 | 84.6 | 85.0 | 84.3 | 83.2 | 83.3 | 83.7 | 84.8 | 86.0 | 85.0 | 85.5 | 84.7 | 84.8 | 84.9 | 84.1 | 83.7 | 83.3 | 83.0 | 83.1 | 82.9 | 84.3 |
| 23   | 82.4 | 82.0 | 81.8 | 81.7 | 81.7 | 81.3 | 81.7 | 83.0 | 83.9 | 83.0 | 82.4 | 83.2 | 85.0 | 83.6 | 82.2 | 82.0 | 81.1 | 81.0 | 81.1 | 80.9 | 80.9 | 80.9 | 80.9 | 80.6 | 82.2 |
| 24   | 80.4 | 80.2 | 80.2 | 80.0 | 80.2 | 80.4 | 81.7 | 81.1 | 82.1 | 82.2 | 83.0 | 85.9 | 84.9 | 84.0 | 85.0 | 84.2 | 82.5 | 82.2 | 81.6 | 80.8 | 80.3 | 80.1 | 80.0 | 80.1 | 81.8 |
| 25   | 80.3 | 80.5 | 80.1 | 80.1 | 80.4 | 80.3 | 81.0 | 82.6 | 83.0 | 83.6 | 81.9 | 81.9 | 84.1 | 82.0 | 80.8 | 82.0 | 81.8 | 82.6 | 82.0 | 81.7 | 80.8 | 81.3 | 79.9 | 80.4 | 81.5 |
| 26   | 80.4 | 80.4 | 80.3 | 80.0 | 80.0 | 80.3 | 81.5 | 82.5 | 83.7 | 84.7 | 84.3 | 84.8 | 84.4 | 84.5 | 84.1 | 82.7 | 82.9 | 82.3 | 82.0 | 81.7 | 80.5 | 81.2 | 81.8 | 81.5 | 82.2 |
| 27   | 81.7 | 81.8 | 81.7 | 82.0 | 82.2 | 82.8 | 83.2 | 83.4 | 83.5 | 84.3 | 84.1 | 84.8 | 83.9 | 83.9 | 83.9 | 83.6 | 83.2 | 83.0 | 82.8 | 82.5 | 82.7 | 82.7 | 82.7 | 82.7 | 83.0 |
| 28   | 82.6 | 82.5 | 82.4 | 82.4 | 82.2 | 82.6 | 82.7 | 83.0 | 83.8 | 83.6 | 85.1 | 85.3 | 86.0 | 85.3 | 85.7 | 85.6 | 86.1 | 86.3 | 86.3 | 85.2 | 82.9 | 81.6 | 81.6 | 81.6 | 83.9 |
| 29   | 82.1 | 81.3 | 81.7 | 81.7 | 83.3 | 83.8 | 85.9 | 86.2 | 87.9 | 89.8 | 90.8 | 91.3 | 91.8 | 92.4 | 92.8 | 92.5 | 90.8 | 90.1 | 88.1 | 86.2 | 85.3 | 84.8 | 84.1 | 83.9 | 87.0 |
| 30   | 83.7 | 82.7 | 82.7 | 82.8 | 82.9 | 83.2 | 83.9 | 84.8 | 85.3 | 84.8 | 84.2 | 83.9 | 83.6 | 83.3 | 83.5 | 83.2 | 83.8 | 82.8 | 82.9 | 82.8 | 82.1 | 81.2 | 81.2 | 81.1 | 83.2 |
| 31   | 81.1 | 81.0 | 81.0 | 81.0 | 81.1 | 81.2 | 81.5 | 81.9 | 82.0 | 82.6 | 83.8 | 83.6 | 84.8 | 84.9 | 84.2 | 84.0 | 83.1 | 82.9 | 82.2 | 82.0 | 82.0 | 81.9 | 81.8 | 81.9 | 82.4 |
| Mean | 79.2 | 79.2 | 79.2 | 79.0 | 79.1 | 79.4 | 80.3 | 81.0 | 81.7 | 82.3 | 82.8 | 83.3 | 83.6 | 83.6 | 83.7 | 83.4 | 82.8 | 82.3 | 81.6 | 80.7 | 79.5 | 79.4 | 79.4 | 79.4 | 81.1 |

131. Eskdalemuir : Louvred Hut :  $h_t$  = 0.9 metres.

June, 1924.

| Day. | 1.   | 2.   | 3.   | 4.   | 5.   | 6.   | 7.   | 8.   | 9.   | 10.  | 11.  | Noon | 13.  | 14.  | 15.  | 16.  | 17.  | 18.  | 19.  | 20.  | 21.  | 22.  | 23.  | 24.  | Mean |
|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| 1    | 81.7 | 81.4 | 81.0 | 80.8 | 80.0 | 80.0 | 79.7 | 79.4 | 79.5 | 79.5 | 78.7 | 78.7 | 79.2 | 80.0 | 81.9 | 81.5 | 82.0 | 82.9 | 81.0 | 80.2 | 79.5 | 79.1 | 78.9 | 78.6 | 80.3 |
| 2    | 78.4 | 78.0 | 77.9 | 77.9 | 77.4 | 77.4 | 78.0 | 80.2 | 80.5 | 80.9 | 81.9 | 82.5 | 83.1 | 83.3 | 84.6 | 84.2 | 85.1 | 83.1 | 84.1 | 82.0 | 80.0 | 79.0 | 77.0 | 75.7 | 80.6 |
| 3    | 74.5 | 74.4 | 73.2 | 72.0 | 73.3 | 76.4 | 80.0 | 81.5 | 82.9 | 83.9 | 84.9 | 84.8 | 85.0 | 85.2 | 84.5 | 84.7 | 86.0 | 84.0 | 83.9 | 82.3 | 81.0 | 79.0 | 77.5 | 75.5 | 80.4 |
| 4    | 74.8 | 75.0 | 74.0 | 74.2 | 75.0 | 77.3 | 79.9 | 82.7 | 84.0 | 85.5 | 86.0 | 86.9 | 87.1 | 88.2 | 86.8 | 86.1 | 85.0 | 84.1 | 83.7 | 82.8 | 82.0 | 81.0 | 79.0 | 78.3 | 81.6 |
| 5    | 78.3 | 77.7 | 77.5 | 77.9 | 78.2 | 79.2 | 81.1 | 82.7 | 84.8 | 85.4 | 86.7 | 87.0 | 87.3 | 86.9 | 86.8 | 86.2 | 86.3 | 85.9 | 85.1 | 84.0 | 83.9 | 83.0 | 83.0 | 72.8 | 83.1 |
| 6    | 82.8 | 82.7 | 82.7 | 83.1 | 83.5 | 83.6 | 83.7 | 83.2 | 83.5 | 84.0 | 84.3 | 84.0 | 84.0 | 83.7 | 83.8 | 83.4 | 83.4 | 83.4 | 83.4 | 83.5 | 83.1 | 83.0 | 83.0 | 83.0 | 83.4 |
| 7    | 83.0 | 83.0 | 82.7 | 82.5 | 83.0 | 83.0 | 83.4 | 83.7 | 84.0 | 83.7 | 84.1 | 85.7 | 87.3 | 89.0 | 88.8 | 88.1 | 88.1 | 86.7 | 86.1 | 85.7 | 84.5 | 84.4 | 84.4 | 84.5 | 84.9 |
| 8    | 84.5 | 84.6 | 84.7 | 84.3 | 84.3 | 84.5 | 84.7 | 85.0 | 85.5 | 85.0 | 85.7 | 86.0 | 85.8 | 86.2 | 86.5 | 85.2 | 86.5 | 86.8 | 86.0 | 85.5 | 85.2 | 84.9 | 84.7 | 84.7 | 85.3 |
| 9    | 84.1 | 84.1 | 84.0 | 83.8 | 84.2 | 84.7 | 84.3 | 84.9 | 85.8 | 86.1 | 87.4 | 86.3 | 85.9 | 87.0 | 86.0 | 86.7 | 86.0 | 85.1 | 84.2 | 83.8 | 83.6 | 83.2 | 83.0 | 83.0 | 84.9 |
| 10   | 82.7 | 82.2 | 82.1 | 82.3 | 82.7 | 83.0 | 83.3 | 83.8 | 85.7 | 85.5 | 85.5 | 85.8 | 84.8 | 84.3 | 84.2 | 84.0 | 84.0 | 83.7 | 83.6 | 83.6 | 83.5 | 83.8 | 83.8 | 83.3 | 83.8 |
| 11   | 83.1 | 83.0 | 82.8 | 83.0 | 83.1 | 83.8 | 84.0 | 85.0 | 84.7 | 84.2 | 85.3 | 85.2 | 85.0 | 85.7 | 86.9 | 86.5 | 86.9 | 87.5 | 87.7 | 85.3 | 83.5 | 82.8 | 83.0 | 82.5 | 84.6 |
| 12   | 82.7 | 83.1 | 82.3 | 81.9 | 82.0 | 83.2 | 83.0 | 83.3 | 83.7 | 84.0 | 84.8 | 83.4 | 83.0 | 83.6 | 82.9 |      |      |      |      |      |      |      |      |      |      |

Readings in degrees absolute at exact hours, Greenwich Mean Time.

132. Eskdalemuir : Louvred Hut :  $h_t$  (height of thermometer bulb above ground) = 0.9 metres.

July, 1924.

Table with 25 columns (Day, 1-24, Mean) and 31 rows (1-31). Each cell contains a temperature reading in degrees absolute. The Mean row shows values like 83.3, 83.1, 82.8, 82.7, etc.

133. Eskdalemuir : Louvred Hut :  $h_t$  = 0.9 metres.

August, 1924.

Table with 25 columns (Day, 1-24, Mean) and 31 rows (1-31). Each cell contains a temperature reading in degrees absolute. The Mean row shows values like 82.7, 82.5, 82.3, 82.3, etc.

NOTE.—The initial 2 or 3 of the readings is omitted, i.e., 275.0 degrees absolute is printed 75.0.

Readings in degrees absolute at exact hours, Greenwich Mean Time.

134. Eskdalemuir : Louvred Hut :  $h_t$  (height of thermometer bulb above ground) = 0.9 metres.

September, 1924.

| Day. | 1.   | 2.   | 3.   | 4.   | 5.   | 6.   | 7.   | 8.   | 9.   | 10.  | 11.  | Noon | 13.  | 14.  | 15.  | 16.  | 17.  | 18.  | 19.  | 20.  | 21.  | 22.  | 23.  | 24.  | Mean |
|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| 1    | 85.8 | 85.4 | 85.3 | 85.0 | 85.0 | 85.0 | 85.1 | 85.5 | 86.2 | 86.4 | 86.9 | 86.9 | 87.0 | 86.9 | 87.0 | 87.3 | 86.8 | 86.0 | 85.4 | 85.0 | 84.6 | 84.6 | 84.7 | 84.4 | 85.8 |
| 2    | 84.0 | 83.1 | 83.6 | 82.9 | 81.0 | 81.3 | 84.0 | 87.1 | 88.8 | 89.4 | 89.0 | 89.1 | 89.7 | 90.0 | 91.1 | 89.9 | 89.0 | 87.3 | 86.0 | 84.7 | 85.5 | 86.0 | 85.9 | 84.8 | 86.4 |
| 3    | 84.3 | 84.0 | 83.6 | 83.9 | 83.3 | 83.2 | 83.9 | 84.9 | 87.0 | 88.5 | 89.8 | 90.6 | 90.8 | 89.3 | 90.4 | 88.3 | 88.2 | 86.6 | 83.4 | 81.6 | 81.0 | 82.9 | 81.1 | 82.0 | 85.6 |
| 4    | 81.6 | 82.6 | 82.4 | 82.4 | 82.1 | 82.4 | 83.8 | 84.4 | 85.0 | 87.1 | 89.2 | 88.9 | 89.3 | 89.5 | 89.4 | 90.0 | 89.0 | 87.5 | 85.3 | 85.1 | 84.3 | 84.3 | 83.9 | 83.1 | 85.5 |
| 5    | 83.1 | 82.0 | 82.0 | 82.2 | 82.4 | 82.9 | 83.5 | 84.0 | 85.0 | 86.4 | 87.0 | 88.0 | 88.9 | 88.9 | 88.0 | 86.5 | 85.8 | 86.1 | 86.0 | 85.4 | 85.5 | 85.0 | 84.8 | 84.9 | 85.1 |
| 6    | 84.9 | 84.9 | 85.0 | 85.1 | 85.1 | 85.3 | 85.8 | 86.9 | 86.8 | 87.7 | 88.1 | 89.0 | 89.0 | 89.4 | 88.7 | 88.8 | 88.1 | 86.8 | 85.3 | 84.1 | 85.0 | 84.1 | 83.7 | 83.3 | 86.4 |
| 7    | 83.2 | 83.1 | 82.9 | 83.0 | 83.1 | 83.3 | 83.7 | 83.9 | 84.3 | 84.7 | 85.0 | 85.8 | 85.5 | 85.3 | 85.6 | 85.9 | 85.7 | 85.7 | 85.7 | 85.7 | 85.8 | 86.0 | 86.3 | 86.3 | 84.8 |
| 8    | 86.2 | 86.4 | 86.6 | 86.5 | 86.3 | 86.8 | 86.5 | 86.6 | 86.8 | 87.0 | 87.9 | 88.0 | 88.7 | 87.7 | 87.0 | 86.4 | 86.1 | 86.0 | 85.9 | 85.8 | 85.7 | 85.7 | 85.6 | 85.3 | 86.7 |
| 9    | 85.2 | 85.0 | 84.9 | 84.7 | 84.3 | 84.2 | 84.7 | 84.0 | 83.9 | 83.0 | 82.1 | 82.8 | 83.0 | 83.4 | 82.8 | 83.3 | 81.8 | 81.2 | 81.2 | 81.1 | 80.4 | 79.0 | 78.4 | 78.1 | 82.8 |
| 10   | 77.8 | 77.2 | 74.8 | 74.9 | 74.5 | 74.3 | 76.8 | 79.1 | 80.6 | 82.1 | 81.8 | 82.1 | 83.9 | 83.0 | 83.0 | 82.4 | 82.1 | 81.4 | 81.0 | 80.5 | 80.1 | 80.1 | 80.1 | 79.9 | 79.7 |
| 11   | 80.0 | 81.0 | 81.8 | 84.1 | 84.0 | 83.7 | 83.5 | 83.7 | 84.3 | 84.7 | 85.2 | 86.3 | 85.3 | 84.4 | 84.7 | 85.0 | 84.4 | 84.3 | 83.7 | 83.3 | 83.3 | 83.0 | 84.0 | 84.5 | 83.7 |
| 12   | 84.1 | 84.9 | 84.4 | 84.1 | 84.2 | 84.9 | 85.4 | 85.9 | 84.8 | 84.7 | 86.0 | 86.4 | 86.9 | 86.0 | 86.4 | 86.0 | 85.9 | 85.5 | 85.5 | 85.5 | 85.6 | 85.6 | 85.9 | 85.7 | 85.4 |
| 13   | 85.5 | 85.5 | 85.6 | 85.3 | 84.5 | 84.4 | 84.2 | 84.4 | 84.8 | 84.9 | 84.5 | 85.1 | 87.0 | 86.0 | 86.9 | 85.5 | 85.4 | 84.8 | 84.0 | 83.5 | 82.9 | 82.6 | 82.0 | 81.6 | 84.7 |
| 14   | 81.8 | 81.2 | 80.5 | 78.5 | 77.1 | 76.1 | 76.8 | 81.5 | 82.7 | 83.5 | 85.5 | 85.4 | 84.8 | 83.3 | 84.6 | 84.7 | 83.9 | 83.9 | 82.7 | 82.5 | 82.2 | 82.7 | 82.0 | 81.9 | 82.1 |
| 15   | 82.0 | 81.5 | 81.9 | 82.0 | 82.5 | 82.9 | 83.0 | 83.9 | 84.3 | 84.5 | 84.0 | 84.9 | 84.5 | 84.6 | 84.5 | 84.0 | 84.0 | 84.0 | 84.5 | 84.6 | 84.5 | 84.0 | 83.8 | 83.2 | 83.6 |
| 16   | 83.0 | 82.8 | 82.9 | 82.7 | 82.5 | 82.5 | 82.6 | 83.1 | 83.8 | 84.6 | 84.7 | 84.5 | 83.9 | 83.4 | 83.7 | 84.8 | 85.6 | 86.5 | 86.8 | 86.5 | 86.5 | 86.4 | 86.4 | 86.4 | 84.4 |
| 17   | 86.2 | 86.0 | 85.8 | 85.1 | 85.2 | 85.5 | 85.8 | 86.0 | 86.7 | 86.7 | 87.1 | 88.1 | 88.1 | 84.3 | 83.4 | 86.4 | 86.0 | 84.5 | 84.0 | 83.6 | 83.5 | 83.0 | 83.3 | 83.0 | 85.5 |
| 18   | 82.6 | 83.0 | 82.7 | 83.0 | 82.6 | 82.3 | 82.6 | 82.6 | 82.3 | 83.5 | 85.0 | 84.5 | 85.3 | 85.7 | 85.5 | 85.3 | 84.8 | 83.5 | 82.5 | 81.5 | 80.2 | 80.8 | 79.6 | 80.1 | 83.0 |
| 19   | 78.5 | 77.9 | 77.1 | 75.6 | 74.8 | 75.0 | 79.6 | 81.0 | 82.7 | 83.6 | 84.2 | 85.2 | 84.8 | 84.2 | 84.9 | 84.5 | 83.6 | 83.0 | 82.5 | 82.1 | 81.5 | 81.5 | 81.3 | 80.7 | 81.2 |
| 20   | 80.9 | 80.5 | 80.2 | 80.4 | 80.9 | 81.0 | 81.5 | 82.0 | 82.9 | 83.9 | 83.6 | 84.0 | 83.9 | 84.0 | 84.0 | 83.5 | 83.3 | 82.8 | 82.9 | 83.2 | 83.5 | 84.0 | 84.0 | 83.0 | 82.6 |
| 21   | 82.8 | 82.8 | 83.8 | 83.4 | 82.0 | 81.8 | 82.0 | 82.5 | 82.2 | 82.1 | 81.1 | 83.0 | 83.5 | 84.8 | 79.8 | 81.6 | 80.6 | 81.0 | 81.0 | 80.8 | 80.1 | 78.6 | 77.8 | 76.1 | 81.6 |
| 22   | 76.4 | 76.3 | 76.0 | 76.2 | 78.3 | 78.1 | 78.6 | 80.0 | 81.1 | 82.1 | 83.5 | 81.1 | 81.1 | 83.3 | 83.4 | 84.4 | 81.2 | 82.0 | 80.1 | 77.7 | 76.1 | 76.2 | 77.0 | 77.8 | 79.0 |
| 23   | 80.0 | 80.4 | 80.4 | 79.3 | 79.4 | 80.0 | 80.8 | 81.4 | 81.6 | 82.0 | 81.9 | 82.5 | 83.7 | 83.0 | 82.4 | 82.1 | 82.4 | 82.0 | 81.1 | 81.2 | 80.8 | 80.2 | 81.0 | 80.6 | 81.2 |
| 24   | 80.4 | 80.0 | 80.0 | 79.9 | 79.7 | 78.7 | 78.3 | 79.8 | 80.9 | 82.2 | 83.0 | 83.0 | 83.8 | 84.5 | 83.5 | 81.0 | 81.3 | 80.2 | 78.4 | 77.8 | 76.8 | 75.9 | 75.0 | 80.1 | 80.1 |
| 25   | 75.0 | 74.6 | 75.2 | 75.2 | 75.9 | 75.9 | 76.0 | 77.0 | 80.6 | 82.8 | 83.8 | 83.7 | 85.2 | 85.9 | 85.4 | 85.3 | 83.9 | 83.0 | 82.6 | 81.4 | 81.2 | 81.9 | 80.2 | 79.9 | 80.3 |
| 26   | 80.0 | 80.2 | 80.5 | 80.5 | 80.6 | 80.9 | 81.2 | 81.8 | 82.1 | 83.7 | 83.3 | 83.0 | 83.1 | 83.1 | 83.9 | 84.0 | 83.0 | 81.6 | 79.8 | 80.2 | 79.9 | 78.5 | 79.7 | 80.9 | 81.5 |
| 27   | 80.5 | 78.7 | 76.1 | 75.9 | 74.9 | 74.0 | 75.0 | 76.1 | 79.0 | 82.1 | 84.2 | 86.0 | 85.0 | 86.1 | 83.9 | 84.0 | 83.8 | 80.4 | 78.2 | 78.0 | 76.1 | 75.1 | 75.0 | 74.7 | 79.5 |
| 28   | 75.1 | 75.9 | 76.9 | 77.1 | 77.9 | 78.1 | 81.1 | 81.7 | 83.1 | 83.2 | 85.0 | 85.0 | 84.6 | 84.8 | 84.3 | 83.6 | 83.7 | 83.7 | 83.8 | 83.1 | 83.3 | 83.3 | 83.8 | 83.9 | 81.7 |
| 29   | 84.0 | 84.0 | 84.0 | 84.1 | 84.3 | 84.3 | 84.3 | 84.2 | 84.2 | 84.1 | 84.0 | 83.9 | 84.6 | 85.3 | 85.3 | 85.0 | 84.4 | 84.3 | 84.1 | 83.9 | 83.9 | 84.8 | 83.5 | 82.9 | 84.2 |
| 30   | 83.9 | 83.9 | 83.5 | 83.1 | 83.0 | 82.3 | 82.7 | 82.9 | 83.5 | 85.0 | 85.0 | 84.0 | 84.0 | 83.0 | 81.8 | 82.1 | 82.5 | 82.0 | 81.5 | 81.2 | 81.0 | 81.0 | 80.4 | 79.0 | 82.7 |
| Mean | 82.0 | 81.8 | 81.7 | 81.5 | 81.3 | 81.4 | 82.1 | 82.9 | 83.7 | 84.5 | 85.0 | 85.4 | 85.7 | 85.5 | 85.3 | 85.0 | 84.6 | 83.9 | 83.1 | 82.6 | 82.4 | 82.2 | 82.0 | 81.8 | 83.2 |

135. Eskdalemuir : Louvred Hut :  $h_t$  = 0.9 metres.

October, 1924.

| Day. | 1.   | 2.   | 3.   | 4.   | 5.   | 6.   | 7.   | 8.   | 9.   | 10.  | 11.  | Noon | 13.  | 14.  | 15.  | 16.  | 17.  | 18.  | 19.  | 20.  | 21.  | 22.  | 23.  | 24.  | Mean |
|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| 1    | 77.0 | 75.2 | 74.4 | 74.0 | 73.3 | 73.0 | 73.0 | 75.2 | 79.0 | 82.0 | 81.3 | 82.2 | 83.3 | 83.0 | 83.0 | 82.9 | 81.9 | 81.6 | 81.3 | 81.3 | 81.2 | 81.1 | 80.6 | 81.0 | 79.2 |
| 2    | 80.7 | 80.7 | 80.2 | 80.2 | 80.5 | 80.3 | 80.7 | 80.3 | 80.9 | 81.4 | 82.8 | 82.7 | 83.5 | 83.8 | 83.9 | 83.6 | 83.2 | 83.0 | 82.2 | 82.2 | 82.3 | 82.2 | 82.3 | 82.2 | 81.9 |
| 3    | 82.2 | 82.1 | 81.8 | 82.0 | 80.6 | 81.4 | 82.2 | 82.4 | 83.1 | 83.8 | 84.5 | 84.0 | 84.4 | 85.0 | 84.5 | 83.6 | 83.2 | 83.0 | 83.0 | 82.8 | 82.5 | 82.0 | 81.9 | 81.8 | 82.8 |
| 4    | 81.8 | 81.7 | 81.8 | 81.4 | 81.1 | 81.0 | 81.1 | 81.5 | 83.8 | 84.3 | 86.0 | 86.8 | 86.9 | 85.8 | 85.6 | 84.8 | 84.2 | 80.2 | 79.7 | 80.4 | 81.7 | 82.1 | 81.8 | 82.1 | 82.8 |
| 5    | 81.9 | 82.0 | 82.0 | 82.3 | 81.8 | 81.0 | 80.8 | 81.2 | 81.8 | 82.8 | 83.0 | 83.5 | 83.4 | 83.3 | 83.4 | 83.0 | 81.8 | 81.1 | 80.8 | 80.8 | 81.0 | 80.9 | 80.7 | 81.0 | 81.9 |
| 6    | 81.1 | 80.7 | 80.0 | 79.8 | 79.8 | 79.4 | 78.3 | 78.7 | 79.7 | 80.0 | 81.3 | 81.7 | 81.6 | 81.2 | 81.2 | 80.5 | 80.8 | 80.6 | 80.3 | 80.0 | 79.6 | 79.1 | 79.0 | 79.1 | 80.2 |
| 7    | 79.0 | 79.0 | 79.0 | 79.0 | 79.7 | 79.8 | 79.8 | 79.5 | 80.0 | 79.8 | 82.0 | 81.3 | 81.4 | 82.7 | 82.6 | 81.9 | 81.1 | 79.1 | 78.0 | 76.5 | 76.4 | 76.3 | 75.3 | 74.5 | 79.4 |
| 8    | 75.0 | 75.9 | 75.8 | 75.3 | 75.3 | 74.4 | 73.9 | 76.0 | 79.0 | 82.8 | 83.2 | 84.0 | 83.6 | 83.7 | 83.8 | 82.7 | 80.0 | 77.0 | 76.1 | 76.9 | 76.9 | 77.4 | 77.1 | 77.3 | 78.4 |
| 9    | 76.5 | 76.2 | 76.6 | 76.8 | 77.0 | 76.9 | 75.3 | 77.3 | 80.0 | 81.4 | 83.0 | 81.3 | 82.4 | 82.1 | 82.8 | 81.5 | 80.7 | 81.0 | 81.1 | 81.4 | 84.0 | 84.7 | 84.0 | 84.0 | 80.2 |
| 10   | 84.0 | 84.0 | 84.0 | 84.0 | 83.9 | 83.8 | 84.0 | 82.0 | 84.3 | 84.0 | 84.9 | 85.2 | 84.5 | 83.9 | 83.0 | 83.1 | 83.0 | 82.8 | 82.6 | 82.8 | 83.1 | 83.3 | 83.5 | 82.1 | 83.6 |
| 11   | 79.5 | 78.6 | 79.5 | 80.9 | 81.1 | 81.3 | 80.9 | 81.8 | 83.4 | 84.0 | 84.9 | 84.9 | 84.9 | 84.4 | 83.8 | 83.8 | 83.7 | 83.3 | 83.0 | 82.2 | 82.2 | 82.0 | 81.0 | 81.1 | 82.4 |
| 12   | 82.1 | 82.6 | 83.0 | 82.9 | 81.3 | 80.1 | 80.6 | 81.1 | 82.0 | 83.7 | 84.3 | 85.0 | 85.5 | 84.9 | 84.1 | 83.8 | 81.1 | 79.3 | 78.1 | 78.3 | 79.6 | 80.3 | 80.2 | 80.5 | 81.9 |
| 13   | 79.1 | 80.3 | 80.2 | 80.6 | 80.9 | 81.2 | 81.3 | 82.2 | 85.0 | 85.3 | 86.6 | 86.3 | 89.0 | 89.3 | 89.0 | 87.0 | 86.1 | 85.0 | 84.3 | 84.0 | 83.0 | 82.6 | 82.0 | 83.9 | 83.9 |
| 14   | 81.5 | 81.0 | 81.0 | 80.3 | 79.7 | 79.0 | 79.8 | 82.8 | 85.8 | 86.8 | 89.3 | 90.8 | 92.0 | 92.0 | 91.8 | 91.0 | 87.4 | 80.0 | 83.8 | 83.0 | 82.5 | 82.0 | 79.9 | 79.8 | 84.1 |
| 15   | 79.1 | 79.0 | 79.0 | 79.1 | 78.8 | 77.6 | 76.7 | 78.0 | 81.0 | 84.8 | 86.5 | 87.2 | 87.8 | 88.1 | 87.8 | 87.0 | 84.0 | 81.2 | 80.2 | 78.4 | 77.1 | 75.9 | 75.5 | 75.0 | 81.1 |
| 16   | 75.7 | 76.1 | 76.8 | 77.7 | 78.3 | 79.0 | 79.8 | 80.4 | 80.2 | 80.4 | 81.3 | 81.7 | 81.9 | 83.0 | 83.0 | 83.0 | 82.9 | 82.9 | 83.0 | 81.9 | 81.7 | 81.8 | 80.7 | 80.0 | 80.4 |
| 17   | 80.0 | 77.9 | 78.1 | 79.1 | 79.3 | 78.0 | 78.0 | 80.3 | 81.2 | 82.0 | 82.1 | 83.4 | 84.0 | 84.5 | 83.8 | 82.4 | 79.9 | 79.1 | 79.9 | 79.8 | 79.5 | 79.3 | 79.1 | 79.0 | 80.4 |
| 18   | 78.8 | 78.0 | 75.5 | 74.9 | 75.3 | 75.7 | 76.1 | 77.0 | 78.6 | 79.5 | 80.0 | 80.6 | 81.0 | 81.1 | 81.0 | 81.0 | 80.3 | 80.0 |      |      |      |      |      |      |      |





TEMPERATURE: ANNUAL MEANS OF HOURLY VALUES.
From readings in degrees absolute at exact hours, Greenwich Mean Time.

138. Eskdalemuir: Louvred Hut: ht = 0.9 metres.

1924.

Table with 25 columns (1-24 hours and Mean) and 12 rows (Jan-Dec and Year) showing hourly temperature means for Eskdalemuir.

TEMPERATURE: MONTHLY MEANS AND DIURNAL INEQUALITIES.
The departures from the mean of the day are adjusted for non-cyclic change.

139. Eskdalemuir: Louvred Hut: ht = .09 metres.

1924.

Table with 25 columns (Month, Mean, Hour 1-24) and 12 rows (Jan-Dec and Year) showing monthly means and diurnal inequalities for Eskdalemuir.

ABSOLUTE EXTREMES OF TEMPERATURE FOR EACH DAY.
Maximum and minimum for the interval 0h. to 24h., Greenwich Mean Time.

140. Eskdalemuir: Louvred Hut: ht = 0.9 metres.

1924.

Large table with 25 columns (Month, Day, Max, Min) and 31 rows (Days 1-31) showing absolute extremes of temperature for Eskdalemuir.

NOTE.—The initial 2 or 3 of the readings is omitted, i.e., 275.0 degrees absolute is printed 75.0.

Percentages at exact hours, Greenwich Mean Time. Determined as explained on page 14.

141. Eskdalemuir : Louvred Hut :  $h_t$  (height of thermometer bulbs above ground) = 0.9 metres.

January, 1924.

| Day.             | 1.      | 2.      | 3.      | 4.      | 5.      | 6.      | 7.      | 8.      | 9.      | 10.     | 11.     | Noon.   | 13.     | 14.     | 15.     | 16.     | 17.     | 18.     | 19.     | 20.     | 21.     | 22.     | 23.     | 24.     | Mean.   | Vapour Pressure.* |     |
|------------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|-------------------|-----|
| 1                | 87      | 90      | 93      | 92      | 90      | 87      | 85      | 88      | 85      | 77      | 78      | 73      | 76      | 86      | 90      | 87      | 89      | 88      | 90      | 93      | 93      | 94      | 94      | 95      | 87.4    | 9.3               |     |
| 2                | 97      | 98      | 98      | 99      | 97      | 97      | 97      | 99      | 99      | 100     | 100     | 100     | 99      | 99      | 99      | 89      | 95      | 92      | 90      | 90      | 84      | 90      | 82      | 85      | 95.0    | 8.8               |     |
| 3                | 84      | 84      | 85      | 88      | 85      | 85      | 85      | 82      | 88      | 87      | 84      | 87      | 82      | 87      | 91      | 92      | 96      | 96      | 97      | 97      | 97      | 97      | 97      | 96      | 89.3    | 6.1               |     |
| 4                | 96      | 96      | 96      | 97      | 97      | 97      | 96      | 96      | 96      | 98      | 98      | 98      | 98      | 97      | 94      | 99      | 99      | 99      | 99      | 97      | 99      | 100     | 100     | 100     | 99      | 97.5              | 5.6 |
| 5                | 95      | 96      | 94      | 98      | 97      | 95      | 98      | 97      | 97      | 92      | 97      | 97      | 97      | 97      | 97      | 97      | 97      | 97      | 95      | 93      | 93      | 93      | 94      | 95      | 95.8    | 7.8               |     |
| 6                | 93      | 93      | 92      | 89      | 88      | 89      | 91      | 90      | 90      | 93      | 94      | 96      | 96      | 95      | 91      | 88      | 83      | 80      | 80      | 81      | 80      | 83      | 78      | 79      | 88.3    | 6.1               |     |
| 7                | 79      | 73      | 87      | 87      | 87      | 88      | 91      | 89      | 88      | 82      | 85      | 80      | 92      | 93      | 89      | 86      | 88      | 85      | 88      | 87      | 85      | 83      | 81      | 83      | 85.6    | 6.3               |     |
| 8                | 85      | 84      | 83      | 83      | 82      | 82      | 85      | 86      | 84      | 84      | 85      | 90      | 90      | 86      | 83      | 86      | 85      | 83      | 87      | 88      | 87      | 84      | 85      | 82      | 85.0    | 5.1               |     |
| 9                | 80      | 78      | 81      | 83      | 78      | 80      | 85      | 88      | 90      | 88      | 86      | 86      | 86      | 86      | 87      | 91      | 93      | 96      | 98      | 97      | 96      | 92      | 90      | 89      | 87.5    | 3.6               |     |
| 10               | 84      | 78      | 70      | 66      | 66      | 83      | 90      | 91      | 88      | 87      | 91      | 96      | 91      | 92      | 94      | 96      | 97      | 93      | 94      | 90      | 93      | 94      | 95      | 97      | 88.0    | 4.4               |     |
| 11               | 97      | 97      | 97      | 97      | 97      | 97      | 97      | 97      | 96      | 96      | 96      | 96      | 95      | 97      | 97      | 96      | 97      | 97      | 97      | 97      | 88      | 91      | 93      | 94      | 95.8    | 4.7               |     |
| 12               | 97      | 100     | 91      | 80      | 81      | 84      | 87      | 94      | 84      | 77      | 79      | 77      | 77      | 77      | 79      | 83      | 83      | 85      | 81      | 76      | 85      | 92      | 92      | 92      | 84.7    | 6.1               |     |
| 13               | 92      | 94      | 100     | 96      | 92      | 100     | 100     | 98      | 96      | 95      | 94      | 96      | 95      | 94      | 97      | 96      | 92      | 92      | 92      | 93      | 94      | 94      | 92      | 92      | 92      | 94.9              | 8.1 |
| 14               | 93      | 92      | 91      | 95      | 96      | 96      | 96      | 95      | 94      | 97      | 97      | 87      | 85      | 87      | 87      | 88      | 94      | 94      | 93      | 90      | 91      | 91      | 88      | 89      | 92.0    | 6.2               |     |
| 15               | 91      | 92      | 91      | 89      | 96      | 88      | 90      | 87      | 86      | 90      | 82      | 81      | 80      | 80      | 85      | 86      | 88      | 87      | 89      | 88      | 85      | 85      | 90      | 86      | 87.2    | 7.4               |     |
| 16               | 81      | 77      | 74      | 84      | 84      | 85      | 76      | 91      | 91      | 91      | 93      | 91      | 90      | 86      | 88      | 88      | 89      | 89      | 89      | 87      | 88      | 88      | 86      | 85      | 86.3    | 6.4               |     |
| 17               | 83      | 85      | 84      | 85      | 85      | 83      | 83      | 83      | 83      | 83      | 83      | 83      | 83      | 86      | 84      | 85      | 84      | 83      | 81      | 85      | 85      | 86      | 83      | 83      | 83.8    | 5.1               |     |
| 18               | 83      | 88      | 88      | 91      | 97      | 98      | 97      | 97      | 98      | 99      | 99      | 99      | 98      | 98      | 98      | 100     | 94      | 92      | 97      | 98      | 99      | 97      | 93      | 94      | 95.3    | 6.3               |     |
| 19               | 89      | 87      | 91      | 88      | 95      | 90      | 87      | 89      | 92      | 95      | 90      | 90      | 88      | 87      | 92      | 93      | 95      | 97      | 97      | 91      | 86      | 91      | 90      | 89      | 90.9    | 7.9               |     |
| 20               | 80      | 82      | 83      | 80      | 81      | 85      | 95      | 82      | 83      | 96      | 80      | 80      | 75      | 75      | 74      | 75      | 79      | 84      | 88      | 92      | 91      | 96      | 97      | 97      | 84.4    | 6.5               |     |
| 21               | 97      | 98      | 98      | 97      | 97      | 97      | 97      | 97      | 100     | 95      | 96      | 96      | 94      | 95      | 97      | 94      | 93      | 95      | 95      | 98      | 95      | 94      | 94      | 97      | 96.1    | 7.4               |     |
| 22               | 97      | 96      | 95      | 98      | 96      | 97      | 95      | 96      | 97      | 93      | 94      | 93      | 98      | 97      | 96      | 98      | 94      | 95      | 97      | 98      | 97      | 94      | 95      | 94      | 95.9    | 9.7               |     |
| 23               | 97      | 98      | 96      | 97      | 97      | 96      | 100     | 98      | 97      | 91      | 88      | 88      | 89      | 89      | 89      | 82      | 87      | 88      | 88      | 89      | 87      | 87      | 82      | 89      | 92.4    | 7.7               |     |
| 24               | 87      | 89      | 90      | 93      | 91      | 97      | 97      | 98      | 97      | 98      | 98      | 100     | 99      | 94      | 95      | 86      | 91      | 97      | 90      | 85      | 85      | 88      | 90      | 92      | 92.7    | 7.7               |     |
| 25               | 95      | 96      | 96      | 88      | 90      | 91      | 95      | 97      | 98      | 96      | 97      | 97      | 93      | 97      | 97      | 96      | 94      | 94      | 93      | 93      | 93      | 95      | 94      | 94      | 94.5    | 7.2               |     |
| 26               | 89      | 89      | 98      | 97      | 97      | 96      | 94      | 94      | 95      | 93      | 90      | 90      | 93      | 92      | 93      | 87      | 90      | 86      | 88      | 87      | 88      | 90      | 91      | 82      | 91.5    | 8.3               |     |
| 27               | 87      | 86      | 82      | 82      | 78      | 82      | 80      | 82      | 77      | 78      | 77      | 74      | 77      | 74      | 79      | 78      | 83      | 88      | 84      | 85      | 85      | 86      | 84      | 84      | 81.3    | 6.4               |     |
| 28               | 85      | 84      | 85      | 84      | 84      | 85      | 83      | 81      | 83      | 83      | 75      | 75      | 73      | 77      | 79      | 79      | 87      | 88      | 89      | 88      | 93      | 95      | 98      | 95      | 84.3    | 7.5               |     |
| 29               | 97      | 98      | 100     | 100     | 100     | 91      | 91      | 91      | 93      | 90      | 90      | 89      | 93      | 89      | 92      | 86      | 89      | 88      | 90      | 96      | 93      | 93      | 93      | 95      | 92.8    | 9.1               |     |
| 30               | 96      | 97      | 98      | 98      | 96      | 89      | 95      | 95      | 94      | 94      | 94      | 95      | 94      | 92      | 89      | 85      | 85      | 89      | 90      | 93      | 96      | 97      | 97      | 98      | 93.5    | 8.0               |     |
| 31               | 98      | 98      | 98      | 97      | 98      | 95      | 93      | 94      | 95      | 95      | 96      | 94      | 90      | 93      | 88      | 87      | 82      | 75      | 76      | 79      | 83      | 81      | 82      | 86      | 0.06    | 7.4               |     |
| Mean             | 90.0    | 90.1    | 90.5    | 90.3    | 90.2    | 90.5    | 91.3    | 91.7    | 91.4    | 90.7    | 89.9    | 89.5    | 89.2    | 89.5    | 89.9    | 89.3    | 90.2    | 90.1    | 90.3    | 90.4    | 90.3    | 91.0    | 90.7    | 90.5    | 90.3    | †6.9              |     |
| Vapour Pressure* | mb. 6.5 | mb. 6.5 | mb. 6.6 | mb. 6.7 | mb. 6.6 | mb. 6.7 | mb. 6.7 | mb. 6.8 | mb. 6.9 | mb. 7.0 | mb. 7.1 | mb. 7.2 | mb. 7.3 | mb. 7.2 | mb. 7.2 | mb. 7.0 | mb. 6.8 | mb. 6.8 | mb. 6.7 | mb. 6.6 | mb. 6.6 | mb. 6.5 | mb. 6.4 | mb. 6.4 | mb. 6.4 | †6.8              |     |

142. Eskdalemuir : Louvred Hut :  $h_t$  = 0.9 metres.

February, 1924.

| Day. | 1. | 2. | 3. | 4. | 5. | 6. | 7. | 8. | 9. | 10. | 11. | Noon. | 13. | 14. | 15. | 16. | 17. | 18. | 19. | 20. | 21. | 22. | 23. | 24. | Mean. | Vapour Pressure.* |
|------|----|----|----|----|----|----|----|----|----|-----|-----|-------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-------|-------------------|
| 1    | 84 | 88 | 89 | 92 | 93 | 93 | 94 | 94 | 93 | 92  | 92  | 94    | 90  | 85  | 83  | 80  | 80  | 85  | 84  | 80  | 81  | 84  | 85  | 81  | 87.5  | 6.3               |
| 2    | 81 | 82 | 83 | 83 | 80 | 82 | 83 | 85 | 85 | 86  | 82  | 81    | 81  | 83  | 85  | 85  | 77  | 80  | 75  | 78  | 77  | 78  | 77  | 77  | 81.2  | 7.9               |
| 3    | 79 | 81 | 81 | 82 | 82 | 75 | 83 | 83 | 80 | 72  | 73  | 70    | 75  | 78  | 78  | 80  | 74  | 78  | 84  | 83  | 87  | 89  | 87  | 87  | 79.8  | 7.6               |
| 4    | 88 | 86 | 89 | 87 | 86 | 86 | 86 | 83 | 84 | 89  | 92  | 86    | 87  | 86  | 81  | 84  | 90  | 89  | 85  | 89  | 86  | 87  | 87  | 87  | 86.7  | 8.8               |
| 5    | 86 | 85 | 86 | 85 | 86 | 87 | 86 | 89 | 88 | 86  | 87  | 84    | 85  | 84  | 80  | 78  | 72  | 76  | 77  | 78  | 79  | 76  | 77  | 82  | 82.5  | 8.0               |
| 6    | 81 | 83 | 84 | 84 | 84 | 85 | 87 | 86 | 81 | 84  | 80  | 80    | 80  | 81  | 83  | 86  | 82  | 82  | 81  | 81  | 83  | 83  | 81  | 76  | 82.5  | 7.8               |
| 7    | 79 | 78 | 75 | 82 | 82 | 85 | 90 | 93 | 89 | 88  | 86  | 88    | 87  | 77  | 79  | 86  | 91  | 87  | 89  | 96  | 95  | 94  | 92  | 91  | 86.3  | 7.3               |
| 8    | 92 | 89 | 91 | 91 | 91 | 92 | 89 | 83 | 82 | 82  | 73  | 77    | 76  | 76  | 77  | 78  | 79  | 79  | 78  | 78  | 79  | 78  | 77  | 77  | 82.3  | 6.4               |
| 9    | 77 | 76 | 76 | 80 | 79 | 79 | 80 | 79 | 80 | 79  | 78  | 74    | 77  | 85  | 89  | 88  | 88  | 89  | 92  | 96  | 95  | 95  | 91  | 94  | 83.7  | 6.0               |
| 10   | 95 | 91 | 95 | 97 | 97 | 95 | 90 | 95 | 91 | 89  | 89  | 89    | 93  | 92  | 91  | 91  | 88  | 91  | 95  | 94  | 92  | 92  | 90  | 91  | 92.6  | 7.0               |
| 11   | 93 | 95 | 91 | 91 | 91 | 87 | 84 | 83 | 84 | 87  | 87  | 84    | 82  | 82  | 83  | 84  | 88  | 88  | 89  | 89  | 92  | 93  | 94  | 92  | 88.0  | 5.5               |
| 12   | 89 | 89 | 89 | 88 | 88 | 86 | 87 | 87 | 87 | 86  | 85  | 85    | 87  | 85  | 91  | 91  | 93  | 89  | 92  | 92  | 96  | 93  | 84  | 85  | 88.6  | 5.7               |
| 13   | 87 | 88 | 89 | 89 | 88 | 88 | 87 | 87 | 85 | 83  | 76  | 76    | 75  | 76  | 70  | 74  | 72  | 72  | 73  | 72  | 69  | 70  | 72  | 73  | 79.0  | 4.5               |
| 14   | 73 | 69 | 70 | 68 | 70 | 70 | 70 | 71 | 72 | 66  | 70  | 67    | 67  | 72  | 68  | 74  | 79  | 79  | 75  | 75  | 80  | 82  | 84  | 88  | 73.0  | 4.0               |
| 15   | 86 | 88 | 89 | 87 | 87 | 88 | 88 | 87 | 79 | 77  | 76  | 77    | 71  | 67  | 67  | 85  | 84  | 82  | 82  | 84  | 85  | 85  | 86  | 87  | 82.3  | 5.4               |
| 16   | 89 | 92 | 92 | 90 | 94 | 92 | 89 | 87 | 85 | 84  | 84  | 77    | 71  | 71  | 72  | 72  | 77  | 77  | 85  | 86  | 89  | 89  | 89  | 89  | 84.2  | 5.5               |
| 17   | 84 | 88 | 89 | 92 | 93 | 92 | 89 | 93 | 94 | 95  | 94  | 92    | 88  | 86  | 85  | 83  | 87  | 87  | 88  | 93  | 90  | 93  | 95  | 95  | 90.1  | 6.1               |
| 18   | 92 | 94 | 95 | 9  |    |    |    |    |    |     |     |       |     |     |     |     |     |     |     |     |     |     |     |     |       |                   |

Percentages at exact hours, Greenwich Mean Time. Determined as explained on page 14.

143. Eskdalemuir : Louvred Hut :  $h_t$  (height of thermometer bulbs above ground) = 0.9 metres.

March, 1924.

| Day.                 | 1.      | 2.      | 3.      | 4.      | 5.      | 6.      | 7.      | 8.      | 9.      | 10.     | 11.     | Noon.   | 13.     | 14.     | 15.     | 16.     | 17.     | 18.     | 19.     | 20.     | 21.     | 22.     | 23.     | 24.     | Mean.   | Vapour Pressure.* |     |
|----------------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|-------------------|-----|
| 1                    | 62      | 64      | 69      | 74      | 79      | 79      | 77      | 74      | 69      | 65      | 60      | 60      | 55      | 56      | 55      | 53      | 54      | 54      | 60      | 60      | 62      | 67      | 74      | 79      | 79      | 65.1              | 3.6 |
| 2                    | 83      | 86      | 89      | 88      | 88      | 87      | 85      | 84      | 83      | 80      | 81      | 71      | 76      | 82      | 82      | 85      | 72      | 73      | 82      | 87      | 92      | 92      | 92      | 92      | 92      | 83.5              | 3.3 |
| 3                    | 93      | 93      | 93      | 94      | 93      | 92      | 93      | 93      | 93      | 80      | 59      | 52      | 54      | 61      | 64      | 69      | 74      | 77      | 83      | 94      | 89      | 92      | 93      | 94      | 94      | 82.1              | 3.8 |
| 4                    | 94      | 94      | 94      | 93      | 93      | 94      | 94      | 94      | 94      | 93      | 92      | 80      | 67      | 71      | 67      | 66      | 71      | 76      | 75      | 76      | 68      | 79      | 81      | 84      | 84      | 82.3              | 4.8 |
| 5                    | 85      | 87      | 88      | 88      | 89      | 89      | 92      | 92      | 93      | 72      | 70      | 59      | 52      | 53      | 52      | 52      | 58      | 70      | 77      | 79      | 81      | 82      | 75      | 73      | 75.6    | 3.8               |     |
| 6                    | 72      | 76      | 80      | 82      | 84      | 87      | 89      | 89      | 87      | 74      | 53      | 53      | 56      | 57      | 54      | 60      | 75      | 82      | 86      | 86      | 86      | 87      | 89      | 93      | 76.1    | 3.9               |     |
| 7                    | 94      | 87      | 87      | 87      | 87      | 87      | 87      | 87      | 79      | 86      | 85      | 91      | 88      | 84      | 89      | 84      | 91      | 87      | 87      | 87      | 87      | 87      | 88      | 92      | 87.0    | 6.0               |     |
| 8                    | 97      | 91      | 90      | 90      | 94      | 93      | 93      | 92      | 86      | 79      | 73      | 77      | 77      | 74      | 73      | 77      | 81      | 80      | 79      | 76      | 82      | 85      | 87      | 87      | 84.0    | 5.9               |     |
| 9                    | 86      | 87      | 92      | 92      | 92      | 89      | 92      | 92      | 87      | 71      | 54      | 60      | 58      | 58      | 58      | 61      | 68      | 70      | 77      | 75      | 75      | 76      | 80      | 84      | 76.5    | 5.3               |     |
| 10                   | 87      | 92      | 92      | 92      | 92      | 92      | 89      | 92      | 83      | 76      | 56      | 40      | 38      | 48      | 38      | 37      | 42      | 54      | 60      | 69      | 80      | 83      | 91      | 84      | 68.8    | 5.2               |     |
| 11                   | 84      | 82      | 82      | 80      | 78      | 77      | 78      | 77      | 70      | 41      | 39      | 39      | 38      | 41      | 39      | 42      | 53      | 63      | 69      | 79      | 82      | 84      | 84      | 85      | 66.0    | 5.2               |     |
| 12                   | 86      | 91      | 92      | 92      | 92      | 85      | 85      | 85      | 80      | 61      | 57      | 49      | 49      | 47      | 42      | 43      | 53      | 61      | 76      | 76      | 79      | 78      | 80      | 78      | 71.7    | 5.8               |     |
| 13                   | 81      | 78      | 77      | 74      | 71      | 70      | 69      | 67      | 49      | 44      | 41      | 39      | 33      | 33      | 34      | 37      | 38      | 47      | 45      | 58      | 57      | 63      | 69      | 66      | 56.1    | 4.9               |     |
| 14                   | 67      | 66      | 64      | 62      | 63      | 69      | 68      | 70      | 66      | 45      | 43      | 39      | 37      | 28      | 35      | 35      | 31      | 56      | 60      | 61      | 65      | 61      | 59      | 61      | 54.7    | 4.8               |     |
| 15                   | 66      | 72      | 79      | 81      | 83      | 86      | 80      | 67      | 60      | 62      | 60      | 56      | 55      | 51      | 53      | 54      | 57      | 71      | 75      | 77      | 85      | 82      | 83      | 85      | 69.5    | 5.4               |     |
| 16                   | 97      | 97      | 97      | 96      | 86      | 77      | 77      | 86      | 60      | 63      | 63      | 60      | 59      | 59      | 60      | 55      | 57      | 63      | 67      | 72      | 72      | 79      | 81      | 80      | 73.6    | 5.2               |     |
| 17                   | 86      | 92      | 92      | 80      | 81      | 85      | 92      | 85      | 75      | 65      | 63      | 56      | 63      | 61      | 54      | 56      | 60      | 67      | 79      | 80      | 83      | 84      | 87      | 94      | 75.5    | 4.4               |     |
| 18                   | 96      | 96      | 97      | 98      | 99      | 100     | 97      | 93      | 65      | 55      | 54      | 51      | 51      | 47      | 52      | 54      | 58      | 66      | 77      | 82      | 85      | 93      | 96      | 97      | 77.4    | 4.7               |     |
| 19                   | 98      | 96      | 95      | 94      | 94      | 93      | 95      | 95      | 94      | 85      | 91      | 96      | 98      | 93      | 85      | 84      | 79      | 77      | 84      | 77      | 76      | 81      | 82      | 84      | 88.8    | 5.5               |     |
| 20                   | 81      | 79      | 79      | 79      | 81      | 82      | 81      | 78      | 64      | 58      | 55      | 53      | 51      | 55      | 54      | 54      | 52      | 60      | 71      | 80      | 85      | 87      | 87      | 94      | 70.6    | 4.0               |     |
| 21                   | 94      | 94      | 95      | 95      | 96      | 96      | 96      | 96      | 82      | 75      | 70      | 61      | 52      | 49      | 51      | 60      | 63      | 67      | 71      | 73      | 79      | 81      | 83      | 85      | 77.9    | 4.5               |     |
| 22                   | 87      | 94      | 85      | 86      | 88      | 94      | 94      | 96      | 98      | 98      | 97      | 97      | 98      | 100     | 98      | 94      | 92      | 95      | 93      | 98      | 97      | 98      | 98      | 94      | 94.3    | 7.6               |     |
| 23                   | 97      | 97      | 97      | 97      | 93      | 95      | 94      | 92      | 95      | 95      | 94      | 93      | 95      | 93      | 94      | 95      | 93      | 90      | 90      | 94      | 94      | 91      | 91      | 94      | 93.9    | 8.6               |     |
| 24                   | 95      | 95      | 95      | 97      | 97      | 98      | 95      | 94      | 95      | 98      | 97      | 100     | 98      | 97      | 100     | 94      | 96      | 98      | 100     | 100     | 95      | 98      | 97      | 100     | 96.9    | 7.4               |     |
| 25                   | 100     | 100     | 100     | 100     | 100     | 100     | 98      | 97      | 95      | 92      | 90      | 89      | 89      | 89      | 89      | 94      | 94      | 94      | 96      | 98      | 98      | 95      | 97      | 96      | 95.5    | 6.8               |     |
| 26                   | 95      | 96      | 96      | 94      | 93      | 92      | 92      | 91      | 88      | 92      | 83      | 83      | 85      | 83      | 82      | 85      | 81      | 84      | 84      | 86      | 88      | 89      | 91      | 92      | 88.6    | 6.0               |     |
| 27                   | 92      | 92      | 92      | 92      | 92      | 92      | 92      | 87      | 82      | 77      | 75      | 74      | 72      | 70      | 70      | 69      | 71      | 75      | 82      | 79      | 91      | 94      | 94      | 94      | 83.3    | 5.4               |     |
| 28                   | 94      | 92      | 86      | 81      | 82      | 68      | 82      | 82      | 69      | 69      | 69      | 68      | 67      | 65      | 70      | 69      | 73      | 77      | 82      | 84      | 85      | 91      | 80      | 77.6    | 5.5     |                   |     |
| 29                   | 77      | 80      | 95      | 96      | 96      | 97      | 97      | 79      | 67      | 64      | 64      | 65      | 58      | 53      | 55      | 60      | 60      | 65      | 70      | 77      | 83      | 84      | 85      | 91      | 75.5    | 4.8               |     |
| 30                   | 95      | 95      | 86      | 84      | 83      | 79      | 78      | 75      | 68      | 67      | 63      | 60      | 60      | 56      | 52      | 57      | 59      | 61      | 72      | 71      | 71      | 75      | 80      | 81      | 72.2    | 5.3               |     |
| 31                   | 84      | 86      | 87      | 87      | 94      | 94      | 92      | 82      | 67      | 56      | 57      | 59      | 58      | 65      | 61      | 59      | 62      | 64      | 72      | 85      | 92      | 95      | 96      | 95      | 76.7    | 5.6               |     |
| Mean ...             | 87.3    | 88.0    | 88.5    | 87.9    | 88.2    | 87.7    | 87.8    | 85.3    | 78.5    | 71.7    | 67.4    | 65.3    | 64.1    | 63.6    | 63.3    | 64.3    | 66.6    | 71.6    | 76.7    | 79.8    | 82.0    | 84.1    | 85.8    | 86.7    | 78.0    | 75.3              |     |
| Vapour Pressure* ... | mb. 4.7 | mb. 4.7 | mb. 4.6 | mb. 4.7 | mb. 4.6 | mb. 4.5 | mb. 4.7 | mb. 5.0 | mb. 5.3 | mb. 5.5 | mb. 5.6 | mb. 5.7 | mb. 5.8 | mb. 5.8 | mb. 5.8 | mb. 5.7 | mb. 5.6 | mb. 5.3 | mb. 5.3 | mb. 5.3 | mb. 5.1 | mb. 5.1 | mb. 4.9 | mb. 4.8 | mb. 4.5 | mb. 4.2           |     |

144. Eskdalemuir : Louvred Hut :  $h_t$  = 0.9 metres.

April, 1924.

| Day. | 1. | 2. | 3. | 4. | 5. | 6. | 7. | 8. | 9. | 10. | 11. | Noon. | 13. | 14. | 15. | 16. | 17. | 18. | 19. | 20. | 21. | 22. | 23. | 24.  | Mean. | Vapour Pressure.* |
|------|----|----|----|----|----|----|----|----|----|-----|-----|-------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|-------|-------------------|
| 1    | 96 | 96 | 95 | 91 | 88 | 89 | 77 | 81 | 66 | 61  | 61  | 51    | 54  | 53  | 54  | 56  | 58  | 60  | 66  | 79  | 82  | 84  | 87  | 89   | 74.0  | 5.2               |
| 2    | 89 | 89 | 90 | 91 | 86 | 82 | 79 | 72 | 69 | 65  | 62  | 58    | 58  | 55  | 54  | 55  | 63  | 76  | 86  | 88  | 88  | 89  | 90  | 90   | 74.5  | 4.8               |
| 3    | 90 | 90 | 94 | 94 | 95 | 95 | 96 | 91 | 78 | 68  | 62  | 55    | 52  | 50  | 51  | 57  | 64  | 70  | 76  | 82  | 86  | 90  | 94  | 95   | 78.0  | 5.0               |
| 4    | 95 | 95 | 94 | 96 | 96 | 96 | 95 | 90 | 77 | 84  | 78  | 72    | 63  | 65  | 67  | 71  | 65  | 69  | 83  | 83  | 83  | 85  | 91  | 96   | 82.8  | 6.1               |
| 5    | 97 | 96 | 97 | 97 | 95 | 94 | 97 | 90 | 78 | 59  | 58  | 59    | 52  | 49  | 51  | 54  | 60  | 64  | 72  | 75  | 79  | 76  | 78  | 81   | 75.6  | 6.4               |
| 6    | 84 | 83 | 95 | 97 | 97 | 98 | 86 | 88 | 74 | 59  | 57  | 60    | 58  | 53  | 55  | 56  | 60  | 62  | 68  | 82  | 83  | 80  | 84  | 83   | 75.0  | 6.7               |
| 7    | 83 | 85 | 83 | 84 | 85 | 86 | 81 | 81 | 87 | 83  | 83  | 86    | 89  | 89  | 91  | 86  | 75  | 70  | 71  | 71  | 72  | 75  | 77  | 73   | 81.3  | 7.3               |
| 8    | 73 | 84 | 77 | 80 | 79 | 81 | 86 | 76 | 81 | 84  | 73  | 61    | 72  | 60  | 50  | 59  | 71  | 72  | 78  | 81  | 82  | 82  | 86  | 74.7 | 5.7   |                   |
| 9    | 88 | 90 | 90 | 94 | 94 | 94 | 94 | 94 | 63 | 58  | 55  | 58    | 55  | 58  | 58  | 71  | 65  | 67  | 76  | 85  | 94  | 99  | 99  | 99   | 77.0  | 5.3               |
| 10   | 98 | 98 | 96 | 96 | 97 | 97 | 95 | 90 | 89 | 90  | 84  | 84    | 61  | 65  | 75  | 76  | 76  | 83  | 88  | 89  | 91  | 94  | 95  | 94   | 87.7  | 5.6               |
| 11   | 95 | 94 | 94 | 95 | 96 | 96 | 97 | 95 | 92 | 60  | 73  | 71    | 61  | 64  | 67  | 83  | 87  | 83  | 85  | 91  | 95  | 97  | 97  | 96   | 86.0  | 5.1               |
| 12   | 95 | 91 | 89 | 89 | 89 | 91 | 94 | 91 | 86 | 80  | 78  | 89    | 94  | 89  | 75  | 83  | 76  | 82  | 86  | 90  | 94  | 94  | 95  | 98   | 88.2  | 5.6               |
| 13   | 97 | 97 | 97 | 96 | 96 | 96 | 96 | 91 | 71 | 61  | 59  | 58    | 77  | 80  | 83  | 92  | 91  | 91  | 90  | 92  | 94  | 93  | 90  | 93   | 86.9  | 5.5               |
| 14   | 94 | 94 | 95 | 95 | 94 | 94 | 94 | 89 | 85 | 84  | 82  | 82    | 72  | 75  | 65  | 63  | 61  | 66  | 76  | 79  | 79  | 87  | 91  | 91   | 83.3  | 5.8               |
| 15   | 94 | 94 | 89 | 91 | 94 | 84 | 86 | 77 | 74 | 69  | 68  | 63    | 59  | 75  | 63  | 74  | 69  | 69  | 74  | 75  | 88  | 87  | 87  | 85   | 78.8  | 6.0               |
| 16   | 82 | 82 | 84 | 81 | 81 | 81 | 78 | 74 | 68 | 59  | 56  | 54    | 53  | 47  | 48  | 48  | 52  | 55  | 59  | 71  | 76  | 80  | 83  | 83   | 68.2  | 5.8               |
| 17   | 88 | 86 | 89 | 90 | 91 | 94 | 91 | 87 | 49 | 49  | 46  | 49    | 46  | 46  | 49  | 48  | 47  | 53  | 69  | 81  | 89  | 90  | 91  | 94   | 71.1  | 5.2               |
| 18   | 95 | 94 | 89 |    |    |    |    |    |    |     |     |       |     |     |     |     |     |     |     |     |     |     |     |      |       |                   |

RELATIVE HUMIDITY.

Percentages at exact hours, Greenwich Mean Time. Determined as explained on page 14.

145. Eskdalemuir : Louvred Hut :  $h_t$  (height of thermometer bulbs above ground) = 0.9 metres.

May, 1924.

| Day.             | 1.      | 2.      | 3.      | 4.      | 5.      | 6.      | 7.      | 8.      | 9.      | 10.     | 11.     | Noon.   | 13.     | 14.     | 15.     | 16.     | 17.     | 18.     | 19.     | 20.     | 21.     | 22.     | 23.     | 24.     | Mean.   | Vapour Pressure.* |     |
|------------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|-------------------|-----|
| 1                | 87      | 85      | 85      | 86      | 88      | 88      | 86      | 77      | 73      | 70      | 70      | 62      | 57      | 64      | 61      | 70      | 75      | 80      | 87      | 87      | 91      | 91      | 92      | 91      | 91      | 79.3              | 7.6 |
| 2                | 91      | 91      | 91      | 91      | 91      | 93      | 90      | 91      | 80      | 75      | 74      | 73      | 75      | 78      | 83      | 77      | 89      | 89      | 89      | 93      | 93      | 92      | 92      | 97      | 86.5    | 8.5               |     |
| 3                | 97      | 94      | 97      | 96      | 82      | 92      | 89      | 91      | 91      | 92      | 92      | 91      | 87      | 91      | 86      | 83      | 83      | 85      | 91      | 90      | 91      | 90      | 88      | 88      | 90.1    | 7.5               |     |
| 4                | 90      | 88      | 89      | 88      | 87      | 87      | 82      | 77      | 72      | 70      | 67      | 67      | 78      | 76      | 79      | 84      | 94      | 94      | 93      | 90      | 92      | 96      | 91      | 94      | 84.3    | 6.2               |     |
| 5                | 93      | 96      | 88      | 93      | 90      | 86      | 88      | 85      | 85      | 88      | 87      | 75      | 73      | 68      | 58      | 84      | 86      | 76      | 83      | 83      | 85      | 84      | 84      | 84      | 84      | 83.6              | 6.6 |
| 6                | 84      | 84      | 85      | 88      | 89      | 87      | 88      | 85      | 84      | 74      | 68      | 66      | 71      | 75      | 72      | 67      | 69      | 74      | 78      | 84      | 87      | 88      | 86      | 86      | 86      | 79.9              | 6.8 |
| 7                | 87      | 87      | 90      | 93      | 92      | 87      | 89      | 86      | 82      | 79      | 67      | 61      | 57      | 65      | 60      | 70      | 77      | 82      | 83      | 73      | 89      | 87      | 88      | 88      | 88      | 79.9              | 7.3 |
| 8                | 88      | 87      | 87      | 87      | 89      | 89      | 85      | 85      | 85      | 88      | 85      | 81      | 72      | 70      | 69      | 71      | 73      | 69      | 70      | 69      | 72      | 71      | 75      | 75      | 75      | 79.1              | 6.6 |
| 9                | 77      | 73      | 75      | 78      | 80      | 82      | 77      | 70      | 59      | 57      | 59      | 59      | 53      | 56      | 54      | 58      | 55      | 64      | 77      | 79      | 77      | 90      | 97      | 93      | 70.4    | 6.3               |     |
| 10               | 95      | 95      | 96      | 93      | 96      | 93      | 93      | 93      | 93      | 92      | 88      | 88      | 85      | 88      | 91      | 92      | 91      | 92      | 97      | 95      | 97      | 97      | 92      | 93      | 92.7    | 10.3              |     |
| 11               | 94      | 95      | 94      | 93      | 93      | 94      | 95      | 92      | 91      | 82      | 74      | 77      | 73      | 74      | 72      | 80      | 90      | 75      | 78      | 86      | 85      | 92      | 97      | 91      | 86.2    | 8.9               |     |
| 12               | 89      | 94      | 93      | 92      | 94      | 91      | 90      | 85      | 89      | 84      | 77      | 72      | 67      | 66      | 61      | 58      | 60      | 63      | 72      | 80      | 87      | 91      | 88      | 88      | 80.5    | 8.6               |     |
| 13               | 87      | 83      | 85      | 86      | 87      | 90      | 92      | 93      | 96      | 95      | 95      | 84      | 79      | 69      | 62      | 63      | 59      | 76      | 78      | 86      | 89      | 93      | 92      | 93      | 83.7    | 9.2               |     |
| 14               | 90      | 91      | 90      | 90      | 89      | 88      | 82      | 76      | 75      | 68      | 65      | 71      | 82      | 77      | 77      | 77      | 81      | 82      | 87      | 89      | 93      | 94      | 89      | 92      | 83.1    | 9.3               |     |
| 15               | 86      | 86      | 86      | 90      | 85      | 84      | 84      | 72      | 67      | 75      | 73      | 65      | 60      | 60      | 57      | 55      | 57      | 55      | 61      | 67      | 79      | 89      | 85      | 89      | 89      | 75.2              | 8.8 |
| 16               | 92      | 90      | 85      | 87      | 89      | 88      | 88      | 89      | 89      | 74      | 70      | 61      | 61      | 65      | 61      | 52      | 62      | 60      | 59      | 62      | 75      | 77      | 78      | 80      | 74.9    | 8.0               |     |
| 17               | 81      | 82      | 82      | 82      | 80      | 77      | 71      | 69      | 65      | 67      | 71      | 64      | 57      | 61      | 62      | 60      | 64      | 71      | 55      | 72      | 83      | 85      | 95      | 91      | 72.6    | 7.7               |     |
| 18               | 96      | 95      | 95      | 95      | 94      | 94      | 80      | 56      | 51      | 47      | 47      | 50      | 47      | 47      | 47      | 46      | 61      | 63      | 69      | 75      | 77      | 81      | 87      | 87      | 70.4    | 8.6               |     |
| 19               | 90      | 92      | 91      | 91      | 86      | 89      | 85      | 85      | 76      | 78      | 68      | 67      | 63      | 63      | 56      | 57      | 57      | 57      | 72      | 75      | 77      | 80      | 87      | 89      | 76.3    | 9.0               |     |
| 20               | 90      | 90      | 91      | 93      | 95      | 95      | 95      | 94      | 95      | 92      | 89      | 89      | 88      | 87      | 85      | 87      | 87      | 88      | 91      | 92      | 93      | 93      | 93      | 96      | 91.0    | 9.4               |     |
| 21               | 96      | 93      | 93      | 92      | 91      | 92      | 93      | 92      | 91      | 88      | 82      | 76      | 73      | 90      | 91      | 88      | 86      | 94      | 89      | 90      | 92      | 96      | 97      | 97      | 90.1    | 12.0              |     |
| 22               | 95      | 91      | 91      | 90      | 93      | 93      | 97      | 94      | 97      | 97      | 95      | 90      | 82      | 90      | 86      | 91      | 90      | 85      | 88      | 88      | 89      | 89      | 91      | 94      | 91.2    | 12.1              |     |
| 23               | 95      | 100     | 99      | 97      | 97      | 100     | 93      | 87      | 83      | 78      | 82      | 80      | 69      | 82      | 87      | 86      | 86      | 85      | 87      | 87      | 87      | 89      | 89      | 89      | 88.1    | 10.2              |     |
| 24               | 90      | 91      | 90      | 89      | 86      | 90      | 87      | 85      | 81      | 72      | 76      | 59      | 60      | 76      | 67      | 66      | 76      | 73      | 79      | 86      | 86      | 85      | 86      | 86      | 80.2    | 9.0               |     |
| 25               | 89      | 90      | 90      | 91      | 91      | 91      | 90      | 80      | 80      | 75      | 79      | 77      | 88      | 71      | 82      | 86      | 87      | 78      | 75      | 81      | 80      | 85      | 83      | 85      | 87      | 83.7              | 9.2 |
| 26               | 87      | 87      | 86      | 92      | 93      | 90      | 82      | 75      | 67      | 59      | 56      | 60      | 55      | 57      | 59      | 75      | 71      | 74      | 77      | 81      | 87      | 89      | 87      | 84      | 76.3    | 8.8               |     |
| 27               | 91      | 91      | 91      | 91      | 93      | 93      | 94      | 94      | 92      | 94      | 98      | 90      | 92      | 92      | 95      | 98      | 98      | 97      | 96      | 98      | 98      | 98      | 98      | 96      | 94.3    | 11.5              |     |
| 28               | 96      | 97      | 97      | 97      | 96      | 96      | 95      | 96      | 91      | 92      | 84      | 79      | 75      | 79      | 79      | 75      | 75      | 74      | 74      | 83      | 87      | 92      | 84      | 85      | 86.8    | 11.2              |     |
| 29               | 86      | 86      | 87      | 87      | 85      | 86      | 78      | 81      | 78      | 72      | 72      | 69      | 73      | 53      | 51      | 51      | 51      | 61      | 66      | 74      | 78      | 77      | 79      | 80      | 73.5    | 11.6              |     |
| 30               | 81      | 85      | 79      | 67      | 67      | 73      | 70      | 74      | 74      | 80      | 92      | 93      | 92      | 96      | 91      | 90      | 90      | 93      | 93      | 92      | 96      | 97      | 97      | 97      | 85.6    | 10.6              |     |
| 31               | 96      | 97      | 97      | 96      | 97      | 97      | 93      | 92      | 93      | 92      | 90      | 92      | 91      | 89      | 93      | 92      | 97      | 93      | 97      | 97      | 99      | 100     | 100     | 95      | 94.8    | 11.1              |     |
| Mean             | 89.9    | 89.9    | 89.5    | 89.7    | 89.2    | 89.5    | 87.1    | 84.0    | 81.3    | 79.0    | 77.1    | 74.2    | 71.5    | 73.7    | 72.2    | 74.0    | 76.3    | 77.6    | 80.7    | 83.7    | 87.3    | 88.7    | 89.5    | 89.5    | 82.7    | †9.0              |     |
| Vapour Pressure* | mb. 8.5 | mb. 8.5 | mb. 8.4 | mb. 8.3 | mb. 8.4 | mb. 8.6 | mb. 8.9 | mb. 9.0 | mb. 9.5 | mb. 9.5 | mb. 9.6 | mb. 9.3 | mb. 9.3 | mb. 9.4 | mb. 9.2 | mb. 9.2 | mb. 9.0 | mb. 9.1 | mb. 8.9 | mb. 8.7 | mb. 8.7 | mb. 8.6 | mb. 8.6 | mb. 8.5 | mb. 8.5 | †8.9              |     |

146. Eskdalemuir : Louvred Hut :  $h_t$  = 0.9 metres.

June, 1924.

| Day. | 1. | 2. | 3. | 4. | 5.  | 6. | 7. | 8. | 9. | 10. | 11. | Noon. | 13. | 14. | 15. | 16. | 17. | 18. | 19. | 20. | 21. | 22. | 23. | 24.  | Mean. | Vapour Pressure.* |     |
|------|----|----|----|----|-----|----|----|----|----|-----|-----|-------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|-------|-------------------|-----|
| 1    | 93 | 96 | 98 | 96 | 100 | 98 | 98 | 94 | 93 | 94  | 98  | 90    | 83  | 77  | 73  | 69  | 65  | 61  | 71  | 74  | 77  | 76  | 77  | 78   | 84.9  | 8.6               |     |
| 2    | 80 | 85 | 87 | 83 | 84  | 80 | 73 | 61 | 60 | 59  | 57  | 58    | 55  | 53  | 49  | 49  | 50  | 63  | 54  | 67  | 71  | 62  | 83  | 87   | 66.9  | 6.9               |     |
| 3    | 90 | 89 | 94 | 94 | 94  | 86 | 74 | 71 | 58 | 59  | 55  | 54    | 65  | 61  | 63  | 68  | 62  | 66  | 67  | 69  | 73  | 76  | 79  | 84   | 88    | 73.8              | 7.6 |
| 4    | 87 | 88 | 86 | 93 | 88  | 85 | 81 | 68 | 65 | 65  | 61  | 55    | 58  | 51  | 61  | 67  | 71  | 73  | 76  | 79  | 79  | 84  | 88  | 73.8 | 8.2   |                   |     |
| 5    | 86 | 86 | 89 | 87 | 87  | 86 | 84 | 71 | 68 | 66  | 64  | 61    | 65  | 68  | 69  | 68  | 65  | 70  | 78  | 86  | 87  | 86  | 87  | 89   | 77.2  | 9.5               |     |
| 6    | 89 | 91 | 91 | 96 | 93  | 92 | 91 | 96 | 92 | 87  | 92  | 87    | 90  | 90  | 91  | 90  | 93  | 94  | 94  | 93  | 97  | 98  | 95  | 97   | 92.3  | 11.6              |     |
| 7    | 97 | 91 | 90 | 92 | 90  | 93 | 93 | 91 | 96 | 97  | 95  | 95    | 88  | 83  | 69  | 70  | 77  | 79  | 82  | 87  | 92  | 94  | 97  | 96   | 89.0  | 12.3              |     |
| 8    | 96 | 99 | 96 | 97 | 96  | 95 | 94 | 97 | 95 | 91  | 89  | 88    | 90  | 84  | 85  | 82  | 78  | 79  | 82  | 84  | 81  | 83  | 81  | 88.9 | 12.6  |                   |     |
| 9    | 86 | 86 | 86 | 87 | 85  | 84 | 90 | 89 | 87 | 84  | 81  | 85    | 85  | 79  | 86  | 73  | 75  | 80  | 83  | 88  | 87  | 93  | 97  | 97   | 85.2  | 11.8              |     |
| 10   | 91 | 94 | 93 | 94 | 91  | 92 | 94 | 90 | 81 | 82  | 82  | 74    | 83  | 87  | 91  | 91  | 91  | 95  | 95  | 95  | 96  | 94  | 94  | 96   | 90.3  | 11.6              |     |
| 11   | 97 | 97 | 95 | 93 | 96  | 90 | 92 | 88 | 89 | 96  | 86  | 84    | 91  | 84  | 78  | 80  | 77  | 73  | 74  | 84  | 85  | 87  | 86  | 89   | 87.3  | 11.8              |     |
| 12   | 95 | 90 | 88 | 89 | 90  | 77 | 89 | 89 | 86 | 86  | 81  | 92    | 97  | 83  | 91  | 90  | 92  | 89  | 86  | 89  | 86  | 78  | 79  | 84   | 87.5  | 9.9               |     |
| 13   | 81 | 78 | 79 | 76 | 77  | 74 | 74 | 71 | 64 | 67  | 64  | 59    | 61  | 58  | 58  | 60  | 60  | 67  | 74  | 82  | 83  | 83  | 83  | 84   | 70.6  | 7.5               |     |
| 14   | 84 | 85 | 94 | 95 | 87  | 84 | 80 | 72 | 66 | 68  | 62  | 63    | 63  | 59  | 61  | 51  | 56  | 59  | 63  | 67  | 81  | 87  | 87  | 88   | 73.3  | 8.6               |     |
| 15   | 91 | 95 | 97 | 96 | 96  | 94 | 98 | 96 | 97 | 96  | 92  | 93    | 92  | 94  | 89  | 89  | 89  | 95  | 91  | 98  | 97  | 96  | 96  | 97   | 94.1  | 12.8              |     |
| 16   | 98 | 94 | 92 | 94 | 95  | 96 | 86 | 77 | 70 | 61  | 61  | 62    | 57  | 54  | 53  | 57  | 54  | 53  | 61  | 70  | 70  | 71  | 75  | 80   | 72.9  | 11.1              |     |
| 17   | 79 | 76 | 77 | 82 | 82  | 83 | 87 | 86 | 78 | 74  | 67  | 69    | 67  | 64  | 53  | 52  | 57  | 59  | 67  | 81  | 70  | 77  | 85  | 84   | 73.1  | 11.8              |     |
|      |    |    |    |    |     |    |    |    |    |     |     |       |     |     |     |     |     |     |     |     |     |     |     |      |       |                   |     |

Percentages at exact hours, Greenwich Mean Time. Determined as explained on page 14.

147. Eskdalemuir : Louvred Hut :  $h_t$  (height of thermometer bulbs above ground) = 0.9 metres.

July, 1924.

| Day.                 | 1.       | 2.       | 3.       | 4.       | 5.       | 6.       | 7.       | 8.       | 9.       | 10.      | 11.      | Noon.    | 13.      | 14.      | 15.      | 16.      | 17.      | 18.      | 19.      | 20.      | 21.      | 22.      | 23.      | 24.      | Mean.    | Vapour Pressure.* |
|----------------------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|-------------------|
| 1                    | 80       | 85       | 87       | 87       | 86       | 83       | 82       | 77       | 77       | 71       | 66       | 60       | 68       | 62       | 54       | 56       | 75       | 73       | 79       | 82       | 84       | 86       | 94       | 86       | 76.5     | m.b. 9.8          |
| 2                    | 86       | 94       | 92       | 96       | 96       | 96       | 93       | 92       | 85       | 82       | 79       | 79       | 77       | 85       | 88       | 84       | 87       | 86       | 84       | 86       | 81       | 86       | 76       | 79       | 86.4     | 11.6              |
| 3                    | 79       | 84       | 85       | 85       | 87       | 88       | 78       | 80       | 79       | 80       | 77       | 75       | 63       | 59       | 71       | 68       | 77       | 84       | 87       | 90       | 88       | 88       | 87       | 92       | 80.2     | 10.4              |
| 4                    | 87       | 83       | 83       | 76       | 85       | 84       | 84       | 78       | 74       | 79       | 75       | 64       | 67       | 68       | 74       | 87       | 73       | 78       | 75       | 75       | 84       | 87       | 89       | 87       | 79.1     | 10.1              |
| 5                    | 88       | 88       | 87       | 88       | 86       | 86       | 82       | 78       | 74       | 80       | 74       | 69       | 81       | 81       | 75       | 73       | 71       | 81       | 88       | 94       | 90       | 96       | 96       | 95       | 83.2     | 10.6              |
| 6                    | 92       | 96       | 96       | 95       | 92       | 92       | 84       | 90       | 82       | 72       | 69       | 63       | 61       | 53       | 54       | 68       | 65       | 64       | 76       | 83       | 91       | 95       | 95       | 92       | 80.1     | 11.2              |
| 7                    | 94       | 89       | 92       | 90       | 91       | 92       | 92       | 96       | 92       | 91       | 88       | 88       | 90       | 86       | 80       | 75       | 81       | 85       | 78       | 78       | 81       | 78       | 82       | 84       | 86.5     | 12.2              |
| 8                    | 84       | 83       | 90       | 87       | 87       | 87       | 91       | 87       | 90       | 91       | 78       | 78       | 78       | 78       | 80       | 82       | 83       | 85       | 88       | 89       | 91       | 90       | 91       | 95       | 85.7     | 12.2              |
| 9                    | 93       | 91       | 91       | 92       | 96       | 94       | 93       | 91       | 69       | 68       | 65       | 63       | 61       | 59       | 59       | 69       | 73       | 73       | 78       | 83       | 86       | 88       | 91       | 93       | 80.0     | 12.6              |
| 10                   | 93       | 97       | 97       | 95       | 93       | 96       | 95       | 95       | 96       | 96       | 94       | 93       | 94       | 96       | 96       | 100      | 99       | 100      | 100      | 100      | 100      | 100      | 99       | 98       | 96.7     | 13.1              |
| 11                   | 96       | 97       | 97       | 100      | 100      | 100      | 100      | 99       | 98       | 96       | 96       | 96       | 99       | 96       | 99       | 98       | 95       | 96       | 91       | 95       | 96       | 95       | 96       | 95       | 97.0     | 14.8              |
| 12                   | 95       | 100      | 94       | 89       | 95       | 94       | 87       | 66       | 61       | 60       | 57       | 55       | 54       | 66       | 57       | 62       | 76       | 85       | 96       | 94       | 95       | 96       | 91       | 91       | 79.9     | 15.4              |
| 13                   | 96       | 95       | 95       | 95       | 91       | 95       | 91       | 90       | 88       | 78       | 80       | 73       | 84       | 81       | 81       | 77       | 71       | 76       | 80       | 77       | 76       | 74       | 77       | 82       | 83.7     | 12.3              |
| 14                   | 87       | 85       | 85       | 85       | 82       | 83       | 81       | 74       | 70       | 79       | 70       | 70       | 69       | 67       | 66       | 70       | 76       | 82       | 87       | 90       | 92       | 92       | 90       | 92       | 80.0     | 11.7              |
| 15                   | 92       | 92       | 93       | 92       | 92       | 93       | 93       | 92       | 86       | 86       | 85       | 83       | 83       | 81       | 73       | 71       | 64       | 69       | 76       | 82       | 86       | 88       | 89       | 92       | 84.7     | 12.8              |
| 16                   | 90       | 90       | 90       | 92       | 96       | 92       | 99       | 91       | 85       | 81       | 79       | 77       | 71       | 79       | 87       | 79       | 73       | 73       | 81       | 85       | 88       | 89       | 90       | 87       | 85.3     | 12.4              |
| 17                   | 85       | 87       | 88       | 89       | 89       | 87       | 86       | 86       | 84       | 76       | 82       | 74       | 78       | 79       | 86       | 86       | 89       | 91       | 87       | 89       | 90       | 91       | 91       | 89       | 85.7     | 11.6              |
| 18                   | 88       | 87       | 85       | 87       | 87       | 90       | 86       | 80       | 87       | 80       | 75       | 76       | 75       | 70       | 84       | 70       | 70       | 67       | 75       | 77       | 80       | 86       | 87       | 84       | 80.7     | 11.3              |
| 19                   | 88       | 84       | 84       | 81       | 86       | 80       | 82       | 77       | 76       | 77       | 71       | 63       | 62       | 67       | 59       | 62       | 61       | 62       | 66       | 76       | 81       | 85       | 84       | 86       | 75.0     | 11.1              |
| 20                   | 87       | 92       | 90       | 95       | 91       | 86       | 88       | 78       | 72       | 71       | 69       | 66       | 71       | 81       | 79       | 67       | 62       | 69       | 77       | 86       | 91       | 91       | 90       | 90       | 80.7     | 11.1              |
| 21                   | 96       | 96       | 97       | 96       | 94       | 95       | 94       | 96       | 90       | 88       | 90       | 89       | 88       | 89       | 88       | 85       | 88       | 92       | 91       | 90       | 89       | 89       | 90       | 92       | 91.3     | 12.7              |
| 22                   | 95       | 92       | 92       | 91       | 90       | 89       | 85       | 73       | 76       | 71       | 68       | 69       | 67       | 76       | 83       | 85       | 83       | 82       | 86       | 86       | 88       | 92       | 91       | 91       | 83.4     | 12.5              |
| 23                   | 95       | 92       | 93       | 97       | 92       | 91       | 87       | 81       | 77       | 73       | 71       | 75       | 77       | 80       | 89       | 90       | 89       | 75       | 76       | 81       | 82       | 84       | 84       | 83       | 84.1     | 11.3              |
| 24                   | 86       | 84       | 83       | 90       | 87       | 89       | 85       | 86       | 79       | 76       | 85       | 80       | 71       | 66       | 67       | 63       | 62       | 69       | 69       | 76       | 78       | 81       | 79       | 80       | 78.0     | 10.2              |
| 25                   | 81       | 81       | 82       | 82       | 84       | 81       | 80       | 74       | 73       | 68       | 69       | 72       | 70       | 72       | 66       | 62       | 64       | 70       | 71       | 80       | 84       | 85       | 88       | 87       | 75.9     | 10.8              |
| 26                   | 88       | 89       | 91       | 90       | 88       | 88       | 89       | 80       | 73       | 69       | 67       | 70       | 61       | 53       | 61       | 57       | 64       | 68       | 69       | 78       | 77       | 77       | 75       | 85       | 75.3     | 10.6              |
| 27                   | 86       | 93       | 88       | 90       | 93       | 91       | 81       | 84       | 79       | 74       | 68       | 67       | 68       | 68       | 65       | 67       | 74       | 74       | 77       | 84       | 88       | 88       | 88       | 85       | 80.0     | 10.3              |
| 28                   | 88       | 90       | 87       | 89       | 89       | 89       | 89       | 89       | 90       | 91       | 89       | 85       | 87       | 89       | 92       | 92       | 94       | 92       | 92       | 93       | 97       | 95       | 94       | 94       | 90.5     | 11.6              |
| 29                   | 94       | 92       | 92       | 93       | 92       | 95       | 89       | 91       | 92       | 91       | 92       | 94       | 94       | 94       | 89       | 88       | 91       | 88       | 90       | 91       | 91       | 94       | 95       | 91       | 91.8     | 13.6              |
| 30                   | 92       | 96       | 96       | 96       | 95       | 91       | 88       | 86       | 83       | 79       | 78       | 83       | 85       | 81       | 80       | 93       | 94       | 82       | 88       | 88       | 94       | 95       | 94       | 97       | 88.8     | 13.9              |
| 31                   | 92       | 96       | 95       | 94       | 94       | 90       | 91       | 87       | 84       | 77       | 81       | 81       | 69       | 68       | 81       | 84       | 90       | 92       | 96       | 95       | 95       | 93       | 95       | 95       | 88.2     | 13.3              |
| Mean ...             | 89.5     | 90.3     | 90.2     | 90.5     | 90.5     | 89.0     | 87.0     | 84.7     | 81.3     | 79.1     | 77.0     | 75.2     | 74.9     | 75.2     | 76.2     | 76.5     | 77.0     | 79.5     | 82.4     | 85.6     | 87.5     | 88.8     | 89.0     | 89.3     | 83.7     | †11.9             |
| Vapour Pressure* ... | mb. 10.2 | mb. 11.1 | mb. 10.7 | mb. 10.7 | mb. 11.0 | mb. 11.5 | mb. 11.8 | mb. 12.0 | mb. 12.1 | mb. 12.3 | mb. 12.4 | mb. 12.4 | mb. 12.5 | mb. 12.4 | mb. 12.4 | mb. 12.4 | mb. 12.3 | mb. 12.2 | mb. 12.1 | mb. 12.0 | mb. 11.8 | mb. 11.7 | mb. 11.6 | mb. 11.4 | mb. 11.8 |                   |

148. Eskdalemuir : Louvred Hut :  $h_t$  = 0.9 metres.

August, 1924.

|    | %  | %   | %  | %  | %  | %  | %   | %   | %  | %  | %  | %  | %  | %  | %  | %  | %  | %  | %  | %  | %  | %  | %  | %    | %    | mb.  |      |
|----|----|-----|----|----|----|----|-----|-----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|------|------|------|------|
| 1  | 95 | 91  | 94 | 94 | 96 | 95 | 94  | 91  | 91 | 91 | 83 | 90 | 95 | 95 | 96 | 94 | 96 | 96 | 98 | 96 | 96 | 97 | 97 | 97   | 97   | 94.0 | 13.9 |
| 2  | 97 | 91  | 95 | 91 | 88 | 87 | 84  | 74  | 72 | 72 | 69 | 60 | 56 | 65 | 66 | 63 | 69 | 72 | 85 | 88 | 86 | 88 | 89 | 87   | 79.1 | 12.5 |      |
| 3  | 89 | 92  | 91 | 93 | 93 | 94 | 94  | 81  | 82 | 85 | 78 | 85 | 84 | 85 | 76 | 90 | 97 | 94 | 96 | 97 | 91 | 87 | 90 | 88   | 88.8 | 11.9 |      |
| 4  | 88 | 88  | 89 | 90 | 87 | 86 | 84  | 85  | 79 | 74 | 74 | 69 | 71 | 64 | 66 | 74 | 75 | 79 | 87 | 88 | 94 | 96 | 97 | 96   | 82.3 | 12.3 |      |
| 5  | 97 | 100 | 99 | 98 | 96 | 96 | 95  | 90  | 79 | 74 | 87 | 85 | 79 | 76 | 70 | 69 | 70 | 68 | 70 | 78 | 75 | 77 | 85 | 84.0 | 13.5 |      |      |
| 6  | 82 | 85  | 85 | 87 | 86 | 86 | 83  | 75  | 83 | 73 | 73 | 73 | 68 | 65 | 68 | 64 | 78 | 73 | 75 | 80 | 84 | 83 | 88 | 87   | 78.5 | 10.3 |      |
| 7  | 88 | 87  | 86 | 86 | 89 | 88 | 85  | 76  | 67 | 79 | 83 | 73 | 69 | 69 | 63 | 61 | 65 | 68 | 74 | 78 | 85 | 79 | 78 | 77   | 77.4 | 9.9  |      |
| 8  | 81 | 78  | 84 | 86 | 90 | 92 | 82  | 74  | 62 | 61 | 68 | 69 | 62 | 67 | 62 | 65 | 61 | 78 | 82 | 85 | 87 | 91 | 93 | 93   | 76.9 | 10.0 |      |
| 9  | 91 | 94  | 97 | 92 | 98 | 96 | 100 | 100 | 82 | 80 | 78 | 78 | 68 | 71 | 69 | 63 | 63 | 72 | 76 | 88 | 92 | 97 | 94 | 90   | 84.6 | 10.6 |      |
| 10 | 91 | 97  | 94 | 97 | 97 | 94 | 97  | 93  | 93 | 76 | 73 | 65 | 66 | 69 | 67 | 68 | 81 | 75 | 83 | 88 | 88 | 91 | 95 | 83.6 | 11.1 |      |      |
| 11 | 89 | 92  | 94 | 96 | 94 | 95 | 91  | 92  | 88 | 86 | 85 | 85 | 87 | 86 | 92 | 95 | 97 | 95 | 89 | 92 | 94 | 94 | 90 | 91   | 91.3 | 13.6 |      |
| 12 | 95 | 89  | 92 | 94 | 94 | 96 | 93  | 93  | 90 | 88 | 85 | 87 | 76 | 70 | 68 | 75 | 79 | 83 | 84 | 94 | 90 | 91 | 90 | 91   | 87.0 | 13.0 |      |
| 13 | 91 | 91  | 97 | 96 | 95 | 95 | 88  | 92  | 74 | 63 | 62 | 65 | 67 | 73 | 90 | 74 | 83 | 87 | 90 | 91 | 93 | 90 | 94 | 94   | 84.7 | 11.6 |      |
| 14 | 95 | 97  | 98 | 98 | 96 | 92 | 94  | 89  | 79 | 79 | 73 | 89 | 90 | 94 | 92 | 96 | 93 | 88 | 84 | 82 | 87 | 89 | 90 | 90   | 90.6 | 12.4 |      |
| 15 | 85 | 87  | 97 | 94 | 91 | 80 | 87  | 85  | 82 | 75 | 68 | 72 | 65 | 62 | 65 | 66 | 68 | 76 | 84 | 87 | 89 | 89 | 89 | 89   | 89   | 80.5 | 10.1 |
| 16 | 96 | 96  | 92 | 93 | 91 | 92 | 92  | 90  | 97 | 81 | 75 | 88 | 91 | 88 | 85 | 82 | 68 | 82 | 90 | 90 | 90 | 89 | 90 | 95   | 88.3 | 11.2 |      |
| 17 | 96 | 97  | 94 | 96 | 97 | 90 | 86  | 79  | 86 | 78 | 82 | 82 | 76 | 68 | 87 | 93 | 92 | 93 | 92 | 96 | 91 | 88 | 89 | 89   | 89.1 | 10.5 |      |
| 18 | 87 | 84  |    |    |    |    |     |     |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |      |      |      |      |

Percentages at exact hours, Greenwich Mean Time. Determined as explained on page 14.

149. Eskdalemuir : Louvred Hut :  $h_t$  (height of thermometer bulbs above ground) = 0.9 metres.

September, 1924.

| Day.             | 1.       | 2.       | 3.       | 4.       | 5.      | 6.      | 7.       | 8.       | 9.       | 10.      | 11.      | Noon.    | 13.      | 14.      | 15.      | 16.      | 17.      | 18.      | 19.      | 20.      | 21.      | 22.      | 23.      | 24.      | Mean.    | Vapour Pressure.* |
|------------------|----------|----------|----------|----------|---------|---------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|-------------------|
| 1                | 89       | 91       | 88       | 89       | 89      | 89      | 95       | 91       | 81       | 82       | 75       | 78       | 78       | 79       | 79       | 78       | 79       | 85       | 83       | 84       | 83       | 83       | 84       | 85       | 84.2     | 12.3              |
| 2                | 87       | 86       | 83       | 86       | 89      | 93      | 87       | 77       | 69       | 70       | 69       | 69       | 69       | 70       | 64       | 70       | 73       | 83       | 82       | 86       | 92       | 88       | 89       | 90       | 80.0     | 12.2              |
| 3                | 94       | 91       | 94       | 91       | 92      | 94      | 90       | 82       | 78       | 74       | 66       | 57       | 56       | 67       | 57       | 66       | 68       | 75       | 84       | 92       | 91       | 88       | 93       | 91       | 80.4     | 11.6              |
| 4                | 93       | 92       | 96       | 97       | 95      | 96      | 91       | 93       | 91       | 87       | 69       | 63       | 56       | 57       | 59       | 51       | 55       | 66       | 82       | 80       | 86       | 87       | 88       | 97       | 80.2     | 11.5              |
| 5                | 97       | 97       | 97       | 97       | 95      | 95      | 94       | 97       | 97       | 87       | 86       | 79       | 74       | 72       | 62       | 74       | 76       | 80       | 87       | 87       | 90       | 89       | 90       | 89       | 87.2     | 12.2              |
| 6                | 89       | 90       | 92       | 95       | 94      | 94      | 90       | 89       | 88       | 83       | 84       | 79       | 77       | 74       | 80       | 79       | 78       | 88       | 92       | 94       | 90       | 96       | 91       | 96       | 87.5     | 13.3              |
| 7                | 97       | 97       | 94       | 97       | 98      | 96      | 95       | 97       | 95       | 91       | 91       | 90       | 92       | 95       | 92       | 92       | 95       | 95       | 95       | 94       | 96       | 98       | 96       | 96       | 94.7     | 13.0              |
| 8                | 98       | 96       | 94       | 96       | 97      | 96      | 95       | 92       | 91       | 89       | 86       | 84       | 80       | 79       | 81       | 87       | 91       | 91       | 91       | 92       | 94       | 94       | 93       | 94       | 90.9     | 14.1              |
| 9                | 92       | 91       | 91       | 89       | 85      | 85      | 81       | 86       | 78       | 79       | 83       | 78       | 72       | 69       | 69       | 65       | 73       | 74       | 74       | 74       | 75       | 78       | 74       | 73       | 79.1     | 9.5               |
| 10               | 74       | 74       | 86       | 85       | 86      | 85      | 86       | 74       | 70       | 65       | 64       | 64       | 60       | 65       | 60       | 64       | 66       | 72       | 77       | 80       | 90       | 93       | 95       | 91       | 75.7     | 7.4               |
| 11               | 95       | 98       | 95       | 92       | 89      | 90      | 92       | 91       | 86       | 80       | 74       | 70       | 86       | 80       | 79       | 78       | 83       | 81       | 79       | 86       | 91       | 94       | 92       | 90       | 86.3     | 11.0              |
| 12               | 92       | 89       | 91       | 91       | 93      | 93      | 91       | 87       | 88       | 90       | 77       | 75       | 77       | 89       | 82       | 86       | 87       | 87       | 89       | 90       | 91       | 90       | 88       | 89       | 87.6     | 12.5              |
| 13               | 90       | 89       | 89       | 84       | 83      | 84      | 79       | 83       | 79       | 76       | 81       | 78       | 67       | 76       | 66       | 72       | 78       | 85       | 82       | 87       | 85       | 87       | 88       | 92       | 81.6     | 11.1              |
| 14               | 89       | 96       | 93       | 89       | 90      | 95      | 94       | 86       | 80       | 82       | 69       | 63       | 70       | 91       | 82       | 80       | 87       | 87       | 79       | 81       | 83       | 79       | 87       | 88       | 84.3     | 9.7               |
| 15               | 87       | 92       | 88       | 89       | 89      | 87      | 89       | 85       | 86       | 86       | 88       | 84       | 90       | 84       | 82       | 88       | 93       | 93       | 93       | 92       | 90       | 87       | 84       | 88       | 88.1     | 11.2              |
| 16               | 86       | 87       | 88       | 91       | 91      | 90      | 91       | 91       | 84       | 81       | 77       | 83       | 85       | 92       | 92       | 94       | 95       | 94       | 92       | 95       | 94       | 89       | 89       | 89       | 89.2     | 11.9              |
| 17               | 86       | 88       | 89       | 88       | 87      | 92      | 89       | 91       | 94       | 97       | 99       | 85       | 79       | 78       | 78       | 70       | 68       | 71       | 75       | 77       | 69       | 71       | 72       | 77       | 82.3     | 11.8              |
| 18               | 82       | 80       | 85       | 78       | 84      | 77      | 81       | 80       | 87       | 80       | 68       | 72       | 67       | 64       | 63       | 61       | 66       | 73       | 78       | 79       | 89       | 89       | 90       | 90       | 77.3     | 9.4               |
| 19               | 92       | 91       | 95       | 96       | 96      | 98      | 93       | 96       | 88       | 81       | 75       | 76       | 74       | 85       | 76       | 73       | 82       | 85       | 88       | 92       | 93       | 90       | 92       | 90       | 87.5     | 9.4               |
| 20               | 89       | 93       | 93       | 93       | 88      | 86      | 88       | 82       | 82       | 79       | 79       | 77       | 77       | 76       | 76       | 81       | 84       | 88       | 81       | 83       | 87       | 90       | 86       | 87       | 84.5     | 10.0              |
| 21               | 89       | 92       | 90       | 84       | 80      | 78      | 79       | 77       | 82       | 74       | 83       | 69       | 72       | 61       | 83       | 74       | 80       | 84       | 80       | 79       | 85       | 87       | 88       | 92       | 80.8     | 9.0               |
| 22               | 92       | 92       | 96       | 95       | 94      | 93      | 95       | 93       | 93       | 84       | 74       | 81       | 85       | 76       | 65       | 78       | 76       | 83       | 88       | 93       | 90       | 92       | 92       | 94       | 87.2     | 8.1               |
| 23               | 86       | 77       | 81       | 83       | 91      | 87      | 88       | 83       | 84       | 85       | 87       | 87       | 79       | 82       | 85       | 86       | 83       | 87       | 90       | 92       | 91       | 94       | 88       | 89       | 86.1     | 9.3               |
| 24               | 88       | 86       | 85       | 85       | 82      | 83      | 84       | 76       | 80       | 73       | 66       | 67       | 61       | 72       | 80       | 83       | 85       | 91       | 88       | 93       | 92       | 93       | 91       | 91       | 81.3     | 8.2               |
| 25               | 91       | 94       | 97       | 97       | 96      | 95      | 98       | 95       | 96       | 80       | 73       | 74       | 69       | 60       | 68       | 71       | 80       | 84       | 84       | 87       | 87       | 88       | 95       | 94       | 85.5     | 8.7               |
| 26               | 93       | 95       | 93       | 92       | 91      | 87      | 88       | 88       | 87       | 79       | 83       | 87       | 88       | 85       | 84       | 85       | 87       | 89       | 90       | 95       | 93       | 91       | 93       | 92       | 89.0     | 9.8               |
| 27               | 93       | 93       | 98       | 89       | 92      | 100     | 93       | 97       | 94       | 92       | 83       | 68       | 76       | 68       | 66       | 71       | 78       | 86       | 88       | 88       | 95       | 95       | 93       | 92       | 87.0     | 8.4               |
| 28               | 97       | 90       | 92       | 95       | 90      | 95      | 97       | 91       | 91       | 96       | 81       | 75       | 77       | 79       | 82       | 85       | 81       | 82       | 81       | 92       | 94       | 93       | 90       | 90       | 88.2     | 9.9               |
| 29               | 92       | 91       | 91       | 93       | 93      | 93      | 95       | 95       | 93       | 93       | 90       | 89       | 88       | 79       | 78       | 75       | 80       | 82       | 84       | 86       | 87       | 91       | 85       | 88       | 88.0     | 11.6              |
| 30               | 89       | 90       | 93       | 93       | 87      | 92      | 92       | 91       | 88       | 87       | 87       | 91       | 93       | 88       | 88       | 89       | 84       | 87       | 86       | 84       | 81       | 75       | 71       | 65       | 87.0     | 10.5              |
| Mean             | 90.3     | 90.3     | 91.2     | 90.6     | 90.2    | 90.6    | 90.0     | 87.9     | 86.1     | 82.8     | 78.9     | 76.4     | 76.0     | 76.0     | 75.0     | 76.8     | 79.6     | 83.4     | 84.8     | 87.0     | 88.5     | 88.7     | 88.2     | 89.0     | 85.0     | † 10.6            |
| Vapour Pressure* | mb. 10.3 | mb. 10.2 | mb. 10.2 | mb. 10.0 | mb. 9.8 | mb. 9.9 | mb. 10.3 | mb. 10.6 | mb. 11.0 | mb. 11.1 | mb. 11.0 | mb. 10.9 | mb. 11.0 | mb. 10.9 | mb. 10.1 | mb. 10.7 | mb. 11.0 | mb. 10.8 | mb. 10.4 | mb. 10.4 | mb. 10.3 | mb. 10.3 | mb. 10.1 | mb. 10.0 | mb. 10.5 |                   |

150. Eskdalemuir : Louvred Hut :  $h_t$  = 0.9 metres.

October, 1924.

| Day. | 1. | 2. | 3. | 4. | 5. | 6. | 7. | 8. | 9. | 10. | 11. | Noon. | 13. | 14. | 15. | 16. | 17. | 18. | 19. | 20. | 21. | 22. | 23. | 24. | Mean. | Vapour Pressure.* |
|------|----|----|----|----|----|----|----|----|----|-----|-----|-------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-------|-------------------|
| 1    | 89 | 96 | 93 | 94 | 94 | 94 | 93 | 96 | 87 | 75  | 76  | 74    | 68  | 66  | 67  | 77  | 78  | 82  | 86  | 86  | 89  | 94  | 92  | 91  | 84.3  | 7.9               |
| 2    | 93 | 94 | 97 | 97 | 95 | 95 | 91 | 96 | 93 | 95  | 77  | 91    | 87  | 83  | 86  | 88  | 89  | 91  | 96  | 95  | 96  | 95  | 92  | 92  | 92.1  | 10.4              |
| 3    | 95 | 93 | 92 | 91 | 92 | 93 | 93 | 92 | 91 | 89  | 84  | 84    | 79  | 72  | 75  | 80  | 84  | 86  | 85  | 85  | 85  | 87  | 88  | 89  | 87.0  | 10.5              |
| 4    | 89 | 90 | 89 | 94 | 94 | 92 | 94 | 91 | 89 | 79  | 68  | 67    | 67  | 70  | 71  | 71  | 78  | 93  | 89  | 93  | 89  | 90  | 95  | 95  | 84.5  | 10.2              |
| 5    | 93 | 93 | 94 | 94 | 92 | 91 | 94 | 97 | 95 | 88  | 85  | 82    | 84  | 82  | 81  | 87  | 84  | 85  | 86  | 86  | 86  | 85  | 80  | 85  | 88.1  | 10.0              |
| 6    | 85 | 86 | 86 | 77 | 76 | 72 | 88 | 90 | 81 | 86  | 68  | 78    | 77  | 84  | 89  | 93  | 92  | 91  | 90  | 86  | 87  | 84  | 86  | 85  | 84.0  | 8.5               |
| 7    | 86 | 86 | 86 | 86 | 81 | 84 | 81 | 82 | 85 | 87  | 75  | 76    | 70  | 65  | 65  | 67  | 74  | 82  | 87  | 93  | 92  | 93  | 94  | 93  | 81.9  | 7.8               |
| 8    | 95 | 90 | 91 | 94 | 94 | 93 | 89 | 90 | 93 | 67  | 64  | 65    | 63  | 65  | 66  | 69  | 79  | 85  | 95  | 88  | 87  | 90  | 90  | 91  | 83.2  | 7.4               |
| 9    | 96 | 97 | 92 | 93 | 96 | 94 | 95 | 96 | 93 | 83  | 77  | 83    | 80  | 80  | 81  | 85  | 93  | 93  | 97  | 96  | 100 | 91  | 89  | 91  | 90.5  | 9.1               |
| 10   | 92 | 92 | 95 | 92 | 90 | 87 | 86 | 83 | 82 | 73  | 68  | 66    | 66  | 66  | 76  | 84  | 86  | 86  | 91  | 90  | 96  | 96  | 94  | 84  | 85.5  | 10.8              |
| 11   | 85 | 89 | 93 | 92 | 88 | 86 | 86 | 86 | 81 | 74  | 70  | 73    | 73  | 80  | 87  | 88  | 87  | 91  | 87  | 87  | 84  | 87  | 89  | 88  | 84.5  | 9.9               |
| 12   | 82 | 84 | 88 | 79 | 83 | 85 | 83 | 85 | 87 | 74  | 71  | 72    | 66  | 69  | 74  | 79  | 84  | 85  | 84  | 92  | 89  | 82  | 85  | 82  | 81.1  | 9.2               |
| 13   | 85 | 82 | 84 | 82 | 79 | 84 | 84 | 81 | 81 | 84  | 84  | 78    | 77  | 76  | 77  | 86  | 86  | 88  | 91  | 91  | 97  | 98  | 96  | 98  | 85.0  | 11.0              |
| 14   | 95 | 96 | 95 | 98 | 92 | 94 | 96 | 93 | 96 | 88  | 67  | 65    | 59  | 60  | 61  | 67  | 79  | 84  | 87  | 86  | 88  | 83  | 85  | 82  | 83.5  | 10.9              |
| 15   | 87 | 86 | 85 | 82 | 84 | 88 | 88 | 88 | 88 | 74  | 68  | 67    | 66  | 67  | 68  | 72  | 88  | 86  | 93  | 94  | 93  | 90  | 95  | 91  | 82.5  | 8.8               |
| 16   | 94 | 98 | 91 | 91 | 95 | 95 | 93 | 93 | 95 | 96  | 96  | 91    | 97  | 91  | 91  | 92  | 92  | 96  | 97  | 88  | 86  | 84  | 83  | 85  | 92.2  | 9.4               |
| 17   | 85 | 84 | 86 | 87 | 83 | 85 | 83 | 79 | 78 | 74  | 75  | 68    | 66  | 63  | 64  | 73  | 85  | 87  | 85  | 85  | 85  | 85  | 86  | 87  | 80.0  | 8.2               |
| 18   | 88 | 90 | 89 | 88 | 94 | 90 | 96 | 94 | 90 | 89  | 86  | 82    | 79  | 83  | 87  | 92  | 95  | 95  | 97  | 100 | 97  | 100 | 99  | 91  | 91.3  | 8.5               |
| 19   | 90 |    |    |    |    |    |    |    |    |     |     |       |     |     |     |     |     |     |     |     |     |     |     |     |       |                   |

Percentages at exact hours, Greenwich Mean Time. Determined as explained on page 14.

151. Eskdalemuir : Louvred Hut :  $h_t$  (height of thermometer bulbs above ground) = 0.9 metres.

November, 1924.

| Day.             | 1.      | 2.      | 3.      | 4.      | 5.      | 6.      | 7.      | 8.      | 9.      | 10.     | 11.     | Noon.   | 13.     | 14.     | 15.     | 16.     | 17.     | 18.     | 19.     | 20.     | 21.     | 22.     | 23.     | 24.     | Mean.   | Vapour Pressure.* |      |
|------------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|-------------------|------|
| 1                | 85      | 90      | 86      | 89      | 85      | 83      | 85      | 85      | 87      | 89      | 88      | 86      | 84      | 89      | 89      | 96      | 95      | 95      | 94      | 95      | 93      | 92      | 80      | 81      | 88.5    | 9.5               |      |
| 2                | 86      | 87      | 86      | 86      | 86      | 86      | 86      | 86      | 86      | 86      | 86      | 87      | 90      | 91      | 86      | 86      | 89      | 85      | 86      | 82      | 80      | 83      | 87      | 83      | 86.1    | 8.9               |      |
| 3                | 79      | 83      | 88      | 85      | 87      | 90      | 85      | 85      | 79      | 76      | 69      | 69      | 68      | 64      | 68      | 75      | 74      | 76      | 77      | 79      | 80      | 84      | 77      | 81      | 78.8    | 5.5               |      |
| 4                | 80      | 69      | 73      | 76      | 76      | 74      | 77      | 78      | 81      | 76      | 69      | 67      | 68      | 76      | 77      | 82      | 92      | 89      | 95      | 91      | 97      | 92      | 92      | 93      | 80.6    | 5.7               |      |
| 5                | 91      | 90      | 85      | 86      | 86      | 89      | 90      | 87      | 84      | 77      | 76      | 70      | 65      | 66      | 70      | 75      | 76      | 81      | 86      | 90      | 94      | 93      | 93      | 93      | 83.0    | 8.1               |      |
| 6                | 94      | 93      | 93      | 93      | 93      | 94      | 94      | 93      | 92      | 88      | 84      | 80      | 71      | 68      | 74      | 76      | 81      | 84      | 84      | 83      | 83      | 83      | 86      | 84      | 85.3    | 6.7               |      |
| 7                | 83      | 84      | 84      | 84      | 86      | 85      | 87      | 83      | 83      | 86      | 77      | 76      | 81      | 80      | 82      | 82      | 87      | 87      | 88      | 88      | 91      | 86      | 86      | 88      | 84.3    | 7.9               |      |
| 8                | 87      | 88      | 88      | 87      | 86      | 86      | 86      | 86      | 86      | 86      | 86      | 83      | 86      | 81      | 82      | 80      | 81      | 83      | 86      | 87      | 86      | 86      | 86      | 84      | 85.2    | 8.1               |      |
| 9                | 86      | 89      | 86      | 86      | 91      | 85      | 86      | 89      | 87      | 80      | 77      | 74      | 75      | 77      | 78      | 81      | 83      | 85      | 85      | 76      | 91      | 95      | 96      | 94      | 84.5    | 8.0               |      |
| 10               | 91      | 88      | 90      | 92      | 93      | 92      | 92      | 93      | 92      | 94      | 97      | 85      | 78      | 70      | 69      | 76      | 81      | 86      | 88      | 91      | 90      | 90      | 88      | 90      | 87.5    | 8.1               |      |
| 11               | 93      | 93      | 90      | 92      | 94      | 91      | 93      | 95      | 91      | 89      | 89      | 94      | 97      | 97      | 93      | 97      | 92      | 89      | 95      | 98      | 98      | 98      | 98      | 100     | 93.7    | 9.2               |      |
| 12               | 91      | 91      | 91      | 91      | 81      | 79      | 85      | 89      | 91      | 84      | 71      | 70      | 64      | 66      | 70      | 77      | 81      | 84      | 88      | 87      | 88      | 85      | 86      | 88      | 88      | 82.7              | 6.2  |
| 13               | 89      | 92      | 89      | 87      | 92      | 88      | 89      | 93      | 90      | 97      | 83      | 77      | 68      | 74      | 79      | 84      | 91      | 90      | 91      | 89      | 89      | 88      | 90      | 90      | 90      | 87.0              | 6.3  |
| 14               | 87      | 85      | 85      | 87      | 88      | 89      | 90      | 93      | 91      | 83      | 78      | 78      | 85      | 84      | 85      | 84      | 87      | 86      | 85      | 85      | 86      | 87      | 87      | 87      | 87      | 86.0              | 7.5  |
| 15               | 86      | 82      | 81      | 80      | 82      | 86      | 87      | 93      | 90      | 90      | 75      | 74      | 75      | 72      | 79      | 83      | 85      | 86      | 86      | 87      | 91      | 91      | 90      | 90      | 84.2    | 6.6               |      |
| 16               | 90      | 90      | 90      | 90      | 92      | 90      | 90      | 90      | 90      | 89      | 87      | 79      | 82      | 84      | 88      | 90      | 92      | 90      | 91      | 91      | 91      | 92      | 92      | 92      | 92      | 89.3              | 4.4  |
| 17               | 92      | 92      | 91      | 91      | 91      | 91      | 91      | 91      | 90      | 88      | 90      | 93      | 97      | 95      | 97      | 98      | 100     | 97      | 100     | 98      | 98      | 97      | 100     | 98      | 94.4    | 6.0               |      |
| 18               | 97      | 94      | 94      | 92      | 95      | 97      | 97      | 95      | 95      | 98      | 89      | 70      | 65      | 74      | 75      | 85      | 85      | 87      | 86      | 85      | 86      | 92      | 90      | 90      | 90      | 88.2              | 7.8  |
| 19               | 90      | 90      | 77      | 78      | 75      | 75      | 75      | 80      | 80      | 82      | 82      | 78      | 82      | 85      | 81      | 87      | 89      | 86      | 87      | 86      | 85      | 87      | 88      | 85      | 85      | 83.0              | 7.9  |
| 20               | 84      | 84      | 87      | 83      | 82      | 83      | 79      | 87      | 91      | 91      | 84      | 83      | 81      | 82      | 83      | 84      | 89      | 85      | 89      | 90      | 89      | 89      | 88      | 88      | 86      | 85.5              | 8.9  |
| 21               | 88      | 89      | 87      | 86      | 85      | 87      | 87      | 87      | 87      | 89      | 85      | 76      | 76      | 78      | 80      | 78      | 80      | 79      | 85      | 87      | 92      | 91      | 94      | 94      | 94      | 85.1              | 8.8  |
| 22               | 93      | 92      | 94      | 92      | 91      | 91      | 92      | 93      | 93      | 94      | 93      | 94      | 94      | 94      | 96      | 96      | 96      | 96      | 93      | 94      | 94      | 92      | 91      | 90      | 93.3    | 10.8              |      |
| 23               | 88      | 87      | 86      | 86      | 94      | 93      | 92      | 93      | 97      | 97      | 96      | 96      | 95      | 92      | 90      | 98      | 97      | 96      | 97      | 93      | 92      | 94      | 94      | 92      | 93.1    | 11.1              |      |
| 24               | 92      | 94      | 89      | 96      | 92      | 89      | 90      | 92      | 92      | 88      | 89      | 88      | 89      | 89      | 92      | 89      | 89      | 90      | 93      | 93      | 93      | 91      | 91      | 91      | 90.9    | 9.6               |      |
| 25               | 92      | 90      | 89      | 90      | 90      | 94      | 93      | 90      | 90      | 90      | 88      | 81      | 84      | 90      | 89      | 85      | 90      | 89      | 89      | 90      | 94      | 87      | 88      | 88      | 89.5    | 9.0               |      |
| 26               | 89      | 88      | 90      | 91      | 91      | 95      | 95      | 95      | 92      | 92      | 92      | 93      | 94      | 91      | 90      | 92      | 90      | 91      | 92      | 92      | 94      | 94      | 91      | 91      | 91.8    | 10.8              |      |
| 27               | 92      | 89      | 90      | 86      | 85      | 84      | 85      | 85      | 86      | 89      | 94      | 90      | 91      | 90      | 90      | 94      | 88      | 93      | 90      | 88      | 91      | 91      | 87      | 87      | 89.0    | 8.7               |      |
| 28               | 87      | 85      | 85      | 84      | 82      | 81      | 86      | 85      | 88      | 94      | 93      | 90      | 88      | 84      | 85      | 86      | 86      | 86      | 83      | 87      | 81      | 79      | 77      | 79      | 85.2    | 6.4               |      |
| 29               | 84      | 85      | 87      | 91      | 88      | 92      | 94      | 96      | 95      | 95      | 91      | 92      | 86      | 86      | 85      | 87      | 89      | 87      | 86      | 87      | 86      | 85      | 87      | 87      | 88.6    | 8.3               |      |
| 30               | 93      | 93      | 93      | 94      | 94      | 89      | 91      | 89      | 91      | 87      | 89      | 88      | 84      | 87      | 87      | 89      | 93      | 97      | 98      | 97      | 96      | 95      | 93      | 95      | 91.6    | 9.6               |      |
| Mean             | 88.6    | 88.2    | 87.5    | 87.7    | 87.8    | 87.4    | 87.7    | 88.4    | 89.0    | 89.1    | 88.3    | 85.0    | 82.0    | 81.4    | 81.9    | 83.0    | 85.7    | 87.6    | 87.9    | 89.1    | 89.0    | 89.9    | 89.8    | 88.9    | 89.0    | 87.2              | †8.0 |
| Vapour Pressure* | mb. 7.5 | mb. 7.5 | mb. 7.4 | mb. 7.4 | mb. 7.5 | mb. 7.4 | mb. 7.5 | mb. 7.6 | mb. 7.8 | mb. 8.3 | mb. 8.5 | mb. 8.4 | mb. 8.5 | mb. 8.6 | mb. 8.6 | mb. 8.4 | mb. 8.2 | mb. 8.0 | mb. 8.0 | mb. 7.8 | mb. 7.7 | mb. 7.6 | mb. 7.5 | mb. 7.5 | mb. 7.9 |                   |      |

152. Eskdalemuir : Louvred Hut :  $h_t$  = 0.9 metres.

December, 1924.

| Day. | 1. | 2. | 3. | 4. | 5. | 6. | 7. | 8. | 9. | 10. | 11. | Noon. | 13. | 14. | 15. | 16. | 17. | 18. | 19. | 20. | 21. | 22. | 23. | 24. | Mean. | Vapour Pressure.* |     |
|------|----|----|----|----|----|----|----|----|----|-----|-----|-------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-------|-------------------|-----|
| 1    | 95 | 94 | 95 | 93 | 94 | 94 | 94 | 94 | 94 | 95  | 96  | 91    | 91  | 91  | 88  | 90  | 88  | 88  | 89  | 89  | 90  | 87  | 88  | 92  | 97    | 91.7              | 8.9 |
| 2    | 87 | 89 | 89 | 93 | 95 | 92 | 91 | 87 | 88 | 84  | 81  | 86    | 91  | 89  | 91  | 91  | 93  | 94  | 90  | 90  | 90  | 91  | 90  | 89  | 90    | 89.8              | 8.3 |
| 3    | 90 | 94 | 95 | 90 | 87 | 86 | 85 | 85 | 88 | 83  | 90  | 93    | 86  | 87  | 87  | 94  | 94  | 93  | 90  | 90  | 90  | 95  | 95  | 94  | 90.3  | 8.8               |     |
| 4    | 90 | 90 | 90 | 91 | 89 | 87 | 86 | 86 | 87 | 86  | 86  | 90    | 94  | 94  | 93  | 95  | 97  | 93  | 97  | 97  | 99  | 98  | 94  | 95  | 91.8  | 8.6               |     |
| 5    | 93 | 88 | 92 | 97 | 95 | 96 | 98 | 89 | 84 | 85  | 81  | 83    | 85  | 83  | 82  | 85  | 80  | 81  | 81  | 83  | 84  | 87  | 89  | 86  | 87.2  | 8.3               |     |
| 6    | 92 | 91 | 90 | 87 | 87 | 84 | 82 | 82 | 83 | 87  | 90  | 88    | 93  | 86  | 91  | 89  | 90  | 90  | 91  | 95  | 97  | 96  | 97  | 100 | 89.6  | 8.2               |     |
| 7    | 98 | 94 | 94 | 94 | 93 | 93 | 94 | 94 | 94 | 92  | 89  | 86    | 82  | 86  | 83  | 84  | 84  | 87  | 86  | 87  | 93  | 94  | 94  | 94  | 96    | 90.1              | 9.7 |
| 8    | 96 | 96 | 96 | 96 | 96 | 95 | 95 | 93 | 97 | 95  | 95  | 97    | 96  | 95  | 96  | 96  | 95  | 96  | 96  | 95  | 97  | 92  | 89  | 92  | 95.2  | 9.9               |     |
| 9    | 94 | 95 | 96 | 97 | 98 | 98 | 93 | 95 | 97 | 97  | 100 | 89    | 86  | 89  | 94  | 93  | 95  | 94  | 93  | 95  | 95  | 92  | 93  | 91  | 94.1  | 9.3               |     |
| 10   | 91 | 94 | 89 | 93 | 95 | 94 | 95 | 97 | 93 | 96  | 96  | 88    | 92  | 92  | 93  | 91  | 92  | 96  | 97  | 97  | 92  | 92  | 94  | 93  | 93.4  | 9.8               |     |
| 11   | 90 | 93 | 93 | 90 | 93 | 94 | 94 | 97 | 95 | 95  | 91  | 85    | 86  | 87  | 94  | 94  | 96  | 95  | 91  | 96  | 97  | 96  | 93  | 92  | 92.8  | 9.6               |     |
| 12   | 91 | 93 | 91 | 84 | 90 | 91 | 90 | 91 | 90 | 91  | 90  | 88    | 93  | 93  | 93  | 92  | 91  | 90  | 89  | 92  | 92  | 88  | 90  | 86  | 90.4  | 9.6               |     |
| 13   | 86 | 86 | 86 | 85 | 85 | 83 | 82 | 83 | 87 | 92  | 93  | 92    | 93  | 93  | 93  | 90  | 87  | 88  | 92  | 91  | 92  | 98  | 92  | 93  | 89.1  | 8.5               |     |
| 14   | 94 | 93 | 95 | 94 | 94 | 92 | 90 | 89 | 89 | 92  | 91  | 92    | 88  | 94  | 84  | 84  | 84  | 86  | 87  | 92  | 92  | 95  | 94  | 94  | 90.8  | 6.8               |     |
| 15   | 94 | 94 | 95 | 94 | 94 | 94 | 96 | 96 | 95 | 89  | 85  | 88    | 85  | 88  | 90  | 89  | 90  | 89  | 91  | 88  | 94  | 97  | 97  | 96  | 92.0  | 6.9               |     |
| 16   | 96 | 97 | 98 | 97 | 98 | 97 | 92 | 86 | 80 | 80  | 81  | 81    | 83  | 82  | 86  | 89  | 95  | 89  | 90  | 88  | 94  | 94  | 94  | 94  | 90.7  | 7.4               |     |
| 17   | 94 | 94 | 94 | 95 | 94 | 94 | 93 | 96 | 96 | 98  | 97  | 100   | 98  | 97  | 97  | 98  | 98  | 97  | 97  | 97  | 97  | 98  | 98  | 98  | 96.4  | 9.1               |     |
| 18   | 92 | 92 | 92 | 93 | 93 | 93 | 93 | 93 | 93 | 98  | 96  | 97    | 98  | 98  | 92  | 96  | 93  | 94  | 94  | 97  | 96  | 97  | 97  |     |       |                   |     |



HUMIDITY: ANNUAL MEANS OF HOURLY VALUES.

From the monthly means for exact hours, Greenwich Mean Time.

153. Eskdalemuir: (Louvred Hut) ht = 0.9 metres.

1924.

| G.M.T.                             | 1.      | 2.      | 3.      | 4.      | 5.      | 6.      | 7.      | 8.      | 9.      | 10.     | 11.     | Noon    | 13.     | 14.     | 15.     | 16.     | 17.     | 18.     | 19.     | 20.     | 21.     | 22.     | 23.     | 24.     | Mean    |
|------------------------------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| Relative Humidity ...              | % 89.3  | % 89.5  | % 89.8  | % 89.7  | % 89.5  | % 89.2  | % 88.5  | % 86.6  | % 83.9  | % 81.4  | % 80.5  | % 77.3  | % 76.5  | % 76.4  | % 76.6  | % 77.9  | % 79.6  | % 81.6  | % 83.7  | % 85.9  | % 87.5  | % 88.2  | % 88.6  | % 88.9  | % 84.4  |
| Vapour Pressure (in millibars) ... | mb. 8.1 | mb. 8.2 | mb. 8.1 | mb. 8.1 | mb. 8.1 | mb. 8.2 | mb. 8.3 | mb. 8.6 | mb. 8.8 | mb. 8.9 | mb. 9.0 | mb. 9.0 | mb. 9.1 | mb. 9.1 | mb. 9.0 | mb. 9.0 | mb. 8.9 | mb. 8.8 | mb. 8.7 | mb. 8.6 | mb. 8.5 | mb. 8.4 | mb. 8.3 | mb. 8.2 | mb. 8.6 |

RELATIVE HUMIDITY: MONTHLY MEANS AND DIURNAL INEQUALITIES.

The departures from the mean of the day are adjusted for non-cyclic change.

154. Eskdalemuir: (Louvred Hut) ht = 0.9 metres.

1924.

| G.M.T. | Mean | 1.      | 2.      | 3.      | 4.      | 5.      | 6.      | 7.      | 8.      | 9.      | 10.     | 11.     | Noon    | 13.     | 14.     | 15.     | 16.     | 17.     | 18.     | 19.     | 20.     | 21.     | 22.     | 23.     | 24.     |
|--------|------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| Jan.   | 90.3 | % -0.34 | % -0.26 | % +0.12 | % -0.09 | % -0.19 | % +0.13 | % +0.98 | % +1.34 | % +1.09 | % +0.41 | % -0.45 | % -0.84 | % -1.09 | % -0.83 | % -0.41 | % -0.95 | % -0.11 | % -0.23 | % +0.03 | % +0.13 | % +0.07 | % +0.72 | % +0.38 | % +0.28 |
| Feb.   | 81.5 | +1.53   | +2.01   | +2.69   | +3.35   | +3.88   | +2.97   | +2.96   | +1.85   | +0.54   | -1.11   | -2.53   | -3.29   | -3.99   | -5.65   | -5.06   | -4.09   | -2.65   | -0.31   | +0.27   | +1.06   | +1.58   | +1.92   | +1.26   | +1.36   |
| Mar.   | 78.0 | +9.73   | +10.40  | +10.84  | +10.24  | +10.46  | +9.94   | +10.06  | +7.53   | +0.69   | -6.26   | -10.53  | -12.67  | -13.93  | -14.49  | -14.83  | -13.81  | -11.62  | -6.63   | -1.63   | +1.49   | +3.66   | +5.69   | +7.39   | +8.22   |
| April  | 80.7 | +9.55   | +10.00  | +10.24  | +10.62  | +10.13  | +10.20  | +8.28   | +3.96   | -3.17   | -7.76   | -10.01  | -11.10  | -13.29  | -13.35  | -14.24  | -11.13  | -9.69   | -7.54   | -2.40   | +1.84   | +5.25   | +6.66   | +8.24   | +8.78   |
| May    | 82.7 | +7.27   | +7.26   | +6.90   | +7.08   | +6.55   | +6.87   | +4.47   | +1.33   | -1.39   | -3.66   | -5.60   | -8.50   | -11.17  | -8.99   | -10.51  | -8.78   | -6.44   | -5.16   | -2.13   | +0.92   | +4.49   | +5.90   | +6.63   | +6.69   |
| June   | 81.4 | +8.57   | +8.96   | +9.35   | +9.77   | +8.35   | +5.91   | +3.80   | -0.94   | -3.79   | -4.17   | -5.82   | -6.80   | -7.31   | -9.46   | -10.34  | -10.65  | -9.43   | -6.67   | -3.88   | +0.81   | +3.46   | +5.11   | +6.97   | +8.15   |
| July   | 83.7 | +5.98   | +6.83   | +6.72   | +6.92   | +6.97   | +6.33   | +4.31   | +1.04   | -2.31   | -4.59   | -6.67   | -8.53   | -8.77   | -8.57   | -7.52   | -7.32   | -5.92   | -4.36   | -1.44   | +1.73   | +3.68   | +4.95   | +5.06   | +5.39   |
| Aug.   | 85.3 | +5.06   | +5.68   | +6.52   | +6.66   | +6.95   | +6.25   | +4.25   | +1.94   | -1.93   | -4.76   | -7.79   | -7.85   | -7.77   | -8.16   | -6.54   | -7.18   | -5.72   | -3.07   | -0.32   | +1.68   | +3.43   | +3.62   | +4.60   | +4.38   |
| Sept.  | 84.9 | +4.92   | +4.96   | +5.95   | +5.39   | +5.00   | +5.43   | +4.87   | +2.77   | +1.04   | -2.25   | -6.09   | -8.55   | -8.91   | -8.85   | -9.84   | -8.03   | -5.14   | -1.33   | +0.13   | +2.31   | +3.88   | +4.11   | +3.68   | +4.51   |
| Oct.   | 86.3 | +3.19   | +3.81   | +4.00   | +3.34   | +2.82   | +3.15   | +4.00   | +3.87   | +1.65   | -2.12   | -6.66   | -7.92   | -8.91   | -9.61   | -7.80   | -4.03   | -0.54   | +1.73   | +2.12   | +2.96   | +3.17   | +2.20   | +2.88   | +2.79   |
| Nov.   | 87.2 | +1.60   | +1.16   | +0.41   | +0.63   | +0.69   | +0.57   | +1.29   | +1.85   | +1.93   | +1.12   | -2.14   | -5.15   | -5.76   | -5.34   | -4.25   | -1.51   | +0.35   | +0.64   | +1.85   | +1.68   | +2.60   | +2.51   | +1.60   | +1.69   |
| Dec.   | 90.6 | +1.30   | +0.70   | +1.04   | +0.23   | +0.70   | +0.26   | +0.28   | +0.01   | -0.14   | -0.19   | -1.78   | -3.18   | -3.10   | -2.37   | -1.71   | -0.92   | -0.42   | -0.14   | -0.22   | +1.05   | +2.01   | +2.16   | +2.43   | +1.99   |
| Year   | 84.4 | +4.86   | +5.13   | +5.40   | +5.35   | +5.15   | +4.83   | +4.13   | +2.21   | -0.48   | -2.95   | -5.51   | -7.04   | -7.83   | -7.97   | -7.92   | -6.53   | -4.78   | -2.76   | -0.63   | +1.47   | +3.11   | +3.80   | +4.26   | +4.52   |

RAINFALL: ANNUAL TOTALS OF HOURLY VALUES.

† Amounts, in millimetres; durations, in hours, for periods of sixty minutes between the exact hours, Greenwich Mean Time.

155. Eskdalemuir: H<sub>r</sub> = 242.0 metres + 0.4 metres.

1924.

| G.M.T.   | 0 to 1   | 1 to 2   | 2 to 3   | 3 to 4   | 4 to 5   | 5 to 6   | 6 to 7   | 7 to 8   | 8 to 9   | 9 to 10  | 10 to 11 | 11 to Noon | Noon to 13 | 13 to 14 | 14 to 15 | 15 to 16 | 16 to 17 | 17 to 18 | 18 to 19 | 19 to 20 | 20 to 21 | 21 to 22 | 22 to 23 | 23 to 24 | 0 to 24    |
|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|------------|------------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|------------|
| Amount   | mm. 66.7 | mm. 75.0 | mm. 76.8 | mm. 69.5 | mm. 70.7 | mm. 72.0 | mm. 59.3 | mm. 42.3 | mm. 42.3 | mm. 48.3 | mm. 38.8 | mm. 56.5   | mm. 53.7   | mm. 62.8 | mm. 84.0 | mm. 81.9 | mm. 87.2 | mm. 71.5 | mm. 78.4 | mm. 65.0 | mm. 54.0 | mm. 69.4 | mm. 77.2 | mm. 77.5 | mm. 1580.8 |
| Duration | hr. 64.2 | hr. 63.6 | hr. 68.1 | hr. 66.2 | hr. 61.6 | hr. 59.1 | hr. 62.2 | hr. 50.2 | hr. 45.6 | hr. 45.0 | hr. 37.6 | hr. 49.7   | hr. 54.8   | hr. 52.9 | hr. 53.0 | hr. 58.7 | hr. 59.0 | hr. 68.8 | hr. 59.3 | hr. 60.1 | hr. 50.3 | hr. 55.7 | hr. 61.9 | hr. 63.1 | hr. 1370.7 |

† The totals and durations for individual months are printed in the tables on the following pages.

NOTES ON RAINFALL.

156. Eskdalemuir.

1924.

Notable Falls of the Year.

- (a) A fall worthy of notice occurred on July 12th, when 12 mm. fell in nine minutes. This was part of a fall of 19.3 mm. which fell during the hour 18h. to 19h.
- (b) Details of the greatest continuous falls are as follow:—

| Date.                   | Amount. | Duration. |
|-------------------------|---------|-----------|
|                         | mm.     | hrs.      |
| January 12th—13th ...   | 54      | 22.8      |
| May 9th—10th ...        | 28      | 13.4      |
| September 28th—29th ... | 41      | 17.7      |
| December 26th—27th ...  | 46      | 11.1      |
| December 29th—30th ...  | 43      | 10.9      |

Wet Periods.

- (a) There were three "rain spells" (i.e., periods of fifteen or more consecutive days on each of which 0.2 mm. or more of rain fell), viz., August 11th to August 29th, September 7th to September 24th, December 11th to December 31st.
- (b) There were no "wet spells" (i.e., periods of fifteen or more consecutive days on each of which 1.0 mm. or more of rain fell), but the period September 10th to September 24th fell short of a "wet spell" in having only 0.9 mm. on the 10th and 24th respectively. The period December 11th to December 27th failed to classify as a "wet spell" in having only 0.7 mm. rainfall on the 21st.

Dry Periods.

- (a) There were no periods of "absolute drought" (i.e., fifteen or more consecutive days on each of which less than 0.2 mm. of rain fell), or of "partial drought" (i.e., twenty-nine or more consecutive days, the mean rainfall of which did not exceed 0.2 mm. per day).
- (b) Details of the relatively dry periods are as follow:—
  - (i) March 5th to March 21st. Total rainfall 1.3 mm., of which 1.1 mm. fell on March 19th. No rain occurred in the period March 8th to March 18th.
  - (ii) March 26th to April 6th—a period of 12 days in which no rain fell.

Amounts in millimetres, for periods of sixty minutes, between the exact hours, Greenwich Mean Time.

157. Eskdalemuir :  $H_r$  (height of receiving surface above M.S.L.) =  $H$  (height of station above M.S.L.) +  $h_r$  (height of receiving surface above ground) = 242.0 metres + 0.4 metres.

January, 1924.

| Day             | 0-1      | 1-2     | 2-3     | 3-4     | 4-5     | 5-6     | 6-7     | 7-8     | 8-9     | 9-10    | 10-11   | 11-12   | 12-13    | 13-14   | 14-15   | 15-16   | 16-17   | 17-18   | 18-19   | 19-20   | 20-21   | 21-22   | 22-23   | 23-24   | 0-24      | Duration.<br>0-24 |      |
|-----------------|----------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|----------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|-----------|-------------------|------|
|                 | mm.      | mm.     | mm.     | mm.     | mm.     | mm.     | mm.     | mm.     | mm.     | mm.     | mm.     | mm.     | mm.      | mm.     | mm.     | mm.     | mm.     | mm.     | mm.     | mm.     | mm.     | mm.     | mm.     | mm.     | mm.       | hr.               |      |
| 1               | .2       | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...      | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | 0.2       | 0.3               |      |
| 2               | ...      | ...     | ...     | .1      | ...     | .2      | .3      | .2      | ...     | ...     | ...     | ...     | ...      | ...     | 1.0     | 3.1     | 0.8     | .2      | (.3)    | ...     | ...     | ...     | ...     | ...     | 6.2       | 8.0               |      |
| 3               | ...      | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...      | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...       | ...               |      |
| 4               | ...      | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...      | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...       | ...               |      |
| 5               | .3       | .3      | .5      | .6      | .4      | 1.0     | .4      | .3      | .2      | .4      | .3      | .3      | .3       | .2      | .2      | .4      | .3      | .1      | .2      | .2      | ...     | .2      | .1      | .1      | 7.3       | 23.0              |      |
| 6               | .1       | ...     | .1      | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...      | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...       | 0.2               | 2.0  |
| 7               | ...      | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...      | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...       | 1.5               | 2.5  |
| 8               | ...      | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...      | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...       | ...               |      |
| 9               | ...      | ...     | ...     | ...     | ...     | ...     | ...     | ...     | (.1)    | (...)   | ...     | ...     | ...      | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...       | 0.1               | ...  |
| 10              | ...      | ...     | ...     | ...     | ...     | (.2)    | (.3)    | ...     | ...     | ...     | .2      | .6      | .1       | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...       | 1.4               | 3.9  |
| 11              | ...      | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | .2      | .1      | .1       | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | (1.6)   | (1.6)   | (1.6)   | 5.2       | (5.1)             |      |
| 12              | (1.6)    | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...      | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...       | ...               |      |
| 13              | 2.5      | 2.3     | 2.7     | 1.0     | 1.9     | 3.4     | 3.1     | 2.2     | 4.8     | 5.0     | 2.3     | .4      | .9       | 1.6     | 1.5     | 2.9     | 5.6     | 3.3     | 1.8     | .9      | .3      | ...     | ...     | ...     | 7.5       | (3.8)             |      |
| 14              | ...      | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...      | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...       | 50.4              | 20.7 |
| 15              | ...      | ...     | ...     | ...     | .3      | .2      | ...     | ...     | ...     | ...     | ...     | ...     | ...      | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...       | 0.5               | 0.6  |
| 16              | ...      | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...      | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...       | ...               |      |
| 17              | ...      | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...      | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...       | ...               |      |
| 18              | ...      | ...     | ...     | .4      | 1.8     | 2.1     | .7      | 2.2     | .1      | ...     | ...     | .3      | .7       | 4.1     | .2      | 4.0     | 3.2     | .4      | ...     | .1      | .6      | ...     | .5      | .3      | 19.7      | 14.7              |      |
| 19              | .2       | .1      | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...      | ...     | ...     | .1      | 2.5     | 1.8     | .8      | ...     | .1      | .9      | .4      | .4      | 7.3       | 8.9               |      |
| 20              | ...      | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...      | ...     | ...     | (.1)    | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...       | 0.1               | 0.3  |
| 21              | ...      | ...     | ...     | ...     | ...     | ...     | .4      | .5      | .4      | .7      | ...     | .1      | .1       | .2      | .2      | .3      | .2      | .4      | .2      | .1      | ...     | ...     | .4      | .6      | 4.8       | 12.4              |      |
| 22              | .2       | ...     | .1      | .4      | 1.8     | 2.7     | 1.6     | 1.2     | 1.8     | 2.0     | 1.1     | 1.8     | .9       | 1.3     | .7      | .8      | .3      | .5      | .2      | .3      | ...     | ...     | .1      | ...     | 19.8      | 19.8              |      |
| 23              | .1       | .1      | .1      | .1      | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...      | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...       | 0.5               | 4.7  |
| 24              | ...      | .4      | 2.2     | 2.2     | .8      | .4      | 1.2     | 1.1     | 1.1     | .7      | .4      | .2      | .1       | ...     | ...     | ...     | ...     | ...     | ...     | .1      | ...     | ...     | ...     | ...     | ...       | 10.9              | 10.8 |
| 25              | ...      | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | .5      | .2       | .1      | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...       | 0.9               | 2.4  |
| 26              | ...      | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | .2      | .7      | 1.1      | .4      | .6      | .1      | ...     | ...     | .2      | ...     | .4      | 2.3     | 4.0     | 3.8     | 13.8      | 7.9               |      |
| 27              | 1.3      | 1.5     | .8      | .5      | ...     | .2      | ...     | ...     | ...     | ...     | ...     | ...     | .1       | ...     | ...     | ...     | ...     | .2      | .1      | ...     | ...     | ...     | ...     | ...     | ...       | 4.7               | 4.5  |
| 28              | ...      | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...      | ...     | ...     | ...     | ...     | ...     | ...     | ...     | .1      | .1      | .2      | .1      | .3        | 0.8               | 4.3  |
| 29              | .3       | .3      | .4      | .2      | .3      | .1      | ...     | (.1)    | ...     | ...     | ...     | ...     | ...      | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...       | 1.7               | 4.9  |
| 30              | ...      | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...      | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...       | ...               | ...  |
| 31              | .1       | .1      | ...     | .1      | ...     | ...     | .3      | .3      | .1      | .1      | .1      | 1.0     | 1.4      | 2.1     | 2.1     | ...     | .3      | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...       | 8.1               | 10.4 |
| Sum.            | 6.9      | 5.1     | 6.9     | 5.6     | 7.3     | 10.5    | 8.4     | 8.4     | 8.6     | 9.1     | 5.3     | 6.4     | 5.5      | 11.2    | 6.3     | 11.6    | 13.3    | 7.1     | 3.9     | 1.9     | 1.6     | 5.5     | 9.2     | 9.3     | 174.9     | 182.8             |      |
| Total Duration. | hr. 10.0 | hr. 7.2 | hr. 8.0 | hr. 8.8 | hr. 5.7 | hr. 7.5 | hr. 9.0 | hr. 8.1 | hr. 6.1 | hr. 4.9 | hr. 6.5 | hr. 9.5 | hr. 10.1 | hr. 8.4 | hr. 7.8 | hr. 6.1 | hr. 7.6 | hr. 8.5 | hr. 7.3 | hr. 6.8 | hr. 4.9 | hr. 5.8 | hr. 9.4 | hr. 8.8 | hr. 182.8 |                   |      |

158. Eskdalemuir :  $H_r = 242.0$  metres + 0.4 metres.

February, 1924.

| Day             | mm.     | mm.     | mm.     | mm.     | mm.     | mm.     | mm.     | mm.     | mm.     | mm.     | mm.    | mm.     | mm.     | mm.     | mm.     | mm.     | mm.     | mm.     | mm.     | mm.     | mm.     | mm.     | mm.     | mm.     | mm.      | hr.  |      |     |
|-----------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|--------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|----------|------|------|-----|
| 1               | ...     | ...     | ...     | ...     | ...     | ...     | ...     | (.1)    | ...     | ...     | (...)  | ...     | ...     | ...     | ...     | ...     | .2      | .2      | (.1)    | ...     | ...     | ...     | ...     | ...     | ...      | 0.6  | 0.8  |     |
| 2               | .2      | ...     | ...     | (.1)    | ...     | ...     | ...     | (.1)    | ...     | ...     | ...    | ...     | ...     | ...     | ...     | .1      | .1      | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...      | 0.6  | 2.2  |     |
| 3               | ...     | ...     | ...     | (.1)    | (.1)    | (...)   | ...     | (.1)    | ...     | ...     | (...)  | ...     | ...     | (.1)    | .1      | (...)   | ...     | ...     | ...     | ...     | .1      | .2      | .3      | ...     | ...      | 1.0  | 3.9  |     |
| 4               | .2      | ...     | .2      | .2      | .1      | ...     | ...     | .1      | ...     | ...     | ...    | ...     | ...     | ...     | .1      | .3      | .1      | .1      | ...     | .1      | .1      | ...     | ...     | ...     | ...      | 2.1  | 9.0  |     |
| 5               | .3      | .4      | .5      | .3      | .4      | .3      | .3      | .3      | .7      | .4      | ...    | .1      | .1      | .8      | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...      | 4.9  | 11.5 |     |
| 6               | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...    | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...      | ...  | ...  |     |
| 7               | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | .2      | .1     | ...     | .1      | .2      | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...      | 0.6  | 1.5  |     |
| 8               | ...     | ...     | .1      | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...    | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...      | 0.1  | 0.4  |     |
| 9               | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...    | ...     | ...     | .3      | .8      | .2      | .4      | .7      | .5      | .2      | ...     | ...     | ...     | ...     | ...      | 3.1  | 6.2  |     |
| 10              | ...     | ...     | ...     | ...     | .2      | ...     | ...     | ...     | ...     | ...     | ...    | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...      | 0.8  | 1.6  |     |
| 11              | .1      | ...     | ...     | .1      | ...     | ...     | ...     | ...     | ...     | ...     | ...    | ...     | ...     | ...     | ...     | ...     | ...     | .1      | ...     | ...     | .2      | .3      | .3      | ...     | ...      | 1.1  | 4.2  |     |
| 12              | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...    | ...     | ...     | (...)   | (.1)    | (...)   | (.1)    | (...)   | ...     | ...     | ...     | ...     | ...     | ...     | ...      | 0.2  | ...  |     |
| 13              | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...    | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...      | ...  | ...  |     |
| 14              | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...    | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...      | ...  | ...  |     |
| 15              | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...    | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...      | ...  | ...  |     |
| 16              | ...     | (.1)    | ...     | (.1)    | ...     | ...     | ...     | ...     | ...     | ...     | ...    | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...      | 0.2  | 0.7  |     |
| 17              | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...    | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...      | 6.1  | 1.9  |     |
| 18              | 3.6     | .3      | .1      | ...     | ...     | ...     | ...     | .1      | .3      | ...     | ...    | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...      | 4.4  | 2.9  |     |
| 19              | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...    | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...      | ...  | ...  |     |
| 20              | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...    | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...      | ...  | ...  |     |
| 21              | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...    | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...      | ...  | ...  |     |
| 22              | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...    | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...      | ...  | ...  |     |
| 23              | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...    | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...      | ...  | ...  |     |
| 24              | ...     | ...     | ...     | ...     | 1.4     | .9      | ...     | .1      | ...     | ...     | .3     | .5      | .2      | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...      | 3.4  | 2.2  |     |
| 25              | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...    | ...     | ...     | (.1)    | ...     | ...     | ...     | ...     | (.1)    | ...     | ...     | ...     | ...     | ...     | ...      | 0.2  | 0.6  |     |
| 26              | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...    | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...      | ...  | ...  |     |
| 27              | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...    | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...      | ...  | 0.7  | 1.6 |
| 28              | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...    | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...      | ...  | 0.1  | ... |
| 29              | .1      | ...     | .7      | 1.3     | 1.7     | .1      | 1.3     | .3      | ...     | ...     | ...    | .2      | (.1)    | ...     | *°      | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...      | 5.8  | 5.0  |     |
| Sum.            | 4.5     | 0.8     | 1.6     | 2.0     | 3.9     | 1.4     | 1.7     | 1.3     | 0.7     | 0.7     | 0.4    | 0.9     | 0.7     | 1.3     | 1.3     | 0.5     | 1.1     | 1.1     | 0.9     | 0.3     | 0.3     | 0.9     | 2.0     | 5.7     | 36.0     | 56.2 |      |     |
| Total Duration. | hr. 4.3 | hr. 2.1 | hr. 3.6 | hr. 3.8 | hr. 3.2 | hr. 2.1 | hr. 1.6 | hr. 2.8 | hr. 1.0 | hr. 1.0 | hr. .4 | hr. 2.0 | hr. 1.6 | hr. 2.0 | hr. 1.7 | hr. 2.2 | hr. 3.5 | hr. 2.8 | hr. 2.3 | hr. 0.9 | hr. 1.8 | hr. 3.3 | hr. 2.5 | hr. 3.7 | hr. 56.2 |      |      |     |
| G.M.T.          | 0-1     | 1-2     | 2-3     | 3-4     | 4-5     | 5-6     | 6-7     | 7-8     | 8-9     | 9-10    | 10-11  | 11-12   | 12-13   | 13-14   | 14-15   | 15-16   | 16-17   | 17-18   | 18-19   | 19-20   | 20-21   | 21-22   | 22-23   | 23-24   | 0-24     | —    |      |     |

Amounts in millimetres, for periods of sixty minutes, between the exact hours, Greenwich Mean Time.

159. Eskdalemuir :  $H_r$  (height of receiving surface above M.S.L.) =  $H$  (height of station above M.S.L.) +  $h_r$  (height of receiving surface above ground) = 242.0 metres + 0.4 metres. **March, 1924.**

| Day.            | 0-1     | 1-2     | 2-3     | 3-4     | 4-5     | 5-6     | 6-7     | 7-8     | 8-9     | 9-10    | 10-11   | 11-12   | 12-13   | 13-14   | 14-15   | 15-16   | 16-17   | 17-18   | 18-19   | 19-20   | 20-21   | 21-22   | 22-23   | 23-24   | 0-24     | Duration.<br>0-24 |
|-----------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|----------|-------------------|
|                 | mm.     | mm.     | mm.     | mm.     | mm.     | mm.     | mm.     | mm.     | mm.     | mm.     | mm.     | mm.     | mm.     | mm.     | mm.     | mm.     | mm.     | mm.     | mm.     | mm.     | mm.     | mm.     | mm.     | mm.     | mm.      | hr.               |
| 1               | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...      | ...               |
| 2               | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...      | ...               |
| 3               | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...      | ...               |
| 4               | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...      | ...               |
| 5               | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...      | ...               |
| 6               | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...      | ...               |
| 7               | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...      | ...               |
| 8               | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...      | ...               |
| 9               | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...      | ...               |
| 10              | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...      | ...               |
| 11              | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...      | ...               |
| 12              | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...      | ...               |
| 13              | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...      | ...               |
| 14              | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...      | ...               |
| 15              | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...      | ...               |
| 16              | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...      | ...               |
| 17              | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...      | ...               |
| 18              | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...      | ...               |
| 19              | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...      | ...               |
| 20              | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...      | ...               |
| 21              | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...      | ...               |
| 22              | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...      | ...               |
| 23              | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...      | ...               |
| 24              | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...      | ...               |
| 25              | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...      | ...               |
| 26              | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...      | ...               |
| 27              | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...      | ...               |
| 28              | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...      | ...               |
| 29              | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...      | ...               |
| 30              | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...      | ...               |
| 31              | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...      | ...               |
| Sum.            | 0.4     | 1.5     | 0.9     | 0.3     | 0.7     | 1.4     | 2.0     | 1.4     | 1.4     | 1.3     | 0.9     | 1.7     | 1.5     | 1.1     | 0.3     | 0.5     | 0.7     | 1.1     | 0.8     | 1.5     | 1.3     | 1.7     | 0.6     | 1.0     | 26.0     | 48.3              |
| Total Duration. | hr. 1.0 | hr. 1.5 | hr. 1.0 | hr. 1.4 | hr. 2.2 | hr. 2.0 | hr. 2.8 | hr. 2.8 | hr. 2.8 | hr. 1.9 | hr. 2.0 | hr. 2.3 | hr. 2.8 | hr. 2.5 | hr. 1.0 | hr. 1.2 | hr. 1.2 | hr. 2.3 | hr. 1.9 | hr. 2.9 | hr. 2.4 | hr. 2.4 | hr. 2.0 | hr. 2.0 | hr. 48.3 |                   |

160. Eskdalemuir :  $H_r = 242.0$  metres + 0.4 metres.

**April, 1924.**

|                 | mm.     | mm.     | mm.     | mm.     | mm.     | mm.     | mm.     | mm.     | mm.     | mm.     | mm.     | mm.     | mm.     | mm.     | mm.     | mm.     | mm.     | mm.     | mm.     | mm.     | mm.     | mm.     | mm.     | mm.     | mm.      | hr.  |
|-----------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|----------|------|
| 1               | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...      | ...  |
| 2               | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...      | ...  |
| 3               | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...      | ...  |
| 4               | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...      | ...  |
| 5               | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...      | ...  |
| 6               | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...      | ...  |
| 7               | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...      | ...  |
| 8               | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...      | ...  |
| 9               | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...      | ...  |
| 10              | (.8)    | (.8)    | (.8)    | (.9)    | (.8)    | (.8)    | (.8)    | .1      | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...      | ...  |
| 11              | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...      | ...  |
| 12              | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...      | ...  |
| 13              | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...      | ...  |
| 14              | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...      | ...  |
| 15              | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...      | ...  |
| 16              | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...      | ...  |
| 17              | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...      | ...  |
| 18              | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...      | ...  |
| 19              | 1.0     | .6      | .5      | .2      | .1      | .6      | .2      | .4      | .3      | .2      | ...     | (.1)    | ...     | (...)   | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...      | ...  |
| 20              | ...     | (...)   | (...)   | (.1)    | (...)   | (.1)    | (...)   | .4      | .3      | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...      | ...  |
| 21              | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...      | ...  |
| 22              | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...      | ...  |
| 23              | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...      | ...  |
| 24              | .7      | .4      | .2      | .4      | .2      | .3      | .1      | ...     | .4      | .3      | ...     | 1.1     | .3      | 2.5     | 2.4     | .4      | 1.4     | .9      | 1.1     | 2.1     | .8      | ...     | .2      | .7      | 16.9     | 17.9 |
| 25              | .4      | .6      | ...     | .1      | ...     | ...     | .1      | .1      | .1      | ...     | ...     | .1      | .9      | .4      | .5      | 6.4     | 3.6     | 4.2     | 3.0     | 2.3     | 1.3     | .6      | .3      | .2      | 25.2     | 15.0 |
| 26              | 1.7     | .7      | 1.1     | 1.1     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | .7      | .4      | .1      | .2      | 1.1     | 2.4     | .1      | ...     | ...     | ...     | ...     | ...     | ...     | ...      | ...  |
| 27              | .5      | .8      | .6      | 1.0     | 1.5     | .1      | ...     | ...     | ...     | ...     | ...     | (.1)    | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...      | ...  |
| 28              | .3      | .1      | .1      | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...      | ...  |
| 29              | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...      | ...  |
| 30              | .7      | .2      | .1      | .2      | .3      | .4      | .4      | .3      | .1      | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...      | ...  |
| Sum             | 6.1     | 4.3     | 3.7     | 4.4     | 2.9     | 2.3     | 1.6     | 0.9     | 0.9     | 0.8     | 0.5     | 2.3     | 2.5     | 4.0     | 3.8     | 13.8    | 13.0    | 7.0     | 4.5     | 5.9     | 2.9     | 3.8     | 3.6     | 2.7     | 98.2     | 95.1 |
| Total Duration. | hr. 7.6 | hr. 7.8 | hr. 6.5 | hr. 6.6 | hr. 4.8 | hr. 4.1 | hr. 3.5 | hr. 3.2 | hr. 3.2 | hr. 2.5 | hr. 0.7 | hr. 1.8 | hr. 3.8 | hr. 2.8 | hr. 2.9 | hr. 4.4 | hr. 5.1 | hr. 3.5 | hr. 2.7 | hr. 3.5 | hr. 2.3 | hr. 2.4 | hr. 4.0 | hr. 5.4 | hr. 95.1 |      |
| G.M.T.          | 0-1     | 1-2     | 2-3     | 3-4     | 4-5     | 5-6     | 6-7     | 7-8     | 8-9     | 9-10    | 10-11   | 11-12   | 12-13   | 13-14   | 14-15   | 15-16   | 16-17   | 17-18   | 18-19   | 19-20   | 20-21   | 21-22   | 22-23   | 23-24   | 0-24     | —    |

Amounts in millimetres, for periods of sixty minutes, between the exact hours, Greenwich Mean Time.

161. Eskdalemuir :  $H_r$  (height of receiving surface above M.S.L.) =  $H$  (height of station above M.S.L.) +  $h_r$  (height of receiving surface above ground) = 242.0 metres + 0.4 metres. May, 1924.

| Day.            | 0-1 | 1-2 | 2-3 | 3-4  | 4-5 | 5-6  | 6-7 | 7-8 | 8-9 | 9-10 | 10-11 | 11-12 | 12-13 | 13-14 | 14-15 | 15-16 | 16-17 | 17-18 | 18-19 | 19-20 | 20-21 | 21-22 | 22-23 | 23-24 | 0-24  | Duration.<br>0-24 |      |     |
|-----------------|-----|-----|-----|------|-----|------|-----|-----|-----|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------------------|------|-----|
|                 | mm. | mm. | mm. | mm.  | mm. | mm.  | mm. | mm. | mm. | mm.  | mm.   | mm.   | mm.   | mm.   | mm.   | mm.   | mm.   | mm.   | mm.   | mm.   | mm.   | mm.   | mm.   | mm.   | mm.   | hr.               |      |     |
| 1               | ... | ... | ... | ...  | ... | ...  | ... | ... | ... | ...  | ...   | ...   | ...   | ...   | ...   | ...   | ...   | 1.0   | 0.6   | 0.3   | ...   | ...   | ...   | ...   | ...   | 1.9               | 2.3  |     |
| 2               | ... | ... | ... | ...  | ... | ...  | ... | ... | ... | ...  | ...   | ...   | ...   | ...   | ...   | ...   | ...   | 1.4   | 0.7   | 0.1   | ...   | ...   | ...   | ...   | ...   | 2.5               | 2.6  |     |
| 3               | ... | ... | ... | ...  | ... | ...  | ... | ... | ... | ...  | ...   | ...   | ...   | ...   | ...   | ...   | ...   | ...   | ...   | ...   | ...   | ...   | ...   | ...   | ...   | 1.0               | 3.1  |     |
| 4               | ... | ... | ... | ...  | ... | ...  | ... | ... | ... | ...  | ...   | ...   | ...   | ...   | ...   | ...   | ...   | ...   | ...   | ...   | ...   | ...   | ...   | ...   | ...   | 9.9               | 8.4  |     |
| 5               | ... | ... | ... | ...  | ... | ...  | ... | ... | ... | ...  | ...   | ...   | ...   | ...   | ...   | ...   | ...   | ...   | ...   | ...   | ...   | ...   | ...   | ...   | ...   | 7.3               | 5.9  |     |
| 6               | ... | ... | ... | ...  | ... | ...  | ... | ... | ... | ...  | ...   | ...   | ...   | ...   | ...   | ...   | ...   | ...   | ...   | ...   | ...   | ...   | ...   | ...   | ...   | 0.9               | 2.2  |     |
| 7               | ... | ... | ... | ...  | ... | ...  | ... | ... | ... | ...  | ...   | ...   | ...   | ...   | ...   | ...   | ...   | ...   | ...   | ...   | ...   | ...   | ...   | ...   | ...   | 9.0               | 7.3  |     |
| 8               | ... | ... | ... | ...  | ... | ...  | ... | ... | ... | ...  | ...   | ...   | ...   | ...   | ...   | ...   | ...   | ...   | ...   | ...   | ...   | ...   | ...   | ...   | ...   | 2.1               | 5.0  |     |
| 9               | ... | ... | ... | ...  | ... | ...  | ... | ... | ... | ...  | ...   | ...   | ...   | ...   | ...   | ...   | ...   | ...   | ...   | ...   | ...   | ...   | ...   | ...   | ...   | 6.2               | 2.5  |     |
| 10              | ... | ... | ... | ...  | ... | ...  | ... | ... | ... | ...  | ...   | ...   | ...   | ...   | ...   | ...   | ...   | ...   | ...   | ...   | ...   | ...   | ...   | ...   | ...   | 25.5              | 15.0 |     |
| 11              | ... | ... | ... | ...  | ... | ...  | ... | ... | ... | ...  | ...   | ...   | ...   | ...   | ...   | ...   | ...   | ...   | ...   | ...   | ...   | ...   | ...   | ...   | ...   | 7.3               | 3.8  |     |
| 12              | ... | ... | ... | ...  | ... | ...  | ... | ... | ... | ...  | ...   | ...   | ...   | ...   | ...   | ...   | ...   | ...   | ...   | ...   | ...   | ...   | ...   | ...   | ...   | 0.2               | 0.2  |     |
| 13              | ... | ... | ... | ...  | ... | ...  | ... | ... | ... | ...  | ...   | ...   | ...   | ...   | ...   | ...   | ...   | ...   | ...   | ...   | ...   | ...   | ...   | ...   | ...   | 3.1               | 6.6  |     |
| 14              | ... | ... | ... | ...  | ... | ...  | ... | ... | ... | ...  | ...   | ...   | ...   | ...   | ...   | ...   | ...   | ...   | ...   | ...   | ...   | ...   | ...   | ...   | ...   | ...               | ...  | ... |
| 15              | ... | ... | ... | ...  | ... | ...  | ... | ... | ... | ...  | ...   | ...   | ...   | ...   | ...   | ...   | ...   | ...   | ...   | ...   | ...   | ...   | ...   | ...   | ...   | 0.6               | 0.7  |     |
| 16              | ... | ... | ... | ...  | ... | ...  | ... | ... | ... | ...  | ...   | ...   | ...   | ...   | ...   | ...   | ...   | ...   | ...   | ...   | ...   | ...   | ...   | ...   | ...   | 5.4               | 3.2  |     |
| 17              | ... | ... | ... | ...  | ... | ...  | ... | ... | ... | ...  | ...   | ...   | ...   | ...   | ...   | ...   | ...   | ...   | ...   | ...   | ...   | ...   | ...   | ...   | ...   | ...               | ...  | ... |
| 18              | ... | ... | ... | ...  | ... | ...  | ... | ... | ... | ...  | ...   | ...   | ...   | ...   | ...   | ...   | ...   | ...   | ...   | ...   | ...   | ...   | ...   | ...   | ...   | 0.3               | 0.6  |     |
| 19              | ... | ... | ... | ...  | ... | ...  | ... | ... | ... | ...  | ...   | ...   | ...   | ...   | ...   | ...   | ...   | ...   | ...   | ...   | ...   | ...   | ...   | ...   | ...   | 0.2               | 0.4  |     |
| 20              | ... | ... | ... | ...  | ... | ...  | ... | ... | ... | ...  | ...   | ...   | ...   | ...   | ...   | ...   | ...   | ...   | ...   | ...   | ...   | ...   | ...   | ...   | ...   | 2.2               | 5.3  |     |
| 21              | ... | ... | ... | ...  | ... | ...  | ... | ... | ... | ...  | ...   | ...   | ...   | ...   | ...   | ...   | ...   | ...   | ...   | ...   | ...   | ...   | ...   | ...   | ...   | 7.0               | 4.3  |     |
| 22              | ... | ... | ... | ...  | ... | ...  | ... | ... | ... | ...  | ...   | ...   | ...   | ...   | ...   | ...   | ...   | ...   | ...   | ...   | ...   | ...   | ...   | ...   | ...   | 7.2               | 3.6  |     |
| 23              | ... | ... | ... | ...  | ... | ...  | ... | ... | ... | ...  | ...   | ...   | ...   | ...   | ...   | ...   | ...   | ...   | ...   | ...   | ...   | ...   | ...   | ...   | ...   | 3.9               | 3.1  |     |
| 24              | ... | ... | ... | ...  | ... | ...  | ... | ... | ... | ...  | ...   | ...   | ...   | ...   | ...   | ...   | ...   | ...   | ...   | ...   | ...   | ...   | ...   | ...   | ...   | 3.1               | 3.0  |     |
| 25              | ... | ... | ... | ...  | ... | ...  | ... | ... | ... | ...  | ...   | ...   | ...   | ...   | ...   | ...   | ...   | ...   | ...   | ...   | ...   | ...   | ...   | ...   | ...   | 8.3               | 5.7  |     |
| 26              | ... | ... | ... | ...  | ... | ...  | ... | ... | ... | ...  | ...   | ...   | ...   | ...   | ...   | ...   | ...   | ...   | ...   | ...   | ...   | ...   | ...   | ...   | ...   | 0.8               | 1.1  |     |
| 27              | ... | ... | ... | ...  | ... | ...  | ... | ... | ... | ...  | ...   | ...   | ...   | ...   | ...   | ...   | ...   | ...   | ...   | ...   | ...   | ...   | ...   | ...   | ...   | 16.8              | 16.1 |     |
| 28              | ... | ... | ... | ...  | ... | ...  | ... | ... | ... | ...  | ...   | ...   | ...   | ...   | ...   | ...   | ...   | ...   | ...   | ...   | ...   | ...   | ...   | ...   | ...   | 1.7               | 5.1  |     |
| 29              | ... | ... | ... | ...  | ... | ...  | ... | ... | ... | ...  | ...   | ...   | ...   | ...   | ...   | ...   | ...   | ...   | ...   | ...   | ...   | ...   | ...   | ...   | ...   | 0.1               | 0.3  |     |
| 30              | ... | ... | ... | ...  | ... | ...  | ... | ... | ... | ...  | ...   | ...   | ...   | ...   | ...   | ...   | ...   | ...   | ...   | ...   | ...   | ...   | ...   | ...   | ...   | 5.8               | 8.7  |     |
| 31              | ... | ... | ... | ...  | ... | ...  | ... | ... | ... | ...  | ...   | ...   | ...   | ...   | ...   | ...   | ...   | ...   | ...   | ...   | ...   | ...   | ...   | ...   | ...   | 2.4               | 4.1  |     |
| Sum.            | 6.2 | 6.6 | 6.2 | 11.6 | 7.1 | 13.0 | 7.7 | 6.7 | 4.3 | 2.5  | 1.7   | 5.6   | 1.9   | 5.0   | 9.8   | 8.7   | 6.3   | 6.7   | 5.1   | 5.6   | 1.6   | 3.2   | 5.7   | 4.8   | 143.6 | 130.2             |      |     |
| Total Duration. | 5.5 | 6.7 | 5.0 | 7.0  | 7.7 | 8.7  | 8.0 | 6.7 | 5.1 | 5.0  | 3.1   | 5.6   | 4.2   | 4.7   | 5.5   | 5.7   | 3.9   | 6.6   | 5.8   | 4.3   | 1.5   | 3.3   | 4.9   | 5.7   | 130.2 |                   |      |     |

162. Eskdalemuir :  $H_r = 242.0$  metres + 0.4 metres.

June, 1924.

|                 | mm. | mm. | mm. | mm. | mm. | mm. | mm. | mm. | mm. | mm.  | mm.   | mm.   | mm.   | mm.   | mm.   | mm.   | mm.   | mm.   | mm.   | mm.   | mm.   | mm.   | mm.   | mm.   | mm.  | hr.  |      |     |
|-----------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|------|------|------|-----|
| 1               | ... | ... | ... | ... | ... | ... | ... | ... | ... | ...  | ...   | ...   | ...   | ...   | ...   | ...   | ...   | ...   | ...   | ...   | ...   | ...   | ...   | ...   | ...  | 2.4  | 7.1  |     |
| 2               | ... | ... | ... | ... | ... | ... | ... | ... | ... | ...  | ...   | ...   | ...   | ...   | ...   | ...   | ...   | ...   | ...   | ...   | ...   | ...   | ...   | ...   | ...  | 0.1  | 0.7  |     |
| 3               | ... | ... | ... | ... | ... | ... | ... | ... | ... | ...  | ...   | ...   | ...   | ...   | ...   | ...   | ...   | ...   | ...   | ...   | ...   | ...   | ...   | ...   | ...  | ...  | ...  | ... |
| 4               | ... | ... | ... | ... | ... | ... | ... | ... | ... | ...  | ...   | ...   | ...   | ...   | ...   | ...   | ...   | ...   | ...   | ...   | ...   | ...   | ...   | ...   | ...  | ...  | ...  | ... |
| 5               | ... | ... | ... | ... | ... | ... | ... | ... | ... | ...  | ...   | ...   | ...   | ...   | ...   | ...   | ...   | ...   | ...   | ...   | ...   | ...   | ...   | ...   | ...  | ...  | ...  | ... |
| 6               | ... | ... | ... | ... | ... | ... | ... | ... | ... | ...  | ...   | ...   | ...   | ...   | ...   | ...   | ...   | ...   | ...   | ...   | ...   | ...   | ...   | ...   | ...  | 11.3 | 11.2 |     |
| 7               | ... | ... | ... | ... | ... | ... | ... | ... | ... | ...  | ...   | ...   | ...   | ...   | ...   | ...   | ...   | ...   | ...   | ...   | ...   | ...   | ...   | ...   | ...  | 4.7  | 4.3  |     |
| 8               | ... | ... | ... | ... | ... | ... | ... | ... | ... | ...  | ...   | ...   | ...   | ...   | ...   | ...   | ...   | ...   | ...   | ...   | ...   | ...   | ...   | ...   | ...  | 6.8  | 7.5  |     |
| 9               | ... | ... | ... | ... | ... | ... | ... | ... | ... | ...  | ...   | ...   | ...   | ...   | ...   | ...   | ...   | ...   | ...   | ...   | ...   | ...   | ...   | ...   | ...  | 0.1  | ...  |     |
| 10              | ... | ... | ... | ... | ... | ... | ... | ... | ... | ...  | ...   | ...   | ...   | ...   | ...   | ...   | ...   | ...   | ...   | ...   | ...   | ...   | ...   | ...   | ...  | 12.9 | 13.5 |     |
| 11              | ... | ... | ... | ... | ... | ... | ... | ... | ... | ...  | ...   | ...   | ...   | ...   | ...   | ...   | ...   | ...   | ...   | ...   | ...   | ...   | ...   | ...   | ...  | 10.8 | 6.7  |     |
| 12              | ... | ... | ... | ... | ... | ... | ... | ... | ... | ...  | ...   | ...   | ...   | ...   | ...   | ...   | ...   | ...   | ...   | ...   | ...   | ...   | ...   | ...   | ...  | 1.1  | 3.8  |     |
| 13              | ... | ... | ... | ... | ... | ... | ... | ... | ... | ...  | ...   | ...   | ...   | ...   | ...   | ...   | ...   | ...   | ...   | ...   | ...   | ...   | ...   | ...   | ...  | ...  | ...  | ... |
| 14              | ... | ... | ... | ... | ... | ... | ... | ... | ... | ...  | ...   | ...   | ...   | ...   | ...   | ...   | ...   | ...   | ...   | ...   | ...   | ...   | ...   | ...   | ...  | ...  | ...  | ... |
| 15              | ... | ... | ... | ... | ... | ... | ... | ... | ... | ...  | ...   | ...   | ...   | ...   | ...   | ...   | ...   | ...   | ...   | ...   | ...   | ...   | ...   | ...   | ...  | 2.3  | 4.1  |     |
| 16              | ... | ... | ... | ... | ... | ... | ... | ... | ... | ...  | ...   | ...   | ...   | ...   | ...   | ...   | ...   | ...   | ...   | ...   | ...   | ...   | ...   | ...   | ...  | 0.1  | 0.3  |     |
| 17              | ... | ... | ... | ... | ... | ... | ... | ... | ... | ...  | ...   | ...   | ...   | ...   | ...   | ...   | ...   | ...   | ...   | ...   | ...   | ...   | ...   | ...   | ...  | 1.5  | 0.8  |     |
| 18              | ... | ... | ... | ... | ... | ... | ... | ... | ... | ...  | ...   | ...   | ...   | ...   | ...   | ...   | ...   | ...   | ...   | ...   | ...   | ...   | ...   | ...   | ...  | 0.3  | 0.4  |     |
| 19              | ... | ... | ... | ... | ... | ... | ... | ... | ... | ...  | ...   | ...   | ...   | ...   | ...   | ...   | ...   | ...   | ...   | ...   | ...   | ...   | ...   | ...   | ...  | ...  | ...  | ... |
| 20              | ... | ... | ... | ... | ... | ... | ... | ... | ... | ...  | ...   | ...   | ...   | ...   | ...   | ...   | ...   | ...   | ...   | ...   | ...   | ...   | ...   | ...   | ...  | ...  | ...  | ... |
| 21              | ... | ... | ... | ... | ... | ... | ... | ... | ... | ...  | ...   | ...   | ...   | ...   | ...   | ...   | ...   | ...   | ...   | ...   | ...   | ...   | ...   | ...   | ...  | 3.9  | 2.9  |     |
| 22              | ... | ... | ... | ... | ... | ... | ... | ... | ... | ...  | ...   | ...   | ...   | ...   | ...   | ...   | ...   | ...   | ...   | ...   | ...   | ...   | ...   | ...   | ...  | ...  | ...  | ... |
| 23              | ... | ... | ... | ... | ... | ... | ... | ... | ... | ...  | ...   | ...   | ...   | ...   | ...   | ...   | ...   | ...   | ...   | ...   | ...   | ...   | ...   | ...   | ...  | 0.7  | 1.0  |     |
| 24              | ... | ... | ... | ... | ... | ... | ... | ... | ... | ...  | ...   | ...   | ...   | ...   | ...   | ...   | ...   | ...   | ...   | ...   | ...   | ...   | ...   | ...   | ...  | ...  | ...  | ... |
| 25              | ... | ... | ... | ... | ... | ... | ... | ... | ... | ...  | ...   | ...   | ...   | ...   | ...   | ...   | ...   | ...   | ...   | ...   | ...   | ...   | ...   | ...   | ...  | 0.3  | 1.1  |     |
| 26              | ... | ... | ... | ... | ... | ... | ... | ... | ... | ...  | ...   | ...   | ...   | ...   | ...   | ...   | ...   | ...   | ...   | ...   | ...   | ...   | ...   | ...   | ...  | 6.9  | 7.1  |     |
| 27              | ... | ... | ... | ... | ... | ... | ... | ... | ... | ...  | ...   | ...   | ...   | ...   | ...   | ...   | ...   | ...   | ...   | ...   | ...   | ...   | ...   | ...   | ...  | 1.1  | 1.6  |     |
| 28              | ... | ... | ... | ... | ... | ... | ... | ... | ... | ...  | ...   | ...   | ...   | ...   | ...   | ...   | ...   | ...   | ...   | ...   | ...   | ...   | ...   | ...   | ...  | 8.5  | 11.8 |     |
| 29              | ... | ... | ... | ... | ... | ... | ... | ... | ... | ...  | ...   | ...   | ...   | ...   | ...   | ...   | ...   | ...   | ...   | ...   | ...   | ...   | ...   | ...   | ...  | 2.2  | 2.4  |     |
| 30              | ... | ... | ... | ... | ... | ... | ... | ... | ... | ...  | ...   | ...   | ...   | ...   | ...   | ...   | ...   | ...   | ...   | ...   | ...   | ...   | ...   | ...   | ...  | 0.8  | 2.0  |     |
| Sum.            | 1.9 | 1.3 | 2.9 | 5.0 | 5.2 | 0.9 | 4.5 | 1.9 | 3.1 | 5.8  | 3.6   | 2.3   | 4.2   | 4.0   | 1.7   | 2.9   | 2.7   | 2.4   | 2.9   | 3.5   | 1.7   | 4.8   | 5.2   | 4.4   | 78.8 | 90.3 |      |     |
| Total Duration. | 2.8 | 2.4 | 5.2 | 5.0 | 4.7 | 3.5 | 4.6 | 1.9 | 2.9 | 3.9  | 3.7   | 3.3   | 3.7   | 4.4   | 1.9   | 4.1   | 3.6   | 4.8   | 3.6   | 4.0   | 2.7   | 5.1   | 4.8   | 3.7   | 90.3 |      |      |     |
| G.M.T.          | 0-1 | 1-2 | 2-3 | 3-4 | 4-5 | 5-6 | 6-7 | 7-8 | 8-9 | 9-10 | 10-11 | 11-12 | 12-13 | 13-14 | 14-15 | 15-16 | 16-17 | 17-18 | 18-19 | 19-20 | 20-21 | 21-22 | 22-23 | 23-24 | 0-24 | —    |      |     |

Amounts in millimetres, for periods of sixty minutes, between the exact hours, Greenwich Mean Time.

163. Eskdalemuir :  $H_r$  (height of receiving surface above M.S.L.) =  $H$  (height of station above M.S.L.) +  $h_r$  (height of receiving surface above ground) = 242.0 metres + 0.4 metres. **July, 1924.**

| Day.            | 0-1     | 1-2     | 2-3     | 3-4     | 4-5     | 5-6     | 6-7     | 7-8     | 8-9     | 9-10    | 10-11   | 11-12   | 12-13   | 13-14   | 14-15   | 15-16   | 16-17   | 17-18   | 18-19   | 19-20   | 20-21   | 21-22   | 22-23   | 23-24   | 0-24      | Duration.<br>0-24 |
|-----------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|-----------|-------------------|
| 1               | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...       | 0.5               |
| 2               | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...       | 0.1               |
| 3               | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...       | 0.5               |
| 4               | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...       | 0.5               |
| 5               | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...       | 0.5               |
| 6               | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...       | 0.5               |
| 7               | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...       | 0.5               |
| 8               | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...       | 0.5               |
| 9               | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...       | 0.5               |
| 10              | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...       | 0.5               |
| 11              | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...       | 0.5               |
| 12              | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...       | 0.5               |
| 13              | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...       | 0.5               |
| 14              | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...       | 0.5               |
| 15              | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...       | 0.5               |
| 16              | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...       | 0.5               |
| 17              | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...       | 0.5               |
| 18              | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...       | 0.5               |
| 19              | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...       | 0.5               |
| 20              | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...       | 0.5               |
| 21              | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...       | 0.5               |
| 22              | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...       | 0.5               |
| 23              | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...       | 0.5               |
| 24              | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...       | 0.5               |
| 25              | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...       | 0.5               |
| 26              | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...       | 0.5               |
| 27              | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...       | 0.5               |
| 28              | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...       | 0.5               |
| 29              | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...       | 0.5               |
| 30              | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...       | 0.5               |
| 31              | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...       | 0.5               |
| Sum.            | 4.6     | 3.8     | 3.5     | 5.1     | 5.0     | 4.4     | 5.1     | 3.7     | 3.9     | 1.3     | 1.1     | 3.8     | 5.8     | 6.8     | 8.3     | 6.8     | 9.1     | 4.7     | 22.7    | 4.4     | 6.9     | 6.4     | 7.1     | 7.3     | 141.6     | 118.2             |
| Total Duration. | hr. 5.2 | hr. 5.5 | hr. 5.0 | hr. 6.7 | hr. 5.6 | hr. 7.2 | hr. 7.8 | hr. 4.8 | hr. 3.7 | hr. 2.3 | hr. 1.3 | hr. 1.1 | hr. 3.1 | hr. 3.1 | hr. 6.3 | hr. 5.1 | hr. 3.4 | hr. 6.4 | hr. 6.2 | hr. 4.7 | hr. 5.6 | hr. 5.1 | hr. 6.3 | hr. 7.2 | hr. 118.2 | hr. 118.2         |

164. Eskdalemuir :  $H_r = 242.0$  metres +  $0.4$  metres.

August, 1924.

| Day.            | 0-1     | 1-2     | 2-3     | 3-4     | 4-5     | 5-6     | 6-7     | 7-8     | 8-9     | 9-10    | 10-11   | 11-12   | 12-13   | 13-14   | 14-15   | 15-16   | 16-17   | 17-18   | 18-19   | 19-20   | 20-21   | 21-22   | 22-23   | 23-24   | 0-24      | Duration.<br>0-24 |      |
|-----------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|-----------|-------------------|------|
| 1               | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...       | 19.0              | 15.8 |
| 2               | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...       | ...               | 4.1  |
| 3               | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...       | ...               | 4.1  |
| 4               | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...       | ...               | 3.7  |
| 5               | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...       | ...               | 9.5  |
| 6               | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...       | ...               | 0.9  |
| 7               | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...       | ...               | 0.1  |
| 8               | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...       | ...               | ...  |
| 9               | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...       | ...               | ...  |
| 10              | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...       | ...               | ...  |
| 11              | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...       | ...               | 5.7  |
| 12              | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...       | ...               | 1.3  |
| 13              | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...       | ...               | 3.0  |
| 14              | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...       | ...               | 4.8  |
| 15              | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...       | ...               | 0.5  |
| 16              | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...       | ...               | 8.0  |
| 17              | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...       | ...               | 6.1  |
| 18              | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...       | ...               | 0.2  |
| 19              | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...       | ...               | 1.3  |
| 20              | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...       | ...               | 11.8 |
| 21              | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...       | ...               | 8.4  |
| 22              | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...       | ...               | 2.5  |
| 23              | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...       | ...               | 3.2  |
| 24              | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...       | ...               | 2.1  |
| 25              | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...       | ...               | 3.3  |
| 26              | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...       | ...               | 3.7  |
| 27              | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...       | ...               | 1.9  |
| 28              | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...       | ...               | 17.4 |
| 29              | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...       | ...               | 5.9  |
| 30              | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...       | ...               | ...  |
| 31              | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...       | ...               | 5.1  |
| Sum.            | 3.7     | 9.4     | 14.9    | 6.8     | 5.7     | 7.8     | 6.5     | 2.7     | 1.1     | 2.3     | 3.6     | 3.7     | 8.1     | 4.9     | 25.8    | 8.6     | 6.6     | 8.8     | 10.8    | 11.6    | 4.3     | 4.2     | 1.7     | 3.5     | 167.1     | 130.8             |      |
| Total Duration. | hr. 4.9 | hr. 4.9 | hr. 6.1 | hr. 5.1 | hr. 4.4 | hr. 3.8 | hr. 6.2 | hr. 3.2 | hr. 2.3 | hr. 3.6 | hr. 4.4 | hr. 4.4 | hr. 5.8 | hr. 6.4 | hr. 9.5 | hr. 7.5 | hr. 7.0 | hr. 9.8 | hr. 7.5 | hr. 8.2 | hr. 5.6 | hr. 4.6 | hr. 3.0 | hr. 2.6 | hr. 130.8 | hr. 130.8         |      |
| G.M.T.          | 0-1     | 1-2     | 2-3     | 3-4     | 4-5     | 5-6     | 6-7     | 7-8     | 8-9     | 9-10    | 10-11   | 11-12   | 12-13   | 13-14   | 14-15   | 15-16   | 16-17   | 17-18   | 18-19   | 19-20   | 20-21   | 21-22   | 22-23   | 23-24   | 0-24      | —                 |      |

Amounts in millimetres, for periods of sixty minutes, between the exact hours, Greenwich Mean Time.

165. Eskdalemuir :  $H_r$  (height of receiving surface above M.S.L.) =  $H$  (height of station above M.S.L.) +  $h_r$  (height of receiving surface above ground) = 242.0 metres + 0.4 metres. **September, 1924.**

| Day.            | 0-1     | 1-2     | 2-3     | 3-4     | 4-5     | 5-6     | 6-7     | 7-8     | 8-9     | 9-10    | 10-11   | 11-12   | 12-13   | 13-14   | 14-15   | 15-16   | 16-17   | 17-18   | 18-19   | 19-20   | 20-21   | 21-22   | 22-23   | 23-24   | 0-24      | Duration.<br>0-24 |     |
|-----------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|-----------|-------------------|-----|
|                 | mm.     | mm.     | mm.     | mm.     | mm.     | mm.     | mm.     | mm.     | mm.     | mm.     | mm.     | mm.     | mm.     | mm.     | mm.     | mm.     | mm.     | mm.     | mm.     | mm.     | mm.     | mm.     | mm.     | mm.     | mm.       | hr.               |     |
| 1               | ...     | ...     | ...     | 1       | 2       | 7       | 2       | 3       | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | 1.5       | 3.3               |     |
| 2               | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...       | ...               |     |
| 3               | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...       | ...               |     |
| 4               | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...       | ...               |     |
| 5               | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | 2       | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | 0.2       | 0.3               |     |
| 6               | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...       | ...               |     |
| 7               | ...     | ...     | ...     | ...     | 3       | 1       | ...     | 1.2     | 1.3     | 1       | 1       | 4       | ...     | ...     | ...     | 1       | ...     | 2       | 1       | 2.2     | 2       | 2       | ...     | ...     | 6.5       | 8.7               |     |
| 8               | ...     | 1.6     | 1.9     | 1       | 1.1     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | 2       | ...     | ...     | ...     | 1.0     | 2.8     | 4.8     | 2.8     | 3       | 16.6      | 7.2               |     |
| 9               | ...     | ...     | 1       | ...     | ...     | ...     | ...     | ...     | ...     | ...     | 3       | 1       | 1       | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | 0.6       | 2.7               |     |
| 10              | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | 2       | 7       | 0.9       | 1.4               |     |
| 11              | 1.0     | 9       | 8       | 2.2     | 8       | ...     | ...     | ...     | 1       | 1       | 1       | ...     | 2       | 1       | ...     | (1)     | (...)   | ...     | ...     | ...     | ...     | 1       | ...     | ...     | 6.5       | 8.7               |     |
| 12              | ...     | ...     | 2       | 1       | ...     | ...     | 7       | ...     | 2       | 2       | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | 2       | ...     | ...     | ...     | 1.6       | 3.0               |     |
| 13              | 1.1     | ...     | 1       | ...     | ...     | ...     | ...     | 1       | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | 5       | 5       | ...     | ...     | ...     | 2.3       | 3.1               |     |
| 14              | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | 8       | 1.6     | 2       | 6       | 1.1     | 2.0     | ...     | ...     | ...     | ...     | ...     | ...     | 6.3       | 3.9               |     |
| 15              | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | 1.1     | 1.2     | 3       | ...     | 1       | 2.2     | 2.5     | 5.3     | 4.5     | 1.8     | 2       | ...     | ...     | ...     | ...     | 19.2      | 6.4               |     |
| 16              | ...     | ...     | ...     | ...     | 1       | 4       | ...     | 1       | ...     | ...     | ...     | ...     | 1       | 1.9     | 3.0     | 6       | 6       | ...     | 2.0     | 1.3     | ...     | ...     | ...     | ...     | 10.1      | 5.0               |     |
| 17              | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | 6       | 3       | ...     | 2.5     | 1       | 1.1     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | 4.6       | 2.4               |     |
| 18              | 4       | 4       | 1       | 3       | ...     | ...     | ...     | 1.3     | 1.7     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | 4.2       | 3.1               |     |
| 19              | ...     | (...)   | (...)   | (1)     | (...)   | (...)   | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | 1.4     | 3.2     | 3.2     | 7.9       | 3.0               |     |
| 20              | 1.4     | 3.5     | 8       | 1.0     | 6       | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | 6       | 3.2     | 1.0     | 4       | 12.5    | 7.4       |                   |     |
| 21              | 1.2     | 3.1     | 2.4     | 8       | 6       | ...     | ...     | 3       | 2       | 6       | 1.2     | 9       | ...     | 3.4     | 1.2     | 1.2     | 5       | ...     | ...     | ...     | ...     | ...     | ...     | ...     | 17.6      | 7.9               |     |
| 22              | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | 6       | 4       | ...     | 5       | 2       | ...     | ...     | ...     | ...     | ...     | 6       | ...     | ...     | 2.3       | 1.8               |     |
| 23              | ...     | 2       | 1.4     | 1.6     | 2.6     | 2       | 1       | ...     | 2       | 4       | 5       | 1.1     | ...     | 5       | 1.1     | ...     | ...     | ...     | 2       | 2       | ...     | ...     | ...     | ...     | 10.3      | 9.7               |     |
| 24              | ...     | ...     | ...     | ...     | 1       | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | 7       | 1       | ...     | ...     | ...     | ...     | ...     | ...     | ...     | 0.9       | 1.1               |     |
| 25              | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...       | ...               |     |
| 26              | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | 3       | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | 0.3       | 0.7               |     |
| 27              | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...       | ...               |     |
| 28              | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | (1)     | (...)   | ...     | ...     | ...     | 1.3     | 1.4     | 1.6     | 2.2     | 3.5       | 10.1              | 4.8 |
| 29              | 3.8     | 1.9     | 2.9     | 3.0     | 2.1     | 2.4     | 2.9     | 1.5     | 2.0     | 1.6     | 2.6     | 2.4     | 1.7     | ...     | ...     | ...     | ...     | 1       | 4       | 2       | ...     | 4       | 1       | 32.0    | 14.7      |                   |     |
| 30              | 1.2     | 3       | 2       | 6       | 1       | ...     | 2       | ...     | ...     | ...     | ...     | 6       | 1.2     | 5       | 9       | 4       | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | 6.2       | 8.7               |     |
| Sum             | 10.1    | 11.9    | 10.9    | 9.9     | 8.6     | 3.8     | 4.1     | 3.2     | 5.6     | 4.9     | 5.6     | 7.0     | 5.3     | 4.9     | 9.1     | 9.1     | 5.8     | 7.8     | 6.7     | 9.4     | 7.6     | 11.9    | 9.8     | 8.2     | 181.2     | 119.0             |     |
| Total Duration. | hr. 6.3 | hr. 6.2 | hr. 8.0 | hr. 7.1 | hr. 7.8 | hr. 3.3 | hr. 3.1 | hr. 3.1 | hr. 5.5 | hr. 5.0 | hr. 4.5 | hr. 5.0 | hr. 4.8 | hr. 3.7 | hr. 4.5 | hr. 4.9 | hr. 3.7 | hr. 3.8 | hr. 2.6 | hr. 5.6 | hr. 6.2 | hr. 6.0 | hr. 4.1 | hr. 4.2 | hr. 119.0 |                   |     |

166. Eskdalemuir :  $H_r = 242.0$  metres + 0.4 metres.

**October, 1924.**

|                 | mm.     | mm.     | mm.     | mm.     | mm.     | mm.     | mm.     | mm.     | mm.     | mm.     | mm.     | mm.     | mm.     | mm.     | mm.     | mm.     | mm.     | mm.     | mm.     | mm.     | mm.     | mm.     | mm.     | mm.     | mm.       | hr.   |     |
|-----------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|-----------|-------|-----|
| 1               | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | 3       | 2       | ...     | ...       | 0.5   | 1.7 |
| 2               | 2       | 3       | 4       | 3       | 1       | ...     | ...     | ...     | 2       | ...     | ...     | ...     | ...     | ...     | ...     | ...     | 2       | 1       | ...     | ...     | ...     | ...     | ...     | ...     | ...       | 1.8   | 5.1 |
| 3               | 2       | 1       | 1       | 1       | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...       | 0.5   | 2.7 |
| 4               | ...     | ...     | ...     | (1)     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | 4       | 4       | 4       | 4       | 4         | 1.3   | 1.9 |
| 5               | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | 1       | 3       | 6       | 3       | 6       | 4       | 5       | 3       | 4       | 2       | ...     | ...       | 3.7   | 8.8 |
| 6               | 2       | 1.4     | 1.2     | 1       | ...     | ...     | ...     | ...     | ...     | ...     | 1       | ...     | 9       | 1.0     | 2.1     | 8       | 2.0     | 1.3     | 2       | 2       | ...     | ...     | ...     | ...     | 11.5      | 8.9   |     |
| 7               | 1       | 3       | ...     | ...     | ...     | 1       | 7       | ...     | ...     | 1.2     | 3       | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | 1       | ...     | ...     | ...     | ...     | 2.8       | 2.1   |     |
| 8               | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | 1       | ...     | ...     | 0.1       | 0.3   |     |
| 9               | 1       | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | 5       | 5       | 9       | 2.4     | 4       | 1       | ...     | ...     | ...     | 5.0       | 5.5   |     |
| 10              | ...     | ...     | 2       | 1.3     | 8       | 9       | 2       | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | 8       | 1       | 7       | 1.6     | 1.1     | 1       | ...     | 7.8       | 8.0   |     |
| 11              | ...     | ...     | ...     | ...     | ...     | 2       | ...     | ...     | ...     | ...     | ...     | ...     | ...     | 1.2     | 6       | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | 2.0       | 1.1   |     |
| 12              | ...     | ...     | 2       | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | 0.2       | 0.4   |     |
| 13              | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...       | ...   |     |
| 14              | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...       | ...   |     |
| 15              | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...       | ...   |     |
| 16              | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | 1       | 1       | 1.2     | ...     | 2       | ...     | ...     | ...     | 1.6       | 2.9   |     |
| 17              | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...       | ...   |     |
| 18              | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | 1       | 4       | 3       | 2       | 6       | 3       | 1.6     | 1.1     | 7       | 8       | ...     | 6.1       | 8.8   |     |
| 19              | 1.3     | 1.9     | 1.0     | 2       | 8       | 1.1     | 6       | 3       | 2       | ...     | ...     | 1       | ...     | 1       | 9       | 4.4     | 4       | ...     | ...     | ...     | ...     | ...     | ...     | ...     | 13.3      | 11.5  |     |
| 20              | ...     | ...     | ...     | 3       | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | 0.3       | 0.3   |     |
| 21              | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | (1)     | (1)     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | 0.2       | 0.5   |     |
| 22              | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...       | ...   |     |
| 23              | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...       | ...   |     |
| 24              | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...       | ...   |     |
| 25              | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | 1       | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | 0.1       | 0.3   |     |
| 26              | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | 1       | 9       | 1.9     | 1.2     | 1.4     | 1.9     | 1.3     | 9       | 6       | ...     | 10.2      | 8.3   |     |
| 27              | 1       | ...     | ...     | ...     | ...     | ...     | ...     | 1       | 1       | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | 1.0     | 8       | 3       | 4       | ...     | ...     | 2.8       | 4.2   |     |
| 28              | 1       | 2       | ...     | ...     | 4       | 1.3     | 2       | 2       | 9       | 6       | 4       | 2       | 6       | 4       | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | 5.3       | 7.4   |     |
| 29              | ...     | ...     | 3       | 6       | 4       | 2       | 1.5     | 2.0     | 1.6     | 6       | 4       | 1       | 1.4     | 2.0     | 6.2     | 3.4     | 4       | 1       | ...     | ...     | ...     | ...     | ...     | ...     | 21.6      | 12.8  |     |
| 30              | ...     | ...     | ...     | ...     | ...     | 4       | 2       | 1       | 1.0     | 2.1     | 2.4     | 1.3     | 1.3     | 1       | 3.0     | 1       | 1.1     | 2       | ...     | ...     | ...     | ...     | ...     | ...     | 13.3      | 8.7   |     |
| 31              | 1       | 4       | ...     | 2       | 1       | 3       | 4       | ...     | ...     | ...     | 2       | ...     | 4       | ...     | 5       | 1.3     | 3       | ...     | ...     | ...     | ...     | ...     | ...     | ...     | 4.2       | 5.1   |     |
| Sum             | 2.4     | 4.6     | 3.1     | 2.4     | 2.8     | 3.2     | 3.7     | 2.6     | 2.6     | 4.8     | 3.6     | 3.2     | 2.2     | 3.1     | 4.6     | 10.3    | 15.1    | 10.4    | 6.2     | 6.1     | 6.4     | 5.8     | 4.2     | 2.8     | 116.2     | 117.3 |     |
| Total Duration. | hr. 4.4 | hr. 4.9 | hr. 4.6 | hr. 4.3 | hr. 4.2 | hr. 4.7 | hr. 4.0 | hr. 3.8 | hr. 2.7 | hr. 4.1 | hr. 2.6 | hr. 2.8 | hr. 2.5 | hr. 4.0 | hr. 3.5 | hr. 6.5 | hr. 7.5 | hr. 8.3 | hr. 7.2 | hr. 5.9 | hr. 5.3 | hr. 6.2 | hr. 6.7 | hr. 6.0 | hr. 117.3 |       |     |
| G.M.T.          | 0-1     | 1-2     | 2-3     | 3-4     | 4-5     | 5-6     | 6-7     | 7-8     | 8-9     | 9-10    | 10-11   | 11-12   | 12-13   | 13-14   | 14-15   | 15-16   | 16-17   | 17-18   | 18-19   | 19-20   | 20-21   | 21-22   | 22-23   | 23-24   | 0-24      | —     |     |

Amounts in millimetres, for periods of sixty minutes, between the exact hours, Greenwich Mean Time.

167. Eskdalemuir :  $H_r$  (height of receiving surface above M.S.L.) =  $H$  (height of station above M.S.L.) +  $h_r$  (height receiving surface above ground) = 242.0 metres + 0.4 metres. **November, 1924.**

| Day.                    | 0-1        | 1-2        | 2-3        | 3-4        | 4-5        | 5-6        | 6-7        | 7-8        | 8-9        | 9-10       | 10-11      | 11-12      | 12-13      | 13-14      | 14-15      | 15-16      | 16-17      | 17-18      | 18-19      | 19-20      | 20-21      | 21-22      | 22-23      | 23-24      | 0-24        | Dura-<br>tion<br>0-24 |     |
|-------------------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|-------------|-----------------------|-----|
|                         | mm.        | mm.        | mm.        | mm.        | mm.        | mm.        | mm.        | mm.        | mm.        | mm.        | mm.        | mm.        | mm.        | mm.        | mm.        | mm.        | mm.        | mm.        | mm.        | mm.        | mm.        | mm.        | mm.        | mm.        | mm.         | hr.                   |     |
| 1                       | ...        | .5         | .8         | .2         | .5         | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | .2         | .4         | 2.8        | 1.4        | .8         | .5         | ...        | 3.0        | ...        | 11.1        | 7.4                   |     |
| 2                       | ...        | .4         | ...        | ...        | 1.1        | 2.8        | .3         | .3         | .8         | 1.3        | 1.4        | 1.7        | 1.5        | 1.7        | ...        | ...        | ...        | ...        | ...        | ...        | (.1)       | ...        | ...        | ...        | 13.4        | 8.0                   |     |
| 3                       | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...         | ...                   | ... |
| 4                       | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...         | ...                   | ... |
| 5                       | .1         | .2         | .1         | ...        | ...        | ...        | .2         | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...         | 0.6                   | 2.7 |
| 6                       | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...         | ...                   | ... |
| 7                       | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...         | ...                   | ... |
| 8                       | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...         | ...                   | ... |
| 9                       | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...         | ...                   | ... |
| 10                      | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...         | ...                   | ... |
| 11                      | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | .3         | 1.1        | 2.4        | .8         | .3         | .1         | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...         | 5.0                   | 5.5 |
| 12                      | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...         | ...                   | ... |
| 13                      | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...         | ...                   | ... |
| 14                      | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...         | 0.2                   | 0.4 |
| 15                      | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...         | ...                   | ... |
| 16                      | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...         | ...                   | ... |
| 17                      | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...         | ...                   | ... |
| 18                      | ...        | ...        | ...        | ...        | ...        | ...        | (.1)       | (.1)       | (.1)       | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...         | 0.3                   | 2.8 |
| 19                      | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...         | ...                   | ... |
| 20                      | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...         | ...                   | ... |
| 21                      | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | .1         | 1.7        | 2.8        | 3.5        | 4.6         | 12.7                  | 4.3 |
| 22                      | 2.7        | 1.7        | .9         | .6         | .4         | .3         | .7         | .8         | 1.7        | .7         | 3.9        | 5.3        | 4.6        | 3.7        | 2.2        | .5         | .6         | .3         | .3         | .4         | .4         | ...        | ...        | ...        | 32.0        | 17.6                  |     |
| 23                      | ...        | ...        | ...        | ...        | ...        | ...        | .5         | .4         | .8         | 1.2        | 1.0        | .4         | .3         | .2         | ...        | ...        | ...        | .2         | 1.2        | 1.6        | 3.8        | 4.5        | 1.3        | .7         | 18.1        | 13.3                  |     |
| 24                      | .6         | 1.2        | .6         | 2.7        | 1.6        | 1.0        | 1.1        | ...        | .7         | 3.1        | 1.9        | 3.0        | .8         | ...        | ...        | ...        | .1         | .2         | .1         | .7         | .4         | ...        | ...        | ...        | 19.8        | 12.9                  |     |
| 25                      | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | .1         | .3         | .6         | ...        | ...        | ...        | ...        | 1.3        | .4         | ...        | ...         | 2.7                   | 2.2 |
| 26                      | ...        | ...        | ...        | .1         | .2         | .3         | ...        | ...        | ...        | ...        | ...        | .1         | .8         | ...        | .4         | .5         | ...        | ...        | ...        | ...        | ...        | 1.1        | .2         | .2         | 3.9         | 5.9                   |     |
| 27                      | .1         | .7         | .3         | ...        | ...        | ...        | ...        | .1         | .2         | ...        | ...        | ...        | ...        | ...        | 1.6        | .8         | .3         | ...        | ...        | ...        | (...)      | (.1)       | (...)      | ...        | 4.2         | 5.6                   |     |
| 28                      | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...         | ...                   | ... |
| 29                      | ...        | ...        | .4         | .6         | .5         | .6         | .5         | .2         | ...        | ...        | ...        | 1.5        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | 4.3         | 5.0                   |     |
| 30                      | .3         | .1         | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | .3         | .2         | .2         | ...        | ...        | ...        | .6         | .2         | 1.9         | 2.4                   |     |
| Sum.                    | 3.8        | 4.8        | 3.1        | 4.2        | 4.3        | 5.0        | 3.6        | 1.9        | 4.3        | 6.3        | 8.2        | 12.3       | 9.1        | 8.0        | 3.5        | 3.4        | 2.9        | 4.0        | 2.9        | 3.6        | 6.4        | 9.9        | 9.0        | 5.7        | 130.2       | 96.0                  |     |
| Total<br>Dura-<br>tion. | hr.<br>3.0 | hr.<br>4.9 | hr.<br>4.8 | hr.<br>3.3 | hr.<br>4.4 | hr.<br>4.5 | hr.<br>5.3 | hr.<br>4.3 | hr.<br>4.5 | hr.<br>3.7 | hr.<br>3.5 | hr.<br>5.6 | hr.<br>5.2 | hr.<br>3.6 | hr.<br>2.6 | hr.<br>4.2 | hr.<br>5.5 | hr.<br>3.7 | hr.<br>2.4 | hr.<br>3.1 | hr.<br>3.2 | hr.<br>4.4 | hr.<br>3.6 | hr.<br>2.7 | hr.<br>96.0 |                       |     |

168. Eskdalemuir :  $H_r = 242.0$  metres + 0.4 metres.

**December, 1924.**

|                         | mm.        | mm.        | mm.         | mm.        | mm.        | mm.        | mm.        | mm.        | mm.        | mm.        | mm.        | mm.        | mm.        | mm.        | mm.        | mm.        | mm.        | mm.        | mm.        | mm.         | mm.        | mm.        | mm.         | mm.         | mm.          | mm.   | hr. |
|-------------------------|------------|------------|-------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|-------------|------------|------------|-------------|-------------|--------------|-------|-----|
| 1                       | ...        | .5         | .1          | ...        | 2.0        | 2.5        | 2.6        | ...        | ...        | .9         | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...         | ...        | ...        | ...         | ...         | ...          | 8.6   | 4.2 |
| 2                       | ...        | ...        | ...         | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...         | ...        | ...        | ...         | ...         | ...          | 0.2   | 0.6 |
| 3                       | ...        | .1         | .1          | .1         | ...        | ...        | ...        | ...        | ...        | .1         | .1         | ...        | ...        | ...        | .1         | ...        | ...        | (.1)       | ...        | ...         | ...        | ...        | ...         | ...         | ...          | 0.7   | 3.2 |
| 4                       | ...        | ...        | ...         | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | 1.3        | 2.1        | 1.5        | .3         | .4         | .4         | 1.3        | 2.5        | 3.0         | 3.5        | 1.6        | 1.6         | .6          | 20.1         | 12.0  |     |
| 5                       | .1         | ...        | ...         | ...        | ...        | ...        | ...        | .1         | ...        | ...        | ...        | .2         | ...        | ...        | ...        | ...        | ...        | .2         | ...        | ...         | ...        | ...        | ...         | 4.6         | .3           | 5.5   | 3.0 |
| 6                       | .5         | 2.0        | 1.0         | .1         | .5         | .1         | ...        | ...        | ...        | ...        | .1         | .2         | .2         | ...        | ...        | ...        | ...        | ...        | ...        | ...         | ...        | .5         | .2          | .3          | 5.7          | 6.5   |     |
| 7                       | ...        | ...        | ...         | ...        | ...        | ...        | ...        | ...        | ...        | (.1)       | (...)      | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...         | ...        | 1.6        | 2.2         | 2.3         | 2.8          | 9.0   | 3.9 |
| 8                       | 2.0        | 1.6        | 1.2         | 1.0        | .7         | .6         | .1         | ...        | ...        | ...        | ...        | .4         | .5         | .3         | .8         | 1.4        | 1.4        | 1.0        | 1.6        | 1.6         | 2.6        | .4         | ...         | .4          | 19.6         | 16.8  |     |
| 9                       | .5         | 1.6        | .5          | .6         | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...         | ...        | ...        | ...         | ...         | ...          | 3.2   | 3.8 |
| 10                      | ...        | ...        | ...         | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...         | ...        | ...        | ...         | ...         | ...          | ...   | ... |
| 11                      | ...        | ...        | ...         | ...        | ...        | ...        | ...        | ...        | ...        | ...        | .1         | ...        | ...        | ...        | .5         | .2         | .8         | .2         | (.1)       | (≡;)        | .2         | .3         | .2          | .2          | 2.6          | 6.3   |     |
| 12                      | ...        | ...        | ...         | ...        | ...        | ...        | ...        | ...        | .2         | .5         | ...        | 1.3        | ...        | ...        | .2         | ...        | ...        | ...        | ...        | ...         | ...        | ...        | ...         | ...         | ...          | 2.3   | 2.6 |
| 13                      | ...        | ...        | ...         | ...        | ...        | ...        | ...        | .2         | 1.0        | 2.4        | 1.2        | 1.7        | 2.0        | 1.2        | 1.2        | .9         | .4         | ...        | ...        | ...         | ...        | ...        | ...         | ...         | ...          | 12.2  | 8.6 |
| 14                      | ...        | ...        | (...)       | (...)      | (.1)       | ...        | ...        | ...        | ...        | ...        | ...        | .2         | 1.7        | .7         | .4         | ...        | ...        | ...        | ...        | ...         | ...        | ...        | ...         | ...         | ...          | 3.1   | 1.6 |
| 15                      | ...        | ...        | (.1)        | (≡;)       | ...        | ...        | ...        | ...        | ...        | ...        | ...        | .1         | .2         | 1.1        | .2         | .6         | 1.2        | .2         | .1         | .8          | .6         | .1         | .9          | .6          | .2           | 6.2   | 9.4 |
| 16                      | 1.1        | .2         | ...         | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...         | ...        | ...        | ...         | ...         | ...          | 1.3   | 1.8 |
| 17                      | ...        | ...        | (.1)        | (...)      | (...)      | (...)      | .1         | .1         | .3         | .5         | 1.6        | .2         | .2         | .2         | ...        | 2.4        | .2         | .4         | .8         | .8          | .2         | .2         | .1          | .1          | 8.4          | 14.6  |     |
| 18                      | ...        | ...        | ...         | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | .3         | .6         | ...        | .1         | .3         | 2.0        | .6         | 1.1         | .2         | ...        | ...         | ...         | .1           | 5.3   | 4.7 |
| 19                      | ...        | ...        | ...         | ...        | .2         | 2.8        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | .2         | ...        | ...         | ...        | ...        | ...         | ...         | ...          | 3.2   | 1.4 |
| 20                      | ...        | ...        | ...         | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | (.1)       | (...)      | (.1)       | (...)      | .1         | .2          | .1         | .1         | .1          | .2          | 1.0          | 4.8   |     |
| 21                      | .3         | .2         | .2          | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...         | ...        | ...        | ...         | ...         | ...          | 0.7   | 3.0 |
| 22                      | ...        | ...        | ...         | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | .6         | .2         | 1.3         | ...        | ...        | ...         | ...         | ...          | 2.1   | 2.0 |
| 23                      | ...        | ...        | 1.1         | 2.8        | 5.7        | 3.9        | 2.3        | 2.1        | .8         | 1.3        | ...        | ...        | ...        | ...        | ...        | .8         | .9         | .9         | .1         | ...         | ...        | ...        | ...         | ...         | ...          | 22.7  | 9.9 |
| 24                      | ...        | ...        | .6          | ...        | .6         | .6         | 1.2        | 1.4        | 1.0        | 2.4        | .6         | ...        | .6         | .1         | 4.0        | .2         | ...        | .5         | 2.1        | 1.3         | .2         | .1         | .6          | 4.1         | 22.2         | 12.5  |     |
| 25                      | .4         | .8         | 2.8         | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | .1          | .5         | ...        | .1          | 1.0         | 5.7          | 4.4   |     |
| 26                      | 1.6        | 2.3        | 1.5         | .9         | 1.6        | .1         | .5         | 1.1        | .7         | .4         | 1.8        | .7         | .7         | 2.5        | .4         | ...        | 3.9        | .3         | ...        | ...         | ...        | ...        | 2.2         | 3.4         | 26.6         | 17.0  |     |
| 27                      | 4.2        | 6.2        | 5.8         | 5.2        | 4.7        | 6.7        | 2.7        | 2.6        | 2.0        | .1         | ...        | ...        | ...        | .5         | 1.4        | .1         | ...        | ...        | ...        | ...         | ...        | ...        | ...         | ...         | 42.2         | 11.1  |     |
| 28                      | ...        | ...        | ...         | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | .1         | ...        | ...        | ...        | ...        | (.2)        | (.1)       | ...        | ...         | ...         | ...          | 0.4   | 1.3 |
| 29                      | ...        | ...        | ...         | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | 1.4        | 1.9        | 1.3         | 2.6        | 5.4        | 6.5         | 7.7         | 26.8         | 6.7   |     |
| 30                      | 5.4        | 5.4        | 4.1         | 1.0        | .1         | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...         | ...        | ...        | ...         | ...         | ...          | 16.0  | 4.2 |
| 31                      | ...        | ...        | ...         | (.4)       | (1.0)      | (1.0)      | (1.0)      | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...         | ...        | ...        | ...         | ...         | ...          | 3.4   | 3.3 |
| Sum.                    | 16.1       | 20.9       | 19.1        | 12.2       | 17.2       | 18.3       | 10.4       | 7.6        | 5.8        | 8.5        | 4.3        | 7.3        | 6.9        | 8.5        | 9.5        | 5.7        | 10.6       | 10.4       | 11.0       | 11.2        | 13.0       | 11.3       | 19.1        | 22.1        | 287.0        | 186.5 |     |
| Total<br>Dura-<br>tion. | hr.<br>9.2 | hr.<br>9.5 | hr.<br>10.3 | hr.<br>7.1 | hr.<br>6.9 | hr.<br>7.7 | hr.<br>6.2 | hr.<br>5.5 | hr.<br>5.8 | hr.<br>7.1 | hr.<br>4.9 | hr.<br>6.3 | hr.<br>7.2 | hr.<br>7.3 | hr.<br>5.8 | hr.<br>6.8 | hr.<br>7.0 | hr.<br>8.3 | hr.<br>9.8 | hr.<br>10.2 | hr.<br>8.8 | hr.<br>7.1 | hr.<br>10.6 | hr.<br>11.1 | hr.<br>186.5 |       |     |
| G.M.T.                  | 0-1        | 1-2        | 2-3         | 3-4        | 4-5        | 5-6        | 6-7        | 7-8        | 8-9        | 9-10       | 10-11      | 11-12      | 12-13      | 13-14      | 14-15      | 15-16      | 16-17      | 17-18      | 18-19      | 19-20       | 20-21      | 21-22      | 22-23       | 23-24       | 0-24         |       |     |





For periods of sixty minutes, between the exact hours of Local Apparent Time.

171. Eskdalemuir :  $h_s$  (height of recorder above ground) = 1.5 metres.

March, 1924.

| Day.  | 3 to | 4 to | 5 to | 6 to | 7 to | 8 to | 9 to | 10 to | 11 to | Noon | 13 to | 14 to | 15 to | 16 to | 17 to | 18 to | 19 to | 20 to | 21 to       | Total for Day. | Per cent. of Possible. | Radiation by Angström Pyrheliometer. |                 |      |        |
|-------|------|------|------|------|------|------|------|-------|-------|------|-------|-------|-------|-------|-------|-------|-------|-------|-------------|----------------|------------------------|--------------------------------------|-----------------|------|--------|
|       | 4.   | 5.   | 6.   | 7.   | 8.   | 9.   | 10.  | 11.   | Noon  | 13.  | 14.   | 15.   | 16.   | 17.   | 18.   | 19.   | 20.   | 21.   | Time G.M.T. |                |                        | Inten- sity.                         | $p/p_0$ sec. Z. | Sky. |        |
| 1     | —    | —    | —    | —    | —    | 3    | 8    | 10    | 10    | 10   | 10    | 10    | 10    | 7     | —     | —     | —     | —     | —           | 7.8            | 73                     | —                                    | —               | —    | —      |
| 2     | —    | —    | —    | —    | —    | —    | —    | —     | —     | —    | —     | —     | —     | —     | —     | —     | —     | —     | —           | 4.8            | 45                     | —                                    | —               | —    | —      |
| 3     | —    | —    | —    | —    | 7    | 10   | 10   | 10    | 10    | 10   | 7     | —     | —     | —     | —     | —     | —     | —     | —           | 6.6            | 61                     | —                                    | —               | —    | —      |
| 4     | —    | —    | —    | —    | —    | —    | —    | —     | —     | —    | —     | —     | —     | —     | —     | —     | —     | —     | —           | 6.4            | 59                     | —                                    | —               | —    | —      |
| 5     | —    | —    | —    | —    | —    | —    | —    | —     | —     | —    | —     | —     | —     | —     | —     | —     | —     | —     | —           | —              | —                      | —                                    | —               | —    | —      |
| 6     | —    | —    | —    | —    | 2    | 10   | 10   | 10    | 10    | 10   | 10    | 8     | 2     | —     | —     | —     | —     | —     | —           | 7.2            | 65                     | 12 04                                | 62              | 2.06 | Haze.  |
| 7     | —    | —    | —    | —    | —    | —    | —    | —     | —     | —    | —     | —     | —     | —     | —     | —     | —     | —     | —           | 0.2            | 2                      | —                                    | —               | —    | —      |
| 8     | —    | —    | —    | —    | 2    | 2    | —    | 4     | 5     | 4    | 2     | 4     | —     | —     | —     | —     | —     | —     | —           | 2.3            | 21                     | —                                    | —               | —    | —      |
| 9     | —    | —    | —    | —    | —    | 3    | 1    | 8     | —     | —    | —     | —     | —     | —     | —     | —     | —     | —     | —           | 3.4            | 30                     | —                                    | —               | —    | —      |
| 10    | —    | —    | —    | —    | 5    | 9    | 10   | 10    | 10    | 10   | 10    | 10    | 10    | 10    | —     | —     | —     | —     | —           | 9.4            | 83                     | 12 05                                | 80              | 1.95 | Haze.  |
| 11    | —    | —    | —    | —    | 10   | 10   | 10   | 10    | 10    | 10   | 10    | 10    | 10    | 3     | —     | —     | —     | —     | —           | 9.3            | 81                     | 12 02                                | 83              | 1.94 | Clear. |
| 12    | —    | —    | —    | —    | 9    | 10   | 10   | 10    | 10    | 10   | 10    | 10    | 10    | 3     | —     | —     | —     | —     | —           | 9.2            | 80                     | 12 09                                | 68              | 1.93 | Haze.  |
| 13    | —    | —    | —    | —    | 2    | 10   | 10   | 10    | 10    | 10   | 7     | 6     | 8     | 4     | —     | —     | —     | —     | —           | 8.7            | 75                     | —                                    | —               | —    | —      |
| 14    | —    | —    | —    | —    | —    | —    | 4    | 4     | 6     | —    | —     | —     | —     | —     | —     | —     | —     | —     | —           | 3.0            | 26                     | —                                    | —               | —    | —      |
| 15    | —    | —    | —    | —    | —    | —    | —    | —     | —     | —    | —     | —     | —     | —     | —     | —     | —     | —     | —           | 0.4            | 3                      | —                                    | —               | —    | —      |
| 16    | —    | —    | —    | —    | 6    | 10   | —    | 2     | 4     | 4    | 3     | 6     | 3     | 6     | 2     | —     | —     | —     | —           | 4.6            | 39                     | —                                    | —               | —    | —      |
| 17    | —    | —    | —    | —    | 3    | 10   | 10   | 4     | 3     | 6    | 6     | 5     | 1     | —     | —     | —     | —     | —     | —           | 4.8            | 40                     | —                                    | —               | —    | —      |
| 18    | —    | —    | —    | —    | —    | 10   | 10   | 10    | 10    | 10   | 8     | 5     | —     | —     | —     | —     | —     | —     | —           | 5.3            | 44                     | 12 04                                | 84              | 1.79 | Ci.St. |
| 19    | —    | —    | —    | —    | 1    | —    | —    | —     | —     | —    | —     | —     | —     | —     | —     | —     | —     | —     | —           | 0.1            | 1                      | —                                    | —               | —    | —      |
| 20    | —    | —    | —    | —    | 2    | 10   | 10   | 10    | 10    | 10   | 10    | 10    | 10    | 10    | 3     | —     | —     | —     | —           | 10.5           | 87                     | —                                    | —               | —    | —      |
| 21    | —    | —    | —    | —    | —    | —    | —    | 2     | 3     | 6    | —     | —     | —     | —     | —     | —     | —     | —     | —           | 1.7            | 14                     | —                                    | —               | —    | —      |
| 22    | —    | —    | —    | —    | —    | —    | —    | —     | —     | —    | —     | —     | —     | —     | —     | —     | —     | —     | —           | —              | —                      | —                                    | —               | —    | —      |
| 23    | —    | —    | —    | —    | —    | —    | —    | —     | —     | —    | —     | —     | —     | —     | —     | —     | —     | —     | —           | —              | —                      | —                                    | —               | —    | —      |
| 24    | —    | —    | —    | —    | —    | —    | —    | —     | —     | —    | —     | —     | —     | —     | —     | —     | —     | —     | —           | —              | —                      | —                                    | —               | —    | —      |
| 25    | —    | —    | —    | —    | —    | —    | —    | —     | —     | —    | —     | —     | —     | —     | —     | —     | —     | —     | —           | —              | —                      | —                                    | —               | —    | —      |
| 26    | —    | —    | —    | —    | —    | —    | —    | —     | —     | —    | —     | —     | —     | —     | —     | —     | —     | —     | —           | 0.1            | 1                      | —                                    | —               | —    | —      |
| 27    | —    | —    | —    | —    | —    | —    | —    | —     | —     | —    | —     | —     | —     | —     | —     | —     | —     | —     | —           | 1.2            | 9                      | —                                    | —               | —    | —      |
| 28    | —    | —    | —    | —    | —    | —    | —    | —     | —     | —    | —     | —     | —     | —     | —     | —     | —     | —     | —           | —              | —                      | —                                    | —               | —    | —      |
| 29    | —    | —    | —    | —    | 8    | 7    | 3    | 1     | —     | —    | —     | —     | —     | —     | —     | —     | —     | —     | —           | 6.2            | 49                     | —                                    | —               | —    | —      |
| 30    | —    | —    | —    | —    | 6    | 6    | —    | 5     | 10    | 10   | 10    | 7     | —     | —     | —     | —     | —     | —     | —           | 6.0            | 47                     | —                                    | —               | —    | —      |
| 31    | —    | —    | —    | —    | 5    | 10   | 10   | 10    | 10    | 9    | 3     | 4     | 8     | 4     | 6     | 1     | —     | —     | —           | 8.0            | 62                     | —                                    | —               | —    | —      |
| Sum.  | —    | —    | —    | 1.3  | 9.5  | 13.0 | 11.2 | 14.3  | 15.5  | 14.8 | 14.6  | 12.7  | 11.6  | 7.3   | 1.4   | —     | —     | —     | —           | 127.2          | —                      | —                                    | —               | —    | —      |
| Mean. | —    | —    | —    | .04  | .31  | .42  | .36  | .46   | .50   | .48  | .47   | .41   | .37   | .24   | .05   | —     | —     | —     | —           | 4.10           | 35                     | —                                    | —               | —    | —      |

172. Eskdalemuir :  $h_s$  = 1.5 metres.

April, 1924.

| Day.        | hr.     | hr.     | hr.     | hr.     | hr.     | hr.     | hr.      | hr.       | hr.        | hr.         | hr.       | hr.       | hr.       | hr.       | hr.       | hr.       | hr.       | hr.         | hr.            | Total for Day.         | Per cent. of Possible.               | Radiation by Angström Pyrheliometer. |      |   |   |
|-------------|---------|---------|---------|---------|---------|---------|----------|-----------|------------|-------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-------------|----------------|------------------------|--------------------------------------|--------------------------------------|------|---|---|
|             | 3 to 4. | 4 to 5. | 5 to 6. | 6 to 7. | 7 to 8. | 8 to 9. | 9 to 10. | 10 to 11. | Noon       | 13 to 14.   | 14 to 15. | 15 to 16. | 16 to 17. | 17 to 18. | 18 to 19. | 19 to 20. | 20 to 21. | Time G.M.T. | Inten- sity.   |                        |                                      | $p/p_0$ sec. Z.                      | Sky. |   |   |
| 1           | —       | —       | —       | —       | —       | —       | —        | —         | —          | —           | —         | —         | —         | —         | —         | —         | —         | —           | —              | 4.1                    | 31                                   | —                                    | —    | — | — |
| 2           | —       | —       | —       | —       | —       | —       | —        | —         | —          | —           | —         | —         | —         | —         | —         | —         | —         | —           | —              | 7.5                    | 57                                   | —                                    | —    | — | — |
| 3           | —       | —       | —       | —       | —       | —       | —        | —         | —          | —           | —         | —         | —         | —         | —         | —         | —         | —           | —              | 4.6                    | 35                                   | —                                    | —    | — | — |
| 4           | —       | —       | —       | 6       | 9       | 6       | —        | 1         | 2          | 2           | 2         | 1         | 3         | 9         | 10        | —         | —         | —           | —              | 5.1                    | 39                                   | —                                    | —    | — | — |
| 5           | —       | —       | —       | —       | —       | —       | —        | —         | —          | —           | —         | —         | —         | —         | —         | —         | —         | —           | —              | 2.2                    | 16                                   | —                                    | —    | — | — |
| 6           | —       | —       | —       | —       | —       | —       | —        | —         | —          | —           | —         | —         | —         | —         | —         | —         | —         | —           | —              | 0.5                    | 4                                    | —                                    | —    | — | — |
| 7           | —       | —       | —       | —       | —       | —       | —        | —         | —          | —           | —         | —         | —         | —         | —         | —         | —         | —           | —              | 1.5                    | 11                                   | —                                    | —    | — | — |
| 8           | —       | —       | —       | —       | 4       | 10      | 9        | 8         | 8          | 10          | 4         | 10        | 8         | 5         | 2         | 1         | 2         | —           | —              | 8.1                    | 60                                   | —                                    | —    | — | — |
| 9           | —       | —       | —       | —       | 9       | 10      | 8        | 3         | 3          | 2           | 5         | —         | —         | —         | —         | —         | —         | —           | —              | 5.5                    | 40                                   | —                                    | —    | — | — |
| 10          | —       | —       | —       | —       | —       | —       | —        | —         | —          | —           | —         | —         | —         | —         | —         | —         | —         | —           | —              | 8.7                    | 64                                   | —                                    | —    | — | — |
| 11          | —       | —       | —       | —       | 1       | 3       | 4        | 10        | 2          | 5           | 5         | 9         | 10        | —         | —         | —         | —         | —           | —              | 5.1                    | 37                                   | —                                    | —    | — | — |
| 12          | —       | —       | —       | —       | —       | —       | —        | —         | —          | —           | —         | —         | —         | —         | —         | —         | —         | —           | —              | 1.6                    | 12                                   | —                                    | —    | — | — |
| 13          | —       | —       | —       | —       | 6       | 10      | 10       | 5         | —          | —           | —         | —         | —         | —         | —         | —         | —         | —           | —              | 3.1                    | 22                                   | —                                    | —    | — | — |
| 14          | —       | —       | —       | —       | —       | —       | —        | —         | —          | —           | —         | —         | —         | —         | —         | —         | —         | —           | —              | 7.4                    | 53                                   | —                                    | —    | — | — |
| 15          | —       | —       | —       | —       | 3       | 10      | 10       | 9         | 9          | 10          | 4         | 5         | 9         | 3         | 7         | 3         | 1         | —           | —              | 8.3                    | 59                                   | —                                    | —    | — | — |
| 16          | —       | —       | —       | —       | —       | —       | —        | —         | —          | —           | —         | —         | —         | —         | —         | —         | —         | —           | —              | —                      | —                                    | —                                    | —    | — | — |
| 17          | —       | —       | —       | —       | 7       | 10      | 10       | 10        | 10         | 10          | 10        | 10        | 10        | 8         | 9         | 2         | —         | —           | —              | 11.6                   | 82                                   | —                                    | —    | — | — |
| 18          | —       | —       | —       | —       | —       | —       | —        | —         | —          | —           | —         | —         | —         | —         | —         | —         | —         | —           | —              | 11.8                   | 83                                   | —                                    | —    | — | — |
| 19          | —       | —       | —       | —       | —       | —       | —        | —         | —          | —           | —         | —         | —         | —         | —         | —         | —         | —           | —              | 0.8                    | 6                                    | —                                    | —    | — | — |
| 20          | —       | —       | —       | —       | —       | —       | —        | —         | —          | —           | —         | —         | —         | —         | —         | —         | —         | —           | —              | —                      | —                                    | —                                    | —    | — | — |
| 21          | —       | —       | —       | —       | —       | —       | —        | —         | —          | —           | —         | —         | —         | —         | —         | —         | —         | —           | —              | —                      | —                                    | —                                    | —    | — | — |
| 22          | —       | —       | —       | —       | —       | —       | —        | —         | —          | —           | —         | —         | —         | —         | —         | —         | —         | —           | —              | 6.9                    | 48                                   | —                                    | —    | — | — |
| 23          | —       | —       | —       | —       | —       | —       | —        | —         | —          | —           | —         | —         | —         | —         | —         | —         | —         | —           | —              | 2.2                    | 15                                   | —                                    | —    | — | — |
| 24          | —       | —       | —       | —       | —       | —       | —        | —         | —          | —           | —         | —         | —         | —         | —         | —         | —         | —           | —              | 8.7                    | 59                                   | —                                    | —    | — | — |
| 25          | —       | —       | —       | —       | —       | —       | —        | —         | —          | —           | —         | —         | —         | —         | —         | —         | —         | —           | —              | —                      | —                                    | —                                    | —    | — | — |
| 26          | —       | —       | —       | —       | —       | —       | —        | —         | —          | —           | —         | —         | —         | —         | —         | —         | —         | —           | —              | —                      | —                                    | —                                    | —    | — | — |
| 27          | —       | —       | —       | —       | —       | —       | —        | —         | —          | —           | —         | —         | —         | —         | —         | —         | —         | —           | —              | 0.5                    | 3                                    | —                                    | —    | — | — |
| 28          | —       | —       | —       | —       | —       | —       | —        | —         | —          | —           | —         | —         | —         | —         | —         | —         | —         | —           | —              | 6.8                    | 45                                   | —                                    | —    | — | — |
| 29          | —       | —       | —       | —       | —       | —       | —        | —         | —          | —           | —         | —         | —         | —         | —         | —         | —         | —           | —              | 1.7                    | 11                                   | —                                    | —    | — | — |
| 30          | —       | —       | —       | —       | —       | —       | —        | —         | —          | —           | —         | —         | —         | —         | —         | —         | —         | —           | —              | 3.7                    | 25                                   | —                                    | —    | — | — |
| Sum.        | —       | —       | —       | 0.8     | 8.3     | 10.9    | 12.6     | 10.4      | 11.0       | 11.5        | 11.8      | 13.7      | 10.8      | 8.9       | 9.3       | 7.4       | 1.6       | —           | —              | 129.0                  | —                                    | —                                    | —    | — | — |
| Mean.       | —       | —       | —       | .03     | .28     | .36     | .42      | .35       | .37        | .38         | .39       | .46       | .36       | .30       | .31       | .25       | .05       | —           | —              | 4.30                   | 31                                   | —                                    | —    | — | — |
| Hour L.A.T. | 3 to 4. | 4 to 5. | 5 to 6. | 6 to 7. | 7 to 8. | 8 to 9. | 9 to 10. | 10 to 11. | 11 to Noon | Noon to 13. | 13 to 14. | 14 to 15. | 15 to 16. | 16 to 17. | 17 to 18. | 18 to 19. | 19 to 20. | 20 to 21.   | Total for Day. | Per cent. of Possible. | Radiation by Angström Pyrheliometer. |                                      |      |   |   |

For periods of sixty minutes, between the exact hours of Local Apparent Time.

173. Eskdalemuir :  $h_s$  (height of recorder above ground) = 1.5 metres.

May, 1924.

| Day.  | 3 to 4. | 4 to 5. | 5 to 6. | 6 to 7. | 7 to 8. | 8 to 9. | 9 to 10. | 10 to 11. | 11 to Noon | Noon 13. | 13 to 14. | 14 to 15. | 15 to 16. | 16 to 17. | 17 to 18. | 18 to 19. | 19 to 20. | 20 to 21. | Total for Day. | Per cent. of Possible. | Radiation by Ångström Pyrheliometer. |   |       |            |
|-------|---------|---------|---------|---------|---------|---------|----------|-----------|------------|----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|----------------|------------------------|--------------------------------------|---|-------|------------|
|       | hr.     | hr.     | hr.     | hr.     | hr.     | hr.     | hr.      | hr.       | hr.        | hr.      | hr.       | hr.       | hr.       | hr.       | hr.       | hr.       | hr.       | hr.       |                |                        | hr.                                  | % | h. m. | Intensity. |
| 1     | —       | —       | —       | —       | —       | —       | 2        | 4         | 3          | 1        | 2         | —         | —         | —         | —         | —         | —         | —         | 1.2            | 8                      | —                                    | — | —     | —          |
| 2     | —       | —       | —       | —       | —       | —       | —        | —         | —          | —        | —         | —         | —         | —         | —         | —         | —         | —         | —              | —                      | —                                    | — | —     | —          |
| 3     | —       | —       | —       | —       | —       | —       | —        | —         | —          | —        | —         | —         | —         | —         | —         | —         | —         | —         | —              | —                      | —                                    | — | —     | —          |
| 4     | —       | —       | —       | 1       | —       | —       | 2        | —         | —          | —        | —         | —         | —         | —         | —         | —         | —         | —         | 0.3            | 2                      | —                                    | — | —     | —          |
| 5     | —       | —       | —       | —       | —       | —       | —        | 2         | 1.0        | 1        | —         | 4         | 4         | 6         | 3         | 1         | —         | —         | 3.1            | 20                     | —                                    | — | —     | —          |
| 6     | —       | —       | —       | —       | —       | —       | —        | 5         | —          | —        | 2         | —         | —         | —         | —         | —         | —         | —         | 0.7            | 5                      | —                                    | — | —     | —          |
| 7     | —       | —       | —       | —       | 7       | 4       | 1        | 5         | 8          | 9        | 5         | 1.0       | 4         | 4         | —         | 8         | —         | —         | 6.5            | 42                     | —                                    | — | —     | —          |
| 8     | —       | —       | —       | —       | —       | —       | —        | —         | —          | —        | —         | —         | —         | —         | 1         | —         | —         | —         | 0.1            | 1                      | —                                    | — | —     | —          |
| 9     | —       | 3       | 1.0     | 1.0     | 1.0     | 1.0     | 1.0      | 9         | 9          | 7        | 1         | 3         | 3         | —         | —         | —         | —         | —         | 8.5            | 54                     | —                                    | — | —     | —          |
| 10    | —       | —       | —       | —       | —       | —       | —        | —         | —          | —        | —         | —         | —         | —         | —         | —         | —         | —         | —              | —                      | —                                    | — | —     | —          |
| 11    | —       | —       | —       | —       | —       | —       | —        | 6         | 1          | 1        | 1         | 4         | 6         | 2         | 1         | —         | —         | —         | 2.2            | 14                     | —                                    | — | —     | —          |
| 12    | —       | —       | —       | —       | —       | —       | 1        | 1         | 8          | 9        | 1.0       | 1.0       | 1.0       | 1.0       | 1.0       | 1.0       | 3         | —         | 8.2            | 51                     | —                                    | — | —     | —          |
| 13    | —       | —       | —       | —       | —       | —       | —        | —         | —          | —        | 5         | 8         | 3         | 9         | 1         | 4         | —         | —         | 3.0            | 19                     | —                                    | — | —     | —          |
| 14    | —       | —       | 1       | —       | —       | —       | 4        | —         | —          | —        | —         | —         | —         | —         | —         | —         | —         | —         | 0.5            | 3                      | —                                    | — | —     | —          |
| 15    | —       | —       | —       | 2       | 6       | 7       | 8        | 9         | 9          | 9        | 1.0       | 1.0       | 1.0       | 1.0       | 1.0       | 8         | 1         | —         | 10.9           | 68                     | —                                    | — | —     | —          |
| 16    | —       | —       | —       | —       | —       | —       | 6        | 6         | 9          | 9        | 9         | 9         | 1.0       | 1.0       | 1.0       | 1         | —         | —         | 7.9            | 49                     | —                                    | — | —     | —          |
| 17    | —       | —       | 1.0     | 1.0     | 7       | 8       | 2        | 1         | —          | 4        | 5         | 6         | 5         | —         | —         | 2         | —         | —         | 6.0            | 37                     | —                                    | — | —     | —          |
| 18    | —       | —       | 7       | 1.0     | 1.0     | 1.0     | 1.0      | 1.0       | 7          | 1.0      | 9         | 9         | 8         | 4         | —         | —         | —         | —         | 10.8           | 66                     | —                                    | — | —     | —          |
| 19    | —       | —       | —       | —       | —       | —       | 1        | 4         | 2          | 7        | 2         | 1.0       | —         | —         | 3         | —         | —         | —         | 2.9            | 18                     | —                                    | — | —     | —          |
| 20    | —       | —       | —       | —       | —       | —       | —        | —         | —          | —        | —         | —         | —         | —         | —         | —         | —         | —         | —              | —                      | —                                    | — | —     | —          |
| 21    | —       | —       | —       | —       | —       | —       | —        | 1         | —          | —        | —         | —         | —         | —         | —         | —         | —         | —         | 0.1            | 1                      | —                                    | — | —     | —          |
| 22    | —       | —       | —       | —       | —       | —       | —        | —         | —          | —        | —         | —         | —         | —         | —         | —         | —         | —         | —              | —                      | —                                    | — | —     | —          |
| 23    | —       | —       | —       | —       | 5       | 2       | 2        | 1         | —          | 3        | 1         | —         | —         | 3         | —         | —         | —         | —         | 1.7            | 10                     | —                                    | — | —     | —          |
| 24    | —       | —       | —       | 6       | 4       | 4       | 7        | 8         | 1.0        | 6        | 4         | 1.0       | 2         | 2         | 1         | —         | —         | —         | 6.4            | 39                     | —                                    | — | —     | —          |
| 25    | —       | —       | —       | 1       | 3       | —       | 3        | —         | —          | —        | —         | —         | —         | —         | —         | —         | —         | —         | 0.7            | 4                      | —                                    | — | —     | —          |
| 26    | —       | —       | —       | 3       | 8       | 1.0     | 1.0      | 1.0       | 9          | 9        | 5         | 3         | —         | 7         | —         | —         | —         | —         | 7.4            | 44                     | —                                    | — | —     | —          |
| 27    | —       | —       | —       | —       | —       | —       | —        | —         | 1          | —        | —         | —         | —         | —         | —         | —         | —         | —         | 0.1            | 1                      | —                                    | — | —     | —          |
| 28    | —       | —       | —       | —       | —       | —       | —        | —         | —          | —        | —         | —         | —         | 3         | 4         | —         | —         | —         | 0.7            | 4                      | —                                    | — | —     | —          |
| 29    | —       | —       | 4       | 1.0     | 1.0     | 1.0     | 1.0      | 9         | 1.0        | 1.0      | 1.0       | 1.0       | 1.0       | 9         | 8         | 3         | —         | —         | 12.8           | 73                     | —                                    | — | —     | —          |
| 30    | —       | —       | —       | —       | —       | —       | —        | —         | —          | —        | —         | —         | —         | —         | —         | —         | —         | —         | —              | —                      | —                                    | — | —     | —          |
| 31    | —       | —       | —       | —       | —       | —       | —        | —         | —          | —        | —         | —         | —         | —         | —         | —         | —         | —         | —              | —                      | —                                    | — | —     | —          |
| Sum.  | —       | 0.3     | 3.2     | 5.3     | 7.0     | 6.6     | 8.2      | 8.9       | 9.4        | 9.5      | 8.1       | 10.6      | 7.5       | 7.9       | 5.6       | 3.7       | 0.4       | —         | 102.2          | —                      | —                                    | — | —     | —          |
| Mean. | —       | .01     | .10     | .17     | .23     | .21     | .26      | .29       | .30        | .31      | .26       | .34       | .24       | .25       | .18       | .12       | .01       | —         | 3.30           | 21                     | —                                    | — | —     | —          |

174. Eskdalemuir :  $h_s$  = 1.5 metres.

June, 1924.

| Day.  | 3 to 4. | 4 to 5. | 5 to 6. | 6 to 7. | 7 to 8. | 8 to 9. | 9 to 10. | 10 to 11. | 11 to Noon | Noon 13. | 13 to 14. | 14 to 15. | 15 to 16. | 16 to 17. | 17 to 18. | 18 to 19. | 19 to 20. | 20 to 21. | Total for Day. | Per cent. of Possible. | Radiation by Ångström Pyrheliometer. |   |       |            |
|-------|---------|---------|---------|---------|---------|---------|----------|-----------|------------|----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|----------------|------------------------|--------------------------------------|---|-------|------------|
|       | hr.     | hr.     | hr.     | hr.     | hr.     | hr.     | hr.      | hr.       | hr.        | hr.      | hr.       | hr.       | hr.       | hr.       | hr.       | hr.       | hr.       | hr.       |                |                        | hr.                                  | % | h. m. | Intensity. |
| 1     | —       | —       | —       | —       | —       | —       | —        | —         | —          | —        | 2         | 8         | 6         | 8         | 7         | —         | —         | —         | 3.1            | 18                     | —                                    | — | —     | —          |
| 2     | —       | —       | —       | —       | 6       | 3       | 1        | 7         | 9          | 9        | 7         | 5         | 9         | 8         | 1         | 4         | —         | —         | 6.9            | 41                     | —                                    | — | —     | —          |
| 3     | —       | 2       | 1.0     | 1.0     | 1.0     | 8       | 1.0      | 1.0       | 1.0        | 1.0      | 9         | 1         | 1         | 8         | 4         | 5         | —         | —         | 10.8           | 63                     | —                                    | — | —     | —          |
| 4     | —       | 3       | 1.0     | 1.0     | 1.0     | 1.0     | 9        | 1.0       | 1.0        | 8        | 1.0       | 2         | —         | —         | —         | —         | —         | —         | 9.2            | 54                     | —                                    | — | —     | —          |
| 5     | —       | —       | —       | 7       | 4       | 6       | 5        | 8         | 7          | 6        | 2         | —         | —         | —         | —         | —         | —         | —         | 4.5            | 26                     | —                                    | — | —     | —          |
| 6     | —       | —       | —       | —       | —       | —       | —        | —         | —          | —        | —         | —         | —         | —         | —         | —         | —         | —         | —              | —                      | —                                    | — | —     | —          |
| 7     | —       | —       | —       | —       | —       | —       | —        | —         | —          | —        | 1         | 5         | —         | —         | —         | —         | —         | —         | 0.6            | 3                      | —                                    | — | —     | —          |
| 8     | —       | —       | —       | —       | —       | —       | —        | —         | —          | —        | —         | —         | —         | —         | —         | —         | —         | —         | —              | —                      | —                                    | — | —     | —          |
| 9     | —       | —       | —       | —       | —       | —       | —        | 4         | —          | —        | —         | —         | —         | —         | —         | —         | —         | —         | 0.4            | 2                      | —                                    | — | —     | —          |
| 10    | —       | —       | —       | —       | —       | 7       | 8        | 3         | 4          | —        | —         | —         | —         | —         | —         | —         | —         | —         | 2.2            | 13                     | —                                    | — | —     | —          |
| 11    | —       | —       | —       | —       | 1       | —       | —        | 1         | 1          | 1        | 1         | 5         | —         | —         | 8         | 7         | —         | —         | 2.5            | 15                     | —                                    | — | —     | —          |
| 12    | —       | —       | —       | —       | —       | —       | —        | —         | —          | —        | —         | —         | —         | —         | —         | —         | —         | —         | —              | —                      | —                                    | — | —     | —          |
| 13    | —       | —       | —       | —       | —       | 8       | 1.0      | 1.0       | 1.0        | 9        | 1.0       | 1.0       | 1.0       | 1.0       | 1.0       | 1.0       | 6         | —         | 11.8           | 65                     | —                                    | — | —     | —          |
| 14    | —       | —       | 9       | 8       | 1.0     | 1.0     | 1.0      | 1.0       | 1.0        | 1.0      | 1.0       | 1.0       | 6         | 1         | —         | —         | —         | —         | 10.4           | 60                     | —                                    | — | —     | —          |
| 15    | —       | —       | —       | —       | —       | —       | —        | —         | —          | —        | —         | —         | —         | —         | —         | —         | —         | —         | —              | —                      | —                                    | — | —     | —          |
| 16    | —       | —       | —       | 7       | 1.0     | 1.0     | 1.0      | 6         | 1          | 9        | 1.0       | 9         | 8         | 8         | 9         | —         | —         | —         | 9.7            | 56                     | —                                    | — | —     | —          |
| 17    | —       | —       | —       | —       | —       | —       | 9        | 1.0       | 1.0        | 1.0      | 9         | 9         | 1.0       | 9         | 1         | 2         | —         | —         | 7.9            | 45                     | —                                    | — | —     | —          |
| 18    | —       | —       | —       | 5       | 7       | 6       | 9        | 1.0       | 9          | 1.0      | 8         | 5         | 9         | 3         | 1         | —         | —         | —         | 7.2            | 41                     | —                                    | — | —     | —          |
| 19    | —       | —       | —       | —       | 3       | 1.0     | 9        | 7         | 1.0        | 5        | 5         | 9         | 1.0       | 7         | 6         | 1.0       | 2         | —         | 9.7            | 56                     | —                                    | — | —     | —          |
| 20    | —       | —       | —       | 2       | 1       | 1       | 9        | 9         | 1.0        | 1.0      | 1.0       | 1.0       | 1.0       | 1.0       | 1.0       | 1.0       | 8         | —         | 11.0           | 64                     | —                                    | — | —     | —          |
| 21    | —       | —       | —       | 2       | —       | —       | —        | —         | —          | 5        | 1.0       | 1.0       | 1.0       | 6         | 2         | —         | —         | —         | 4.5            | 26                     | —                                    | — | —     | —          |
| 22    | —       | —       | —       | 2       | 1.0     | 4       | 5        | 3         | —          | 6        | 3         | 1.0       | 1.0       | 7         | —         | 5         | —         | —         | 6.5            | 37                     | —                                    | — | —     | —          |
| 23    | —       | —       | —       | —       | —       | —       | —        | —         | —          | —        | —         | 3         | —         | —         | —         | —         | —         | —         | 0.3            | 2                      | —                                    | — | —     | —          |
| 24    | —       | —       | 2       | 1       | 1.0     | 6       | 1.0      | 1.0       | 1.0        | 1.0      | 1.0       | 1.0       | 4         | 5         | 3         | —         | —         | —         | 9.1            | 52                     | —                                    | — | —     | —          |
| 25    | —       | 2       | 1.0     | 1.0     | 6       | 1       | —        | —         | —          | —        | —         | —         | —         | —         | —         | —         | —         | —         | 2.9            | 17                     | —                                    | — | —     | —          |
| 26    | —       | —       | —       | —       | —       | —       | —        | —         | —          | —        | —         | 1         | —         | —         | —         | —         | —         | —         | 0.1            | 1                      | —                                    | — | —     | —          |
| 27    | —       | —       | —       | 2       | 1       | 9       | 9        | 5         | 8          | 8        | 8         | 4         | 8         | 9         | 8         | 7         | 5         | —         | 9.1            | 53                     | —                                    | — | —     | —          |
| 28    | —       | —       | —       | —       | —       | —       | —        | —         | —          | —        | —         | —         | —         | —         | —         | —         | —         | —         | —              | —                      | —                                    | — | —     | —          |
| 29    | —       | —       | —       | 9       | 9       | 9       | 1.0      | 2         | 4          | 1        | 4         | 1         | 2         | 2         | —         | —         | —         | —         | 5.3            | 31                     | —                                    | — | —     | —          |
| 30    | —       | —       | —       | 6       | 4       | 2       | 7        | 8         | 8          | 1.0      | 1.0       | 9         | 1.0       | 7         | 4         | 8         | 8         | —         | 10.1           | 58                     | —                                    | — | —     | —          |
| Sum.  | —       | 0.7     | 4.1     | 8.1     | 10.2    | 11.0    | 14.0     | 13.3      | 13.1       | 13.5     | 13.8      | 13.4      | 11.9      | 10.4      | 7.4       | 7.5       | 2.9       | —         | 155.3          | —                      | —                                    | — | —     | —          |
| Mean. | —       | .02     | .14     | .27     | .34     | .37     | .47      | .44       | .44        | .45      | .46       | .45       | .40       | .35       | .25       | .25       | .10       | —         | 5.18           | 30                     | —                                    | — | —     | —          |

For periods of sixty minutes, between the exact hours of Local Apparent Time.

175. Eskdalemuir :  $h_s$  (height of recorder above ground) = 1.5 metres.

July, 1924.

| Day. | 3 to 4. | 4 to 5. | 5 to 6. | 6 to 7. | 7 to 8. | 8 to 9. | 9 to 10. | 10 to 11. | 11 to Noon | Noon to 13. | 13 to 14. | 14 to 15. | 15 to 16. | 16 to 17. | 17 to 18. | 18 to 19. | 19 to 20. | 20 to 21. | Total for Day. | Per cent. of Possible. | Radiation by Angström Pyrheliometer. |             |                 |      |
|------|---------|---------|---------|---------|---------|---------|----------|-----------|------------|-------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|----------------|------------------------|--------------------------------------|-------------|-----------------|------|
|      | hr.     | hr.     | hr.     | hr.     | hr.     | hr.     | hr.      | hr.       | hr.        | hr.         | hr.       | hr.       | hr.       | hr.       | hr.       | hr.       | hr.       | hr.       |                |                        | Time G.M.T.                          | Inten-sity. | $p/p_0$ sec. Z. | Sky. |
| 1    | ...     | ...     | ...     | 2       | 6       | 2       | ...      | 3         | 3          | 7           | 7         | 10        | 10        | 4         | ...       | ...       | ...       | ...       | 5.4            | 31                     | ...                                  | ...         | ...             | ...  |
| 2    | ...     | ...     | ...     | ...     | ...     | ...     | 2        | 8         | 9          | 6           | ...       | ...       | ...       | ...       | ...       | ...       | ...       | ...       | 2.5            | 15                     | ...                                  | ...         | ...             | ...  |
| 3    | ...     | ...     | ...     | 6       | 2       | ...     | ...      | 6         | 7          | 4           | ...       | ...       | ...       | ...       | ...       | ...       | ...       | ...       | 2.5            | 15                     | ...                                  | ...         | ...             | ...  |
| 4    | ...     | ...     | ...     | 5       | 2       | 7       | 9        | 9         | 9          | 10          | 8         | 1         | ...       | 5         | 8         | 5         | ...       | ...       | 7.8            | 45                     | ...                                  | ...         | ...             | ...  |
| 5    | ...     | ...     | 3       | 4       | 4       | 9       | 7        | 5         | 1          | ...         | 1         | 3         | 2         | 6         | ...       | ...       | ...       | ...       | 4.5            | 26                     | ...                                  | ...         | ...             | ...  |
| 6    | ...     | ...     | ...     | ...     | ...     | ...     | 4        | 7         | 9          | 9           | 10        | 7         | 6         | 5         | 8         | 1         | ...       | ...       | 6.6            | 39                     | ...                                  | ...         | ...             | ...  |
| 7    | ...     | ...     | ...     | ...     | ...     | ...     | ...      | ...       | 1          | 2           | 2         | 4         | ...       | 2         | 2         | ...       | ...       | ...       | 1.3            | 8                      | ...                                  | ...         | ...             | ...  |
| 8    | ...     | ...     | ...     | ...     | ...     | ...     | ...      | 1         | 3          | 1           | ...       | ...       | ...       | ...       | ...       | ...       | ...       | ...       | 0.5            | 3                      | ...                                  | ...         | ...             | ...  |
| 9    | ...     | ...     | ...     | ...     | 8       | 6       | 3        | 5         | 3          | 8           | 7         | 8         | 10        | 5         | 8         | 4         | ...       | ...       | 7.5            | 44                     | ...                                  | ...         | ...             | ...  |
| 10   | ...     | ...     | ...     | ...     | ...     | ...     | ...      | ...       | ...        | ...         | ...       | ...       | ...       | ...       | ...       | ...       | ...       | ...       | ...            | ...                    | ...                                  | ...         | ...             | ...  |
| 11   | ...     | ...     | ...     | ...     | ...     | ...     | ...      | ...       | ...        | ...         | ...       | ...       | ...       | ...       | ...       | 2         | ...       | ...       | 0.2            | 1                      | ...                                  | ...         | ...             | ...  |
| 12   | ...     | ...     | 6       | 10      | 10      | 10      | 10       | 10        | 8          | 3           | 2         | 5         | 2         | ...       | ...       | ...       | ...       | ...       | 7.6            | 45                     | ...                                  | ...         | ...             | ...  |
| 13   | ...     | ...     | ...     | ...     | ...     | 1       | 1        | 3         | 2          | 2           | ...       | 2         | 3         | 9         | 9         | 1         | ...       | ...       | 3.3            | 19                     | ...                                  | ...         | ...             | ...  |
| 14   | ...     | 4       | 10      | 4       | 7       | 7       | 1        | 8         | 2          | 6           | 7         | 3         | ...       | ...       | ...       | 1         | ...       | ...       | 6.0            | 36                     | ...                                  | ...         | ...             | ...  |
| 15   | ...     | ...     | ...     | ...     | ...     | ...     | ...      | ...       | ...        | ...         | ...       | 9         | 9         | 7         | 10        | 2         | ...       | ...       | 3.7            | 22                     | ...                                  | ...         | ...             | ...  |
| 16   | ...     | ...     | ...     | ...     | ...     | 1       | 4        | ...       | 4          | 5           | 3         | ...       | 3         | 6         | 1         | ...       | ...       | ...       | 2.7            | 16                     | ...                                  | ...         | ...             | ...  |
| 17   | ...     | ...     | 5       | ...     | ...     | ...     | 7        | ...       | ...        | 4           | ...       | ...       | 3         | ...       | ...       | ...       | ...       | ...       | 1.9            | 11                     | ...                                  | ...         | ...             | ...  |
| 18   | ...     | ...     | ...     | ...     | 1       | ...     | ...      | ...       | 3          | ...         | 2         | 2         | 10        | 3         | 2         | 3         | ...       | ...       | 2.6            | 16                     | ...                                  | ...         | ...             | ...  |
| 19   | ...     | ...     | ...     | ...     | ...     | 3       | 5        | 10        | 10         | 10          | 10        | 10        | 10        | 10        | 10        | 10        | 3         | ...       | 10.1           | 61                     | ...                                  | ...         | ...             | ...  |
| 20   | ...     | ...     | 6       | 1       | ...     | ...     | ...      | 5         | 6          | 8           | 2         | 2         | 3         | 3         | ...       | ...       | ...       | ...       | 3.6            | 22                     | ...                                  | ...         | ...             | ...  |
| 21   | ...     | ...     | ...     | ...     | ...     | ...     | ...      | ...       | ...        | ...         | ...       | ...       | ...       | ...       | ...       | ...       | ...       | ...       | ...            | ...                    | ...                                  | ...         | ...             | ...  |
| 22   | ...     | ...     | ...     | ...     | 4       | ...     | 6        | 10        | 10         | 9           | 1         | ...       | ...       | ...       | ...       | ...       | ...       | ...       | 4.6            | 28                     | ...                                  | ...         | ...             | ...  |
| 23   | ...     | ...     | ...     | 1       | 3       | 10      | 2        | 4         | ...        | 1           | ...       | ...       | ...       | ...       | 8         | 8         | ...       | ...       | 3.7            | 23                     | ...                                  | ...         | ...             | ...  |
| 24   | ...     | ...     | ...     | ...     | 4       | ...     | ...      | ...       | 9          | 10          | 9         | 8         | 5         | 10        | 6         | ...       | ...       | ...       | 6.1            | 37                     | ...                                  | ...         | ...             | ...  |
| 25   | ...     | 6       | 4       | 2       | ...     | 2       | 1        | ...       | ...        | ...         | ...       | 5         | 7         | 6         | ...       | 3         | ...       | ...       | 3.6            | 22                     | ...                                  | ...         | ...             | ...  |
| 26   | ...     | ...     | ...     | ...     | ...     | 3       | 4        | 5         | 3          | 7           | 10        | 1         | 9         | 1         | ...       | ...       | ...       | ...       | 4.3            | 26                     | ...                                  | ...         | ...             | ...  |
| 27   | ...     | 2       | 10      | 10      | 10      | 1       | 1        | 8         | 9          | 1           | ...       | ...       | ...       | ...       | ...       | ...       | ...       | ...       | 5.2            | 32                     | ...                                  | ...         | ...             | ...  |
| 28   | ...     | ...     | ...     | ...     | ...     | ...     | ...      | ...       | ...        | ...         | ...       | ...       | ...       | ...       | ...       | ...       | ...       | ...       | ...            | ...                    | ...                                  | ...         | ...             | ...  |
| 29   | ...     | ...     | ...     | ...     | ...     | ...     | ...      | ...       | ...        | ...         | ...       | ...       | ...       | ...       | ...       | ...       | ...       | ...       | ...            | ...                    | ...                                  | ...         | ...             | ...  |
| 30   | ...     | ...     | ...     | ...     | ...     | ...     | ...      | ...       | ...        | ...         | ...       | ...       | ...       | ...       | 2         | ...       | ...       | ...       | 0.2            | 12                     | ...                                  | ...         | ...             | ...  |
| 31   | ...     | ...     | ...     | ...     | 2       | 2       | 8        | 9         | 4          | 8           | 6         | 1         | ...       | ...       | ...       | ...       | ...       | ...       | 4.0            | 25                     | ...                                  | ...         | ...             | ...  |
| Sum. | ...     | 1.2     | 4.4     | 4.5     | 5.6     | 6.7     | 8.4      | 11.6      | 10.8       | 11.8        | 8.9       | 8.2       | 9.5       | 7.7       | 6.9       | 5.4       | 0.4       | ...       | 112.0          | —                      | —                                    | —           | —               | —    |
| Mean | ...     | .04     | .14     | .15     | .18     | .22     | .27      | .37       | .35        | .38         | .29       | .26       | .31       | .25       | .22       | .17       | .01       | ...       | 3.61           | 22                     | —                                    | —           | —               | —    |

176. Eskdalemuir :  $h_s$  = 1.5 metres.

August, 1924.

| Hour. L.A.T. | 3 to 4. | 4 to 5. | 5 to 6. | 6 to 7. | 7 to 8. | 8 to 9. | 9 to 10. | 10 to 11. | 11 to Noon | Noon to 13. | 13 to 14. | 14 to 15. | 15 to 16. | 16 to 17. | 17 to 18. | 18 to 19. | 19 to 20. | 20 to 21. | Total for Day. | Per cent. of Possible. | Radiation by Angström Pyrheliometer. |             |                 |      |
|--------------|---------|---------|---------|---------|---------|---------|----------|-----------|------------|-------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|----------------|------------------------|--------------------------------------|-------------|-----------------|------|
|              | hr.     | hr.     | hr.     | hr.     | hr.     | hr.     | hr.      | hr.       | hr.        | hr.         | hr.       | hr.       | hr.       | hr.       | hr.       | hr.       | hr.       | hr.       |                |                        | Time G.M.T.                          | Inten-sity. | $p/p_0$ sec. Z. | Sky. |
| 1            | ...     | ...     | ...     | ...     | ...     | ...     | ...      | 1         | ...        | ...         | ...       | ...       | ...       | ...       | ...       | ...       | ...       | ...       | 0.1            | 1                      | ...                                  | ...         | ...             | ...  |
| 2            | ...     | ...     | ...     | 5       | 10      | 10      | 10       | 10        | 9          | 8           | 6         | 10        | 10        | 9         | 9         | 1         | ...       | ...       | 10.7           | 67                     | ...                                  | ...         | ...             | ...  |
| 3            | ...     | ...     | ...     | ...     | 3       | ...     | 5        | ...       | ...        | ...         | 1         | ...       | ...       | ...       | ...       | ...       | ...       | ...       | 0.9            | 6                      | ...                                  | ...         | ...             | ...  |
| 4            | ...     | ...     | ...     | ...     | ...     | 5       | 4        | 1         | 1          | ...         | 4         | ...       | 2         | 2         | 1         | ...       | ...       | ...       | 2.0            | 13                     | ...                                  | ...         | ...             | ...  |
| 5            | ...     | ...     | ...     | ...     | 4       | 7       | 7        | 7         | 5          | 4           | 2         | 4         | 8         | 10        | 10        | 9         | 1         | ...       | 7.8            | 50                     | ...                                  | ...         | ...             | ...  |
| 6            | ...     | ...     | ...     | ...     | ...     | ...     | ...      | ...       | ...        | 3           | ...       | 1         | 2         | 3         | 7         | 4         | ...       | ...       | 2.0            | 13                     | ...                                  | ...         | ...             | ...  |
| 7            | ...     | ...     | ...     | 1       | 10      | ...     | 4        | ...       | 8          | 9           | 6         | 10        | 10        | 6         | 8         | 1         | ...       | ...       | 8.0            | 51                     | ...                                  | ...         | ...             | ...  |
| 8            | ...     | ...     | 9       | 10      | 10      | 10      | 6        | 3         | ...        | ...         | 1         | ...       | ...       | ...       | ...       | ...       | ...       | ...       | 4.9            | 32                     | ...                                  | ...         | ...             | ...  |
| 9            | ...     | ...     | ...     | ...     | ...     | 5       | 9        | 4         | 3          | 1           | 2         | 1         | 2         | ...       | 1         | ...       | ...       | ...       | 2.8            | 18                     | ...                                  | ...         | ...             | ...  |
| 10           | ...     | ...     | ...     | ...     | ...     | ...     | 5        | 1         | 1          | ...         | ...       | ...       | ...       | ...       | ...       | ...       | ...       | ...       | 0.7            | 5                      | ...                                  | ...         | ...             | ...  |
| 11           | ...     | ...     | ...     | ...     | ...     | ...     | ...      | ...       | ...        | ...         | ...       | ...       | ...       | ...       | ...       | ...       | ...       | ...       | ...            | ...                    | ...                                  | ...         | ...             | ...  |
| 12           | ...     | ...     | ...     | ...     | ...     | 1       | 1        | 1         | 5          | 9           | 10        | 9         | 5         | ...       | 3         | ...       | ...       | ...       | 4.4            | 29                     | ...                                  | ...         | ...             | ...  |
| 13           | ...     | ...     | 2       | 6       | 8       | 10      | 8        | 8         | 5          | ...         | 4         | ...       | 4         | ...       | ...       | ...       | ...       | ...       | 5.5            | 36                     | ...                                  | ...         | ...             | ...  |
| 14           | ...     | ...     | ...     | ...     | ...     | ...     | ...      | ...       | ...        | ...         | ...       | ...       | ...       | ...       | ...       | ...       | ...       | ...       | ...            | ...                    | ...                                  | ...         | ...             | ...  |
| 15           | ...     | ...     | 3       | 10      | 10      | 10      | 8        | 9         | 7          | 10          | 10        | 10        | 9         | 7         | 5         | ...       | ...       | ...       | 10.8           | 72                     | ...                                  | ...         | ...             | ...  |
| 16           | ...     | ...     | ...     | ...     | ...     | 1       | ...      | ...       | ...        | ...         | ...       | 3         | 10        | 4         | ...       | ...       | ...       | ...       | 1.8            | 12                     | ...                                  | ...         | ...             | ...  |
| 17           | ...     | ...     | ...     | 2       | 1       | ...     | ...      | ...       | ...        | 2           | ...       | ...       | ...       | ...       | ...       | ...       | ...       | ...       | 0.5            | 3                      | ...                                  | ...         | ...             | ...  |
| 18           | ...     | ...     | ...     | ...     | 3       | 3       | 5        | 2         | 1          | 2           | 6         | 8         | 10        | 10        | 6         | ...       | ...       | ...       | 5.6            | 38                     | ...                                  | ...         | ...             | ...  |
| 19           | ...     | ...     | ...     | ...     | ...     | ...     | ...      | 4         | 6          | 1           | ...       | ...       | ...       | ...       | ...       | ...       | ...       | ...       | 1.1            | 7                      | ...                                  | ...         | ...             | ...  |
| 20           | ...     | ...     | ...     | ...     | ...     | ...     | ...      | ...       | ...        | ...         | ...       | ...       | ...       | ...       | ...       | ...       | ...       | ...       | ...            | ...                    | ...                                  | ...         | ...             | ...  |
| 21           | ...     | ...     | ...     | ...     | 2       | ...     | ...      | ...       | 1          | 1           | 1         | 4         | ...       | ...       | ...       | ...       | ...       | ...       | 0.9            | 6                      | ...                                  | ...         | ...             | ...  |
| 22           | ...     | ...     | ...     | ...     | ...     | ...     | 7        | ...       | ...        | ...         | 8         | 1         | ...       | ...       | ...       | ...       | ...       | ...       | 1.6            | 11                     | ...                                  | ...         | ...             | ...  |
| 23           | ...     | ...     | ...     | ...     | 2       | 10      | 7        | 5         | 3          | ...         | ...       | 1         | ...       | ...       | ...       | ...       | ...       | ...       | 2.8            | 19                     | ...                                  | ...         | ...             | ...  |
| 24           | ...     | ...     | ...     | ...     | ...     | 1       | 4        | ...       | ...        | ...         | ...       | 2         | ...       | ...       | 7         | ...       | ...       | ...       | 1.4            | 10                     | ...                                  | ...         | ...             | ...  |
| 25           | ...     | ...     | 3       | ...     | ...     | ...     | ...      | ...       | ...        | ...         | ...       | ...       | ...       | ...       | ...       | ...       | ...       | ...       | 0.3            | 2                      | ...                                  | ...         | ...             | ...  |
| 26           | ...     | ...     | ...     | ...     | ...     | ...     | ...      | ...       | ...        | ...         | ...       | 2         | 4         | 4         | ...       | ...       | ...       | ...       | 1.0            | 7                      | ...                                  | ...         | ...             | ...  |
| 27           | ...     | ...     | ...     | ...     | ...     | 3       | 6        | 10        | 8          | 2           | 7         | 3         | 7         | ...       | ...       | ...       | ...       | ...       | 4.6            | 33                     | ...                                  | ...         | ...             | ...  |
| 28           | ...     | ...     | ...     | ...     | ...     | ...     | ...      | ...       | ...        | ...         | ...       | ...       | ...       | ...       | ...       | ...       | ...       | ...       | ...            | ...                    | ...                                  | ...         | ...             | ...  |
| 29           | ...     | ...     | ...     | ...     | 2       | 1       | ...      | ...       | ...        | ...         | ...       | ...       | ...       | ...       | ...       | ...       | ...       | ...       | 0.3            | 2                      | ...                                  | ...         | ...             | ...  |
| 30           | ...     | ...     | ...     | ...     | ...     | ...     | ...      | ...       | ...        | ...         | ...       | ...       | ...       | ...       | ...       | ...       | ...       | ...       | ...            | ...                    | ...                                  | ...         | ...             | ...  |
| 31           | ...     | ...     | ...     | ...     | ...     | ...     | ...      | ...       | ...        | ...         | 1         | 3         | ...       | ...       | ...       | ...       | ...       | ...       | 0.4            | 3                      | ...                                  | ...         | ...             | ...  |
| Sum.         | ...     | ...     | 1.7     | 3.4     | 6.5     | 8.3     | 9.0      | 7.3       | 6.3        | 5.2         | 5.9       | 7.8       | 7.7       | 6.1       | 6.1       | 1.5       | 0.1       | ...       | 82.9           | —                      | —                                    | —           | —               | —    |
| Mean         | ...     | ...     | .05     | .11     | .21     | .27     | .29      | .24       | .20        | .17         | .19       | .25       | .25       | .20       | .20       | .05       | .00       | ...       | 2.67           | 18                     | —                                    | —           | —               | —    |

DURATION OF BRIGHT SUNSHINE.

For periods of sixty minutes, between the exact hours of Local Apparent Time.

177. Eskdalemuir :  $h_s$  (height of recorder above ground) = 1.5 metres.

September, 1924.

| Day.  | 3 to 4. | 4 to 5. | 5 to 6. | 6 to 7. | 7 to 8. | 8 to 9. | 9 to 10. | 10 to 11. | 11 to Noon | Noon to 13. | 13 to 14. | 14 to 15. | 15 to 16. | 16 to 17. | 17 to 18. | 18 to 19. | 19 to 20. | 20 to 21. | Total for Day. | Per cent. of Possible. | Radiation by Ångström Pyrheliometer. |            |                 |      |
|-------|---------|---------|---------|---------|---------|---------|----------|-----------|------------|-------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|----------------|------------------------|--------------------------------------|------------|-----------------|------|
|       | hr.     | hr.     | hr.     | hr.     | hr.     | hr.     | hr.      | hr.       | hr.        | hr.         | hr.       | hr.       | hr.       | hr.       | hr.       | hr.       | hr.       | hr.       |                |                        | h. m.                                | Intensity. | $p/p_0$ sec. Z. | Sky. |
| 1     | —       | —       | —       | —       | —       | ·5      | ·1       | —         | —          | —           | —         | —         | —         | —         | —         | —         | —         | —         | 0·6            | 4                      | —                                    | —          | —               |      |
| 2     | —       | —       | ·1      | ·6      | 1·0     | 1·0     | 1·0      | ·6        | ·3         | ·8          | ·8        | ·6        | ·6        | 1·0       | ·8        | —         | —         | —         | 9·2            | 67                     | —                                    | —          | —               |      |
| 3     | —       | —       | —       | —       | ·8      | 1·0     | 1·0      | 1·0       | 1·0        | 1·0         | 1·0       | 1·0       | 1·0       | ·9        | ·8        | ·2        | —         | —         | 10·7           | 79                     | —                                    | —          | —               |      |
| 4     | —       | —       | —       | —       | —       | —       | ·4       | —         | —          | 1·0         | 1·0       | ·6        | ·4        | 1·0       | ·7        | ·1        | —         | —         | 6·2            | 46                     | —                                    | —          | —               |      |
| 5     | —       | —       | —       | —       | —       | —       | —        | —         | —          | —           | ·3        | —         | —         | —         | —         | —         | —         | —         | 0·3            | 2                      | —                                    | —          | —               |      |
| 6     | —       | —       | —       | —       | ·4      | ·1      | —        | ·1        | ·1         | ·9          | ·6        | ·1        | ·3        | —         | —         | —         | —         | —         | 2·6            | 19                     | —                                    | —          | —               |      |
| 7     | —       | —       | —       | —       | —       | —       | —        | —         | —          | —           | —         | —         | —         | —         | —         | —         | —         | —         | —              | —                      | —                                    | —          | —               |      |
| 8     | —       | —       | —       | —       | —       | —       | —        | —         | ·1         | ·3          | ·6        | ·8        | ·2        | —         | —         | —         | —         | —         | 2·0            | 15                     | —                                    | —          | —               |      |
| 9     | —       | —       | —       | —       | —       | —       | —        | —         | —          | —           | —         | —         | —         | —         | —         | —         | —         | —         | —              | —                      | —                                    | —          | —               |      |
| 10    | —       | —       | —       | ·9      | 1·0     | 1·0     | 1·0      | ·7        | ·4         | ·9          | ·4        | —         | ·3        | —         | —         | —         | —         | —         | 6·6            | 50                     | —                                    | —          | —               |      |
| 11    | —       | —       | —       | —       | —       | —       | —        | —         | ·8         | ·3          | ·1        | —         | —         | —         | —         | —         | —         | —         | 1·2            | 9                      | —                                    | —          | —               |      |
| 12    | —       | —       | —       | —       | —       | —       | —        | ·5        | ·1         | ·3          | ·2        | ·3        | —         | —         | —         | —         | —         | —         | 1·4            | 11                     | —                                    | —          | —               |      |
| 13    | —       | —       | —       | —       | ·1      | ·1      | —        | —         | ·4         | 1·0         | ·8        | ·9        | ·5        | —         | —         | —         | —         | —         | 3·8            | 29                     | —                                    | —          | —               |      |
| 14    | —       | —       | —       | —       | ·8      | 1·0     | ·9       | ·8        | ·6         | —           | ·2        | ·2        | —         | —         | —         | —         | —         | —         | 4·5            | 35                     | —                                    | —          | —               |      |
| 15    | —       | —       | —       | —       | —       | —       | —        | ·1        | —          | —           | —         | —         | —         | —         | —         | —         | —         | —         | 0·1            | 1                      | —                                    | —          | —               |      |
| 16    | —       | —       | —       | —       | —       | ·1      | ·4       | —         | —          | —           | —         | —         | —         | —         | —         | —         | —         | —         | 0·5            | 4                      | —                                    | —          | —               |      |
| 17    | —       | —       | —       | —       | —       | —       | —        | —         | —          | ·3          | —         | ·5        | ·6        | ·9        | ·4        | —         | —         | —         | 2·7            | 21                     | —                                    | —          | —               |      |
| 18    | —       | —       | —       | ·1      | ·1      | ·1      | ·7       | ·9        | ·9         | ·8          | 1·0       | 1·0       | 1·0       | 1·0       | ·5        | —         | —         | —         | 8·1            | 65                     | —                                    | —          | —               |      |
| 19    | —       | —       | —       | ·1      | ·7      | ·7      | ·7       | ·9        | ·3         | ·2          | —         | —         | ·2        | —         | —         | —         | —         | —         | 3·8            | 31                     | —                                    | —          | —               |      |
| 20    | —       | —       | —       | —       | ·1      | 1·0     | ·7       | ·1        | ·3         | ·1          | —         | —         | —         | —         | —         | —         | —         | —         | 2·3            | 19                     | —                                    | —          | —               |      |
| 21    | —       | —       | —       | —       | ·4      | ·2      | ·6       | ·7        | ·7         | ·8          | 1·0       | ·3        | ·2        | —         | —         | —         | —         | —         | 4·9            | 40                     | —                                    | —          | —               |      |
| 22    | —       | —       | —       | —       | —       | —       | ·1       | ·8        | 1·0        | ·2          | ·7        | 1·0       | ·2        | ·6        | ·4        | —         | —         | —         | 5·0            | 41                     | —                                    | —          | —               |      |
| 23    | —       | —       | —       | —       | —       | —       | —        | —         | —          | —           | —         | —         | —         | —         | —         | —         | —         | —         | —              | —                      | —                                    | —          | —               |      |
| 24    | —       | —       | —       | —       | ·4      | ·2      | ·5       | ·8        | 1·0        | ·9          | ·8        | ·4        | —         | —         | —         | —         | —         | —         | 5·0            | 41                     | —                                    | —          | —               |      |
| 25    | —       | —       | —       | —       | —       | ·5      | ·6       | —         | —          | ·5          | ·7        | —         | ·5        | —         | —         | —         | —         | —         | 2·8            | 23                     | —                                    | —          | —               |      |
| 26    | —       | —       | —       | —       | —       | —       | ·1       | —         | —          | —           | —         | ·4        | ·2        | —         | —         | —         | —         | —         | 0·7            | 6                      | —                                    | —          | —               |      |
| 27    | —       | —       | —       | —       | —       | —       | —        | ·2        | 1·0        | ·4          | ·5        | ·3        | ·2        | ·7        | ·3        | —         | —         | —         | 3·6            | 31                     | —                                    | —          | —               |      |
| 28    | —       | —       | —       | —       | —       | ·2      | ·1       | ·8        | ·6         | ·4          | —         | —         | —         | —         | —         | —         | —         | —         | 2·1            | 18                     | —                                    | —          | —               |      |
| 29    | —       | —       | —       | —       | —       | —       | —        | —         | —          | —           | —         | —         | —         | —         | —         | —         | —         | —         | —              | —                      | —                                    | —          | —               |      |
| 30    | —       | —       | —       | —       | —       | —       | ·2       | —         | —          | —           | —         | —         | —         | —         | —         | —         | —         | —         | 0·2            | 2                      | —                                    | —          | —               |      |
| Sum.  | —       | —       | 0·1     | 1·7     | 5·8     | 7·7     | 9·1      | 10·1      | 10·8       | 11·4        | 10·5      | 7·2       | 7·0       | 6·0       | 3·3       | 0·2       | —         | —         | 90·9           | —                      | —                                    | —          | —               |      |
| Mean. | —       | —       | ·00     | ·06     | ·19     | ·26     | ·30      | ·34       | ·36        | ·38         | ·35       | ·34       | ·33       | ·30       | ·11       | ·01       | —         | —         | 3·03           | 24                     | —                                    | —          | —               |      |

178. Eskdalemuir :  $h_s$  = 1.5 metres.

October, 1924.

| Day.  | 3 to 4. | 4 to 5. | 5 to 6. | 6 to 7. | 7 to 8. | 8 to 9. | 9 to 10. | 10 to 11. | 11 to Noon | Noon to 13. | 13 to 14. | 14 to 15. | 15 to 16. | 16 to 17. | 17 to 18. | 18 to 19. | 19 to 20. | 20 to 21. | Total for Day. | Per cent. of Possible. | Radiation by Ångström Pyrheliometer. |            |                 |         |
|-------|---------|---------|---------|---------|---------|---------|----------|-----------|------------|-------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|----------------|------------------------|--------------------------------------|------------|-----------------|---------|
|       | hr.     | hr.     | hr.     | hr.     | hr.     | hr.     | hr.      | hr.       | hr.        | hr.         | hr.       | hr.       | hr.       | hr.       | hr.       | hr.       | hr.       | hr.       |                |                        | h. m.                                | Intensity. | $p/p_0$ sec. Z. | Sky.    |
| 1     | —       | —       | —       | ·2      | 1·0     | 1·0     | 1·0      | ·8        | ·7         | ·9          | —         | —         | ·5        | —         | —         | —         | —         | —         | 6·1            | 53                     | 12 22                                | 29         | 1·88            | Ci.-St. |
| 2     | —       | —       | —       | —       | —       | —       | —        | —         | —          | —           | —         | —         | —         | —         | —         | —         | —         | —         | —              | —                      | —                                    | —          | —               | —       |
| 3     | —       | —       | —       | —       | —       | —       | —        | —         | —          | ·4          | —         | ·3        | —         | —         | —         | —         | —         | —         | 0·7            | 6                      | —                                    | —          | —               | —       |
| 4     | —       | —       | —       | —       | —       | ·4      | ·5       | 1·0       | 1·0        | 1·0         | ·1        | —         | ·1        | ·5        | —         | —         | —         | —         | 4·6            | 41                     | —                                    | —          | —               | —       |
| 5     | —       | —       | —       | —       | —       | —       | —        | —         | —          | —           | —         | —         | —         | —         | —         | —         | —         | —         | —              | —                      | —                                    | —          | —               | —       |
| 6     | —       | —       | —       | —       | ·1      | ·7      | ·9       | 1·0       | ·6         | ·5          | ·3        | ·1        | —         | —         | —         | —         | —         | —         | 4·2            | 38                     | —                                    | —          | —               | —       |
| 7     | —       | —       | —       | —       | ·3      | ·3      | ·7       | ·8        | ·5         | ·9          | 1·0       | 1·0       | ·2        | —         | —         | —         | —         | —         | 5·7            | 51                     | —                                    | —          | —               | —       |
| 8     | —       | —       | —       | —       | ·3      | ·8      | 1·0      | 1·0       | 1·0        | 1·0         | ·7        | ·4        | ·8        | ·4        | —         | —         | —         | —         | 7·4            | 67                     | —                                    | —          | —               | —       |
| 9     | —       | —       | —       | —       | ·8      | 1·0     | 1·0      | 1·0       | ·2         | —           | —         | —         | —         | —         | —         | —         | —         | —         | 4·0            | 37                     | —                                    | —          | —               | —       |
| 10    | —       | —       | —       | —       | —       | —       | 1·0      | ·8        | ·9         | ·5          | ·5        | —         | —         | —         | —         | —         | —         | —         | 3·7            | 34                     | —                                    | —          | —               | —       |
| 11    | —       | —       | —       | —       | ·5      | ·6      | ·9       | 1·0       | ·7         | ·5          | —         | —         | —         | —         | —         | —         | —         | —         | 4·2            | 39                     | —                                    | —          | —               | —       |
| 12    | —       | —       | —       | —       | ·2      | ·5      | ·9       | 1·0       | 1·0        | 1·0         | 1·0       | ·6        | ·2        | ·4        | —         | —         | —         | —         | 6·8            | 64                     | —                                    | —          | —               | —       |
| 13    | —       | —       | —       | —       | —       | 1·0     | ·2       | ·1        | 1·0        | 1·0         | 1·0       | 1·0       | ·9        | —         | —         | —         | —         | —         | 6·2            | 58                     | —                                    | —          | —               | —       |
| 14    | —       | —       | —       | —       | ·1      | 1·0     | 1·0      | 1·0       | 1·0        | 1·0         | 1·0       | 1·0       | 1·0       | ·7        | —         | —         | —         | —         | 8·8            | 83                     | 12 44                                | 61         | 2·30            | Haze.   |
| 15    | —       | —       | —       | —       | ·7      | 1·0     | 1·0      | 1·0       | 1·0        | 1·0         | 1·0       | 1·0       | 1·0       | ·6        | —         | —         | —         | —         | 9·3            | 89                     | 12 07                                | 73         | 2·27            | —       |
| 16    | —       | —       | —       | —       | —       | —       | —        | —         | —          | —           | —         | —         | —         | —         | —         | —         | —         | —         | —              | —                      | —                                    | —          | —               | —       |
| 17    | —       | —       | —       | —       | ·7      | 1·0     | 1·0      | ·4        | ·7         | 1·0         | 1·0       | ·9        | ·5        | —         | —         | —         | —         | —         | 7·2            | 70                     | 12 05                                | 80         | 2·33            | F. Cu.  |
| 18    | —       | —       | —       | —       | —       | —       | —        | —         | —          | —           | —         | —         | —         | —         | —         | —         | —         | —         | —              | —                      | —                                    | —          | —               | —       |
| 19    | —       | —       | —       | —       | —       | —       | —        | —         | —          | —           | —         | —         | —         | —         | —         | —         | —         | —         | —              | —                      | —                                    | —          | —               | —       |
| 20    | —       | —       | —       | —       | —       | ·1      | ·6       | ·9        | ·6         | —           | —         | —         | —         | —         | —         | —         | —         | —         | 2·2            | 22                     | 12 11                                | 77         | 2·37            | A. Cu.  |
| 21    | —       | —       | —       | —       | —       | ·2      | —        | —         | ·1         | —           | —         | —         | —         | —         | —         | —         | —         | —         | 0·3            | 3                      | —                                    | —          | —               | —       |
| 22    | —       | —       | —       | —       | ·2      | ·9      | ·4       | ·9        | ·3         | —           | ·2        | —         | —         | —         | —         | —         | —         | —         | 2·9            | 29                     | —                                    | —          | —               | —       |
| 23    | —       | —       | —       | —       | —       | —       | —        | —         | —          | —           | —         | —         | —         | —         | —         | —         | —         | —         | —              | —                      | —                                    | —          | —               | —       |
| 24    | —       | —       | —       | —       | ·5      | 1·0     | 1·0      | 1·0       | 1·0        | 1·0         | 1·0       | 1·0       | ·6        | —         | —         | —         | —         | —         | 8·1            | 83                     | 12 05                                | 80         | 2·56            | Ci.     |
| 25    | —       | —       | —       | —       | —       | —       | —        | —         | —          | —           | —         | —         | —         | —         | —         | —         | —         | —         | —              | —                      | —                                    | —          | —               | —       |
| 26    | —       | —       | —       | —       | —       | ·3      | —        | —         | —          | —           | —         | —         | —         | —         | —         | —         | —         | —         | 0·3            | 3                      | —                                    | —          | —               | —       |
| 27    | —       | —       | —       | —       | —       | —       | —        | —         | —          | —           | —         | —         | —         | —         | —         | —         | —         | —         | —              | —                      | —                                    | —          | —               | —       |
| 28    | —       | —       | —       | —       | —       | —       | —        | —         | —          | —           | —         | —         | —         | —         | —         | —         | —         | —         | —              | —                      | —                                    | —          | —               | —       |
| 29    | —       | —       | —       | —       | —       | —       | —        | —         | —          | —           | —         | —         | —         | —         | —         | —         | —         | —         | —              | —                      | —                                    | —          | —               | —       |
| 30    | —       | —       | —       | —       | —       | —       | —        | —         | —          | —           | —         | —         | —         | —         | —         | —         | —         | —         | —              | —                      | —                                    | —          | —               | —       |
| 31    | —       | —       | —       | —       | —       | —       | ·2       | ·1        | ·2         | ·7          | ·3        | ·1        | —         | —         | —         | —         | —         | —         | 1·6            | 17                     | —                                    | —          | —               | —       |
| Sum.  | —       | —       | —       | 0·2     | 5·1     | 11·5    | 13·0     | 18·8      | 13·1       | 11·1        | 9·7       | 7·3       | 6·7       | 2·8       | —         | —         | —         | —         | 9·43           | —                      | —                                    | —          | —               | —       |
| Mean. | —       | —       | —       | ·01     | ·16     | ·37     | ·42      | ·45       | ·42        | ·36         | ·31       | ·24       | ·22       | ·09       | —         | —         | —         | —         | 3·04           | 29                     | —                                    | —          | —               | —       |

DURATION OF BRIGHT SUNSHINE.

For periods of sixty minutes, between the exact hours of Local Apparent Time.

179. Eskdalemuir : h<sub>s</sub> (height of recorder above ground) = 1.5 metres.

November, 1924.

Table for November 1924 at Eskdalemuir. Columns include Day, time intervals (3 to 4, 4 to 5, etc.), Total for Day, Per cent. of Possible, and Radiation by Ångström Pyrheliometer (Time G.M.T., Intensity, p/p<sub>0</sub> sec. Z., Sky).

180. Eskdalemuir : h<sub>s</sub> = 1.5 metres.

December, 1924.

Table for December 1924 at Eskdalemuir. Columns include Day, time intervals, Total for Day, Per cent. of Possible, and Radiation by Ångström Pyrheliometer. Includes an Annual Total row at the bottom.

Direction expressed in degrees from North (E = 90°, S = 180°, W = 270°, N = 360°). Speed in metres per second.

181. Eskdalemuir :

H<sub>a</sub> (height of anemograph above M.S.L.) = Height of ground above

| Day.     | 1.  |      | 2.  |      | 3.  |      | 4.  |      | 5.  |      | 6.  |      | 7.  |      | 8.  |      | 9.  |      | 10. |      | 11. |      | Noon. |      |
|----------|-----|------|-----|------|-----|------|-----|------|-----|------|-----|------|-----|------|-----|------|-----|------|-----|------|-----|------|-------|------|
|          | °   | m/s. | °   | m/s. | °   | m/s. | °   | m/s. | °   | m/s. | °   | m/s. | °   | m/s. | °   | m/s. | °   | m/s. | °   | m/s. | °   | m/s. | °     | m/s. |
| 1        | 310 | 4.1  | 300 | 5.3  | 270 | 5.2  | 240 | 4.5  | 280 | 4.9  | 280 | 2.5  | 300 | 5.0  | 300 | 5.1  | 200 | 3.5  | 160 | 2.6  | 300 | 3.4  | 320   | 3.9  |
| 2        | 180 | 2.0  | 190 | 2.6  | 180 | 2.0  | 210 | 3.3  | 190 | 2.1  | 190 | 3.0  | 190 | 2.1  | 180 | 2.1  | —   | 1.0  | 180 | 2.0  | 230 | 2.5  | 230   | 1.9  |
| 3        | 280 | 6.0  | 290 | 6.6  | 290 | 7.1  | 290 | 4.6  | 290 | 5.1  | 260 | 3.0  | 240 | 2.1  | 240 | 3.1  | 260 | 4.0  | 250 | 2.0  | 270 | 2.6  | 270   | 1.8  |
| 4        | —   | 1.1  | —   | 1.1  | —   | 1.0  | —   | 1.0  | —   | 1.0  | —   | 1.0  | —   | 0.4  | —   | 0.4  | —   | 0.4  | —   | 0.0  | —   | 0.3  | 170   | 2.0  |
| 5        | 170 | 1.9  | 170 | 1.9  | 170 | 1.9  | 180 | 4.0  | 180 | 6.6  | 180 | 8.9  | 180 | 10.1 | 190 | 12.0 | 200 | 10.9 | 210 | 12.4 | 200 | 9.6  | 200   | 9.1  |
| 6        | 190 | 9.0  | 190 | 6.4  | 190 | 6.3  | 190 | 6.0  | 190 | 6.4  | 180 | 3.9  | 170 | 4.5  | 170 | 3.9  | 180 | 5.1  | 180 | 6.1  | 170 | 6.0  | 170   | 5.3  |
| 7        | 80  | 2.1  | 140 | 4.3  | 150 | 5.0  | 150 | 5.8  | 160 | 5.4  | 150 | 5.5  | 150 | 3.8  | —   | 1.1  | 140 | 2.2  | 140 | 3.6  | 140 | 2.4  | 140   | 3.6  |
| 8        | 50  | 2.9  | 80  | 5.1  | 90  | 8.4  | 100 | 7.7  | 100 | 9.0  | 90  | 9.6  | 90  | 10.1 | 90  | 9.5  | 90  | 10.9 | 100 | 13.5 | 90  | 12.6 | 90    | 12.4 |
| 9        | 60  | 10.8 | 60  | 9.4  | 50  | 8.0  | 50  | 7.5  | 50  | 6.9  | 30  | 5.1  | 20  | 6.2  | 20  | 4.9  | 10  | 5.9  | 30  | 7.0  | 30  | 6.9  | 50    | 7.0  |
| 10       | 100 | 5.0  | 110 | 6.4  | 110 | 8.5  | 110 | 9.4  | 110 | 9.9  | 110 | 8.3  | 110 | 8.5  | 110 | 8.1  | 110 | 6.0  | 120 | 2.6  | —   | 1.0  | —     | 1.0  |
| 11       | —   | 0.4  | —   | 0.5  | —   | 1.5  | —   | 1.2  | —   | 1.1  | —   | 1.4  | —   | 0.6  | —   | 1.5  | —   | 1.5  | —   | 1.4  | —   | 1.4  | —     | 1.3  |
| 12       | 170 | 10.9 | 190 | 12.6 | 200 | 13.0 | 220 | 10.6 | 220 | 8.5  | 220 | 8.5  | 220 | 9.5  | 220 | 11.1 | 210 | 11.6 | 210 | 11.0 | 210 | 10.5 | 220   | 11.6 |
| 13       | 30  | 1.8  | —   | 1.5  | 180 | 3.2  | 190 | 4.9  | 170 | 5.3  | 160 | 4.5  | 150 | 4.4  | 160 | 5.4  | 160 | 6.6  | 170 | 9.0  | 180 | 11.6 | 190   | 17.1 |
| 14       | 210 | 8.0  | 210 | 5.7  | 220 | 2.6  | 180 | 2.5  | 180 | 2.3  | 180 | 2.7  | 190 | 2.7  | 220 | 3.0  | 200 | 2.7  | 210 | 2.1  | 190 | 2.4  | 200   | 2.4  |
| 15       | —   | 1.1  | —   | 0.5  | —   | 1.5  | 50  | 1.7  | —   | 0.5  | —   | 1.5  | —   | 0.6  | 130 | 3.0  | 140 | 4.3  | 150 | 2.3  | 130 | 3.0  | 120   | 2.4  |
| 16       | 120 | 5.0  | 100 | 7.3  | 90  | 5.1  | 10  | 2.0  | 20  | 2.6  | 20  | 2.7  | 30  | 3.4  | 30  | 3.8  | 50  | 3.8  | 60  | 5.2  | 50  | 4.5  | 50    | 4.6  |
| 17       | 30  | 2.4  | 80  | 4.0  | 70  | 4.1  | 50  | 3.0  | 50  | 6.8  | 70  | 6.1  | 70  | 6.3  | 80  | 5.5  | 80  | 5.5  | 100 | 5.8  | 100 | 7.0  | 100   | 6.0  |
| 18       | 70  | 3.0  | 60  | 3.0  | 60  | 3.6  | 70  | 4.1  | 60  | 3.0  | 30  | 3.1  | 30  | 3.2  | 20  | 2.7  | 360 | 2.6  | 360 | 2.2  | 360 | 1.6  | —     | 1.5  |
| 19       | 210 | 9.2  | 210 | 9.3  | 220 | 8.4  | 210 | 9.4  | 200 | 8.4  | 210 | 9.0  | 210 | 9.5  | 220 | 9.8  | 210 | 8.0  | 210 | 7.9  | 220 | 8.5  | 220   | 9.0  |
| 20       | 270 | 9.6  | 260 | 9.6  | 270 | 10.0 | 270 | 13.0 | 280 | 13.4 | †   | 10.8 | 290 | 10.5 | 290 | 10.3 | 290 | 10.9 | 270 | 5.1  | 260 | 7.1  | 260   | 5.4  |
| 21       | —   | 0.6  | —   | 0.4  | —   | 0.4  | —   | 1.0  | —   | 0.9  | —   | 0.8  | —   | 0.5  | —   | 1.4  | —   | 1.5  | 170 | 2.1  | 160 | 3.3  | 160   | 4.3  |
| 22       | 160 | 3.9  | 160 | 5.0  | 160 | 5.5  | 160 | 5.4  | 160 | 5.4  | 170 | 5.0  | 170 | 4.6  | 170 | 5.1  | 170 | 5.0  | 180 | 5.4  | 180 | 5.5  | 180   | 5.2  |
| 23       | 210 | 2.5  | 210 | 1.6  | 210 | 2.1  | —   | 1.5  | —   | 1.0  | 210 | 1.9  | 200 | 2.4  | 170 | 1.6  | 180 | 3.5  | 190 | 1.9  | 180 | 3.5  | 200   | 3.9  |
| 24       | 190 | 9.2  | 200 | 10.4 | 200 | 10.6 | 200 | 10.3 | 200 | 12.0 | 200 | 11.4 | 200 | 10.9 | 200 | 11.0 | 210 | 10.0 | 200 | 10.0 | 210 | 8.5  | 200   | 7.1  |
| 25       | 190 | 1.9  | 150 | 2.9  | 160 | 3.0  | 230 | 5.2  | 200 | 4.3  | 230 | 4.3  | 210 | 4.6  | 170 | 4.5  | 170 | 4.0  | 190 | 4.6  | 200 | 7.0  | 200   | 7.8  |
| 26       | 190 | 6.1  | 180 | 3.8  | 190 | 7.6  | 190 | 10.0 | 190 | 11.9 | 190 | 11.6 | 200 | 12.5 | 200 | 13.3 | 200 | 13.5 | 210 | 14.8 | 210 | 15.0 | 210   | 15.2 |
| 27       | 270 | 7.9  | 270 | 10.1 | 280 | 10.2 | 280 | 9.1  | 280 | 7.7  | 280 | 8.6  | 280 | 7.6  | 280 | 6.9  | 280 | 8.0  | 270 | 7.0  | 270 | 7.3  | 270   | 6.6  |
| 28       | 280 | 8.4  | 290 | 9.0  | 290 | 10.2 | 290 | 11.2 | 300 | 10.5 | 290 | 10.4 | 300 | 5.0  | 320 | 4.1  | 300 | 5.9  | 300 | 9.5  | 280 | 8.9  | 280   | 7.1  |
| 29       | 220 | 5.1  | 220 | 4.9  | 210 | 5.6  | 220 | 4.5  | 210 | 4.4  | 240 | 4.6  | 230 | 6.0  | 230 | 5.1  | 240 | 5.6  | 260 | 7.7  | 260 | 7.0  | 260   | 5.4  |
| 30       | 210 | 4.2  | 200 | 4.5  | 210 | 5.9  | 220 | 6.7  | 230 | 7.4  | 240 | 7.4  | 220 | 6.7  | 220 | 6.5  | 210 | 8.9  | 210 | 8.3  | 210 | 8.7  | 230   | 10.5 |
| 31       | 200 | 5.0  | 200 | 5.5  | 200 | 6.3  | 200 | 6.3  | 200 | 6.7  | 200 | 9.2  | 200 | 9.0  | 200 | 9.0  | 200 | 9.4  | 200 | 8.9  | 210 | 10.6 | 200   | 10.5 |
| Mean ... | —   | 4.9  | —   | 5.2  | —   | 5.6  | —   | 5.7  | —   | 5.9  | —   | 5.7  | —   | 5.6  | —   | 5.6  | —   | 5.9  | —   | 5.9  | —   | 6.1  | —     | 6.2  |

182. Eskdalemuir : H<sub>a</sub> = 235 metres + 15 metres.

| Day. | 1.  |      | 2.  |      | 3.  |      | 4.  |      | 5.  |      | 6.  |      | 7.  |      | 8.  |      | 9.  |      | 10. |      | 11. |      | Noon. |      |
|------|-----|------|-----|------|-----|------|-----|------|-----|------|-----|------|-----|------|-----|------|-----|------|-----|------|-----|------|-------|------|
|      | °   | m/s. | °   | m/s. | °   | m/s. | °   | m/s. | °   | m/s. | °   | m/s. | °   | m/s. | °   | m/s. | °   | m/s. | °   | m/s. | °   | m/s. | °     | m/s. |
| 1    | 260 | 3.2  | 240 | 2.9  | 230 | 2.6  | 230 | 3.6  | 190 | 1.7  | 170 | 1.6  | 170 | 2.4  | 200 | 3.9  | 210 | 3.5  | 210 | 5.0  | 200 | 4.9  | 200   | 5.1  |
| 2    | 260 | 11.0 | 260 | 11.6 | 260 | 11.7 | 260 | 12.1 | 260 | 11.9 | 270 | 12.5 | 270 | 11.6 | 270 | 11.0 | 270 | 10.1 | 270 | 10.3 | 270 | 10.1 | 270   | 9.5  |
| 3    | 280 | 9.7  | 290 | 10.0 | 290 | 11.4 | 300 | 11.6 | 300 | 9.6  | 300 | 10.7 | 300 | 9.2  | 290 | 8.2  | 280 | 7.3  | 270 | 9.7  | 270 | 13.5 | 280   | 14.1 |
| 4    | 270 | 6.6  | 260 | 5.6  | 270 | 6.5  | 270 | 5.5  | 280 | 6.7  | 270 | 4.9  | 280 | 8.6  | 270 | 10.5 | 270 | 11.1 | 260 | 8.4  | 270 | 7.4  | 270   | 7.4  |
| 5    | 270 | 11.8 | 270 | 11.7 | †   | 14.4 | †   | 15.1 | †   | 14.8 | †   | 13.8 | 270 | 13.9 | 270 | 12.5 | 270 | 12.5 | 270 | 14.7 | 270 | 14.9 | 270   | 14.4 |
| 6    | 270 | 6.0  | 280 | 6.5  | 280 | 7.0  | 280 | 7.2  | †   | 7.0  | 270 | 7.8  | 280 | 8.3  | 290 | 8.0  | 300 | 7.3  | 290 | 8.1  | 290 | 9.1  | 300   | 10.2 |
| 7    | 290 | 9.2  | 290 | 7.8  | 280 | 4.1  | 270 | 3.0  | 270 | 2.2  | 260 | 2.5  | 270 | 2.5  | 260 | 2.9  | 270 | 3.0  | 230 | 4.4  | 230 | 4.8  | 240   | 4.0  |
| 8    | 290 | 3.7  | 180 | 4.0  | 180 | 3.6  | 180 | 2.6  | 160 | 3.4  | 150 | 3.6  | 160 | 4.9  | 160 | 5.1  | 150 | 6.0  | 160 | 5.8  | 160 | 6.0  | 140   | 5.5  |
| 9    | 150 | 5.9  | 140 | 7.0  | 140 | 8.4  | 120 | 6.1  | 120 | 6.9  | 120 | 5.6  | 110 | 3.3  | 100 | 4.5  | 100 | 6.5  | 120 | 11.1 | 110 | 10.4 | 110   | 10.1 |
| 10   | —   | 0.2  | —   | 1.4  | —   | 1.4  | —   | 1.3  | —   | 1.3  | —   | 1.3  | —   | 1.5  | 360 | 2.0  | 10  | 1.9  | 50  | 4.6  | 30  | 4.4  | 20    | 5.1  |
| 11   | 40  | †    | 40  | †    | 30  | †    | 30  | †    | 70  | 5.4  | 70  | 5.0  | 50  | 4.4  | 50  | 4.1  | 30  | 4.8  | 50  | 4.7  | 70  | 5.9  | 60    | 6.5  |
| 12   | 50  | 4.0  | 50  | 4.5  | 50  | 4.0  | 60  | 4.0  | 70  | 4.9  | 70  | 4.8  | 60  | 4.9  | 60  | 4.2  | 50  | 4.8  | 80  | 5.6  | 80  | 5.4  | 80    | 5.5  |
| 13   | 80  | 8.5  | 80  | 8.9  | 60  | 9.5  | 70  | 8.3  | 80  | 9.4  | 60  | 10.0 | 70  | 9.1  | 50  | 9.6  | 50  | 8.6  | 60  | 7.0  | 70  | 8.4  | 80    | 9.5  |
| 14   | 80  | 3.5  | 90  | 4.0  | 100 | 3.4  | 100 | 3.1  | 100 | 3.4  | 120 | 3.4  | 140 | 2.0  | 160 | 3.5  | 180 | 3.9  | 190 | 3.8  | 210 | 4.9  | 200   | 5.3  |
| 15   | 170 | 2.8  | 190 | 3.0  | 140 | 3.0  | 200 | 5.0  | 190 | 4.5  | 210 | 3.7  | 220 | 5.0  | 240 | 3.4  | 250 | 4.0  | 220 | 4.4  | 210 | 3.0  | 230   | 3.0  |
| 16   | 320 | 6.8  | 320 | 5.6  | 320 | 5.4  | 320 | 3.4  | 320 | 4.3  | 320 | 5.0  | 320 | 2.6  | 320 | 3.3  | 360 | 1.6  | 30  | 2.4  | 30  | 3.0  | 60    | 2.9  |
| 17   | 230 | 2.8  | 160 | 2.5  | 150 | 3.8  | 150 | 3.6  | 160 | 3.9  | 180 | 4.0  | 230 | 5.9  | 220 | 5.4  | 210 | 4.6  | 200 | 5.2  | 200 | 5.5  | 220   | 6.9  |
| 18   | 220 | 7.8  | 210 | 5.3  | 180 | 3.0  | 230 | 3.6  | 290 | 6.6  | 290 | 4.8  | 320 | 7.0  | 340 | 6.4  | 360 | 11.3 | 10  | 10.9 | 10  | 10.5 | 10    | 10.0 |
| 19   | 340 | 8.0  | 340 | 6.0  | 340 | 6.1  | 330 | 5.1  | 340 | 5.6  | 340 | 5.6  | 330 | 4.6  | 330 | 4.0  | 360 | 4.9  | 360 | 5.5  | 360 | 5.4  | 360   | 4.5  |
| 20   | —   | 0.3  | —   | 0.4  | —   | 0.5  | —   | 0.4  | —   | 0.4  | —   | 0.4  | —   | 0.5  | —   | 0.5  | —   | 0.6  | 150 | 3.9  | 210 | 5.0  | 210   | 5.6  |
| 21   | 280 | 3.5  | 270 | 3.9  | 280 | 3.6  | 270 | 4.2  | 250 | 4.1  | 250 | 5.1  | 240 | 4.5  | 250 | 4.6  | 290 | 4.3  | 330 | 4.1  | 330 | 5.0  | 360   | 5.1  |
| 22   | 360 | 3.1  | †   | 2.6  | †   | 3.1  | †   | 3.5  | †   | 2.6  | —   | 1.1  | 340 | 3.7  | 340 | 3.6  | 340 | 4.4  | 360 | 5.6  | 360 | 6.5  | 360   | 6.5  |
| 23   | 330 | 2.9  | 340 | 3.9  | 340 | 3.0  | 340 | 2.6  | 340 | 2.6  | 340 | 2.5  | 350 | 2.4  | 320 | 2.2  | 310 | 2.9  | 310 | 3.9  | 280 | 4.0  | 300   | 4.2  |
| 24   | 270 | 8.0  | 270 | 9.5  | 260 | 8.8  | 250 | 8.5  | 270 | 8.5  | 280 | 8.7  | 300 | 8.4  | 290 | 7.2  | 300 | 7.0  | 310 | 7.0  | 320 | 6.9  | 320   | 6.0  |
| 25   | 330 | 7.5  | 340 | 6.1  | 330 | 6.0  | 360 | 4.1  | 360 | 7.0  | 360 | 7.0  | 3   |      |     |      |     |      |     |      |     |      |       |      |



Direction expressed in degrees from North (E = 90°, S = 180°, W = 270°, N = 360°). Speed in metres per second.

183. Eskdalemuir :

H<sub>a</sub> (height of anemograph above M.S.L.) = Height of ground above

| Day.      | 1.  |      | 2.  |      | 3.  |      | 4.  |      | 5.  |      | 6.  |      | 7.  |      | 8.  |      | 9.  |      | 10. |      | 11. |      | Noon. |      |     |
|-----------|-----|------|-----|------|-----|------|-----|------|-----|------|-----|------|-----|------|-----|------|-----|------|-----|------|-----|------|-------|------|-----|
|           | °   | m/s. | °   | m/s. | °   | m/s. | °   | m/s. | °   | m/s. | °   | m/s. | °   | m/s. | °   | m/s. | °   | m/s. | °   | m/s. | °   | m/s. | °     | m/s. |     |
| 1         | †   | 19.9 | †   | 19.8 | †   | 16.0 | †   | 13.4 | †   | 12.3 | †   | 14.8 | †   | 15.0 | 310 | 14.7 | 310 | 14.2 | 300 | 12.8 | 300 | 13.0 | 300   | 12.9 |     |
| 2         | —   | 1.3  | —   | 1.0  | —   | 1.1  | —   | 1.2  | —   | 1.4  | —   | 1.3  | —   | 1.2  | —   | 1.1  | —   | 0.3  | —   | 0.3  | †   | 2.5  | 110   | 2.8  |     |
| 3         | —   | †    | —   | †    | —   | †    | —   | †    | —   | †    | —   | †    | —   | †    | —   | †    | —   | 160  | 2.6 | 230  | 4.7 | 240  | 5.5   |      |     |
| 4         | —   | †    | —   | †    | —   | †    | —   | †    | —   | †    | —   | †    | —   | †    | —   | †    | —   | 180  | 1.6 | 280  | 2.6 | 310  | 2.9   |      |     |
| 5         | 180 | 1.6  | —   | †    | —   | †    | —   | †    | —   | †    | —   | †    | —   | †    | —   | †    | —   | †    | †   | —    | 1.4 | —    | 0.4   |      |     |
| 6         | 10  | 3.6  | †   | 2.8  | —   | 0.6  | —   | 0.4  | —   | 0.3  | —   | 0.3  | —   | 0.3  | —   | 0.3  | —   | 0.5  | —   | 0.4  | 210 | 1.8  | 200   | 2.9  |     |
| 7         | —   | 0.1  | 200 | 3.5  | 210 | 3.0  | 210 | 5.1  | 210 | 4.9  | 200 | 5.0  | 210 | 5.4  | 210 | 8.6  | 220 | 10.5 | 210 | 10.1 | 210 | 10.6 | 210   | 11.1 |     |
| 8         | 220 | 9.5  | 220 | 9.1  | 220 | 7.9  | 220 | 8.0  | 210 | 5.9  | 210 | 4.4  | 200 | 2.0  | —   | 1.3  | —   | 1.1  | 240 | 4.5  | 230 | 7.4  | 220   | 7.5  |     |
| 9         | —   | 0.1  | —   | 0.0  | —   | 0.1  | —   | 0.0  | —   | 0.0  | —   | 0.0  | —   | 0.1  | —   | 0.0  | —   | 190  | 1.5 | 200  | 3.4 | 230  | 8.0   |      |     |
| 10        | —   | 0.0  | —   | 0.0  | —   | 0.1  | —   | 0.1  | —   | 0.1  | —   | 0.2  | —   | 0.0  | —   | 0.1  | —   | 0.1  | —   | 0.1  | —   | 1.0  | 190   | 2.5  |     |
| 11        | —   | 1.5  | —   | 1.0  | —   | 1.0  | —   | 1.0  | —   | 0.7  | —   | 0.6  | —   | 0.9  | —   | 1.1  | —   | 0.5  | 200 | 2.4  | 170 | 4.0  | 180   | 4.5  |     |
| 12        | 320 | 1.6  | —   | 1.5  | —   | 1.1  | —   | 1.2  | —   | 1.4  | 340 | 1.9  | —   | 1.4  | —   | 0.5  | —   | 0.3  | 190 | 2.9  | 190 | 4.8  | 190   | 6.6  |     |
| 13        | —   | 0.3  | —   | 0.4  | —   | 1.0  | —   | 1.5  | 340 | 1.7  | 350 | 2.1  | 360 | 1.7  | —   | 1.1  | —   | 0.9  | 150 | 6.5  | 150 | 6.3  | 160   | 6.6  |     |
| 14        | —   | 1.0  | —   | 1.5  | —   | 1.4  | —   | 0.9  | —   | 0.5  | —   | 0.5  | —   | 0.8  | —   | 0.3  | —   | 0.2  | —   | 0.2  | 200 | 3.0  | 180   | 5.0  |     |
| 15        | —   | 0.4  | —   | 1.3  | —   | 1.2  | —   | 0.5  | —   | 1.0  | —   | 1.5  | 240 | 4.5  | 260 | 5.2  | 240 | 4.5  | 200 | 4.5  | 230 | 4.5  | 250   | 3.8  |     |
| 16        | —   | 0.2  | —   | 0.4  | —   | 0.9  | †   | 3.2  | †   | 4.4  | †   | 2.6  | —   | 2.3  | —   | 0.9  | 180 | 2.2  | 350 | 5.1  | 360 | 5.0  | †     | 5.8  |     |
| 17        | —   | 1.5  | —   | 0.9  | —   | 1.4  | 360 | 4.0  | 350 | 3.1  | —   | 0.1  | —   | 0.1  | —   | 0.5  | —   | 1.5  | 10  | 5.0  | 360 | 4.9  | 350   | 4.0  |     |
| 18        | —   | 0.5  | —   | 0.1  | —   | 0.1  | —   | 0.1  | —   | 0.2  | —   | 1.2  | 200 | 3.0  | 160 | 3.8  | 50  | 8.1  | 330 | 6.0  | 330 | 4.3  | 290   | 4.4  |     |
| 19        | 230 | 3.2  | 220 | 3.6  | 210 | 5.0  | 220 | 5.5  | 200 | 5.8  | 200 | 6.7  | 150 | 5.2  | 140 | 6.2  | 150 | 6.1  | 230 | 2.3  | 230 | 2.3  | —     | 1.5  |     |
| 20        | 350 | 1.4  | 350 | 2.6  | 350 | 2.5  | 350 | 2.8  | 350 | 2.5  | 350 | 2.4  | 350 | 3.0  | 350 | 2.5  | 100 | 4.3  | 130 | 5.0  | 150 | 4.4  | 160   | 3.5  |     |
| 21        | —   | 1.0  | —   | 0.4  | —   | 0.8  | —   | 0.9  | —   | 1.1  | —   | 1.1  | —   | 1.0  | —   | 0.4  | —   | 0.5  | —   | 0.1  | —   | 0.2  | —     | 1.3  |     |
| 22        | —   | 0.1  | —   | 0.4  | —   | 0.1  | 280 | 0.3  | 320 | 1.8  | 340 | 2.4  | 340 | 2.4  | 340 | 2.6  | —   | 1.5  | —   | 1.2  | —   | 0.6  | —     | 1.4  |     |
| 23        | 200 | 2.5  | —   | 1.5  | —   | 0.2  | 310 | 1.8  | 350 | 1.6  | 360 | 1.6  | 350 | 3.9  | 340 | 6.4  | 30  | 7.0  | 40  | 5.5  | 30  | 4.9  | 30    | 4.9  |     |
| 24        | 350 | 2.1  | 340 | 4.0  | 330 | 3.8  | 340 | 3.9  | 350 | 4.0  | 340 | 4.0  | †   | 6.1  | †   | 6.5  | †   | 5.4  | †   | 5.6  | †   | 6.4  | †     | 6.0  |     |
| 25        | 20  | 4.6  | 20  | 5.3  | 20  | 5.0  | 20  | 4.7  | 20  | 4.6  | 20  | 4.4  | 20  | 4.5  | 20  | 4.0  | 20  | 3.5  | 20  | 3.3  | 20  | 4.2  | 20    | 4.5  |     |
| 26        | 10  | 4.4  | 10  | 4.3  | 10  | 4.5  | 10  | 4.4  | 10  | 4.0  | 10  | 4.3  | 10  | 4.0  | 10  | 4.0  | 20  | 6.3  | 30  | 6.4  | 50  | 6.8  | 50    | 6.1  |     |
| 27        | 30  | 3.5  | 30  | 3.1  | 30  | 3.1  | 30  | 2.8  | 30  | 3.0  | 40  | 3.1  | 50  | 3.1  | 50  | 3.0  | 60  | 3.6  | 70  | 3.2  | 50  | 3.5  | 60    | 3.2  |     |
| 28        | —   | 0.3  | 350 | 1.8  | 340 | 1.7  | 330 | 2.0  | 340 | 2.4  | 350 | 4.1  | 360 | 3.6  | 360 | 4.4  | 10  | 4.4  | 20  | 4.1  | 20  | 4.3  | 30    | 4.3  |     |
| 29        | 20  | 4.0  | 20  | 4.4  | —   | 1.0  | —   | 0.8  | —   | 0.4  | —   | 0.2  | —   | 0.2  | —   | 10   | 2.2 | 20   | 6.1 | 20   | 6.5 | 20   | 6.4   | 20   | 5.6 |
| 30        | —   | 0.6  | 340 | 2.2  | 360 | 3.4  | 360 | 3.0  | 360 | 3.5  | 350 | 3.5  | 360 | 3.2  | 350 | 3.1  | 350 | 4.5  | 360 | 3.2  | 30  | 3.4  | 360   | 1.6  |     |
| 31        | —   | 0.3  | —   | 1.1  | —   | 0.6  | —   | 0.6  | 340 | 2.2  | 350 | 3.6  | 350 | 2.6  | 340 | 2.2  | 360 | 5.1  | 30  | 4.9  | 30  | 5.4  | 20    | 5.9  |     |
| Mean †... | —   | 2.5  | —   | 2.9  | —   | 2.5  | —   | 2.7  | —   | 2.7  | —   | 2.8  | —   | 3.0  | —   | 3.2  | —   | 3.9  | —   | 4.3  | —   | 4.8  | —     | 5.0  |     |

184. Eskdalemuir : H<sub>a</sub> = 235 metres + 15 metres.

| Day. | 1.  |      | 2.  |      | 3.  |      | 4.  |      | 5.  |      | 6.  |      | 7.  |      | 8.  |      | 9.  |      | 10. |      | 11. |      | Noon. |      |
|------|-----|------|-----|------|-----|------|-----|------|-----|------|-----|------|-----|------|-----|------|-----|------|-----|------|-----|------|-------|------|
|      | °   | m/s. | °   | m/s. | °   | m/s. | °   | m/s. | °   | m/s. | °   | m/s. | °   | m/s. | °   | m/s. | °   | m/s. | °   | m/s. | °   | m/s. | °     | m/s. |
| 1    | 350 | 4.3  | 350 | 4.0  | 360 | 4.0  | 350 | 3.4  | 350 | 3.0  | 360 | 3.1  | 360 | 4.6  | 360 | 6.2  | 360 | 7.2  | 360 | 8.0  | 10  | 7.2  | 10    | 6.6  |
| 2    | —   | 0.8  | —   | 0.8  | —   | 0.2  | —   | 0.6  | 360 | 4.5  | 360 | 4.6  | 360 | 4.0  | 360 | 5.5  | 30  | 5.2  | 50  | 4.5  | 50  | 4.8  | 30    | 4.6  |
| 3    | 20  | 2.2  | —   | 1.4  | —   | 1.0  | —   | 0.6  | —   | 0.8  | —   | 0.8  | —   | 0.7  | —   | 1.4  | 360 | 4.0  | 40  | 5.4  | 50  | 5.7  | 30    | 5.6  |
| 4    | 10  | 6.4  | 10  | 6.1  | 10  | 6.0  | 10  | 6.1  | 10  | 5.8  | 10  | 4.4  | 10  | 4.5  | 40  | 4.4  | 40  | 5.3  | 40  | 4.8  | 40  | 6.7  | 30    | 6.5  |
| 5    | —   | 0.3  | —   | 0.2  | —   | 0.2  | —   | 0.6  | —   | 0.2  | —   | 0.1  | —   | 0.1  | —   | 0.1  | —   | —    | 1.1 | —    | 0.6 | —    | —     | 0.3  |
| 6    | 350 | 2.3  | 350 | 3.8  | —   | 0.2  | —   | 0.1  | —   | 0.2  | —   | 0.1  | —   | 0.2  | —   | 0.2  | —   | 0.2  | —   | 1.5  | 340 | 1.7  | —     | 1.5  |
| 7    | 250 | 3.7  | 210 | 2.1  | 250 | 7.4  | 230 | 6.4  | 210 | 5.0  | 190 | 4.9  | 240 | 4.9  | 220 | 6.6  | 210 | 6.9  | 210 | 7.5  | 210 | 8.0  | 210   | 9.5  |
| 8    | †   | 12.4 | †   | 12.4 | †   | 13.5 | †   | 12.0 | †   | 11.0 | †   | 12.0 | †   | 12.0 | 250 | 11.1 | 240 | 12.2 | 240 | 11.5 | 250 | 11.0 | 260   | 10.5 |
| 9    | 260 | 4.0  | 260 | 3.1  | 290 | 4.6  | 290 | 5.4  | 290 | 4.2  | 280 | 2.8  | 290 | 5.1  | 310 | 4.1  | 310 | 3.2  | 300 | 2.6  | —   | 1.5  | 60    | 1.9  |
| 10   | —   | 0.8  | 350 | 1.6  | 340 | 1.6  | —   | 0.4  | —   | 0.2  | —   | 0.2  | —   | 0.5  | —   | 1.5  | 350 | 2.6  | 40  | 5.9  | 40  | 6.2  | 40    | 6.5  |
| 11   | —   | 1.5  | —   | 1.4  | —   | 0.6  | —   | 0.2  | —   | 0.4  | —   | 0.2  | —   | 0.1  | —   | 0.1  | 180 | 2.4  | 190 | 5.9  | 200 | 6.1  | 190   | 6.7  |
| 12   | 340 | 2.0  | 360 | 1.8  | 360 | 1.8  | —   | 1.4  | 340 | 1.8  | 350 | 3.0  | 360 | 2.9  | 360 | 5.2  | 50  | 5.7  | 60  | 4.9  | 20  | 4.5  | 360   | 5.6  |
| 13   | 30  | 2.5  | —   | 1.5  | —   | 1.4  | —   | 1.3  | 40  | 1.8  | —   | 1.1  | —   | 0.5  | —   | 0.5  | 120 | 1.7  | 140 | 6.0  | 160 | 7.1  | 190   | 5.0  |
| 14   | —   | 1.0  | —   | 0.4  | —   | 0.4  | —   | 0.4  | 310 | 2.6  | 340 | 2.8  | 360 | 3.8  | 360 | 2.5  | 360 | 2.6  | 350 | 3.1  | 340 | 2.8  | 340   | 2.0  |
| 15   | —   | 0.4  | 240 | 5.1  | 220 | 4.2  | 190 | 4.0  | 200 | 6.4  | 210 | 9.0  | 210 | 10.0 | 220 | 10.5 | 210 | 11.3 | 230 | 12.3 | 230 | 11.1 | 230   | 9.6  |
| 16   | 250 | 4.5  | 260 | 6.1  | 250 | 6.3  | 260 | 6.5  | 270 | 6.6  | 270 | 7.6  | 270 | 10.0 | 270 | 12.0 | 290 | 13.4 | 290 | 10.1 | 290 | 11.1 | 290   | 10.4 |
| 17   | 310 | 2.2  | 320 | 2.9  | 320 | 3.0  | —   | 0.6  | —   | 0.8  | —   | 0.4  | —   | 0.3  | —   | 1.1  | 110 | 1.7  | 140 | 3.1  | 210 | 2.8  | 240   | 3.6  |
| 18   | —   | 0.0  | 230 | 1.9  | 220 | 3.0  | 220 | 2.1  | 200 | 4.6  | 200 | 5.0  | 190 | 5.8  | 200 | 6.4  | 210 | 7.2  | 220 | 10.3 | 210 | 8.6  | 200   | 8.0  |
| 19   | 220 | 5.0  | 220 | 5.4  | 220 | 5.3  | 210 | 4.0  | 200 | 4.1  | 190 | 4.4  | 190 | 5.4  | 210 | 6.5  | 230 | 6.0  | 220 | 5.8  | 210 | 6.8  | 230   | 6.9  |
| 20   | 180 | 3.0  | 210 | 3.4  | 150 | 3.3  | 150 | 3.4  | 250 | 3.4  | 240 | 6.2  | 230 | 5.8  | 240 | 6.2  | 240 | 6.3  | 200 | 5.9  | 210 | 7.0  | 220   | 6.0  |
| 21   | 230 | 3.6  | 270 | 5.6  | 280 | 5.2  | 280 | 5.2  | 310 | 7.0  | 310 | 9.5  | 300 | 8.5  | 300 | 5.9  | 300 | 8.4  | 290 | 11.5 | 300 | 6.1  | 290   | 3.9  |
| 22   | —   | 0.4  | 210 | 2.6  | 220 | 2.8  | —   | 1.5  | 300 | 4.6  | 300 | 2.6  | 310 | 2.1  | 300 | 5.3  | 310 | 5.2  | 30  | 7.4  | 20  | 5.0  | 20    | 4.7  |
| 23   | —   | 0.8  | —   | 0.4  | —   | 0.0  | —   | 0.1  | —   | 0.2  | —   | 0.2  | —   | 0.0  | —   | 0.0  | 140 | 2.7  | 180 | 1.8  | 180 | 2.7  | 180   | 2.8  |
| 24   | —   | 0.5  | 40  | 2.4  | 20  | 3.4  | 10  | 3.0  | 20  | 3.2  | 20  | 3.7  | 20  | 4.5  | 20  | 4.1  | 20  | 5.1  | 30  | 5.1  | 30  | 3.5  | 20    | 1.8  |
| 25   | 210 | 8.8  | 210 | 9.4  | 210 | 7.4  | 210 | 7.4  | 190 | 6.8  | 190 | 6.8  | 190 | 6.8  | 190 | 6.5  | 180 | 5.5  | 170 | 5.1  | 150 | 5.1  | 150   | 5.2  |
| 26   | 170 | 5.0  | 180 | 4.1  | 160 | 4.0  | 150 | 3.9  | 150 | 4.0  | 140 | 4.8  | 130 | 6.1  | 130 | 7.6  | 130 | 7.5  | 140 | 7.4  | 150 | 10.1 | 140   | 9.1  |
| 27   | 200 | 6.4  | 200 | 6.2  | 220 | 6.4  | 250 | 9.5  | 240 | 8.5  | 230 | 6.8  | 230 | 8.6  | 230 | 7.8  | 240 | 8.5  | 220 | 7.8  | 210 | 7.1  | 200   | 6.7  |



Averages for periods of sixty minutes, centred at the exact hours, Greenwich Mean Time.

M.S.L. + h<sub>a</sub> (height of anemograph above ground) = 235 metres + 15 metres.

March, 1924.

| 13. |      | 14. |      | 15. |      | 16. |      | 17. |      | 18. |      | 19. |      | 20. |      | 21. |      | 22. |      | 23. |      | 24. |      | Mean | Day. |    |
|-----|------|-----|------|-----|------|-----|------|-----|------|-----|------|-----|------|-----|------|-----|------|-----|------|-----|------|-----|------|------|------|----|
| °   | m/s. | °   | m/s. | °   | m/s. | °   | m/s. | °   | m/s. | °   | m/s. | °   | m/s. | °   | m/s. | °   | m/s. | °   | m/s. | °   | m/s. | °   | m/s. | m/s. |      |    |
| 300 | 13.0 | 300 | 13.5 | 290 | 11.1 | 290 | 10.6 | 290 | 9.6  | 280 | 6.2  | 270 | 7.6  | 270 | 7.5  | 270 | 5.4  | 260 | 2.9  | 180 | 2.1  | —   | 1.4  | 11.6 | 1    |    |
| 140 | 2.1  | 150 | 1.6  | 150 | 1.6  | 210 | 3.0  | 220 | 3.2  | 350 | 1.7  | —   | 1.3  | —   | 1.5  | —   | 0.9  | —   | 0.9  | —   | †    | —   | †    | —    | 2    |    |
| 240 | 6.0  | 230 | 6.4  | 210 | 5.7  | 220 | 6.0  | 200 | 3.3  | 200 | 2.0  | 190 | 2.5  | 210 | 3.5  | 210 | 2.2  | 190 | 1.7  | 190 | 1.6  | —   | †    | —    | 3    |    |
| 300 | 4.4  | 290 | 6.0  | 300 | 5.1  | 300 | 5.1  | 300 | 3.4  | 300 | 2.5  | 270 | 2.0  | —   | 1.4  | 280 | 3.2  | —   | 1.5  | —   | 1.5  | —   | 1.4  | —    | 4    |    |
| —   | 1.5  | 360 | 2.3  | 360 | 3.8  | 360 | 3.6  | 360 | 2.9  | 360 | 2.6  | 360 | 1.8  | 360 | 2.8  | 360 | 4.1  | 360 | 6.0  | 360 | 5.4  | 360 | 4.5  | —    | 5    |    |
| 200 | 4.6  | 210 | 4.6  | 210 | 5.6  | 210 | 5.4  | 230 | 4.4  | 230 | 1.8  | —   | 0.4  | —   | 0.1  | —   | 0.1  | —   | 0.0  | —   | 0.0  | —   | 0.0  | 1.8  | 6    |    |
| 210 | 10.4 | 210 | 11.4 | 210 | 10.6 | 210 | 9.0  | 210 | 7.5  | 210 | 7.0  | 210 | 7.7  | 220 | 6.9  | 210 | 8.0  | 220 | 8.0  | 220 | 9.0  | 220 | 9.5  | 7.4  | 7    |    |
| 230 | 8.0  | 220 | 8.1  | 220 | 8.6  | 220 | 7.0  | 220 | 5.7  | 220 | 3.5  | 220 | 4.1  | 230 | 4.4  | 220 | 3.7  | 220 | 2.0  | —   | 0.1  | —   | 0.3  | 5.4  | 8    |    |
| 230 | 7.1  | 230 | 7.0  | 220 | 6.3  | 220 | 4.8  | 220 | 3.5  | 200 | 1.8  | —   | 0.6  | —   | 0.1  | —   | 0.2  | —   | 0.1  | —   | 0.1  | —   | 0.0  | 2.2  | 9    |    |
| 190 | 2.7  | 190 | 2.3  | 190 | 2.7  | 190 | 2.7  | —   | 0.9  | 310 | 2.0  | 350 | 2.7  | 350 | 3.9  | 350 | 4.0  | 350 | 1.8  | —   | 1.2  | 350 | 2.0  | 1.3  | 10   |    |
| 170 | 5.6  | 180 | 6.1  | 170 | 5.6  | 170 | 3.9  | 170 | 2.6  | 200 | 2.5  | —   | 1.1  | —   | 0.0  | —   | 0.3  | —   | 1.0  | 310 | 1.7  | 310 | 1.9  | 2.1  | 11   |    |
| 190 | 6.0  | 190 | 6.5  | 200 | 6.1  | 230 | 4.6  | 230 | 1.8  | —   | 1.0  | —   | 0.6  | —   | 0.2  | —   | 1.0  | —   | 0.9  | —   | 0.5  | —   | 0.4  | 2.3  | 12   |    |
| 160 | 6.2  | 170 | 6.2  | 170 | 5.9  | 170 | 5.2  | 170 | 3.2  | —   | 0.5  | —   | 1.5  | —   | 0.9  | —   | 0.6  | —   | 0.7  | —   | 0.7  | —   | 0.4  | 2.6  | 13   |    |
| 220 | 4.5  | 260 | 4.8  | 250 | 5.0  | 260 | 5.5  | 270 | 3.4  | —   | 0.4  | —   | 0.2  | —   | 0.2  | —   | 1.0  | —   | 0.3  | —   | 0.8  | —   | 0.9  | 1.7  | 14   |    |
| 300 | 3.4  | 290 | 3.0  | 300 | 3.4  | 300 | 2.6  | †   | 4.0  | 40  | 3.0  | 20  | 2.7  | 20  | 2.3  | 20  | 2.4  | —   | 0.4  | —   | 0.2  | —   | 0.2  | 2.5  | 15   |    |
| 30  | 5.4  | 50  | 5.0  | 30  | 4.5  | 30  | 5.1  | †   | 4.5  | 360 | 3.2  | 360 | 3.1  | 330 | 2.9  | 360 | 3.5  | 340 | 2.8  | 310 | 2.3  | —   | 0.4  | 3.1  | 16   |    |
| 360 | 3.9  | 360 | 4.9  | 350 | 5.2  | 350 | 3.6  | 350 | 3.4  | 340 | 2.6  | —   | 1.3  | —   | 0.3  | —   | 0.1  | —   | 0.3  | —   | 0.7  | —   | 0.3  | 2.2  | 17   |    |
| 290 | 4.6  | 290 | 4.5  | 280 | 4.5  | 290 | 5.1  | 290 | 5.0  | 290 | 3.6  | —   | 0.3  | —   | 0.1  | —   | 0.2  | —   | 0.1  | —   | 0.1  | —   | 0.1  | 2.5  | 18   |    |
| —   | 1.2  | 30  | 4.0  | 30  | 4.9  | 30  | 4.7  | 30  | 3.4  | 30  | 4.9  | 40  | 4.7  | 20  | 3.6  | 20  | 2.4  | 20  | 1.9  | 20  | 2.5  | —   | 1.5  | 3.9  | 19   |    |
| 160 | 3.6  | 150 | 4.0  | 150 | 4.7  | 140 | 4.2  | 140 | 3.0  | —   | 1.3  | —   | 0.1  | —   | 0.8  | —   | 1.1  | —   | 1.2  | —   | 1.3  | —   | 1.5  | 2.7  | 20   |    |
| 130 | 1.7  | 140 | 1.6  | 160 | 1.7  | 180 | 2.4  | 200 | 3.1  | 230 | 2.0  | —   | 0.1  | —   | 0.0  | —   | 0.0  | —   | 0.0  | —   | 0.0  | —   | 0.0  | 0.9  | 21   |    |
| 190 | 5.9  | 200 | 5.7  | 200 | 5.4  | 200 | 7.0  | 200 | 5.0  | 200 | 5.7  | 200 | 5.1  | 200 | 4.7  | 190 | 3.2  | 200 | 5.2  | 200 | 5.2  | 200 | 5.2  | 3.6  | 3.1  | 22 |
| 30  | 5.0  | 20  | 4.5  | 10  | 4.5  | 10  | 4.1  | 10  | 2.8  | 20  | 1.8  | †   | 4.5  | †   | 4.9  | †   | 4.6  | 320 | 3.3  | 350 | 5.1  | 350 | 3.0  | 3.8  | 23   |    |
| 20  | 5.0  | 20  | 5.8  | 20  | 6.2  | 20  | 6.3  | 20  | 5.5  | 20  | 4.6  | 20  | 5.0  | 20  | 4.6  | 20  | 5.0  | 20  | 3.9  | 20  | 4.5  | 20  | 5.0  | 4.9  | 24   |    |
| 30  | 4.8  | 30  | 5.0  | 30  | 4.8  | 20  | 4.8  | 20  | 4.7  | 20  | 4.5  | 20  | 4.1  | 10  | 4.0  | 20  | 4.5  | 20  | 4.6  | 10  | 4.3  | 10  | 4.4  | 4.5  | 25   |    |
| 40  | 5.5  | 40  | 6.3  | 40  | 5.9  | 50  | 4.9  | 60  | 4.0  | 60  | 3.8  | 60  | 3.8  | 40  | 3.0  | 30  | 3.5  | 50  | 3.0  | 60  | 3.2  | 40  | 3.5  | 4.6  | 26   |    |
| 60  | 3.0  | 50  | 3.1  | 80  | 3.1  | 80  | 3.7  | 90  | 3.2  | 90  | 2.5  | —   | 0.5  | —   | 0.1  | —   | 0.9  | —   | 0.4  | —   | 0.2  | —   | 0.2  | 2.5  | 27   |    |
| 20  | 4.5  | 20  | 4.4  | 20  | 4.6  | 20  | 3.6  | 20  | 3.8  | 20  | 3.0  | 20  | 3.5  | —   | 1.5  | —   | 1.5  | 10  | 2.8  | —   | 1.4  | 20  | 3.6  | 3.1  | 28   |    |
| 20  | 6.0  | 30  | 6.4  | 40  | 6.5  | 40  | 7.0  | 30  | 5.8  | 20  | 4.8  | 30  | 4.3  | —   | 0.6  | —   | 1.3  | 360 | 1.6  | 340 | 1.6  | 340 | 1.6  | 3.6  | 29   |    |
| —   | 1.4  | —   | 1.4  | —   | 1.1  | 280 | 2.8  | 310 | 2.1  | —   | 1.5  | —   | 0.4  | —   | 0.2  | —   | 0.2  | —   | 0.2  | 280 | 2.0  | —   | 0.4  | 2.1  | 30   |    |
| 30  | 6.3  | 20  | 6.5  | 20  | 5.0  | 350 | 4.8  | 360 | 5.4  | 360 | 4.5  | 360 | 3.5  | 360 | 4.0  | 350 | 4.4  | 340 | 4.0  | 340 | 4.2  | 350 | 4.5  | 3.7  | 31   |    |
| —   | 5.2  | —   | 5.4  | —   | 5.3  | —   | 5.0  | —   | 4.1  | —   | 3.1  | —   | 2.7  | —   | 2.3  | —   | 2.3  | —   | 2.0  | —   | 2.0  | —   | 1.9  | 3.4  | †    |    |

April, 1924.

| °   | m/s. | °   | m/s. | °   | m/s. | °   | m/s. | °   | m/s. | °   | m/s. | °   | m/s. | °   | m/s. | °   | m/s. | °   | m/s. | °   | m/s. | °   | m/s. | m/s. |    |
|-----|------|-----|------|-----|------|-----|------|-----|------|-----|------|-----|------|-----|------|-----|------|-----|------|-----|------|-----|------|------|----|
| 10  | 5.9  | 10  | 6.2  | 360 | 5.6  | 340 | 5.0  | 20  | 6.1  | 10  | 5.2  | 10  | 3.6  | —   | 0.6  | —   | 0.2  | —   | 0.2  | —   | 0.2  | —   | 0.1  | 4.3  | 1  |
| 30  | 5.3  | 40  | 4.9  | 40  | 5.0  | 50  | 4.9  | 50  | 5.2  | 40  | 5.1  | 30  | 2.3  | 30  | 2.0  | 20  | 1.9  | —   | 0.9  | —   | 1.0  | 20  | 1.6  | 3.3  | 2  |
| 30  | 5.5  | 40  | 5.0  | 40  | 6.0  | 50  | 5.9  | 40  | 5.5  | 30  | 4.6  | 20  | 3.9  | 20  | 4.6  | 10  | 5.6  | 10  | 4.8  | 20  | 5.0  | 10  | 4.9  | 3.8  | 3  |
| 30  | 7.4  | 30  | 6.2  | 30  | 6.0  | 20  | 5.5  | 30  | 5.7  | 30  | 4.6  | —   | 0.6  | 330 | 3.1  | 330 | 3.0  | 330 | 2.6  | —   | 0.8  | —   | 0.7  | 4.8  | 4  |
| —   | 1.5  | 280 | 2.6  | 280 | 3.2  | 270 | 4.0  | 270 | 4.5  | 270 | 4.6  | 280 | 4.0  | 290 | 6.5  | 290 | 6.6  | 310 | 4.4  | —   | 0.6  | —   | 0.8  | 2.0  | 5  |
| 160 | 2.3  | 220 | 2.8  | 240 | 3.5  | 230 | 4.4  | 230 | 4.5  | 240 | 2.6  | 240 | 1.9  | —   | 1.0  | 260 | 2.0  | 280 | 4.1  | 260 | 2.8  | 230 | 3.5  | 1.9  | 6  |
| 220 | 10.4 | 220 | 9.9  | 210 | 8.6  | 260 | 9.2  | 260 | 10.9 | 250 | 12.1 | 250 | 11.3 | 240 | 12.5 | 240 | 10.9 | 250 | 12.0 | 250 | 14.6 | †   | 12.1 | 8.5  | 7  |
| 260 | 7.9  | 260 | 8.3  | 270 | 7.5  | 260 | 7.2  | 260 | 8.1  | 260 | 6.5  | 260 | 4.9  | 270 | 4.4  | 300 | 4.4  | 210 | 3.6  | 300 | 2.9  | 270 | 3.5  | 8.9  | 8  |
| 130 | 1.8  | 260 | 4.7  | 240 | 7.6  | 250 | 7.0  | 230 | 4.4  | 200 | 2.0  | —   | 1.5  | —   | 0.4  | —   | 0.1  | —   | 0.4  | —   | 1.5  | 330 | 1.6  | 3.2  | 9  |
| 30  | 7.4  | 40  | 7.0  | 30  | 9.3  | 60  | 8.9  | 30  | 7.9  | 20  | 6.0  | 30  | 3.6  | 30  | 3.6  | 20  | 2.0  | —   | 1.4  | 340 | 2.5  | 330 | 1.9  | 3.7  | 10 |
| 200 | 8.5  | 200 | 9.3  | 210 | 10.4 | 220 | 8.3  | 200 | 6.0  | 200 | 5.4  | 210 | 4.1  | 210 | 1.7  | —   | 0.2  | —   | 0.0  | —   | 0.6  | —   | 1.5  | 3.4  | 11 |
| 360 | 6.2  | 20  | 5.7  | 30  | 6.5  | 30  | 7.0  | 30  | 8.0  | 20  | 7.0  | 20  | 6.5  | 20  | 5.7  | 20  | 5.6  | 30  | 3.1  | 30  | 1.8  | 20  | 1.7  | 4.4  | 12 |
| 210 | 6.1  | 210 | 6.3  | 190 | 4.4  | 150 | 2.1  | —   | 1.2  | 120 | 2.0  | —   | 1.4  | —   | 0.9  | —   | 1.1  | 130 | 2.9  | 130 | 2.8  | 170 | 1.6  | 2.6  | 13 |
| 290 | 4.8  | 290 | 6.6  | 270 | 9.4  | 280 | 8.2  | 270 | 6.5  | 270 | 6.1  | 270 | 6.3  | 270 | 3.9  | 250 | 3.6  | —   | 0.8  | —   | 1.3  | —   | 0.7  | 3.5  | 14 |
| 240 | 12.6 | 220 | 12.1 | 240 | 11.5 | 230 | 12.0 | 250 | 11.5 | 250 | 10.3 | 250 | 9.0  | 240 | 9.0  | 240 | 7.0  | 230 | 5.4  | 220 | 5.0  | 220 | 4.4  | 8.4  | 15 |
| 290 | 9.8  | 270 | 9.2  | 290 | 10.0 | 280 | 10.2 | 290 | 10.0 | 280 | 8.5  | 280 | 6.2  | 290 | 1.6  | —   | 1.3  | —   | 1.3  | —   | 1.0  | 300 | 2.8  | 7.4  | 16 |
| 230 | 4.1  | 210 | 5.5  | 210 | 5.5  | 200 | 5.6  | 200 | 4.6  | 200 | 4.6  | 200 | 3.8  | —   | 0.6  | —   | 0.4  | —   | 0.1  | —   | 0.0  | —   | 0.0  | 2.4  | 17 |
| 200 | 10.6 | 190 | 9.6  | 190 | 8.0  | 190 | 8.0  | 190 | 6.4  | 200 | 7.1  | 180 | 4.0  | 180 | 3.9  | 180 | 3.4  | 180 |      |     |      |     |      |      |    |

Direction expressed in degrees from North (E = 90°, S = 180°, W = 270°, N = 360°). Speed in metres per second.

185. Eskdalemuir :

H<sub>a</sub> (height of anemograph above M.S.L.) = Height of ground above

| Day.  | 1.  |      | 2.  |      | 3.  |      | 4.  |      | 5.  |      | 6.  |      | 7.  |      | 8.  |      | 9.  |      | 10. |      | 11. |      | Noon. |      |     |
|-------|-----|------|-----|------|-----|------|-----|------|-----|------|-----|------|-----|------|-----|------|-----|------|-----|------|-----|------|-------|------|-----|
|       | °   | m/s. | °   | m/s. | °   | m/s. | °   | m/s. | °   | m/s. | °   | m/s. | °   | m/s. | °   | m/s. | °   | m/s. | °   | m/s. | °   | m/s. | °     | m/s. |     |
| 1     | 360 | 2.4  | 360 | 2.3  | 360 | 2.4  | 360 | 1.8  | —   | 0.8  | —   | 0.9  | —   | 1.5  | 20  | 1.8  | —   | 1.0  | —   | 0.4  | —   | 1.3  | —     | 1.1  |     |
| 2     | —   | 0.0  | —   | 0.0  | —   | 0.0  | —   | 0.1  | —   | 0.3  | —   | 0.2  | —   | 0.0  | —   | 0.0  | —   | 0.3  | —   | 0.1  | —   | 0.4  | —     | 0.2  |     |
| 3     | 360 | 2.2  | 360 | 1.8  | 360 | 2.8  | 360 | 3.1  | 10  | 2.5  | 20  | 2.9  | 10  | 3.5  | 20  | 3.4  | 360 | 4.0  | 10  | 4.5  | 10  | 5.4  | 10    | 4.5  |     |
| 4     | 360 | 5.1  | 10  | 4.6  | 360 | 3.5  | 360 | 3.5  | 360 | 3.6  | 10  | 4.0  | 10  | 3.6  | 40  | 4.6  | 50  | 4.0  | 50  | 3.1  | 90  | 2.7  | 90    | 2.5  |     |
| 5     | —   | 0.0  | —   | 0.1  | —   | 1.5  | —   | 0.1  | —   | 0.5  | 240 | 4.3  | 240 | 5.4  | 240 | 4.8  | 250 | 4.5  | 270 | 4.6  | 290 | 5.5  | 290   | 5.0  |     |
| 6     | 230 | 4.0  | 230 | 4.0  | 230 | 2.9  | —   | 0.1  | —   | 0.1  | —   | 0.0  | —   | 0.0  | —   | 0.0  | —   | 1.5  | 150 | 1.6  | 120 | 1.6  | 140   | 3.5  |     |
| 7     | —   | 3.0  | —   | 0.9  | —   | 0.1  | —   | 0.8  | —   | 0.2  | 190 | 1.7  | —   | 0.7  | —   | 1.5  | 150 | 2.6  | —   | 1.4  | 200 | 4.6  | 210   | 4.5  |     |
| 8     | †   | 3.2  | †   | 2.9  | —   | 1.3  | —   | 1.4  | 340 | 4.4  | 340 | 5.3  | 340 | 6.6  | 330 | 7.9  | 330 | 9.0  | 350 | 10.1 | 350 | 10.0 | 350   | 10.1 |     |
| 9     | 250 | 2.0  | 270 | 4.0  | 350 | 6.1  | —   | 0.3  | —   | 0.6  | —   | 0.1  | —   | 0.3  | —   | 0.6  | —   | 1.2  | 160 | 2.5  | 170 | 4.0  | 180   | 4.1  |     |
| 10    | 150 | 4.1  | 150 | 5.4  | 150 | 5.8  | 170 | 8.2  | 190 | 11.6 | 190 | 12.5 | 200 | 11.6 | 200 | 9.1  | 200 | 6.9  | 210 | 5.7  | 200 | 4.7  | 230   | 4.3  |     |
| 11    | 200 | 4.1  | 200 | 3.9  | 200 | 3.7  | 200 | 3.1  | 200 | 2.3  | 200 | 2.7  | 220 | 3.6  | 220 | 5.2  | 230 | 5.3  | 250 | 6.1  | 260 | 5.2  | 240   | 4.5  |     |
| 12    | —   | 0.2  | —   | 1.0  | 170 | 1.8  | —   | 1.3  | —   | 1.5  | 190 | 2.0  | 200 | 2.8  | 210 | 3.7  | 210 | 4.0  | 200 | 3.3  | 200 | 3.3  | 190   | 5.6  |     |
| 13    | —   | 0.9  | —   | 1.5  | —   | 0.5  | 340 | 1.7  | 350 | 3.0  | 30  | 3.3  | —   | 0.4  | 130 | 2.0  | 160 | 3.2  | 200 | 8.1  | 220 | 7.4  | 260   | 5.4  |     |
| 14    | —   | 0.1  | —   | 0.1  | —   | 0.0  | —   | 0.0  | —   | 0.0  | —   | 1.0  | 150 | 2.4  | 150 | 3.0  | 150 | 3.7  | 140 | 4.6  | 140 | 2.5  | 140   | 3.1  |     |
| 15    | 200 | 4.1  | 200 | 4.0  | 200 | 4.2  | 200 | 4.0  | 210 | 4.6  | 210 | 5.4  | 230 | 5.8  | 210 | 6.3  | 200 | 7.0  | 220 | 6.9  | 210 | 7.3  | 200   | 7.3  |     |
| 16    | 200 | 5.8  | 200 | 4.7  | 210 | 4.8  | 200 | 3.8  | 200 | 4.5  | 200 | 4.5  | 210 | 7.1  | 220 | 7.1  | 240 | 5.9  | 260 | 6.8  | 260 | 8.2  | 260   | 9.0  |     |
| 17    | 250 | 4.7  | 240 | 4.4  | 240 | 5.0  | 240 | 4.4  | 240 | 3.8  | 240 | 5.3  | 230 | 6.9  | 230 | 6.0  | 220 | 7.1  | 200 | 6.7  | 200 | 7.3  | 210   | 7.6  |     |
| 18    | —   | 1.0  | —   | 0.9  | —   | 0.3  | —   | 0.1  | —   | 0.0  | —   | 0.0  | —   | 0.0  | —   | 0.5  | —   | 0.5  | 150 | 2.1  | 160 | 2.6  | 170   | 2.2  |     |
| 19    | 340 | 2.6  | 10  | 3.8  | 10  | 3.1  | 360 | 3.8  | 10  | 2.7  | 20  | 4.5  | 40  | 6.0  | 50  | 5.6  | 40  | 7.0  | 50  | 7.1  | 70  | 7.7  | 90    | 6.9  |     |
| 20    | 40  | 2.9  | 30  | 5.5  | 40  | 8.1  | 20  | 7.1  | 20  | 4.8  | 30  | 3.2  | 40  | 3.1  | 60  | 4.3  | 60  | 4.8  | 90  | 4.5  | 80  | 3.2  | 70    | 4.3  |     |
| 21    | 40  | 3.8  | 30  | 3.1  | 40  | 3.3  | 20  | 2.9  | —   | 1.4  | 360 | 1.7  | 350 | 2.1  | —   | 1.3  | 360 | 1.7  | 80  | 1.8  | 150 | 5.3  | 160   | 4.4  |     |
| 22    | —   | 0.5  | —   | 0.5  | —   | 0.4  | —   | 0.3  | —   | 0.2  | —   | 1.2  | 220 | 6.3  | 220 | 8.2  | 220 | 7.2  | 210 | 7.7  | 210 | 8.8  | 210   | 9.2  |     |
| 23    | 220 | 9.8  | 210 | 7.8  | 200 | 7.6  | 210 | 7.1  | 210 | 7.5  | 200 | 8.1  | 210 | 9.4  | 210 | 9.3  | 210 | 10.3 | 210 | 10.4 | 210 | 7.8  | 210   | 9.8  |     |
| 24    | 210 | 6.4  | 210 | 6.6  | 210 | 6.4  | 210 | 6.0  | 210 | 5.6  | 200 | 6.8  | 190 | 7.9  | 190 | 7.8  | 190 | 8.1  | 210 | 7.5  | 210 | 8.0  | 210   | 8.1  |     |
| 25    | —   | 1.0  | —   | 0.6  | —   | 0.5  | —   | 0.0  | —   | 0.5  | —   | 1.4  | —   | 1.4  | —   | 1.70 | 2.0 | 200  | 1.7 | 280  | 2.6 | 330  | 2.3   | —    | 0.5 |
| 26    | †   | 1.7  | —   | 0.5  | —   | 0.0  | —   | 0.0  | —   | 0.1  | —   | 0.8  | 230 | 2.2  | 240 | 3.4  | 270 | 4.8  | 260 | 7.1  | 260 | 7.6  | 260   | 8.5  |     |
| 27    | 210 | 7.6  | 210 | 9.5  | 210 | 11.4 | 220 | 12.5 | 220 | 11.0 | 220 | 11.8 | 230 | 12.2 | 230 | 10.9 | 230 | 10.6 | 240 | 11.0 | 240 | 10.6 | 240   | 10.1 |     |
| 28    | 210 | 6.5  | 210 | 6.9  | 210 | 6.0  | 210 | 5.2  | 210 | 5.3  | 200 | 4.5  | 210 | 6.7  | 210 | 6.8  | 210 | 7.4  | 210 | 8.1  | 210 | 6.1  | 210   | 7.0  |     |
| 29    | 330 | 2.6  | 330 | 2.0  | 330 | 2.0  | 330 | 2.5  | 330 | 1.8  | 360 | 2.1  | 360 | 2.2  | 40  | 4.5  | 50  | 4.5  | 60  | 4.1  | 40  | 4.3  | 50    | 4.2  |     |
| 30    | 20  | 3.3  | 10  | 3.6  | 360 | 4.5  | 360 | 4.0  | 330 | 3.0  | 360 | 3.1  | 20  | 3.4  | 40  | 5.0  | 30  | 5.0  | 40  | 4.9  | 70  | 3.4  | 70    | 3.3  |     |
| 31    | 10  | 2.5  | 10  | 2.4  | 360 | 2.2  | 360 | 2.0  | 10  | 2.5  | 360 | 2.7  | 360 | 2.5  | 10  | 3.1  | 360 | 3.4  | 10  | 3.6  | 40  | 4.2  | 40    | 2.9  |     |
| Mean. | —   | 3.2  | —   | 3.2  | —   | 3.3  | —   | 2.9  | —   | 2.9  | —   | 3.5  | —   | 4.1  | —   | 4.5  | —   | 4.8  | —   | 5.1  | —   | 5.3  | —     | 5.3  |     |

186. Eskdalemuir : H<sub>a</sub> = 235 metres + 15 metres.

| Day. | 1.  |      | 2.  |      | 3.  |      | 4.  |      | 5.  |      | 6.  |      | 7.  |      | 8.  |      | 9.  |      | 10. |      | 11. |      | Noon. |      |
|------|-----|------|-----|------|-----|------|-----|------|-----|------|-----|------|-----|------|-----|------|-----|------|-----|------|-----|------|-------|------|
|      | °   | m/s. | °   | m/s. | °   | m/s. | °   | m/s. | °   | m/s. | °   | m/s. | °   | m/s. | °   | m/s. | °   | m/s. | °   | m/s. | °   | m/s. | °     | m/s. |
| 1    | 30  | 9.1  | 20  | 9.1  | 20  | 9.4  | 20  | 10.3 | †   | 10.9 | †   | 11.6 | †   | 12.8 | †   | 12.3 | 20  | 14.5 | 10  | 12.9 | 10  | 13.6 | 10    | 14.1 |
| 2    | —   | 0.3  | —   | 0.1  | —   | 0.1  | —   | 0.8  | 360 | 2.0  | —   | 1.5  | 360 | 2.4  | 360 | 3.8  | 360 | 3.4  | 360 | 2.4  | 10  | 3.0  | 10    | 3.1  |
| 3    | —   | 0.0  | —   | 0.0  | —   | 0.0  | —   | 0.0  | —   | 0.0  | —   | 0.3  | —   | 0.3  | —   | 0.6  | —   | 1.3  | 220 | 1.8  | 200 | 2.3  | 190   | 4.6  |
| 4    | —   | 0.2  | —   | 0.1  | —   | 0.8  | 360 | 2.1  | 360 | 1.6  | —   | 1.5  | 20  | 1.6  | 50  | 2.0  | —   | 1.5  | —   | 0.9  | —   | 1.1  | —     | 1.4  |
| 5    | 360 | 1.9  | 360 | 2.9  | 360 | 2.0  | 360 | 1.7  | —   | 1.0  | —   | 0.3  | —   | 0.1  | —   | 0.9  | —   | 0.8  | 220 | 2.5  | 220 | 3.5  | 240   | 4.0  |
| 6    | —   | 0.0  | —   | 0.0  | —   | 0.7  | 180 | 2.8  | 190 | 5.6  | 210 | 7.3  | 200 | 7.0  | 210 | 7.5  | 220 | 7.5  | 220 | 7.6  | 220 | 7.6  | 210   | 7.1  |
| 7    | 210 | 2.3  | 210 | 1.6  | 200 | 1.8  | —   | 1.5  | 220 | 1.7  | —   | 1.3  | —   | 0.6  | —   | 1.5  | —   | 1.4  | 210 | 5.5  | 220 | 4.6  | 220   | 4.0  |
| 8    | —   | 0.0  | —   | 0.6  | —   | 1.4  | —   | 0.9  | —   | 0.2  | —   | 0.0  | —   | 0.0  | —   | 0.0  | —   | 1.3  | 220 | 4.3  | 230 | 2.7  | 230   | 4.5  |
| 9    | 270 | 4.0  | —   | 1.1  | 250 | 2.0  | 300 | 1.6  | —   | 0.6  | —   | 1.5  | 270 | 3.2  | 280 | 3.2  | 290 | 5.2  | 280 | 4.1  | 270 | 3.6  | 210   | 4.4  |
| 10   | 220 | 5.9  | 210 | 4.6  | 210 | 3.0  | 210 | 2.2  | 210 | 3.5  | 210 | 3.5  | 210 | 4.9  | 220 | 5.9  | 220 | 7.6  | †   | 7.8  | 190 | 8.0  | 190   | 8.6  |
| 11   | 190 | 8.3  | 190 | 7.6  | 190 | 6.6  | 190 | 5.0  | 190 | 4.9  | 190 | 6.1  | 180 | 5.2  | 190 | 5.1  | 180 | 4.4  | 180 | 4.1  | 200 | 4.7  | 190   | 4.1  |
| 12   | 360 | 3.4  | 360 | 4.4  | 360 | 3.0  | 360 | 2.2  | —   | 1.5  | 360 | 2.4  | 360 | 4.6  | 360 | 4.8  | 360 | 4.2  | †   | 5.7  | 10  | 7.2  | 20    | 7.5  |
| 13   | 20  | 7.2  | 320 | 2.5  | 30  | 5.2  | 20  | 7.3  | 20  | 7.4  | 10  | 6.6  | 20  | 6.1  | 30  | 6.6  | 30  | 7.9  | 40  | 6.5  | 30  | 6.0  | 30    | 5.9  |
| 14   | 360 | 2.4  | —   | 1.4  | —   | 0.4  | —   | 0.3  | —   | 0.3  | —   | 0.3  | —   | 0.4  | 190 | 3.1  | 230 | 4.5  | 220 | 5.2  | 220 | 4.9  | 230   | 5.4  |
| 15   | 210 | 2.7  | 220 | 2.8  | 210 | 2.9  | 210 | 3.2  | 210 | 3.0  | 210 | 4.2  | 210 | 3.5  | 230 | 3.5  | 220 | 4.4  | 210 | 5.5  | 210 | 4.8  | 210   | 5.2  |
| 16   | 230 | 2.1  | —   | 0.8  | —   | 0.5  | —   | 0.1  | —   | 0.1  | —   | 0.0  | 260 | 1.6  | 250 | 3.0  | 250 | 4.1  | 240 | 4.7  | 250 | 4.8  | 250   | 4.9  |
| 17   | 350 | 2.0  | 350 | 1.8  | 360 | 2.7  | 350 | 2.9  | 350 | 3.2  | 350 | 3.9  | 40  | 4.1  | 40  | 5.9  | 20  | 4.8  | 40  | 5.6  | 50  | 6.0  | 50    | 7.9  |
| 18   | 10  | 3.3  | 40  | 3.9  | 30  | 3.2  | 10  | 2.5  | —   | 1.4  | 70  | 2.4  | 140 | 5.4  | 180 | 5.9  | 170 | 4.1  | 170 | 5.2  | 160 | 7.0  | 150   | 6.0  |
| 19   | —   | 1.5  | 360 | 2.0  | 360 | 1.8  | 360 | 1.6  | —   | 1.4  | —   | 1.3  | 140 | 4.0  | 140 | 4.7  | 150 | 5.7  | 170 | 4.9  | 190 | 4.6  | 200   | 6.0  |
| 20   | 190 | 2.1  | 200 | 3.5  | 210 | 3.6  | 180 | 1.9  | 180 | 2.9  | 160 | 2.7  | 190 | 4.3  | 210 | 5.0  | 200 | 6.3  | 200 | 5.9  | 200 | 6.4  | 200   | 7.5  |
| 21   | —   | 0.3  | —   | 0.4  | —   | 0.3  | —   | 1.1  | —   | 1.1  | 160 | 1.7  | 150 | 3.5  | 150 | 4.5  | 150 | 4.0  | 150 | 4.0  | 150 | 3.0  | 170   | 3.6  |
| 22   | —   | 0.1  | —   | 0.3  | —   | 1.0  | —   | 0.9  | —   | 0.4  | —   | 0.2  | —   | 0.2  | 270 | 4.0  | 270 | 3.5  | 270 | 4.0  | 290 | 4.2  | 290   | 4.1  |
| 23   | —   | 0.1  | —   | 0.1  | —   | 0.1  | —   | 0.1  | —   | 0.1  | —   | 0.1  | —   | 0.2  | 180 | 3.1  | 200 | 3.9  | 200 | 5.5  | 210 | 6.9  | 200   | 7.6  |
| 24   | 220 | 7.4  | 240 | 6.6  | 240 | 5.0  | 260 | 5.3  | 270 | 6.1  | 260 | 4.4  | 270 | 5.5  | 270 | 6.4  | 280 | 5.6  | 280 | 6.6  | 280 | 6.0  | 280   | 6.3  |
| 25   | 250 | 4.6  | 240 | 3.2  | —   | 0.2  | —   | 0.1  | —   | 0.1  | —   | 1.5  | 220 | 3.0  | 220 | 5.5  | 230 | 6.1  | 220 | 5.9  | 210 | 6.4  | 210   | 6.3  |
| 26   | 220 | 7.1  | 220 | 6.8  | 220 | 7.1  | 220 | 7.4  | 220 | 7.4  | 220 | 4.4  | 200 | 4.0  | 180 | 4.5  | 190 | 7.8  | 200 | 10.6 | 200 | 10   |       |      |



Direction expressed in degrees from North (E = 90°, S = 180°. W = 270°, N = 360°). Speed in metres per second.

187. Eskdalemuir :

H<sub>a</sub> (height of anemograph above M.S.L.) = Height of ground above

| Day.     | 1.  |      | 2.  |      | 3.  |      | 4.  |      | 5.  |      | 6.  |      | 7.  |      | 8.  |      | 9.  |      | 10. |      | 11. |      | Noon. |      |
|----------|-----|------|-----|------|-----|------|-----|------|-----|------|-----|------|-----|------|-----|------|-----|------|-----|------|-----|------|-------|------|
|          | °   | m/s. | °   | m/s. | °   | m/s. | °   | m/s. | °   | m/s. | °   | m/s. | °   | m/s. | °   | m/s. | °   | m/s. | °   | m/s. | °   | m/s. | °     | m/s. |
| 1        | 240 | 6.6  | 230 | 6.0  | 230 | 3.9  | 230 | 3.1  | 230 | 3.2  | 230 | 3.5  | 220 | 4.6  | 220 | 5.2  | 210 | 5.0  | 210 | 6.5  | 220 | 7.0  | 210   | 6.5  |
| 2        | 140 | 5.5  | 150 | 4.6  | 140 | 5.5  | 140 | 6.2  | 140 | 6.1  | 150 | 5.6  | 170 | 8.5  | 180 | 9.4  | 180 | 9.2  | 190 | 10.4 | 190 | 12.1 | 190   | 13.0 |
| 3        | 210 | 11.1 | 200 | 9.5  | 210 | 8.8  | 210 | 8.7  | 210 | 9.0  | 200 | 7.2  | 210 | 9.4  | 210 | 9.2  | 200 | 7.4  | 190 | 8.5  | 190 | 9.2  | 190   | 9.5  |
| 4        | †   | 8.0  | 270 | 7.0  | 360 | 6.3  | 250 | 7.1  | 220 | 6.6  | 220 | 8.0  | 220 | 8.8  | 220 | 8.0  | 210 | 9.7  | 210 | 9.5  | 210 | 9.9  | 210   | 10.5 |
| 5        | 190 | 3.4  | 210 | 5.0  | 220 | 6.1  | 220 | 5.8  | 220 | 6.0  | 210 | 5.9  | 210 | 7.0  | 210 | 9.4  | 210 | 9.9  | 210 | 10.0 | 210 | 10.1 | 210   | 10.2 |
| 6        | —   | 1.2  | —   | 0.3  | —   | 0.3  | —   | 0.6  | —   | 0.5  | —   | 0.2  | 300 | 2.6  | 310 | 3.6  | 280 | 4.5  | 270 | 6.6  | 270 | 6.2  | 260   | 5.9  |
| 7        | 200 | 7.6  | 210 | 9.4  | 190 | 6.8  | 200 | 8.9  | 200 | 7.5  | 200 | 8.0  | 200 | 7.8  | 200 | 9.2  | 210 | 10.1 | 210 | 8.6  | 210 | 8.2  | 210   | 10.0 |
| 8        | 240 | 5.1  | 240 | 3.6  | —   | 1.1  | 220 | 2.6  | 220 | 3.5  | 230 | 3.9  | 220 | 4.7  | 230 | 4.6  | 200 | 3.5  | 220 | 5.6  | 220 | 6.5  | 200   | 7.2  |
| 9        | —   | 0.1  | —   | 0.1  | —   | 0.5  | —   | 0.2  | —   | 0.2  | —   | 0.1  | —   | 0.1  | —   | 0.1  | —   | 0.3  | —   | 1.4  | 270 | 1.8  | 270   | 1.6  |
| 10       | —   | 0.7  | —   | 0.9  | —   | 0.4  | —   | 0.2  | —   | 0.1  | —   | 0.0  | —   | 1.0  | 190 | 3.3  | 190 | 5.1  | 200 | 7.5  | 200 | 8.3  | 190   | 8.9  |
| 11       | 200 | 6.1  | 200 | 5.8  | 190 | 5.3  | 180 | 3.8  | 190 | 3.7  | 190 | 4.6  | 190 | 4.9  | 190 | 5.6  | 200 | 5.4  | 190 | 6.3  | 190 | 7.2  | 200   | 6.0  |
| 12       | —   | 1.5  | †   | 3.0  | †   | 1.9  | †   | 2.7  | —   | 1.5  | —   | 1.1  | —   | 0.3  | 130 | 3.4  | 140 | 4.7  | 140 | 5.9  | 140 | 7.0  | 150   | 6.1  |
| 13       | 190 | 6.7  | 190 | 6.1  | 190 | 5.0  | 210 | 5.1  | 210 | 4.4  | 200 | 4.3  | 210 | 7.2  | 210 | 7.9  | 220 | 9.0  | 220 | 9.5  | 220 | 8.9  | 220   | 7.9  |
| 14       | 210 | 4.3  | 230 | 4.8  | 240 | 5.5  | 230 | 4.8  | 240 | 4.4  | 240 | 4.6  | 230 | 5.8  | 230 | 7.9  | 220 | 7.0  | 220 | 7.1  | 210 | 7.6  | 210   | 8.1  |
| 15       | 190 | 6.0  | 200 | 7.6  | 200 | 7.2  | 200 | 7.6  | 190 | 8.9  | 200 | 8.5  | 210 | 9.0  | 200 | 10.2 | 200 | 10.0 | 190 | 7.7  | 190 | 8.4  | 200   | 7.2  |
| 16       | 190 | 3.9  | 180 | 4.5  | 180 | 5.1  | 190 | 5.8  | 180 | 4.4  | 170 | 7.0  | 180 | 7.2  | 190 | 6.9  | 200 | 6.9  | 210 | 8.1  | 200 | 7.7  | 210   | 7.5  |
| 17       | 210 | 4.1  | 220 | 5.4  | 210 | 4.2  | 220 | 5.1  | 220 | 4.9  | 220 | 6.4  | 220 | 5.5  | 210 | 5.5  | 210 | 5.9  | 210 | 5.6  | 200 | 6.9  | 210   | 6.6  |
| 18       | —   | 1.1  | —   | 0.8  | —   | 0.8  | 270 | 3.4  | 270 | 4.9  | 270 | 3.0  | 270 | 4.1  | 270 | 4.5  | 260 | 3.4  | 260 | 4.6  | 270 | 4.2  | 270   | 5.2  |
| 19       | 290 | 3.9  | 260 | 4.4  | —   | 1.4  | —   | 0.9  | —   | 0.2  | —   | 0.6  | 270 | 1.9  | 250 | 2.9  | 270 | 3.9  | 280 | 3.0  | 270 | 3.6  | 270   | 4.7  |
| 20       | —   | 0.0  | —   | 0.0  | —   | 0.0  | —   | 0.0  | —   | 0.0  | —   | 0.0  | —   | 0.0  | 220 | 2.1  | 230 | 1.9  | —   | 1.5  | 210 | 2.9  | 220   | 3.0  |
| 21       | —   | 0.8  | —   | 1.5  | 30  | 3.0  | 40  | 4.0  | 40  | 4.9  | 30  | 4.2  | 30  | 3.5  | 40  | 3.4  | 60  | 3.0  | 100 | 2.9  | 90  | 3.5  | 80    | 3.5  |
| 22       | 10  | 3.1  | 20  | 4.0  | 10  | 2.5  | 10  | 3.1  | 10  | 4.1  | 10  | 4.5  | 20  | 4.5  | 20  | 5.4  | 20  | 6.0  | 50  | 5.6  | 50  | 5.9  | 50    | 5.1  |
| 23       | —   | 0.2  | —   | 0.1  | —   | 0.1  | —   | 1.4  | 250 | 1.8  | 200 | 3.5  | 250 | 3.4  | 220 | 2.1  | 240 | 4.7  | 250 | 6.2  | 240 | 8.8  | 230   | 6.4  |
| 24       | 270 | 4.5  | 260 | 4.0  | 240 | 3.5  | 190 | 1.8  | 230 | 5.4  | 250 | 5.9  | 260 | 7.2  | 250 | 7.6  | 270 | 7.9  | 280 | 5.6  | 280 | 5.2  | 290   | 6.6  |
| 25       | 280 | 6.5  | 280 | 7.6  | 280 | 7.9  | 290 | 7.3  | 280 | 4.9  | 280 | 5.0  | 280 | 7.7  | 280 | 6.1  | 290 | 3.4  | 280 | 3.6  | 280 | 4.0  | 280   | 3.3  |
| 26       | —   | 0.4  | —   | 0.8  | —   | 0.8  | —   | 0.3  | —   | 0.1  | —   | 0.1  | —   | 0.0  | —   | 0.5  | 260 | 2.2  | 290 | 2.1  | 290 | 3.3  | 290   | 3.4  |
| 27       | —   | 1.1  | —   | 0.4  | —   | 0.6  | —   | 0.6  | —   | 0.4  | —   | 0.3  | —   | 0.6  | —   | 0.7  | 140 | 2.3  | 170 | 3.0  | 190 | 3.4  | 210   | 3.8  |
| 28       | —   | 1.0  | 30  | 2.1  | 40  | 3.5  | 60  | 4.4  | 60  | 4.6  | 60  | 4.9  | 70  | 6.1  | 70  | 8.2  | 70  | 7.7  | 80  | 6.7  | 70  | 7.8  | 70    | 9.4  |
| 29       | 70  | 7.3  | 70  | 7.8  | 70  | 7.0  | 70  | 6.4  | 70  | 6.6  | 80  | 7.4  | 70  | 7.0  | 60  | 5.5  | 60  | 5.8  | 60  | 6.4  | 70  | 6.1  | 60    | 6.0  |
| 30       | 40  | 2.5  | 70  | 2.1  | 70  | 1.6  | —   | 1.5  | —   | 0.8  | 60  | 1.4  | 100 | 1.7  | 100 | 1.6  | —   | 0.9  | 170 | 3.1  | 170 | 2.9  | 220   | 1.9  |
| 31       | 230 | 2.4  | 230 | 2.4  | 240 | 3.4  | 240 | 2.9  | 240 | 3.1  | 230 | 3.1  | 230 | 3.6  | 230 | 5.1  | 230 | 6.5  | 240 | 8.6  | 220 | 8.0  | 230   | 8.2  |
| Mean ... | —   | 3.8  | —   | 3.9  | —   | 3.5  | —   | 3.7  | —   | 3.8  | —   | 4.0  | —   | 4.7  | —   | 5.3  | —   | 5.6  | —   | 6.1  | —   | 6.5  | —     | 6.5  |

188. Eskdalemuir : H<sub>a</sub> = 235 metres + 15 metres.

| Day. | 1.  |      | 2.  |      | 3.  |      | 4.  |      | 5.  |      | 6.  |      | 7.  |      | 8.  |      | 9.  |      | 10. |      | 11. |      | Noon. |      |
|------|-----|------|-----|------|-----|------|-----|------|-----|------|-----|------|-----|------|-----|------|-----|------|-----|------|-----|------|-------|------|
|      | °   | m/s. | °   | m/s. | °   | m/s. | °   | m/s. | °   | m/s. | °   | m/s. | °   | m/s. | °   | m/s. | °   | m/s. | °   | m/s. | °   | m/s. | °     | m/s. |
| 1    | 220 | 7.2  | 230 | 7.6  | 220 | 7.1  | 220 | 7.2  | 210 | 7.5  | 210 | 8.2  | 220 | 9.1  | 210 | 7.6  | 220 | 9.9  | 220 | 10.1 | 210 | 9.6  | 210   | 10.4 |
| 2    | 240 | 3.4  | 280 | 2.6  | 300 | 2.0  | 320 | 2.7  | 310 | 4.0  | 310 | 4.5  | 300 | 4.6  | 300 | 4.9  | 310 | 4.7  | 300 | 7.4  | 300 | 8.5  | 290   | 7.3  |
| 3    | 270 | 2.6  | 360 | 2.1  | †   | 2.0  | †   | 1.9  | †   | 1.9  | †   | 1.8  | 220 | 1.6  | 190 | 4.5  | 200 | 5.6  | 220 | 5.7  | 220 | 6.1  | 210   | 6.0  |
| 4    | 260 | 4.1  | 250 | 3.4  | 260 | 3.6  | 260 | 4.0  | 250 | 3.1  | 260 | 3.1  | 230 | 3.9  | 240 | 4.6  | 230 | 5.4  | 240 | 7.1  | 240 | 5.4  | 240   | 6.1  |
| 5    | 190 | 6.5  | 210 | 8.1  | 210 | 7.0  | 210 | 6.2  | 210 | 5.5  | 210 | 7.5  | 220 | 8.5  | 230 | 10.2 | 230 | 10.3 | 240 | 10.4 | 250 | 12.5 | 240   | 11.6 |
| 6    | 250 | 2.5  | 200 | 2.1  | 220 | 2.9  | 200 | 4.5  | 210 | 4.5  | 200 | 3.9  | 210 | 5.5  | 200 | 5.2  | 220 | 4.9  | 230 | 7.4  | 240 | 8.2  | 250   | 7.1  |
| 7    | 250 | 4.4  | 240 | 3.0  | 250 | 4.1  | 220 | 3.5  | 210 | 3.3  | 220 | 3.2  | 260 | 2.9  | 270 | 5.6  | 270 | 6.4  | 280 | 6.0  | 290 | 5.9  | 280   | 8.4  |
| 8    | —   | 0.9  | —   | 0.8  | 190 | 1.6  | 230 | 0.6  | —   | 1.2  | —   | 1.5  | 130 | 2.4  | 30  | 1.6  | 290 | 2.6  | —   | 1.1  | 280 | 1.8  | 280   | 3.8  |
| 9    | —   | 0.0  | —   | 0.1  | —   | 0.0  | —   | 0.0  | —   | 0.0  | —   | 0.0  | —   | 0.2  | —   | 0.1  | 200 | 2.9  | 200 | 5.6  | 210 | 5.0  | 220   | 5.0  |
| 10   | —   | 0.3  | —   | 0.3  | —   | 0.3  | —   | 0.3  | —   | 0.3  | —   | 0.3  | —   | 0.3  | —   | 0.3  | 190 | 2.4  | 200 | 5.7  | 200 | 6.5  | 200   | 6.0  |
| 11   | 190 | 2.1  | 180 | 3.0  | 180 | 3.1  | 190 | 4.6  | 190 | 5.0  | 180 | 5.2  | 180 | 5.8  | 190 | 7.4  | 190 | 7.9  | 190 | 8.6  | 190 | 8.5  | 190   | 8.2  |
| 12   | 210 | 3.6  | 220 | 5.6  | 210 | 3.1  | 200 | 2.6  | 190 | 2.4  | 180 | 1.6  | 190 | 2.8  | 210 | 3.5  | 200 | 4.0  | 200 | 4.4  | 200 | 6.4  | 200   | 6.4  |
| 13   | —   | 0.5  | —   | 0.6  | —   | 0.6  | —   | 0.2  | —   | 0.2  | —   | 0.1  | —   | 0.1  | —   | 0.4  | 360 | 2.1  | —   | 0.5  | —   | 0.6  | —     | 0.4  |
| 14   | —   | 0.1  | —   | 0.0  | —   | 0.1  | 190 | 1.9  | 190 | 2.0  | 180 | 2.4  | 180 | 2.5  | 180 | 4.3  | 180 | 6.0  | 180 | 5.6  | 200 | 8.8  | 200   | 9.1  |
| 15   | 270 | 3.0  | 270 | 3.2  | 260 | 2.0  | —   | 1.1  | —   | 1.4  | 180 | 2.4  | 210 | 4.3  | 230 | 5.5  | 220 | 6.1  | 220 | 6.7  | 230 | 7.1  | 220   | 8.0  |
| 16   | 180 | 5.1  | 170 | 4.6  | 160 | 3.7  | 160 | 4.5  | 160 | 4.1  | 160 | 3.0  | 160 | 3.5  | 160 | 4.3  | 150 | 5.1  | 170 | 5.5  | 160 | 5.0  | 180   | 3.6  |
| 17   | —   | 0.1  | —   | 1.0  | —   | 0.5  | —   | 0.2  | —   | 0.3  | —   | 0.2  | —   | 0.1  | —   | 1.5  | 140 | 3.8  | 100 | 2.9  | 110 | 3.5  | 110   | 3.0  |
| 18   | †   | 5.0  | †   | 3.9  | †   | 3.0  | †   | 1.5  | †   | 2.0  | †   | 4.7  | †   | 3.9  | 270 | 3.7  | 270 | 4.0  | 290 | 5.6  | 290 | 6.5  | 290   | 7.9  |
| 19   | 230 | 3.5  | 190 | 1.6  | 230 | 3.5  | 240 | 2.9  | 160 | 2.5  | 220 | 3.6  | 250 | 4.5  | 250 | 4.9  | 270 | 6.1  | 270 | 6.4  | 270 | 6.9  | 260   | 6.6  |
| 20   | 220 | 3.8  | 220 | 3.8  | 210 | 4.6  | 200 | 4.6  | 220 | 3.5  | 220 | 2.9  | 220 | 2.9  | 230 | 2.4  | 270 | 2.1  | †   | †    | 260 | 4.6  | 240   | 6.8  |
| 21   | 230 | 6.6  | 220 | 6.7  | 220 | 6.5  | 230 | 6.2  | 230 | 5.8  | 230 | 4.5  | 240 | 4.6  | 250 | 5.0  | 250 | 4.6  | 240 | 5.2  | 230 | 4.0  | 240   | 4.9  |
| 22   | 240 | 3.5  | —   | 1.5  | 230 | 3.0  | 220 | 2.8  | 230 | 4.1  | 230 | 4.2  | 230 | 2.9  | 230 | 3.8  | 220 | 4.0  | 220 | 3.9  | 220 | 4.0  | 220   | 4.5  |
| 23   | —   | 1.0  | 350 | 2.5  | 350 | 2.9  | 350 | 3.8  | 350 | 5.1  | 360 | 5.1  | 20  | 6.8  | 20  | 5.1  | 20  | 7.1  | 30  | 5.6  | 20  | 4.4  | 10    | 3.3  |
| 24   | 310 | 1.8  | 330 | 3.0  | 330 | 4.9  | 330 | 4.5  | 320 | 3.3  | 300 | 2.5  | 330 | 5.0  | 310 | 7.9  | 320 | 7.6  | 320 | 6.0  | 310 | 5.3  | 300   | 5.5  |
| 25   | 310 | 6.5  | 320 | 6.0  | 270 | 2.5  | 310 | 3.0  | —   | 1.0  | —   | 1.1  | 290 | 2.8  | 240 | 2.5  | 200 | 4.0  | 220 | 3.5  | 220 | 4.9  | 220   | 5.9  |
| 26   | 220 | 2.1  | 230 | 3.1  | 240 |      |     |      |     |      |     |      |     |      |     |      |     |      |     |      |     |      |       |      |

Average for periods of sixty minutes, centred at the exact hours, Greenwich Mean Time.

M.S.L. +  $h_a$  (height of anemograph above ground) = 235 metres + 15 metres.

July, 1924.

| 13. |      | 14. |      | 15. |      | 16. |      | 17. |      | 18. |      | 19. |      | 20. |      | 21. |      | 22. |      | 23. |      | 24. |      | Mean | Day. |
|-----|------|-----|------|-----|------|-----|------|-----|------|-----|------|-----|------|-----|------|-----|------|-----|------|-----|------|-----|------|------|------|
| °   | m/s. | °   | m/s. | °   | m/s. | °   | m/s. | °   | m/s. | °   | m/s. | °   | m/s. | °   | m/s. | °   | m/s. | °   | m/s. | °   | m/s. | °   | m/s. | m/s. |      |
| 190 | 8.1  | 190 | 6.5  | 190 | 7.0  | 190 | 7.9  | 200 | 6.6  | 190 | 5.1  | 190 | 4.1  | 180 | 2.5  | —   | 1.2  | —   | 0.4  | —   | 0.0  | 160 | 2.9  | 4.8  | 1    |
| 190 | 13.3 | 190 | 12.7 | 190 | 12.8 | 190 | 12.6 | 180 | 12.5 | 190 | 11.9 | 190 | 11.7 | 190 | 11.7 | 200 | 11.4 | 190 | 10.2 | 200 | 11.1 | 200 | 10.9 | 9.8  | 2    |
| 190 | 8.4  | 190 | 6.5  | 210 | 3.8  | —   | 0.5  | 360 | 2.5  | 360 | 5.2  | 360 | 7.7  | 360 | 6.0  | 10  | 7.1  | 360 | 8.4  | 360 | 10.6 | 260 | 10.9 | 7.7  | 3    |
| 200 | 10.1 | 190 | 8.9  | 190 | 9.0  | 190 | 8.0  | 190 | 9.2  | 190 | 9.1  | 190 | 7.5  | 190 | 7.5  | 190 | 4.9  | 200 | 1.6  | 180 | 4.7  | 190 | 3.8  | 7.8  | 4    |
| 200 | 9.1  | 190 | 10.1 | 190 | 8.5  | 190 | 8.4  | 190 | 9.4  | 190 | 6.3  | 180 | 4.6  | 160 | 2.2  | —   | 0.6  | 30  | 3.5  | 30  | 3.9  | 130 | 2.4  | 6.6  | 5    |
| 250 | 7.1  | 240 | 8.5  | 230 | 7.8  | 220 | 9.8  | 210 | 9.6  | 210 | 9.6  | 200 | 6.4  | 210 | 8.9  | 190 | 7.0  | 180 | 8.6  | 200 | 9.1  | 240 | 7.5  | 5.4  | 6    |
| 220 | 10.0 | 240 | 9.4  | 250 | 8.5  | 240 | 8.6  | 240 | 7.5  | 250 | 7.4  | 250 | 7.9  | 240 | 6.5  | 250 | 5.0  | 250 | 4.6  | 230 | 3.1  | 240 | 4.7  | 7.8  | 7    |
| 200 | 7.8  | 200 | 7.1  | 190 | 7.0  | 190 | 6.8  | 190 | 6.0  | 190 | 5.0  | 190 | 4.7  | 190 | 1.6  | 170 | 1.6  | —   | 1.3  | —   | 0.9  | —   | 0.4  | 4.3  | 8    |
| 260 | 1.6  | 240 | 2.8  | 210 | 4.1  | 190 | 5.4  | 190 | 5.5  | 190 | 5.2  | 210 | 4.9  | 210 | 2.9  | —   | 1.1  | —   | 1.2  | —   | 0.1  | —   | 0.0  | 1.7  | 9    |
| 200 | 10.0 | 200 | 8.5  | 200 | 8.9  | 200 | 9.9  | 200 | 8.2  | 200 | 8.2  | 200 | 7.4  | 200 | 8.5  | 200 | 8.0  | 200 | 6.1  | 190 | 6.0  | 190 | 6.0  | 5.4  | 10   |
| 190 | 6.1  | 180 | 6.6  | 180 | 6.3  | 190 | 5.0  | 190 | 3.9  | 200 | 3.7  | 190 | 1.6  | —   | 0.4  | —   | 0.3  | —   | 0.0  | —   | 0.0  | —   | 0.6  | 4.2  | 11   |
| 140 | 5.6  | 130 | 5.9  | 130 | 7.6  | 140 | 5.7  | 160 | 9.1  | 200 | 8.9  | 200 | 9.0  | 180 | 7.1  | 190 | 7.6  | 190 | 9.5  | 190 | 8.5  | 190 | 7.9  | 5.3  | 12   |
| 240 | 8.6  | 240 | 6.9  | 240 | 8.6  | 260 | 6.4  | 260 | 6.1  | 270 | 4.4  | 260 | 6.0  | 260 | 4.6  | 260 | 2.4  | 240 | 2.8  | 230 | 4.7  | 210 | 3.5  | 6.2  | 13   |
| 210 | 9.0  | 210 | 8.1  | 210 | 8.4  | 200 | 6.5  | 180 | 6.3  | 190 | 4.5  | 200 | 7.4  | 200 | 8.5  | 200 | 9.1  | 200 | 9.2  | 200 | 6.9  | 200 | 5.4  | 6.7  | 14   |
| 190 | 7.5  | 190 | 7.9  | 190 | 6.4  | 190 | 6.5  | 200 | 7.9  | 190 | 5.2  | 200 | 4.0  | 190 | 3.2  | 190 | 4.7  | 190 | 3.1  | 180 | 3.9  | 180 | 3.1  | 6.8  | 15   |
| 200 | 7.9  | 200 | 8.0  | 240 | 6.7  | 260 | 5.1  | 250 | 4.2  | 250 | 4.6  | 210 | 4.5  | 200 | 3.7  | 200 | 2.0  | 200 | 4.0  | 190 | 4.0  | 220 | 5.1  | 5.6  | 16   |
| 200 | 6.1  | 190 | 5.5  | 190 | 6.0  | 180 | 5.2  | 180 | 2.9  | 180 | 2.9  | 230 | 3.1  | —   | 1.1  | —   | 0.6  | —   | 0.2  | —   | 1.2  | —   | 0.4  | 4.3  | 17   |
| 280 | 5.9  | 280 | 7.5  | 280 | 8.2  | 280 | 8.0  | 280 | 9.0  | 270 | 6.9  | 270 | 5.6  | 270 | 3.2  | —   | 1.5  | 270 | 2.2  | 280 | 5.6  | 280 | 5.0  | 4.4  | 18   |
| 280 | 5.0  | 270 | 4.6  | 280 | 4.9  | 270 | 5.8  | 280 | 5.1  | 280 | 4.6  | 270 | 2.6  | 260 | 3.1  | 270 | 3.0  | —   | 1.0  | —   | 0.0  | —   | 0.1  | 3.1  | 19   |
| 170 | 4.0  | 260 | 3.5  | —   | 1.2  | —   | 0.1  | —   | 0.1  | 260 | 2.4  | —   | 1.5  | 360 | 3.0  | 30  | 1.8  | 10  | 1.6  | 10  | 2.1  | —   | 0.8  | 1.4  | 20   |
| 60  | 2.7  | 50  | 3.1  | 70  | 3.7  | 50  | 3.3  | 20  | 2.5  | 20  | 3.1  | 20  | 3.0  | 20  | 4.3  | 20  | 3.8  | 30  | 4.0  | 20  | 3.9  | 360 | 3.2  | 3.2  | 21   |
| 50  | 5.1  | 40  | 4.6  | 30  | 3.1  | 30  | 2.9  | 50  | 3.6  | 50  | 3.8  | 40  | 3.1  | —   | 0.8  | —   | 0.2  | —   | 0.1  | —   | 0.0  | —   | 0.0  | 3.4  | 22   |
| 220 | 8.5  | 210 | 9.0  | 210 | 9.2  | 210 | 9.1  | 240 | 5.7  | 260 | 5.1  | 270 | 3.5  | 280 | 3.2  | 270 | 3.0  | 260 | 3.6  | 260 | 4.6  | 260 | 4.0  | 4.4  | 23   |
| 280 | 8.2  | 280 | 8.5  | 290 | 8.9  | 290 | 8.0  | 290 | 7.5  | 280 | 9.1  | 280 | 8.4  | 280 | 7.4  | 270 | 6.2  | 280 | 8.0  | 280 | 6.1  | 270 | 5.1  | 6.5  | 24   |
| 280 | 3.0  | 280 | 3.6  | 280 | 4.9  | 270 | 3.1  | 260 | 3.0  | 260 | 3.1  | 260 | 3.0  | 310 | 3.0  | 350 | 2.4  | 350 | 1.6  | —   | 0.1  | —   | 0.5  | 4.2  | 25   |
| 300 | 4.7  | 310 | 5.6  | 320 | 5.8  | 330 | 4.7  | 300 | 4.0  | 310 | 3.4  | 290 | 3.0  | 290 | 4.6  | 290 | 3.1  | 260 | 3.6  | 250 | 1.9  | —   | 1.2  | 2.5  | 26   |
| 210 | 4.5  | 200 | 3.6  | 210 | 4.5  | 220 | 5.1  | 220 | 5.5  | 220 | 3.9  | 210 | 2.1  | —   | 1.5  | —   | 0.8  | —   | 0.2  | —   | 0.3  | —   | 0.1  | 2.1  | 27   |
| 70  | 9.5  | 60  | 9.7  | 60  | 9.0  | 60  | 9.0  | 50  | 10.0 | 50  | 8.5  | 40  | 7.8  | 50  | 8.6  | 50  | 8.6  | 50  | 7.8  | 50  | 8.0  | 60  | 7.0  | 7.0  | 28   |
| 60  | 6.7  | 70  | 6.1  | 60  | 5.1  | 60  | 5.0  | 70  | 4.6  | 60  | 4.9  | 70  | 5.0  | 60  | 4.0  | 60  | 4.0  | 60  | 3.6  | 60  | 2.0  | 20  | 1.8  | 5.6  | 29   |
| —   | 1.4  | 220 | 2.4  | 230 | 4.1  | 220 | 3.4  | 210 | 3.0  | 230 | 3.2  | 270 | 2.5  | 230 | 1.8  | 240 | 1.6  | —   | 0.7  | 230 | 1.8  | 220 | 2.2  | 2.1  | 30   |
| 230 | 9.3  | 220 | 7.9  | 210 | 7.5  | 210 | 6.6  | 200 | 5.8  | 210 | 7.1  | 210 | 8.0  | 210 | 8.0  | 230 | 6.6  | 220 | 6.7  | 210 | 6.7  | 210 | 7.6  | 5.9  | 31   |
| —   | 6.9  | —   | 6.8  | —   | 6.7  | —   | 6.2  | —   | 6.0  | —   | 5.7  | —   | 5.2  | —   | 4.6  | —   | 3.9  | —   | 3.9  | —   | 3.9  | —   | 3.7  | 5.0  | —    |

August, 1924.

| 13. |      | 14. |      | 15. |      | 16. |      | 17. |      | 18. |      | 19. |      | 20. |       | 21. |      | 22. |      | 23. |      | 24. |      | Mean | Day. |
|-----|------|-----|------|-----|------|-----|------|-----|------|-----|------|-----|------|-----|-------|-----|------|-----|------|-----|------|-----|------|------|------|
| °   | m/s. | °   | m/s. | °   | m/s. | °   | m/s. | °   | m/s. | °   | m/s. | °   | m/s. | °   | m/s.  | °   | m/s. | °   | m/s. | °   | m/s. | °   | m/s. | m/s. |      |
| 200 | 11.4 | 200 | 11.5 | 210 | 10.8 | 210 | 10.3 | 210 | 9.3  | 210 | 7.6  | 210 | 9.0  | 210 | 9.8   | 210 | 8.3  | 220 | 6.1  | 220 | 5.0  | 220 | 3.1  | 8.6  | 1    |
| 280 | 8.0  | 280 | 8.0  | 290 | 8.6  | 280 | 9.0  | 290 | 8.4  | 290 | 7.1  | 330 | 3.6  | 300 | 2.4   | —   | 1.3  | —   | 1.5  | 300 | 2.8  | 360 | 2.9  | 5.0  | 2    |
| 200 | 6.7  | 200 | 8.0  | 200 | 8.3  | 200 | 7.6  | 200 | 4.9  | 190 | 4.3  | 220 | 4.1  | 220 | 3.5   | 250 | 4.1  | 270 | 5.1  | 270 | 3.5  | 270 | 3.9  | 4.4  | 3    |
| 240 | 6.8  | 240 | 6.6  | 230 | 6.9  | 220 | 7.6  | 220 | 8.0  | 220 | 8.4  | 210 | 5.8  | 210 | 5.3   | 190 | 5.2  | 190 | 4.5  | 180 | 5.3  | 180 | 5.2  | 5.4  | 4    |
| 240 | 12.3 | 240 | 10.5 | 260 | 9.6  | 270 | 10.0 | 270 | 10.6 | 270 | 5.0  | 270 | 4.1  | 240 | 1.9   | 230 | 2.4  | 240 | 4.4  | 250 | 3.3  | 250 | 1.4  | 7.6  | 5    |
| 240 | 7.4  | 240 | 6.7  | 250 | 7.1  | 250 | 5.2  | 260 | 4.8  | 260 | 5.6  | 270 | 4.5  | 270 | 4.0   | 270 | 3.9  | 270 | 3.7  | 270 | 3.1  | 270 | 3.6  | 4.9  | 6    |
| 280 | 7.9  | 290 | 7.9  | 290 | 7.0  | 290 | 8.6  | 290 | 7.2  | 290 | 5.8  | 290 | 6.3  | 290 | 4.5   | 290 | 5.5  | 300 | 3.9  | —   | 0.5  | —   | 0.6  | 5.2  | 7    |
| 270 | 3.3  | 270 | 3.6  | 260 | 2.5  | —   | 1.4  | 240 | 2.5  | 230 | 4.0  | 240 | 2.2  | 260 | 1.9   | 240 | 2.1  | —   | 0.6  | —   | 0.3  | —   | 0.1  | 1.9  | 8    |
| 210 | 5.6  | 200 | 6.0  | 210 | 5.6  | 210 | 5.2  | 220 | 4.9  | 190 | 3.4  | 190 | 2.6  | 190 | 1.7   | —   | 0.9  | —   | 0.3  | —   | 0.3  | —   | 0.3  | 2.3  | 9    |
| 190 | 5.2  | 210 | 5.6  | 200 | 5.5  | 220 | 6.0  | 210 | 5.5  | 190 | 4.5  | 200 | 3.9  | 200 | 4.1   | 190 | 4.1  | 190 | 2.0  | —   | 0.5  | —   | 1.1  | 2.9  | 10   |
| 200 | 8.1  | 200 | 9.2  | 200 | 8.0  | 190 | 7.5  | 190 | 6.7  | 200 | 5.1  | 210 | 4.1  | 210 | 4.4   | 200 | 4.0  | 200 | 5.2  | 200 | 4.5  | 210 | 4.9  | 5.8  | 11   |
| 210 | 6.5  | 210 | 5.8  | 210 | 5.5  | 200 | 5.4  | 200 | 5.0  | 200 | 4.0  | 200 | 2.1  | —   | 0.3   | —   | 0.1  | —   | 0.1  | —   | 0.6  | —   | 0.4  | 3.5  | 12   |
| —   | 1.5  | 120 | 2.5  | 300 | 4.5  | —   | 1.5  | 180 | 1.6  | —   | 0.3  | —   | 0.1  | —   | 0.5   | —   | 1.0  | —   | 1.0  | —   | 0.6  | —   | 0.2  | 0.9  | 13   |
| 200 | 6.9  | 200 | 6.4  | 200 | 5.1  | 190 | 4.6  | 200 | 6.4  | 210 | 6.4  | 280 | 5.0  | 280 | 5.9   | 270 | 4.3  | 260 | 3.4  | 260 | 2.9  | 270 | 3.0  | 4.2  | 14   |
| 220 | 8.1  | 220 | 8.5  | 220 | 7.9  | 210 | 8.4  | 200 | 7.1  | 200 | 6.4  | 210 | 6.6  | 200 | 2.6   | —   | 1.5  | 200 | 2.1  | 190 | 2.9  | 180 | 3.4  | 4.8  | 15   |
| 160 | 3.6  | 160 | 3.9  | —   | 1.2  | —   | 1.4  | 360 | 3.4  | 290 | 2.6  | 230 | 4.5  | 260 | 4.2   | 270 | 2.2  | —   | 0.6  | —   | 0.1  | —   | 0.0  | 3.4  | 16   |
| 120 | 5.1  | 110 | 6.7  | 90  | 5.1  | 60  | 6.0  | 50  | 7.1  | 50  | 6.5  | 40  | 6.9  | 30  | 6.6   | 20  | 6.0  | 10  | 5.9  | 360 | 5.2  | †   | 5.5  | 3.6  | 17   |
| 290 | 8.7  | 280 | 9.1  | 280 | 9.3  | 280 | 9.4  | 280 | 8.8  | 270 | 7.2  | 270 | 5.5  | 270 | 5.2   | 270 | 4.4  | 270 | 5.4  | 260 | 5.2  | 260 | 3.6  | 5.6  | 18   |
| 260 | 5.2  | 270 | 4.5  | 260 | 5.2  | 250 | 5.0  | 250 | 5.0  | 230 | 5.5  | 220 | 6.0  | 230 | 6.7   | 220 | 5.6  | 220 | 5.0  | 220 | 4.5  | 220 | 3.6  | 4.8  | 19   |
| 240 | 6.8  | 230 | 7.0  | 220 | 7.8  | 210 | 7.4  | 220 | 8.4  | 210 | 7.7  | 210 | 7.1  | 220 | 6.4   | 220 | 5.4  | 220 | 5.0  | 220 | 6.2  | 230 | 6.1  | —    | 20   |
| 240 | 5.1  | 260 | 4.0  | 250 | 5.5  | 270 | 4.2  | 280 | 3.5  | 270 | 3.2  | 260 | 3.5  | 250 | 3.6   | 250 | 3.5  | 250 | 3.5  | 250 | 3.9  | 250 | 5.0  | 4.7  | 21   |
| 230 | 2.0  | 230 | 1.7  | 230 | 3.1  | 260 | 3.2  | 270 | 2.1  | —   | 0.0  | —   | 0.0  | —   | 0.3   | —   | 1.5  | —   | 1.5  | —   | 1.0  | —   | 0.5  | 2.6  | 22   |
| 10  | 2.8  | 10  | 1.8  | 10  | 3.0  | 10  | 2.1  | 10  | 2.4  | 360 | 1.9  | —   | 0.2  | —   | 0.3</ |     |      |     |      |     |      |     |      |      |      |

WIND: DIRECTION AND SPEED.

Direction expressed in degrees from North (E = 90°, S = 180°, W = 270°, N = 360°). Speed in metres per second.

189. Eskdalemuir :

H<sub>a</sub> (height of anemograph above M.S.L.) = Height of ground above

| Day.     | 1.  |      | 2.  |      | 3.  |      | 4.  |      | 5.  |      | 6.  |      | 7.  |      | 8.  |      | 9.  |      | 10. |      | 11. |      | Noon. |      |
|----------|-----|------|-----|------|-----|------|-----|------|-----|------|-----|------|-----|------|-----|------|-----|------|-----|------|-----|------|-------|------|
|          | °   | m/s. | °   | m/s. | °   | m/s. | °   | m/s. | °   | m/s. | °   | m/s. | °   | m/s. | °   | m/s. | °   | m/s. | °   | m/s. | °   | m/s. | °     | m/s. |
| 1        | 220 | 6.5  | 220 | 6.0  | 220 | 5.5  | 220 | 5.0  | 220 | 6.0  | 230 | 5.7  | 230 | 5.6  | 220 | 4.9  | 250 | 5.5  | 240 | 4.3  | 250 | 4.9  | 260   | 5.5  |
| 2        | —   | 1.1  | —   | 1.1  | —   | 0.9  | —   | 1.1  | —   | 1.0  | —   | 0.6  | —   | 1.0  | 30  | 3.0  | 60  | 3.5  | 70  | 4.0  | 60  | 2.6  | 60    | 2.5  |
| 3        | 50  | 2.5  | 50  | 2.2  | 50  | 1.6  | —   | 1.5  | 60  | 3.2  | 50  | 4.5  | 50  | 4.0  | 60  | 4.1  | 70  | 4.4  | 70  | 4.6  | 80  | 5.1  | 80    | 5.4  |
| 4        | 40  | 3.4  | 40  | 4.1  | 30  | 4.6  | 40  | 3.4  | 50  | 2.0  | 50  | 2.0  | 40  | 2.1  | 40  | 3.5  | 50  | 4.1  | 60  | 5.1  | 70  | 5.0  | 80    | 6.0  |
| 5        | 20  | 3.8  | 40  | 3.5  | 40  | 2.5  | 20  | 2.5  | 20  | 2.1  | 30  | 2.7  | 10  | 2.6  | 10  | 2.6  | 10  | 2.9  | 40  | 4.7  | 50  | 4.5  | 50    | 5.1  |
| 6        | 20  | 3.2  | 20  | 2.6  | 30  | 2.1  | 20  | 3.0  | 20  | 1.6  | 40  | 2.2  | 60  | 2.9  | 70  | 2.5  | 60  | 2.6  | 50  | 3.5  | 60  | 4.0  | 50    | 4.0  |
| 7        | 20  | 3.9  | 20  | 4.4  | 10  | 3.5  | 10  | 3.1  | 10  | 2.1  | 20  | 1.8  | 20  | 3.1  | 50  | 6.1  | 40  | 4.2  | 30  | 3.1  | 40  | 4.6  | 40    | 3.4  |
| 8        | 50  | 5.1  | 50  | 4.9  | 50  | 6.5  | 50  | 6.6  | 60  | 4.9  | 130 | 2.0  | 190 | 5.8  | 210 | 6.1  | 210 | 5.9  | 220 | 6.2  | 220 | 7.0  | 220   | 8.0  |
| 9        | 230 | 7.5  | 230 | 5.5  | 250 | 3.1  | 320 | 2.0  | —   | 1.2  | 360 | 2.4  | 330 | 4.9  | 340 | 7.2  | 350 | 9.2  | 360 | 9.0  | 350 | 7.6  | 340   | 8.0  |
| 10       | 330 | 6.2  | 320 | 6.0  | 310 | 3.8  | 290 | 4.1  | 300 | 4.5  | 290 | 4.2  | 280 | 3.0  | 270 | 3.5  | 270 | 3.9  | 290 | 4.6  | 290 | 5.4  | 270   | 5.0  |
| 11       | —   | 1.1  | 180 | 3.8  | 190 | 6.7  | 240 | 8.6  | 230 | 8.1  | 230 | 8.0  | 230 | 8.7  | 240 | 9.5  | 250 | 10.3 | 270 | 9.1  | 270 | 8.5  | 260   | 9.9  |
| 12       | 200 | 4.4  | 210 | 9.9  | 200 | 11.5 | 200 | 9.8  | 190 | 7.1  | 210 | 10.0 | 220 | 11.7 | 230 | 12.3 | 230 | 11.4 | 220 | 8.5  | 220 | 9.1  | 220   | 10.7 |
| 13       | 210 | 12.7 | 210 | 11.2 | 210 | 11.0 | 220 | 9.5  | 220 | 8.9  | 220 | 7.8  | 220 | 7.9  | 230 | 8.0  | 230 | 10.0 | 220 | 9.5  | 220 | 10.0 | 220   | 10.4 |
| 14       | 230 | 1.9  | —   | 1.1  | 240 | 1.7  | —   | 1.1  | —   | 0.4  | —   | 0.4  | —   | 0.4  | 230 | 6.0  | 230 | 7.5  | 230 | 8.3  | 240 | 10.4 | 230   | 10.5 |
| 15       | 220 | 4.1  | 210 | 4.3  | 220 | 4.0  | 220 | 4.1  | 230 | 5.5  | 220 | 6.2  | 210 | 5.7  | 220 | 6.1  | 210 | 6.5  | 210 | 8.3  | 220 | 7.5  | 220   | 10.2 |
| 16       | 240 | 8.2  | 230 | 6.0  | 230 | 7.4  | 230 | 7.5  | 220 | 7.0  | 220 | 6.5  | 230 | 7.8  | 230 | 8.6  | 240 | 8.7  | 240 | 9.5  | 230 | 8.8  | 220   | 9.4  |
| 17       | 240 | 9.5  | 220 | 8.5  | 230 | 9.5  | 230 | 8.2  | 230 | 8.5  | 220 | 9.3  | 220 | 9.0  | 220 | 9.8  | 210 | 9.9  | 210 | 10.2 | 220 | 12.0 | 230   | 13.1 |
| 18       | 230 | 11.6 | 230 | 11.6 | 230 | 10.6 | 230 | 8.2  | 220 | 8.2  | 240 | 11.1 | 230 | 12.0 | 240 | 11.9 | 250 | 11.5 | 250 | 14.0 | 250 | 15.1 | 250   | 15.1 |
| 19       | —   | 1.1  | —   | 1.0  | —   | 0.8  | —   | 0.3  | —   | 0.5  | —   | 0.5  | 200 | 2.9  | 190 | 2.5  | 200 | 4.9  | 230 | 6.5  | 230 | 6.4  | 220   | 6.5  |
| 20       | 20  | 4.0  | 20  | 5.3  | 10  | 5.6  | 20  | 4.5  | 20  | 5.1  | 20  | 4.5  | 10  | 2.5  | 10  | 2.7  | 10  | 3.3  | —   | 1.5  | 230 | 4.1  | 210   | 4.5  |
| 21       | 180 | 8.4  | 180 | 8.8  | 250 | 10.4 | 270 | 8.5  | 280 | 16.0 | 270 | 13.0 | 270 | 12.5 | 270 | 11.0 | 270 | 11.3 | 250 | 11.2 | 250 | 11.0 | 250   | 10.4 |
| 22       | —   | 0.2  | —   | 0.2  | —   | 0.5  | —   | 0.1  | —   | 0.6  | —   | 0.9  | —   | 0.7  | —   | 0.5  | —   | 0.5  | 270 | 2.2  | 280 | 4.9  | 260   | 6.0  |
| 23       | 120 | 3.6  | 100 | 6.0  | 70  | 8.2  | 60  | 10.9 | 60  | 10.6 | 70  | 7.1  | 70  | 5.5  | 80  | 5.8  | 90  | 4.7  | 130 | 4.2  | 140 | 4.2  | 130   | 4.3  |
| 24       | †   | 1.6  | †   | 3.7  | †   | 4.8  | †   | 5.4  | †   | 3.7  | †   | 2.0  | —   | 1.0  | †   | 3.0  | 280 | 3.2  | 280 | 2.6  | 270 | 5.0  | 290   | 4.6  |
| 25       | —   | 0.2  | —   | 0.2  | —   | 0.3  | —   | 0.0  | —   | 0.0  | —   | 0.0  | —   | 0.0  | —   | 0.0  | —   | 0.1  | —   | 0.7  | —   | 1.0  | —     | 0.8  |
| 26       | 30  | 2.1  | 50  | 3.6  | 40  | 5.1  | 50  | 4.1  | 50  | 4.6  | 30  | 4.8  | 40  | 4.6  | 30  | 4.9  | 30  | 4.5  | 40  | 5.5  | 60  | 5.0  | 60    | 5.1  |
| 27       | —   | 1.4  | 360 | 1.8  | —   | 1.1  | —   | 0.3  | —   | 0.0  | —   | 0.1  | —   | 0.0  | —   | 0.0  | —   | 0.0  | —   | 0.1  | 300 | 2.0  | 290   | 3.5  |
| 28       | —   | 0.1  | —   | 0.2  | —   | 0.1  | —   | 0.1  | —   | 0.0  | —   | 0.0  | —   | 0.0  | 190 | 4.5  | 200 | 6.6  | 210 | 8.4  | 230 | 10.6 | 230   | 11.0 |
| 29       | 210 | 11.6 | 220 | 10.8 | 210 | 10.5 | 220 | 9.6  | 210 | 9.6  | 210 | 10.0 | 200 | 11.6 | 200 | 13.0 | 200 | 13.5 | 200 | 13.1 | 190 | 12.0 | 180   | 11.7 |
| 30       | 210 | 8.5  | 200 | 9.9  | 190 | 7.6  | 180 | 6.6  | 170 | 4.6  | 160 | 3.0  | 160 | 3.6  | 170 | 3.0  | 160 | 3.8  | 170 | 4.5  | 180 | 4.5  | 190   | 4.5  |
| Mean ... | —   | 4.7  | —   | 4.9  | —   | 5.1  | —   | 4.7  | —   | 4.6  | —   | 4.4  | —   | 4.9  | —   | 5.5  | —   | 5.9  | —   | 6.2  | —   | 6.8  | —     | 7.2  |

190. Eskdalemuir : H<sub>a</sub> = 235 metres + 15 metres.

|    | °   | m/s. | °   | m/s. | °   | m/s. | °   | m/s. | °   | m/s. | °   | m/s. | °   | m/s. | °   | m/s. | °   | m/s. | °   | m/s. | °   | m/s. | °   | m/s. |
|----|-----|------|-----|------|-----|------|-----|------|-----|------|-----|------|-----|------|-----|------|-----|------|-----|------|-----|------|-----|------|
| 1  | —   | 0.1  | —   | 0.2  | —   | 0.4  | —   | 0.5  | —   | 0.3  | —   | 0.2  | —   | 0.5  | —   | 0.2  | —   | 0.4  | 210 | 5.4  | 230 | 6.6  | 220 | 7.0  |
| 2  | 180 | 4.8  | 180 | 5.0  | 170 | 3.0  | 190 | 2.9  | 180 | 3.1  | 170 | 3.7  | 170 | 4.2  | 160 | 3.4  | 160 | 3.1  | 170 | 3.5  | 170 | 5.1  | 180 | 3.5  |
| 3  | —   | 1.5  | —   | 1.2  | —   | 0.6  | —   | 1.3  | —   | 0.4  | —   | 0.9  | 20  | 2.9  | 10  | 3.9  | 10  | 3.5  | 20  | 3.5  | 30  | 6.1  | 20  | 5.9  |
| 4  | —   | 0.0  | —   | 0.1  | —   | 0.1  | —   | 0.1  | —   | 0.1  | —   | 0.2  | —   | 0.2  | 170 | 2.0  | 200 | 3.2  | 220 | 2.5  | 230 | 3.0  | 210 | 4.0  |
| 5  | —   | 1.0  | —   | 0.3  | —   | 0.5  | 170 | 1.9  | 170 | 1.6  | —   | 0.2  | —   | 0.3  | —   | 0.3  | —   | 0.2  | —   | 1.5  | 40  | 1.6  | —   | 1.5  |
| 6  | 260 | 5.9  | 270 | 8.5  | 270 | 9.5  | 270 | 9.4  | 260 | 9.0  | 250 | 9.4  | 230 | 7.8  | 240 | 9.3  | 240 | 9.0  | 230 | 10.5 | 230 | 10.6 | 230 | 8.7  |
| 7  | 230 | 8.9  | 240 | 8.9  | 240 | 6.6  | 250 | 4.0  | 270 | 4.1  | 260 | 4.9  | 260 | 5.4  | 230 | 5.5  | 230 | 8.6  | 250 | 4.0  | 240 | 10.0 | 240 | 9.1  |
| 8  | —   | 0.8  | —   | 0.7  | —   | 0.6  | —   | 0.5  | —   | 1.0  | —   | 0.8  | —   | 0.5  | —   | 0.0  | —   | 0.0  | —   | 0.5  | —   | 1.0  | 290 | 2.4  |
| 9  | —   | 0.4  | —   | 0.3  | —   | 0.6  | —   | 0.4  | —   | 0.3  | —   | 0.3  | —   | 0.4  | —   | 0.4  | —   | 1.1  | 200 | 4.0  | 210 | 5.5  | 210 | 5.4  |
| 10 | 210 | 4.6  | 220 | 5.5  | 210 | 4.6  | 200 | 5.1  | 230 | 3.8  | 220 | 2.1  | 270 | 6.1  | 280 | 3.5  | 230 | 3.6  | 210 | 6.2  | 220 | 6.2  | 220 | 6.6  |
| 11 | 230 | 5.0  | 220 | 4.1  | 190 | 3.0  | 210 | 5.8  | 210 | 7.2  | 210 | 7.5  | 210 | 6.1  | 210 | 6.2  | 210 | 10.4 | 220 | 12.6 | 220 | 11.0 | 210 | 10.7 |
| 12 | 180 | 7.9  | 190 | 10.5 | 210 | 10.3 | 230 | 9.0  | 240 | 7.5  | 230 | 6.4  | 230 | 6.2  | 230 | 8.6  | 220 | 7.4  | 230 | 8.8  | 230 | 7.5  | 220 | 6.8  |
| 13 | 340 | 3.0  | 330 | 2.4  | 330 | 2.1  | 330 | 3.0  | 330 | 2.6  | 330 | 2.6  | 330 | 1.6  | 330 | 3.1  | 360 | 2.7  | 30  | 1.9  | 20  | 1.8  | 50  | 2.4  |
| 14 | —   | 0.1  | —   | 1.1  | —   | 1.5  | —   | 1.4  | —   | 0.6  | —   | 0.2  | —   | 0.1  | —   | 0.1  | —   | 0.1  | —   | 0.6  | —   | 1.3  | —   | 1.5  |
| 15 | 320 | 1.7  | 320 | 2.2  | —   | 1.5  | 330 | 2.1  | 330 | 1.6  | —   | 1.4  | —   | 0.5  | —   | 0.2  | —   | 0.2  | —   | 1.0  | 170 | 2.4  | 160 | 3.5  |
| 16 | —   | 0.1  | —   | 0.1  | —   | 0.2  | —   | 0.3  | —   | 0.6  | —   | 1.5  | —   | 1.0  | —   | 1.4  | —   | 1.2  | 160 | 1.9  | 190 | 2.7  | 180 | 2.4  |
| 17 | 240 | 2.0  | —   | 1.3  | —   | 1.1  | —   | 1.0  | —   | 1.5  | 270 | 1.8  | 240 | 3.1  | 150 | 1.6  | 260 | 5.2  | 290 | 4.5  | —   | 1.5  | 270 | 2.6  |
| 18 | —   | 0.0  | —   | 0.1  | —   | 1.0  | —   | 0.1  | —   | 0.1  | —   | 0.0  | —   | 0.0  | —   | 0.0  | —   | 0.0  | —   | 0.0  | —   | 0.0  | —   | 0.0  |
| 19 | 170 | 5.7  | 160 | 4.5  | 150 | 3.9  | 160 | 3.6  | 160 | 3.5  | 150 | 2.8  | 160 | 2.5  | 170 | 2.4  | 160 | 2.4  | 200 | 4.3  | 210 | 5.5  | 210 | 5.7  |
| 20 | 250 | 5.4  | 240 | 5.0  | 240 | 4.3  | 230 | 4.9  | 240 | 4.4  | 240 | 3.3  | 240 | 1.7  | —   | 1.5  | 260 | 4.0  | 270 | 6.4  | 280 | 3.5  | 290 | 4.2  |
| 21 | 360 | 2.9  | 360 | 3.4  | 360 | 3.2  | 360 | 2.9  | 360 | 3.4  | 10  | 3.5  | 10  | 3.1  | 10  | 3.5  | 10  | 3.7  | 30  | 7.0  | 50  | 8.5  | 40  | 8.0  |
| 22 | 10  | 5.9  | 10  | 3.7  | 20  | 2.6  | †   | 4.6  | †   | 3.6  | —   | 0.3  | —   | 1.2  | —   | 0.8  | †   | 2.9  | 40  | 1.8  | 60  | 2.0  | 80  | 1.6  |
| 23 | —   | 0.1  | —   | 0.0  | —   | 0.1  | —   | 0.1  | —   | 0.0  | —   | 0.0  | —   | 0.1  | —   | 0.1  | —   | 0.2  | 200 | 1.7  | 170 | 1.6  | 170 | 2.8  |
| 24 | —   | 0.7  | —   | 0.2  | —   | 0.2  | —   | 0.2  | —   | 0.5  | —   | 0.4  | —   | 1.4  | —   | 1.2  | 150 | 2.0  | 140 | 3.6  | 130 | 3.4  | 130 | 5.0  |
| 25 | 80  | 2.1  | 100 | 5.8  | 100 | 5.6  | 110 | 6.2  | 110 | 5.5  | 90  | 3.4  | 30  | 3.1  | 60  | 2.9  | 40  | 2.4  | 90  | 2.3  | 110 | 3.1  | —   | 1.1  |
| 26 | —   | 0.2  | —   | 1.1  | —   | 1.0  | —   | 1.0  | —   | 0.6  | —   | 1.0  | —   | 1.2  | —   | 0.6  | —   | 0.9  | 20  | 1.9  | 40  | 3.4  | 50  | 4.0  |
| 27 | 10  | 6.6  | 10  | 6.1  | 360 | 5.7  | 350 | 4.5  | 350 | 3.6  | 340 | 3.1  | 340 | 3.5  | 350 | 4.0  | 360 | 3.5  | 360 | 3.1  | 360 | 3.1  | 360 | 2.9  |
| 28 | —   | 1.0  | —   | 0.2  | —   | 0.1  | —   | 0.1  | —   | 0.0  | —   | 0.0  | —   | 0.1  | —   | 0.1  | —   | 0.0  |     |      |     |      |     |      |

Averages for periods of sixty minutes, centred at the exact hours, Greenwich Mean Time.

M.S.L. +  $h_a$  (height of anemograph above ground) = 235 metres + 15 metres.

September, 1924.

| 13. |      | 14. |      | 15. |      | 16. |      | 17. |      | 18. |      | 19. |      | 20. |      | 21. |      | 22. |      | 23. |      | 24. |      | Mean | Day. |
|-----|------|-----|------|-----|------|-----|------|-----|------|-----|------|-----|------|-----|------|-----|------|-----|------|-----|------|-----|------|------|------|
| °   | m/s. | °   | m/s. | °   | m/s. | °   | m/s. | °   | m/s. | °   | m/s. | °   | m/s. | °   | m/s. | °   | m/s. | °   | m/s. | °   | m/s. | °   | m/s. | m/s. |      |
| 260 | 5.8  | 270 | 4.5  | 270 | 4.0  | 260 | 5.0  | 270 | 5.0  | 270 | 5.1  | 260 | 3.0  | 230 | 2.3  | 260 | 4.4  | 260 | 4.6  | 280 | 5.7  | —   | 1.5  | 4.9  | 1    |
| 60  | 2.4  | 50  | 3.0  | 70  | 3.5  | 70  | 4.1  | 80  | 3.5  | 70  | 2.6  | —   | 1.0  | —   | 1.1  | 50  | 1.6  | 50  | 1.7  | 50  | 3.7  | 50  | 2.8  | 2.2  | 2    |
| 80  | 6.8  | 80  | 6.5  | 80  | 6.0  | 70  | 6.1  | 70  | 5.0  | 70  | 4.1  | 50  | 3.5  | 50  | 3.4  | 10  | 2.6  | 10  | 2.1  | 30  | 2.1  | 40  | 2.5  | 3.9  | 3    |
| 100 | 6.6  | 80  | 7.0  | 80  | 6.2  | 90  | 5.4  | 90  | 5.0  | 80  | 3.5  | 40  | 2.5  | 50  | 3.6  | 50  | 2.6  | 50  | 2.4  | 50  | 3.0  | 50  | 4.1  | 4.0  | 4    |
| 50  | 5.6  | 60  | 4.8  | 70  | 5.4  | 70  | 3.8  | 60  | 1.8  | 30  | 3.0  | 50  | 3.6  | 40  | 3.4  | 30  | 3.4  | 30  | 3.0  | 20  | 3.0  | 20  | 2.8  | 3.5  | 5    |
| 60  | 4.0  | 50  | 4.1  | 60  | 4.9  | 60  | 4.6  | 70  | 3.8  | 60  | 2.5  | —   | 1.1  | —   | 1.4  | 20  | 1.6  | 20  | 2.1  | 10  | 3.4  | 20  | 3.5  | 3.0  | 6    |
| 30  | 4.2  | 30  | 4.8  | 40  | 5.0  | 40  | 4.5  | 30  | 4.2  | 30  | 4.5  | 40  | 5.5  | 30  | 5.0  | 30  | 4.1  | 20  | 4.0  | 30  | 5.0  | 40  | 5.4  | 4.1  | 7    |
| 200 | 9.6  | 200 | 9.9  | 200 | 9.1  | 200 | 10.0 | 200 | 8.4  | 200 | 8.8  | 200 | 8.5  | 210 | 10.1 | 210 | 9.0  | 220 | 8.0  | 220 | 9.1  | 220 | 8.9  | 7.3  | 8    |
| 340 | 9.5  | 330 | 9.5  | 330 | 10.1 | 330 | 10.1 | 340 | 10.0 | 330 | 10.2 | 340 | 8.6  | 330 | 5.8  | 330 | 6.0  | 340 | 4.5  | 330 | 4.5  | 330 | 5.5  | 6.8  | 9    |
| 270 | 5.0  | 260 | 5.9  | 270 | 5.8  | 270 | 4.5  | 250 | 5.0  | 240 | 4.6  | 230 | 4.0  | 220 | 3.0  | —   | 1.5  | 180 | 2.2  | 180 | 3.9  | 180 | 2.5  | 4.3  | 10   |
| 250 | 9.1  | 250 | 7.5  | 240 | 7.9  | 250 | 9.1  | 240 | 8.5  | 250 | 7.8  | 240 | 4.6  | 210 | 3.8  | 210 | 2.5  | 180 | 3.0  | 190 | 3.8  | 210 | 5.5  | 6.8  | 11   |
| 220 | 10.5 | 210 | 10.0 | 210 | 11.0 | 210 | 10.6 | 210 | 11.0 | 210 | 11.5 | 210 | 11.1 | 210 | 12.2 | 210 | 13.0 | 210 | 13.5 | 210 | 12.5 | 210 | 13.6 | 10.5 | 12   |
| 220 | 10.5 | 210 | 9.7  | 220 | 10.1 | 220 | 9.0  | 210 | 8.1  | 210 | 8.1  | 220 | 9.0  | 230 | 8.5  | 230 | 5.6  | 230 | 6.0  | 250 | 2.0  | 230 | 2.5  | 8.8  | 13   |
| 230 | 10.5 | 230 | 10.5 | 230 | 10.4 | 230 | 11.1 | 230 | 11.2 | 240 | 9.4  | 260 | 7.4  | 240 | 5.7  | 230 | 3.7  | 220 | 3.5  | 190 | 4.3  | 200 | 3.1  | 5.8  | 14   |
| 210 | 9.5  | 220 | 10.5 | 210 | 12.0 | 210 | 14.5 | 210 | 13.3 | 220 | 12.8 | 220 | 13.8 | 230 | 12.5 | 240 | 9.9  | 240 | 9.4  | 240 | 8.5  | 240 | 7.3  | 8.5  | 15   |
| 220 | 10.2 | 220 | 12.2 | 220 | 10.1 | 220 | 9.7  | 220 | 9.5  | 230 | 9.5  | 230 | 9.0  | 230 | 11.8 | 230 | 10.9 | 230 | 12.0 | 230 | 12.7 | 240 | 12.0 | 9.3  | 16   |
| 230 | 12.8 | 240 | 9.9  | 230 | 8.5  | 240 | 10.5 | 230 | 9.3  | 210 | 5.4  | 210 | 8.7  | 220 | 10.1 | 220 | 12.1 | 230 | 12.3 | 230 | 13.0 | 230 | 13.5 | 10.1 | 17   |
| 260 | 15.0 | 260 | 16.1 | 270 | 13.1 | 270 | 10.2 | 270 | 6.5  | 270 | 3.5  | 220 | 3.7  | 230 | 2.7  | 220 | 2.5  | 230 | 3.0  | 250 | 3.6  | 250 | 3.6  | 9.6  | 18   |
| 220 | 6.5  | 210 | 4.7  | 210 | 6.5  | 210 | 7.0  | 210 | 4.9  | 210 | 2.2  | —   | 0.8  | —   | 0.1  | —   | 0.1  | —   | 0.1  | —   | 1.0  | 60  | 3.0  | 3.0  | 19   |
| 200 | 3.0  | 210 | 5.1  | 210 | 4.8  | 210 | 3.6  | 210 | 1.6  | 150 | 2.3  | 90  | 3.8  | 100 | 6.2  | 120 | 8.4  | 140 | 7.5  | 190 | 11.5 | 190 | 9.7  | 4.7  | 20   |
| 250 | 11.0 | 230 | 11.5 | 240 | 7.9  | 230 | 6.5  | 250 | 6.0  | 230 | 6.0  | 220 | 7.5  | 230 | 8.2  | 230 | 5.1  | 200 | 1.7  | —   | 0.4  | —   | 0.4  | 8.7  | 21   |
| 240 | 5.5  | 250 | 5.7  | 250 | 6.7  | 270 | 5.4  | 260 | 3.3  | 250 | 3.3  | —   | 0.7  | —   | 0.2  | —   | 0.3  | —   | 0.5  | —   | 0.2  | —   | 0.3  | 2.1  | 22   |
| 150 | 3.7  | 160 | 4.8  | —   | 0.3  | 130 | 3.2  | 130 | 1.6  | —   | 0.2  | —   | 0.0  | —   | 0.0  | —   | 0.0  | —   | 0.1  | —   | 1.1  | †   | 2.5  | 3.8  | 23   |
| 280 | 4.2  | 260 | 4.4  | 260 | 6.1  | 250 | 6.7  | 260 | 3.8  | 260 | 3.1  | —   | 1.2  | —   | 0.3  | —   | 0.1  | —   | 0.0  | —   | 0.1  | —   | 0.1  | 3.0  | 24   |
| —   | 0.5  | —   | 0.2  | —   | 1.3  | 120 | 3.5  | 70  | 2.4  | 70  | 2.8  | 40  | 3.6  | 50  | 2.6  | 40  | 2.5  | 40  | 1.7  | 30  | 3.2  | 30  | 2.5  | 1.2  | 25   |
| 60  | 5.2  | 50  | 4.7  | 30  | 4.8  | 40  | 3.7  | 40  | 3.1  | 40  | 2.0  | —   | 1.3  | 350 | 2.1  | —   | 1.2  | —   | 1.4  | —   | 0.9  | —   | 1.3  | 3.6  | 26   |
| 290 | 2.9  | 290 | 3.5  | 290 | 3.1  | 300 | 4.0  | 300 | 2.6  | 290 | 2.5  | 290 | 2.6  | —   | 1.0  | —   | 0.0  | —   | 0.0  | —   | 0.0  | —   | 0.1  | 1.4  | 27   |
| 220 | 12.0 | 220 | 10.9 | 210 | 11.4 | 210 | 11.0 | 200 | 11.0 | 200 | 11.0 | 200 | 11.6 | 210 | 12.5 | 210 | 12.5 | 210 | 12.6 | 210 | 11.5 | 210 | 11.1 | 7.4  | 28   |
| 180 | 10.3 | 180 | 10.9 | 180 | 10.6 | 180 | 10.0 | 180 | 7.1  | 170 | 8.0  | 160 | 7.0  | 160 | 7.4  | 160 | 7.0  | 200 | 10.5 | 230 | 10.6 | 210 | 6.6  | 10.2 | 29   |
| 210 | 2.7  | 280 | 4.6  | 310 | 4.5  | —   | 0.8  | —   | 0.5  | —   | 0.2  | 320 | 3.5  | 310 | 5.6  | 310 | 4.8  | —   | 1.5  | —   | 1.2  | —   | 0.1  | 4.1  | 30   |
| —   | 7.2  | —   | 7.3  | —   | 7.0  | —   | 6.9  | —   | 5.9  | —   | 5.3  | —   | 5.1  | —   | 5.1  | —   | 4.6  | —   | 4.5  | —   | 4.9  | —   | 4.6  | 5.5  |      |

October, 1924.

| 13. |      | 14. |      | 15. |      | 16. |      | 17. |      | 18. |      | 19. |      | 20. |      | 21. |      | 22. |      | 23. |      | 24. |      | Mean | Day. |
|-----|------|-----|------|-----|------|-----|------|-----|------|-----|------|-----|------|-----|------|-----|------|-----|------|-----|------|-----|------|------|------|
| °   | m/s. | °   | m/s. | °   | m/s. | °   | m/s. | °   | m/s. | °   | m/s. | °   | m/s. | °   | m/s. | °   | m/s. | °   | m/s. | °   | m/s. | °   | m/s. | m/s. |      |
| 220 | 6.9  | 210 | 7.5  | 220 | 8.0  | 200 | 6.8  | 200 | 6.2  | 200 | 3.4  | 190 | 2.5  | 160 | 2.8  | 170 | 3.6  | 190 | 4.0  | 180 | 3.4  | 200 | 4.2  | 3.3  | 1    |
| 180 | 4.1  | 180 | 3.5  | 170 | 2.8  | 170 | 2.3  | 170 | 2.0  | —   | 0.8  | —   | 0.4  | —   | 0.2  | —   | 0.1  | —   | 0.1  | —   | 0.1  | —   | 0.6  | 2.7  | 2    |
| 20  | 6.4  | 20  | 6.0  | 30  | 5.1  | 30  | 3.3  | 20  | 2.9  | 10  | 3.1  | 360 | 2.9  | 360 | 2.5  | —   | 1.5  | —   | 0.9  | —   | 0.3  | —   | 0.1  | 2.8  | 3    |
| 200 | 4.4  | 200 | 4.2  | 190 | 3.5  | 190 | 2.4  | —   | 0.2  | —   | 1.1  | —   | 0.8  | —   | 0.9  | —   | 0.9  | —   | 1.2  | —   | 1.1  | —   | 0.7  | 1.5  | 4    |
| —   | 1.4  | —   | 1.0  | —   | 0.1  | —   | 0.3  | 320 | 2.3  | 340 | 2.8  | —   | 1.5  | 290 | 4.5  | 290 | 5.1  | 290 | 6.1  | 280 | 6.4  | 260 | 5.1  | 1.9  | 5    |
| 210 | 8.4  | 210 | 6.0  | 190 | 5.5  | 160 | 4.6  | 150 | 6.4  | 170 | 6.6  | 220 | 6.9  | 230 | 10.0 | 230 | 9.5  | 230 | 8.9  | 230 | 8.0  | 230 | 8.6  | 8.1  | 6    |
| 240 | 9.9  | 240 | 9.6  | 240 | 9.0  | 240 | 6.6  | 240 | 3.5  | 240 | 2.4  | —   | 1.5  | —   | 1.0  | —   | 0.8  | —   | 0.5  | —   | 1.3  | —   | 0.8  | 5.5  | 7    |
| 300 | 3.3  | 290 | 3.5  | 290 | 3.9  | 280 | 2.6  | 280 | 2.5  | 270 | 2.5  | 290 | 3.0  | —   | 1.1  | —   | 1.0  | —   | 0.7  | —   | 0.5  | —   | 0.5  | 1.4  | 8    |
| 210 | 8.0  | 210 | 7.2  | 200 | 6.7  | 180 | 3.7  | 180 | 3.6  | 170 | 4.0  | 180 | 6.0  | 180 | 4.5  | 220 | 4.4  | 230 | 5.5  | 230 | 6.0  | 230 | 5.9  | 3.4  | 9    |
| 220 | 7.3  | 230 | 6.5  | 210 | 3.8  | 200 | 2.1  | —   | 1.1  | —   | 1.1  | —   | 1.5  | 170 | 3.0  | 170 | 3.5  | 180 | 3.0  | 220 | 5.8  | 240 | 6.5  | 4.4  | 10   |
| 220 | 11.2 | 200 | 11.0 | 200 | 10.8 | 210 | 10.8 | 210 | 10.2 | 200 | 8.0  | 190 | 7.7  | 190 | 6.0  | 180 | 5.1  | 180 | 5.0  | 180 | 4.9  | 180 | 7.0  | 7.8  | 11   |
| 210 | 6.4  | 200 | 6.5  | 200 | 5.4  | 200 | 3.1  | —   | 1.5  | —   | 1.1  | —   | 1.1  | —   | 1.0  | —   | 1.4  | 350 | 1.9  | 340 | 2.0  | 340 | 2.5  | 5.5  | 12   |
| —   | 1.5  | —   | 1.5  | 70  | 2.5  | 60  | 2.6  | 40  | 1.9  | 360 | 3.0  | 360 | 3.8  | 360 | 2.8  | 360 | 3.5  | 360 | 2.7  | —   | 1.0  | —   | 0.1  | 2.4  | 13   |
| 150 | 1.9  | 140 | 2.1  | —   | 1.5  | —   | 1.2  | —   | 0.9  | —   | 0.8  | —   | 0.2  | —   | 0.6  | —   | 0.1  | —   | 1.4  | —   | 0.8  | 310 | 1.6  | 0.9  | 14   |
| 140 | 3.1  | 150 | 3.0  | 150 | 3.1  | 160 | 2.6  | —   | 0.5  | —   | 0.1  | —   | 0.2  | —   | 0.1  | —   | 0.1  | —   | 0.2  | —   | 0.2  | —   | 0.1  | 1.3  | 15   |
| 170 | 5.0  | 200 | 6.6  | 210 | 7.0  | 200 | 6.2  | 190 | 6.9  | 200 | 7.5  | 200 | 6.4  | 250 | 4.0  | 260 | 3.0  | 260 | 3.8  | 260 | 4.5  | 240 | 2.7  | 3.2  | 16   |
| 310 | 3.0  | 290 | 2.4  | 270 | 2.9  | 260 | 2.9  | 280 | 3.1  | 280 | 2.4  | —   | 0.8  | —   | 1.5  | 300 | 1.9  | —   | 0.5  | —   | 0.1  | —   | 0.1  | 2.1  | 17   |
| —   | 0.3  | —   | 1.1  | —   | 0.8  | —   | 1.5  | 160 | 2.0  | —   | 1.2  | —   | 1.0  | —   | 0.6  | 150 | 2.5  | 150 | 3.1  | 150 | 4.5  | 160 | 6.1  | 1.0  | 18   |
| 210 | 6.0  | 220 | 5.4  | 220 | 5.4  | 230 | 4.4  | 240 | 2.8  | 260 | 3.2  | 250 | 4.1  | 220 | 4.3  | 210 | 1.9  | 210 | 3.8  | 230 | 4.0  | 250 | 4.5  | 4.1  | 19   |
| 310 | 2.2  | 360 | 2.0  | —   | 1.0  | 360 | 1.9  | 10  | 2.9  | 30  | 3.0  | —   | 3.8  | 10  | 4.0  | 10  | 2.8  | 360 | 3.6  | 360 | 3.3  | 360 | 2.5  | 3.4  | 20   |
| 40  | 8.2  | 30  | 6.6  | 40  | 6.6  | 40  | 6.2  | 20  | 3.9  | 20  | 4.4  | 20  | 5.2  | 20  | 5.1  | 20  | 6.4  | 20  | 6.6  | 20  | 6.1  | 10  | 6.1  | 5.1  | 21   |
| —   | 1.4  | —   | 1.0  | —   | 0.2  | —   | 0.2  | —   | 0.0  | —   | 0.0  | —   | 0.0  | —   | 0.0  | —   | 0.0  | —   | 0.0  | —   | 0.0  | —   | 0.0  | 1.5  | 22   |
| 190 | 3.5  | 190 | 4.1  | 190 | 4.0  | 190 | 3.0  | 190 | 3.5  | 210 | 5.2  | 210 | 4.5  | —   | 1.0  | —   | 0.1  | —   | 0.4  | —   | 0.1  | —   | 0.1  | 1.5  | 23   |
| 120 | 6.0  | 120 | 6.1  | 100 | 4.6  | 100 | 4.6  | 80  |      |     |      |     |      |     |      |     |      |     |      |     |      |     |      |      |      |

Direction expressed in degrees from North (E = 90°, S = 180°, W = 270°, N = 360°). Speed in metres per second.

191. Eskdalemuir :

H<sub>a</sub> (height of anemograph above M.S.L.) = Height of ground above

| Day.     | 1.  |      | 2.  |      | 3.  |      | 4.  |      | 5.  |      | 6.  |      | 7.  |      | 8.  |      | 9.  |      | 10. |      | 11. |      | Noon. |      |
|----------|-----|------|-----|------|-----|------|-----|------|-----|------|-----|------|-----|------|-----|------|-----|------|-----|------|-----|------|-------|------|
|          | °   | m/s. | °   | m/s. | °   | m/s. | °   | m/s. | °   | m/s. | °   | m/s. | °   | m/s. | °   | m/s. | °   | m/s. | °   | m/s. | °   | m/s. | °     | m/s. |
| 1        | 220 | 8.4  | 230 | 11.8 | 220 | 9.8  | 220 | 8.9  | 250 | 9.6  | 260 | 10.2 | 270 | 9.0  | 180 | 2.5  | 140 | 1.8  | 210 | 4.1  | 210 | 4.5  | 210   | 4.6  |
| 2        | 210 | 6.9  | 210 | 8.0  | 210 | 8.0  | 210 | 8.6  | 210 | 9.9  | 210 | 9.0  | 210 | 9.9  | 210 | 8.5  | 210 | 9.4  | 210 | 10.6 | 220 | 9.4  | 210   | 5.6  |
| 3        | 320 | 5.2  | —   | 1.1  | —   | 1.4  | 280 | 1.8  | —   | 0.1  | —   | 0.3  | 270 | 3.5  | 290 | 3.1  | 300 | 4.0  | 300 | 5.5  | 320 | 5.4  | 340   | 6.9  |
| 4        | —   | 1.0  | —   | 1.4  | 300 | 2.1  | 300 | 2.0  | —   | 0.6  | —   | 1.4  | —   | 1.3  | —   | 0.6  | —   | 0.5  | —   | 1.1  | 160 | 3.5  | 160   | 5.0  |
| 5        | 210 | 5.0  | 230 | 6.1  | 240 | 6.6  | 240 | 6.4  | 250 | 5.1  | 280 | 6.6  | 280 | 4.3  | 270 | 7.5  | 290 | 8.6  | 290 | 5.5  | 300 | 4.7  | 320   | 4.8  |
| 6        | —   | 0.0  | —   | 0.0  | —   | 0.0  | —   | 0.0  | —   | 0.0  | —   | 0.0  | —   | 0.4  | —   | 0.5  | —   | 0.5  | —   | 1.1  | 360 | 2.1  | 40    | 4.3  |
| 7        | —   | 0.3  | —   | 0.6  | —   | 0.4  | —   | 1.1  | —   | 0.5  | —   | 1.2  | —   | 1.5  | 20  | 2.1  | —   | 1.5  | 40  | 2.1  | 40  | 4.0  | 40    | 3.7  |
| 8        | 60  | 2.4  | 70  | 2.5  | 70  | 3.0  | 70  | 2.7  | 80  | 2.5  | 90  | 3.0  | 90  | 2.2  | 90  | 2.5  | 100 | 3.9  | 100 | 3.6  | 100 | 4.1  | 100   | 4.5  |
| 9        | 50  | 4.2  | 30  | 4.5  | 50  | 4.9  | 70  | 3.7  | 70  | 2.6  | 80  | 2.8  | —   | 1.5  | 70  | 2.9  | 70  | 3.0  | 100 | 4.7  | 90  | 4.3  | 60    | 3.5  |
| 10       | 350 | 1.6  | 350 | 3.0  | 340 | 2.5  | 340 | 3.5  | 340 | 2.8  | 340 | 3.0  | 340 | 1.9  | 360 | 1.6  | 20  | 3.6  | 10  | 4.0  | 10  | 3.2  | 20    | 3.9  |
| 11       | —   | 0.4  | —   | 0.9  | —   | 0.4  | —   | 0.6  | —   | 1.0  | —   | 1.1  | 160 | 3.9  | 150 | 3.8  | 140 | 3.4  | 140 | 3.6  | 140 | 3.5  | 140   | 3.5  |
| 12       | —   | 0.1  | —   | 1.0  | —   | 0.5  | —   | 1.4  | 360 | 2.5  | 310 | 3.3  | —   | 0.5  | —   | 0.4  | —   | 0.4  | —   | 0.1  | 350 | 2.8  | 340   | 4.1  |
| 13       | 330 | 2.9  | —   | 0.6  | —   | 1.2  | —   | 0.6  | —   | 1.2  | 320 | 1.9  | 340 | 2.6  | —   | 0.9  | —   | 0.2  | —   | 0.1  | —   | 0.0  | —     | 0.1  |
| 14       | —   | 1.5  | 320 | 2.1  | 330 | 3.0  | —   | 1.5  | —   | 1.4  | —   | 1.5  | —   | 0.7  | —   | 0.4  | —   | 1.1  | 130 | 3.1  | 110 | 3.4  | 130   | 2.2  |
| 15       | 120 | 3.6  | 120 | 3.5  | 120 | 3.6  | —   | 0.9  | —   | 1.5  | 60  | 3.0  | 30  | 2.1  | —   | 0.8  | —   | 0.9  | —   | 0.5  | 130 | 3.4  | 130   | 4.9  |
| 16       | —   | 0.2  | —   | 0.2  | —   | 0.2  | —   | 0.2  | —   | 0.2  | —   | 0.2  | —   | 0.1  | —   | 0.2  | —   | 0.1  | —   | 0.0  | —   | 0.0  | —     | 0.0  |
| 17       | —   | 0.0  | —   | 0.1  | —   | 0.0  | —   | 0.0  | —   | 0.2  | —   | 0.2  | 210 | 3.0  | 220 | 4.8  | 210 | 4.4  | 220 | 3.1  | 210 | 3.0  | 190   | 3.1  |
| 18       | 220 | 3.5  | 240 | 3.5  | 240 | 3.7  | 210 | 2.9  | 200 | 4.1  | 210 | 3.1  | 180 | 2.8  | 200 | 3.1  | 180 | 3.1  | —   | 1.3  | 260 | 3.1  | 300   | 4.2  |
| 19       | —   | 0.1  | —   | 1.5  | 110 | 1.9  | —   | 1.3  | —   | 1.5  | 320 | 2.5  | 340 | 2.6  | 170 | 1.8  | —   | 1.5  | —   | 1.5  | 300 | 5.5  | 230   | 2.1  |
| 20       | 290 | 8.2  | 280 | 7.7  | 270 | 5.4  | 280 | 6.0  | 270 | 5.1  | 270 | 3.4  | 230 | 4.0  | 170 | 2.2  | 150 | 3.2  | 180 | 3.4  | 210 | 4.0  | 220   | 5.0  |
| 21       | 210 | 5.2  | 210 | 7.1  | 210 | 5.4  | 210 | 5.9  | 200 | 5.0  | 200 | 4.3  | 210 | 7.4  | 210 | 7.9  | 210 | 10.6 | 210 | 10.0 | 220 | 12.0 | 220   | 14.4 |
| 22       | 220 | 12.8 | 220 | 15.4 | 230 | 18.0 | 240 | 19.4 | 240 | 17.9 | 240 | 15.1 | 230 | 11.9 | 220 | 11.7 | 220 | 11.8 | 220 | 10.6 | 210 | 9.9  | 220   | 10.3 |
| 23       | 270 | 2.0  | —   | 0.7  | —   | 0.6  | 190 | 1.6  | 170 | 2.0  | —   | 1.4  | 190 | 2.6  | 200 | 3.1  | 200 | 7.4  | 210 | 11.7 | 220 | 12.6 | 230   | 13.4 |
| 24       | 200 | 11.7 | 200 | 11.1 | 190 | 10.9 | 200 | 10.4 | 200 | 10.7 | 200 | 10.3 | 200 | 10.3 | 200 | 10.6 | 200 | 11.1 | 190 | 11.5 | 190 | 12.5 | 200   | 11.1 |
| 25       | 170 | 3.6  | 160 | 2.5  | 170 | 2.1  | 160 | 3.1  | 160 | 3.1  | 150 | 3.2  | 150 | 3.0  | 150 | 2.2  | 150 | 3.1  | 150 | 2.9  | 150 | 3.0  | 150   | 1.9  |
| 26       | 110 | 4.1  | 90  | 4.8  | 120 | 4.4  | 130 | 5.0  | 130 | 5.5  | 150 | 5.6  | 150 | 4.9  | 150 | 4.8  | 140 | 3.5  | 150 | 3.8  | 150 | 3.5  | 130   | 2.6  |
| 27       | 90  | 7.1  | 90  | 7.1  | 110 | 6.9  | 120 | 7.3  | 110 | 6.2  | 90  | 5.1  | 100 | 5.9  | 100 | 5.9  | 90  | 3.7  | 40  | 1.9  | —   | 0.0  | —     | 1.4  |
| 28       | 220 | 9.0  | 220 | 8.0  | 210 | 6.3  | 220 | 6.4  | 220 | 6.2  | 210 | 4.4  | 200 | 3.5  | 200 | 3.4  | 200 | 2.7  | 180 | 2.5  | 190 | 2.6  | 160   | 3.7  |
| 29       | 100 | 4.9  | 110 | 6.4  | 100 | 8.2  | 110 | 8.5  | 120 | 7.6  | 130 | 5.7  | 150 | 5.1  | 160 | 4.0  | 170 | 3.0  | 190 | 4.7  | 190 | 4.9  | 170   | 5.0  |
| 30       | 160 | 4.5  | 160 | 4.5  | 170 | 2.1  | 160 | 3.4  | 160 | 3.4  | 160 | 3.5  | 160 | 1.9  | 150 | 4.4  | 150 | 4.5  | 150 | 4.5  | 150 | 4.9  | 140   | 4.0  |
| Mean ... | —   | 4.0  | —   | 4.3  | —   | 4.1  | —   | 4.2  | —   | 4.0  | —   | 3.9  | —   | 3.8  | —   | 3.6  | —   | 3.9  | —   | 4.1  | —   | 4.7  | —     | 4.8  |

192. Eskdalemuir : H<sub>a</sub> = 235 metres + 15 metres.

| Day. | 1.  |      | 2.  |      | 3.  |      | 4.  |      | 5.  |      | 6.  |      | 7.  |      | 8.  |      | 9.  |      | 10. |      | 11. |      | Noon. |      |
|------|-----|------|-----|------|-----|------|-----|------|-----|------|-----|------|-----|------|-----|------|-----|------|-----|------|-----|------|-------|------|
|      | °   | m/s. | °   | m/s. | °   | m/s. | °   | m/s. | °   | m/s. | °   | m/s. | °   | m/s. | °   | m/s. | °   | m/s. | °   | m/s. | °   | m/s. | °     | m/s. |
| 1    | 180 | 6.1  | 180 | 7.3  | 180 | 2.6  | 170 | 2.4  | 170 | 2.6  | 160 | 2.1  | 150 | 2.5  | 150 | 3.4  | 150 | 3.1  | 160 | 3.0  | 160 | 3.6  | 160   | 3.1  |
| 2    | —   | 0.2  | —   | 0.1  | —   | 0.0  | —   | 0.1  | —   | 0.4  | —   | 0.6  | —   | 0.5  | —   | 0.6  | 50  | 1.6  | 70  | 3.2  | 80  | 3.5  | 60    | 2.6  |
| 3    | 10  | 4.4  | 20  | 5.0  | 20  | 5.0  | 10  | 6.0  | 360 | 5.7  | 360 | 5.6  | 360 | 5.0  | 350 | 4.6  | 350 | 5.3  | 360 | 4.9  | 360 | 3.6  | 360   | 3.0  |
| 4    | —   | 0.1  | —   | 0.6  | 140 | 2.0  | 130 | 2.7  | 130 | 4.3  | 140 | 2.9  | 140 | 3.9  | 140 | 4.8  | 140 | 5.5  | 150 | 7.1  | 160 | 7.2  | 160   | 6.0  |
| 5    | —   | 0.6  | 250 | 2.0  | 240 | 3.1  | —   | 1.1  | —   | 0.7  | —   | 1.4  | 220 | 7.0  | 210 | 9.0  | 220 | 11.2 | 210 | 8.6  | 210 | 8.9  | 210   | 11.1 |
| 6    | 230 | 9.5  | 270 | 10.2 | 270 | 9.1  | 270 | 7.4  | 260 | 7.4  | 260 | 7.9  | 260 | 8.2  | 250 | 7.3  | 240 | 7.1  | 240 | 7.0  | 210 | 4.2  | 230   | 6.6  |
| 7    | 200 | 9.5  | 200 | 9.4  | 210 | 8.0  | 210 | 8.2  | 210 | 10.5 | 200 | 8.8  | 190 | 9.0  | 190 | 9.6  | 190 | 10.5 | 190 | 10.9 | 190 | 12.0 | 180   | 10.4 |
| 8    | 200 | 10.5 | 200 | 10.2 | 200 | 10.9 | 210 | 9.4  | 210 | 8.0  | 220 | 5.0  | 220 | 2.0  | —   | 0.5  | —   | 0.2  | —   | 0.0  | —   | 0.1  | —     | 0.9  |
| 9    | 190 | 5.1  | 180 | 6.0  | 180 | 5.1  | 190 | 6.9  | 200 | 5.5  | 200 | 6.0  | 220 | 4.0  | 220 | 2.6  | 190 | 1.5  | 180 | 1.9  | 160 | 1.9  | 190   | 2.5  |
| 10   | 180 | 2.1  | —   | 1.2  | 200 | 4.7  | 190 | 2.1  | —   | 0.2  | —   | 0.6  | 180 | 2.1  | 190 | 4.0  | 200 | 3.8  | 200 | 4.2  | 200 | 4.9  | 210   | 6.8  |
| 11   | —   | 0.3  | —   | 0.6  | 230 | 2.4  | 230 | 2.3  | —   | 0.9  | —   | 0.6  | —   | 0.9  | 190 | 1.6  | 210 | 3.5  | 210 | 4.2  | 230 | 4.1  | 230   | 3.2  |
| 12   | 190 | 7.4  | 190 | 6.4  | 190 | 5.3  | 200 | 5.0  | 190 | 4.4  | 190 | 6.0  | 190 | 5.3  | 190 | 5.4  | 190 | 9.0  | 200 | 10.0 | 200 | 9.1  | 190   | 6.4  |
| 13   | 190 | 11.2 | 190 | 12.6 | 190 | 13.1 | 190 | 13.4 | 180 | 13.5 | 180 | 12.0 | 180 | 13.0 | 180 | 13.4 | 190 | 14.0 | 200 | 14.5 | 190 | 14.0 | 180   | 13.0 |
| 14   | 220 | 4.8  | 200 | 3.0  | 210 | 2.6  | 200 | 2.6  | 220 | 4.7  | 230 | 6.1  | 230 | 4.6  | 220 | 4.4  | 200 | 5.8  | 210 | 5.2  | 220 | 5.4  | 220   | 5.8  |
| 15   | —   | 0.1  | —   | 0.2  | —   | 0.1  | —   | 0.1  | —   | 0.2  | —   | 0.2  | —   | 0.2  | —   | 1.4  | 130 | 3.0  | 130 | 3.5  | 130 | 4.6  | 110   | 5.0  |
| 16   | —   | 1.4  | —   | 0.5  | —   | 0.3  | —   | 0.4  | —   | 0.3  | —   | 0.4  | 250 | 2.5  | 270 | 2.8  | —   | 1.3  | 300 | 1.9  | —   | 1.4  | 280   | 3.9  |
| 17   | —   | 0.0  | —   | 0.1  | —   | 0.4  | 170 | 2.0  | 180 | 3.0  | 210 | 8.4  | 200 | 7.4  | 210 | 7.6  | 190 | 5.5  | 210 | 10.6 | 200 | 9.6  | 170   | 4.2  |
| 18   | 220 | 10.4 | 220 | 11.9 | 210 | 10.3 | 200 | 10.7 | 200 | 11.2 | 200 | 10.7 | 200 | 10.9 | 200 | 11.8 | 200 | 12.8 | 210 | 14.5 | 210 | 15.2 | 200   | 15.5 |
| 19   | 200 | 11.8 | 210 | 13.2 | 200 | 12.3 | 200 | 11.5 | 210 | 12.0 | 220 | 11.4 | 220 | 10.3 | 220 | 10.0 | 230 | 15.1 | 240 | 16.5 | 240 | 15.0 | 240   | 9.5  |
| 20   | 210 | 10.0 | 220 | 10.0 | 220 | 8.9  | 220 | 9.1  | 220 | 9.5  | 220 | 11.0 | 220 | 8.0  | 200 | 5.5  | 190 | 6.1  | 210 | 6.1  | 210 | 8.6  | 220   | 8.5  |
| 21   | 200 | 7.9  | 200 | 7.5  | 200 | 7.1  | 200 | 6.3  | 200 | 6.5  | 190 | 4.8  | 190 | 6.5  | 190 | 5.8  | 190 | 6.2  | 180 | 5.4  | 180 | 4.9  | 180   | 4.9  |
| 22   | 150 | 3.3  | 150 | 2.6  | 150 | 2.4  | 160 | 2.5  | —   | 1.2  | 170 | 3.4  | 180 | 2.0  | 160 | 3.0  | 150 | 2.0  | 170 | 4.8  | 170 | 4.8  | 170   | 4.6  |
| 23   | 180 | 10.1 | 170 | 9.1  | 160 | 9.4  | 160 | 11.5 | 160 | 10.3 | 180 | 18.5 | 180 | 18.4 | 180 | 19.3 | 180 | 19.0 | 210 | 15.4 | 220 | 14.0 | 210   | 12.5 |
| 24   | 190 | 4.9  | 190 | 4.4  | 180 | 3.6  | 190 | 6.0  | 190 | 3.5  | —   | 0.5  | 200 | 2.1  | 210 | 1.6  | —   | 1.5  | 200 | 5.6  | 200 | 6.1  | 200   | 5.9  |
| 25   | 180 | 9.2  | 180 | 9.1  | 220 | 11.6 | 220 | 9.0  | 220 | 9.9  | 220 | 9.2  | 210 | 5.5  | 200 | 4.1  | 210 | 4.3  | 200 | 2.9  | 190 | 1.6  | —     | 1.1  |
| 26   | †   | 6.4  | †   | 6.0  | 130 | 4.6  | 150 | 5.6  | 150 | 5.3  | 150 | 4.8  | 160 | 7.0  | 150 | 6.0  | 150 | 6.6  | 150 | 5.4  | 180 | 6.8  | 210   |      |



Averages for periods of sixty minutes, centred at the exact hours, Greenwich Mean Time.

M.S.L. +  $h_a$  (height of anemograph above ground) = 235 metres + 15 metres.

November, 1924.

| 13. |      | 14. |      | 15. |      | 16. |      | 17. |      | 18. |      | 19. |      | 20. |      | 21. |      | 22. |      | 23. |      | 24. |      | Mean | Day. |
|-----|------|-----|------|-----|------|-----|------|-----|------|-----|------|-----|------|-----|------|-----|------|-----|------|-----|------|-----|------|------|------|
| °   | m/s  | °   | m/s  | °   | m/s. | °   | m/s. | °   | m/s. | °   | m/s. | °   | m/s. | °   | m/s. | °   | m/s. | °   | m/s. | °   | m/s. | °   | m/s. | m/s. |      |
| 190 | 4.1  | 180 | 4.5  | 180 | 4.2  | 150 | 2.2  | 130 | 4.2  | 150 | 5.6  | 150 | 5.5  | 170 | 4.0  | 220 | 6.2  | 220 | 7.9  | 230 | 9.0  | 220 | 8.6  | 6.3  | 1    |
| 230 | 4.6  | 240 | 3.1  | —   | 1.5  | 360 | 4.4  | 360 | 5.0  | 360 | 2.2  | —   | 0.3  | 340 | 2.9  | 320 | 4.6  | 330 | 3.4  | 320 | 5.2  | 320 | 4.8  | 6.2  | 2    |
| 330 | 4.7  | 310 | 6.8  | 320 | 5.0  | 330 | 2.0  | 340 | 1.8  | 330 | 3.4  | 330 | 3.8  | 330 | 2.0  | —   | 1.2  | 330 | 2.0  | —   | 1.1  | —   | 0.9  | 3.1  | 3    |
| 190 | 5.2  | 200 | 5.4  | 210 | 4.6  | 210 | 4.3  | 210 | 3.8  | 190 | 2.8  | 190 | 4.0  | 210 | 5.4  | 220 | 6.5  | 220 | 8.0  | 160 | 6.3  | 150 | 5.2  | 3.3  | 4    |
| 330 | 3.0  | 330 | 2.7  | 320 | 2.7  | 330 | 1.6  | 330 | 2.1  | —   | 0.8  | —   | 0.2  | —   | 0.0  | —   | 0.0  | —   | 0.1  | —   | 0.0  | —   | 0.0  | 3.6  | 5    |
| 40  | 2.6  | 70  | 2.3  | 50  | 2.1  | —   | 1.5  | —   | 1.0  | —   | 0.6  | —   | 0.1  | —   | 0.5  | —   | 0.9  | —   | 0.5  | —   | 0.4  | —   | 0.4  | 0.9  | 6    |
| 40  | 3.6  | 50  | 3.2  | 50  | 3.1  | 40  | 3.0  | 40  | 1.8  | 40  | 2.4  | 40  | 2.4  | 30  | 1.7  | 50  | 2.6  | 50  | 3.5  | 40  | 2.8  | 50  | 2.4  | 2.1  | 7    |
| 100 | 4.9  | 110 | 4.4  | 100 | 4.3  | 90  | 3.9  | 100 | 4.1  | 70  | 2.0  | 50  | 1.8  | 60  | 1.6  | 70  | 2.1  | 80  | 4.4  | 80  | 5.1  | 70  | 3.5  | 3.3  | 8    |
| 70  | 3.4  | 100 | 5.0  | 90  | 4.8  | 90  | 4.3  | 90  | 2.5  | —   | 1.0  | —   | 0.5  | —   | 0.5  | —   | 0.7  | —   | 1.5  | —   | 1.4  | 340 | 1.9  | 3.0  | 9    |
| 40  | 4.2  | 100 | 4.1  | 130 | 4.2  | 140 | 4.8  | 150 | 3.9  | —   | 1.4  | —   | 0.6  | —   | 1.1  | —   | 0.2  | —   | 0.8  | —   | 0.6  | —   | 1.0  | 2.6  | 10   |
| 140 | 2.5  | —   | 1.5  | 170 | 1.6  | 200 | 2.9  | 230 | 3.6  | —   | 0.5  | 210 | 2.2  | —   | 0.2  | —   | 0.2  | —   | 0.7  | —   | 0.1  | —   | 0.0  | 1.8  | 11   |
| 350 | 5.0  | 360 | 4.0  | 360 | 2.9  | 360 | 3.1  | 360 | 3.6  | 340 | 1.8  | —   | 0.6  | 310 | 2.0  | 340 | 2.5  | 340 | 3.9  | 360 | 3.8  | 350 | 3.8  | 2.2  | 12   |
| —   | 1.4  | 180 | 2.4  | 210 | 1.9  | —   | 1.1  | —   | 1.1  | —   | 0.9  | —   | 0.8  | —   | 1.0  | —   | 1.4  | 330 | 3.0  | —   | 1.4  | 340 | 1.6  | 1.3  | 13   |
| 140 | 3.4  | 130 | 3.1  | 120 | 2.8  | 120 | 3.4  | —   | 1.0  | —   | 1.5  | 120 | 3.6  | 110 | 3.0  | 120 | 3.0  | 130 | 2.4  | 120 | 4.0  | 120 | 3.9  | 2.3  | 14   |
| 110 | 4.0  | 120 | 3.0  | —   | 0.9  | —   | 0.6  | —   | 0.1  | —   | 0.4  | —   | 1.0  | —   | 1.1  | —   | 0.9  | —   | 0.2  | —   | 0.1  | —   | 0.1  | 1.8  | 15   |
| —   | 0.3  | —   | 0.3  | —   | 0.1  | —   | 0.2  | —   | 0.4  | —   | 0.3  | —   | 0.1  | —   | 0.0  | —   | 0.1  | —   | 0.1  | —   | 0.0  | —   | 0.0  | 0.1  | 16   |
| 190 | 2.4  | 190 | 2.7  | 180 | 1.9  | 190 | 2.5  | 180 | 2.9  | 190 | 1.9  | —   | 1.3  | —   | 1.2  | —   | 0.6  | —   | 1.5  | —   | 1.5  | 150 | 2.1  | 1.8  | 17   |
| 320 | 3.2  | —   | 1.1  | 350 | 2.2  | —   | 1.1  | —   | 0.4  | 300 | 2.2  | 330 | 1.8  | —   | 0.1  | —   | 0.1  | —   | 0.1  | —   | 0.1  | —   | 0.0  | 2.2  | 18   |
| 270 | 4.1  | 280 | 5.1  | 270 | 3.5  | 270 | 3.9  | 240 | 2.7  | 260 | 3.8  | 270 | 4.5  | 270 | 5.4  | 270 | 5.4  | 270 | 5.0  | 270 | 5.0  | 290 | 8.2  | 3.2  | 19   |
| 210 | 4.4  | 240 | 4.0  | 230 | 4.6  | 230 | 5.4  | 220 | 5.5  | 220 | 5.5  | 220 | 5.2  | 210 | 6.0  | 210 | 5.9  | 210 | 5.1  | 200 | 6.1  | 220 | 6.0  | 5.1  | 20   |
| 210 | 11.0 | 210 | 11.0 | 210 | 11.7 | 220 | 16.4 | 210 | 13.4 | 220 | 13.5 | 220 | 14.5 | 220 | 13.0 | 220 | 11.7 | 210 | 10.0 | 210 | 9.8  | 210 | 10.2 | 10.0 | 21   |
| 210 | 10.0 | 210 | 10.0 | 220 | 8.5  | 220 | 9.0  | 220 | 8.4  | 230 | 8.9  | 230 | 9.4  | 230 | 10.4 | 240 | 11.6 | 240 | 11.1 | 230 | 7.1  | 230 | 6.0  | 11.6 | 22   |
| 220 | 13.2 | 230 | 12.0 | 220 | 10.2 | 210 | 9.8  | 220 | 10.1 | 200 | 7.1  | 200 | 7.9  | 190 | 7.6  | 190 | 8.5  | 200 | 12.4 | 200 | 12.6 | 200 | 11.4 | 7.5  | 23   |
| 200 | 11.0 | 190 | 8.9  | 190 | 8.6  | 190 | 10.2 | 180 | 9.1  | 180 | 7.1  | 190 | 8.7  | 190 | 7.9  | 180 | 7.4  | 170 | 5.5  | 180 | 4.0  | 170 | 4.1  | 9.5  | 24   |
| 140 | 1.9  | 140 | 3.3  | —   | 0.6  | —   | 0.2  | 140 | 1.8  | 140 | 2.5  | 120 | 1.6  | 70  | 1.8  | —   | 0.9  | —   | 0.5  | 110 | 3.2  | 120 | 2.9  | 2.3  | 25   |
| 130 | 1.6  | 100 | 2.5  | 80  | 1.9  | 80  | 2.9  | 70  | 2.1  | 90  | 4.5  | 90  | 3.4  | 50  | 4.1  | 40  | 4.5  | 70  | 5.7  | 60  | 5.5  | 70  | 9.1  | 4.1  | 26   |
| 190 | 4.4  | 200 | 3.5  | 180 | 3.6  | 190 | 4.9  | 210 | 8.0  | 220 | 6.5  | 220 | 7.2  | 230 | 9.5  | 230 | 10.5 | 220 | 11.4 | 220 | 10.5 | 220 | 9.8  | 6.2  | 27   |
| 150 | 4.2  | 150 | 4.1  | 150 | 3.5  | 150 | 4.0  | 150 | 3.0  | 150 | 3.0  | 140 | 2.2  | —   | 0.6  | —   | 0.3  | —   | 0.6  | —   | 0.2  | 80  | 2.1  | 3.8  | 28   |
| 170 | 4.1  | 170 | 3.5  | 160 | 3.6  | 150 | 3.5  | 160 | 3.5  | 160 | 2.5  | 150 | 3.5  | 160 | 2.5  | 150 | 2.5  | 150 | 3.5  | 150 | 5.5  | 160 | 4.6  | 4.6  | 29   |
| 140 | 3.1  | 150 | 3.9  | 150 | 2.9  | 160 | 3.1  | 180 | 5.0  | 200 | 5.5  | 200 | 6.0  | 200 | 6.6  | 190 | 5.8  | 200 | 5.8  | 200 | 5.6  | 180 | 5.7  | 4.3  | 30   |
| —   | 4.5  | —   | 4.4  | —   | 3.8  | —   | 4.0  | —   | 3.9  | —   | 3.4  | —   | 3.5  | —   | 3.5  | —   | 3.6  | —   | 4.0  | —   | 3.9  | —   | 4.0  | 4.0  |      |

December, 1924.

|     |      |     |      |     |      |     |      |     |      |     |      |     |      |     |      |     |      |     |      |     |      |     |      |      |    |
|-----|------|-----|------|-----|------|-----|------|-----|------|-----|------|-----|------|-----|------|-----|------|-----|------|-----|------|-----|------|------|----|
| 160 | 2.4  | 160 | 1.6  | —   | 0.7  | —   | 0.4  | —   | 0.1  | —   | 0.5  | —   | 0.3  | —   | 0.1  | —   | 0.1  | —   | 0.1  | —   | 0.6  | —   | 0.2  | 2.1  | 1  |
| 50  | 4.1  | 70  | 4.9  | 50  | 3.2  | 40  | 3.1  | 30  | 3.3  | 40  | 3.5  | 30  | 2.9  | 30  | 2.5  | 30  | 4.0  | 20  | 3.0  | 20  | 3.8  | 20  | 5.0  | 2.3  | 2  |
| 360 | 3.0  | 10  | 2.9  | 10  | 2.0  | 20  | 2.9  | 50  | 1.7  | 30  | 2.3  | —   | 1.1  | —   | 0.5  | —   | 0.8  | —   | 1.1  | —   | 0.6  | —   | 0.2  | 3.3  | 3  |
| 160 | 5.5  | 160 | 7.7  | 160 | 7.5  | 160 | 7.0  | 160 | 6.4  | 160 | 5.0  | 170 | 3.9  | 160 | 2.4  | —   | 0.1  | —   | 0.0  | —   | 0.1  | —   | 0.3  | 3.9  | 4  |
| 210 | 11.0 | 210 | 10.0 | 210 | 9.1  | 210 | 10.0 | 210 | 9.7  | 210 | 10.0 | 220 | 8.2  | 210 | 8.1  | 210 | 7.4  | 210 | 11.0 | 220 | 10.6 | 230 | 9.6  | 7.3  | 5  |
| 210 | 4.9  | 210 | 4.6  | 170 | 5.0  | 210 | 5.9  | 190 | 4.1  | 180 | 4.0  | 170 | 3.9  | 170 | 3.0  | 190 | 5.0  | 190 | 5.9  | 190 | 8.0  | 190 | 9.6  | 6.5  | 6  |
| 180 | 10.8 | 190 | 12.7 | 190 | 12.5 | 200 | 12.0 | 200 | 11.5 | 190 | 11.0 | 200 | 11.8 | 190 | 11.0 | 200 | 12.4 | 200 | 13.0 | 200 | 12.2 | 200 | 11.4 | 10.8 | 7  |
| 150 | 1.6  | 160 | 2.5  | 170 | 2.7  | 160 | 2.6  | 160 | 2.3  | 160 | 2.8  | 170 | 3.5  | 170 | 3.9  | 170 | 3.8  | 180 | 5.9  | 190 | 6.5  | 190 | 5.5  | 4.3  | 8  |
| 220 | 3.7  | 220 | 3.6  | —   | 1.5  | —   | 1.2  | —   | 0.9  | 180 | 3.0  | 180 | 3.0  | 190 | 3.0  | 180 | 3.0  | 180 | 2.0  | 180 | 2.4  | 180 | 2.4  | 3.3  | 9  |
| 210 | 7.1  | 210 | 6.6  | 210 | 5.5  | 220 | 6.9  | 220 | 5.9  | 220 | 4.9  | 220 | 5.0  | 230 | 6.0  | 220 | 4.9  | 210 | 3.9  | 200 | 2.6  | 210 | 2.2  | 4.1  | 10 |
| 210 | 3.4  | 200 | 3.6  | 200 | 2.6  | 200 | 3.5  | 200 | 4.5  | 210 | 5.1  | 210 | 5.2  | 200 | 6.5  | 200 | 7.4  | 200 | 9.0  | 200 | 8.5  | 200 | 8.1  | 3.7  | 11 |
| 200 | 7.0  | 200 | 9.4  | 200 | 10.7 | 200 | 10.4 | 200 | 11.5 | 200 | 12.1 | 190 | 10.7 | 190 | 11.6 | 180 | 11.6 | 180 | 12.6 | 190 | 13.6 | 180 | 12.5 | 8.8  | 12 |
| 190 | 11.7 | 190 | 10.9 | 190 | 9.9  | 250 | 5.1  | —   | 0.9  | 220 | 2.2  | 210 | 2.0  | 210 | 2.6  | 200 | 2.1  | 210 | 3.0  | 220 | 3.9  | 220 | 4.0  | 9.2  | 13 |
| 220 | 5.7  | 240 | 5.0  | 270 | 5.8  | 280 | 5.2  | 280 | 5.5  | 260 | 3.5  | —   | 1.5  | —   | 1.5  | 210 | 2.2  | —   | 1.2  | —   | 0.9  | —   | 0.1  | 4.0  | 14 |
| 110 | 7.2  | 120 | 7.5  | 130 | 5.5  | 130 | 6.5  | 130 | 5.5  | 120 | 4.1  | 120 | 4.0  | 130 | 4.0  | —   | 1.5  | —   | 0.5  | —   | 1.1  | —   | 1.4  | 2.8  | 15 |
| 280 | 3.6  | 280 | 3.1  | 280 | 3.4  | 280 | 1.9  | 300 | 3.4  | —   | 1.0  | —   | 0.6  | —   | 0.1  | —   | 0.0  | —   | 0.0  | —   | 0.0  | —   | 0.0  | 1.5  | 16 |
| 180 | 4.4  | 190 | 7.8  | 190 | 7.4  | 170 | 6.6  | 180 | 8.1  | 190 | 9.6  | 190 | 9.0  | 200 | 10.0 | 200 | 11.0 | 200 | 11.1 | 200 | 9.7  | 210 | 10.5 | 6.6  | 17 |
| 200 | 12.6 | 200 | 13.7 | 210 | 15.3 | 200 | 15.1 | 200 | 13.8 | 200 | 15.1 | 200 | 15.0 | 200 | 12.4 | 200 | 10.6 | 200 | 11.7 | 210 | 11.5 | 200 | 11.6 | 12.7 | 18 |
| 200 | 3.8  | 200 | 5.1  | 210 | 6.9  | 200 | 6.5  | 190 | 5.8  | 190 | 7.5  | 190 | 7.2  | 190 | 8.0  | 200 | 10.0 | 200 | 10.6 | 200 | 10.6 | 200 | 10.0 | 10.1 | 19 |
| 210 | 6.4  | 220 | 7.5  | 210 | 7.4  | 210 | 7.8  | 220 | 7.5  | 210 | 6.4  | 190 | 5.4  | 190 | 5.0  | 210 | 5.5  | 210 | 6.1  | 200 | 6.0  | 200 | 8.3  | 7.6  | 20 |
| 180 | 5.1  | 180 | 5.0  | 180 | 3.8  | 190 | 4.4  | 190 | 4.0  | 180 | 3.3  | 170 | 3.2  | 170 | 3.1  | 160 | 3.5  | 170 | 3.5  | 180 | 4.1  | 170 | 3.9  | 5.1  | 21 |
| 160 | 4.4  | 150 | 4.0  | 150 | 6.9  | 160 | 8.4  | 170 | 9.0  | 170 | 10.6 | 160 | 11.4 | 190 | 17.2 | 200 | 12.9 | 200 | 11.2 | 200 | 12.9 | 180 | 12.0 | 6.4  | 22 |
| 220 | 9.5  | 210 | 6.5  | 220 | 4.3  | 190 | 8.0  | 180 | 11.5 | 190 | 11.0 | 190 | 7.8  | 180 | 4.5  | 170 | 1.6  | 190 | 1.9  | 190 | 2.0  | 190 | 3.8  | 10.2 | 23 |
| 190 | 6.1  | 180 | 5.6  | 180 | 8.4  | 180 | 6.4  | 180 | 6.8  | 180 | 7.6  | 200 | 8.1  | 170 | 7.0  | 170 | 7.0  | 170 | 6.6  | 160 | 8.2  | 180 | 8.0  | 5.4  | 24 |
| —   | 0.6  | —   | 0.2  | —   | 1.0  | —   | 0.5  | —   | 0.4  | —   | 0.5  | —   | 0.3  | —   | 1.5  | —   | 1.5  | —   | 0.6  | —   | 0.4  | 350 | 4.9  | 3.8  | 25 |
| 200 | 7.9  | 190 | 6.6  | 180 | 5.9  | 180 | 6.1  | 190 | 6.6  | 210 | 7.   |     |      |     |      |     |      |     |      |     |      |     |      |      |    |

HIGHEST INSTANTANEOUS WIND SPEED RECORDED EACH DAY BY THE DINES TUBE ANEMOGRAPH.

193. Eskdalemuir :  $H_a = 235$  metres + 15 metres.

1924.

| Day. | Jan.            |               | Feb.            |                | Mar.            |               | April           |               | May             |               | June            |               | July            |               | Aug.            |               | Sept.           |               | Oct.            |                | Nov.            |                | Dec.            |               |
|------|-----------------|---------------|-----------------|----------------|-----------------|---------------|-----------------|---------------|-----------------|---------------|-----------------|---------------|-----------------|---------------|-----------------|---------------|-----------------|---------------|-----------------|----------------|-----------------|----------------|-----------------|---------------|
|      | Max. in a Gust. | Time of Gust. | Max. in a Gust. | Time of Gust.  | Max. in a Gust. | Time of Gust. | Max. in a Gust. | Time of Gust. | Max. in a Gust. | Time of Gust. | Max. in a Gust. | Time of Gust. | Max. in a Gust. | Time of Gust. | Max. in a Gust. | Time of Gust. | Max. in a Gust. | Time of Gust. | Max. in a Gust. | Time of Gust.  | Max. in a Gust. | Time of Gust.  | Max. in a Gust. | Time of Gust. |
| 1    | 17              | 0 5           | 20              | 15 40          | 27              | 1 15          | 12              | 9 55          | 5               | 14 10         | 21              | 8 55          | 12              | 12 45         | 18              | 13 5          | 12              | 13 15         | 11              | 15 25          | 19              | 2 0            | 13              | 2 50          |
| 2    | 9               | 22 7          | 25              | 17 50          | 5               | 12 5          | 10              | 12 40         | 5               | 22 10         | 8               | 12 5          | 20              | 13 20         | 13              | 13 5          | 7               | 14 20         | 9               | 11 5           | 16              | 10 40          | 9               | 13 50         |
| 3    | 11              | 2 25          | 24              | 12 15          | 11              | 13 30         | 10              | 10 35         | 12              | 21 20         | 10              | 13 25         | 17              | 0 25          | 13              | 15 0          | 11              | 15 25         | 11              | 13 10          | 12              | 12 15          | 10              | 7 45          |
| 4    | 3               | 16 40         | 20              | 8 55           | 10              | 13 25         | 12              | 13 5          | 8               | 1 35          | 8               | 17 20         | 16              | 12 30         | 12              | 18 25         | 12              | 13 35         | 7               | 13 5           | 12              | 21 50          | 18              | 14 30         |
| 5    | 17              | 9 58          | 31              | 11 30          | 10              | 21 30         | 12              | 20 30         | 12              | 15 20         | 9               | 12 40         | 15              | 10,15         | 21              | 12 50         | 10              | 15 55         | 13              | 22 10          | 15              | 8 25           | 23              | 22 5          |
| 6    | 15              | 1 6           | 20              | 17 5           | 8               | 15 20         | 8               | 21 30         | 10              | 19 45         | 15              | 15 40         | 16              | 16 0          | 13              | 15 25         | 7               | 14 35         | 17              | 13 10          | 7               | 11 35          | 21              | 2 10          |
| 7    | 11              | 3 35          | 14              | 1 10           | 17              | 12 0          | 24              | 22 50         | 9               | 14 15         | 9               | 10 25         | 17              | 13 5          | 14              | 12 15         | 10              | 11 35         | 16              | 14 0           | 7               | 10 45          | 22              | 13 55         |
| 8    | 24              | 16 1          | 12              | 23 55          | 14              | 1 0           | 21              | 3 0           | 20              | 14 5          | 10              | 15 35         | 11              | 13 35         | 7               | 15 0          | 15              | 20 0          | 8               | 14 30          | 10              | 20 5           | 17              | 2 35          |
| 9    | 19              | 0 54          | 19              | 10 20          | 11              | 11 25         | 12              | 14 5          | 15              | 2 50          | 10              | 16 55         | 8               | 15 30         | 10              | 14 40         | 18              | 17 0          | 12              | 13 10          | 9               | 3 50           | 12              | 3 50          |
| 10   | 15              | 4 5           | 8               | 12 20          | 6               | 20 40         | 14              | 15 35         | 18              | 6 0           | 13              | 23 45         | 14              | 13 5          | 10              | 10 30         | 11              | 15 0          | 12              | 23 45          | 10              | 16 15          | 12              | 16 10         |
| 11   | 17              | 23 5          | 10              | 12 20          | 10              | 15 0          | 14              | 14 55         | 14              | 17 45         | 11              | 0 30          | 11              | 0 25          | 15              | 14 20         | 17              | 9 30          | 18              | 9 50           | 7               | 6 45           | 13              | 22 10         |
| 12   | 23              | 2 30          | 17              | 19 25<br>23 45 | 10              | 12 0          | 15              | 15 35         | 10              | 15 15         | 22              | 19 25         | 17              | 17 5          | 10              | 13 25         | 23              | 21 35         | 20              | 2 25           | 7               | 13 00          | 21              | 22 40         |
| 13   | 26              | 12 32         | 20              | 0 20           | 10              | 12 25         | 12              | 11 20         | 12              | 10 0          | 14              | 0 45          | 15              | 13 0          | 12              | 14 40         | 20              | 0 15          | 7               | 19 50          | 5               | 0 15           | 23              | 9 46          |
| 14   | 11              | 0 15          | 9               | 14 15          | 8               | 15 45         | 14              | 15 10         | 11              | 19 35         | 11              | 14 50         | 13              | 12 50         | 14              | 12 0          | 18              | 16 20         | 3               | 12 25          | 7               | 22 45          | 13              | 14 55         |
| 15   | 10              | 13 14         | 12              | 23 30          | 8               | 8 10          | 23              | 13 15         | 14              | 16 20         | 8               | 10 5          | 15              | 10 40         | 13              | 11 15         | 23              | 16 0          | 5               | 12 15<br>14 40 | 8               | 11 45          | 13              | 13 10         |
| 16   | 13              | 20 20         | 10              | 1 25           | 10              | 11 35         | 19              | 8 20          | 19              | 13 20         | 9               | 14 35         | 15              | 14 30         | 11              | 1 0           | 19              | 23 45         | 14              | 14 15          | 2               | 16 15<br>16 55 | 9               | 13 35         |
| 17   | 15              | 8 54          | 14              | 21 5<br>22 30  | 9               | 14 40         | 10              | 12 30         | 12              | 12 45         | 15              | 16 20         | 11              | 12 5          | 11              | 13 56         | 23              | 13 40         | 10              | 10 5           | 8               | 8 55           | 17              | 21 25         |
| 18   | 16              | 20 15         | 18              | 8 30           | 11              | 9 25          | 11              | 10 15         | 15              | 17 0          | 12              | 10 35         | 14              | 14 35         | 16              | 15 40         | 23              | 14 0          | 10              | 24 0           | 8               | 12 20          | 24              | 16 20         |
| 19   | 19              | 20 20         | 15              | 0 15           | 10              | 8 15          | 11              | 12 0          | 14              | 14 25         | 13              | 13 30         | 12              | 1 35          | 12              | 11 0          | 11              | 14 30         | 9               | 0 40           | 15              | 11 20          | 24              | 10 35         |
| 20   | 23              | 4 13          | 9               | 14 15          | 9               | 9 30          | 18              | 17 30         | 13              | 3 10          | 14              | 12 5          | 9               | 13 50         | 13              | 16 30         | 20              | 23 20         | 12              | 9 30           | 14              | 0 35           | 17              | 2 20          |
| 21   | 8               | 20 35         | 15              | 6 15           | 5               | 12 10         | 16              | 9 50          | 11              | 13 30         | 11              | 13 15         | 7               | 20 25         | 10              | 2 5           | 28              | 5 0           | 13              | 10 45          | 24              | 16 10          | 12              | 0 20          |
| 22   | 9               | 22 55         | 13              | 13 30          | 12              | 16 00         | 11              | 9 55          | 20              | 18 0          | 9               | 17 40         | 11              | 10 10         | 8               | 11 20         | 13              | 15 40         | 8               | 0 35           | 26              | 3 45           | 27              | 19 50         |
| 23   | 12              | 23 27         | 16              | 19 55          | 10              | 9 10          | 7               | 14 55         | 17              | 17 15         | 13              | 12 30         | 15              | 10 50         | 13              | 7 5           | 19              | 4 10          | 7               | 13 50          | 18              | 13 20          | 30              | 6 25          |
| 24   | 17              | 7 54          | 20              | 4 50           | 11              | 8 15          | 17              | 20 35         | 15              | 14 45         | 13              | 4 45          | 15              | 18 0          | 13              | 23 40         | 11              | 15 30         | 11              | 16 25          | 20              | 11 15          | 19              | 18 35         |
| 25   | 14              | 12 43         | 20              | 11 40          | 9               | 1 45          | 15              | 20 15         | 9               | 16 50         | 15              | 16 0          | 14              | 6 40          | 12              | 18 15         | 7               | 23 10         | 12              | 2 40           | 7               | 0 25           | 19              | 2 40          |
| 26   | 23              | 22 5          | 8               | 10 55          | 10              | 10 0          | 16              | 10 45         | 13              | 12 20         | 16              | 12 30         | 10              | 13 25         | 11              | 13 15         | 9               | 10 10         | 11              | 22 10          | 15              | 23 55          | 29              | 23 45         |
| 27   | 22              | 2 13          | 16              | 17 0           | 7               | 16 15         | 17              | 3 45          | 19              | 3 55          | 17              | 3 5           | 8               | 16 50         | 9               | 10 35         | 8               | 16 0          | 10              | 0 15           | 17              | 0 25           | 31              | 1 40          |
| 28   | 12              | 5 0           | 13              | 23 55          | 8               | 14 50         | 12              | 3 45          | 12              | 7 35          | 20              | 14 10         | 15              | 18 45         | 13              | 17 25         | 21              | 20 15         | 2               | 1 0<br>19 30   | 15              | 0 35           | 20              | 22 55         |
| 29   | 12              | 9 50          | 27              | 7 5            | 11              | 16 25         | 7               | 19 20         | 11              | 18 15         | 22              | 7 10          | 13              | 3 5           | 9               | 10 25         | 23              | 8 10          | 18              | 12 40          | 16              | 4 20           | 30              | 22 55         |
| 30   | 17              | 12 29         | —               | —              | 8               | 8 45          | 10              | 6 30          | 9               | 15 0          | 14              | 15 30         | 6               | 15 35         | 4               | 16 50         | 15              | 1 50          | 11              | 15 30          | 10              | 19 30          | 29              | 0 55          |
| 31   | 17              | 21 11         | —               | —              | 11              | 11 40         | —               | —             | 14              | 22 45         | —               | —             | 13              | 13 5          | 11              | 16 0          | —               | —             | 17              | 13 50          | —               | —              | 21              | 5 15          |

DISTRIBUTION OF WIND SPEED: EXTREME VELOCITIES AS RECORDED BY THE DINES TUBE ANEMOGRAPH.

194. Eskdalemuir :  $H_a = 235$  metres + 15 metres.

1924.

| Month.    | DISTRIBUTION OF WIND SPEED.        |           |                   |           |                  |                 |                    |             | EXTREME VELOCITIES.  |         |           |               |         |         |       |       |
|-----------|------------------------------------|-----------|-------------------|-----------|------------------|-----------------|--------------------|-------------|----------------------|---------|-----------|---------------|---------|---------|-------|-------|
|           | More than 17.1 m/s.                |           | 10.8 to 17.1 m/s. |           | 5.5 to 10.7 m/s. | 1.6 to 5.4 m/s. | Less than 1.6 m/s. | No. Record. | Highest Hourly Wind. |         |           | Highest Gust. |         |         |       |       |
|           | Dates of Occurrence.               | Duration. | No. of Days.      | Duration. | Duration.        | Duration.       | Duration.          | Duration.   | Veer from N.         | Speed.  | Mid Time. | Speed.        | Date.   |         |       |       |
| Jan. ...  | —                                  | hr. 0     | 10                | hr. 61    | hr. 253          | hr. 341         | hr. 89             | hr. 0       | 190                  | m/s. 17 | day. 13   | hour. 12      | m/s. 26 | day. 13 | h. 12 | m. 32 |
| Feb. ...  | 29th                               | 1         | 11                | 70        | 265              | 296             | 51                 | 13          | 290*                 | 18      | 29        | 24            | 31      | 5       | 11    | 30    |
| Mar. ...  | 1st                                | 2         | 2                 | 15        | 102              | 359             | 236                | 30          | 280*                 | 20      | 1         | 1             | 27      | 1       | 1     | 15    |
| April ... | —                                  | 0         | 6                 | 32        | 222              | 316             | 150                | 0           | 250                  | 15      | 7         | 23            | 24      | 7       | 22    | 50    |
| May ...   | —                                  | 0         | 5                 | 20        | 228              | 348             | 148                | 0           | 200                  | 13      | 22        | 18            | 20      | 8       | 14    | 5     |
| June ...  | —                                  | 0         | 6                 | 34        | 236              | 299             | 150                | 1           | 230                  | 16      | 29        | 8             | 22      | 29      | 7     | 10    |
| July ...  | —                                  | 0         | 2                 | 15        | 320              | 293             | 116                | 0           | 190                  | 13      | 2         | 13            | 20      | 2       | 13    | 20    |
| Aug. ...  | —                                  | 0         | 2                 | 6         | 208              | 389             | 140                | 1           | 250                  | 13      | 5         | 11            | 21      | 5       | 12    | 50    |
| Sept. ... | —                                  | 0         | 12                | 82        | 229              | 300             | 109                | 0           | 260                  | 16      | 18        | 14            | 28      | 21      | 5     | 0     |
| Oct. ...  | —                                  | 0         | 2                 | 7         | 161              | 310             | 266                | 0           | 220                  | 13      | 11        | 10            | 20      | 12      | 2     | 25    |
| Nov. ...  | 22nd                               | 3         | 6                 | 37        | 129              | 360             | 191                | 0           | 240                  | 19      | 22        | 4             | 26      | 22      | 3     | 45    |
| Dec. ...  | 22nd, 23rd, 26th, 27th, 29th, 30th | 21        | 18                | 104       | 275              | 242             | 102                | 0           | 190                  | 20      | 29        | 24            | 31      | 27      | 1     | 40    |
| Year ...  | 9 days                             | 27        | 82                | 483       | 2,628            | 3,853           | 1,748              | 45          | 280                  | 20      | Mar. 1    | 1             | 31      | Dec. 27 | 1     | 40    |

\* Interpolated values.

## MINIMUM TEMPERATURE "ON THE GRASS" DURING THE INTERVAL 18H. TO 7H. G.M.T.

Readings, in degrees absolute.

195. Eskdalemuir.

1924.

| Day.     | Jan.        | Feb.        | Mar.        | April       | May         | June        | July        | Aug.        | Sept.       | Oct.        | Nov.        | Dec.        |
|----------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
|          | <i>a.</i>   | <i>a.</i>   | <i>a.</i>   | <i>a.</i>   | <i>a.</i>   | <i>a.</i>   | <i>a.</i>   | <i>a.</i>   | <i>a.</i>   | <i>a.</i>   | <i>a.</i>   | <i>a.</i>   |
| 1        | 74·7        | 70·0        | 69·0        | 71·0        | 75·7        | 80·0        | 77·7        | 85·0        | 84·1        | 70·0        | 78·9        | 76·7        |
| 2        | 77·7        | 76·0        | 60·8        | 65·9        | 77·0        | 76·6        | 81·4        | 83·7        | 77·7        | 79·7        | 78·8        | 73·5        |
| 3        | 72·6        | 76·8        | <b>60·1</b> | 64·0        | 77·3        | <b>68·8</b> | 81·8        | 79·5        | 80·2        | 77·5        | 69·6        | 78·0        |
| 4        | 68·5        | 77·0        | 67·0        | 70·0        | 73·5        | 70·8        | 80·2        | 79·9        | 78·9        | 80·0        | 65·6        | 77·4        |
| 5        | 74·1        | 78·0        | 62·0        | 67·9        | 73·0        | 75·3        | 79·9        | 85·8        | 79·3        | 77·0        | 75·0        | 72·9        |
| 6        | 75·7        | 76·6        | 60·6        | 69·9        | 70·9        | 81·9        | 79·5        | 78·0        | 84·0        | 77·0        | 67·0        | 76·0        |
| 7        | 68·4        | 75·0        | 67·2        | 72·2        | 76·0        | 81·9        | 82·8        | 75·9        | 79·9        | 77·0        | 77·2        | 76·8        |
| 8        | 68·7        | 74·2        | 71·0        | 73·2        | 74·0        | 84·0        | 81·1        | 73·4        | 85·1        | 71·0        | 77·7        | 77·8        |
| 9        | <b>59·0</b> | 73·7        | 68·9        | 68·5        | <b>68·6</b> | 82·7        | 80·3        | <b>73·0</b> | 82·0        | 72·7        | 76·6        | 76·8        |
| 10       | 63·1        | 73·8        | 66·0        | 66·9        | 77·2        | 81·2        | 78·2        | 74·5        | 72·0        | 80·2        | 71·9        | 78·1        |
| 11       | 63·6        | 73·0        | 65·0        | 64·4        | 79·3        | 82·4        | 85·6        | 80·8        | 79·0        | 76·1        | 74·2        | 75·6        |
| 12       | 69·1        | 72·2        | 67·1        | 67·0        | 73·5        | 78·1        | 80·7        | 83·8        | 82·0        | 78·3        | 69·9        | 79·4        |
| 13       | 73·0        | 72·0        | 67·1        | 66·0        | 73·0        | 76·1        | 84·9        | 76·0        | 83·1        | 76·1        | 69·0        | 80·0        |
| 14       | 73·2        | 70·1        | 69·2        | 69·7        | 75·8        | 69·8        | 78·8        | 79·9        | 72·5        | 75·6        | 69·2        | 72·5        |
| 15       | 69·9        | 70·2        | 70·8        | 66·3        | 79·9        | 81·5        | 84·9        | 75·2        | 79·8        | 73·4        | 73·9        | <b>69·0</b> |
| 16       | 73·0        | 69·0        | 68·7        | 72·1        | 78·0        | —           | 83·0        | 79·0        | 81·2        | 71·9        | 64·7        | 76·0        |
| 17       | 70·4        | 68·0        | 63·6        | 65·1        | 73·5        | 82·5        | 80·8        | 77·0        | 84·0        | 73·1        | <b>64·1</b> | 69·6        |
| 18       | 69·0        | 75·2        | 61·1        | 68·3        | 70·6        | 81·3        | 77·2        | 79·3        | 80·2        | 71·8        | 75·0        | 81·1        |
| 19       | 76·3        | 70·6        | 66·5        | 78·8        | 80·0        | 78·3        | 79·2        | 80·0        | 72·9        | 79·0        | 67·1        | 79·8        |
| 20       | 74·5        | 72·0        | 64·0        | 78·9        | 78·0        | 79·0        | <b>73·0</b> | 81·1        | 79·7        | 80·2        | 77·3        | 80·1        |
| 21       | 68·6        | 75·9        | 62·3        | 80·7        | 80·0        | 73·8        | 83·5        | 82·2        | 79·6        | 77·2        | 77·8        | 79·4        |
| 22       | 78·1        | 67·1        | 72·0        | 75·8        | 82·9        | 74·7        | 83·0        | 82·0        | 73·0        | <b>69·1</b> | 80·0        | 74·6        |
| 23       | 77·5        | 67·2        | 77·5        | <b>63·7</b> | 81·0        | 77·1        | 75·1        | 80·6        | 73·3        | 71·2        | 79·3        | 78·2        |
| 24       | 74·7        | 74·9        | 76·2        | 75·0        | 79·0        | 83·2        | 78·7        | 80·2        | 74·0        | 69·7        | 80·5        | 76·2        |
| 25       | 70·3        | 72·1        | 73·3        | 79·2        | 78·9        | 75·7        | 81·0        | 80·0        | 72·1        | 70·0        | 77·3        | 74·3        |
| 26       | 76·7        | 70·0        | 73·1        | 81·0        | 76·7        | 85·5        | 77·0        | 78·7        | 76·2        | 76·2        | 80·0        | 73·4        |
| 27       | 73·0        | 71·0        | 71·9        | 75·6        | 79·0        | 80·9        | 73·4        | 76·0        | 71·0        | 78·7        | 78·8        | 76·0        |
| 28       | 74·9        | <b>66·4</b> | 68·1        | 74·6        | 82·1        | 76·5        | 81·2        | 75·0        | <b>70·8</b> | 77·0        | 73·0        | 73·0        |
| 29       | 76·0        | 71·3        | 65·2        | 69·1        | 79·4        | 83·0        | 83·6        | 83·9        | 82·3        | 79·8        | 69·7        | 73·0        |
| 30       | 75·2        | —           | 67·0        | 75·7        | 80·5        | 80·6        | 84·3        | 84·1        | 81·4        | 79·9        | 77·4        | 75·7        |
| 31       | 76·1        | —           | 68·5        | —           | 80·8        | —           | —           | 82·0        | —           | 79·0        | —           | 71·5        |
| Mean ... | 72·1        | 72·4        | 67·4        | 71·2        | 76·9        | 78·7        | 80·4        | 79·5        | 78·4        | 75·7        | 73·9        | 75·9        |

NOTES.—(1) The initial 2 or 3 of the readings is omitted, *i.e.*, 275·0 is written 75·0.

(2) The minimum refers to the interval from 18h. the previous day to 7h. on the day to which it is entered. Mean for June is for 29 days only. Mean for July is for 30 days only.

(3) Annual Mean 275·2.

196. Eskdalemuir.

| Day.            | Cloud Forms.    |                      |                 | Cloud Amount (All Forms). |                |                 |                 |                 |                 | Weather.         |                |                 |                 |                 | Remarks.  |
|-----------------|-----------------|----------------------|-----------------|---------------------------|----------------|-----------------|-----------------|-----------------|-----------------|------------------|----------------|-----------------|-----------------|-----------------|---|
|                 | 7 <sup>h</sup>  | 13 <sup>h</sup>      | 18 <sup>h</sup> | 7 <sup>h</sup>            | 9 <sup>h</sup> | 13 <sup>h</sup> | 15 <sup>h</sup> | 18 <sup>h</sup> | 21 <sup>h</sup> | 7 <sup>h</sup>   | 9 <sup>h</sup> | 13 <sup>h</sup> | 15 <sup>h</sup> | 18 <sup>h</sup> |   |
| 1               | Cu. : Fr-Cu.    | St-Cu.               | St.             | 3                         | 3              | 2               | 10              | 10              | 10              | ...              | ...            | ...             | ...             | ...             | o, c, b a : b, o p : o, o ≡ n : [cn: od <sub>0</sub> ≡, a a : od <sub>0</sub> ≡, o ≡ p : o ≡ n : bc <sub>0</sub> ≡, o a : o, c p : c, o ≡ n : b ≡, b ≡, o a : o ≡; od <sub>0</sub> p : od <sub>0</sub> ≡ n : od <sub>0</sub> ≡, o ≡ a : od <sub>0</sub> ≡ p : od <sub>0</sub> ≡ n :   |
| 2               | St.             | St. : St-Cu.         | Nb.             | 10                        | 10             | 10              | 10              | 10              | 9               | d <sub>0</sub> ≡ | ...            | ...             | ...             | ...             | od <sub>0</sub> ≡ early, o a : o, b ≡ p : b ≡ n : b ≡, c, od <sub>0</sub> ≡ a : o and o ≡ p : c, o n : o, o ≡, og a : o, op * p : o ≡ n : b, op * <sup>0</sup> , b a : b, bc p : bc, c ≡ n : ☒ thin layer, o * <sup>0</sup> , a : o a * <sup>0</sup> , bc p : bc, b n : [o ≡ p : o * <sup>0</sup> ≡ n : ☒ 1 cm. b, o, o * <sup>0</sup> ≡ a : o * <sup>0</sup> ≡, c, o * <sup>0</sup> q, co a : o p : o ≡, o * <sup>0</sup> ≡ n : o * <sup>0</sup> ≡, o * <sup>0</sup> ≡ a : o : o * <sup>0</sup> ≡ to o ≡ p and n : o ≡, b a : b, o p : o n : o, op * <sup>0</sup> , o a : o, c p and n :   |
| 3               | St-Cu.          | St-Cu.               | St-Cu.          | 5                         | 3              | 9               | 9               | 8               | 10              | ...              | ...            | ...             | ...             | ...             | bc, c ≡ a : o ≡, bc ≡ p : b ≡ n : o a and p : o, o * <sup>0</sup> n : ☒ 5 cm. o * <sup>0</sup> ≡, o ≡ a : o ≡, od ≡, o ≡ p : o ≡ n : o ≡, o a : o, o ≡ p : o ≡ and o n : o, b to o a : c, op * <sup>0</sup> , b p : b, cp <sub>0</sub> , bn : [od ≡, o ≡ n : ≡ early, op, o a : o ≡, od ≡ p o ≡, od ≡ a : o ≡ p : o ≡ n : o ≡, o ≡ a : o p : o ≡ n : o ≡, o ≡ a : o ≡, o p : b n : bc ≡, op <sub>0</sub> , o ≡ a : od ≡ p : o ≡, o n : [o ≡, o n : op <sub>0</sub> , o ≡, o ≡ a : c, o ≡ p : o ≡, bc, op a : o, d <sub>0</sub> p : od <sub>0</sub> , b n : b, o a : o, od <sub>0</sub> p : o and od <sub>0</sub> ≡ n : o and od ≡ a : o, b, b ≡ 1750 p : b ≡, op <sub>0</sub> , c n : o ≡, od <sub>0</sub> a : o p : o, o ≡ n : [p : b, p * <sup>0</sup> n : od ≡, o, o ≡ a : o op Δ at 16:50 |
| 4               | —               | St.                  | Nb.             | 0                         | 9              | 10              | 10              | 10              | 10              | ...              | ...            | ...             | ...             | ...             |   |
| 5               | Nb.             | Nb.                  | Nb.             | 10                        | 10             | 10              | 10              | 10              | 10              | ...              | ...            | ...             | ...             | ...             |   |
| 6               | St-Cu.          | St-Cu.               | —               | 10                        | 10             | 10              | 8               | 0               | 0               | ...              | ...            | ...             | ...             | ...             |   |
| 7               | St-Cu.          | Nb.                  | St-Cu.          | 3                         | 7              | 10              | 10              | 10              | 7               | ...              | ...            | ...             | ...             | ...             |   |
| 8               | St-Cu.          | St.                  | St-Cu.          | 10                        | 10             | 10              | 10              | 9               | 10              | ...              | ...            | ...             | ...             | ...             |   |
| 9               | A-St.           | —                    | St-Cu.          | 1                         | 3              | 0               | 1               | 4               | 8               | ...              | ...            | ...             | ...             | ...             |   |
| 10              | Nb.             | Nb.                  | St-Cu.          | 10                        | 10             | 10              | 10              | 6               | 2               | ...              | ...            | ...             | ...             | ...             |   |
| 11              | St.             | Nb.                  | St.             | 9                         | 10             | 10              | 8               | 10              | 10              | ...              | ...            | ...             | ...             | ...             |   |
| 12              | St-Cu.          | A-St. : Ci-St.       | A-St.           | 4                         | 8              | 9               | 10              | 10              | 10              | ...              | ...            | ...             | ...             | ...             |   |
| 13              | Nb.             | Nb.                  | Nb.             | 10                        | 10             | 10              | 10              | 10              | 10              | ...              | ...            | ...             | ...             | ...             |   |
| 14              | St.             | Cu. : Fr-Cu. : A-Cu. | St-Cu.          | 10                        | 9              | 3               | 1               | 9               | 9               | ...              | ...            | ...             | ...             | ...             |   |
| 15              | St-Cu.          | St. : St-Cu.         | St. : St-Cu.    | 9                         | 10             | 9               | 10              | 10              | 7               | ...              | ...            | ...             | ...             | ...             |   |
| 16              | St-Cu. : Ci-St. | A-Cu.                | A-Cu. : Ci-St.  | 7                         | 7              | 7               | 9               | 6               | 3               | ...              | ...            | ...             | ...             | ...             |   |
| 17              | St-Cu.          | St-Cu.               | St-Cu.          | 10                        | 10             | 10              | 10              | 10              | 10              | ...              | ...            | ...             | ...             | ...             |   |
| 18              | Nb.             | Nb.                  | Nb.             | 10                        | 10             | 10              | 10              | 10              | 10              | ...              | ...            | ...             | ...             | ...             |   |
| 19              | St.             | St-Cu.               | Nb.             | 10                        | 10             | 10              | 10              | 10              | 10              | ...              | ...            | ...             | ...             | ...             |   |
| 20              | St-Cu.          | St-Cu. : Ci.         | St-Cu.          | 1                         | 1              | 8               | 7               | 3               | 0               | ...              | ...            | ...             | ...             | ...             |   |
| 21              | St.             | St.                  | Nb.             | 10                        | 10             | 10              | 10              | 10              | 10              | ...              | ...            | ...             | ...             | ...             |   |
| 22              | Nb.             | Nb.                  | Nb.             | 10                        | 10             | 10              | 10              | 10              | 10              | ...              | ...            | ...             | ...             | ...             |   |
| 23              | St.             | St.                  | St-Cu.          | 10                        | 10             | 10              | 10              | 10              | 10              | ...              | ...            | ...             | ...             | ...             |   |
| 24              | Nb.             | St.                  | St-Cu.          | 10                        | 10             | 10              | 10              | 9               | 2               | ...              | ...            | ...             | ...             | ...             |   |
| 25              | St-Cu.          | St.                  | St.             | 4                         | 10             | 10              | 10              | 10              | 9               | ...              | ...            | ...             | ...             | ...             |   |
| 26              | St-Cu.          | Nb.                  | St-Cu. : A-St.  | 10                        | 10             | 10              | 8               | 10              | 10              | ...              | ...            | ...             | ...             | ...             |   |
| 27              | St-Cu.          | St-Cu.               | St. : Nb.       | 4                         | 6              | 10              | 9               | 10              | 3               | ...              | ...            | ...             | ...             | ...             |   |
| 28              | St-Cu. : A-St.  | A-St. : Ci-Cu.       | Nb. : A-St.     | 9                         | 9              | 9               | 10              | 10              | 10              | ...              | ...            | ...             | ...             | ...             |   |
| 29              | St-Cu.          | Nb. : St.            | St-Cu. : Ci-St. | 9                         | 9              | 10              | 10              | 3               | 8               | ...              | ...            | ...             | ...             | ...             |   |
| 30              | St.             | St. : Nb.            | St-Cu.          | 10                        | 10             | 10              | 10              | 10              | 10              | ...              | ...            | ...             | ...             | ...             |   |
| 31              | Nb.             | Nb.                  | St-Cu. : A-St.  | 10                        | 10             | 10              | 10              | 10              | 2               | ...              | ...            | ...             | ...             | ...             |   |
| Mean Cloud Am't |                 |                      |                 | 7.7                       | 8.5            | 8.9             | 9.0             | 8.6             | 7.7             |                  |                |                 |                 |                 |   |

197. Eskdalemuir.

| Day.            | Cloud Forms.   |                      |                      | Cloud Amount (All Forms). |                |                 |                 |                 |                 | Weather.       |                |                 |                 |                 | Remarks.   |
|-----------------|----------------|----------------------|----------------------|---------------------------|----------------|-----------------|-----------------|-----------------|-----------------|----------------|----------------|-----------------|-----------------|-----------------|--|
|                 | 7 <sup>h</sup> | 13 <sup>h</sup>      | 18 <sup>h</sup>      | 7 <sup>h</sup>            | 9 <sup>h</sup> | 13 <sup>h</sup> | 15 <sup>h</sup> | 18 <sup>h</sup> | 21 <sup>h</sup> | 7 <sup>h</sup> | 9 <sup>h</sup> | 13 <sup>h</sup> | 15 <sup>h</sup> | 18 <sup>h</sup> |  |
| 1               | St-Cu.         | St-Cu.               | Nb.                  | 3                         | 3              | 10              | 10              | 10              | 8               | ...            | ...            | ...             | ...             | ...             | [op * <sup>0</sup> , c n : b ≡, bc p <sub>0</sub> , op * <sup>0</sup> a : o, o ≡ p : o and od a : op <sub>0</sub> , o p : o n : op <sub>0</sub> and o a : c and op <sub>0</sub> p : c and op <sub>0</sub> n : o ≡ early, bc to od <sub>0</sub> a : o and od <sub>0</sub> p : o d <sub>0</sub> and o ≡ n : o ≡ to o ≡ a : op to o p : o n : Faint auroral glow 19 <sup>h</sup> to 21 <sup>h</sup> . o to bc and o a : o and c p : c to b n : o, o ≡ 9 <sup>h</sup> , bc and cop a : op and o p : o to e n : o, o ≡, o ≡ to o a : o p and n : o, o ≡ to o a : o * and o ≡ p : o ≡ to o ≡ n : c and o ≡, p <sub>0</sub> a : o ≡ and od <sub>0</sub> ≡ p and n : [o * <sup>0</sup> ≡ n : od, o ≡ to o a : o to op * <sup>0</sup> p : o * <sup>0</sup> ≡, o ≡ and o a : o and opd ≡ p and n : o ≡ to o a : o p and n : o, c and o a : c and o p : o, o * <sup>0</sup> , c n : b and bc to c a : c p * <sup>0</sup> to b p : b and bc n : [o, o ≡ n : bc, b ≡ c op * <sup>0</sup> , o and c a : o p : o ≡, o ≡, op * <sup>0</sup> a : o, op * <sup>0</sup> and o ≡ : p and n : [bc, o n : o, o ≡ to o and c a : o, c, bc p : o and c, bc, o a : o p and n : o to o ≡ a : o ≡ to o ≡ p : o ≡ to o n : o to b to o a : o, bc, c p : c and bc ≡ n : bc and b to o a : o to c p : c and o n : b and b ≡, c a : c, o to b p : b and bc to o n : [opd <sub>0</sub> n : o, o ≡, op <sub>0</sub> a : o to b p : b and bc to o and c a : c and op * <sup>0</sup> p : o, op * <sup>0</sup> , o and c n : c, cp * <sup>0</sup> , bc, op <sub>0</sub> a : o p and n : o ≡ to o ≡, op a : o and op, o Δ Kq * <sup>0</sup> (14 <sup>h</sup> ) o and c p : op * <sup>0</sup> to b n : b and c to o a : o y, bc, o p : o n : o, * <sup>0</sup> to bc early, op Δ * <sup>0</sup> a : op * <sup>0</sup> to b p : b n : |
| 2               | Nb.            | Nb. : St-Cu.         | St-Cu.               | 10                        | 10             | 10              | 10              | 10              | 10              | d              | ...            | ...             | ...             | ...             |  |
| 3               | St-Cu.         | St-Cu.               | St-Cu.               | 9                         | 10             | 8               | 8               | 8               | 10              | ...            | ...            | ...             | ...             | ...             |  |
| 4               | St-Cu.         | Nb.                  | Nb. : St-Cu.         | 5                         | 5              | 10              | 10              | 10              | 10              | ...            | ...            | ...             | ...             | ...             |  |
| 5               | Nb. : A-St.    | Nb.                  | St-Cu. : A-St.       | 10                        | 10             | 10              | 10              | 9               | 9               | ...            | ...            | ...             | ...             | ...             |  |
| 6               | St-Cu.         | St-Cu. : Ci.         | St-Cu.               | 4                         | 9              | 8               | 10              | 7               | 1               | ...            | ...            | ...             | ...             | ...             |  |
| 7               | Nb.            | Nb. : St-Cu.         | St-Cu.               | 9                         | 7              | 10              | 9               | 10              | 10              | ...            | ...            | ...             | ...             | ...             |  |
| 8               | St-Cu. : A-St. | St-Cu.               | St.                  | 10                        | 10             | 10              | 10              | 10              | 10              | ...            | ...            | ...             | ...             | ...             |  |
| 9               | St-Cu.         | St. : A-St.          | Nb.                  | 9                         | 9              | 10              | 10              | 10              | 10              | ...            | ...            | ...             | ...             | ...             |  |
| 10              | St-Cu. : A-St. | St. : Fr-St. : A-St. | St.                  | 8                         | 10             | 10              | 10              | 10              | 10              | ...            | ...            | ...             | ...             | ...             |  |
| 11              | St-Cu.         | St-Cu. : A-St.       | Nb.                  | 10                        | 10             | 10              | 10              | 10              | 10              | ...            | ...            | ...             | ...             | ...             |  |
| 12              | St.            | St.                  | St.                  | 10                        | 10             | 10              | 10              | 10              | 10              | ...            | ...            | ...             | ...             | ...             |  |
| 13              | St.            | St-Cu.               | St-Cu.               | 10                        | 10             | 10              | 10              | 10              | 10              | ...            | ...            | ...             | ...             | ...             |  |
| 14              | St-Cu.         | St-Cu.               | St-Cu.               | 10                        | 9              | 10              | 8               | 10              | 10              | ...            | ...            | ...             | ...             | ...             |  |
| 15              | St-Cu.         | St-Cu. : Cu. : A-Cu. | St-Cu.               | 3                         | 3              | 7               | 9               | 3               | 5               | ...            | ...            | ...             | ...             | ...             |  |
| 16              | St.            | St-Cu.               | St-Cu. : Ci-St.      | 10                        | 10             | 10              | 10              | 9               | 10              | ...            | ...            | ...             | ...             | ...             |  |
| 17              | A-St.          | St. : A-St.          | St. : A-St.          | 10                        | 10             | 10              | 9               | 10              | 10              | ...            | ...            | ...             | ...             | ...             |  |
| 18              | Nb.            | St-Cu.               | St-Cu.               | 10                        | 8              | 10              | 8               | 3               | 9               | ...            | ...            | ...             | ...             | ...             |  |
| 19              | St-Cu.         | St-Cu. : A-St.       | St-Cu. : A-St.       | 8                         | 10             | 10              | 10              | 10              | 10              | ...            | ...            | ...             | ...             | ...             |  |
| 20              | St.            | St.                  | St. : Fr-St. : A-St. | 10                        | 10             | 10              | 10              | 10              | 10              | ...            | ...            | ...             | ...             | ...             |  |
| 21              | St-Cu.         | St-Cu.               | St-Cu.               | 9                         | 3              | 9               | 10              | 7               | 6               | ...            | ...            | ...             | ...             | ...             |  |
| 22              | St-Cu.         | St-Cu.               | St-Cu.               | 9                         | 10             | 10              | 10              | 7               | 9               | ...            | ...            | ...             | ...             | ...             |  |
| 23              | St-Cu.         | St-Cu. : Ci.         | Fr-Cu. : St-Cu.      | 2                         | 8              | 8               | 9               | 3               | 10              | ...            | ...            | ...             | ...             | ...             |  |
| 24              | St-Cu.         | St-Cu.               | —                    | 9                         | 9              | 10              | 2               | 0               | 9               | ...            | ...            | ...             | ...             | ...             |  |
| 25              | St-Cu.         | St-Cu.               | Nb. : St-Cu.         | 8                         | 9              | 8               | 9               | 9               | 7               | ...            | ...            | ...             | ...             | ...             |  |
| 26              | St-Cu.         | St-Cu.               | St-Cu.               | 8                         | 6              | 10              | 10              | 10              | 9               | ...            | ...            | ...             | ...             | ...             |  |
| 27              | St.            | Nb. : St. : St-Cu.   | Nb. : St-Cu.         | 10                        | 10             | 10              | 7               | 10              | 0               | ...            | ...            | ...             | ...             | ...             |  |
| 28              | St-Cu.         | St-Cu.               | St-Cu.               | 7                         | 5              | 10              | 8               | 10              | 9               | ...            | ...            | ...             | ...             | ...             |  |
| 29              | Nb.            | Nb. : St-Cu.         | St-Cu.               | 10                        | 4              | 8               | 6               | 2               | 1               | ...            | ...            | ...             | ...             | ...             |  |
| Mean Cloud Am't |                |                      |                      | 8.3                       | 8.2            | 9.5             | 9.0             | 8.2             | 8.3             |                |                |                 |                 |                 |  |
| Day.            |                |                      |                      | 7 <sup>h</sup>            | 9 <sup>h</sup> | 13 <sup>h</sup> | 15 <sup>h</sup> | 18 <sup>h</sup> | 21 <sup>h</sup> | 7 <sup>h</sup> | 9 <sup>h</sup> | 13 <sup>h</sup> | 15 <sup>h</sup> | 18 <sup>h</sup> | 21 <sup>h</sup>  |

198. Eskdalemuir.

March, 1924.

Table for 198. Eskdalemuir, March 1924. Columns include Day, Cloud Forms (7h, 13h, 18h), Cloud Amount (7h, 9h, 13h, 15h, 18h, 21h), Weather (7h, 9h, 13h, 15h, 18h, 21h), and Remarks. Data rows 1-31 and Mean Cloud Am't.

199. Eskdalemuir.

April, 1924.

Table for 199. Eskdalemuir, April 1924. Columns include Day, Cloud Forms (7h, 13h, 18h), Cloud Amount (7h, 9h, 13h, 15h, 18h, 21h), Weather (7h, 9h, 13h, 15h, 18h, 21h), and Remarks. Data rows 1-30 and Mean Cloud Am't.

200. Eskdalemuir.

| Day.            | Cloud Forms.          |                         |                         | Cloud Amount (All Forms). |                |                 |                 |                 |                 | Weather.                      |                               |                 |                  |                  | Remarks.                      |   |
|-----------------|-----------------------|-------------------------|-------------------------|---------------------------|----------------|-----------------|-----------------|-----------------|-----------------|-------------------------------|-------------------------------|-----------------|------------------|------------------|-------------------------------|---|
|                 | 7 <sup>h</sup>        | 13 <sup>h</sup>         | 18 <sup>h</sup>         | 7 <sup>h</sup>            | 9 <sup>h</sup> | 13 <sup>h</sup> | 15 <sup>h</sup> | 18 <sup>h</sup> | 21 <sup>h</sup> | 7 <sup>h</sup>                | 9 <sup>h</sup>                | 13 <sup>h</sup> | 15 <sup>h</sup>  | 18 <sup>h</sup>  |                               | 21 <sup>h</sup>   |
| 1               | St.                   | St-Cu.                  | Nb. : Cu-Nb.            | 10                        | 10             | 10              | 10              | 10              | 10              | ...                           | ...                           | y               | ...              | ●                | ...                           | o to oy a : oy, oy to o ● p : o ● and o n :   |
| 2               | St.                   | St. : St-Cu.            | Nb. : Nb.               | 10                        | 10             | 10              | 10              | 10              | 10              | ≡ <sup>0</sup> e              | ...                           | ...             | ...              | ● <sup>0</sup>   | ≡ <sup>0</sup>                | o, p <sub>0</sub> ≡ <sup>0</sup> , d ≡ <sup>0</sup> to o a : o and o ● <sup>0</sup> p :                     |
| 3               | St.                   | Nb. : St-Cu.            | Nb. : St-Cu.            | 10                        | 10             | 10              | 10              | 10              | 10              | ...                           | ...                           | op <sub>0</sub> | ● <sup>0</sup>   | ● <sup>0</sup>   | ● <sup>0</sup> ≡ <sup>0</sup> | o ≡ <sup>0</sup> early, o and op a : o and o ● <sup>0</sup>   |
| 4               | A-St. : A-Cu.         | Nb.                     | Nb.                     | 9                         | 9              | 10              | 10              | 10              | 10              | ...                           | ...                           | ● <sup>0</sup>  | d                | * ≡ <sup>0</sup> | * <sup>0</sup> ≡ <sup>0</sup> | p : o and o ● <sup>0</sup> ≡ <sup>0</sup> n :   |
| 5               | Nb.                   | Nb. : St-Cu.            | Cu-Nb. : A-St.          | 10                        | 9              | 10              | 8               | 8               | 9               | * <sup>0</sup> ≡ <sup>0</sup> | ...                           | ● ▲             | y                | ...              | ● p                           | o ≡ <sup>0</sup> , o * <sup>0</sup> ≡ <sup>0</sup> , ocp <sub>0</sub> , ▲ ● a : cy                          |
| 6               | St. : St-Cu. : Ci-St  | St-Cu.                  | Fr-St. : A-St.          | 9                         | 10             | 10              | 10              | 10              | 10              | ...                           | ...                           | ...             | ...              | ...              | ● ≡ <sup>0</sup>              | p ▲ ● p : op ▲ and p ● n :  |
| 7               | St-Cu. : Ci. : Ci-St. | Cu. : St-Cu.            | Cu-Nb. : St-Cu.         | 7                         | 8              | 9               | 7               | 6               | 10              | ...                           | ...                           | y               | ...              | ...              | ...                           | o a : o, op ▲ ● : o p : o, o ● ≡ <sup>0</sup> n :   |
| 8               | Nb.                   | Nb. : St-Cu.            | St-Cu. : Ci-St.         | 10                        | 10             | 10              | 10              | 9               | 2               | ● <sup>0</sup>                | ● <sup>0</sup>                | ...             | ...              | ...              | ...                           | o ● at first, c, cp, oy a : oy, cp,   |
| 9               | —                     | Cu. : Ci-St.            | St. : A-St.             | 0                         | 2              | 10              | 9               | 10              | 10              | ...                           | ...                           | y               | y                | ...              | ● <sup>0</sup>                | bc p : b and c, op o n :  |
| 10              | Nb.                   | Nb.                     | Nb.                     | 10                        | 10             | 10              | 10              | 10              | 10              | ...                           | ...                           | ● <sup>0</sup>  | ● ≡ <sup>0</sup> | ...              | ● <sup>0</sup>                | o, o ● <sup>0</sup> , op and oa : o, op <sub>0</sub> and op :   |
| 11              | St.                   | Nb. : Cu-Nb.            | Nb. : Cu-Nb. : Ci-St.   | 10                        | 10             | 9               | 9               | 8               | 1               | ≡ <sup>0</sup>                | ...                           | p               | p                | ...              | ...                           | o to b □ : n :  |
| 12              | St. : St-Cu.          | Cu. : Fr-Cu.            | Fr-Cu.                  | 10                        | 10             | 6               | 8               | 1               | 7               | ...                           | ...                           | ...             | ...              | ...              | ...                           | b-o, oy a : oy, op <sub>0</sub> p : op, o ● n :   |
| 13              | St.                   | St-Cu.                  | St-Cu.                  | 10                        | 10             | 10              | 8               | 7               | 7               | ...                           | ...                           | ...             | ...              | ...              | ...                           | o ● a : o and o ● ≡ <sup>0</sup> p : o ●, o ≡ <sup>0</sup> n :  |
| 14              | St-Cu. : St. : Fr-St. | St-Cu.                  | St. : Fr-St.            | 10                        | 10             | 10              | 10              | 10              | 10              | d <sub>0</sub> ≡ <sup>0</sup> | ...                           | ...             | ...              | ...              | ...                           | [b-c n :  |
| 15              | Fr-St. : St-Cu.       | Cu. : Fr-Cu.            | Cu. : Ci. : Ci-St.      | 9                         | 7              | 7               | 5               | 4               | 8               | ...                           | ...                           | ...             | y                | ( )              | ...                           | b early-o, od <sub>0</sub> , op ●, bc a : bc, c, b p :  |
| 16              | St. : Fr-St. : St-Cu. | Nb. : Cu.               | Fr-Cu.                  | 10                        | 9              | 8               | 7               | 3               | 1               | ...                           | ...                           | ...             | ...              | ...              | ...                           | o, o ● and d, ≡ <sup>0</sup> o a : o to c p : c-b-c n :   |
| 17              | Cu. : A-Cu.           | Fr-Cu. : A-Cu. : Ci-St. | Fr-St. : A-Cu.          | 5                         | 8              | 9               | 8               | 9               | 1               | ...                           | ...                           | p               | ...              | ...              | ...                           | o, op ● a : o p : o ≡ <sup>0</sup> n :  |
| 18              | —                     | Fr-Cu. : A-Cu. : Ci-St. | A-Cu. : Cu.             | 0                         | 7              | 7               | 6               | 7               | 10              | ...                           | ...                           | y               | ...              | ...              | ...                           | [ ● n :   |
| 19              | Fr-St. : St-Cu.       | St-Cu.                  | St-Cu. : A-St. : Ci-St. | 10                        | 9              | 9               | 9               | 8               | 9               | ...                           | ...                           | ...             | y                | y                | ...                           | o to ca : c, bcy, bc ( ) p : bc ( ), b, o to op   |
| 20              | Nb.                   | St.                     | St. : St-Cu.            | 10                        | 10             | 10              | 10              | 10              | 10              | d <sub>0</sub>                | d <sub>0</sub> ≡ <sup>0</sup> | ...             | ...              | ...              | ...                           | o, o ● ▲, ● cp ● a : cp ●, c, bc p : b n :  |
| 21              | St.                   | Nb.                     | Nb. : A-St.             | 10                        | 10             | 10              | 10              | 10              | 10              | ≡ <sup>0</sup>                | ≡ <sup>0</sup>                | ...             | ...              | ...              | ...                           | b, bc, c, oy a : oy, c, o p : o to b n :  |
| 22              | St.                   | Fr-St. : St-Cu.         | Nb. : Fr-Nb. : Cu-Nb.   | 10                        | 10             | 10              | 10              | 9               | 10              | ≡ <sup>0</sup>                | ≡ <sup>0</sup>                | ...             | ...              | ...              | ...                           | o ● <sup>0</sup> early, o ≡ <sup>0</sup> a : o ● p ● <sup>2</sup> ≡ <sup>0</sup> p :                        |
| 23              | Nb.                   | St-Cu.                  | St-Cu. : A-Cu. : Ci-St. | 10                        | 10             | 10              | 10              | 7               | 10              | d <sub>0</sub>                | ...                           | ...             | ...              | ...              | ...                           | o ● <sup>0</sup> and o ● ≡ <sup>0</sup> , o ≡ <sup>0</sup> : op ● a :                                       |
| 24              | St-Cu.                | Cu. : St-Cu. : A-St.    | St-Cu. : A-St.          | 9                         | 9              | 9               | 7               | 9               | 10              | ...                           | ...                           | ...             | ...              | ...              | ...                           | op ● <sup>0</sup> ≡ <sup>0</sup> p : o n : [c, op and o n :   |
| 25              | Nb.                   | Cu-Nb. : St-Cu.         | St-Cu. : A-St.          | 9                         | 9              | 9               | 10              | 10              | 10              | ...                           | ...                           | ...             | ...              | ...              | ...                           | od <sub>0</sub> , o and op a : o, o ●, op to c p :  |
| 26              | St. : St-Cu.          | St-Cu.                  | St. : St-Cu. : A-Cu.    | 9                         | 5              | 8               | 10              | 9               | 9               | ...                           | ...                           | T               | ...              | ...              | ...                           | o, op ●, ▲, c and o a : c and o p : o, o ● n :  |
| 27              | Nb.                   | Nb.                     | Nb.                     | 10                        | 10             | 10              | 10              | 10              | 10              | ...                           | ...                           | y               | y                | ...              | ...                           | b, o ●, T a : T o, ● p : o to b n :   |
| 28              | St.                   | St-Cu.                  | Cu-Nb. : St-Cu. : A-Cu. | 10                        | 10             | 10              | 10              | 9               | 10              | ...                           | ...                           | ...             | ...              | ...              | ...                           | o, opto bc, cy a : cy, op <sub>0</sub> , o p : o and c n :  |
| 29              | Fr-St. : A-Cu.        | Cu. : Ci-St.            | A-Cu. : Ci-St.          | 2                         | 2              | 8               | 3               | 8               | 9               | ...                           | ...                           | ...             | ...              | ...              | ...                           | o, ● ≡ <sup>0</sup> a : o ● ≡ <sup>0</sup> p : o ● ≡ <sup>0</sup> , o ≡ <sup>0</sup> , o ≡ <sup>0</sup> n : |
| 30              | A-St.                 | Nb.                     | Nb.                     | 10                        | 10             | 10              | 10              | 10              | 10              | ...                           | ...                           | ...             | ...              | ...              | ...                           | o ≡ <sup>0</sup> : to o a : o, op <sub>0</sub> p : o n :  |
| 31              | Nb.                   | Nb. : St-Cu.            | St.                     | 10                        | 10             | 10              | 10              | 10              | 10              | ...                           | ...                           | ...             | ...              | ...              | ...                           | o, op <sub>0</sub> to b, o to ca : cy-by p : cy to o n :  |
| Mean Cloud Am't |                       |                         |                         | 8.6                       | 8.8            | 9.3             | 8.8             | 8.5             | 8.5             |                               |                               |                 |                  |                  |                               | o, o ● d ≡ <sup>0</sup> a : o, od ≡ <sup>0</sup> p : od ≡ <sup>0</sup> n :                                  |

201. Eskdalemuir.

| Day.            | Cloud Forms.          |                         |                            | Cloud Amount (All Forms). |                |                 |                 |                 |                 | Weather.                      |                               |                 |                 |                 | Remarks. |   |
|-----------------|-----------------------|-------------------------|----------------------------|---------------------------|----------------|-----------------|-----------------|-----------------|-----------------|-------------------------------|-------------------------------|-----------------|-----------------|-----------------|----------|---|
|                 | 7 <sup>h</sup>        | 13 <sup>h</sup>         | 18 <sup>h</sup>            | 7 <sup>h</sup>            | 9 <sup>h</sup> | 13 <sup>h</sup> | 15 <sup>h</sup> | 18 <sup>h</sup> | 21 <sup>h</sup> | 7 <sup>h</sup>                | 9 <sup>h</sup>                | 13 <sup>h</sup> | 15 <sup>h</sup> | 18 <sup>h</sup> |          | 21 <sup>h</sup>   |
| 1               | Nb.                   | St. : A-St.             | St-Cu. : A-Cu.             | 10                        | 10             | 10              | 9               | 7               | 10              | ● <sup>0</sup> ≡ <sup>0</sup> | ...                           | ...             | ...             | ...             | ...      | o ● ≡ <sup>0</sup> and o a : o to c p : c, bc to o n :  |
| 2               | St-Cu. : Ci-St.       | St-Cu.                  | St-Cu.                     | 9                         | 9              | 8               | 8               | 8               | 4               | ...                           | ...                           | y               | y               | ...             | ...      | o, oy a : cy to bc, b : p and n :   |
| 3               | Cu. : Ci. : Ci-St.    | Fr-Cu. : Ci. : Ci-Cu.   | St-Cu. : Ci-Cu.            | 4                         | 5              | 6               | 8               | 5               | 7               | ...                           | ...                           | y               | y               | ...             | ...      | bc □ to bcy a : cy, bc p : bc to c n :  |
| 4               | Ci. : Ci-St.          | Cu. : Fr-Cu.            | St-Cu. : A-St.             | 3                         | 4              | 7               | 9               | 10              | 10              | ...                           | ...                           | ...             | ...             | ...             | ...      | b □ to bcy a : cy to o p : o, o ≡ <sup>0</sup> n :  |
| 5               | St-Cu. : A-St.        | Fr-Cu. : St-Cu. : A-St. | St-Cu. : A-St.             | 9                         | 7              | 9               | 10              | 10              | 10              | ...                           | ...                           | ...             | ...             | ...             | ...      | c, o □ ≡ <sup>0</sup> , c to oy a : oy to op : o, o □ n :                                       |
| 6               | St.                   | Nb.                     | Nb.                        | 10                        | 10             | 10              | 10              | 10              | 10              | ...                           | ...                           | ...             | ...             | ...             | ...      | o, ●, o, op a : o, od ≡ <sup>0</sup> and o ● ≡ <sup>0</sup>                                     |
| 7               | Nb.                   | St-Cu.                  | St.                        | 10                        | 10             | 10              | 8               | 10              | 10              | d ≡ <sup>0</sup>              | ...                           | ...             | ...             | ...             | ...      | p : o ● ≡ <sup>0</sup> to o ≡ <sup>0</sup> n : [od <sup>0</sup> ≡ <sup>0</sup> n :              |
| 8               | St.                   | Nb. : St-Cu. : A-St.    | St-Cu. : A-St.             | 10                        | 10             | 10              | 10              | 10              | 10              | d <sub>0</sub> ≡ <sup>0</sup> | d <sub>0</sub> ≡ <sup>0</sup> | ...             | ...             | ...             | ...      | o ●, d <sup>0</sup> , o ● ≡ <sup>0</sup> to oa : oc, od <sub>0</sub> p : o and                  |
| 9               | St-Cu.                | St-Cu.                  | St-Cu.                     | 10                        | 10             | 10              | 10              | 10              | 10              | ...                           | ...                           | ...             | ...             | ...             | ...      | o ≡ <sup>0</sup> d to o ● <sup>0</sup> a : o p and n :  |
| 10              | Nb.                   | Nb. : St-Cu.            | Nb.                        | 10                        | 10             | 10              | 10              | 10              | 10              | ...                           | ...                           | ...             | ...             | ...             | ...      | od <sub>0</sub> early, o a : o p : o to o ≡ <sup>0</sup> n :                                    |
| 11              | Nb.                   | Nb. : Cu-Nb. : St-Cu.   | Cu. : St-Cu. : A-Cu. : Ci. | 10                        | 10             | 10              | 8               | 7               | 2               | ...                           | ...                           | ...             | ...             | ...             | ...      | o ● ≡ <sup>0</sup> , o a : o, od ≡ <sup>0</sup> p : od ≡ <sup>0</sup>                           |
| 12              | St-Cu. : A-Cu.        | Nb.                     | St. : Nb.                  | 10                        | 10             | 10              | 10              | 10              | 10              | ...                           | ...                           | ...             | ...             | ...             | ...      | and o ● ≡ <sup>0</sup> n :  |
| 13              | St-Cu.                | St-Cu.                  | Ci.                        | 10                        | 8              | 7               | 3               | 1               | 1               | ...                           | ...                           | ...             | ...             | ...             | ...      | o ●, o ●, o ≡ <sup>0</sup> , o ● T at 1235 a :  |
| 14              | Ci-St.                | Cu. : St-Cu. : Ci.      | St-Cu. : A-St. : Ci-St.    | 1                         | 1              | 6               | 4               | 8               | 10              | ...                           | ...                           | ...             | ...             | ...             | ...      | o ● <sup>2</sup> , to c p : c to b n :  |
| 15              | St.                   | St.                     | St. : St-Cu. : Nb.         | 10                        | 10             | 10              | 10              | 10              | 10              | ...                           | ...                           | ...             | ...             | ...             | ...      | b to o ●, o ● ≡ <sup>0</sup> a : o ● <sup>0</sup> ≡ <sup>0</sup> p :                            |
| 16              | Ci. : St-Cu. : Fr-St. | Cu. : Fr-Cu. : A-Cu.    | Cu. : Ci-Cu. : A-Cu.       | 6                         | 8              | 7               | 8               | 5               | 8               | ...                           | ...                           | ...             | ...             | ...             | ...      | o ● <sup>0</sup> and o n :  |
| 17              | A-St. : St-Cu.        | Cu. : Ci-St.            | Cu. : Fr-Cu. : Ci-St.      | 10                        | 10             | 3               | 6               | 8               | 10              | ...                           | ...                           | ...             | ...             | ...             | ...      | o, c, o a : c and bc p : b n :  |
| 18              | St. : St-Cu.          | Cu. : Fr-Cu. : Ci.      | Cu. : St-Cu.               | 9                         | 8              | 8               | 8               | 9               | 8               | ...                           | ...                           | ...             | ...             | ...             | ...      | b, b □, bc a : bc and cy p : cy, o n :  |
| 19              | St. : St-Cu.          | Cu. : St-Cu. : A-Cu.    | Cu. : A-Cu. : Ci.          | 10                        | 7              | 8               | 9               | 7               | 3               | ...                           | ...                           | ...             | ...             | ...             | ...      | o ≡ <sup>0</sup> ; od ≡ <sup>0</sup> to o ≡ <sup>0</sup> a : od <sup>0</sup> ≡ <sup>0</sup> and |
| 20              | St-Cu.                | Cu. : A-Cu.             | Cu.                        | 9                         | 9              | 3               | 3               | 1               | 1               | ...                           | ...                           | ...             | ...             | ...             | ...      | o ≡ <sup>0</sup> p and n : [bcy to c n :  |
| 21              | St-Cu. : Fr-St.       | Cu. : Fr-Cu. : Ci.      | Cu. : St-Cu.               | 9                         | 6              | 4               | 4               | 5               | 9               | ...                           | ...                           | ...             | ...             | ...             | ...      | od <sub>0</sub> ≡ <sup>0</sup> , b to cy a : cy and bcy p :                                     |
| 22              | St. : Fr-St.          | St-Cu.                  | Cu. : Ci-Cu. : Ci-St.      | 8                         | 7              | 8               | 6               | 9               | 10              | ...                           | ...                           | ...             | ...             | ...             | ...      | c, o T ● (0555), o to b a : b and   |
| 23              | St. : A-Cu. : Ci.     | Nb. : St-Cu.            | St.                        | 8                         | 10             | 10              | 10              | 10              | 10              | ...                           | ...                           | ...             | ...             | ...             | ...      | bcy p : cy, op <sub>0</sub> ●, o ● <sup>0</sup> n :   |
| 24              | St-Cu.                | Cu. : Fr-Cu. : St-Cu.   | Cu. : St-Cu.               | 8                         | 7              | 6               | 4               | 8               | 9               | ...                           | ...                           | ...             | ...             | ...             | ...      | o ●, cy, a : cy, bc to o a : o and c n :  |
| 25              | St-Cu. : Ci.          | Nb.                     | St.                        | 4                         | 10             | 10              | 10              | 10              | 10              | ...                           | ...                           | ...             | ...             | ...             | ...      | c, o p to c a : o to c p : c to b n :   |
| 26              | St.                   | Nb.                     | Nb. : St. : St-Cu.         | 10                        | 10             | 10              | 10              | 10              | 10              | ...                           | ...                           | ...             | ...             | ...             | ...      | o □ early, o ● <sup>0</sup> , by a : b, bv p :  |
| 27              | St-Cu.                | St-Cu.                  | Cu. : St-Cu.               | 5                         | 8              | 9               | 9               | 8               | 3               | ...                           | ...                           | ...             | ...             | ...             | ...      | by to b n :   |
| 28              | St. : A-St.           | Nb.                     | Nb.                        | 10                        | 10             | 10              | 10              | 10              | 10              | ...                           | ...                           | ...             | ...             | ...             | ...      | c, o ●, bc a : b and bc p : bc to o n :   |
| 29              | St-Cu.                | Nb. : St-Cu.            | St. : St-Cu.               | 8                         | 9              | 9               | 10              | 9               | 7               | ...                           | ...                           | ...             | ...             | ...             | ...      | o ≡ <sup>0</sup> early, bc and c a : bc to o p : o n :  |
| 30              | St-Cu. : Ci. : Ci-St. | St-Cu. : Ci.            | St-Cu.                     | 9                         | 9              | 7               | 7               | 7               | 4               | ...                           | ...                           | ...             | ...             | ...             | ...      | b to o, od and o a : o to o p : o ≡ <sup>0</sup> n :  |
| Mean Cloud Am't |                       |                         |                            | 8.3                       | 8.4            | 8.2             | 8.0             | 8.1             | 7.9             |                               |                               |                 |                 |                 |          | o ≡ <sup>0</sup> , c d to bc a : bc, c p : c and o n :  |
| Day.            |                       |                         |                            |                           |                |                 |                 |                 |                 |                               |                               |                 |                 |                 |          | b, o to od <sub>0</sub> ≡ <sup>0</sup> a : od <sub>0</sub> ≡ <sup>0</sup> and o p :             |

202. Eskdalemuir.

July, 1924.

Table for July 1924 at Eskdalemuir. Columns include Day, Cloud Forms (7h, 13h, 18h), Cloud Amount (7h, 9h, 13h, 15h, 18h, 21h), Weather (7h, 9h, 13h, 15h, 18h, 21h), and Remarks. Includes a Mean Cloud Am't row at the bottom.

203. Eskdalemuir.

August, 1924.

Table for August 1924 at Eskdalemuir. Columns include Day, Cloud Forms (7h, 13h, 18h), Cloud Amount (7h, 9h, 13h, 15h, 18h, 21h), Weather (7h, 9h, 13h, 15h, 18h, 21h), and Remarks. Includes a Mean Cloud Am't row at the bottom.

204. Eskdalemuir.

| Day.            | Cloud Forms.          |                       |                        | Cloud Amount (All Forms). |                |                 |                 |                 |                 | Weather.                      |                               |                 |                  |                               |                               | Remarks.  |
|-----------------|-----------------------|-----------------------|------------------------|---------------------------|----------------|-----------------|-----------------|-----------------|-----------------|-------------------------------|-------------------------------|-----------------|------------------|-------------------------------|-------------------------------|---|
|                 | 7 <sup>h</sup>        | 13 <sup>h</sup>       | 18 <sup>h</sup>        | 7 <sup>h</sup>            | 9 <sup>h</sup> | 13 <sup>h</sup> | 15 <sup>h</sup> | 18 <sup>h</sup> | 21 <sup>h</sup> | 7 <sup>h</sup>                | 9 <sup>h</sup>                | 13 <sup>h</sup> | 15 <sup>h</sup>  | 18 <sup>h</sup>               | 21 <sup>h</sup>               |   |
| 1               | Nb. : St. : St-Cu.    | St-Cu. : Nb.          | St-Cu. : Nb.           | 10                        | 9              | 9               | 9               | 9               | 1               | ...                           | ...                           | ...             | ...              | P <sub>0</sub>                | ...                           | o ●, o a : o, op ●, co p : co, bc bn :  |
| 2               | St-Cu. : A-Cu.        | St-Cu. : Cu.          | St-Cu.                 | 6                         | 3              | 8               | 5               | 1               | 10              | ...                           | ...                           | ...             | ...              | ...                           | ...                           | b, bc, c a : c, bc, b p : b, o n :  |
| 3               | St-Cu. : Cu.          | Cu. : Fr-Cu.          | Cu.                    | 7                         | 3              | 6               | 3               | 3               | 1               | ...                           | ...                           | ...             | ...              | ...                           | ...                           | bc, c, b a : bc and b p : b, b n :  |
| 4               | St-Cu. : Fr-St.       | St-Cu. : Cu. : Fr-Cu. | A-Cu. : Fr-Cu.         | 10                        | 10             | 7               | 5               | 8               | 6               | ...                           | ...                           | y               | y                | ...                           | ...                           | b p, cy a : cy, bcy, c p : c, bc n :  |
| 5               | St. : Nb.             | St. : St-Cu.          | St-Cu. : A-St.         | 10                        | 10             | 9               | 9               | 10              | 9               | ...                           | ...                           | ...             | ...              | ...                           | ...                           | bc, op ●, o a : o, op, o p : o n :  |
| 6               | St. : St-Cu.          | Cu.                   | Fr-St. : St-Cu. : Ci.  | 10                        | 10             | 8               | 9               | 9               | 10              | ...                           | ...                           | ...             | ...              | ...                           | ...                           | o, o p, c a : c, op ●, c p : o n :  |
| 7               | St. : Nb.             | St. : Nb. : St-Cu.    | St. : Nb.              | 10                        | 10             | 10              | 10              | 10              | 10              | ● <sup>0</sup> ≡ <sup>0</sup> | ●                             | ● <sup>0</sup>  | ...              | ● <sup>0</sup> ≡ <sup>0</sup> | ● <sup>0</sup> ≡ <sup>0</sup> | o, o ● <sup>0</sup> ≡ <sup>0</sup> , oi ● <sup>0</sup> a : o, o ● <sup>0</sup> ≡ <sup>0</sup> p :         |
| 8               | St.                   | St. : St-Cu.          | Nb. : Fr-Nb. : A-St.   | 10                        | 10             | 9               | 10              | 9               | 10              | ...                           | ...                           | ...             | ● <sup>0</sup> p | ...                           | ...                           | o, op ●, a and p : o, o ● <sup>0</sup> n :  |
| 9               | St. : St-Cu.          | St. : St-Cu.          | St. : St-Cu. : A-St.   | 10                        | 10             | 10              | 10              | 9               | 4               | P...                          | d <sub>0</sub>                | ...             | ...              | ...                           | ...                           | ●, opd, o a : o p : o to b n :  |
| 10              | —                     | St-Cu.                | St-Cu. : A-St. : A-Cu. | 0                         | 2              | 8               | 9               | 9               | 10              | P...                          | ...                           | ...             | ...              | ...                           | ...                           | b p, c a : c and o p : op <sub>0</sub> ●,   |
| 11              | Nb.                   | St. : St-Cu.          | St-Cu. : A-St.         | 10                        | 10             | 9               | 9               | 10              | 10              | d                             | d ≡ <sup>0</sup>              | ...             | ...              | ...                           | ...                           | o ● <sup>0</sup> ≡ <sup>0</sup> , od ≡ <sup>0</sup> , o a : op <sub>0</sub> ● p :                         |
| 12              | St.                   | St-Cu.                | Nb. : St-Cu. : A-St.   | 10                        | 10             | 9               | 10              | 10              | 10              | ...                           | d ≡ <sup>0</sup>              | ...             | ...              | ● <sup>0</sup> p              | q                             | od <sub>0</sub> ≡ <sup>0</sup> , c, opd, a : op <sub>0</sub> ● p : o, o ●,                                |
| 13              | St.                   | Cu. : St-Cu. : Ci-St. | Nb. : A-Cu.            | 10                        | 9              | 4               | 4               | 4               | 3               | ...                           | ...                           | ...             | ...              | ...                           | ...                           | o q n :   |
| 14              | Ci.                   | St-Cu.                | Nb.                    | 2                         | 4              | 10              | 10              | 10              | 8               | ...                           | ...                           | ...             | ● p              | ...                           | ...                           | ● <sup>0</sup> , bc a : bc, op ●, bc p : bc, cp, b n :  |
| 15              | St.                   | Nb.                   | Nb.                    | 10                        | 9              | 10              | 10              | 10              | 8               | ...                           | ...                           | ...             | ...              | ...                           | ...                           | b, b ≡, op, a : op ●, c, p : o ● <sup>2</sup> q, c n :  |
| 16              | St. : Fr-St.          | St. : Nb.             | Nb.                    | 10                        | 10             | 10              | 10              | 10              | 10              | ...                           | ...                           | ...             | ...              | ...                           | ...                           | o, op <sub>0</sub> , o ● <sup>0</sup> a : o ●, ● <sup>2</sup> p : o ● <sup>2</sup> ≡ <sup>0</sup> , c n : |
| 17              | St. : Fr-St. : Ci.    | St-Cu.                | St-Cu.                 | 9                         | 10             | 10              | 9               | 10              | 9               | ...                           | d ≡ <sup>0</sup>              | ...             | ...              | ...                           | ...                           | op <sub>0</sub> a : ● <sup>0</sup> ≡ <sup>0</sup> , d ≡ <sup>0</sup> p : od ≡ <sup>0</sup> , o n :        |
| 18              | St-Cu. : Fr-St.       | St-Cu.                | St-Cu. : Ci.           | 8                         | 10             | 9               | 2               | 6               | 8               | P...                          | ● <sup>0</sup> ≡ <sup>0</sup> | ...             | ...              | ...                           | ...                           | o, ● <sup>0</sup> ≡ <sup>0</sup> a : o ● <sup>2</sup> q, c, op ● <sup>2</sup> , b, o p :                  |
| 19              | Fr-St. : Ci.          | St-Cu.                | St. : St-Cu.           | 6                         | 9              | 10              | 9               | 10              | 10              | P...                          | ...                           | ...             | ...              | ...                           | ...                           | bc ≡ <sup>0</sup> D, o, c, a : o p : o, o ● <sup>0</sup> n :  |
| 20              | St-Cu.                | St-Cu.                | Nb. : A-St.            | 10                        | 6              | 10              | 10              | 10              | 10              | ...                           | ...                           | ...             | ...              | ...                           | ...                           | o ●, bc, o a : o, o ● <sup>0</sup> p : o ● <sup>0</sup> n :   |
| 21              | Nb. : St-Cu.          | Cu.                   | Cu. : Ci.              | 9                         | 9              | 7               | 9               | 7               | 2               | d                             | p                             | ...             | ...              | ...                           | ...                           | o ● q ≡, od, cp, bcp <sub>2</sub> a : bc, o ▲ <sup>2</sup> ●,   |
| 22              | St.                   | Nb. : St-Cu.          | St-Cu. : Ci-St.        | 10                        | 9              | 9               | 5               | 4               | 5               | ≡                             | ...                           | ● p             | v                | ...                           | ...                           | c p : c, b n :  |
| 23              | Nb. St-Cu. : A-St.    | St. : St-Cu.          | St. : St-Cu.           | 9                         | 10             | 10              | 9               | 9               | 10              | ...                           | ...                           | ...             | ...              | ...                           | ...                           | b, o ≡ P, op ●, a : bc Δ, cp, bc p :  |
| 24              | Cu. : St-Cu. : Ci-St. | St-Cu.                | St-Cu. : Ci.           | 5                         | 8              | 7               | 7               | 5               | 3               | ...                           | ...                           | ...             | ...              | ...                           | ...                           | bc, o ● <sup>0</sup> n :  |
| 25              | —                     | Cu. : St-Cu.          | Cu. : Nb. : St-Cu.     | 0                         | 4              | 8               | 9               | 8               | 2               | ≡                             | ...                           | ...             | ...              | ...                           | ...                           | o, o ● <sup>0</sup> a : o ● p : o ●, o n :  |
| 26              | St. : Fr-St.          | St. : St-Cu.          | St-Cu.                 | 10                        | 9              | 10              | 9               | 5               | 1               | ...                           | ...                           | ...             | ...              | ...                           | ...                           | o, b, o, bc a : c, bc, cp, p : bc, b, b D n :   |
| 27              | St-Cu. : A-Cu.        | St-Cu.                | Fr-Cu.                 | 7                         | 9              | 9               | 7               | 2               | 1               | P...                          | ...                           | ...             | ...              | ...                           | ...                           | b p, b p ≡ to c a : c and o p : c, b n :  |
| 28              | St.                   | Nb. : St-Cu. : Ci-St. | Nb. : St-Cu. : A-St.   | 10                        | 9              | 10              | 10              | 10              | 10              | ...                           | ...                           | ...             | ...              | ...                           | ...                           | b, o, p ● <sup>0</sup> a : o ●, c, bc p : bc, b n :   |
| 29              | Nb.                   | St. : Nb.             | St-Cu.                 | 10                        | 10             | 10              | 10              | 10              | 10              | ...                           | d <sub>2</sub> ≡ <sup>0</sup> | ...             | ...              | ...                           | ...                           | b L, b p, o a : o to b p : b, bc n :  |
| 30              | St. : A-St.           | St. : Nb.             | St-Cu.                 | 10                        | 10             | 10              | 10              | 9               | 9               | ...                           | ...                           | ...             | ...              | ...                           | ...                           | c, o, op <sub>0</sub> , o a : oq, op ● p : oq ● n :   |
| Mean Cloud Am't |                       |                       |                        | 8.3                       | 8.4            | 8.8             | 8.2             | 7.9             | 7.0             |                               |                               |                 |                  |                               |                               | o ● <sup>2</sup> , o, od <sub>2</sub> ≡ <sup>0</sup> a : o, op ● <sup>0</sup> p :                         |

205. Eskdalemuir.

| Day.            | Cloud Forms.            |                       |                      | Cloud Amount (All Forms). |                |                 |                 |                 |                 | Weather.                      |                               |                  |                 |                 |                               | Remarks.   |
|-----------------|-------------------------|-----------------------|----------------------|---------------------------|----------------|-----------------|-----------------|-----------------|-----------------|-------------------------------|-------------------------------|------------------|-----------------|-----------------|-------------------------------|--|
|                 | 7 <sup>h</sup>          | 13 <sup>h</sup>       | 18 <sup>h</sup>      | 7 <sup>h</sup>            | 9 <sup>h</sup> | 13 <sup>h</sup> | 15 <sup>h</sup> | 18 <sup>h</sup> | 21 <sup>h</sup> | 7 <sup>h</sup>                | 9 <sup>h</sup>                | 13 <sup>h</sup>  | 15 <sup>h</sup> | 18 <sup>h</sup> | 21 <sup>h</sup>               |  |
| 1               | Ci.                     | Cu. : St-Cu. : Ci-St. | St-Cu.               | 1                         | 2              | 7               | 8               | 9               | 10              | [                             | ...                           | ...              | ...             | ...             | d <sub>2</sub> p              | o, b, b L, c a : c, o p : o, opd <sub>0</sub> n :  |
| 2               | Nb.                     | St.                   | Nb.                  | 10                        | 10             | 10              | 10              | 10              | 10              | d <sub>0</sub>                | e                             | ...              | ...             | ...             | d <sub>0</sub> ≡ <sup>0</sup> | oi d <sub>0</sub> , oc, a : o, oi d <sub>0</sub> ≡ <sup>0</sup> p : o ≡ <sup>0</sup> n :           |
| 3               | St. : St-Cu. : A-St.    | St. : St-Cu.          | St. : St-Cu.         | 9                         | 10             | 9               | 9               | 10              | 9               | ...                           | g                             | ...              | ...             | ...             | ...                           | oi d <sub>0</sub> , og ≡ <sup>0</sup> a : o, o ≡ <sup>0</sup> p : o ≡ <sup>0</sup> , o n :         |
| 4               | St. : A-Cu.             | Cu.                   | St-Cu. : A-St.       | 9                         | 8              | 5               | 9               | 10              | 10              | ...                           | ...                           | ...              | ...             | ...             | ...                           | o ≡ <sup>0</sup> , bc a : bc, o p : p ● <sup>0</sup> ≡ <sup>0</sup> n :                            |
| 5               | St.                     | Nb.                   | Nb.                  | 10                        | 10             | 10              | 10              | 10              | 10              | ...                           | ...                           | d ≡ <sup>0</sup> | d <sub>0</sub>  | ...             | ...                           | op ● <sup>0</sup> ≡ <sup>0</sup> , o ≡ <sup>0</sup> , od ≡ <sup>0</sup> a : o and                  |
| 6               | St-Cu. : Ci.            | St-Cu.                | St-Cu.               | 8                         | 9              | 9               | 10              | 10              | 9               | ...                           | ...                           | ...              | ...             | ...             | ...                           | od <sub>0</sub> p : o ● <sup>0</sup> n :   |
| 7               | St-Cu.                  | St-Cu.                | St-Cu.               | 9                         | 10             | 7               | 8               | 8               | 10              | ...                           | ...                           | ...              | ...             | ...             | ...                           | o, bc, c, op a : o ● q, o p : oi ●, o n :  |
| 8               | A-St. : Ci.             | Fr-Cu.                | A-Cu.                | 5                         | 7              | 4               | 7               | 1               | 9               | [                             | ...                           | ...              | ...             | ...             | ...                           | oi ●, op, bc a : bc, c p : c, b, o ● <sup>0</sup> ,  |
| 9               | St. : St-Cu.            | St-Cu.                | Nb.                  | 4                         | 8              | 10              | 10              | 10              | 10              | ...                           | ...                           | ...              | ...             | ...             | ...                           | U 19h-20h n :  |
| 10              | St-Cu.                  | St-Cu. : Ci-St.       | Nb. : St-Cu. : A-St. | 9                         | 7              | 9               | 10              | 10              | 10              | ...                           | ...                           | ...              | ...             | ...             | ...                           | b L, c, bc a : bc, b p : b, o n :  |
| 11              | St-Cu. : Ci-St.         | St-Cu.                | Nb. : St-Cu. : A-St. | 4                         | 9              | 8               | 10              | 10              | 10              | ...                           | ...                           | ...              | ...             | ...             | ...                           | b, bc, o a : o, o ●, od p : o and od n :   |
| 12              | St-Cu.                  | Cu. : Fr-Cu. : Ci.    | A-Cu. : Ci-St.       | 8                         | 8              | 7               | 8               | 7               | 10              | ...                           | ...                           | ...              | ...             | ...             | ...                           | o, bc, a : op <sub>0</sub> , d <sub>0</sub> p : od <sub>0</sub> , o ● n :                          |
| 13              | Fr-Nb. : St-Cu. : A-St. | Fr-Cu. : Ci-St.       | St-Cu.               | 10                        | 8              | 3               | 2               | 5               | 7               | P <sub>0</sub>                | ...                           | ...              | ...             | ...             | ...                           | b, o, c a : c, op ●, o p : o n :   |
| 14              | —                       | Ci.                   | —                    | 0                         | 1              | 1               | 0               | 0               | 0               | ...                           | ...                           | ...              | ...             | ...             | ...                           | bc, c a : c p : o n :  |
| 15              | —                       | —                     | —                    | 0                         | 0              | 0               | 0               | 0               | 0               | ...                           | ...                           | ...              | ...             | ...             | ...                           | op ● <sup>0</sup> , b a : b, bc p : bc, c ≡ <sup>0</sup> n :                                       |
| 16              | St.                     | St.                   | Nb.                  | 10                        | 10             | 10              | 10              | 10              | 9               | ...                           | ...                           | ...              | ...             | ...             | ...                           | ≡ <sup>0</sup> ; b ≡ <sup>0</sup> a : b ∞, b, p : b n :  |
| 17              | Cu.                     | Cu. : Fr-Cu.          | St-Cu.               | 1                         | 1              | 4               | 5               | 9               | 9               | ...                           | ...                           | ...              | ...             | ...             | ...                           | b, b D, b a : b p : b, b ≡ <sup>0</sup> n :  |
| 18              | St-Cu.                  | St-Cu. : A-St.        | Nb. : A-St.          | 10                        | 10             | 10              | 10              | 10              | 10              | d <sub>0</sub> ≡ <sup>0</sup> | d <sub>0</sub> ≡ <sup>0</sup> | ...              | ...             | ...             | ...                           | ≡ <sup>0</sup> ; o ≡ <sup>0</sup> a : o, od <sub>0</sub> ≡ <sup>0</sup> p : od ≡ <sup>0</sup> ,    |
| 19              | Nb.                     | St.                   | Nb. : St. : St-Cu.   | 10                        | 10             | 10              | 9               | 10              | 10              | ...                           | ...                           | ...              | ...             | ...             | ...                           | p ●, o n :   |
| 20              | Nb. : St-Cu.            | St-Cu. : A-Cu.        | St-Cu.               | 9                         | 9              | 8               | 10              | 9               | 10              | ...                           | ...                           | ...              | ...             | ...             | ...                           | c, bc a : bc, o p : o and c n :  |
| 21              | St.                     | St. : Nb.             | St-Cu. : A-St.       | 10                        | 8              | 10              | 10              | 10              | 6               | ...                           | ...                           | ...              | ...             | ...             | ...                           | o a : o, o ● p : o ●, o ● <sup>0</sup> ≡ <sup>0</sup> n :  |
| 22              | St-Cu. : Ci. : Ci-St.   | St-Cu.                | St-Cu.               | 2                         | 8              | 9               | 8               | 8               | 7               | ...                           | ...                           | ...              | ...             | ...             | ...                           | o ≡ <sup>0</sup> early, od ≡, o ≡ <sup>0</sup> to o a :  |
| 23              | St.                     | St.                   | —                    | 10                        | 10             | 9               | 0               | 0               | 0               | ...                           | ...                           | ...              | ...             | ...             | ...                           | o, op ● <sup>0</sup> , bc, c a : c, o p : o n :  |
| 24              | Ci-St.                  | Ci-St.                | —                    | 1                         | 1              | 1               | 5               | 0               | 0               | ...                           | ...                           | ...              | ...             | ...             | ...                           | o, c, o ● a : o, oi ● <sup>0</sup> p : o, c, bc n :  |
| 25              | St-Cu.                  | St.                   | St.                  | 5                         | 9              | 10              | 10              | 10              | 10              | ...                           | ...                           | ...              | ...             | ...             | ...                           | b, b L, o a : o, c, p : c n :  |
| 26              | St-Cu.                  | St-Cu. : A-St.        | Nb.                  | 10                        | 9              | 10              | 10              | 10              | 10              | ...                           | ...                           | ...              | ...             | ...             | ...                           | o a : o, b p : b ≡ <sup>0</sup> , b L n :  |
| 27              | St.                     | St.                   | St.                  | 10                        | 10             | 10              | 10              | 10              | 10              | ...                           | ...                           | ...              | ...             | ...             | ...                           | b L, b a : b, and bc p and n :   |
| 28              | Nb.                     | St.                   | St.                  | 10                        | 10             | 10              | 10              | 10              | 10              | d <sub>0</sub>                | d ≡ <sup>0</sup>              | ...              | ...             | ...             | ...                           | bc, c, b to o a : o, od <sub>0</sub> , o ≡ <sup>0</sup> p : o ≡ <sup>0</sup> ,                     |
| 29              | Nb.                     | Nb.                   | St. : Nb.            | 10                        | 10             | 10              | 10              | 10              | 10              | d ≡ <sup>0</sup>              | d <sub>0</sub> ≡ <sup>0</sup> | d ≡ <sup>0</sup> | ...             | ...             | ...                           | e ≡ <sup>0</sup> n :   |
| 30              | Nb.                     | Nb.                   | Nb.                  | 10                        | 10             | 10              | 8               | 10              | 6               | ...                           | ...                           | ...              | ...             | ...             | ...                           | o ≡ <sup>0</sup> a : o ≡ <sup>0</sup> , op <sub>0</sub> p : o ● ≡ <sup>0</sup> n :                 |
| 31              | Nb.                     | St. : St-Cu.          | St-Cu.               | 10                        | 10             | 8               | 8               | 6               | 4               | ...                           | ...                           | ...              | ...             | ...             | ...                           | o, ● <sup>0</sup> ≡ <sup>0</sup> , o, oid <sub>0</sub> ≡ <sup>0</sup> , o a : o ≡ <sup>0</sup> p : |
| Mean Cloud Am't |                         |                       |                      | 7.2                       | 7.8            | 7.7             | 8.2             | 7.8             | 7.9             |                               |                               |                  |                 |                 |                               | o ≡ <sup>0</sup> , o ● <sup>0</sup> ≡ <sup>0</sup> n :   |



206. Eskdalemuir.

Table for November 1924 at Eskdalemuir. Columns include Day, Cloud Forms (7h, 13h, 18h), Cloud Amount (7h, 9h, 13h, 15h, 18h, 21h), Weather (7h, 9h, 13h, 15h, 18h, 21h), and Remarks. Data rows 1-30 show various cloud types like St., Cu., Fr., and weather conditions like d0, p, etc.

December, 1924.

207. Eskdalemuir.

Table for December 1924 at Eskdalemuir. Columns include Day, Cloud Forms, Cloud Amount, Weather, and Remarks. Data rows 1-31 show cloud observations and weather notes, including specific cloud types and weather symbols like p, q, r, etc.

Summary table for December 1924. Rows include Mean Cloud Am't, Mean Ann'al Cloud Am't, Cloud Forms, Cloud Amount (All Forms), Weather, and Remarks.

208. Eskdalemuir.

1924.

| Day.     | January. Factor 6.39. |        |       |       | February. Factor 6.39. |       |       |       | March. Factor 6.53. |      |       |       |         |  |  |  |         |  |  |  |         |  |  |  |
|----------|-----------------------|--------|-------|-------|------------------------|-------|-------|-------|---------------------|------|-------|-------|---------|--|--|--|---------|--|--|--|---------|--|--|--|
|          | 3 h.                  | 9 h.   | 15 h. | 21 h. | 3 h.                   | 9 h.  | 15 h. | 21 h. | 3 h.                | 9 h. | 15 h. | 21 h. |         |  |  |  |         |  |  |  |         |  |  |  |
|          | v/m.                  | v/m.   | v/m.  | v/m.  | v/m.                   | v/m.  | v/m.  | v/m.  | v/m.                | v/m. | v/m.  | v/m.  |         |  |  |  |         |  |  |  |         |  |  |  |
| 1        | 85                    | 118    | *     | 429   | 248                    | 733   | *     | 197   | 119                 | *    | 211   | 231   |         |  |  |  |         |  |  |  |         |  |  |  |
| 2        | 338                   | 485    | -733  | 197   | 51                     |       | 150   | 154   | 227                 | 123  | 123   | 151   |         |  |  |  |         |  |  |  |         |  |  |  |
| 3        | 90                    | 164    | 243   | 271   | 99                     | 75    | 43    | 91    | 159                 | 482  | 271   | -88   |         |  |  |  |         |  |  |  |         |  |  |  |
| 4        | 45                    | *      | 214   | 237   | 79                     | 71    | 71    | 185   | 310                 | 573  | 279   | 259   |         |  |  |  |         |  |  |  |         |  |  |  |
| 5        | 180                   | 355    | 389   | 169   | 67                     | 134   | 177   | 307   | 215                 | 334  | 207   | 521   |         |  |  |  |         |  |  |  |         |  |  |  |
| 6        | 141                   | 203    | 310   | 406   | 138                    | -55   | *     | *     | 442                 | 314  | 406   | 653   |         |  |  |  |         |  |  |  |         |  |  |  |
| 7        | 169                   | 237    | 23    | 846   | *                      | 201   | *     | *     | 255                 | 159  | 243   | 430   |         |  |  |  |         |  |  |  |         |  |  |  |
| 8        | 350                   | 180    | 180   | 56    | 102                    | 256   | 398   | 331   | 458                 | 390  | 418   | 509   |         |  |  |  |         |  |  |  |         |  |  |  |
| 9        | 34                    | 158    | *     | *     | 158                    | 315   | 165   | 75    | 362                 | 430  | 350   | 549   |         |  |  |  |         |  |  |  |         |  |  |  |
| 10       | *                     | *      | 254   | 620   | 520                    | 1,206 | 453   | 229   | 310                 | 402  | 330   | 338   |         |  |  |  |         |  |  |  |         |  |  |  |
| 11       | 299                   | 226    | 592   | 620   | 150                    | 114   | 205   | 374   | 549                 | 438  | 219   | 414   |         |  |  |  |         |  |  |  |         |  |  |  |
| 12       | 90                    | 220    | 226   | 333   | 20                     | *     | 284   | *     | 279                 | 434  | 279   | 501   |         |  |  |  |         |  |  |  |         |  |  |  |
| 13       | -1,297                | -2,008 | -254  | 186   | 99                     | *     | 165   | *     | 386                 | 318  | 279   | 521   |         |  |  |  |         |  |  |  |         |  |  |  |
| 14       | 248                   | 446    | 327   | 141   | *                      | 213   | 162   | 272   | 239                 | 191  | 318   | 358   |         |  |  |  |         |  |  |  |         |  |  |  |
| 15       | 175                   | 90     | 243   | 429   | 445                    | 292   | 335   | 244   | 287                 | 438  | 358   | 310   |         |  |  |  |         |  |  |  |         |  |  |  |
| 16       | 220                   | 395    | 384   | 564   | 47                     | 315   | 165   | 626   | 605                 | 394  | 167   | 195   |         |  |  |  |         |  |  |  |         |  |  |  |
| 17       | 361                   | 214    | 282   | 85    | 508                    | 158   | 315   | 154   | 199                 | 215  | 159   | 486   |         |  |  |  |         |  |  |  |         |  |  |  |
| 18       | 169                   | 28     | z-    | 68    | 244                    | 110   | 217   | 264   | 275                 | 131  | 155   | 788   |         |  |  |  |         |  |  |  |         |  |  |  |
| 19       | 90                    | 56     | 102   | -62   | 193                    | 229   | 248   | 875   | 338                 | 171  | 36    | 203   |         |  |  |  |         |  |  |  |         |  |  |  |
| 20       | 17                    | 102    | 180   | 226   | 276                    | 394   | 209   | 118   | 88                  | 167  | 211   | 338   |         |  |  |  |         |  |  |  |         |  |  |  |
| 21       | 310                   | -113   | 124   | 243   | 102                    | 162   | 165   | 205   | 159                 | 159  | 211   | 239   |         |  |  |  |         |  |  |  |         |  |  |  |
| 22       | 158                   | -45    | -23   | 361   | 303                    | 217   | 162   | 315   | -52                 | 60   | 215   | 525   |         |  |  |  |         |  |  |  |         |  |  |  |
| 23       | 282                   | 389    | 248   | 564   | 347                    | 520   | 429   | 189   | 171                 | -175 | *     | *     |         |  |  |  |         |  |  |  |         |  |  |  |
| 24       | -1,444                | 169    | 147   | 214   | 12                     | 83    | 193   | 205   | *                   | *    | 100   | -163  |         |  |  |  |         |  |  |  |         |  |  |  |
| 25       | 519                   | 446    | 107   | 164   | 126                    | 138   | *     | 244   | -12                 | -199 | -36   | 8     |         |  |  |  |         |  |  |  |         |  |  |  |
| 26       | 259                   | 197    | *     | 40    | 426                    | 362   | 126   | 284   | 76                  | 76   | 64    | 159   |         |  |  |  |         |  |  |  |         |  |  |  |
| 27       | z+                    | 175    | 270   | 377   | 165                    | 319   | *     | *     | 111                 | 111  | 199   | 398   |         |  |  |  |         |  |  |  |         |  |  |  |
| 28       | 216                   | 297    | 256   | 270   | *                      | 177   | 154   | 154   | 330                 | 111  | 151   | 199   |         |  |  |  |         |  |  |  |         |  |  |  |
| 29       | 27                    | 135    | 283   | 377   | -477                   | 248   | 146   | 158   | 239                 | 199  | 151   | 314   |         |  |  |  |         |  |  |  |         |  |  |  |
| 30       | 297                   | 148    | 148   | 135   | —                      | —     | —     | —     | 151                 | 115  | 183   | 235   |         |  |  |  |         |  |  |  |         |  |  |  |
| 31       | 377                   | 256    | *     | 233   | —                      | —     | —     | —     | 139                 | 100  | 151   | 96    |         |  |  |  |         |  |  |  |         |  |  |  |
| (a)      | 205                   | 227    | 241   | 306   | 197                    | 286   | 214   | 260   | 267                 | 261  | 222   | 355   |         |  |  |  |         |  |  |  |         |  |  |  |
| (b)      | 80                    | 121    | 165   | 295   | 180                    | 255   | 208   | 268   | 254                 | 244  | 218   | 343   |         |  |  |  |         |  |  |  |         |  |  |  |
| Mean ... | (a) 245               |        |       |       | (b) 165                |       |       |       | (a) 239             |      |       |       | (b) 228 |  |  |  | (a) 276 |  |  |  | (b) 265 |  |  |  |

| Day.     | April. Factor 6.43. |      |       |        | May. Factor 6.33. |        |       |       | June. Factor 6.41. |      |       |       |        |  |  |  |         |  |  |  |         |  |  |  |
|----------|---------------------|------|-------|--------|-------------------|--------|-------|-------|--------------------|------|-------|-------|--------|--|--|--|---------|--|--|--|---------|--|--|--|
|          | 3 h.                | 9 h. | 15 h. | 21 h.  | 3 h.              | 9 h.   | 15 h. | 21 h. | 3 h.               | 9 h. | 15 h. | 21 h. |        |  |  |  |         |  |  |  |         |  |  |  |
|          | v/m.                | v/m. | v/m.  | v/m.   | v/m.              | v/m.   | v/m.  | v/m.  | v/m.               | v/m. | v/m.  | v/m.  |        |  |  |  |         |  |  |  |         |  |  |  |
| 1        | 113                 | 98   | 137   | 293    | 104               | 104    | 124   | 239   | -4                 | -36  | 158   | 233   |        |  |  |  |         |  |  |  |         |  |  |  |
| 2        | 133                 | 117  | 160   | 274    | 197               | 158    | 73    | 135   | 16                 | 182  | 134   | 115   |        |  |  |  |         |  |  |  |         |  |  |  |
| 3        | 133                 | 90   | 203   | 336    | 108               | *      | *     | *     | 130                | 158  | 126   | 138   |        |  |  |  |         |  |  |  |         |  |  |  |
| 4        | 78                  | 94   | 113   | 117    | *                 | *      | *     | *     | 478                | 269  | 103   | 245   |        |  |  |  |         |  |  |  |         |  |  |  |
| 5        | 109                 | 133  | 82    | 196    | *                 | *      | 409   | 112   | 213                | 130  | 154   | 205   |        |  |  |  |         |  |  |  |         |  |  |  |
| 6        | 266                 | 196  | 137   | 305    | 158               | 135    | 181   | -521  | -225               | 43   | 8     | 324   |        |  |  |  |         |  |  |  |         |  |  |  |
| 7        | 86                  | 113  | -637  | 117    | -2,752            | -104   | 216   | -560  | 277                | -399 | 166   | 316   |        |  |  |  |         |  |  |  |         |  |  |  |
| 8        | 78                  | 133  | 188   | 282    | 158               | -1,015 | 108   | 93    | z+                 | 158  | 115   | 119   |        |  |  |  |         |  |  |  |         |  |  |  |
| 9        | 250                 | 98   | 145   | 321    | 158               | 154    | 162   | 100   | 103                | 174  | 99    | 217   |        |  |  |  |         |  |  |  |         |  |  |  |
| 10       | z+                  | 438  | 129   | 203    | -984              | -27    | -97   | 243   | -802               | 119  | 39    | -197  |        |  |  |  |         |  |  |  |         |  |  |  |
| 11       | 106                 | 180  | 168   | 399    | 347               | 166    | z-    | 313   | 111                | z+   | 79    | 221   |        |  |  |  |         |  |  |  |         |  |  |  |
| 12       | 231                 | 152  | -66   | 168    | 340               | 162    | 139   | 259   | 154                | 39   | z+    | 95    |        |  |  |  |         |  |  |  |         |  |  |  |
| 13       | 305                 | 160  | *     | 227    | -23               | 340    | 127   | 197   | 91                 | 111  | 154   | 284   |        |  |  |  |         |  |  |  |         |  |  |  |
| 14       | 508                 | 309  | 321   | 297    | 189               | 208    | 162   | *     | 158                | 150  | 217   | 462   |        |  |  |  |         |  |  |  |         |  |  |  |
| 15       | 137                 | 192  | z+    | 160    | 185               | 193    | 158   | 259   | 162                | 201  | 269   | 336   |        |  |  |  |         |  |  |  |         |  |  |  |
| 16       | 133                 | 149  | 215   | 387    | 166               | 23     | 139   | 270   | 182                | 115  | 87    | 233   |        |  |  |  |         |  |  |  |         |  |  |  |
| 17       | 231                 | 117  | 192   | 352    | 108               | 181    | 185   | 359   | 119                | 229  | 142   | z+    |        |  |  |  |         |  |  |  |         |  |  |  |
| 18       | 47                  | 137  | 141   | 274    | 301               | 116    | 120   | 93    | z+                 | 162  | 170   | 154   |        |  |  |  |         |  |  |  |         |  |  |  |
| 19       | 82                  | 117  | 113   | 270    | 286               | 178    | 162   | 154   | 154                | 324  | 158   | 237   |        |  |  |  |         |  |  |  |         |  |  |  |
| 20       | 305                 | 176  | 164   | 383    | -116              | 112    | 143   | 143   | 166                | 154  | 197   | 241   |        |  |  |  |         |  |  |  |         |  |  |  |
| 21       | 348                 | 172  | 199   | 47     | 93                | 151    | -73   | 455   | 154                | 119  | 158   | 201   |        |  |  |  |         |  |  |  |         |  |  |  |
| 22       | 368                 | -23  | 164   | 109    | 220               | 185    | 151   | *     | 363                | 91   | 119   | 340   |        |  |  |  |         |  |  |  |         |  |  |  |
| 23       | 168                 | 192  | 180   | 235    | 158               | 85     | -919  | 135   | 126                | 186  | 138   | 296   |        |  |  |  |         |  |  |  |         |  |  |  |
| 24       | 51                  | 152  | -520  | 297    | 147               | 135    | 301   | -8    | 399                | 158  | 138   | 209   |        |  |  |  |         |  |  |  |         |  |  |  |
| 25       | 129                 | 250  | 106   | 141    | 85                | 73     | z±    | 197   | 585                | 119  | 111   | 363   |        |  |  |  |         |  |  |  |         |  |  |  |
| 26       | -8                  | 152  | 156   | -43    | 69                | 120    | 27    | 228   | 257                | 920  | 166   | 107   |        |  |  |  |         |  |  |  |         |  |  |  |
| 27       | -919                | 137  | 141   | -1,568 | -266              | -180   | -58   | 147   | 12                 | 138  | 130   | 304   |        |  |  |  |         |  |  |  |         |  |  |  |
| 28       | -282                | 133  | z+    | 227    | 189               | 185    | 193   | 193   | 237                | 36   | 32    | 79    |        |  |  |  |         |  |  |  |         |  |  |  |
| 29       | 149                 | 152  | 140   | 317    | 112               | 162    | 147   | 147   | 197                | 103  | 115   | 0     |        |  |  |  |         |  |  |  |         |  |  |  |
| 30       | 74                  | 12   | 78    | *      | 166               | 89     | 185   | -66   | 51                 | 205  | 166   | 233   |        |  |  |  |         |  |  |  |         |  |  |  |
| 31       | —                   | —    | —     | —      | 197               | 135    | 205   | 243   | —                  | —    | —     | —     |        |  |  |  |         |  |  |  |         |  |  |  |
| (a)      | 178                 | 157  | 158   | 249    | 177               | 148    | 166   | 205   | 196                | 178  | 133   | 225   |        |  |  |  |         |  |  |  |         |  |  |  |
| (b)      | 127                 | 144  | 94    | 172    | -35               | 66     | 81    | 122   | 139                | 151  | 134   | 221   |        |  |  |  |         |  |  |  |         |  |  |  |
| Mean ... | (a) 185             |      |       |        | (b) 134           |        |       |       | (a) 174            |      |       |       | (b) 59 |  |  |  | (a) 183 |  |  |  | (b) 161 |  |  |  |

NOTE.—The Potential Gradient is reckoned as positive if the potential increases upwards. For indeterminate potential gradient the following notation is used : z +, Indeterminate, positive value ; z -, Indeterminate, negative value ; z, ± Indeterminate in magnitude and sign.  
 \* Defective record. (a) Mean of all positive readings. (b) Mean from all complete days using both positive and negative readings.

| Day.     | July. Factor 6·30. |      |       |       | August. Factor 6·14. |      |       |       | September. Factor 6·48. |      |       |       |
|----------|--------------------|------|-------|-------|----------------------|------|-------|-------|-------------------------|------|-------|-------|
|          | 3 h.               | 9 h. | 15 h. | 21 h. | 3 h.                 | 9 h. | 15 h. | 21 h. | 3 h.                    | 9 h. | 15 h. | 21 h. |
|          | v/m.               | v/m. | v/m.  | v/m.  | v/m.                 | v/m. | v/m.  | v/m.  | v/m.                    | v/m. | v/m.  | v/m.  |
| 1        | 198                | 116  | 178   | 136   | 8                    | 197  | -80   | 38    | 148                     | 140  | 140   | 272   |
| 2        | -97                | 194  | 159   | 113   | 91                   | 201  | 152   | -4    | 144                     | 100  | 156   | 244   |
| 3        | 70                 | 116  | 194   | z-    | 315                  | 140  | 125   | 125   | 368                     | 160  | 136   | 168   |
| 4        | 167                | 136  | 120   | 202   | 140                  | 148  | 102   | 110   | 236                     | 148  | 104   | 232   |
| 5        | 39                 | 81   | 89    | -287  | -182                 | 42   | 76    | 224   | 196                     | 48   | 100   | 244   |
| 6        | 268                | 155  | *     | *     | 144                  | 91   | 49    | 197   | 236                     | 68   | 140   | 228   |
| 7        | *                  | *    | 74    | 136   | 171                  | 148  | 152   | 235   | 416                     | -24  | 64    | 76    |
| 8        | 140                | 70   | 109   | 225   | 114                  | 152  | 133   | 375   | -432                    | 172  | *     | -560  |
| 9        | 396                | 124  | 186   | 341   | 387                  | 243  | 148   | 493   | 108                     | 36   | -112  | 392   |
| 10       | 512                | 81   | 124   | 206   | 322                  | 148  | 117   | 38    | 476                     | 244  | 156   | -4    |
| 11       | 272                | *    | 341   | 427   | 42                   | 23   | 19    | 258   | -28                     | 40   | 80    | 116   |
| 12       | 295                | *    | 163   | 151   | 246                  | 155  | 159   | 474   | 40                      | 84   | 156   | 84    |
| 13       | 66                 | 151  | 47    | 229   | 193                  | 72   | z-    | 106   | 108                     | 200  | 196   | 164   |
| 14       | 159                | 155  | 175   | 175   | 326                  | 258  | 30    | 159   | 276                     | 204  | -168  | 192   |
| 15       | 74                 | 97   | 147   | 272   | 284                  | 186  | 136   | 140   | 152                     | 196  | -32   | 168   |
| 16       | 81                 | 213  | z-    | 252   | z±                   | 182  | z±    | 485   | 128                     | 112  | -484  | 52    |
| 17       | 221                | 58   | -291  | 116   | 447                  | 91   | -186  | 57    | 180                     | 172  | z-    | 184   |
| 18       | 202                | 85   | -369  | 244   | 197                  | 91   | 45    | 186   | 68                      | 8    | 156   | 204   |
| 19       | 155                | 124  | 136   | 229   | 197                  | *    | *     | *     | 476                     | 200  | 252   | 132   |
| 20       | 171                | 120  | z+    | 132   | *                    | *    | -694  | 8     | -112                    | 328  | 192   | z-    |
| 21       | -1,148             | -718 | 74    | 78    | -701                 | 117  | 121   | 27    | -192                    | -72  | z±    | 372   |
| 22       | 74                 | 113  | *     | 202   | 182                  | 224  | z+    | 197   | 308                     | 348  | 208   | -28   |
| 23       | 415                | 124  | -380  | 202   | -451                 | 125  | 121   | 527   | -924                    | 84   | 28    | 20    |
| 24       | 23                 | 116  | 136   | 147   | -178                 | 95   | 76    | 186   | 28                      | 280  | 192   | 652   |
| 25       | 116                | 93   | 124   | 43    | *                    | *    | *     | *     | 284                     | 328  | 128   | 316   |
| 26       | 264                | 128  | 124   | 252   | 129                  | 144  | -379  | 224   | *                       | *    | *     | *     |
| 27       | 155                | 163  | 128   | 70    | 136                  | 171  | z-    | 87    | *                       | 272  | 164   | 356   |
| 28       | 47                 | 109  | -116  | -225  | 190                  | 110  | 273   | -4    | 120                     | 188  | 180   | 36    |
| 29       | 39                 | 54   | 109   | 109   | 144                  | 140  | 106   | 224   | -576                    | -92  | 84    | 120   |
| 30       | 93                 | 136  | -140  | 396   | 265                  | 186  | 152   | 292   | 124                     | 240  | -108  | 180   |
| 31       | 435                | 175  | 113   | -167  | 57                   | 258  | 178   | 288   | -                       | -    | -     | -     |
| (a)      | 187                | 122  | 139   | 196   | 197                  | 148  | 118   | 213   | 210                     | 169  | 143   | 208   |
| (b)      | 114                | 82   | 49    | 129   | 104                  | 145  | 76    | 203   | 121                     | 139  | 73    | 177   |
| Mean ... | (a) 161 (b) 93     |      |       |       | (a) 169 (b) 132      |      |       |       | (a) 183 (b) 127         |      |       |       |

| Day.             | October. Factor 6·19. |      |       |       | November. Factor 6·17. |      |       |        | December. Factor 6·40. |      |        |         |     |         |     |     |
|------------------|-----------------------|------|-------|-------|------------------------|------|-------|--------|------------------------|------|--------|---------|-----|---------|-----|-----|
|                  | 3 h.                  | 9 h. | 15 h. | 21 h. | 3 h.                   | 9 h. | 15 h. | 21 h.  | 3 h.                   | 9 h. | 15 h.  | 21 h.   |     |         |     |     |
|                  | v/m.                  | v/m. | v/m.  | v/m.  | v/m.                   | v/m. | v/m.  | v/m.   | v/m.                   | v/m. | v/m.   | v/m.    |     |         |     |     |
| 1                | 149                   | 232  | 191   | 160   | -19                    | 121  | 125   | 299    | 232                    | -449 | 390    | 394     |     |         |     |     |
| 2                | 149                   | 198  | 244   | 476   | 87                     | 11   | 64    | 352    | 374                    | 280  | 99     | 59      |     |         |     |     |
| 3                | 301                   | 137  | 267   | 324   | 277                    | 235  | 258   | 284    | 79                     | -39  | -24    | 394     |     |         |     |     |
| 4                | -19                   | 381  | 225   | 84    | 364                    | 315  | 273   | 152    | 311                    | 197  | 205    | -398    |     |         |     |     |
| 5                | 122                   | 232  | -225  | -229  | 106                    | 159  | 239   | 371    | 465                    | 158  | 217    | 177     |     |         |     |     |
| 6                | -69                   | 126  | -514  | -8    | 208                    | 326  | 152   | 136    | -138                   | 102  | 343    | 75      |     |         |     |     |
| 7                | 103                   | 4    | 263   | 61    | 258                    | 227  | 159   | 163    | 193                    | 110  | 205    | -114    |     |         |     |     |
| 8                | 198                   | 229  | 156   | 331   | 133                    | 152  | 262   | 322    | 71                     | 362  | 410    | -71     |     |         |     |     |
| 9                | 156                   | 305  | 110   | 114   | 152                    | 201  | 394   | 610    | 51                     | 670  | 335    | 453     |     |         |     |     |
| 10               | *                     | *    | 156   | -42   | 569                    | 417  | 231   | 417    | 213                    | 414  | 240    | 295     |     |         |     |     |
| 11               | 251                   | 183  | -57   | 347   | 341                    | 220  | 235   | 1,020  | 236                    | 284  | 236    | 382     |     |         |     |     |
| 12               | 221                   | 194  | 187   | 149   | 273                    | 273  | 337   | 519    | 429                    | 146  | 177    | 47      |     |         |     |     |
| 13               | *                     | *    | 290   | 960   | 315                    | 334  | 345   | 190    | 126                    | -339 | -1,245 | 579     |     |         |     |     |
| 14               | 503                   | 537  | 221   | 491   | 57                     | 292  | 220   | 220    | 323                    | 197  | 114    | 229     |     |         |     |     |
| 15               | 373                   | 202  | 191   | 644   | 95                     | 443  | 349   | 409    | 177                    | 209  | -1,316 | -28     |     |         |     |     |
| 16               | 187                   | 236  | 191   | 179   | 269                    | 337  | 330   | 584    | 118                    | 347  | 461    | 745     |     |         |     |     |
| 17               | 152                   | 118  | 225   | 259   | 383                    | 284  | 152   | 421    | 678                    | 158  | 280    | 138     |     |         |     |     |
| 18               | 168                   | 80   | -263  | 415   | 455                    | 341  | 724   | 675    | 197                    | 162  | 91     | 114     |     |         |     |     |
| 19               | 42                    | 251  | -187  | 385   | 148                    | 148  | 258   | 102    | 118                    | 118  | 276    | 276     |     |         |     |     |
| 20               | 76                    | 183  | 263   | 164   | 193                    | 235  | 76    | 216    | 114                    | 276  | 359    | 165     |     |         |     |     |
| 21               | 133                   | 179  | 114   | 194   | 180                    | 182  | 159   | -724   | 292                    | 339  | 406    | 626     |     |         |     |     |
| 22               | 122                   | 80   | 152   | 187   | -8                     | 117  | -212  | 193    | 276                    | 244  | 481    | 209     |     |         |     |     |
| 23               | 69                    | 126  | 301   | 476   | 110                    | 387  | 129   | -1,137 | -1,076                 | -362 | 229    | 154     |     |         |     |     |
| 24               | 377                   | 274  | 411   | 453   | 15                     | -189 | 197   | 117    | 374                    | z-   | z+     | 158     |     |         |     |     |
| 25               | 191                   | 271  | 141   | 187   | 284                    | 262  | 23    | -144   | z-                     | 264  | 280    | -55     |     |         |     |     |
| 26               | 339                   | 644  | 320   | -884  | 144                    | 246  | -91   | -288   | -922                   | -292 | 63     | 79      |     |         |     |     |
| 27               | 145                   | 95   | 396   | 8     | 64                     | -212 | -91   | -15    | -689                   | -126 | z+     | 327     |     |         |     |     |
| 28               | 156                   | 122  | -358  | 640   | 125                    | 197  | 299   | 603    | 319                    | 126  | 276    | 16      |     |         |     |     |
| 29               | 556                   | 114  | 110   | 229   | -849                   | 424  | 375   | 311    | 158                    | 209  | 142    | -859    |     |         |     |     |
| 30               | 259                   | z+   | z-    | 198   | 220                    | 125  | 227   | 265    | -1,013                 | 118  | 284    | 496     |     |         |     |     |
| 31               | 191                   | 152  | 183   | 160   | -                      | -    | -     | -      | 142                    | 138  | 158    | 118     |     |         |     |     |
| (a)              | 211                   | 210  | 221   | 306   | 216                    | 250  | 244   | 358    | 243                    | 235  | 260    | 268     |     |         |     |     |
| (b)              | 191                   | 210  | 116   | 214   | 165                    | 220  | 207   | 221    | 91                     | 139  | 139    | 170     |     |         |     |     |
| Mean ...         | (a) 237 (b) 183       |      |       |       | (a) 267 (b) 203        |      |       |        | (a) 251 (b) 135        |      |        |         |     |         |     |     |
| Annual Means ... |                       |      |       |       |                        |      |       |        |                        |      |        | (a)     | 207 | 199     | 188 | 262 |
|                  |                       |      |       |       |                        |      |       |        |                        |      |        | (b)     | 128 | 160     | 130 | 211 |
|                  |                       |      |       |       |                        |      |       |        |                        |      |        | (a) 214 |     | (b) 157 |     |     |

The Potential Gradient is reckoned as positive if the potential increases upwards. For indeterminate potential gradient the following notation is used:  
 z + Indeterminate, positive value; z - Indeterminate, negative value; z ± Indeterminate in magnitude and sign.  
 \*Defective record. (a) Mean from all positive readings. (b) Mean of all complete days using both positive and negative readings. z A

POTENTIAL GRADIENT (reduced to level surface): DIURNAL INEQUALITIES (in volts per metre).

The departures from the mean of the day are adjusted for non-cyclic change.

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\* 0a DAYS ONLY.

1924.

| Month and Season. | Hour G.M.T. |         |          |          |          |          |          |          |          |          |          |         |          |          |          |          |          |           |           |           |          |          |          |         | Non-cyclic change 24-0. | No. of Days used. | Mean Values. |  |
|-------------------|-------------|---------|----------|----------|----------|----------|----------|----------|----------|----------|----------|---------|----------|----------|----------|----------|----------|-----------|-----------|-----------|----------|----------|----------|---------|-------------------------|-------------------|--------------|--|
|                   | 1.          | 2.      | 3.       | 4.       | 5.       | 6.       | 7.       | 8.       | 9.       | 10.      | 11.      | Noon    | 13.      | 14.      | 15.      | 16.      | 17.      | 18.       | 19.       | 20.       | 21.      | 22.      | 23.      | 24.     |                         |                   |              |  |
| Jan. ...          | v/m. +17    | v/m. +8 | v/m. -85 | v/m. -79 | v/m. -81 | v/m. -63 | v/m. -40 | v/m. -33 | v/m. -33 | v/m. -56 | v/m. -24 | v/m. -6 | v/m. -25 | v/m. -13 | v/m. -10 | v/m. +20 | v/m. +80 | v/m. +100 | v/m. +109 | v/m. +118 | v/m. +18 | v/m. +40 | v/m. +21 | v/m. +7 | v/m. +38                | 8                 | v/m. 279     |  |
| Feb. ...          | -26         | -41     | -28      | -54      | -37      | -51      | -79      | -6       | +50      | -28      | -10      | -2      | -27      | -3       | +20      | +11      | +10      | +68       | +76       | +39       | +14      | +39      | +38      | +10     | -82                     | 5                 | 213          |  |
| Mar. ...          | +22         | +7      | +1       | -26      | -31      | -24      | +3       | +9       | -29      | -63      | -63      | -65     | -56      | -47      | -52      | -47      | -18      | +24       | +74       | +84       | +96      | +80      | +65      | +46     | +7                      | 20                | 290          |  |
| April ...         | +18         | -7      | +7       | +13      | -47      | -36      | -22      | -25      | -55      | -72      | -68      | -29     | -26      | -10      | -25      | -10      | -13      | -4        | +23       | +85       | +82      | +97      | +71      | +40     | -63                     | 8                 | 208          |  |
| May ...           | +9          | -7      | -18      | -10      | -17      | -33      | -2       | -5       | +10      | +38      | -8       | -19     | -34      | -50      | -30      | -30      | -6       | -98       | -83       | +65       | +99      | +84      | +84      | +54     | +178                    | 1                 | 193          |  |
| June ...          | +51         | +37     | +72      | +45      | +104     | +112     | +58      | -19      | -40      | -58      | -64      | -56     | -65      | -78      | -78      | -74      | -72      | -61       | -37       | +16       | +57      | +65      | +54      | +26     | +26                     | 8                 | 215          |  |
| July ...          | +37         | +49     | +45      | +37      | +16      | +40      | +8       | -6       | -40      | -38      | -39      | -37     | -28      | -20      | -39      | -44      | -37      | -22       | -17       | -19       | +19      | +42      | +50      | +34     | +65                     | 6                 | 180          |  |
| Aug. ...          | +50         | +48     | +76      | +45      | +38      | +30      | -5       | -38      | -12      | +4       | -41      | -55     | -60      | -63      | -51      | -56      | -41      | -43       | -29       | +10       | +53      | +33      | +46      | +62     | -5                      | 5                 | 177          |  |
| Sept. ...         | +58         | +65     | +67      | +68      | +75      | +76      | +82      | +44      | -32      | -77      | -76      | -86     | -93      | -103     | -95      | -72      | -40      | -67       | -38       | +41       | -7       | +37      | +76      | +91     | +139                    | 4                 | 210          |  |
| Oct. ...          | -17         | -4      | -35      | -32      | -1       | -10      | +5       | -27      | -58      | -73      | -49      | -41     | -33      | -25      | -24      | -14      | +31      | +16       | +73       | +105      | +87      | +81      | +65      | -12     | +19                     | 10                | 260          |  |
| Nov. ...          | -1          | -37     | -46      | -42      | -57      | -65      | -55      | -35      | -28      | -12      | -36      | -42     | -31      | -53      | -16      | +6       | +56      | +129      | +107      | +98       | +63      | +45      | +31      | +16     | -1                      | 17                | 300          |  |
| Dec. ...          | -21         | -27     | -14      | -15      | -30      | -57      | -107     | -82      | -8       | +36      | +14      | +3      | +93      | +35      | +20      | +6       | +21      | -18       | +9        | +45       | +57      | +23      | +19      | -12     | -75                     | 5                 | 293          |  |
| Year ...          | +16         | +8      | +3       | -4       | -6       | -7       | -13      | -19      | -23      | -33      | -39      | -36     | -32      | -36      | -32      | -25      | -2       | +2        | +22       | +57       | +53      | +55      | +52      | +31     | -                       | -                 | 236          |  |
| Winter            | -8          | -24     | -43      | -47      | -51      | -59      | -70      | -39      | -5       | -15      | -14      | -12     | +3       | -9       | +3       | +11      | +42      | +70       | +75       | +75       | +38      | +37      | +27      | +7      | -                       | -                 | 271          |  |
| Equinox           | +20         | +15     | +10      | +6       | -1       | +1       | +17      | -0       | -43      | -71      | -64      | -55     | -52      | -46      | -49      | -36      | -10      | -8        | +33       | +79       | +65      | +74      | +69      | +43     | -                       | -                 | 244          |  |
| Summer            | +37         | +32     | +44      | +29      | +35      | +37      | +15      | -17      | -21      | -13      | -38      | -42     | -47      | -53      | -49      | -51      | -39      | -56       | -41       | +18       | +57      | +56      | +59      | +44     | -                       | -                 | 191          |  |

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\* 1a AND 2a DAYS ONLY.

1924.

| Month and Season. | Hour G.M.T. |           |           |           |           |           |          |         |          |          |          |           |          |           |          |          |          |           |          |          |          |           |           |           | Non-cyclic change 24-0. | No. of Days used. | Mean Values. |  |
|-------------------|-------------|-----------|-----------|-----------|-----------|-----------|----------|---------|----------|----------|----------|-----------|----------|-----------|----------|----------|----------|-----------|----------|----------|----------|-----------|-----------|-----------|-------------------------|-------------------|--------------|--|
|                   | 1.          | 2.        | 3.        | 4.        | 5.        | 6.        | 7.       | 8.      | 9.       | 10.      | 11.      | Noon      | 13.      | 14.       | 15.      | 16.      | 17.      | 18.       | 19.      | 20.      | 21.      | 22.       | 23.       | 24.       |                         |                   |              |  |
| Jan. ...          | v/m. +194   | v/m. +156 | v/m. +129 | v/m. +111 | v/m. -168 | v/m. -111 | v/m. -41 | v/m. -6 | v/m. -24 | v/m. -44 | v/m. -81 | v/m. -157 | v/m. -11 | v/m. -117 | v/m. -68 | v/m. -64 | v/m. +24 | v/m. -123 | v/m. -38 | v/m. -34 | v/m. +51 | v/m. +152 | v/m. +162 | v/m. +108 | v/m. +378               | 2                 | v/m. 100     |  |
| Feb. ...          | -84         | -37       | -49       | -52       | -61       | -43       | +38      | +34     | 0        | -29      | -6       | -23       | -42      | -55       | -49      | -27      | +6       | +89       | +164     | +64      | +157     | +57       | 0         | -50       | +81                     | 3                 | 177          |  |
| Mar. ...          | +12         | +27       | -30       | -25       | -22       | -10       | +1       | 0       | -23      | -40      | -25      | -6        | +3       | -2        | +3       | +14      | +21      | -24       | +6       | +85      | +72      | -25       | -8        | +1        | -26                     | 2                 | 137          |  |
| April ...         | -50         | -94       | -37       | -56       | -73       | -38       | +9       | -29     | -60      | -65      | -47      | -30       | -32      | -24       | +10      | +8       | +29      | +53       | +84      | +137     | +122     | +138      | +83       | -33       | -90                     | 7                 | 161          |  |
| May ...           | -53         | -62       | -90       | -68       | -26       | -19       | -28      | -41     | +14      | +41      | +12      | -30       | +12      | +25       | +17      | +33      | +35      | +32       | +45      | +89      | +61      | +60       | +6        | -64       | -66                     | 6                 | 150          |  |
| June ...          | -7          | -8        | -19       | -16       | -31       | -4        | -14      | 0       | +6       | -1       | +13      | -8        | +2       | +5        | -10      | -21      | -27      | +3        | +30      | +44      | +66      | +13       | -16       | -1        | +30                     | 8                 | 161          |  |
| July ...          | +23         | +28       | +41       | +30       | +42       | +67       | +79      | +32     | +6       | +45      | +24      | +1        | +5       | +7        | -25      | -32      | -44      | -68       | -73      | -103     | -61      | -76       | +8        | +37       | +30                     | 4                 | 95           |  |
| Aug. ...          | -45         | -36       | +5        | +12       | +53       | +68       | +35      | +13     | +12      | +10      | -33      | -15       | -72      | -58       | -50      | -96      | -88      | -21       | +1       | +65      | +96      | +71       | +63       | +8        | -22                     | 5                 | 159          |  |
| Sept. ...         | +82         | +46       | +64       | +7        | -74       | -2        | +20      | -100    | -64      | -27      | -4       | 0         | -19      | -37       | -5       | +11      | -10      | -10       | +7       | +29      | +25      | +2        | +35       | +35       | -23                     | 3                 | 128          |  |
| Oct. ...          | -35         | -64       | -74       | -96       | -48       | -6        | +36      | +69     | +50      | +52      | +36      | +24       | -6       | -15       | -97      | -63      | -2       | +68       | +92      | +41      | +33      | +27       | +26       | -38       | -142                    | 7                 | 169          |  |
| Nov. ...          | -106        | -111      | -128      | -107      | -66       | -95       | -70      | +46     | +120     | +81      | +22      | +5        | +15      | -2        | +62      | -1       | +108     | +113      | +32      | +80      | +75      | +28       | -35       | -75       | -53                     | 1                 | 165          |  |
| Dec. ...          | -168        | -117      | -40       | -17       | +13       | +33       | +54      | +99     | +57      | +51      | +60      | +55       | +38      | +73       | +45      | +46      | +53      | +127      | +112     | +68      | -106     | -131      | -175      | -242      | -34                     | 8                 | 197          |  |
| Year ...          | -20         | -22       | -19       | -23       | -38       | -13       | +10      | +10     | +8       | +6       | -2       | -15       | -9       | -17       | -14      | -10      | +9       | +20       | +39      | +47      | +49      | +26       | +12       | -26       | -                       | -                 | 150          |  |
| Winter            | -41         | -27       | -22       | -16       | -71       | -54       | -5       | +43     | +38      | +15      | -1       | -20       | 0        | -25       | -3       | -11      | +48      | +51       | +87      | +45      | +44      | +27       | -12       | -65       | -                       | -                 | 160          |  |
| Equinox           | +2          | -21       | -19       | -43       | -54       | -14       | +17      | -15     | -24      | -20      | -10      | -3        | -13      | -19       | -22      | -7       | +9       | +22       | +47      | +78      | +63      | +35       | +34       | -9        | -                       | -                 | 149          |  |
| Summer            | -21         | -18       | -16       | -11       | +9        | +28       | +18      | +1      | +9       | +24      | +4       | -13       | -13      | -5        | -17      | -29      | -31      | -13       | +1       | +24      | +41      | +17       | +15       | -5        | -                       | -                 | 141          |  |

\* NOTE.—For explanation of 0a, 1a and 2a Days, see page 171.

## ELECTRICAL CHARACTER OF EACH DAY.

210A. Eskdalemuir.

1924.

| Day.                | Jan. | Feb. | Mar. | April | May  | June | July | Aug. | Sept. | Oct. | Nov. | Dec. |
|---------------------|------|------|------|-------|------|------|------|------|-------|------|------|------|
| 1                   | 1a   | *    | *    | 0a    | 1a   | 2b   | 1a   | 2b   | 1a    | 0a   | 2b   | 2c   |
| 2                   | 2b   | 0a   | 0a   | 0a    | 1b   | 1a   | 1b   | 1b   | 0a    | 0a   | 2b   | 1a   |
| 3                   | 0a   | 1a   | 1b   | 0a    | *    | 0a   | 2c   | 0a   | *     | 0a   | 0a   | 1a   |
| 4                   | *    | 1a   | 1b   | 1a    | *    | 0a   | 2c   | 0a   | 0a    | 1a   | 0a   | 2c   |
| 5                   | 0a   | 2a   | 0a   | 0a    | *    | 1a   | 2b   | 1b   | 1b    | 2a   | 0a   | 1b   |
| 6                   | 0a   | *    | 0a   | 0a    | 2b   | 2b   | *    | 1b   | 0a    | 2c   | 0a   | 2c   |
| 7                   | 2b   | *    | 0a   | 2b    | 2c   | 1b   | *    | 1a   | 2a    | 1b   | 0a   | 2a   |
| 8                   | 0a   | 1b   | 0a   | 1b    | 2b   | 1b   | 1a   | 0a   | 2c    | 1a   | 0a   | 2a   |
| 9                   | *    | 2b   | 0a   | 1b    | 2a   | 1a   | 0a   | 0a   | 2b    | 1a   | 0a   | 2a   |
| 10                  | *    | 1b   | 0a   | 2b    | 2c   | 2c   | 1b   | 0a   | 1b    | *    | 0a   | 0a   |
| 11                  | 2b   | 1a   | 0a   | 1b    | 2c   | 2c   | 1a   | 1a   | 1b    | 1b   | 1b   | 0a   |
| 12                  | *    | *    | 0a   | 1b    | *    | 1b   | *    | 1b   | 1a    | 1a   | 0a   | *    |
| 13                  | 2c   | *    | 0a   | 1b    | 1a   | 1a   | 1b   | 2b   | 1b    | *    | 0a   | 2c   |
| 14                  | 0a   | *    | 0a   | 0a    | *    | 0a   | 0a   | 1a   | 2b    | 0a   | 1a   | 1b   |
| 15                  | 0a   | 1b   | 0a   | 1b    | 1b   | 1a   | 0a   | 1b   | 2b    | 0a   | 0a   | 2c   |
| 16                  | 0a   | 1a   | 0a   | 1a    | 2c   | 0a   | 1b   | 2c   | 1b    | 1a   | 0a   | 1a   |
| 17                  | 1a   | 1b   | 0a   | 1a    | 0a   | 2b   | 2b   | 2c   | 1b    | 0a   | 0a   | 0a   |
| 18                  | 2c   | 1b   | 0a   | 1a    | 1b   | 1b   | 1b   | 1b   | 1b    | 1a   | 0a   | 1b   |
| 19                  | 2c   | 0a   | 1b   | 1a    | 1b   | 0a   | 0a   | *    | 2b    | 2b   | 0a   | 1b   |
| 20                  | 1a   | 0a   | 0a   | 0a    | 2a   | 0a   | 1b   | *    | 2c    | 0a   | 0a   | 0a   |
| 21                  | 1a   | 0a   | 1a   | 0a    | 2b   | 1b   | 2c   | 2b   | 2c    | 1b   | 2b   | 0a   |
| 22                  | 2a   | 0a   | 2b   | 1a    | 1b   | 0a   | *    | 2c   | 1b    | 0a   | 2b   | 1b   |
| 23                  | 0a   | 0a   | *    | 1a    | 2b   | 1a   | 1b   | 2c   | 2c    | 0a   | 2b   | 2c   |
| 24                  | 2b   | 2b   | *    | 2c    | 1b   | 1a   | 1b   | 2b   | 1b    | 0a   | 2c   | 2c   |
| 25                  | 1b   | *    | 2b   | 2c    | 2c   | 0a   | 1a   | *    | 0a    | 1b   | 2b   | 2b   |
| 26                  | 2b   | 1b   | 1a   | 2c    | 1b   | 2b   | 0a   | 1b   | *     | 2c   | 2b   | 2c   |
| 27                  | 2b   | *    | 0a   | 2c    | 2c   | 1a   | 0a   | 2b   | *     | 1b   | 2c   | 2b   |
| 28                  | 1a   | *    | 0a   | 2b    | 1a   | 2b   | 2a   | *    | 2b    | 1b   | 0a   | 1a   |
| 29                  | 0a   | 2b   | 0a   | 1b    | 1a   | 1b   | 1a   | 1a   | 2b    | 1b   | 2c   | 2a   |
| 30                  | 0a   | —    | 0a   | 2b    | 1b   | 1a   | 1b   | 1a   | 1b    | 2c   | 1b   | 2b   |
| 31                  | *    | —    | 0a   | —     | 1a   | —    | 1b   | 1a   | —     | 2c   | —    | 1b   |
| Mean ... ..         | 1.00 | 0.90 | 0.32 | 1.00  | 1.42 | 0.97 | 1.00 | 1.15 | 1.26  | 0.86 | 0.77 | 1.33 |
| No. of days used... | 26   | 20   | 28   | 30    | 26   | 30   | 27   | 27   | 27    | 29   | 30   | 30   |

Annual Mean Character Figure 1.00. \* Defective Record.

*Explanatory Note.*—The electric character of the day is indicated by the figures 0, 1, or 2, according to the character of the trace of the electrograph as regards negative potential gradient. The explanation of these symbols is as follows:—

0, denotes a day during which from midnight to midnight no negative potential was recorded.

1, denotes one or more excursions of limited duration to the negative side of the scale.

2, denotes negative potential extending in the aggregate over 3 hours or more.

"a," denotes that within the 25 periods of 60 minutes for which an estimate of the mean potential gradient has to be made in the process of tabulation there was in no case a range of potential gradient in the open exceeding 1000 volts.

"b," denotes that a range of potential gradient in the open exceeding 1000 volts was reached in at least one but in fewer than six of the 25 hourly periods referred to above.

"c," denotes that a range of 1000 volts or more occurred in at least six of the 25 hourly periods.

Mean values for periods of sixty minutes centred at the Hours of Greenwich Mean Time.

211. Eskdalemuir. (X.)

15,000  $\gamma$  (-15 C.G.S. unit) +

January, 1924.

| Hour. G.M.T. | 0.       | 1.       | 2.       | 3.       | 4.       | 5.       | 6.       | 7.       | 8.       | 9.       | 10.      | 11.      | Noon.    | 13.      | 14.      | 15.      | 16.      | 17.      | 18.      | 19.      | 20.      | 21.      | 22.      | 23.      | 24.      | Mean.    |      |
|--------------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|------|
| Day.         | $\gamma$ | $\gamma$ | $\gamma$ | $\gamma$ | $\gamma$ | $\gamma$ | $\gamma$ | $\gamma$ | $\gamma$ | $\gamma$ | $\gamma$ | $\gamma$ | $\gamma$ | $\gamma$ | $\gamma$ | $\gamma$ | $\gamma$ | $\gamma$ | $\gamma$ | $\gamma$ | $\gamma$ | $\gamma$ | $\gamma$ | $\gamma$ | $\gamma$ | $\gamma$ |      |
| 1 Q          | 1016     | 1016     | 1016     | 1016     | 1016     | 1016     | 1016     | 1016     | 1016     | 1015     | 1012     | 1010     | 1009     | 1009     | 1015     | 1019     | 1020     | 1021     | 1022     | 1022     | 1024     | 1021     | 1021     | 1020     | 1016     | 1017     |      |
| 2            | 1016     | 1016     | 1017     | 1019     | 1020     | 1021     | 1021     | 1022     | 1021     | 1020     | 1020     | 1019     | 1019     | 1017     | 1021     | 1024     | 1026     | 1025     | 1025     | 1024     | 1024     | 1024     | 1019     | 1020     | 1021     | 1021     | 1021 |
| 3            | 1021     | 1003     | 1007     | 1007     | 1013     | 1014     | 1014     | 1012     | 1015     | 1011     | 1020     | 1026     | 1015     | 1003     | 1006     | 1004     | 1013     | 1007     | 1002     | 1002     | 1006     | 1002     | 1025     | 1005     | 1010     | 1011     | 1011 |
| 4            | 1010     | 1003     | 1007     | 1007     | 1011     | 1011     | 1013     | 1011     | 1015     | 1010     | 1008     | 1010     | 1010     | 1011     | 1010     | 1016     | 1016     | 1016     | 1016     | 1016     | 1015     | 1011     | 1010     | 1008     | 1011     | 1011     | 1011 |
| 5            | 1010     | 1009     | 1010     | 1014     | 1014     | 1016     | 1014     | 1014     | 1014     | 1013     | 1013     | 1011     | 1013     | 1013     | 1014     | 1013     | 1015     | 1015     | 1015     | 1018     | 1019     | 1019     | 1018     | 1015     | 1014     | 1014     | 1014 |
| 6            | 1014     | 1019     | 1018     | 1015     | 1016     | 1019     | 1019     | 1019     | 1019     | 1015     | 1009     | 1007     | 1006     | 1004     | 1006     | 1006     | 1009     | 1014     | 1018     | 1019     | 1020     | 1019     | 1018     | 1019     | 1020     | 1015     | 1016 |
| 7            | 1020     | 1019     | 1021     | 1015     | 1018     | 1024     | 1023     | 1020     | 1018     | 1024     | 1018     | 1009     | 1008     | 1006     | 1011     | 1010     | 1018     | 1013     | 1014     | 1015     | 1019     | 1024     | 1014     | 1011     | 1013     | 1016     | 1016 |
| 8            | 1013     | 1011     | 1014     | 1014     | 1015     | 1018     | 1020     | 1024     | 1023     | 1016     | 1011     | 1004     | 1009     | 1018     | 1020     | 1016     | 1014     | 1015     | 1015     | 1019     | 1014     | 1010     | 1006     | 1008     | 1010     | 1014     | 1014 |
| 9            | 1010     | 1014     | 1014     | 1014     | 1015     | 1019     | 1023     | 1023     | 1023     | 1018     | 1019     | 1010     | 1001     | 1004     | 1010     | 1013     | 1015     | 1014     | 1015     | 1014     | 1017     | 1008     | 1010     | 1013     | 1014     | 1014     | 1014 |
| 10 D         | 1014     | 1014     | 1020     | 1020     | 1024     | 1028     | 1028     | 1028     | 1018     | 1005     | 1001     | 992      | 1001     | 985      | 974      | 971      | 956      | 971      | 985      | 991      | 1000     | 1015     | 1005     | 995      | 999      | 1001     | 1001 |
| 11           | 999      | 999      | 1004     | 1009     | 1006     | 1012     | 1008     | 1010     | 1009     | 1005     | 1006     | 1010     | 1010     | 1010     | 1013     | 1008     | 1003     | 1001     | 1003     | 995      | 1003     | 1014     | 1011     | 1010     | 1001     | 1007     |      |
| 12 Q         | 1000     | 999      | 1005     | 1006     | 1009     | 1018     | 1019     | 1019     | 1018     | 1018     | 1014     | 1009     | 1008     | 1008     | 1008     | 1008     | 1008     | 1008     | 1012     | 1010     | 1010     | 1010     | 1008     | 1008     | 1009     | 1010     | 1010 |
| 13 Q         | 1009     | 1013     | 1012     | 1013     | 1012     | 1013     | 1013     | 1013     | 1014     | 1018     | 1018     | 1014     | 1013     | 1013     | 1018     | 1010     | 1010     | 1013     | 1014     | 1017     | 1016     | 1014     | 1014     | 1014     | 1014     | 1014     | 1014 |
| 14 Q         | 1014     | 1014     | 1014     | 1013     | 1013     | 1014     | 1018     | 1018     | 1017     | 1014     | 1011     | 1009     | 1012     | 1014     | 1018     | 1018     | 1019     | 1019     | 1019     | 1018     | 1017     | 1019     | 1018     | 1017     | 1013     | 1016     | 1016 |
| 15           | 1013     | 1013     | 1013     | 1014     | 1017     | 1019     | 1022     | 1022     | 1020     | 1014     | 1014     | 1014     | 1018     | 1020     | 1022     | 1019     | 1017     | 1018     | 1008     | 1003     | 1000     | 1005     | 1000     | 1010     | 1012     | 1014     | 1014 |
| 16           | 1012     | 1012     | 1015     | 1008     | 1013     | 1013     | 1027     | 1022     | 1017     | 1016     | 1008     | 1000     | 1003     | 1007     | 1005     | 1010     | 1011     | 1011     | 1015     | 1013     | 1012     | 1013     | 1012     | 1013     | 1007     | 1012     | 1012 |
| 17           | 1007     | 1010     | 1008     | 1008     | 1014     | 1017     | 1014     | 1018     | 1018     | 1013     | 1012     | 1012     | 1010     | 1013     | 1019     | 1022     | 1023     | 1023     | 1024     | 1020     | 1010     | 1012     | 1007     | 1013     | 1014     | 1014     | 1015 |
| 18           | 1013     | 1014     | 1011     | 1011     | 1012     | 1014     | 1017     | 1019     | 1018     | 1013     | 1006     | 1003     | 1000     | 1005     | 1010     | 1015     | 1019     | 1020     | 1022     | 1019     | 1018     | 1016     | 1012     | 1014     | 1017     | 1013     | 1013 |
| 19           | 1017     | 1016     | 1014     | 1015     | 1017     | 1018     | 1021     | 1023     | 1027     | 1025     | 1017     | 1012     | 1007     | 1012     | 1016     | 1013     | 1003     | 1014     | 1020     | 1018     | 1020     | 1020     | 1008     | 1012     | 1017     | 1016     | 1016 |
| 20 Q         | 1017     | 1017     | 1017     | 1018     | 1021     | 1022     | 1022     | 1021     | 1021     | 1021     | 1018     | 1016     | 1009     | 1014     | 1008     | 1018     | 1022     | 1023     | 1022     | 1022     | 1022     | 1022     | 1022     | 1020     | 1018     | 1019     | 1019 |
| 21           | 1018     | 1017     | 1019     | 1021     | 1022     | 1026     | 1026     | 1026     | 1023     | 1022     | 1018     | 1013     | 1013     | 1018     | 1021     | 1023     | 1024     | 1027     | 1027     | 1026     | 1026     | 1022     | 1022     | 1022     | 1024     | 1022     | 1022 |
| 22 D         | 1024     | 1031     | 1016     | 1023     | 1018     | 1031     | 1021     | 1019     | 1019     | 1018     | 1017     | 1014     | 1017     | 1019     | 1018     | 1013     | 1014     | 1002     | 989      | 982      | 1004     | 1019     | 1024     | 1012     | 1014     | 1015     | 1016 |
| 23 D         | 1014     | 1017     | 1036     | 1045     | 1036     | 1042     | 1038     | 1017     | 1007     | 1008     | 994      | 988      | 988      | 993      | 1019     | 1012     | 1007     | 1004     | 1017     | 1022     | 1007     | 1036     | 1022     | 1009     | 1012     | 1016     | 1016 |
| 24           | 1012     | 1013     | 1005     | 1008     | 1017     | 1013     | 1017     | 1017     | 1015     | 1014     | 1012     | 1003     | 999      | 1014     | 1014     | 1008     | 1003     | 992      | 1003     | 1017     | 1027     | 1011     | 1014     | 1023     | 1012     | 1011     | 1011 |
| 25           | 1011     | 1017     | 1006     | 1021     | 1021     | 1014     | 1018     | 1021     | 1019     | 1006     | 1003     | 1002     | 1002     | 990      | 1015     | 1017     | 1012     | 1008     | 1019     | 1019     | 1018     | 1019     | 1016     | 1017     | 1019     | 1013     | 1013 |
| 26           | 1019     | 1017     | 1017     | 1017     | 1020     | 1020     | 1018     | 1020     | 1021     | 1011     | 1006     | 1003     | 1007     | 1006     | 998      | 987      | 1010     | 1011     | 1003     | 1016     | 1021     | 1020     | 1020     | 1016     | 1016     | 1013     | 1013 |
| 27           | 1016     | 1017     | 1026     | 1016     | 1019     | 1021     | 1025     | 1023     | 1018     | 1013     | 1006     | 1001     | 998      | 1002     | 1008     | 1011     | 1014     | 1016     | 1018     | 1030     | 1021     | 1019     | 1020     | 1020     | 1017     | 1016     | 1016 |
| 28           | 1017     | 1016     | 1017     | 1018     | 1021     | 1023     | 1024     | 1026     | 1025     | 1017     | 1011     | 1015     | 1016     | 1013     | 1011     | 1011     | 1017     | 1020     | 1025     | 1026     | 1026     | 1026     | 1025     | 1023     | 1021     | 1020     | 1020 |
| 29 D         | 1021     | 1021     | 1020     | 1020     | 1022     | 1026     | 1043     | 1046     | 1043     | 1026     | 1020     | 1006     | 996      | 994      | 1005     | 1011     | 1003     | 1036     | 1003     | 1017     | 996      | 971      | 964      | 992      | 1022     | 1013     | 1013 |
| 30 D         | 1022     | 934      | 958      | 963      | 977      | 982      | 982      | 986      | 997      | 995      | 983      | 978      | 986      | 997      | 997      | 997      | 998      | 1004     | 1003     | 1002     | 1029     | 1002     | 1008     | 1008     | 1006     | 991      | 991  |
| 31           | 1006     | 1001     | 1001     | 999      | 1006     | 1011     | 1013     | 1016     | 1014     | 1003     | 1002     | 1002     | 998      | 998      | 1001     | 1007     | 1011     | 1011     | 1011     | 1005     | 997      | 1002     | 1007     | 1012     | 1015     | 1006     |      |
| Mean         | 1014     | 1011     | 1012     | 1013     | 1015     | 1018     | 1019     | 1018     | 1018     | 1014     | 1011     | 1007     | 1006     | 1007     | 1010     | 1011     | 1011     | 1013     | 1013     | 1014     | 1015     | 1014     | 1013     | 1013     | 1014     | 1013     | 1013 |

TERRESTRIAL MAGNETIC FORCE: WEST COMPONENT.

Mean values for periods of sixty minutes centred at the Hours of Greenwich Mean Time.

212. Eskdalemuir. (-Y.)

4,000  $\gamma$  (-04 C.G.S. unit) +

January, 1924.

| Hour. G.M.T. | 0.       | 1.       | 2.       | 3.       | 4.       | 5.       | 6.       | 7.       | 8.       | 9.       | 10.      | 11.      | Noon.    | 13.      | 14.      | 15.      | 16.      | 17.      | 18.      | 19.      | 20.      | 21.      | 22.      | 23.      | 24.      | Mean.    |     |
|--------------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|-----|
| Day.         | $\gamma$ | $\gamma$ | $\gamma$ | $\gamma$ | $\gamma$ | $\gamma$ | $\gamma$ | $\gamma$ | $\gamma$ | $\gamma$ | $\gamma$ | $\gamma$ | $\gamma$ | $\gamma$ | $\gamma$ | $\gamma$ | $\gamma$ | $\gamma$ | $\gamma$ | $\gamma$ | $\gamma$ | $\gamma$ | $\gamma$ | $\gamma$ | $\gamma$ | $\gamma$ |     |
| 1 Q          | 630      | 630      | 631      | 631      | 630      | 630      | 630      | 630      | 630      | 632      | 633      | 637      | 640      | 642      | 638      | 634      | 631      | 634      | 634      | 634      | 634      | 633      | 631      | 630      | 630      | 633      | 633 |
| 2            | 630      | 630      | 631      | 631      | 633      | 630      | 629      | 630      | 629      | 629      | 635      | 639      | 640      | 642      | 640      | 636      | 634      | 634      | 634      | 635      | 635      | 615      | 626      | 629      | 633      | 632      | 632 |
| 3            | 633      | 638      | 637      | 633      | 635      | 631      | 628      | 630      | 630      | 631      | 632      | 641      | 646      | 647      | 646      | 638      | 636      | 649      | 642      | 640      | 621      | 612      | 620      | 612      | 615      | 633      |     |
| 4            | 615      | 626      | 627      | 629      | 625      | 626      | 625      | 628      | 629      | 626      | 630      | 637      | 642      | 643      | 640      | 635      | 632      | 632      | 632      | 630      | 630      | 612      | 627      | 623      | 620      | 626      | 630 |
| 5            | 626      | 626      | 636      | 626      | 630      | 630      | 630      | 629      | 626      | 626      | 630      | 637      | 636      | 641      | 639      | 636      | 636      | 635      | 632      | 630      | 629      | 629      | 630      | 630      | 630      | 632      | 632 |
| 6            | 630      | 630      | 629      | 632      | 631      | 629      | 629      | 629      | 626      | 625      | 627      | 633      | 639      | 648      | 650      | 643      | 642      | 641      | 636      | 631      | 629      | 629      | 629      | 629      | 629      | 629      | 633 |
| 7            | 628      | 628      | 638      | 629      | 633      | 634      | 634      | 635      | 635      | 628      | 631      | 633      | 636      | 640      | 640      |          |          |          |          |          |          |          |          |          |          |          |     |



TERRESTRIAL MAGNETIC FORCE: NORTH COMPONENT.

Mean values for periods of sixty minutes centred at the Hours of Greenwich Mean Time.

215. Eskdalemuir. (X.)

15,000  $\gamma$  (.15 C.G.S. unit) +

February, 1924.

| Hour G.M.T. | 0.       | 1.       | 2.       | 3.       | 4.       | 5.       | 6.       | 7.       | 8.       | 9.       | 10.      | 11.      | Noon.    | 13.      | 14.      | 15.      | 16.      | 17.      | 18.      | 19.      | 20.      | 21.      | 22.      | 23.      | 24.      | Mean.    |
|-------------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| Day.        | $\gamma$ | $\gamma$ | $\gamma$ | $\gamma$ | $\gamma$ | $\gamma$ | $\gamma$ | $\gamma$ | $\gamma$ | $\gamma$ | $\gamma$ | $\gamma$ | $\gamma$ | $\gamma$ | $\gamma$ | $\gamma$ | $\gamma$ | $\gamma$ | $\gamma$ | $\gamma$ | $\gamma$ | $\gamma$ | $\gamma$ | $\gamma$ | $\gamma$ | $\gamma$ |
| 1           | 1015     | 1010     | 1007     | 1003     | 1006     | 1008     | 1012     | 1017     | 1016     | 1011     | 1003     | 999      | 996      | 996      | 999      | 1009     | 1011     | 1012     | 1012     | 1017     | 1017     | 1016     | 1016     | 1017     | 1011     | 1009     |
| 2           | 1011     | 1015     | 1013     | 1016     | 1019     | 1016     | 1015     | 1017     | 1018     | 1014     | 1006     | 1001     | 1000     | 1006     | 1011     | 1013     | 1014     | 1016     | 1016     | 1016     | 1016     | 1017     | 1019     | 1016     | 1017     | 1014     |
| 3           | 1017     | 1017     | 1016     | 1016     | 1017     | 1020     | 1022     | 1025     | 1021     | 1020     | 1016     | 1017     | 1016     | 1017     | 1017     | 1018     | 1017     | 1020     | 1016     | 1014     | 1017     | 1016     | 1016     | 1018     | 1018     | 1018     |
| 4           | 1018     | 1022     | 1017     | 1018     | 1020     | 1020     | 1022     | 1025     | 1022     | 1021     | 1020     | 1017     | 1015     | 1018     | 1020     | 1023     | 1020     | 1019     | 1016     | 1022     | 1024     | 1024     | 1021     | 1018     | 1018     | 1020     |
| 5D          | 1018     | 1017     | 1017     | 1019     | 1020     | 1022     | 1025     | 1028     | 1032     | 1032     | 1029     | 1025     | 1017     | 1007     | 1006     | 1005     | 1004     | 1011     | 1021     | 1029     | 1032     | 1022     | 990      | 1025     | 976      | 1018     |
| 6D          | 976      | 1005     | 997      | 991      | 996      | 1011     | 1002     | 1007     | 1011     | 1012     | 1004     | 992      | 992      | 998      | 998      | 1006     | 1006     | 1015     | 1015     | 1011     | 1010     | 1020     | 1009     | 1014     | 1014     | 1005     |
| 7           | 1014     | 1018     | 1011     | 1007     | 1016     | 1016     | 1016     | 1016     | 1016     | 1010     | 1015     | 1010     | 1008     | 1009     | 1005     | 1005     | 1004     | 1001     | 1010     | 997      | 1007     | 1006     | 1005     | 1012     | 1015     | 1010     |
| 8           | 1015     | 1011     | 1012     | 1016     | 1016     | 1016     | 1016     | 1016     | 1016     | 1012     | 1008     | 1007     | 1010     | 1009     | 1008     | 1012     | 1015     | 1016     | 1017     | 1017     | 1016     | 1019     | 1017     | 1029     | 1017     | 1014     |
| 9           | 1017     | 1016     | 1016     | 1016     | 1016     | 1018     | 1019     | 1017     | 1017     | 1015     | 1010     | 1006     | 1005     | 1006     | 1011     | 1017     | 1017     | 1018     | 1019     | 1019     | 1019     | 1020     | 1021     | 1019     | 1019     | 1016     |
| 10          | 1018     | 1019     | 1018     | 1019     | 1019     | 1020     | 1024     | 1018     | 1019     | 1022     | 1015     | 1010     | 1006     | 1013     | 1022     | 1026     | 1024     | 1026     | 1021     | 1011     | 1010     | 1021     | 1018     | 1035     | 1012     | 1019     |
| 11          | 1012     | 1034     | 1013     | 1009     | 1011     | 1015     | 1019     | 1015     | 1016     | 1015     | 1009     | 1006     | 1008     | 1010     | 1016     | 1020     | 1018     | 1015     | 1018     | 1018     | 1016     | 1019     | 1028     | 1017     | 1017     | 1016     |
| 12          | 1017     | 1016     | 1018     | 1017     | 1018     | 1020     | 1020     | 1014     | 1020     | 1019     | 1010     | 1013     | 1012     | 1015     | 1014     | 1015     | 1013     | 1015     | 1016     | 1018     | 1019     | 1020     | 1020     | 1020     | 1023     | 1017     |
| 13          | 1023     | 1018     | 1028     | 1018     | 1016     | 1019     | 1024     | 1019     | 1015     | 1010     | 1006     | 1001     | 1003     | 1008     | 1011     | 1015     | 1016     | 1012     | 1013     | 1015     | 1016     | 1015     | 1016     | 1016     | 1016     | 1015     |
| 14Q         | 1016     | 1018     | 1015     | 1014     | 1011     | 1018     | 1019     | 1022     | 1019     | 1014     | 1001     | 999      | 999      | 1000     | 1006     | 1014     | 1016     | 1018     | 1019     | 1019     | 1020     | 1019     | 1020     | 1019     | 1019     | 1014     |
| 15Q         | 1019     | 1019     | 1019     | 1019     | 1019     | 1021     | 1023     | 1024     | 1025     | 1021     | 1014     | 1011     | 1009     | 1009     | 1014     | 1019     | 1018     | 1019     | 1021     | 1021     | 1020     | 1019     | 1019     | 1019     | 1019     | 1018     |
| 16          | 1019     | 1019     | 1019     | 1019     | 1023     | 1031     | 1040     | 1043     | 1031     | 1013     | 1006     | 1002     | 994      | 990      | 1001     | 1012     | 1016     | 1015     | 1015     | 1016     | 1014     | 1015     | 1019     | 1021     | 1020     | 1016     |
| 17          | 1020     | 1020     | 1023     | 1021     | 1020     | 1021     | 1020     | 1024     | 1024     | 1022     | 1008     | 991      | 996      | 1005     | 1006     | 1005     | 1010     | 1011     | 1011     | 1022     | 1018     | 1016     | 1016     | 1018     | 1019     | 1014     |
| 18Q         | 1019     | 1018     | 1018     | 1019     | 1017     | 1018     | 1019     | 1019     | 1019     | 1015     | 1010     | 1005     | 999      | 1004     | 1009     | 1011     | 1014     | 1016     | 1019     | 1020     | 1023     | 1024     | 1023     | 1023     | 1021     | 1016     |
| 19          | 1021     | 1020     | 1020     | 1022     | 1024     | 1024     | 1025     | 1025     | 1024     | 1021     | 1011     | 1000     | 1004     | 1006     | 1015     | 1019     | 1023     | 1020     | 1024     | 1026     | 1019     | 1005     | 1015     | 1019     | 1024     | 1018     |
| 20D         | 1024     | 1021     | 1022     | 1025     | 1030     | 1047     | 1034     | 1035     | 1026     | 1024     | 1019     | 1015     | 985      | 991      | 986      | 1001     | 1000     | 1010     | 1023     | 985      | 1005     | 1009     | 1014     | 1035     | 1015     | 1015     |
| 21D         | 1015     | 1010     | 1011     | 1015     | 1013     | 1006     | 1019     | 1021     | 1014     | 1006     | 999      | 995      | 992      | 976      | 986      | 1001     | 1005     | 1000     | 1013     | 1011     | 1011     | 1012     | 1022     | 1016     | 1023     | 1007     |
| 22          | 1023     | 1023     | 1012     | 999      | 1011     | 1019     | 1011     | 1019     | 1018     | 1012     | 1006     | 1002     | 992      | 997      | 994      | 1000     | 1005     | 1015     | 1015     | 1021     | 1024     | 1019     | 1019     | 1021     | 1020     | 1011     |
| 23D         | 1020     | 1019     | 1020     | 1013     | 1009     | 1018     | 1020     | 1015     | 1013     | 1013     | 985      | 999      | 979      | 985      | 1006     | 1006     | 1016     | 1014     | 1017     | 1039     | 1044     | 1044     | 1011     | 1009     | 1012     | 1013     |
| 24          | 1011     | 1013     | 1014     | 1014     | 1016     | 1018     | 1018     | 1018     | 1018     | 1006     | 995      | 995      | 990      | 1003     | 1010     | 1010     | 988      | 1009     | 1007     | 1017     | 1010     | 1022     | 1017     | 1020     | 1022     | 1010     |
| 25          | 1022     | 1019     | 1017     | 1015     | 1014     | 1012     | 1014     | 1022     | 1006     | 1001     | 993      | 997      | 999      | 1004     | 1009     | 1013     | 1010     | 1014     | 1018     | 1016     | 1016     | 1014     | 1028     | 1023     | 1027     | 1012     |
| 26          | 1027     | 1025     | 1009     | 1009     | 1013     | 1018     | 1022     | 1009     | 1013     | 1009     | 1003     | 1000     | 1003     | 1004     | 995      | 1005     | 1005     | 1014     | 1018     | 1022     | 1020     | 1028     | 1017     | 1017     | 1018     | 1012     |
| 27          | 1018     | 1018     | 1014     | 1015     | 1018     | 1018     | 1018     | 1017     | 1015     | 1012     | 1004     | 998      | 998      | 998      | 1000     | 1008     | 1013     | 1015     | 1019     | 1023     | 1019     | 1022     | 1018     | 1018     | 1018     | 1013     |
| 28Q         | 1018     | 1018     | 1018     | 1018     | 1015     | 1019     | 1019     | 1022     | 1019     | 1017     | 1011     | 1003     | 997      | 997      | 1001     | 1013     | 1014     | 1017     | 1016     | 1019     | 1018     | 1019     | 1019     | 1023     | 1021     | 1015     |
| 29Q         | 1021     | 1015     | 1014     | 1017     | 1016     | 1018     | 1019     | 1022     | 1022     | 1016     | 1009     | 1004     | 1004     | 1008     | 1014     | 1018     | 1018     | 1018     | 1019     | 1019     | 1019     | 1019     | 1019     | 1019     | 1018     | 1016     |
| Mean†       | 1016     | 1017     | 1016     | 1015     | 1016     | 1019     | 1020     | 1021     | 1019     | 1015     | 1008     | 1004     | 1001     | 1003     | 1007     | 1012     | 1012     | 1015     | 1016     | 1017     | 1018     | 1019     | 1017     | 1020     | 1017     | 1014     |

TERRESTRIAL MAGNETIC FORCE: WEST COMPONENT.

Mean values for periods of sixty minutes centred at the Hours of Greenwich Mean Time.

216. Eskdalemuir. (-Y.)

4,000  $\gamma$  (.04 C.G.S. unit) +

February, 1924.

| Hour G.M.T. | 0.       | 1.       | 2.       | 3.       | 4.       | 5.       | 6.       | 7.       | 8.       | 9.       | 10.      | 11.      | Noon.    | 13.      | 14.      | 15.      | 16.      | 17.      | 18.      | 19.      | 20.      | 21.      | 22.      | 23.      | 24.      | Mean.    |
|-------------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| Day.        | $\gamma$ | $\gamma$ | $\gamma$ | $\gamma$ | $\gamma$ | $\gamma$ | $\gamma$ | $\gamma$ | $\gamma$ | $\gamma$ | $\gamma$ | $\gamma$ | $\gamma$ | $\gamma$ | $\gamma$ | $\gamma$ | $\gamma$ | $\gamma$ | $\gamma$ | $\gamma$ | $\gamma$ | $\gamma$ | $\gamma$ | $\gamma$ | $\gamma$ | $\gamma$ |
| 1           | 625      | 632      | 628      | 620      | 619      | 620      | 623      | 622      | 620      | 618      | 621      | 624      | 629      | 631      | 633      | 631      | 630      | 628      | 623      | 623      | 624      | 623      | 624      | 624      | 624      | 625      |
| 2           | 624      | 628      | 638      | 624      | 624      | 623      | 624      | 626      | 625      | 623      | 623      | 626      | 631      | 635      | 638      | 632      | 629      | 628      | 628      | 628      | 626      | 625      | 625      | 625      | 625      | 627      |
| 3           | 625      | 624      | 626      | 624      | 625      | 623      | 624      | 622      | 621      | 617      | 620      | 626      | 634      | 641      | 641      | 634      | 631      | 633      | 620      | 623      | 624      | 624      | 623      | 624      | 628      | 626      |
| 4           | 628      | 632      | 625      | 628      | 626      | 627      | 627      | 625      | 625      | 624      | 627      | 630      | 630      | 634      | 636      | 634      | 632      | 633      | 628      | 632      | 630      | 627      | 624      | 623      | 625      | 629      |
| 5D          | 625      | 624      | 628      | 628      | 630      | 631      | 630      | 630      | 630      | 630      | 631      | 631      | 636      | 634      | 647      | 644      | 655      | 648      | 637      | 635      | 632      | 625      | 581      | 539      | 561      | 626      |
| 6D          | 561      | 600      | 606      | 621      | 622      | 624      | 625      | 628      | 621      | 620      | 626      | 627      | 627      | 638      | 633      | 631      | 631      | 618      | 631      | 628      | 624      | 606      | 612      | 617      | 623      | 621      |
| 7           | 623      | 624      | 616      | 618      | 618      | 614      | 617      | 619      | 620      | 624      | 626      | 627      | 631      | 637      | 635      | 633      | 622      | 631      | 634      | 626      | 622      | 611      | 603      | 613      | 618      | 623      |
| 8           | 618      | 621      | 624      | 624      | 625      | 625      | 624      | 623      | 623      | 624      | 625      | 629      | 633      | 635      | 635      | 635      | 632      | 630      | 623      | 623      | 626      | 623      | 620      | 615      | 618      | 626      |
| 9           | 618      | 623      | 623      | 624      | 624      | 625      | 623      | 623      | 624      | 624      | 625      | 630      | 630      | 635      | 638      | 637      | 633      | 634      | 630      | 629      | 621      | 624      | 623      | 618      | 617      | 627      |
| 10          | 617      | 616      | 619      | 619      | 622      | 622      | 620      | 619      | 622      | 628      | 630      | 635      | 639      | 642      | 644      | 643      | 640      | 646      | 648      | 654      | 626      | 627      | 630      | 613      | 608      | 630      |
| 11          | 608      | 632      | 619      |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |



Mean values for periods of sixty minutes centred at the Hours of Greenwich Mean Time.

217. Eskdalemuir. (Z.)

44,000  $\gamma$  (.44 C.G.S. unit) +

February, 1924.

| Hour G.M.T. | 0.  | 1.  | 2.  | 3.  | 4.  | 5.  | 6.  | 7.  | 8.  | 9.  | 10. | 11. | Noon. | 13. | 14. | 15. | 16. | 17. | 18. | 19. | 20. | 21. | 22. | 23. | 24. | Mean. |     |
|-------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-------|-----|
| Day. 1      | 934 | 930 | 926 | 930 | 933 | 933 | 934 | 935 | 937 | 937 | 934 | 936 | 937   | 934 | 937 | 938 | 940 | 940 | 938 | 937 | 937 | 937 | 937 | 937 | 937 | 937   | 935 |
| 2           | 937 | 936 | 929 | 930 | 933 | 933 | 933 | 933 | 934 | 937 | 937 | 937 | 937   | 933 | 933 | 936 | 937 | 937 | 935 | 936 | 936 | 936 | 936 | 937 | 937 | 937   | 935 |
| 3           | 937 | 936 | 935 | 934 | 933 | 933 | 932 | 933 | 933 | 935 | 933 | 931 | 927   | 926 | 929 | 930 | 932 | 932 | 935 | 937 | 935 | 935 | 936 | 934 | 933 | 933   | 933 |
| 4           | 934 | 931 | 933 | 933 | 933 | 931 | 930 | 930 | 930 | 931 | 930 | 930 | 930   | 930 | 929 | 929 | 933 | 933 | 934 | 934 | 933 | 933 | 933 | 934 | 935 | 935   | 932 |
| 5D          | 935 | 934 | 934 | 933 | 932 | 931 | 930 | 930 | 927 | 926 | 926 | 926 | 925   | 926 | 929 | 935 | 938 | 938 | 938 | 934 | 934 | 934 | 942 | 917 | 931 | 931   | 931 |
| 6D          | 931 | 931 | 937 | 939 | 941 | 938 | 938 | 938 | 938 | 938 | 938 | 939 | 942   | 942 | 943 | 950 | 950 | 950 | 946 | 942 | 943 | 943 | 942 | 942 | 942 | 942   | 941 |
| 7           | 942 | 938 | 938 | 938 | 938 | 938 | 938 | 934 | 934 | 934 | 934 | 934 | 934   | 935 | 939 | 946 | 949 | 946 | 944 | 946 | 946 | 935 | 935 | 938 | 938 | 939   |     |
| 8           | 939 | 939 | 939 | 939 | 939 | 939 | 939 | 937 | 935 | 935 | 934 | 934 | 931   | 932 | 934 | 938 | 939 | 939 | 939 | 939 | 939 | 938 | 937 | 935 | 934 | 937   |     |
| 9           | 934 | 935 | 935 | 935 | 935 | 935 | 935 | 935 | 932 | 931 | 931 | 931 | 931   | 931 | 931 | 934 | 935 | 935 | 935 | 936 | 937 | 936 | 935 | 935 | 935 | 934   |     |
| 10          | 935 | 935 | 935 | 935 | 935 | 934 | 934 | 934 | 934 | 934 | 935 | 935 | 932   | 931 | 932 | 934 | 935 | 935 | 938 | 944 | 951 | 947 | 944 | 936 | 936 | 936   |     |
| 11          | 937 | 928 | 915 | 920 | 925 | 931 | 932 | 933 | 933 | 936 | 935 | 933 | 932   | 932 | 935 | 936 | 939 | 939 | 939 | 937 | 937 | 938 | 936 | 936 | 936 | 936   | 933 |
| 12          | 936 | 935 | 935 | 935 | 935 | 936 | 936 | 936 | 934 | 932 | 933 | 933 | 936   | 935 | 937 | 940 | 940 | 940 | 940 | 940 | 939 | 937 | 937 | 936 | 936 | 936   | 936 |
| 13          | 936 | 935 | 932 | 931 | 933 | 933 | 933 | 933 | 933 | 935 | 936 | 939 | 937   | 939 | 941 | 941 | 941 | 940 | 940 | 940 | 940 | 940 | 940 | 940 | 940 | 940   | 937 |
| 14Q         | 940 | 940 | 940 | 940 | 939 | 937 | 937 | 937 | 940 | 940 | 940 | 940 | 938   | 938 | 936 | 939 | 939 | 939 | 939 | 939 | 939 | 939 | 939 | 940 | 938 | 937   | 939 |
| 15Q         | 937 | 937 | 937 | 936 | 936 | 936 | 936 | 936 | 936 | 937 | 939 | 939 | 936   | 935 | 936 | 938 | 939 | 937 | 937 | 937 | 939 | 939 | 940 | 940 | 939 | 937   | 937 |
| 16          | 940 | 938 | 938 | 937 | 937 | 933 | 933 | 931 | 932 | 933 | 933 | 933 | 932   | 933 | 936 | 938 | 941 | 940 | 941 | 941 | 941 | 941 | 941 | 941 | 941 | 938   | 937 |
| 17          | 938 | 937 | 936 | 934 | 936 | 936 | 936 | 936 | 937 | 940 | 937 | 937 | 937   | 937 | 940 | 942 | 944 | 942 | 943 | 944 | 940 | 938 | 939 | 939 | 938 | 939   |     |
| 18Q         | 939 | 938 | 938 | 938 | 938 | 937 | 937 | 938 | 938 | 940 | 938 | 935 | 934   | 933 | 932 | 934 | 937 | 937 | 937 | 937 | 937 | 937 | 937 | 937 | 937 | 937   | 937 |
| 19          | 937 | 938 | 938 | 937 | 937 | 935 | 934 | 934 | 934 | 934 | 931 | 930 | 929   | 930 | 930 | 933 | 934 | 934 | 934 | 934 | 935 | 942 | 942 | 938 | 937 | 935   |     |
| 20D         | 937 | 938 | 937 | 937 | 922 | 916 | 918 | 919 | 924 | 926 | 930 | 926 | 930   | 932 | 943 | 953 | 959 | 972 | 962 | 964 | 954 | 943 | 942 | 935 | 931 | 938   |     |
| 21D         | 931 | 934 | 938 | 937 | 934 | 933 | 930 | 930 | 930 | 934 | 934 | 934 | 935   | 942 | 946 | 947 | 948 | 951 | 958 | 956 | 946 | 945 | 939 | 938 | 936 | 940   |     |
| 22          | 937 | 935 | 938 | 935 | 932 | 936 | 936 | 936 | 938 | 938 | 936 | 935 | 937   | 938 | 945 | 952 | 958 | 952 | 948 | 946 | 943 | 940 | 942 | 941 | 941 | 941   |     |
| 23D         | 941 | 942 | 939 | 938 | 938 | 938 | 938 | 938 | 939 | 939 | 942 | 938 | 941   | 947 | 947 | 952 | 958 | 954 | 951 | 941 | 940 | 934 | 931 | 936 | 938 | 942   |     |
| 24          | 938 | 939 | 939 | 940 | 940 | 940 | 940 | 940 | 940 | 942 | 938 | 935 | 938   | 938 | 939 | 944 | 958 | 955 | 950 | 948 | 948 | 947 | 943 | 939 | 935 | 935   |     |
| 25          | 936 | 936 | 938 | 940 | 940 | 940 | 939 | 935 | 936 | 935 | 937 | 932 | 935   | 935 | 937 | 941 | 946 | 944 | 944 | 944 | 944 | 945 | 941 | 935 | 923 | 930   |     |
| 26          | 923 | 922 | 928 | 932 | 936 | 937 | 937 | 937 | 935 | 936 | *   | —   | —     | —   | —   | —   | —   | —   | —   | —   | —   | —   | —   | —   | —   | —     |     |
| 27          | —   | —   | —   | —   | —   | —   | —   | —   | —   | —   | —   | *   | 937   | 937 | 939 | 943 | 944 | 944 | 945 | 944 | 943 | 942 | 940 | 940 | 939 | 937   |     |
| 28Q         | 939 | 939 | 939 | 939 | 939 | 939 | 939 | 939 | 939 | 937 | 936 | 936 | 935   | 935 | 934 | 938 | 941 | 942 | 940 | 940 | 940 | 940 | 940 | 939 | 937 | 937   |     |
| 29Q         | 937 | 936 | 936 | 936 | 936 | 936 | 936 | 936 | 935 | 936 | 932 | 931 | 929   | 932 | 935 | 937 | 939 | 940 | 940 | 940 | 940 | 939 | 939 | 939 | 939 | 936   |     |
| Mean †      | 937 | 936 | 935 | 935 | 935 | 935 | 935 | 934 | 935 | 935 | 935 | 934 | 934   | 934 | 936 | 940 | 943 | 942 | 942 | 942 | 940 | 939 | 939 | 937 | 936 | 937   |     |

DAILY EXTREMES OF EACH COMPONENT OF TERRESTRIAL MAGNETIC FORCE : MAGNETIC CHARACTER FIGURES : TEMPERATURE IN MAGNET HOUSE.

218. Eskdalemuir.

February, 1924.

| Day. | Terrestrial Magnetic Force. |          |                          |       |          |                         |          |                         |       |          |                          |          |                          |       |          | Character Figures. ‡ |        | Magnetic Character of Day (0-2). | Temperature in Magnet House 200 + |
|------|-----------------------------|----------|--------------------------|-------|----------|-------------------------|----------|-------------------------|-------|----------|--------------------------|----------|--------------------------|-------|----------|----------------------|--------|----------------------------------|-----------------------------------|
|      | North Component.            |          |                          |       |          | West Component.         |          |                         |       |          | Vertical Component.      |          |                          |       |          | $\Sigma R^2$         | $\rho$ |                                  |                                   |
|      | Maximum 15000 $\gamma$ +    |          | Minimum 15000 $\gamma$ + |       | Range.   | Maximum 4000 $\gamma$ + |          | Minimum 4000 $\gamma$ + |       | Range.   | Maximum 44000 $\gamma$ + |          | Minimum 44000 $\gamma$ + |       | Range.   |                      |        |                                  |                                   |
| 1    | h. m.                       | $\gamma$ | $\gamma$                 | h. m. | $\gamma$ | h. m.                   | $\gamma$ | $\gamma$                | h. m. | $\gamma$ | h. m.                    | $\gamma$ | $\gamma$                 | h. m. | $\gamma$ | 100 <sup>2</sup>     | $\rho$ | 0                                | 83.9                              |
| 2    | 23 19                       | 1021     | 990                      | 13 10 | 31       | 13 35                   | 640      | 611                     | 18 23 | 29       | 18 30                    | 941      | 925                      | 1 40  | 16       | 21                   | .26    | 0                                | 84.1                              |
| 3    | 4 18                        | 1021     | 996                      | 11 42 | 25       | 1 31                    | 646      | 618                     | 9 12  | 28       | 11 20                    | 938      | 928                      | 2 10  | 10       | 15                   | .19    | 0                                | 84.1                              |
| 4    | 15 2                        | 1028     | 1000                     | 18 38 | 28       | 13 30                   | 650      | 609                     | 18 29 | 41       | 18 36                    | 941      | 925                      | 13 9  | 16       | 27                   | .34    | 0                                | 84.1                              |
| 5    | 0 42                        | 1032     | 1011                     | 18 18 | 21       | 0 39                    | 642      | 619                     | 22 53 | 23       | 22 58                    | 936      | 926                      | 13 20 | 10       | 11                   | .13    | 0                                | 84.1                              |
| 6    | 22 34                       | 1072     | 945                      | 23 52 | 127      | 15 53                   | 662      | 533                     | 23 41 | 129      | 22 11                    | 954      | 906                      | 23 20 | 48       | 351                  | 4.38   | 1                                | 84.1                              |
| 7    | 20 59                       | 1035     | 967                      | 0 1   | 68       | 13 25                   | 646      | 556                     | 0 1   | 90       | 16 53                    | 953      | 930                      | 1 19  | 23       | 133                  | 1.65   | 1                                | 84.1                              |
| 8    | 20 43                       | 1050     | 981                      | 15 39 | 69       | 20 46                   | 648      | 584                     | 21 10 | 64       | 16 0                     | 950      | 932                      | 20 51 | 18       | 92                   | 1.15   | 1                                | 84.1                              |
| 9    | 23 12                       | 1043     | 1004                     | 13 35 | 39       | 13 55                   | 638      | 608                     | 23 28 | 30       | 19 13                    | 941      | 931                      | 12 0  | 10       | 25                   | .31    | 0                                | 84.1                              |
| 10   | 22 10                       | 1025     | 1001                     | 12 15 | 24       | 14 51                   | 639      | 609                     | 20 18 | 30       | 20 30                    | 939      | 930                      | 9 50  | 9        | 16                   | .19    | 0                                | 84.0                              |
| 11   | 22 33                       | 1058     | 999                      | 19 52 | 59       | 18 42                   | 662      | 597                     | 23 23 | 65       | 20 4                     | 954      | 931                      | 13 2  | 23       | 82                   | 1.03   | 1                                | 84.0                              |
| 12   | 1 12                        | 1058     | 1000                     | 1 52  | 58       | 1 15                    | 650      | 598                     | 2 48  | 52       | 20 40                    | 940      | 912                      | 1 40  | 28       | 69                   | .85    | 1                                | 83.9                              |
| 13   | 8 10                        | 1022     | 1009                     | 7 6   | 13       | 13 23                   | 642      | 616                     | 6 10  | 26       | 15 53                    | 941      | 931                      | 9 30  | 10       | 9                    | .12    | 0                                | 84.0                              |
| 14   | 0 19                        | 1036     | 1000                     | 11 20 | 36       | 0 16                    | 638      | 606                     | 5 2   | 32       | 15 37                    | 943      | 929                      | 3 13  | 14       | 25                   | .31    | 0                                | 84.1                              |
| 15   | 7 5                         | 1024     | 997                      | 12 30 | 27       | 13 56                   | 638      | 615                     | 21 20 | 23       | 9 43                     | 941      | 935                      | 13 0  | 6        | 13                   | .16    | 0                                | 84.3                              |
| 16   | 8 16                        | 1026     | 1006                     | 12 51 | 20       | 14 0                    | 635      | 619                     | 24 0  | 16       | 2 38                     | 940      | 934                      | 12 40 | 6        | 7                    | .09    | 0                                | 84.1                              |
| 17   | 6 59                        | 1045     | 982                      | 12 41 | 63       | 4 27                    | 640      | 612                     | 9 6   | 28       | 20 0                     | 943      | 930                      | 7 20  | 13       | 49                   | .61    | 1                                | 84.2                              |
| 18   | 2 25                        | 1035     | 985                      | 10 42 | 50       | 2 10                    | 649      | 594                     | 18 38 | 55       | 18 40                    | 945      | 931                      | 2 29  | 14       | 57                   | .71    | 1                                | 84.2                              |
| 19   | 21 21                       | 1025     | 995                      | 12 3  | 30       | 14 20                   | 640      | 615                     | 10 5  | 25       | 8 50                     | 941      | 932                      | 14 0  | 9        | 16                   | .20    | 0                                | 84.3                              |
| 20   | 19 14                       | 1038     | 995                      | 10 50 | 43       | 13 39                   | 647      | 608                     | 21 20 | 39       | 21 28                    | 945      | 929                      |       |          |                      |        |                                  |                                   |

TERRESTRIAL MAGNETIC FORCE : NORTH COMPONENT.

Mean values for periods of sixty minutes centred at the Hours of Greenwich Mean Time.

219. Eskdalemuir. (X.)

15,000 γ (.15 C.G.S. unit) +

March, 1924.

Table with 25 columns (Hour G.M.T., 0-24, Mean) and 30 rows (Day, 1Q-31D). Values range from 984 to 1028.

TERRESTRIAL MAGNETIC FORCE : WEST COMPONENT.

Mean values for periods of sixty minutes centred at the Hours of Greenwich Mean Time.

220. Eskdalemuir. (-Y.)

4,000 γ (.04 C.G.S. unit) +

March, 1924.

Table with 25 columns (Hour G.M.T., 0-24, Mean) and 30 rows (Day, 1Q-31D). Values range from 586 to 638.

Q denotes an "International Quiet Day," while D denotes a disturbed day used for the computation of Tables 271-276.

TERRESTRIAL MAGNETIC FORCE: VERTICAL COMPONENT.  
 Mean values for periods of sixty minutes centred at the Hours of Greenwich Mean Time.

March, 1924.

221. Eskdalemuir. (Z.)

44,000 γ (·44 C.G.S. unit) ±

| Hour G.M.T. | 0.  | 1.  | 2.  | 3.  | 4.  | 5.  | 6.  | 7.  | 8.  | 9.  | 10. | 11. | Noon. | 13. | 14. | 15. | 16. | 17. | 18. | 19. | 20. | 21. | 22. | 23. | 24. | Mean. |     |     |
|-------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-------|-----|-----|
| Day.        | γ   | γ   | γ   | γ   | γ   | γ   | γ   | γ   | γ   | γ   | γ   | γ   | γ     | γ   | γ   | γ   | γ   | γ   | γ   | γ   | γ   | γ   | γ   | γ   | γ   | γ     |     |     |
| 1Q          | 940 | 938 | 938 | 938 | 937 | 937 | 937 | 937 | 937 | 934 | 933 | 933 | 930   | 930 | 933 | 934 | 937 | 936 | 937 | 937 | 937 | 937 | 937 | 937 | 937 | 936   | 936 |     |
| 2           | 936 | 933 | 931 | 931 | 933 | 933 | 933 | 933 | 933 | 933 | 933 | 934 | 937   | 939 | 941 | 944 | 941 | 941 | 941 | 941 | 947 | 954 | 946 | 942 | 941 | 938   | 938 |     |
| 3           | 941 | 939 | 936 | 933 | 934 | 935 | 935 | 936 | 936 | 935 | 933 | 932 | 932   | 934 | 941 | 950 | 953 | 953 | 953 | 953 | 956 | 954 | 950 | 946 | 944 | 942   | 942 |     |
| 4           | 944 | 941 | 941 | 940 | 940 | 938 | 937 | 937 | 939 | 938 | 938 | 937 | 937   | 938 | 941 | 942 | 945 | 945 | 941 | 941 | 941 | 941 | 941 | 938 | 940 | 940   | 940 |     |
| 5           | 941 | 938 | 938 | 935 | 933 | 934 | 935 | 938 | 938 | 936 | 934 | 934 | 931   | 935 | 940 | 947 | 957 | 966 | 967 | 963 | 958 | 951 | 950 | 943 | 944 | 943   | 943 |     |
| 6           | 944 | 942 | 941 | 939 | 939 | 938 | 938 | 938 | 935 | 934 | 931 | 930 | 931   | 934 | 938 | 953 | 963 | 970 | 975 | 974 | 967 | 956 | 951 | 947 | 945 | 946   | 946 |     |
| 7D          | 945 | 933 | 927 | 933 | 934 | 934 | 933 | 931 | 934 | 934 | 931 | 927 | 927   | 931 | 937 | 942 | 942 | 942 | 941 | 941 | 944 | 938 | 935 | 907 | 913 | 934   | 934 |     |
| 8D          | 913 | 923 | 926 | 918 | 921 | 918 | 921 | 926 | 933 | 934 | 934 | 932 | 931   | 931 | 938 | 946 | 943 | 942 | 939 | 938 | 942 | 950 | 947 | 930 | 925 | 933   | 933 |     |
| 9           | 925 | 926 | 922 | 924 | 931 | 934 | 935 | 934 | 938 | 937 | 938 | 937 | 933   | 931 | 935 | 945 | 947 | 947 | 950 | 949 | 947 | 946 | 942 | 935 | 918 | 937   | 937 |     |
| 10          | 918 | 918 | 925 | 927 | 930 | 933 | 934 | 935 | 935 | 935 | 931 | 931 | 930   | 933 | 938 | 942 | 945 | 943 | 941 | 939 | 939 | 942 | 939 | 938 | 938 | 935   | 935 |     |
| 11          | 938 | 937 | 935 | 931 | 930 | 929 | 930 | 931 | 933 | 931 | 930 | 930 | 926   | 926 | 930 | 936 | 939 | 938 | 938 | 938 | 936 | 936 | 936 | 935 | 931 | 931   | 933 |     |
| 12          | 931 | 929 | 930 | 926 | 918 | 922 | 922 | 926 | 930 | 931 | 933 | 930 | 929   | 926 | 930 | 934 | 938 | 938 | 938 | 935 | 935 | 934 | 934 | 934 | 934 | 934   | 931 | 931 |
| 13          | 935 | 935 | 934 | 934 | 934 | 934 | 935 | 935 | 934 | 932 | 931 | 928 | 923   | 923 | 926 | 930 | 934 | 935 | 935 | 935 | 935 | 935 | 935 | 934 | 934 | 934   | 932 | 932 |
| 14Q         | 934 | 934 | 934 | 934 | 934 | 934 | 934 | 935 | 935 | 934 | 930 | 928 | 923   | 923 | 927 | 931 | 935 | 938 | 936 | 935 | 935 | 935 | 935 | 935 | 934 | 934   | 933 | 933 |
| 15Q         | 934 | 932 | 933 | 932 | 932 | 932 | 934 | 935 | 935 | 935 | 931 | 927 | 926   | 927 | 928 | 932 | 935 | 935 | 933 | 934 | 934 | 934 | 934 | 932 | 931 | 931   | 932 |     |
| 16          | 931 | 931 | 931 | 931 | 931 | 931 | 931 | 931 | 932 | 934 | 931 | 930 | 929   | 927 | 927 | 932 | 939 | 943 | 952 | 954 | 946 | 940 | 939 | 936 | 935 | 935   | 935 |     |
| 17Q         | 935 | 935 | 933 | 932 | 933 | 934 | 934 | 936 | 936 | 936 | 932 | 928 | 926   | 924 | 927 | 934 | 939 | 939 | 935 | 935 | 935 | 935 | 935 | 935 | 935 | 935   | 933 | 933 |
| 18          | 935 | 934 | 934 | 934 | 933 | 933 | 934 | 935 | 935 | 934 | 927 | 923 | 922   | 923 | 927 | 934 | 938 | 935 | 938 | 943 | 939 | 935 | 935 | 935 | 935 | 935   | 933 | 933 |
| 19          | 935 | 935 | 934 | 934 | 932 | 931 | 930 | 927 | 928 | 928 | 927 | 925 | 924   | 923 | 927 | 931 | 935 | 939 | 939 | 936 | 937 | 939 | 939 | 939 | 937 | 937   | 932 | 932 |
| 20D         | 938 | 936 | 936 | 929 | 916 | 919 | 920 | 923 | 925 | 929 | 928 | 928 | 928   | 928 | 932 | 935 | 936 | 939 | 937 | 936 | 935 | 936 | 935 | 936 | 924 | 920   | 930 | 930 |
| 21          | 920 | 925 | 930 | 929 | 931 | 929 | 924 | 927 | 931 | 931 | 928 | 927 | 924   | 924 | 928 | 932 | 936 | 940 | 940 | 941 | 937 | 936 | 935 | 929 | 919 | 931   | 931 |     |
| 22          | 919 | 915 | 920 | 920 | 920 | 923 | 930 | 932 | 932 | 932 | 931 | 929 | 928   | 931 | 933 | 937 | 943 | 948 | 937 | 935 | 936 | 937 | 925 | 924 | 927 | 930   | 930 |     |
| 23          | 927 | 929 | 931 | 932 | 928 | 928 | 928 | 928 | 931 | 931 | 928 | 923 | 920   | 924 | 932 | 939 | 942 | 944 | 940 | 940 | 936 | 932 | 930 | 929 | 931 | 931   | 931 |     |
| 24          | 931 | 932 | 932 | 932 | 932 | 932 | 932 | 932 | 932 | 932 | 929 | 927 | 924   | 924 | 930 | 936 | 940 | 940 | 939 | 936 | 933 | 932 | 932 | 931 | 931 | 931   | 932 |     |
| 25          | 931 | 932 | 932 | 931 | 931 | 931 | 932 | 935 | 936 | 932 | 927 | 924 | 920   | 920 | 924 | 931 | 933 | 936 | 936 | 933 | 933 | 932 | 932 | 931 | 931 | 931   | 931 |     |
| 26          | 931 | 931 | 931 | 931 | 932 | 932 | 932 | 932 | 933 | 931 | 926 | 924 | 924   | 924 | 928 | 931 | 935 | 936 | 936 | 935 | 933 | 936 | 933 | 932 | 930 | 931   | 931 |     |
| 27          | 930 | 929 | 928 | 920 | 920 | 923 | 924 | 926 | 928 | 927 | 923 | 920 | 916   | 920 | 925 | 932 | 935 | 937 | 937 | 936 | 935 | 932 | 932 | 931 | 929 | 928   | 928 |     |
| 28Q         | 929 | 928 | 929 | 929 | 931 | 931 | 931 | 931 | 931 | 931 | 926 | 923 | 920   | 921 | 926 | 929 | 931 | 932 | 932 | 932 | 932 | 932 | 932 | 932 | 932 | 932   | 929 | 929 |
| 29          | 932 | 931 | 931 | 931 | 929 | 927 | 926 | 927 | 927 | 924 | 919 | 916 | 915   | 914 | 919 | 926 | 931 | 936 | 936 | 933 | 932 | 932 | 932 | 932 | 932 | 932   | 927 | 927 |
| 30D         | 932 | 931 | 929 | 929 | 929 | 929 | 929 | 928 | 928 | 928 | 928 | 928 | 924   | 927 | 928 | 935 | 941 | 953 | 965 | 969 | 957 | 957 | 924 | 904 | 935 | 935   | 935 |     |
| 31D         | 904 | 888 | 888 | 890 | 895 | 913 | 924 | 929 | 931 | 935 | 934 | 932 | 931   | 925 | 927 | 935 | 939 | 940 | 940 | 940 | 937 | 936 | 935 | 934 | 934 | 925   | 925 |     |
| Mean        | 932 | 930 | 930 | 929 | 929 | 930 | 931 | 932 | 933 | 932 | 930 | 928 | 926   | 927 | 931 | 937 | 941 | 942 | 942 | 942 | 940 | 939 | 937 | 933 | 931 | 931   | 933 |     |

DAILY EXTREMES OF EACH COMPONENT OF TERRESTRIAL MAGNETIC FORCE:  
 MAGNETIC CHARACTER FIGURES: TEMPERATURE IN MAGNET HOUSE.

March, 1924.

222. Eskdalemuir.

| Day. | Terrestrial Magnetic Force. |                    |        |                   |                   |                 |                    |                    |            |       |                     |       |       |             |      | Character Figures. § |       | Magnetic Character of Day (0-2). | Temperature in Magnet House 200 + |
|------|-----------------------------|--------------------|--------|-------------------|-------------------|-----------------|--------------------|--------------------|------------|-------|---------------------|-------|-------|-------------|------|----------------------|-------|----------------------------------|-----------------------------------|
|      | North Component.            |                    |        |                   |                   | West Component. |                    |                    |            |       | Vertical Component. |       |       |             |      | ΣR²                  | ρ     |                                  |                                   |
|      | Maximum 15,000 γ +          | Minimum 15,000 γ + | Range. | Maximum 4,000 γ + | Minimum 4,000 γ + | Range.          | Maximum 44,000 γ + | Minimum 44,000 γ + | Range.     | 100γ² | 100γ²               |       |       |             |      |                      |       |                                  |                                   |
| 1    | h. m. 23 5                  | γ 1029             | γ 1013 | h. m. 11 40       | γ 16              | h. m. 12 28     | γ 639              | γ 616              | h. m. 6 38 | γ 23  | h. m. 22 52         | γ 939 | γ 929 | h. m. 12 36 | γ 10 | 100γ² 9              | ρ .07 | 0                                | 84.1                              |
| 2    | 0 11                        | 1035               | 989    | 16 16             | 46                | 15 55           | 660                | 570                | 21 10      | 90    | 21 3                | 957   | 930   | 1 52        | 27   | 109                  | .91   | 1                                | 84.1                              |
| 3    | 1 14                        | 1038               | 989    | 13 23             | 49                | 13 58           | 679                | 583                | 3 31       | 96    | 20 0                | 957   | 930   | 11 23       | 27   | 123                  | 1.03  | 1                                | 84.1                              |
| 4    | 21 29                       | 1049               | 998    | 10 30             | 51                | 13 17           | 639                | 599                | 21 9       | 40    | 16 40               | 946   | 937   | 12 0        | 9    | 43                   | .36   | 0                                | 84.1                              |
| 5    | 3 38                        | 1035               | 977    | 10 44             | 58                | 13 42           | 662                | 601                | 23 40      | 61    | 17 53               | 969   | 930   | 3 38        | 39   | 86                   | .72   | 0                                | 84.0                              |
| 6    | 2 30                        | 1023               | 979    | 15 21             | 44                | 14 57           | 665                | 579                | 19 23      | 86    | 17 43               | 976   | 929   | 10 42       | 47   | 115                  | .96   | 1                                | 83.9                              |
| 7    | 20 30                       | 1121               | 979    | 21 31             | 142               | 13 24           | 663                | 514                | 20 26      | 149   | 20 10               | 950   | 899   | 23 3        | 51   | 450                  | 3.74  | 2                                | 83.9                              |
| 8    | 23 41                       | 1035               | 979    | 14 32             | 56                | 14 12           | 659                | 573                | 21 32      | 86    | 21 31               | 951   | 911   | 0 1         | 40   | 121                  | 1.01  | 1                                | 83.9                              |
| 9    | 23 10                       | 1071               | 955    | 11 0              | 116               | 13 32           | 651                | 581                | 20 2       | 70    | 18 39               | 951   | 918   | 24 0        | 33   | 194                  | 1.62  | 1                                | 83.9                              |
| 10   | 0 1                         | 1047               | 988    | 11 28             | 59                | 13 31           | 653                | 572                | 1 20       | 81    | 15 58               | 946   | 914   | 0 32        | 32   | 111                  | .92   | 1                                | 83.9                              |
| 11   | 22 43                       | 1039               | 989    | 11 24             | 50                | 13 8            | 652                | 594                | 23 4       | 58    | 16 8                | 940   | 925   | 12 40       | 15   | 61                   | .51   | 0                                | 83.9                              |
| 12   | 5 20                        | 1034               | 998    | 11 58             | 36                | 13 44           | 646                | 597                | 1 50       | 49    | 17 20               | 938   | 918   | 4 10        | 20   | 41                   | .34   | 0                                | 83.8                              |
| 13   | 22 25                       | 1038               | 1004   | 12 39             | 34                | 13 26           | 640                | 603                | 22 49      | 37    | 17 12               | 936   | 923   | 12 50       | 13   | 27                   | .22   | 0                                | 83.8                              |
| 14   | 20 7                        | 1033               | 1005   | 12 23             | 28                | 13 23           | 642                | 606                | 8 45       | 36    | 16 40               | 939   | 923   | 12 40       | 16   | 23                   | .19   | 0                                | 83.8                              |
| 15   | 22 11                       | 1036               | 998    | 12 0              | 38                | 13 32           | 640                | 601                | 8 35       | 39    |                     |       |       |             |      |                      |       |                                  |                                   |

Mean values for periods of sixty minutes centred at the Hours of Greenwich Mean Time.

April, 1924.

223. Eskdalemuir. (X.)

15,000  $\gamma$  (-15 C.G.S. unit)  $\downarrow$

| Hour G.M.T. | 0.       | 1.       | 2.       | 3.       | 4.       | 5.       | 6.       | 7.       | 8.       | 9.       | 10.      | 11.      | Noon.    | 13.      | 14.      | 15.      | 16.      | 17.      | 18.      | 19.      | 20.      | 21.      | 22.      | 23.      | 24.      | Mean.    |
|-------------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| Day.        | $\gamma$ | $\gamma$ | $\gamma$ | $\gamma$ | $\gamma$ | $\gamma$ | $\gamma$ | $\gamma$ | $\gamma$ | $\gamma$ | $\gamma$ | $\gamma$ | $\gamma$ | $\gamma$ | $\gamma$ | $\gamma$ | $\gamma$ | $\gamma$ | $\gamma$ | $\gamma$ | $\gamma$ | $\gamma$ | $\gamma$ | $\gamma$ | $\gamma$ | $\gamma$ |
| 1           | 1024     | 1023     | 1019     | 1019     | 1019     | 1023     | 1021     | 1019     | 1014     | 1004     | 995      | 994      | 994      | 1001     | 1007     | 1013     | 1018     | 1024     | 1022     | 1028     | 1028     | 1030     | 1028     | 1025     | 1024     | 1016     |
| 2           | 1024     | 1023     | 1025     | 1025     | 1025     | 1028     | 1028     | 1027     | 1022     | 1012     | 1001     | 998      | 1000     | 1008     | 1018     | 1022     | 1025     | 1028     | 1029     | 1033     | 1033     | 1031     | 1032     | 1033     | 1033     | 1022     |
| 3           | 1033     | 1033     | 1031     | 1033     | 1033     | 1034     | 1033     | 1033     | 1023     | 1011     | 999      | 996      | 1000     | 1007     | 1014     | 1020     | 1027     | 1029     | 1036     | 1037     | 1026     | 1016     | 1026     | 1030     | 1028     | 1023     |
| 4Q          | 1028     | 1025     | 1028     | 1032     | 1031     | 1027     | 1030     | 1023     | 1023     | 1014     | 1001     | 996      | 1000     | 1008     | 1017     | 1024     | 1024     | 1027     | 1028     | 1034     | 1034     | 1030     | 1030     | 1029     | 1029     | 1023     |
| 5Q          | 1029     | 1028     | 1028     | 1028     | 1028     | 1028     | 1025     | 1023     | 1018     | 1006     | 1000     | 996      | 1000     | 1011     | 1019     | 1025     | 1028     | 1029     | 1033     | 1034     | 1034     | 1033     | 1030     | 1028     | 1030     | 1023     |
| 6D          | 1030     | 1029     | 1029     | 1029     | 1028     | 1028     | 1032     | 1032     | 1030     | 1035     | 1020     | 1016     | 995      | 1005     | 1016     | 1031     | 1025     | 1006     | 1018     | 1022     | 1035     | 1032     | 1033     | 1033     | 1033     | 1025     |
| 7D          | 1033     | 1030     | 1030     | 1029     | 1028     | 1028     | 1028     | 1028     | 1023     | 1015     | 1018     | 1011     | 1014     | 1021     | 1026     | 1021     | 1030     | 1031     | 1035     | 1037     | 1020     | 1027     | 1011     | 1020     | 1028     | 1025     |
| 8           | 1028     | 1030     | 1029     | 1030     | 1030     | 1037     | 1037     | 1033     | 1022     | 1010     | 999      | 994      | 996      | 1003     | 1011     | 1019     | 1024     | 1025     | 1028     | 1028     | 1028     | 1029     | 1030     | 1029     | 1030     | 1022     |
| 9           | 1029     | 1028     | 1029     | 1029     | 1029     | 1029     | 1029     | 1029     | 1023     | 1013     | 1000     | 990      | 991      | 1000     | 1011     | 1021     | 1028     | 1029     | 1033     | 1031     | 1029     | 1030     | 1024     | 1029     | 1029     | 1021     |
| 10          | 1029     | 1032     | 1029     | 1028     | 1029     | 1024     | 1028     | 1025     | 1022     | 1013     | 1004     | 999      | 1000     | 1004     | 1011     | 1018     | 1030     | 1033     | 1034     | 1034     | 1033     | 1029     | 1029     | 1029     | 1029     | 1023     |
| 11Q         | 1030     | 1028     | 1027     | 1029     | 1031     | 1031     | 1031     | 1031     | 1026     | 1016     | 1004     | 995      | 995      | 1002     | 1014     | 1028     | 1030     | 1036     | 1036     | 1031     | 1031     | 1031     | 1032     | 1031     | 1031     | 1024     |
| 12          | 1031     | 1031     | 1030     | 1030     | 1030     | 1030     | 1030     | 1030     | 1026     | 1019     | 1008     | 1005     | 1006     | 1013     | 1024     | 1029     | 1033     | 1035     | 1038     | 1036     | 1035     | 1034     | 1030     | 1049     | 1045     | 1028     |
| 13Q         | 1045     | 1035     | 1035     | 1038     | 1036     | 1035     | 1035     | 1035     | 1035     | 1029     | 1019     | 1010     | 1007     | 1011     | 1019     | 1025     | 1030     | 1031     | 1035     | 1039     | 1038     | 1036     | 1037     | 1036     | 1035     | 1030     |
| 14          | 1035     | 1035     | 1034     | 1034     | 1034     | 1034     | 1034     | 1035     | 1034     | 1025     | 1019     | 1009     | 1006     | 1007     | 1014     | 1021     | 1028     | 1035     | 1040     | 1043     | 1042     | 1040     | 1039     | 1044     | 1044     | 1030     |
| 15          | 1044     | 1039     | 1035     | 1038     | 1035     | 1039     | 1029     | 1030     | 1030     | 1021     | 1010     | 1006     | 1002     | 1008     | 1015     | 1024     | 1025     | 1035     | 1035     | 1036     | 1035     | 1034     | 1034     | 1035     | 1039     | 1028     |
| 16          | 1039     | 1044     | 1031     | 1031     | 1035     | 1034     | 1034     | 1031     | 1030     | 1020     | 1010     | 1002     | 1000     | 1008     | 1009     | 1017     | 1023     | 1031     | 1038     | 1039     | 1038     | 1039     | 1039     | 1039     | 1038     | 1028     |
| 17D         | 1038     | 1038     | 1036     | 1036     | 1037     | 1039     | 1037     | 1033     | 1028     | 1019     | 1003     | 991      | 1000     | 1005     | 1014     | 1019     | 1026     | 1036     | 1045     | 1043     | 1038     | 1047     | 1038     | 1039     | 1038     | 1029     |
| 18          | 1038     | 1035     | 1035     | 1034     | 1031     | 1029     | 1030     | 1031     | 1028     | 1018     | 1005     | 1001     | 1005     | 1016     | 1021     | 1026     | 1034     | 1037     | 1037     | 1038     | 1040     | 1038     | 1045     | 1047     | 1044     | 1029     |
| 19          | 1044     | 1035     | 1031     | 1034     | 1035     | 1037     | 1036     | 1033     | 1028     | 1020     | 1011     | 1004     | 1002     | 1006     | 1015     | 1024     | 1030     | 1035     | 1039     | 1038     | 1039     | 1036     | 1036     | 1035     | 1036     | 1028     |
| 20          | 1036     | 1036     | 1039     | 1033     | 1022     | 1030     | 1033     | 1030     | 1021     | 1010     | 997      | 989      | 989      | 998      | 1009     | 1019     | 1024     | 1035     | 1035     | 1038     | 1038     | 1037     | 1034     | 1034     | 1031     | 1024     |
| 21          | 1032     | 1033     | 1031     | 1034     | 1037     | 1038     | 1039     | 1040     | 1036     | 1025     | 1012     | 1002     | 997      | 1007     | 1016     | 1025     | 1040     | 1041     | 1042     | 1045     | 1043     | 1045     | 1046     | 1051     | 1046     | 1082     |
| 22          | 1046     | 1044     | 1037     | 1035     | 1035     | 1037     | 1036     | 1036     | 1030     | 1017     | 1003     | 996      | 996      | 1003     | 1014     | 1032     | 1023     | 1032     | 1040     | 1041     | 1045     | 1041     | 1041     | 1037     | 1035     | 1029     |
| 23          | 1035     | 1034     | 1032     | 1035     | 1036     | 1037     | 1041     | 1039     | 1032     | 1025     | 1010     | 997      | 1003     | 1011     | 1021     | 1029     | 1031     | 1029     | 1032     | 1037     | 1036     | 1037     | 1037     | 1039     | 1043     | 1029     |
| 24          | 1043     | 1036     | 1032     | 1032     | 1032     | 1032     | 1032     | 1036     | 1032     | 1025     | 1011     | 1004     | 1005     | 1008     | 1021     | 1026     | 1032     | 1036     | 1037     | 1037     | 1038     | 1040     | 1047     | 1053     | 1055     | 1031     |
| 25D         | 1055     | 1060     | 1036     | 1029     | 1026     | 1048     | 1045     | 1036     | 1031     | 1026     | 1012     | 1005     | 997      | 1001     | 1013     | 1030     | 1030     | 1017     | 1017     | 1013     | 1011     | 1036     | 1037     | 1036     | 1037     | 1027     |
| 26D         | 1037     | 1037     | 1037     | 1039     | 1039     | 1039     | 1040     | 1039     | 1023     | 1004     | 988      | 972      | 971      | 984      | 992      | 1024     | 1008     | 1005     | 1021     | 1021     | 1021     | 1020     | 1021     | 1022     | 1021     | 1017     |
| 27          | 1021     | 1021     | 1021     | 1022     | 1023     | 1022     | 1023     | 1027     | 1026     | 1015     | 1002     | 1003     | 1007     | 1016     | 1020     | 1022     | 1021     | 1026     | 1031     | 1035     | 1031     | 1028     | 1028     | 1031     | 1027     | 1022     |
| 28          | 1027     | 1031     | 1026     | 1027     | 1027     | 1025     | 1026     | 1021     | 1018     | 1011     | 1008     | 1006     | 1007     | 1015     | 1021     | 1032     | 1028     | 1039     | 1042     | 1040     | 1040     | 1032     | 1031     | 1034     | 1031     | 1026     |
| 29          | 1032     | 1032     | 1032     | 1040     | 1027     | 1027     | 1022     | 1021     | 1019     | 1017     | 1010     | 1005     | 1006     | 1012     | 1013     | 1024     | 1027     | 1035     | 1040     | 1032     | 1034     | 1033     | 1049     | 1027     | 1028     | 1025     |
| 30Q         | 1028     | 1028     | 1028     | 1027     | 1027     | 1027     | 1027     | 1021     | 1012     | 1004     | 1003     | 1007     | 1015     | 1023     | 1031     | 1035     | 1033     | 1035     | 1038     | 1037     | 1036     | 1035     | 1033     | 1034     | 1037     | 1026     |
| Mean        | 1034     | 1033     | 1031     | 031      | 1031     | 1032     | 1032     | 1030     | 1025     | 1017     | 1006     | 1000     | 1000     | 1007     | 1016     | 1024     | 1027     | 1030     | 1034     | 1035     | 1034     | 1034     | 1034     | 1035     | 1034     | 1025     |

TERRESTRIAL MAGNETIC FORCE : WEST COMPONENT.

Mean values for periods of sixty minutes centred at the Hours of Greenwich Mean Time.

April, 1924.

224. Eskdalemuir. (-Y.)

4,000  $\gamma$  (+04 C.G.S. unit)  $\uparrow$

| Hour G.M.T. | 0.       | 1.       | 2.       | 3.       | 4.       | 5.       | 6.       | 7.       | 8.       | 9.       | 10.      | 11.      | Noon.    | 13.      | 14.      | 15.      | 16.      | 17.      | 18.      | 19.      | 20.      | 21.      | 22.      | 23.      | 24.      | Mean.    |
|-------------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| Day.        | $\gamma$ | $\gamma$ | $\gamma$ | $\gamma$ | $\gamma$ | $\gamma$ | $\gamma$ | $\gamma$ | $\gamma$ | $\gamma$ | $\gamma$ | $\gamma$ | $\gamma$ | $\gamma$ | $\gamma$ | $\gamma$ | $\gamma$ | $\gamma$ | $\gamma$ | $\gamma$ | $\gamma$ | $\gamma$ | $\gamma$ | $\gamma$ | $\gamma$ | $\gamma$ |
| 1           | 615      | 616      | 617      | 615      | 614      | 610      | 607      | 600      | 596      | 597      | 602      | 615      | 627      | 637      | 640      | 633      | 623      | 622      | 616      | 614      | 615      | 615      | 615      | 615      | 616      | 616      |
| 2           | 616      | 626      | 624      | 615      | 614      | 613      | 610      | 603      | 595      | 596      | 603      | 615      | 631      | 641      | 644      | 634      | 625      | 622      | 621      | 620      | 619      | 619      | 619      | 619      | 619      | 619      |
| 3           | 619      | 619      | 619      | 615      | 614      | 613      | 609      | 605      | 600      | 597      | 604      | 615      | 632      | 642      | 644      | 638      | 635      | 631      | 629      | 618      | 621      | 611      | 615      | 615      | 615      |          |
| 4Q          | 615      | 611      | 614      | 607      | 601      | 599      | 600      | 604      | 595      | 591      | 603      | 614      | 630      | 643      | 642      | 634      | 627      | 622      | 616      | 614      | 619      | 619      | 616      | 615      | 615      |          |
| 5Q          | 615      | 615      | 615      | 611      | 610      | 607      | 604      | 599      | 595      | 596      | 608      | 621      | 645      | 650      | 644      | 632      | 623      | 620      | 615      | 619      | 619      | 619      | 617      | 614      | 615      |          |
| 6D          | 615      | 615      | 614      | 614      | 610      | 610      | 609      | 607      | 597      | 599      | 603      | 626      | 641      | 666      | 665      | 661      | 663      | 627      | 619      | 611      | 614      | 619      | 619      | 619      | 619      |          |
| 7D          | 619      | 615      | 615      | 614      | 610      | 609      | 608      | 600      | 595      | 594      | 611      | 625      | 649      | 669      | 669      | 663      | 647      | 641      | 629      | 618      | 600      | 613      | 584      | 584      | 579      |          |
| 8           | 579      | 593      | 593      | 593      | 589      | 591      | 592      | 593      | 598      | 602      | 610      | 622      | 631      | 641      | 644      | 636      | 627      | 620      | 615      | 615      | 615      | 615      | 615      | 615      | 615      |          |
| 9           | 615      | 615      | 615      | 615      | 615      | 614      | 609      | 603      | 596      | 595      | 605      | 616      | 631      | 642      | 644      | 637      | 632      | 624      | 617      | 619      | 616      | 604      | 605      | 614      | 616      |          |
| 10          | 616      | 618      | 615      | 61       |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |

TERRESTRIAL MAGNETIC FORCE: VERTICAL COMPONENT.  
 Mean values for periods of sixty minutes centred at the Hours of Greenwich Mean Time.

225. Eskdalemuir. (Z.)

44,000  $\gamma$  (.44 C.G.S. unit) +

April, 1924.

| Hour. G.M.T. | 0.       | 1.       | 2.       | 3.       | 4.       | 5.       | 6.       | 7.       | 8.       | 9.       | 10.      | 11.      | Noon.    | 13.      | 14.      | 15.      | 16.      | 17.      | 18.      | 19.      | 20.      | 21.      | 22.      | 23.      | 24.      | Mean.    |     |
|--------------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|-----|
| Day.         | $\gamma$ | $\gamma$ | $\gamma$ | $\gamma$ | $\gamma$ | $\gamma$ | $\gamma$ | $\gamma$ | $\gamma$ | $\gamma$ | $\gamma$ | $\gamma$ | $\gamma$ | $\gamma$ | $\gamma$ | $\gamma$ | $\gamma$ | $\gamma$ | $\gamma$ | $\gamma$ | $\gamma$ | $\gamma$ | $\gamma$ | $\gamma$ | $\gamma$ | $\gamma$ |     |
| 1            | 934      | 932      | 932      | 932      | 932      | 932      | 934      | 936      | 936      | 933      | 931      | 926      | 924      | 921      | 927      | 932      | 935      | 936      | 936      | 936      | 935      | 934      | 933      | 932      | 932      | 932      | 932 |
| 2            | 932      | 930      | 931      | 932      | 932      | 930      | 931      | 932      | 932      | 931      | 928      | 924      | 920      | 921      | 924      | 924      | 929      | 932      | 931      | 929      | 929      | 931      | 931      | 930      | 929      | 929      | 929 |
| 3            | 929      | 928      | 928      | 928      | 927      | 927      | 926      | 927      | 927      | 927      | 924      | 917      | 911      | 911      | 916      | 923      | 928      | 928      | 931      | 933      | 935      | 939      | 936      | 932      | 932      | 927      | 927 |
| 4 Q          | 931      | 931      | 930      | 924      | 923      | 923      | 923      | 926      | 925      | 923      | 920      | 915      | 914      | 916      | 922      | 924      | 927      | 931      | 931      | 931      | 929      | 929      | 929      | 929      | 929      | 930      | 925 |
| 5 Q          | 930      | 931      | 931      | 931      | 929      | 930      | 931      | 931      | 931      | 927      | 922      | 918      | 915      | 920      | 927      | 931      | 932      | 931      | 931      | 930      | 928      | 927      | 929      | 931      | 930      | 930      | 928 |
| 6 D          | 930      | 931      | 931      | 931      | 931      | 929      | 928      | 928      | 926      | 921      | 915      | 908      | 907      | 908      | 917      | 923      | 928      | 935      | 936      | 935      | 931      | 927      | 927      | 927      | 927      | 927      | 925 |
| 7 D          | 927      | 927      | 927      | 928      | 928      | 928      | 929      | 931      | 930      | 926      | 913      | 906      | 904      | 911      | 923      | 932      | 938      | 940      | 943      | 944      | 948      | 943      | 943      | 937      | 928      | 929      |     |
| 8            | 928      | 920      | 922      | 922      | 923      | 921      | 919      | 919      | 917      | 915      | 910      | 906      | 906      | 911      | 918      | 926      | 928      | 930      | 928      | 928      | 926      | 926      | 926      | 926      | 926      | 926      | 921 |
| 9            | 926      | 927      | 927      | 927      | 927      | 927      | 928      | 928      | 927      | 927      | 923      | 919      | 914      | 911      | 914      | 918      | 923      | 928      | 934      | 931      | 931      | 931      | 933      | 932      | 928      | 926      | 925 |
| 10           | 926      | 924      | 926      | 927      | 926      | 926      | 926      | 926      | 923      | 922      | 919      | 915      | 914      | 915      | 919      | 923      | 926      | 927      | 927      | 927      | 927      | 926      | 926      | 926      | 926      | 926      | 924 |
| 11 Q         | 926      | 927      | 927      | 927      | 927      | 926      | 927      | 927      | 927      | 926      | 923      | 920      | 911      | 908      | 919      | 924      | 929      | 931      | 931      | 931      | 931      | 930      | 927      | 927      | 927      | 927      | 925 |
| 12           | 927      | 927      | 927      | 927      | 927      | 927      | 927      | 930      | 928      | 926      | 922      | 917      | 915      | 915      | 922      | 924      | 926      | 927      | 927      | 927      | 929      | 927      | 928      | 926      | 920      | 925      |     |
| 13 Q         | 919      | 921      | 922      | 922      | 922      | 922      | 923      | 924      | 922      | 922      | 921      | 918      | 914      | 910      | 914      | 917      | 919      | 922      | 923      | 925      | 925      | 925      | 925      | 925      | 925      | 925      | 921 |
| 14           | 925      | 925      | 925      | 924      | 924      | 925      | 925      | 925      | 923      | 921      | 917      | 916      | 913      | 912      | 915      | 917      | 918      | 922      | 922      | 922      | 922      | 923      | 923      | 923      | 924      | 921      | 921 |
| 15           | 924      | 923      | 922      | 920      | 914      | 910      | 914      | 918      | 921      | 920      | 917      | 914      | 913      | 913      | 916      | 919      | 922      | 922      | 925      | 926      | 926      | 926      | 926      | 926      | 925      | 920      | 920 |
| 16           | 925      | 919      | 919      | 921      | 922      | 922      | 922      | 922      | 923      | 921      | 918      | 911      | 913      | 911      | 917      | 921      | 922      | 923      | 926      | 927      | 927      | 928      | 928      | 926      | 926      | 926      | 921 |
| 17 D         | 926      | 926      | 926      | 926      | 926      | 926      | 926      | 925      | 923      | 921      | 918      | 918      | 918      | 918      | 921      | 923      | 925      | 926      | 929      | 931      | 934      | 934      | 933      | 926      | 926      | 925      | 924 |
| 18           | 926      | 927      | 926      | 926      | 926      | 926      | 926      | 925      | 923      | 921      | 918      | 915      | 914      | 914      | 918      | 921      | 925      | 925      | 926      | 929      | 930      | 932      | 930      | 925      | 922      | 924      |     |
| 19           | 922      | 922      | 922      | 922      | 925      | 926      | 925      | 925      | 923      | 921      | 918      | 915      | 912      | 909      | 914      | 921      | 925      | 926      | 931      | 934      | 933      | 930      | 930      | 930      | 927      | 923      |     |
| 20           | 927      | 925      | 921      | 921      | 922      | 925      | 927      | 929      | 930      | 931      | 930      | 926      | 921      | 918      | 923      | 927      | 930      | 935      | 935      | 935      | 935      | 934      | 930      | 930      | 930      | 928      | 928 |
| 21           | 930      | 929      | 928      | 929      | 930      | 930      | 929      | 930      | 929      | 926      | 926      | 922      | 917      | 914      | 919      | 923      | 926      | 930      | 930      | 930      | 928      | 926      | 926      | 926      | 926      | 925      | 926 |
| 22           | 925      | 925      | 926      | 927      | 927      | 927      | 930      | 930      | 927      | 926      | 924      | 922      | 918      | 919      | 925      | 932      | 931      | 930      | 930      | 930      | 927      | 930      | 930      | 926      | 926      | 927      | 927 |
| 23           | 926      | 926      | 926      | 926      | 926      | 926      | 926      | 925      | 922      | 921      | 918      | 918      | 918      | 921      | 926      | 930      | 932      | 935      | 934      | 932      | 930      | 930      | 927      | 927      | 926      | 926      |     |
| 24           | 925      | 925      | 925      | 925      | 925      | 925      | 928      | 929      | 929      | 924      | 920      | 913      | 909      | 909      | 916      | 920      | 922      | 925      | 926      | 925      | 924      | 924      | 921      | 920      | 917      | 922      |     |
| 25 D         | 917      | 902      | 912      | 915      | 901      | 901      | 908      | 908      | 904      | 905      | 913      | 913      | 909      | 910      | 914      | 916      | 918      | 922      | 925      | 925      | 925      | 924      | 922      | 921      | 921      | 914      |     |
| 26 D         | 921      | 922      | 921      | 921      | 922      | 922      | 921      | 917      | 917      | 917      | 920      | 921      | 929      | 937      | 946      | 950      | 972      | 966      | 948      | 938      | 935      | 934      | 933      | 932      | 930      | 932      |     |
| 27           | 930      | 930      | 930      | 929      | 929      | 929      | 928      | 926      | 924      | 920      | 917      | 913      | 913      | 913      | 920      | 928      | 934      | 938      | 940      | 938      | 936      | 933      | 930      | 929      | 927      | 924      |     |
| 28           | 926      | 920      | 920      | 919      | 920      | 923      | 924      | 925      | 924      | 919      | 912      | 908      | 908      | 914      | 919      | 923      | 925      | 932      | 935      | 935      | 933      | 929      | 928      | 927      | 924      | 923      |     |
| 29           | 924      | 924      | 923      | 917      | 921      | 925      | 928      | 928      | 921      | 918      | 911      | 904      | 905      | 912      | 917      | 923      | 928      | 928      | 932      | 932      | 932      | 929      | 925      | 924      | 921      | 922      |     |
| 30 Q         | 921      | 924      | 924      | 925      | 926      | 928      | 926      | 924      | 923      | 919      | 912      | 908      | 907      | 913      | 920      | 928      | 928      | 928      | 928      | 928      | 930      | 929      | 928      | 928      | 928      | 923      |     |
| Mean         | 926      | 925      | 925      | 925      | 925      | 925      | 926      | 925      | 923      | 919      | 916      | 914      | 914      | 915      | 920      | 925      | 928      | 930      | 931      | 930      | 930      | 929      | 927      | 926      | 926      | 925      |     |

DAILY EXTREMES OF EACH COMPONENT OF TERRESTRIAL MAGNETIC FORCE:  
 MAGNETIC CHARACTER FIGURES: TEMPERATURE IN MAGNET HOUSE.

226. Eskdalemuir.

April, 1924.

| Day. | Terrestrial Magnetic Force. |                           |          |                          |                          |                 |                           |                           |        |                           |                           |          |          |       |          | Character Figures. <sup>§</sup> |        | Magnetic Character of Day (0-2). | Temperature in Magnet House 200 +. |
|------|-----------------------------|---------------------------|----------|--------------------------|--------------------------|-----------------|---------------------------|---------------------------|--------|---------------------------|---------------------------|----------|----------|-------|----------|---------------------------------|--------|----------------------------------|------------------------------------|
|      | North Component.            |                           |          |                          |                          | West Component. |                           |                           |        |                           | Vertical Component.       |          |          |       |          | $\Sigma R^2$                    | $\rho$ |                                  |                                    |
|      | Maximum 15,000 $\gamma$ +   | Minimum 15,000 $\gamma$ + | Range.   | Maximum 4,000 $\gamma$ + | Minimum 4,000 $\gamma$ + | Range.          | Maximum 44,000 $\gamma$ + | Minimum 44,000 $\gamma$ + | Range. | Maximum 44,000 $\gamma$ + | Minimum 44,000 $\gamma$ + | Range.   |          |       |          |                                 |        |                                  |                                    |
| 1    | h. m.                       | $\gamma$                  | $\gamma$ | h. m.                    | $\gamma$                 | h. m.           | $\gamma$                  | $\gamma$                  | h. m.  | $\gamma$                  | h. m.                     | $\gamma$ | $\gamma$ | h. m. | $\gamma$ | 100 $\gamma^2$                  |        |                                  | a.                                 |
| 2    | 20 49                       | 1034                      | 990      | 11 10                    | 44                       | 14 9            | 642                       | 595                       | 9 21   | 47                        | 7 40                      | 936      | 921      | 12 56 | 15       | 44                              | 0.57   | 0                                | 83.7                               |
| 3    | 19 24                       | 1034                      | 995      | 11 2                     | 39                       | 13 28           | 648                       | 594                       | 8 9    | 54                        | 7 12                      | 932      | 920      | 12 40 | 12       | 46                              | 0.60   | 0                                | 83.7                               |
| 4    | 17 42                       | 1048                      | 992      | 10 33                    | 56                       | 13 42           | 647                       | 588                       | 8 4    | 59                        | 20 59                     | 940      | 909      | 12 15 | 31       | 76                              | 0.99   | 0                                | 83.5                               |
| 5    | 4 3                         | 1036                      | 994      | 10 50                    | 42                       | 13 40           | 644                       | 590                       | 9 10   | 54                        | 18 30                     | 931      | 912      | 11 43 | 19       | 50                              | 0.66   | 0                                | 83.6                               |
| 6    | 20 37                       | 1037                      | 995      | 10 51                    | 42                       | 13 20           | 653                       | 590                       | 8 30   | 63                        | 16 12                     | 933      | 915      | 11 50 | 18       | 61                              | 0.79   | 0                                | 83.6                               |
| 7    | 15 20                       | 1043                      | 975      | 16 56                    | 68                       | 13 30           | 675                       | 583                       | 8 12   | 92                        | 17 28                     | 939      | 906      | 11 33 | 33       | 142                             | 1.86   | 1                                | 83.5                               |
| 8    | 19 3                        | 1048                      | 1000     | 21 58                    | 48                       | 12 47           | 676                       | 572                       | 24 0   | 104                       | 20 8                      | 951      | 903      | 11 50 | 48       | 154                             | 2.02   | 1                                | 83.5                               |
| 9    | 0 20                        | 1039                      | 990      | 11 26                    | 49                       | 13 52           | 646                       | 570                       | 0 2    | 76                        | 17 20                     | 931      | 906      | 11 40 | 25       | 88                              | 1.15   | 1                                | 83.5                               |
| 10   | 17 50                       | 1038                      | 988      | 11 21                    | 50                       | 14 9            | 645                       | 594                       | 8 0    | 51                        | 18 10                     | 935      | 910      | 12 50 | 25       | 57                              | 0.75   | 0                                | 83.5                               |
| 11   | 18 40                       | 1034                      | 996      | 11 20                    | 38                       | 13 30           | 640                       | 595                       | 8 29   | 45                        | 18 0                      | 928      | 914      | 12 20 | 14       | 37                              | 0.48   | 0                                | 83.5                               |
| 12   | 18 19                       | 1039                      | 992      | 11 19                    | 47                       | 13 38           | 650                       | 595                       | 7 40   | 55                        | 18 30                     | 932      | 906      | 12 48 | 26       | 59                              | 0.78   | 0                                | 83.5                               |
| 13   | 22 37                       | 1058                      | 1004     | 10 38                    | 54                       | 12 53           | 636                       | 591                       | 8 50   | 45                        | 19 50                     | 931      | 914      | 12 0  | 17       | 52                              | 0.69   | 0                                | 83.6                               |
| 14   | 0 3                         | 1053                      | 1005     | 11 42                    | 48                       | 13 53           | 642                       | 599                       | 9 0    | 43                        | 21 38                     | 926      | 909      | 13 0  | 17       | 44                              | 0.58   | 0                                | 83.7                               |
| 15   | 22 58                       | 1048                      | 1005     | 12 9                     | 43                       | 13 43           | 640                       | 595                       | 8 12   | 45                        | 6 18                      | 925      | 910      | 12 35 | 15       | 41                              | 0.54   | 0                                | 83.7                               |
| 16   | 4 40                        | 1055                      | 1001     | 11 50                    | 54                       | 14 9            | 633                       | 590                       | 9 44   | 43                        | 23 25                     | 926      | 909      | 4.40  | 17       | 51                              | 0.66   | 1                                | 83.7                               |
| 17   | 18 36                       | 10                        |          |                          |                          |                 |                           |                           |        |                           |                           |          |          |       |          |                                 |        |                                  |                                    |

TERRESTRIAL MAGNETIC FORCE : NORTH COMPONENT.

Mean values for periods of sixty minutes centred at the Hours of Greenwich Mean Time.

227. Eskdalemuir. (X.)

15,000 γ (-15 C.G.S. unit) +

May, 1924.

Table with 25 columns (Hour G.M.T., 0-24, Mean) and 31 rows (Day, 1-31). Values range from 1028 to 1058.

TERRESTRIAL MAGNETIC FORCE : WEST COMPONENT.

Mean values for periods of sixty minutes centred at the Hours of Greenwich Mean Time.

228. Eskdalemuir. (-Y.)

4,000 γ (-04 C.G.S. unit) +

May, 1924.

Table with 25 columns (Hour G.M.T., 0-24, Mean) and 31 rows (Day, 1-31). Values range from 582 to 631.

Q denotes an "International Quiet Day," while D denotes a disturbed day used for the computation of Tables 271-276.

229. Eskdalemuir. (Z.)

44,000 γ (.44 C.G.S. unit) ±

May, 1924.

| Hour G.M.T. | 0.  | 1.  | 2.  | 3.  | 4.  | 5.  | 6.  | 7.  | 8.  | 9.  | 10. | 11. | Noon. | 13. | 14. | 15.  | 16.  | 17.  | 18.  | 19.  | 20. | 21. | 22. | 23. | 24. | Mean. |     |
|-------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-------|-----|-----|------|------|------|------|------|-----|-----|-----|-----|-----|-------|-----|
| Day 1       | 928 | 928 | 928 | 925 | 924 | 924 | 924 | 925 | 924 | 920 | 916 | 912 | 912   | 918 | 920 | 924  | 927  | 929  | 931  | 932  | 929 | 928 | 928 | 928 | 928 | 924   |     |
| 2 D         | 928 | 928 | 928 | 928 | 927 | 925 | 925 | 924 | 920 | 917 | 913 | 908 | 911   | 915 | 921 | 925  | 924  | 925  | 925  | 925  | 925 | 925 | 926 | 927 | 927 | 927   | 923 |
| 3           | 926 | 927 | 927 | 927 | 927 | 926 | 927 | 927 | 924 | 923 | 919 | 911 | 907   | 907 | 915 | 920  | 923  | 927  | 930  | 930  | 928 | 927 | 927 | 927 | 927 | 923   |     |
| 4           | 927 | 927 | 927 | 927 | 927 | 927 | 925 | 924 | 923 | 919 | 914 | 907 | 903   | 902 | 907 | 911  | 915  | 922  | 924  | 928  | 930 | 927 | 927 | 927 | 927 | 921   |     |
| 5           | 924 | 925 | 926 | 926 | 925 | 926 | 923 | 922 | 922 | 918 | 918 | 917 | 914   | 914 | 915 | 921  | 926  | 930  | 930  | 930  | 929 | 927 | 927 | 926 | 926 | 923   |     |
| 6 Q         | 926 | 926 | 926 | 926 | 926 | 926 | 926 | 923 | 919 | 915 | 914 | 914 | 911   | 910 | 912 | 918  | 923  | 926  | 926  | 927  | 927 | 926 | 926 | 926 | 925 | 923   |     |
| 7 Q         | 923 | 925 | 926 | 926 | 926 | 926 | 923 | 922 | 918 | 911 | 902 | 898 | 903   | 903 | 912 | 918  | 922  | 926  | 927  | 927  | 926 | 924 | 923 | 923 | 923 | 920   |     |
| 8           | 923 | 924 | 926 | 926 | 926 | 927 | 927 | 926 | 923 | 918 | 911 | 905 | 905   | 906 | 910 | 915  | 925  | 930  | 932  | 932  | 934 | 934 | 930 | 926 | 926 | 923   |     |
| 9           | 925 | 925 | 925 | 925 | 925 | 925 | 925 | 922 | 921 | 917 | 913 | 909 | 909   | 912 | 914 | 917  | 921  | 925  | 926  | 926  | 925 | 925 | 923 | 924 | 924 | 921   |     |
| 10          | 924 | 924 | 924 | 925 | 925 | 925 | 925 | 922 | 917 | 914 | 909 | 905 | 901   | 908 | 912 | 917  | 917  | 920  | 922  | 925  | 925 | 923 | 923 | 922 | 921 | 919   |     |
| 11          | 920 | 920 | 916 | 916 | 918 | 924 | 920 | 920 | 913 | 908 | 908 | 908 | 906   | 908 | 912 | 916  | 920  | 924  | 924  | 924  | 924 | 924 | 924 | 924 | 923 | 921   |     |
| 12          | 921 | 921 | 921 | 921 | 923 | 924 | 924 | 924 | 919 | 912 | 911 | 903 | 900   | 908 | 916 | 921  | 925  | 931  | 929  | 932  | 932 | 930 | 928 | 924 | 924 | 920   |     |
| 13          | 903 | 900 | 900 | 908 | 913 | 916 | 916 | 916 | 915 | 908 | 900 | 895 | 893   | 897 | 908 | 917  | 921  | 924  | 924  | 924  | 924 | 924 | 924 | 924 | 924 | 913   |     |
| 14 Q        | 924 | 924 | 924 | 924 | 924 | 924 | 921 | 920 | 916 | 910 | 907 | 905 | 907   | 911 | 913 | 919  | 923  | 925  | 924  | 925  | 927 | 925 | 924 | 924 | 924 | 920   |     |
| 15          | 923 | 923 | 923 | 924 | 924 | 926 | 926 | 923 | 920 | 915 | 907 | 907 | 907   | 908 | 911 | 916  | 922  | 923  | 923  | 924  | 926 | 926 | 924 | 924 | 924 | 920   |     |
| 16          | 923 | 923 | 923 | 924 | 924 | 927 | 927 | 924 | 922 | 914 | 911 | 907 | 910   | 910 | 915 | 919  | 920  | 924  | 931  | 936  | 936 | 931 | 927 | 926 | 927 | 922   |     |
| 17          | 926 | 922 | 922 | 921 | 923 | 926 | 927 | 927 | 926 | 919 | 914 | 909 | 906   | 910 | 918 | 922  | 923  | 926  | 926  | 926  | 924 | 926 | 923 | 923 | 922 | 921   |     |
| 18 Q        | 922 | 922 | 922 | 923 | 926 | 926 | 926 | 923 | 919 | 914 | 907 | 905 | 905   | 912 | 921 | 926  | 929  | 926  | 923  | 923  | 922 | 922 | 922 | 923 | 923 | 920   |     |
| 19          | 923 | 923 | 923 | 925 | 926 | 926 | 926 | 923 | 919 | 914 | 906 | 903 | 906   | 910 | 918 | 919  | 925  | 930  | 930  | 926  | 922 | 922 | 922 | 922 | 922 | 920   |     |
| 20          | 921 | 921 | 918 | 918 | 922 | 921 | 924 | 926 | 926 | 918 | 909 | 905 | 901   | 906 | 918 | 923  | 930  | 934  | 934  | 929  | 924 | 922 | 921 | 921 | 921 | 920   |     |
| 21          | 921 | 922 | 922 | 922 | 925 | 926 | 926 | 922 | 920 | 916 | 905 | 901 | 909   | 908 | 913 | 921  | 929  | 930  | 929  | 929  | 929 | 925 | 925 | 922 | 925 | 921   |     |
| 22 D        | 924 | 921 | 905 | 877 | 854 | 825 | 854 | 862 | 886 | 901 | 917 | 930 | 953   | 970 | 997 | 1013 | 1036 | 1058 | 1035 | 1017 | 986 | 970 | 945 | 909 | 838 | 938   |     |
| 23 D        | 838 | 838 | 863 | 870 | 866 | 879 | 891 | 902 | 900 | 905 | 912 | 915 | 916   | 917 | 923 | 933  | 949  | 963  | 939  | 960  | 949 | 933 | 933 | 914 | 908 | 910   |     |
| 24 D        | 907 | 886 | 874 | 886 | 907 | 916 | 924 | 928 | 928 | 924 | 919 | 919 | 920   | 925 | 929 | 931  | 932  | 934  | 934  | 936  | 940 | 939 | 932 | 925 | 922 | 921   |     |
| 25          | 922 | 927 | 924 | 911 | 910 | 918 | 921 | 923 | 920 | 919 | 915 | 911 | 911   | 914 | 918 | 923  | 927  | 932  | 932  | 939  | 939 | 935 | 932 | 931 | 924 | 924   |     |
| 26          | 924 | 923 | 922 | 920 | 925 | 931 | 932 | 932 | 932 | 932 | 927 | 919 | 916   | 920 | 925 | 928  | 933  | 936  | 939  | 940  | 940 | 938 | 935 | 932 | 928 | 929   |     |
| 27          | 928 | 927 | 927 | 923 | 925 | 927 | 931 | 931 | 927 | 920 | 915 | 907 | 904   | 911 | 915 | 919  | 925  | 931  | 935  | 935  | 935 | 935 | 932 | 931 | 928 | 925   |     |
| 28 D        | 927 | 915 | 891 | 874 | 862 | 848 | 856 | 877 | 885 | 899 | 907 | 914 | 922   | 938 | 950 | 960  | 971  | 984  | 984  | 975  | 964 | 955 | 947 | 939 | 932 | 923   |     |
| 29          | 931 | 925 | 921 | 918 | 921 | 925 | 930 | 933 | 933 | 930 | 921 | 920 | 918   | 922 | 925 | 925  | 929  | 930  | 930  | 929  | 930 | 930 | 933 | 932 | 930 | 927   |     |
| 30          | 929 | 929 | 929 | 929 | 928 | 928 | 924 | 923 | 920 | 920 | 916 | 913 | 914   | 922 | 931 | 937  | 945  | 949  | 946  | 949  | 949 | 945 | 940 | 936 | 933 | 931   |     |
| 31 Q        | 933 | 932 | 929 | 929 | 931 | 931 | 932 | 933 | 933 | 929 | 925 | 917 | 916   | 921 | 925 | 929  | 934  | 937  | 937  | 933  | 932 | 932 | 929 | 929 | 929 | 929   |     |
| Mean        | 921 | 919 | 921 | 917 | 917 | 918 | 920 | 920 | 919 | 916 | 913 | 910 | 910   | 914 | 921 | 926  | 928  | 936  | 935  | 935  | 933 | 931 | 928 | 925 | 921 | 922   |     |

DAILY EXTREMES OF EACH COMPONENT OF TERRESTRIAL MAGNETIC FORCE: MAGNETIC CHARACTER FIGURES: TEMPERATURE IN MAGNET HOUSE.

230. Eskdalemuir.

May, 1924.

| Day. | Terrestrial Magnetic Force. |                    |        |                   |                   |                 |                    |                    |        |                    |                     |        |     |       |    | Character Figures. § |     | Magnetic Character of Day (0-2). | Temperature in Magnet House 200 ± |
|------|-----------------------------|--------------------|--------|-------------------|-------------------|-----------------|--------------------|--------------------|--------|--------------------|---------------------|--------|-----|-------|----|----------------------|-----|----------------------------------|-----------------------------------|
|      | North Component.            |                    |        |                   |                   | West Component. |                    |                    |        |                    | Vertical Component. |        |     |       |    | ΣR²                  | ρ   |                                  |                                   |
|      | Maximum 15,000 γ ±          | Minimum 15,000 γ ± | Range. | Maximum 4,000 γ ± | Minimum 4,000 γ ± | Range.          | Maximum 44,000 γ ± | Minimum 44,000 γ ± | Range. | Maximum 44,000 γ ± | Minimum 44,000 γ ±  | Range. |     |       |    |                      |     |                                  |                                   |
| 1    | h. m.                       | γ                  | γ      | h. m.             | γ                 | h. m.           | γ                  | γ                  | h. m.  | γ                  | h. m.               | γ      | γ   | h. m. | γ  | 100γ²                |     |                                  | a.                                |
| 2    | 18 48                       | 1056               | 1002   | 10 58             | 54                | 12 49           | 643                | 584                | 8 0    | 59                 | 19 10               | 933    | 911 | 11 10 | 22 | 69                   | .36 | 0                                | 83.7                              |
| 3    | 20 40                       | 1042               | 998    | 11 30             | 44                | 13 58           | 629                | 593                | 7 56   | 36                 | 0 55                | 928    | 908 | 11 12 | 20 | 36                   | .19 | 0                                | 83.7                              |
| 4    | 18 42                       | 1048               | 1017   | 11 20             | 31                | 13 53           | 641                | 589                | 7 29   | 52                 | 19 10               | 930    | 906 | 12 0  | 24 | 42                   | .22 | 0                                | 83.8                              |
| 5    | 21 14                       | 1050               | 1013   | 11 19             | 37                | 14 8            | 647                | 592                | 8 20   | 55                 | 20 0                | 931    | 899 | 12 50 | 32 | 54                   | .29 | 0                                | 83.9                              |
| 6    | 17 16                       | 1046               | 1003   | 10 32             | 43                | 14 8            | 647                | 593                | 8 28   | 54                 | 18 0                | 930    | 913 | 12 0  | 17 | 51                   | .27 | 0                                | 83.9                              |
| 7    | 22 11                       | 1053               | 1004   | 10 50             | 49                | 13 0            | 633                | 595                | 8 21   | 38                 | 19 39               | 929    | 910 | 13 0  | 19 | 42                   | .22 | 0                                | 83.9                              |
| 8    | 17 33                       | 1053               | 995    | 11 36             | 58                | 14 44           | 630                | 589                | 9 30   | 41                 | 18 40               | 928    | 897 | 11 58 | 31 | 60                   | .32 | 0                                | 83.9                              |
| 9    | 19 16                       | 1058               | 997    | 12 27             | 61                | 14 18           | 643                | 582                | 7 25   | 61                 | 21 12               | 934    | 902 | 11 6  | 32 | 85                   | .45 | 1                                | 83.9                              |
| 10   | 18 51                       | 1051               | 1004   | 13 26             | 47                | 14 51           | 645                | 590                | 7 10   | 55                 | 18 6                | 928    | 908 | 12 0  | 20 | 56                   | .30 | 1                                | 83.9                              |
| 11   | 23 43                       | 1058               | 1013   | 10 14             | 45                | 18 10           | 624                | 592                | 7 1    | 32                 | 4 30                | 926    | 900 | 11 59 | 26 | 37                   | .20 | 0                                | 83.9                              |
| 12   | 18 23                       | 1057               | 1005   | 11 26             | 52                | 18 27           | 625                | 592                | 5 50   | 33                 | 19 40               | 925    | 905 | 12 5  | 20 | 42                   | .22 | 0                                | 83.9                              |
| 13   | 24 0                        | 1067               | 1017   | 9 48              | 50                | 15 51           | 638                | 591                | 7 43   | 47                 | 19 0                | 932    | 900 | 24 0  | 32 | 57                   | .30 | 1                                | 83.9                              |
| 14   | 0 3                         | 1069               | 1003   | 10 23             | 66                | 12 48           | 625                | 569                | 0 31   | 56                 | 18 0                | 925    | 892 | 11 50 | 33 | 86                   | .45 | 1                                | 83.9                              |
| 15   | 19 3                        | 1052               | 1009   | 12 48             | 43                | 12 0            | 622                | 595                | 7 51   | 27                 | 20 0                | 928    | 904 | 10 40 | 24 | 32                   | .17 | 0                                | 84.0                              |
| 16   | 18 25                       | 1057               | 1006   | 10 40             | 51                | 14 53           | 630                | 593                | 7 20   | 37                 | 19 52               | 927    | 906 | 11 5  | 21 | 44                   | .23 | 0                                | 84.0                              |
| 17   | 17 10                       | 1083               | 1014   | 15 20             | 69                | 17 11           | 640                | 583                | 7 33   | 57                 | 19 19               | 939    | 907 | 11 3  | 32 | 90                   | .48 | 1                                | 84.0                              |
| 18   | 20 12                       | 1054               | 1009   | 11 52             | 45                | 12 48           | 639                | 577                | 5 56   | 62                 | 5 55                | 929    | 905 | 11 45 | 24 | 64                   | .34 | 0                                |                                   |

TERRESTRIAL MAGNETIC FORCE : NORTH COMPONENT.

Mean values for periods of sixty minutes centred at the Hours of Greenwich Mean Time.

231. Eskdalemuir. (X.)

June, 1924.

15,000  $\gamma$  (.15 C.G.S. unit) +

| Hour G.M.T. | 0.       | 1.       | 2.       | 3.       | 4.       | 5.       | 6.       | 7.       | 8.       | 9.       | 10.      | 11.      | Noon.    | 13.      | 14.      | 15.      | 16.      | 17.      | 18.      | 19.      | 20.      | 21.      | 22.      | 23.      | 24.      | Mean.    |
|-------------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| Day.        | $\gamma$ | $\gamma$ | $\gamma$ | $\gamma$ | $\gamma$ | $\gamma$ | $\gamma$ | $\gamma$ | $\gamma$ | $\gamma$ | $\gamma$ | $\gamma$ | $\gamma$ | $\gamma$ | $\gamma$ | $\gamma$ | $\gamma$ | $\gamma$ | $\gamma$ | $\gamma$ | $\gamma$ | $\gamma$ | $\gamma$ | $\gamma$ | $\gamma$ | $\gamma$ |
| 1           | 1042     | 1041     | 1041     | 1040     | 1041     | 1038     | 1032     | 1023     | 1013     | 1004     | 992      | 992      | 997      | 1004     | 1004     | 1020     | 1032     | 1041     | 1047     | 1051     | 1051     | 1044     | 1041     | 1040     | 1038     | 1028     |
| 2           | 1038     | 1040     | 1034     | 1036     | 1041     | 1041     | 1038     | 1030     | 1017     | 1012     | 1016     | 1000     | 1004     | 1004     | 1007     | 1020     | 1023     | 1035     | 1046     | 1050     | 1047     | 1045     | 1041     | 1040     | 1037     | 1029     |
| 3 Q         | 1037     | 1036     | 1036     | 1038     | 1041     | 1042     | 1040     | 1032     | 1023     | 1012     | 1005     | 999      | 1002     | 1002     | 1009     | 1020     | 1026     | 1041     | 1045     | 1046     | 1050     | 1046     | 1043     | 1042     | 1040     | 1030     |
| 4           | 1040     | 1038     | 1037     | 1041     | 1043     | 1047     | 1051     | 1051     | 1038     | 1017     | 1001     | 992      | 993      | 1002     | 1004     | 1004     | 1025     | 1042     | 1052     | 1054     | 1055     | 1050     | 1043     | 1042     | 1041     | 1032     |
| 5           | 1042     | 1038     | 1037     | 1037     | 1038     | 1042     | 1042     | 1042     | 1042     | 1042     | 1028     | 1022     | 1016     | 1018     | 1008     | 1016     | 1029     | 1038     | 1043     | 1050     | 1051     | 1048     | 1046     | 1043     | 1038     | 1036     |
| 6 Q         | 1038     | 1037     | 1037     | 1037     | 1041     | 1043     | 1042     | 1038     | 1032     | 1022     | 1007     | 1003     | 1003     | 1009     | 1014     | 1021     | 1032     | 1042     | 1048     | 1048     | 1051     | 1047     | 1044     | 1043     | 1042     | 1033     |
| 7 Q         | 1042     | 1027     | 1038     | 1039     | 1043     | 1044     | 1044     | 1041     | 1028     | 1016     | 1009     | 1008     | 1009     | 1007     | 1009     | 1020     | 1034     | 1044     | 1052     | 1054     | 1050     | 1047     | 1044     | 1043     | 1043     | 1034     |
| 8 Q         | 1043     | 1042     | 1041     | 1042     | 1042     | 1042     | 1043     | 1043     | 1037     | 1023     | 1002     | 990      | 986      | 992      | 1004     | 1023     | 1035     | 1045     | 1052     | 1052     | 1052     | 1046     | 1043     | 1042     | 1043     | 1032     |
| 9           | 1043     | 1042     | 1043     | 1043     | 1045     | 1046     | 1043     | 1037     | 1029     | 1023     | 1010     | 1007     | 1008     | 1015     | 1024     | 1046     | 1042     | 1043     | 1068     | 1066     | 1066     | 1055     | 1052     | 1065     | 1065     | 1041     |
| 10 D        | 1066     | 1072     | 1039     | 1039     | 1047     | 1053     | 1054     | 1027     | 1019     | 1024     | 999      | 982      | 989      | 1008     | 1056     | 1119     | 1180     | 1144     | 1039     | 1036     | 991      | 959      | 973      | 963      | 987      | 1035     |
| 11 D        | 987      | 960      | 986      | 1010     | 979      | 961      | 997      | 992      | 984      | 989      | 977      | 976      | 980      | 987      | 1011     | 999      | 1031     | 1033     | 1035     | 1044     | 1060     | 1067     | 1083     | 1054     | 1026     | 1008     |
| 12          | 1026     | 1027     | 1032     | 1029     | 1028     | 1028     | 1023     | 1019     | 1022     | 1021     | 1013     | 1005     | 1006     | 1012     | 1013     | 1026     | 1034     | 1040     | 1045     | 1037     | 1037     | 1031     | 1033     | 1043     | 1026     | 1026     |
| 13          | 1026     | 1028     | 1027     | 1025     | 1028     | 1026     | 1026     | 1016     | 1009     | 1005     | 1004     | 1005     | 1004     | 1008     | 1011     | 1019     | 1022     | 1029     | 1039     | 1037     | 1033     | 1033     | 1030     | 1029     | 1029     | 1022     |
| 14 Q        | 1029     | 1029     | 1029     | 1029     | 1030     | 1030     | 1026     | 1021     | 1014     | 1009     | 1003     | 1002     | 1008     | 1014     | 1014     | 1013     | 1021     | 1027     | 1031     | 1035     | 1034     | 1033     | 1033     | 1033     | 1032     | 1023     |
| 15          | 1032     | 1033     | 1031     | 1027     | 1034     | 1033     | 1029     | 1024     | 1017     | 1012     | 1008     | 1003     | 1003     | 1004     | 1020     | 1031     | 1038     | 1049     | 1060     | 1048     | 1043     | 1043     | 1043     | 1040     | 1036     | 1029     |
| 16          | 1037     | 1035     | 1031     | 1035     | 1040     | 1029     | 1033     | 1027     | 1010     | 1001     | 998      | 1000     | 995      | 993      | 1022     | 1044     | 1055     | 1047     | 1061     | 1054     | 1053     | 1048     | 1048     | 1047     | 1045     | 1031     |
| 17          | 1045     | 1040     | 1039     | 1038     | 1036     | 1040     | 1039     | 1033     | 1027     | 1020     | 1014     | 1004     | 998      | 994      | 1001     | 1016     | 1026     | 1035     | 1045     | 1051     | 1049     | 1043     | 1045     | 1044     | 1042     | 1030     |
| 18 D        | 1042     | 1038     | 1031     | 1037     | 1039     | 1041     | 1039     | 1034     | 1024     | 1009     | 991      | 987      | 1002     | 1010     | 1025     | 1045     | 1059     | 1077     | 1083     | 1060     | 1059     | 1053     | 1045     | 1072     | 1065     | 1038     |
| 19 D        | 1065     | 1044     | 1042     | 1035     | 1032     | 1028     | 1029     | 1036     | 1030     | 1019     | 1005     | 989      | 996      | 1012     | 1016     | 1014     | 1050     | 1068     | 1072     | 1071     | 1044     | 1012     | 1010     | 1017     | 1055     | 1030     |
| 20 D        | 1055     | 979      | 993      | 994      | 996      | 1028     | 1020     | 1006     | 998      | 989      | 970      | 964      | 992      | 1012     | 1011     | 1021     | 1027     | 1024     | 1037     | 1042     | 1039     | 1033     | 1031     | 1032     | 1032     | 1012     |
| 21          | 1033     | 1031     | 1016     | 1022     | 1026     | 1027     | 1027     | 1026     | 1026     | 1021     | 1010     | 1001     | 998      | 1000     | 1009     | 1010     | 1019     | 1027     | 1038     | 1046     | 1048     | 1050     | 1078     | 1055     | 1033     | 1027     |
| 22          | 1033     | 1035     | 1030     | 1038     | 1044     | 1039     | 1033     | 1025     | 1020     | 1015     | 1002     | 995      | 999      | 1008     | 1020     | 1031     | 1035     | 1038     | 1034     | 1044     | 1035     | 1038     | 1038     | 1038     | 1035     | 1028     |
| 23          | 1035     | 1023     | 1029     | 1030     | 1026     | 1040     | 1028     | 1016     | 1018     | 1015     | 1002     | 989      | 1006     | 1010     | 1015     | 1014     | 1035     | 1035     | 1030     | 1049     | 1060     | 1050     | 1042     | 1035     | 1033     | 1026     |
| 24          | 1033     | 1034     | 1036     | 1035     | 1035     | 1031     | 1028     | 1021     | 1023     | 1024     | 1012     | 1001     | 1002     | 1018     | 1025     | 1030     | 1030     | 1035     | 1040     | 1050     | 1046     | 1041     | 1035     | 1033     | 1031     | 1029     |
| 25          | 1031     | 1030     | 1028     | 1028     | 1033     | 1036     | 1033     | 1027     | 1021     | 1014     | 1007     | 1008     | 1006     | 1005     | 1011     | 1018     | 1031     | 1039     | 1050     | 1058     | 1049     | 1049     | 1038     | 1032     | 1032     | 1028     |
| 26          | 1033     | 1031     | 1036     | 1036     | 1037     | 1041     | 1037     | 1032     | 1026     | 1017     | 1012     | 1010     | 1008     | 1014     | 1022     | 1028     | 1029     | 1036     | 1043     | 1047     | 1046     | 1043     | 1041     | 1040     | 1040     | 1031     |
| 27          | 1040     | 1041     | 1041     | 1041     | 1041     | 1042     | 1042     | 1034     | 1026     | 1024     | 1026     | 1028     | 1034     | 1037     | 1037     | 1026     | 1030     | 1046     | 1044     | 1051     | 1053     | 1042     | 1040     | 1029     | 1029     | 1037     |
| 28          | 1029     | 1030     | 1031     | 1036     | 1041     | 1040     | 1036     | 1031     | 1025     | 1023     | 1022     | 1016     | 1014     | 1032     | 1041     | 1037     | 1034     | 1034     | 1041     | 1050     | 1047     | 1042     | 1041     | 1044     | 1040     | 1034     |
| 29          | 1041     | 1037     | 1036     | 1037     | 1041     | 1042     | 1040     | 1032     | 1022     | 1013     | 1004     | 990      | 1012     | 1028     | 1039     | 1041     | 1040     | 1042     | 1041     | 1037     | 1041     | 1039     | 1042     | 1041     | 1039     | 1032     |
| 30          | 1039     | 1038     | 1030     | 1037     | 1042     | 1042     | 1046     | 1046     | 1040     | 1030     | 1007     | 988      | 992      | 1007     | 1004     | 1019     | 1037     | 1057     | 1061     | 1058     | 1053     | 1047     | 1048     | 1060     | 1061     | 1035     |
| Mean        | 1037     | 1032     | 1031     | 1033     | 1034     | 1035     | 1035     | 1029     | 1022     | 1015     | 1005     | 999      | 1002     | 1009     | 1017     | 1026     | 1038     | 1044     | 1047     | 1049     | 1046     | 1041     | 1040     | 1039     | 1038     | 1030     |

TERRESTRIAL MAGNETIC FORCE : WEST COMPONENT.

Mean values for periods of sixty minutes centred at the Hours of Greenwich Mean Time.

232. Eskdalemuir. (-Y.)

June, 1924.

4,000  $\gamma$  (.04 C.G.S. unit) +

| Hour G.M.T. | 0.       | 1.       | 2.       | 3.       | 4.       | 5.       | 6.       | 7.       | 8.       | 9.       | 10.      | 11.      | Noon.    | 13.      | 14.      | 15.      | 16.      | 17.      | 18.      | 19.      | 20.      | 21.      | 22.      | 23.      | 24.      | Mean.    |
|-------------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| Day.        | $\gamma$ | $\gamma$ | $\gamma$ | $\gamma$ | $\gamma$ | $\gamma$ | $\gamma$ | $\gamma$ | $\gamma$ | $\gamma$ | $\gamma$ | $\gamma$ | $\gamma$ | $\gamma$ | $\gamma$ | $\gamma$ | $\gamma$ | $\gamma$ | $\gamma$ | $\gamma$ | $\gamma$ | $\gamma$ | $\gamma$ | $\gamma$ | $\gamma$ | $\gamma$ |
| 1           | 609      | 607      | 606      | 602      | 599      | 595      | 587      | 583      | 578      | 580      | 592      | 610      | 625      | 639      | 631      | 628      | 622      | 613      | 610      | 606      | 604      | 602      | 607      | 607      | 606      | 606      |
| 2           | 606      | 606      | 603      | 603      | 596      | 595      | 585      | 586      | 579      | 575      | 585      | 605      | 624      | 634      | 634      | 636      | 626      | 619      | 616      | 611      | 606      | 606      | 607      | 606      | 602      | 606      |
| 3 Q         | 602      | 603      | 603      | 602      | 600      | 596      | 591      | 586      | 580      | 575      | 585      | 604      | 624      | 628      | 627      | 625      | 623      | 622      | 616      | 613      | 611      | 610      | 610      | 607      | 608      | 606      |
| 4           | 608      | 607      | 607      | 605      | 600      | 595      | 592      | 592      | 592      | 590      | 592      | 604      | 615      | 629      | 634      | 634      | 632      | 621      | 613      | 608      | 607      | 605      | 605      | 605      | 606      | 608      |
| 5           | 606      | 604      | 602      | 600      | 599      | 590      | 589      | 590      | 600      | 595      | 596      | 598      | 606      | 617      | 619      | 626      | 627      | 624      | 613      | 607      | 608      | 609      | 608      | 602      | 603      | 606      |
| 6 Q         | 603      | 604      | 602      | 600      | 595      | 590      | 587      | 585      | 581      | 580      | 595      | 610      | 619      | 626      | 625      | 621      | 623      | 621      | 616      | 616      | 611      | 611      | 611      | 609      | 606      | 606      |
| 7 Q         | 607      | 607      | 607      | 608      | 604      | 599      | 592      | 589      | 582      | 575      | 581      | 597      | 616      | 623      | 624      | 623      | 620      | 618      | 617      | 616      | 612      | 610      | 607      | 607      | 606      | 606      |
| 8 Q         | 606      | 606      | 605      | 603      | 601      | 594      | 589      | 586      | 583      | 588      | 592      | 600      | 615      | 627      | 635      | 633      | 634      | 628      | 622      | 613      | 612      | 612      | 612      | 612      | 612      | 609      |
| 9           | 612      | 607      | 606      | 604      | 600      | 590      | 581      | 576      | 576      | 578      | 587      | 603      | 618      | 627      | 638      | 653      | 643      | 629      | 635      | 619      | 606      | 609      | 616      | 619      | 625      | 610      |
| 10 D        | 625</    |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |



Mean values for periods of sixty minutes centred at the Hours of Greenwich Mean Time.

June, 1924.

233. Eskdalemuir. (Z.)

44,000  $\gamma$  (-44 C.G.S. unit) +

| Hour G.M.T. | 0.       | 1.       | 2.       | 3.       | 4.       | 5.       | 6.       | 7.       | 8.       | 9.       | 10.      | 11.      | Noon.    | 13.      | 14.      | 15.      | 16.      | 17.      | 18.      | 19.      | 20.      | 21.      | 22.      | 23.      | 24.      | Mean.    |     |
|-------------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|-----|
| Day.        | $\gamma$ | $\gamma$ | $\gamma$ | $\gamma$ | $\gamma$ | $\gamma$ | $\gamma$ | $\gamma$ | $\gamma$ | $\gamma$ | $\gamma$ | $\gamma$ | $\gamma$ | $\gamma$ | $\gamma$ | $\gamma$ | $\gamma$ | $\gamma$ | $\gamma$ | $\gamma$ | $\gamma$ | $\gamma$ | $\gamma$ | $\gamma$ | $\gamma$ | $\gamma$ |     |
| 1           | 928      | 928      | 929      | 931      | 932      | 932      | 932      | 932      | 931      | 928      | 916      | 904      | 901      | 907      | 918      | 924      | 929      | 929      | 931      | 931      | 931      | 932      | 931      | 928      | 928      | 928      | 926 |
| 2           | 927      | 924      | 926      | 927      | 927      | 928      | 930      | 930      | 931      | 923      | 914      | 911      | 912      | 919      | 921      | 926      | 930      | 931      | 931      | 931      | 928      | 927      | 927      | 927      | 927      | 927      | 925 |
| 3 Q         | 927      | 927      | 927      | 927      | 928      | 929      | 930      | 930      | 928      | 923      | 919      | 915      | 916      | 918      | 918      | 920      | 926      | 931      | 932      | 932      | 932      | 930      | 927      | 927      | 927      | 927      | 926 |
| 4           | 927      | 927      | 928      | 930      | 930      | 930      | 930      | 927      | 928      | 930      | 922      | 914      | 912      | 914      | 920      | 924      | 926      | 931      | 935      | 934      | 931      | 930      | 928      | 927      | 928      | 928      | 926 |
| 5           | 927      | 928      | 929      | 930      | 930      | 931      | 930      | 927      | 925      | 923      | 918      | 914      | 917      | 918      | 922      | 926      | 929      | 931      | 935      | 935      | 934      | 930      | 929      | 926      | 926      | 927      | 927 |
| 6 Q         | 925      | 925      | 926      | 927      | 928      | 928      | 928      | 928      | 922      | 919      | 914      | 909      | 905      | 910      | 913      | 919      | 923      | 927      | 928      | 928      | 928      | 926      | 925      | 925      | 925      | 925      | 922 |
| 7 Q         | 925      | 925      | 926      | 926      | 926      | 925      | 925      | 928      | 926      | 921      | 914      | 912      | 908      | 911      | 917      | 920      | 925      | 928      | 929      | 929      | 928      | 927      | 925      | 925      | 925      | 925      | 923 |
| 8 Q         | 924      | 924      | 924      | 925      | 926      | 925      | 924      | 925      | 924      | 924      | 918      | 916      | 911      | 909      | 911      | 918      | 922      | 928      | 930      | 928      | 928      | 927      | 925      | 924      | 923      | 923      | 923 |
| 9           | 923      | 924      | 924      | 925      | 926      | 927      | 928      | 929      | 929      | 927      | 919      | 910      | 904      | 906      | 910      | 916      | 920      | 925      | 929      | 932      | 933      | 930      | 926      | 923      | 920      | 923      | 923 |
| 10 D        | 919      | 898      | 908      | 918      | 922      | 921      | 912      | 911      | 912      | 914      | 915      | 918      | 923      | 938      | 964      | 1051     | 1129     | 1153     | 1112     | 1055     | 980      | 948      | 932      | 898      | 877      | 877      | 960 |
| 11 D        | 877      | 862      | 833      | 828      | 828      | 856      | 870      | 885      | 904      | 917      | 920      | 918      | 921      | 929      | 945      | 949      | 948      | 950      | 947      | 945      | 939      | 936      | 931      | 932      | 939      | 939      | 908 |
| 12          | 938      | 934      | 931      | 933      | 935      | 934      | 932      | 928      | 925      | 916      | 913      | 916      | 918      | 925      | 926      | 927      | 932      | 935      | 937      | 935      | 935      | 935      | 934      | 924      | 924      | 928      | 929 |
| 13          | 927      | 916      | 904      | 919      | 926      | 929      | 927      | 928      | 925      | 924      | 922      | 922      | 923      | 931      | 933      | 936      | 934      | 936      | 937      | 938      | 937      | 937      | 934      | 934      | 934      | 934      | 928 |
| 14 Q        | 934      | 933      | 933      | 933      | 933      | 934      | 934      | 938      | 941      | 936      | 931      | 926      | 924      | 927      | 929      | 931      | 932      | 933      | 933      | 933      | 933      | 933      | 933      | 933      | 933      | 934      | 933 |
| 15          | 933      | 932      | 932      | 929      | 928      | 933      | 935      | 935      | 932      | 924      | 920      | 917      | 915      | 916      | 917      | 924      | 933      | 937      | 940      | 938      | 934      | 932      | 931      | 932      | 932      | 932      | 929 |
| 16          | 931      | 930      | 927      | 926      | 927      | 923      | 915      | 921      | 924      | 922      | 919      | 918      | 920      | 925      | 924      | 922      | 924      | 930      | 932      | 932      | 932      | 931      | 930      | 929      | 928      | 925      |     |
| 17          | 928      | 929      | 930      | 932      | 932      | 933      | 932      | 931      | 926      | 923      | 920      | 922      | 923      | 925      | 927      | 928      | 932      | 938      | 940      | 942      | 939      | 936      | 932      | 932      | 931      | 931      |     |
| 18 D        | 931      | 931      | 931      | 932      | 934      | 933      | 933      | 929      | 927      | 921      | 913      | 908      | 904      | 910      | 914      | 920      | 926      | 935      | 954      | 957      | 952      | 939      | 931      | 911      | 907      | 928      |     |
| 19 D        | 906      | 918      | 923      | 928      | 929      | 930      | 930      | 930      | 930      | 926      | 918      | 910      | 909      | 912      | 912      | 926      | 943      | 956      | 963      | 966      | 959      | 946      | 923      | 912      | 887      | 929      |     |
| 20 D        | 887      | 860      | 836      | 830      | 824      | 880      | 910      | 922      | 925      | 923      | 922      | 926      | 923      | 920      | 925      | 930      | 937      | 939      | 939      | 937      | 934      | 933      | 932      | 930      | 926      | 910      |     |
| 21          | 925      | 923      | 923      | 927      | 931      | 933      | 932      | 930      | 928      | 927      | 926      | 923      | 918      | 913      | 919      | 925      | 931      | 938      | 946      | 948      | 939      | 932      | 914      | 897      | 910      | 927      |     |
| 22          | 910      | 920      | 924      | 921      | 911      | 912      | 921      | 929      | 930      | 928      | 920      | 914      | 913      | 916      | 921      | 929      | 937      | 938      | 937      | 937      | 939      | 937      | 934      | 932      | 929      | 926      |     |
| 23          | 929      | 921      | 902      | 908      | 916      | 914      | 917      | 920      | 925      | 926      | 929      | 928      | 920      | 921      | 925      | 929      | 929      | 936      | 937      | 937      | 937      | 937      | 934      | 933      | 930      | 926      |     |
| 24          | 929      | 925      | 921      | 925      | 928      | 929      | 932      | 936      | 933      | 926      | 921      | 921      | 921      | 924      | 928      | 928      | 931      | 937      | 937      | 937      | 938      | 936      | 936      | 933      | 929      | 930      |     |
| 25          | 929      | 929      | 932      | 933      | 933      | 936      | 936      | 937      | 937      | 932      | 922      | 919      | 916      | 915      | 916      | 924      | 929      | 931      | 931      | 933      | 936      | 934      | 933      | 932      | 931      | 929      |     |
| 26          | 930      | 930      | 928      | 929      | 931      | 932      | 935      | 934      | 932      | 931      | 927      | 919      | 915      | 916      | 919      | 924      | 928      | 935      | 936      | 932      | 931      | 931      | 930      | 930      | 930      | 929      |     |
| 27          | 930      | 930      | 930      | 931      | 933      | 935      | 933      | 932      | 930      | 927      | 923      | 919      | 916      | 921      | 926      | 930      | 933      | 935      | 937      | 937      | 939      | 939      | 936      | 935      | 935      | 931      |     |
| 28          | 935      | 934      | 933      | 931      | 932      | 933      | 932      | 933      | 935      | 931      | 928      | 922      | 920      | 919      | 915      | 919      | 927      | 932      | 932      | 931      | 932      | 932      | 931      | 929      | 927      | 929      |     |
| 29          | 927      | 928      | 930      | 931      | 931      | 931      | 930      | 928      | 925      | 920      | 918      | 918      | 916      | 919      | 923      | 932      | 937      | 942      | 944      | 944      | 944      | 940      | 936      | 935      | 935      | 931      |     |
| 30          | 935      | 934      | 932      | 928      | 930      | 931      | 931      | 931      | 930      | 928      | 932      | 928      | 924      | 927      | 931      | 932      | 935      | 940      | 943      | 941      | 939      | 936      | 935      | 931      | 917      | 932      |     |
| Mean        | 924      | 922      | 919      | 921      | 922      | 925      | 926      | 927      | 927      | 925      | 920      | 917      | 916      | 919      | 923      | 930      | 937      | 942      | 943      | 941      | 937      | 934      | 930      | 926      | 924      | 927      |     |

DAILY EXTREMES OF EACH COMPONENT OF TERRESTRIAL MAGNET FORCE: MAGNETIC CHARACTER FIGURES: TEMPERATURE IN MAGNET HOUSE.

June, 1924.

234. Eskdalemuir.

| Day. | Terrestrial Magnetic Force. |                           |           |                          |                          |                 |                           |                           |            |                           |                           |              |           |               |          | Character Figures. § |        | Magnetic Character of Day (0-2). | Temperature in Magnet House 200 + |
|------|-----------------------------|---------------------------|-----------|--------------------------|--------------------------|-----------------|---------------------------|---------------------------|------------|---------------------------|---------------------------|--------------|-----------|---------------|----------|----------------------|--------|----------------------------------|-----------------------------------|
|      | North Component.            |                           |           |                          |                          | West Component. |                           |                           |            |                           | Vertical Component.       |              |           |               |          | $\Sigma R^2$         | $\rho$ |                                  |                                   |
|      | Maximum 15,000 $\gamma$ +   | Minimum 15,000 $\gamma$ + | Range.    | Maximum 4,000 $\gamma$ + | Minimum 4,000 $\gamma$ + | Range.          | Maximum 44,000 $\gamma$ + | Minimum 44,000 $\gamma$ + | Range.     | Maximum 44,000 $\gamma$ + | Minimum 44,000 $\gamma$ + | Range.       |           |               |          |                      |        |                                  |                                   |
| 1    | h. m. 19 45                 | $\gamma$ 1056             | h. m. 089 | $\gamma$ 10 38           | h. m. 67                 | $\gamma$ 13 1   | h. m. 644                 | $\gamma$ 575              | h. m. 8 25 | $\gamma$ 69               | h. m. 20 40               | $\gamma$ 932 | h. m. 899 | $\gamma$ 12 5 | h. m. 33 | 100 $\gamma^2$ 103   | .40    | 0                                | a. 84.4                           |
| 2    | 19 0                        | 1051                      | 097       | 11 9                     | 54                       | 14 30           | 639                       | 574                       | 9 3        | 65                        | 8 0                       | 931          | 911       | 10 40         | 20       | 75                   | .29    | 0                                | 84.4                              |
| 3    | 20 3                        | 1051                      | 997       | 11 2                     | 54                       | 12 36           | 629                       | 574                       | 9 10       | 55                        | 17 45                     | 933          | 914       | 10 44         | 19       | 63                   | .24    | 0                                | 84.4                              |
| 4    | 17 59                       | 1058                      | 983       | 12 36                    | 75                       | 14 30           | 641                       | 589                       | 9 29       | 52                        | 18 40                     | 935          | 911       | 11 40         | 24       | 89                   | .34    | 0                                | 84.4                              |
| 5    | 20 11                       | 1057                      | 1004      | 14 28                    | 53                       | 15 39           | 630                       | 585                       | 6 24       | 45                        | 18 19                     | 936          | 913       | 11 3          | 23       | 54                   | .21    | 0                                | 84.5                              |
| 6    | 19 40                       | 1052                      | 1002      | 12 0                     | 50                       | 13 42           | 628                       | 578                       | 9 18       | 50                        | 18 30                     | 929          | 904       | 12 0          | 25       | 56                   | .22    | 0                                | 84.5                              |
| 7    | 19 20                       | 1058                      | 1003      | 13 41                    | 55                       | 13 50           | 626                       | 573                       | 9 26       | 53                        | 17 42                     | 930          | 907       | 12 10         | 23       | 64                   | .25    | 0                                | 84.6                              |
| 8    | 18 32                       | 1056                      | 984       | 12 16                    | 72                       | 14 42           | 637                       | 582                       | 8 6        | 55                        | 17 52                     | 932          | 908       | 12 35         | 24       | 88                   | .34    | 0                                | 84.6                              |
| 9    | 17 51                       | 1091                      | 1004      | 10 25                    | 87                       | 15 20           | 660                       | 572                       | 8 0        | 88                        | 19 34                     | 935          | 904       | 12 20         | 31       | 163                  | .63    | 1                                | 84.6                              |
| 10   | 16 6                        | 1252                      | 926       | 20 48                    | 326                      | 16 6            | 851                       | 532                       | 22 34      | 319                       | 16 36                     | 1216         | 877       | 24 0          | 339      | 3230                 | 12.51  | 2                                | 84.7                              |
| 11   | 22 44                       | 1137                      | 944       | 4 42                     | 193                      | 22 45           | 652                       | 517                       | 22 59      | 135                       | 16 46                     | 952          | 824       | 2 45          | 128      | 719                  | 2.78   | 2                                | 84.7                              |
| 12   | 22 40                       | 1072                      | 1001      | 12 40                    | 71                       | 22 41           | 623                       | 573                       | 4 45       | 50                        | 0 1                       | 940          | 912       | 9 36          | 28       | 83                   | .32    | 1                                | 84.7                              |
| 13   | 18 17                       | 1048                      | 1000      | 11 51                    | 48                       | 0 58            | 639                       | 570                       | 7 28       | 69                        | 19 2                      | 938          | 901       | 1 40          | 37       | 84                   | .33    | 1                                | 84.8                              |
| 14   | 17 35                       | 1038                      | 994       | 10 50                    | 44                       | 13 37           | 623                       | 571                       | 8 54       | 52                        | 8 5                       | 942          | 922       | 12 4          | 20       | 50                   | .20    | 0                                | 84.8                              |
| 15   | 18 4                        | 1077                      | 999       | 12 10                    | 78                       | 18 5            | 618                       | 575                       | 6 20       | 43                        | 18 10                     | 941          | 914       | 12 0          | 27       | 87                   | .34    | 0                                | 84.9                              |
| 16   | 18 6                        | 1074                      | 975       | 12 38                    | 99                       | 15 53           | 645                       | 565                       | 8 48       | 80                        | 18 26                     | 934          | 915       | 6 16</        |          |                      |        |                                  |                                   |

Mean values for periods of sixty minutes centred at the Hours of Greenwich Mean Time.

235. Eskdalemuir. (X.)

15,000 γ (-15 C.G.S. unit) +

July, 1924.

Table with 25 columns (Hour G.M.T., 0-24, Mean) and 31 rows (Day 1-31). Values range from 1030 to 1048.

TERRESTRIAL MAGNETIC FORCE : WEST COMPONENT.

Mean values for periods of sixty minutes centred at the Hours of Greenwich Mean Time.

236. Eskdalemuir. (-Y.)

4,000 γ (-04 C.G.S. unit) +

July, 1924.

Table with 25 columns (Hour G.M.T., 0-24, Mean) and 31 rows (Day 1-31). Values range from 573 to 626.

Q denotes an "International Quiet Day," while D denotes a disturbed day used for the computation of Tables 271-276.

Mean values for periods of sixty minutes centred at the Hours of Greenwich Mean Time.

July, 1924.

237. Eskdalemuir. (Z.)

44,000 γ (·44 C.G.S. unit) +

| Hour G.M.T. | 0.    | 1.    | 2.    | 3.    | 4.    | 5.    | 6.    | 7.    | 8.    | 9.    | 10.   | 11.   | Noon. | 13.   | 14.   | 15.   | 16.   | 17.   | 18.   | 19.   | 20.   | 21.   | 22.   | 23.   | 24.   | Mean. |
|-------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Day. 1      | γ 916 | γ 921 | γ 925 | γ 929 | γ 931 | γ 930 | γ 930 | γ 934 | γ 934 | γ 932 | γ 930 | γ 926 | γ 926 | γ 930 | γ 931 | γ 934 | γ 939 | γ 942 | γ 942 | γ 941 | γ 938 | γ 938 | γ 936 | γ 934 | γ 934 | γ 932 |
| 2           | 934   | 934   | 934   | 927   | 926   | 931   | 934   | 934   | 931   | 934   | 935   | 933   | 925   | 921   | 919   | 927   | 935   | 938   | 942   | 947   | 947   | 942   | 939   | 935   | 934   | 934   |
| 3 Q         | 933   | 932   | 930   | 933   | 935   | 936   | 934   | 937   | 937   | 933   | 925   | 918   | 918   | 922   | 925   | 933   | 938   | 940   | 941   | 943   | 941   | 938   | 937   | 937   | 937   | 933   |
| 4 Q         | 937   | 936   | 937   | 937   | 937   | 936   | 935   | 940   | 938   | 940   | 936   | 929   | 921   | 922   | 929   | 933   | 937   | 941   | 945   | 945   | 938   | 936   | 933   | 933   | 933   | 935   |
| 5           | 933   | 933   | 933   | 934   | 937   | 938   | 938   | 938   | 934   | 929   | 925   | 922   | 917   | 917   | 922   | 933   | 937   | 937   | 938   | 941   | 941   | 937   | 934   | 933   | 933   | 932   |
| 6           | 933   | 933   | 933   | 934   | 937   | 938   | 939   | 938   | 938   | 934   | 933   | 929   | 920   | 920   | 921   | 926   | 931   | 938   | 941   | 941   | 941   | 941   | 938   | 934   | 933   | 934   |
| 7           | 933   | 934   | 933   | 934   | 937   | 940   | 941   | 940   | 938   | 933   | 933   | 930   | 931   | 932   | 930   | 933   | 933   | 937   | 941   | 953   | 954   | 950   | 945   | 938   | 933   | 938   |
| 8           | 933   | 930   | 929   | 929   | 929   | 930   | 933   | 933   | 934   | 930   | 924   | 920   | 918   | 920   | 922   | 929   | 934   | 940   | 941   | 942   | 941   | 940   | 937   | 936   | 936   | 931   |
| 9 D         | 935   | 936   | 936   | 936   | 937   | 937   | 936   | 935   | 932   | 927   | 919   | 916   | 915   | 916   | 921   | 932   | 947   | 953   | 953   | 952   | 951   | 945   | 939   | 936   | 933   | 935   |
| 10          | 933   | 936   | 936   | 937   | 936   | 928   | 932   | 937   | 940   | 933   | 925   | 931   | 932   | 932   | 935   | 941   | 945   | 952   | 953   | 954   | 949   | 948   | 944   | 939   | 932   | 939   |
| 11          | 932   | 936   | 937   | 940   | 939   | 940   | 937   | 933   | 933   | 928   | 923   | 921   | 924   | 924   | 924   | 932   | 936   | 937   | 940   | 944   | 944   | 942   | 941   | 939   | 937   | 934   |
| 12          | 936   | 935   | 935   | 936   | 936   | 936   | 935   | 935   | 935   | 932   | 925   | 927   | 922   | 927   | 934   | 936   | 936   | 941   | 939   | 939   | 939   | 936   | 935   | 935   | 935   | 934   |
| 13          | 935   | 935   | 935   | 934   | 935   | 935   | 935   | 938   | 936   | 931   | 928   | 927   | 931   | 931   | 935   | 934   | 938   | 940   | 941   | 940   | 938   | 939   | 938   | 938   | 937   | 935   |
| 14          | 937   | 938   | 937   | 937   | 938   | 938   | 937   | 936   | 935   | 931   | 925   | 926   | 924   | 927   | 931   | 935   | 935   | 932   | 934   | 935   | 939   | 938   | 938   | 936   | 937   | 934   |
| 15          | 937   | 937   | 938   | 939   | 940   | 943   | 940   | 941   | 943   | 941   | 934   | 927   | 927   | 930   | 932   | 938   | 944   | 953   | 957   | 963   | 964   | 959   | 955   | 948   | 941   | 943   |
| 16          | 941   | 935   | 935   | 936   | 936   | 936   | 935   | 938   | 939   | 939   | 941   | 936   | 933   | 932   | 931   | 936   | 943   | 944   | 948   | 948   | 948   | 948   | 947   | 943   | 936   | 939   |
| 17          | 935   | 938   | 938   | 939   | 939   | 942   | 939   | 938   | 938   | 935   | 923   | 914   | 921   | 930   | 934   | 935   | 939   | 942   | 942   | 942   | 942   | 941   | 943   | 940   | 934   | 936   |
| 18          | 933   | 926   | 914   | 920   | 921   | 927   | 933   | 933   | 929   | 926   | 929   | 922   | 921   | 926   | 932   | 933   | 938   | 942   | 945   | 942   | 941   | 941   | 941   | 939   | 937   | 931   |
| 19          | 937   | 937   | 938   | 939   | 941   | 941   | 941   | 941   | 940   | 936   | 929   | 928   | 925   | 927   | 939   | 939   | 945   | 945   | 941   | 941   | 940   | 938   | 937   | 937   | 937   | 937   |
| 20 D        | 937   | 938   | 939   | 941   | 941   | 943   | 943   | 941   | 938   | 933   | 929   | 928   | 925   | 925   | 932   | 941   | 942   | 941   | 950   | 955   | 957   | 952   | 950   | 946   | 937   | 940   |
| 21          | 937   | 937   | 941   | 941   | 938   | 936   | 937   | 938   | 936   | 934   | 933   | 934   | 930   | 933   | 934   | 938   | 946   | 947   | 946   | 946   | 946   | 945   | 945   | 942   | 939   | 939   |
| 22          | 939   | 930   | 934   | 938   | 941   | 941   | 941   | 945   | 942   | 935   | 937   | 937   | 937   | 938   | 937   | 937   | 941   | 949   | 949   | 949   | 949   | 946   | 945   | 942   | 941   | 941   |
| 23 Q        | 940   | 940   | 940   | 940   | 941   | 944   | 944   | 940   | 940   | 936   | 928   | 922   | 923   | 925   | 932   | 936   | 936   | 940   | 940   | 941   | 943   | 943   | 941   | 941   | 941   | 937   |
| 24          | 941   | 940   | 940   | 940   | 941   | 944   | 944   | 941   | 940   | 937   | 934   | 930   | 927   | 930   | 938   | 942   | 944   | 944   | 944   | 944   | 944   | 942   | 940   | 940   | 940   | 940   |
| 25 D        | 940   | 940   | 940   | 937   | 941   | 940   | 937   | 940   | 940   | 936   | 929   | 926   | 924   | 925   | 929   | 937   | 945   | 949   | 955   | 956   | 958   | 952   | 947   | 945   | 944   | 940   |
| 26 D        | 944   | 944   | 943   | 943   | 944   | 944   | 941   | 940   | 940   | 940   | 934   | 932   | 928   | 937   | 950   | 963   | 969   | 969   | 969   | 961   | 956   | 952   | 947   | 945   | 945   | 947   |
| 27 D        | 945   | 945   | 946   | 945   | 937   | 922   | 918   | 912   | 908   | 911   | 908   | 912   | 918   | 928   | 934   | 943   | 949   | 956   | 967   | 969   | 965   | 963   | 953   | 935   | 933   | 937   |
| 28          | 932   | 936   | 936   | 933   | 937   | 939   | 939   | 941   | 944   | 943   | 939   | 935   | 934   | 939   | 946   | 950   | 950   | 948   | 949   | 951   | 949   | 948   | 947   | 946   | 946   | 942   |
| 29          | 946   | 945   | 944   | 944   | 942   | 944   | 944   | 948   | 948   | 952   | 948   | 946   | 940   | 940   | 944   | 950   | 952   | 953   | 952   | 948   | 948   | 948   | 947   | 946   | 946   | 947   |
| 30 Q        | 946   | 946   | 946   | 946   | 947   | 947   | 945   | 948   | 948   | 948   | 944   | 937   | 935   | 935   | 937   | 944   | 948   | 951   | 951   | 950   | 948   | 948   | 947   | 946   | 946   | 945   |
| 31 Q        | 946   | 947   | 947   | 944   | 948   | 947   | 946   | 947   | 947   | 948   | 944   | 940   | 935   | 932   | 937   | 943   | 951   | 952   | 952   | 951   | 948   | 948   | 946   | 946   | 946   | 945   |
| Mean        | 937   | 936   | 936   | 937   | 938   | 938   | 937   | 938   | 937   | 935   | 931   | 928   | 926   | 928   | 932   | 938   | 942   | 945   | 947   | 948   | 947   | 945   | 942   | 940   | 938   | 938   |

DAILY EXTREMES OF EACH COMPONENT OF TERRESTRIAL MAGNETIC FORCE: MAGNETIC CHARACTER FIGURES: TEMPERATURE IN MAGNET HOUSE.

July, 1924.

238. Eskdalemuir.

| Day. | Terrestrial Magnetic Force. |                    |        |                   |                   |                 |                    |                    |            |                    |                     |        |       |           |      | Character Figures. §  |      | Magnetic Character of Day (0-2). | Temperature in Magnet House 200 + |
|------|-----------------------------|--------------------|--------|-------------------|-------------------|-----------------|--------------------|--------------------|------------|--------------------|---------------------|--------|-------|-----------|------|-----------------------|------|----------------------------------|-----------------------------------|
|      | North Component.            |                    |        |                   |                   | West Component. |                    |                    |            |                    | Vertical Component. |        |       |           |      | ΣR <sup>2</sup>       | ρ    |                                  |                                   |
|      | Maximum 15,000 γ +          | Minimum 15,000 γ + | Range. | Maximum 4,000 γ + | Minimum 4,000 γ + | Range.          | Maximum 44,000 γ + | Minimum 44,000 γ + | Range.     | Maximum 44,000 γ + | Minimum 44,000 γ +  | Range. |       |           |      |                       |      |                                  |                                   |
| 1    | h. m. 0 1                   | γ 1059             | γ 1003 | h. m. 11 40       | γ 56              | h. m. 14 2      | γ 636              | γ 558              | h. m. 0 40 | γ 78               | h. m. 16 55         | γ 943  | γ 914 | h. m. 0 5 | γ 29 | 100γ <sup>2</sup> 101 | ·93  | I                                | a 85·4                            |
| 2    | 18 22                       | 1060               | 1002   | 12 39             | 58                | 14 32           | 636                | 567                | 9 10       | 69                 | 19 28               | 949    | 918   | 13 45     | 31   | 91                    | ·84  | I                                | 85·4                              |
| 3    | 17 40                       | 1052               | 989    | 10 50             | 63                | 12 44           | 629                | 566                | 9 0        | 63                 | 18 41               | 944    | 917   | 11 0      | 27   | 87                    | ·80  | 0                                | 85·5                              |
| 4    | 17 20                       | 1048               | 995    | 11 20             | 53                | 13 41           | 638                | 564                | 7 36       | 74                 | 18 10               | 946    | 920   | 12 8      | 26   | 90                    | ·83  | 0                                | 85·5                              |
| 5    | 19 52                       | 1055               | 994    | 12 5              | 61                | 14 40           | 630                | 564                | 7 59       | 66                 | 19 20               | 939    | 917   | 11 50     | 22   | 86                    | ·79  | 0                                | 85·5                              |
| 6    | 20 28                       | 1082               | 992    | 11 29             | 90                | 14 28           | 647                | 561                | 7 20       | 86                 | 18 20               | 941    | 917   | 12 20     | 24   | 161                   | 1·48 | I                                | 85·5                              |
| 7    | 19 2                        | 1083               | 996    | 11 12             | 87                | 16 26           | 639                | 568                | 9 22       | 71                 | 19 40               | 955    | 929   | 13 53     | 26   | 133                   | 1·23 | I                                | 85·5                              |
| 8    | 18 40                       | 1049               | 995    | 10 28             | 54                | 14 44           | 622                | 562                | 7 19       | 60                 | 19 20               | 943    | 917   | 11 10     | 26   | 72                    | ·66  | 0                                | 85·5                              |
| 9    | 19 29                       | 1092               | 985    | 12 40             | 107               | 16 36           | 654                | 552                | 7 14       | 102                | 19 0                | 957    | 891   | 12 11     | 66   | 262                   | 2·42 | 2                                | 85·6                              |
| 10   | 17 43                       | 1059               | 985    | 10 53             | 74                | 17 43           | 619                | 572                | 10 43      | 47                 | 18 40               | 956    | 924   | 10 0      | 32   | 87                    | ·80  | I                                | 85·6                              |
| 11   | 17 53                       | 1061               | 1000   | 12 10             | 61                | 14 8            | 628                | 573                | 8 5        | 55                 | 19 18               | 944    | 920   | 11 2      | 24   | 73                    | ·68  | I                                | 85·6                              |
| 12   | 20 11                       | 1054               | 1008   | 11 23             | 46                | 13 0            | 623                | 572                | 6 54       | 51                 | 17 0                | 943    | 919   | 12 15     | 24   | 53                    | ·49  | 0                                | 85·7                              |
| 13   | 17 52                       | 1045               | 996    | 12 5              | 49                | 13 2            | 619                | 561                | 8 3        | 58                 | 18 0                | 941    | 925   | 10 38     | 16   | 60                    | ·56  | 0                                | 85·7                              |
| 14   | 17 53                       | 1047               | 1011   | 11 39             | 36                | 17 15           | 619                | 570                | 7 7        | 49                 | 20 0                | 939    | 923   | 12 10     | 16   | 40                    | ·37  | 0                                | 85·9                              |
| 15   | 18 23                       | 1066               | 997    | 11 23             | 69                | 14 23           | 636                | 557                | 22 32      | 79                 | 19 32               | 964    | 927   | 11 0      | 37   | 124                   | 1·14 | I                                | 85·9                              |
| 16   | 19 50                       | 1055               | 989    | 12 15             | 66                | 14 50           | 628                | 561                | 1 47       | 67                 | 20 0                | 950    | 929   | 13 40     | 21   | 93                    | ·86  | I                                | 85·9                              |
| 17   | 18 36                       | 1049               | 998    | 11 10             | 51                | 14 0            | 632                | 554                | 8 43       | 78                 | 22 10               | 944    | 913   | 11 21     | 31   | 96                    | ·89  | I                                |                                   |

Mean values for periods of sixty minutes centred at the Hours of Greenwich Mean Time.

239. Eskdalemuir. (X.)

15,000  $\gamma$  (.15 C.G.S. unit) +

August, 1924.

| Hour G.M.T. | 0.       | 1.       | 2.       | 3.       | 4.       | 5.       | 6.       | 7.       | 8.       | 9.       | 10.      | 11.      | Noon.    | 13.      | 14.      | 15.      | 16.      | 17.      | 18.      | 19.      | 20.      | 21.      | 22.      | 23.      | 24.      | Mean.    |
|-------------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| Day.        | $\gamma$ | $\gamma$ | $\gamma$ | $\gamma$ | $\gamma$ | $\gamma$ | $\gamma$ | $\gamma$ | $\gamma$ | $\gamma$ | $\gamma$ | $\gamma$ | $\gamma$ | $\gamma$ | $\gamma$ | $\gamma$ | $\gamma$ | $\gamma$ | $\gamma$ | $\gamma$ | $\gamma$ | $\gamma$ | $\gamma$ | $\gamma$ | $\gamma$ | $\gamma$ |
| 1           | 1040     | 1038     | 1040     | 1039     | 1041     | 1045     | 1042     | 1039     | 1030     | 1021     | 1008     | 998      | 990      | 1003     | 1011     | 1018     | 1019     | 1022     | 1030     | 1040     | 1045     | 1044     | 1044     | 1041     | 1041     | 1029     |
| 2           | 1042     | 1036     | 1032     | 1036     | 1037     | 1041     | 1040     | 1035     | 1027     | 1016     | 1002     | 993      | 991      | 1000     | 1020     | 1029     | 1041     | 1048     | 1051     | 1047     | 1046     | 1045     | 1042     | 1041     | 1046     | 1031     |
| 3           | 1046     | 1046     | 1047     | 1046     | 1046     | 1044     | 1041     | 1031     | 1023     | 1017     | 1008     | 1005     | 1006     | 1004     | 1013     | 1027     | 1033     | 1036     | 1042     | 1046     | 1047     | 1043     | 1041     | 1038     | 1035     | 1032     |
| 4           | 1036     | 1043     | 1042     | 1037     | 1046     | 1043     | 1042     | 1034     | 1033     | 1021     | 1014     | 1003     | 1006     | 995      | 1020     | 1039     | 1043     | 1042     | 1048     | 1050     | 1050     | 1048     | 1049     | 1054     | 1043     | 1035     |
| 5 D         | 1043     | 1042     | 1049     | 1035     | 1037     | 1039     | 1036     | 1032     | 1032     | 1021     | 1011     | 1005     | 1014     | 1020     | 1018     | 1034     | 1036     | 1034     | 1046     | 1044     | 1042     | 1042     | 1053     | 1058     | 1054     | 1035     |
| 6           | 1054     | 1057     | 1031     | 1038     | 1042     | 1045     | 1031     | 1038     | 1033     | 1018     | 1010     | 999      | 994      | 999      | 1009     | 1022     | 1028     | 1042     | 1052     | 1051     | 1037     | 1040     | 1037     | 1035     | 1035     | 1031     |
| 7           | 1036     | 1035     | 1034     | 1035     | 1036     | 1034     | 1038     | 1034     | 1024     | 1023     | 1014     | 999      | 995      | 995      | 1004     | 1009     | 1024     | 1029     | 1052     | 1053     | 1048     | 1044     | 1046     | 1053     | 1038     | 1029     |
| 8           | 1038     | 1030     | 1037     | 1023     | 1029     | 1035     | 1038     | 1029     | 1027     | 1024     | 1018     | 1009     | 1009     | 1009     | 1010     | 1016     | 1030     | 1043     | 1046     | 1052     | 1044     | 1040     | 1036     | 1035     | 1036     | 1029     |
| 9           | 1037     | 1035     | 1034     | 1031     | 1030     | 1034     | 1035     | 1030     | 1025     | 1015     | 1006     | 1001     | 1006     | 1019     | 1024     | 1030     | 1034     | 1038     | 1047     | 1046     | 1039     | 1039     | 1036     | 1038     | 1035     | 1029     |
| 10          | 1035     | 1038     | 1038     | 1037     | 1037     | 1035     | 1034     | 1030     | 1026     | 1019     | 1015     | 1015     | 1018     | 1019     | 1026     | 1034     | 1042     | 1043     | 1039     | 1041     | 1043     | 1043     | 1043     | 1045     | 1048     | 1033     |
| 11 Q        | 1048     | 1041     | 1036     | 1038     | 1039     | 1039     | 1034     | 1029     | 1025     | 1015     | 1010     | 1012     | 1011     | 1015     | 1023     | 1033     | 1039     | 1043     | 1041     | 1043     | 1044     | 1041     | 1039     | 1039     | 1038     | 1032     |
| 12 Q        | 1039     | 1040     | 1040     | 1039     | 1040     | 1036     | 1037     | 1032     | 1022     | 1013     | 1011     | 1016     | 1021     | 1027     | 1032     | 1037     | 1040     | 1041     | 1047     | 1051     | 1049     | 1047     | 1046     | 1045     | 1044     | 1035     |
| 13          | 1044     | 1040     | 1042     | 1042     | 1040     | 1035     | 1030     | 1021     | 1016     | 1011     | 1013     | 1013     | 1020     | 1021     | 1025     | 1025     | 1037     | 1042     | 1047     | 1050     | 1049     | 1045     | 1044     | 1044     | 1042     | 1034     |
| 14          | 1042     | 1041     | 1041     | 1041     | 1041     | 1040     | 1035     | 1031     | 1025     | 1016     | 1002     | 998      | 1008     | 1018     | 1021     | 1032     | 1040     | 1045     | 1045     | 1046     | 1045     | 1044     | 1041     | 1041     | 1040     | 1033     |
| 15          | 1041     | 1041     | 1041     | 1042     | 1041     | 1041     | 1036     | 1032     | 1027     | 1021     | 1007     | 1004     | 1006     | 1022     | 1023     | 1025     | 1036     | 1044     | 1050     | 1051     | 1050     | 1046     | 1046     | 1045     | 1046     | 1034     |
| 16          | 1046     | 1043     | 1041     | 1042     | 1041     | 1041     | 1038     | 1032     | 1021     | 1008     | 996      | 1003     | 1012     | 1022     | 1036     | 1043     | 1041     | 1040     | 1050     | 1057     | 1047     | 1041     | 1041     | 1048     | 1051     | 1035     |
| 17 D        | 1052     | 1052     | 1049     | 1049     | 1051     | 1042     | 1038     | 1040     | 1034     | 1032     | 1018     | 1020     | 1028     | 1036     | 1047     | 1042     | 1047     | 1066     | 1066     | 1073     | 1028     | 1037     | 1043     | 1049     | 1062     | 1044     |
| 18 D        | 1062     | 1056     | 1047     | 1022     | 1042     | 1032     | 1028     | 1019     | 1013     | 1008     | 998      | 998      | 999      | 1014     | 1023     | 1030     | 1033     | 1038     | 1041     | 1033     | 1035     | 1039     | 1037     | 1035     | 1033     | 1028     |
| 19          | 1033     | 1033     | 1023     | 1031     | 1034     | 1033     | 1028     | 1027     | 1022     | 1009     | 995      | 994      | 1003     | 1011     | 1015     | 1019     | 1025     | 1027     | 1031     | 1037     | 1037     | 1034     | 1040     | 1035     | 1032     | 1024     |
| 20 Q        | 1033     | 1034     | 1033     | 1033     | 1034     | 1034     | 1033     | 1033     | 1028     | 1018     | 1009     | 1004     | 1004     | 1006     | 1014     | 1023     | 1033     | 1039     | 1043     | 1043     | 1043     | 1039     | 1038     | 1038     | 1038     | 1029     |
| 21 Q        | 1038     | 1035     | 1034     | 1034     | 1034     | 1034     | 1034     | 1033     | 1029     | 1023     | 1014     | 1004     | 1000     | 1004     | 1015     | 1021     | 1023     | 1029     | 1034     | 1040     | 1044     | 1043     | 1042     | 1038     | 1043     | 1028     |
| 22          | 1043     | 1039     | 1038     | 1038     | 1038     | 1038     | 1040     | 1038     | 1034     | 1025     | 1010     | 1001     | 999      | 1005     | 1017     | 1029     | 1034     | 1039     | 1052     | 1052     | 1045     | 1045     | 1044     | 1043     | 1039     | 1033     |
| 23          | 1040     | 1039     | 1039     | 1039     | 1039     | 1037     | 1039     | 1036     | 1031     | 1022     | 1015     | 1010     | 1016     | 1015     | 1019     | 1026     | 1030     | 1039     | 1045     | 1049     | 1053     | 1045     | 1039     | 1038     | 1040     | 1033     |
| 24          | 1040     | 1038     | 1036     | 1040     | 1039     | 1038     | 1036     | 1030     | 1020     | 1011     | 1001     | 1001     | 1009     | 1016     | 1024     | 1030     | 1039     | 1040     | 1044     | 1044     | 1041     | 1039     | 1044     | 1041     | 1044     | 1031     |
| 25 Q        | 1044     | 1043     | 1040     | 1040     | 1040     | 1039     | 1036     | 1031     | 1021     | 1015     | 1007     | 1006     | 1008     | 1015     | 1025     | 1031     | 1036     | 1040     | 1044     | 1044     | 1044     | 1044     | 1045     | 1045     | 1044     | 1033     |
| 26          | 1044     | 1044     | 1044     | 1040     | 1039     | 1036     | 1035     | 1029     | 1020     | 1011     | 1010     | 1015     | 1022     | 1033     | 1039     | 1045     | 1049     | 1050     | 1046     | 1043     | 1040     | 1039     | 1039     | 1039     | 1039     | 1035     |
| 27          | 1039     | 1039     | 1039     | 1039     | 1036     | 1035     | 1034     | 1029     | 1024     | 1021     | 1021     | 1021     | 1025     | 1029     | 1029     | 1036     | 1038     | 1042     | 1047     | 1043     | 1044     | 1042     | 1039     | 1039     | 1039     | 1035     |
| 28          | 1040     | 1040     | 1040     | 1040     | 1040     | 1040     | 1041     | 1040     | 1034     | 1025     | 1011     | 1008     | 1011     | 1026     | 1037     | 1046     | 1049     | 1066     | 1048     | 1050     | 1052     | 1052     | 1054     | 1054     | 1055     | 1039     |
| 29 D        | 1055     | 1058     | 1054     | 1040     | 1039     | 1041     | 1041     | 1039     | 1027     | 1020     | 1006     | 1002     | 1006     | 1020     | 1028     | 1037     | 1030     | 1030     | 1035     | 1036     | 1035     | 1034     | 1036     | 1035     | 1031     | 1032     |
| 30 D        | 1031     | 1027     | 1044     | 1044     | 1045     | 1040     | 1035     | 1035     | 1025     | 1010     | 1001     | 998      | 1009     | 1009     | 1022     | 1031     | 1036     | 1040     | 1045     | 1046     | 1045     | 1045     | 1045     | 1047     | 1046     | 1032     |
| 31          | 1046     | 1043     | 1044     | 1047     | 1043     | 1040     | 1040     | 1031     | 1008     | 1002     | 1003     | 1000     | 1006     | 1016     | 1031     | 1035     | 1037     | 1045     | 1050     | 1050     | 1050     | 1044     | 1042     | 1046     | 1047     | 1033     |
| Mean†       | 1042     | 1040     | 1040     | 1038     | 1039     | 1038     | 1037     | 1032     | 1025     | 1017     | 1008     | 1005     | 1008     | 1015     | 1023     | 1030     | 1036     | 1040     | 1045     | 1047     | 1044     | 1042     | 1042     | 1042     | 1042     | 1032     |

TERRESTRIAL MAGNETIC FORCE : WEST COMPONENT.

Mean values for periods of sixty minutes centred at the Hours of Greenwich Mean Time.

240. Eskdalemuir. (-Y.)

4,000  $\gamma$  (.04 C.G.S. unit) +

August, 1924.

| Hour G.M.T. | 0.       | 1.       | 2.       | 3.       | 4.       | 5.       | 6.       | 7.       | 8.       | 9.       | 10.      | 11.      | Noon.    | 13.      | 14.      | 15.      | 16.      | 17.      | 18.      | 19.      | 20.      | 21.      | 22.      | 23.      | 24.      | Mean.    |     |
|-------------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|-----|
| Day.        | $\gamma$ | $\gamma$ | $\gamma$ | $\gamma$ | $\gamma$ | $\gamma$ | $\gamma$ | $\gamma$ | $\gamma$ | $\gamma$ | $\gamma$ | $\gamma$ | $\gamma$ | $\gamma$ | $\gamma$ | $\gamma$ | $\gamma$ | $\gamma$ | $\gamma$ | $\gamma$ | $\gamma$ | $\gamma$ | $\gamma$ | $\gamma$ | $\gamma$ | $\gamma$ |     |
| 1           | 601      | 600      | 596      | 590      | 589      | 581      | 570      | 568      | 568      | 577      | 589      | 603      | 619      | 631      | 633      | 629      | 619      | 614      | 604      | 603      | 604      | 604      | 605      | 605      | 600      | 600      | 600 |
| 2           | 600      | 596      | 596      | 595      | 593      | 589      | 581      | 575      | 567      | 568      | 578      | 594      | 614      | 630      | 632      | 627      | 618      | 606      | 602      | 599      | 600      | 600      | 599      | 599      | 592      | 592      | 598 |
| 3           | 593      | 591      | 590      | 588      | 585      | 582      | 580      | 577      | 574      | 570      | 574      | 588      | 616      | 628      | 624      | 618      | 611      | 607      | 601      | 601      | 603      | 601      | 601      | 600      | 592      | 596      |     |
| 4           | 592      | 593      | 574      | 577      | 582      | 574      | 568      | 574      | 574      | 578      | 584      | 595      | 622      | 624      | 630      | 630      | 623      | 609      | 608      | 606      | 606      | 605      | 606      | 602      | 613      | 598      |     |
| 5 D         | 613      | 600      | 570      | 578      | 584      | 576      | 575      | 569      | 570      | 574      | 588      | 602      | 619      | 631      | 630      | 633      | 625      | 618      | 613      | 612      | 606      | 605      | 611      | 605      | 604      | 600      |     |
| 6           | 604      | 605      | 603      | 608      | 591      | 587      | 583      | 594      | 585      | 585      | 586      | 588      | 603      | 613      | 617      | 610      | 603      | 604      | 605      | 604      | 604      | 606      | 601      | 598      | 598      | 601      |     |
| 7           | 598      | 597      | 596      | 597      | 593      | 584      | 580      | 574      | 571      | 577      | 579      | 586      | 603      | 614      | 623      | 623      | 620      | 615      | 614      | 609      | 605      | 605      | 604      | 590      | 576      | 598      |     |
| 8           | 576      | 591      | 592      | 596      | 597      | 583      | 580      | 576      | 574      | 572      | 569      | 577      | 588      | 597      | 605      | 609      | 609      | 607      | 606      | 6        |          |          |          |          |          |          |     |

TERRESTRIAL MAGNETIC FORCE : VERTICAL COMPONENT.

Mean values for periods of sixty minutes centred at the Hours of Greenwich Mean Time.

241. Eskdalemuir. (Z.)

44,000  $\gamma$  (-44 C.G.S. unit) +

August, 1924.

| Hour G.M.T. | 0.  | 1.  | 2.  | 3.  | 4.  | 5.  | 6.  | 7.  | 8.  | 9.  | 10. | 11. | Noon. | 13. | 14. | 15. | 16. | 17. | 18. | 19. | 20. | 21. | 22. | 23. | 24. | Mean. |
|-------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-------|
| Day. 1      | 946 | 944 | 944 | 945 | 947 | 947 | 946 | 944 | 943 | 937 | 927 | 926 | 931   | 931 | 937 | 945 | 953 | 960 | 961 | 957 | 955 | 952 | 948 | 948 | 946 | 945   |
| 2           | 946 | 947 | 948 | 948 | 951 | 952 | 952 | 952 | 952 | 949 | 944 | 940 | 939   | 939 | 941 | 948 | 949 | 954 | 953 | 951 | 948 | 946 | 946 | 946 | 946 | 948   |
| 3           | 946 | 945 | 946 | 947 | 948 | 948 | 947 | 945 | 943 | 940 | 934 | 927 | 924   | 931 | 935 | 939 | 944 | 948 | 948 | 946 | 944 | 944 | 944 | 944 | 944 | 946   |
| 4           | 946 | 944 | 944 | 947 | 947 | 948 | 948 | 945 | 940 | 938 | 932 | 932 | 931   | 932 | 932 | 939 | 946 | 951 | 951 | 948 | 944 | 944 | 944 | 944 | 944 | 947   |
| 5 D         | 947 | 939 | 930 | †   | †   | †   | †   | †   | †   | †   | 934 | 932 | 928   | 932 | *   | *   | *   | *   | *   | *   | *   | *   | *   | *   | *   | —     |
| 6           | *   | *   | *   | *   | *   | *   | *   | *   | *   | *   | 940 | 940 | 939   | 939 | 943 | 952 | 960 | 960 | 960 | 960 | 959 | 955 | 951 | 951 | 949 | —     |
| 7           | 948 | 948 | 948 | 947 | 947 | 950 | 951 | 951 | 950 | 946 | 944 | 943 | 943   | 943 | 944 | 947 | 951 | 956 | 956 | 958 | 955 | 951 | 950 | 947 | 944 | 949   |
| 8           | 944 | 945 | 945 | 944 | 943 | 947 | 950 | 951 | 951 | 947 | 946 | 946 | 942   | 942 | 947 | 948 | 950 | 954 | 955 | 955 | 955 | 952 | 951 | 951 | 950 | 948   |
| 9           | 950 | 950 | 950 | 951 | 951 | 951 | 951 | 950 | 947 | 950 | 946 | 943 | 938   | 938 | 946 | 951 | 952 | 955 | 956 | 956 | 955 | 953 | 951 | 951 | 951 | 950   |
| 10          | 951 | 951 | 951 | 951 | 951 | 952 | 953 | 954 | 952 | 945 | 942 | 938 | 934   | 936 | 939 | 947 | 953 | 955 | 956 | 954 | 952 | 951 | 951 | 950 | 947 | 949   |
| 11 Q        | 947 | 947 | 947 | 948 | 951 | 952 | 954 | 950 | 950 | 947 | 942 | 939 | 940   | 943 | 947 | 947 | 952 | 947 | 955 | 951 | 951 | 951 | 951 | 951 | 951 | 948   |
| 12 Q        | 951 | 951 | 951 | 951 | 951 | 954 | 955 | 957 | 955 | 951 | 947 | 937 | 935   | 939 | 947 | 955 | 956 | 955 | 954 | 948 | 948 | 950 | 950 | 950 | 950 | 950   |
| 13          | 950 | 951 | 951 | 950 | 951 | 952 | 951 | 952 | 951 | 947 | 938 | 938 | 935   | 936 | 940 | 951 | 958 | 959 | 951 | 950 | 950 | 950 | 950 | 948 | 947 | 948   |
| 14          | 947 | 947 | 947 | 950 | 951 | 951 | 951 | 951 | 951 | 948 | 942 | 938 | 938   | 943 | 949 | 947 | 950 | 955 | 954 | 951 | 949 | 950 | 950 | 950 | 950 | 948   |
| 15          | 949 | 950 | 950 | 949 | 950 | 953 | 953 | 951 | 950 | 946 | 941 | 937 | 939   | 937 | 938 | 946 | 950 | 951 | 951 | 949 | 949 | 947 | 947 | 949 | 949 | 947   |
| 16          | 949 | 950 | 950 | 950 | 950 | 953 | 953 | 953 | 950 | 943 | 938 | 937 | 934   | 937 | 944 | 952 | 954 | 957 | 954 | 953 | 953 | 951 | 950 | 950 | 950 | 949   |
| 17 D        | 950 | 950 | 950 | 950 | 950 | 953 | 949 | 945 | 945 | 940 | 937 | 933 | 930   | 930 | 934 | 942 | 945 | 949 | 958 | 963 | 958 | 960 | 955 | 953 | 954 | 947   |
| 18 D        | 954 | 935 | 935 | 889 | 900 | 930 | 941 | 945 | 945 | 939 | 933 | 930 | 937   | 938 | 949 | 958 | 964 | 966 | 965 | 962 | 962 | 958 | 954 | 954 | 954 | 943.  |
| 19          | 954 | 954 | 951 | 949 | 953 | 958 | 958 | 955 | 954 | 951 | 950 | 946 | 943   | 945 | 950 | 955 | 961 | 962 | 961 | 958 | 954 | 957 | 954 | 954 | 954 | 954   |
| 20 Q        | 954 | 954 | 954 | 954 | 955 | 958 | 958 | 958 | 958 | 953 | 949 | 943 | 939   | 941 | 946 | 953 | 956 | 958 | 959 | 960 | 959 | 957 | 957 | 955 | 954 | 954   |
| 21 Q        | 954 | 954 | 954 | 954 | 954 | 958 | 958 | 955 | 955 | 953 | 949 | 938 | 934   | 935 | 942 | 950 | 955 | 957 | 954 | 954 | 954 | 953 | 954 | 954 | 953 | 951   |
| 22          | 952 | 952 | 951 | 952 | 952 | 952 | 951 | 951 | 950 | 949 | 945 | 941 | 934   | 931 | 938 | 945 | 948 | 949 | 950 | 952 | 952 | 952 | 951 | 951 | 951 | 948   |
| 23          | 951 | 950 | 949 | 952 | 952 | 953 | 953 | 955 | 953 | 952 | 950 | 946 | 941   | 941 | 945 | 950 | 951 | 953 | 953 | 952 | 954 | 954 | 954 | 954 | 951 | 951   |
| 24          | 951 | 950 | 949 | 948 | 949 | 952 | 952 | 953 | 952 | 949 | 944 | 936 | 929   | 934 | 942 | 948 | 950 | 953 | 953 | 952 | 952 | 953 | 953 | 952 | 950 | 948   |
| 25 Q        | 950 | 950 | 950 | 950 | 950 | 953 | 957 | 957 | 956 | 948 | 941 | 937 | 937   | 942 | 948 | 950 | 953 | 953 | 951 | 950 | 952 | 952 | 953 | 953 | 953 | 950   |
| 26          | 953 | 952 | 952 | 952 | 952 | 953 | 953 | 957 | 953 | 949 | 942 | 940 | 940   | 941 | 944 | 951 | 949 | 950 | 952 | 952 | 952 | 952 | 952 | 953 | 953 | 950   |
| 27          | 953 | 953 | 952 | 952 | 953 | 953 | 953 | 953 | 952 | 946 | 944 | 937 | 938   | 945 | 948 | 950 | 953 | 953 | 957 | 957 | 957 | 957 | 958 | 957 | 957 | 951   |
| 28          | 956 | 955 | 953 | 952 | 952 | 952 | 952 | 954 | 952 | 948 | 947 | 940 | 936   | 935 | 945 | 956 | 956 | 953 | 951 | 948 | 951 | 950 | 951 | 951 | 951 | 950   |
| 29 D        | 951 | 948 | 944 | 948 | 948 | 951 | 952 | 952 | 952 | 949 | 941 | 932 | 932   | 941 | 953 | 964 | 972 | 978 | 987 | 988 | 977 | 965 | 963 | 954 | 932 | 955   |
| 30 D        | 932 | 933 | 934 | 928 | 930 | 935 | 940 | 948 | 952 | 949 | 940 | 939 | 937   | 941 | 948 | 953 | 956 | 956 | 954 | 955 | 951 | 952 | 952 | 953 | 955 | 945   |
| 31          | 955 | 956 | 955 | 951 | 951 | 952 | 953 | 956 | 956 | 952 | 949 | 947 | 943   | 941 | 950 | 958 | 960 | 959 | 956 | 953 | 953 | 956 | 956 | 954 | 953 | 953   |
| Mean†       | 950 | 949 | 948 | 947 | 948 | 951 | 952 | 952 | 951 | 947 | 942 | 938 | 936   | 938 | 944 | 950 | 953 | 955 | 956 | 955 | 953 | 952 | 952 | 951 | 950 | 949   |

DAILY EXTREMES OF EACH COMPONENT OF TERRESTRIAL MAGNETIC FORCE :

242. Eskdalemuir.

MAGNETIC CHARACTER FIGURES : TEMPERATURE IN MAGNET HOUSE.

August, 1924.

| Day. | Terrestrial Magnetic Force. |                           |                          |                           |                           |              |                           |                           |             |              |              | Character Figures. § |             | Magnetic Character of Day (0-2). | Temperature in Magnet House 200 + |      |   |      |
|------|-----------------------------|---------------------------|--------------------------|---------------------------|---------------------------|--------------|---------------------------|---------------------------|-------------|--------------|--------------|----------------------|-------------|----------------------------------|-----------------------------------|------|---|------|
|      | North Component.            |                           |                          | West Component.           |                           |              | Vertical Component.       |                           |             | $\Sigma R^2$ | $\rho$       |                      |             |                                  |                                   |      |   |      |
|      | Maximum 15,000 $\gamma$ +   | Minimum 15,000 $\gamma$ + | Range.                   | Maximum 44,000 $\gamma$ + | Minimum 44,000 $\gamma$ + | Range.       | Maximum 44,000 $\gamma$ + | Minimum 44,000 $\gamma$ + | Range.      |              |              |                      |             |                                  |                                   |      |   |      |
| 1    | h. m. 18 43                 | $\gamma$ 1050             | $\gamma$ h. m. 983 11 58 | $\gamma$ 67               | h. m. 13 53               | $\gamma$ 636 | $\gamma$ 566              | h. m. 8 9                 | $\gamma$ 70 | h. m. 17 38  | $\gamma$ 964 | $\gamma$ 924         | h. m. 10 40 | $\gamma$ 40                      | 100 $\gamma^2$ 110                | 1.23 | I | 86.5 |
| 2    | 18 0                        | 1066                      | 990 11 46                | 76                        | 13 49                     | 639          | 566                       | 8 42                      | 73          | 17 0         | 955          | 939                  | 13 46       | 16                               | 114                               | 1.27 | I | 86.5 |
| 3    | 19 52                       | 1051                      | 992 11 19                | 59                        | 13 52                     | 629          | 568                       | 8 58                      | 61          | 4 58         | 949          | 923                  | 12 0        | 26                               | 79                                | .88  | O | 86.5 |
| 4    | 22 36                       | 1066                      | 975 13 3                 | 91                        | 12 42                     | 643          | 562                       | 6 30                      | 81          | 17 8         | 952          | 930                  | 12 43       | 22                               | 153                               | 1.71 | I | 86.6 |
| 5    | 1 31 }<br>22 3 }            | 1066                      | 998 11 18                | 68                        | 13 18                     | 644          | 560                       | 7 30                      | 84          | *            | *            | *                    | *           | *                                | —                                 | —    | I | 86.6 |
| 6    | 0 36                        | 1071                      | 989 12 20                | 82                        | 0 12                      | 630          | 579                       | 5 50                      | 51          | 17 5         | 960          | 938                  | 12 10       | 22                               | 98                                | 1.10 | I | 86.6 |
| 7    | 22 50                       | 1058                      | 994 11 58                | 64                        | 15 41                     | 626          | 568                       | 8 4                       | 58          | 16 40        | 959          | 942                  | 13 29       | 17                               | 77                                | .87  | I | 86.7 |
| 8    | 18 58                       | 1056                      | 1004 13 55               | 52                        | 16 26                     | 612          | 568                       | 9 0                       | 44          | 17 20        | 956          | 939                  | 12 16       | 17                               | 49                                | .55  | I | 86.7 |
| 9    | 18 20                       | 1051                      | 998 11 18                | 53                        | 15 42                     | 618          | 578                       | 8 22                      | 40          | 18 1         | 957          | 938                  | 12 39       | 19                               | 48                                | .53  | O | 86.7 |
| 10   | 16 25                       | 1049                      | 1011 11 28               | 38                        | 13 55                     | 617          | 574                       | 8 23                      | 43          | 17 34        | 957          | 932                  | 12 11       | 25                               | 39                                | .44  | O | 86.7 |
| 11   | 0 10                        | 1050                      | 1008 12 2                | 42                        | 13 51                     | 630          | 577                       | 8 58                      | 53          | 15 30        | 957          | 938                  | 10 42       | 19                               | 49                                | .55  | O | 86.8 |
| 12   | 19 20                       | 1054                      | 1007 9 46                | 47                        | 13 0                      | 621          | 572                       | 8 20                      | 49          | 7 20         | 958          | 934                  | 12 0        | 24                               | 52                                | .58  | O | 86.8 |
| 13   | 19 38                       | 1061                      | 1011 10 29               | 50                        | 12 48                     | 638          | 578                       | 6 12                      | 60          | 16 40        | 959          | 934                  | 12 30       | 25                               | 67                                | .75  | O | 86.8 |
| 14   | 17 12                       | 1050                      | 997 10 49                | 53                        | 13 0                      | 634          | 577                       | 8 0                       | 57          | 17 2         | 955          | 935                  | 11 30       | 20                               | 65                                | .72  | O | 86.9 |
| 15   | 18 34                       | 1055                      | 1003 10 59               | 52                        | 13 24                     | 622          | 568                       | 8 3                       | 54          | 5 50         | 954          | 936                  | 13 6        | 18                               | 59                                | .67  | O | 86.9 |
| 16   | 19 10                       | 1063                      | 993 9 59                 | 70                        | 13 38                     | 625          | 563                       | 7 31                      | 62          | 16 53        | 958          | 933                  | 12 23       | 25                               | 94                                | 1.05 | I | 86.9 |
| 17   | 19 11                       | 1118                      | 999 19 35                | 119                       | 19 22                     | 650          | 564                       | 5 30                      | 86          | 18 58        | 966          | 929                  | 12 23       | 37                               | 229                               | 2.57 | I | 86.9 |
| 18   | 0 30                        | 1077                      | 985 2 38                 | 92                        | 13 33                     | 628          | 543                       | 1 50                      | 85          | 17 20        | 966          | 867                  | 3 10        | 99                               | 255                               | 2.85 | I |      |

Mean values for periods of sixty minutes centred at the Hours of Greenwich Mean Time.

243. Eskdalemuir. (X.)

15,000 γ (·15 C.G.S. unit) +

September, 1924.

Table with 25 columns (Hour G.M.T., 0-24, Mean) and 31 rows (Day, 1-30). Contains magnetic force data for Eskdalemuir (X.) in 1924.

TERRESTRIAL MAGNETIC FORCE : WEST COMPONENT.

Mean values for periods of sixty minutes centred at the Hours of Greenwich Mean Time.

244. Eskdalemuir. (-Y.)

4,000 γ (·04 C.G.S. unit) +

September, 1924.

Table with 25 columns (Hour G.M.T., 0-24, Mean) and 31 rows (Day, 1-30). Contains magnetic force data for Eskdalemuir (-Y.) in 1924.

Q denotes an "International Quiet Day," while D denotes a disturbed day used for the computation of Tables 271-276.



TERRESTRIAL MAGNETIC FORCE : NORTH COMPONENT.
Mean values for periods of sixty minutes centred at the Hours of Greenwich Mean Time.

247. Eskdalemuir. (X.)

15,000 γ (.15 C.G.S. unit) +

October, 1924.

Table with 25 columns (Hour G.M.T., 0-24, Mean) and 32 rows (Day 1-31). Contains magnetic force data for the North Component at Eskdalemuir.

TERRESTRIAL MAGNETIC FORCE : WEST COMPONENT.

Mean values for periods of sixty minutes centred at the Hours of Greenwich Mean Time.

248. Eskdalemuir. (-Y.)

4,000 γ (.04 C.G.S. unit) +

October, 1924.

Table with 25 columns (Hour G.M.T., 0-24, Mean) and 32 rows (Day 1-31). Contains magnetic force data for the West Component at Eskdalemuir.

\* Light failed.

† Mean of 30 days; 6th omitted.

Q denotes an "International Quiet Day," while D denotes a disturbed day used for the computation of Tables 271-276.



249. Eskdalemuir. (Z.)

44,000  $\gamma$  (.44 C.G.S. unit) +

October, 1924.

| Hour G.M.T. | 0.       | 1.       | 2.       | 3.       | 4.       | 5.       | 6.       | 7.       | 8.       | 9.       | 10.      | 11.      | Noon.    | 13.      | 14.      | 15.      | 16.      | 17.      | 18.      | 19.      | 20.      | 21.      | 22.      | 23.      | 24.      | Mean.    |     |
|-------------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|-----|
| Day.        | $\gamma$ | $\gamma$ | $\gamma$ | $\gamma$ | $\gamma$ | $\gamma$ | $\gamma$ | $\gamma$ | $\gamma$ | $\gamma$ | $\gamma$ | $\gamma$ | $\gamma$ | $\gamma$ | $\gamma$ | $\gamma$ | $\gamma$ | $\gamma$ | $\gamma$ | $\gamma$ | $\gamma$ | $\gamma$ | $\gamma$ | $\gamma$ | $\gamma$ | $\gamma$ |     |
| 1           | 948      | 951      | 951      | 953      | 955      | 955      | 955      | 955      | 952      | 951      | 947      | 944      | 943      | 944      | 944      | 948      | 955      | 956      | 956      | 956      | 956      | 955      | 955      | 955      | 955      | 955      | 952 |
| 2           | 955      | 956      | 956      | 956      | 955      | 955      | 953      | 953      | 954      | 951      | 948      | 947      | 944      | 947      | 948      | 952      | 955      | 956      | 955      | 955      | 955      | 954      | 955      | 955      | 955      | 955      | 953 |
| 3           | 955      | 955      | 955      | 955      | 955      | 955      | 955      | 955      | 955      | 955      | 952      | 950      | 948      | 948      | 948      | 948      | 953      | 955      | 953      | 954      | 952      | 951      | 952      | 952      | 952      | 953      | 953 |
| 4           | 953      | 952      | 952      | 953      | 954      | 954      | 955      | 957      | 957      | 954      | 951      | 948      | 948      | 950      | 952      | 957      | 964      | 966      | 965      | 969      | 968      | 963      | 960      | 953      | 946      | 956      |     |
| 5           | 946      | 944      | 946      | 950      | 951      | 952      | 952      | 954      | 955      | 955      | 953      | 951      | 947      | 947      | 951      | 957      | 963      | 963      | 963      | 960      | 959      | 960      | 957      | 956      | 952      | 954      |     |
| 6           | 952      | 951      | 951      | 951      | 951      | 952      | 952      | 954      | 954      | 952      | 948      | 947      | 947      | 947      | 951      | 952      | 955      | 956      | 956      | 954      | 953      | 953      | 952      | 952      | 951      | 952      |     |
| 7           | 951      | 948      | 948      | 949      | 951      | 951      | 951      | 952      | 951      | 948      | 951      | 947      | 947      | 946      | 943      | 948      | 955      | 954      | 952      | 952      | 951      | 951      | 951      | 951      | 951      | 950      |     |
| 8           | 951      | 951      | 951      | 950      | 950      | 948      | 951      | 953      | 956      | 955      | 951      | 950      | 951      | 948      | 947      | 948      | 952      | 953      | 952      | 955      | 956      | 959      | 958      | 959      | 952      | 952      |     |
| 9           | 952      | 947      | 947      | 949      | 951      | 951      | 951      | 952      | 955      | 952      | 947      | 944      | 943      | 944      | 947      | 948      | 951      | 951      | 951      | 951      | 951      | 952      | 952      | 951      | 951      | 950      |     |
| 10          | 951      | 951      | 951      | 948      | 948      | 948      | 948      | 948      | 951      | 951      | 951      | 949      | 943      | 944      | 946      | 948      | 951      | 951      | 951      | 951      | 951      | 952      | 952      | 953      | 952      | 949      |     |
| 11 Q        | 952      | 951      | 951      | 951      | 951      | 949      | 950      | 948      | 948      | 948      | 947      | 944      | 942      | 940      | 944      | 951      | 955      | 955      | 952      | 952      | 955      | 955      | 954      | 952      | 951      | 950      |     |
| 12 Q        | 951      | 951      | 951      | 951      | 951      | 951      | 951      | 951      | 951      | 951      | 947      | 946      | 944      | 942      | 943      | 947      | 951      | 951      | 948      | 948      | 948      | 950      | 951      | 951      | 951      | 949      |     |
| 13          | 951      | 951      | 947      | 948      | 948      | 948      | 948      | 951      | 952      | 953      | 951      | 946      | 944      | 943      | 947      | 951      | 952      | 951      | 951      | 949      | 948      | 948      | 949      | 951      | 951      | 949      |     |
| 14 Q        | 951      | 951      | 951      | 951      | 951      | 950      | 950      | 951      | 951      | 948      | 946      | 943      | 943      | 943      | 944      | 949      | 951      | 951      | 950      | 950      | 950      | 951      | 951      | 951      | 951      | 949      |     |
| 15          | 951      | 951      | 951      | 950      | 948      | 948      | 947      | 947      | 948      | 948      | 945      | 939      | 937      | 940      | 943      | 945      | 947      | 946      | 944      | 944      | 944      | 944      | 944      | 946      | 947      | 946      |     |
| 16          | 947      | 944      | 940      | 941      | 941      | 940      | 941      | 941      | 943      | 943      | 940      | 939      | 941      | 946      | 947      | 951      | 948      | 947      | 947      | 947      | 948      | 948      | 948      | 948      | 948      | 944      |     |
| 17          | 948      | 940      | 939      | 936      | 939      | 940      | 943      | 947      | 951      | 952      | 951      | 946      | 944      | 944      | 947      | 951      | 951      | 951      | 948      | 950      | 951      | 951      | 952      | 951      | 948      | 947      |     |
| 18 D        | 948      | 948      | 949      | 944      | 935      | 939      | 940      | 944      | 947      | 951      | 946      | 944      | 948      | 952      | 959      | 961      | 963      | 960      | 956      | 955      | 956      | 955      | 955      | 952      | 951      | 950      |     |
| 19          | 951      | 951      | 951      | 947      | 947      | 947      | 947      | 948      | 950      | 949      | 944      | 940      | 943      | 947      | 948      | 951      | 952      | 951      | 951      | 951      | 951      | 951      | 951      | 951      | 947      | 949      |     |
| 20          | 947      | 943      | 946      | 947      | 947      | 947      | 947      | 947      | 948      | 944      | 942      | 940      | 939      | 943      | 944      | 947      | 951      | 949      | 948      | 948      | 950      | 947      | 947      | 947      | 944      | 946      |     |
| 21          | 944      | 943      | 943      | 943      | 943      | 940      | 942      | 943      | 947      | 947      | 943      | 940      | 939      | 942      | 947      | 951      | 956      | 961      | 964      | 965      | 960      | 956      | 952      | 951      | 949      | 949      |     |
| 22          | 949      | 942      | 939      | 939      | 939      | 943      | 943      | 947      | 948      | 951      | 951      | 947      | 947      | 947      | 951      | 955      | 956      | 955      | 952      | 952      | 951      | 951      | 951      | 948      | 946      | 948      |     |
| 23 D        | 946      | 925      | 926      | 927      | 930      | 926      | 914      | 922      | 938      | 941      | 943      | 943      | 944      | 944      | 946      | 950      | 951      | 954      | 956      | 961      | 976      | 973      | 964      | 935      | 915      | 943      |     |
| 24 D        | 915      | 910      | 900      | 893      | 874      | 853      | 868      | 893      | 913      | 939      | 948      | 955      | 952      | 951      | 953      | 956      | 956      | 956      | 955      | 952      | 955      | 955      | 953      | 946      | 936      | 930      |     |
| 25 D        | 936      | 935      | 935      | 932      | 927      | 915      | 918      | 924      | 934      | 939      | 943      | 944      | 948      | 952      | 956      | 960      | 963      | 962      | 956      | 956      | 956      | 953      | 954      | 954      | 953      | 944      |     |
| 26          | 953      | 952      | 951      | 951      | 951      | 951      | 951      | 951      | 953      | 953      | 952      | 950      | 952      | 955      | 956      | 957      | 957      | 956      | 956      | 955      | 955      | 952      | 952      | 951      | 951      | 953      |     |
| 27 D        | 951      | 951      | 951      | 951      | 949      | 948      | 948      | 950      | 954      | 955      | 951      | 948      | 950      | 951      | 955      | 956      | 956      | 956      | 961      | 964      | 964      | 966      | 960      | 951      | 946      | 954      |     |
| 28          | 946      | 943      | 935      | 943      | 947      | 948      | 950      | 951      | 951      | 951      | 951      | 951      | 948      | 948      | 952      | 955      | 955      | 952      | 952      | 951      | 951      | 951      | 951      | 951      | 951      | 949      |     |
| 29 Q        | 951      | 951      | 951      | 950      | 948      | 948      | 948      | 948      | 948      | 947      | 942      | 939      | 941      | 943      | 948      | 953      | 953      | 951      | 951      | 949      | 949      | 948      | 948      | 948      | 948      | 948      |     |
| 30 Q        | 948      | 947      | 947      | 947      | 947      | 947      | 947      | 947      | 947      | 946      | 939      | 935      | 938      | 943      | 948      | 951      | 951      | 948      | 948      | 948      | 947      | 946      | 947      | 947      | 948      | 946      |     |
| 31          | 948      | 948      | 946      | 944      | 944      | 944      | 944      | 944      | 945      | 942      | 939      | 939      | 943      | 944      | 947      | 947      | 947      | 947      | 946      | 946      | 944      | 944      | 948      | 954      | 951      | 945      |     |
| Mean†       | 948      | 946      | 945      | 945      | 944      | 943      | 944      | 946      | 948      | 949      | 947      | 945      | 945      | 946      | 948      | 952      | 954      | 954      | 953      | 953      | 954      | 953      | 952      | 951      | 948      | 949      |     |

DAILY EXTREMES OF EACH COMPONENT OF TERRESTRIAL MAGNETIC FORCE :  
 MAGNETIC CHARACTER FIGURES : TEMPERATURE IN MAGNET HOUSE.

250. Eskdalemuir.

October, 1924.

| Day. | Terrestrial Magnetic Force. |                           |          |                          |                          |                 |                           |                           |        |                           |                             |          |          |       |          | Character Figures.‡ |        | Magnetic Character of Day (0-2). | Temperature in Magnet House 200 + |
|------|-----------------------------|---------------------------|----------|--------------------------|--------------------------|-----------------|---------------------------|---------------------------|--------|---------------------------|-----------------------------|----------|----------|-------|----------|---------------------|--------|----------------------------------|-----------------------------------|
|      | North Component.            |                           |          |                          |                          | West Component. |                           |                           |        |                           | Vertical Component.         |          |          |       |          | $\Sigma R^2$        | $\rho$ |                                  |                                   |
|      | Maximum 15,000 $\gamma$ +   | Minimum 15,000 $\gamma$ + | Range.   | Maximum 4,000 $\gamma$ + | Minimum 4,000 $\gamma$ + | Range.          | Maximum 44,000 $\gamma$ + | Minimum 44,000 $\gamma$ + | Range. | Maximum 44,000 $\gamma$ + | Minimum 44,000 $\gamma$ +   | Range.   |          |       |          |                     |        |                                  |                                   |
| 1    | h. m.                       | $\gamma$                  | $\gamma$ | h. m.                    | $\gamma$                 | h. m.           | $\gamma$                  | $\gamma$                  | h. m.  | $\gamma$                  | h. m.                       | $\gamma$ | $\gamma$ | h. m. | $\gamma$ | 100 $\gamma^2$      |        |                                  | a                                 |
| 1    | 20 32                       | 1056                      | 1008     | 12 39                    | 48                       | 13 23           | 612                       | 563                       | 8 53   | 49                        | 17 0 }<br>19 12 }<br>20 0 } | 956      | 942      | 11 40 | 14       | 49                  | .53    | 0                                | 87.4                              |
| 2    | 17 30                       | 1041                      | 1003     | 10 58                    | 38                       | 13 41           | 610                       | 564                       | 8 35   | 46                        | 3 46                        | 956      | 944      | 12 3  | 12       | 37                  | .40    | 0                                | 87.4                              |
| 3    | 23 39                       | 1049                      | 998      | 11 24                    | 51                       | 14 52           | 609                       | 563                       | 9 3    | 46                        | 7 0                         | 956      | 947      | 12 20 | 9        | 48                  | .52    | 0                                | 87.4                              |
| 4    | 23 52                       | 1050                      | 989      | 10 51                    | 61                       | 13 34           | 629                       | 537                       | 24 0   | 92                        | 19 10                       | 972      | 943      | 24 0  | 29       | 130                 | 1.42   | 1                                | 87.4                              |
| 5    | 19 40                       | 1050                      | 993      | 12 48                    | 57                       | 14 6            | 607                       | 535                       | 0 7    | 72                        | 16 30                       | 964      | 943      | 0 1   | 21       | 89                  | .97    | 1                                | 87.4                              |
| 6    | 17 43                       | 1045                      | 1006     | 10 50                    | 39                       | 13 54           | 605                       | 572                       | 17 18  | 33                        | 17 33                       | 958      | 945      | 12 30 | 13       | 28                  | .30    | 0                                | 87.4                              |
| 7    | 19 57                       | 1062                      | 996      | 15 1                     | 66                       | 14 59           | 629                       | 568                       | 8 8    | 61                        | 15 43                       | 956      | 941      | 14 0  | 15       | 83                  | .90    | 1                                | 87.4                              |
| 8    | 18 27                       | 1048                      | 1005     | 10 20                    | 43                       | 14 5            | 612                       | 555                       | 23 33  | 57                        | 22 41                       | 960      | 947      | 14 30 | 13       | 53                  | .57    | 0                                | 87.3                              |
| 9    | 0 40                        | 1049                      | 1005     | 11 34                    | 44                       | 14 30           | 595                       | 558                       | 0 20   | 37                        | 8 16                        | 955      | 942      | 11 28 | 13       | 35                  | .38    | 0                                | 87.3                              |
| 10   | 18 34                       | 1044                      | 1005     | 11 55                    | 39                       | 13 12           | 610                       | 562                       | 8 43   | 48                        | 22 20                       | 954      | 942      | 13 0  | 12       | 40                  | .43    | 0                                | 87.3                              |
| 11   | 19 25                       | 1043                      | 1006     | 12 0                     | 37                       | 13 28           | 617                       | 569                       | 10 4   | 48                        | 20 10                       | 956      | 939      | 12 40 | 17       | 40                  | .43    | 0                                | 87.3                              |
| 12   | 23 2                        | 1043                      | 1002     | 11 2                     | 41                       | 14 10           | 609                       | 563                       | 9 28   | 46                        | 0 30                        | 952      | 940      | 13 15 | 12       | 39                  | .43    | 0                                | 87.3                              |
| 13   | 0 12                        | 1044                      | 995      | 11 32                    | 49                       | 13 1            | 607                       | 562                       | 8 20   | 45                        | 8 40                        | 955      | 943      | 13 0  | 12       | 46                  | .50    | 0                                | 87.3                              |
| 14   | 20 3                        | 1044                      | 1000     | 11 10                    | 44                       | 13 23           | 606                       | 558                       | 9 25   | 48                        | 16 0                        | 952      | 942      | 12 20 | 10       | 43                  | .47    | 0                                | 87.3                              |
| 15   | 19 32                       | 1063                      | 1001     | 11 16                    | 62                       | 14 35           | 611                       | 561                       | 9 28   | 50                        | 1 10                        |          |          |       |          |                     |        |                                  |                                   |

Mean values for periods of sixty minutes centred at the Hours of Greenwich Mean Time.

251. Eskdalemuir. (X.)

November, 1924.

15,000  $\gamma$  ( $\cdot 15$  C.G.S. unit) +

| Hour G.M.T. | 0.       | 1.       | 2.       | 3.       | 4.       | 5.       | 6.       | 7.       | 8.       | 9.       | 10.      | 11.      | Noon.    | 13.      | 14.      | 15.      | 16.      | 17.      | 18.      | 19.      | 20.      | 21.      | 22.      | 23.      | 24.      | Mean.    |
|-------------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| Day.        | $\gamma$ | $\gamma$ | $\gamma$ | $\gamma$ | $\gamma$ | $\gamma$ | $\gamma$ | $\gamma$ | $\gamma$ | $\gamma$ | $\gamma$ | $\gamma$ | $\gamma$ | $\gamma$ | $\gamma$ | $\gamma$ | $\gamma$ | $\gamma$ | $\gamma$ | $\gamma$ | $\gamma$ | $\gamma$ | $\gamma$ | $\gamma$ | $\gamma$ | $\gamma$ |
| 1D          | 1024     | 1026     | 1026     | 1029     | 1033     | 1034     | 1034     | 1030     | 1028     | 1021     | 1014     | 1011     | 1016     | 1025     | 1029     | 1030     | 1031     | 1037     | 1040     | 1041     | 1041     | 1035     | 1010     | 1013     | 1018     | 1027     |
| 2           | 1017     | 1018     | 1027     | 1021     | 1025     | 1032     | 1025     | 1025     | 1024     | 1020     | 1013     | 1013     | 1014     | 1016     | 1022     | 1023     | 1014     | 1014     | 1020     | 1020     | 1019     | 1023     | 1028     | 1027     | 1047     | 1021     |
| 3           | 1047     | 1039     | 1024     | 1023     | 1027     | 1029     | 1034     | 1033     | 1030     | 1022     | 1013     | 1009     | 1009     | 1011     | 1013     | 1010     | 1015     | 1028     | 1027     | 1022     | 1020     | 1019     | 1028     | 1033     | 1038     | 1023     |
| 4           | 1038     | 1032     | 1028     | 1029     | 1033     | 1033     | 1029     | 1029     | 1025     | 1023     | 1016     | 1014     | 1018     | 1021     | 1024     | 1024     | 1025     | 1025     | 1029     | 1031     | 1031     | 1028     | 1028     | 1029     | 1029     | 1027     |
| 5Q          | 1028     | 1029     | 1031     | 1032     | 1032     | 1033     | 1036     | 1032     | 1030     | 1024     | 1017     | 1013     | 1012     | 1016     | 1018     | 1026     | 1032     | 1033     | 1036     | 1036     | 1035     | 1035     | 1037     | 1035     | 1034     | 1029     |
| 6           | 1034     | 1033     | 1033     | 1037     | 1041     | 1043     | 1046     | 1042     | 1041     | 1038     | 1027     | 1027     | 1022     | 1024     | 1030     | 1032     | 1032     | 1037     | 1038     | 1042     | 1041     | 1029     | 1028     | 1014     | 1020     | 1034     |
| 7           | 1020     | 1022     | 1021     | 1028     | 1033     | 1038     | 1042     | 1037     | 1031     | 1026     | 1013     | 1016     | 1022     | 1019     | 1019     | 1022     | 1027     | 1031     | 1032     | 1033     | 1033     | 1032     | 1032     | 1032     | 1031     | 1028     |
| 8Q          | 1031     | 1028     | 1028     | 1032     | 1032     | 1033     | 1033     | 1032     | 1028     | 1023     | 1018     | 1016     | 1018     | 1022     | 1025     | 1028     | 1031     | 1033     | 1037     | 1036     | 1033     | 1034     | 1033     | 1032     | 1032     | 1029     |
| 9           | 1031     | 1028     | 1031     | 1032     | 1035     | 1036     | 1036     | 1037     | 1041     | 1032     | 1022     | 1026     | 1024     | 1023     | 1024     | 1029     | 1031     | 1033     | 1032     | 1022     | 1026     | 1035     | 1040     | 1031     | 1027     | 1031     |
| 10          | 1027     | 1031     | 1027     | 1028     | 1032     | 1035     | 1037     | 1037     | 1031     | 1026     | 1014     | 1007     | 1006     | 1017     | 1021     | 1021     | 1026     | 1037     | 1023     | 1035     | 1019     | 1025     | 1021     | 1026     | 1028     | 1025     |
| 11          | 1028     | 1034     | 1026     | 1029     | 1022     | 1025     | 1035     | 1032     | 1030     | 1022     | 1015     | 1012     | 1012     | 1017     | 1022     | 1022     | 1021     | 1021     | 1022     | 1023     | 1032     | 1022     | 1027     | 1031     | 1031     | 1024     |
| 12          | 1031     | 1029     | 1031     | 1031     | 1032     | 1034     | 1040     | 1037     | 1036     | 1027     | 1022     | 1017     | 1016     | 1018     | 1022     | 1023     | 1026     | 1031     | 1032     | 1029     | 1030     | 1028     | 1032     | 1036     | 1032     | 1029     |
| 13D         | 1031     | 1028     | 1024     | 1025     | 1026     | 1036     | 1043     | 1033     | 1035     | 1030     | 1016     | 1020     | 1020     | 1020     | 1019     | 1012     | 1016     | 1026     | 1029     | 1034     | 1041     | 1035     | 1028     | 1023     | 1027     | 1027     |
| 14          | 1027     | 1012     | 1022     | 1017     | 1022     | 1025     | 1030     | 1033     | 1030     | 1022     | 1017     | 1015     | 1016     | 1017     | 1017     | 1017     | 1021     | 1021     | 1024     | 1030     | 1030     | 1031     | 1031     | 1031     | 1031     | 1023     |
| 15          | 1031     | 1028     | 1026     | 1026     | 1026     | 1030     | 1032     | 1031     | 1030     | 1025     | 1021     | 1018     | *        | —        | —        | —        | —        | —        | —        | —        | —        | —        | —        | —        | —        | —        |
| 16          | *        | —        | —        | —        | —        | —        | —        | —        | —        | —        | *        | 1018     | 1017     | 1016     | 1021     | 1026     | 1030     | 1035     | 1031     | 1035     | 1032     | 1032     | 1031     | 1030     | 1031     | —        |
| 17Q         | 1030     | 1029     | 1029     | 1029     | 1034     | 1039     | 1043     | 1043     | 1029     | 1030     | 1021     | 1015     | 1014     | 1015     | 1019     | 1021     | 1024     | 1033     | 1032     | 1034     | 1034     | 1034     | 1034     | 1034     | 1034     | 1029     |
| 18Q         | 1032     | 1031     | 1030     | 1035     | 1034     | 1037     | 1038     | 1036     | 1034     | 1030     | 1024     | 1020     | 1020     | 1023     | 1026     | 1030     | 1034     | 1035     | 1038     | 1037     | 1035     | 1035     | 1034     | 1034     | 1034     | 1032     |
| 19D         | 1034     | 1034     | 1034     | 1035     | 1038     | 1038     | 1038     | 1038     | 1038     | 1034     | 1038     | 1038     | 1039     | 1039     | 1010     | 986      | 991      | 1004     | 1022     | 1023     | 1024     | 1022     | 1030     | 1030     | 1029     | 1027     |
| 20          | 1029     | 1023     | 1024     | 1025     | 1026     | 1029     | 1029     | 1029     | 1029     | 1026     | 1020     | 1019     | 1015     | 1016     | 1012     | 1021     | 1027     | 1030     | 1029     | 1029     | 1031     | 1032     | 1033     | 1033     | 1033     | 1026     |
| 21          | 1034     | 1030     | 1029     | 1029     | 1030     | 1035     | 1038     | 1033     | 1025     | 1024     | 1020     | 1016     | 1019     | 1024     | 1029     | 1033     | 1027     | 1029     | 1025     | 1024     | 1038     | 1033     | 1031     | 1031     | 1030     | 1029     |
| 22          | 1029     | 1028     | 1028     | 1034     | 1033     | 1034     | 1037     | 1034     | 1031     | 1024     | 1019     | 1015     | 1014     | 1016     | 1023     | 1027     | 1024     | 1028     | 1029     | 1029     | 1030     | 1026     | 1033     | 1033     | 1033     | 1028     |
| 23          | 1033     | 1029     | 1030     | 1031     | 1032     | 1033     | 1037     | 1037     | 1029     | 1028     | 1023     | 1020     | 1019     | 1024     | 1028     | 1033     | 1033     | 1037     | 1035     | 1035     | 1037     | 1038     | 1034     | 1034     | 1033     | 1031     |
| 24D         | 1033     | 1033     | 1034     | 1034     | 1037     | 1038     | 1042     | 1037     | 1033     | 1027     | 1023     | 1019     | 1004     | 985      | 990      | 1003     | 974      | 984      | 997      | 967      | 965      | 995      | 1000     | 1018     | 1009     | 1031     |
| 25          | 1009     | 1009     | 1008     | 1003     | 1008     | 1010     | 1009     | 1009     | 1009     | 1009     | 1005     | 1004     | 1001     | 1004     | 1012     | 1015     | 1012     | 1022     | 1023     | 1023     | 1020     | 1022     | 1022     | 1022     | 1022     | 1013     |
| 26D         | 1024     | 1023     | 1023     | 1028     | 1023     | 1027     | 1028     | 1027     | 1028     | 1026     | 1018     | 1018     | 1020     | 1022     | 1022     | 1024     | 1030     | 1032     | 1034     | 1038     | 1035     | 1025     | 1028     | 1023     | 1027     | 1026     |
| 27          | 1027     | 1027     | 1028     | 1026     | 1032     | 1036     | 1037     | 1037     | 1036     | 1032     | 1033     | 1032     | 1027     | 1024     | 1023     | 1023     | 1026     | 1033     | 1033     | 1032     | 1033     | 1032     | 1028     | 1028     | 1032     | 1030     |
| 28          | 1032     | 1027     | 1033     | 1037     | 1041     | 1045     | 1050     | 1047     | 1045     | 1047     | 1038     | 1023     | 1027     | 1028     | 1032     | 1034     | 1038     | 1040     | 1039     | 1034     | 1038     | 1039     | 1037     | 1037     | 1036     | 1037     |
| 29          | 1036     | 1032     | 1028     | 1029     | 1032     | 1027     | 1027     | 1031     | 1036     | 1028     | 1024     | 1023     | 1021     | 1019     | 1018     | 1017     | 1023     | 1033     | 1032     | 1032     | 1032     | 1032     | 1031     | 1028     | 1027     | 1028     |
| 30Q         | 1027     | 1028     | 1029     | 1032     | 1032     | 1033     | 1036     | 1033     | 1032     | 1032     | 1028     | 1022     | 1022     | 1020     | 1019     | 1022     | 1026     | 1028     | 1031     | 1032     | 1032     | 1032     | 1032     | 1032     | 1030     | 1029     |
| Meant†      | 1029     | 1028     | 1027     | 1029     | 1031     | 1033     | 1035     | 1034     | 1031     | 1027     | 1020     | 1018     | 1017     | 1019     | 1020     | 1022     | 1023     | 1027     | 1029     | 1029     | 1029     | 1029     | 1029     | 1029     | 1030     | 1027     |

TERRESTRIAL MAGNETIC FORCE : WEST COMPONENT.

Mean values for periods of sixty minutes centred at the Hours of Greenwich Mean Time.

252. Eskdalemuir. (-Y.)

November, 1924.

4,000  $\gamma$  ( $\cdot 04$  C.G.S. unit) +

| Hour G.M.T. | 0.       | 1.       | 2.       | 3.       | 4.       | 5.       | 6.       | 7.       | 8.       | 9.       | 10.      | 11.      | Noon.    | 13.      | 14.      | 15.      | 16.      | 17.      | 18.      | 19.      | 20.      | 21.      | 22.      | 23.      | 24.      | Mean.    |
|-------------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| Day.        | $\gamma$ | $\gamma$ | $\gamma$ | $\gamma$ | $\gamma$ | $\gamma$ | $\gamma$ | $\gamma$ | $\gamma$ | $\gamma$ | $\gamma$ | $\gamma$ | $\gamma$ | $\gamma$ | $\gamma$ | $\gamma$ | $\gamma$ | $\gamma$ | $\gamma$ | $\gamma$ | $\gamma$ | $\gamma$ | $\gamma$ | $\gamma$ | $\gamma$ | $\gamma$ |
| 1D          | 572      | 572      | 576      | 578      | 580      | 576      | 580      | 576      | 574      | 572      | 578      | 585      | 594      | 598      | 597      | 592      | 588      | 589      | 590      | 587      | 584      | 575      | 539      | 528      | 526      | 577      |
| 2           | 526      | 546      | 570      | 574      | 576      | 573      | 575      | 575      | 573      | 574      | 578      | 587      | 594      | 595      | 595      | 588      | 584      | 584      | 584      | 582      | 572      | 562      | 572      | 571      | 568      | 576      |
| 3           | 568      | 567      | 561      | 576      | 581      | 582      | 581      | 577      | 575      | 568      | 573      | 582      | 593      | 601      | 596      | 595      | 594      | 587      | 583      | 577      | 572      | 567      | 576      | 576      | 576      | 580      |
| 4           | 576      | 577      | 574      | 578      | 575      | 575      | 576      | 576      | 572      | 573      | 583      | 589      | 593      | 589      | 588      | 582      | 577      | 578      | 576      | 570      | 571      | 571      | 576      | 576      | 577      | 578      |
| 5Q          | 577      | 577      | 579      | 580      | 579      | 581      | 580      | 576      | 576      | 574      | 579      | 588      | 592      | 590      | 584      | 581      | 581      | 581      | 581      | 581      | 581      | 579      | 577      | 576      | 577      | 580      |
| 6           | 578      | 579      | 580      | 579      | 584      | 583      | 584      | 583      | 584      | 574      | 585      | 593      | 591      | 589      | 586      | 581      | 581      | 584      | 583      | 582      | 584      | 565      | 534      | 545      | 553      | 578      |
| 7           | 553      | 547      | 550      | 558      | 563      | 562      | 567      | 573      | 579      | 576      | 583      | 591      | 594      | 592      | 590      | 583      | 581      | 579      | 579      | 579      | 579      | 577      | 576      | 575      | 575      | 575      |
| 8Q          | 575      | 576      | 577      | 576      | 577      | 579      | 575      | 574      | 575      | 573      | 578      | 584      | 589      | 591      | 587      | 584      | 583      | 584      | 580      | 580      | 580      | 580      | 579      | 579      | 577      | 580      |
| 9           | 577      | 579      | 579      | 576      | 576      | 579      | 575      | 574      | 573      | 574      | 575      | 587      | 598      | 593      | 589      | 586      | 585      | 584      | 580      | 568      | 570      | 566      | 557      | 560      | 576      | 577      |
| 10          | 576      | 579      | 581      |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |



TERRESTRIAL MAGNETIC FORCE : NORTH COMPONENT.  
Mean values for periods of sixty minutes centred at the Hours of Greenwich Mean Time.

255. Eskdalemuir. (X.)

15,000  $\gamma$  ( $\cdot 15$  C.G.S. unit) +

December, 1924.

Table with 25 columns (Hour G.M.T. 0-24) and 1 Mean column. Rows include Day (1-31) and Mean†. Values range from 1022 to 1036.

TERRESTRIAL MAGNETIC FORCE : WEST COMPONENT.

Mean values for periods of sixty Minutes centred at the Hours of Greenwich Mean Time.

256. Eskdalemuir. (-Y.)

4,000  $\gamma$  ( $\cdot 04$  C.G.S. unit) +

December, 1924.

Table with 25 columns (Hour G.M.T. 0-24) and 1 Mean column. Rows include Day (1-31) and Mean†. Values range from 565 to 585.

\* Adjusting West Instrument (see p. 96).

† Mean of 29 days; 20th and 31st omitted.

Q denotes an "International Quiet Day," while D denotes a disturbed day used for the computation of Tables 271-276.

TERRESTRIAL MAGNETIC FORCE: VERTICAL COMPONENT.

Mean values for periods of sixty minutes centred at the Hours of Greenwich Mean Time.

257. Eskdalemuir. (Z.)

44,000  $\gamma$  (.44 C.G.S. unit) + .

December, 1924.

| Hour G.M.T. | 0.  | 1.  | 2.  | 3.  | 4.  | 5.  | 6.  | 7.  | 8.  | 9.  | 10. | 11. | Noon. | 13. | 14. | 15. | 16. | 17. | 18. | 19. | 20. | 21. | 22. | 23. | 24. | Mean. |
|-------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-------|
| Day. 1      | 936 | 936 | 936 | 936 | 935 | 933 | 933 | 932 | 932 | 931 | 932 | 932 | 931   | 931 | 933 | 934 | 935 | 936 | 937 | 937 | 937 | 937 | 936 | 935 | 935 | 934   |
| 2           | 936 | 933 | 933 | 934 | 935 | 936 | 936 | 936 | 933 | 929 | 929 | 929 | 933   | 934 | 937 | 937 | 939 | 941 | 941 | 941 | 941 | 940 | 938 | 937 | 937 | 936   |
| 3           | 937 | 934 | 932 | 934 | 936 | 936 | 936 | 936 | 936 | 934 | 934 | 934 | 936   | 936 | 937 | 937 | 938 | 937 | 937 | 937 | 937 | 937 | 937 | 937 | 937 | 936   |
| 4           | 936 | 936 | 936 | 934 | 934 | 936 | 934 | 934 | 934 | 934 | 933 | 933 | 933   | 933 | 936 | 936 | 936 | 936 | 936 | 936 | 936 | 936 | 936 | 936 | 934 | 935   |
| 5Q          | 935 | 935 | 934 | 934 | 934 | 934 | 934 | 934 | 934 | 934 | 934 | 933 | 930   | 933 | 935 | 937 | 938 | 938 | 937 | 937 | 937 | 938 | 938 | 938 | 938 | 937   |
| 6Q          | 937 | 936 | 935 | 934 | 934 | 934 | 934 | 935 | 935 | 936 | 935 | 934 | 934   | 934 | 934 | 934 | 934 | 934 | 934 | 934 | 934 | 934 | 934 | 934 | 934 | 934   |
| 7           | 934 | 934 | 933 | 933 | 931 | 931 | 932 | 933 | 934 | 934 | 934 | 934 | 934   | 931 | 933 | 934 | 934 | 934 | 935 | 943 | 950 | 946 | 942 | 938 | 937 | 935   |
| 8           | 935 | 934 | 934 | 934 | 930 | 932 | 931 | 932 | 932 | 933 | 934 | 934 | 934   | 934 | 937 | 938 | 938 | 942 | 942 | 942 | 942 | 942 | 939 | 937 | 935 | 937   |
| 9           | 937 | 937 | 935 | 935 | 934 | 934 | 934 | 934 | 934 | 934 | 934 | 934 | 937   | 938 | 938 | 938 | 938 | 937 | 938 | 937 | 937 | 937 | 938 | 937 | 937 | 936   |
| 10          | 938 | 936 | 935 | 935 | 935 | 934 | 934 | 933 | 933 | 935 | 936 | 936 | 936   | 938 | 939 | 939 | 938 | 937 | 936 | 936 | 935 | 935 | 936 | 936 | 936 | 935   |
| 11          | 935 | 935 | 935 | 935 | 934 | 934 | 934 | 934 | 933 | 935 | 939 | 940 | 940   | 940 | 939 | 938 | 938 | 937 | 936 | 935 | 934 | 934 | 935 | 935 | 934 | 926   |
| 12D         | 926 | 925 | 928 | 926 | 926 | 930 | 930 | 927 | 930 | 931 | 936 | 939 | 938   | 935 | 938 | 939 | 939 | 939 | 939 | 939 | 939 | 939 | 943 | 942 | 939 | 932   |
| 13D         | 933 | 928 | 932 | 935 | 932 | 931 | 931 | 932 | 932 | 932 | 936 | 937 | 939   | 939 | 939 | 939 | 939 | 937 | 937 | 936 | 936 | 935 | 936 | 936 | 935 | 935   |
| 14          | 935 | 933 | 933 | 934 | 933 | 933 | 935 | 934 | 933 | 932 | 935 | 936 | 934   | 932 | 933 | 937 | 937 | 936 | 936 | 936 | 936 | 936 | 936 | 936 | 936 | 935   |
| 15          | 935 | 936 | 936 | 935 | 935 | 933 | 932 | 932 | 932 | 932 | 932 | 933 | 933   | 931 | 932 | 932 | 934 | 935 | 936 | 939 | 948 | 949 | 944 | 944 | 940 | 936   |
| 16Q         | 937 | 936 | 936 | 937 | 937 | 936 | 936 | 936 | 936 | 936 | 936 | 934 | 932   | 931 | 935 | 937 | 937 | 937 | 937 | 937 | 937 | 937 | 936 | 936 | 936 | 936   |
| 17          | 936 | 936 | 936 | 936 | 934 | 933 | 933 | 933 | 933 | 933 | 933 | 933 | 932   | 933 | 933 | 936 | 936 | 936 | 936 | 936 | 936 | 936 | 936 | 936 | 936 | 936   |
| 18          | 940 | 933 | 932 | 932 | 933 | 933 | 933 | 932 | 933 | 932 | 930 | 932 | 932   | 932 | 933 | 937 | 936 | 936 | 935 | 934 | 933 | 933 | 933 | 933 | 933 | 933   |
| 19          | 934 | 934 | 934 | 934 | 934 | 934 | 934 | 933 | 932 | 931 | 932 | 929 | 930   | 932 | 937 | 938 | 938 | 938 | 938 | 938 | 939 | 939 | 939 | 938 | 937 | 935   |
| 20D         | 935 | 933 | 928 | 931 | 932 | 932 | 933 | 931 | 930 | 931 | 930 | 930 | 931   | 931 | 933 | 934 | 934 | 934 | 934 | 934 | 934 | 934 | 934 | 934 | 934 | 932   |
| 21D         | 932 | 926 | 923 | 930 | 927 | 919 | 928 | 931 | 934 | 933 | 934 | 934 | 938   | 942 | 942 | 942 | 942 | 942 | 942 | 942 | 943 | 942 | 941 | 939 | 938 | 939   |
| 22          | 940 | 939 | 938 | 937 | 935 | 935 | 935 | 935 | 936 | 935 | 935 | 937 | 937   | 935 | 939 | 942 | 939 | 939 | 939 | 939 | 939 | 939 | 938 | 938 | 936 | 937   |
| 23D         | 935 | 938 | 935 | 934 | 933 | 933 | 934 | 934 | 934 | 934 | 934 | 935 | 934   | 935 | 938 | 940 | 939 | 939 | 939 | 939 | 939 | 940 | 939 | 940 | 939 | 936   |
| 24          | 940 | 939 | 937 | 937 | 936 | 935 | 932 | 935 | 936 | 936 | 935 | 935 | 936   | 937 | 939 | 940 | 941 | 943 | 944 | 942 | 940 | 940 | 940 | 940 | 940 | 938   |
| 25          | 939 | 938 | 937 | 936 | 936 | 936 | 936 | 936 | 936 | 936 | 938 | 940 | 939   | 936 | 940 | 943 | 943 | 943 | 941 | 940 | 939 | 939 | 939 | 939 | 939 | 938   |
| 26          | 940 | 939 | 939 | 937 | 937 | 937 | 937 | 937 | 937 | 937 | 940 | 941 | 937   | 940 | 943 | 944 | 945 | 944 | 944 | 942 | 941 | 941 | 940 | 940 | 940 | 938   |
| 27          | 939 | 939 | 938 | 938 | 937 | 936 | 935 | 934 | 934 | 933 | 934 | 934 | 933   | 934 | 939 | 942 | 942 | 942 | 942 | 939 | 938 | 938 | 938 | 941 | 940 | 938   |
| 28          | 938 | 938 | 938 | 935 | 933 | 931 | 930 | 930 | 930 | 933 | 934 | 933 | 933   | 937 | 939 | 940 | 939 | 938 | 938 | 938 | 938 | 937 | 937 | 937 | 937 | 936   |
| 29Q         | 939 | 939 | 939 | 939 | 939 | 939 | 938 | 938 | 937 | 936 | 936 | 935 | 934   | 937 | 942 | 942 | 943 | 943 | 943 | 943 | 942 | 941 | 939 | 939 | 938 | 939   |
| 30Q         | 938 | 938 | 937 | 937 | 938 | 938 | 938 | 938 | 938 | 937 | 935 | 938 | 938   | 939 | 939 | 942 | 942 | 943 | 943 | 943 | 942 | 941 | 939 | 939 | 938 | 937   |
| 31          | 938 | 938 | 935 | 934 | 935 | 935 | 935 | 935 | 935 | 933 | *   | *   | *     | *   | *   | *   | *   | *   | 945 | 944 | 944 | 943 | 940 | 940 | 940 | —     |
| Mean†       | 936 | 935 | 935 | 935 | 934 | 934 | 934 | 934 | 934 | 934 | 934 | 935 | 935   | 935 | 937 | 938 | 939 | 938 | 938 | 939 | 938 | 938 | 937 | 936 | 936 | 936   |

DAILY EXTREMES OF EACH COMPONENT OF TERRESTRIAL MAGNETIC FORCE: MAGNETIC CHARACTER FIGURES: TEMPERATURE IN MAGNET HOUSE.

258. Eskdalemuir.

December, 1924.

| Day. | Terrestrial Magnetic Force. |      |                           |       |        |                          |     |                          |       |        |                           |     |                           |       |        | Character Figures.‡       |      | Magnetic Character of Day (0-2). | Temperature in Magnet House 200 °. |
|------|-----------------------------|------|---------------------------|-------|--------|--------------------------|-----|--------------------------|-------|--------|---------------------------|-----|---------------------------|-------|--------|---------------------------|------|----------------------------------|------------------------------------|
|      | North Component.            |      |                           |       |        | West Component.          |     |                          |       |        | Vertical Component.       |     |                           |       |        | ΣR <sup>2</sup>           | ρ    |                                  |                                    |
|      | Maximum 15,000 $\gamma$ +   |      | Minimum 15,000 $\gamma$ + |       | Range. | Maximum 4,000 $\gamma$ + |     | Minimum 4,000 $\gamma$ + |       | Range. | Maximum 44,000 $\gamma$ + |     | Minimum 44,000 $\gamma$ + |       | Range. |                           |      |                                  |                                    |
| 1    | h. m.                       | γ    | γ                         | h. m. | γ      | h. m.                    | γ   | γ                        | h. m. | γ      | h. m.                     | γ   | γ                         | h. m. | γ      | 100 $\gamma$ <sup>2</sup> |      |                                  |                                    |
| 2    | 21 23                       | 1046 | 1021                      | 13 33 | 25     | 13 12                    | 583 | 562                      | 20 50 | 21     | 20 53                     | 939 | 930                       | 12 53 | 9      | 11                        | .34  | 0                                | 86.2                               |
| 3    | 1 11                        | 1037 | 1015                      | 17 53 | 22     | 0 45                     | 583 | 566                      | 22 27 | 17     | 18 40                     | 943 | 928                       | 10 20 | 15     | 10                        | .30  | 0                                | 86.3                               |
| 4    | 24 0                        | 1052 | 1022                      | 15 29 | 30     | 2 10                     | 582 | 560                      | 24 0  | 22     | 15 58                     | 939 | 929                       | 2 20  | 10     | 15                        | .44  | 0                                | 86.3                               |
| 5    | 0 1                         | 1052 | 1021                      | 2 38  | 31     | 12 8                     | 582 | 559                      | 0 6   | 23     | 15 20                     | 937 | 932                       | 12 0  | 5      | 15                        | .45  | 0                                | 86.3                               |
| 6    | 8 0                         | 1040 | 1026                      | 11 55 | 14     | 12 42                    | 587 | 571                      | 20 40 | 16     | 19 40                     | 938 | 930                       | 12 0  | 8      | 5                         | .15  | 0                                | 86.3                               |
| 7    | 18 15                       | 1043 | 1029                      | 0 1   | 14     | 13 26                    | 588 | 571                      | 1 3   | 17     | 0 1                       | 937 | 933                       | 12 18 | 4      | 5                         | .15  | 0                                | 86.3                               |
| 8    | 14 10                       | 1046 | 991                       | 18 23 | 55     | 12 58                    | 591 | 564                      | 23 40 | 27     | 18 48                     | 951 | 930                       | 11 55 | 21     | 42                        | 1.25 | 1                                | 86.2                               |
| 9    | 7 33                        | 1049 | 1010                      | 16 10 | 39     | 12 9                     | 589 | 549                      | 21 43 | 40     | 17 38                     | 944 | 930                       | 4 10  | 14     | 33                        | .99  | 1                                | 86.2                               |
| 10   | 7 12                        | 1040 | 1016                      | 10 58 | 24     | 13 10                    | 589 | 561                      | 21 49 | 28     | 13 20                     | 939 | 933                       | 9 45  | 6      | 14                        | .42  | 0                                | 86.2                               |
| 11   | 19 18                       | 1039 | 1023                      | 9 40  | 16     | 13 2                     | 589 | 568                      | 22 39 | 21     | 13 0                      | 939 | 933                       | 6 35  | 6      | 7                         | .22  | 0                                | 86.1                               |
| 12   | 23 57                       | 1082 | 1019                      | 11 59 | 63     | 23 0                     | 582 | 552                      | 23 29 | 30     | 12 30                     | 941 | 926                       | 24 0  | 15     | 51                        | 1.52 | 1                                | 86.1                               |
| 13   | 23 59                       | 1082 | 1000                      | 11 0  | 82     | 13 27                    | 593 | 497                      | 21 9  | 96     | 21 22                     | 950 | 922                       | 0 10  | 28     | 167                       | 4.99 | 1                                | 86.1                               |
| 14   | 0 4                         | 1049 | 1015                      | 11 9  | 34     | 0 41                     | 585 | 545                      | 24 0  | 40     | 13 0                      | 940 | 927                       | 0 42  | 13     | 29                        | .87  | 1                                | 86.1                               |
| 15   | 0 18                        | 1039 | 1019                      | 11 36 | 20     | 13 43                    | 583 | 545                      | 0 9   | 38     | 16 0                      | 937 | 931                       | 13 10 | 6      | 19                        | .56  | 0                                | 86.1                               |
| 16   | 7 20                        | 1038 | 1001                      | 19 53 | 37     | 14 33                    | 587 | 541                      | 20 8  | 46     | 20 22                     | 952 | 931                       | 9 10  | 21     | 39                        | 1.17 | 1                                | 86.0                               |
| 17   | 0 45                        | 1034 | 1018                      | 12 40 | 16     | 14 0                     | 583 | 555                      | 0 30  | 28     | 19 40                     | 937 | 929                       | 12 40 | 8      | 11                        | .33  | 0                                | 86.1                               |
| 18   | 19 22                       | 1047 | 1008                      | 23 52 | 39     | 14 5                     | 588 | 532                      | 22 37 | 56     | 22 53                     | 946 | 932                       | 12 11 | 14     | 49                        |      |                                  |                                    |

DIURNAL INEQUALITIES OF THE GEOGRAPHICAL COMPONENTS OF MAGNETIC FORCE.—“ ALL ” DAYS.

(Not corrected for the effect of the North Force on the West Magnetograph, or vice versa, or for the effect of the Horizontal Force on the V.F. Balance.)

Departures from mean of the day adjusted for non-cyclic change.

Table 259: NORTH COMPONENT (all days except Feb. 26, 27; Aug. 5, 6; Oct. 6; Nov. 15, 16; Dec. 20, 31). 1924. Columns: Hour (1-24), G.M.T. (1-24), Month and Season, and 24 columns of magnetic force data.

Table 260: WEST COMPONENT (all days except Feb. 26, 27; Aug. 5, 6; Oct. 6; Nov. 15, 16; Dec. 20, 31). 1924. Columns: Month and Season, and 24 columns of magnetic force data.

Table 261: VERTICAL COMPONENT (all days except Feb. 26, 27; Aug. 5, 6; Oct. 6; Nov. 15, 16; Dec. 20, 31). 1924. Columns: Month and Season, and 24 columns of magnetic force data.

DIURNAL INEQUALITIES OF THE MAGNETIC COMPONENTS, DECLINATION, INCLINATION, AND HORIZONTAL FORCE: "ALL" DAYS.

Departures from mean of the day adjusted for non-cyclic change.

Table 262: Declination (measured positive towards the West) for Eskdalemuir, 1924. Columns include months (Jan-Dec), Year, Winter, Equinox, Summer, and hours (1-24). Values range from -1.85 to +1.97.

INCLINATION (all days except Feb. 26, 27; Aug. 5, 6; Oct. 6; Nov. 15, 16; Dec. 20, 31).

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1924.

Table 263: Inclination for Eskdalemuir, 1924. Columns include months (Jan-Dec), Year, Winter, Equinox, Summer, and hours (1-24). Values range from -0.47 to +0.37.

HORIZONTAL FORCE (all days except Feb. 26, 27; Aug. 5, 6; Oct. 6; Nov. 15, 16; Dec. 20, 31).

264. Eskdalemuir.

1924.

Table 264: Horizontal Force for Eskdalemuir, 1924. Columns include months (Jan-Dec), Year, Winter, Equinox, Summer, and hours (1-24). Values range from -1.8 to +7.0.

DIURNAL INEQUALITIES OF THE GEOGRAPHICAL COMPONENTS OF MAGNETIC FORCE.— INTERNATIONAL QUIET DAYS.

Departures from the mean of the day adjusted for non-cyclic change.

Table 265: Eskdalemuir. NORTH COMPONENT (Quiet Days). 1924. Columns: Hour (1-24), G.M.T. (1-24), Month and Season. Rows: Jan. to Dec., Year, Winter, Equinox, Summer.

Table 266: Eskdalemuir. WEST COMPONENT (Quiet Days). 1924. Columns: Hour (1-24), G.M.T. (1-24), Month and Season. Rows: Jan. to Dec., Year, Winter, Equinox, Summer.

Table 267: Eskdalemuir. VERTICAL COMPONENT (Quiet Days). 1924. Columns: Hour (1-24), G.M.T. (1-24), Month and Season. Rows: Jan. to Dec., Year, Winter, Equinox, Summer.



DIURNAL INEQUALITIES OF THE MAGNETIC COMPONENTS, DECLINATION, INCLINATION AND HORIZONTAL FORCE.—INTERNATIONAL QUIET DAYS.

Departures from mean of the day adjusted for non-cyclic change.

Table 268: Eskdalemuir. 1924. DECLINATION (measured positive towards the West) (Quiet Days). Columns: Hour (1-24), G.M.T., Month and Season, and values for each hour from Jan to Dec.

Table 269: Eskdalemuir. 1924. INCLINATION (Quiet Days). Columns: Hour (1-24), G.M.T., Month and Season, and values for each hour from Jan to Dec.

Table 270: Eskdalemuir. 1924. HORIZONTAL FORCE (Quiet Days). Columns: Hour (1-24), G.M.T., Month and Season, and values for each hour from Jan to Dec.

DIURNAL INEQUALITIES OF THE GEOGRAPHICAL COMPONENTS OF MAGNETIC FORCE.—SELECTED DISTURBED DAYS.

Departures from mean of the day adjusted for non-cyclic change.

Table 271: Eskdalemuir. NORTH COMPONENT (Disturbed Days). 1924. Columns: Hour. G.M.T. (1-24), Month and Season, and 24 columns of magnetic force data.

Table 272: Eskdalemuir. WEST COMPONENT (Disturbed Days). 1924. Columns: Month and Season, and 24 columns of magnetic force data.

Table 273: Eskdalemuir. VERTICAL COMPONENTS (Disturbed Days). 1924. Columns: Month and Season, and 24 columns of magnetic force data.

DIURNAL INEQUALITIES OF THE MAGNETIC COMPONENTS, DECLINATION, INCLINATION AND HORIZONTAL FORCE.—  
SELECTED DISTURBED DAYS.

Departures from mean of the day adjusted for non-cyclic change.

Table 274: Eskdalemuir. 1924. Declination (measured positive towards the West) (Disturbed Days). Columns: Hour (G.M.T. 1-24), Month and Season, and values for each hour from Jan to Dec, plus Year, Winter, Equinox, and Summer averages.

Table 275: Eskdalemuir. 1924. Inclination (Disturbed Days). Columns: Hour (G.M.T. 1-24), Month and Season, and values for each hour from Jan to Dec, plus Year, Winter, Equinox, and Summer averages.

Table 276: Eskdalemuir. 1924. Horizontal Force (Disturbed Days). Columns: Hour (G.M.T. 1-24), Month and Season, and values for each hour from Jan to Dec, plus Year, Winter, Equinox, and Summer averages.

RANGE OF MEAN DIURNAL INEQUALITIES FOR THE MONTHS, YEAR, AND SEASONS OF 1924.

NOTE.—The ranges are those shown in Tables 259 to 276, in the preparation of which the non-cyclic change has been eliminated.

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1924.

| Month and Season. | " All " Days. |      |      | Quiet Days. |      |      | Disturbed Days. |      |       | " All " Days. |      |      | Quiet Days. |      |      | Disturbed Days. |      |       |
|-------------------|---------------|------|------|-------------|------|------|-----------------|------|-------|---------------|------|------|-------------|------|------|-----------------|------|-------|
|                   | N.            | W.   | V.   | N.          | W.   | V.   | N.              | W.   | V.    | D.            | I.   | H.   | D.          | I.   | H.   | D.              | I.   | H.    |
| January ...       | 7             | 7    | 7    | 7           | 7    | 7    | 7               | 7    | 7     | /             | /    | 7    | /           | /    | 7    | /               | /    | 7     |
| February ...      | 12.8          | 24.5 | 22.1 | 8.1         | 14.6 | 5.8  | 25.1            | 56.3 | 106.6 | 5.24          | 0.91 | 10.9 | 2.94        | 0.54 | 7.7  | 11.75           | 3.14 | 29.0  |
| March ...         | 20.1          | 20.5 | 8.7  | 20.4        | 15.7 | 5.2  | 30.9            | 44.4 | 21.9  | 4.90          | 1.09 | 16.4 | 3.88        | 1.06 | 16.7 | 10.17           | 1.78 | 24.7  |
| April ...         | 30.5          | 36.5 | 15.7 | 21.9        | 31.2 | 11.2 | 41.2            | 65.8 | 30.1  | 8.42          | 1.70 | 26.8 | 6.75        | 1.06 | 17.7 | 14.82           | 2.12 | 28.6  |
| May ...           | 34.5          | 44.9 | 17.5 | 34.0        | 45.4 | 16.4 | 40.1            | 52.8 | 24.0  | 9.55          | 1.93 | 34.3 | 9.48        | 1.91 | 33.2 | 11.56           | 1.99 | 34.4  |
| June ...          | 44.2          | 39.4 | 25.9 | 40.4        | 35.5 | 20.9 | 72.2            | 49.7 | 94.0  | 8.40          | 2.58 | 46.4 | 7.78        | 2.39 | 41.0 | 9.27            | 4.33 | 79.2  |
| July ...          | 50.5          | 49.2 | 27.5 | 46.2        | 46.4 | 17.6 | 92.1            | 86.1 | 98.4  | 10.34         | 2.86 | 51.4 | 9.96        | 2.83 | 47.1 | 14.68           | 5.53 | 104.4 |
| August ...        | 46.6          | 52.9 | 21.2 | 46.5        | 54.3 | 19.6 | 51.4            | 65.2 | 37.9  | 10.75         | 2.83 | 47.8 | 11.21       | 2.90 | 47.0 | 13.41           | 2.82 | 55.0  |
| September ...     | 41.5          | 48.7 | 19.3 | 36.1        | 47.4 | 19.6 | 45.3            | 61.6 | 36.9  | 10.36         | 2.40 | 40.3 | 9.99        | 2.21 | 35.4 | 13.03           | 2.46 | 43.4  |
| October ...       | 38.3          | 40.2 | 18.4 | 42.4        | 51.8 | 17.5 | 43.2            | 49.9 | 58.0  | 9.07          | 2.07 | 35.4 | 10.55       | 2.65 | 41.1 | 11.25           | 3.08 | 46.7  |
| November ...      | 32.9          | 34.6 | 11.0 | 30.7        | 36.7 | 11.0 | 44.0            | 56.0 | 44.5  | 7.14          | 2.02 | 29.6 | 7.56        | 1.76 | 29.5 | 12.74           | 3.40 | 39.5  |
| December ...      | 18.1          | 24.3 | 11.6 | 20.7        | 13.9 | 6.1  | 25.6            | 51.8 | 34.0  | 5.43          | 0.97 | 15.2 | 3.31        | 1.19 | 18.5 | 11.04           | 1.89 | 16.5  |
| Year ...          | 11.6          | 16.1 | 5.1  | 6.6         | 12.9 | 5.6  | 24.1            | 30.1 | 9.8   | 3.53          | 0.68 | 9.8  | 2.75        | 0.36 | 5.7  | 6.12            | 1.48 | 22.6  |
| Winter ...        | 28.9          | 32.7 | 15.4 | 27.8        | 31.8 | 12.2 | 33.2            | 43.3 | 39.4  | 7.13          | 1.50 | 27.6 | 6.97        | 1.58 | 26.8 | 9.26            | 1.92 | 33.9  |
| Equinox ...       | 15.2          | 20.2 | 10.2 | 13.3        | 12.9 | 5.1  | 19.9            | 36.0 | 37.7  | 4.50          | 0.80 | 11.9 | 3.06        | 0.67 | 10.7 | 7.71            | 1.32 | 15.1  |
| Summer ...        | 33.0          | 38.6 | 14.8 | 30.8        | 39.9 | 13.2 | 36.4            | 47.3 | 33.4  | 8.32          | 1.79 | 30.1 | 8.43        | 1.79 | 29.5 | 10.58           | 2.39 | 31.3  |
| Year ...          | 45.7          | 47.4 | 23.0 | 41.8        | 45.0 | 18.7 | 58.5            | 55.4 | 57.6  | 9.88          | 2.61 | 45.4 | 9.70        | 2.55 | 41.8 | 10.61           | 3.32 | 66.3  |

NON-CYCLIC CHANGE (24h.—0h.).

MEAN VALUE OF THE SQUARES OF THE ABSOLUTE DAILY RANGES. (Unit, 100γ².)

278. Eskdalemuir.

1924.

279. Eskdalemuir.

1924.

| Month.        | " All " Days. |      |      | Quiet Days. |      |      | Disturbed Days. |       |      | R <sub>N</sub> | R <sub>W</sub> | R <sub>V</sub> | R <sub>N</sub> + R <sub>W</sub> | R <sub>N</sub> + R <sub>V</sub> | Mean Character Figure. |
|---------------|---------------|------|------|-------------|------|------|-----------------|-------|------|----------------|----------------|----------------|---------------------------------|---------------------------------|------------------------|
|               | N.            | W.   | V.   | N.          | W.   | V.   | N.              | W.    | V.   |                |                |                |                                 |                                 |                        |
| January ...   | 7             | 7    | 7    | 7           | 7    | 7    | 7               | 7     | 7    | 59.1           | 81.4           | 60.9           | 140.5                           | 201.5                           | 0.65                   |
| February ...  | +0.1          | -0.1 | -0.1 | +2.8        | +5.6 | -1.0 | -8.4            | -8.0  | +2.0 | 32.0           | 40.3           | *6.2           | 72.3                            | *80.2                           | 0.52                   |
| March ...     | +0.2          | 0.0  | -0.7 | +1.0        | +0.8 | -0.6 | -2.6            | -1.0  | +0.6 | 51.0           | 60.1           | 9.3            | 111.1                           | 120.3                           | 0.65                   |
| April ...     | +0.2          | -0.2 | -0.3 | +5.0        | +2.6 | -0.8 | 0.0             | -5.4  | -7.2 | 32.6           | 37.0           | 6.6            | 69.6                            | 76.2                            | 0.37                   |
| May ...       | +0.3          | -0.1 | -0.1 | +0.4        | +4.6 | +2.6 | -7.2            | -11.0 | +2.2 | 81.6           | 37.0           | 6.6            | 69.6                            | 76.2                            | 0.37                   |
| June ...      | 0.0           | -0.1 | +0.4 | +3.0        | +1.8 | -1.2 | -6.8            | -2.4  | +0.6 | 107.6          | 57.2           | 50.0           | 138.9                           | 188.9                           | 0.61                   |
| July ...      | +0.4          | -0.2 | +0.1 | +2.2        | +2.8 | -0.2 | -10.0           | -7.2  | +3.2 | 48.2           | 50.6           | 9.4            | 98.8                            | 108.3                           | 0.65                   |
| August ...    | -0.9          | -0.2 | +1.2 | +4.4        | +0.4 | +0.2 | -1.8            | -6.4  | -1.8 | 39.0           | 41.8           | †97.2          | 80.9                            | †89.4                           | 0.39                   |
| September ... | +0.2          | +0.2 | +0.3 | +1.0        | -0.2 | +1.0 | -3.4            | -3.2  | +2.0 | 55.5           | 61.2           | 18.4           | 116.7                           | 135.0                           | 0.70                   |
| October ...   | -0.1          | -0.4 | -0.1 | +3.6        | +0.2 | +0.8 | -3.6            | -5.8  | -1.0 | 38.7           | 44.6           | 8.5            | 83.3                            | 91.8                            | 0.55                   |
| November ...  | -0.6          | -0.9 | +0.1 | +1.4        | -0.2 | -0.8 | -2.8            | -11.0 | +1.0 | †24.5          | 34.2           | †116.6         | †59.7                           | †71.3                           | 0.47                   |
| December ...  | +0.5          | 0.0  | -0.6 | +2.8        | +1.8 | -1.8 | -7.2            | -32.6 | -3.6 | 13.0           | †18.3          | 2.0            | †31.6                           | †33.5                           | 0.32                   |
| Year 1924...  | +0.7          | +0.9 | -0.3 | +1.0        | +3.4 | -0.8 | -8.8            | -3.4  | +4.7 | 48.6           | 51.5           | 28.3           | 100.2                           | 121.2                           | 0.54                   |

\* Mean of 27 days ; † Mean of 30 days ; ‡ Mean of 29 days.

MEAN MONTHLY AND ANNUAL VALUES OF TERRESTRIAL MAGNETIC ELEMENTS.

(All days except those noted in monthly tables.)

280. Eskdalemuir.

1924.

| Month.        | North. | West. | Vertical | Total. | Declination (West). |      | Inclination (North). |      | Horizontal Force. |
|---------------|--------|-------|----------|--------|---------------------|------|----------------------|------|-------------------|
| January ...   | 7      | 7     | 7        | 7      | °                   | '    | °                    | '    | 7                 |
| February ...  | 16013  | 4628  | 44940    | 47932  | 16                  | 7.2  | 69                   | 39.0 | 16668             |
| March ...     | 16014  | 4624  | 44937    | 47929  | 16                  | 6.4  | 69                   | 39.0 | 16668             |
| April ...     | 16017  | 4620  | 44933    | 47926  | 16                  | 5.4  | 69                   | 38.7 | 16670             |
| May ...       | 16025  | 4615  | 44925    | 47920  | 16                  | 3.9  | 69                   | 38.1 | 16676             |
| June ...      | 16028  | 4610  | 44922    | 47918  | 16                  | 2.8  | 69                   | 37.9 | 16678             |
| July ...      | 16030  | 4603  | 44927    | 47923  | 16                  | 1.3  | 69                   | 38.0 | 16678             |
| August ...    | 16030  | 4598  | 44938    | 47933  | 16                  | 0.3  | 69                   | 38.4 | 16676             |
| September ... | 16032  | 4596  | 44949    | 47943  | 15                  | 59.8 | 69                   | 38.6 | 16678             |
| October ...   | 16029  | 4588  | 44952    | 47944  | 15                  | 58.4 | 69                   | 39.0 | 16673             |
| November ...  | 16028  | 4583  | 44949    | 47941  | 15                  | 57.4 | 69                   | 39.1 | 16670             |
| December ...  | 16027  | 4577  | 44944    | 47935  | 15                  | 56.3 | 69                   | 39.1 | 16668             |
| Year 1924 ... | 16030  | 4571  | 44936    | 47928  | 15                  | 54.9 | 69                   | 38.9 | 16669             |
| Year 1924 ... | 16025  | 4601  | 44938    | 47931  | 16                  | 1.2  | 69                   | 38.7 | 16673             |

Values of  $a_n, b_n$  in the series  $\Sigma (a_n \cos 15nt^\circ + b_n \sin 15nt^\circ)$ ,  $t$  being reckoned in hours from midnight G.M.T.

(Longitude of Eskdalemuir Observatory,  $3^\circ 12' W.$ )

281. Eskdalemuir.

1924.

| Month and Season.      | North Component. |        |        |        |        |        |        |        | West Component. |        |        |        |        |        |        |        | Vertical Component. |        |        |        |        |        |        |        |
|------------------------|------------------|--------|--------|--------|--------|--------|--------|--------|-----------------|--------|--------|--------|--------|--------|--------|--------|---------------------|--------|--------|--------|--------|--------|--------|--------|
|                        | $a_1.$           | $b_1.$ | $a_2.$ | $b_2.$ | $a_3.$ | $b_3.$ | $a_4.$ | $b_4.$ | $a_1.$          | $b_1.$ | $a_2.$ | $b_2.$ | $a_3.$ | $b_3.$ | $a_4.$ | $b_4.$ | $a_1.$              | $b_1.$ | $a_2.$ | $b_2.$ | $a_3.$ | $b_3.$ | $a_4.$ | $b_4.$ |
| <i>"All" Days.</i>     |                  |        |        |        |        |        |        |        |                 |        |        |        |        |        |        |        |                     |        |        |        |        |        |        |        |
| Jan.                   | +1.8             | +2.0   | -3.4   | -1.1   | +0.9   | -1.2   | -0.1   | +0.5   | -8.7            | -0.4   | +0.2   | +3.1   | -1.1   | -0.7   | +0.9   | +0.5   | +0.6                | -7.6   | -2.5   | -2.8   | -0.5   | -1.2   | -0.1   | -0.1   |
| Feb.                   | +5.5             | +1.3   | -4.2   | -1.7   | +2.5   | -1.0   | -0.5   | +0.6   | -6.1            | -1.9   | +1.9   | +4.1   | +0.5   | -1.4   | 0.0    | +1.3   | +0.7                | -3.7   | -1.7   | +0.1   | +0.7   | +0.4   | -0.4   | -0.5   |
| Mar.                   | +11.6            | +0.8   | -6.0   | -0.9   | +2.9   | -2.0   | -0.4   | +0.7   | -8.9            | -6.8   | +3.5   | +8.7   | -1.7   | -3.3   | +2.0   | +1.3   | +1.2                | -5.4   | -3.8   | -1.4   | +1.4   | +0.6   | -0.9   | -0.3   |
| Apr.                   | +12.8            | -1.9   | -7.7   | +1.0   | +3.7   | -1.8   | -0.5   | +1.3   | -5.7            | -12.0  | +4.3   | +9.4   | -2.2   | -4.0   | +0.9   | +1.8   | +4.4                | -2.6   | -4.2   | -0.7   | +1.9   | +0.2   | -0.8   | -0.2   |
| May                    | +13.5            | -7.5   | -8.8   | +3.3   | +1.3   | -1.1   | +0.8   | +1.4   | -6.2            | -12.5  | +3.2   | +8.0   | -3.3   | -2.2   | +1.0   | -0.1   | +4.2                | -7.8   | -5.5   | -0.9   | +1.8   | 0.0    | -0.5   | +0.6   |
| June                   | +14.8            | -7.7   | -11.3  | +1.0   | +2.5   | -1.0   | +0.6   | 0.0    | -5.5            | -18.3  | +2.9   | +10.7  | -1.9   | -2.0   | +0.3   | +0.2   | +1.8                | -7.6   | -7.6   | -1.9   | +2.1   | +0.7   | +0.1   | -0.3   |
| July                   | +13.9            | -6.8   | -10.6  | +2.2   | +0.8   | -1.5   | +0.6   | +1.2   | -6.1            | -18.5  | +4.8   | +9.5   | -3.4   | -1.9   | +0.8   | +0.5   | +4.5                | -3.7   | -5.3   | -1.1   | +1.1   | +0.4   | -0.7   | +0.1   |
| Aug.                   | +14.7            | -5.1   | -8.0   | +2.4   | +2.0   | -1.5   | +0.5   | +1.1   | -6.2            | -14.0  | +7.4   | +8.1   | -4.2   | -3.4   | +0.4   | +0.8   | +4.1                | -2.2   | -5.2   | -0.6   | +2.8   | -0.2   | -0.3   | -0.1   |
| Sept.                  | +15.0            | -3.1   | -7.5   | +2.2   | +1.5   | -2.2   | +0.5   | +1.2   | -10.5           | -10.6  | +4.9   | +6.6   | -3.2   | -2.3   | +1.8   | +1.8   | +2.1                | -5.2   | -4.0   | -1.4   | +2.1   | -0.1   | -0.4   | +0.3   |
| Oct.                   | +13.0            | -0.3   | -6.7   | 0.0    | +2.1   | -2.1   | +0.1   | +0.7   | -7.2            | -7.1   | -0.5   | +6.4   | -4.0   | -3.9   | +2.3   | +1.6   | +0.5                | -4.4   | -1.2   | -1.4   | +1.4   | +0.2   | -1.2   | -0.3   |
| Nov.                   | +4.5             | +2.4   | -4.4   | -1.1   | +1.2   | -1.1   | +0.7   | +0.5   | -7.7            | -3.0   | -0.8   | +4.9   | -2.3   | -0.4   | +0.7   | +1.0   | +0.9                | -4.7   | -1.9   | +0.1   | +0.6   | -0.7   | -0.7   | -0.3   |
| Dec.                   | +2.2             | +1.0   | -2.6   | -1.0   | +1.1   | -1.5   | +0.1   | +0.5   | -5.2            | -1.8   | +0.4   | +2.8   | -1.3   | -0.6   | +0.8   | +0.6   | +0.4                | -2.7   | -0.3   | 0.0    | +0.2   | -0.2   | -0.3   | -0.2   |
| Year                   | +10.3            | -2.1   | -6.8   | +0.5   | +1.9   | -1.5   | +0.2   | +0.8   | -7.0            | -8.9   | +2.7   | +6.9   | -2.4   | -2.2   | +1.0   | +0.9   | +2.1                | -4.8   | -3.6   | -1.0   | +1.3   | 0.0    | -0.5   | -0.1   |
| W.                     | +3.5             | +1.7   | -3.7   | -1.2   | +1.4   | -1.2   | 0.0    | +0.5   | -6.9            | -1.8   | +0.4   | +3.7   | -1.3   | -0.8   | +0.6   | +0.9   | +0.6                | -4.7   | -1.6   | -0.7   | +0.2   | -0.4   | -0.4   | -0.3   |
| Eq.                    | +13.1            | -1.1   | -7.0   | +0.6   | +2.6   | -2.0   | -0.1   | +1.0   | -8.1            | -9.1   | +3.0   | +7.8   | -2.8   | -3.4   | +1.7   | +1.6   | +2.1                | -4.4   | -3.3   | -1.2   | +1.7   | +0.2   | -0.9   | -0.1   |
| S.                     | +14.2            | -6.8   | -9.7   | +2.2   | +1.6   | -1.3   | +0.6   | +0.9   | -6.0            | -15.8  | +4.6   | +9.1   | -3.2   | -2.4   | +0.6   | +0.3   | +3.6                | -5.3   | -5.9   | -1.1   | +1.9   | +0.2   | -0.4   | +0.1   |
| <i>Quiet Days.</i>     |                  |        |        |        |        |        |        |        |                 |        |        |        |        |        |        |        |                     |        |        |        |        |        |        |        |
| Year                   | +9.9             | -2.1   | -6.6   | +0.7   | +1.8   | -1.2   | +0.1   | +0.7   | -3.8            | -7.8   | +4.0   | +6.0   | -2.9   | -2.6   | +1.1   | +1.0   | +3.2                | -0.7   | -3.1   | -0.1   | +1.7   | +0.1   | -0.7   | -0.1   |
| W.                     | +3.2             | +0.4   | -3.8   | -1.2   | +1.4   | -0.6   | -0.3   | +0.2   | -3.6            | -1.3   | +0.8   | +2.6   | -1.5   | -0.8   | +0.8   | +0.6   | +1.1                | -1.3   | -0.9   | +0.2   | +0.6   | -0.1   | -0.3   | 0.0    |
| Eq.                    | +11.5            | -2.1   | -6.6   | +1.8   | +2.4   | -1.7   | -0.3   | +1.1   | -4.8            | -8.7   | +5.1   | +7.2   | -3.6   | -4.0   | +1.5   | +1.9   | +3.4                | -0.3   | -3.2   | -0.2   | +2.3   | +0.1   | -1.0   | -0.2   |
| S.                     | +15.1            | -4.5   | -9.5   | +1.6   | +1.6   | -1.3   | +0.8   | +0.8   | -3.0            | -13.6  | +6.2   | +8.3   | -3.7   | -2.8   | +1.1   | +0.5   | +5.0                | -0.5   | -5.2   | -0.2   | +2.3   | +0.1   | -0.7   | 0.0    |
| <i>Disturbed Days.</i> |                  |        |        |        |        |        |        |        |                 |        |        |        |        |        |        |        |                     |        |        |        |        |        |        |        |
| Year                   | +10.7            | -3.8   | -8.0   | +1.8   | +2.2   | -1.7   | +0.6   | +0.6   | -14.2           | -11.2  | -0.6   | +8.5   | -1.8   | -2.4   | +1.4   | +0.4   | -1.3                | -16.5  | -5.9   | -3.4   | +1.4   | +0.3   | -0.4   | 0.0    |
| W.                     | +4.7             | +2.7   | -5.1   | -3.0   | +0.9   | -1.7   | +0.3   | +0.5   | -14.0           | -4.2   | -0.7   | +4.6   | -0.9   | -1.9   | -0.2   | +1.0   | -0.6                | -13.7  | -4.9   | -3.5   | -0.9   | -0.9   | -0.5   | -0.8   |
| Eq.                    | +14.3            | -0.6   | -7.2   | +2.0   | +2.2   | -2.3   | +0.4   | +0.1   | -14.5           | -9.5   | +0.4   | +8.6   | -1.8   | -2.9   | +3.2   | +1.6   | -1.0                | -12.6  | -2.8   | -3.8   | +1.5   | +0.8   | -0.9   | +1.0   |
| S.                     | +13.1            | -13.6  | -11.6  | +6.5   | +3.5   | -1.1   | +1.1   | +1.1   | -14.1           | -19.9  | -1.4   | +12.2  | -2.8   | -2.5   | +1.2   | -1.5   | -2.4                | -23.2  | -9.9   | -3.0   | +3.6   | +1.0   | +0.1   | -0.3   |

HARMONIC COMPONENTS OF THE DIURNAL INEQUALITY OF MAGNETIC FORCE.

Values of  $c_n, \alpha_n$  in the series  $\Sigma c_n \sin (15nT^\circ + \alpha_n)$ ,  $T$  being Mean Local Time reckoned in hours from midnight.

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| Month and Season.      | North Component. |             |        |             |        |             |        |             | West Component. |             |        |             |        |             |        |             | Vertical Component. |             |        |             |        |             |        |             |
|------------------------|------------------|-------------|--------|-------------|--------|-------------|--------|-------------|-----------------|-------------|--------|-------------|--------|-------------|--------|-------------|---------------------|-------------|--------|-------------|--------|-------------|--------|-------------|
|                        | $c_1.$           | $\alpha_1.$ | $c_2.$ | $\alpha_2.$ | $c_3.$ | $\alpha_3.$ | $c_4.$ | $\alpha_4.$ | $c_1.$          | $\alpha_1.$ | $c_2.$ | $\alpha_2.$ | $c_3.$ | $\alpha_3.$ | $c_4.$ | $\alpha_4.$ | $c_1.$              | $\alpha_1.$ | $c_2.$ | $\alpha_2.$ | $c_3.$ | $\alpha_3.$ | $c_4.$ | $\alpha_4.$ |
| <i>"All" Days.</i>     |                  |             |        |             |        |             |        |             |                 |             |        |             |        |             |        |             |                     |             |        |             |        |             |        |             |
| Jan.                   | 2.7              | 45.2        | 3.6    | 258.7       | 1.5    | 151.2       | 0.5    | 355.7       | 8.7             | 270.7       | 3.1    | 9.7         | 1.3    | 247.1       | 1.1    | 72.9        | 7.7                 | 179.0       | 3.8    | 227.8       | 1.3    | 213.1       | 0.1    | 232.2       |
| Feb.                   | 5.7              | 80.3        | 4.6    | 54.0        | 2.7    | 120.7       | 0.8    | 329.5       | 6.4             | 255.6       | 4.6    | 31.3        | 1.5    | 170.7       | 1.3    | 14.7        | 3.8                 | 173.2       | 1.7    | 278.4       | 0.8    | 67.0        | 0.7    | 233.9       |
| Mar.                   | 11.6             | 89.1        | 6.1    | 268.2       | 3.5    | 134.5       | 0.8    | 344.9       | 11.2            | 235.7       | 9.4    | 28.1        | 3.7    | 216.4       | 2.4    | 69.3        | 5.5                 | 170.7       | 4.0    | 256.5       | 1.6    | 76.8        | 1.0    | 263.7       |
| April                  | 13.0             | 101.7       | 7.7    | 284.0       | 4.2    | 125.3       | 1.4    | 350.0       | 13.3            | 208.6       | 10.3   | 31.2        | 4.5    | 218.1       | 2.0    | 39.2        | 5.1                 | 124.4       | 4.2    | 266.7       | 1.9    | 93.0        | 0.9    | 269.4       |
| May                    | 15.4             | 122.3       | 9.4    | 297.0       | 1.7    | 138.7       | 1.6    | 41.8        | 14.0            | 209.4       | 8.7    | 28.4        | 7.8    | 246.1       | 1.0    | 107.6       | 8.9                 | 155.3       | 5.6    | 266.8       | 1.8    | 98.6        | 0.8    | 334.1       |
| June                   | 16.6             | 120.7       | 11.3   | 281.5       | 2.7    | 122.2       | 0.6    | 100.8       | 19.1            | 200.1       | 11.1   | 21.8        | 2.7    | 233.1       | 0.4    | 72.4        | 7.8                 | 169.7       | 7.8    | 262.3       | 2.2    | 81.6        | 0.3    | 173.5       |
| July                   | 15.5             | 119.2       | 10.8   | 288.1       | 1.7    | 162.5       | 1.4    | 39.3        | 19.4            | 201.3       | 10.6   | 33.0        | 3.9    | 250.9       | 0.9    | 72.0        | 5.9                 | 132.8       | 5.5    | 264.9       | 1.1    | 77.6        | 0.7    | 289.4       |
| Aug.                   | 15.5             | 112.5       | 8.3    | 292.9       | 2.5    | 137.4       | 1.2    | 34.8        | 15.3            | 206.9       | 10.9   | 48.8        | 5.4    | 240.3       | 0.8    | 37.8        | 4.6                 | 121.5       | 5.3    | 269.9       | 2.8    | 104.1       | 0.3    | 273.3       |
| Sept.                  | 15.3             | 104.8       | 7.9    | 292.8       | 2.6    | 154.6       | 1.3    | 36.7        | 14.9            | 227.9       | 8.2    | 42.8        | 3.9    | 243.3       | 2.5    | 58.6        | 5.6                 | 160.7       | 4.3    | 257.4       | 2.1    | 101.5       | 0.6    | 320.2       |
| Oct.                   | 13.0             | 94.7        | 6.7    | 273.4       | 3.0    | 145.6       | 0.7    | 23.2        | 10.1            | 228.7       | 6.4    | 1.7         | 5.6    | 234.8       | 2.8    | 67.7        | 4.4                 | 176.4       | 1.8    | 227.1       | 1.4    | 91.8        | 1.3    | 270.4       |
| Nov.                   | 5.1              | 65.1        | 4.5    | 262.3       | 1.6    | 141.5       | 0.9    | 65.8        | 8.2             | 251.6       | 5.0    | 357.6       | 2.3    | 270.7       | 1.3    | 46.4        | 4.8                 | 172.0       | 1.9    | 279.2       | 1.0    | 147.7       | 0.8    | 261.8       |
| Dec.                   | 2.4              | 68.7        | 2.8    | 255.1       | 1.9    | 153.1       | 0.5    | 28.7        | 5.5             | 254.2       | 2.8    | 14.5        | 1.4    | 253.9       | 1.0    | 64.7        | 2.7                 | 173.7       | 0.3    | 268.9       | 0.3    | 142.1       | 0.3    | 248.3       |
| Year                   | 10.5             | 104.6       | 6.8    | 280.9       | 2.4    | 138.2       | 0.8    | 26.4        | 11.3            | 221.3       | 7.4    | 27.8        | 3.2    | 237.5       | 1.4    | 59.1        | 5.2                 | 159.4       | 3.7    | 260.8       | 1.3    | 98.8        | 0.5    | 272.9       |
| W.                     | 3.9              | 67.8        | 3.9    | 257.7       | 1.9    | 139.1       | 0.5    | 17.5        | 7.1             | 258.7       | 3.8    | 13.0        | 1.5    | 248.7       | 1.1    | 47.9        | 4.7                 | 175.3       | 1.7    | 253.2       | 0.5    | 158.7       | 0.5    | 247.8       |
| Eq.                    | 13.2             | 98.1        | 7.0    | 281.4       | 3.3    | 138.1       | 1.0    | 8.6         | 12.2            | 224.7       | 8.3    | 27.7        | 4.4    | 228.5       | 2.4    | 60.0        | 4.9                 | 158.1       | 3.5    | 256.2       | 1.7    | 91.8        | 0.9    | 275.2       |
| S.                     | 15.7             | 118.7       | 9.9    | 289.3       | 2.1    | 137.8       | 1.1    | 46.0        | 16.9            | 203.9       | 10.2   | 33.2        | 4.0    | 243.1       | 0.7    | 74.0        | 6.4                 | 148.9       | 6.0    | 265.6       | 1.9    | 92.8        | 0.4    | 297.9       |
| <i>Quiet Days.</i>     |                  |             |        |             |        |             |        |             |                 |             |        |             |        |             |        |             |                     |             |        |             |        |             |        |             |
| Year                   | 10.1             | 104.9       | 6.7    | 282.8       | 2.2    | 132.2       | 0.7    | 21.1        | 8.7             | 209.1       | 7.3    | 40.2        | 3.9    | 238.4       | 1.5    | 62.3        | 3.2                 | 105.8       | 3.1    | 275.0       | 1.7    | 97.4        | 0.7    | 276.4       |
| W.                     | 3.2              | 85.2        | 3.9    | 259.4       | 1.5    | 121.8       | 0.3    | 324.5       | 3.9             | 253.7       | 2.7    | 23.5        | 1.7    | 249.8       | 1.0    | 65.9        | 1.7                 | 143.4       | 0.9    | 288.9       | 0.6    | 104.2       | 0.3    | 286.2       |
| Eq.                    | 11.7             | 103.7       | 6.9    | 291.5       | 3.0    | 134.0       | 1.1    | 359.9       | 9.9             | 212.2       | 8.8    | 41.5        | 5.4    | 231.3       | 2.4    | 52.1        | 3.4                 | 97.8        | 3.2    | 272.8       | 2.3    | 96.8        | 1.0    | 268.8       |
| S.                     | 15.8             | 109.7       | 9.6    | 286.0       | 2.0    | 137.5       | 1.2    | 57.0        | 13.9            | 195.7       | 10.3   | 43.3        | 4.7    | 242.4       | 1.2    | 80.3        | 5.0                 | 99.0        | 5.2    | 273.9       | 2.3    | 96.0        | 0.7    | 283.5       |
| <i>Disturbed Days.</i> |                  |             |        |             |        |             |        |             |                 |             |        |             |        |             |        |             |                     |             |        |             |        |             |        |             |
| Year                   | 11.4             | 112.9       | 8.2    | 289.4       | 2.8    | 137.2       | 0.8    | 58.3        | 18.1            | 235.0       | 8.5    | 2.5         | 3.0    | 226.5       | 1.4    | 88.2        | 16.6                | 187.9       | 6.8    | 246.1       | 1.4    | 87.3        | 0.4    | 278.1       |
| W.                     | 5.4              | 63.9        | 5.9    | 246.0       | 2.0    | 161.1       | 0.6    | 38.9        | 14.6            | 256.6       | 4.6    | 357.5       | 2.1    | 214.6       | 1.0    | 2.1         | 13.8                | 185.6       | 6.0    | 241.0       | 1.3    | 235.7       | 0.9    | 223.8       |
| Eq.                    | 14.3             | 95.5        | 7.4    | 291.8       | 3.2    | 146.3       | 0.4    | 91.2        | 17.3            | 240.0       | 8.6    | 8.8         | 3.3    | 221.2       | 3.6    | 76.3        | 12.6                | 187.9       | 4.7    | 222.7       | 1.7    | 71.2        | 1.4    | 328.9       |
| S.                     | 18.9             | 139.3       | 13.3   | 305.8       | 3.7    | 116.4       | 1.5    | 56.7        | 24.4            | 218.5       | 12.3   | 0.0         | 3.7    | 237.8       | 1.9    | 155.4       | 23.4                | 189.2       | 10.3   | 259.4       | 3.7    | 83.9        | 0.3    | 171.3       |

SEISMOLOGICAL DIARY : *Instruments.*—Two horizontal and one vertical Galitzin Seismographs, with galvanometric registration.  
 Lat. 55° 19' N. Long. 3° 12' W. Height above M.S.L. 242 metres.

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| Date.  | Phase.  | Time.<br>G.M.T.  | Period | Amplitudes.      |                  | △     | Remarks.                               | Date.    | Phase.   | Time.<br>G.M.T.                                       | Period | Amplitudes.      |                  | △   | Remarks.                                     |
|--------|---|--|--------|------------------|------------------|-------|--|----------|--|---|--------|------------------|------------------|-----|--|
|        |   |  |        | A <sub>N</sub> . | A <sub>E</sub> . |       |  |          |  |   |        | A <sub>N</sub> . | A <sub>E</sub> . |     |  |
|        |   | h. m. s.   | s.     | μ                | μ                | km.   |  |          |  | h. m. s.  | s.     | μ                | μ                | km. |  |
| Jan. 2 | ...   | 9 2 to<br>9 10   | ...    | ...              | ...              | ...   | Small disturbance.                     | Feb. 19  | e<br>i(S)<br>e<br>L<br>F                                 | 7 7<br>7 12 54<br>7 14 48 <sup>8</sup><br>7 17.5<br>8 | ...    | ...              | ...              | ... |  |
| 4      | ...   | 12 45 to<br>12 55  | ...    | ...              | ...              | ...   | Traces of waves.                       | 22       | e <sub>E</sub><br>M <sub>N</sub><br>F                    | 15 38 24<br>15 41<br>15 45                            | ...    | 5                | ...              | ... |  |
| 7      | ...   | 10   | ...    | ...              | ...              | ...   | Record spoiled by clock defects.       | 26       | ...  | 23 25 to<br>23 35                                     | ...    | ...              | ...              | ... | Very feebly developed traces.                |
| 14     | P<br>S<br>SR <sub>1</sub><br>L<br>M <sub>N</sub><br>F                                 | 21 2 52<br>21 13 2<br>21 19<br>21 29<br>21 43<br>23 45         | ...    | ...              | ...              | 9000  |  | 27       | ...  | 0 31 to<br>0 45                                       | ...    | ...              | ...              | ... | Very feebly developed traces.                |
| 18     | e<br>e<br>L<br>F  | 15 12 31<br>15 16<br>15 23<br>15 45                            | ...    | ...              | ...              | ...   |  | Mar. 4   | P <sub>Z</sub><br>L <sub>Z</sub><br>?L <sub>Z</sub><br>F | 10 19 42<br>10 44<br>12 27<br>13 10                   | ...    | ...              | ...              | ... | No horizontal component records.             |
| 20     | e<br>F  | 22 55<br>23 15   | ...    | ...              | ...              | ...   | Very feeble disturbance.               | 10       | e<br>F   | 18 23 11<br>18 26                                     | ...    | ...              | ...              | ... |  |
| 21     | P <sub>N</sub><br>i <sub>Z</sub><br>e <sub>E</sub><br>i <sub>S<sub>N</sub></sub><br>F | 2 3 32<br>2 5 19<br>2 12 9<br>2 12 15<br>3 25                  | ...    | ...              | ...              | 7280  |  | 11       | ?S <sub>E</sub><br>L <sub>N</sub><br>F                   | 11 2 54<br>11 14<br>12                                | ...    | ...              | ...              | ... |  |
| 22     | e<br>L<br>F   | 11 16<br>11 20<br>11 40  | ...    | ...              | ...              | ...   | Confused by microseisms.               | 12       | iP <sub>Z</sub><br>F                                     | 13 56 59<br>14 40                                     | ...    | ...              | ...              | ... | No horizontal component records.             |
| 27     | ...   | 5 10 to<br>5 30  | ...    | ...              | ...              | ...   | Disturbance confused by microseisms.   | 13       | e <sub>Z</sub><br>F                                      | 13 15<br>13 30  | ...    | ...              | ...              | ... |  |
| 29     | eP<br>e(PR <sub>1</sub> )<br>S<br>i<br>L<br>M <sub>E</sub><br>F                       | 2 8 56<br>2 13 5<br>2 19 22<br>2 21 56<br>2 37<br>3 0<br>4 50  | ...    | ...              | ...              | ?9320 |  | 16       | e <sub>Z</sub> ?P<br>i <sub>Z</sub> ?S<br>F              | 10 22 26<br>10 26 8<br>11                             | ...    | ...              | ...              | ... |  |
| 30     | e<br>e<br>e<br>e(?L)<br>F   | 0 27 7<br>0 32<br>0 35.5<br>0 41<br>1                          | ...    | ...              | ...              | ...   |  | 22       | i <sub>Z</sub><br>i <sub>Z</sub><br>L<br>F               | 12 56 17<br>13 13 2<br>13 16<br>14                    | ...    | ...              | ...              | ... | Two shocks.                                  |
| 30     | ...   | 5 to<br>6  | ...    | ...              | ...              | ...   | Traces of disturbance.                 | 25       | ...  | 14 to<br>16   | ...    | ...              | ...              | ... | Traces of disturbance on vertical component. |
| Feb. 9 | L<br>F  | 23 26<br>23 40   | ...    | ...              | ...              | ...   |  | 26       | ...  | 20 30 0<br>22   | ...    | ...              | ...              | ... | Traces of disturbance on vertical component. |
| 11     | e<br>e<br>L<br>F  | 6 36 16<br>6 52<br>7 5<br>8                                    | ...    | ...              | ...              | ...   |  | 28       | ?P <sub>Z</sub><br>L <sub>Z</sub><br>F                   | 5 4 34<br>5 8<br>5 30                                 | ...    | ...              | ...              | ... |  |
| 13     | e<br>L<br>F   | 23 20<br>23 48<br>0 40   | ...    | ...              | ...              | ...   |  | 30       | e <sub>Z</sub><br>L <sub>Z</sub><br>F                    | 0 19<br>0 44<br>1 30                                  | ...    | ...              | ...              | ... |  |
| 14     | L<br>F  | 19 35<br>20  | ...    | ...              | ...              | ...   |  | April. 1 | e<br>F   | 4 53 50<br>5  | ...    | ...              | ...              | ... |  |
| 16     | e<br>L<br>F   | 9 10 50<br>9 13<br>9 35  | ...    | ...              | ...              | ...   |  | 2        | e<br>e<br>F  | 22 9 35<br>22 13 5<br>22 20                           | ...    | ...              | ...              | ... |  |
| 16     | ...   | 10 15 to<br>10 20  | ...    | ...              | ...              | ...   | Traces of very feebly developed waves. | 2        | ...  | 2 to<br>3   | ...    | ...              | ...              | ... | Traces.                                      |
| 18     | ?P<br>?S<br>L<br>M <sub>E</sub><br>M <sub>N</sub><br>F                                | 17 10 45<br>17 15 50<br>17 20<br>17 26 30<br>17 26 55<br>18 10 | ...    | ...              | ...              | ...   |  | 2        | L<br>F   | 3 14<br>3 40  | ...    | ...              | ...              | ... |  |
|        |   |  |        | +17              | +17              |       |  | 4        | e<br>F   | 22 45.7<br>23   | ...    | ...              | ...              | ... |  |
|        |   |  |        | ...              | ...              |       |  | 6        | ...  | 22 to<br>22 30  | ...    | ...              | ...              | ... | Traces of waves.                             |
|        |   |  |        | ...              | ...              |       |  | 8        | L<br>F   | 9 50<br>10  | ...    | ...              | ...              | ... | Confused by microseisms and wind.            |
|        |   |  |        | ...              | ...              |       |  | 10       | e <sub>E</sub><br>L<br>F                                 | 20 22 52<br>20 48<br>21 30                            | ...    | ...              | ...              | ... |  |
|        |   |  |        | ...              | ...              |       |  | 11       | e<br>F   | 7 26 58<br>7 37                                       | ...    | ...              | ...              | ... |  |

SEISMOLOGICAL DIARY :—continued. Instruments.—Two horizontal and one vertical Galitzin Seismographs with galvanometric registration.

Lat. 55° 19' N. Long. 3° 12' W. Height above M.S.L. 242 metres.

## 283. Eskdalemuir.

1924.

| Date.     | Phase.  | Time.<br>G.M.T.  | Period | Amplitudes.      |                  | △<br>km. | Remarks.  | Date.   | Phase.  | Time.<br>G.M.T.  | Period | Amplitudes.      |                  | △<br>km.         | Remarks.  |
|-----------|---|--|--------|------------------|------------------|----------|---|---------|---|--|--------|------------------|------------------|------------------|---|
|           |   |  |        | A <sub>N</sub> . | A <sub>E</sub> . |          |   |         |   |  |        | A <sub>N</sub> . | A <sub>E</sub> . |                  |   |
| April. 11 | ...   | h. m. s.<br>14 7 to<br>14 18                                 | s.     | μ                | μ                | ...      | Waves of small amplitude.                               | May. 6  | e P<br>e<br>S<br>L<br>M <sub>N</sub><br>F                     | h. m. s.<br>16 23 5<br>16 26.5<br>16 33 27<br>16 51<br>17 0 49<br>19 | s.     | μ                | μ                | (9230)           | e P doubtful.   |
| 11        | ...   | 17 56 to<br>18 2   | ...    | ...              | ...              | ...      | Waves of small amplitude.                               | 7       | ...   | 3 to<br>4  | ...    | ...              | ...              | ...              | Very feeble traces.   |
| 12        | e<br>L<br>F   | 22 13<br>22 57<br>24   | ...    | ...              | ...              | ...      |   | 7       | e<br>L<br>F   | 4 12<br>4 17<br>5 15   | ...    | ...              | ...              | ...              |   |
| 13        | e<br>i <sub>E</sub><br>e<br>L<br>F                          | 14 6 40<br>14 12 54<br>14 16<br>14 41<br>16 30               | ...    | ...              | ...              | ...      |   | 7       | e<br>e<br>L<br>F  | 6 34 23<br>6 43 21<br>6 57<br>7 20                                   | ...    | ...              | ...              | ...              |   |
| 14        | ...   | 5 30 to<br>6   | ...    | ...              | ...              | ...      | Very feebly developed traces.                           | 14      | L<br>F  | 2 28<br>3 15   | ...    | ...              | ...              | ...              |   |
| 14        | ...   | 10 14 to<br>10 40  | ...    | ...              | ...              | ...      | Traces.   | June. 4 | e <sub>E</sub> (P)<br>e <sub>E</sub> (S)<br>L<br>F            | 16 21 42<br>16 31 45<br>16 48<br>17 30                               | ...    | ...              | ...              | (8850)           |   |
| 14        | P<br>i (PR <sub>1</sub> )<br>S<br>F                         | 16 34 52<br>16 39 14<br>16 45 32<br>21                       | ...    | ...              | ...              | ...      | Record too confused for identification of other phases. | 9       | ...   | 21 52 to<br>22 5   | ...    | ...              | ...              | ...              | Feeble traces.  |
| 15        | ...   | 12 54 to<br>12 57  | ...    | ...              | ...              | ...      | A few waves confused by microseisms.                    | 15      | ...   | 14 14 to<br>14 28  | ...    | ...              | ...              | ...              | Feeble traces.  |
| 15        | L<br>F  | 21 51<br>22 25   | ...    | ...              | ...              | ...      |   | 16      | L<br>F  | 20 14<br>20 30   | ...    | ...              | ...              | ...              |   |
| 20        | P<br>? PR <sub>2</sub><br>S<br>L<br>M <sub>N</sub><br>F     | 14 36 59<br>14 40 34<br>14 45 2<br>14 55<br>15 4 38<br>15 45 | ...    | ...              | ...              | 6500     |   | 17      | ...   | 21 37 to<br>21 50  | ...    | ...              | ...              | ...              | Feeble traces of L waves.   |
| 28        | L<br>F  | 9 9<br>9 20  | ...    | ...              | ...              | ...      |   | 20      | e<br>L<br>F   | 16 39 33<br>16 46<br>17 30   | ...    | ...              | ...              | ...              |   |
| 28        | e<br>L<br>F   | 17 38 19<br>17 42<br>18                                      | ...    | ...              | ...              | ...      |   | 22      | e (? S)<br>L<br>F   | 13 47 37<br>14 8<br>14 50  | ...    | ...              | ...              | ...              |   |
| 29        | L<br>M <sub>N</sub><br>F                                    | 10 2<br>10 4<br>10 25  | ...    | ...              | ...              | ...      |   | 22      | e <sub>E</sub><br>e <sub>E</sub>                              | 17 1 17<br>17 4 19   | ...    | ...              | ...              | ...              | Other places not well developed.  |
| 29        | ...   | 10 30 to<br>11   | ...    | ...              | ...              | ...      | Feebly developed waves.                                 | 22      | e (P)<br>S<br>L<br>F  | 22 41 2<br>22 50 47<br>?<br>24                                       | ...    | ...              | ...              | (8500)           |   |
| 29        | L<br>F  | 11 40<br>11 50   | ...    | ...              | ...              | ...      |   | 24      | ...   | 22 to<br>23  | ...    | ...              | ...              | ...              | Traces.   |
| 29        | e<br>e<br>e (? L)<br>F                                      | 21 12 30<br>21 16 2<br>21 21<br>22 40                        | ...    | ...              | ...              | ...      |   | 25      | ...   | 3 10 to<br>3 18  | ...    | ...              | ...              | ...              | Traces.   |
| 30        | e<br>F  | 4 24<br>7 35   | ...    | ...              | ...              | ...      | Recurring trains of waves of small amplitude.           | 25      | L<br>F  | 7 29<br>7 38   | ...    | ...              | ...              | ...              |   |
| May. 1    | ...   | 4 30 to<br>6   | ...    | ...              | ...              | ...      | Traces.   | 26      | P<br>F  | 1 57 39<br>6   | ...    | ...              | ...              | ...              | Large disturbance; confused by faintness and superposition of two component traces.                   |
| 2         | ...   | 2 50 to<br>4   | ...    | ...              | ...              | ...      | Traces of disturbance.                                  | 30      | ...   | 4 to<br>4 30   | ...    | ...              | ...              | ...              | Feebly developed disturbance.   |
| 3         | ...   | 12 to<br>12 45   | ...    | ...              | ...              | ...      | Long waves. No record before 12h.                       | 30      | ...   | 12 10 to<br>12 30  | ...    | ...              | ...              | ...              | Feebly developed disturbance.   |
| 3         | ...   | 16 14 to<br>16 23  | ...    | ...              | ...              | ...      | Traces of waves.  | 30      | e P<br>S <sub>E</sub><br>S <sub>N</sub><br>SR<br>SR<br>L<br>F | 15 56 4<br>16 5 43<br>16 5 48<br>16 10 42<br>16 16<br>16 22<br>?     | ...    | ...              | ...              | 8380 }<br>8480 } | Initial P displacements suggest azimuth 17° E. of N. or W. of S. ? Epicentre Kurile Is. or Kamchatka. |
| 4         | i P <sub>N</sub><br>i P <sub>E</sub><br>i <sub>N</sub><br>F | 17 10 30<br>17 10 35<br>17 12 40<br>20                       | ...    | ...              | ...              | ...      | Other phases not recognizable.                          | 5       | e<br>F  | 4 43<br>4 52   | ...    | ...              | ...              | ...              | Record failed after 18h.  |





SEISMOLOGICAL DIARY :—continued. Instruments.—Two horizontal and one vertical Galitzin Seismographs with galvanometric registration.  
 Lat. 55° 19' N. Long. 3° 12' W. Height above M.S.L. 242 metres.

283. Eskdalemuir.

1924.

| Date.  | Phase.  | Time.<br>G.M.T.  | Period | Amplitudes.      |                  | △    | Remarks.   | Date.   | Phase.  | Time.<br>G.M.T.   | Period | Amplitudes.      |                  | △      | Remarks.                   |
|--------|---|--|--------|------------------|------------------|------|--|---------|---|---|--------|------------------|------------------|--------|----------------------------|
|        |   |  |        | A <sub>N</sub> . | A <sub>E</sub> . |      |  |         |   |   |        | A <sub>N</sub> . | A <sub>E</sub> . |        |                            |
|        |   | h. m. s.   | s.     | μ                | μ                | km.  |  |         |   | h. m. s.  | s.     | μ                | μ                | km.    |                            |
| Aug. 9 | L<br>F  | 15 4<br>15 15  | ...    | ...              | ...              | ...  |  | Aug. 25 | M <sub>N</sub><br>F   | 3 26<br>5   | 16     | ...              | ...              | ...    |                            |
| 10     | e <sub>N</sub><br>e <sub>N</sub><br>F   | 6 32<br>6 35.5<br>9  | ...    | ...              | ...              | ...  |  | 25      | eP<br>S<br>L<br>M <sub>N</sub><br>M <sub>E</sub><br>F               | 14 43 27<br>14 53 50<br>15 9 (30)<br>15 18 24<br>15 17<br>17        | ...    | ...              | ...              | 9240   |                            |
| 11     | e<br>F  | 2 39.5<br>3 10   | ...    | ...              | ...              | ...  | Very feeble disturbance.   | 25      | iP<br>iS <sub>N</sub><br>L<br>F                                     | 23 18 9<br>23 27 14<br>23 36<br>I                                   | ...    | ...              | ...              | 7720   |                            |
| 12     | ...   | 16 38 to<br>16 42  | ...    | ...              | ...              | ...  | Very slight disturbance.   | 27      | ...   | 0 to<br>0 30  | ...    | ...              | ...              | ...    | Feebly developed waves.    |
| 13     | e<br>L<br>F   | 18 41 41<br>19 I<br>19 30  | ...    | ...              | ...              | ...  |  | 27      | P<br>S<br>L<br>F  | 22 38 59<br>22 43 4<br>22 44.5<br>23 45                             | ...    | ...              | ...              | 2500   |                            |
| 13     | P<br>e<br>S<br>L<br>F   | 13 41 57<br>13 45<br>13 51 23<br>14 7<br>15 30   | ...    | —                | ...              | 8130 | Azimuth approximately North. Compression.  | 28      | ...   | 18 56 to<br>19 20   | ...    | ...              | ...              | ...    | Traces of irregular waves. |
| 13     | L<br>F  | 16 37<br>17 30   | ...    | ...              | ...              | ...  |  | 29      | e<br>L<br>F   | 0 13<br>0 30<br>1 25  | ...    | ...              | ...              | ...    |                            |
| 14     | P<br>S<br>L<br>F  | 0 8 54<br>0 17 52<br>0 31<br>?   | ...    | ...              | —                | 7570 | Azimuth approximately East. Compression.   | 30      | eP<br>e<br>i(S)<br>SR<br>L<br>M <sub>N</sub><br>M <sub>N</sub><br>F | 3 19 3<br>3 29 23<br>3 29 39<br>3 38<br>3 50<br>4 9<br>4 13<br>6 30 | ...    | ...              | ...              | ? 9520 |                            |
| 14     | e(?S)<br>L<br>F   | 1 6 II<br>1 22<br>3  | ...    | ...              | ...              | ...  |  | Sept. 2 | e<br>L<br>F   | 22 21 22<br>22 53<br>23 30  | ...    | ...              | ...              | ...    |                            |
| 14     | P<br>PR <sub>1</sub><br>PR <sub>2</sub><br>S<br>SR <sub>1</sub><br>L<br>M <sub>N</sub><br>M <sub>N</sub><br>F | 18 15 4<br>18 18 34<br>18 20 14<br>18 25 25<br>18 31.5<br>18 43<br>18 51<br>19 I<br>22 | ...    | ...              | ...              | 9220 |  | 3       | ...   | 0 to<br>I   | ...    | ...              | ...              | ...    | Traces of disturbance.     |
| 14     | eP<br>e(PR <sub>1</sub> )<br>e(PR <sub>2</sub> )<br>S<br>SR   | 23 39 57<br>23 43 8<br>23 45 3<br>23 50 18<br>23 56                                    | ...    | ...              | ...              | 9220 | ? same origin as preceding earthquake.   | 3       | L<br>F  | 2 56<br>3 15  | ...    | ...              | ...              | ...    |                            |
| 15     | L<br>M <sub>N</sub><br>M <sub>E</sub><br>M <sub>N</sub><br>F  | 0 8<br>0 20<br>0 24<br>0 28<br>1 30  | ...    | ...              | ...              | ...  |  | 4       | L<br>F  | 1 30<br>1 45  | ...    | ...              | ...              | ...    |                            |
| 17     | eP<br>eS <sub>E</sub><br>eS <sub>N</sub><br>e<br>L<br>eP<br>S<br>F  | 1 58 34<br>2 8 50<br>2 8 59<br>2 15<br>2 28<br>2 23 8<br>2 33 4<br>4                   | ...    | ...              | ...              | ...  | Records from two shocks overlap.<br>? both shocks from same origin as the two later shocks on August 14th.   | 4       | ? eP <sub>Z</sub><br>L <sub>Z</sub><br>F                            | 16 4 (30)<br>16 7.5<br>17   | ...    | ...              | ...              | ...    |                            |
| 17     | ...   | 12 to<br>13  | ...    | ...              | ...              | ...  | Waves of small amplitude.  | 6       | e(L)<br>F   | 3 16<br>4   | ...    | ...              | ...              | ...    |                            |
| 21     | e<br>e<br>e<br>F  | 19 3<br>19 12.5<br>19 17<br>?  | ...    | ...              | ...              | ...  | Record failed before end of disturbance.   | 6       | e<br>L<br>F   | 5 3 7<br>5 10<br>5 40   | ...    | ...              | ...              | ...    |                            |
| 24     | L<br>F  | 0 I<br>0 10  | ...    | ...              | ...              | ...  |  | 6       | ? e<br>L<br>F   | 11 36 46<br>11 54<br>12 10  | ...    | ...              | ...              | ...    |                            |
| 25     | e<br>i<br>i<br>i<br>i <sub>N</sub><br>L<br>M <sub>E</sub>   | 2 38 15<br>2 44 39<br>2 47 30<br>2 48 25<br>2 53 20<br>3 7<br>3 20                     | ...    | ...              | ...              | ...  | Owing to adjustments of timing clock the times given require correction. The correction is uncertain, but approximate value is probably + 2 minutes. | 6       | L<br>F  | 12 41<br>12 55  | ...    | ...              | ...              | ...    |                            |
|        |   |  |        |                  |                  |      |  | 7       | e<br>L<br>F   | 2 10 38<br>2 38<br>3 30   | ...    | ...              | ...              | ...    |                            |
|        |   |  |        |                  |                  |      |  | 10      | L<br>F  | 12 13<br>12 30  | ...    | ...              | ...              | ...    |                            |
|        |   |  |        |                  |                  |      |  | 14      | L<br>F  | 3 14<br>3 35  | ...    | ...              | ...              | ...    |                            |

SEISMOLOGICAL DIARY:—*continued.* Instruments.—Two horizontal and one vertical Galitzin Seismographs with galvanometric registration.  
Lat. 55° 19' N. Long. 3° 12' W. Height above M.S.L. 242 metres.

## 283. Eskdalemuir.

1924.

| Date.    | Phase.   | Time.<br>G.M.T.   | Period | Amplitudes.      |                  | △       | Remarks.                               | Date.   | Phase.                         | Time.<br>G.M.T.                                | Period | Amplitudes.      |                  | △   | Remarks.  |
|----------|--|---|--------|------------------|------------------|---------|--|---------|--------------------------------|--|--------|------------------|------------------|-----|---|
|          |  |   |        | A <sub>N</sub> . | A <sub>E</sub> . |         |  |         |                                |  |        | A <sub>N</sub> . | A <sub>E</sub> . |     |   |
| Sept. 14 | ...  | h. m. s.<br>5 25 to<br>5 35                                 | ...    | μ                | μ                | km.     | Traces of waves.                       | Oct. 25 | e<br>e(?L)<br>F                | h. m. s.<br>19 18<br>19 24<br>20               | ...    | μ                | μ                | km. |   |
| 14       | e(?S)<br>e(?SR <sub>1</sub> )<br>L<br>M <sub>N</sub><br>F            | 13 34<br>13 39<br>13 54<br>14 8<br>?                        | ...    | ...              | ...              | ...     | Overlapped by next shock.              | 26      | ...                            | 19 to<br>20                                    | ...    | ...              | ...              | ... | Feeble disturbance.   |
| 14       | L<br>M <sub>N</sub><br>M <sub>N</sub><br>F                           | 15<br>15 5<br>15 14<br>16                                   | ...    | ...              | ...              | ...     |  | 27      | e<br>e<br>e<br>L<br>F          | 20 23 2<br>20 30 28<br>20 39 37<br>20 48<br>22 | ...    | ...              | ...              | ... |   |
| 19       | L<br>F   | 8 6<br>8 30   | ...    | ...              | ...              | ...     |  | Nov. 4  | L<br>F                         | 4 12<br>4 30                                   | ...    | ...              | ...              | ... |   |
| 23       | ?e<br>F  | 23 19<br>23 35  | ...    | ...              | ...              | ...     |  | 5       | e <sub>N</sub><br>L<br>F       | 18 58 59<br>19 4.5<br>19 20                    | ...    | ...              | ...              | ... |   |
| 24       | ?e<br>L<br>F   | 19 3 55<br>19 22<br>20                                      | ...    | ...              | ...              | ...     |  | 6       | L<br>F                         | 8 16<br>8 30                                   | ...    | ...              | ...              | ... |   |
| 25       | e<br>L<br>F  | 4 44 45<br>5 23<br>6 30                                     | ...    | ...              | ...              | ...     |  | 6       | L<br>F                         | 23 10<br>23 16                                 | ...    | ...              | ...              | ... |   |
| 27       | ?e<br>e<br>L<br>F  | 4 27<br>4 39.5<br>4 45<br>5 30                              | ...    | ...              | ...              | ...     |  | 13      | ...                            | Between<br>9 40 and<br>11                      | ...    | ...              | ...              | ... | Disturbance. Confused by large microseisms.                       |
| 27       | L<br>F   | 13 56<br>14 30  | ...    | ...              | ...              | ...     |  | 15      | L<br>F                         | 18 42<br>18 50                                 | ...    | ...              | ...              | ... |   |
| 28       | i <sub>E</sub> (P)<br>e<br>i <sub>E</sub> (S)<br>M<br>F              | 13 38 19<br>13 41<br>13 41 42<br>13 43<br>14 10             | ...    | ...              | ...              | ? 2000  |  | 16      | e<br>F                         | 23 32<br>24                                    | ...    | ...              | ...              | ... |   |
| Oct. 8   | L<br>M <sub>N</sub><br>M <sub>N</sub><br>M <sub>E</sub><br>F         | 21 4<br>21 10<br>21 11<br>21 11<br>22 40                    | ...    | ...              | ...              | ...     | Earlier phases lost.<br>Record failed. | 20      | ...                            | Between<br>20 30 and<br>21 30                  | ...    | ...              | ...              | ... | Disturbance. Record before 20h. 55m. lost owing to clock failure. |
| 9        | L<br>F   | 6 1<br>6 15   | ...    | ...              | ...              | ...     |  | 25      | e<br>e<br>F                    | 17 47 11<br>17 49.5<br>18 10                   | ...    | ...              | ...              | ... |   |
| 12       | eP<br>S<br>SR<br>i(L)<br>F   | 19 44 21<br>19 52.5<br>19 56<br>19 59 5<br>21 30            | ...    | ...              | ...              | (?6500) |  | 28      | ...                            | 13 to<br>14                                    | ...    | ...              | ...              | ... | Disturbance. Confused by large microseisms.                       |
| 13       | iP<br>iS<br>F  | 16 26 38<br>16 33 48<br>18                                  | ...    | ...              | ...              | 5510    |  | 28      | ...                            | 19 30 to<br>20 30                              | ...    | ...              | ...              | ... | Disturbance. Confused by large microseisms.                       |
| 18       | L<br>F   | 20 21<br>20 55  | ...    | ...              | ...              | ...     |  | 28      | L<br>F                         | 21 59<br>22 10                                 | ...    | ...              | ...              | ... |   |
| 18       | eP <sub>E</sub><br>S <sub>N</sub><br>L<br>F                          | 23 17 41<br>23 27 41<br>23 45<br>0 30                       | ...    | ...              | ...              | 8790    |  | Dec. 11 | L<br>F                         | 18 33<br>19 15                                 | ...    | ...              | ...              | ... |   |
| 19       | L<br>F   | 15 48<br>16 20  | ...    | ...              | ...              | ...     |  | 11      | ...                            | 23 30 to<br>23 40                              | ...    | ...              | ...              | ... | A few waves.  |
| 20       | P <sub>N</sub><br>iS<br>SR <sub>1</sub><br>SR <sub>2</sub><br>L<br>F | 20 3 53<br>20 12 57<br>20 17.5<br>20 20.8<br>20 26<br>21 30 | ...    | ...              | ...              | 7690    |  | 12      | ?e<br>L<br>M <sub>E</sub><br>F | 2 24.6<br>2 28<br>2 30<br>2 40                 | ...    | ...              | ...              | ... |   |
| 23       | ...  | 12 27 to<br>12 35   | ...    | ...              | ...              | ...     | Traces of waves.                       | 12      | ...                            | 3 36 to<br>3 41                                | ...    | ...              | ...              | ... | Slight disturbance.   |
|          |  |   |        |                  |                  |         |  | 13      | ...                            | 0 44 to<br>1                                   | ...    | ...              | ...              | ... | Waves, confused by microseisms.                                   |
|          |  |   |        |                  |                  |         |  | 14      | ...                            | 9 20 to<br>10                                  | ...    | ...              | ...              | ... | Slight disturbance. Confused by microseisms.                      |
|          |  |   |        |                  |                  |         |  | 15      | e<br>F                         | 21 11<br>23                                    | ...    | ...              | ...              | ... |   |
|          |  |   |        |                  |                  |         |  | 17      | e<br>L<br>F                    | 6 7<br>6 11<br>6 20                            | ...    | ...              | ...              | ... |   |
|          |  |   |        |                  |                  |         |  | 27      | i(?S)<br>F                     | 11 43.5<br>12 (30)                             | ...    | ...              | ...              | ... | Confused by very large microseisms.                               |
|          |  |   |        |                  |                  |         |  | 28      | ...                            | 23<br>24                                       | ...    | ...              | ...              | ... | Disturbance, confused by very large microseisms.                  |





Air Ministry  
METEOROLOGICAL OFFICE

THE  
OBSERVATORIES' YEAR BOOK  
1924

Comprising the meteorological and geophysical results obtained from autographic records and eye observations at the observatories at Lerwick, Aberdeen, Eskdalemuir, Cahirciveen (Valencia Observatory), and Richmond (Kew Observatory), and the results of soundings of the upper atmosphere by means of registering balloons.

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CAHIRCIVEEN (VALENCIA OBSERVATORY)

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Published by the authority of the  
METEOROLOGICAL COMMITTEE



LONDON

PUBLISHED BY HIS MAJESTY'S STATIONERY OFFICE.

1927

## CAHIRCIVEEN (VALENCIA OBSERVATORY).

|                           |    |    |    |    |    |     |      |    |
|---------------------------|----|----|----|----|----|-----|------|----|
| Latitude                  | .. | .. | .. | .. | .. | 51° | 56'  | N. |
| Longitude                 | .. | .. | .. | .. | .. | 10° | 15'  | W. |
| G.M.T. of Local Mean Noon | .. | .. | .. | .. | .. | 12h | 41m. |    |

*Heights in metres above Sea Level.*

|                         |    |    |    |    |    |      |
|-------------------------|----|----|----|----|----|------|
| Barometer               | .. | .. | .. | .. | .. | 13·7 |
| Rain-gauge              | .. | .. | .. | .. | .. | 9·1  |
| Robinson Cup Anemograph | .. | .. | .. | .. | .. | 26   |
| Dines Tube Anemograph   | .. | .. | .. | .. | .. | 30   |

*Heights in metres above Ground.*

|                         |    |    |    |    |    |      |
|-------------------------|----|----|----|----|----|------|
| Thermometer Bulbs       | .. | .. | .. | .. | .. | 1·3  |
| Sunshine Recorder       | .. | .. | .. | .. | .. | 12·8 |
| Robinson Cup Anemograph | .. | .. | .. | .. | .. | 14   |
| Dines Tube Anemograph   | .. | .. | .. | .. | .. | 13   |

## INTRODUCTION.

## SITE.

Valencia Observatory derives its name from the fact that it was originally established on Valencia Island in 1867. It was removed to the mainland in March, 1892, and now lies in a direct line between the old site on Valencia Island and the town of Cahirciveen, about  $2\frac{1}{2}$  miles (4 km.) north-east from the former, and three-quarters of a mile (1 km.) south-west of the latter. It is quite remote from any other buildings. The general character of the country surrounding the Observatory is hilly. The eastern bank of the Cahir river is about 150 metres to the westward, and in that direction there is no very high ground between the Observatory and the open sea, some  $3\frac{1}{2}$  miles (6 km.) away. To the north-west, however, are hills varying in height from 400 (120 m.) to 900 feet (275 m.), the highest being less than 3 miles (5 km.) distant. These are only separated by a narrow gully running in a N N W direction from other hills equally high, which stretch away to the northward: the nearest of these is but little more than a mile ( $1\frac{1}{2}$  km.) from the Observatory. Beyond the town of Cahirciveen to the north-east the river opens out considerably, and the country in this direction becomes an open boggy basin, rising by only a gentle gradient. Southward of this, however, it soon rises again, and at about a mile south-east of the Observatory it culminates in a hill upwards of 1,245 feet (380 m.) in height. Still further south it opens out once more to a distance of nearly 5 miles (8 km.) from the Observatory, where there is a range of hills running east and west, and varying in height from 400 (120 m.) to 1,300 feet (400 m.). To the south-west there is an opening to the sea, between Valencia Island and the mainland; and the circle of hills is completed by those on the island itself, the highest of which is about 800 feet (240 m.) high, and bears about west-south-west from the Observatory. Photographs of the Observatory building, together with a site plan, showing the disposition of the various instruments were reproduced in the Introduction to the 1923 volume.

## METEOROLOGY.

The elements dealt with in the following tables are : atmospheric pressure, air temperature, humidity, rainfall, sunshine, wind speed and direction, minimum temperature on the grass, together with a diary of cloud and weather.

*Pressure and Temperature.*—The photographic barograph and thermograph are installed in a room on the ground floor of the Observatory tower. The standard Fortin barometer, from which the control readings at 9h, 15h and 21h are taken, is mounted in the same room beside a window which faces the north-east. The stems of the dry and wet bulb thermometers pass out into the screen placed against the north wall of the tower. Close to the bulbs of these thermometers are the bulbs of the standard thermometers from which the control readings at 9h, 15h and 21h are taken.

*Rainfall.*—The Beckley raingauge and the 8-inch (20.3 cm.) check gauge are placed in a railed-off enclosure about 40 metres to the north of the tower.

*Sunshine.*—The recorder is cemented to a wooden rail on the roof of the tower. The exposure is satisfactory.

*Wind, Speed and Direction.*—The Robinson Cup Anemograph is placed on the roof of the Observatory tower. The exposure is satisfactory except for winds between south and south-west. Winds from these directions are liable to be deviated and reduced in speed because of the sheltering action of the roof and chimney. The Dines Tube Anemograph stands in an open field, about 250 metres S E by E of the Observatory tower. The field slopes northwards to the river Cahir. About 1 mile ( $1\frac{1}{2}$  km.) to the south-east and in an approximately direct line with the highest point (1,245 feet) is the hill Bantee which extends for some little distance in a northerly and south-westerly direction. A description of the surrounding country has already been given.

*Minimum Temperature on the Grass.*—The grass minimum thermometer is of the type described on p. 12. It is exposed over short grass in the field enclosure. It is set at 18h and read at 7h on the succeeding day, the observation being entered to the day of reading.

**Notes on the Meteorological Summaries.**

*Pressure.*—The mean pressure for the year 1924 was 2.8 millibars below normal. The monthly mean pressures, excepting those for February and November, were below normal, the deficiencies in most months being considerable. For January and May, for example, the means were more than 6 millibars below the average and for September pressure fell short of the normal value by nearly 8 millibars. On the other hand the excess of the February mean over normal was of similar dimensions, being more than 7 millibars.

The highest and lowest pressures of the year were both recorded in January, the highest, on the 27th, being 1040.0 millibars and the lowest, on the 8th, 970.0 millibars, giving a total range for the year of 70 millibars. February, April and November all had ranges of more than 50 millibars. The smallest range for any month was 30.6 millibars recorded in May, while those for June and July were but little greater.

The diurnal inequality of pressure for the year as a whole shows the usual well marked double oscillation with maxima at 11h and 22h of which the second is the principal one ; and minima at 5h and 16h the principal of these two being the morning one. In the inequalities for the individual months it is found that the double

oscillation is much more prominent in some months than in others and in the summer months, May excepted, the morning maxima and the afternoon minima are not sufficiently well defined for times to be assigned to them. The greatest constancy is seen in the morning minimum which is the principal one for nine months of the twelve and occurs always at 4h, 5h or 6h, excepting in December, when it occurs at 2h. The afternoon minima in the winter and equinoctial months occur always at 15h, 16h or 17h; in May this minimum is at 18h and for the remaining summer months the time is indefinite. For the nine months in which the morning maximum can be detected with certainty it appears either at 11h or 12h except for September, in which month it occurs at 9h; in this month and in the winter months the morning maximum is the principal one. The night maximum in nine months out of the twelve occurs at 21h or 22h; in January and March it appears at 24h and in September still later, at the first hour after midnight.

The range of the mean inequality for the year is .78 mb. while for the months considered individually it varies from .86 mb. for May to 1.62 mb. for September. These ranges represent only the regular periodic changes in pressure and are small compared with the ranges obtained from the mean values of the daily maximum and minimum pressures found in Table 299, which vary from 5.92 mb. for May to 10.64 mb. for September.

Comparison of diurnal inequalities may be made by means of analysis into harmonic components. The details of the Fourier analysis of the diurnal inequalities for the year 1924 are given in Table A. The inequality may be represented by either of the equivalent formulæ :—

$$(a) \ a_1 \cos 15t + b_1 \sin 15t + a_2 \cos 30t + b_2 \sin 30t + \dots$$

$$(b) \ c_1 \sin (15t + \alpha_1) + c_2 \sin (30t + \alpha_2) + \dots$$

where  $t$  is the time expressed in hours after midnight of Local Mean Time. In the printed table the co-efficients for formula (b) only are given. The figures in the line immediately following the monthly values are the arithmetic means for the year of the monthly amplitudes. On account of the very large changes in phase throughout the year in some of the terms the amplitudes obtained from the annual inequality are not adequate as measures of the effectiveness of such terms relative to others whose phase angles show less variation from month to month. In these cases comparison of the arithmetic means of the monthly amplitudes is more satisfactory.

The most important terms are the 24-hour and 12-hour terms. For the year considered as a whole the amplitude of the 24-hour term is markedly lower than for the period 1871-1882 whereas the arithmetic mean for the twelve months is slightly higher than for the same period which points apparently to a wider variation than usual in the 24-hour term phase angles throughout the year. The seasonal amplitudes show the usual variation, the winter one being the lowest and that for summer the highest. A considerable part of these differences is due, however, to the very much smaller phase changes during the summer months. The 24-hour term always shows wide and somewhat irregular variations from month to month both in phase and amplitude.

The 12-hour term is more nearly constant during the year, both in amplitude and phase. For 1924 the amplitudes are higher than average. The highest phase angle appears in winter and the lowest at the equinoxes. The summer phase angle in 1924 is unusually high; it is ordinarily lower than that for the equinoxes. The high winter phase angle appears to be the normal state of affairs at Valencia which differs in this respect from most British stations.

In the mean inequality for the year the 8-hour term appears almost negligible when its amplitude is compared with those of the two terms already considered, but that this is due mainly to the very wide variations in phase of this term during the



year is seen quite clearly by reference to the individual months. For all the winter months the 8-hour term amplitude is at least of the same order of magnitude as the 24-hour term amplitude. In November, and for the winter months considered as a whole, it is, in fact, the greater of the two. At other seasons it is relatively unimportant. The phase of this term has a fairly regular seasonal variation, changing somewhat rapidly at the equinoxes by approximately two right angles. The effect of the phase variation at this season is seen in the very small amplitude which appears for the equinoctial mean. In the 6-hour term amplitudes are small throughout and for this reason not very much weight can be attached to the individual phase angles. Nevertheless it is possible to detect an annual variation in the latter in which the movement is generally in the opposite sense to that of the 8-hour term.

*Temperature.*—The mean temperature for the year 1924 was very near to normal, being only 0.07a ( $0.12^{\circ}$  F.) below it. The highest temperature recorded was no more than 292.1a ( $66.4^{\circ}$  F.) which temperature was registered on the 2nd September. On only fourteen days during the whole year were temperatures of 290a ( $62.6^{\circ}$  F.) or higher recorded. On the other hand very low temperatures were not common, the freezing point being passed only on seven days. The lowest temperature registered was 270.6a ( $27.7^{\circ}$  F.) on the 2nd March. The full range of temperature for the year was thus 21.5a ( $36.7^{\circ}$  F.). For the individual months mean temperatures in no case differed greatly from normal. December alone, with an excess of 1.47a ( $2.65^{\circ}$  F.) showed a departure of a full degree (absolute). The monthly ranges of temperature varied from 9.5a ( $17.1^{\circ}$  F.) in June to 16.0a ( $28.8^{\circ}$  F.) in March and May.

The mean diurnal inequality for the year shows a single oscillation in the 24 hours with its maximum at 14h and its minimum at 4h and with a range of 2.29a ( $4.12^{\circ}$  F.). Each of the monthly inequalities has a well marked single oscillation with its maximum at 14h or 15h, excepting that for July in which the maximum occurs at 16h. The time of the minimum does not show the same constancy. In January it is 8h and in succeeding months we find it becoming progressively earlier to June when it is 4h as it is also in July and August. In the four months remaining it varies from 7h in September to 3h in October and 1h in November, becoming much later in December at 8h. In September, October and November, however, the changes from hour to hour are so small and so irregular from midnight to 7h or 8h that the time of the actual lowest temperature depends largely on factors which may be regarded as accidental.

The harmonic analysis of the monthly and seasonal diurnal inequalities of temperature is given in Table B. The 24-hour term is in all cases predominant with the sole exception of the month of December in which the 12-hour term amplitude is slightly greater. Neither in the 24-hour term nor in the 12-hour term is there any very large variation in phase angle throughout the year, the effect of this being seen in each case in the slight differences between the mean amplitude for the year and the amplitude computed directly from the annual inequality. The highest of the seasonal amplitudes for the 24-hour term is found in summer, as is usual, but this amplitude is itself much below normal, the difference between the amplitudes at equinox and summer being usually much more pronounced. The phase angle is least in winter and greatest in summer, a complete reversal of the normal phenomena. For the 12-hour term the seasonal values follow the normal sequence both in amplitude and phase; but here again the summer amplitude is very decidedly low.

The 8-hour term amplitude for the year is so small as to be negligible compared with the other terms but this is due in large measure to the variations of phase angle in this term from month to month. There is approximate opposition of phase as between winter and summer while for the equinoctial months a rapid change takes place from winter to summer values. The equinoctial amplitude thus appears much smaller than those for the individual months which make up this season. The

winter and summer amplitudes are comparable in magnitude with those of the corresponding 12-hour terms, the summer 8-hour term amplitude being, in fact, greater than the 12-hour term amplitude. The seasonal changes in the 8-hour term accord fairly well with those found in a normal year.

The 6-hour term amplitude is greatest at the equinoctial seasons and smallest in winter but variable phase angle has much to do with the very small winter amplitude. The amplitudes for the individual winter months are quite appreciable though smaller than those found at equinox or summer.

*Relative Humidity.*—The highest mean daily value of the relative humidity was 95·8 per cent., recorded for the 10th July and the 23rd November. Another remarkably high summer value was 95·7, for the 24th June. The lowest value was 63·9 per cent. for the 14th March, a very close approach to this, being 64·0 per cent. for the 12th April. The highest mean daily vapour pressure was 16·7 millibars for the 5th August and the lowest was 4·8 millibars for the 2nd March. The mean relative humidity for the year was 0·8 per cent. below normal and the mean hourly values for the year show a range of 6·0 per cent. as compared with a normal range of 8·8 per cent. Of the separate months, all except June, July and October had mean relative humidities less than normal, the deficiency for March being as much as 6 per cent. and for February 4·5 per cent. The excess for June, on the other hand, was 5·6 per cent. The diurnal inequality for the year shows a maximum in the early morning and a minimum in the afternoon; neither of these is very sharply defined as to time of occurrence. There is only one well marked oscillation in the 24 hours. The individual months show, on the whole, similar features but there is some slight indication in most cases of a secondary minimum before the principal maximum.

*Rainfall.*—The total rainfall for the year was 9 per cent. higher than normal, the actual excess being 132 millimetres. The month with the highest rainfall was December, with 252 millimetres, or 53 per cent. more than normal. The lowest monthly total was that for March, the 40 millimetres which fell during that month being only 50 per cent. of the normal amount. The summer months all had rainfalls above their respective normal values. The greatest hour's rainfall was 13·1 millimetres which fell between 17h and 18h on the 17th June.

*Bright Sunshine.*—The total amount of bright sunshine for the year 1924 was about 19 per cent. less than the normal. Only February had more than average sunshine, the excess for this month being about 16 per cent. The most notable deficiency was for June, the total sunshine for this month being less than half the average amount. The greatest recorded sunshine for any one day was 13·1 hours, on the 18th May. There were only three other days during the whole summer on which 12 hours bright sunshine was experienced. The day with the greatest proportion of the total possible sunshine was the 12th April with 90 per cent., the actual sunshine recorded on this day being 12·3 hours.

*Wind Speed.*—The mean monthly wind speeds were higher than average in the summer months more particularly in August and September. In the winter months, on the other hand, mean wind speeds were generally below normal, especially in February; December was an exception, the mean wind speed for this month being slightly higher than normal. Gales were few in number, being experienced only on one day in September and two days in December.

The highest hourly wind speed recorded was 20 metres per second (45 miles per hour) on the 20th September, with which was associated the highest gust of the year 35 metres per second (78 miles per hour).

*Grass Minimum Temperature.*—The mean of the monthly means given in Table 369 is  $79.2a$  ( $43.2^{\circ}$  F.). For no single month is the mean grass minimum temperature lower than the freezing point of water. The lowest value recorded in six months out of the twelve is below the freezing point and in no month is the lowest value as much as 4 degrees absolute higher than this point.

*Cloud and Weather.*—The mean amount of cloud at all observation hours was 7.9. The most cloudy month was June, with a mean cloud amount of 8.6 but July and August, each with mean amounts of 8.3 were hardly less so. The month with least cloud was April with a mean of 7.0. The mean values at the individual observation hours for the whole year show a steady fall in cloud amount from 7h to 21h. There were very few occasions of cloudless sky during 1924, these amounting to no more than 27 in more than 2,000 observations; on no day throughout the year was the sky without cloud at all observation hours and the only near approach to this was on the 15th March, on which day the average cloud amount at all observation hours was 1.0.

---

IDENTIFICATION NUMBERS OF INSTRUMENTS IN USE IN 1924.

|   |       |      |
|---|-------|------|
| Standard Fortin Barometer .. .. .         | M.O.  | 463  |
| Standard Dry Bulb Thermometer .. .. .     | M.O.  | 1701 |
| Standard Wet Bulb Thermometer .. .. .     | M.O.  | 1702 |
| Recording Beckley Raingauge .. .. .       | —     |      |
| Control Raingauge .. .. .                 | M.O.  | 402  |
| Glass for Control Raingauge .. .. .       | M.O.  | 1330 |
| Campbell Stokes Sunshine Recorder .. .. . | M.O.  | 5    |
| Robinson Cup Anemograph .. .. .           | Beck  | 46   |
| Dines Tube Anemograph .. .. .             | —     |      |
| Grass Minimum Thermometer .. .. .         | N & Z | 2497 |

TABLE A.

*Diurnal Variation of Barometric Pressure, 1924. Fourier Coefficients.*  
 Cahirciveen (Valencia Observatory), Longitude 10° 15' W.

| Month or Season.    | $c_1$ | $\alpha_1$ | $c_2$ | $\alpha_2$ | $c_3$ | $\alpha_3$ | $c_4$ | $\alpha_4$ |
|---------------------|-------|------------|-------|------------|-------|------------|-------|------------|
|                     | mb.   | ° /        | mb.   | °          | mb.   | °          | mb.   | °          |
| January ... ..      | .433  | 3 42       | .438  | 135.7      | .137  | 8          | .075  | 234        |
| February ... ..     | .115  | 255 28     | .353  | 149.2      | .090  | 344        | .021  | 123        |
| March ... ..        | .135  | 160 5      | .368  | 136.4      | .013  | 26         | .057  | 8          |
| April ... ..        | .377  | 156 25     | .316  | 147.9      | .022  | 100        | .029  | 35         |
| May ... ..          | .176  | 168 30     | .263  | 138.1      | .079  | 166        | .035  | 333        |
| June ... ..         | .252  | 192 44     | .215  | 162.7      | .071  | 136        | .035  | 346        |
| July ... ..         | .360  | 133 1      | .196  | 147.2      | .055  | 159        | .018  | 356        |
| August ... ..       | .577  | 178 7      | .299  | 150.7      | .047  | 143        | .049  | 319        |
| September ... ..    | .519  | 27 42      | .454  | 144.0      | .048  | 263        | .074  | 8          |
| October ... ..      | .230  | 148 36     | .343  | 153.7      | .032  | 312        | .021  | 348        |
| November ... ..     | .033  | 86 14      | .354  | 157.1      | .136  | 359        | .040  | 154        |
| December ... ..     | .254  | 244 52     | .347  | 178.7      | .106  | 6          | .082  | 218        |
| Arithmetic Mean ... | .288  | ...        | .329  | ...        | .070  | ...        | .044  | ...        |
| Year ... ..         | .104  | 154 16     | .323  | 149.1      | .023  | 13         | .015  | 322        |
| Winter ... ..       | .102  | 315 39     | .358  | 153.2      | .115  | 360        | .044  | 205        |
| Equinox ... ..      | .149  | 109 57     | .369  | 145.2      | .011  | 295        | .044  | 9          |
| Summer ... ..       | .319  | 167 57     | .240  | 149.4      | .062  | 153        | .033  | 334        |

TABLE B.

*Diurnal Variation of Temperature, 1924. Fourier Coefficients.*  
 Cahirciveen (Valencia Observatory), Longitude 10° 15' W.

| Month or Season.    | $c_1$ | $\alpha_1$ | $c_2$ | $\alpha_2$ | $c_3$ | $\alpha_3$ | $c_4$ | $\alpha_4$ |
|---------------------|-------|------------|-------|------------|-------|------------|-------|------------|
|                     | a.    | ° /        | a.    | °          | a.    | °          | a.    | °          |
| January ... ..      | .565  | 227 24     | .279  | 37.8       | .106  | 224        | .007  | 213        |
| February ... ..     | 1.234 | 220 21     | .347  | 58.8       | .095  | 259        | .042  | 201        |
| March ... ..        | 1.473 | 228 27     | .394  | 60.4       | .168  | 300        | .117  | 186        |
| April ... ..        | 1.884 | 236 37     | .405  | 77.6       | .111  | 41         | .091  | 244        |
| May ... ..          | 1.670 | 249 38     | .167  | 90.5       | .226  | 72         | .049  | 304        |
| June ... ..         | 1.395 | 243 53     | .039  | 30.9       | .165  | 90         | .065  | 305        |
| July ... ..         | 1.227 | 244 18     | .144  | 35.4       | .154  | 94         | .013  | 54         |
| August ... ..       | 1.275 | 248 14     | .220  | 50.8       | .111  | 49         | .029  | 227        |
| September ... ..    | 1.056 | 238 56     | .247  | 63.0       | .062  | 359        | .111  | 238        |
| October ... ..      | .976  | 241 19     | .328  | 71.7       | .089  | 256        | .052  | 204        |
| November ... ..     | .745  | 245 22     | .320  | 59.9       | .138  | 240        | .023  | 233        |
| December ... ..     | .251  | 247 27     | .255  | 56.2       | .143  | 236        | .048  | 40         |
| Arithmetic Mean ... | 1.146 | ...        | .263  | ...        | .126  | ...        | .054  | ...        |
| Year ... ..         | 1.130 | 239 12     | .255  | 61.1       | .009  | 63         | .033  | 232        |
| Winter ... ..       | .683  | 230 48     | .301  | 53.8       | .118  | 238        | .006  | 190        |
| Equinox ... ..      | 1.343 | 235 42     | .343  | 68.7       | .057  | 326        | .084  | 219        |
| Summer ... ..       | 1.389 | 240 44     | .132  | 56.2       | .159  | 78         | .029  | 297        |

NOTE.—The seasonal means are derived from the following grouping of months:—*Winter*: January, February, November and December; *Equinox*: March, April, September, October; *Summer*: May to August, inclusive.

## TERRESTRIAL MAGNETISM.

**Notes on the Magnetic Observations for the Year 1924.**

Absolute observations of declination, horizontal force and inclination were made weekly at the Valencia Observatory during the year 1923. The instruments in use were the same as in previous years, namely, the Dover unifilar, No. 139, with collimator magnet 139A and mirror magnet 139C, and the Dover dip circle, No. 118. The mean times of observation were 10.21 for the declination, 11.41 for the horizontal force and 14.29 for the inclination, all according to Greenwich Mean Time. In the individual observations the only departures of note from the mean times were one of 6 minutes and one of 7 minutes for inclination. The deflection of the mirror magnet was measured for two distances of the collimator magnet, namely, 30cm. and 40cm., and a single distribution constant,  $P$ , was calculated. The complete deflection observation consisted of eight readings of the mirror magnet. The extreme variation in  $P$  found for the year 1924 is  $2\gamma$  in the value of  $H$ . The mean value of  $P$  was  $7.54$ . The moment of the collimator magnet has decreased at the rate of about  $1\frac{1}{2}$  units per annum.

The values of the declination, horizontal force and inclination obtained in the absolute observations are given in detail in Table C. All the observations made are included in this table, but in Table D the mean monthly values are computed from only such of the absolute observations as were taken at times subsequently found, by reference to the Kew magnetograph curves and the quarterly list of daily "magnetic characters" published by authority of the International Meteorological Committee, to be free from serious disturbance. Observations in Table C taken at disturbed times, and not, therefore, utilised for the mean values in Table D, are marked with an asterisk. The north, west and vertical components and the total force for each month and the year are computed from the corresponding mean values of the observed elements.

Westerly declination has diminished by  $10'.6$  as compared with 1923. From 1922 to 1923 the decrease was  $10'.5$  and in the previous 12 months  $9'.5$ . The average annual decrease for the five years 1915–1920 was  $9'.2$ , and for the five years 1910–1915 it was  $8'.2$ . During the four years ending in 1924 the average annual decrement is  $10'.7$  so that the rate of the eastward movement of the magnetic needle appears to be increasing slowly.

Northerly inclination decreased by  $0'.9$  from 1923 to 1924. The corresponding change for the preceding year was  $-1'.5$ , and for the year previous to that  $-0'.4$ . From 1910 to 1915 the average yearly decrease was  $1'.0$  and from 1915 to 1920  $0'.5$ . For the four years 1920–1924 the average change per year is  $-1'.2$ . Inclination, therefore, continues to diminish at a slow rate.

It was remarked in these notes for the year 1922, that since the year 1920 the horizontal force had appeared to be increasing slowly whereas previously it had shown a steady decline from year to year. For the five-year period 1910–1915 the average annual decrease was about  $5\gamma$  and for the period 1915–1920 about  $6\gamma$ , while from 1920 to 1921 an increase of  $8\gamma$  appeared, followed the next year by a further increase, but only of  $1\gamma$ . The mean for 1924 shows a further increase of  $2\gamma$  over that for 1923, so that the steady rise in the horizontal force observed from 1921 onwards continues in the present year.

Reference to the last column of Table D shows that the reversal of the annual change in the horizontal force from 1920 onwards is not accompanied by any such reversal in the total force. From 1910 to 1915 the average yearly change in the total force was  $-49\gamma$ , and from 1915 to 1920 it was  $-33\gamma$ . From 1920 to 1924 the mean annual change is again  $-31\gamma$ , so that the total force continues to decrease at a fairly uniform rate. The individual changes from year to year as shown in the table are somewhat irregular, but this may be due in considerable measure to instrumental uncertainties. The total force is computed from the horizontal force and the inclination, using the formula  $T = H \sec I$ , so that an error of  $0'.1$  in  $I$  would give an error of approximately  $4\gamma$  in  $T$  at Valencia. In addition, it is to be remembered that the secular change data for Valencia are obtained from absolute observations made at fixed hours at any of which the value obtained for an element may differ, by an amount which is not necessarily constant, from its true mean value for the day of observation. It is by no means improbable that owing to this and errors of observation, uncertainties to the extent of several tenths of a minute of arc may be introduced into the mean value of  $I$  for the year. For the average change over a series of years these possible errors are naturally much diminished and the average fall of  $33\gamma$  per annum in the total force obtained from the values in Table D is probably a close approximation to the true change. This continued decrease in the total force indicates that the rise in the value of the horizontal force observed since 1920 is not a true increase in the magnetic field but merely a component increase arising from the continued fall in the inclination, which becomes proportionally more effective in the horizontal component as the actual inclination angle itself becomes smaller. The magnetic field in the Valencia district continues to become less year by year, therefore, although without observations of inclination the opposite would have appeared to be the case for the last four years.

TABLE C.

*Cahirciveen (Valencia Observatory). Absolute Magnetic Observations, 1924.*

Latitude 50° 56'. Longitude 10° 15'W.

| Date.         | Westerly Declination | Horizontal Force | Northerly Inclination | Date.          | Westerly Declination | Horizontal Force | Northerly Inclination |
|---------------|----------------------|------------------|-----------------------|----------------|----------------------|------------------|-----------------------|
| January 3 ..  | 18 42.0*             | 17872*           | 68 0.7*               | July 2 ..      | 18 31.9              | 17857            | 68 1.8                |
| " 9 ..        | 18 40.4              | 17858            | 68 ..                 | " 9 ..         | 18 33.2*             | 17868*           | 67 59.1*              |
| " 10 ..       | ..                   | ..               | 68 2.1*               | " 16 ..        | 18 33.5              | 17846            | 68 1.6                |
| " 16 ..       | 18 41.7              | ..               | 68 2.2                | " 23 ..        | 18 31.9              | 17845            | 68 0.2                |
| " 17 ..       | 18 43.6              | 17865            | ..                    | " 30 ..        | 18 34.0              | ..               | 68 0.2                |
| " 23 ..       | 18 43.9*             | 17841*           | 67 59.4*              | August 6 ..    | 18 34.5              | 17843            | 68 0.1                |
| " 30 ..       | 18 41.3*             | 17826*           | 68 2.4*               | " 13 ..        | 18 36.6              | 17868            | 68 0.0                |
| February 6 .. | 18 40.7              | 17845            | 68 1.4                | " 20 ..        | 18 33.1              | 17844            | 68 0.3                |
| " 13 ..       | 18 39.6              | 17850            | 68 0.1                | " 27 ..        | 18 34.8              | 17867            | 67 59.2               |
| " 20 ..       | 18 39.0*             | 17857*           | 67 59.5*              | September 3 .. | 18 34.4              | 17848            | ..                    |
| " 27 ..       | 18 38.1              | 17850            | 67 59.2               | " 10 ..        | 18 34.9              | 17834            | 68 0.5                |
| March 3 ..    | 18 42.7              | 17861            | 68 0.7                | " 17 ..        | 18 33.9              | ..               | ..                    |
| " 14 ..       | 18 37.5              | 17861            | ..                    | " 18 ..        | 18 32.3              | 17860            | 67 59.7               |
| " 15 ..       | ..                   | ..               | 67 59.9*              | " 24 ..        | 18 32.9*             | 17832*           | 68 0.2*               |
| " 19 ..       | 18 40.7              | 17855            | 68 0.1                | " 30 ..        | ..                   | ..               | 68 2.2                |
| " 26 ..       | 18 35.9              | 17842            | 68 1.2                | October 2 ..   | 18 30.9              | 17840            | 67 59.4               |
| April 2 ..    | 18 36.4              | 17852            | 68 0.8                | " 8 ..         | 18 32.0              | 17839            | 68 1.1                |
| " 9 ..        | 18 38.1              | 17848            | 68 0.7                | " 15 ..        | 18 30.2              | 17847            | ..                    |
| " 16 ..       | 18 37.1              | 17847            | 67 59.9               | " 16 ..        | ..                   | ..               | 68 2.0                |
| " 23 ..       | 18 36.3              | 17851            | 68 0.4                | " 23 ..        | 18 30.1*             | 17839*           | 68 2.0*               |
| " 30 ..       | 18 37.7              | 17855            | 67 59.9               | " 30 ..        | 18 31.5              | 17849            | 68 0.5                |
| May 6 ..      | ..                   | ..               | 68 1.9                | November 6 ..  | 18 31.4              | 17867            | 68 1.4                |
| " 8 ..        | 18 35.0              | 17850            | ..                    | " 13 ..        | 18 29.2              | 17869            | 68 1.2                |
| " 14 ..       | 18 36.1              | 17867            | 67 58.8               | " 20 ..        | 18 31.6              | 17863            | 68 0.7                |
| " 21 ..       | 18 37.8*             | 17847*           | 67 58.1*              | " 27 ..        | 18 29.4              | 17869            | ..                    |
| " 28 ..       | 18 40.9*             | 17817*           | 68 3.5*               | " 28 ..        | ..                   | ..               | 67 59.9               |
| June 4 ..     | 18 32.5              | ..               | 68 2.2                | December 4 ..  | 18 30.3              | 17872            | 68 1.1                |
| " 5 ..        | ..                   | 17859            | ..                    | " 11 ..        | 18 31.2              | 17857            | 67 59.4               |
| " 11 ..       | 18 36.5*             | 17827*           | 68 1.8*               | " 18 ..        | 18 29.7              | 17859            | 67 59.4               |
| " 18 ..       | 18 31.3*             | ..               | ..                    | " 24 ..        | 18 29.3              | 17862            | 68 0.6                |
| " 19 ..       | 18 32.1*             | 17837*           | 67 59.7*              |                |                      |                  |                       |
| " 25 ..       | 18 31.9              | 17843            | ..                    |                |                      |                  |                       |
| " 26 ..       | ..                   | ..               | 67 59.6               |                |                      |                  |                       |

\* Disturbance at these times. Values not utilised in computing means given in Table D.

TABLE D.

*Valencia Observatory, Cahirciveen.*

Magnetic Data for the Year 1924.

| 1924.            | Declination<br>(West). |      | Inclination<br>(North). |      | Horizon-<br>tal Force. | North. | West. | Vertical. | Total. |
|------------------|------------------------|------|-------------------------|------|------------------------|--------|-------|-----------|--------|
|                  | °                      | '    | °                       | '    | γ                      | γ      | γ     | γ         | γ      |
| January .. ..    | 18                     | 41·9 | 68                      | 2·2  | 17861                  | 16918  | 5726  | 44288     | 47754  |
| February .. ..   | 18                     | 39·5 | 68                      | 0·2  | 17848                  | 16910  | 5710  | 44182     | 47651  |
| March .. ..      | 18                     | 39·2 | 68                      | 0·5  | 17855                  | 16917  | 5711  | 44211     | 47680  |
| April .. ..      | 18                     | 37·1 | 68                      | 0·3  | 17851                  | 16917  | 5699  | 44194     | 47663  |
| May .. ..        | 18                     | 35·5 | 68                      | 0·4  | 17859                  | 16927  | 5694  | 44217     | 47688  |
| June .. ..       | 18                     | 32·2 | 68                      | 0·9  | 17851                  | 16925  | 5675  | 44215     | 47684  |
| July .. ..       | 18                     | 32·8 | 68                      | 0·9  | 17849                  | 16922  | 5677  | 44210     | 47678  |
| August .. ..     | 18                     | 34·8 | 67                      | 59·9 | 17855                  | 16924  | 5689  | 44189     | 47660  |
| September .. ..  | 18                     | 33·9 | 68                      | 0·8  | 17847                  | 16918  | 5682  | 44203     | 47671  |
| October .. ..    | 18                     | 31·1 | 68                      | 0·8  | 17844                  | 16916  | 5666  | 44186     | 47652  |
| November .. ..   | 18                     | 30·4 | 68                      | 0·8  | 17867                  | 16943  | 5673  | 44252     | 47712  |
| December .. ..   | 18                     | 30·1 | 68                      | 0·1  | 17863                  | 16939  | 5669  | 44216     | 47687  |
| Year, 1924 .. .. | 18                     | 34·9 | 68                      | 0·6  | 17854                  | 16923  | 5689  | 44213     | 47682  |
| Year, 1923 .. .. | 18                     | 46·5 | 68                      | 1·5  | 17852                  | 16902  | 5746  | 44242     | 47707  |
| Year, 1922 .. .. | 18                     | 57·0 | 68                      | 3·0  | 17849                  | 16882  | 5796  | 44289     | 47750  |
| Year, 1921 .. .. | 19                     | 6·5  | 68                      | 3·4  | 17848                  | 16865  | 5842  | 44299     | 47760  |
| Year, 1920 .. .. | 19                     | 17·9 | 68                      | 5·3  | 17840                  | 16837  | 5896  | 44353     | 47806  |
| Year, 1919 .. .. | 19                     | 27·2 | 68                      | 6·1  | 17842                  | 16823  | 5942  | 44385     | 47837  |
| Year, 1915 .. .. | 20                     | 3·8  | 68                      | 7·9* | 17869                  | 16785  | 6130  | 44519*    | 47972* |
| Year, 1910 .. .. | 20                     | 44·6 | 68                      | 13·0 | 17892                  | 16732  | 6337  | 44771     | 48215  |

\* Mean of 11 months only.



Readings in millibars at exact hours, Greenwich Mean Time.

285. Cahirciveen (Valencia Observatory) : H<sub>b</sub> (height of barometer cistern above M.S.L.) = 13.7 metres.

January, 1924.

Table with 25 columns (Day 1-25) and 25 rows (Station Level 1-25). Includes mean values for station and sea level.

286. Cahirciveen (Valencia Observatory) : H<sub>b</sub> = 13.7 metres.

February, 1924.

Table with 25 columns (Day 1-25) and 25 rows (Station Level 1-25). Includes mean values for station and sea level.

NOTE.—When pressure exceeds 1000 mb. the leading figure 1 is not printed, i.e., 1005.6 mb. is written 005.6. This rule does not, however, apply to monthly means.

Readings in millibars at exact hours, Greenwich Mean Time.

287. Cahirciveen (Valencia Observatory) : H<sub>b</sub> (height of barometer cistern above M.S.L.) = 13.7 metres.

March, 1924.

Table with 24 columns for hours (1-24) and a Mean column. Rows represent station levels from 1 to 31. Includes mean values for station level and sea level.

288. Cahirciveen (Valencia Observatory) : H<sub>b</sub> = 13.7 metres.

April, 1924.

Table with 24 columns for hours (1-24) and a Mean column. Rows represent station levels from 1 to 30. Includes mean values for station level and sea level.

NOTE.—When pressure exceeds 1000 mb. the leading figure 1 is not printed, i.e., 1005.6 mb. is written 005.6. This rule does not, however, apply to monthly means.

Readings in millibars at exact hours, Greenwich Mean Time.

289. Cahirciveen (Valencia Observatory) : H<sub>b</sub> (height of barometer cistern above M.S.L.) = 13.7 metres.

May, 1924.

Table with 25 columns (Day 1-25) and 25 rows (Station Level 1-25). Includes mean values for station level and sea level.

290. Cahirciveen (Valencia Observatory) : H<sub>b</sub> = 13.7 metres.

June, 1924.

Table with 25 columns (Day 1-25) and 25 rows (Station Level 1-25). Includes mean values for station level and sea level.

NOTE.—When pressure exceeds 1000 mb. the leading figure i is not printed, i.e., 1001.7 mb. is written 001.7. This rule does not, however, apply to monthly means.

Readings in millibars at exact hours, Greenwich Mean Time.

291. Cahirciveen (Valencia Observatory) : H<sub>b</sub> (height of barometer cistern above M.S.L.) = 13.7 metres.

July, 1924.

Table for Cahirciveen (Valencia Observatory) in July 1924. Columns: Day (1-25), Station Level (1-31), Mean (Station level), Mean (Sea level). Rows contain pressure readings in millibars.

292. Cahirciveen (Valencia Observatory) : H<sub>b</sub> = 13.7 metres.

August, 1924.

Table for Cahirciveen (Valencia Observatory) in August 1924. Columns: Day (1-25), Station Level (1-31), Mean (Station level), Mean (Sea level), G.M.T. (1-24, Mean). Rows contain pressure readings in millibars.

NOTE.—When pressure exceeds 1000 mb. the leading figure 1 is not printed, i.e., 1001.7 mb. is written 001.7. This rule does not, however, apply to monthly means.

Readings in millibars at exact hours, Greenwich Mean Time.

293. Cahirciveen (Valencia Observatory) : H<sub>b</sub> (height of barometer cistern above M.S.L.) = 13.7 metres.

September, 1924.

Table with 25 columns (Day, 1-24, Mean) and 31 rows (Station Level 1-30, Mean Station level, Mean Sea level). Contains pressure readings in millibars for Cahirciveen in September 1924.

294. Cahirciveen (Valencia Observatory) : H<sub>b</sub> = 13.7 metres.

October, 1924.

Table with 25 columns (Day, 1-24, Mean) and 31 rows (Station Level 1-30, Mean Station level, Mean Sea level, G.M.T.). Contains pressure readings in millibars for Cahirciveen in October 1924.

NOTE.—When pressure exceeds 1000 mb. the leading figure 1 is not printed, i.e., 1005.6 mb. is written 005.6. This rule does not, however, apply to monthly means.

Readings in millibars at exact hours, Greenwich Mean Time.

295. Cahirciveen (Valencia Observatory) : H<sub>b</sub> (height of barometer cistern above M.S.L.) = 13.7 metres.

November, 1924.

Table for Cahirciveen (Valencia Observatory) in November 1924. Columns include Day (1-30), Station Level (1-30), and Mean (Station level/Sea level). Rows show hourly pressure readings in millibars.

296. Cahirciveen (Valencia Observatory) : H<sub>b</sub> = 13.7 metres.

December, 1924.

Table for Cahirciveen (Valencia Observatory) in December 1924. Columns include Day (1-31), Station Level (1-31), and Mean (Station level/Sea level). Rows show hourly pressure readings in millibars.

NOTE.—When pressure exceeds 1000 mb. the leading figure 1 is not printed, i.e., 1005.6 mb. is written 005.6. This rule does not however, apply to monthly means.

## ANNUAL MEANS OF HOURLY VALUES.

From readings in millibars at exact hours, Greenwich Mean Time.

297. Cahirciveen (Valencia Observatory) :  $H_b = 13.7$  metres.

1924.

| G.M.T.        | 1      | 2      | 3      | 4      | 5      | 6      | 7      | 8      | 9      | 10     | 11     | Noon.  | 13     | 14     | 15     | 16     | 17     | 18     | 19     | 20     | 21     | 22     | 23     | 24     | Mean.  |
|---------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| Station Level | 009.69 | 009.53 | 009.34 | 009.18 | 009.10 | 009.15 | 009.27 | 009.43 | 009.66 | 009.68 | 009.76 | 009.69 | 009.54 | 009.40 | 009.30 | 009.22 | 009.22 | 009.33 | 009.45 | 009.61 | 009.81 | 009.83 | 009.80 | 009.75 | 009.49 |
| Sea Level     | 011.35 | 011.19 | 011.00 | 010.85 | 010.77 | 010.81 | 010.93 | 011.09 | 011.32 | 011.34 | 011.42 | 011.35 | 011.19 | 011.05 | 010.95 | 010.87 | 010.88 | 010.99 | 011.11 | 011.27 | 011.47 | 011.49 | 011.46 | 011.41 | 011.15 |

## PRESSURE AT STATION LEVEL : MONTHLY MEANS AND DIURNAL INEQUALITIES.

The departures from the mean of the day are adjusted for non-cyclic change.

298. Cahirciveen (Valencia Observatory) :  $H_b = 13.7$  metres.

1924.

| Month. | Mean.   | Hour. 1. | G.M.T. 2. | 3.    | 4.    | 5.    | 6.    | 7.    | 8.    | 9.    | 10.   | 11.   | Noon. | 13.   | 14.   | 15.   | 16.   | 17.   | 18.   | 19.   | 20.   | 21.   | 22.   | 23.   | 24.   |
|--------|---------|----------|-----------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
|        | mb.     | mb.      | mb.       | mb.   | mb.   | mb.   | mb.   | mb.   | mb.   | mb.   | mb.   | mb.   | mb.   | mb.   | mb.   | mb.   | mb.   | mb.   | mb.   | mb.   | mb.   | mb.   | mb.   | mb.   | mb.   |
| Jan.   | 1006.44 | +0.26    | +0.25     | +0.27 | +0.16 | -0.09 | -0.12 | -0.04 | +0.29 | +0.66 | +0.70 | +0.78 | +0.52 | +0.09 | -0.34 | -0.58 | -0.68 | -0.75 | -0.64 | -0.64 | -0.48 | -0.18 | +0.08 | +0.21 | +0.29 |
| Feb.   | 1018.56 | +0.06    | -0.09     | -0.25 | -0.35 | -0.40 | -0.33 | -0.29 | -0.06 | +0.31 | +0.38 | +0.52 | +0.53 | +0.25 | -0.02 | -0.17 | -0.31 | -0.29 | -0.14 | -0.02 | +0.05 | +0.18 | +0.20 | +0.14 | +0.15 |
| Mar.   | 1006.41 | +0.25    | +0.10     | -0.15 | -0.42 | -0.49 | -0.52 | -0.31 | -0.12 | +0.10 | +0.14 | +0.23 | +0.25 | +0.17 | +0.05 | -0.08 | -0.26 | -0.35 | -0.22 | -0.04 | +0.15 | +0.35 | +0.35 | +0.38 | +0.41 |
| Apr.   | 1009.99 | +0.30    | +0.02     | -0.27 | -0.51 | -0.64 | -0.53 | -0.42 | -0.36 | -0.11 | -0.08 | +0.02 | +0.01 | -0.02 | -0.03 | -0.11 | -0.14 | -0.06 | +0.09 | +0.20 | +0.41 | +0.64 | +0.53 | +0.57 | +0.49 |
| May    | 1007.23 | +0.14    | +0.01     | -0.25 | -0.40 | -0.44 | -0.38 | -0.21 | -0.11 | 0.00  | -0.01 | +0.06 | +0.13 | +0.09 | +0.10 | +0.07 | -0.07 | -0.11 | -0.15 | -0.08 | +0.08 | +0.40 | +0.42 | +0.39 | +0.31 |
| June   | 1013.60 | +0.03    | -0.15     | -0.43 | -0.52 | -0.51 | -0.37 | -0.22 | -0.03 | +0.09 | +0.02 | +0.06 | +0.06 | +0.06 | +0.11 | +0.09 | +0.07 | +0.08 | +0.08 | +0.14 | +0.21 | +0.39 | +0.38 | +0.29 | +0.08 |
| July   | 1009.37 | +0.32    | +0.17     | -0.10 | -0.25 | -0.34 | -0.33 | -0.26 | -0.26 | -0.19 | -0.26 | -0.21 | -0.17 | -0.18 | -0.16 | -0.12 | -0.12 | -0.10 | +0.01 | +0.12 | +0.30 | +0.49 | +0.59 | +0.57 | +0.47 |
| Aug.   | 1010.52 | +0.07    | -0.22     | -0.49 | -0.75 | -0.85 | -0.83 | -0.63 | -0.42 | -0.22 | -0.15 | -0.01 | +0.03 | +0.08 | +0.18 | +0.21 | +0.18 | +0.23 | +0.28 | +0.38 | +0.56 | +0.76 | +0.71 | +0.54 | +0.35 |
| Sept.  | 1006.47 | +0.47    | +0.41     | +0.25 | +0.09 | +0.03 | +0.14 | +0.27 | +0.36 | +0.53 | +0.44 | +0.38 | +0.22 | 0.00  | -0.31 | -0.66 | -1.00 | -1.09 | -0.92 | -0.65 | -0.19 | +0.13 | +0.26 | +0.39 | +0.46 |
| Oct.   | 1007.98 | +0.19    | +0.02     | -0.26 | -0.36 | -0.42 | -0.43 | -0.39 | -0.17 | +0.07 | +0.09 | +0.11 | +0.16 | -0.01 | -0.11 | -0.18 | -0.32 | -0.26 | -0.06 | +0.14 | +0.31 | +0.54 | +0.53 | +0.44 | +0.39 |
| Nov.   | 1012.35 | +0.15    | +0.01     | -0.10 | -0.31 | -0.30 | -0.29 | -0.22 | -0.01 | +0.25 | +0.38 | +0.55 | +0.30 | +0.01 | -0.30 | -0.43 | -0.41 | -0.33 | -0.11 | +0.09 | +0.14 | +0.20 | +0.26 | +0.25 | +0.25 |
| Dec.   | 1004.98 | -0.30    | -0.53     | -0.43 | -0.42 | -0.50 | -0.34 | -0.18 | +0.02 | +0.45 | +0.53 | +0.68 | +0.37 | +0.07 | -0.14 | -0.16 | -0.06 | 0.00  | +0.16 | +0.11 | +0.21 | +0.33 | +0.13 | +0.04 | -0.04 |
| Year.  | 1009.49 | +0.16    | 0.00      | -0.18 | -0.34 | -0.41 | -0.36 | -0.24 | -0.07 | +0.16 | +0.18 | +0.27 | +0.20 | +0.05 | -0.08 | -0.18 | -0.26 | -0.25 | -0.15 | -0.02 | +0.15 | +0.35 | +0.37 | +0.35 | +0.30 |

## ABSOLUTE EXTREMES OF PRESSURE AT STATION LEVEL FOR EACH DAY.

Maximum and minimum for the interval 0 h. to 24 h., Greenwich Mean Time.

299. Cahirciveen (Valencia Observatory) :  $H_b = 13.7$  metres.

1924.

| Month | Jan.  |       | Feb.  |       | Mar.  |       | April |       | May   |       | June  |       | July  |       | Aug.  |       | Sept. |       | Oct.  |       | Nov.  |       | Dec.  |       |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Day.  | Max.  | Min.  | Max.  | Min.  | Max.  | Min.  | Max.  | Min.  | Max.  | Min.  | Max.  | Min.  | Max.  | Min.  | Max.  | Min.  | Max.  | Min.  | Max.  | Min.  | Max.  | Min.  | Max.  | Min.  |
|       | mb.   | mb.   | mb.   | mb.   | mb.   | mb.   | mb.   | mb.   | mb.   | mb.   | mb.   | mb.   | mb.   | mb.   | mb.   | mb.   | mb.   | mb.   | mb.   | mb.   | mb.   | mb.   | mb.   | mb.   |
| 1     | 029.8 | 020.6 | 037.5 | 030.6 | 003.1 | 988.1 | 027.2 | 025.1 | 007.9 | 002.1 | 017.2 | 009.6 | 016.4 | 994.7 | 011.5 | 003.7 | 017.5 | 008.9 | 008.1 | 003.0 | 002.6 | 992.5 | 989.7 | 983.8 |
| 2     | 020.6 | 017.7 | 038.1 | 036.9 | 991.4 | 982.6 | 026.0 | 022.8 | 002.1 | 000.0 | 019.6 | 016.9 | 995.9 | 993.7 | 017.5 | 011.5 | 021.4 | 017.5 | 007.8 | 005.7 | 991.7 | 993.4 | 997.6 | 993.4 |
| 3     | 019.8 | 014.8 | 038.0 | 034.5 | 001.6 | 991.4 | 023.8 | 021.7 | 015.1 | 001.6 | 018.8 | 011.0 | 994.9 | 988.3 | 016.5 | 009.8 | 021.4 | 020.1 | 011.4 | 007.8 | 021.6 | 007.4 | 000.5 | 993.4 |
| 4     | 019.1 | 016.9 | 034.5 | 030.1 | 005.6 | 001.5 | 025.1 | 022.0 | 016.4 | 014.4 | 014.1 | 000.9 | 999.8 | 992.9 | 013.2 | 009.5 | 021.0 | 014.8 | 010.7 | 001.9 | 028.2 | 021.6 | 998.6 | 990.0 |
| 5     | 016.9 | 009.1 | 030.1 | 024.2 | 020.0 | 001.9 | 025.5 | 024.0 | 016.2 | 009.0 | 015.0 | 009.0 | 005.6 | 993.3 | 018.0 | 008.8 | 014.9 | 000.0 | 003.8 | 000.5 | 028.8 | 026.4 | 013.8 | 998.2 |
| 6     | 009.1 | 989.3 | 024.2 | 020.3 | 023.1 | 019.9 | 024.9 | 019.2 | 009.0 | 001.5 | 014.2 | 009.5 | 008.7 | 005.6 | 023.6 | 017.4 | 000.0 | 993.9 | 002.8 | 996.5 | 031.6 | 028.8 | 023.6 | 013.8 |
| 7     | 002.5 | 988.7 | 020.3 | 997.7 | 023.0 | 020.0 | 019.2 | 011.4 | 011.6 | 002.5 | 013.1 | 003.2 | 015.7 | 007.6 | 029.6 | 023.6 | 993.9 | 992.2 | 004.6 | 002.3 | 030.9 | 023.2 | 021.3 | 012.5 |
| 8     | 988.7 | 970.0 | 997.7 | 975.4 | 020.0 | 013.6 | 011.4 | 005.4 | 018.1 | 011.0 | 018.2 | 010.3 | 015.2 | 006.5 | 029.7 | 028.6 | 001.1 | 992.4 | 013.8 | 004.0 | 023.2 | 002.0 | 017.8 | 013.8 |
| 9     | 990.9 | 979.5 | 979.0 | 975.4 | 013.6 | 000.2 | 005.6 | 000.2 | 017.0 | 007.2 | 017.7 | 006.4 | 016.9 | 007.6 | 028.9 | 022.4 | 017.1 | 001.0 | 013.6 | 006.5 | 002.0 | 991.4 | 023.5 | 017.8 |
| 10    | 991.0 | 985.4 | 981.8 | 978.1 | 011.4 | 009.5 | 009.3 | 001.0 | 007.3 | 005.1 | 006.4 | 009.5 | 995.7 | 014.6 | 012.8 | 022.4 | 010.2 | 017.2 | 008.7 | 008.5 | 003.4 | 004.7 | 994.2 | 023.8 |
| 11    | 995.0 | 982.8 | 993.6 | 981.8 | 014.6 | 010.9 | 009.4 | 999.1 | 009.0 | 005.1 | 999.1 | 991.2 | 015.4 | 009.3 | 010.2 | 005.8 | 008.7 | 000.5 | 008.5 | 000.0 | 028.4 | 004.7 | 021.9 | 017.1 |
| 12    | 000.2 | 991.0 | 993.4 | 981.8 | 014.2 | 011.0 | 003.7 | 000.3 | 010.0 | 004.9 | 015.8 | 999.1 | 009.3 | 001.0 | 009.5 | 002.0 | 000.6 | 996.0 | 015.0 | 008.5 | 034.8 | 028.2 | 017.1 | 009.4 |
| 13    | 996.4 | 988.4 | 013.5 | 985.9 | 015.1 | 012.5 | 000.7 | 991.8 | 011.3 | 005.2 | 023.6 | 015.8 | 022.3 | 008.1 | 012.3 | 007.3 | 009.9 | 998.3 | 024.0 | 013.0 | 028.2 | 009.8 | 010.3 | 004.6 |
| 14    | 995.1 | 978.6 | 027.1 | 013.5 | 017.0 | 014.9 | 002.8 | 990.5 | 014.2 | 008.5 | 023.3 | 021.7 | 022.3 | 017.2 | 011.0 | 003.3 | 018.1 | 009.9 | 024.4 | 021.3 | 012.5 | 009.3 | 012.9 | 998.4 |
| 15    | 985.2 | 977.8 | 028.9 | 025.8 | 018.2 | 016.5 | 014.5 | 002.8 | 016.6 | 011.1 | 021.7 | 016.0 | 017.2 | 006.6 | 011.1 | 000.8 | 017.4 | 007.7 | 022.3 | 020.0 | 024.9 | 012.5 | 998.4 | 982.6 |
| 16    | 991.5 | 985.2 | 036.0 | 026.4 | 017.9 | 016.4 | 017.3 | 014.3 | 022.6 | 016.6 | 016.0 | 010.6 | 011.5 | 006.7 | 002.5 | 991.6 | 010.7 | 003.0 | 024.5 | 020.9 | 031.1 | 024.9 | 015.8 | 998.4 |
| 17    | 996.1 | 991.5 | 036.2 | 027.0 | 018.0 | 016.3 | 022.3 | 016.6 | 021.9 | 014.6 | 010.6 | 010.6 | 013.8 | 004.4 | 998.9 | 987.8 | 012.9 | 000.3 | 026.9 | 023.0 | 033.9 | 030.7 | 017.9 | 014.2 |
| 18    | 996.1 | 989.7 | 027.4 | 023.0 | 016.4 | 011.5 | 027.3 | 021.9 | 014.6 | 005.0 | 999.9 | 995.8 | 016.5 | 013.8 | 004.9 | 998.9 | 019.4 | 012.9 | 023.0 | 008.3 | 037.7 | 033.4 | 014.2 | 009.3 |
| 19    | 006.1 | 991.4 | 027.4 | 024.8 | 011.5 | 002.5 | 033.6 | 027.3 | 005.0 | 998.4 | 010.0 | 999.8 | 015.6 | 007.7 | 003.5 | 997.6 | 017.8 | 995.3 | 008.3 | 006.2 | 039.5 | 037.3 | 021.3 | 013.5 |
| 20    | 011.4 | 003.3 | 025.8 | 024.7 | 002.5 | 997.3 | 035.4 | 033.0 | 000.1 | 996.0 | 015.4 | 010.0 | 014.8 | 009.1 | 002.3 | 999.0 | 002.4 | 97.9  | 007.0 | 001.2 | 037.3 | 032.6 | 023.9 | 021.1 |
| 21    | 003.5 | 994.3 | 026.6 | 024.6 | 997.3 | 994.4 | 033.0 | 021.2 | 999.1 | 997.1 | 021.9 | 015.4 | 016.2 | 014.7 | 003.4 | 998.7 | 001.1 | 997.0 | 013.6 | 997.9 | 032.7 | 024.7 | 022.6 | 008.4 |
| 22    | 012.5 | 999.7 | 033.0 | 026.2 | 997.8 | 984.4 | 021.2 | 008.1 | 003.1 | 997.3 | 023.9 | 020.1 | 015.8 | 013.4 | 008.0 | 002.6 | 001.4 | 980.7 | 025.8 | 013.6 | 024.7 | 015.6 | 008.4 | 991.5 |
| 23    | 015.5 | 008.8 | 035.8 | 033.0 | 984.4 | 980.1 | 008.1 | 997.5 | 002.6 | 994.7 | 023.2 | 019.3 | 018.1 | 014.2 | 019.4 | 007.1 | 003.7 | 009.9 | 025.7 | 014.8 | 015.6 | 002.5 | 997.4 | 990.2 |
| 24    | 023.6 | 010.0 | 035.4 | 025.5 | 986.5 | 984.4 | 998.0 | 993.7 | 999.7 | 992.0 | 024.8 | 022.0 | 019.6 | 018.0 | 024.0 | 019.3 | 003.6 | 992.3 | 015.1 | 004.1 | 002.5 | 990.0 | 000.3 | 993.0 |
| 25    | 030.0 | 023.6 | 026.3 | 023.1 | 986.3 | 985.3 | 993.8 | 985.1 | 007.9 | 999.7 | 024.7 | 023.0 | 018.5 | 015.5 | 023.6 | 021.3 | 012.0 | 999.4 | 004.1 | 996.4 | 990.4 | 986.8 | 000.7 | 990.9 |
| 26    | 032.2 | 025.1 | 029.3 | 026.3 | 994.0 | 985.8 | 994.5 | 982.4 | 009.8 | 007.2 | 023.1 | 018.0 | 020.8 | 018.4 | 022.4 | 019.3 | 020.8 | 012.0 | 000.5 | 996.2 | 989.0 | 983.4 | 999.2 | 980.4 |
| 27    | 040.0 | 032.2 | 029.0 | 024.2 | 002.9 | 994.0 | 995.0 | 985.6 | 012.2 | 007.2 | 022.7 | 018.3 | 019.8 | 018.9 | 019.4 | 013.4 | 023.9 | 020.8 | 999.6 | 993.9 | 997.0 | 983.0 | 981.9 | 975.9 |
| 28    | 039.8 | 031.9 | 026.2 | 021.7 | 008.6 | 002.9 | 001.0 | 991.0 | 012.2 | 009.5 | 002.2 | 011.3 | 998.9 | 993.1 | 013.4 | 002.9 | 022.5 |       |       |       |       |       |       |       |

Readings in degrees absolute at exact hours, Greenwich Mean Time.

300. Cahirciveen (Valencia Observatory) : North Wall Screen : h<sub>t</sub> (height of thermometer bulbs above ground) = 1.3 metres.

January, 1924.

Table with 25 columns (1-24) and 31 rows (1-31). Columns 1-24 represent hourly readings from 1 a.m. to 24 p.m. Column 25 is the Mean. Values range from 74.8 to 85.0.

301. Cahirciveen (Valencia Observatory) : North Wall Screen : h<sub>t</sub> = 1.3 metres.

February, 1924.

Table with 25 columns (1-24) and 31 rows (1-31). Columns 1-24 represent hourly readings from 1 a.m. to 24 p.m. Column 25 is the Mean. Values range from 76.9 to 83.3.

NOTE.—The initial 2 or 3 of the readings is omitted, i.e., 275.0 degrees absolute is written 75.0.



Readings in degrees absolute at exact hours, Greenwich Mean Time.

302. Cahirciveen (Valencia Observatory) : North Wall Screen : h<sub>t</sub> (height of thermometer bulbs above ground) = 1.3 metres.

March, 1924.

Table with 25 columns (Day, 1-24, Mean) and 31 rows (1-31). Each cell contains a temperature reading in degrees absolute. A 'Mean' row is at the bottom of the data. Values range from approximately 73.0 to 85.7.

303. Cahirciveen (Valencia Observatory) : North Wall Screen : h<sub>t</sub> = 1.3 metres.

April, 1924.

Table with 25 columns (Day, 1-24, Mean) and 31 rows (1-31). Each cell contains a temperature reading in degrees absolute. A 'Mean' row is at the bottom of the data. Values range from approximately 73.0 to 88.4.

NOTE.—The initial 2 or 3 of the readings is omitted, i.e., 275.0 degrees absolute is written 75.0.

Readings in degrees absolute at exact hours, Greenwich Mean Time.

304. Cahirciveen (Valencia Observatory) : North Wall Screen : ht (height of thermometer bulbs above ground) = 1.3 metres.

May, 1924.

Table with 25 columns (Day, 1-24, Mean) and 31 rows of temperature readings for May 1924. Values range from 75.0 to 88.5.

305. Cahirciveen (Valencia Observatory) : North Wall Screen : ht = 1.3 metres.

June, 1924.

Table with 25 columns (Day, 1-24, Mean) and 31 rows of temperature readings for June 1924. Values range from 84.9 to 88.5.

NOTE.—The initial 2 or 3 of the readings is omitted, i.e., 275.0 degrees absolute is written 75.0.

Readings in degrees absolute at exact hours, Greenwich Mean Time.

306. Cahirciveen (Valencia Observatory) : North Wall Screen : ht (height of thermometer bulbs above ground) = 1.3 metres.

July, 1924.

Table with 26 columns (Day, 1-24, Mean) and 31 rows (1-31). Contains temperature readings in degrees absolute for July 1924 at Cahirciveen.

307. Cahirciveen (Valencia Observatory) : North Wall Screen : ht = 1.3 metres.

August, 1924.

Table with 26 columns (Day, 1-24, Mean) and 31 rows (1-31). Contains temperature readings in degrees absolute for August 1924 at Cahirciveen.

NOTE.—The initial 2 or 3 of the readings is omitted, i.e., 275.0 degrees absolute is written 75.0.

Readings in degrees absolute at exact hours, Greenwich Mean Time.

308. Cahirciveen (Valencia Observatory) : North Wall Screen : ht (height of thermometer bulbs above ground) = 1.3 metres.

September, 1924.

Table with 25 columns (Day, 1-24, Mean) and 31 rows (1-30, Mean). Columns 1-24 are labeled with 'a.' and contain temperature readings. The 'Mean' row at the bottom shows the average temperature for each day.

309. Cahirciveen (Valencia Observatory) : North Wall Screen : ht = 1.3 metres.

October, 1924.

Table with 25 columns (Day, 1-24, Mean) and 31 rows (1-30, Mean). Columns 1-24 are labeled with 'a.' and contain temperature readings. The 'Mean' row at the bottom shows the average temperature for each day.

NOTE.—The initial 2 or 3 of the readings is omitted, i.e., 275° degrees absolute is written 75°.

Readings in degrees absolute at exact hours, Greenwich Mean Time.

310. Cahirciveen (Valencia Observatory) : North Wall Screen : ht (height of thermometer bulbs above ground) = 1.3 metres.

November, 1924.

Table with 25 columns (Day, 1-24, Mean) and 31 rows (1-30, Mean). Each cell contains a temperature reading in degrees absolute. The Mean row shows values ranging from 81.7 to 82.3.

311. Cahirciveen (Valencia Observatory) : North Wall Screen : ht = 1.3 metres.

December, 1924.

Table with 25 columns (Day, 1-24, Mean) and 31 rows (1-30, Mean, G.M.T.). Each cell contains a temperature reading in degrees absolute. The Mean row shows values ranging from 82.0 to 82.7. The G.M.T. row shows the corresponding day of the month.

NOTE.—The initial 2 or 3 of the readings is omitted, i.e., 275.0 degrees absolute if written 75.0.

TEMPERATURE: ANNUAL MEANS OF HOURLY VALUES.
From readings in degrees absolute at exact hours, Greenwich Mean Time.

312. Cahirciveen (Valencia Observatory): North Wall Screen: ht = 1.3 metres.

1924.

Table with 25 columns (1-24 hours and Mean) and 12 rows (Jan-Dec and Year). Values range from 82.66 to 84.78.

TEMPERATURE: MONTHLY MEANS AND DIURNAL INEQUALITIES.

The departures from the mean of the day are adjusted for non-cyclic change.

313. Cahirciveen (Valencia Observatory): North Wall Screen: ht = 1.3 metres.

1924

Table with 26 columns (Month, Mean, Hour 1-24, G.M.T. 1-24) and 12 rows (Jan-Dec and Year). Values range from 280.26 to 287.13.

ABSOLUTE EXTREMES OF TEMPERATURE FOR EACH DAY.

Maximum and minimum for the interval 0 h. to 24 h., Greenwich Mean Time.

314. Cahirciveen (Valencia Observatory): North Wall Screen: ht = 1.3 metres.

1924.

Table with 23 columns (Month, Jan-Dec, Day) and 31 rows (Days 1-31). Values range from 70.6 to 91.5.

NOTE.—The initial 2 or 3 of the readings is omitted, i.e., 275.0 degrees absolute is written 75.0.

Percentages at exact hours, Greenwich Mean Time. Determined as explained on page 14.

315. Cahirciveen (Valencia Observatory) : North Wall Screen : ht (height of thermometer bulbs above ground) = 1.3 metres.

January, 1924.

Table with 25 columns for hours (1-24), Mean, and Vapour Pressure. Rows represent days 1 through 31. Data includes relative humidity percentages and vapour pressure in mb.

316. Cahirciveen (Valencia Observatory) : North Wall Screen : ht = 1.3 metres.

February, 1924.

Table with 25 columns for hours (1-24), Mean, and Vapour Pressure. Rows represent days 1 through 29. Data includes relative humidity percentages and vapour pressure in mb.

\* Computed from the mean temperatures and the mean relative humidities.

† Mean of the column.

‡ Mean of the row.

Percentages at exact hours, Greenwich Mean Time. Determined as explained on page 14.

317. Cahirciveen (Valencia Observatory) : North Wall Screen : h<sub>t</sub> (height of thermometer bulbs above ground) = 1.3 metres.

March, 1924.

Table for March 1924 showing relative humidity percentages for each hour from 1 to 31, with columns for the day, hours 1-24, mean, and vapour pressure.

318. Cahirciveen (Valencia Observatory) : North Wall Screen : h<sub>t</sub> = 1.3 metres.

April, 1924.

Table for April 1924 showing relative humidity percentages for each hour from 1 to 30, with columns for the day, hours 1-24, mean, and vapour pressure.

\* Computed from the mean temperatures and the mean relative humidities. † Mean of the column. ‡ Mean of the row.



Percentages at exact hours, Greenwich Mean Time. Determined as explained on page 14.

319. Cahirciveen (Valencia Observatory) : North Wall Screen :  $h_t$  (height of thermometer bulbs above ground) = 1.3 metres.

May, 1924.

Table with 25 columns (1-24) for hourly data and 2 columns (Mean, Vapour Pressure\*) for summary. Rows represent days from 1 to 31. Data includes relative humidity percentages and vapour pressure values in mb.

320. Cahirciveen (Valencia Observatory) : North Wall Screen :  $h_t$  = 1.3 metres.

June, 1924.

Table with 25 columns (1-24) for hourly data and 2 columns (Mean, Vapour Pressure\*) for summary. Rows represent days from 1 to 30. Data includes relative humidity percentages and vapour pressure values in mb.

\* Computed from the mean temperatures and the mean relative humidities.

† Mean of the column.

‡ Mean of the row.

Percentages at exact hours, Greenwich Mean Time. Determined as explained on page 14.

321. Cahirciveen (Valencia Observatory) : North Wall Screen : ht (height of thermometer bulbs above ground) = 1.3 metres.

July, 1924.

| Day.             | 1.       | 2.       | 3.       | 4.       | 5.       | 6.       | 7.       | 8.       | 9.       | 10.      | 11.      | Noon.    | 13.      | 14.      | 15.      | 16.      | 17.      | 18.      | 19.      | 20.      | 21.      | 22.      | 23.      | 24.      | Mean.    | Vapour Pressure.* |      |
|------------------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|-------------------|------|
| 1                | %        | %        | %        | %        | %        | %        | %        | %        | %        | %        | %        | %        | %        | %        | %        | %        | %        | %        | %        | %        | %        | %        | %        | %        | %        | %                 | mb.  |
| 2                | 89       | 91       | 92       | 92       | 87       | 82       | 81       | 77       | 73       | 73       | 74       | 87       | 89       | 91       | 94       | 94       | 94       | 95       | 92       | 88       | 87       | 87       | 87       | 88       | 87       | 86.7              | 12.3 |
| 3                | 85       | 82       | 82       | 83       | 83       | 82       | 82       | 80       | 80       | 80       | 77       | 78       | 76       | 73       | 78       | 77       | 76       | 77       | 80       | 80       | 85       | 85       | 87       | 87       | 88       | 80.7              | 12.4 |
| 4                | 89       | 90       | 92       | 91       | 91       | 90       | 89       | 89       | 90       | 89       | 88       | 88       | 82       | 79       | 78       | 74       | 71       | 70       | 72       | 85       | 83       | 86       | 85       | 87       | 87       | 84.5              | 11.5 |
| 5                | 87       | 87       | 91       | 89       | 89       | 88       | 85       | 81       | 75       | 84       | 85       | 89       | 81       | 76       | 75       | 72       | 76       | 78       | 78       | 85       | 85       | 87       | 87       | 85       | 87       | 85.0              | 10.4 |
| 6                | 90       | 87       | 89       | 91       | 92       | 92       | 87       | 85       | 89       | 87       | 89       | 83       | 85       | 78       | 73       | 81       | 85       | 84       | 78       | 80       | 82       | 83       | 82       | 84       | 85.3     | 12.0              |      |
| 7                | 88       | 88       | 91       | 91       | 91       | 92       | 85       | 82       | 90       | 91       | 88       | 84       | 87       | 87       | 82       | 82       | 83       | 79       | 81       | 84       | 90       | 89       | 89       | 90       | 86.7     | 13.1              |      |
| 8                | 91       | 93       | 92       | 92       | 92       | 92       | 91       | 91       | 90       | 89       | 89       | 85       | 85       | 80       | 79       | 82       | 85       | 83       | 82       | 82       | 86       | 87       | 87       | 87       | 87.4     | 14.3              |      |
| 9                | 87       | 89       | 93       | 91       | 90       | 84       | 83       | 83       | 84       | 81       | 82       | 79       | 74       | 73       | 73       | 79       | 82       | 86       | 89       | 89       | 93       | 89       | 89       | 86       | 84.5     | 13.9              |      |
| 10               | 85       | 91       | 92       | 93       | 94       | 91       | 92       | 92       | 88       | 85       | 87       | 82       | 84       | 82       | 83       | 83       | 82       | 86       | 91       | 91       | 89       | 92       | 94       | 96       | 88.3     | 15.0              |      |
|                  | 95       | 95       | 95       | 94       | 94       | 95       | 92       | 95       | 95       | 94       | 95       | 96       | 96       | 96       | 97       | 95       | 96       | 96       | 97       | 97       | 97       | 99       | 99       | 99       | 95.8     | 16.2              |      |
| 11               | 99       | 99       | 99       | 99       | 99       | 99       | 97       | 97       | 96       | 94       | 94       | 94       | 95       | 93       | 90       | 89       | 82       | 79       | 79       | 78       | 78       | 78       | 79       | 86       | 90.8     | 15.3              |      |
| 12               | 86       | 84       | 80       | 73       | 78       | 83       | 90       | 87       | 92       | 91       | 92       | 87       | 82       | 82       | 81       | 88       | 83       | 81       | 84       | 86       | 87       | 88       | 86       | 88       | 84.9     | 15.2              |      |
| 13               | 89       | 89       | 89       | 88       | 89       | 86       | 84       | 82       | 79       | 78       | 78       | 79       | 78       | 77       | 76       | 77       | 76       | 79       | 82       | 84       | 85       | 86       | 88       | 91       | 82.8     | 13.8              |      |
| 14               | 91       | 91       | 91       | 89       | 91       | 88       | 89       | 85       | 84       | 80       | 81       | 82       | 82       | 83       | 89       | 92       | 91       | 90       | 89       | 90       | 91       | 91       | 92       | 93       | 88.1     | 14.9              |      |
| 15               | 96       | 96       | 96       | 97       | 96       | 96       | 96       | 96       | 96       | 96       | 95       | 97       | 95       | 97       | 93       | 87       | 90       | 87       | 87       | 89       | 91       | 92       | 93       | 93       | 93.6     | 15.9              |      |
| 16               | 92       | 92       | 93       | 89       | 83       | 83       | 79       | 79       | 76       | 77       | 81       | 79       | 77       | 78       | 77       | 77       | 75       | 78       | 80       | 83       | 88       | 89       | 89       | 91       | 82.7     | 13.6              |      |
| 17               | 91       | 91       | 93       | 93       | 93       | 94       | 93       | 93       | 91       | 88       | 81       | 82       | 83       | 81       | 86       | 82       | 74       | 79       | 80       | 82       | 82       | 85       | 85       | 85       | 85       | 86.3              | 13.4 |
| 18               | 87       | 85       | 83       | 85       | 80       | 86       | 86       | 88       | 85       | 81       | 84       | 78       | 84       | 81       | 79       | 81       | 79       | 80       | 82       | 80       | 87       | 88       | 87       | 89       | 83.5     | 13.2              |      |
| 19               | 92       | 91       | 92       | 92       | 92       | 92       | 91       | 87       | 86       | 84       | 81       | 79       | 75       | 75       | 79       | 84       | 84       | 90       | 88       | 89       | 85       | 87       | 88       | 87       | 86.3     | 13.2              |      |
| 20               | 91       | 92       | 90       | 91       | 90       | 90       | 89       | 84       | 80       | 77       | 75       | 71       | 73       | 79       | 74       | 72       | 76       | 79       | 77       | 79       | 81       | 81       | 79       | 81       | 81.4     | 13.3              |      |
| 21               | 85       | 86       | 85       | 88       | 82       | 81       | 74       | 75       | 75       | 74       | 69       | 70       | 72       | 71       | 68       | 73       | 68       | 73       | 77       | 78       | 80       | 83       | 85       | 85       | 77.0     | 11.9              |      |
| 22               | 84       | 86       | 86       | 85       | 86       | 83       | 82       | 76       | 75       | 77       | 74       | 78       | 78       | 78       | 80       | 82       | 91       | 92       | 91       | 94       | 94       | 89       | 83       | 83       | 83.5     | 13.0              |      |
| 23               | 80       | 79       | 82       | 88       | 91       | 93       | 94       | 91       | 95       | 92       | 93       | 91       | 93       | 94       | 94       | 88       | 79       | 82       | 85       | 80       | 76       | 72       | 75       | 76       | 86.1     | 13.6              |      |
| 24               | 76       | 76       | 79       | 79       | 81       | 81       | 83       | 80       | 87       | 93       | 93       | 93       | 91       | 87       | 87       | 85       | 86       | 89       | 95       | 96       | 96       | 94       | 95       | 95       | 86.6     | 13.5              |      |
| 25               | 95       | 95       | 95       | 95       | 96       | 96       | 96       | 97       | 97       | 94       | 90       | 92       | 86       | 90       | 85       | 91       | 82       | 81       | 83       | 89       | 85       | 87       | 86       | 86       | 90.6     | 14.8              |      |
| 26               | 87       | 91       | 88       | 87       | 87       | 87       | 93       | 92       | 91       | 92       | 91       | 90       | 86       | 89       | 88       | 89       | 83       | 84       | 87       | 92       | 92       | 93       | 94       | 95       | 89.3     | 14.4              |      |
| 27               | 93       | 93       | 93       | 93       | 93       | 94       | 94       | 92       | 93       | 93       | 95       | 93       | 94       | 95       | 95       | 93       | 91       | 91       | 92       | 95       | 94       | 94       | 95       | 96       | 93.5     | 15.2              |      |
| 28               | 94       | 94       | 92       | 91       | 94       | 93       | 92       | 89       | 83       | 81       | 81       | 81       | 82       | 79       | 77       | 78       | 75       | 81       | 81       | 85       | 88       | 92       | 93       | 93       | 86.3     | 14.4              |      |
| 29               | 86       | 83       | 88       | 85       | 85       | 84       | 80       | 83       | 78       | 77       | 77       | 79       | 77       | 77       | 75       | 77       | 73       | 77       | 79       | 86       | 91       | 90       | 91       | 92       | 82.1     | 13.8              |      |
| 30               | 93       | 94       | 93       | 94       | 94       | 93       | 93       | 91       | 85       | 83       | 82       | 79       | 88       | 81       | 82       | 80       | 81       | 85       | 90       | 89       | 87       | 87       | 88       | 88       | 87.6     | 15.0              |      |
| 31               | 88       | 92       | 92       | 94       | 91       | 89       | 93       | 94       | 94       | 92       | 93       | 90       | 91       | 90       | 88       | 88       | 87       | 92       | 93       | 93       | 93       | 91       | 90       | 92       | 91.2     | 15.1              |      |
| Mean             | 89.1     | 89.4     | 89.9     | 89.7     | 89.5     | 89.0     | 88.4     | 86.9     | 86.2     | 85.5     | 85.0     | 84.5     | 83.9     | 83.0     | 82.4     | 83.0     | 81.4     | 83.1     | 84.4     | 86.3     | 87.3     | 87.9     | 88.1     | 88.8     | 86.4     | 13.8              |      |
| Vapour Pressure* | mb. 13.3 | mb. 13.2 | mb. 13.4 | mb. 13.3 | mb. 13.3 | mb. 13.4 | mb. 13.6 | mb. 13.8 | mb. 14.0 | mb. 14.1 | mb. 14.1 | mb. 14.4 | mb. 14.5 | mb. 14.5 | mb. 14.3 | mb. 14.5 | mb. 14.1 | mb. 13.9 | mb. 13.7 | mb. 13.6 | mb. 13.5 | mb. 13.6 | mb. 13.5 | mb. 13.6 | mb. 13.8 | 13.8              |      |

322. Cahirciveen (Valencia Observatory) : North Wall Screen : ht = 1.3 metres.

August, 1924.

| Day. | 1. | 2. | 3. | 4. | 5. | 6. | 7. | 8. | 9. | 10. | 11. | Noon. | 13. | 14. | 15. | 16. | 17. | 18. | 19. | 20. | 21. | 22. | 23. | 24.  | Mean. | Vapour Pressure.* |      |
|------|----|----|----|----|----|----|----|----|----|-----|-----|-------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|-------|-------------------|------|
| 1    | %  | %  | %  | %  | %  | %  | %  | %  | %  | %   | %   | %     | %   | %   | %   | %   | %   | %   | %   | %   | %   | %   | %   | %    | %     | %                 | mb.  |
| 2    | 93 | 93 | 93 | 94 | 92 | 92 | 94 | 96 | 92 | 94  | 92  | 87    | 82  | 84  | 87  | 77  | 79  | 78  | 77  | 78  | 79  | 83  | 81  | 85   | 86.9  | 14.7              |      |
| 3    | 89 | 85 | 83 | 83 | 84 | 84 | 83 | 80 | 78 | 77  | 78  | 77    | 77  | 77  | 80  | 80  | 80  | 79  | 82  | 85  | 87  | 89  | 90  | 89   | 82.3  | 13.6              |      |
| 4    | 89 | 91 | 92 | 92 | 96 | 95 | 96 | 95 | 95 | 95  | 97  | 97    | 90  | 78  | 79  | 77  | 77  | 76  | 78  | 85  | 88  | 88  | 90  | 92   | 88.6  | 14.6              |      |
| 5    | 92 | 93 | 94 | 95 | 97 | 96 | 95 | 96 | 97 | 95  | 97  | 95    | 92  | 93  | 94  | 95  | 94  | 93  | 95  | 97  | 97  | 95  | 97  | 97   | 94.8  | 16.7              |      |
| 6    | 95 | 95 | 97 | 98 | 97 | 97 | 96 | 89 | 86 | 85  | 83  | 84    | 88  | 83  | 83  | 77  | 80  | 79  | 79  | 84  | 85  | 86  | 90  | 91   | 88.0  | 15.1              |      |
| 7    | 94 | 93 | 91 | 91 | 93 | 94 | 89 | 90 | 93 | 92  | 89  | 78    | 79  | 73  | 73  | 74  | 70  | 74  | 77  | 76  | 78  | 80  | 79  | 79   | 83.5  | 13.3              |      |
| 8    | 81 | 81 | 84 | 82 | 78 | 82 | 79 | 74 | 73 | 70  | 70  | 72    | 69  | 61  | 69  | 66  | 61  | 62  | 68  | 76  | 82  | 87  | 89  | 74.9 | 11.8  |                   |      |
| 9    | 91 | 89 | 91 | 93 | 92 | 92 | 92 | 88 | 84 | 79  | 77  | 77    | 75  | 74  | 72  | 72  | 73  | 76  | 79  | 85  | 88  | 89  | 89  | 85   | 83.5  | 12.5              |      |
| 10   | 85 | 86 | 89 | 86 | 88 | 89 | 87 | 87 | 84 | 73  | 68  | 65    | 65  | 74  | 72  | 66  | 68  | 72  | 77  | 85  | 83  | 83  | 83  | 83   | 79.4  | 12.3              |      |
| 11   | 83 | 86 | 89 | 86 | 88 | 89 | 87 | 87 | 83 | 84  | 80  | 80    | 80  | 75  | 76  | 75  | 77  | 84  | 84  | 89  | 89  | 89  | 93  | 94   | 84.2  | 14.6              |      |
| 12   | 94 | 95 | 93 | 92 | 93 | 92 | 91 | 92 | 90 | 85  | 83  | 83    | 83  | 81  | 82  | 88  | 84  | 87  | 87  | 89  | 86  | 83  | 77  | 86   | 87.5  | 14.8              |      |
| 13   | 84 | 88 | 83 | 91 | 92 | 92 | 88 | 84 | 86 | 84  | 83  | 83    | 79  | 82  | 82  | 86  | 85  | 89  | 85  | 88  | 84  | 84  | 84  | 83   | 85.4  | 14.0              |      |
| 14   | 88 | 83 | 81 | 81 | 79 | 76 | 78 | 76 | 77 | 77  | 70  | 69    | 73  | 76  | 78  | 77  | 78  | 76  | 81  | 86  | 89  | 92  | 94  | 95   | 80.2  | 13.3              |      |
| 15   | 94 | 95 | 94 | 93 | 92 | 88 | 85 | 81 | 78 | 68  | 69  | 70    | 79  | 75  | 74  | 78  | 77  | 73  | 78  | 77  | 83  | 82  | 79  | 80   | 81.2  | 13.1              |      |
| 16   | 90 | 85 | 85 | 73 | 76 | 80 | 79 | 75 | 73 | 73  | 75  | 71    | 72  | 73  | 73  | 73  | 75  | 78  | 79  | 85  | 87  | 85  | 90  | 91   | 79.0  | 11.9              |      |
| 17   | 92 | 95 | 95 | 94 | 92 | 89 | 90 | 87 | 84 | 80  | 87  | 91    | 89  | 89  | 92  | 79  | 81  | 80  | 78  | 77  | 83  | 87  | 85  | 83   | 86.8  | 13.2              |      |
| 18   | 83 | 84 | 87 | 82 | 81 | 84 | 80 | 80 | 83 | 79  | 81  | 77    | 74  | 74  | 78  | 75  | 84  | 82  | 85  | 85  | 85  | 87  | 87  | 82   | 83    | 81.8              | 12.4 |
| 19   | 84 | 87 | 88 | 87 | 87 | 88 | 84 | 81 | 85 | 79  | 77  | 82    | 80  | 79  | 84  | 81  | 82  | 85  | 88  | 85  | 87  | 87  | 82  | 83   | 83.8  | 12.1              |      |
| 20   | 82 | 91 | 87 | 83 | 82 | 89 | 77 | 81 | 75 | 75  | 73  | 72    | 68  | 69  | 70  | 72  | 73  | 73  | 79  | 79  | 80  | 83  | 82  | 83   | 78.3  | 12.0              |      |
| 21   | 86 | 88 | 92 | 89 | 87 | 91 | 93 | 93 | 89 | 86  | 89  | 85    | 85  | 81  | 85  | 81  | 81  | 81  | 88  | 89  | 90  | 86  | 82  | 85   | 86.5  | 13.3              |      |
| 22   | 89 | 87 | 85 | 89 | 87 | 85 | 82 | 83 | 92 | 89  | 88  | 89    | 83  | 88  | 81  | 78  | 77  | 75  | 80  | 81  | 84  | 85  | 83  | 87   | 84.4  | 12.6              |      |
| 23   | 85 | 83 | 80 | 86 | 89 | 88 | 89 | 87 | 80 | 75  | 70  | 71    | 68  | 69  | 71  | 71  | 73  | 75  | 77  | 81  | 79  | 77  | 77  | 77   | 78.6  | 12.4              |      |
| 24   | 78 | 79 | 75 | 76 | 73 | 83 | 79 | 70 | 76 | 78  | 74  | 67    | 69  | 70  | 76  | 70  | 70  | 73  | 78  | 83  | 82  |     |     |      |       |                   |      |

Percentages at exact hours, Greenwich Mean Time. Determined as explained on page 14.

**323. Cahirciveen (Valencia Observatory) :** North Wall Screen : *h*<sub>t</sub> (height of thermometer bulbs above ground) = 1·3 metres.

September, 1924.

| Day.             | 1.       | 2.       | 3.       | 4.       | 5.       | 6.       | 7.       | 8.       | 9.       | 10.      | 11.      | Noon     | 13.      | 14.      | 15.      | 16.      | 17.      | 18.      | 19.      | 20.      | 21.      | 22.      | 23.      | 24.      | Mean. | Vapour Pressure.* |
|------------------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|-------|-------------------|
| 1                | 88       | 91       | 89       | 93       | 90       | 90       | 91       | 89       | 85       | 82       | 84       | 79       | 79       | 78       | 83       | 78       | 81       | 83       | 89       | 90       | 94       | 93       | 94       | 95       | 86·9  | 14·7              |
| 2                | 96       | 96       | 96       | 96       | 96       | 94       | 94       | 95       | 93       | 92       | 91       | 89       | 84       | 79       | 79       | 82       | 85       | 88       | 83       | 84       | 88       | 85       | 84       | 89       | 89·2  | 16·1              |
| 3                | 91       | 91       | 90       | 90       | 93       | 95       | 95       | 88       | 80       | 80       | 72       | 74       | 75       | 76       | 73       | 73       | 76       | 81       | 85       | 89       | 80       | 78       | 84       | 82       | 83·1  | 15·2              |
| 4                | 77       | 82       | 85       | 78       | 86       | 87       | 91       | 85       | 82       | 72       | 75       | 79       | 78       | 83       | 78       | 83       | 86       | 90       | 91       | 88       | 86       | 81       | 83       | 83       | 83·0  | 13·3              |
| 5                | 85       | 81       | 83       | 82       | 81       | 81       | 80       | 80       | 76       | 80       | 82       | 80       | 79       | 79       | 79       | 78       | 77       | 75       | 78       | 78       | 75       | 78       | 86       | 89       | 80·0  | 13·3              |
| 6                | 84       | 80       | 80       | 83       | 87       | 87       | 91       | 93       | 93       | 82       | 82       | 81       | 82       | 84       | 90       | 89       | 84       | 85       | 88       | 88       | 83       | 79       | 80       | 81       | 85·0  | 14·9              |
| 7                | 84       | 81       | 81       | 80       | 89       | 87       | 81       | 79       | 77       | 75       | 73       | 79       | 91       | 86       | 75       | 73       | 72       | 72       | 73       | 79       | 84       | 81       | 77       | 81       | 79·6  | 15·1              |
| 8                | 79       | 83       | 86       | 82       | 84       | 85       | 85       | 89       | 90       | 87       | 89       | 91       | 92       | 90       | 89       | 84       | 92       | 92       | 89       | 91       | 84       | 83       | 78       | 83       | 86·5  | 16·3              |
| 9                | 78       | 84       | 77       | 77       | 80       | 78       | 79       | 76       | 71       | 77       | 69       | 69       | 66       | 66       | 61       | 66       | 61       | 65       | 66       | 67       | 66       | 63       | 67       | 66       | 71·0  | 10·0              |
| 10               | 67       | 67       | 71       | 79       | 85       | 89       | 93       | 92       | 91       | 95       | 93       | 93       | 94       | 94       | 95       | 96       | 96       | 96       | 96       | 95       | 96       | 95       | 94       | 94       | 89·3  | 12·6              |
| 11               | 96       | 96       | 96       | 94       | 95       | 89       | 82       | 87       | 88       | 91       | 87       | 81       | 81       | 82       | 80       | 81       | 83       | 86       | 91       | 94       | 93       | 93       | 93       | 89       | 88·8  | 13·7              |
| 12               | 91       | 87       | 85       | 87       | 83       | 82       | 91       | 92       | 91       | 94       | 88       | 89       | 86       | 86       | 87       | 82       | 81       | 84       | 88       | 86       | 87       | 82       | 87       | 84       | 86·8  | 13·3              |
| 13               | 82       | 82       | 82       | 80       | 83       | 89       | 89       | 83       | 82       | 78       | 75       | 76       | 79       | 76       | 76       | 78       | 81       | 78       | 81       | 81       | 87       | 81       | 85       | 89       | 81·3  | 11·8              |
| 14               | 88       | 89       | 87       | 85       | 86       | 81       | 85       | 80       | 88       | 87       | 83       | 76       | 74       | 77       | 78       | 78       | 81       | 83       | 87       | 88       | 91       | 89       | 89       | 89       | 84·1  | 12·2              |
| 15               | 87       | 86       | 86       | 87       | 86       | 79       | 81       | 81       | 76       | 79       | 93       | 91       | 95       | 97       | 95       | 92       | 91       | 90       | 89       | 88       | 89       | 88       | 88       | 88       | 87·6  | 13·8              |
| 16               | 89       | 87       | 90       | 90       | 90       | 91       | 91       | 92       | 94       | 95       | 92       | 91       | 90       | 90       | 93       | 95       | 95       | 94       | 95       | 95       | 95       | 95       | 95       | 95       | 92·3  | 14·9              |
| 17               | 95       | 96       | 95       | 95       | 95       | 95       | 92       | 89       | 89       | 82       | 79       | 78       | 77       | 74       | 71       | 70       | 69       | 71       | 71       | 72       | 75       | 76       | 75       | 81       | 82·0  | 13·4              |
| 18               | 81       | 82       | 83       | 87       | 87       | 85       | 86       | 80       | 79       | 74       | 74       | 71       | 71       | 72       | 74       | 70       | 73       | 78       | 83       | 85       | 89       | 89       | 89       | 91       | 80·3  | 11·7              |
| 19               | 91       | 91       | 89       | 83       | 84       | 89       | 91       | 90       | 87       | 85       | 86       | 89       | 92       | 89       | 92       | 93       | 91       | 84       | 88       | 89       | 89       | 83       | 79       | 88·4     | 11·7  |                   |
| 20               | 83       | 89       | 88       | 89       | 91       | 89       | 92       | 88       | 89       | 85       | 88       | 85       | 88       | 93       | 93       | 92       | 82       | 82       | 77       | 81       | 79       | 78       | 80       | 78       | 85·8  | 11·9              |
| 21               | 79       | 79       | 78       | 76       | 81       | 81       | 83       | 85       | 91       | 83       | 80       | 76       | 78       | 77       | 77       | 79       | 89       | 92       | 91       | 91       | 91       | 91       | 92       | 85       | 83·4  | 10·7              |
| 22               | 84       | 78       | 84       | 87       | 78       | 91       | 93       | 91       | 86       | 83       | 89       | 86       | 88       | 87       | 89       | 91       | 92       | 85       | 84       | 88       | 89       | 81       | 83       | 91       | 86·5  | 10·3              |
| 23               | 81       | 81       | 81       | 75       | 81       | 88       | 85       | 81       | 78       | 72       | 77       | 68       | 64       | 69       | 65       | 63       | 70       | 67       | 73       | 71       | 73       | 70       | 74       | 77       | 74·6  | 9·9               |
| 24               | 81       | 83       | 83       | 86       | 87       | 91       | 89       | 91       | 92       | 92       | 93       | 92       | 91       | 89       | 86       | 80       | 85       | 85       | 86       | 86       | 85       | 83       | 85       | 83       | 86·7  | 10·7              |
| 25               | 79       | 79       | 78       | 78       | 77       | 77       | 72       | 71       | 73       | 72       | 73       | 71       | 70       | 68       | 70       | 71       | 72       | 73       | 73       | 75       | 75       | 71       | 72       | 75       | 73·7  | 9·9               |
| 26               | 79       | 77       | 77       | 75       | 77       | 79       | 79       | 76       | 76       | 73       | 71       | 71       | 71       | 71       | 72       | 77       | 79       | 81       | 85       | 86       | 87       | 88       | 86       | 89       | 78·1  | 10·7              |
| 27               | 91       | 89       | 89       | 91       | 91       | 87       | 94       | 93       | 92       | 86       | 71       | 70       | 69       | 69       | 72       | 72       | 74       | 81       | 83       | 85       | 85       | 88       | 87       | 87       | 83·2  | 10·0              |
| 28               | 87       | 86       | 85       | 85       | 85       | 84       | 83       | 84       | 87       | 82       | 83       | 90       | 93       | 93       | 95       | 95       | 95       | 95       | 96       | 96       | 96       | 95       | 94       | 83       | 80·7  | 12·7              |
| 29               | 96       | 95       | 96       | 96       | 96       | 95       | 96       | 96       | 96       | 96       | 96       | 96       | 96       | 96       | 96       | 90       | 90       | 90       | 91       | 93       | 92       | 87       | 83       | 93·7     | 13·6  |                   |
| 30               | 73       | 66       | 70       | 71       | 69       | 69       | 68       | 70       | 67       | 68       | 66       | 69       | 69       | 70       | 68       | 66       | 65       | 66       | 75       | 69       | 76       | 80       | 84       | 70·7     | 8·9   |                   |
| Mean ...         | 84·7     | 84·5     | 84·7     | 84·6     | 85·8     | 86·1     | 86·7     | 85·5     | 84·6     | 82·6     | 81·8     | 81·0     | 81·4     | 81·3     | 81·0     | 80·5     | 81·6     | 82·5     | 84·0     | 84·9     | 85·3     | 84·1     | 84·4     | 85·1     | 83·7  | †12·6             |
| Vapour Pressure* | mb. 12·0 | mb. 12·0 | mb. 12·0 | mb. 12·0 | mb. 12·2 | mb. 12·1 | mb. 12·1 | mb. 12·3 | mb. 12·6 | mb. 12·7 | mb. 12·8 | mb. 12·7 | mb. 12·8 | mb. 12·9 | mb. 13·0 | mb. 12·8 | mb. 12·8 | mb. 12·7 | mb. 12·6 | mb. 12·4 | mb. 12·3 | mb. 12·1 | mb. 11·9 | mb. 12·0 | ‡12·4 |                   |

**324. Cahirciveen (Valencia Observatory) :** North Wall Screen : *h*<sub>t</sub> = 1·3 metres.

October, 1924.

| Day. | 1. | 2. | 3. | 4. | 5. | 6. | 7. | 8. | 9. | 10. | 11. | Noon | 13. | 14. | 15. | 16. | 17. | 18. | 19. | 20. | 21. | 22. | 23. | 24.  | Mean. | Vapour Pressure.* |
|------|----|----|----|----|----|----|----|----|----|-----|-----|------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|-------|-------------------|
| 1    | 89 | 88 | 87 | 88 | 87 | 93 | 92 | 95 | 93 | 92  | 93  | 85   | 85  | 85  | 88  | 84  | 87  | 88  | 88  | 89  | 90  | 92  | 93  | 95   | 89·2  | 12·4              |
| 2    | 94 | 92 | 93 | 93 | 92 | 93 | 85 | 87 | 74 | 72  | 71  | 68   | 70  | 75  | 75  | 71  | 82  | 84  | 87  | 83  | 81  | 79  | 81  | 79   | 82·0  | 10·6              |
| 3    | 79 | 78 | 85 | 78 | 76 | 77 | 73 | 71 | 65 | 64  | 60  | 60   | 65  | 62  | 58  | 61  | 64  | 68  | 70  | 72  | 75  | 76  | 75  | 79   | 70·5  | 8·6               |
| 4    | 78 | 82 | 87 | 87 | 91 | 93 | 91 | 92 | 90 | 85  | 80  | 74   | 75  | 71  | 72  | 74  | 76  | 81  | 80  | 79  | 83  | 83  | 87  | 87   | 82·3  | 8·8               |
| 5    | 89 | 92 | 95 | 93 | 92 | 80 | 75 | 71 | 66 | 69  | 67  | 69   | 70  | 67  | 73  | 69  | 70  | 72  | 73  | 80  | 78  | 82  | 81  | 82   | 77·4  | 9·5               |
| 6    | 87 | 87 | 89 | 92 | 92 | 92 | 92 | 90 | 90 | 87  | 84  | 82   | 77  | 69  | 73  | 75  | 78  | 80  | 76  | 77  | 77  | 78  | 72  | 72   | 82·2  | 10·4              |
| 7    | 72 | 72 | 75 | 76 | 78 | 73 | 85 | 81 | 81 | 81  | 78  | 79   | 84  | 78  | 84  | 84  | 86  | 89  | 91  | 92  | 92  | 92  | 93  | 90   | 82·4  | 9·8               |
| 8    | 93 | 93 | 93 | 93 | 93 | 95 | 93 | 95 | 95 | 95  | 90  | 89   | 87  | 82  | 79  | 80  | 81  | 86  | 86  | 91  | 91  | 91  | 92  | 90   | 80·2  | 10·8              |
| 9    | 93 | 92 | 92 | 93 | 93 | 93 | 95 | 96 | 96 | 95  | 94  | 95   | 93  | 93  | 91  | 93  | 94  | 96  | 96  | 96  | 96  | 96  | 95  | 93   | 94·1  | 13·7              |
| 10   | 91 | 93 | 93 | 95 | 95 | 95 | 93 | 93 | 95 | 93  | 89  | 84   | 82  | 82  | 78  | 80  | 81  | 83  | 81  | 84  | 83  | 85  | 85  | 83   | 87·5  | 11·5              |
| 11   | 82 | 84 | 83 | 86 | 82 | 83 | 85 | 85 | 88 | 85  | 86  | 86   | 88  | 88  | 90  | 91  | 89  | 89  | 85  | 86  | 85  | 87  | 87  | 83   | 86·0  | 11·3              |
| 12   | 87 | 88 | 88 | 89 | 91 | 89 | 88 | 89 | 88 | 77  | 77  | 71   | 69  | 75  | 87  | 87  | 81  | 78  | 84  | 87  | 87  | 93  | 89  | 88   | 84·4  | 10·9              |
| 13   | 89 | 93 | 91 | 83 | 79 | 82 | 83 | 85 | 83 | 83  | 84  | 84   | 79  | 79  | 76  | 79  | 79  | 79  | 79  | 82  | 83  | 81  | 83  | 79   | 82·6  | 14·2              |
| 14   | 80 | 84 | 84 | 86 | 86 | 86 | 86 | 85 | 84 | 80  | 75  | 77   | 75  | 72  | 67  | 67  | 70  | 69  | 70  | 73  | 74  | 75  | 75  | 78   | 77·4  | 14·4              |
| 15   | 83 | 81 | 83 | 83 | 72 | 67 | 64 | 71 | 68 | 68  | 65  | 69   | 65  | 66  | 70  | 76  | 80  | 86  | 89  | 93  | 93  | 91  | 93  | 92   | 77·5  | 13·6              |
| 16   | 93 | 95 | 96 | 96 | 96 | 95 | 96 | 96 | 96 | 95  | 95  | 95   | 96  | 91  | 89  | 89  | 90  | 91  | 92  | 95  | 95  | 95  | 95  | 93   | 93·9  | 13·1              |
| 17   | 93 | 95 | 95 | 92 | 93 | 92 | 92 | 91 | 91 | 82  | 73  | 74   | 74  | 76  | 79  | 80  | 84  | 86  | 89  | 87  | 84  | 87  | 86  | 82   | 85·9  | 10·8              |
| 18   | 84 | 87 | 91 | 92 | 93 | 93 | 95 | 93 | 93 | 92  | 93  | 93   | 93  | 93  | 93  | 92  | 93  | 95  | 95  | 96  | 96  | 96  | 97  | 92·7 | 13·0  |                   |
| 19   | 97 | 96 | 96 | 96 | 95 | 97 | 93 | 93 | 93 | 92  | 91  | 91   | 90  | 87  | 89  | 91  | 91  | 91  | 91  | 91  | 93  | 92  | 92  | 91   | 92·6  | 12·9              |
| 20   | 91 | 92 | 91 | 92 | 93 | 95 | 95 | 93 | 90 | 87  | 84  | 81   | 77  | 77  | 78  | 78  | 78  | 79  | 79  | 80  | 82  | 81  | 82  | 83   | 85·1  | 11·5              |
| 21   | 86 | 89 | 88 | 83 | 84 | 84 | 85 | 85 | 87 | 85  | 86  | 86   | 83  | 82  | 83  | 83  | 83  | 83  | 85  | 83  | 84  | 84  | 84  | 84   | 84·5  | 12·0              |
| 22   | 82 | 78 | 81 | 83 | 86 | 82 | 83 | 82 | 89 | 84  | 75  | 79   | 76  | 77  | 81  | 83  | 85  | 87  | 89  | 90  | 90  | 89  | 89  | 89   | 83·6  | 10·7              |
| 23   | 89 | 89 | 87 | 87 | 85 | 84 | 81 | 83 | 78 | 75  | 75  | 75   | 76  | 77  | 74  | 75  | 74  | 75  | 76  | 75  | 74  | 73  | 75  | 79   | 79·2  | 10·7              |
| 24   | 76 | 75 | 73 | 72 | 72 | 74 | 73 | 71 | 71 | 71  | 70  | 70   | 69  | 69  | 68  | 68  | 71  | 79  | 85  | 85  | 86  | 85  | 86  | 86   | 75·0  | 10·2              |
| 25   | 85 | 84 | 84 | 87 | 88 | 89 | 89 | 88 | 87 | 91  | 91  | 91   | 91  | 8   |     |     |     |     |     |     |     |     |     |      |       |                   |

Percentages at exact hours, Greenwich Mean Time. Determined as explained on page 14.

325. Cahirciveen (Valencia Observatory) : North Wall Screen :  $h_t$  (height of thermometer bulbs above ground) = 1·3 metres.

November, 1924.

Table with 25 columns (Days 1-25) and 24 rows (Hours 1-24). Includes columns for Mean and Vapour Pressure\*. Data shows relative humidity percentages for each hour.

326. Cahirciveen (Valencia Observatory) : North Wall Screen :  $h_t$  = 1·3 metres.

December, 1924.

Table with 25 columns (Days 1-25) and 24 rows (Hours 1-24). Includes columns for Mean and Vapour Pressure\*. Data shows relative humidity percentages for each hour.

\* Computed from the mean temperatures and the mean relative humidities.

† Mean of the column.

‡ Mean of the row.

From the monthly means for exact hours, Greenwich Mean Time.

327. Cahirciveen (Valencia Observatory) : North Wall Screen :  $h_t = 1.3$  metres.

1924.

| G.M.T.                           | 1.       | 2.       | 3.       | 4.       | 5.       | 6.       | 7.       | 8.       | 9.       | 10.      | 11.      | Noon     | 13.      | 14.      | 15.      | 16.      | 17.      | 18.      | 19.      | 20.      | 21.      | 22.      | 23.      | 24.      | Mean     |
|----------------------------------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| Relative Humidity ...            | % 85.7   | % 85.8   | % 85.8   | % 85.8   | % 85.6   | % 85.8   | % 85.4   | % 84.6   | % 83.9   | % 82.5   | % 81.6   | % 80.6   | % 80.1   | % 79.8   | % 80.0   | % 79.9   | % 80.4   | % 81.8   | % 83.0   | % 84.1   | % 84.5   | % 84.8   | % 85.1   | % 85.4   | % 83.4   |
| Vapour Pressure in millibars ... | mb. 10.2 | mb. 10.2 | mb. 10.1 | mb. 10.1 | mb. 10.1 | mb. 10.2 | mb. 10.2 | mb. 10.3 | mb. 10.4 | mb. 10.6 | mb. 10.8 | mb. 10.8 | mb. 10.9 | mb. 10.9 | mb. 10.9 | mb. 10.8 | mb. 10.7 | mb. 10.7 | mb. 10.6 | mb. 10.5 | mb. 10.4 | mb. 10.4 | mb. 10.3 | mb. 10.3 | mb. 10.5 |

RELATIVE HUMIDITY: MONTHLY MEANS AND DIURNAL INEQUALITIES.

The departures from the mean of the day are adjusted for non-cyclic change.

328. Cahirciveen (Valencia Observatory) : North Wall Screen :  $h_t = 1.3$  metres.

1924.

| Month. | Mean.  | Hour. G.M.T. |      |      |      |      |      |      |      |      |      |      |       |      |      |      |      |      |      |      |      |      |      |      |      |
|--------|--------|--------------|------|------|------|------|------|------|------|------|------|------|-------|------|------|------|------|------|------|------|------|------|------|------|------|
|        |        | 1.           | 2.   | 3.   | 4.   | 5.   | 6.   | 7.   | 8.   | 9.   | 10.  | 11.  | Noon. | 13.  | 14.  | 15.  | 16.  | 17.  | 18.  | 19.  | 20.  | 21.  | 22.  | 23.  | 24.  |
| Jan.   | % 86.0 | +0.4         | -0.1 | -0.5 | -0.3 | -0.2 | +0.7 | +0.9 | +1.9 | +1.3 | +0.6 | +0.1 | -0.4  | -1.0 | -1.7 | -2.6 | -2.2 | -1.5 | -0.8 | +1.3 | +1.7 | +1.1 | +0.8 | +0.3 | +0.4 |
| Feb.   | % 81.0 | +1.6         | +1.5 | +1.4 | +2.1 | +1.6 | +2.6 | +2.1 | +2.0 | +1.5 | -0.2 | -0.9 | -2.4  | -3.2 | -3.4 | -3.8 | -3.8 | -3.5 | -0.6 | -0.1 | +0.2 | +1.3 | +1.3 | +1.3 | +1.3 |
| Mar.   | % 77.5 | +1.8         | +2.6 | +2.7 | +1.5 | +1.0 | +1.7 | +1.6 | +1.8 | +1.7 | -0.3 | -2.9 | -4.2  | -4.5 | -3.4 | -2.6 | -3.2 | -2.0 | -1.0 | +0.5 | +0.3 | +1.1 | +1.7 | +2.4 | +1.5 |
| April  | % 78.6 | +3.7         | +3.9 | +4.1 | +4.2 | +3.6 | +4.4 | +4.3 | +2.6 | +1.9 | -0.9 | -2.8 | -4.5  | -5.7 | -5.7 | -6.6 | -5.8 | -4.4 | -2.7 | -1.4 | +0.7 | +0.4 | +1.2 | +2.3 | +3.1 |
| May    | % 80.4 | +4.3         | +4.3 | +3.9 | +4.1 | +3.4 | +2.6 | +1.5 | -0.3 | -1.7 | -3.0 | -3.3 | -3.8  | -4.2 | -4.7 | -3.7 | -4.9 | -5.3 | -2.5 | -1.3 | +1.6 | +2.4 | +3.0 | +3.9 | +3.6 |
| June   | % 87.3 | +3.1         | +2.9 | +3.1 | +3.1 | +3.5 | +2.6 | +1.7 | +0.1 | -1.4 | -2.3 | -2.1 | -2.5  | -3.2 | -3.1 | -2.7 | -4.8 | -4.0 | -2.9 | -1.4 | 0.0  | +1.5 | +1.9 | +3.0 | +3.3 |
| July   | % 86.4 | +2.8         | +3.1 | +3.6 | +3.4 | +3.2 | +2.7 | +2.1 | +0.5 | -0.1 | -0.9 | -1.4 | -1.8  | -2.5 | -3.4 | -4.0 | -3.4 | -5.0 | -3.3 | -2.0 | -0.1 | +0.9 | +1.5 | +1.7 | +2.4 |
| Aug.   | % 84.6 | +3.8         | +4.2 | +3.8 | +3.8 | +3.5 | +4.2 | +2.9 | +1.1 | +0.2 | -1.4 | -3.1 | -4.1  | -4.9 | -5.3 | -4.2 | -5.2 | -4.8 | -3.8 | -1.6 | +1.1 | +1.9 | +2.8 | +2.3 | +2.8 |
| Sept.  | % 83.7 | +0.9         | +0.7 | +0.9 | +0.8 | +2.0 | +2.4 | +3.0 | +1.8 | +0.9 | -1.1 | -1.9 | -2.7  | -2.3 | -2.4 | -2.7 | -3.2 | -2.1 | -1.2 | +0.3 | +1.3 | +1.7 | +0.4 | +0.8 | +1.4 |
| Oct.   | % 84.8 | +2.1         | +2.6 | +2.9 | +2.9 | +2.7 | +2.1 | +1.9 | +2.1 | +1.1 | -0.5 | -2.5 | -3.3  | -4.1 | -5.1 | -3.9 | -3.6 | -2.1 | -0.9 | +0.1 | +0.7 | +1.1 | +1.2 | +1.3 | +1.1 |
| Nov.   | % 83.8 | +1.3         | +1.5 | +1.5 | +1.5 | +1.7 | +1.6 | +1.7 | +0.9 | +0.9 | -0.2 | -0.5 | -2.3  | -3.1 | -3.1 | -2.5 | -1.9 | -1.3 | -0.5 | +0.6 | 0.0  | -0.4 | +0.5 | +0.9 | +1.5 |
| Dec.   | % 86.9 | +1.2         | +1.2 | +0.8 | +1.3 | +0.1 | +0.4 | +0.3 | -0.2 | -0.3 | -0.5 | -0.5 | -1.5  | -1.0 | -1.9 | -1.6 | -0.5 | -0.4 | +0.2 | +0.1 | +0.1 | +0.3 | +0.7 | +0.7 | +1.0 |
| Year   | % 83.4 | +2.3         | +2.4 | +2.3 | +2.4 | +2.2 | +2.3 | +2.0 | +1.2 | +0.5 | -0.9 | -1.8 | -2.8  | -3.3 | -3.6 | -3.4 | -3.5 | -3.0 | -1.7 | -0.4 | +0.6 | +1.1 | +1.4 | +1.7 | +1.9 |

RAINFALL: ANNUAL TOTALS OF HOURLY VALUES.

Amounts, in millimetres; durations in hours for periods of sixty minutes between the exact hours, Greenwich Mean Time.

329. Cahirciveen (Valencia Observatory) :  $H_r$  (height of receiving surface above M.S.L.) =  $H$  (height of station above M.S.L.) +  $h_r$  (height of receiving surface above ground) = 9.1 metres + 0.5 metres.

1924.

| G.M.T. ...   | 0        | 1        | 2        | 3        | 4        | 5        | 6        | 7        | 8        | 9        | 10       | 11       | Noon     | 13       | 14       | 15       | 16       | 17       | 18       | 19       | 20       | 21       | 22       | 23       | 0          |
|--------------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|------------|
|              | to       | to       | to       | to       | to       | to       | to       | to       | to       | to       | to       | to       | Noon     | to       | to       | to       | to       | to       | to       | to       | to       | to       | to       | to       | to         |
| Amount ...   | mm. 60.0 | mm. 52.0 | mm. 57.4 | mm. 59.9 | mm. 78.2 | mm. 77.6 | mm. 76.5 | mm. 47.7 | mm. 66.4 | mm. 61.8 | mm. 52.9 | mm. 53.1 | mm. 65.4 | mm. 58.3 | mm. 54.7 | mm. 74.0 | mm. 67.8 | mm. 88.2 | mm. 68.5 | mm. 82.4 | mm. 73.7 | mm. 70.2 | mm. 60.5 | mm. 68.0 | mm. 1575.2 |
| Duration ... | hr. 33.7 | hr. 33.0 | hr. 30.9 | hr. 29.8 | hr. 35.2 | hr. 36.7 | hr. 37.8 | hr. 32.1 | hr. 35.2 | hr. 29.9 | hr. 30.5 | hr. 30.2 | hr. 31.0 | hr. 29.0 | hr. 32.1 | hr. 32.3 | hr. 31.2 | hr. 37.0 | hr. 38.0 | hr. 39.2 | hr. 35.3 | hr. 30.2 | hr. 31.4 | hr. 34.5 | hr. 796.2  |

330. Cahirciveen (Valencia Observatory).

NOTES ON RAINFALL.

1924.

**Notable Falls of the Year.**—The most notable fall of rain during 1924 was between 15 h. 50 m. on the 8th February and 2h. on the 9th, when 52 mm. (2.1 in.) was recorded. Of this amount 25 mm. (1 in.) fell during an interval of approximately 2 hours 50 minutes from 19 h. 50 m. On the 17th June 32 mm. (1.3 in.) fell between 16 h. 40 m. and 21 h. 20 m., 12 mm. (.4 in.) of this total being registered in the first 40 minutes. On the 1st July 28 mm. (1.1 in.) fell between 11 h. 45 m. and 17 h. 30 m.; and on the 8th January 20 mm. (.8 in.) was recorded between 3 h. and 8 h.

**Dry Periods.**—During 1924 there was only one dry period of more than six days. This covered the period from the 26th March to the 7th April, 13 days.

**Wet Periods.**—The first fifteen days of January were part of a period of 18 days commencing 29th December, 1923, on all of which rain was recorded. Other prolonged periods during which no day passed without rain falling were:—23rd April to 11th May, 19 days; 5th September to 24th September, 20 days; 21st November to 9th December, 19 days.

RAINFALL.

Amounts in millimetres for periods of sixty minutes between the exact hours, Greenwich Mean Time.

**331. Cahirciveen (Valencia Observatory) :**  $H_r$  (height of receiving surface above M.S.L.) = H (height of station above M.S.L.) +  $h_r$  (height of receiving surface above ground) = 9.1 metres + 0.5 metre. **January, 1924.**

| Day.            | 0-1     | 1-2     | 2-3     | 3-4     | 4-5     | 5-6     | 6-7     | 7-8     | 8-9     | 9-10    | 10-11   | 11-12   | 12-13   | 13-14   | 14-15   | 15-16   | 16-17   | 17-18   | 18-19   | 19-20   | 20-21   | 21-22   | 22-23   | 23-24   | 0-24     | Duration 0-24 |     |
|-----------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|----------|---------------|-----|
|                 | mm.     | mm.     | mm.     | mm.     | mm.     | mm.     | mm.     | mm.     | mm.     | mm.     | mm.     | mm.     | mm.     | mm.     | mm.     | mm.     | mm.     | mm.     | mm.     | mm.     | mm.     | mm.     | mm.     | mm.     | mm.      | hr.           |     |
| 1               | .1      | .1      | .1      | .2      | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ..2     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | 0.7      | 1.1           |     |
| 2               | .4      | .6      | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ..2     | ...     | ...     | ...     | ...     | 1.2      | 1.0           |     |
| 3               | ...     | ...     | ...     | ...     | ...     | ...     | ..2     | ..4     | ..4     | ..7     | ..6     | ..6     | ..7     | ..5     | ..6     | ...     | ...     | ...     | ...     | ..1     | ..2     | ...     | ...     | ...     | 4.7      | 6.7           |     |
| 4               | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ..1     | ..2     | ...     | ...     | ...     | 0.3      | 0.5           |     |
| 5               | .2      | .2      | .1      | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ..4     | ...     | ..4     | ..2     | ..2     | ...     | ..2     | ...     | ..1     | ...     | ..1     | ...     | ...     | ..2     | 2.3      | 2.6           |     |
| 6               | .1      | .3      | ...     | ...     | ...     | ...     | ...     | ..6     | ..1     | ..1     | ..3     | ..3     | ...     | ..7     | ...     | ...     | 1.0     | ..4     | 2.4     | 2.0     | ..1     | ...     | ...     | ...     | 8.4      | 5.0           |     |
| 7               | ...     | ...     | ..1     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | 0.1      | 0.1           |     |
| 8               | ...     | ...     | ..3     | 3.6     | 3.2     | 5.0     | 4.3     | 2.8     | 1.6     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ..2     | ...     | ...     | ...     | ...     | 21.0     | 5.9           |     |
| 9               | ...     | ...     | ..1     | ..7     | 1.0     | ..8     | 1.2     | ..6     | ..1     | ..3     | ...     | ...     | ..2     | ...     | ...     | ...     | ...     | ..8     | 4.6     | ..6     | ...     | ...     | ..5     | ...     | 11.5     | 6.9           |     |
| 10              | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | 1.0     | ..5     | ..2     | ..1     | 1.7      | 0.9           |     |
| 11              | ...     | ...     | ...     | ..3     | ...     | ..9     | ..1     | ...     | ...     | ...     | ..2     | ...     | ..1     | ...     | ..5     | 1.6     | ..3     | ...     | 1.7     | ..9     | ...     | 1.2     | ...     | ...     | 7.8      | 3.7           |     |
| 12              | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ..2     | ..4     | 1.1     | ..6     | ..6     | ..8     | ..9     | 1.8     | 6.4      | 7.0           |     |
| 13              | 1.6     | ..4     | 1.3     | 3.0     | 3.1     | 1.6     | ..6     | ..4     | ..4     | ...     | ...     | ...     | ..1     | ..2     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | 12.7     | 7.5           |     |
| 14              | ...     | ...     | ...     | ..7     | ..8     | ..1     | ...     | ...     | ...     | ...     | 1.2     | 1.1     | 3.1     | 1.2     | 2.1     | ..9     | 3.2     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | 14.4     | 5.9           |     |
| 15              | ...     | ...     | ..4     | 2.1     | 4.3     | ..8     | ..9     | ...     | ..2     | ...     | 1.7     | ..2     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | 10.6     | 4.0           |     |
| 16              | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...      | ...           | ... |
| 17              | ..2     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ..2     | ...     | ...     | ...     | ..2     | ..2     | ...     | ...     | ..6     | 1.2     | 1.2     | ..6     | ..4     | ...     | ...     | ...     | 4.8      | 4.2           |     |
| 18              | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ..6     | ...     | ...     | ...     | ...     | ..1     | ...     | ...     | 1.6     | 1.6     | 2.2      | 0.4           |     |
| 19              | ...     | ..4     | ..2     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ..2     | ..1     | 1.3     | ...     | ...     | ...     | ..3     | ..1     | ...     | ..3     | ...     | ..1     | ..1     | 3.0      | 2.0           |     |
| 20              | ...     | ...     | ..1     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | 1.0     | ..1     | 3.9     | 3.1     | 1.5     | ..7     | ..4     | 10.8     | 5.3           |     |
| 21              | ...     | ...     | ..2     | ...     | ...     | ...     | 2.3     | 1.7     | 2.8     | 1.1     | ..5     | ...     | ..6     | ..9     | ..1     | ...     | ...     | ..2     | ..2     | ..3     | ..6     | ...     | ...     | ...     | 11.5     | 6.9           |     |
| 22              | ...     | ...     | ...     | ...     | ...     | ...     | ..3     | ..8     | 1.8     | 2.1     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ..2     | ..1     | 2.6     | 2.7     | 3.9     | 2.6     | ..4     | ...      | 5.0           | 1.8 |
| 23              | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ..2     | ..1     | 2.6     | 2.7     | 3.9     | 2.6     | ..4     | ...     | ...     | ...      | 12.5          | 4.8 |
| 24              | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | 4.3     | ..5     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...      | 5.4           | 0.9 |
| 25              | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...      | ...           | ... |
| 26              | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ..1     | ..4     | ..3     | 1.6     | ..5     | ...     | ...     | 2.9      | 2.3           |     |
| 27              | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ..2     | ..1     | ..1     | ..1     | ..1     | ...      | ...           | ... |
| 28              | ...     | ..1     | ...     | ..2     | ..2     | ..1     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...      | 0.6           | 1.0 |
| 29              | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ..2     | ..1     | ...     | ...     | ..3     | ...     | ...      | 0.6           | 0.8 |
| 30              | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ..2     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ..2     | ..1     | ...     | ...     | ...     | ...     | ...      | 0.8           | 0.9 |
| 31              | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ..3     | ..2     | ..6     | ..7     | ..3     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | 2.1      | 2.2           |     |
| Sum.            | 2.6     | 2.1     | 2.9     | 10.8    | 12.6    | 9.3     | 9.9     | 7.6     | 7.8     | 4.9     | 2.9     | 4.3     | 3.6     | 7.0     | 2.8     | 9.0     | 3.8     | 9.8     | 14.9    | 14.4    | 8.3     | 6.9     | 3.5     | 4.3     | 166.0    | 92.3          |     |
| Total Duration. | hr. 2.0 | hr. 2.7 | hr. 2.8 | hr. 4.9 | hr. 5.1 | hr. 3.9 | hr. 4.5 | hr. 4.2 | hr. 3.4 | hr. 2.6 | hr. 2.9 | hr. 2.7 | hr. 3.0 | hr. 4.3 | hr. 2.3 | hr. 2.8 | hr. 3.3 | hr. 4.8 | hr. 7.6 | hr. 6.7 | hr. 5.7 | hr. 4.4 | hr. 3.3 | hr. 2.4 | hr. 92.3 |               |     |

**332. Cahirciveen (Valencia Observatory) :**  $H_r = 9.1$  metres + 0.5 metre.

**February, 1924.**

|                 | mm.     | mm.     | mm.     | mm.     | mm.     | mm.     | mm.     | mm.     | mm.     | mm.     | mm.   | mm.   | mm.     | mm.     | mm.     | mm.     | mm.     | mm.     | mm.     | mm.     | mm.     | mm.     | mm.     | mm.      | mm.  | hr. |     |
|-----------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|-------|-------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|----------|------|-----|-----|
| 1               | ...     | ...     | ...     | ...     | 1.0     | ..1     | ..1     | ...     | ...     | ...     | ...   | ...   | ...     | ...     | ...     | ...     | ..2     | ...     | ..4     | ...     | ...     | ...     | ...     | ...      | 1.8  | 1.2 |     |
| 2               | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...   | ...   | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ..2     | ...      | 0.2  | 0.2 |     |
| 3               | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...   | ...   | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ..3     | ...      | 0.3  | 0.2 |     |
| 4               | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...   | ...   | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...      | ...  | ... | ... |
| 5               | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...   | ...   | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...      | ...  | ... | ... |
| 6               | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...   | ...   | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...      | ...  | ... | ... |
| 7               | ...     | ...     | ...     | ...     | ..1     | ...     | ...     | ..1     | ...     | ...     | ...   | ...   | ...     | ...     | ...     | ...     | ..2     | ...     | ..1     | ...     | ..1     | ...     | ...     | ...      | 0.6  | 1.0 |     |
| 8               | ...     | ...     | ..1     | ..1     | ..4     | 4.4     | 2.8     | 2.2     | ..1     | 2.4     | ...   | ...   | ...     | ..4     | 1.7     | 1.8     | 3.7     | 6.5     | 9.6     | 9.8     | 7.4     | 6.9     | 60.3    | 12.5     | ...  | ... |     |
| 9               | 3.7     | 1.8     | ..3     | ...     | ...     | ...     | ..3     | ...     | ...     | ...     | ...   | ...   | ..3     | ...     | ...     | ...     | ...     | ..6     | ..4     | ...     | ...     | ...     | ...     | ...      | 7.4  | 3.3 |     |
| 10              | 1.4     | 1.4     | 1.6     | ..8     | ..5     | ..7     | ..5     | 2.4     | ..4     | ...     | ...   | ...   | 1.0     | 2.0     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | 12.7     | 7.2  |     |     |
| 11              | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...   | ...   | ...     | ...     | ...     | ...     | ..2     | 1.1     | ...     | ...     | ...     | ...     | ...     | 1.3      | 0.6  |     |     |
| 12              | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...   | ...   | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...      | ...  | ... | ... |
| 13              | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...   | ...   | ...     | ...     | ...     | ...     | ...     | ...     | ..2     | ..2     | ...     | ...     | ...     | ...      | 0.4  | 0.4 |     |
| 14              | ...     | ...     | ...     | ..2     | ..2     | ..8     | ..4     | ..2     | ...     | ..2     | ...   | ...   | ...     | ...     | ...     | ...     | ...     | ..1     | ..2     | 1.5     | ...     | ...     | ...     | 3.8      | 2.3  |     |     |
| 15              | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...   | ...   | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...      | ...  | ... | ... |
| 16              | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...   | ...   | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...      | ...  | ... | ... |
| 17              | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...   | ...   | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...      | ...  | ... | ... |
| 18              | ..3     | ..3     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...   | ...   | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...      | 0.6  | 0.6 |     |
| 19              | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...   | ...   | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...      | ...  | ... | ... |
| 20              | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...   | ...   | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...      | ...  | ... | ... |
| 21              | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...   | ...   | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...      | ...  | ... | ... |
| 22              | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...   | ...   | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...      | ...  | ... | ... |
| 23              | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...   | ...   | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...      | ...  | ... | ... |
| 24              | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ..2     | ...   | ...   | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...      | 0.2  | 0.3 |     |
| 25              | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...   | ...   | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...      | ...  | ... | ... |
| 26              | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...   | ...   | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ..1     | ..1     | ..1      | 0.2  | 0.4 |     |
| 27              | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...   | ...   | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ..3     | ...     | ...     | ...     | ...      | 0.3  | 0.3 |     |
| 28              | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...   | ...   | ...     | ...     | ...     | ...     | ...     | ..1     | ...     | ..5     | ...     | ...     | ...     | ...      | 0.6  | 0.4 |     |
| 29              | ...     | ...     | ...     | ...     | ...     | ...     | ..2     | ..1     | ..1     | ...     | ...   | ...   | ..8     | ..1     | ..1     | ...     | ..2     | ...     | ..1     | ...     | ...     | ...     | ..2     | ...      | 1.9  | 1.6 |     |
| Sum.            | 5.4     | 3.5     | 2.0     | 1.1     | 1.1     | 7.0     | 4.0     | 5.3     | 0.7     | 2.8     | ...   | ...   | 0.8     | 1.1     | 2.8     | 1.7     | 2.3     | 5.0     | 7.3     | 10.1    | 12.9    | 8.0     | 7.7     | 92.6     | 32.5 |     |     |
| Total Duration. | hr. 1.9 | hr. 2.3 | hr. 1.4 | hr. 1.2 | hr. 1.2 | hr. 2.4 | hr. 1.7 | hr. 2.8 | hr. 1.0 | hr. 1.0 | ...   | ...   | hr. 0.3 | hr. 0.4 | hr. 1.4 | hr. 1.0 | hr. 1.6 | hr. 1.6 | hr. 1.9 | hr. 1.5 | hr. 2.6 | hr. 1.6 | hr. 1.7 | hr. 32.5 |      |     |     |
| G.M.T.          | 0-1     | 1-2     | 2-3     | 3-4     | 4-5     | 5-6     | 6-7     | 7-8     | 8-9     | 9-10    | 10-11 | 11-12 | 12-13   | 13-14   | 14-15   | 15-16   | 16-17   | 17-18   | 18-19   | 19-20   | 20-21   | 21-22   | 22-23   | 23-24    | 0-24 | —   |     |

Amounts in millimetres for periods of sixty minutes between the exact hours, Greenwich Mean Time.

**333. Cahirciveen (Valencia Observatory) :**  $H_r$  (height of receiving surface above M.S.L.) =  $H$  (height of station above M.S.L.) +  $h_r$  (height of receiving surface above ground) = 9.1 metres + 0.5 metre.

**March, 1924.**

| Day.               | 0-1        | 1-2        | 2-3        | 3-4        | 4-5        | 5-6        | 6-7        | 7-8        | 8-9        | 9-10       | 10-11      | 11-12      | 12-13      | 13-14      | 14-15      | 15-16      | 16-17      | 17-18      | 18-19      | 19-20      | 20-21      | 21-22      | 22-23      | 23-24      | 0-24        | Duration<br>0-24. |
|--------------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|-------------|-------------------|
|                    | mm.        | mm.        | mm.        | mm.        | mm.        | mm.        | mm.        | mm.        | mm.        | mm.        | mm.        | mm.        | mm.        | mm.        | mm.        | mm.        | mm.        | mm.        | mm.        | mm.        | mm.        | mm.        | mm.        | mm.        | mm.         | hr.               |
| 1                  | ..         | ..         | ..         | .2         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | .2         | ..         | ..         | .2         | ..         | ..         | ..         | .2         | .1         | ..         | 0.9         | 0.8               |
| 2                  | ..         | ..         | ..         | ..         | .1         | ..         | ..         | ..         | ..         | ..         | ..         | .2         | ..         | ..         | .1         | .2         | ..         | ..         | ..         | ..         | ..         | ..         | .3         | .5         | ..          | 1.5               |
| 3                  | ..         | ..         | ..         | ..         | ..         | ..         | .3         | .2         | .2         | .2         | .5         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..          | 1.4               |
| 4                  | .8         | 1.2        | .6         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | 1.9        | 4.5         | 2.3               |
| 5                  | 2.1        | 1.2        | ..         | .2         | .2         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..          | 1.4               |
| 6                  | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..          | ..                |
| 7                  | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | .1         | ..         | ..         | ..         | ..          | 0.2               |
| 8                  | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | .8         | .9         | .4         | .3         | .1         | ..         | ..         | ..         | ..         | ..         | ..          | 2.1               |
| 9                  | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | .3         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..          | 0.2               |
| 10                 | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..          | ..                |
| 11                 | ..         | ..         | ..         | ..         | .2         | .6         | .2         | .2         | 1.9        | .5         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | .1         | 3.7         | 2.6               |
| 12                 | ..         | .1         | ..         | ..         | ..         | ..         | ..         | .1         | ..         | ..         | ..         | ..         | .3         | .4         | .7         | ..         | .9         | 1.8        | .8         | 1.0        | .7         | ..         | .1         | 1.7        | 8.6         | 6.7               |
| 13                 | 1.1        | .3         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..          | 0.9               |
| 14                 | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..          | ..                |
| 15                 | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..          | ..                |
| 16                 | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..          | ..                |
| 17                 | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..          | ..                |
| 18                 | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..          | ..                |
| 19                 | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..          | ..                |
| 20                 | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | .1         | .1         | ..         | ..         | ..         | ..         | ..         | ..          | 0.6               |
| 21                 | ..         | ..         | ..         | ..         | .2         | ..         | .2         | .7         | 2.4        | 2.2        | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | .2         | .2         | ..         | 6.1         | 3.0               |
| 22                 | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | .1         | .4         | .2         | ..         | .3         | ..         | ..         | ..         | .1         | 1.1         | 1.2               |
| 23                 | .4         | .1         | .1         | ..         | .2         | .2         | .1         | .1         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | .3         | .1         | .3         | .1         | 2.0         | 2.6               |
| 24                 | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..          | ..                |
| 25                 | ..         | ..         | ..         | ..         | 1.0        | .3         | .9         | .1         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..          | 2.3               |
| 26                 | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..          | ..                |
| 27                 | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..          | ..                |
| 28                 | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..          | ..                |
| 29                 | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..          | ..                |
| 30                 | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..          | ..                |
| 31                 | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..          | ..                |
| Sum.               | 4.4        | 2.9        | 0.7        | 0.4        | 1.9        | 1.1        | 1.7        | 1.4        | 4.5        | 2.9        | 0.5        | 0.2        | 0.3        | 0.4        | 2.1        | 1.2        | 1.7        | 2.6        | 1.0        | 1.4        | 1.0        | 0.8        | 1.3        | 3.9        | 40.3        | 29.8              |
| Total<br>Duration. | hr.<br>2.5 | hr.<br>1.7 | hr.<br>0.6 | hr.<br>0.4 | hr.<br>1.7 | hr.<br>1.0 | hr.<br>1.8 | hr.<br>1.8 | hr.<br>2.0 | hr.<br>1.4 | hr.<br>0.4 | hr.<br>0.2 | hr.<br>0.3 | hr.<br>0.3 | hr.<br>1.3 | hr.<br>0.9 | hr.<br>1.5 | hr.<br>1.6 | hr.<br>1.4 | hr.<br>1.5 | hr.<br>1.0 | hr.<br>0.9 | hr.<br>1.5 | hr.<br>2.1 | hr.<br>29.8 |                   |

**334. Cahirciveen (Valencia Observatory) :**  $H_r = 9.1$  metres +  $0.5$  metre.

**April, 1924.**

|                    | mm.        | mm.        | mm.        | mm.        | mm.        | mm.        | mm.        | mm.        | mm.        | mm.        | mm.        | mm.        | mm.        | mm.       | mm. | mm. | mm. | mm. | mm. | mm. | mm. | mm. | mm. | mm. | hr.  |      |
|--------------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|-----------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|------|
| 1                  | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..        | ..  | ..  | ..  | ..  | ..  | ..  | ..  | ..  | ..  | ..  | ..   |      |
| 2                  | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..        | ..  | ..  | ..  | ..  | ..  | ..  | ..  | ..  | ..  | ..  | ..   |      |
| 3                  | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..        | ..  | ..  | ..  | ..  | ..  | ..  | ..  | ..  | ..  | ..  | ..   |      |
| 4                  | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..        | ..  | ..  | ..  | ..  | ..  | ..  | ..  | ..  | ..  | ..  | ..   |      |
| 5                  | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..        | ..  | ..  | ..  | ..  | ..  | ..  | ..  | ..  | ..  | ..  | ..   |      |
| 6                  | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..        | ..  | ..  | ..  | ..  | ..  | ..  | ..  | ..  | ..  | ..  | ..   |      |
| 7                  | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..        | ..  | ..  | ..  | ..  | ..  | ..  | ..  | ..  | ..  | ..  | ..   |      |
| 8                  | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | .6         | ..         | ..         | 1.0        | ..         | 1.1       | ..  | .1  | ..  | .1  | ..  | .2  | ..  | .5  | .4  | 4.0 | 2.2  |      |
| 9                  | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | .1         | ..        | .2  | ..  | ..  | ..  | ..  | ..  | ..  | .2  | .4  | 0.9 | 0.9  |      |
| 10                 | .1         | ..         | .1         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | .8         | .4         | ..         | .4        | ..  | ..  | ..  | ..  | ..  | ..  | ..  | ..  | ..  | 1.8 | 1.3  |      |
| 11                 | ..         | ..         | ..         | ..         | ..         | ..         | ..         | 1.1        | 2.1        | .2         | ..         | ..         | .4         | .7        | .3  | .4  | .2  | ..  | .9  | .3  | .3  | ..  | ..  | 6.9 | 4.1  |      |
| 12                 | ..         | ..         | ..         | ..         | .6         | .1         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..        | ..  | ..  | ..  | ..  | ..  | ..  | ..  | ..  | ..  | ..  | 0.3  |      |
| 13                 | 1.4        | .4         | .3         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..        | ..  | ..  | ..  | ..  | ..  | ..  | ..  | ..  | ..  | ..  | 0.9  |      |
| 14                 | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..        | ..  | ..  | ..  | ..  | ..  | ..  | ..  | ..  | ..  | ..  | ..   |      |
| 15                 | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..        | ..  | ..  | ..  | ..  | ..  | ..  | ..  | ..  | ..  | ..  | ..   |      |
| 16                 | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | .7         | .5         | ..         | ..         | .2         | .4        | .1  | ..  | ..  | ..  | ..  | ..  | ..  | ..  | ..  | ..  | 1.6  |      |
| 17                 | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..        | ..  | ..  | ..  | ..  | ..  | ..  | ..  | ..  | ..  | ..  | ..   |      |
| 18                 | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..        | ..  | ..  | ..  | ..  | ..  | ..  | ..  | ..  | ..  | ..  | ..   |      |
| 19                 | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..        | ..  | ..  | ..  | ..  | ..  | ..  | ..  | ..  | ..  | ..  | ..   |      |
| 20                 | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..        | ..  | ..  | ..  | ..  | ..  | ..  | ..  | ..  | ..  | ..  | ..   |      |
| 21                 | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..        | ..  | ..  | ..  | ..  | ..  | ..  | ..  | ..  | ..  | ..  | ..   |      |
| 22                 | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..        | ..  | ..  | ..  | ..  | ..  | ..  | ..  | ..  | ..  | ..  | ..   |      |
| 23                 | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..        | ..  | ..  | ..  | ..  | ..  | ..  | ..  | ..  | ..  | ..  | ..   |      |
| 24                 | ..         | .4         | 1.4        | .3         | .7         | 1.3        | .6         | 1.0        | 4.2        | .4         | .2         | ..         | 2.6        | ..        | ..  | ..  | .7  | 3.1 | ..  | ..  | ..  | ..  | 2.1 | .7  | 15.9 | 7.0  |
| 25                 | 1.2        | ..         | ..         | 2.5        | 1.5        | .2         | .7         | ..         | ..         | .8         | ..         | ..         | .2         | .7        | .1  | .3  | ..  | ..  | ..  | ..  | .1  | 3.2 | .6  | .6  | 12.7 | 5.1  |
| 26                 | ..         | ..         | ..         | ..         | ..         | .2         | .5         | .1         | ..         | ..         | ..         | ..         | ..         | ..        | .8  | .5  | .2  | .2  | .1  | ..  | ..  | ..  | ..  | ..  | 2.6  | 1.8  |
| 27                 | ..         | ..         | .9         | .1         | .6         | 2.0        | 2.0        | 1.3        | 1.0        | 1.0        | .4         | ..         | ..         | ..        | ..  | ..  | 2.6 | .1  | ..  | ..  | ..  | ..  | .4  | ..  | 12.4 | 7.8  |
| 28                 | ..         | ..         | ..         | .1         | .9         | .2         | .1         | ..         | ..         | ..         | ..         | ..         | ..         | .4        | ..  | ..  | ..  | ..  | ..  | ..  | ..  | ..  | ..  | ..  | 1.7  | 0.9  |
| 29                 | ..         | ..         | ..         | ..         | 1.2        | .4         | .1         | 1.0        | 2.4        | 1.7        | ..         | .1         | ..         | ..        | ..  | ..  | ..  | ..  | ..  | ..  | ..  | ..  | ..  | ..  | 6.9  | 3.3  |
| 30                 | .2         | .3         | .6         | .3         | ..         | .1         | ..         | ..         | ..         | ..         | ..         | ..         | ..         | ..        | ..  | ..  | ..  | ..  | ..  | ..  | ..  | ..  | ..  | ..  | 1.5  | 2.0  |
| Sum.               | 2.9        | 1.1        | 3.3        | 3.3        | 5.5        | 4.5        | 4.0        | 4.5        | 11.0       | 4.6        | 1.4        | 1.5        | 3.9        | 3.3       | 1.5 | 1.3 | 1.1 | 5.9 | 1.2 | 0.3 | 0.6 | 3.2 | 3.8 | 2.1 | 75.8 | 40.4 |
| Total<br>Duration. | hr.<br>1.3 | hr.<br>1.2 | hr.<br>2.2 | hr.<br>1.6 | hr.<br>2.9 | hr.<br>2.8 | hr.<br>2.6 | hr.<br>3.1 | hr.<br>4.1 | hr.<br>3.2 | hr.<br>1.2 | hr.<br>0.9 | hr.<br>1.7 | hr.<br>2. |     |     |     |     |     |     |     |     |     |     |      |      |

*Amounts in millimetres for periods of sixty minutes between the exact hours, Greenwich Mean Time.*

**335. Cahirciveen (Valencia Observatory) : H<sub>r</sub> (height of receiving surface above M.S.L.) = H (height of station above M.S.L.) + h<sub>r</sub> (height of receiving surface above ground) = 9.1 metres + 0.5 metre. May, 1924.**

| Day.               | 0-1        | 1-2        | 2-3        | 3-4        | 4-5        | 5-6        | 6-7        | 7-8        | 8-9        | 9-10       | 10-11      | 11-12      | 12-13      | 13-14      | 14-15      | 15-16      | 16-17      | 17-18      | 18-19      | 19-20      | 20-21      | 21-22      | 22-23      | 23-24      | 0-24        | Duration<br>0-24 |     |
|--------------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|-------------|------------------|-----|
| 1                  | 4          |            |            |            |            | 6          |            | 1          |            |            | 2          | 1          |            |            |            |            |            |            |            | 6          | 9          | 2          |            |            | 3.1         | 3.2              |     |
| 2                  | 1          |            |            |            |            |            | 1          |            |            |            |            |            |            |            |            |            |            |            |            |            |            |            |            |            | 0.3         | 0.5              |     |
| 3                  |            |            |            |            |            |            | 3          | 4          | 1          |            |            |            |            |            |            |            |            |            |            |            |            |            |            |            | 0.8         | 0.8              |     |
| 4                  |            |            |            |            |            |            |            |            |            |            | 6          |            |            |            |            |            |            |            |            |            | 3          | 1.0        |            |            |             | 2.6              | 1.1 |
| 5                  |            |            |            |            |            |            |            |            |            |            |            |            |            |            |            |            |            |            |            |            |            |            |            |            |             | 0.3              | 0.3 |
| 6                  |            |            |            |            |            |            |            |            |            |            | 1          | 9          | 1          |            | 3          |            |            | 1          | 1          | 4          |            | 1          | 2          | 1          |             | 2.4              | 2.2 |
| 7                  | 4          | 4          | 2          |            |            | 1          |            |            |            |            |            |            | 7          | 1          |            |            |            |            |            |            |            | 3          |            |            |             | 2.2              | 1.2 |
| 8                  |            |            | 8          | 4          |            |            |            |            |            |            |            |            |            |            |            |            |            |            |            |            |            |            |            |            |             | 1.2              | 0.4 |
| 9                  |            |            |            |            |            | 2          | 4          | 1.8        | 2.1        | 1.3        | 2          |            |            |            |            |            |            | 1          | 1.4        | 6          | 2          |            |            | 5          | 1.7         | 10.5             | 6.3 |
| 10                 | 4          | 6          |            |            |            | 3          | 1.2        |            |            |            | 5          | 6          |            |            |            | 1.0        | 4          |            |            |            |            |            | 2          |            |             | 6.2              | 3.2 |
| 11                 |            | 2          |            |            |            |            |            |            |            |            |            |            |            |            |            |            |            |            |            |            |            |            |            |            |             | 0.2              | 0.2 |
| 12                 |            |            |            |            |            |            |            |            |            |            |            |            |            |            |            |            |            |            |            |            |            |            |            |            |             |                  |     |
| 13                 |            |            |            |            |            |            |            |            |            |            |            |            |            |            |            |            |            |            |            |            |            |            |            |            |             |                  |     |
| 14                 | 9          | 1          |            |            |            | 1          | 5          |            |            |            |            |            |            |            |            |            |            |            |            |            |            |            |            |            |             | 1.6              | 1.2 |
| 15                 |            |            |            |            | 5          |            | 1.5        |            | 1.5        |            |            | 4          |            |            |            |            | 2          |            | 1          |            | 1          |            | 1          |            |             | 4.6              | 2.1 |
| 16                 |            |            |            |            | 4          |            |            |            |            |            |            |            |            |            |            |            |            |            |            |            |            |            |            |            |             | 0.4              | 0.2 |
| 17                 |            |            |            |            |            |            |            |            |            |            |            |            |            |            |            |            |            |            |            |            |            |            |            |            |             |                  |     |
| 18                 |            |            |            |            |            |            |            |            |            |            |            |            |            |            |            |            |            |            |            |            |            |            |            |            |             |                  |     |
| 19                 |            |            |            |            |            | 1.6        | 4          |            |            |            |            |            | 1.4        | 1.7        | 6          |            |            |            |            |            |            |            |            |            |             | 1.1              | 5.9 |
| 20                 |            |            |            |            |            |            |            |            |            |            | 1.0        | 1          | 2.1        | 9          | 2          |            | 7          | 1.8        | 9          |            |            |            |            |            |             | 7.7              | 4.1 |
| 21                 |            | 1          |            |            |            |            |            |            |            |            |            |            |            |            |            |            |            |            |            | 1.9        | 4          |            |            |            |             | 2.4              | 0.6 |
| 22                 |            |            |            |            |            |            | 5          | 3          | 7          | 7          |            |            |            |            |            | 2          |            |            |            |            |            | 1          | 1          |            | 2           | 2.8              | 1.7 |
| 23                 |            |            |            | 2.0        | 7.0        |            |            |            |            |            |            |            | 9          |            | 6          | 2          |            |            |            |            |            |            |            |            |             | 10.7             | 1.8 |
| 24                 |            |            |            |            |            | 1          |            | 5          |            |            | 2          | 1          | 4          | 3          | 6          |            |            |            |            |            |            |            |            |            |             | 2.2              | 1.8 |
| 25                 |            |            |            |            |            |            |            |            |            |            |            |            |            |            |            |            |            |            |            |            |            |            |            |            |             |                  |     |
| 26                 |            |            |            |            |            |            | 8          |            |            |            |            |            |            |            | 4          | 5          | 1          | 6          | 1.3        | 5          | 1.1        |            |            | 1          |             | 5.4              | 4.8 |
| 27                 | 1.0        | 6          |            |            |            |            | 7          |            | 1.0        | 4          | 4          |            |            |            |            |            |            |            |            |            |            | 9          | 9          | 3          |             | 6.4              | 6.4 |
| 28                 | 1          |            |            |            |            |            |            |            |            |            |            |            |            |            |            |            |            |            |            |            |            |            |            |            |             | 0.4              | 0.5 |
| 29                 |            |            | 4          |            |            |            |            |            |            |            |            |            |            |            |            |            |            |            | 4          | 4          | 1.0        |            |            |            |             | 2.2              | 2.1 |
| 30                 |            |            |            |            |            |            | 1          | 4          | 1.6        | 2.9        | 1          |            |            |            |            |            |            |            |            |            |            |            |            |            |             | 5.1              | 1.5 |
| 31                 |            |            |            |            |            |            |            |            |            |            |            |            |            |            |            |            |            |            |            |            |            |            |            |            |             |                  |     |
| Sum.               | 3.3        | 2.1        | 1.4        | 2.4        | 7.9        | 4.0        | 6.5        | 3.5        | 7.0        | 5.3        | 3.3        | 2.2        | 5.6        | 2.9        | 3.8        | 1.3        | 1.8        | 4.8        | 3.4        | 5.0        | 4.9        | 2.3        | 3.5        | 3.0        | 91.2        | 53.5             |     |
| Total<br>Duration. | hr.<br>2.9 | hr.<br>1.8 | hr.<br>0.8 | hr.<br>0.7 | hr.<br>1.1 | hr.<br>2.3 | hr.<br>3.9 | hr.<br>2.3 | hr.<br>3.0 | hr.<br>1.9 | hr.<br>2.6 | hr.<br>1.7 | hr.<br>2.1 | hr.<br>1.8 | hr.<br>2.4 | hr.<br>0.9 | hr.<br>1.2 | hr.<br>3.6 | hr.<br>3.2 | hr.<br>3.4 | hr.<br>3.1 | hr.<br>2.5 | hr.<br>2.1 | hr.<br>2.2 | hr.<br>53.5 | hr.<br>53.5      |     |

**336. Cahirciveen (Valencia Observatory) : H<sub>r</sub> = 9.1 metres + 0.5 metre. June, 1924.**

| Day.               | 0-1        | 1-2        | 2-3        | 3-4        | 4-5        | 5-6        | 6-7        | 7-8        | 8-9        | 9-10       | 10-11      | 11-12      | 12-13      | 13-14      | 14-15      | 15-16      | 16-17      | 17-18      | 18-19      | 19-20      | 20-21      | 21-22      | 22-23      | 23-24      | 0-24        | Duration<br>0-24 |      |     |     |
|--------------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|-------------|------------------|------|-----|-----|
| 1                  |            |            |            |            |            |            |            |            |            |            |            |            |            |            |            |            |            |            |            |            |            |            |            |            |             |                  |      |     |     |
| 2                  |            |            |            |            |            |            |            |            |            |            |            |            |            |            |            |            |            |            |            |            |            |            |            |            |             |                  |      |     |     |
| 3                  |            |            |            |            |            | 1          | 1          | 3          | 1          |            |            |            |            |            |            |            |            |            |            |            |            |            | 1          | 2          | 1.2         | 2.3              |      |     |     |
| 4                  |            | 8          | 3          |            |            |            |            |            |            |            |            |            |            |            |            |            |            |            |            |            |            |            |            |            |             | 1.1              | 0.9  |     |     |
| 5                  |            |            |            |            |            |            |            |            |            |            |            |            |            |            | 6          |            |            |            |            |            |            |            |            |            | 3           | 0.9              | 0.8  |     |     |
| 6                  | 4          | 7          | 4.6        | 1.2        | 2          |            |            |            |            |            |            |            |            |            |            |            |            |            |            |            |            |            |            |            |             | 7.1              | 2.8  |     |     |
| 7                  |            |            |            |            | 2          | 1          |            | 1          | 4          | 1.6        | 1.7        | 2          |            |            |            | 2.1        |            | 1          |            |            |            |            |            |            |             | 6.5              | 4.0  |     |     |
| 8                  |            |            |            |            |            | 2          |            |            |            |            |            |            |            |            |            |            |            |            |            |            |            |            |            |            |             | 0.2              | 0.1  |     |     |
| 9                  |            |            |            |            |            |            |            |            |            |            | 1.1        | 4          | 1.4        | 8          | 2.2        | 5          |            |            |            |            |            |            |            |            | 7           | 7.1              | 4.4  |     |     |
| 10                 | 4          | 6          |            | 3          |            | 1.7        | 7          | 4          | 6          | 1.5        | 2          | 1.6        | 7          | 8          |            |            |            |            |            |            |            |            |            |            | 3           | 4.7              | 15.5 | 7.2 |     |
| 11                 | 1.4        | 3          | 1.1        | 6          |            |            |            | 3          | 1          | 1.7        | 2.1        |            | 1          | 3          | 2          |            |            |            |            |            |            |            |            |            |             | 8.4              | 4.2  |     |     |
| 12                 |            |            |            |            |            |            |            |            |            |            |            |            |            |            |            |            |            |            |            |            |            |            |            |            |             |                  |      |     |     |
| 13                 |            |            |            |            |            |            |            |            |            |            |            |            |            |            |            |            |            |            |            |            |            |            |            |            |             |                  |      |     |     |
| 14                 |            |            |            |            |            |            |            |            |            |            |            |            |            |            |            |            |            |            |            |            |            |            |            |            |             |                  |      |     |     |
| 15                 |            |            | 4          | 2          | 1.9        | 1.4        | 4          | 5          | 4          |            |            |            |            |            |            |            |            |            |            | 5          | 6          | 6          | 2          | 2          | 6           | 7.9              | 5.9  |     |     |
| 16                 | 4          | 1          | 7          | 2          |            |            |            |            | 1          |            |            |            |            |            |            |            |            | 3.0        | 1.7        | 1.8        | 1.3        | 5          |            |            |             | 9.8              | 5.6  |     |     |
| 17                 |            |            |            |            |            |            |            |            |            |            |            |            |            |            |            |            | 2.0        | 13.1       | 4.2        | 5.6        | 5.1        | 3.4        |            |            |             | 33.4             | 4.9  |     |     |
| 18                 |            |            |            |            |            |            |            |            |            |            |            |            | 1          |            |            |            |            |            |            |            |            |            |            |            |             | 3.1              | 1.4  |     |     |
| 19                 | 7          |            |            |            | 3          | 2          | 1          | 3          |            | 3          |            | 3          |            | 4          |            |            |            |            |            |            |            |            |            |            |             | 2.6              | 2.0  |     |     |
| 20                 |            |            |            |            | 6          |            |            |            |            |            | 2          | 2          | 3          |            | 5          | 1          | 5          | 3          |            |            |            |            |            |            |             | 2.7              | 2.1  |     |     |
| 21                 |            |            |            |            |            |            |            |            |            |            |            |            |            |            |            | 3          | 1.2        |            |            |            |            |            |            |            |             | 1.5              | 0.7  |     |     |
| 22                 |            |            |            |            |            |            |            |            |            |            |            |            | 6          | 1.7        | 1.2        | 2          |            | 1          | 2          |            |            |            |            |            |             | 5.2              | 5.0  |     |     |
| 23                 | 1          | 1          |            |            |            |            |            |            |            |            |            |            |            |            |            |            |            |            |            |            |            |            |            |            |             | 0.4              | 1.0  |     |     |
| 24                 |            | 1          | 1          | 1          |            |            |            |            |            |            |            |            |            |            |            |            |            |            |            |            |            |            |            |            |             | 0.5              | 1.3  |     |     |
| 25                 |            |            |            |            |            |            |            |            |            |            |            |            |            |            |            |            |            |            |            |            |            |            |            |            |             |                  |      |     |     |
| 26                 |            |            | 3          |            |            |            | 2          | 8          | 9          | 1          | 1          | 6          | 7          | 2          | 2          |            |            |            |            | 1.2        | 1.7        | 1.0        | 2          |            |             | 8.2              | 6.3  |     |     |
| 27                 |            |            |            |            |            |            |            |            |            |            |            |            |            |            |            |            |            |            |            |            |            |            |            |            |             |                  |      |     |     |
| 28                 |            |            |            |            |            |            |            |            |            |            |            |            |            |            |            |            |            |            |            |            |            |            |            |            |             | 4                | 0.4  | 0.8 |     |
| 29                 | 5          | 2          | 1          |            | 2          | 2          | 3          |            |            |            |            |            |            |            |            |            |            |            |            |            |            |            |            |            |             | 1                | 5    | 2.2 | 2.5 |
| 30                 |            |            |            |            |            |            |            |            |            |            |            |            |            |            |            |            |            |            |            |            |            |            |            |            |             |                  |      |     |     |
| Sum.               | 3.9        | 2.9        | 7.6        | 2.6        | 3.4        | 4.0        | 1.8        | 2.7        | 2.6        | 5.2        | 5.5        | 3.3        | 3.9        | 4.1        | 5.6        | 4.1        | 2.6        | 16.6       | 8.8        | 10.2       | 8.1        | 4.7        | 2.9        | 9.4        | 126.5       | 67.4             |      |     |     |
| Total<br>Duration. | hr.<br>2.7 | hr.<br>2.8 | hr.<br>3.9 | hr.<br>2.0 | hr.<br>2.1 | hr.<br>2.6 | hr.<br>1.3 | hr.<br>2.5 | hr.<br>3.1 | hr.<br>2.8 | hr.<br>2.8 | hr.<br>2.3 | hr.<br>3.3 | hr.<br>3.4 | hr.<br>3.5 | hr.<br>1.6 | hr.<br>0.8 | hr.<br>2.1 | hr.<br>3.6 | hr.<br>4.1 | hr.<br>4.0 | hr.<br>2.5 | hr.<br>3.0 | hr.<br>4.6 | hr.<br>67.4 |                  |      |     |     |



Amounts in millimetres for periods of sixty minutes between the exact hours, Greenwich Mean Time.

337. Cahirciveen (Valencia Observatory) : Hr (height of receiving surface above M.S.L.) = H (height of station above M.S.L.) + hr (height of receiving surface above ground) = 9.1 metres + 0.5 metre.

July, 1924.

Table with 24 columns for hourly rainfall (0-1 to 23-24) and 2 rows for 'Sum.' and 'Total Duration.'. Columns are labeled 'mm.' and 'hr.'. Values represent rainfall in millimeters and duration in hours.

338. Cahirciveen (Valencia Observatory) : Hr = 9.1 metres + 0.5 metre.

August, 1924.

Table with 24 columns for hourly rainfall (0-1 to 23-24) and 2 rows for 'Sum.' and 'Total Duration.'. Columns are labeled 'mm.' and 'hr.'. Values represent rainfall in millimeters and duration in hours.

*Amounts in millimetres for periods of sixty minutes between the exact hours, Greenwich Mean Time.*

**339. Cahirciveen (Valencia Observatory) :**  $H_r$  (height of receiving surface above M.S.L.) = H (height of station above M.S.L.) +  $h_r$  (height of receiving surface above ground) = 9.1 metres + 0.5 metre.

**September, 1924.**

| Day.               | 0-1        | 1-2        | 2-3        | 3-4        | 4-5        | 5-6        | 6-7        | 7-8        | 8-9        | 9-10       | 10-11      | 11-12      | 12-13      | 13-14      | 14-15      | 15-16      | 16-17      | 17-18      | 18-19      | 19-20      | 20-21      | 21-22      | 22-23      | 23-24      | 0-24        | Dura-<br>tion<br>0-24 |
|--------------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|-------------|-----------------------|
|                    | mm.        | mm.        | mm.        | mm.        | mm.        | mm.        | mm.        | mm.        | mm.        | mm.        | mm.        | mm.        | mm.        | mm.        | mm.        | mm.        | mm.        | mm.        | mm.        | mm.        | mm.        | mm.        | mm.        | mm.        | mm.         | hr.                   |
| 1                  | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...         | 2.0                   |
| 2                  | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...         | 0.2                   |
| 3                  | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...         | ...                   |
| 4                  | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...         | ...                   |
| 5                  | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...         | 1.6                   |
| 6                  | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...         | 3.1                   |
| 7                  | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...         | 4.0                   |
| 8                  | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...         | 1.7                   |
| 9                  | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...         | 1.0                   |
| 10                 | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...         | 9.7                   |
| 11                 | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...         | 1.7                   |
| 12                 | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...         | 1.5                   |
| 13                 | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...         | 0.6                   |
| 14                 | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...         | 0.2                   |
| 15                 | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...         | 3.1                   |
| 16                 | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...         | 5.3                   |
| 17                 | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...         | 2.7                   |
| 18                 | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...         | 0.1                   |
| 19                 | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...         | 6.5                   |
| 20                 | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...         | 3.1                   |
| 21                 | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...         | 3.4                   |
| 22                 | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...         | 8.6                   |
| 23                 | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...         | 2.8                   |
| 24                 | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...         | 8.1                   |
| 25                 | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...         | ...                   |
| 26                 | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...         | ...                   |
| 27                 | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...         | ...                   |
| 28                 | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...         | ...                   |
| 29                 | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...         | 10.6                  |
| 30                 | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...         | 11.3                  |
| 31                 | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...        | ...         | 0.7                   |
| Sum.               | 3.7        | 4.3        | 2.0        | 2.1        | 12.3       | 12.8       | 3.8        | 4.0        | 6.4        | 3.6        | 7.2        | 6.8        | 15.0       | 15.3       | 12.4       | 19.0       | 19.5       | 10.1       | 6.1        | 5.4        | 8.9        | 6.3        | 4.3        | 7.7        | 199.0       | 93.7                  |
| Total<br>Duration. | hr.<br>2.2 | hr.<br>3.3 | hr.<br>1.1 | hr.<br>1.5 | hr.<br>3.1 | hr.<br>3.4 | hr.<br>3.6 | hr.<br>3.2 | hr.<br>3.9 | hr.<br>2.7 | hr.<br>3.4 | hr.<br>5.5 | hr.<br>6.8 | hr.<br>5.9 | hr.<br>5.9 | hr.<br>5.5 | hr.<br>6.3 | hr.<br>4.0 | hr.<br>3.0 | hr.<br>4.3 | hr.<br>4.2 | hr.<br>2.1 | hr.<br>4.5 | hr.<br>4.3 | hr.<br>93.7 |                       |

**340. Cahirciveen (Valencia Observatory) :**  $H_r$  = 9.1 metres + 0.5 metre.

**October, 1924.**

|    | mm. | mm. | mm. | mm. | mm. | mm. | mm. | mm. | mm. | mm. | mm. | mm. | mm. | mm. | mm. | mm. | mm. | mm. | mm. | mm. | mm. | mm. | mm. | mm. | mm. | hr.  |
|----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|
| 1  | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 0.3  |
| 2  | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 3.5  |
| 3  | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 0.5  |
| 4  | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 0.4  |
| 5  | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 4.6  |
| 6  | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 2.7  |
| 7  | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 0.2  |
| 8  | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 0.8  |
| 9  | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 7.2  |
| 10 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 0.8  |
| 11 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 2.7  |
| 12 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 1.6  |
| 13 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 1.0  |
| 14 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ...  |
| 15 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ...  |
| 16 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 2.3  |
| 17 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 0.4  |
| 18 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 15.8 |
| 19 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 2.3  |
| 20 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 0.2  |
| 21 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 2.8  |
| 22 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ...  |
| 23 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ...  |
| 24 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 5.0  |
| 25 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 14.3 |
| 26 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ...  |
| 27 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 4.5  |
| 28 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 0.5  |
| 29 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 2.3  |
| 30 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 1.5  |
| 31 | ... | ... | ... |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |      |

Amounts in millimetres for periods of sixty minutes between the exact hours, Greenwich Mean Time.

341. Cahirciveen (Valencia Observatory) : H<sub>r</sub> (height of receiving surface above M.S.L.) = H (height of station above M.S.L.) + h<sub>r</sub> (height of receiving surface above ground) = 9.1 metres + 0.5 metre. November, 1924.

| Day.            | 0-1     | 1-2     | 2-3     | 3-4     | 4-5     | 5-6     | 6-7     | 7-8     | 8-9     | 9-10    | 10-11   | 11-12   | 12-13   | 13-14   | 14-15   | 15-16   | 16-17   | 17-18   | 18-19   | 19-20   | 20-21   | 21-22   | 22-23   | 23-24   | 0-24     | Duration 0-24 |     |
|-----------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|----------|---------------|-----|
|                 | mm.     | mm.     | mm.     | mm.     | mm.     | mm.     | mm.     | mm.     | mm.     | mm.     | mm.     | mm.     | mm.     | mm.     | mm.     | mm.     | mm.     | mm.     | mm.     | mm.     | mm.     | mm.     | mm.     | mm.     | mm.      | mm.           | hr. |
| 1               | ...     | ...     | ...     | ...     | ...     | 3       | 2.2     | 5       | 2.8     | 2.2     | 1.0     | 2       | 4       | 8       | ...     | ...     | ...     | ...     | ...     | 2.2     | ...     | ...     | ...     | ...     | 12.6     | 5.5           |     |
| 2               | ...     | ...     | ...     | ...     | ...     | ...     | 3       | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | 4       | ...     | ...     | ...     | 1.1      | 1.1           |     |
| 3               | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...      | ...           | ... |
| 4               | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...      | ...           | ... |
| 5               | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...      | ...           | ... |
| 6               | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...      | ...           | ... |
| 7               | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...      | ...           | ... |
| 8               | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...      | 0.3           | 0.2 |
| 9               | ...     | 6       | ...     | 5       | 8       | 3       | 8       | ...     | ...     | 3       | 1.1     | ...     | ...     | ...     | ...     | ...     | ...     | 1.6     | ...     | 1.3     | 8       | 1.3     | ...     | ...     | ...      | 0.3           | 5.9 |
| 10              | ...     | ...     | ...     | ...     | 8       | 5       | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | 3       | 4.0     | 3.4     | 2       | ...     | ...      | 9.3           | 3.2 |
| 11              | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...      | ...           | ... |
| 12              | ...     | 1.0     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...      | 1.0           | 0.3 |
| 13              | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | 8       | 6       | 2       | 6       | ...     | ...     | ...     | 6       | 6       | 2       | 1.2     | 7       | 6        | 5.5           | 6.0 |
| 14              | ...     | ...     | ...     | ...     | ...     | ...     | ...     | 3       | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...      | 0.3           | 0.2 |
| 15              | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | 1       | 0.1      | 0.1           | 0.1 |
| 16              | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...      | ...           | ... |
| 17              | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...      | ...           | ... |
| 18              | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...      | ...           | ... |
| 19              | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...      | ...           | ... |
| 20              | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...      | ...           | ... |
| 21              | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | 1       | ...     | ...     | ...     | 3       | 4       | 0.8      | 1.3           |     |
| 22              | ...     | ...     | ...     | ...     | 2       | 1.0     | 4       | ...     | 4       | 1.7     | 2.8     | 2.0     | 9       | 2       | 2       | 6       | 3       | 1       | ...     | ...     | 1       | 2       | ...     | ...     | 11.1     | 8.8           |     |
| 23              | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | 4       | 2.3     | 6       | 2.0     | 2.6     | 6       | 3       | 3       | 4       | 5       | ...     | ...     | 4       | 2       | ...     | 10.7     | 10.1          |     |
| 24              | ...     | 2       | ...     | ...     | ...     | ...     | ...     | ...     | 1.5     | 3       | 2       | ...     | ...     | ...     | 5       | 8       | 2.2     | 3.2     | 2.8     | 2.7     | 3.0     | 3.2     | 2.9     | 2.6     | 26.3     | 10.2          |     |
| 25              | 1.8     | 1.1     | 2       | 1       | 1       | 1       | ...     | ...     | ...     | ...     | ...     | 1       | 4       | ...     | 1       | ...     | ...     | 3       | ...     | ...     | ...     | ...     | 1.3     | ...     | 5.6      | 2.6           |     |
| 26              | 1.5     | 1.0     | 2.7     | 1.7     | 1       | ...     | 3       | 4       | 1       | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...      | 7.8           | 3.6 |
| 27              | 2       | 2       | 3       | 6       | 8       | 4       | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | 2       | ...     | ...     | 1       | ...     | ...     | ...     | ...     | ...     | ...     | 2.8      | 3.2           |     |
| 28              | ...     | ...     | 2       | ...     | ...     | ...     | ...     | ...     | ...     | ...     | 3       | 6       | 6       | 9       | 2.0     | 3.5     | 8.4     | 5       | 2       | ...     | 1       | ...     | 2       | 2       | 17.6     | 7.1           |     |
| 29              | 1       | ...     | ...     | ...     | 4       | ...     | ...     | ...     | ...     | ...     | ...     | ...     | 6       | 9       | 2.0     | 3.5     | 8.4     | 5       | 2       | 1.0     | 4       | ...     | 2       | ...     | 3.1      | 1.7           |     |
| 30              | 1       | 1       | 2.6     | ...     | 1       | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | 1.0     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | 3.9      | 1.3           |     |
| Sum.            | 3.7     | 4.2     | 6.0     | 2.9     | 3.3     | 2.6     | 4.0     | 1.2     | 4.8     | 4.9     | 7.7     | 3.7     | 4.3     | 4.5     | 4.5     | 6.8     | 11.5    | 7.9     | 4.6     | 8.0     | 8.6     | 9.6     | 6.0     | 4.1     | 129.4    | 72.4          |     |
| Total Duration. | hr. 1.8 | hr. 2.8 | hr. 2.7 | hr. 2.2 | hr. 2.8 | hr. 1.9 | hr. 2.7 | hr. 1.1 | hr. 1.9 | hr. 3.8 | hr. 3.7 | hr. 3.0 | hr. 3.3 | hr. 2.8 | hr. 4.4 | hr. 4.7 | hr. 3.8 | hr. 4.4 | hr. 2.7 | hr. 3.0 | hr. 3.6 | hr. 3.9 | hr. 2.8 | hr. 2.6 | hr. 72.4 | hr. —         |     |

342. Cahirciveen (Valencia Observatory) : H<sub>r</sub> = 9.1 metres + 0.5 metre. December, 1924.

|                 | mm.     | mm.     | mm.     | mm.     | mm.     | mm.     | mm.     | mm.     | mm.     | mm.     | mm.     | mm.     | mm.     | mm.     | mm.     | mm.     | mm.     | mm.     | mm.     | mm.     | mm.     | mm.     | mm.     | mm.     | mm.       | mm.   | hr.   |     |
|-----------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|-----------|-------|-------|-----|
| 1               | ...     | ...     | 3       | 2.5     | 1.0     | 1.9     | 2.8     | 8       | 5       | 4       | 1.0     | 6       | 1       | ...     | 2       | 1.3     | 3.0     | 3.0     | 1.8     | 3.0     | 7       | 3       | 3       | 1       | 25.6      | 13.0  |       |     |
| 2               | 2       | 9       | 2.6     | 2       | ...     | 4       | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...       | 4.3   | 1.2   |     |
| 3               | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | 2       | 0.2       | 0.4   | 0.4   |     |
| 4               | 1.0     | 3.1     | 3.3     | 6.7     | 8.6     | 1.5     | 2       | 2       | ...     | ...     | ...     | ...     | ...     | 2       | 1.0     | 8       | 1.0     | 1.2     | 7       | ...     | ...     | ...     | ...     | ...     | 29.5      | 10.7  |       |     |
| 5               | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | 1.2     | 1       | ...     | 1       | ...     | ...     | ...     | 1       | 3       | 1.8       | 0.9   | 0.9   |     |
| 6               | ...     | 3       | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...       | 0.3   | 0.2   |     |
| 7               | ...     | ...     | ...     | ...     | ...     | ...     | 3       | ...     | ...     | ...     | 1       | ...     | ...     | ...     | 1.4     | 2.7     | 1.9     | 2.0     | 1.4     | ...     | ...     | ...     | ...     | ...     | ...       | 9.8   | 4.6   |     |
| 8               | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | 1       | 7       | 1.7     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...       | 2.5   | 2.0   |     |
| 9               | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | 1       | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...       | 0.1   | 0.2   |     |
| 10              | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...       | ...   | ...   | ... |
| 11              | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | 1       | 2       | 2       | 8       | 4       | 2       | 5         | 2.4   | 3.2   |     |
| 12              | 3       | 2       | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | 2       | 4       | ...     | ...     | ...     | ...     | 3       | 1       | ...     | ...     | ...       | 1.5   | 2.1   |     |
| 13              | 6       | 6       | 3.3     | 2.5     | 1.7     | 3.9     | 1.7     | ...     | ...     | ...     | ...     | ...     | 1.2     | 3       | 2       | ...     | ...     | 2       | ...     | 1       | 4       | 5       | ...     | ...     | 17.2      | 6.8   |       |     |
| 14              | ...     | 1       | ...     | 2       | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | 1       | ...     | ...     | 1.6     | 2.8     | 4.2     | 9.2       | 3.1   | 3.1   |     |
| 15              | 2.9     | 2.5     | 1.7     | ...     | ...     | 1       | ...     | 1       | ...     | 1.6     | ...     | 2.2     | 3.4     | 5       | 6       | 2.8     | 3       | 2       | ...     | ...     | ...     | ...     | ...     | ...     | 18.9      | 7.0   |       |     |
| 16              | 3       | ...     | ...     | ...     | 1.3     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | 1       | 4       | 2.1       | 1.3   | 1.3   |     |
| 17              | 3       | ...     | 1       | 1       | 1       | 1       | 1       | ...     | ...     | ...     | 1       | 2       | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | 1       | 2       | 1       | 1.5       | 2.9   | 2.9   |     |
| 18              | ...     | ...     | ...     | ...     | ...     | ...     | ...     | 1       | 1       | 1       | 4       | 1.4     | 3.3     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...       | 5.4   | 2.7   |     |
| 19              | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...       | ...   | ...   | ... |
| 20              | ...     | ...     | ...     | ...     | 1       | 1       | ...     | 2       | ...     | ...     | 2       | ...     | 1       | 1       | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...       | 0.8   | 1.2   |     |
| 21              | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...       | ...   | ...   | ... |
| 22              | ...     | ...     | ...     | 4       | 5       | 2.9     | 1.2     | ...     | ...     | ...     | ...     | 4.0     | 1.8     | 1.4     | 1       | ...     | ...     | ...     | ...     | ...     | ...     | 1.5     | 1.0     | 1.6     | 16.4      | 6.4   | 6.4   |     |
| 23              | 4.4     | 1.7     | 6       | 4       | ...     | ...     | 5       | ...     | ...     | ...     | 7       | 6       | ...     | 1.9     | 1       | ...     | ...     | ...     | ...     | ...     | ...     | 9       | 4       | ...     | 12.2      | 3.6   | 3.6   |     |
| 24              | 6       | ...     | 1.0     | ...     | ...     | ...     | ...     | ...     | 3       | 4       | 9       | 8       | ...     | 9       | 7       | ...     | ...     | ...     | 1       | ...     | ...     | ...     | ...     | ...     | ...       | 5.7   | 2.1   | 2.1 |
| 25              | ...     | ...     | ...     | ...     | ...     | 8       | 1       | ...     | ...     | ...     | 7       | 3       | 5.4     | 1.7     | 1.8     | 1.0     | 2       | 4       | 1.2     | 2       | 3       | ...     | ...     | ...     | 14.1      | 6.3   | 6.3   |     |
| 26              | 1.1     | 2       | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | 4       | 2.7     | 2.6     | 2.7     | 3.7     | 3.0     | 8       | 4       | ...     | 17.6      | 8.1   | 8.1   |     |
| 27              | 1.8     | 2.8     | 1.5     | 5       | 2       | ...     | ...     | 2       | ...     | ...     | ...     | ...     | ...     | 1       | ...     | 4       | 9       | 2.4     | 7       | 2       | ...     | 8       | 2.1     | 1.1     | 15.7      | 5.7   | 5.7   |     |
| 28              | ...     | 3       | 2       | 3       | 1       | ...     | ...     | 4       | 4       | ...     | ...     | 2       | ...     | ...     | ...     | 1       | 1       | ...     | 1       | ...     | 3       | ...     | ...     | ...     | 3.4       | 2.7   | 2.7   |     |
| 29              | ...     | ...     | ...     | 2       | 2       | 2       | 2       | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | 5       | 1.2     | 1.1     | 2.7     | 2.8     | 3.8     | 2.7     | 2.8     | 1.8     | 20.0      | 9.1   | 9.1   |     |
| 30              | 1.7     | 6       | 7       | 2       | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | 3       | 1       | 4       | ...     | ...     | ...     | ...     | ...     | ...     | ...       | 4.0   | 2.5   | 2.5 |
| 31              | 5       | ...     | ...     | 6       | 2       | ...     | 5       | ...     | 3       | 8       | 4       | 6       | ...     | ...     | ...     | 3       | 2       | 3       | 1.4     | 4       | 1.3     | ...     | ...     | 1.8     | 9.6       | 4.7   | 4.7   |     |
| Sum.            | 15.7    | 13.3    | 15.3    | 14.6    | 12.9    | 13.2    | 7.4     | 2.0     | 1.8     | 3.3     | 4.4     | 12.0    | 14.6    | 7.1     | 6.8     | 13.4    | 9.5     | 14.2    | 12.9    | 9.9     | 12.1    | 11.0    | 11.3    | 13.1    | 251.8     | 114.8 | 114.8 |     |
| Total Duration. | hr. 6.9 | hr. 5.5 | hr. 6.0 | hr. 5.4 | hr. 5.5 | hr. 5.4 | hr. 3.4 | hr. 1.3 | hr. 1.8 | hr. 2.2 | hr. 2.5 | hr. 4.4 | hr. 3.4 | hr. 2.9 | hr. 4.9 | hr. 7.0 | hr. 6.4 | hr. 7.3 | hr. 6.0 | hr. 4.4 | hr. 4.5 | hr. 4.6 | hr. 5.7 | hr. 7.4 | hr. 114.8 | hr. — | hr. — |     |
| G.M.T.          | 0-1     | 1-2     | 2-3     | 3-4     | 4-5     | 5-6     | 6-7     | 7-8     | 8-9     | 9-10    | 10-11   | 11-12   | 12-13   | 13-14   | 14-15   | 15-16   | 16-17   | 17-18   | 18-19   | 19-20   | 20-21   | 21-22   | 22-23   | 23-24   | 0-24      | —     | —     |     |

DURATION OF BRIGHT SUNSHINE.

For periods of sixty minutes, between the exact hours of Local Apparent Time.

343. Cahirciveen (Valencia Observatory) : h<sub>s</sub> (height of recorder above ground) = 12.8 metres.

January, 1924.

| Day.  | 3 to 4. | 4 to 5. | 5 to 6. | 6 to 7. | 7 to 8. | 8 to 9. | 9 to 10. | 10 to 11. | 11 to Noon | Noon to 13. | 13 to 14. | 14 to 15. | 15 to 16. | 16 to 17. | 17 to 18. | 18 to 19. | 19 to 20. | 20 to 21. | Total for Day. | Per cent. of Possible. |
|-------|---------|---------|---------|---------|---------|---------|----------|-----------|------------|-------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|----------------|------------------------|
|       | hr.     | hr.     | hr.     | hr.     | hr.     | hr.     | hr.      | hr.       | hr.        | hr.         | hr.       | hr.       | hr.       | hr.       | hr.       | hr.       | hr.       | hr.       | hr.            | %                      |
| 1     | —       | —       | —       | —       | —       | —       | ..       | ..        | .1         | ..          | ..        | ..        | ..        | —         | —         | —         | —         | —         | 0.1            | 1                      |
| 2     | —       | —       | —       | —       | —       | ..      | ..4      | 1.0       | 1.0        | .8          | .8        | .3        | .3        | —         | —         | —         | —         | —         | 4.6            | 60                     |
| 3     | —       | —       | —       | —       | —       | ..      | ..       | ..        | ..         | ..          | ..        | ..        | ..        | —         | —         | —         | —         | —         | ..             | ..                     |
| 4     | —       | —       | —       | —       | —       | ..      | ..       | ..        | ..         | ..          | .2        | .5        | .2        | —         | —         | —         | —         | —         | 0.9            | 11                     |
| 5     | —       | —       | —       | —       | —       | ..      | ..       | ..        | ..         | ..          | ..        | ..        | ..        | —         | —         | —         | —         | —         | ..             | ..                     |
| 6     | —       | —       | —       | —       | —       | ..      | ..       | ..        | ..         | ..          | ..        | ..        | ..        | —         | —         | —         | —         | —         | ..             | ..                     |
| 7     | —       | —       | —       | —       | —       | ..      | ..8      | 1.0       | 1.0        | 1.0         | 1.0       | 1.0       | .2        | —         | —         | —         | —         | —         | 6.0            | 78                     |
| 8     | —       | —       | —       | —       | —       | ..      | ..       | ..        | ..         | .5          | .1        | ..        | ..        | —         | —         | —         | —         | —         | 0.6            | 8                      |
| 9     | —       | —       | —       | —       | —       | ..      | ..       | ..        | ..         | ..          | ..        | ..        | ..        | —         | —         | —         | —         | —         | ..             | ..                     |
| 10    | —       | —       | —       | —       | —       | ..      | ..       | ..        | ..         | ..          | ..        | ..        | ..        | —         | —         | —         | —         | —         | ..             | ..                     |
| 11    | —       | —       | —       | —       | —       | ..      | ..       | ..        | ..         | ..          | ..        | ..        | ..        | —         | —         | —         | —         | —         | ..             | ..                     |
| 12    | —       | —       | —       | —       | —       | ..      | ..       | ..        | ..         | ..          | ..        | ..        | ..        | —         | —         | —         | —         | —         | ..             | ..                     |
| 13    | —       | —       | —       | —       | ..      | ..      | ..       | ..        | .5         | .1          | .4        | .2        | .4        | —         | —         | —         | —         | —         | 1.6            | 20                     |
| 14    | —       | —       | —       | —       | ..      | ..      | ..       | ..        | ..         | ..          | ..        | ..        | ..        | —         | —         | —         | —         | —         | ..             | ..                     |
| 15    | —       | —       | —       | —       | ..      | ..      | ..       | ..        | ..         | .7          | .9        | 1.0       | .2        | —         | —         | —         | —         | —         | 2.8            | 34                     |
| 16    | —       | —       | —       | —       | ..      | ..      | ..       | ..8       | ..8        | .9          | 1.0       | 1.0       | ..        | —         | —         | —         | —         | —         | 4.5            | 55                     |
| 17    | —       | —       | —       | —       | ..      | ..      | ..       | ..2       | ..         | ..          | .1        | ..        | ..        | —         | —         | —         | —         | —         | 0.3            | 4                      |
| 18    | —       | —       | —       | —       | ..      | ..      | ..       | ..4       | ..2        | .6          | .5        | .2        | ..        | —         | —         | —         | —         | —         | 1.9            | 23                     |
| 19    | —       | —       | —       | —       | ..      | ..      | ..       | ..1       | ..1        | .4          | .4        | .3        | ..        | —         | —         | —         | —         | —         | 1.3            | 15                     |
| 20    | —       | —       | —       | —       | ..      | ..      | ..6      | ..8       | ..5        | .6          | .5        | ..        | ..        | —         | —         | —         | —         | —         | 3.0            | 36                     |
| 21    | —       | —       | —       | —       | ..      | ..      | ..       | ..        | ..         | ..          | ..        | ..        | ..        | —         | —         | —         | —         | —         | ..             | ..                     |
| 22    | —       | —       | —       | —       | ..      | ..      | ..       | ..3       | ..7        | .2          | .7        | .8        | .8        | —         | —         | —         | —         | —         | 3.5            | 41                     |
| 23    | —       | —       | —       | —       | ..      | ..      | ..       | ..        | ..         | ..          | ..        | ..        | ..        | —         | —         | —         | —         | —         | ..             | ..                     |
| 24    | —       | —       | —       | —       | ..      | ..      | ..7      | ..8       | ..2        | .2          | ..        | ..        | ..        | —         | —         | —         | —         | —         | 1.9            | 22                     |
| 25    | —       | —       | —       | —       | ..      | ..      | ..4      | ..3       | ..2        | .8          | .3        | ..        | ..        | —         | —         | —         | —         | —         | 2.0            | 23                     |
| 26    | —       | —       | —       | —       | ..      | ..      | ..       | ..        | ..         | ..          | ..        | ..        | ..        | —         | —         | —         | —         | —         | ..             | ..                     |
| 27    | —       | —       | —       | —       | ..      | ..3     | 1.0      | 1.0       | .8         | .2          | .7        | .5        | .1        | —         | —         | —         | —         | —         | 4.6            | 53                     |
| 28    | —       | —       | —       | —       | ..      | ..      | ..2      | ..5       | ..7        | ..          | ..        | ..        | ..        | —         | —         | —         | —         | —         | 1.4            | 16                     |
| 29    | —       | —       | —       | —       | ..      | ..      | ..       | ..        | ..         | ..          | ..        | ..        | ..        | —         | —         | —         | —         | —         | ..             | ..                     |
| 30    | —       | —       | —       | —       | ..      | ..      | ..1      | ..        | ..         | ..          | ..        | ..        | ..        | —         | —         | —         | —         | —         | 0.1            | 1                      |
| 31    | —       | —       | —       | —       | ..      | ..      | ..       | ..        | ..         | ..          | ..        | .8        | .6        | —         | —         | —         | —         | —         | 1.4            | 16                     |
| Sum.  | —       | —       | —       | —       | ..      | 0.3     | 4.2      | 7.3       | 6.7        | 7.0         | 7.6       | 6.6       | 2.8       | ..        | —         | —         | —         | —         | 42.5           | —                      |
| Mean. | —       | —       | —       | —       | ..      | 0.01    | 0.14     | 0.24      | 0.22       | 0.23        | 0.25      | 0.21      | 0.09      | ..        | —         | —         | —         | —         | 1.37           | 17                     |

344. Cahirciveen (Valencia Observatory) : h<sub>s</sub> = 12.8 metres.

February, 1924.

|             | hr.     | hr.     | hr.     | hr.     | hr.     | hr.     | hr.      | hr.       | hr.        | hr.         | hr.       | hr.       | hr.       | hr.       | hr.       | hr.       | hr.       | hr.       | hr.            | %                      |
|-------------|---------|---------|---------|---------|---------|---------|----------|-----------|------------|-------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|----------------|------------------------|
| 1           | —       | —       | —       | —       | ..      | ..      | ..       | ..        | .1         | 1.0         | 1.0       | .9        | 1.0       | .2        | —         | —         | —         | —         | 4.2            | 47                     |
| 2           | —       | —       | —       | —       | ..      | ..      | ..       | ..6       | ..5        | .4          | .8        | .2        | ..        | ..        | —         | —         | —         | —         | 2.5            | 28                     |
| 3           | —       | —       | —       | —       | ..      | ..      | ..       | ..1       | ..         | ..          | ..        | ..        | ..        | —         | —         | —         | —         | —         | 0.1            | 1                      |
| 4           | —       | —       | —       | —       | ..      | ..      | ..       | ..        | ..         | ..          | ..        | ..        | ..        | —         | —         | —         | —         | —         | ..             | ..                     |
| 5           | —       | —       | —       | —       | ..      | ..      | ..       | ..1       | ..         | ..          | ..        | ..        | ..        | —         | —         | —         | —         | —         | 0.1            | 1                      |
| 6           | —       | —       | —       | —       | ..      | ..      | ..       | ..1       | ..5        | .8          | .4        | ..        | ..        | —         | —         | —         | —         | —         | 1.8            | 19                     |
| 7           | —       | —       | —       | —       | ..      | ..      | ..       | ..        | ..         | ..          | ..        | ..        | .2        | —         | —         | —         | —         | —         | 0.2            | 2                      |
| 8           | —       | —       | —       | —       | ..      | ..      | ..       | ..        | ..         | ..          | ..        | ..        | ..        | —         | —         | —         | —         | —         | ..             | ..                     |
| 9           | —       | —       | —       | —       | ..      | ..5     | .4       | .9        | 1.0        | 1.0         | .7        | .7        | ..        | —         | —         | —         | —         | —         | 5.2            | 55                     |
| 10          | —       | —       | —       | —       | ..      | ..      | ..1      | ..3       | ..2        | ..          | ..        | .7        | .1        | .1        | —         | —         | —         | —         | 1.5            | 16                     |
| 11          | —       | —       | —       | —       | ..      | ..      | ..2      | ..        | ..3        | .5          | .2        | .4        | ..        | ..        | —         | —         | —         | —         | 1.6            | 17                     |
| 12          | —       | —       | —       | —       | ..      | ..      | ..       | ..        | ..         | ..          | ..        | ..        | ..        | —         | —         | —         | —         | —         | ..             | ..                     |
| 13          | —       | —       | —       | —       | ..      | ..      | ..       | ..4       | ..         | .8          | 1.0       | .3        | ..        | —         | —         | —         | —         | —         | 2.5            | 26                     |
| 14          | —       | —       | —       | —       | ..      | ..      | ..6      | ..1       | ..2        | 1.0         | 1.0       | .6        | ..        | —         | —         | —         | —         | —         | 3.5            | 36                     |
| 15          | —       | —       | —       | —       | ..      | ..      | ..       | ..1       | ..         | ..          | ..        | ..        | ..        | —         | —         | —         | —         | —         | 0.1            | 1                      |
| 16          | —       | —       | —       | —       | ..      | ..8     | 1.0      | 1.0       | 1.0        | 1.0         | 1.0       | 1.0       | 1.0       | .2        | —         | —         | —         | —         | 8.0            | 81                     |
| 17          | —       | —       | —       | —       | ..      | ..4     | .9       | .8        | 1.0        | 1.0         | 1.0       | .9        | .7        | .1        | —         | —         | —         | —         | 6.8            | 68                     |
| 18          | —       | —       | —       | —       | ..      | ..2     | .8       | .9        | .6         | ..          | .3        | 1.0       | .5        | .5        | —         | —         | —         | —         | 4.8            | 48                     |
| 19          | —       | —       | —       | —       | ..      | ..9     | 1.0      | 1.0       | 1.0        | 1.0         | 1.0       | .3        | ..        | ..        | —         | —         | —         | —         | 6.2            | 61                     |
| 20          | —       | —       | —       | —       | ..      | ..      | ..       | ..        | ..         | ..          | ..        | ..        | ..        | —         | —         | —         | —         | —         | ..             | ..                     |
| 21          | —       | —       | —       | —       | ..      | ..      | ..       | ..        | ..2        | .1          | .2        | ..        | ..        | ..        | —         | —         | —         | —         | 0.5            | 5                      |
| 22          | —       | —       | —       | —       | ..      | ..1.0   | 1.0      | 1.0       | 1.0        | 1.0         | 1.0       | 1.0       | 1.0       | .8        | —         | —         | —         | —         | 8.8            | 85                     |
| 23          | —       | —       | —       | —       | ..      | ..      | ..       | ..        | ..3        | .9          | .8        | 1.0       | .9        | .8        | —         | —         | —         | —         | 5.7            | 55                     |
| 24          | —       | —       | —       | —       | ..      | ..      | ..1      | ..3       | ..         | .1          | .2        | ..        | ..        | ..        | —         | —         | —         | —         | 0.7            | 7                      |
| 25          | —       | —       | —       | —       | ..      | ..      | ..       | ..        | ..1        | ..          | .9        | .6        | .6        | ..        | —         | —         | —         | —         | 2.2            | 21                     |
| 26          | —       | —       | —       | —       | ..2     | 1.0     | 1.0      | 1.0       | 1.0        | 1.0         | 1.0       | 1.0       | 1.0       | .2        | ..        | —         | —         | —         | 8.4            | 79                     |
| 27          | —       | —       | —       | —       | ..      | ..1     | .1       | .3        | .6         | .2          | .1        | .6        | .7        | .7        | —         | —         | —         | —         | 3.4            | 32                     |
| 28          | —       | —       | —       | —       | ..      | ..1     | .2       | ..        | .2         | .2          | .3        | .5        | ..        | ..        | —         | —         | —         | —         | 1.5            | 14                     |
| 29          | —       | —       | —       | —       | ..      | ..1     | .4       | 1.0       | .5         | .2          | .1        | ..        | ..        | ..        | —         | —         | —         | —         | 2.3            | 21                     |
| Sum.        | —       | —       | —       | ..      | 0.2     | 5.2     | 7.9      | 9.7       | 11.3       | 12.3        | 13.0      | 11.7      | 7.7       | 3.6       | ..        | —         | —         | —         | 82.6           | —                      |
| Mean.       | —       | —       | —       | ..      | 0.01    | 0.18    | 0.27     | 0.33      | 0.39       | 0.42        | 0.45      | 0.40      | 0.27      | 0.12      | ..        | —         | —         | —         | 2.85           | 29                     |
| Hour L.A.T. | 3 to 4. | 4 to 5. | 5 to 6. | 6 to 7. | 7 to 8. | 8 to 9. | 9 to 10. | 10 to 11. | 11 to Noon | Noon to 13. | 13 to 14. | 14 to 15. | 15 to 16. | 16 to 17. | 17 to 18. | 18 to 19. | 19 to 20. | 20 to 21. | Total for Day. | Per cent. of Possible. |

For periods of sixty minutes, between the exact hours of Local Apparent Time.

**345. Cahirciveen (Valencia Observatory) : h<sub>s</sub> (height of the recorder above ground) = 12.8 metres. March, 1924.**

| Day.  | 3 to 4. | 4 to 5. | 5 to 6. | 6 to 7. | 7 to 8. | 8 to 9. | 9 to 10. | 10 to 11. | 11 to Noon. | Noon to 13. | 13 to 14. | 14 to 15. | 15 to 16. | 16 to 17. | 17 to 18. | 18 to 19. | 19 to 20. | 20 to 21. | Total for Day. | Per cent. of Possible. |
|-------|---------|---------|---------|---------|---------|---------|----------|-----------|-------------|-------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|----------------|------------------------|
|       | hr.     | hr.     | hr.     | hr.     | hr.     | hr.     | hr.      | hr.       | hr.         | hr.         | hr.       | hr.       | hr.       | hr.       | hr.       | hr.       | hr.       | hr.       | hr.            | %                      |
| 1     | —       | —       | —       | ...     | ·2      | ·1      | ...      | ...       | ...         | ·3          | ·6        | ·5        | ·3        | ·2        | ...       | ...       | ...       | ...       | 2·2            | 20                     |
| 2     | —       | —       | —       | ...     | ...     | ...     | ·1       | 1·0       | 1·0         | ·4          | ...       | ·9        | ·2        | ·7        | ...       | ...       | ...       | ...       | 4·3            | 40                     |
| 3     | —       | —       | —       | ...     | ...     | ...     | ...      | ·7        | ·9          | 1·0         | ·9        | ...       | ...       | ...       | ...       | ...       | ...       | ...       | 3·5            | 32                     |
| 4     | —       | —       | —       | ...     | ·4      | 1·0     | 1·0      | 1·0       | ·7          | 1·0         | ·8        | ·8        | ·7        | ·1        | ...       | ...       | ...       | ...       | 7·6            | 69                     |
| 5     | —       | —       | —       | ...     | ...     | ·5      | 1·0      | 1·0       | ·9          | 1·0         | ·9        | ·9        | 1·0       | ·7        | ...       | ...       | ...       | ...       | 7·9            | 72                     |
| 6     | —       | —       | —       | ...     | ·4      | 1·0     | 1·0      | 1·0       | 1·0         | 1·0         | 1·0       | 1·0       | 1·0       | ·4        | ...       | ...       | ...       | ...       | 8·8            | 79                     |
| 7     | —       | —       | —       | ...     | ...     | ...     | ...      | ...       | ...         | ...         | ...       | ...       | ...       | ...       | ...       | ...       | ...       | ...       | ...            | ...                    |
| 8     | —       | —       | —       | ...     | ·1      | ·5      | ·4       | ·2        | ...         | ...         | ...       | ...       | ...       | ...       | ...       | ...       | ...       | ...       | 1·2            | 11                     |
| 9     | —       | —       | —       | ...     | ...     | ...     | ...      | ...       | ...         | ...         | ...       | ...       | ...       | ...       | ...       | ...       | ...       | ...       | ...            | ...                    |
| 10    | —       | —       | —       | ...     | ...     | ...     | ...      | ...       | ...         | ...         | ·7        | 1·0       | 1·0       | ·2        | ...       | ...       | ...       | ...       | 2·9            | 25                     |
| 11    | —       | —       | —       | ...     | ...     | ...     | ...      | ...       | ...         | ...         | ...       | ...       | ...       | ...       | ...       | ...       | ...       | ...       | ...            | ...                    |
| 12    | —       | —       | —       | ...     | ...     | ...     | ...      | ...       | ...         | ...         | ...       | ...       | ...       | ...       | ...       | ...       | ...       | ...       | ...            | ...                    |
| 13    | —       | —       | —       | ...     | ...     | ...     | ...      | ...       | ...         | ...         | ...       | ...       | ·1        | ...       | ...       | ...       | ...       | ...       | 0·1            | 1                      |
| 14    | —       | —       | —       | ...     | ·5      | 1·0     | 1·0      | 1·0       | 1·0         | ·3          | ·3        | 1·0       | ·7        | ·6        | ...       | ...       | ...       | ...       | 7·4            | 63                     |
| 15    | —       | —       | —       | ...     | ·8      | 1·0     | 1·0      | 1·0       | 1·0         | 1·0         | 1·0       | 1·0       | 1·0       | 1·0       | ·3        | ...       | ...       | ...       | 10·1           | 86                     |
| 16    | —       | —       | —       | ...     | ·8      | 1·0     | 1·0      | 1·0       | 1·0         | 1·0         | 1·0       | 1·0       | 1·0       | ·9        | ...       | ...       | ...       | ...       | 9·7            | 82                     |
| 17    | —       | —       | —       | ...     | ...     | ...     | ...      | ...       | ...         | ...         | ...       | ...       | ...       | ...       | ...       | ...       | ...       | ...       | ...            | ...                    |
| 18    | —       | —       | —       | ...     | ...     | ...     | ...      | ...       | ...         | ...         | ...       | ...       | ...       | ...       | ...       | ...       | ...       | ...       | ...            | ...                    |
| 19    | —       | —       | —       | ...     | ...     | ...     | ...      | ...       | ·1          | ...         | ...       | ...       | ...       | ·2        | ...       | ...       | ...       | ...       | 0·3            | 2                      |
| 20    | —       | —       | —       | ...     | ...     | ·9      | ·2       | 1·0       | 1·0         | ·5          | ...       | ...       | ...       | ...       | ...       | ...       | ...       | ...       | 3·6            | 30                     |
| 21    | —       | —       | —       | ...     | ...     | ...     | ...      | ...       | ...         | ...         | ...       | ...       | ...       | ...       | ...       | ...       | ...       | ...       | ...            | ...                    |
| 22    | —       | —       | —       | ...     | ...     | ...     | ...      | ·1        | ·2          | ·7          | ...       | ...       | ...       | ...       | ...       | ...       | ...       | ...       | 1·0            | 8                      |
| 23    | —       | —       | —       | ...     | ...     | ...     | ...      | ...       | ...         | ...         | ...       | ...       | ...       | ...       | ...       | ...       | ...       | ...       | ...            | ...                    |
| 24    | —       | —       | —       | ...     | ...     | ...     | ...      | ...       | ...         | ...         | ·1        | ...       | ...       | ...       | ...       | ...       | ...       | ...       | 0·1            | 1                      |
| 25    | —       | —       | —       | ...     | ...     | ...     | ...      | ...       | ...         | ...         | ·1        | ·7        | ·2        | ·3        | ...       | ...       | ...       | ...       | 1·3            | 10                     |
| 26    | —       | —       | —       | ...     | ...     | ...     | ...      | ·1        | ·1          | ...         | ...       | ...       | ...       | ...       | ...       | ...       | ...       | ...       | 0·2            | 2                      |
| 27    | —       | —       | —       | ...     | ...     | ...     | ...      | ...       | ...         | ...         | ...       | ...       | ...       | ...       | ...       | ...       | ...       | ...       | ...            | ...                    |
| 28    | —       | —       | —       | ...     | ...     | ...     | ...      | ...       | ...         | ...         | ...       | ...       | ...       | ...       | ...       | ...       | ...       | ...       | ...            | ...                    |
| 29    | —       | —       | —       | ...     | ...     | ...     | ...      | ...       | ...         | ...         | ...       | ...       | ...       | ...       | ...       | ...       | ...       | ...       | ...            | ...                    |
| 30    | —       | —       | —       | ...     | ...     | ...     | ...      | ...       | ·2          | ·9          | 1·0       | ·9        | 1·0       | ·7        | ...       | ...       | ...       | ...       | 4·7            | 37                     |
| 31    | —       | —       | —       | ...     | ·3      | ·7      | ·7       | 1·0       | 1·0         | 1·0         | ·9        | ·9        | 1·0       | 1·0       | ·9        | ...       | ...       | ...       | 10·4           | 81                     |
| Sum.  | —       | —       | ...     | 0·3     | 3·9     | 7·7     | 7·7      | 10·1      | 10·2        | 10·1        | 9·3       | 10·6      | 9·2       | 7·0       | 1·2       | ...       | ...       | ...       | 87·3           | —                      |
| Mean. | —       | —       | ...     | 0·01    | 0·13    | 0·25    | 0·25     | 0·33      | 0·33        | 0·33        | 0·30      | 0·34      | 0·30      | 0·23      | 0·04      | ...       | ...       | ...       | 2·82           | 24                     |

**346. Cahirciveen (Valencia Observatory) : h<sub>s</sub> = 12.8 metres.**

**April, 1924.**

|             | hr.     | hr.     | hr.     | hr.     | hr.     | hr.     | hr.      | hr.       | hr.         | hr.         | hr.       | hr.       | hr.       | hr.       | hr.       | hr.       | hr.       | hr.       | hr.            | %                      |
|-------------|---------|---------|---------|---------|---------|---------|----------|-----------|-------------|-------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|----------------|------------------------|
| 1           | —       | —       | ...     | ·7      | 1·0     | ·8      | ·9       | 1·0       | 1·0         | 1·0         | 1·0       | ·9        | 1·0       | ·7        | ...       | ...       | ...       | ...       | 11·0           | 85                     |
| 2           | —       | —       | ...     | ·5      | 1·0     | 1·0     | 1·0      | 1·0       | 1·0         | ·8          | ·8        | ·1        | ·4        | 1·0       | ·6        | ...       | ...       | ...       | 9·2            | 71                     |
| 3           | —       | —       | ...     | ·4      | ·9      | ·8      | ·7       | ·8        | ·8          | ·5          | ·9        | 1·0       | 1·0       | ·8        | ...       | ...       | ...       | ...       | 9·5            | 73                     |
| 4           | —       | —       | ...     | ...     | ·1      | ·4      | ·2       | 1·0       | ·9          | 1·0         | ·6        | ·4        | ·6        | ·5        | ·2        | ...       | ...       | ...       | 5·9            | 45                     |
| 5           | —       | —       | ...     | ·7      | 1·0     | 1·0     | 1·0      | 1·0       | 1·0         | 1·0         | ·9        | 1·0       | ·9        | 1·0       | ·8        | ...       | ...       | ...       | 11·3           | 86                     |
| 6           | —       | —       | ...     | ·6      | 1·0     | 1·0     | ·3       | ·2        | ·6          | ·5          | ·4        | ...       | ...       | ...       | ...       | ...       | ...       | ...       | 4·6            | 35                     |
| 7           | —       | —       | ...     | ·3      | ·5      | ·4      | 1·0      | 1·0       | 1·0         | 1·0         | ·2        | ·2        | ...       | ...       | ...       | ...       | ...       | ...       | 5·6            | 42                     |
| 8           | —       | —       | ...     | ·2      | ·1      | ·5      | ·5       | ·4        | ·6          | ·2          | 1·0       | ·6        | ·6        | ·6        | ·2        | ...       | ...       | ...       | 5·5            | 41                     |
| 9           | —       | —       | ...     | ·9      | ·3      | ·7      | ·9       | ·9        | 1·0         | ·9          | ·9        | 1·0       | 1·0       | ·4        | ·3        | ...       | ...       | ...       | 9·2            | 69                     |
| 10          | —       | —       | ...     | ·3      | ·4      | ·5      | ·9       | ·1        | ·7          | ·8          | ·2        | ·6        | ·5        | ·9        | ·5        | ...       | ...       | ...       | 6·4            | 47                     |
| 11          | —       | —       | ...     | ...     | ...     | ...     | ...      | ·2        | ·2          | ...         | ...       | ·4        | ·4        | ·6        | ·6        | ...       | ...       | ...       | 2·4            | 18                     |
| 12          | —       | —       | ...     | ·8      | 1·0     | 1·0     | 1·0      | 1·0       | 1·0         | 1·0         | 1·0       | 1·0       | 1·0       | 1·0       | 1·0       | ·5        | ...       | ...       | 12·3           | 90                     |
| 13          | —       | —       | ...     | ...     | ·1      | ...     | ·2       | ·2        | ·6          | ...         | ·3        | ...       | ...       | ...       | ...       | ...       | ...       | ...       | 1·4            | 10                     |
| 14          | —       | —       | ...     | ·5      | ...     | ·3      | ...      | ...       | ·5          | 1·0         | 1·0       | 1·0       | 1·0       | 1·0       | 1·0       | ·8        | ...       | ...       | 8·1            | 59                     |
| 15          | —       | —       | ·2      | 1·0     | ·9      | ·9      | 1·0      | 1·0       | 1·0         | 1·0         | 1·0       | 1·0       | ·9        | 1·0       | ·2        | ...       | ...       | ...       | 11·1           | 80                     |
| 16          | —       | —       | ...     | ...     | ...     | ...     | ...      | ...       | ...         | ...         | ...       | ...       | ...       | ...       | ...       | ...       | ...       | ...       | ...            | ...                    |
| 17          | —       | —       | ...     | ·2      | ·3      | ·1      | ·1       | 1·0       | 1·0         | 1·0         | 1·0       | 1·0       | 1·0       | ·7        | ·2        | ...       | ...       | ...       | 8·6            | 62                     |
| 18          | —       | —       | ...     | ...     | ...     | ...     | ...      | ...       | ...         | ...         | ·2        | ·7        | ·2        | ·1        | ...       | ...       | ...       | ...       | 1·2            | 9                      |
| 19          | —       | —       | ...     | ...     | ·8      | ·5      | ·1       | ...       | ...         | ·1          | ·6        | ·8        | ·5        | ...       | ...       | ...       | ...       | ...       | 3·4            | 24                     |
| 20          | —       | —       | ...     | ...     | ...     | ...     | ...      | ...       | ...         | ...         | ...       | ·7        | 1·0       | 1·0       | ·8        | ...       | ...       | ...       | 3·5            | 25                     |
| 21          | —       | —       | ...     | ...     | ...     | ·9      | ·9       | 1·0       | 1·0         | 1·0         | 1·0       | 1·0       | 1·0       | ·4        | ...       | ...       | ...       | ...       | 8·2            | 58                     |
| 22          | —       | —       | ...     | ...     | ...     | ...     | ·3       | ·2        | 1·0         | ·7          | ·1        | ·3        | ·6        | ·5        | ·1        | ...       | ...       | ...       | 3·8            | 27                     |
| 23          | —       | —       | ...     | ...     | ...     | ...     | ...      | ...       | ...         | ·1          | ...       | ...       | ...       | ...       | ...       | ...       | ...       | ...       | 0·1            | 1                      |
| 24          | —       | —       | ...     | ...     | ...     | ...     | ...      | ·1        | ...         | ...         | ·2        | ·9        | ·4        | ·2        | ·7        | ...       | ...       | ...       | 2·5            | 17                     |
| 25          | —       | —       | ...     | ...     | ...     | ...     | ...      | ...       | ·2          | ...         | ·7        | ·1        | ...       | ...       | ...       | ...       | ...       | ...       | 1·0            | 7                      |
| 26          | —       | —       | ...     | ·2      | ·7      | ·6      | ·2       | ·5        | ...         | ...         | ...       | ·1        | ·1        | ·3        | ...       | ...       | ...       | ...       | 2·7            | 19                     |
| 27          | —       | —       | ...     | ...     | ...     | ...     | ...      | ...       | ·8          | 1·0         | 1·0       | 1·0       | ·7        | ...       | ...       | ...       | ...       | ...       | 4·5            | 31                     |
| 28          | —       | —       | ...     | ...     | ...     | ...     | ...      | ...       | ...         | ·2          | ·3        | ·1        | ...       | ...       | ·2        | ...       | ...       | ...       | 0·8            | 5                      |
| 29          | —       | —       | ...     | ...     | ...     | ...     | ...      | ...       | ...         | ...         | ·1        | ·9        | 1·0       | ·4        | ·4        | ...       | ...       | ...       | 2·8            | 19                     |
| 30          | —       | —       | ...     | ...     | ...     | ...     | ...      | ·1        | ...         | ·5          | ·9        | ·5        | ·1        | ...       | ·1        | ...       | ...       | ...       | 2·3            | 16                     |
| Sum.        | —       | ...     | 0·4     | 7·4     | 9·9     | 11·4    | 11·8     | 12·8      | 15·1        | 15·6        | 16·9      | 17·1      | 15·5      | 13·7      | 9·8       | 1·5       | ...       | ...       | 158·9          | —                      |
| Mean.       | —       | ...     | 0·01    | 0·25    | 0·33    | 0·38    | 0·39     | 0·43      | 0·50        | 0·52        | 0·56      | 0·57      | 0·52      | 0·46      | 0·33      | 0·05      | ...       | ...       | 5·30           | 38                     |
| Hour L.A.T. | 3 to 4. | 4 to 5. | 5 to 6. | 6 to 7. | 7 to 8. | 8 to 9. | 9 to 10. | 10 to 11. | 11 to Noon. | Noon to 13. | 13 to 14. | 14 to 15. | 15 to 16. | 16 to 17. | 17 to 18. | 18 to 19. | 19 to 20. | 20 to 21. | Total for Day. | Per cent. of Possible. |

For periods of sixty minutes, between the exact hours of Local Apparent Time.

347. Cahirciveen (Valencia Observatory) : h<sub>s</sub> (height of recorder above ground) = 12·8 metres. May, 1924.

| Day.  | 3 to 4. | 4 to 5. | 5 to 6. | 6 to 7. | 7 to 8. | 8 to 9. | 9 to 10. | 10 to 11. | 11 to Noon | Noon to 13. | 13 to 14. | 14 to 15. | 15 to 16. | 16 to 17. | 17 to 18. | 18 to 19. | 19 to 20. | 20 to 21. | Total for Day. | Per cent of Possible. |     |
|-------|---------|---------|---------|---------|---------|---------|----------|-----------|------------|-------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|----------------|-----------------------|-----|
|       | hr.     | hr.     | hr.     | hr.     | hr.     | hr.     | hr.      | hr.       | hr.        | hr.         | hr.       | hr.       | hr.       | hr.       | hr.       | hr.       | hr.       | hr.       | hr.            | %                     |     |
| 1     | —       | ...     | ...     | ...     | ...     | ...     | ...      | ...       | ...        | ·2          | ·5        | 1·0       | 1·0       | ·5        | ·2        | ...       | ...       | ...       | 3·4            | 23                    |     |
| 2     | —       | ...     | ...     | ·1      | ·7      | 1·0     | 1·0      | 1·0       | 1·0        | 1·0         | 1·0       | 1·10      | 1·0       | 1·0       | 1·0       | ·6        | ...       | ...       | 11·4           | 77                    |     |
| 3     | —       | ...     | ...     | ...     | ...     | ·4      | 1·0      | ·8        | ·9         | 1·0         | 1·0       | 1·0       | 1·0       | ·9        | 1·0       | ·9        | ...       | ...       | 9·9            | 66                    |     |
| 4     | —       | ·2      | 1·0     | ·9      | ·9      | ·3      | ...      | ·2        | ·6         | 1·0         | ·8        | ·5        | ·8        | ·4        | ...       | ...       | ...       | ...       | 8·4            | 56                    |     |
| 5     | —       | ...     | ·3      | ·8      | 1·0     | 1·0     | ·7       | 1·0       | 1·0        | 1·0         | ·9        | ·1        | ...       | ...       | ...       | ...       | ...       | ...       | 7·8            | 52                    |     |
| 6     | —       | ...     | ...     | ·2      | ·2      | ·2      | ·2       | ...       | ...        | ...         | ·5        | 1·0       | ·9        | ·8        | ·7        | ·1        | ...       | ...       | 4·8            | 32                    |     |
| 7     | —       | ...     | ·4      | ·7      | 1·0     | 1·0     | ·9       | ·8        | ·6         | 1·0         | ·9        | ·9        | ·7        | ·7        | ·7        | ·1        | ...       | ...       | 10·4           | 69                    |     |
| 8     | —       | ...     | ·8      | 1·0     | 1·0     | 1·0     | ·9       | 1·0       | 1·0        | 1·0         | 1·0       | 1·0       | 1·0       | ·8        | ·4        | ...       | ...       | ...       | 11·9           | 78                    |     |
| 9     | —       | ...     | ...     | ...     | ...     | ...     | ...      | ...       | ...        | ...         | ...       | ...       | ...       | ...       | ...       | ...       | ...       | ...       | ...            | ...                   | ... |
| 10    | —       | ...     | ...     | ·1      | ·9      | ·4      | ·1       | ...       | ·8         | ·9          | ·4        | ·2        | ·9        | 1·0       | 1·0       | ·8        | ...       | ...       | 7·5            | 49                    |     |
| 11    | —       | ...     | ·4      | 1·0     | ·4      | ·2      | ·5       | ·7        | ...        | ...         | ...       | ...       | ...       | ...       | ·5        | 1·0       | ...       | ...       | 4·7            | 31                    |     |
| 12    | —       | ...     | ·9      | ·9      | ·2      | ·2      | ·4       | ·6        | ·9         | 1·0         | ·7        | ...       | ...       | ...       | ...       | ...       | ...       | ...       | 5·8            | 38                    |     |
| 13    | —       | ...     | ·7      | ·8      | ·8      | 1·0     | 1·0      | 1·0       | ·9         | 1·0         | ·4        | ·3        | ·7        | ·3        | ...       | ...       | ...       | ...       | 8·9            | 57                    |     |
| 14    | —       | ...     | ...     | ·4      | ·4      | ·5      | ·7       | ...       | ·9         | ·9          | ·9        | ·6        | 1·0       | 1·0       | 1·0       | 1·0       | ·1        | ...       | 9·4            | 60                    |     |
| 15    | —       | ...     | ...     | ·1      | ·1      | ·2      | ·6       | ·5        | ·9         | 1·0         | 1·0       | 1·0       | ·8        | 1·0       | ·2        | ·5        | ...       | ...       | 7·9            | 51                    |     |
| 16    | —       | ...     | 1·0     | 1·0     | 1·0     | ·9      | 1·0      | 1·0       | 1·0        | ·7          | ...       | ·7        | ·9        | ·9        | ·7        | ·4        | ...       | ...       | 11·2           | 72                    |     |
| 17    | —       | ...     | ·7      | ·8      | 1·0     | ·9      | 1·0      | 1·0       | 1·0        | 1·0         | ·7        | ·5        | ·7        | 1·0       | 1·0       | ·7        | ...       | ...       | 12·0           | 77                    |     |
| 18    | —       | ·1      | ·3      | 1·0     | 1·0     | 1·0     | 1·0      | ·9        | 1·0        | 1·0         | 1·0       | 1·0       | 1·0       | 1·0       | ·7        | ·9        | ·2        | ...       | 13·1           | 83                    |     |
| 19    | —       | ...     | ...     | ·3      | ...     | ...     | ...      | ...       | ...        | ...         | ...       | ...       | ·1        | ...       | ...       | ...       | ...       | ...       | 0·4            | 3                     |     |
| 20    | —       | ...     | ...     | ...     | ·4      | ·1      | ...      | ·7        | ...        | ...         | ...       | ·5        | ·2        | ...       | ...       | ...       | ...       | ...       | 1·9            | 12                    |     |
| 21    | —       | ...     | ...     | ·1      | 1·0     | ·6      | ·4       | ...       | ...        | ...         | ·6        | ·9        | ...       | ...       | ...       | ...       | ...       | ...       | 3·6            | 23                    |     |
| 22    | —       | ...     | ...     | ·1      | ·4      | ...     | ...      | ...       | ...        | ...         | ...       | ...       | ...       | ...       | ...       | ...       | ...       | ...       | 0·5            | 3                     |     |
| 23    | —       | ...     | ·7      | ·1      | ·5      | ·9      | ·9       | 1·0       | ·8         | 1·0         | ·7        | 1·0       | 1·0       | ·9        | 1·0       | ·5        | ...       | ...       | 11·0           | 69                    |     |
| 24    | —       | ...     | ...     | ...     | ...     | ...     | ...      | ·5        | ...        | ·2          | ...       | ...       | ·4        | ·8        | 1·0       | ·5        | ...       | ...       | 3·4            | 21                    |     |
| 25    | —       | ...     | ·1      | ...     | ·2      | ·9      | ·7       | ·2        | ·6         | ·5          | ·9        | ·2        | ·2        | ·2        | ·2        | ...       | ...       | ...       | 4·9            | 31                    |     |
| 26    | —       | ...     | ...     | ·4      | ·5      | ·7      | ·6       | ·4        | ...        | ...         | ...       | ...       | ...       | ...       | ...       | ...       | ...       | ...       | 2·6            | 16                    |     |
| 27    | ...     | ...     | ...     | ...     | ...     | ...     | ...      | ...       | ·1         | ...         | ...       | ...       | ...       | ...       | ...       | ...       | ...       | ...       | 0·1            | 1                     |     |
| 28    | ...     | ...     | ·2      | ·1      | ·5      | ·9      | ·4       | ·5        | ·1         | ·4          | 1·0       | 1·0       | ·9        | ...       | ...       | ·2        | ...       | ...       | 6·2            | 38                    |     |
| 29    | ...     | ...     | ...     | ...     | ...     | ·1      | ...      | ...       | ...        | ...         | ...       | ...       | ...       | ...       | ...       | ...       | ...       | ...       | 0·1            | 1                     |     |
| 30    | ...     | ...     | ...     | ...     | ...     | ·1      | ...      | ·8        | 1·0        | 1·0         | 1·0       | 1·0       | 1·0       | ·8        | ·4        | ...       | ...       | ...       | 7·1            | 44                    |     |
| 31    | ...     | ...     | ·4      | ...     | ·2      | ...     | ...      | 1·0       | ·8         | 1·0         | ·9        | ·7        | ·8        | ·7        | ·1        | ...       | ...       | ...       | 6·6            | 41                    |     |
| Sum.  | ...     | 0·3     | 7·9     | 10·9    | 14·3    | 14·5    | 14·0     | 15·6      | 15·9       | 17·8        | 16·8      | 16·1      | 17·0      | 15·1      | 12·2      | 8·2       | 0·3       | ...       | 196·9          | —                     |     |
| Mean. | ...     | 0·01    | 0·25    | 0·35    | 0·46    | 0·47    | 0·45     | 0·50      | 0·51       | 0·57        | 0·54      | 0·52      | 0·55      | 0·49      | 0·39      | 0·26      | 0·01      | ...       | 6·35           | 41                    |     |

348. Cahirciveen (Valencia Observatory) : h<sub>s</sub> = 12·8 metres.

June, 1924.

|             | hr.     | hr.     | hr.     | hr.     | hr.     | hr.     | hr.      | hr.       | hr.        | hr.         | hr.       | hr.       | hr.       | hr.       | hr.       | hr.       | hr.       | hr.       | hr.            | hr.                    | %   |
|-------------|---------|---------|---------|---------|---------|---------|----------|-----------|------------|-------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|----------------|------------------------|-----|
| 1           | ...     | ...     | ...     | ...     | ·4      | ...     | 1·0      | ·9        | ·9         | ·8          | ·1        | ·8        | ·6        | ·9        | ·2        | ...       | ...       | ...       | 6·6            | 40                     |     |
| 2           | ...     | ...     | ...     | ...     | ...     | ...     | ...      | ...       | ...        | ...         | ...       | ...       | ·3        | ...       | ...       | ...       | ...       | ...       | 0·3            | 2                      |     |
| 3           | ...     | ...     | ...     | ...     | ...     | ...     | ...      | ...       | ·1         | ...         | ·2        | ...       | ...       | ...       | ...       | ...       | ...       | ...       | 0·3            | 2                      |     |
| 4           | ...     | ...     | ...     | ...     | ...     | ...     | ·1       | ·3        | ·5         | 1·0         | 1·0       | 1·0       | ·1        | ·2        | ...       | ...       | ...       | ...       | 4·2            | 26                     |     |
| 5           | ...     | ...     | ...     | ·2      | ·8      | ·1      | ...      | ...       | ...        | ...         | ...       | ...       | ...       | ...       | ...       | ...       | ...       | ...       | 1·1            | 7                      |     |
| 6           | ...     | ...     | ...     | ·1      | ·2      | ·4      | 1·0      | 1·0       | 1·0        | 1·0         | 1·0       | 1·0       | 1·0       | 1·0       | ·3        | ...       | ...       | ...       | 9·0            | 55                     |     |
| 7           | ...     | ...     | ...     | ...     | ...     | ...     | ...      | ...       | ...        | ·1          | ·1        | ...       | ·1        | ·6        | ·8        | ...       | ...       | ...       | 1·7            | 10                     |     |
| 8           | ...     | ...     | ·2      | ·2      | ·4      | ...     | ...      | ...       | ·1         | ·5          | ·9        | 1·0       | ·7        | ·8        | ·8        | ·1        | ...       | ...       | 5·7            | 34                     |     |
| 9           | ...     | ...     | ...     | ...     | ...     | ...     | ...      | ...       | ...        | ...         | ...       | ...       | ·7        | ·7        | ·8        | ·1        | ...       | ...       | 2·3            | 14                     |     |
| 10          | ...     | ...     | ...     | ...     | ...     | ...     | ...      | ...       | ...        | ...         | ·2        | 1·0       | 1·0       | ·1        | ...       | ...       | ...       | ...       | 2·3            | 14                     |     |
| 11          | ...     | ...     | ...     | ...     | ...     | ...     | ...      | ...       | ...        | ·1          | ·2        | ...       | ...       | ·1        | ...       | ...       | ...       | ...       | 0·4            | 2                      |     |
| 12          | ...     | ...     | ...     | ...     | ...     | ...     | ...      | ...       | ...        | ...         | ...       | ...       | ...       | ·2        | ·8        | ·4        | ...       | ...       | 1·4            | 8                      |     |
| 13          | ...     | ...     | ...     | ...     | ...     | ...     | ...      | ...       | ·5         | ·8          | ·9        | 1·0       | 1·0       | 1·0       | 1·0       | ·5        | ·4        | ...       | 7·1            | 43                     |     |
| 14          | ...     | ...     | ...     | ...     | ...     | ...     | ...      | ...       | ...        | ...         | ...       | ...       | ...       | ...       | ...       | ...       | ...       | ...       | ...            | ...                    | ... |
| 15          | ...     | ...     | ...     | ...     | ...     | ·1      | ·3       | ·3        | ·1         | ...         | ·2        | ...       | ...       | ...       | ...       | ...       | ...       | ...       | 1·2            | 7                      |     |
| 16          | ...     | ...     | ...     | ...     | ...     | ...     | ...      | ...       | ...        | ...         | ...       | ...       | ...       | ...       | ...       | ...       | ...       | ...       | ...            | ...                    | ... |
| 17          | ...     | ·3      | ·9      | ·1      | ·3      | ·2      | ...      | ...       | ...        | ·3          | ...       | ...       | ...       | ...       | ...       | ...       | ...       | ...       | 2·1            | 13                     |     |
| 18          | ...     | ...     | ·4      | ·3      | ·2      | ·6      | ...      | ...       | ...        | ·1          | ·7        | ·3        | ·3        | ...       | ...       | ...       | ...       | ...       | 2·9            | 17                     |     |
| 19          | ...     | ...     | ...     | ...     | ...     | ...     | ·5       | ·3        | ·2         | ·7          | ·2        | ·8        | 1·0       | 1·0       | ·8        | ·2        | ·2        | ...       | 5·9            | 35                     |     |
| 20          | ...     | ·4      | ·6      | ·6      | ·5      | ·2      | ...      | ...       | ...        | ...         | ...       | ...       | ...       | ·2        | ·6        | ·9        | ·2        | ...       | 4·2            | 25                     |     |
| 21          | ...     | ·3      | 1·0     | ·8      | ·8      | ·3      | ·9       | 1·0       | 1·0        | ·8          | ·1        | ·2        | ·7        | ·9        | ...       | ...       | ...       | ...       | 8·8            | 53                     |     |
| 22          | ...     | ...     | ...     | ...     | ·6      | ·5      | ·6       | ·3        | ...        | ...         | ...       | ...       | ...       | ...       | ...       | ...       | ...       | ...       | 2·0            | 12                     |     |
| 23          | ...     | ...     | ...     | ...     | ...     | ...     | ...      | ·1        | ...        | ...         | ...       | ...       | ...       | ...       | ...       | ...       | ...       | ...       | 0·1            | 1                      |     |
| 24          | ...     | ...     | ...     | ...     | ...     | ...     | ...      | ...       | ...        | ...         | ...       | ...       | ...       | ...       | ...       | ...       | ...       | ...       | ...            | ...                    | ... |
| 25          | ...     | ...     | ...     | ...     | ...     | ...     | ...      | ...       | ...        | ...         | ...       | ...       | ...       | ...       | ...       | ...       | ...       | ...       | ...            | ...                    | ... |
| 26          | ...     | ...     | ...     | ...     | ...     | ...     | ...      | ...       | ...        | ...         | ...       | ...       | ...       | ...       | ...       | ...       | ...       | ...       | ...            | ...                    | ... |
| 27          | ...     | ...     | ·3      | ...     | ...     | ...     | ...      | ...       | ...        | ·1          | ·8        | 1·0       | 1·0       | ·7        | 1·0       | ·6        | ·2        | ...       | 5·7            | 34                     |     |
| 28          | ...     | ...     | ...     | ...     | ...     | ...     | ...      | ...       | ...        | ...         | ·2        | ...       | ...       | ...       | ...       | ...       | ...       | ...       | 0·2            | 1                      |     |
| 29          | ...     | ...     | ...     | ...     | ...     | ...     | ...      | ...       | ·2         | ·6          | ·9        | ·9        | ·8        | ·9        | ·4        | ...       | ...       | ...       | 4·7            | 28                     |     |
| 30          | ...     | ·1      | ...     | ·1      | ·6      | ·4      | ·3       | 1·0       | 1·0        | 1·0         | 1·0       | 1·0       | 1·0       | 1·0       | 1·0       | ·7        | ·5        | ...       | 10·7           | 65                     |     |
| Sum.        | ...     | 1·1     | 3·4     | 2·4     | 4·8     | 2·8     | 4·7      | 5·2       | 5·4        | 7·3         | 8·1       | 10·7      | 10·3      | 9·6       | 8·9       | 4·7       | 1·5       | ...       | 90·9           | —                      |     |
| Mean.       | ...     | 0·04    | 0·11    | 0·08    | 0·16    | 0·09    | 0·16     | 0·17      | 0·18       | 0·24        | 0·27      | 0·36      | 0·34      | 0·32      | 0·30      | 0·16      | 0·05      | ...       | 3·03           | 18                     |     |
| Hour L.A.T. | 3 to 4. | 4 to 5. | 5 to 6. | 6 to 7. | 7 to 8. | 8 to 9. | 9 to 10. | 10 to 11. | 11 to Noon | Noon to 13. | 13 to 14. | 14 to 15. | 15 to 16. | 16 to 17. | 17 to 18. | 18 to 19. | 19 to 20. | 20 to 21. | Total for Day. | Per cent. of Possible. |     |

For periods of sixty minutes, between the exact hours of Local Apparent Time.

**349. Cahirciveen (Valencia Observatory) :  $h_s$  (height of recorder above ground) = 12.8 metres. July, 1924.**

| Day.  | 3 to 4. | 4 to 5. | 5 to 6. | 6 to 7. | 7 to 8. | 8 to 9. | 9 to 10. | 10 to 11. | 11 to Noon | Noon to 13. | 13 to 14. | 14 to 15. | 15 to 16. | 16 to 17. | 17 to 18. | 18 to 19. | 19 to 20. | 20 to 21. | Total for Day. | Per cent. of Possible. |
|-------|---------|---------|---------|---------|---------|---------|----------|-----------|------------|-------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|----------------|------------------------|
|       | hr.     | hr.     | hr.     | hr.     | hr.     | hr.     | hr.      | hr.       | hr.        | hr.         | hr.       | hr.       | hr.       | hr.       | hr.       | hr.       | hr.       | hr.       | hr.            | %                      |
| 1     | ...     | 3       | ...     | 9       | 8       | 2       | ...      | ...       | ...        | ...         | ...       | ...       | ...       | 1         | ...       | ...       | ...       | ...       | 2.5            | 15                     |
| 2     | ...     | ...     | 1       | 1       | 7       | 1       | 9        | 6         | 3          | 7           | 9         | 1.0       | 1.0       | 9         | 1.0       | 3         | 4         | ...       | 9.0            | 54                     |
| 3     | ...     | 1       | 2       | ...     | ...     | ...     | ...      | ...       | ...        | ...         | 4         | 9         | 1.0       | 9         | 9         | 7         | ...       | 5.1       | 31             |                        |
| 4     | ...     | ...     | 1       | 2       | 3       | 4       | 6        | ...       | 3          | 1.0         | 9         | 1.0       | 1.0       | 9         | 5         | 1         | ...       | 8.3       | 50             |                        |
| 5     | ...     | ...     | ...     | ...     | ...     | ...     | ...      | ...       | 2          | 8           | 8         | 9         | 5         | ...       | 2         | 5         | 9         | ...       | 4.8            | 29                     |
| 6     | ...     | ...     | 7       | 6       | ...     | ...     | ...      | ...       | ...        | 1           | 5         | 4         | 1         | 2         | 2         | ...       | ...       | 2.8       | 17             |                        |
| 7     | ...     | ...     | ...     | ...     | ...     | ...     | ...      | ...       | ...        | ...         | ...       | ...       | ...       | ...       | ...       | ...       | ...       | ...       | ...            | ...                    |
| 8     | ...     | ...     | ...     | ...     | ...     | ...     | ...      | ...       | 2          | 5           | 2         | ...       | ...       | ...       | ...       | ...       | ...       | 0.9       | 5              |                        |
| 9     | ...     | ...     | ...     | ...     | 5       | 6       | ...      | 2         | 1.0        | 7           | 9         | ...       | ...       | ...       | ...       | ...       | ...       | 3.9       | 24             |                        |
| 10    | ...     | ...     | ...     | ...     | ...     | ...     | ...      | ...       | ...        | ...         | ...       | ...       | ...       | ...       | ...       | ...       | ...       | ...       | ...            | ...                    |
| 11    | ...     | ...     | ...     | ...     | ...     | ...     | ...      | ...       | ...        | ...         | ...       | ...       | ...       | ...       | ...       | ...       | ...       | ...       | ...            | ...                    |
| 12    | ...     | ...     | ...     | ...     | ...     | ...     | ...      | 2         | 7          | 9           | 4         | ...       | 2         | 1.0       | 6         | 2         | ...       | 4.2       | 26             |                        |
| 13    | ...     | 1       | 3       | 1       | 1.0     | 1.0     | 1.0      | 1.0       | 1.0        | 1.0         | 1.0       | 1.0       | 1.0       | 1.0       | 3         | ...       | ...       | 11.8      | 72             |                        |
| 14    | ...     | ...     | ...     | 2       | 3       | 4       | 1.0      | 8         | ...        | ...         | ...       | ...       | ...       | ...       | 8         | ...       | ...       | 2.7       | 17             |                        |
| 15    | ...     | ...     | ...     | ...     | ...     | ...     | ...      | ...       | ...        | ...         | 1         | 5         | 3         | ...       | ...       | ...       | ...       | 1.7       | 10             |                        |
| 16    | ...     | ...     | 5       | 7       | 1.0     | 8       | 5        | 6         | 1.0        | 1.0         | 8         | 1.0       | 9         | 1.0       | 1.0       | 4         | ...       | 11.2      | 69             |                        |
| 17    | ...     | ...     | ...     | ...     | ...     | ...     | ...      | 2         | 9          | 6           | 7         | 1         | 7         | 7         | 7         | 4         | 2         | ...       | 5.2            | 32                     |
| 18    | ...     | ...     | ...     | ...     | ...     | ...     | ...      | 1         | 2          | ...         | 2         | 7         | 8         | 1.0       | 7         | 1         | ...       | 3.8       | 24             |                        |
| 19    | ...     | ...     | ...     | 3       | ...     | ...     | ...      | 2         | ...        | ...         | ...       | ...       | ...       | ...       | ...       | ...       | ...       | 0.5       | 3              |                        |
| 20    | ...     | ...     | ...     | 2       | 1       | 3       | ...      | 6         | 6          | 1           | 1         | 9         | 6         | 5         | 3         | 4         | 2         | ...       | 4.9            | 31                     |
| 21    | ...     | 4       | 1.0     | 4       | 2       | 1.0     | 1.0      | 6         | 9          | 1.0         | 1.0       | 1.0       | 1.0       | 1.0       | 1.0       | 9         | 3         | ...       | 12.7           | 79                     |
| 22    | ...     | 6       | 1.0     | 1.0     | 1.0     | 1.0     | 1.0      | 1.0       | 6          | 4           | 2         | ...       | ...       | ...       | ...       | ...       | ...       | 7.8       | 49             |                        |
| 23    | ...     | ...     | ...     | ...     | ...     | ...     | ...      | ...       | ...        | ...         | ...       | ...       | 2         | 7         | 2         | 5         | 1         | ...       | 1.7            | 11                     |
| 24    | ...     | ...     | ...     | ...     | ...     | ...     | ...      | ...       | ...        | ...         | ...       | ...       | 1         | ...       | ...       | ...       | ...       | 0.1       | 1              |                        |
| 25    | ...     | ...     | ...     | ...     | ...     | ...     | ...      | ...       | ...        | ...         | ...       | ...       | 5         | 2         | ...       | ...       | ...       | 0.7       | 4              |                        |
| 26    | ...     | ...     | ...     | ...     | ...     | ...     | ...      | ...       | ...        | ...         | ...       | ...       | 5         | 1.0       | 3         | 2         | ...       | 2.0       | 13             |                        |
| 27    | ...     | ...     | ...     | 3       | 2       | ...     | ...      | ...       | ...        | ...         | ...       | ...       | ...       | ...       | ...       | ...       | ...       | 0.5       | 3              |                        |
| 28    | ...     | ...     | ...     | ...     | 3       | 1.0     | 9        | 2         | 1.0        | 1.0         | 1.0       | 7         | 6         | 7         | 6         | 1         | ...       | 8.1       | 51             |                        |
| 29    | ...     | ...     | ...     | ...     | ...     | 9       | 9        | 2         | 1.0        | 1.0         | 4         | 1.0       | 1.0       | 1.0       | 8         | 7         | ...       | 7.1       | 45             |                        |
| 30    | ...     | ...     | ...     | ...     | 1       | 1       | ...      | 2         | 4          | 6           | 2         | 7         | 6         | ...       | ...       | ...       | ...       | 2.9       | 19             |                        |
| 31    | ...     | ...     | ...     | ...     | ...     | ...     | ...      | ...       | ...        | ...         | ...       | ...       | ...       | ...       | ...       | ...       | ...       | ...       | ...            | ...                    |
| Sum.  | ...     | 1.5     | 3.9     | 5.0     | 6.5     | 6.9     | 7.8      | 7.0       | 9.5        | 11.0        | 10.3      | 11.4      | 12.4      | 12.9      | 11.3      | 6.6       | 2.9       | ...       | 126.9          | —                      |
| Mean. | ...     | 0.05    | 0.13    | 0.16    | 0.21    | 0.22    | 0.25     | 0.23      | 0.31       | 0.35        | 0.33      | 0.37      | 0.40      | 0.42      | 0.36      | 0.21      | 0.09      | ...       | 4.09           | 25                     |

**350. Cahirciveen (Valencia Observatory) :  $h_s$  = 12.8 metres. August, 1924.**

| Day.        | hr.     | hr.     | hr.     | hr.     | hr.     | hr.     | hr.      | hr.       | hr.        | hr.         | hr.       | hr.       | hr.       | hr.       | hr.       | hr.       | hr.       | hr.       | hr.            | %                      |
|-------------|---------|---------|---------|---------|---------|---------|----------|-----------|------------|-------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|----------------|------------------------|
| 1           | ...     | ...     | ...     | ...     | ...     | 1       | ...      | 1         | 1          | 3           | 3         | ...       | 1         | 4         | 8         | 2         | ...       | ...       | 2.4            | 15                     |
| 2           | ...     | ...     | ...     | 3       | 8       | 9       | 8        | 1.0       | 1.0        | 1.0         | 1.0       | 1.0       | ...       | 7         | ...       | ...       | ...       | ...       | 9.2            | 60                     |
| 3           | ...     | ...     | ...     | ...     | ...     | ...     | ...      | ...       | ...        | 1           | 3         | ...       | 1         | ...       | ...       | ...       | ...       | ...       | 0.5            | 3                      |
| 4           | ...     | ...     | ...     | ...     | ...     | ...     | ...      | ...       | ...        | ...         | ...       | ...       | ...       | ...       | ...       | ...       | ...       | ...       | ...            | ...                    |
| 5           | ...     | ...     | ...     | ...     | ...     | ...     | ...      | ...       | 1          | ...         | ...       | 1         | 2         | 5         | 7         | ...       | ...       | ...       | 1.6            | 11                     |
| 6           | ...     | ...     | ...     | ...     | ...     | ...     | ...      | ...       | 7          | 7           | 7         | 4         | 1.0       | 1.0       | 1.0       | 9         | 2         | ...       | 6.6            | 43                     |
| 7           | ...     | ...     | 6       | 4       | 7       | 1.0     | 1.0      | 7         | 2          | 9           | 1.0       | 8         | 1.0       | 1.0       | 1.0       | 1.0       | 1         | ...       | 11.4           | 75                     |
| 8           | ...     | ...     | ...     | ...     | ...     | ...     | 2        | 1.0       | 3          | 8           | 1.0       | 1.0       | 1.0       | 1.0       | 1.0       | 1.0       | 2         | ...       | 8.5            | 56                     |
| 9           | ...     | ...     | ...     | 2       | 1.0     | 1.0     | 6        | 3         | 2          | ...         | 2         | 1.0       | 1.0       | 6         | 8         | 1         | ...       | 7.0       | 47             |                        |
| 10          | ...     | ...     | ...     | ...     | ...     | ...     | ...      | 3         | 3          | 7           | 8         | 9         | ...       | ...       | ...       | 1         | ...       | 3.8       | 25             |                        |
| 11          | ...     | ...     | ...     | ...     | ...     | 1       | 2        | ...       | 6          | 5           | 3         | 1         | 2         | 3         | 2         | ...       | ...       | 2.6       | 17             |                        |
| 12          | ...     | ...     | ...     | ...     | ...     | ...     | ...      | ...       | ...        | ...         | 1         | 1         | ...       | ...       | ...       | ...       | ...       | 0.2       | 1              |                        |
| 13          | ...     | ...     | ...     | 1       | ...     | 1       | 2        | 5         | 2          | 5           | 5         | ...       | ...       | 5         | 2         | 2         | ...       | 3.0       | 20             |                        |
| 14          | ...     | ...     | ...     | ...     | ...     | ...     | 7        | 3         | 8          | 7           | 1.0       | 9         | 9         | 9         | 6         | 4         | ...       | 7.2       | 49             |                        |
| 15          | ...     | ...     | 1       | 1       | ...     | 1       | 2        | ...       | ...        | ...         | ...       | ...       | ...       | 1         | ...       | ...       | ...       | 0.6       | 4              |                        |
| 16          | ...     | ...     | 1       | 4       | 9       | 9       | 1.0      | 9         | 9          | 6           | 7         | 1         | 2         | ...       | ...       | ...       | ...       | 6.7       | 46             |                        |
| 17          | ...     | ...     | ...     | ...     | ...     | 5       | 3        | ...       | 1          | ...         | ...       | 1.0       | 1         | 7         | 8         | 3         | ...       | 3.8       | 26             |                        |
| 18          | ...     | ...     | ...     | 4       | 5       | 8       | 9        | 1.0       | 1.0        | 1.0         | 1.0       | 1.0       | 8         | 8         | 1         | ...       | ...       | 9.3       | 64             |                        |
| 19          | ...     | ...     | ...     | ...     | ...     | 6       | 7        | 4         | 4          | 8           | 2         | 4         | ...       | ...       | ...       | ...       | ...       | 3.5       | 24             |                        |
| 20          | ...     | ...     | ...     | ...     | ...     | 1       | 2        | 8         | 1.0        | 9           | 5         | 9         | 1.0       | 1.0       | 8         | 1         | ...       | 7.3       | 51             |                        |
| 21          | ...     | ...     | ...     | ...     | ...     | 1       | ...      | ...       | 2          | ...         | 5         | 5         | ...       | 4         | 2         | ...       | ...       | 1.9       | 13             |                        |
| 22          | ...     | ...     | ...     | 7       | 2       | 6       | 7        | 1         | 5          | 1           | 8         | 3         | 3         | 4         | 5         | 4         | ...       | 5.6       | 39             |                        |
| 23          | ...     | ...     | ...     | ...     | ...     | 4       | 9        | 1.0       | 1.0        | 1.0         | 1.0       | 9         | 9         | 1.0       | 3         | ...       | ...       | 8.4       | 59             |                        |
| 24          | ...     | ...     | ...     | ...     | ...     | ...     | ...      | ...       | ...        | ...         | 1         | ...       | ...       | ...       | ...       | ...       | ...       | 0.1       | 1              |                        |
| 25          | ...     | ...     | ...     | 1       | ...     | ...     | ...      | 2         | 8          | 2           | 6         | 1.0       | 1.0       | 1.0       | 7         | 2         | ...       | 5.8       | 41             |                        |
| 26          | ...     | ...     | ...     | ...     | ...     | ...     | 1        | 4         | 1          | 2           | 8         | 6         | 7         | ...       | 4         | ...       | ...       | 3.3       | 24             |                        |
| 27          | ...     | ...     | ...     | ...     | ...     | ...     | ...      | ...       | ...        | ...         | ...       | ...       | ...       | 2         | 2         | 2         | ...       | ...       | 0.6            | 4                      |
| 28          | ...     | ...     | ...     | ...     | ...     | ...     | ...      | ...       | ...        | ...         | ...       | ...       | ...       | ...       | ...       | ...       | ...       | ...       | ...            | ...                    |
| 29          | ...     | ...     | ...     | ...     | ...     | ...     | ...      | ...       | ...        | ...         | ...       | ...       | ...       | ...       | ...       | ...       | ...       | ...       | ...            | ...                    |
| 30          | ...     | ...     | ...     | ...     | ...     | 1       | ...      | ...       | ...        | ...         | ...       | ...       | ...       | ...       | 3         | ...       | ...       | 0.4       | 3              |                        |
| 31          | ...     | ...     | ...     | ...     | ...     | 2       | ...      | ...       | ...        | ...         | ...       | ...       | 4         | 1         | ...       | 1         | ...       | 0.8       | 6              |                        |
| Sum.        | ...     | ...     | 0.8     | 2.6     | 4.2     | 7.5     | 8.8      | 9.0       | 10.5       | 11.0        | 13.3      | 13.1      | 12.6      | 11.9      | 11.3      | 5.0       | 0.5       | ...       | 122.1          | —                      |
| Mean.       | ...     | ...     | 0.03    | 0.08    | 0.14    | 0.24    | 0.28     | 0.29      | 0.34       | 0.35        | 0.43      | 0.42      | 0.41      | 0.38      | 0.36      | 0.16      | 0.02      | ...       | 3.94           | 27                     |
| Hour L.A.T. | 3 to 4. | 4 to 5. | 5 to 6. | 6 to 7. | 7 to 8. | 8 to 9. | 9 to 10. | 10 to 11. | 11 to Noon | Noon to 13. | 13 to 14. | 14 to 15. | 15 to 16. | 16 to 17. | 17 to 18. | 18 to 19. | 19 to 20. | 20 to 21. | Total for Day. | Per cent. of Possible. |

DURATION OF BRIGHT SUNSHINE.

For periods of sixty minutes, between the exact hours of Local Apparent Time.

351. Cahirciveen (Valencia Observatory : h<sub>s</sub> (height of recorder above ground) = 12·8 metres. September, 1924.

| Day.  | 3 to 4. | 4 to 5. | 5 to 6. | 6 to 7. | 7 to 8. | 8 to 9. | 9 to 10. | 10 to 11. | 11 to Noon. | Noon to 13. | 13 to 14. | 14 to 15. | 15 to 16. | 16 to 17. | 17 to 18. | 18 to 19. | 19 to 20. | 20 to 21. | Total for Day. | Per cent. of Possible. |
|-------|---------|---------|---------|---------|---------|---------|----------|-----------|-------------|-------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|----------------|------------------------|
|       | hr.     | hr.     | hr.     | hr.     | hr.     | hr.     | hr.      | hr.       | hr.         | hr.         | hr.       | hr.       | hr.       | hr.       | hr.       | hr.       | hr.       | hr.       | hr.            | %                      |
| 1     | ---     | ---     | ---     | ---     | ·1      | ---     | ---      | ---       | ---         | ---         | ---       | ---       | ·2        | ---       | ---       | ---       | ---       | ---       | 0·3            | 2                      |
| 2     | ---     | ---     | ---     | ---     | ---     | ---     | ---      | ---       | ---         | ·2          | ---       | ---       | ---       | ---       | ---       | ---       | ---       | ---       | 0·2            | 1                      |
| 3     | ---     | ---     | ---     | ---     | ·2      | ·6      | ·2       | ·9        | ·3          | ·2          | ·6        | ·9        | ·4        | 1·0       | ·6        | ---       | ---       | ---       | 5·9            | 44                     |
| 4     | ---     | ---     | ---     | ·8      | 1·0     | 1·0     | 1·0      | ·3        | ·2          | ---         | ---       | ·3        | ---       | ---       | ---       | ---       | ---       | ---       | 4·6            | 34                     |
| 5     | ---     | ---     | ---     | ---     | ---     | ---     | ---      | ---       | ---         | ---         | ---       | ---       | ---       | ---       | ---       | ---       | ---       | ---       | ---            | ---                    |
| 6     | ---     | ---     | ---     | ---     | ---     | ---     | ---      | ·1        | ·3          | ---         | ---       | ---       | ---       | ---       | ---       | ---       | ---       | ---       | 0·4            | 30                     |
| 7     | ---     | ---     | ---     | ---     | ---     | ---     | ---      | ---       | ---         | ·1          | 1·0       | 1·0       | ·9        | ·7        | ·2        | ---       | ---       | ---       | 3·9            | 30                     |
| 8     | ---     | ---     | ---     | ---     | ---     | ---     | ---      | ---       | ---         | ---         | ---       | ---       | ---       | ---       | ---       | ---       | ---       | ---       | ---            | ---                    |
| 9     | ---     | ---     | ---     | ---     | ·1      | ·9      | ·7       | ·9        | ·9          | ·9          | 1·0       | 1·0       | ·9        | 1·0       | ·4        | ---       | ---       | ---       | 8·7            | 67                     |
| 10    | ---     | ---     | ---     | ---     | ---     | ---     | ---      | ---       | ---         | ---         | ---       | ---       | ---       | ---       | ---       | ---       | ---       | ---       | ---            | ---                    |
| 11    | ---     | ---     | ---     | ---     | ·1      | ---     | ---      | ---       | ---         | ---         | ---       | ---       | ---       | ---       | ---       | ---       | ---       | ---       | 0·1            | 1                      |
| 12    | ---     | ---     | ---     | ---     | ---     | ---     | ---      | ---       | ---         | ·1          | ·3        | ·1        | ·7        | ·3        | ---       | ---       | ---       | ---       | 1·5            | 12                     |
| 13    | ---     | ---     | ---     | ·2      | ·3      | 1·0     | 1·0      | ·8        | 1·0         | ·9          | 1·0       | 1·0       | 1·0       | 1·0       | ·8        | ---       | ---       | ---       | 10·0           | 78                     |
| 14    | ---     | ---     | ---     | ·4      | ·7      | ---     | ·7       | ·7        | ·6          | ·6          | ·6        | ·1        | ---       | ·1        | ·1        | ---       | ---       | ---       | 4·6            | 36                     |
| 15    | ---     | ---     | ---     | ---     | ---     | ---     | ---      | ---       | ---         | ---         | ---       | ---       | ·1        | ---       | ---       | ---       | ---       | ---       | 0·1            | 1                      |
| 16    | ---     | ---     | ---     | ---     | ---     | ---     | ---      | ---       | ---         | ---         | ---       | ---       | ---       | ---       | ---       | ---       | ---       | ---       | ---            | ---                    |
| 17    | ---     | ---     | ---     | ---     | ---     | ·2      | 1·0      | 1·0       | ·9          | 1·0         | ·9        | 1·0       | ·9        | ·7        | ·1        | ---       | ---       | ---       | 7·7            | 61                     |
| 18    | ---     | ---     | ---     | ---     | ·6      | 1·0     | 1·0      | ·6        | 1·0         | 1·0         | ·7        | ·6        | ·7        | ·2        | ·1        | ---       | ---       | ---       | 7·5            | 60                     |
| 19    | ---     | ---     | ---     | ---     | ---     | ---     | ---      | ---       | ---         | ---         | ---       | ---       | ---       | ---       | ---       | ---       | ---       | ---       | ---            | ---                    |
| 20    | ---     | ---     | ---     | ---     | ---     | ---     | ---      | ·2        | ·3          | ---         | ---       | ---       | ---       | ---       | ---       | ---       | ---       | ---       | 0·5            | 4                      |
| 21    | ---     | ---     | ---     | ·1      | ·2      | ·4      | ·5       | ·3        | ---         | ---         | ---       | ---       | ---       | ---       | ---       | ---       | ---       | ---       | 1·5            | 12                     |
| 22    | ---     | ---     | ---     | ---     | ·8      | 1·0     | ·2       | ---       | ---         | ---         | ---       | ---       | ---       | ---       | ---       | ---       | ---       | ---       | 2·0            | 16                     |
| 23    | ---     | ---     | ---     | ---     | ---     | ---     | ---      | ---       | ·8          | ·3          | ·6        | ·9        | 1·0       | ·9        | ·4        | ---       | ---       | ---       | 4·9            | 40                     |
| 24    | ---     | ---     | ---     | ---     | ---     | ---     | ---      | ---       | ---         | ---         | ---       | ---       | ---       | ---       | ---       | ---       | ---       | ---       | ---            | ---                    |
| 25    | ---     | ---     | ---     | ---     | ---     | ·2      | ·3       | ·7        | ·7          | ·5          | ·7        | ·4        | ·1        | ·4        | ·5        | ---       | ---       | ---       | 4·5            | 37                     |
| 26    | ---     | ---     | ---     | ---     | ·8      | ·5      | 1·0      | 1·0       | 1·0         | 1·0         | 1·0       | 1·0       | ·5        | ·3        | ---       | ---       | ---       | ---       | 8·1            | 68                     |
| 27    | ---     | ---     | ---     | ---     | ---     | ·2      | ---      | ·8        | 1·0         | ·8          | 1·0       | ·8        | ·2        | ·5        | ---       | ---       | ---       | ---       | 5·3            | 45                     |
| 28    | ---     | ---     | ---     | ---     | ·2      | ·3      | ---      | ---       | ---         | ---         | ---       | ---       | ---       | ---       | ---       | ---       | ---       | ---       | 0·5            | 4                      |
| 29    | ---     | ---     | ---     | ---     | ---     | ---     | ---      | ---       | ---         | ·2          | ·9        | ---       | ---       | ---       | ---       | ---       | ---       | ---       | 1·1            | 9                      |
| 30    | ---     | ---     | ---     | ---     | ·1      | ·9      | ·7       | ·7        | ·8          | 1·0         | 1·0       | 1·0       | ·9        | 1·0       | ·4        | ---       | ---       | ---       | 8·5            | 73                     |
| Sum.  | ---     | ---     | ---     | 1·5     | 5·0     | 8·1     | 8·6      | 9·0       | 9·8         | 8·6         | 10·6      | 11·0      | 8·5       | 8·1       | 3·6       | ---       | ---       | ---       | 92·4           | ---                    |
| Mean. | ---     | ---     | ---     | 0·05    | 0·17    | 0·27    | 0·29     | 0·30      | 0·33        | 0·29        | 0·35      | 0·37      | 0·28      | 0·27      | 0·12      | ---       | ---       | ---       | 3·08           | 24                     |

352. Cahirciveen (Valencia Observatory) : h<sub>s</sub> = 12·8 metres.

October, 1924.

| I           | 2       | 3       | 4       | 5       | 6       | 7       | 8        | 9         | 10          | 11          | 12        | 13        | 14        | 15        | 16        | 17        | 18        | 19        | 20             | 21                     | 22  | 23  | 24  | 25  | 26  | 27  | 28  | 29  | 30  | 31  | Sum. | Mean. | Hour L.A.T. |     |     |     |     |
|-------------|---------|---------|---------|---------|---------|---------|----------|-----------|-------------|-------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|----------------|------------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|-------|-------------|-----|-----|-----|-----|
| hr.         | hr.     | hr.     | hr.     | hr.     | hr.     | hr.     | hr.      | hr.       | hr.         | hr.         | hr.       | hr.       | hr.       | hr.       | hr.       | hr.       | hr.       | hr.       | hr.            | hr.                    | hr. | hr. | hr. | hr. | hr. | hr. | hr. | hr. | hr. | hr. | hr.  | hr.   |             |     |     |     |     |
| 1           | ---     | ---     | ---     | ---     | ---     | ---     | ---      | ·1        | ---         | ---         | ---       | ---       | ---       | ---       | ---       | ---       | ---       | ---       | ---            | ---                    | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | ---  | ---   |             |     |     |     |     |
| 2           | ---     | ---     | ---     | ---     | ---     | ·2      | 1·0      | 1·0       | 1·0         | ·7          | ---       | ·1        | ---       | ---       | ---       | ---       | ---       | ---       | ---            | ---                    | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | ---  | ---   |             |     |     |     |     |
| 3           | ---     | ---     | ---     | ---     | ·1      | ·9      | 1·0      | 1·0       | 1·0         | ·9          | 1·0       | 1·0       | 1·0       | 1·0       | ·5        | ---       | ---       | ---       | ---            | ---                    | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | ---  | ---   |             |     |     |     |     |
| 4           | ---     | ---     | ---     | ---     | ·4      | 1·0     | ·9       | ·9        | 1·0         | ·8          | 1·0       | ·2        | ---       | ---       | ---       | ---       | ---       | ---       | ---            | ---                    | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | ---  | ---   |             |     |     |     |     |
| 5           | ---     | ---     | ---     | ---     | ·2      | 1·0     | ·4       | ·9        | 1·0         | ·8          | ·9        | ·9        | ·5        | ·2        | ---       | ---       | ---       | ---       | ---            | ---                    | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | ---  | ---   |             |     |     |     |     |
| 6           | ---     | ---     | ---     | ---     | ---     | ·1      | ·1       | ·1        | ·6          | ·6          | ·9        | ·3        | ·7        | ·8        | ---       | ---       | ---       | ---       | ---            | ---                    | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | ---  | ---   |             |     |     |     |     |
| 7           | ---     | ---     | ---     | ---     | ·1      | ·3      | ·2       | ·3        | ---         | ---         | ---       | ---       | ---       | ---       | ---       | ---       | ---       | ---       | ---            | ---                    | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | ---  | ---   | ---         |     |     |     |     |
| 8           | ---     | ---     | ---     | ---     | ---     | ---     | ---      | ·2        | ---         | ·2          | ·5        | 1·0       | ·9        | ·4        | ---       | ---       | ---       | ---       | ---            | ---                    | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | ---  | ---   |             |     |     |     |     |
| 9           | ---     | ---     | ---     | ---     | ---     | ---     | ---      | ---       | ---         | ---         | ·1        | ·2        | ---       | ---       | ---       | ---       | ---       | ---       | ---            | ---                    | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | ---  | ---   | ---         |     |     |     |     |
| 10          | ---     | ---     | ---     | ---     | ---     | ---     | ---      | ---       | ·2          | ·7          | ·9        | ·8        | 1·0       | ·8        | ---       | ---       | ---       | ---       | ---            | ---                    | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | ---  | ---   | ---         |     |     |     |     |
| 11          | ---     | ---     | ---     | ---     | ---     | ---     | ·2       | ---       | ---         | ---         | ---       | ---       | ---       | ---       | ---       | ---       | ---       | ---       | ---            | ---                    | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | ---  | ---   | ---         |     |     |     |     |
| 12          | ---     | ---     | ---     | ---     | ---     | ---     | ---      | ---       | ---         | ---         | ---       | ---       | ---       | ---       | ---       | ---       | ---       | ---       | ---            | ---                    | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | ---  | ---   | ---         | --- |     |     |     |
| 13          | ---     | ---     | ---     | ---     | ·2      | ·5      | ·6       | ·7        | 1·0         | ·9          | 1·0       | 1·0       | 1·0       | ·6        | ---       | ---       | ---       | ---       | ---            | ---                    | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | ---  | ---   | ---         |     |     |     |     |
| 14          | ---     | ---     | ---     | ---     | ·2      | ·9      | ·7       | 1·0       | 1·0         | 1·0         | 1·0       | 1·0       | 1·0       | ·8        | ---       | ---       | ---       | ---       | ---            | ---                    | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | ---  | ---   | ---         | --- |     |     |     |
| 15          | ---     | ---     | ---     | ---     | ·2      | 1·0     | 1·0      | 1·0       | 1·0         | 1·0         | 1·0       | 1·0       | ·2        | ·2        | ---       | ---       | ---       | ---       | ---            | ---                    | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | ---  | ---   | ---         | --- |     |     |     |
| 16          | ---     | ---     | ---     | ---     | ---     | ---     | ---      | ---       | ---         | ---         | ·2        | ---       | ---       | ---       | ---       | ---       | ---       | ---       | ---            | ---                    | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | ---  | ---   | ---         | --- |     |     |     |
| 17          | ---     | ---     | ---     | ---     | ---     | ·7      | ·4       | ·8        | ·6          | ·9          | ·7        | ·2        | ---       | ---       | ---       | ---       | ---       | ---       | ---            | ---                    | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | ---  | ---   | ---         | --- |     |     |     |
| 18          | ---     | ---     | ---     | ---     | ---     | ---     | ---      | ---       | ---         | ---         | ---       | ---       | ---       | ---       | ---       | ---       | ---       | ---       | ---            | ---                    | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | ---  | ---   | ---         | --- | --- |     |     |
| 19          | ---     | ---     | ---     | ---     | ---     | ---     | ·3       | ·2        | ·2          | ·1          | ·9        | ·4        | ·1        | ---       | ---       | ---       | ---       | ---       | ---            | ---                    | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | ---  | ---   | ---         | --- |     |     |     |
| 20          | ---     | ---     | ---     | ---     | ---     | ·4      | ·2       | ---       | ---         | ---         | ---       | ---       | ---       | ---       | ---       | ---       | ---       | ---       | ---            | ---                    | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | ---  | ---   | ---         | --- | --- |     |     |
| 21          | ---     | ---     | ---     | ---     | ---     | ---     | ·1       | ·9        | ·7          | ·7          | ---       | ·1        | ·4        | ---       | ---       | ---       | ---       | ---       | ---            | ---                    | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | ---  | ---   | ---         | --- | --- |     |     |
| 22          | ---     | ---     | ---     | ---     | ---     | 1·0     | 1·0      | ·9        | 1·0         | 1·0         | 1·0       | 1·0       | ·9        | ---       | ---       | ---       | ---       | ---       | ---            | ---                    | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | ---  | ---   | ---         | --- | --- |     |     |
| 23          | ---     | ---     | ---     | ---     | ---     | ·1      | ---      | ·1        | ·1          | ---         | ---       | ---       | ---       | ---       | ---       | ---       | ---       | ---       | ---            | ---                    | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | ---  | ---   | ---         | --- | --- |     |     |
| 24          | ---     | ---     | ---     | ---     | ---     | ---     | ·2       | ---       | ---         | ---         | ---       | ---       | ---       | ---       | ---       | ---       | ---       | ---       | ---            | ---                    | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | ---  | ---   | ---         | --- | --- | --- |     |
| 25          | ---     | ---     | ---     | ---     | ---     | ---     | ---      | ---       | ---         | ---         | ---       | ---       | ---       | ---       | ---       | ---       | ---       | ---       | ---            | ---                    | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | ---  | ---   | ---         | --- | --- | --- |     |
| 26          | ---     | ---     | ---     | ---     | ---     | ·7      | 1·0      | 1·0       | ·9          | ·2          | ---       | ·2        | ---       | ---       | ---       | ---       | ---       | ---       | ---            | ---                    | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | ---  | ---   | ---         | --- | --- | --- |     |
| 27          | ---     | ---     | ---     | ---     | ---     | ---     | ---      | ---       | ·1          | ·5          | 1·0       | ·8        | ---       | ---       | ---       | ---       | ---       | ---       | ---            | ---                    | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | ---  | ---   | ---         | --- | --- | --- |     |
| 28          | ---     | ---     | ---     | ---     | ---     | ---     | ---      | ---       | ·2          | ·1          | ---       | ---       | ---       | ---       | ---       | ---       | ---       | ---       | ---            | ---                    | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | ---  | ---   | ---         | --- | --- | --- |     |
| 29          | ---     | ---     | ---     | ---     | ---     | ---     | ---      | ·1        | ·3          | ·9          | 1·0       | ·4        | ·5        | ·1        | ---       | ---       | ---       | ---       | ---            | ---                    | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | ---  | ---   | ---         | --- | --- | --- |     |
| 30          | ---     | ---     | ---     | ---     | ·1      | ·4      | ·6       | ·6        | 1·0         | ·7          | ·1        | ---       | ---       | ---       | ---       | ---       | ---       | ---       | ---            | ---                    | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | ---  | ---   | ---         | --- | --- | --- |     |
| 31          | ---     | ---     | ---     | ---     | ---     | ---     | ---      | ---       | ---         | ---         | ---       | ---       | ---       | ---       | ---       | ---       | ---       | ---       | ---            | ---                    | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | ---  | ---   | ---         | --- | --- | --- | --- |
| Sum.        | ---     | ---     | ---     | ---     | 1·2     | 8·6     | 9·6      | 11·6      | 12·3        | 13·1        | 13·7      | 10·7      | 8·2       | 4·9       | 0·5       | ---       | ---       | ---       | ---            | ---                    | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | ---  | ---   | ---         | --- | --- | --- | --- |
| Mean.       | ---     | ---     | ---     | ---     | 0·04    | 0·28    | 0·32     | 0·38      | 0·40        | 0·42        | 0·44      | 0·35      | 0·26      | 0·16      | 0·02      | ---       | ---       | ---       | ---            | ---                    | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | ---  | ---   | ---         | --- | --- | --- | --- |
| Hour L.A.T. | 3 to 4. | 4 to 5. | 5 to 6. | 6 to 7. | 7 to 8. | 8 to 9. | 9 to 10. | 10 to 11. | 11 to Noon. | Noon to 13. | 13 to 14. | 14 to 15. | 15 to 16. | 16 to 17. | 17 to 18. | 18 to 19. | 19 to 20. | 20 to 21. | Total for Day. | Per cent. of Possible. |     |     |     |     |     |     |     |     |     |     |      |       |             |     |     |     |     |



For periods of sixty minutes, between the exact hours of Local Apparent Time.

353. Cahirciveen (Valencia Observatory): h<sub>s</sub> (height of recorder above ground) = 12.8 metres. November, 1924.

| Day.  | 3 to 4. | 4 to 5. | 5 to 6. | 6 to 7. | 7 to 8. | 8 to 9. | 9 to 10. | 10 to 11. | 11 to Noon. | Noon to 13. | 13 to 14. | 14 to 15. | 15 to 16. | 16 to 17. | 17 to 18. | 18 to 19. | 19 to 20. | 20 to 21. | Total for Day. | Per cent. of Possible. |
|-------|---------|---------|---------|---------|---------|---------|----------|-----------|-------------|-------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|----------------|------------------------|
|       | hr.     | hr.     | hr.     | hr.     | hr.     | hr.     | hr.      | hr.       | hr.         | hr.         | hr.       | hr.       | hr.       | hr.       | hr.       | hr.       | hr.       | hr.       | hr.            | %                      |
| 1     | —       | —       | —       | —       | ...     | ...     | ...      | ...       | ...         | ...         | ...       | ...       | ...       | ...       | ...       | ...       | ...       | ...       | ...            | ...                    |
| 2     | —       | —       | —       | —       | ...     | ...     | ...      | ...       | ...         | ...         | ...       | 7         | 8         | ...       | ...       | ...       | ...       | ...       | ...            | 1.5                    |
| 3     | —       | —       | —       | —       | ...     | ...     | ...      | ...       | ...         | 5           | 1.0       | 1.0       | 1.0       | 3         | ...       | ...       | ...       | ...       | ...            | 3.8                    |
| 4     | —       | —       | —       | —       | ...     | ...     | 7        | 1.0       | 1.0         | 1.0         | 1.0       | 1.0       | 1.0       | 4         | ...       | ...       | ...       | ...       | ...            | 8.1                    |
| 5     | —       | —       | —       | —       | ...     | ...     | ...      | ...       | ...         | ...         | ...       | ...       | ...       | ...       | ...       | ...       | ...       | ...       | ...            | ...                    |
| 6     | —       | —       | —       | —       | ...     | ...     | ...      | 1         | ...         | ...         | ...       | 2         | ...       | ...       | ...       | ...       | ...       | ...       | ...            | 0.3                    |
| 7     | —       | —       | —       | —       | ...     | ...     | ...      | ...       | ...         | ...         | ...       | 7         | 1.0       | 1.0       | ...       | ...       | ...       | ...       | ...            | 2.7                    |
| 8     | —       | —       | —       | —       | ...     | ...     | ...      | ...       | ...         | ...         | ...       | ...       | ...       | ...       | ...       | ...       | ...       | ...       | ...            | ...                    |
| 9     | —       | —       | —       | —       | ...     | ...     | ...      | ...       | ...         | 5           | 1         | ...       | ...       | ...       | ...       | ...       | ...       | ...       | ...            | 0.6                    |
| 10    | —       | —       | —       | —       | ...     | ...     | ...      | 3         | 4           | 4           | ...       | 1         | ...       | ...       | ...       | ...       | ...       | ...       | ...            | 1.2                    |
| 11    | —       | —       | —       | —       | ...     | ...     | 3        | 1.0       | 1.0         | 1.0         | 1.0       | 7         | 8         | 8         | ...       | ...       | ...       | ...       | ...            | 6.6                    |
| 12    | —       | —       | —       | —       | ...     | ...     | 5        | 1.0       | 1.0         | 1.0         | 1.0       | 1.0       | 1.0       | 9         | ...       | ...       | ...       | ...       | ...            | 7.4                    |
| 13    | —       | —       | —       | —       | ...     | ...     | ...      | ...       | ...         | ...         | ...       | ...       | ...       | ...       | ...       | ...       | ...       | ...       | ...            | ...                    |
| 14    | —       | —       | —       | —       | ...     | ...     | ...      | ...       | 2           | 6           | ...       | ...       | 6         | ...       | ...       | ...       | ...       | ...       | ...            | 1.4                    |
| 15    | —       | —       | —       | —       | ...     | ...     | ...      | ...       | 1           | 5           | 7         | 4         | ...       | ...       | ...       | ...       | ...       | ...       | ...            | 1.7                    |
| 16    | —       | —       | —       | —       | ...     | ...     | ...      | 1.0       | 1.0         | 1.0         | 1.0       | ...       | 4         | ...       | ...       | ...       | ...       | ...       | ...            | 4.4                    |
| 17    | —       | —       | —       | —       | ...     | ...     | ...      | 1         | ...         | ...         | 9         | 8         | 2         | ...       | ...       | ...       | ...       | ...       | ...            | 2.0                    |
| 18    | —       | —       | —       | —       | ...     | ...     | ...      | ...       | ...         | ...         | 9         | ...       | ...       | ...       | ...       | ...       | ...       | ...       | ...            | 0.9                    |
| 19    | —       | —       | —       | —       | ...     | ...     | ...      | ...       | ...         | ...         | ...       | ...       | ...       | ...       | ...       | ...       | ...       | ...       | ...            | ...                    |
| 20    | —       | —       | —       | —       | ...     | ...     | ...      | ...       | ...         | ...         | ...       | ...       | ...       | ...       | ...       | ...       | ...       | ...       | ...            | ...                    |
| 21    | —       | —       | —       | —       | ...     | ...     | ...      | ...       | ...         | ...         | ...       | ...       | ...       | ...       | ...       | ...       | ...       | ...       | ...            | ...                    |
| 22    | —       | —       | —       | —       | ...     | ...     | ...      | ...       | ...         | ...         | ...       | ...       | ...       | ...       | ...       | ...       | ...       | ...       | ...            | ...                    |
| 23    | —       | —       | —       | —       | ...     | ...     | ...      | ...       | ...         | ...         | ...       | ...       | ...       | ...       | ...       | ...       | ...       | ...       | ...            | ...                    |
| 24    | —       | —       | —       | —       | ...     | ...     | ...      | ...       | ...         | ...         | ...       | ...       | ...       | ...       | ...       | ...       | ...       | ...       | ...            | ...                    |
| 25    | —       | —       | —       | —       | ...     | ...     | ...      | ...       | ...         | ...         | ...       | ...       | ...       | ...       | ...       | ...       | ...       | ...       | ...            | ...                    |
| 26    | —       | —       | —       | —       | ...     | ...     | ...      | 5         | 2           | ...         | ...       | ...       | ...       | ...       | ...       | ...       | ...       | ...       | ...            | 0.7                    |
| 27    | —       | —       | —       | —       | ...     | ...     | ...      | 7         | 8           | 4           | 7         | 6         | ...       | ...       | ...       | ...       | ...       | ...       | ...            | 3.2                    |
| 28    | —       | —       | —       | —       | ...     | ...     | ...      | ...       | ...         | ...         | ...       | ...       | ...       | ...       | ...       | ...       | ...       | ...       | ...            | ...                    |
| 29    | —       | —       | —       | —       | ...     | ...     | ...      | 2         | 3           | 2           | 7         | 3         | ...       | ...       | ...       | ...       | ...       | ...       | ...            | 1.7                    |
| 30    | —       | —       | —       | —       | ...     | ...     | ...      | 4         | 9           | 7           | 4         | 3         | 1         | ...       | ...       | ...       | ...       | ...       | ...            | 3.8                    |
| Sum.  | —       | —       | —       | —       | ...     | 1.6     | 5.3      | 6.4       | 7.0         | 8.2         | 8.9       | 7.7       | 6.2       | 0.7       | —         | —         | —         | —         | 52.0           | —                      |
| Mean. | —       | —       | —       | —       | ...     | 0.05    | 0.18     | 0.21      | 0.23        | 0.27        | 0.30      | 0.26      | 0.21      | 0.02      | —         | —         | —         | —         | 1.73           | 20                     |

354. Cahirciveen (Valencia Observatory): h<sub>s</sub> = 12.8 metres.

December, 1924.

|       | hr. | hr. | hr. | hr. | hr. | hr. | hr.  | hr.  | hr.  | hr.  | hr.  | hr.  | hr. | hr. | hr. | hr. | hr. | hr. | hr. | hr. | %    |
|-------|-----|-----|-----|-----|-----|-----|------|------|------|------|------|------|-----|-----|-----|-----|-----|-----|-----|-----|------|
| 1     | —   | —   | —   | —   | ... | ... | ...  | ...  | ...  | ...  | ...  | ...  | ... | ... | ... | ... | ... | ... | ... | ... | ...  |
| 2     | —   | —   | —   | —   | ... | ... | 2    | 4    | 1.0  | 9    | 3    | 2    | ... | ... | ... | ... | ... | ... | ... | ... | 3.0  |
| 3     | —   | —   | —   | —   | ... | ... | 8    | 1.0  | 1.0  | 9    | 1    | 2    | ... | ... | ... | ... | ... | ... | ... | ... | 4.0  |
| 4     | —   | —   | —   | —   | ... | ... | ...  | ...  | ...  | ...  | ...  | ...  | ... | ... | ... | ... | ... | ... | ... | ... | ...  |
| 5     | —   | —   | —   | —   | ... | ... | 1    | 7    | 8    | 4    | 2    | ...  | ... | ... | ... | ... | ... | ... | ... | ... | 2.2  |
| 6     | —   | —   | —   | —   | ... | ... | ...  | ...  | 7    | 2    | 1    | ...  | ... | ... | ... | ... | ... | ... | ... | ... | 1.0  |
| 7     | —   | —   | —   | —   | ... | ... | ...  | ...  | ...  | ...  | ...  | ...  | ... | ... | ... | ... | ... | ... | ... | ... | ...  |
| 8     | —   | —   | —   | —   | ... | ... | 1    | 2    | ...  | ...  | ...  | ...  | ... | ... | ... | ... | ... | ... | ... | ... | 0.3  |
| 9     | —   | —   | —   | —   | ... | ... | 3    | 5    | 9    | 1.0  | 2    | ...  | ... | ... | ... | ... | ... | ... | ... | ... | 2.9  |
| 10    | —   | —   | —   | —   | ... | ... | 1    | ...  | 2    | 2    | 8    | ...  | ... | ... | ... | ... | ... | ... | ... | ... | 1.3  |
| 11    | —   | —   | —   | —   | ... | ... | 2    | 1.0  | 2    | ...  | ...  | ...  | ... | ... | ... | ... | ... | ... | ... | ... | 1.4  |
| 12    | —   | —   | —   | —   | ... | ... | ...  | ...  | ...  | ...  | ...  | ...  | ... | ... | ... | ... | ... | ... | ... | ... | ...  |
| 13    | —   | —   | —   | —   | ... | ... | 5    | 3    | 8    | 8    | 6    | 8    | ... | ... | ... | ... | ... | ... | ... | ... | 3.8  |
| 14    | —   | —   | —   | —   | ... | ... | 3    | 8    | 9    | 9    | 8    | ...  | ... | ... | ... | ... | ... | ... | ... | ... | 3.7  |
| 15    | —   | —   | —   | —   | ... | ... | 4    | ...  | ...  | 2    | ...  | ...  | ... | ... | ... | ... | ... | ... | ... | ... | 0.6  |
| 16    | —   | —   | —   | —   | ... | ... | 5    | 8    | ...  | ...  | ...  | ...  | ... | ... | ... | ... | ... | ... | ... | ... | 1.3  |
| 17    | —   | —   | —   | —   | ... | ... | ...  | ...  | ...  | ...  | ...  | ...  | ... | ... | ... | ... | ... | ... | ... | ... | ...  |
| 18    | —   | —   | —   | —   | ... | ... | ...  | ...  | ...  | ...  | ...  | ...  | ... | ... | ... | ... | ... | ... | ... | ... | 0.2  |
| 19    | —   | —   | —   | —   | ... | ... | ...  | ...  | 1    | ...  | 1    | ...  | ... | ... | ... | ... | ... | ... | ... | ... | 0.3  |
| 20    | —   | —   | —   | —   | ... | ... | ...  | ...  | ...  | ...  | ...  | ...  | ... | ... | ... | ... | ... | ... | ... | ... | ...  |
| 21    | —   | —   | —   | —   | ... | ... | ...  | ...  | ...  | ...  | ...  | ...  | ... | ... | ... | ... | ... | ... | ... | ... | ...  |
| 22    | —   | —   | —   | —   | ... | ... | ...  | ...  | ...  | 2    | ...  | ...  | ... | ... | ... | ... | ... | ... | ... | ... | 0.2  |
| 23    | —   | —   | —   | —   | ... | ... | 3    | ...  | ...  | ...  | 7    | 5    | ... | ... | ... | ... | ... | ... | ... | ... | 1.5  |
| 24    | —   | —   | —   | —   | ... | ... | ...  | 2    | ...  | 1    | 2    | 5    | ... | ... | ... | ... | ... | ... | ... | ... | 1.0  |
| 25    | —   | —   | —   | —   | ... | ... | ...  | ...  | ...  | ...  | ...  | ...  | ... | ... | ... | ... | ... | ... | ... | ... | ...  |
| 26    | —   | —   | —   | —   | ... | ... | 5    | 4    | ...  | ...  | ...  | ...  | ... | ... | ... | ... | ... | ... | ... | ... | 0.9  |
| 27    | —   | —   | —   | —   | ... | ... | ...  | ...  | ...  | 5    | 2    | ...  | ... | ... | ... | ... | ... | ... | ... | ... | 0.7  |
| 28    | —   | —   | —   | —   | ... | ... | ...  | 1    | 2    | 6    | ...  | ...  | ... | ... | ... | ... | ... | ... | ... | ... | 0.9  |
| 29    | —   | —   | —   | —   | ... | ... | ...  | ...  | ...  | ...  | ...  | ...  | ... | ... | ... | ... | ... | ... | ... | ... | ...  |
| 30    | —   | —   | —   | —   | ... | ... | 2    | ...  | 1    | 6    | 2    | ...  | ... | ... | ... | ... | ... | ... | ... | ... | 1.1  |
| 31    | —   | —   | —   | —   | ... | ... | 3    | 5    | ...  | 3    | ...  | ...  | ... | ... | ... | ... | ... | ... | ... | ... | 1.1  |
| Sum.  | —   | —   | —   | —   | ... | ... | 4.8  | 7.0  | 6.8  | 7.9  | 4.5  | 2.4  | ... | ... | ... | ... | ... | ... | ... | ... | 33.4 |
| Mean. | —   | —   | —   | —   | ... | ... | 0.15 | 0.23 | 0.22 | 0.25 | 0.15 | 0.08 | ... | ... | ... | ... | ... | ... | ... | ... | 1.08 |

| Annual Total. | 2.9     | 16.4    | 30.1    | 50.0    | 74.6    | 95.2    | 110.7    | 120.5     | 129.9       | 133.0       | 129.1     | 110.4     | 87.5      | 58.5      | 26.0      | 5.2       | ...       | ...       | 1180.3         | —                      |
|---------------|---------|---------|---------|---------|---------|---------|----------|-----------|-------------|-------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|----------------|------------------------|
| Annual Mean.  | 0.01    | 0.04    | 0.08    | 0.14    | 0.20    | 0.26    | 0.30     | 0.33      | 0.35        | 0.36        | 0.35      | 0.30      | 0.24      | 0.16      | 0.07      | 0.01      | ...       | ...       | 3.22           | 26                     |
| Hour L.A.T.   | 3 to 4. | 4 to 5. | 5 to 6. | 6 to 7. | 7 to 8. | 8 to 9. | 9 to 10. | 10 to 11. | 11 to Noon. | Noon to 13. | 13 to 14. | 14 to 15. | 15 to 16. | 16 to 17. | 17 to 18. | 18 to 19. | 19 to 20. | 20 to 21. | Total for Day. | Per cent. of Possible. |

Direction expressed in degrees from North (E = 90°, S = 180°, W = 270°, N = 360°): Speed in Metres per second.

355. Cahirciveen (Valencia Observatory) :

$H_a$  (height of anemograph above M.S.L.) = Height of ground above

Table with columns: Day., 1., 2., 3., 4., 5., 6., 7., 8., 9., 10., 11., Noon. Each day has multiple columns for wind speed (m/s) and direction (degrees).

NOTE.—The values printed in italics are taken from the records of the Dines tube anemograph, the Robinson cup anemograph being out of action. The monthly means are computed from the hourly values as printed.

356. Cahirciveen (Valencia Observatory) :  $H_a$  = 12 metres + 14 metres.

Table with columns: G.M.T., 1., 2., 3., 4., 5., 6., 7., 8., 9., 10., 11., Noon. Similar to table 355, but with additional 'G.M.T.' column and different data points.

Averages for periods of sixty minutes, centered at the exact hours, Greenwich Mean Time.

M.S.L. +  $h_a$  (height of anemograph above ground) = 12 metres + 14 metres.

January, 1924.

| 13. |      | 14. |      | 15. |      | 16. |      | 17. |      | 18. |      | 19. |      | 20. |      | 21. |      | 22. |      | 23. |      | 24. |      | Mean | Day. |  |
|-----|------|-----|------|-----|------|-----|------|-----|------|-----|------|-----|------|-----|------|-----|------|-----|------|-----|------|-----|------|------|------|--|
| °   | m/s. | °   | m/s. | °   | m/s. | °   | m/s. | °   | m/s. | °   | m/s. | °   | m/s. | °   | m/s. | °   | m/s. | °   | m/s. | °   | m/s. | °   | m/s. | m/s. |      |  |
| 220 | 5.2  | 225 | 4.6  | 215 | 4.3  | 185 | 5.2  | 185 | 4.9  | 195 | 4.9  | 210 | 5.6  | 200 | 4.9  | 185 | 4.6  | 195 | 4.6  | 195 | 4.9  | 190 | 4.6  | 3.5  | 1    |  |
| 255 | 5.9  | 280 | 7.2  | 275 | 5.9  | 275 | 6.2  | 285 | 5.6  | 290 | 5.2  | 285 | 4.9  | 285 | 6.6  | 280 | 4.3  | 280 | 4.3  | 285 | 5.9  | 290 | 4.9  | 4.8  | 2    |  |
| 230 | 10.8 | 230 | 9.8  | 235 | 10.2 | 240 | 9.8  | 245 | 7.9  | 250 | 4.6  | 260 | 3.3  | 255 | 6.9  | 255 | 5.9  | 255 | 6.6  | 255 | 6.2  | 255 | 6.6  | 6.2  | 3    |  |
| 180 | 3.9  | 180 | 3.6  | 180 | 3.6  | 180 | 4.6  | 180 | 3.6  | 175 | 5.2  | 170 | 4.6  | 170 | 4.9  | 170 | 5.9  | 170 | 5.6  | 170 | 5.6  | 170 | 6.6  | 3.7  | 4    |  |
| 170 | 6.2  | 170 | 7.2  | 170 | 7.2  | 165 | 8.2  | 170 | 7.5  | 170 | 8.2  | 170 | 7.2  | 170 | 7.5  | 170 | 7.5  | 170 | 8.9  | 170 | 8.9  | 170 | 8.9  | 7.3  | 5    |  |
| 160 | 12.8 | 155 | 15.4 | 155 | 16.1 | 160 | 15.4 | 150 | 16.4 | 160 | 13.4 | 165 | 11.5 | 180 | 8.2  | 185 | 7.9  | 185 | 7.2  | 180 | 6.9  | 180 | 6.9  | 11.9 | 6    |  |
|     | 0.0  |     | 0.7  |     | 1.3  | 125 | 2.3  | 125 | 3.9  | 120 | 3.9  | 130 | 6.2  | 140 | 8.2  | 130 | 9.5  | 135 | 10.8 | 130 | 11.5 | 135 | 11.8 | 4.1  | 7    |  |
| 100 | 6.9  | 95  | 6.9  | 95  | 6.6  | 95  | 6.9  | 90  | 5.9  | 85  | 5.9  | 70  | 4.6  | 60  | 5.9  | 60  | 7.9  | 50  | 6.2  | 55  | 6.9  | 65  | 7.5  | 9.9  | 8    |  |
| 130 | 3.3  | 120 | 3.6  | 135 | 5.2  | 150 | 6.6  | 140 | 9.8  | 140 | 9.5  | 140 | 7.9  | 255 | 12.1 | 255 | 12.1 | 255 | 9.5  | 285 | 14.4 | 280 | 11.1 | 5.5  | 9    |  |
| 45  | 2.0  |     | 1.3  | 60  | 2.0  | 80  | 3.3  | 110 | 3.0  | 135 | 3.9  | 150 | 4.9  | 110 | 6.6  | 90  | 7.5  | 130 | 2.3  |     | 0.7  |     | 1.3  | 4.1  | 10   |  |
| 165 | 10.2 | 160 | 9.2  | 170 | 8.5  | 180 | 7.5  | 175 | 7.9  | 185 | 7.9  | 205 | 8.5  | 195 | 9.8  | 200 | 13.1 | 225 | 17.7 | 225 | 12.5 | 225 | 12.8 | 8.3  | 11   |  |
| 165 | 2.3  | 135 | 2.6  | 95  | 3.6  | 90  | 3.9  | 95  | 4.6  | 95  | 3.6  | 60  | 5.9  | 60  | 8.5  | 60  | 11.8 | 60  | 11.8 | 60  | 12.8 | 60  | 12.8 | 7.7  | 12   |  |
| 340 | 1.6  | 340 | 4.6  | 320 | 4.6  |     | 1.0  | 210 | 1.6  | 105 | 2.0  | 95  | 1.6  | 95  | 2.3  | 120 | 2.0  | 155 | 4.9  | 160 | 3.6  | 170 | 4.6  | 5.9  | 13   |  |
| 140 | 12.8 | 140 | 14.1 | 140 | 14.4 | 140 | 14.8 | 140 | 14.8 | 170 | 10.5 | 170 | 7.9  | 170 | 7.2  | 170 | 7.9  | 165 | 7.5  | 155 | 7.9  | 150 | 9.2  | 10.4 | 14   |  |
| 155 | 6.6  | 160 | 5.9  | 150 | 6.9  | 150 | 6.6  | 150 | 6.6  | 145 | 6.2  | 140 | 5.9  | 140 | 5.6  | 135 | 6.6  | 130 | 5.6  | 140 | 5.2  | 135 | 5.6  | 6.3  | 15   |  |
| 145 | 5.2  | 140 | 4.3  | 140 | 4.6  | 140 | 4.9  | 135 | 4.6  | 130 | 4.6  | 125 | 4.9  | 125 | 4.6  | 120 | 5.2  | 120 | 5.2  | 130 | 5.6  | 145 | 4.6  | 4.7  | 16   |  |
| 170 | 5.2  | 170 | 5.2  | 170 | 5.9  | 170 | 5.9  | 170 | 5.2  | 140 | 6.9  | 130 | 6.2  | 155 | 7.9  | 170 | 3.6  | 180 | 3.3  | 185 | 3.9  | 160 | 5.2  | 5.3  | 17   |  |
| 210 | 9.8  | 210 | 9.8  | 205 | 8.9  | 220 | 8.9  | 220 | 8.2  | 215 | 7.9  | 220 | 7.9  | 205 | 5.9  | 205 | 7.2  | 205 | 6.6  | 210 | 6.6  | 210 | 7.5  | 7.5  | 18   |  |
| 240 | 13.4 | 245 | 12.8 | 250 | 12.8 | 250 | 12.8 | 250 | 11.1 | 250 | 11.1 | 255 | 10.2 | 245 | 10.5 | 245 | 9.8  | 245 | 11.5 | 245 | 11.5 | 250 | 10.2 | 9.8  | 19   |  |
| 170 | 5.2  | 170 | 4.9  | 170 | 5.6  | 165 | 6.6  | 160 | 6.6  | 155 | 9.8  | 150 | 9.8  | 150 | 10.2 | 145 | 13.8 | 150 | 12.1 | 155 | 9.8  | 160 | 10.2 | 7.2  | 20   |  |
| 160 | 11.5 | 155 | 12.1 | 160 | 14.4 | 160 | 14.8 | 160 | 13.8 | 165 | 15.1 | 165 | 11.8 | 165 | 12.1 | 190 | 9.5  | 210 | 4.9  | 210 | 4.9  | 195 | 3.3  | 9.8  | 21   |  |
| 185 | 3.3  | 190 | 3.9  | 220 | 4.6  | 240 | 4.6  | 240 | 3.3  |     | 0.3  |     | 0.3  |     | 1.3  |     | 1.3  | 240 | 1.6  |     | 1.3  |     | 1.3  | 2.7  | 22   |  |
| 170 | 8.2  | 170 | 9.8  | 170 | 11.5 | 170 | 11.8 | 170 | 11.5 | 170 | 10.8 | 170 | 10.8 | 170 | 10.2 | 175 | 9.2  | 175 | 6.2  | 215 | 4.9  | 200 | 3.9  | 6.8  | 23   |  |
| 235 | 5.6  | 230 | 4.6  | 230 | 5.6  | 290 | 3.6  |     | 0.0  | 285 | 3.3  | 280 | 2.3  | 265 | 1.6  | 265 | 3.0  | 245 | 5.9  | 260 | 3.6  | 240 | 5.9  | 4.5  | 24   |  |
| 210 | 5.6  | 200 | 4.6  | 190 | 4.9  | 190 | 4.3  | 185 | 5.2  | 180 | 5.2  | 180 | 5.9  | 175 | 5.6  | 175 | 6.6  | 175 | 7.5  | 170 | 9.2  | 170 | 10.5 | 5.4  | 25   |  |
| 205 | 11.7 | 180 | 8.9  | 185 | 9.8  | 190 | 10.5 | 190 | 9.2  | 190 | 9.2  | 195 | 9.8  | 200 | 10.8 | 255 | 11.1 | 290 | 9.5  | 290 | 8.9  | 320 | 8.9  | 9.7  | 26   |  |
| 280 | 4.3  | 270 | 3.9  | 290 | 3.9  | 295 | 4.3  | 300 | 2.0  |     | 0.0  |     | 0.3  |     | 0.0  |     | 0.0  |     | 0.7  |     | 1.3  |     | 0.7  | 3.0  | 27   |  |
| 210 | 3.6  | 215 | 3.3  | 215 | 3.3  | 215 | 2.3  | 215 | 2.0  | 185 | 3.3  | 175 | 3.6  | 175 | 3.3  | 175 | 3.3  | 175 | 3.0  | 200 | 2.6  | 210 | 1.6  | 2.2  | 28   |  |
|     | 0.0  |     | 0.7  |     | 0.0  |     | 0.3  |     | 1.0  | 205 | 2.3  | 200 | 2.3  | 195 | 2.3  | 190 | 2.0  | 190 | 3.3  | 180 | 3.3  | 180 | 3.3  | 1.1  | 29   |  |
| 175 | 3.9  | 175 | 4.6  | 175 | 3.9  | 175 | 3.6  | 175 | 4.3  | 180 | 3.6  | 180 | 3.3  | 195 | 3.3  | 185 | 5.2  | 180 | 3.3  | 185 | 3.9  | 180 | 4.6  | 3.7  | 30   |  |
|     | 0.3  |     | 1.0  | 300 | 4.3  | 325 | 5.2  | 335 | 4.6  | 335 | 2.6  |     | 1.0  | 335 | 2.0  | 325 | 2.3  | 300 | 3.3  | 290 | 3.3  |     | 1.0  | 3.6  | 31   |  |
|     | 6.0  |     | 6.2  |     | 6.6  |     | 6.7  |     | 6.3  |     | 6.2  |     | 5.8  |     | 6.3  |     | 6.7  |     | 6.5  |     | 6.4  |     | 6.4  | 6.0  |      |  |

February, 1924.

| 13. |      | 14. |      | 15. |      | 16. |      | 17. |      | 18. |      | 19. |      | 20. |      | 21. |      | 22. |      | 23. |      | 24. |      | Mean | Day. |     |    |    |
|-----|------|-----|------|-----|------|-----|------|-----|------|-----|------|-----|------|-----|------|-----|------|-----|------|-----|------|-----|------|------|------|-----|----|----|
| °   | m/s. | °   | m/s. | °   | m/s. | °   | m/s. | °   | m/s. | °   | m/s. | °   | m/s. | °   | m/s. | °   | m/s. | °   | m/s. | °   | m/s. | °   | m/s. | m/s. |      |     |    |    |
| 280 | 4.3  | 285 | 6.2  | 285 | 6.6  | 265 | 4.6  | 275 | 5.2  | 275 | 3.9  | 285 | 3.9  | 285 | 3.6  | 290 | 2.6  | 300 | 3.6  | 300 | 3.6  | 325 | 4.6  | 315  | 5.6  | 3.6 | 1  |    |
| 300 | 5.2  | 295 | 5.6  | 305 | 4.3  | 300 | 4.9  | 305 | 4.3  | 320 | 4.9  | 315 | 4.6  | 335 | 3.3  | 315 | 4.6  | 320 | 3.6  | 320 | 3.6  | 325 | 4.6  | 315  | 4.6  | 4.1 | 2  |    |
| 330 | 2.3  | 315 | 2.6  | 310 | 2.6  | 310 | 3.3  | 310 | 3.3  | 295 | 3.3  | 315 | 2.3  | 320 | 1.6  | 305 | 1.6  | 305 | 2.3  | 310 | 3.0  | 300 | 3.6  | 2.9  | 2.9  | 3   | 3  |    |
| 270 | 3.6  | 270 | 3.3  | 270 | 3.3  | 275 | 3.6  | 280 | 4.3  | 270 | 3.6  | 270 | 3.6  | 270 | 3.0  | 270 | 3.6  | 270 | 3.6  | 250 | 3.3  | 280 | 4.6  | 2.9  | 4    | 4   | 4  |    |
| 270 | 5.9  | 270 | 7.2  | 270 | 7.2  | 275 | 8.2  | 280 | 8.5  | 285 | 8.2  | 285 | 6.9  | 280 | 7.2  | 280 | 7.9  | 280 | 8.2  | 285 | 7.5  | 285 | 7.9  | 6.6  | 6.6  | 5   | 5  |    |
| 255 | 4.6  | 255 | 5.6  | 300 | 2.3  |     | 1.3  | 285 | 2.0  |     | 1.0  |     | 1.3  |     | 0.7  |     | 0.3  |     | 1.0  |     | 1.3  | 190 | 2.0  | 3.4  | 6    | 6   | 6  |    |
| 170 | 7.5  | 165 | 7.5  | 160 | 6.9  | 155 | 7.9  | 145 | 8.5  | 160 | 8.2  | 165 | 8.5  | 160 | 9.8  | 150 | 11.1 | 155 | 10.8 | 145 | 11.8 | 145 | 13.1 | 6.5  | 7    | 7   | 7  |    |
| 165 | 3.9  | 165 | 4.6  | 150 | 5.2  | 140 | 5.9  | 135 | 3.0  | 95  | 1.6  |     | 1.3  | 55  | 2.0  | 330 | 6.2  | 320 | 4.3  | 310 | 6.9  | 315 | 10.5 | 8.1  | 8    | 8   | 8  |    |
| 230 | 4.6  | 220 | 4.3  | 215 | 3.6  | 200 | 2.6  | 195 | 2.0  | 165 | 4.3  | 155 | 4.6  | 135 | 5.9  | 130 | 6.2  | 130 | 5.6  | 105 | 5.6  | 95  | 5.6  | 4.9  | 9    | 9   | 9  |    |
| 145 | 4.3  | 140 | 2.6  | 140 | 2.6  | 165 | 3.6  | 170 | 2.0  | 160 | 1.6  | 115 | 4.3  | 110 | 3.6  | 110 | 3.0  |     | 1.0  |     | 1.0  |     | 1.0  | 2.0  | 10   | 10  | 10 |    |
|     | 1.0  | 180 | 2.0  |     | 1.0  | 225 | 2.0  | 225 | 1.6  | 225 | 1.6  | 225 | 1.6  |     | 1.3  |     | 1.3  |     | 1.0  | 130 | 2.3  |     | 1.0  | 1.4  | 11   | 11  | 11 |    |
| 105 | 10.5 | 100 | 9.2  | 100 | 9.2  | 90  | 9.5  | 90  | 8.9  | 90  | 9.2  | 90  | 10.8 | 80  | 11.1 | 75  | 8.9  | 65  | 8.2  | 65  | 8.9  | 75  | 9.5  | 7.9  | 12   | 12  | 12 |    |
| 50  | 8.9  | 55  | 9.8  | 60  | 9.8  | 55  | 8.5  | 55  | 6.2  | 45  | 6.6  | 50  | 4.9  | 55  | 4.9  | 60  | 4.3  | 60  | 3.6  | 30  | 4.6  | 50  | 4.6  | 7.6  | 13   | 13  | 13 |    |
|     | 0.3  | 145 | 2.0  | 150 | 2.0  |     | 1.3  |     | 1.3  |     | 0.0  |     | 0.3  |     | 0.3  |     | 0.3  |     | 0.3  |     | 0.3  |     | 0.3  | 1.3  | 14   | 14  | 14 |    |
| 310 | 2.6  | 300 | 3.6  | 305 | 5.6  | 310 | 4.9  | 320 | 4.6  | 330 | 5.2  | 330 | 5.6  | 335 | 4.9  | 350 | 4.9  | 55  | 3.9  | 40  | 3.3  | 20  | 3.3  | 2.6  | 15   | 15  | 15 |    |
| 60  | 5.6  | 70  | 6.9  | 70  | 5.9  | 90  | 4.6  | 85  | 3.9  | 85  | 3.6  | 85  | 3.6  | 100 | 3.0  |     | 1.3  | 105 | 2.0  | 75  | 1.6  |     | 0.7  | 4.2  | 16   | 16  | 16 |    |
| 155 | 2.6  | 160 | 2.6  | 200 | 3.0  | 210 | 3.0  | 225 | 3.3  | 235 | 3.0  | 245 | 3.9  | 250 | 4.3  | 250 | 3.3  | 265 | 4.6  | 260 | 6.2  | 260 | 6.9  | 2.6  | 17   | 17  | 17 |    |
| 30  | 8.2  | 35  | 7.9  | 35  | 8.5  | 30  | 8.9  | 30  | 9.5  | 25  | 10.5 | 20  | 7.2  | 30  | 7.2  | 35  | 5.2  | 40  | 3.9  | 70  | 3.9  | 75  | 7.2  | 6.5  | 18   | 18  | 18 |    |
| 55  | 4.6  | 55  | 4.9  | 35  | 4.3  | 20  | 3.9  | 25  | 3.0  | 35  | 3.0  | 40  | 3.6  | 40  | 2.0  | 45  | 1.6  | 30  | 3.3  | 50  | 5.9  | 85  | 3.6  | 4.1  | 19   | 19  | 19 |    |
|     | 1.0  | 90  | 1.6  |     | 0.3  |     | 1.0  | 305 | 1.6  | 310 | 2.3  | 310 | 1.6  |     | 0.3  |     | 0.0  |     | 0.7  |     | 0.3  |     | 0.0  | 0.0  | 0.9  | 20  | 20 | 20 |
| 55  | 2.3  | 10  | 2.6  | 10  | 3.9  | 340 | 3.3  | 335 | 3.3  | 350 | 4.6  | 355 | 3.6  | 25  | 4.3  | 45  | 1.6  | 50  | 2.3  | 65  | 3.3  |     | 1.3  | 2.5  | 21   | 21  | 21 |    |
| 290 | 3.3  | 310 | 3.9  | 330 | 4.3  | 345 | 2.6  | 360 | 4.3  | 70  | 4.6  | 75  | 7.9  | 70  | 6.9  | 70  | 5.6  |     |      |     |      |     |      |      |      |     |    |    |

Direction expressed in degrees from North (E = 90°, S = 180°, W = 270°, N = 360°): Speed in metres per second.

357. Cahirciveen (Valencia Observatory) :

H<sub>a</sub> (height of anemograph above M.S.L.) = Height of ground above

Table with 13 columns (Day, 1-11, Noon) and 3 rows of wind speed data (m/s, degrees, m/s). Includes a 'Mean ...' row at the bottom.

358. Cahirciveen (Valencia Observatory) : H<sub>a</sub> = 12 metres + 14 metres.

Table with 13 columns (Day, 1-11, Noon) and 3 rows of wind speed data (m/s, degrees, m/s). Includes a 'Mean ...' row at the bottom.

Summary table with 13 columns: G.M.T., 1-11, Noon. It contains the mean values for each day from the two tables above.

Averages for periods of sixty minutes centred at the exact hours, Greenwich Mean Time.

M.S.L. +  $h_a$  (height of anemograph above ground) = 12 metres + 14 metres.

March, 1924.

| 13. | 14.  | 15. | 16.  | 17. | 18.  | 19. | 20.  | 21. | 22.  | 23. | 24.  | Mean | Day. |     |      |     |      |      |      |     |      |     |      |      |    |
|-----|------|-----|------|-----|------|-----|------|-----|------|-----|------|------|------|-----|------|-----|------|------|------|-----|------|-----|------|------|----|
| 265 | 9.5  | 265 | 8.5  | 285 | 4.9  | 260 | 9.5  | 250 | 9.8  | 260 | 9.5  | 10.8 | 305  | 8.9 | 285  | 9.5 | 295  | 11.8 | 305  | 9.2 | 275  | 5.9 | 9.3  | 1    |    |
| 355 | 6.9  | 335 | 7.9  | 340 | 3.3  | 360 | 2.0  | 355 | 3.6  | 305 | 4.9  | 295  | 2.6  | —   | 0.7  | 315 | 7.2  | 355  | 4.9  | 325 | 2.6  | 305 | 9.2  | 4.6  | 2  |
| 355 | 3.6  | 335 | 5.6  | 325 | 6.2  | 325 | 6.2  | 330 | 4.9  | 305 | 3.9  | 320  | 5.6  | 330 | 4.6  | 335 | 2.3  | —    | 0.3  | —   | 1.3  | 240 | 2.6  | 5.0  | 3  |
| 180 | 3.0  | 185 | 3.0  | 200 | 3.3  | 210 | 3.3  | 200 | 3.0  | 200 | 3.0  | 200  | 2.6  | 185 | 4.6  | 180 | 4.6  | 175  | 5.9  | 180 | 5.6  | 195 | 7.5  | 2.9  | 4  |
| 5   | 7.9  | 5   | 7.5  | 355 | 6.2  | 15  | 5.2  | 10  | 5.9  | 10  | 5.2  | 10   | 3.6  | 15  | 3.0  | 70  | 2.0  | 60   | 3.0  | 50  | 2.3  | 50  | 3.3  | 6.6  | 5  |
| 160 | 2.6  | 165 | 3.0  | 175 | 3.9  | 170 | 4.6  | 165 | 5.2  | 155 | 4.6  | 165  | 3.9  | 160 | 3.6  | 150 | 5.2  | 150  | 3.9  | 150 | 3.9  | 150 | 2.3  | 2.6  | 6  |
| 155 | 6.6  | 150 | 6.6  | 150 | 6.2  | 150 | 6.6  | 155 | 5.9  | 140 | 5.6  | 135  | 5.9  | 140 | 5.6  | 145 | 6.2  | 145  | 6.6  | 155 | 6.6  | 155 | 6.6  | 5.0  | 7  |
| 135 | 6.9  | 135 | 6.6  | 130 | 6.6  | 140 | 6.2  | 140 | 7.2  | 140 | 8.5  | 140  | 8.9  | 140 | 8.5  | 140 | 7.2  | 140  | 7.5  | 135 | 6.6  | 140 | 8.9  | 7.0  | 8  |
| 130 | 7.5  | 135 | 6.9  | 130 | 6.9  | 135 | 6.6  | 120 | 6.9  | 120 | 8.9  | 115  | 8.5  | 110 | 8.9  | 100 | 9.5  | 100  | 10.8 | 100 | 12.1 | 95  | 10.5 | 7.9  | 9  |
| 110 | 7.2  | 100 | 8.5  | 110 | 9.8  | 110 | 9.5  | 115 | 5.9  | 110 | 7.5  | 105  | 8.2  | 100 | 8.5  | 100 | 8.2  | 105  | 9.2  | 100 | 8.2  | 105 | 7.9  | 8.4  | 10 |
| 140 | 8.5  | 130 | 6.9  | 130 | 7.9  | 120 | 7.5  | 125 | 6.9  | 120 | 7.2  | 120  | 7.9  | 115 | 7.9  | 120 | 7.5  | 130  | 8.2  | 135 | 8.5  | 130 | 9.2  | 8.3  | 11 |
| 130 | 10.5 | 120 | 10.2 | 120 | 10.2 | 125 | 11.5 | 130 | 11.1 | 130 | 10.2 | 135  | 10.8 | 135 | 10.8 | 135 | 10.2 | 140  | 10.8 | 140 | 9.5  | 135 | 8.5  | 10.3 | 12 |
| 110 | 8.5  | 100 | 8.5  | 95  | 9.8  | 90  | 11.8 | 85  | 11.5 | 90  | 12.8 | 95   | 12.8 | 100 | 12.5 | 110 | 9.2  | 110  | 9.8  | 100 | 8.5  | 90  | 7.2  | 9.1  | 13 |
| 85  | 4.3  | 100 | 3.9  | 95  | 3.9  | 100 | 6.2  | 95  | 6.9  | 115 | 9.5  | 110  | 9.2  | 100 | 7.5  | 105 | 8.2  | 105  | 8.2  | 105 | 5.9  | 100 | 3.0  | 6.3  | 14 |
| 220 | 3.3  | 230 | 2.6  | 250 | 3.0  | 300 | 2.3  | 300 | 3.0  | 300 | 1.6  | —    | 1.0  | —   | 0.3  | 310 | 2.0  | —    | 1.3  | 20  | 1.6  | —   | 1.3  | 2.1  | 15 |
| 310 | 2.6  | 295 | 3.3  | 310 | 3.3  | 310 | 2.0  | —   | 1.3  | —   | 0.0  | —    | 0.0  | —   | 1.3  | 60  | 4.3  | —    | 1.3  | —   | 0.0  | —   | 1.3  | 1.3  | 16 |
| 315 | 2.0  | 315 | 2.0  | 325 | 3.0  | 350 | 1.6  | —   | 1.3  | —   | 1.3  | —    | 0.3  | 80  | 2.6  | 95  | 2.6  | 100  | 2.6  | 100 | 2.6  | 90  | 3.0  | 1.3  | 17 |
| 90  | 2.6  | 110 | 3.9  | 115 | 2.6  | 115 | 2.6  | 115 | 2.3  | 115 | 2.3  | 115  | 2.0  | —   | 1.3  | —   | 1.3  | 115  | 2.0  | 115 | 1.6  | —   | 1.3  | 2.8  | 18 |
| 110 | 3.0  | 100 | 2.0  | 120 | 4.3  | 105 | 5.9  | 105 | 4.9  | 100 | 3.3  | 105  | 3.9  | 100 | 3.9  | 90  | 4.9  | 110  | 4.3  | 105 | 5.6  | 105 | 6.2  | 3.5  | 19 |
| 105 | 7.9  | 105 | 7.2  | 110 | 6.2  | 120 | 5.9  | 120 | 6.2  | 110 | 6.6  | 110  | 5.9  | 95  | 5.2  | 100 | 6.6  | 100  | 6.9  | 110 | 6.6  | 120 | 6.2  | 6.3  | 20 |
| 175 | 6.2  | 175 | 6.2  | 180 | 5.6  | 180 | 6.9  | 180 | 5.6  | 185 | 4.3  | 185  | 4.3  | 190 | 4.6  | 185 | 4.9  | 185  | 5.9  | 210 | 6.2  | 225 | 6.9  | 6.6  | 21 |
| 155 | 7.2  | 145 | 7.2  | 135 | 6.2  | 135 | 6.9  | 140 | 6.9  | 120 | 6.6  | 100  | 8.2  | 100 | 8.5  | 110 | 7.9  | 110  | 5.6  | 130 | 6.2  | 150 | 5.2  | 5.9  | 22 |
| 230 | 3.0  | 230 | 2.0  | 230 | 4.6  | 230 | 4.3  | 230 | 5.2  | 225 | 4.6  | 225  | 5.9  | 235 | 6.2  | 240 | 7.5  | 240  | 7.5  | 240 | 7.5  | 235 | 8.5  | 3.8  | 23 |
| 170 | 6.6  | 170 | 4.6  | 170 | 4.9  | 170 | 3.9  | 170 | 3.6  | 170 | 3.6  | 170  | 3.6  | 170 | 2.6  | 170 | 2.6  | 170  | 3.9  | 170 | 5.2  | 165 | 3.9  | 3.9  | 24 |
| 165 | 3.3  | 170 | 3.3  | 170 | 3.6  | 170 | 3.6  | 170 | 3.6  | 170 | 3.3  | 170  | 2.6  | 170 | 2.6  | 170 | 2.0  | —    | 0.7  | —   | 0.0  | —   | 0.3  | 2.5  | 25 |
| 90  | 3.3  | 70  | 3.3  | 65  | 4.6  | 85  | 5.9  | 90  | 3.9  | 75  | 2.6  | 55   | 3.0  | 55  | 3.6  | 55  | 2.6  | 60   | 3.6  | 60  | 3.9  | 70  | 3.3  | 2.9  | 26 |
| 100 | 3.6  | 50  | 3.0  | 50  | 4.3  | 50  | 3.3  | 60  | 2.0  | 40  | 3.6  | 40   | 4.3  | 45  | 5.2  | 50  | 4.6  | 55   | 3.0  | 55  | 1.6  | —   | 1.0  | 2.9  | 27 |
| 100 | 2.3  | —   | 1.0  | —   | 1.3  | 90  | 2.6  | 65  | 4.9  | 65  | 3.9  | 65   | 3.0  | 65  | 2.0  | 65  | 2.3  | 65   | 2.0  | 70  | 3.0  | —   | 1.3  | 2.3  | 28 |
| 65  | 5.2  | 55  | 3.9  | 55  | 4.9  | 55  | 4.6  | 55  | 5.2  | 50  | 5.2  | 50   | 5.6  | 60  | 4.6  | 60  | 4.3  | 60   | 4.6  | 60  | 5.2  | 55  | 3.6  | 5.1  | 29 |
| 55  | 5.2  | 60  | 5.6  | 45  | 5.2  | 40  | 5.6  | 45  | 4.3  | 50  | 3.3  | 50   | 2.6  | 45  | 3.6  | 45  | 2.3  | —    | 1.3  | —   | 0.7  | 50  | 2.0  | 4.1  | 30 |
| 220 | 3.9  | 305 | 3.9  | 340 | 3.9  | 360 | 3.9  | 340 | 4.3  | 335 | 5.9  | 335  | 2.6  | —   | 0.7  | —   | 0.3  | —    | 0.3  | —   | 0.3  | 40  | 2.0  | 2.3  | 31 |
| —   | 5.3  | —   | 5.1  | —   | 5.2  | —   | 5.4  | —   | 5.3  | —   | 5.3  | —    | 5.2  | —   | 4.6  | —   | 5.2  | —    | 5.1  | —   | 4.8  | —   | 4.8  | 4.9  |    |

April, 1924.

| 13. | 14.  | 15. | 16.  | 17. | 18.  | 19. | 20.  | 21. | 22.  | 23. | 24.  | Mean | Day. |     |      |     |      |     |      |     |       |     |      |     |    |
|-----|------|-----|------|-----|------|-----|------|-----|------|-----|------|------|------|-----|------|-----|------|-----|------|-----|-------|-----|------|-----|----|
| 305 | 2.3  | 275 | 3.0  | 295 | 2.0  | 310 | 5.2  | 310 | 5.9  | 305 | 5.9  | 315  | 2.0  | 50  | 2.0  | 60  | 1.6  | 65  | 3.0  | 65  | 2.0   | 65  | 1.6  | 2.3 | 1  |
| 85  | 1.6  | 105 | 2.3  | 70  | 2.3  | 80  | 2.0  | 190 | 3.3  | 205 | 1.6  | 205  | 2.6  | 205 | 2.0  | 205 | 1.6  | 205 | 2.0  | 205 | 2.6   | 105 | 2.0  | 1.8 | 2  |
| 55  | 4.9  | 50  | 3.9  | 60  | 3.9  | 45  | 5.2  | 50  | 5.9  | 50  | 4.6  | 60   | 2.6  | —   | 1.0  | —   | 0.7  | 60  | 1.6  | 70  | 1.6   | 60  | 1.6  | 2.8 | 3  |
| 55  | 6.9  | 75  | 5.9  | 55  | 5.2  | 60  | 5.9  | 45  | 5.6  | 55  | 5.2  | 50   | 4.3  | 50  | 2.6  | 50  | 3.0  | 50  | 2.3  | 50  | 1.6   | 50  | 2.0  | 3.7 | 4  |
| 25  | 7.5  | 40  | 8.2  | 5   | 8.9  | 360 | 8.5  | 360 | 8.5  | 360 | 6.9  | 5    | 7.9  | 5   | 7.5  | 10  | 5.6  | 25  | 2.3  | —   | 1.0   | 25  | 3.0  | 5.4 | 5  |
| 5   | 4.3  | 355 | 4.3  | 330 | 6.6  | 335 | 6.6  | 335 | 5.2  | 335 | 6.2  | 335  | 5.2  | 335 | 3.9  | 335 | 3.9  | 335 | 2.6  | —   | 1.3   | 335 | 2.0  | 4.2 | 6  |
| 265 | 5.2  | 265 | 4.6  | 265 | 5.6  | 260 | 5.2  | 260 | 5.2  | 300 | 4.6  | 315  | 3.0  | 310 | 3.9  | 310 | 3.6  | 310 | 3.6  | 310 | 2.3   | 300 | 3.9  | 2.7 | 7  |
| 325 | 4.6  | 310 | 3.0  | 280 | 4.9  | 285 | 6.2  | 295 | 4.3  | 295 | 4.9  | 320  | 5.2  | 285 | 6.2  | 300 | 4.6  | 315 | 4.9  | 350 | 4.9   | —   | 0.7  | 5.1 | 8  |
| 240 | 5.6  | 280 | 6.9  | 265 | 7.2  | 310 | 5.9  | 270 | 5.9  | 285 | 8.2  | 280  | 7.5  | 270 | 7.5  | 315 | 6.9  | 330 | 4.6  | 355 | 6.9   | 15  | 3.9  | 4.3 | 9  |
| 310 | 9.8  | 330 | 10.8 | 320 | 13.1 | 330 | 12.8 | 330 | 13.1 | 330 | 14.4 | 330  | 13.1 | 330 | 11.5 | 340 | 10.5 | 330 | 11.5 | 335 | 10.8  | 340 | 8.9  | 9.8 | 10 |
| 245 | 9.5  | 250 | 7.9  | 270 | 6.9  | 270 | 7.9  | 275 | 10.5 | 285 | 10.2 | 275  | 10.8 | 270 | 10.2 | 275 | 14.8 | 290 | 11.8 | 300 | 11.5  | 300 | 12.8 | 7.2 | 11 |
| 320 | 8.9  | 325 | 8.9  | 330 | 7.5  | 330 | 6.6  | 300 | 5.6  | 295 | 3.3  | —    | 1.0  | —   | 1.3  | 35  | 3.0  | 120 | 3.6  | 150 | 6.6   | 170 | 7.9  | 8.3 | 12 |
| 200 | 3.6  | 190 | 2.3  | 185 | 2.3  | 185 | 1.6  | 310 | 3.6  | 320 | 3.0  | 335  | 2.3  | —   | 1.0  | 30  | 2.6  | 50  | 2.6  | —   | 1.3   | 50  | 2.0  | 3.4 | 13 |
| 320 | 4.3  | 320 | 4.9  | 320 | 5.9  | 320 | 5.9  | 310 | 5.9  | 310 | 5.6  | 330  | 4.9  | 335 | 3.3  | 335 | 2.3  | 335 | 2.0  | 335 | 1.6   | —   | 1.0  | 3.2 | 14 |
| 285 | 5.9  | 285 | 5.9  | 280 | 5.6  | 280 | 6.2  | 270 | 4.9  | 285 | 5.9  | 270  | 6.2  | 280 | 4.3  | 280 | 5.2  | 280 | 5.6  | 295 | 2.6   | —   | 1.3  | 3.8 | 15 |
| 130 | 4.3  | 160 | 4.6  | 165 | 5.2  | 155 | 4.6  | 145 | 4.9  | 120 | 3.9  | 100  | 5.6  | 110 | 6.9  | 110 | 6.9  | 105 | 5.9  | 105 | 4.6   | 105 | 5.9  | 3.7 | 16 |
| 170 | 5.2  | 175 | 4.9  | 175 | 4.6  | 175 | 4.9  | 175 | 4.6  | 175 | 5.2  | 175  | 4.6  | 175 | 4.9  | 160 | 5.9  | 160 | 5.9  | 160 | 5.6   | 170 | 4.9  | 4.3 | 17 |
| 180 | 6.2  | 175 | 7.2  | 175 | 7.9  | 175 | 7.2  | 175 | 5.9  | 180 | 6.2  | 175  | 4.9  | 180 | 3.6  | 180 | 3.6  | 180 | 4.3  | 180 | 4.3   | 175 | 4.9  | 6.0 | 18 |
| 180 | 4.6  | 180 | 3.3  | 180 | 3.6  | 195 | 3.0  | 190 | 2.0  | 190 | 2.3  | 190  | 2.0  | 190 | 1.6  | 190 | 2.0  | —   | 0.7  | —   | 1.0   | —   | 0.0  | 3.2 | 19 |
| 260 | 2.6  | 295 | 2.3  | 295 | 2.6  | 295 | 3.0  | 300 | 4.3  | 310 | 3.9  | 320  | 2.3  | 320 | 2.0  | 320 | 1.6  | 320 | 2.3  | 345 | 2.3   | 350 | 4.3  | 1.5 | 20 |
| 45  | 4.6  | 25  | 4.9  | 20  | 3.6  | 60  | 3.3  | 60  | 3.6  | 60  | 3.3  | 145  | 2.0  | —   | 1.0  | —   | 0.0  | —   | 0.0  | 115 | 1.6   | 95  | 2.0  | 2.5 | 21 |
| 245 | 3.3  | 245 | 3.6  | 245 | 4.3  | 245 | 4.6  | 245 | 3.3  | 245 | 2.6  | 245  | 1.6  | —   | 0.7  | 220 | 2.3  | 190 | 2.6  | 185 | 2.3   | 185 | 2.0  | 1.9 | 22 |
| 140 | 6.6  | 145 | 6.9  | 140 | 5.2  | 135 | 5.6  | 145 | 6.0  | 160 | 5.2  | 195  | 3.6  | 200 | 3.3  | 200 | 4.6  | 190 | 4.9  | 180 | 5.6   | 180 | 4.6  | 4.0 | 23 |
| 185 | 4.6  | 180 | 5.6  | 180 | 6.9  | 190 | 7.2  | 190 | 6.6  | 185 | 5.6  | 185  | 5.6  | 175 | 6.6  | 170 | 6.2  | 170 | 5.9  | 175 | 5.6   | 170 | 7.2  | 5.8 | 24 |
| 170 | 11.8 | 180 | 9.5  | 180 | 8.9  | 175 | 6.9  | 175 | 6.9  | 175 | 7.5  | 175  | 6.6  | 165 | 7.2  | 155 | 7.2  | 165 | 8.2  | 165 | 9.2</ |     |      |     |    |

Direction expressed in degrees from North (E = 90°, S = 180°, W = 270°, N = 360°) : Speed in metres per second.

## 359. Cahirciveen (Valencia Observatory) :

 $H_a$  (height of anemograph above M.S.L.) = Height of ground above

| Day.     | 1.  |      | 2.  |      | 3.  |      | 4.  |      | 5.  |      | 6.  |      | 7.  |      | 8.  |      | 9.  |      | 10. |      | 11. |      | Noon. |      |   |
|----------|-----|------|-----|------|-----|------|-----|------|-----|------|-----|------|-----|------|-----|------|-----|------|-----|------|-----|------|-------|------|---|
|          | °   | m/s. | °   | m/s. | °   | m/s. | °   | m/s. | °   | m/s. | °   | m/s. | °   | m/s. | °   | m/s. | °   | m/s. | °   | m/s. | °   | m/s. | °     | m/s. | ° |
| 1        | 255 | 5.2  | 250 | 5.6  | 245 | 5.2  | 250 | 3.6  | 265 | 2.6  | 250 | 3.6  | 240 | 6.2  | 245 | 3.0  | 220 | 2.6  | 250 | 3.0  | 240 | 4.9  | 255   | 3.3  |   |
| 2        | 130 | 2.3  | 10  | 2.0  | 270 | 1.6  | 225 | 1.6  | —   | 1.3  | 225 | 1.6  | 225 | 1.6  | 230 | 3.3  | 240 | 4.3  | 240 | 4.3  | 245 | 3.9  | 250   | 4.3  |   |
| 3        | 320 | 4.3  | 325 | 4.6  | 330 | 6.6  | 20  | 3.9  | 25  | 3.9  | 30  | 4.6  | 20  | 3.9  | 5   | 3.9  | 10  | 3.3  | 360 | 3.6  | 330 | 6.9  | 330   | 7.2  |   |
| 4        | 25  | 1.6  | —   | 1.0  | —   | 0.3  | —   | 0.7  | 60  | 1.6  | 60  | 1.6  | —   | 1.3  | —   | 1.0  | 155 | 2.3  | 205 | 3.5  | 250 | 4.3  | 220   | 2.6  |   |
| 5        | 295 | 6.9  | 290 | 7.5  | 295 | 8.2  | 290 | 9.2  | 290 | 9.2  | 290 | 9.2  | 290 | 9.2  | 285 | 9.5  | 290 | 9.8  | 290 | 6.6  | 280 | 8.2  |       |      |   |
| 6        | 250 | 9.2  | 250 | 7.9  | 250 | 6.9  | 245 | 6.9  | 240 | 6.9  | 240 | 3.3  | 260 | 4.3  | 245 | 3.9  | 235 | 6.2  | 210 | 7.5  | 230 | 6.9  | 230   | 6.2  |   |
| 7        | 295 | 9.2  | 325 | 11.1 | 330 | 9.8  | 320 | 9.8  | 330 | 8.5  | 320 | 8.9  | 315 | 9.5  | 300 | 9.8  | 305 | 9.5  | 305 | 8.5  | 295 | 8.9  | 315   | 6.9  |   |
| 8        | 285 | 9.2  | 295 | 9.8  | 310 | 7.2  | 310 | 6.2  | 320 | 6.6  | 330 | 6.9  | 340 | 7.9  | 335 | 8.5  | 325 | 10.5 | 320 | 9.2  | 320 | 8.9  | 325   | 8.9  |   |
| 9        | 135 | 3.6  | 150 | 4.3  | 165 | 5.9  | 155 | 5.6  | 150 | 7.9  | 155 | 7.9  | 155 | 8.9  | 170 | 7.2  | 175 | 8.2  | 180 | 8.2  | 185 | 6.9  | 185   | 5.2  |   |
| 10       | 205 | 3.6  | 220 | 2.6  | —   | 1.3  | 200 | 2.3  | 175 | 4.6  | 170 | 3.9  | 225 | 3.3  | 215 | 2.6  | 195 | 3.9  | 205 | 6.2  | 215 | 4.6  | 190   | 4.9  |   |
| 11       | 220 | 2.6  | 210 | 2.6  | 200 | 2.3  | 200 | 3.0  | 205 | 3.0  | 195 | 3.0  | 175 | 3.0  | 175 | 3.3  | 180 | 3.6  | 175 | 3.3  | 175 | 3.6  | 175   | 3.6  |   |
| 12       | —   | 1.3  | —   | 1.0  | —   | 1.3  | 30  | 2.0  | 30  | 1.6  | 30  | 1.6  | —   | 1.3  | 150 | 3.3  | 170 | 4.3  | 175 | 5.2  | 165 | 6.2  | 170   | 5.9  |   |
| 13       | 230 | 3.0  | 230 | 2.0  | 220 | 1.6  | 185 | 2.6  | 190 | 2.6  | 220 | 5.2  | 245 | 5.2  | 245 | 4.9  | 225 | 4.6  | 210 | 5.2  | 210 | 4.6  | 195   | 4.9  |   |
| 14       | 165 | 4.9  | 170 | 3.9  | 170 | 4.3  | 175 | 4.9  | 170 | 3.9  | 190 | 4.3  | 200 | 2.0  | 205 | 3.6  | 200 | 3.0  | 190 | 5.9  | 190 | 6.2  | 195   | 7.2  |   |
| 15       | 185 | 3.9  | 180 | 3.3  | 180 | 3.6  | 170 | 4.9  | 170 | 4.3  | 155 | 6.2  | 185 | 3.9  | 175 | 5.2  | 190 | 4.3  | 220 | 5.6  | 185 | 4.3  | 200   | 7.2  |   |
| 16       | 260 | 6.9  | 260 | 6.9  | 260 | 5.9  | 245 | 6.6  | 250 | 5.2  | 250 | 4.6  | 250 | 5.9  | 240 | 6.6  | 245 | 6.2  | 245 | 5.2  | 255 | 4.6  | 250   | 4.9  |   |
| 17       | 190 | 2.3  | 180 | 2.6  | 180 | 3.3  | 180 | 2.6  | 180 | 3.3  | 180 | 3.0  | 175 | 5.9  | 170 | 6.2  | 170 | 5.9  | 170 | 5.9  | 170 | 7.2  | 170   | 7.5  |   |
| 18       | 150 | 3.3  | 150 | 3.3  | 150 | 3.3  | 145 | 3.3  | 140 | 3.3  | 130 | 2.6  | 130 | 1.6  | 140 | 1.6  | 160 | 1.6  | —   | 1.3  | 190 | 2.6  | 260   | 3.0  |   |
| 19       | —   | 1.0  | 80  | 2.0  | 85  | 3.6  | 90  | 1.6  | 100 | 5.2  | 55  | 4.3  | 65  | 3.3  | 70  | 3.6  | 85  | 6.6  | 95  | 5.2  | 90  | 6.2  | 80    | 4.6  |   |
| 20       | 170 | 6.6  | 170 | 6.6  | 170 | 4.6  | 170 | 5.9  | 150 | 4.9  | 140 | 6.9  | 135 | 6.6  | 130 | 8.9  | 120 | 9.2  | 105 | 9.5  | 100 | 9.5  | 110   | 10.5 |   |
| 21       | 165 | 5.6  | 165 | 4.9  | 155 | 5.2  | 140 | 5.9  | 140 | 6.6  | 130 | 6.9  | 120 | 4.3  | 125 | 4.6  | 140 | 4.3  | 140 | 4.6  | 150 | 5.6  | 155   | 6.6  |   |
| 22       | 160 | 6.6  | 160 | 6.6  | 165 | 6.9  | 170 | 7.5  | 170 | 7.5  | 170 | 7.9  | 170 | 8.2  | 175 | 8.5  | 175 | 9.2  | 180 | 8.9  | 180 | 7.5  | 185   | 8.2  |   |
| 23       | 180 | 6.2  | 175 | 6.2  | 175 | 8.5  | 180 | 7.2  | 210 | 3.9  | 225 | 5.6  | 220 | 6.6  | 220 | 6.6  | 210 | 7.5  | 220 | 8.9  | 205 | 9.5  | 200   | 7.9  |   |
| 24       | 195 | 4.3  | 195 | 4.6  | 205 | 5.2  | 215 | 5.2  | 195 | 4.6  | 220 | 6.6  | 225 | 6.9  | 230 | 7.9  | 235 | 8.5  | 240 | 9.5  | 245 | 9.5  | 255   | 6.9  |   |
| 25       | 305 | 4.3  | 295 | 5.2  | 290 | 5.2  | 285 | 4.9  | 285 | 4.9  | 280 | 4.3  | 280 | 3.6  | 290 | 4.6  | 300 | 5.6  | 295 | 6.2  | 290 | 6.2  | 290   | 6.2  |   |
| 26       | 295 | 4.3  | 295 | 3.6  | 285 | 3.6  | 295 | 3.6  | 295 | 3.3  | 280 | 3.6  | 285 | 2.3  | —   | 0.7  | 255 | 3.6  | 220 | 3.3  | 220 | 4.9  | 205   | 5.2  |   |
| 27       | 180 | 5.9  | 185 | 6.2  | 185 | 6.2  | 180 | 6.6  | 180 | 6.6  | 175 | 6.6  | 175 | 6.6  | 175 | 6.6  | 175 | 7.2  | 170 | 8.2  | 175 | 7.5  | 180   | 5.6  |   |
| 28       | 170 | 3.9  | 160 | 4.9  | 160 | 3.6  | 160 | 4.9  | 140 | 4.6  | 140 | 4.9  | 145 | 5.9  | 145 | 5.2  | 145 | 6.2  | 135 | 6.6  | 145 | 6.9  | 160   | 6.2  |   |
| 29       | 100 | 5.2  | 85  | 4.3  | 95  | 4.9  | 80  | 5.6  | 90  | 7.5  | 85  | 8.5  | 85  | 6.6  | 75  | 5.2  | 95  | 6.2  | 115 | 6.2  | 100 | 4.6  | 105   | 4.9  |   |
| 30       | 160 | 4.6  | 150 | 3.6  | 120 | 5.6  | 105 | 4.6  | 90  | 5.6  | 80  | 4.9  | 120 | 5.6  | 120 | 6.2  | 150 | 7.9  | 160 | 8.5  | 165 | 9.5  | 165   | 9.2  |   |
| 31       | 170 | 3.6  | 165 | 3.0  | 140 | 4.6  | 135 | 3.6  | 130 | 6.2  | 135 | 4.3  | 125 | 4.6  | 130 | 3.9  | 135 | 4.6  | 150 | 3.6  | 140 | 4.6  | 145   | 5.2  |   |
| Mean ... | —   | 4.7  | —   | 4.6  | —   | 4.7  | —   | 4.7  | —   | 4.9  | —   | 5.1  | —   | 5.1  | —   | 5.2  | —   | 5.7  | —   | 6.1  | —   | 6.3  | —     | 6.1  |   |

360. Cahirciveen (Valencia Observatory) :  $H_a = 12$  metres + 14 metres.

| Day. | 1.  |      | 2.  |      | 3.  |      | 4.  |      | 5.  |      | 6.  |      | 7.  |      | 8.  |      | 9.  |      | 10. |      | 11. |      | Noon. |      |   |
|------|-----|------|-----|------|-----|------|-----|------|-----|------|-----|------|-----|------|-----|------|-----|------|-----|------|-----|------|-------|------|---|
|      | °   | m/s. | °   | m/s. | °   | m/s. | °   | m/s. | °   | m/s. | °   | m/s. | °   | m/s. | °   | m/s. | °   | m/s. | °   | m/s. | °   | m/s. | °     | m/s. | ° |
| 1    | —   | 0.0  | —   | 0.0  | —   | 0.0  | —   | 1.3  | 20  | 2.0  | —   | 1.3  | —   | 1.0  | 345 | 1.6  | 315 | 5.9  | 325 | 6.6  | 325 | 8.2  | 320   | 7.9  |   |
| 2    | 330 | 4.3  | 320 | 3.3  | 320 | 3.6  | 320 | 3.3  | 320 | 1.6  | —   | 1.3  | 290 | 3.3  | 285 | 3.6  | 285 | 3.0  | 295 | 3.3  | 290 | 3.3  | 280   | 2.0  |   |
| 3    | 170 | 3.3  | 170 | 2.6  | 170 | 3.3  | 170 | 3.9  | 170 | 3.3  | 155 | 3.9  | 150 | 3.6  | 155 | 4.3  | 155 | 4.6  | 145 | 5.2  | 150 | 4.9  | 145   | 4.6  |   |
| 4    | —   | 1.0  | 180 | 2.0  | 235 | 2.6  | 305 | 6.2  | 305 | 5.6  | 310 | 6.2  | 310 | 5.6  | 300 | 6.2  | 300 | 5.2  | 300 | 4.6  | 315 | 4.6  | 320   | 5.6  |   |
| 5    | 310 | 1.6  | —   | 1.0  | 270 | 2.0  | 270 | 2.6  | 270 | 2.6  | —   | 1.3  | —   | 1.3  | 260 | 2.3  | 255 | 2.3  | 220 | 2.3  | 195 | 3.3  | 175   | 3.6  |   |
| 6    | 165 | 8.2  | 165 | 7.5  | 160 | 7.9  | 175 | 4.6  | 220 | 3.6  | 230 | 3.3  | 230 | 2.3  | —   | 1.3  | 225 | 2.6  | 215 | 4.6  | 220 | 3.9  | 220   | 4.6  |   |
| 7    | 135 | 3.6  | 135 | 3.9  | 135 | 4.9  | 120 | 4.9  | 110 | 5.9  | 105 | 6.2  | 110 | 8.5  | 100 | 10.5 | 100 | 7.2  | 135 | 8.2  | 170 | 6.6  | 170   | 7.9  |   |
| 8    | 235 | 5.9  | 240 | 8.5  | 240 | 8.5  | 240 | 8.5  | 240 | 9.5  | 250 | 7.9  | 250 | 7.5  | 245 | 7.5  | 240 | 10.2 | 240 | 8.9  | 245 | 10.2 | 240   | 9.5  |   |
| 9    | 235 | 1.6  | 200 | 2.6  | 190 | 2.3  | 185 | 2.3  | 160 | 4.3  | 150 | 4.6  | 160 | 5.2  | 170 | 6.6  | 165 | 6.6  | 170 | 7.5  | 170 | 8.5  | 155   | 8.9  |   |
| 10   | 190 | 6.2  | 205 | 8.2  | 210 | 8.5  | 205 | 7.2  | 195 | 6.2  | 200 | 7.9  | 220 | 9.5  | 205 | 8.9  | 200 | 8.2  | 185 | 8.5  | 185 | 8.5  | 185   | 9.5  |   |
| 11   | 185 | 6.6  | 180 | 7.2  | 190 | 7.9  | 220 | 7.5  | 225 | 5.6  | 225 | 4.9  | 220 | 5.6  | 240 | 7.9  | 240 | 7.9  | 250 | 6.6  | 250 | 6.6  | 275   | 6.2  |   |
| 12   | 325 | 13.1 | 330 | 12.8 | 335 | 12.1 | 335 | 10.5 | 335 | 9.2  | 335 | 8.9  | 335 | 9.2  | 335 | 9.5  | 335 | 8.2  | 340 | 7.9  | 340 | 8.9  | 335   | 8.5  |   |
| 13   | 355 | 5.9  | 360 | 3.9  | 355 | 4.3  | 355 | 2.3  | 355 | 3.0  | 355 | 3.3  | 350 | 3.3  | 340 | 2.6  | 340 | 3.0  | 330 | 3.3  | 315 | 3.6  | 310   | 3.9  |   |
| 14   | —   | 1.3  | 35  | 1.6  | —   | 0.7  | —   | 0.7  | —   | 0.7  | 160 | 2.0  | 170 | 3.9  | 175 | 5.6  | 175 | 4.6  | 175 | 5.6  | 170 | 6.6  | 170   | 7.2  |   |
| 15   | 165 | 3.9  | 165 | 3.3  | 165 | 2.6  | 170 | 3.6  | 185 | 3.9  | 280 | 2.6  | —   | 0.3  | —   | 1.0  | —   | 1.0  | —   | 1.0  | 290 | 1.6  | 270   | 2.0  |   |
| 16   | 360 | 1.6  | —   | 1.0  | —   | 0.3  | —   | 0.3  | —   | 0.7  | —   | 1.0  | 30  | 2.3  | 50  | 2.3  | 20  | 2.0  | —   | 0.7  | 10  | 1.6  | —     | 1.0  |   |
| 17   | —   | 0.0  | —   | 0.3  | —   | 0.0  | —   | 0.0  | —   | 1.3  | —   | 1.3  | 35  | 3.3  | 45  | 3.6  | 50  | 4.9  | 60  | 5.9  | 60  | 6.6  | 45    | 5.9  |   |
| 18   | 140 | 2.0  | 105 | 2.0  | 90  | 3.3  | —   | 1.3  | —   | 1.0  | —   | 0.0  | —   | 0.3  | —   | 0.0  | —   | 0.7  | 95  | 2.0  | 95  | 2.0  | —     | 1.3  |   |
| 19   | 275 | 6.2  | 265 | 7.2  | 255 | 7.9  | 245 | 8.9  | 235 | 7.9  | 230 | 7.2  | 235 | 7.9  | 230 | 6.6  | 230 | 8.2  | 220 | 6.9  | 215 | 6.6  | 220   | 7.5  |   |
| 20   | 180 | 3.6  | 180 | 3.0  | 180 | 4.3  | 180 | 4.3  | 180 | 2.6  | 180 | 3.0  | 180 | 3.0  | 195 | 2.6  | 180 | 3.9  | 170 | 5.9  | 175 | 5.6  | 170   | 6.2  |   |
| 21   | —   | 0.7  | —   | 0.0  | —   | 0.3  | —   | 0.3  | —   | 0.3  | —   | 0.0  | 225 | 2.6  | 245 | 4.9  | 250 | 4.6  | 250 | 4.6  | 250 | 4.6  | 260   | 5.2  |   |
| 22   | 290 | 3.0  | 285 | 2.3  | 280 | 3.6  | 280 | 3.3  | 280 | 3.3  | 280 | 2.6  | 280 | 2.3  | 280 | 3.0  | 275 | 3.3  | 275 | 2.3  | 275 | 3.9  | 260   | 4.3  |   |
| 23   | 180 | 6.2  | 180 | 5.2  | 195 | 2.6  | 215 | 2.3  | 215 | 2.0  | 215 | 1.6  | 215 | 1.6  | 220 | 3.0  | 250 | 3.3  | 250 | 4.3  | 245 | 3.6  | —     | 1.3  |   |
| 24   | —   | 1.3  | 195 | 2.3  | 200 | 2.6  | 205 | 3.3  | 215 | 3.9  | 215 | 3.9  | 215 | 4.3  | 220 | 3.6  | 220 | 5.2  | 225 | 4.6  | 225 | 4.6  | 225   | 3.9  |   |
| 25   | 200 | 3.6  | 190 | 3.0  | 190 | 3.9  | 180 | 4.3  | 180 | 4.6  | 180 | 4.3  | 180 | 3.9  | 175 | 4.3  | 175 | 4.9  | 170 |      |     |      |       |      |   |

Averages for periods of sixty minutes centered at the exact hours, Greenwich Mean Time.

M.S.L. +  $h_a$  (height of anemograph above ground) = 12 metres + 14 metres.

May, 1924.

| 13.  | 14.  | 15.  | 16.  | 17.  | 18.  | 19.  | 20.  | 21.  | 22.  | 23.  | 24.  | Mean | Day. |     |     |     |     |     |     |     |     |     |     |     |     |     |    |
|------|------|------|------|------|------|------|------|------|------|------|------|------|------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|----|
| m/s. | m/s. | m/s. | m/s. | m/s. | m/s. | m/s. | m/s. | m/s. | m/s. | m/s. | m/s. | m/s. |      |     |     |     |     |     |     |     |     |     |     |     |     |     |    |
| 220  | 4.9  | 220  | 4.9  | 215  | 6.2  | 215  | 5.2  | 210  | 4.9  | 195  | 3.6  | 190  | 3.3  | 150 | 4.6 | 120 | 3.9 | 120 | 3.6 | 135 | 4.3 | 4.2 | 1   |     |     |     |    |
| 250  | 4.9  | 250  | 4.6  | 250  | 4.3  | 270  | 3.6  | 275  | 3.9  | 285  | 3.6  | 305  | 4.3  | 305 | 2.0 | 305 | 2.3 | 305 | 2.6 | 310 | 2.6 | 3.1 | 2   |     |     |     |    |
| 330  | 7.5  | 330  | 8.2  | 335  | 8.3  | 340  | 7.5  | 360  | 5.6  | 355  | 5.6  | 10   | 7.2  | 5   | 7.5 | 10  | 6.9 | 10  | 6.2 | 10  | 4.9 | 10  | 3.3 | 5.6 | 3   |     |    |
| 245  | 6.6  | 250  | 7.5  | 245  | 7.5  | 260  | 7.5  | 275  | 7.5  | 275  | 7.9  | 270  | 7.2  | 260 | 6.9 | 290 | 5.2 | 290 | 6.9 | 290 | 6.9 | 290 | 6.2 | 4.3 | 4   |     |    |
| 265  | 9.2  | 255  | 8.2  | 240  | 7.9  | 220  | 6.9  | 225  | 9.5  | 225  | 9.8  | 225  | 10.8 | 225 | 9.5 | 225 | 8.9 | 225 | 7.9 | 235 | 9.2 | 235 | 9.2 | 8.7 | 5   |     |    |
| 255  | 7.2  | 245  | 5.9  | 255  | 7.9  | 245  | 8.9  | 240  | 9.8  | 245  | 6.6  | 240  | 5.9  | 275 | 6.2 | 285 | 6.2 | 290 | 7.2 | 280 | 8.2 | 285 | 9.5 | 6.9 | 6   |     |    |
| 290  | 7.9  | 290  | 7.9  | 305  | 8.9  | 300  | 8.5  | 295  | 8.5  | 295  | 8.2  | 285  | 8.5  | 295 | 7.5 | 295 | 6.9 | 295 | 7.5 | 290 | 8.5 | 285 | 8.9 | 8.7 | 7   |     |    |
| 315  | 7.9  | 310  | 8.5  | 300  | 7.5  | 300  | 8.2  | 300  | 6.6  | 300  | 4.9  | 305  | 3.9  | 305 | 2.0 | —   | —   | —   | —   | —   | —   | 1.3 | 110 | 2.0 | 6.6 | 8   |    |
| 185  | 5.9  | 185  | 4.9  | 185  | 4.9  | 190  | 4.9  | 190  | 3.9  | 185  | 1.6  | 185  | 3.0  | 175 | 3.9 | 170 | 4.6 | 170 | 3.9 | 175 | 5.2 | 175 | 4.6 | 5.4 | 9   |     |    |
| 220  | 6.2  | 230  | 5.9  | 205  | 3.9  | 220  | 6.6  | 230  | 6.6  | 230  | 6.6  | 225  | 5.2  | 220 | 4.3 | 225 | 3.3 | 230 | 4.6 | 220 | 3.0 | 220 | 2.6 | 4.3 | 10  |     |    |
| —    | 1.3  | 295  | 2.3  | 290  | 2.6  | 290  | 2.6  | 295  | 3.3  | 320  | 4.6  | 310  | 4.3  | 310 | 2.0 | —   | —   | —   | —   | —   | 0.3 | —   | 1.0 | 2.6 | 11  |     |    |
| 170  | 6.2  | 170  | 6.2  | 170  | 6.6  | 165  | 5.9  | 160  | 6.6  | 145  | 5.2  | 145  | 2.0  | 150 | 2.0 | 135 | 2.3 | —   | 1.3 | —   | 0.7 | 240 | 2.0 | 3.4 | 12  |     |    |
| 190  | 4.6  | 170  | 6.9  | 170  | 7.2  | 170  | 7.5  | 170  | 6.5  | 170  | 5.9  | 170  | 6.5  | 170 | 5.9 | 170 | 4.6 | 170 | 5.6 | 170 | 5.2 | 155 | 4.6 | 4.8 | 13  |     |    |
| 205  | 6.6  | 215  | 7.2  | 220  | 6.9  | 215  | 7.2  | 225  | 7.9  | 225  | 6.2  | 225  | 4.6  | 215 | 3.0 | 195 | 3.3 | 190 | 3.3 | 185 | 3.3 | 185 | 3.9 | 4.9 | 14  |     |    |
| 210  | 7.2  | 220  | 8.2  | 220  | 8.2  | 225  | 7.5  | 220  | 7.9  | 225  | 8.5  | 230  | 8.2  | 230 | 5.9 | 230 | 8.5 | 240 | 9.2 | 260 | 9.8 | 265 | 6.6 | 6.3 | 15  |     |    |
| 245  | 6.2  | 245  | 6.2  | 245  | 5.6  | 245  | 5.6  | 225  | 4.9  | 225  | 3.9  | 225  | 3.6  | 200 | 3.3 | 200 | 2.6 | 200 | 3.3 | 200 | 3.3 | 190 | 3.3 | 5.1 | 16  |     |    |
| 170  | 7.2  | 170  | 7.5  | 170  | 7.5  | 170  | 6.2  | 175  | 5.6  | 175  | 6.6  | 170  | 5.9  | 165 | 3.9 | 165 | 3.9 | 140 | 4.9 | 140 | 4.9 | 150 | 3.6 | 5.1 | 17  |     |    |
| 305  | 4.6  | 310  | 3.9  | 290  | 4.3  | 275  | 3.3  | 295  | 3.9  | 315  | 4.6  | 315  | 3.9  | 10  | 1.6 | —   | —   | —   | 0.3 | —   | —   | —   | —   | 0.3 | 2.7 | 18  |    |
| 95   | 3.9  | 95   | 3.0  | 100  | 5.6  | 115  | 5.9  | 100  | 3.9  | 90   | 3.3  | 75   | 1.6  | 125 | 3.0 | —   | —   | —   | 1.3 | 145 | 3.9 | 160 | 4.6 | 170 | 5.2 | 3.7 | 19 |
| 110  | 11.1 | 115  | 9.8  | 130  | 10.5 | 140  | 9.5  | 145  | 9.8  | 155  | 8.2  | 160  | 8.5  | 160 | 8.2 | 160 | 7.2 | 160 | 6.6 | 160 | 5.2 | 160 | 5.6 | 7.9 | 20  |     |    |
| 165  | 7.2  | 160  | 7.5  | 160  | 8.2  | 160  | 8.9  | 150  | 6.2  | 155  | 7.2  | 160  | 6.6  | 165 | 6.6 | 170 | 5.9 | 165 | 6.2 | 165 | 5.9 | 165 | 6.2 | 6.1 | 21  |     |    |
| 190  | 7.9  | 200  | 8.2  | 200  | 7.5  | 210  | 7.9  | 210  | 8.5  | 220  | 8.5  | 220  | 8.2  | 215 | 6.2 | 205 | 5.6 | 205 | 5.9 | 190 | 5.9 | 190 | 5.9 | 7.6 | 22  |     |    |
| 215  | 9.2  | 220  | 9.8  | 215  | 8.5  | 200  | 9.2  | 195  | 10.2 | 195  | 8.2  | 200  | 9.2  | 190 | 5.6 | 185 | 5.6 | 190 | 5.9 | 195 | 6.2 | 195 | 5.2 | 7.4 | 23  |     |    |
| 260  | 6.9  | 270  | 6.6  | 260  | 6.2  | 265  | 4.9  | 290  | 4.9  | 300  | 6.2  | 300  | 5.6  | 295 | 5.9 | 295 | 5.2 | 300 | 4.6 | 290 | 5.9 | 295 | 4.9 | 6.2 | 24  |     |    |
| 290  | 6.9  | 300  | 7.2  | 305  | 6.9  | 300  | 6.6  | 300  | 6.9  | 300  | 7.2  | 300  | 6.2  | 300 | 5.6 | 315 | 6.2 | 310 | 6.2 | 310 | 6.2 | 295 | 3.9 | 5.6 | 25  |     |    |
| 195  | 5.2  | 200  | 5.9  | 195  | 5.9  | 185  | 5.6  | 170  | 5.9  | 170  | 7.2  | 175  | 6.9  | 180 | 7.2 | 185 | 7.5 | 185 | 5.9 | 190 | 6.6 | 185 | 6.6 | 4.9 | 26  |     |    |
| 175  | 6.9  | 175  | 6.6  | 175  | 6.2  | 175  | 7.2  | 175  | 5.9  | 170  | 6.2  | 170  | 5.6  | 175 | 6.2 | 170 | 5.9 | 170 | 5.2 | 170 | 5.2 | 170 | 4.9 | 6.4 | 27  |     |    |
| 155  | 6.2  | 150  | 5.2  | 150  | 4.9  | 140  | 5.2  | 140  | 4.9  | 150  | 3.9  | 110  | 3.6  | 100 | 4.6 | 105 | 4.3 | 100 | 3.9 | 100 | 4.9 | 85  | 4.6 | 5.0 | 28  |     |    |
| 105  | 4.9  | 110  | 5.2  | 90   | 6.6  | 80   | 3.9  | 110  | 3.3  | 165  | 4.6  | 165  | 4.6  | 165 | 3.3 | 130 | 3.6 | 150 | 3.0 | 140 | 2.6 | 155 | 2.6 | 5.0 | 29  |     |    |
| 165  | 9.2  | 170  | 9.5  | 170  | 8.9  | 170  | 9.2  | 170  | 7.9  | 165  | 7.5  | 165  | 6.6  | 165 | 6.2 | 165 | 5.6 | 165 | 6.2 | 165 | 4.6 | 170 | 3.3 | 6.7 | 30  |     |    |
| 145  | 4.6  | 145  | 3.9  | 145  | 3.6  | 155  | 3.6  | 165  | 3.6  | 225  | 2.0  | 310  | 3.6  | —   | —   | —   | —   | —   | —   | —   | —   | —   | —   | —   | —   | 31  |    |
| —    | 6.5  | —    | 6.6  | —    | 6.6  | —    | 6.5  | —    | 6.3  | —    | 5.9  | —    | 5.7  | —   | 4.9 | —   | 4.6 | —   | 4.6 | —   | 4.6 | —   | 4.7 | —   | 4.4 | 5.4 |    |

June, 1924.

| 13.  | 14.  | 15.  | 16.  | 17.  | 18.  | 19.  | 20.  | 21.  | 22.  | 23.  | 24.  | Mean | Day. |     |     |     |     |     |     |     |      |     |      |     |     |    |
|------|------|------|------|------|------|------|------|------|------|------|------|------|------|-----|-----|-----|-----|-----|-----|-----|------|-----|------|-----|-----|----|
| m/s. | m/s. | m/s. | m/s. | m/s. | m/s. | m/s. | m/s. | m/s. | m/s. | m/s. | m/s. | m/s. |      |     |     |     |     |     |     |     |      |     |      |     |     |    |
| 320  | 8.2  | 320  | 7.5  | 325  | 7.5  | 330  | 9.2  | 325  | 7.9  | 330  | 6.9  | 335  | 5.9  | 345 | 5.9 | 355 | 5.2 | 340 | 5.2 | 340 | 4.9  | 340 | 4.9  | 4.9 | 1   |    |
| —    | 0.7  | —    | 1.3  | —    | 1.0  | 295  | 1.6  | 285  | 2.3  | 285  | 3.0  | 285  | 3.0  | 285 | 1.6 | —   | —   | —   | —   | —   | —    | 170 | 2.3  | 2.5 | 2   |    |
| 145  | 4.9  | 140  | 4.3  | 145  | 5.6  | 150  | 4.9  | 160  | 3.9  | 165  | 2.3  | 165  | 2.6  | 165 | 2.0 | 165 | 1.6 | —   | 0.7 | —   | 0.7  | —   | 0.3  | 3.4 | 3   |    |
| 310  | 6.6  | 300  | 6.6  | 305  | 6.9  | 310  | 5.9  | 330  | 5.9  | 340  | 5.6  | 325  | 5.6  | 320 | 3.9 | 330 | 2.3 | 315 | 3.0 | 310 | 2.3  | 310 | 1.6  | 4.6 | 4   |    |
| 170  | 4.9  | 170  | 5.2  | 170  | 5.6  | 160  | 5.2  | 165  | 5.6  | 170  | 5.9  | 160  | 6.2  | 160 | 4.9 | 160 | 6.9 | 160 | 6.9 | 160 | 7.2  | 150 | 10.8 | 4.0 | 5   |    |
| 220  | 4.3  | 225  | 3.9  | 220  | 4.9  | 220  | 4.3  | 220  | 3.6  | 220  | 3.6  | 210  | 2.0  | 190 | 2.3 | 185 | 3.0 | 185 | 2.6 | 175 | 3.6  | 150 | 3.3  | 4.1 | 6   |    |
| 180  | 5.2  | 200  | 5.9  | 210  | 4.9  | 235  | 9.5  | 250  | 9.2  | 250  | 8.5  | 250  | 8.5  | 245 | 7.9 | 245 | 7.2 | 240 | 8.2 | 240 | 8.5  | 240 | 8.5  | 7.0 | 7   |    |
| 245  | 9.2  | 245  | 9.5  | 250  | 9.2  | 250  | 8.9  | 250  | 7.9  | 260  | 7.2  | 250  | 6.9  | 255 | 4.6 | 255 | 3.6 | 255 | 3.9 | 255 | 2.3  | 255 | 1.6  | 7.5 | 8   |    |
| 145  | 9.5  | 155  | 9.2  | 165  | 8.5  | 185  | 6.9  | 210  | 6.6  | 190  | 5.6  | 185  | 5.6  | 185 | 6.2 | 180 | 5.2 | 180 | 5.9 | 195 | 5.9  | 180 | 6.6  | 5.8 | 9   |    |
| 180  | 8.2  | 195  | 9.5  | 205  | 7.9  | 195  | 8.5  | 190  | 7.5  | 190  | 6.9  | 195  | 7.2  | 195 | 7.2 | 190 | 6.9 | 190 | 6.9 | 195 | 6.9  | 195 | 5.2  | 7.8 | 10  |    |
| 275  | 8.5  | 280  | 8.5  | 280  | 12.1 | 295  | 7.9  | 300  | 8.5  | 300  | 8.9  | 290  | 9.5  | 305 | 9.5 | 320 | 9.2 | 320 | 9.2 | 320 | 10.5 | 325 | 12.5 | 8.0 | 11  |    |
| 330  | 8.9  | 330  | 9.5  | 330  | 9.8  | 330  | 10.2 | 335  | 7.5  | 330  | 10.8 | 340  | 8.9  | 345 | 6.6 | 350 | 3.9 | 350 | 7.2 | 335 | 8.5  | 340 | 6.9  | 9.2 | 12  |    |
| 305  | 3.3  | 300  | 3.0  | 290  | 3.3  | 300  | 4.9  | 300  | 3.6  | 290  | 3.0  | 300  | 2.3  | —   | 0.3 | —   | 0.0 | —   | 0.0 | —   | 0.3  | —   | —    | 1.0 | 2.9 | 13 |
| 170  | 6.9  | 170  | 6.6  | 165  | 6.9  | 170  | 7.2  | 170  | 6.2  | 170  | 6.2  | 170  | 5.2  | 170 | 4.6 | 170 | 4.3 | 170 | 3.9 | 170 | 4.3  | 165 | 3.9  | 4.4 | 14  |    |
| 270  | 2.3  | 270  | 3.3  | 270  | 3.0  | 270  | 4.3  | 270  | 2.0  | —    | 0.0  | —    | 0.3  | —   | 0.7 | —   | —   | —   | 0.7 | —   | —    | —   | —    | 0.7 | 1.9 | 15 |
| 45   | 1.6  | 10   | 2.3  | 10   | 2.6  | 10   | 3.9  | 360  | 3.6  | 30   | 1.6  | 60   | 3.0  | —   | 1.3 | 5   | 1.6 | —   | 0.0 | —   | 0.0  | —   | 0.0  | —   | 1.5 | 16 |
| 55   | 6.2  | 20   | 4.6  | 20   | 6.2  | 20   | 6.9  | 55   | 2.3  | —    | 1.3  | 95   | 2.0  | —   | 0.3 | 335 | 1.6 | —   | 1.3 | —   | 0.7  | —   | 1.0  | 2.8 | 17  |    |
| 270  | 4.9  | 240  | 2.3  | 190  | 3.0  | 180  | 3.6  | 175  | 5.6  | 175  | 4.6  | 170  | 4.3  | 175 | 2.6 | —   | —   | —   | 1.0 | —   | 1.0  | 235 | 4.3  | 2.2 | 18  |    |
| 215  | 6.6  | 230  | 6.9  | 220  | 6.2  | 215  | 6.2  | 215  | 5.2  | 210  | 3.9  | 200  | 4.6  | 210 | 3.0 | 205 | 2.0 | 200 | 3.0 | 180 | 3.9  | 215 | 1.6  | 6.0 | 19  |    |
| 160  | 6.9  | 160  | 6.6  | 170  | 4.9  | 185  | 4.9  | 205  | 4.9  | 210  | 4.6  | 220  | 6.2  | 235 | 3.9 | 240 | 5.9 | 250 | 3.3 | 250 | 1.6  | —   | 1.0  | 4.2 | 20  |    |
| 255  | 6.2  | 255  | 5.2  | 265  | 4.9  | 275  | 5.6  | 275  | 4.6  | 280  | 5.2  | 280  | 4.3  | 280 | 4.3 | 285 | 4.6 | 285 | 3.9 | 290 | 3.6  | 290 | 3.3  | 3.4 | 21  |    |
| 250  | 2.0  | —    | 1.3  | —    | 1.3  | 190  | 2.0  | 185  | 3.6  | 180  | 3.9  | 180  | 4.6  | 180 | 6.6 | 180 | 7.2 | 180 | 5.9 | 180 | 6.6  | 180 | 5.9  | 3.6 | 22  |    |
| —    | 0.7  | 210  | 3.3  | 215  | 3.6  | 240  | 5.2  | 240  | 2.6  | 225  | 3.0  | 225  | 3.0  | 225 | 2.6 | 230 | 3.0 | 230 | 3.6 | 230 | 2.6  | —   | 0.7  | 3.1 | 23  |    |
| 225  | 4.6  | 230  | 5.2  | 230  | 4.3  | 230  | 4.6  | 230  | 4.3  | 230  | 4    |      |      |     |     |     |     |     |     |     |      |     |      |     |     |    |

Direction expressed in degrees from North (E = 90°, S = 180°, W = 270°, N = 360°) : Speed in metres per second.

361. Cahirciveen (Valencia Observatory) :

H<sub>a</sub> (height of anemograph above M.S.L.) = Height of ground above

Table with 31 rows (Day 1-31) and 24 columns (1-11, Noon). Each day has two columns for wind speed in degrees and m/s. Mean values are shown at the bottom.

362. Cahirciveen (Valencia Observatory) : H<sub>a</sub> = 12 metres + 14 metres.

Table with 31 rows (Day 1-31) and 24 columns (1-11, Noon). Each day has two columns for wind speed in degrees and m/s. Mean values are shown at the bottom. Includes a G.M.T. row at the bottom.



Averages for periods of sixty minutes centered at exact hours, Greenwich Mean Time.

M.S.L. + h<sub>a</sub> (height of anemograph above ground) = 12 metres + 14 metres.

July, 1924.

Main data table for July 1924. Columns represent days of the month (13-25, 26-31) and rows represent hours (150-180). Each cell contains wind speed in m/s and height in meters.

August, 1924.

Main data table for August 1924. Columns represent days of the month (1-31) and rows represent hours (240-310). Each cell contains wind speed in m/s and height in meters.

Direction expressed in degrees from North (E = 90°, S = 180°, W = 270°, N = 360°) : Speed in metres per second.

363. Cahirciveen (Valencia Observatory) :

Ha (height of anemograph above M.S.L.)=Height of ground above

Table with columns: Day, 1., 2., 3., 4., 5., 6., 7., 8., 9., 10., 11., Noon. Rows include data for days 1-30 and a Mean row. Each day's data is presented in two columns of wind speed (m/s) and direction (degrees).

364. Cahirciveen (Valencia Observatory) : Ha = 12 metres + 14 metres.

Table with columns: G.M.T., 1., 2., 3., 4., 5., 6., 7., 8., 9., 10., 11., Noon. Rows include data for days 1-31 and a Mean row. Each day's data is presented in two columns of wind speed (m/s) and direction (degrees).

Averages for periods of sixty minutes centered at the exact hours, Greenwich Mean Time.

M.S.L. + h<sub>a</sub> (height of anemograph above ground) = 12 metres + 14 metres.

September, 1924.

Table with columns 13 through 24, Mean, and Day. Each column contains wind speed readings in m/s for different time intervals. The table spans from approximately 06:00 to 18:00.

October, 1924.

Table with columns 13 through 24, Mean, and Day. Each column contains wind speed readings in m/s for different time intervals. The table spans from approximately 18:00 to 06:00.

WIND: DIRECTION AND SPEED.

Direction expressed in degrees from North (E = 90°, S = 180°, W = 270°, N = 360°) : Speed in metres per second.

365. Cahirciveen (Valencia Observatory) :

Ha (height of anemograph above M.S.L.) = Height of ground above

Table with 13 columns (Day, 1-11, Noon) and 20 rows (1-30). Each column contains two data series in degrees and m/s. Includes a 'Mean ...' row at the bottom.

NOTE.—The values printed in italics are taken from the records of the Dines tube anemograph, the Robinson cup anemograph being out of action. The monthly means are computed from the hourly values as printed.

366. Cahirciveen (Valencia Observatory) : Ha = 12 metres + 14 metres.

Table with 13 columns (Day, 1-11, Noon) and 20 rows (1-30). Each column contains two data series in degrees and m/s. Includes a 'Mean ...' row and an 'Annual Mean ...' row at the bottom.

Averages for periods of sixty minutes centered at the exact hours, Greenwich Mean Time.

M.S.L. + h<sub>a</sub> (height of anemograph above ground) = 12 metres + 14 metres.

November, 1924.

Table with columns for days 13 to 24, Mean, and Day. Each day has two columns of wind speed data in m/s. Values are printed in italics if taken from Dines tube anemograph records.

NOTE.—The values printed in italics are taken from the records of the Dines tube anemograph, the Robinson cup anemograph being out of action. The monthly means are computed from the hourly values as printed.

December, 1924.

Table with columns for days 145 to 245, Mean, and Day. Each day has two columns of wind speed data in m/s. Values are printed in italics if taken from Dines tube anemograph records.

367. Cahirciveen (Valencia Observatory) :  $H_a = 17 \text{ metres} + 13 \text{ metres.}$

| Day. | Jan.            |               | Feb.            |               | Mar.            |               | April           |               | May             |               | June            |               | July            |               | Aug.            |               | Sept.           |               | Oct.            |               | Nov.            |               | Dec.            |               |
|------|-----------------|---------------|-----------------|---------------|-----------------|---------------|-----------------|---------------|-----------------|---------------|-----------------|---------------|-----------------|---------------|-----------------|---------------|-----------------|---------------|-----------------|---------------|-----------------|---------------|-----------------|---------------|
|      | Max. in a Gust. | Time of Gust. | Max. in a Gust. | Time of Gust. | Max. in a Gust. | Time of Gust. | Max. in a Gust. | Time of Gust. | Max. in a Gust. | Time of Gust. | Max. in a Gust. | Time of Gust. | Max. in a Gust. | Time of Gust. | Max. in a Gust. | Time of Gust. | Max. in a Gust. | Time of Gust. | Max. in a Gust. | Time of Gust. | Max. in a Gust. | Time of Gust. | Max. in a Gust. | Time of Gust. |
| 1    | 12              | 18 45         | 11              | 22 55         | 20              | 3 50          | 9               | 15 45         | 11              | 11 15         | 12              | 15 45         | 22              | 15 10         | 17              | 2 15          | 12              | 3 55          | 9               | 11 25         | 22              | 23 15         | 18              | 6 45          |
| 2    | 12              | 20 5          | 11              | 17 50         | 15              | 23 30         | 8               | 16 45         | 7               | 13 5          | 7               | 0 30          | 18              | 9 55          | 11              | 4 10          | 8               | 10 35         | 11              | 5 50          | 26              | 3 40          | 6               | 2 40          |
| 3    | 15              | 14 5          | 8               | 7 5           | 18              | 1 20          | 9               | 16 15         | 11              | 14 0          | 10              | 16 10         | 11              | 19 55         | 13              | 6 45          | 9               | 20 50         | 11              | 10 35         | 11              | 21 5          | 14              | 23 15         |
| 4    | 11              | 23 50         | 8               | 0 10          | 18              | 23 30         | 12              | 13 0          | 13              | 18 25         | 9               | 14 30         | 14              | 10 50         | 13              | 23 30         | 6               | 23 0          | 9               | 21 45         | 8               | 0 40          | 20              | 4 0           |
| 5    | 16              | 22 25         | 13              | 16 0          | 20              | 7 5           | 13              | 19 10         | 22              | 4 0           | 20              | 23 55         | 16              | 16 25         | 14              | 5 25          | 17              | 20 40         | 13              | 19 25         | 10              | 16 5          | 22              | 15 25         |
| 6    | 27              | 15 25         | 10              | 1 40          | 9               | 21 20         | 10              | 9 10          | 15              | 10 55         | 19              | 0 10          | 14              | 12 25         | 9               | 15 50         | 18              | 9 25          | 20              | 17 20         | 8               | 11 25         | 16              | 22 50         |
| 7    | 20              | 23 40         | 23              | 23 35         | 12              | 16 45         | 10              | 17 5          | 18              | 11 30         | 15              | 16 55         | 14              | 4 0           | 9               | 12 45         | 18              | 1 20          | 12              | 0 25          | 11              | 22 40         | 20              | 12 10         |
| 8    | 31              | 6 50          | 30              | 5 40          | 14              | 17 25         | 16              | 15 30         | 14              | 1 10          | 14              | 11 0          | 16              | 15 50         | 8               | 13 5          | 15              | 20 55         | 11              | 15 45         | 20              | 23 20         | 5               | 15 25         |
| 9    | 17              | 22 25         | 13              | 1 0           | 16              | 21 55         | 15              | 18 5          | 15              | 10 5          | 17              | 22 25         | 13              | 22 25         | 11              | 15 45         | 18              | 8 20          | 23              | 9 40          | 23              | 16 40         | 9               | 21 40         |
| 10   | 15              | 0 35          | 9               | 0 45          | 17              | 0 45          | 19              | 19 0          | 12              | 10 35         | 20              | 13 35         | 14              | 8 15          | 13              | 15 5          | 13              | 23 40         | 16              | 21 45         | 14              | 21 0          | 9               | 13 20         |
| 11   | 26              | 21 5          | 5               | 13 50         | 19              | 2 50          | 20              | 21 15         | 8               | 8 50          | 16              | 3 15          | 16              | 20 35         | 14              | 21 20         | 13              | 21 10         | 20              | 16 40         | 12              | 15 30         | 15              | 24 0          |
| 12   | 22              | 0 30          | 26              | 18 55         | 23              | 19 25         | 22              | 3 25          | 11              | 14 30         | 18              | 1 35          | 16              | 3 45          | 15              | 16 30         | 17              | 12 35         | 16              | 19 20         | 13              | 1 0           | 22              | 23 45         |
| 13   | 23              | 5 5           | 17              | 0 20          | 17              | 18 15         | 16              | 3 25          | 13              | 15 35         | 10              | 0 20          | 11              | 12 10         | 16              | 2 40          | 13              | 13 0          | 14              | 6 40          | 22              | 22 10         | 25              | 3 15          |
| 14   | 30              | 16 40         | 7               | 0 25          | 13              | 4 55          | 9               | 16 45         | 16              | 11 40         | 12              | 14 35         | 15              | 13 50         | 13              | 7 15          | 14              | 14 0          | 13              | 15 25         | 13              | 0 15          | 23              | 23 15         |
| 15   | 14              | 0 5           | 10              | 20 15         | 8               | 2 0           | 10              | 12 40         | 15              | 15 40         | 10              | 5 35          | 13              | 0 10          | 15              | 15 30         | 21              | 12 20         | 11              | 6 50          | 11              | 8 5           | 26              | 0 0           |
| 16   | 11              | 0 50          | 13              | 9 40          | 7               | 14 15         | 10              | 20 25         | 13              | 4 45          | 7               | 16 20         | 12              | 2 45          | 14              | 23 45         | 17              | 10 45         | 9               | 2 25          | 5               | 24 0          | 15              | 4 55          |
| 17   | 13              | 18 15         | 10              | 23 30         | 6               | 21 45         | 11              | 11 35         | 13              | 13 45         | 11              | 15 5          | 12              | 14 55         | 23              | 6 55          | 17              | 20 10         | 7               | 21 40         | 9               | 13 10         | 15              | 23 50         |
| 18   | 20              | 12 30         | 17              | 18 0          | 8               | 8 30          | 14              | 11 35         | 8               | 13 15         | 10              | 16 55         | 12              | 0 0           | 13              | 18 35         | 13              | 0 55          | 14              | 16 30         | 5               | 0 40          | 22              | 10 45         |
| 19   | 20              | 12 5          | 11              | 0 20          | 11              | 23 5          | 11              | 8 15          | 13              | 6 45          | 13              | 11 45         | 14              | 19 45         | 15              | 13 10         | 16              | 18 25         | 11              | 16 5          | 5               | 16 40         | 15              | 1 40          |
| 20   | 20              | 21 0          | 6               | 1 35          | 14              | 12 5          | 7               | 17 25         | 19              | 13 15         | 12              | 12 55         | 12              | 16 0          | 13              | 22 45         | 35              | 16 55         | 15              | 19 40         | 8               | 21 50         | 16              | 11 15         |
| 21   | 24              | 15 5          | 8               | 14 30         | 15              | 6 25          | 10              | 11 0          | 13              | 15 5          | 10              | 13 25         | 13              | 7 40          | 15              | 6 15          | 15              | 0 25          | 13              | 4 0           | 16              | 14 50         | 24              | 22 40         |
| 22   | 13              | 9 0           | 12              | 18 45         | 14              | 15 30         | 6               | 14 45         | 19              | 12 10         | 14              | 21 35         | 10              | 22 35         | 13              | 16 55         | 28              | 23 25         | 8               | 22 30         | 16              | 17 25         | 31              | 14 5          |
| 23   | 20              | 18 25         | 8               | 15 35         | 11              | 23 45         | 11              | 13 35         | 19              | 9 45          | 11              | 0 20          | 15              | 13 0          | 16              | 3 30          | 24              | 1 25          | 26              | 22 55         | 16              | 21 15         | 27              | 2 10          |
| 24   | 13              | 8 5           | 17              | 19 45         | 10              | 13 0          | 15              | 16 15         | 13              | 10 55         | 9               | 9 10          | 10              | 1 45          | 14              | 5 30          | 13              | 21 30         | 25              | 12 15         | 19              | 11 5          | 17              | 9 25          |
| 25   | 17              | 24 0          | 16              | 5 50          | 7               | 11 20         | 21              | 13 15         | 12              | 17 40         | 11              | 12 10         | 14              | 16 25         | 12              | 5 50          | 16              | 8 30          | 12              | 0 40          | 10              | 5 0           | 13              | 21 20         |
| 26   | 21              | 0 45          | 8               | 15 0          | 9               | 16 10         | 20              | 17 25         | 16              | 21 5          | 14              | 10 40         | 12              | 10 10         | 12              | 23 45         | 10              | 5 0           | 10              | 23 5          | 17              | 23 55         | 27              | 21 10         |
| 27   | 12              | 0 40          | 16              | 22 30         | 9               | 19 20         | 19              | 10 40         | 15              | 9 30          | 9               | 17 40         | 13              | 21 40         | 12              | 0 30          | 7               | 23 15         | 14              | 20 15         | 23              | 5 0           | 25              | 1 45          |
| 28   | 9               | 12 25         | 12              | 2 15          | 8               | 0 55          | 19              | 4 40          | 11              | 10 55         | 14              | 22 55         | 11              | 2 5           | 17              | 8 30          | 19              | 15 15         | 19              | 3 25          | 26              | 12 15         | 25              | 3 50          |
| 29   | 8               | 22 40         | 19              | 13 40         | 11              | 8 40          | 19              | 24 0          | 13              | 8 50          | 15              | 22 10         | 13              | 6 35          | 14              | 3 15          | 15              | 23 25         | 19              | 2 50          | 17              | 16 25         | 26              | 19 35         |
| 30   | 10              | 2 55          | —               | —             | 11              | 3 50          | 21              | 3 40          | 15              | 8 20          | 9               | 9 55          | 9               | 19 5          | 11              | 13 40         | 19              | 10 25         | 22              | 5 45          | 16              | 2 10          | 24              | 9 25          |
| 31   | 12              | 10 15         | —               | —             | 8               | 17 55         | —               | —             | 10              | 8 20          | —               | —             | 16              | 13 10         | 12              | 16 10         | —               | —             | 14              | 11 0          | —               | —             | 26              | 18 15         |

DISTRIBUTION OF WIND SPEED: EXTREME VELOCITIES AS RECORDED BY THE DINES TUBE ANEMOGRAPH.

368. Cahirciveen (Valencia Observatory) :  $H_a = 17 \text{ metres} + 13 \text{ metres.}$

| Month.       | DISTRIBUTION OF WIND. |           |                   |           |                  |                 |               |            |                      | EXTREME VELOCITIES. |            |               |         |          |      |       |
|--------------|-----------------------|-----------|-------------------|-----------|------------------|-----------------|---------------|------------|----------------------|---------------------|------------|---------------|---------|----------|------|-------|
|              | More than 17.2 m/s.   |           | 10.8 to 17.1 m/s. |           | 5.5 to 10.7 m/s. | 1.6 to 5.4 m/s. | 0 to 1.5 m/s. | No Record. | Highest Hourly Wind. |                     |            | Highest Gust. |         |          |      |       |
|              | Dates of Occurrence.  | Duration. | No. of Days.      | Duration. | Duration.        | Duration.       | Duration.     | Duration.  | Veer from N.         | Speed.              | Mid. Time. | Speed.        | Time.   |          |      |       |
| Jan. ... ..  | —                     | 0         | 15                | 106       | 314              | 276             | 48            | 0          | 135                  | 17                  | day 8      | hour 5        | m/s. 31 | day 8    | h. 6 | m. 50 |
| Feb. ... ..  | —                     | 0         | 6                 | 16        | 169              | 378             | 133           | 0          | 160                  | 16                  | 8          | 6             | 30      | 8        | 5    | 40    |
| Mar. ... ..  | —                     | 0         | 5                 | 10        | 328              | 323             | 83            | 0          | 355                  | 13                  | 5          | 7             | 23      | 12       | 19   | 25    |
| April ... .. | —                     | 0         | 8                 | 32        | 283              | 319             | 86            | 0          | 250                  | 14                  | 30         | 4             | 22      | 12       | 3    | 25    |
| May ... ..   | —                     | 0         | 3                 | 6         | 401              | 303             | 34            | 0          | 210                  | 12                  | 23         | 16            | 22      | 5        | 4    | 0     |
| June ... ..  | —                     | 0         | 4                 | 12        | 302              | 344             | 62            | 0          | 210                  | 13                  | 10         | 14            | 20      | 10       | 13   | 35    |
| July ... ..  | —                     | 0         | 3                 | 13        | 423              | 266             | 42            | 0          | 165                  | 14                  | 1          | 15            | 22      | 1        | 15   | 10    |
| Aug. ... ..  | —                     | 0         | 3                 | 7         | 433              | 278             | 26            | 0          | 260                  | 13                  | 6          | 17            | 23      | 17       | 6    | 55    |
| Sept. ... .. | 20th                  | 2         | 11                | 61        | 351              | 256             | 50            | 0          | 245                  | 20                  | 20         | 17            | 35      | 20       | 16   | 55    |
| Oct. ... ..  | —                     | 0         | 7                 | 52        | 316              | 321             | 55            | 0          | 155                  | 15                  | 24         | 3             | 26      | 23       | 22   | 55    |
| Nov. ... ..  | —                     | 0         | 9                 | 71        | 254              | 261             | 134           | 0          | 235                  | 17                  | 2          | 4             | 26      | 28       | 12   | 15    |
| Dec. ... ..  | 22nd, 26th            | 6         | 17                | 161       | 381              | 131             | 65            | 0          | 210                  | 18                  | 22         | 14            | 31      | 22       | 14   | 5     |
| Year ... ..  | 3 days                | 8         | 91                | 547       | 3,955            | 3,456           | 818           | 0          | 245                  | 20                  | Sept. 20   | 17            | 35      | Sept. 16 | 55   |       |

## MINIMUM TEMPERATURE "ON THE GRASS" DURING THE INTERVAL 18H. TO 7H. G.M.T.

Readings in degrees absolute.

## 369. Cahirciveen (Valencia Observatory).

1924.

| Day.     | Jan.        | Feb.        | Mar.        | April       | May         | June        | July        | Aug.        | Sept.       | Oct.        | Nov.        | Dec.        |
|----------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
|          | <i>a.</i>   | <i>a.</i>   | <i>a.</i>   | <i>a.</i>   | <i>a.</i>   | <i>a.</i>   | <i>a.</i>   | <i>a.</i>   | <i>a.</i>   | <i>a.</i>   | <i>a.</i>   | <i>a.</i>   |
| 1        | 78.0        | 73.4        | 72.5        | 71.5        | 80.5        | 80.4        | <b>76.9</b> | 86.1        | 85.0        | 78.1        | 79.6        | 80.2        |
| 2        | 79.5        | 77.3        | <b>67.0</b> | 69.8        | 79.5        | 82.3        | 82.9        | 83.9        | 87.0        | 82.5        | 82.5        | 77.7        |
| 3        | 75.3        | 77.5        | 71.0        | 70.9        | 78.7        | 84.1        | 81.4        | 82.6        | 87.1        | 77.5        | 76.7        | 75.9        |
| 4        | 80.5        | 75.9        | 70.3        | 69.8        | <b>72.1</b> | 84.4        | 78.6        | 86.0        | 80.0        | <b>74.5</b> | <b>71.3</b> | 80.1        |
| 5        | 80.3        | 77.1        | 75.0        | 72.9        | 74.7        | 83.7        | 81.0        | 87.3        | 85.1        | 80.9        | 73.0        | 77.9        |
| 6        | 80.3        | 79.1        | 68.1        | 74.1        | 78.9        | 84.5        | 80.3        | 82.3        | 85.7        | 79.7        | 81.0        | 78.0        |
| 7        | 73.5        | 75.9        | 76.1        | 73.7        | 76.5        | 81.7        | 84.9        | 80.0        | 86.9        | 78.5        | 73.1        | 81.4        |
| 8        | 73.3        | 77.9        | 76.9        | 76.5        | 75.9        | 82.5        | 85.1        | 78.4        | 85.1        | 77.1        | 77.1        | <b>74.1</b> |
| 9        | 75.4        | 75.8        | 79.3        | 71.5        | 78.1        | 80.1        | 84.9        | <b>77.3</b> | 82.6        | 78.5        | 82.1        | 74.9        |
| 10       | 73.0        | 77.9        | 77.8        | 72.3        | 77.9        | 83.1        | 86.3        | 79.3        | 79.6        | 80.3        | 81.2        | 81.1        |
| 11       | 71.9        | 72.8        | 78.7        | 74.2        | 77.0        | 82.3        | 87.1        | 85.9        | 85.1        | 80.2        | 79.1        | 80.6        |
| 12       | 74.5        | 75.8        | 81.2        | 74.8        | 75.7        | 83.1        | 86.0        | 84.0        | 83.7        | 76.5        | 72.4        | 83.0        |
| 13       | 73.5        | 78.1        | 81.3        | 71.3        | 78.4        | 81.3        | 83.8        | 84.5        | 81.2        | 83.6        | 77.1        | 81.9        |
| 14       | <b>71.8</b> | 71.5        | 78.6        | 73.9        | 80.1        | 77.0        | 85.0        | 85.4        | 79.5        | 83.7        | 80.6        | 77.5        |
| 15       | 78.9        | 72.9        | 74.3        | <b>69.3</b> | 77.9        | 84.5        | 86.8        | 81.8        | 83.0        | 84.2        | 75.7        | 79.1        |
| 16       | 79.1        | 71.9        | 71.3        | 72.6        | 77.7        | 83.1        | 83.5        | 81.8        | 82.7        | 80.8        | 76.3        | 80.7        |
| 17       | 78.3        | <b>69.5</b> | 73.9        | 76.2        | 77.0        | <b>76.5</b> | 83.7        | 83.2        | 85.8        | 77.5        | 76.5        | 80.8        |
| 18       | 79.2        | 76.1        | 72.4        | 79.1        | 77.5        | 79.5        | 83.8        | 82.1        | 83.0        | 82.5        | 80.2        | 83.6        |
| 19       | 77.2        | 71.7        | 71.3        | 78.5        | 77.6        | 82.5        | 84.4        | 82.0        | 78.1        | 83.3        | 80.7        | 81.4        |
| 20       | 78.1        | 75.9        | 73.1        | 81.9        | 81.9        | 77.2        | 82.2        | 81.0        | 80.3        | 81.5        | 80.2        | 80.8        |
| 21       | 79.7        | 78.2        | 78.0        | 75.9        | 82.9        | 76.8        | 82.8        | 83.6        | 79.5        | 83.1        | 81.3        | 79.9        |
| 22       | 78.6        | 73.5        | 80.3        | 82.7        | 83.1        | 83.0        | 79.4        | 81.8        | <b>76.9</b> | 78.4        | 82.5        | 81.9        |
| 23       | 72.4        | 70.4        | 81.3        | 80.5        | 80.3        | 83.4        | 84.8        | 83.0        | 80.3        | 80.9        | 84.1        | 78.9        |
| 24       | 77.5        | 70.1        | 78.6        | 82.0        | 79.9        | 85.8        | 81.4        | 82.3        | 79.4        | 82.3        | 80.5        | 75.5        |
| 25       | 75.8        | 78.5        | 79.3        | 81.3        | 79.7        | 85.4        | 86.6        | 83.2        | 81.3        | 81.6        | 79.7        | 74.3        |
| 26       | 79.1        | 70.6        | 81.2        | 80.2        | 80.3        | 84.4        | 85.8        | 80.2        | 81.9        | 77.1        | 73.5        | 77.1        |
| 27       | 73.5        | 74.3        | 80.4        | 77.4        | 83.1        | 81.4        | 83.9        | 83.1        | 77.6        | 79.3        | 77.7        | 79.7        |
| 28       | 72.7        | 73.1        | 78.0        | 77.3        | 82.5        | 81.2        | 84.7        | 85.6        | 78.7        | 81.9        | 71.9        | 74.5        |
| 29       | 78.1        | 75.3        | 71.1        | 79.6        | 83.9        | 84.9        | 85.8        | 84.1        | 84.5        | 85.8        | 76.4        | 75.9        |
| 30       | 78.7        | —           | 75.9        | 81.7        | 81.5        | 81.2        | 81.4        | 86.3        | 80.9        | 81.9        | 78.9        | 77.6        |
| 31       | 79.8        | —           | 68.6        | —           | 81.5        | —           | <b>85.9</b> | <b>85.1</b> | —           | 80.3        | —           | 74.2        |
| Mean ... | 76.7        | 74.8        | 75.6        | 75.8        | 79.1        | 82.0        | 83.6        | 83.0        | 82.3        | 80.5        | 78.1        | 78.7        |

NOTES:—(1) The initial 2 of the readings is omitted, *i.e.*, 275.0 degrees absolute is written 75.0.  
(2) The minimum refers to the interval from 18h. the previous day to 7h. on the day to which it is entered.  
(3) Annual Mean 279.1.

370. Cahirciveen (Valencia Observatory).

| Day.            | Cloud Forms.    |                       |                       | Cloud Amount<br>(All Forms). |                |                 |                 |                 |                 | Weather.                      |                |                  |                  |   |   | Remarks.   |
|-----------------|-----------------|-----------------------|-----------------------|------------------------------|----------------|-----------------|-----------------|-----------------|-----------------|-------------------------------|----------------|------------------|------------------|---|---|--|
|                 | 7 <sup>h</sup>  | 13 <sup>h</sup>       | 18 <sup>h</sup>       | 7 <sup>h</sup>               | 9 <sup>h</sup> | 13 <sup>h</sup> | 15 <sup>h</sup> | 18 <sup>h</sup> | 21 <sup>h</sup> | 7 <sup>h</sup>                | 9 <sup>h</sup> | 13 <sup>h</sup>  | 15 <sup>h</sup>  | 18 <sup>h</sup>   | 21 <sup>h</sup>   |  |
| 1               | St.-Cu. : St.   | St.                   | St. : St.-Cu.         | 10                           | 10             | 10              | 8               | 10              | 10              | ...                           | ● <sup>0</sup> | p ● <sup>0</sup> | ...              | ...   | ● <sup>0</sup>  | o all day with ● <sup>0</sup> in a and at n : [fine n :          |
| 2               | St. : St.-Cu.   | St. : St.-Cu. : A-St. | St.                   | 3                            | 8              | 3               | 4               | 3               | 1               | ...                           | ...            | ...              | ...              | ...   | ...   | ● <sup>0</sup> early. Fine to cloudy day, p ● <sup>0</sup> p :   |
| 3               | St.             | St.                   | St.                   | 10                           | 10             | 10              | 10              | 10              | 7               | ● <sup>0</sup>                | ● <sup>0</sup> | ●                | ...              | ...   | ...   | ● <sup>0</sup> a and p : o at n with occasional ● <sup>0</sup> . |
| 4               | St.             | St. : St.-Cu.         | St. : St.-Cu. : A-St. | 10                           | 10             | 8               | 7               | 10              | 9               | ...                           | ...            | ...              | ...              | ...   | ...   | ● <sup>0</sup> early. Overcast or cloudy all                     |
| 5               | St.             | St.                   | St.                   | 10                           | 10             | 10              | 10              | 10              | 10              | ...                           | ...            | ...              | ...              | ≡ <sup>0</sup> ● <sup>0</sup> ≡ <sup>0</sup> ● <sup>0</sup> | ≡ <sup>0</sup> ● <sup>0</sup> ≡ <sup>0</sup> ● <sup>0</sup> | o a with ● or ● <sup>0</sup> at times : ● ≡ <sup>0</sup> n :     |
| 6               | St.-Cu.         | St.-Cu.               | St.-Cu.               | 10                           | 10             | 10              | 10              | 10              | 8               | ...                           | ...            | ...              | p ● <sup>0</sup> | ...   | ...   | o all day with ● or ● <sup>0</sup> , c n :                       |
| 7               | St.             | St.-Cu.               | A-St.                 | 1                            | 3              | 1               | -               | 2               | 6               | ...                           | ...            | ...              | ...              | ...   | ...   | p ● <sup>0</sup> early : fair or fine all day.                   |
| 8               | St.             | St. : St.-Cu. : A-Cu. | St.-Cu. : A-St.       | 10                           | 10             | 6               | 6               | 8               | 4               | ● ≡ <sup>0</sup>              | ...            | ...              | ...              | ...   | ...   | ● and ≡ <sup>0</sup> early : o a : fair p and n :                |
| 9               | St.             | St. : A-St.           | St.                   | 10                           | 10             | 10              | 00              | 10              | 2               | ...                           | ...            | ...              | ...              | ...   | ...   | ● a and p : fine at n : [and ✕ n :                               |
| 10              | St.             | Cu. : A-Cu.           | St. : A-St.           | 2                            | 7              | 7               | 8               | 8               | 5               | ...                           | ...            | ...              | ...              | ...   | ...   | Fine early to cloudy day. Fair to p ●                            |
| 11              | St. : A-St.     | St. : A-St.           | St. : A-St.           | 8                            | 10             | 10              | 10              | 10              | 10              | ...                           | ...            | ...              | ...              | ...   | ...   | [fair to p ● ▲ n :   |
| 12              | St.             | St. : A-St.           | St. : A-St.           | 1                            | 8              | 10              | 10              | 10              | 10              | ...                           | ...            | ...              | ...              | ● <sup>0</sup>  | ...   | Fine to cloudy a : o p to o ● n : [and n :                       |
| 13              | St.             | St.-Cu. : Cu.         | Cu.                   | 10                           | 10             | 9               | 8               | 2               | 1               | ...                           | ...            | ...              | ()               | ...   | ...   | o a with ● at times : p ● to fine p                              |
| 14              | St. : Cu.       | St.                   | St. : St.-Cu.         | 10                           | 8              | 10              | 10              | 8               | 9               | ...                           | ...            | ...              | ...              | ...   | ...   | ● early and at times a : steady ● p :                            |
| 15              | St.-Cu.         | St. : St.-Cu.         | St.-Cu. : Cu.         | 10                           | 9              | 8               | 6               | 4               | 10              | ...                           | ...            | ...              | ...              | ...   | ...   | overcast at n : [at n :  |
| 16              | St.-Cu.         | St.-Cu. : Cu.         | St.-Cu. : Ci.-Cu.     | 10                           | 7              | 6               | 6               | 7               | 7               | ...                           | ...            | ...              | ...              | ...   | ...   | ● early : p ● late a : fair p to o                               |
| 17              | Nb. : St.-Cu.   | St. : St.-Cu.         | St. : St.-Cu.         | 8                            | 8              | 10              | 7               | 8               | 10              | p ● <sup>0</sup>              | ...            | p ●              | ...              | p ●   | ● <sup>0</sup> ≡ <sup>0</sup>                               | Fair to cloudy all day. [and ≡ <sup>0</sup> n :                  |
| 18              | St.             | St. : St.-Cu.         | St. : St.-Cu.         | 10                           | 10             | 8               | 8               | 6               | 2               | ...                           | ...            | ...              | ...              | ...   | ...   | Fair early : c to o p ● a and p : ● <sup>0</sup>                 |
| 19              | St.             | St. : St.-Cu.         | Nb. : St.-Cu.         | 8                            | 5              | 9               | 9               | 10              | 9               | ...                           | ...            | p ●              | ...              | ...   | ...   | o to ca : p ● <sup>0</sup> to bc p : fine to p ● <sup>2</sup> n, |
| 20              | St.-Cu.         | Cu. : A-St.           | St.-Cu. : A-St.       | 6                            | 8              | 8               | 9               | 10              | 10              | ...                           | ...            | ...              | ...              | ...   | ...   | o p ● to fair a : c to o p ● p : ● <sup>0</sup> n :              |
| 21              | St.             | St. : A-St.           | St.                   | 10                           | 10             | 10              | 10              | 10              | 10              | ...                           | ...            | ...              | ...              | ...   | ...   | p ● <sup>0</sup> early to c, b, c a : o p to o ● n :             |
| 22              | Nb. : St.-Cu.   | St.-Cu. : A-Cu.       | St.-Cu.               | 9                            | 10             | 3               | 8               | 5               | 4               | p ●                           | ●              | ...              | ...              | ...   | ...   | [intermittent in p :   |
| 23              | St.-Cu. : A-St. | St.                   | St.                   | 10                           | 10             | 10              | 10              | 10              | 10              | ...                           | ...            | ...              | ...              | ...   | ...   | Overcast all day with ●, steady in a.                            |
| 24              | St. : St.-Cu.   | Cu. : A-Cu.           | Cu. : St.-Cu.         | 10                           | 6              | 8               | 10              | 3               | 1               | ...                           | ...            | ...              | ...              | ...   | ...   | c to o p ● ▲ a : fair or fine p and n :                          |
| 25              | Cu.             | Cu.                   | Cu. : A-St.           | 9                            | 8              | 3               | 8               | 3               | 4               | ...                           | ...            | ...              | ...              | ...   | ...   | o or c a : o ● <sup>0</sup> to o ● p and n :                     |
| 26              | St.-Cu. : A-St. | Cu. : A-St. : A-Cu.   | St. : St.-Cu. : A-St. | 10                           | 8              | 9               | 9               | 10              | 10              | ...                           | ...            | ...              | ...              | ...   | ...   | o to bc or b a : c to op ▲ p : p ▲                               |
| 27              | —               | Cu. : A-St.           | St. : St.-Cu.         | —                            | 3              | 9               | 7               | 8               | 10              | ...                           | ...            | ...              | ...              | ...   | ...   | and p ● to fine n :  |
| 28              | St. : St.-Cu.   | St.-Cu.               | St.                   | 4                            | 8              | 10              | 10              | 10              | 10              | ...                           | ...            | ...              | ...              | ...   | ...   | o to b a : fair p : fair or fine n :                             |
| 29              | St.             | St. : St.-Cu. : A-St. | St. : St.-Cu. : A-St. | 10                           | 8              | 10              | 10              | 10              | 10              | ...                           | ...            | ...              | ...              | ...   | ...   | c or o all day : [at n :   |
| 30              | St.             | St. : St.-Cu.         | St.                   | 10                           | 8              | 10              | 10              | 10              | 10              | ● <sup>0</sup> ≡ <sup>0</sup> | ...            | ...              | ...              | ...   | ...   | Fine or fair a : o or c p and n :                                |
| 31              | St.             | St. : St.-Cu. : A-St. | St.-Cu.               | 10                           | 10             | 10              | 7               | 1               | 2               | ...                           | ...            | ...              | ...              | ...   | ...   | Fine to o with ∞ a : o p : o with                                |
| Mean Cloud Am't |                 |                       |                       | 8.0                          | 8.4            | 8.2             | 8.2             | 7.6             | 7.1             |                               |                |                  |                  |   |   | ≡ <sup>0</sup> and ● <sup>0</sup> n :                            |

371. Cahirciveen (Valencia Observatory).

|                 |                |                       |                       |                              |                |                 |                 |                 |                 |                  |                |                  |                 |                  |                 |  |
|-----------------|----------------|-----------------------|-----------------------|------------------------------|----------------|-----------------|-----------------|-----------------|-----------------|------------------|----------------|------------------|-----------------|------------------|-----------------|--|
| 1               | St.            | St.-Cu.               | St.-Cu.               | 8                            | 5              | 6               | 5               | 4               | 2               | ...              | ...            | ...              | ...             | ...              | ...             | c p ● to fair early and a : fair or                    |
| 2               | St.-Cu.        | St.-Cu.               | St.                   | 10                           | 9              | 9               | 8               | 10              | 10              | ...              | ...            | ...              | ...             | p ● <sup>0</sup> | ...             | fine p : c p ● <sup>0</sup> to fine n :                |
| 3               | St.            | St.-Cu.               | St.-Cu.               | 10                           | 9              | 10              | 10              | 10              | 3               | ● <sup>0</sup>   | ...            | ...              | ...             | ...              | ...             | c or o with ● <sup>0</sup> early : fair p to o p ● n : |
| 4               | St.-Cu.        | St.-Cu.               | St. : St.-Cu.         | 10                           | 10             | 9               | 8               | 8               | 10              | ...              | ...            | ...              | ...             | ...              | ...             | c or o at times a : o p to ● n :                       |
| 5               | St.            | St.-Cu.               | St.-Cu.               | 10                           | 10             | 10              | 10              | 8               | 10              | ...              | ...            | ()               | ()              | ...              | ...             | o a to c p : o n : [fair or fine n :                   |
| 6               | St.            | St.-Cu. : A-Cu.       | St.-Cu.               | 10                           | 10             | 7               | 7               | 8               | 10              | ...              | ...            | ...              | ...             | ...              | ...             | o or c all day : () a and p :                          |
| 7               | St.-Cu.        | St. : A-St.           | St.-Cu. : A-St.       | 9                            | 8              | 10              | 9               | 8               | 7               | ...              | ...            | ...              | ...             | ...              | ...             | o or c all day : () a and p :                          |
| 8               | St.-Cu.        | St. : A-St.           | St. : A-St.           | 10                           | 8              | 10              | 10              | 10              | 10              | ...              | ...            | ...              | ...             | ...              | ...             | o or c with ● at times a : o to o ● <sup>2</sup>       |
| 9               | St.            | Cu.                   | St. : St.-Cu. : A-St. | 10                           | 3              | 2               | 8               | 10              | 9               | ...              | ...            | ...              | ...             | ...              | p ●             | p and n : [fair to c p ● and n :                       |
| 10              | St.            | St.-Cu.               | St. : St.-Cu.         | 10                           | 9              | 9               | 8               | 8               | 9               | ...              | ...            | ...              | p ●             | ...              | ...             | o ● <sup>2</sup> early to fine a with p ● :            |
| 11              | St.            | Cu. : A-Cu. : Ci.-Cu. | St. : St.-Cu.         | 10                           | 7              | 6               | 7               | 8               | 9               | ...              | ...            | ...              | ...             | ...              | ...             | o ● early to o a : c p ● p to fair or c n :            |
| 12              | St.-Cu.        | St.-Cu. : A-St.       | St.-Cu. : A-St.       | 10                           | 10             | 10              | 10              | 10              | 10              | ...              | ...            | ...              | ...             | ...              | ...             | Variable cloud a : c p : fair, o p to ● n :            |
| 13              | St.-Cu.        | St.-Cu.               | St.-Cu.               | 10                           | 9              | 7               | 7               | 7               | 8               | ...              | ...            | ∞                | ∞               | ∞                | ∞               | o all day with squalls in p : o at n :                 |
| 14              | St.            | St.-Cu.               | St. : A-St.           | 10                           | 4              | 4               | 2               | 10              | 10              | ∞                | ∞              | ∞                | ∞               | ∞                | ∞               | o or c all day with ∞. [o n :                          |
| 15              | St. : A-St.    | St.-Cu. : A-Cu.       | St. : St.-Cu. : A-St. | 8                            | 9              | 7               | 10              | 8               | 10              | ...              | ...            | ...              | ...             | ...              | ...             | Fair or fine day with ∞ to o ● <sup>0</sup> and        |
| 16              | St.-Cu.        | Cu.                   | St.-Cu.               | 6                            | 4              | 1               | -               | 2               | -               | ...              | ...            | ...              | ...             | ...              | ...             | band o p ● early : c or o with p ● a :                 |
| 17              | St.            | A-St.                 | St.-Cu. : A-Cu.       | 9                            | 9              | 5               | 3               | 5               | 10              | ≡ <sup>0</sup> □ | ∞ □            | ∞                | ∞               | ∞                | ∞               | c p to o ● n :   |
| 18              | St.-Cu.        | St.-Cu. : Cu.         | St.-Cu.               | 10                           | 7              | 7               | 7               | 6               | 8               | ...              | ...            | ...              | ...             | ...              | ...             | Fair or fine a : fine p : fine with ∞ n :              |
| 19              | St.            | Cu.                   | St.-Cu.               | 1                            | 3              | 2               | 7               | 8               | 10              | ...              | ...            | ...              | ...             | ...              | ...             | □ early : fair to o with ∞ a : b or                    |
| 20              | St.            | St. : A-St.           | St.                   | 9                            | 8              | 10              | 10              | 10              | 10              | ...              | ...            | ...              | ...             | ...              | ...             | bc with ∞ p : o ∞ n : [squalls a :                     |
| 21              | St.-Cu.        | St. : St.-Cu.         | St. : St.-Cu.         | 10                           | 10             | 7               | 8               | 7               | 5               | ...              | ...            | ...              | ...             | ...              | ...             | o ● early : o or c a and p : bc to c n :               |
| 22              | St.            | Cu.                   | St. : Ci.-St.         | 1                            | 1              | 1               | 1               | 4               | 4               | ...              | ...            | ...              | ...             | ...              | ...             | Fine a to c in p and o at n :                          |
| 23              | St.            | St.-Cu.               | St.-Cu.               | 5                            | 9              | 4               | 5               | 4               | -               | □                | ...            | ...              | ...             | ...              | ...             | c or o all day : ● <sup>0</sup> early p :              |
| 24              | St.            | St.-Cu.               | St.                   | 10                           | 10             | 9               | 9               | 10              | 10              | ...              | ● <sup>0</sup> | ...              | ...             | ...              | ...             | o a to c p : fair to o n :                             |
| 25              | St.-Cu.        | St. : A-St.           | St.-Cu.               | 7                            | 9              | 8               | 9               | 7               | 3               | ...              | ...            | ...              | ...             | ...              | ...             | Fine day : fair n :                                    |
| 26              | A-St. : A-Cu.  | Cu.                   | St.-Cu.               | 6                            | -              | 1               | 1               | 3               | 7               | □                | ∞              | ...              | ...             | ...              | ...             | □ early : bc to o a : bc p to b n :                    |
| 27              | St.            | St.-Cu. : A-St.       | St. : St.-Cu.         | 10                           | 8              | 9               | 6               | 3               | 5               | ...              | ...            | ...              | ...             | ...              | ...             | Fine early to o with ● <sup>0</sup> a : o p and        |
| 28              | St.-Cu.        | St.-Cu. : A-St.       | St.-Cu.               | 10                           | 9              | 8               | 6               | 8               | 8               | ...              | ...            | ...              | ...             | ...              | ...             | n : ● <sup>0</sup> late p :                            |
| 29              | St.-Cu.        | St. : A-St.           | St.-Cu.               | 10                           | 8              | 10              | 8               | 6               | 10              | ...              | ...            | p ● <sup>0</sup> | ...             | p ●              | ...             | c or o a : o ● <sup>0</sup> early p to fine at n :     |
| Mean Cloud Am't |                |                       |                       | 8.6                          | 7.4            | 6.8             | 6.9             | 7.2             | 7.5             |                  |                |                  |                 |                  |                 | [to c at n :   |
| Day.            | 7 <sup>h</sup> | 13 <sup>h</sup>       | 18 <sup>h</sup>       | 7 <sup>h</sup>               | 9 <sup>h</sup> | 13 <sup>h</sup> | 15 <sup>h</sup> | 17 <sup>h</sup> | 21 <sup>h</sup> | 7 <sup>h</sup>   | 9 <sup>h</sup> | 13 <sup>h</sup>  | 15 <sup>h</sup> | 18 <sup>h</sup>  | 21 <sup>h</sup> | Remarks.   |
|                 | Cloud Forms.   |                       |                       | Cloud Amount<br>(All Forms). |                |                 |                 |                 |                 | Weather.         |                |                  |                 |                  |                 |  |



372. Cahirciveen (Valencia Observatory).

March, 1924.

Table for March 1924 at Cahirciveen. Columns include Day, Cloud Forms (7h, 13h, 18h), Cloud Amount (7h-21h), Weather (7h-21h), and Remarks. Data rows 1-31 show various cloud types like Cu, St, and weather conditions like p, o, c.

373. Cahirciveen (Valencia Observatory).

April, 1924.

Table for April 1924 at Cahirciveen. Columns include Day, Cloud Forms (7h, 13h, 18h), Cloud Amount (7h-21h), Weather (7h-21h), and Remarks. Data rows 1-30 show various cloud types like Cu, St, and weather conditions like p, o, c.

374. Cahirciveen (Valencia Observatory).

Table for May 1924 at Cahirciveen. Columns include Day, Cloud Forms (7h, 13h, 18h), Cloud Amount (7h-21h), Weather (7h-21h), and Remarks. Data rows 1-31 show cloud types like St., St-Cu., Ci., and weather symbols like p, o, c, n.

375. Cahirciveen (Valencia Observatory).

Table for June 1924 at Cahirciveen. Columns include Day, Cloud Forms (7h, 13h, 18h), Cloud Amount (7h-21h), Weather (7h-21h), and Remarks. Data rows 1-30 show cloud types like St., St-Cu., Ci., and weather symbols like p, o, c, n.

376. Cahirciveen (Valencia Observatory).

July, 1924.

Table for July 1924 with columns for Day, Cloud Forms (7h, 13h, 18h), Cloud Amount (7h, 9h, 13h, 15h, 18h, 21h), Weather (7h, 9h, 13h, 15h, 18h, 21h), and Remarks. Includes a Mean Cloud Am't row at the bottom.

377. Cahirciveen (Valencia Observatory).

August, 1924.

Table for August 1924 with columns for Day, Cloud Forms (7h, 13h, 18h), Cloud Amount (7h, 9h, 13h, 15h, 18h, 21h), Weather (7h, 9h, 13h, 15h, 18h, 21h), and Remarks. Includes a Mean Cloud Am't row at the bottom.

378. Cahirciveen (Valencia Observatory).

September, 1924.

Table for 378. Cahirciveen (Valencia Observatory) for September 1924. Columns include Day, Cloud Forms (7h, 13h, 18h), Cloud Amount (All Forms) (7h, 9h, 13h, 15h, 18h, 21h), Weather (7h, 9h, 13h, 15h, 18h, 21h), and Remarks. Includes a Mean Cloud Am't row at the bottom.

379. Cahirciveen (Valencia Observatory).

October, 1924.

Table for 379. Cahirciveen (Valencia Observatory) for October 1924. Columns include Day, Cloud Forms (7h, 13h, 18h), Cloud Amount (All Forms) (7h, 9h, 13h, 15h, 18h, 21h), Weather (7h, 9h, 13h, 15h, 18h, 21h), and Remarks. Includes a Mean Cloud Am't row at the bottom.

380. Cahirciveen (Valencia Observatory).

November, 1924.

Table for 380. Cahirciveen (Valencia Observatory) for November 1924. Columns include Day, Cloud Forms (7h, 13h, 18h), Cloud Amount (All Forms) (7h, 9h, 13h, 15h, 18h, 21h), Weather (7h, 9h, 13h, 15h, 18h, 21h), and Remarks. Data rows 1-30 and Mean Cloud Am't.

381. Cahirciveen (Valencia Observatory).

December, 1924.

Table for 381. Cahirciveen (Valencia Observatory) for December 1924. Columns include Day, Cloud Forms (7h, 13h, 18h), Cloud Amount (All Forms) (7h, 9h, 13h, 15h, 18h, 21h), Weather (7h, 9h, 13h, 15h, 18h, 21h), and Remarks. Data rows 1-31 and Mean Cloud Am't and Mean Annual Cloud Am't.



Air Ministry  
METEOROLOGICAL OFFICE

THE  
OBSERVATORIES' YEAR BOOK  
1924

Comprising the meteorological and geophysical results obtained from autographic records and eye observations at the observatories at Lerwick, Aberdeen, Eskdalemuir, Cahirciveen (Valencia Observatory), and Richmond (Kew Observatory), and the results of soundings of the upper atmosphere by means of registering balloons.

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RICHMOND (KEW OBSERVATORY)

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PUBLISHED BY HIS MAJESTY'S STATIONERY OFFICE.

## RICHMOND (KEW OBSERVATORY).

|                                   |            |
|-----------------------------------|------------|
| Latitude .. .. .                  | 51° 28' N. |
| Longitude .. .. .                 | 0° 19' W.  |
| G.M.T. of Local Mean Noon .. .. . | 12h 1m.    |

### *Heights in Metres above Sea Level.*

|                                 |      |
|---------------------------------|------|
| Barometer .. .. .               | 10·4 |
| Raingauge .. .. .               | 5·5  |
| Robinson Cup Anemograph .. .. . | 25   |
| Dines Tube Anemograph .. .. .   | 25   |

### *Heights in Metres above Ground.*

|                                 |      |
|---------------------------------|------|
| Thermometer Bulbs .. .. .       | 3·0  |
| Sunshine Recorder .. .. .       | 13·3 |
| Robinson Cup Anemograph .. .. . | 20   |
| Dines Tube Anemograph .. .. .   | 20   |

## INTRODUCTION.

### SITE.

The Observatory was built in 1769 as the private observatory of King George III. Since 1842 it has been devoted to physics and meteorology. The meteorological records are continuous from 1854. The Observatory is in the Old Deer Park, Richmond (Surrey), about 10 miles (16 km.) to the west of the City of London. The Observatory stands on a low artificial mound whose level is about  $1\frac{1}{2}$  metres higher than that of the surrounding park. The river Thames is distant about 300 metres on the north and west. Kew Gardens, which are extensively wooded, lie to the east-north-east, the nearest point of the Gardens being about 600 metres away. The town of Richmond, to the south-east, is about 1,100 metres distant. On the east side of the Park is the main road from Richmond to Kew; on the south side the railway from Richmond to Twickenham. The Old Deer Park is mainly open pasture. Round the Observatory a golf course has been laid out. Another open area partly wooded, Syon Park, lies to the north-north-east across the river. Richmond Park is about  $1\frac{1}{2}$  miles ( $2\frac{1}{2}$  km.) to the south-east. For general views of the Observatory building and the exposure lawn, see the 1923 volume. For the early history of the Observatory reference may be made to papers by R. H. Scott (Royal Society's Proceedings, Vol. 39 (1885), pp. 37-86), and C. Chree (The Record of the Royal Society, 1897).

### METEOROLOGY.

The elements dealt with in the following tables are: atmospheric pressure, temperature, humidity, rainfall, sunshine, solar radiation, wind speed and direction, earth temperature, minimum temperature on the grass, level of underground water; there is also a diary of cloud and weather.

For brief descriptions of most of the instruments from which values of the above elements have been obtained and of the methods of tabulating the records, reference should be made to the General Introduction (pp. 10-16). The following notes supplement, where necessary, the information contained therein.



### Notes on Instruments.

*Pressure.*—The barograph is mounted in the magnetograph room (in the basement of the Observatory) where the diurnal variation of temperature is very small. The barograph magnifies barometric changes in the ratio 1.553 : 1, i.e. the change of ordinate equivalent to a change of 1 mm. in the height of the barometer is 1.553 mm. "Residual corrections," obtained from the control observations taken daily with the Newman barometer at 9h, 15h and 21h, are applied to the hourly measurements. The same correction is applied to all the readings on the same photographic sheet, i.e. generally for forty-eight hours. The individual entries published for the hours of the control observations may differ by .3 mb. from those observations. The Newman barometer is compared from time to time with the two large mercury barometers, which were set up in 1855 and 1860 respectively and are still recognised as standards. A zero correction is based on these comparisons. A comparison, made in 1924, confirmed the correction +0.2 mb. (+ .006 mercury inch) which has been applied for many years. Comparisons are made on the assumption that the value of the acceleration due to gravity is  $g = 981.199 \text{ cm./sec}^2$ . This is the value given by pendulum observations. The departure from the value given for the latitude by Helmert's formula is insignificant. On a few occasions when a loss of trace occurred, the missing hourly values were derived from the Dines Float Barograph.\* There were 27 hours in the year for which this was necessary.

*Temperature and Humidity.*—The thermograph is mounted in the West Room on the first floor of the Observatory, the thermometer bulbs being exposed in the screen attached to the north wall of the building. This screen has single louvres and the bottom is open. There is an additional flat louvred screen which shields the main screen from direct sunshine when the sun is in the West and not too low. The height of the bottom of the bulbs of the recording thermometers above the bottom of the sides of the screen containing them is 30 cm. in summer, 33 cm. in winter. The height of the bulbs above the top of the artificial mound on which the Observatory stands is approximately 3 metres; the height above the lawn where the raingauge is situated is approximately 5 metres. The scale values of the photographic records are not identical for the dry and wet-bulb curves. For the dry-bulb, tube No. 4 was in use from the beginning of the year until May 22nd, and the scale value was 1 mm. = 0.2715a. From May 22nd to the end of the year No. 4 II was installed and the scale value was 1 mm. = 0.3336a; for the wet-bulb the old Falmouth wet-bulb tube (no number) was in use and the scale value was 1 mm. = 0.290a.

The control thermometers, which were graduated and mounted by Messrs. Negretti & Zambra in 1915, had been made and filled many years before and were therefore well seasoned. The National Physical Laboratory certificates dated 1915 give corrections to the nearest 0.05° C., the largest being 0.10°. The thermometers are tested each January in ice. According to tests made in January, 1924, there was no indication of any change of zero.

Control eye-readings of the standard thermometers are taken daily at 9h., 15h. and 21h. Residual corrections obtained from the control observations are applied to the hourly measurements of the curves. The same correction is applied to all the readings on the same photographic sheet, i.e. generally for forty-eight hours. The individual entries published for the hours of the control observations may differ by 0.3a from these observations. The larger departures refer to occasions when temperature is oscillating or changing rapidly.

When failure of the dry-bulb trace occurs recourse is had to the trace from the Callendar platinum-thermometer recorder, the thermometer of which is in the North-wall screen and adjacent to the mercury thermometers. Forty-two hours had to be thus dealt with during the year. When the wet-bulb trace is missing or defective, the

\*For a description of this instrument see *Observatories' Year Book*, 1923, p. 94.

missing values are derived from the dry-bulb trace and the records of a hair hygrometer. The same procedure is always adopted when the wet-bulb reading is below 27.3a. 198 hours had thus to be dealt with during the year. Humidity is determined from the dry and wet bulb readings by the table, based on Glaisher's factors, published in the *Computer's Handbook*.

It may be noted that during 1924, as in previous years, the temperatures published for Kew Observatory in the Daily Weather Report and elsewhere also refer to the North-wall screen. For the daily and weekly reports the readings of maximum and minimum thermometers exposed in that screen are utilised.

*Rainfall.*—As from January, 1921, the standard raingauge for the Observatory has been an 8-inch gauge with the deep "Snowdon" funnel. The site is level and protected from wind, principally by hedges about 1½ m. high and distant 11 metres to East and 17 metres to West. The readings of this standard gauge are at 7h and 18h. The hourly readings of the Beckley gauge are adjusted to give totals in agreement with the standard gauge.

*Sunshine.*—The sunshine recorder is mounted on the south parapet of the roof. The same frame has been in use since 1880 and it is believed that the ball has not been changed. The ball is now somewhat yellow.

*Solar Radiation.*—Observations are made with an Ångström pyrheliometer, which measures the intensity of the direct radiation received from the sun by a surface which is normal to the sun's rays. The observations are made within half an hour of noon on all days except Sundays, provided that the sun is visible and not too much obscured by cloud, fog or thick haze. The conditions of the intervening atmosphere are indicated in Tables 440-451 in the column "sky." The amount of radiation is given in milliwatts per square centimetre in the column headed "total." For conversion to the unit more ordinarily employed abroad, the following relation may be used, 1mw. per sq. cm. = 0.01435 gramme-calorie per sq. cm. per minute. The vertical component, i.e. the direct radiation received per square centimetre of a horizontal surface, is also given.

The Ångström instruments in use are by Rose, Stockholm. No. 100 was in use in January and February and from July 15th to the end of the year. Both No. 100 and the older instrument No. 24 were sent to the maker in March for renewal of the black strips. The ammeter is No. 68956, which was certified at the National Physical Laboratory in 1919. The readings are evaluated according to Ångström's original instructions. To bring the readings into accordance with the scale adopted by the Smithsonian Institution, a correction of +3.5 per cent. is required.\* During the period when the Ångström instruments were not available readings were made with the Abbot silver disc pyrheliometer No. 28. These readings have been adjusted to the Ångström scale.

*Wind Speed and Direction.*—The Robinson cup anemograph from which the results are mainly derived is exposed on the roof of the Observatory. This instrument has 9 inch cups; the radius of the circle described by their centres is 24 inches. The horizontal arms are 17.8 mm. wide; their vertical thickness is 4.6 mm. in the middle and 2.5 mm. at the edges. The oblique stays are rectangular in section, the dimensions being 6.3 mm. (facing the wind) and 3.8 mm. (facing upwards). The height of the cups above the lawn is 20 m. There are trees in the neighbourhood reaching greater heights. Those along the river to the West of the Observatory and about 280 m. away average 25 m.

Wind direction is taken from the Beckley vane. Direction is not tabulated when the speed of the wind averages less than 1.6 metres per second. Data missing owing to imperfections of the trace or other causes are replaced by results from the Dines tube anemograph, the head of which is approximately at the same height as the Robinson anemograph cups. The head of the present Dines instrument, set up at the beginning of the year 1923, is of the Mark II pattern. In the vertical tube

\* R. E. Watson. *Geophysical Memoir*, No. 21, 1923.

there are 80 holes in 4 rows of 20. The diameter of each hole is 3 mm. The connecting tubes, 17 metres long, have the internal diameter 12 mm.

*Earth Temperature.*—The two thermometers in use were at 30 cm. and 122 cm. The ground in which the tubes for the thermometers are sunk is under grass. The soil is gravel. The site is well exposed. There are, however, three fruit trees about 9 metres to the east and 6 metres high. The bulb of the lower thermometer is 430 cm. above sea level. As will be seen from Table 468, the surface of the underground water surpassed this level towards the end of the year when the park was flooded.

*Minimum Temperature on the Grass.*—The grass minimum thermometer is set at 18h and read at 9h on the succeeding day, the reading being assigned to the day of reading.

This thermometer has a spherical bulb, diameter 17 mm. The thermometer is placed with the bulb about 25 mm. above the turf. The exposure is good, there being no obstruction within 76° from the zenith.

IDENTIFICATION NUMBERS OF INSTRUMENTS IN USE IN 1924.

|   |         |                          |
|---|---------|--------------------------|
| Control Barometer                         | .. .. . | Newman 34                |
| Control Dry Bulb Thermometer              | .. .. . | Negretti & Zambra 173971 |
| Control Wet Bulb Thermometer              | .. .. . | Negretti & Zambra 173969 |
| Control Raingauge (8-inch)                | .. .. . | M.O. 1271                |
| Measuring Glass for the Control Raingauge | .. .. . | M.O. 1409 & 1425         |
| Campbell-Stokes Sunshine Recorder         | .. .. . | M.O. 12                  |
| Dines Tube Anemograph Head                | .. .. . | M.O. 1017                |
| Dines Tube Anemograph Recorder            | .. .. . | M.O. 1017                |
| Earth Thermometer 1 ft.                   | .. .. . | M.O. 5                   |
| Earth Thermometer 4 ft.                   | .. .. . | M.O. 10                  |
| Grass Minimum Thermometer                 | .. .. . | M.O. 23001 & 23005       |
| Photo-thermograph                         | .. .. . | No number                |
| Photo-barograph                           | .. .. . | "                        |
| Robinson Cup Anemograph                   | .. .. . | "                        |

**Notes on the Meteorological Tables.**

*The weather of 1924.*—The year was notable for the dull, wet and cool summer. In every month from April to December the rainfall exceeded the normal. In the gale of October one of the three elms which grew close to the Observatory on the south-east was blown down. At the end of December a large part of the Old Deer Park was flooded and water rose in the Observatory cellars to a higher level than on any occasion since the basement was reconstructed in 1913.

*Pressure.*—During the year pressure at station level ranged between 981.4 mb and 1037.2 mb. These values occurred on February 9th and January 26th respectively. The extreme values of the mean pressure for the calendar day were 984.8 mb on February 10th and 1033.5 mb. on November 19th. The low pressures of February 9th and 10th were general over a very large area, sea level readings as low as 975 mb occurring in the south of Ireland. The high pressure on January 26th was on the north side of a ridge of higher pressure over northern France and on the flank of a broad current of air flowing across the British Isles from SW to NE. On the other hand the high pressure on November 19th occurred in the muggy weather of a persistent anticyclone.

*Pressure (Diurnal Variation).*—In accordance with the precedent of the last two years the first four harmonic components have been computed for each month. The results are tabulated in Table A.

The inequality is supposed to be given by the expression

$$c_1 \sin (15 t^\circ + \alpha_1) + c_2 \sin (30 t^\circ + \alpha_2) + \dots$$

*t* being the time in hours since midnight. The angles  $\alpha$  are the phases of the several sine-waves at midnight. The curves are tabulated according to Greenwich mean time but the phases in Table A have been reduced to local mean time. The difference

in Longitude between Kew and Greenwich being only 19' the correction is hardly appreciable in the figures which are rounded to the nearest degree.

As is well known for a single month the first harmonic component departs erratically from the normal value\* computed from averages covering many years. The passage of a depression across the country is recorded in the pressure tabulations as a rise and fall of perhaps 30 millibars and affects the average hourly values for the month to the extent of a millibar. The normal values of the amplitude of the first component are comparatively large in summer, about .3 millibar, and very small in winter. The highest value found in 1924, .561 millibar in April, is just double the normal for the month. The next one, February, .413 millibar, is very large compared with the normal .059 millibar. For the summer months the phases of the first component are fairly consistent; Kew being an inland station pressure tends to be high in the early morning about sunrise and lowest in the early afternoon. The phases for the winter half year are promiscuous. On the other hand, the amplitudes and phases of the higher components are all comparatively close to their normal values. Thus the maximum amplitude of the second component occurs as it should in April. The amplitude is .426 mb as compared with a normal .407 mb; the phase is 144° as compared with 151°. The maximum of the third component is in January, .184 mb, the normal being .166 mb, the phase is 343° instead of 347°. For the fourth component the maximum is also in January, .093 mb, the normal for that month being .071 mb. The phase is 221° instead of 204°, the difference being equivalent to about a quarter of an hour.

TABLE A.

Diurnal Variation of Barometric Pressure. Fourier Coefficients.  
Richmond (Kew Observatory), Longitude 0° 19' W. 1924.

| Month or Season.       | $c_1$ | $\alpha_1$ | $c_2$ | $\alpha_2$ | $c_3$ | $\alpha_3$ | $c_4$ | $\alpha_4$ |
|------------------------|-------|------------|-------|------------|-------|------------|-------|------------|
|                        | mb.   | °          | mb.   | °          | mb.   | °          | mb.   | °          |
| January ... ..         | .153  | 204        | .287  | 137        | .184  | 343        | .093  | 221        |
| February ... ..        | .413  | 59         | .305  | 151        | .143  | 333        | .046  | 81         |
| March ... ..           | .026  | 61         | .409  | 142        | .069  | 322        | .060  | 42         |
| April ... ..           | .561  | 34         | .426  | 145        | .029  | 205        | .024  | 19         |
| May ... ..             | .234  | 25         | .272  | 142        | .070  | 150        | .023  | 320        |
| June ... ..            | .283  | 13         | .304  | 139        | .076  | 149        | .019  | 91         |
| July ... ..            | .504  | 358        | .261  | 128        | .083  | 159        | .011  | 176        |
| August ... ..          | .198  | 42         | .282  | 149        | .028  | 147        | .041  | 320        |
| September ... ..       | .205  | 220        | .363  | 151        | .010  | 12         | .053  | 333        |
| October ... ..         | .316  | 269        | .263  | 158        | .090  | 344        | .034  | 27         |
| November ... ..        | .102  | 306        | .366  | 159        | .134  | 17         | .005  | 260        |
| December ... ..        | .214  | 138        | .348  | 159        | .176  | 2          | .067  | 189        |
| Arithmetic Mean ... .. | .267  | ...        | .324  | ...        | .091  | ...        | .040  | ...        |
| Year ... ..            | .127  | 20         | .320  | 147        | .042  | 356        | .004  | 346        |
| Winter ... ..          | .088  | 94         | .320  | 152        | .153  | 353        | .033  | 193        |
| Equinox ... ..         | .082  | 341        | .364  | 148        | .037  | 328        | .037  | 15         |
| Summer ... ..          | .291  | 14         | .278  | 140        | .064  | 152        | .011  | 331        |

Note.—*Winter* comprises the four months, January, February, November, December.  
*Equinox* the months March, April, September, October, and *Summer* May to August.

*Temperature.*—There were no prolonged spells of very hot or very cold weather during the year. The latter half of the summer was decidedly cool and, on the other hand, December was exceptionally mild, temperature in the north wall screen going below the freezing point on only two nights.

The lowest temperature recorded in this screen was 268.5a (23.9° F.). This occurred about sunrise on February 15th after a clear night with little wind. Easterly winds had been bringing cold air from the continent for some days previously. The

\* The normals quoted refer to the period 1871-1915.

lowest average temperature for a calendar day was 271.5a (29.3° F.). This is credited to January 9th, which was the only day of the year on which temperature did not rise above the freezing point. The maximum during the daylight hours was 272.6a; the entry in Table is 272.8a and refers to the first midnight of the calendar day. The sky was overcast continually and the wind, strong and squally, was from the east.

The hottest day of the year was July 12th, the average for the 24 hours being 296.7a (74.7° F.). At sunrise the temperature was 289.1a (61.0° F.) (the highest minimum of the year) and the maximum, reached about 15h, was 302.9a (85.8° F.). On the day in question there was a deep current of warm air from the south. At South Farnborough at 5.30 in the morning 66° F. was reported at 1,100 ft. and 46° F. at 9,270 ft. The only other day on which the maximum reading at Kew Observatory exceeded 300a was the preceding one, July 11th.

*Temperature (Diurnal Variation).*—The Table of diurnal inequalities of temperature exhibits the normal characteristics, the minimum for the day occurring at sunrise, the maximum in the late afternoon. The case of January is somewhat anomalous, the minimum being as early as 3 h. This is to be attributed to the setting in of warmer winds during the later part of the night on two or three occasions. Harmonic analysis shows the first component as the dominant one in all months of the year; the second component is very small in the summer months when the interval between the daily maxima and minima approximates to 12 hours. In the year under review the most striking departure from the normal was in the case of March. This was a very sunny month and the daily range of temperature was high. The mean difference between the temperatures at 7 h and 15 h was 6.67a as compared with the normal 5.09a. The amplitude of the first harmonic component was 3.06a or 24 per cent. above normal, that of the second, 0.95a, was 53 per cent. above normal and nearly double that for any other month. On the other hand, the lack of sunshine in August and September was responsible for considerable reductions in the amplitudes of the leading components.

TABLE B.  
Diurnal Variation of Temperature. Fourier Coefficients.  
Richmond (Kew Observatory), Longitude 0° 19' W.

| Month or Season.       | $c_1$ | $\alpha_1$ | $c_2$ | $\alpha_2$ | $c_3$ | $\alpha_3$ | $c_4$ | $\alpha_4$ |
|------------------------|-------|------------|-------|------------|-------|------------|-------|------------|
|                        | a.    | °          | a.    | °          | a.    | °          | a.    | °          |
| January ... ..         | 1.057 | 224        | .356  | 34         | .226  | 197        | .023  | 351        |
| February ... ..        | 1.321 | 213        | .483  | 39         | .092  | 227        | .096  | 169        |
| March ... ..           | 3.063 | 221        | .953  | 29         | .028  | 83         | .081  | 176        |
| April ... ..           | 3.081 | 224        | .428  | 27         | .308  | 34         | .100  | 250        |
| May ... ..             | 3.507 | 230        | .280  | 53         | .329  | 35         | .067  | 30         |
| June ... ..            | 3.600 | 221        | .104  | 337        | .217  | 12         | .079  | 352        |
| July ... ..            | 3.877 | 224        | .073  | 259        | .352  | 10         | .124  | 38         |
| August ... ..          | 2.983 | 231        | .420  | 65         | .220  | 39         | .037  | 303        |
| September ... ..       | 2.105 | 235        | .513  | 35         | .087  | 64         | .146  | 219        |
| October ... ..         | 1.854 | 220        | .534  | 56         | .077  | 265        | .121  | 232        |
| November ... ..        | 1.075 | 224        | .514  | 46         | .111  | 251        | .064  | 77         |
| December ... ..        | 0.770 | 231        | .460  | 47         | .158  | 226        | .041  | 100        |
| Arithmetic Mean ... .. | 2.358 | ...        | .427  | ...        | .188  | ...        | .082  | ...        |
| Year ... ..            | 2.349 | 225        | .403  | 40         | .076  | 18         | .010  | 215        |
| Winter ... ..          | 1.048 | 222        | .451  | 42         | .138  | 221        | .034  | 119        |
| Equinox ... ..         | 2.513 | 225        | .596  | 36         | .088  | 34         | .102  | 222        |
| Summer ... ..          | 3.484 | 226        | .163  | 49         | .272  | 24         | .066  | 15         |

NOTE.—*Winter* comprises the four months January, February, November, December.  
*Equinox* the months March, April, September, October, and *Summer* May to August.

*Humidity.*—The humidity tables illustrate the contrast between the dry conditions which prevailed from February to July and the wet ones in the rest of the year.

The diurnal variation of relative humidity has always the same general characteristics, but it is of some interest to notice that the monthly means of hourly values do not run "smoothly." It has been found that this is mostly due to the irregularity of occurrence of rain; a shower causes a sudden rise in humidity and the effect is not averaged out in a single month. There is an appreciable irregularity in the means of relative humidity for the year, the 14h value looking somewhat high.

The diurnal variation of vapour pressure at Kew is in all months of the simple type with the minimum at sunrise, and very slight changes after the dew has disappeared in the morning. An examination of the observations for the thirteen days in July 1924 on which no rain fell, showed that there was no such drop in vapour pressure as occurs in the middle of the day in desert climates. On the average of these thirteen days the vapor pressure was practically stationary at 13.5 millibars from 8h to midnight; the value at sunrise was 12.6 millibars.

*Rainfall.*—The year was a wet one, the total rainfall 786 mm. being 180 mm. above the normal (which is computed for the period 1881-1915). There was however no single month with excessive rain, the highest total, that of July, being only 95 mm. The heaviest fall credited to a single day was 27 mm., which occurred in a thunderstorm on July 17th. In reckoning the duration of rainfall it is the rule to ignore the time in which the rate of fall is less than 0.1 mm. per hour. By this criterion the day with the longest duration was November 12th with 15.6 hours. There were three other days with more than 12 hours. With regard to Tables 428-439 it should be mentioned that in cases of slight precipitation spread out over several hours, amounts of .1 mm. have been credited to certain hours at equal intervals whilst the appropriate symbol for dew, hoarfrost, or wet fog is shown for the other hours.\*

Snow or sleet fell on twenty days in the year, all with one exception being in the first four months. "Snow lying" at 7h was registered on six occasions, but the depth was never considerable. Snow which fell on the night of January 8th accumulated to about 4 cm. and persisted for two days. No deeper deposit was recorded during the year.

*Sunshine.*—The average daily duration of bright sunshine (as recorded by the Campbell-Stokes instrument) was 3.80 hours or 0.25 hours below the normal. There were large deficits in several months, notably in August. The longest duration, 14.7 hours, occurred on June 26th, the percentage of the time the sun was above the horizon being 89 on that day and also on July 14th. There were 75 sunless days in the year (including 15 in January and 15 in December) and 40 days with more than 9 hours (including 12 in July).

*Solar Radiation.*—The most powerful sunshine measured was on September 22nd, 93.1 milliwatts per square centimetre. Only two higher measurements, 98.9 mw/cm<sup>2</sup> on March 27th, 1923 and 94 mw/cm<sup>2</sup> on July 10th, 1916, have been made at the Observatory. The comparatively low elevation of the sun makes the observation the more noteworthy. The "Solar constant" being 135 mw/cm<sup>2</sup> the proportion of sunshine passing completely through the atmosphere on this occasion was 69 per cent.

*Wind.*—February 13th with an average speed of 9.9 metres per second was the most windy day of the year. For December 27th the average speed was a little less, 9.7 metres per second. At the other end of the scale was one day, December 10th, credited with an average of 0.3 metres per second; this came between two days with 0.6 and 0.5 metres per second. From 23h on December 8th to 9h on December 12th there were only two hours for which the cup anemograph indicated a wind exceeding 1 metre per second.

The average winds for the individual months of 1924 were remarkably uniform, all being between 3 and 4 metres per second.

\* For explanation See General Introduction, p. 14.

The hourly means for the whole year will be found at the foot of the December Table (instead of being reproduced, as in the 1922 and 1923 year books in the text). The lowest and highest hourly means, 2.7 m/s at 2h and 4.7 m/s at 13h, are both rather higher than the normal values, computed for 1881-1915, 2.58 m/s and 4.52 m/s.

A new Dines anemograph was brought into use at the end of February, 1923. This instrument is provided with a larger vane than its predecessor and it has a twin lever direction recorder. The agreement between the Dines records and those of the Robinson anemograph was not so satisfactory as hitherto. A reason for this discrepancy, a defective joint in one of the connecting tubes, was found and remedied in May, 1924. To allow for this the estimates of wind speed given by the Dines instrument during the first part of the year have now been increased by 10 per cent. The "highest gust" of Table 465 refers to the amended figures. The other columns of the table are, for the first five months, derived from the Robinson records. It is to be noted that the corresponding tables in the Weekly and Monthly Weather Reports, 1924, require similar amendment.

The highest gust for the year occurred on November 27th, but it is of special local interest to note that the one recorded on October 30th (28 metres per second) brought down one of three elms\* which had been picturesque neighbours of the observatory throughout its history.

*Earth Temperatures.*—With regard to the table of earth temperatures it may be noted that at the end of the year the tubes containing the thermometers must have been reached by the underground water. The level of the underground water (Table 468) was above the bottom of the 122 cm. tube for four days. No exceptional fluctuation of underground temperature was observed however.

The annual means of the readings at the two depths were (30 cm.) 283.1a and (122 cm.) 283.3a. These means refer to 9h, a time at which the temperature at 30 cm is below the mean for the day. In fact it is known from thermograph records† that the correction required to get the mean for the day at this depth is on the average + 0.2a. With this correction applied the agreement between the annual means at 30 cm. and 122 cm. is exact.

*Grass Minimum Temperatures.*—The mean of the monthly means of "grass minimum" temperature for the year 1924 was 276.8a. There were few low readings in January, but temperatures below the freezing point were recorded every morning from February 23rd to March 22nd. On the other hand, in the early autumn the nights were exceptionally mild and there was not a ground frost until October 23rd.

*Level of Underground Water.*—In Table 468 there is given for each day the mean height above sea level of the surface of the underground water. The level actually measured is the surface of water in a pipe which passes through the floor of the basement into the ground. The water level depends mainly on the state of the river Thames. The Observatory is close to Richmond lock, which is half-tidal, and the underground water is in summer a little below the level of low water above the lock (220 cm. above M.S.L.). The effects of the spring and neap tides are conspicuous in the fluctuations of level in summer. In the year 1924 the usual fall was interrupted in May, the rainfall of that month being exceptional in the south of England. The level continued to rise until the middle of June.

The record was interrupted on December 28th by a very sudden large rise in the water level. This was due to the flooding of the park by water which overflowed the embankment along the Thames. The water in the park subsided gradually, and it appears that the overflow did not recur although persistent rain was increasing the floods in the higher reaches of the river.‡

\* The other two were felled subsequently.

† A thermograph with two bulbs was installed in 1923, the depth of one bulb being 10 cm., that of the other 30 cm.

‡ *Meteorological Magazine*, February, 1925.

*Diary of Cloud and Weather.*—As explained in the footnotes, observations are lacking at 15h on Sundays and a few other days. The last line in each monthly table gives the mean amount of cloud for each of the six hours of observation. The following mean data are derived from these:—

*Mean Amount of Cloud from Six Observation Hours.*

| Month     | Jan. | Feb. | Mar. | Apl. | May | June | July | Aug. | Sept. | Oct. | Nov. | Dec. | Year. |
|-----------|------|------|------|------|-----|------|------|------|-------|------|------|------|-------|
| Cloud ... | 7·4  | 7·9  | 5·5  | 7·1  | 7·1 | 6·9  | 5·9  | 7·5  | 7·5   | 7·6  | 7·5  | 7·0  | 7·1   |

*Mean Amount of Cloud for the Year at the Six Observation Hours.*

| Hour ... | 7h  | 9h  | 13h | 15h | 18h | 21h |
|----------|-----|-----|-----|-----|-----|-----|
| Cloud .. | 7·1 | 7·3 | 7·3 | 7·5 | 7·0 | 6·3 |

The persistent cloudiness of the last five months of the year will be noticed. With regard to the low average for March the complete absence of ordinary cloud from the evening of the 9th to the afternoon of the 14th is noteworthy (two entries of cloud amount, 10 on the morning of the 11th refer to fog).

The use of the symbols  $\equiv$  and  $\infty$  in the weather columns of Tables 469-480 is governed as far as daylight observations are concerned by the following conventions, which are in accordance with the general practice adopted by the Meteorological Office.\* If the Orange Tree Inn, 1,000 metres S.E. of the Observatory cannot be seen, there is fog  $\equiv$ . If trees 200 metres away cannot be seen, there is thick fog  $\equiv^3$ . If the Orange Tree Inn can be seen the chimney $\S$  of the brewery at Mortlake, 4 km. away, if visible at all is not very clear, there is either mist  $\equiv^0$  or haze  $\infty$ , the distinction being made according to the relative humidity at the Observatory. On occasions when the humidity is 80 per cent. or above, the obscurity is attributed to mist; when the humidity is below that limit, to haze.

The symbols are used at night to indicate as nearly as may be the same degrees of atmospheric obscurity.

### Atmospheric Electricity.

The systematic observations in atmospheric electricity are devoted to potential gradient, air-earth current and ionization. In the case of potential gradient there is continuous autographic registration; the other elements are observed each afternoon when conditions are favourable.

*Potential Gradient.*—The Kelvin water-dropper electrograph has been housed since 1915 in a low building known as the Clinical House. The pipe carrying the jet projects through a hole in a window and is adjusted so that the point where the jet breaks into spray is 1·50 m.† from the window and 1·73 m. above the pool into which the water falls.‡ The electrogram is a record of the difference of potential between the ground and the point where the jet breaks. The aim is, however, to obtain the potential gradient in the open. For this purpose observations are made at a site in the Observatory garden. The apparatus for these "absolute" observations consists essentially of a long insulated rod carrying at the end a lighted fuse, which is connected to an electrostatic voltmeter. Readings are taken with the fuse at one metre and at two metres above the ground, the grass on which is kept short. The observations

\* The convention as to mist and haze was altered in April, 1925.

§ The Introduction 1923, p. 265, should be corrected in this sense.

† This measurement was made in July, 1926. It is believed that there has been no appreciable change since 1915.

‡ This height is regulated and has been kept the same.



are taken about noon on all convenient dry days. From the observations the ratio of the potential gradient in the garden to the potential recorded by the electrograph is computed. Such a ratio is given for each month in Table 482.

In the spring of 1924 there was a change in the surroundings of the site on the lawn where observations are taken; previously there had been fruit bushes and vegetables on either side of the grass plot. The ground was dug up in the spring and grass was sown in May, 1924. There is no indication in the run of the exposure factors that this had any effect.

There was, however, a notable change in the ratio between August and October, 1924. This change persisted, the average value of the ratio, which had been 2.15 in 1923, rose to 2.77 in 1925. It was shown eventually that the change could be accounted for by the erection in September, 1924, of an aerial for the reception of time-signals by wireless telegraphy. This affected the exposure of the electrograph but not that of the apparatus for absolute observations. There is therefore no reason to suspect the computed potential gradient values.

During the year\* two electrostatic voltmeters, No. 1684 and No. 1685, were used for the absolute observations. One of them, No. 1684 (low range), was under repair between March and August, 1924. The voltmeters and also the electrograph are calibrated at frequent intervals by means of a Cambridge and Paul potentiometer.

The data appearing in Table 481 include the electrical character figure assigned to each day from the consideration of the electrograms. Of the character figures, 0 denotes the absence of negative potential, 1 implies the existence of negative potential at one or more times during the day but with a total duration of less than 3 hours, while 2 implies the existence of negative potential with a total duration exceeding 3 hours. As a negative potential gradient hardly ever occurs except when rain is in the neighbourhood, character 0 occurs on dry days and character 2 on days with continuous rainfall. The mean character figure for 1924 was 0.63 and therefore appreciably above the average for the previous 13 years, 0.605.

Table 482 gives daily data derived from measurements of the electrograms. They represent means for 60-minute intervals centered at the exact hours 3h, 9h, 15h, and 21h G.M.T. Blanks indicate that the trace was in some way defective. On some occasions the curve, though existent, is so oscillatory that no satisfactory estimate is possible of the mean value of the ordinate. Such occasions are indicated by the letter *z*. If there is no doubt as to the sign of the hourly mean value, though a numerical measure is unobtainable, the sign is indicated by a + or a — attached to the *z*. The symbol  $z \pm$  indicates that there were oscillations on both sides of the zero line, and that the sign of the mean value was uncertain.

The extreme hourly mean values in Table 482 are + 1405 v/m at 3h on November 18th and — 1055 v/m at 3h on April 12th. The former value is representative of foggy conditions; on this particular occasion the fog developed rapidly after midnight and decreased from 4h onwards. There was more persistent fog and a steadier high potential gradient on December 11th. The extreme negative potential gradient of April 12th may be regarded as adventitious; the rainfall with which it was associated began at about 1h 30m and during the first hour there were violent oscillations of potential. For the hour 2h 30m—3h 30m the gradient was persistently negative, but not beyond the limit of registration; this is the hour to which the estimate — 1055 v/m refers.

Of the two sets of mean monthly values at 3h, 9h, 15h and 21h given in Table 482 at the foot of each month's data, the first set (*a*) represents the arithmetic means of all the positive potentials in the column, the second set (*b*) represents the algebraic mean derived from all days on which all four hours were represented. The last line gives the mean value for each month as derived from the (*a*) and the (*b*) values respectively.

For reasons explained in the 1922 Year Book, it is believed that the values (*a*) may be expected to give approximately the true monthly mean from all days

\* As from January 1st, 1923, the electrostatic voltmeters took the place of the Kelvin portable electrometer, No. 81, previously used for this purpose.

when negative potentials are excluded, while the values (*b*) may be expected to give approximately the true monthly mean when negative potentials are included. But a reservation is necessary in both cases, for the highly oscillatory occasions such as are met with during thunderstorms have been omitted, and this omission may have a sensible effect.

If the monthly means in Tables 482 and 483 be compared, it will be found that the quiet day mean is the highest in nine months out of the twelve. In some of the nine months its excess over the mean (*a*)—which always exceeds the mean (*b*)—is considerable. For the year as a whole, allowing equal weight to the 12 months, the quiet day mean, the mean (*a*), and the mean (*b*) are respectively 329 v/m, 300 v/m, and 285 v/m. In each case there is a slight increase as compared with the values for 1923 which were 318 v/m, 296 v/m and 276 v/m.

As to comparison with earlier years it is to be noted that the present method of making the "absolute" observations was initiated at the beginning of 1910. Since then there has been no considerable change in the exposure at the control station. The annual mean potential gradient for selected quiet days is available from that date onwards.\*

|      |         |      |         |      |         |
|------|---------|------|---------|------|---------|
| 1910 | 310 v/m | 1915 | 354 v/m | 1920 | 315 v/m |
| 11   | 301 v/m | 16   | 367 v/m | 21   | 281 v/m |
| 12   | 300 v/m | 17   | 354 v/m | 22   | 318 v/m |
| 13   | 335 v/m | 18   | 346 v/m | 23   | 318 v/m |
| 14   | 345 v/m | 19   | 331 v/m | 24   | 329 v/m |

The average for the 15 years is 327 volts per metre.

The low minimum of 1921 was probably to be attributed in part to the exceptional atmospheric conditions prevailing during the coal strike of that year. Apart from this abnormality a smooth change of potential gradient is to be noticed. In fact, the figures have been quoted† by Dr. Bauer as evidence for a connection between atmospheric electricity and solar activity.

The diurnal inequalities and the mean monthly and annual values in Table 483 are based on the curves of quiet days selected from those entirely free from negative potential. Other objects aimed at in the selection of the days are freedom from large irregular movements, absence of indications of inferior insulation in the electrograph, and the avoidance, so far as possible, of large non-cyclic changes. The quiet days numbered 10 in each month; but to complete that number in July, August and September it was necessary to include several 24-hour periods which did not commence at midnight.

Except in these cases the non-cyclic change is given explicitly in Table 483, so that anyone who may desire to reproduce the figures as they were before the non-cyclic correction was applied can easily do so.

All the inequalities show a well marked double oscillation with minima in the early morning and early afternoon, maxima in the late morning as well as in the evening. The diurnal inequality for the whole year shows the higher maximum at 20h, the lower minimum at 4h. This is not the case in every year. The hours of the extremes and the range of the inequality is given for each year from 1910 in the following list.

| Year. | Max.<br>hr. | Min.<br>hr. | Range<br>v/m | Year | Max.<br>hr. | Min.<br>hr. | Range<br>v/m | Year. | Max.<br>hr. | Min.<br>hr. | Range<br>v/m |
|-------|-------------|-------------|--------------|------|-------------|-------------|--------------|-------|-------------|-------------|--------------|
| 1910  | 20          | 4           | 138          | 1915 | 19          | 5           | 173          | 1920  | 9           | 3           | 122          |
| 1911  | 9           | 4           | 154          | 1916 | 20          | 4           | 151          | 1921  | 20          | 3, 4        | 132          |
| 1912  | 9           | 4           | 149          | 1917 | 20          | 4           | 154          | 1922  | 20          | 4           | 144          |
| 1913  | 19          | 3, 4        | 160          | 1918 | 20          | 2           | 139          | 1923  | 9           | 4           | 160          |
| 1914  | 20          | 3           | 169          | 1919 | 8           | 4           | 124          | 1924  | 20          | 4           | 133          |

\* Estimates for the years 1898–1909 are given by Chree, *Phil. Trans.* A (1915) p. 141. The change of site of the electrograph in 1915 is discussed in *Hourly Values*, 1916.

† Washington, Carnegie Institution. *Researches of the Dept. of Terr. Mag.*, Vol. V., pp. 361–384.

It will be seen that the range has been considerably lower in most recent years than it was in the years 1911 to 1917.

If the inequalities for the year and the seasons are compared with the corresponding inequalities for atmospheric pollution given in Table 485, a remarkably close similarity will be noticed in the hours of occurrence of the principal maxima and minima. The main outstanding difference occurs in the equinoctial months, when the prominent principal maximum of pollution is in the forenoon whereas that of the potential gradient is in the evening.

*Air-earth Current.*—To determine the current flowing from air to earth, the conductivity of the atmosphere at one metre above the ground is measured by means of the Wilson universal electrometer.\* For calculating the conductivity at 15h, four observations, each giving the leakage from a charged plate in 5 minutes, are averaged. The product of the conductivity so determined and the potential gradient at 15h (as given in Table 482) is taken as the measure of the air-earth current. The conductivity is not observed during rain nor when the potential gradient is negative. Data are available for about half the days of the year 1924.

The conditions under which the air-earth current is measured are maintained as uniform as possible, but they differ from the conditions under which the vertical current passes from the air to the earth in the absence of the apparatus. The presumption is that the results obtained would require to be multiplied by a factor to represent the true air-earth current. The monthly mean of the observed values of the current varied from 0.51 in January to 1.12 in December in terms of the unit  $1 \times 10^{-16}$  ampere per square centimetre. Allowing equal weight to each month we find that the mean for the year in terms of the above unit is 0.80. The mean derived directly from the 191 observations is 0.79. There is very little difference from the corresponding values for other years.

There is some doubt as to the comparability of observations made with the Wilson apparatus and other estimates of the air-earth current. Determinations based on separate measurements of the conductivity for positive and negative electricity have yielded on the continent averages about  $2 \times 10^{-16}$  amperes per square centimetre.

*Ionic Charges.*—Table 481 also gives the volume-charges carried by such positive and negative ions (including all of the more mobile type) as are caught by the Ebert apparatus.† The observations extend over some 20 minutes near 15h, being simultaneous with the experiments with the Wilson electrometer.

Normally, two Ebert instruments are in use, one charged positively, the other negatively, the signs alternating from day to day.

During the first seven months of the year both instruments were used, though the action of one was not entirely satisfactory.‡ From August, when this instrument was sent to the makers for new "fibres" to be fitted, observations of the positive and negative ionization were not made on the same day.

As is usual at Kew the highest values of the ionization occurred during the summer half of the year. Positive ionization exceeding  $1 \times 10^{-16}$  coulomb per c.c. occurred on days in April, July and September. The negative ionization exceeded the same limit on September 8th. In foggy weather the number of small ions is

\* *Proceedings of the Cambridge Philosophical Society*, Vol. 13, p. 184 (1906).

† *Physikalische Zeitschrift*, Vol. 8, No. 8, p. 246 (1907).

‡ Similar difficulties, due to the deterioration of the conducting coatings on the quartz fibres of the Wulf electrometer, are discussed in the *Geophysical Journal*, 1919, Annual Supplement, p. 111.

very small and uncertain. The lowest ionization tabulated is that for December 4th,  $0.04 \times 10^{-16}$  coulomb per c.c. The averages for the year were  $+0.45$  and  $-0.34 \times 10^{-16}$  coulomb per c.c., both being rather low as compared with previous years. According to Millikan's experiments\* the ionic charge is  $15.9 \times 10^{-20}$  coulomb, so that these averages correspond respectively with 280 positive and 210 negative ions per c.c. These averages are much lower than those obtained by observers in other countries. According to Bauer and Swann § the means for the principal observations reported at land stations before 1917 were 737 positive and 668 negative ions per c.c. The proportion of positive ions is higher at Kew than elsewhere.

#### ATMOSPHERIC POLLUTION.

At the beginning of the year the Owens atmospheric pollution recorder or air filter No. 1†, which had been in continuous operation since 1921, was in need of a thorough overhaul. On January 30th it was replaced temporarily by the loan from Dr. Owens of a similar instrument (by Griffin), which was in use until October 10th, when No. 1 was returned to the Observatory. The instrument is normally situated in the Clinical House, and the air it samples is about  $1\frac{1}{2}$ m. above that of the adjacent ground. From August 1st to September 18th it was housed in the "clock room," the air being drawn into the instrument from a point outside at the same level as at the original site. The weight of the pollution is not obtained directly, but is deduced from shade numbers 0, 1, 2, etc., assigned to the deposit left on filter paper through which a measured volume of air has been drawn. Shade number 1 answers to 0.32 milligrams per cubic metre, according to Mr. J. G. Clark's determinations.‡

Table 484 gives mean hourly values derived from all the days of the month for which complete records were obtained. There were 292 such days in the year. The highest and lowest of these hourly values are in heavy type.

Table 485 gives diurnal inequalities derived from the data in Table 484 after the application of non-cyclic corrections. The principal reason for computing the diurnal inequalities was to facilitate comparison with the corresponding diurnal variations in barometric pressure and the potential gradient of atmospheric electricity.

Record was entirely lacking for two days and for the greater part of a good many other days, owing to defective behaviour of the apparatus. Of the days of complete record December 10th was the dirtiest, the mean amount of pollution from the hourly values being 1.2 milligrams per cubic metre. The day was foggy throughout, except for a few hours round about noon, and the maximum value was 1.9 milligrams per cubic metre at 23h. This value was exceeded at 10h. on March 11th when 2.2 milligrams per cubic metre were registered.

The winter months of 1924 were dirtier than those of 1923 but the summer months were cleaner.

The mean value computed for the year 1924 was 0.323 milligrams per cubic metre, as compared with 0.305 in 1923, 0.394 in 1922 and 0.307 in 1921. In any discussion of these mean values it should be borne in mind that at Kew Observatory the great majority of estimates are shade 0 or shade 1. To discriminate between these two shades is difficult and the decision depends on the "personal equation" of the observer. Some change in standard from year to year is inevitable. The nature of the diurnal variation is most easily recognised in Table 485. There is always a well defined

\* Phil. Mag. (6) 34 (1917) 3.

§ Washington, Carnegie Institution. *Researches Dept. of Terr. Mag.*, Vol. III (1917) p. 411.

† A description of the instrument is given in the *Report of the Advisory Committee for Atmospheric Pollution*. 4th Report, 1917-1918 (p. 20).

‡ London, M.O. *Report of the Advisory Committee for Atmospheric Pollution*. 3rd Report, 1916-1917 (p. 20).

minimum during the night and another in the early afternoon. The first maximum of the day usually occurs about 9h and the second one follows about 12 hours later. In 1924 the diurnal inequalities for the equinoctial and summer seasons and for eight individual months show the principal maximum in the forenoon, at 9h, 8h or 7h, the earlier occurrences being in the summer months. For the year as a whole, the winter season, and for January, February and November the principal maximum occurs at 20h in the evening. In April it is at 21h. In the summer season, and in March and August, the principal minimum is at midnight, and in June and July it is in the early afternoon. In the other eight months, in the seasons and in the year as a whole, it occurs in the early hours of the morning, before 5h.

### TERRESTRIAL MAGNETISM.

Absolute observations of declination (D), inclination (I), and horizontal force (H) have been taken usually once a week. The instruments employed have been the Jones unifilar magnetometer with declination magnet K.O.90, collimator magnet K.C.1 and mirror magnet A.N, and the Barrow dip circle No. 33, with 3½-inch needles. In the absolute observations of horizontal force, deflections were made at three distances, 22·5, 30 and 40 cm., and values were calculated for the distribution constants P and Q from all the observations of the year. The values obtained of late years have been as follows :—

| Year. | P.     | Q.    | Mean Value at 22·5, 30 and 40 cm.<br>of $\log_{10} (1 + Pr^{-2} + Qr^{-4})$ . |
|-------|--------|-------|---|
| 1919  | +1·496 | -1525 | $\bar{1}\cdot99958$   |
| 1920  | +0·971 | -1280 | $\bar{1}\cdot99950$   |
| 1921  | +0·272 | -1054 | $\bar{1}\cdot99930$   |
| 1922  | +1·809 | -1642 | $\bar{1}\cdot99966$   |
| 1923  | +2·240 | -1787 | $\bar{1}\cdot99977$   |
| 1924  | +2·084 | -1682 | $\bar{1}\cdot99977$   |

Values for earlier years will be found in the report for the year 1920.\* It will be seen that numerical increases in P and Q tend to neutralise one another, so that the effect on the value of H (horizontal force) of the fluctuations from year to year in the values of P and Q is less serious than might appear at first sight. Following the example of 1923 it was decided to employ mean values for P and Q, derived from the years 1917 to 1924. The reason for commencing with 1917 was the fact that an accident calculated to influence the values of P and Q occurred in 1916. The fact that the discontinuance of the practice of applying a provisional correction based on the previous year's results should have been immediately followed by the incidence of equal corrections from two successive years 1923 and 1924—an event which had never occurred before—seems almost an example of perversity in Nature.

The Adie magnetographs were in regular operation up to the end of the year.† The scale value of the declination magnetograph remained as in previous years 1 mm. = 0·87'.

Scale value determinations of the H magnetograph taken in January and December gave 6·4γ as the force equivalent of 1 mm., and this value was accordingly in use throughout the whole year. Scale value determinations of the vertical force magnetograph were also taken in January, October and December, the values obtained for the force equivalent of 1 mm. being respectively 10·7γ, 10·3γ and 11·4γ. The method of determining the scale values was that due to Broun, an auxiliary magnet being used to deflect the D and H magnets at the same distances and under like conditions, and similarly with the D and V magnets. The D, H and V magnets are alike in size and shape, and the deflection distances relatively large, viz., 85 cm. for H and D, and 75 cm. for V and D. The disturbance of the magnetic curves by

\* *Hourly Values from Autographic Records*, 1920, p. 54.

† The magnetographs were subsequently dismantled and despatched to Eskdalemuir on October 15th, 1925.

artificial electric currents has been much as in the previous year. The publication of diurnal inequalities of D and H has thus been continued. As in previous years, a temperature correction of  $3.1\gamma$  per  $1^{\circ}$  C. was applied to the readings of the H curves.

Particulars of the magnetic character of individual days on the international scale "0" (quiet), "1" (moderately disturbed) and "2" (highly disturbed), as contributed quarterly to Prof. van Everdingen, at De Bilt, for utilisation in the international lists, appear in Table 490. It also gives the number of days in each month to which the several characters were assigned, and the numerical mean of the character figures treated as if ordinary arithmetical quantities. As there is a wide range in the disturbance to which any one figure is attached, and an uncertain personal element in assigning the figure, the monthly means should be regarded as giving only a general indication of the disturbance prevailing.

While this is the case, the difference between the figures for 1923 and 1924 is so substantial that we may safely conclude that the latter was the more disturbed year. The mean monthly character figure was larger in 1924 than in 1923 in nine months and smaller in only 2 months. The difference was mainly due to an increase from 23 to 33 in the number of days of character 2. Judging by the mean character figure and the number of days of character 2, April was the quietest month and September the most disturbed. But August had more days of character 0 than April, and June made a close approach to September. There were some long sequences of days of character 0, one of fourteen days from November 27 to December 10 and one of eleven days from May 29 to June 8. August itself provided two long sequences of 0's, one of ten the other of nine days. June and October each presented a sequence of three days of character 2. Of the 33 days awarded 2 in Table 490 all except two—both September days—are included in the list of international disturbed days.

The following were amongst the most disturbed days of the year:—January 29th, 30th; May 22nd, 23rd; June 10th; October 23rd, 24th; November 24th. No disturbance was of an outstanding character, but the traces on June 10th and November 24th were more oscillatory than is usual for disturbances of such comparatively moderate range.

At Kew Observatory, large disturbance in V is rare and it never occurs without large disturbance in D and H; thus it is immaterial whether the V curves are considered or not when assigning daily character figures. But on individual occasions disturbance may be much more prominent in H than in D, and conversely. In allotting daily characters in the weekly chronicle prepared for mining engineers, D only is under consideration, whereas H is equally considered when assigning characters for De Bilt. Also the object in view is different in the case of mining engineers. In their case the precise period of the day which is disturbed is of importance. Two-hour periods are dealt with, and when character 2 is assigned to a particular day, the periods during which the D curve has that character are particularised. The number of these disturbed periods at different hours of the day during 1924 was as follows:—

| Hour ...                | 0-2h | 2-4h | 4-6h | 6-8h | 8-10h | 10-12h | 12-14h | 14-16h | 16-18h | 18-20h | 20-22h | 22-24h |
|-------------------------|------|------|------|------|-------|--------|--------|--------|--------|--------|--------|--------|
| Disturbed occasions ... | 9    | 9    | 2    | 1    | 1     | 0      | 0      | 2      | 5      | 8      | 11     | 12     |

This represents a total for the year of 60 occasions, i.e., 120 hours, considered highly disturbed, as compared with 90 hours in 1923. Of the 120 disturbed hours during 1924, October contributed 26 and June 24. There was no contribution from April, July or August. The twelve hours 4h to 16h contributed only 10 per cent. of the disturbed hours; this is an exceptionally low contribution from the day hours.

The data for mining engineers are issued within a few days of the end of the week, and only a single week's curves are under consideration at one time. Also H is not considered, thus the character figures issued to mining engineers are by no means identical with those sent to De Bilt. The days awarded Characters 0, 1 and 2 numbered respectively 251, 95 and 20, giving a mean character figure for the year of 0.37, as compared with 0.31 for 1923. As in the case of the De Bilt character figures, there is a marked increase in the number of 2's as compared with the previous year.

Prior to 1919 diurnal inequalities were given only for the five international quiet days, and before taking the readings the curves were smoothed by hand. A change of procedure appeared desirable when D inequalities were prepared from all ordinary days (i.e., all days except those of character 2). Accordingly, all the curves are now measured with a mean value scale, the 60-minute intervals employed centering at exact hours G.M.T.

In all the inequalities the non-cyclic change has been allowed for in the usual way, i.e., by assuming it to come in at a uniform rate throughout the day. Particulars as to the size of the non-cyclic changes are given in Table 491. In addition to the results for 1924 there are data for the previous ten years, so far as available, so as to cover a complete sunspot period. Results for D' (the ordinary day declination) were available only from 1918. The non-cyclic changes in D' and D (i.e., the quiet day declination) vary irregularly from month to month, but, as is usual on quiet days, the non-cyclic change in H has a positive sign throughout. The mean non-cyclic change in H for the year is considerably below the average, but is substantially in excess of that for 1923.

The diurnal inequalities of declination from ordinary days, i.e., all days except those highly disturbed, are given in Table 486. Of the 20 days omitted as highly disturbed, nine occurred in the equinoctial months, six in the summer months, and five in the winter months.

The diurnal inequalities for D and H from the international quiet days are given in Tables 487 and 488. The international quiet days in 1924 had the following dates:—

|          |     |    |    |    |    |    |           |     |    |    |    |    |    |
|----------|-----|----|----|----|----|----|-----------|-----|----|----|----|----|----|
| January  | ... | 1  | 12 | 13 | 14 | 20 | July      | ... | 3  | 4  | 23 | 30 | 31 |
| February | ... | 14 | 15 | 18 | 28 | 29 | August    | ... | 11 | 12 | 20 | 21 | 25 |
| March    | ... | 1  | 14 | 15 | 17 | 28 | September | ... | 2  | 11 | 16 | 17 | 20 |
| April    | ... | 4  | 5  | 11 | 13 | 30 | October   | ... | 11 | 12 | 14 | 29 | 30 |
| May...   | ... | 6  | 7  | 14 | 18 | 31 | November  | ... | 5  | 8  | 17 | 18 | 30 |
| June     | ... | 3  | 6  | 7  | 8  | 14 | December  | ... | 5  | 6  | 16 | 29 | 30 |

The units employed in the inequality tables are 1' in D and  $1\gamma$  ( $1 \times 10^{-5}$  C.G.S. unit) in H. In the case of D the minus sign means that the magnet points to the east of its mean position for the day. Inequalities are given for each month of the year, for the year as a whole, and for three seasons defined as in previous years. The maximum and minimum hourly values are in heavy type. There is, as usual, a distinct difference in character between the diurnal inequalities of D on quiet and ordinary days; the easterly deviation near midnight is decidedly smaller in the quiet days. The difference is especially marked in the winter months. At that season the principal minimum (i.e., the easterly extreme) has a tendency to shift from the morning to the late evening hours. In Table 486 it occurs at 21h, 23h or 24h in the winter season and the four winter months; whereas in Table 487 January is the only month in which it occurs in the late evening, the other three winter months and the winter season showing the minimum at 9h. The run of the figures in the seasonal inequalities suggests a slightly later hour of occurrence of the principal maximum on ordinary days than on quiet days. There are, however, only two months, January and February when there is an apparent difference of an hour in this direction, and in October the difference is in the opposite direction. The run of the figures also suggests a difference between the summer and winter seasons, the maximum occurring a little later in summer; but 13h appears as the hour of maximum for all seasons in both Table 486 and Table 487.

In the case of H two winter months, January and December, show the principal minimum at 11h, but in all the other ten months and in all the seasonal inequalities it appears at 10h or 11h. January and December also differ from the other months in having the principal maximum in the forenoon at 8h or 9h, instead of in the afternoon at 18h or 19h. A double daily oscillation with maxima in the forenoon and afternoon is recognisable in most if not all months, but it is most prominent in the winter months.

Table 489 is intended to give a general picture of the chief magnetic phenomena of the year, and a survey of the phenomena for 1924 and the previous ten years, thus including an 11-year period. As we have just been discussing the diurnal inequalities, attention is first claimed by the ranges, A.D.'s, and non-cyclic changes. By A.D. (average departure) is meant the arithmetic mean of the 24 hourly departures from the mean of the day. It is a quantity which is less dependent than the range on the accident of how the times of maximum and minimum happen to lie relative to the nearest hour G.M.T. The data under D' relate to the declination from the ordinary days, those under D to the declination from quiet days. It will be noticed that while the D range exceeds the D' range slightly in October and the equinoctial season, and very substantially in July and September, the A.D. is invariably greater for D' than for D, the excess being usually very substantial. The influence of disturbance in increasing the amplitude of the regular diurnal variation is more conspicuous in the A.D. than in the range.

In the case of the mean diurnal inequality for the year, 1924 shows an advance in amplitude as compared with 1923 in all the ranges and A.D.'s. The increase is more apparent in D than in H, and is true more especially of the summer months. In December somewhat curiously the ranges and A.D.'s were all less in 1924 than in 1923.

The data in the earlier columns of Table 489 are of interest chiefly in connection with the secular change. The data for D, H, N (north component) and W (west component) are derived from the hourly measurements of the curves of the international quiet days. The values of I (inclination) are derived from the absolute observations corrected to the mean of the day. The values of V and T (total force) are derived by combining the values of I and H. The mean monthly values of D from quiet days exceeded those from ordinary days on the average by 0'09. The quiet day mean was the larger in five months and the smaller in three, the two means being identical in January, May, July and December. September was the only month in which the difference exceeded 0'2.

Comparing the yearly means in Table 489, we see that the fall in D from 1923 to 1924 was 12'2, as compared with 11'5 in the previous year. It is the largest annual change recorded since magnetic observations started at Kew. The rapid rate at which the annual change has accelerated of late years is illustrated by the fact that the annual change during the five years 1919 to 1924 averaged 11'2 as compared with an average annual change of only 9'4 from the immediately preceding five years. H, on the other hand, seems to be very nearly stationary. It seems to be still falling, but the mean average annual fall from 1919 to 1924 was only 5γ, as compared with an average annual fall of 14γ during the previous five years. Inclination shows a fall of 0'5 between 1923 and 1924, as compared with 0'6 in the previous year.

Every month shows a fall in D and also a fall in W as compared with the previous month. These monthly falls vary only between 0'6 and 1'4 in the case of D, and between 3γ and 7γ in the case of W. The smoothness of the apparent changes is presumably a tribute not so much to the uniformity of Nature, as to the satisfactory working of the D magnetograph and the truly representative character of the international quiet days.



The annual fall in  $W$  from 1919 to 1924 averaged  $59\gamma$ , as compared with an average fall of  $52\gamma$  during the previous five years. In the case of  $N$ , where a fall of  $H$  and a fall of  $D$  work in opposite directions, the aggregate change between 1914 and 1919 was nearly nil, but since that time the fall in  $D$  has had decidedly the upper hand, and a steady rise in  $N$  has resulted. The rise from 1923 to 1924 was almost identical with that in the previous year.

Both the vertical force and the total force have shown a steady decline of late years. The fall from 1923 to 1924 was  $25\gamma$  for the former element and  $23\gamma$  for the latter, values slightly in excess of the average from the period 1914 to 1924.

Instrumental and observational uncertainties enter more into the values of  $I$ ,  $V$  and  $T$  than into those of  $D$  and  $H$ , and are probably largely responsible for the irregularities apparent in the monthly values of the former elements and in their secular change.

Table 492 gives the mean yearly values of magnetic declination, inclination, horizontal force and vertical force for a number of observatories, the publications of which are received at Kew Observatory. Table 493 includes a few stations for which there were no data for years subsequent to 1921.

Use has also been made of a number of results which have recently come to hand for Russian stations, filling up gaps in previous tables. It will be noticed that an older station at Irkutsk was carried on for some years as well as a newer station some little distance away at Zui.

As usual, secular change data are much more consistent for  $D$  than for the other elements. The easterly movements between 1923 and 1924 recorded at the four older British stations—Greenwich, Kew, Stonyhurst and Eskdalemuir—varied only between  $12' \cdot 2$  and  $12' \cdot 6$ . The mean  $12' \cdot 3$  from the four stations is the largest change recorded in Great Britain in any year since the invention of magnetographs. The new station, Lerwick, shows an even greater change,  $13' \cdot 9$ , but in view of its recent erection it would be prudent to await further results before concluding that the change of declination is so much more rapid in Shetland than in the South of England. Potsdam and De Bilt each showed a change of  $11' \cdot 9$ , and Pavlovsk a change of  $9' \cdot 0$ , while the mean change from San Fernando and Tortosa was  $9' \cdot 8$ . Thus, presumably, the change was larger in the British Isles than elsewhere in Europe.

The changes in  $H$  apparent at the European stations are much less consistent, and part of the difference between stations is presumably of instrumental origin. There were small falls varying from  $2\gamma$  to  $6\gamma$  at Eskdalemuir, Kew and De Bilt. The falls at Potsdam and Pavlovsk were respectively  $15\gamma$  and  $40\gamma$ . Valencia, Nantes, and Tortosa differed from the other European stations in showing a rise.

Inclination showed an annual change of only  $0' \cdot 1$  at Stonyhurst, Eskdalemuir and De Bilt; a rise at Stonyhurst and De Bilt, a fall at Eskdalemuir. Valencia, Greenwich and Kew showed somewhat larger falls, but at Potsdam, Rude Skov, Lerwick and Pavlovsk there appeared a decided rise.

## SEISMOLOGY.

Table C, shown below, gives a résumé of the results obtained during the year from the Milne seismograph (No. 9) in the basement.\* The boom pointed north and south, so the instrument indicated movements of the ground in the east-west direction. Observations to determine the sensitiveness made on May 8th, July 31st and December 5th, gave results in close agreement, the mean value found for the angle of tilt

\* The Milne instrument was removed in June, 1925, the room it occupied being required for the recording apparatus of the Galitzine seismographs.

answering to 1 mm. ordinate on the trace being 0.55". Observations made on the oscillation period on these three occasions gave a mean of 17.2 seconds. In an instrument of this type it is difficult, if not impossible, to discriminate between the different kinds of waves, and there is often considerable uncertainty as to the time of commencement. Thus the information given in Table C is confined to the time of the largest movement and its amplitude. Numerical measurements are not given if the measured amplitude is less than 1 mm. The letters *a*, *b*, *c* denote amplitudes on an increasing scale, *a* representing an amplitude not exceeding 0.2 mm., *b* an amplitude of at least 0.2 mm., but less than 0.5 mm., and *c* an amplitude of at least 0.5 mm., but less than 1.0 mm. The amplitude is partly determined by the approach in the period of the earthquake wave to the natural period of the boom, but a large amplitude is never experienced unless the earthquake has been a really considerable one.

The greatest amplitude recorded during the year, on July 11th, was due to an earthquake in Tibet. The disturbance of July 3rd originated in the same region. The centre of the large disturbance recorded on April 14th is believed to have been in the Philippine Islands.

TABLE C.—SEISMOLOGICAL DIARY.

Richmond (Kew Observatory).

Times G.M.T.

1924.

| Maximum. |       |          | Maximum. |        |          | Maximum. |       |     | Maximum. |       |          | Maximum. |       |          | Maximum. |        |            |
|----------|-------|----------|----------|--------|----------|----------|-------|-----|----------|-------|----------|----------|-------|----------|----------|--------|------------|
| Date.    | Time. |          | Date.    | Time.  |          | Date.    | Time. |     | Date.    | Time. |          | Date.    | Time. |          | Date.    | Time.  |            |
|          | h. m. | mm.      |          | h. m.  | mm.      |          | h. m. | mm. |          | h. m. | mm.      |          | h. m. | mm.      |          | h. m.  | mm.        |
| Jan. 2   | 9 4   | <i>a</i> | Mar. 4   | 10 59  | 5.6      | May 1    | 20 44 | 2.2 | July 3   | 4 50  | 9.0      | Sept. 4  | 16 12 | <i>b</i> | Nov. 5   | 19 3   | <i>a</i>   |
| 14       | 21 42 | 1.5      | 11       | 11 33  | <i>c</i> | 6        | 17 16 | 1.3 | 5        | 23 44 | <i>a</i> | 13       | 14 58 | 7.9      | 13       | 10 10  | <i>b</i>   |
| 21       | 2 15  | <i>b</i> | 12       | 14 2   | <i>a</i> |          |       |     | 6        | 15 14 | <i>c</i> | 14       | 14 10 | <i>b</i> | 20       | 20 38  | 2.0        |
| 27       | 5 23  | <i>b</i> | 15       | 11 19  | 3.8      |          |       |     | 6        | 18 53 | <i>c</i> | 14       | 15 15 | <i>b</i> | 28       | 20 00  | <i>a</i>   |
| 29       | 2 59  | 1.9      | 22       | 13 21  | 1.3      |          |       |     | 7        | 4 12  | <i>b</i> | 16       | 3 11  | <i>b</i> | 28       | 22 3   | <i>b</i>   |
|          |       |          | 25       | 15 0   | <i>b</i> |          |       |     | 11       | 20 23 | 10.2     | 18       | 2 00  | <i>b</i> |          |        |            |
|          |       |          | 28       | 5 12   | <i>b</i> |          |       |     | 12       | 15 45 | 2.3      | 25       | 5 39  | <i>a</i> |          |        |            |
|          |       |          | 30       | 0 52   | <i>c</i> |          |       |     | 14       | 3 10  | <i>a</i> | 27       | 4 52  | <i>a</i> |          |        |            |
|          |       |          |          |        |          |          |       |     | 22       | 4 51  | <i>b</i> | 28       | 13 45 | <i>b</i> |          |        |            |
|          |       |          |          |        |          |          |       |     | 22       | 15 21 | 1.3      | 30       | 12 20 | <i>b</i> |          |        |            |
|          |       |          |          |        |          |          |       |     | 24       | 6 43  | 1.1      |          |       |          |          |        |            |
|          |       |          |          |        |          |          |       |     | 29       | 6 32  | <i>b</i> |          |       |          |          |        |            |
| Maximum. |       |          | Maximum. |        |          | Maximum. |       |     | Maximum. |       |          | Maximum. |       |          | Maximum. |        |            |
| Date.    | Time. |          | Date.    | Time.  |          | Date.    | Time. |     | Date.    | Time. |          | Date.    | Time. |          | Date.    | Time.  |            |
|          | h. m. | mm.      |          | h. m.  | mm.      |          | h. m. | mm. |          | h. m. | mm.      |          | h. m. | mm.      |          | h. m.  | mm.        |
| Feb. 9   | 23 35 | <i>a</i> | Apr. 8   | 9 55   | <i>b</i> | June 26  | 3 28  | 4.4 | Aug. 6   | 1 55  | <i>a</i> | Oct. 8   | 21 13 | 1.2      | Dec. 7   | 15 51* | <i>b</i>   |
| 14       | 0 1   | <i>b</i> | 11       | 14 15  | <i>a</i> | 30       | 16 34 | 1.2 | 10       | 7 59  | <i>b</i> | 12       | 20 4* | <i>b</i> | 11       | 18 54* | <i>a</i>   |
| 18       | 17 25 | <i>c</i> | 13       | 15 8   | <i>b</i> |          |       |     | 11       | 16 14 | <i>a</i> | 13       | 16 41 | <i>c</i> | 12       | 2 31*  | <i>b</i>   |
| 19       | 7 31  | <i>b</i> | 14       | 17 25* | 9.5      |          |       |     | 13       | 14 30 | <i>b</i> | 14       | 5 24  | <i>c</i> | 12       | 3 35*  | <i>a</i>   |
|          |       |          | 15       | 12 53* | <i>b</i> |          |       |     | 13       | 16 42 | <i>a</i> | 18       | 20 28 | <i>b</i> | 17       | 6 15*  | <i>b</i>   |
|          |       |          | 20       | 15 4   | <i>b</i> |          |       |     | 14       | 0 41  | <i>a</i> | 20       | 20 57 | <i>b</i> | 28       | 23 45  | <i>c</i> } |
|          |       |          | 28       | 17 46  | <i>b</i> |          |       |     | 14       | 1 36  | <i>b</i> | 25       | 20 00 | <i>b</i> |          | 23 59  | <i>c</i> } |
|          |       |          | 29       | 9 37   | <i>b</i> |          |       |     | 14       | 18 59 | 4.6      | 27       | 21 3  | <i>b</i> |          |        |            |
|          |       |          | 29       | 21 42  | <i>b</i> |          |       |     | 15       | 0 24  | <i>b</i> |          |       |          |          |        |            |
|          |       |          |          |        |          |          |       |     | 17       | 2 39  | <i>b</i> |          |       |          |          |        |            |
|          |       |          |          |        |          |          |       |     | 17       | 3 7   | <i>c</i> |          |       |          |          |        |            |
|          |       |          |          |        |          |          |       |     | 21       | 19 48 | <i>a</i> |          |       |          |          |        |            |
|          |       |          |          |        |          |          |       |     | 25       | 3 20  | 1.0      |          |       |          |          |        |            |
|          |       |          |          |        |          |          |       |     | 25       | 15 22 | <i>c</i> |          |       |          |          |        |            |
|          |       |          |          |        |          |          |       |     | 26       | 0 3   | <i>a</i> |          |       |          |          |        |            |
|          |       |          |          |        |          |          |       |     | 27       | 22 47 | <i>a</i> |          |       |          |          |        |            |
|          |       |          |          |        |          |          |       |     | 30       | 4 17  | 1.9      |          |       |          |          |        |            |

\* Times uncertain.

Readings in millibars at exact hours, Greenwich Mean Time.

382. Richmond (Kew Observatory) : H<sub>b</sub> (height of barometer cistern above M.S.L.) = 10.4 metres.

January, 1924.

Table for Richmond (Kew Observatory) in January 1924. Columns include Day (1-31), Station Level (1-31), Mean (Station level), Mean (Sea level), and G.M.T. (1-24, Mean). Rows show hourly barometric readings in millibars.

383. Richmond (Kew Observatory) : H<sub>b</sub> = 10.4 metres.

February, 1924.

Table for Richmond (Kew Observatory) in February 1924. Columns include Day (1-29), Station Level (1-29), Mean (Station level), Mean (Sea level), and G.M.T. (1-24, Mean). Rows show hourly barometric readings in millibars.

NOTE.—When pressure exceeds 1000 mb. the leading figure 1 is not printed, i.e., 1005.6 mb. is written 005.6. This rule does not, however, apply to monthly means.

Readings in millibars at exact hours, Greenwich Mean Time.

384. Richmond (Kew Observatory) : H<sub>b</sub> (height of barometer cistern above M.S.L.) = 10.4 metres.

March, 1924.

Table for Richmond (Kew Observatory) in March 1924. Columns include Day, Station Level (1-31), and Mean (Station level/Sea level). Rows show hourly pressure readings in millibars.

385. Richmond (Kew Observatory) : H<sub>b</sub> = 10.4 metres.

April, 1924.

Table for Richmond (Kew Observatory) in April 1924. Columns include Day, Station Level (1-31), and Mean (Station level/Sea level). Rows show hourly pressure readings in millibars.

\* When pressure exceeds 1000 mb. the leading figure 1 is not printed, i.e., 1005.6 mb. is written 005.6. This rule, does not however, apply to monthly means.

Readings in millibars at exact hours, Greenwich Mean Time.

386. Richmond (Kew Observatory) : H<sub>b</sub> (height of barometer cistern above M.S.L.) = 10.4 metres.

May, 1924.

Table with 26 columns (Day 1-24, Mean) and 31 rows (Station Level 1-31). Data includes millibar readings for each hour and monthly means for station and sea level.

387. Richmond (Kew Observatory) : H<sub>b</sub> = 10.4 metres.

June, 1924.

Table with 26 columns (Day 1-24, Mean) and 31 rows (Station Level 1-31). Data includes millibar readings for each hour and monthly means for station and sea level.

NOTE.—When pressure exceeds 1000 mb. the leading figure 1 is not printed, i.e., 1005.6 mb. is written 005.6. This rule does not, however, apply to monthly means.

Readings in millibars at exact hours, Greenwich Mean Time.

388. Richmond (Kew Observatory) : H<sub>b</sub> (height of barometer cistern above M.S.L.) = 10.4 metres.

July, 1924.

| Day.                 | 1.   | 2.        | 3.        | 4.        | 5.        | 6.        | 7.        | 8.        | 9.        | 10.       | 11.       | Noon      | 13.       | 14.       | 15.       | 16.       | 17.       | 18.       | 19.       | 20.       | 21.       | 22.       | 23.       | 24.       | Mean      |           |       |
|----------------------|------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-------|
| Station Level ↑      | 1    | mb. 016.6 | mb. 016.9 | mb. 016.9 | mb. 017.0 | mb. 016.8 | mb. 016.7 | mb. 016.9 | mb. 016.6 | mb. 016.2 | mb. 015.9 | mb. 015.9 | mb. 015.5 | mb. 014.7 | mb. 014.0 | mb. 013.5 | mb. 013.1 | mb. 012.9 | mb. 012.4 | mb. 012.0 | mb. 011.6 | mb. 011.3 | mb. 010.9 | mb. 010.0 | mb. 009.1 | mb. 014.5 |       |
|                      | 2    | 008.4     | 007.2     | 006.0     | 005.2     | 004.0     | 003.0     | 002.3     | 001.7     | 001.3     | 000.7     | 000.7     | 000.7     | 000.7     | 000.7     | 000.6     | 000.7     | 000.7     | 001.0     | 001.3     | 001.6     | 001.7     | 001.9     | 002.0     | 002.0     | 001.5     | 002.5 |
|                      | 3    | 001.0     | 000.7     | 000.1     | 000.9     | 001.7     | 002.5     | 003.1     | 003.6     | 003.8     | 003.6     | 003.9     | 003.6     | 003.0     | 002.1     | 001.2     | 000.3     | 000.2     | 000.7     | 001.2     | 001.3     | 001.4     | 001.3     | 001.3     | 001.3     | 001.3     | 001.5 |
|                      | 4    | 009.1     | 009.8     | 000.9     | 001.4     | 001.8     | 002.5     | 003.1     | 003.6     | 003.8     | 003.6     | 003.9     | 003.6     | 003.0     | 002.1     | 001.2     | 000.3     | 000.2     | 000.7     | 001.2     | 001.3     | 001.4     | 001.3     | 001.3     | 001.3     | 001.3     | 001.5 |
|                      | 5    | 005.6     | 006.1     | 000.7     | 001.4     | 001.8     | 002.5     | 003.1     | 003.6     | 003.8     | 003.6     | 003.9     | 003.6     | 003.0     | 002.1     | 001.2     | 000.3     | 000.2     | 000.7     | 001.2     | 001.3     | 001.4     | 001.3     | 001.3     | 001.3     | 001.3     | 001.5 |
|                      | 6    | 006.9     | 006.6     | 006.9     | 007.3     | 007.5     | 008.0     | 009.0     | 009.6     | 010.0     | 010.8     | 011.3     | 011.6     | 012.3     | 012.7     | 012.8     | 012.9     | 013.2     | 013.5     | 014.0     | 014.6     | 015.4     | 015.5     | 015.7     | 015.7     | 015.7     | 011.2 |
|                      | 7    | 015.7     | 015.6     | 015.3     | 015.0     | 014.7     | 014.5     | 014.7     | 014.8     | 014.9     | 015.0     | 015.4     | 015.3     | 015.4     | 015.4     | 015.3     | 015.3     | 015.3     | 015.5     | 015.7     | 016.1     | 016.5     | 017.0     | 017.4     | 017.4     | 017.4     | 015.5 |
|                      | 8    | 017.8     | 017.8     | 017.8     | 017.9     | 018.1     | 018.3     | 018.7     | 018.6     | 018.5     | 018.5     | 018.1     | 017.7     | 016.9     | 016.2     | 015.6     | 015.2     | 015.0     | 015.0     | 014.8     | 014.8     | 014.8     | 014.8     | 014.8     | 014.8     | 014.8     | 016.7 |
|                      | 9    | 013.9     | 013.5     | 013.1     | 013.0     | 012.8     | 013.3     | 013.4     | 013.7     | 013.9     | 014.1     | 014.5     | 014.8     | 015.3     | 015.5     | 015.3     | 016.1     | 016.6     | 017.1     | 017.5     | 017.7     | 018.9     | 019.4     | 019.5     | 019.4     | 020.1     | 015.4 |
|                      | 10   | 020.3     | 020.4     | 020.3     | 020.5     | 020.9     | 021.3     | 021.3     | 021.3     | 021.3     | 020.9     | 020.8     | 020.4     | 020.8     | 020.7     | 020.5     | 020.2     | 020.1     | 020.3     | 020.7     | 021.0     | 021.3     | 021.0     | 021.2     | 021.4     | 021.4     | 020.7 |
|                      | 11   | 021.1     | 021.1     | 021.1     | 021.2     | 021.5     | 021.9     | 022.0     | 022.1     | 021.8     | 021.7     | 021.7     | 021.3     | 020.9     | 020.4     | 019.9     | 019.4     | 019.3     | 019.2     | 019.2     | 019.1     | 019.1     | 019.0     | 019.0     | 018.6     | 020.5     |       |
|                      | 12   | 018.2     | 018.1     | 017.6     | 017.2     | 016.9     | 016.5     | 016.0     | 015.1     | 014.6     | 014.0     | 013.4     | 012.8     | 011.8     | 011.3     | 010.7     | 010.2     | 009.4     | 009.2     | 009.3     | 009.5     | 009.9     | 010.2     | 011.4     | 011.7     | 013.3     |       |
|                      | 13   | 012.2     | 012.7     | 012.9     | 013.3     | 013.8     | 014.1     | 014.8     | 014.9     | 014.9     | 015.4     | 015.7     | 016.0     | 015.7     | 017.1     | 017.4     | 017.9     | 018.5     | 019.1     | 020.0     | 020.7     | 022.0     | 022.6     | 023.5     | 024.2     | 016.8     |       |
|                      | 14   | 024.4     | 024.8     | 025.1     | 025.2     | 025.2     | 025.9     | 026.2     | 026.5     | 026.7     | 026.8     | 026.5     | 026.3     | 025.7     | 025.5     | 025.1     | 024.8     | 024.4     | 024.1     | 024.3     | 024.4     | 024.6     | 024.4     | 024.3     | 024.0     | 025.2     |       |
|                      | 15   | 023.6     | 023.0     | 022.5     | 022.2     | 021.8     | 021.9     | 021.6     | 021.0     | 020.6     | 020.1     | 019.4     | 018.5     | 017.6     | 017.0     | 016.4     | 015.8     | 015.0     | 014.4     | 014.2     | 013.9     | 013.5     | 013.1     | 012.7     | 012.1     | 018.2     |       |
|                      | 16   | 011.4     | 010.5     | 010.2     | 010.0     | 009.7     | 009.5     | 009.5     | 009.3     | 009.4     | 009.5     | 009.8     | 009.6     | 009.3     | 009.1     | 009.0     | 009.0     | 009.2     | 009.5     | 010.1     | 010.4     | 011.2     | 011.7     | 012.0     | 012.0     | 010.0     |       |
|                      | 17   | 011.8     | 012.0     | 012.2     | 012.3     | 012.2     | 012.1     | 011.8     | 011.6     | 011.2     | 010.6     | 010.2     | 009.9     | 008.8     | 008.0     | 006.7     | 005.6     | 003.8     | 002.1     | 000.2     | 998.5     | 997.8     | 998.3     | 999.9     | 001.5     | 007.3     |       |
|                      | 18   | 003.2     | 004.6     | 005.6     | 006.5     | 007.3     | 008.0     | 008.4     | 009.2     | 009.5     | 009.9     | 010.3     | 010.4     | 010.5     | 011.1     | 011.3     | 011.4     | 011.4     | 011.4     | 011.7     | 012.2     | 012.6     | 012.7     | 012.6     | 012.8     | 009.5     |       |
|                      | 19   | 012.3     | 012.3     | 012.3     | 012.3     | 012.3     | 012.5     | 012.6     | 012.7     | 012.5     | 012.4     | 012.8     | 012.7     | 012.5     | 012.4     | 012.3     | 012.3     | 012.5     | 012.6     | 012.8     | 012.3     | 013.6     | 014.0     | 014.3     | 014.4     | 012.7     |       |
|                      | 20   | 014.7     | 014.5     | 014.6     | 014.6     | 014.8     | 015.0     | 015.2     | 014.9     | 014.9     | 014.7     | 014.4     | 014.3     | 014.1     | 013.6     | 013.2     | 012.9     | 012.7     | 012.8     | 012.8     | 012.9     | 013.1     | 012.7     | 012.2     | 011.8     | 013.9     |       |
|                      | 21   | 011.8     | 011.5     | 010.7     | 010.6     | 010.4     | 010.2     | 010.5     | 009.9     | 010.2     | 009.6     | 009.5     | 010.3     | 009.5     | 009.5     | 009.4     | 009.5     | 009.6     | 009.7     | 010.0     | 010.2     | 010.5     | 010.4     | 010.3     | 010.5     | 010.2     |       |
|                      | 22   | 010.6     | 010.2     | 010.3     | 010.2     | 010.1     | 010.5     | 010.4     | 010.2     | 009.8     | 009.3     | 009.0     | 008.7     | 008.3     | 008.4     | 008.6     | 008.5     | 007.9     | 008.2     | 008.1     | 008.1     | 008.4     | 008.3     | 008.6     | 008.6     | 009.2     |       |
|                      | 23   | 008.7     | 008.9     | 009.2     | 009.9     | 010.2     | 010.7     | 011.4     | 011.6     | 011.7     | 011.9     | 012.2     | 012.3     | 012.3     | 012.4     | 012.9     | 011.1     | 011.6     | 011.2     | 011.2     | 011.3     | 011.6     | 011.7     | 011.2     | 010.8     | 011.1     |       |
|                      | 24   | 009.8     | 009.6     | 010.2     | 010.6     | 011.2     | 011.6     | 011.9     | 012.3     | 012.2     | 012.4     | 012.3     | 012.3     | 012.1     | 012.1     | 012.0     | 011.9     | 012.1     | 012.0     | 012.1     | 012.6     | 013.1     | 013.7     | 014.0     | 014.1     | 011.9     |       |
|                      | 25   | 014.1     | 014.3     | 014.4     | 014.4     | 014.7     | 014.7     | 014.9     | 014.9     | 015.1     | 015.3     | 015.0     | 015.0     | 014.8     | 014.6     | 014.4     | 014.1     | 013.7     | 013.4     | 012.9     | 012.5     | 011.9     | 011.2     | 010.6     | 009.9     | 013.9     |       |
|                      | 26   | 009.4     | 009.0     | 009.3     | 010.1     | 010.1     | 010.9     | 011.7     | 012.0     | 012.7     | 013.1     | 013.2     | 013.5     | 013.7     | 013.6     | 014.4     | 015.3     | 015.3     | 015.7     | 016.3     | 016.7     | 017.2     | 017.5     | 017.5     | 017.5     | 013.4     |       |
|                      | 27   | 017.6     | 017.5     | 017.5     | 017.4     | 017.4     | 017.4     | 017.4     | 017.4     | 017.4     | 017.1     | 016.9     | 016.6     | 016.1     | 015.5     | 014.9     | 014.3     | 013.8     | 013.6     | 013.3     | 013.5     | 013.3     | 012.8     | 012.3     | 011.2     | 015.6     |       |
|                      | 28   | 010.3     | 009.4     | 008.1     | 007.3     | 006.2     | 005.1     | 004.2     | 003.3     | 002.5     | 001.3     | 001.1     | 000.1     | 998.9     | 998.0     | 997.4     | 996.4     | 995.7     | 995.2     | 995.0     | 995.1     | 995.4     | 995.5     | 995.5     | 995.6     | 000.9     |       |
|                      | 29   | 995.6     | 995.4     | 995.1     | 995.2     | 995.2     | 995.3     | 995.4     | 995.5     | 995.6     | 995.6     | 995.8     | 996.2     | 996.6     | 997.2     | 997.7     | 998.0     | 998.7     | 999.0     | 999.7     | 999.7     | 999.7     | 999.7     | 999.8     | 999.4     | 001.8     |       |
|                      | 30   | 002.0     | 002.6     | 002.8     | 003.1     | 003.7     | 004.3     | 004.6     | 004.9     | 005.2     | 005.4     | 005.6     | 005.4     | 005.4     | 005.5     | 005.5     | 005.6     | 005.6     | 005.9     | 006.6     | 007.6     | 008.4     | 008.9     | 009.3     | 009.6     | 005.4     |       |
|                      | 31   | 009.9     | 010.1     | 010.2     | 010.5     | 011.2     | 011.5     | 012.1     | 012.3     | 012.6     | 012.9     | 013.1     | 013.1     | 013.4     | 013.3     | 013.6     | 013.7     | 014.0     | 014.5     | 014.9     | 015.1     | 015.4     | 015.6     | 015.7     | 015.5     | 013.0     |       |
| Mean (Station level) | 1011 | 1011      | 1011      | 1011      | 1011      | 1011      | 1011      | 1011      | 1011      | 1011      | 1011      | 1011      | 1011      | 1011      | 1010      | 1010      | 1010      | 1010      | 1010      | 1012      | 1012      | 1012      | 1012      | 1011      | 1011      | 1011      |       |
| Mean (Sea level)     | 1012 | 1012      | 1012      | 1012      | 1012      | 1013      | 1013      | 1013      | 1013      | 1012      | 1012      | 1012      | 1012      | 1012      | 1012      | 1011      | 1011      | 1011      | 1011      | 1012      | 1012      | 1012      | 1012      | 1012      | 1012      | 1012      |       |
|                      | .80  | .76       | .73       | .80       | .84       | .00       | .14       | .11       | .08       | .01       | .97       | .85       | .54       | .38       | .15       | .99       | .81       | .79       | .88       | .11       | .47       | .61       | .80       | .77       | .60       |           |       |

389. Richmond (Kew Observatory) : H<sub>b</sub> = 10.4 metres.

August, 1924.

| Day.            | 1. | 2.        | 3.        | 4.        | 5.        | 6.        | 7.        | 8.        | 9.        | 10.       | 11.       | Noon      | 13.       | 14.       | 15.       | 16.       | 17.       | 18.       | 19.       | 20.       | 21.       | 22.       | 23.       | 24.       | Mean      |       |
|-----------------|----|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-------|
| Station Level ↑ | 1  | mb. 015.5 | mb. 015.4 | mb. 015.4 | mb. 015.4 | mb. 015.4 | mb. 015.2 | mb. 015.1 | mb. 015.2 | mb. 014.8 | mb. 014.6 | mb. 014.0 | mb. 013.7 | mb. 013.4 | mb. 013.2 | mb. 012.5 | mb. 012.1 | mb. 011.7 | mb. 011.6 | mb. 011.5 | mb. 011.3 | mb. 010.9 | mb. 010.4 | mb. 010.1 | mb. 013.6 |       |
|                 | 2  | 009.6     | 008.9     | 008.4     | 008.1     | 007.8     | 007.9     | 007.9     | 008.1     | 008.4     | 009.0     | 009.6     | 009.6     | 010.4     | 010.4     | 010.6     | 010.9     | 011.2     | 011.7     | 012.0     | 012.4     | 013.0     | 013.6     | 013.6     | 013.6     | 010.2 |
|                 | 3  | 014.0     | 014.0     | 014.2     | 014.5     | 014.5     | 014.6     | 014.6     | 014.6     | 014.6     | 014.6     | 014.3     | 014.3     | 014.3     | 014.3     | 014.3     | 014.3     | 014.3     | 014.3     | 014.3     | 014.3     | 014.3     | 014.3     | 014.3     | 014.3     | 013.4 |
|                 | 4  | 008.1     | 007.7     | 007.5     | 007.8     | 008.3     | 009.0     | 009.8     | 010.2     | 010.6     | 010.8     | 011.0     | 011.3     | 011.5     | 011.7     | 011.7     | 011.6     | 011.6     | 011.5     | 011.6     | 011.9     | 011.8     | 011.9     | 011.8     | 011.8     | 010.5 |
|                 | 5  | 011.7     | 011.6     | 011.4     | 011.2     | 011.3     | 011.3     | 011.5     | 011.2     | 011.3     | 011.5     | 011.5     | 011.3     | 010.8     | 010.8     | 010.7     | 010.9     | 011.7     | 012.0     | 012.4     | 013.1     | 013.9     | 014.6     | 014.9     | 015.4     | 011.9 |
|                 | 6  | 015.8     | 015.6     | 015.9     | 016.1     | 016.3     | 016.7     | 017.0     | 017.3     | 017.5     | 017.6     | 017.2     | 017.1     | 016.9     | 016.6     | 015.7     | 015.5     | 015.5     | 015.2     | 015.4     | 016.2     | 016.9     | 017.3     | 017.6     | 017.6     | 016.5 |
|                 | 7  | 017.6     | 017.7     | 017.9     | 018.0     | 018.2     | 018.6     | 019.2     | 019.5     | 019.7     | 019.9     | 020.1     | 020.0     | 019.7     | 020.2     | 020.2     | 020.3     | 020.9     | 021.4     | 022.1     | 022.8     | 023.5     | 023.7     | 024.0     | 024.2     | 020.3 |
|                 | 8  | 024.6     | 025.1     | 025.4     | 025.6     | 026.2     | 026.8     | 027.3     | 027.8     | 028.0     | 028.4     | 028.7     | 028.7     | 028.5     | 028.5     | 028.6     | 028.5     | 028.5     | 028.5     | 028.7     | 029.1     | 029.8     | 030.0     | 030.3     | 030.4     | 027.9 |
|                 | 9  | 030.3     | 030.3     | 030.2     | 030.0     | 030.1     | 030.2     | 030.1     | 030.2     | 030.2     | 030.1     | 029.8     | 029.6     | 029.0     | 028.3     | 027.7     | 027.3     | 026.9     | 026.8     | 026.9     | 027.3     | 027.6     | 027.4     | 027.4     | 027.1     | 028.9 |
|                 | 10 | 026.8     | 026.5     | 026.1     | 025.8     |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |       |

Readings in millibars at exact hours, Greenwich Mean Time.

390. Richmond (Kew Observatory) : H<sub>b</sub> (height of barometer cistern above M.S.L.) = 10.4 metres.

September, 1924.

Table for Richmond (Kew Observatory) in September 1924. Columns: Day (1-30), Station Level (1-30), Mean (Station level), Mean (Sea level). Rows: 1-30. Values in millibars.

391. Richmond (Kew Observatory) : H<sub>b</sub> = 10.4 metres.

October, 1924.

Table for Richmond (Kew Observatory) in October 1924. Columns: Day (1-31), Station Level (1-31), Mean (Station level), Mean (Sea level), G.M.T. (1-24, Mean). Rows: 1-31. Values in millibars.

NOTE.—When pressure exceeds 1000 mb. the leading figure 1 is not printed, i.e., 1005.6 mb. is written 005.6. This rule does not, however, apply to monthly means

Readings in millibars at exact hours, Greenwich Mean Time.

392. Richmond (Kew Observatory) : H<sub>b</sub> (height of barometer cistern above M.S.L.) = 10.4 metres.

November, 1924.

Table for 392. Richmond (Kew Observatory) showing pressure readings in millibars for November 1924. Columns include Day, Station Level (1-30), and Mean (Station level). Rows show hourly readings from 1 to 30 days.

393. Richmond (Kew Observatory) : H<sub>b</sub> = 10.4 metres.

December, 1924.

Table for 393. Richmond (Kew Observatory) showing pressure readings in millibars for December 1924. Columns include Day, Station Level (1-31), and Mean (Station level). Rows show hourly readings from 1 to 31 days.

NOTE.—When pressure exceeds 1000 mb. the leading figure 1 is not printed, i.e., 1005.6 mb. is written 005.6. This rule does not, however, apply to monthly means.





Readings in degrees absolute at exact hours, Greenwich Mean Time.

397. Richmond (Kew Observatory) : North Wall Screen : h<sub>t</sub> (height of thermometer bulb above the ground) = 3.0 metres.

January, 1924.

Table with 25 columns (Day, 1-24, Mean) and 31 rows (1-31). Each cell contains a temperature reading in degrees absolute. The Mean row shows a range from 77.7 to 80.0.

398. Richmond (Kew Observatory) : North Wall Screen : h<sub>t</sub> = 3.0 metres.

February, 1924.

Table with 25 columns (Day, 1-24, Mean) and 29 rows (1-29). Each cell contains a temperature reading in degrees absolute. The Mean row shows a range from 75.7 to 78.1.

NOTE.—The initial 2 or 3 of the readings is omitted, i.e., 275.0 degrees absolute is written 75.0.

Readings in degrees absolute at exact hours, Greenwich Mean Time.

399. Richmond (Kew Observatory) : North Wall Screen : h<sub>t</sub> (height of thermometer bulb above the ground) = 3.0 metres.

March, 1924.

Table with 24 columns (Day, 1-24, Mean) and 31 rows (1-31). Each cell contains a temperature reading in degrees absolute. The Mean row shows average values for each day.

400. Richmond (Kew Observatory) : North Wall Screen : h<sub>b</sub> = 3.0 metres.

April, 1924.

Table with 24 columns (Day, 1-24, Mean) and 31 rows (1-31). Each cell contains a temperature reading in degrees absolute. The Mean row shows average values for each day.

NOTE.—The initial 2 or 3 of the readings is omitted, i.e., 275.0 degrees absolute is written 75.0.

Readings in degrees absolute at exact hours, Greenwich Mean Time.

401. Richmond (Kew Observatory) : North Wall Screen : ht (height of thermometer bulb above the ground) = 3.0 metres.

May, 1924.

Table with 25 columns (Day, 1-24, Mean) and 31 rows (1-31). Each cell contains a temperature reading in degrees absolute. The 'Mean' row at the bottom shows the average for each day.

402. Richmond (Kew Observatory) : North Wall Screen : ht = 3.0 metres.

June, 1924.

Table with 25 columns (Day, 1-24, Mean) and 31 rows (1-31). Each cell contains a temperature reading in degrees absolute. The 'Mean' row at the bottom shows the average for each day.

NOTE.—The initial 2 or 3 of the readings is omitted, i.e., 275.0 degrees absolute is written 75.0.

Readings in degrees absolute at exact hours, Greenwich Mean Time.

403. Richmond (Kew Observatory) : North Wall Screen : h<sub>t</sub> (height of thermometer bulb above the ground) = 3.0 metres..

July, 1924.

Table with 25 columns (Day, 1-24, Mean) and 31 rows (1-31). Contains temperature readings in degrees absolute for July 1924.

404. Richmond (Kew Observatory) : North Wall Screen : h<sub>t</sub> = 3.0 metres.

August, 1924.

Table with 25 columns (Day, 1-24, Mean) and 31 rows (1-31). Contains temperature readings in degrees absolute for August 1924.

NOTE.—The initial 2 or 3 of the readings is omitted, i.e., 275.0 degrees absolute is written 75.0.

Readings in degrees absolute at exact hours, Greenwich Mean Time.

405. Richmond (Kew Observatory) : North Wall Screen : h<sub>t</sub> (height of thermometer bulb above the ground)=3.0 metres.

September, 1924.

Table with 25 columns (Day, 1-24, Mean) and 31 rows (1-30, Mean). Each cell contains a temperature reading in degrees absolute. The Mean row shows a range from 85.8 to 87.4.

406. Richmond (Kew Observatory) : North Wall Screen : h<sub>t</sub> = 3.0 metres.

October, 1924.

Table with 25 columns (Day, 1-24, Mean) and 31 rows (1-30, Mean). Each cell contains a temperature reading in degrees absolute. The Mean row shows a range from 83.1 to 84.2.

NOTE.—The initial 2 or 3 of the readings is omitted, i.e., 275.0 degrees absolute is written 75.0.

*Readings in degrees absolute at exact hours, Greenwich Mean Time.*

407. Richmond (Kew Observatory) : North Wall Screen : h<sub>t</sub> (height of thermometer bulb above the ground) = 3.0 metres.

November, 1924.

| Day. | 1.   | 2.   | 3.   | 4.   | 5.   | 6.   | 7.   | 8.          | 9.   | 10.  | 11.  | Noon | 13.  | 14.  | 15.         | 16.  | 17.  | 18.  | 19.  | 20.  | 21.  | 22.  | 23.  | 24.  | Mean |      |
|------|------|------|------|------|------|------|------|-------------|------|------|------|------|------|------|-------------|------|------|------|------|------|------|------|------|------|------|------|
| 1    | a.   | a.   | a.   | a.   | a.   | a.   | a.   | a.          | a.   | a.   | a.   | a.   | a.   | a.   | a.          | a.   | a.   | a.   | a.   | a.   | a.   | a.   | a.   | a.   | a.   |      |
| 2    | 83.5 | 83.0 | 82.6 | 82.2 | 82.1 | 81.7 | 81.3 | 82.2        | 83.6 | 84.4 | 84.4 | 84.8 | 84.2 | 84.2 | 84.5        | 86.0 | 87.5 | 87.6 | 87.9 | 87.9 | 88.2 | 88.5 | 88.2 | 88.2 | 84.8 |      |
| 3    | 87.7 | 87.0 | 86.5 | 86.0 | 85.5 | 85.1 | 85.0 | 85.1        | 85.5 | 86.1 | 87.0 | 86.7 | 86.8 | 86.9 | 86.7        | 86.5 | 85.9 | 85.5 | 85.2 | 85.0 | 84.8 | 84.7 | 84.3 | 84.2 | 85.9 |      |
| 4    | 83.8 | 83.2 | 82.1 | 81.3 | 80.5 | 80.0 | 79.4 | 78.9        | 79.9 | 81.0 | 82.1 | 83.3 | 83.7 | 83.9 | 83.3        | 82.6 | 81.6 | 80.9 | 80.1 | 79.2 | 78.3 | 77.7 | 77.4 | 76.7 | 81.0 |      |
| 5    | 76.2 | 75.6 | 75.2 | 75.1 | 74.8 | 74.4 | 73.9 | 73.9        | 75.4 | 76.6 | 78.1 | 79.1 | 79.6 | 79.9 | 79.9        | 79.3 | 78.4 | 77.7 | 77.0 | 76.4 | 75.8 | 74.3 | 74.2 | 73.7 | 76.5 |      |
| 6    | 73.1 | 73.1 | 72.6 | 72.1 | 72.2 | 71.5 | 71.9 | 71.7        | 73.1 | 74.1 | 77.2 | 80.2 | 81.0 | 81.0 | 80.9        | 80.6 | 80.2 | 80.1 | 79.7 | 79.3 | 78.7 | 78.8 | 78.8 | 80.1 | 76.7 |      |
| 7    | 81.0 | 80.6 | 80.5 | 80.2 | 80.0 | 80.1 | 79.4 | 79.4        | 80.8 | 82.1 | 83.2 | 83.5 | 84.0 | 84.4 | 83.4        | 82.9 | 82.8 | 82.7 | 82.7 | 82.4 | 82.6 | 82.7 | 82.3 | 82.1 | 81.9 |      |
| 8    | 81.9 | 81.8 | 81.0 | 80.2 | 80.9 | 81.2 | 81.2 | 81.7        | 82.4 | 82.8 | 83.1 | 83.7 | 83.7 | 83.7 | 83.7        | 83.6 | 83.4 | 83.2 | 83.1 | 82.8 | 82.7 | 82.9 | 82.9 | 82.8 | 82.5 |      |
| 9    | 82.7 | 82.5 | 82.4 | 82.3 | 82.4 | 82.4 | 82.3 | 82.5        | 82.8 | 83.0 | 83.1 | 83.5 | 83.5 | 83.1 | 82.7        | 82.2 | 82.3 | 82.6 | 82.7 | 82.3 | 81.9 | 81.6 | 81.0 | 80.4 | 82.5 |      |
| 10   | 80.2 | 79.9 | 79.4 | 79.1 | 78.4 | 77.8 | 77.2 | 77.1        | 78.1 | 79.2 | 81.4 | 82.6 | 82.6 | 82.4 | 81.6        | 80.1 | 80.2 | 80.0 | 80.1 | 80.0 | 80.1 | 80.1 | 80.5 | 80.6 | 79.9 |      |
| 11   | 80.6 | 80.4 | 80.4 | 79.8 | 79.5 | 78.9 | 79.0 | 78.9        | 79.1 | 80.6 | 81.9 | 83.5 | 85.9 | 86.1 | 85.9        | 85.0 | 83.1 | 81.9 | 82.1 | 80.3 | 79.0 | 79.6 | 78.8 | 80.5 | 81.3 |      |
| 12   | 79.0 | 79.4 | 81.0 | 81.5 | 81.4 | 82.4 | 82.4 | 82.0        | 83.1 | 83.9 | 84.6 | 85.1 | 85.5 | 85.2 | 84.6        | 84.2 | 84.0 | 83.8 | 83.4 | 83.2 | 83.1 | 83.4 | 83.9 | 84.0 | 83.0 |      |
| 13   | 84.1 | 84.1 | 84.0 | 83.9 | 83.3 | 82.9 | 82.5 | 82.5        | 82.4 | 82.4 | 82.2 | 82.2 | 82.2 | 82.2 | 82.2        | 81.8 | 81.7 | 82.0 | 81.6 | 81.3 | 81.5 | 81.2 | 81.4 | 81.8 | 82.4 |      |
| 14   | 82.0 | 82.0 | 81.9 | 81.8 | 81.8 | 81.4 | 81.4 | 81.3        | 81.3 | 81.3 | 81.6 | 81.8 | 81.6 | 81.6 | 81.8        | 81.8 | 81.8 | 81.6 | 81.5 | 81.4 | 81.4 | 81.2 | 80.9 | 81.0 | 81.6 |      |
| 15   | 81.0 | 81.1 | 81.1 | 81.4 | 81.4 | 81.4 | 81.4 | 81.4        | 81.6 | 82.1 | 82.6 | 83.0 | 83.0 | 82.6 | 82.5        | 82.3 | 82.2 | 82.1 | 82.0 | 81.9 | 81.4 | 81.2 | 81.1 | 81.0 | 81.9 |      |
| 16   | 81.0 | 80.9 | 80.8 | 80.7 | 80.5 | 80.4 | 80.2 | 80.0        | 79.2 | 79.3 | 79.4 | 79.5 | 79.1 | 78.8 | 78.6        | 79.0 | 79.2 | 79.3 | 79.0 | 79.0 | 78.8 | 77.6 | 77.6 | 76.3 | 79.4 |      |
| 17   | 75.5 | 75.1 | 74.8 | 75.1 | 74.8 | 75.1 | 75.1 | 75.7        | 76.8 | 77.7 | 79.0 | 79.4 | 79.7 | 79.6 | 79.4        | 78.3 | 77.4 | 78.0 | 77.5 | 77.4 | 76.8 | 76.8 | 76.3 | 75.7 | 77.0 |      |
| 18   | 76.0 | 76.1 | 76.3 | 76.3 | 76.3 | 76.2 | 76.2 | 76.3        | 76.4 | 76.4 | 76.8 | 77.1 | 77.5 | 77.5 | 77.3        | 76.6 | 76.2 | 75.1 | 74.2 | 72.4 | 72.0 | 71.8 | 72.4 | 72.1 | 75.6 |      |
| 19   | 71.4 | 71.2 | 71.0 | 71.1 | 70.7 | 71.6 | 72.3 | 72.7        | 72.9 | 73.1 | 73.4 | 74.1 | 74.8 | 75.6 | 76.1        | 76.5 | 76.7 | 77.3 | 77.3 | 77.8 | 78.1 | 78.4 | 79.5 | 80.2 | 74.6 |      |
| 20   | 80.6 | 80.8 | 80.6 | 80.1 | 79.5 | 79.2 | 79.0 | 79.2        | 80.0 | 80.3 | 80.8 | 81.0 | 81.0 | 80.7 | 80.2        | 80.0 | 79.9 | 79.4 | 79.7 | 79.3 | 78.5 | 76.1 | 76.0 | 75.6 | 79.1 |      |
| 21   | 77.3 | 78.0 | 78.1 | 78.1 | 78.6 | 78.8 | 79.2 | 80.0        | 80.6 | 82.1 | 82.9 | 83.6 | 84.1 | 84.0 | 83.9        | 83.1 | 82.9 | 81.8 | 80.6 | 80.3 | 80.8 | 80.9 | 80.6 | 81.5 | 80.8 |      |
| 22   | 81.1 | 80.7 | 80.5 | 80.4 | 80.1 | 80.0 | 80.0 | 80.0        | 80.1 | 80.6 | 81.6 | 82.2 | 82.7 | 82.4 | 82.3        | 82.2 | 82.1 | 82.1 | 82.0 | 81.8 | 81.3 | 81.0 | 80.7 | 80.9 | 81.2 |      |
| 23   | 81.2 | 81.3 | 81.4 | 81.1 | 81.6 | 81.9 | 82.1 | 82.3        | 82.7 | 83.6 | 83.8 | 84.0 | 84.0 | 84.2 | 84.0        | 83.6 | 83.5 | 83.4 | 83.1 | 83.1 | 83.0 | 83.1 | 83.2 | 83.4 | 82.8 |      |
| 24   | 83.3 | 83.1 | 83.1 | 83.4 | 83.5 | 83.6 | 83.6 | 83.6        | 84.1 | 85.0 | 85.5 | 85.2 | 85.4 | 85.9 | 85.0        | 84.8 | 84.3 | 84.0 | 83.6 | 83.4 | 83.4 | 83.3 | 83.3 | 83.1 | 84.0 |      |
| 25   | 82.8 | 82.4 | 81.8 | 81.4 | 81.2 | 81.1 | 80.6 | 80.0        | 79.7 | 79.8 | 79.8 | 80.1 | 80.3 | 80.1 | 80.2        | 80.2 | 80.3 | 80.1 | 80.3 | 80.4 | 80.3 | 80.4 | 80.2 | 80.6 | 80.6 |      |
| 26   | 80.2 | 80.2 | 80.2 | 80.2 | 80.8 | 81.0 | 81.6 | 81.6        | 81.7 | 82.1 | 82.6 | 83.2 | 83.7 | 84.3 | 84.3        | 84.3 | 84.0 | 83.5 | 84.2 | 84.9 | 84.8 | 85.0 | 84.9 | 85.2 | 82.7 |      |
| 27   | 84.8 | 84.6 | 84.8 | 84.3 | 84.3 | 84.2 | 84.1 | 84.1        | 84.0 | 84.2 | 84.1 | 84.3 | 84.6 | 84.7 | 83.9        | 83.4 | 83.5 | 83.8 | 83.7 | 82.8 | 82.3 | 82.6 | 83.2 | 83.1 | 83.9 |      |
| 28   | 83.4 | 83.5 | 82.2 | 82.4 | 82.6 | 82.4 | 82.1 | 82.4        | 82.9 | 83.7 | 83.0 | 83.1 | 83.8 | 84.0 | 83.7        | 83.1 | 82.2 | 81.4 | 80.6 | 79.6 | 79.0 | 78.4 | 77.3 | 77.4 | 82.0 |      |
| 29   | 76.6 | 77.1 | 77.1 | 77.8 | 77.8 | 78.1 | 78.5 | 78.6        | 78.5 | 78.7 | 78.9 | 79.0 | 79.7 | 80.0 | 80.0        | 79.8 | 78.9 | 78.8 | 77.9 | 78.0 | 78.8 | 80.5 | 80.9 | 81.2 | 81.6 |      |
| 30   | 82.3 | 82.9 | 83.1 | 83.6 | 84.1 | 83.9 | 83.5 | 83.0        | 83.5 | 84.5 | 84.7 | 85.4 | 85.1 | 84.7 | 84.2        | 84.0 | 83.8 | 84.0 | 83.4 | 83.6 | 83.7 | 83.8 | 83.7 | 83.5 | 83.8 |      |
| 31   | 83.9 | 84.2 | 83.6 | 83.2 | 83.0 | 83.9 | 84.1 | 84.2        | 84.2 | 85.0 | 85.4 | 85.3 | 85.9 | 85.2 | 85.2        | 84.2 | 84.0 | 83.6 | 83.3 | 83.3 | 83.2 | 82.4 | 82.3 | 82.3 | 84.0 |      |
| Mean | ...  | 80.6 | 80.5 | 80.3 | 80.2 | 80.1 | 80.1 | <b>80.0</b> | 80.1 | 80.5 | 81.2 | 81.8 | 82.3 | 82.6 | <b>82.6</b> | 82.4 | 82.1 | 81.8 | 81.5 | 81.2 | 80.9 | 80.8 | 80.7 | 80.6 | 80.7 | 81.1 |

408. Richmond (Kew Observatory) : North Wall Screen : h<sub>t</sub> = 3.0 metres.

December, 1924.

| Day. | 1.   | 2.   | 3.   | 4.   | 5.   | 6.   | 7.   | 8.   | 9.   | 10.  | 11.  | Noon | 13.  | 14.  | 15.  | 16.  | 17.  | 18.  | 19.  | 20.  | 21.  | 22.  | 23.  | 24.  | Mean        |
|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|-------------|
| 1    | a.   | a.   | a.   | a.   | a.   | a.   | a.   | a.   | a.   | a.   | a.   | a.   | a.   | a.   | a.   | a.   | a.   | a.   | a.   | a.   | a.   | a.   | a.   | a.   | a.          |
| 2    | 82.2 | 81.9 | 81.8 | 81.5 | 81.7 | 82.1 | 82.7 | 82.8 | 83.5 | 84.0 | 84.4 | 84.8 | 85.2 | 85.2 | 84.6 | 83.1 | 82.6 | 82.4 | 82.6 | 82.0 | 82.0 | 82.9 | 82.2 | 81.7 | 83.0        |
| 3    | 82.2 | 82.4 | 82.6 | 82.6 | 82.5 | 82.3 | 82.3 | 82.4 | 82.6 | 82.8 | 82.1 | 82.1 | 81.8 | 81.8 | 81.6 | 81.9 | 82.0 | 81.8 | 81.5 | 81.3 | 81.3 | 80.8 | 80.6 | 80.9 | 81.9        |
| 4    | 81.0 | 81.0 | 80.9 | 80.4 | 80.7 | 80.8 | 80.9 | 80.9 | 81.1 | 81.5 | 81.9 | 82.0 | 82.2 | 82.2 | 82.2 | 82.0 | 81.9 | 81.8 | 81.6 | 81.5 | 81.7 | 81.8 | 81.7 | 81.6 | 81.5        |
| 5    | 81.3 | 81.1 | 80.8 | 80.1 | 79.3 | 78.6 | 78.2 | 77.9 | 78.0 | 78.7 | 79.7 | 81.0 | 82.0 | 82.7 | 83.1 | 82.8 | 82.1 | 82.1 | 82.1 | 82.4 | 82.7 | 83.1 | 83.3 | 83.8 | 81.1        |
| 6    | 84.3 | 85.1 | 85.5 | 85.6 | 85.1 | 84.6 | 83.6 | 84.0 | 84.1 | 85.0 | 84.1 | 85.0 | 85.1 | 84.9 | 84.9 | 83.7 | 83.3 | 83.1 | 82.9 | 82.6 | 82.6 | 82.6 | 83.1 | 83.3 | <b>84.1</b> |
| 7    | 83.0 | 83.1 | 83.1 | 81.3 | 80.9 | 80.4 | 79.9 | 80.0 | 81.0 | 81.9 | 82.6 | 83.2 | 83.2 | 82.9 | 82.9 | 81.8 | 80.6 | 80.4 | 79.5 | 79.3 | 77.5 | 77.2 | 78.0 | 77.5 | 80.9        |
| 8    | 76.5 | 75.3 | 74.8 | 76.0 | 76.7 | 75.5 | 75.7 | 75.7 | 79.6 | 81.6 | 82.5 | 82.8 | 82.8 | 82.1 | 81.3 | 80.1 | 79.8 | 79.2 | 79.1 | 79.5 | 79.5 | 79.4 | 79.4 | 79.4 | 78.7        |
| 9    | 79.3 | 79.0 | 78.5 | 78.2 | 78.0 | 77.5 | 78.4 | 78.7 | 79.1 | 79.8 | 79.9 | 80.3 | 80.5 | 80.6 | 80.3 | 79.7 | 79.2 | 79.0 | 78.7 | 78.6 | 78.7 | 78.6 | 78.1 | 77.7 | 79.1        |
| 10   | 78.2 | 78.1 | 78.7 | 78.1 | 77.5 | 77.2 | 76.5 | 76.7 | 75.7 | 76.6 | 78.0 | 79.6 | 80.6 | 81.0 | 80.8 | 79.8 | 78.1 | 76.6 | 75.4 | 74.2 | 73.6 | 73.1 | 73.0 | 73.0 | 77.2        |
| 11   | 72.4 | 73.1 | 73.1 | 73.6 | 74.1 | 74.3 | 73.6 | 73.0 | 73.1 | 73.9 | 74.4 | 74.1 | 74.2 | 74.1 | 74.3 | 73.7 | 73.6 | 73.6 | 73.5 | 73.7 | 73.6 | 74.0 | 74.2 | 74.0 | 73.7        |
| 12   | 73.9 | 73.3 | 73.1 | 73.1 | 72.9 | 72.6 | 72.5 | 72.6 | 73.1 | 73.0 | 72.8 | 73.4 | 73.6 | 73.6 | 74.0 | 73.8 | 73.6 | 73.6 | 73.2 | 73.6 | 73.6 | 73.6 | 73.6 | 73.7 | <b>73.3</b> |
| 13   | 74.1 | 74.2 | 74.4 | 74.5 | 74.7 | 75.3 | 75.2 | 75.0 | 75.4 | 76.4 | 77.0 | 77.6 | 77.9 | 77.8 | 77.6 | 77.1 | 77.0 | 77.0 | 76.9 | 76.9 | 76.5 | 76.6 | 76.6 | 76.5 | 76.1        |
| 14   | 76.6 | 76.5 | 76.5 | 76.5 | 76.6 | 76.5 | 76.5 | 76.0 | 76.2 | 76.6 | 77.0 | 76.9 | 77.0 | 77.0 | 77.2 | 77.1 | 77.0 | 77.2 | 77.3 | 77.2 | 77.3 | 77.9 | 78.3 | 79.0 | 76.9        |
| 15   | 79.1 | 78.5 | 78.2 | 78.2 | 77.0 | 76.1 | 75.2 | 74.7 | 74.8 | 76.2 | 77.5 | 79.2 | 80.4 | 80.5 | 80.2 | 79.1 | 78.1 | 77.9 | 77.5 | 77.1 | 76.7 | 76.2 | 75.8 | 75.3 | 77.6        |
| 16   | 75.2 | 74.0 | 73.3 | 73.1 | 73.3 | 75.3 | 77.8 | 79.2 | 80.1 | 80.4 | 80.8 | 81.0 | 80.4 | 80.5 | 80.0 | 80.0 | 80.5 | 80.5 | 81.2 | 81.6 | 81.9 | 82.0 | 82.2 | 82.2 | 78.6        |
| 17   | 82.3 | 81.8 | 81.6 | 81.6 | 81.8 | 81.9 | 82.0 | 81.8 | 81.9 | 83.0 | 83.4 | 83.4 | 83.3 | 83.0 | 83.0 | 82.9 | 82.5 | 82.0 | 81.6 | 81.5 | 81.1 | 80.6 | 80.0 | 79.8 | 82.0        |
| 18   | 79.9 | 79.8 | 79.1 | 78.9 | 78.5 | 78.1 | 78.0 | 77.3 | 78.0 | 78.0 | 78.1 | 78.1 | 78.2 | 78.4 | 78.7 | 78.0 | 77.8 | 7    |      |      |      |      |      |      |             |

TEMPERATURE : ANNUAL MEANS OF HOURLY VALUES. From readings in degrees absolute at exact hours, Greenwich Mean Time.

409. Richmond (Kew Observatory) : North Wall Screen : h<sub>t</sub> = 3.0 metres.

Table with 25 columns (1-24 hours and Mean) and 2 rows (a. and numerical values). Values range from 81.60 to 85.86.

TEMPERATURE : MONTHLY MEANS AND DIURNAL INEQUALITIES. The departures from the mean of the day are adjusted for non-periodic change.

410. Richmond (Kew Observatory) : North Wall Screen : h<sub>t</sub> = 3.0 metres.

Table with 25 columns (Month, Mean, Hour 1-24) and 12 rows (Jan to Dec and Year). Values range from 276.30 to 289.62.

ABSOLUTE EXTREMES OF TEMPERATURE FOR EACH DAY. Maximum and Minimum for the interval 0h. to 24h., Greenwich Mean Time.

411. Richmond (Kew Observatory) : North Wall Screen : h<sub>t</sub> = 3.0 metres.

Large table with 23 columns (Month, Day, Max, Min) and 31 rows (Days 1-31). Values range from 70.4 to 88.8.

NOTE.—The initial 2 or 3 of the readings is omitted, i.e., 275.0 degrees absolute is written 75.0.



Percentages at exact hours Greenwich Mean Time. Determined as explained on page 14.

**412. Richmond (Kew Observatory) :** North Wall Screen : *h<sub>t</sub>* (height of thermometer bulbs above the ground) = 3·0 metres.

**January, 1924.**

| Day.             | 1.      | 2.      | 3.      | 4.      | 5.      | 6.      | 7.      | 8.      | 9.      | 10.     | 11.     | Noon.   | 13.     | 14.     | 15.     | 16.     | 17.     | 18.     | 19.     | 20.     | 21.     | 22.     | 23.     | 24.     | Mean    | Vapour Pressure.* |     |
|------------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|-------------------|-----|
|                  | %       | %       | %       | %       | %       | %       | %       | %       | %       | %       | %       | %       | %       | %       | %       | %       | %       | %       | %       | %       | %       | %       | %       | %       | %       | %                 | mb. |
| 1                | 99      | 100     | 100     | 97      | 96      | 95      | 95      | 95      | 97      | 97      | 95      | 93      | 91      | 93      | 91      | 91      | 89      | 89      | 92      | 89      | 83      | 87      | 85      | 85      | 93·0    | 10·4              |     |
| 2                | 85      | 85      | 87      | 87      | 87      | 90      | 90      | 90      | 94      | 94      | 92      | 89      | 85      | 83      | 87      | 88      | 92      | 95      | 96      | 96      | 96      | 95      | 93      | 94      | 90·2    | 9·8               |     |
| 3                | 94      | 95      | 94      | 93      | 95      | 92      | 91      | 89      | 92      | 91      | 78      | 78      | 75      | 72      | 73      | 75      | 80      | 85      | 89      | 91      | 91      | 95      | 97      | 95      | 87·5    | 7·2               |     |
| 4                | 99      | 96      | 96      | 99      | 95      | 99      | 99      | 95      | 99      | 99      | 97      | 93      | 92      | 91      | 90      | 90      | 95      | 95      | 95      | 91      | 87      | 85      | 87      | 87      | 94·0    | 5·6               |     |
| 5                | 87      | 89      | 89      | 87      | 86      | 86      | 89      | 91      | 88      | 85      | 87      | 82      | 78      | 77      | 80      | 83      | 89      | 91      | 93      | 93      | 93      | 87      | 91      | 85      | 87·0    | 5·5               |     |
| 6                | 89      | 89      | 91      | 89      | 89      | 93      | 87      | 95      | 91      | 85      | 77      | 75      | 69      | 69      | 66      | 71      | 73      | 81      | 81      | 77      | 75      | 76      | 76      | 80      | 81·1    | 5·8               |     |
| 7                | 81      | 83      | 83      | 85      | 91      | 91      | 93      | 95      | 91      | 87      | 85      | 80      | 81      | 81      | 79      | 79      | 83      | 88      | 87      | 87      | 87      | 88      | 88      | 88      | 85·7    | 5·7               |     |
| 8                | 91      | 91      | 91      | 91      | 91      | 93      | 95      | 97      | 91      | 93      | 95      | 97      | 93      | 93      | 92      | 93      | 93      | 95      | 91      | 91      | 95      | 91      | 96      | 96      | 93·0    | 6·9               |     |
| 9                | 89      | 86      | 93      | 89      | 81      | 79      | 80      | 80      | 77      | 67      | 72      | 65      | 65      | 71      | 76      | 74      | 81      | 81      | 81      | 81      | 76      | 79      | 81      | 81      | 78·8    | 4·3               |     |
| 10               | 83      | 87      | 91      | 91      | 94      | 91      | 94      | 91      | 80      | 92      | 90      | 88      | 87      | 88      | 87      | 91      | 89      | 93      | 97      | 93      | 97      | 97      | 95      | 93      | 90·8    | 6·5               |     |
| 11               | 95      | 99      | 99      | 99      | 95      | 90      | 87      | 85      | 85      | 81      | 75      | 72      | 71      | 75      | 75      | 78      | 83      | 87      | 89      | 86      | 81      | 83      | 89      | 92      | 85·5    | 7·3               |     |
| 12               | 89      | 87      | 86      | 85      | 85      | 85      | 86      | 87      | 86      | 85      | 81      | 79      | 81      | 83      | 79      | 81      | 79      | 79      | 77      | 71      | 70      | 71      | 75      | 77      | 81·3    | 9·8               |     |
| 13               | 77      | 76      | 75      | 76      | 77      | 77      | 75      | 77      | 73      | 73      | 73      | 71      | 69      | 68      | 69      | 73      | 75      | 75      | 76      | 79      | 77      | 77      | 78      | 79      | 74·7    | 8·1               |     |
| 14               | 81      | 82      | 85      | 85      | 87      | 92      | 89      | 88      | 92      | 87      | 88      | 88      | 87      | 87      | 87      | 84      | 85      | 85      | 84      | 85      | 82      | 83      | 87      | 89      | 86·0    | 9·9               |     |
| 15               | 91      | 91      | 92      | 91      | 87      | 90      | 87      | 89      | 85      | 83      | 81      | 79      | 76      | 74      | 68      | 71      | 75      | 77      | 76      | 83      | 85      | 86      | 89      | 89      | 83·0    | 8·5               |     |
| 16               | 91      | 89      | 92      | 93      | 91      | 91      | 91      | 90      | 90      | 87      | 83      | 81      | 79      | 79      | 78      | 79      | 81      | 82      | 85      | 91      | 88      | 91      | 92      | 92      | 86·8    | 7·1               |     |
| 17               | 90      | 88      | 89      | 89      | 87      | 91      | 91      | 91      | 95      | 89      | 91      | 89      | 91      | 89      | 93      | 95      | 93      | 91      | 95      | 95      | 95      | 99      | 99      | 99      | 92·0    | 6·5               |     |
| 18               | 97      | 95      | 94      | 97      | 94      | 96      | 95      | 97      | 95      | 92      | 95      | 96      | 96      | 95      | 93      | 95      | 95      | 95      | 91      | 89      | 89      | 85      | 82      | 81      | 93·3    | 10·3              |     |
| 19               | 87      | 92      | 92      | 95      | 93      | 92      | 93      | 91      | 87      | 80      | 81      | 73      | 68      | 66      | 78      | 86      | 86      | 76      | 79      | 81      | 83      | 82      | 86      | 85      | 83·7    | 9·4               |     |
| 20               | 87      | 89      | 81      | 81      | 85      | 86      | 83      | 83      | 85      | 86      | 77      | 71      | 67      | 67      | 68      | 72      | 78      | 81      | 85      | 89      | 91      | 94      | 90      | 93      | 81·9    | 8·6               |     |
| 21               | 93      | 93      | 94      | 94      | 97      | 95      | 97      | 97      | 95      | 93      | 97      | 96      | 99      | 99      | 95      | 97      | 97      | 96      | 96      | 96      | 97      | 96      | 96      | 96      | 96      | 95·7              | 9·8 |
| 22               | 96      | 96      | 96      | 96      | 93      | 92      | 91      | 91      | 89      | 88      | 83      | 81      | 77      | 79      | 78      | 77      | 82      | 92      | 95      | 95      | 99      | 97      | 99      | 99      | 99      | 89·9              | 9·7 |
| 23               | 100     | 99      | 99      | 100     | 100     | 100     | 97      | 99      | 97      | 93      | 91      | 91      | 91      | 90      | 95      | 94      | 94      | 94      | 93      | 93      | 93      | 93      | 93      | 94      | 95·3    | 9·4               |     |
| 24               | 97      | 95      | 84      | 93      | 94      | 97      | 97      | 97      | 94      | 93      | 89      | 83      | 85      | 91      | 93      | 94      | 99      | 95      | 99      | 99      | 100     | 99      | 100     | 99      | 94·1    | 9·2               |     |
| 25               | 94      | 94      | 93      | 93      | 93      | 94      | 93      | 93      | 91      | 89      | 83      | 76      | 71      | 61      | 61      | 68      | 81      | 81      | 85      | 92      | 91      | 85      | 92      | 91      | 85·2    | 8·0               |     |
| 26               | 93      | 95      | 97      | 95      | 99      | 97      | 95      | 95      | 95      | 99      | 94      | 90      | 90      | 86      | 83      | 85      | 87      | 92      | 94      | 94      | 94      | 94      | 93      | 94      | 93·1    | 7·9               |     |
| 27               | 93      | 90      | 89      | 82      | 81      | 75      | 80      | 78      | 78      | 69      | 63      | 62      | 59      | 59      | 60      | 69      | 70      | 74      | 79      | 82      | 81      | 84      | 89      | 89      | 76·6    | 7·1               |     |
| 28               | 91      | 93      | 93      | 93      | 91      | 91      | 90      | 85      | 84      | 81      | 80      | 76      | 72      | 70      | 73      | 73      | 79      | 83      | 83      | 85      | 86      | 89      | 89      | 94      | 84·2    | 7·5               |     |
| 29               | 95      | 99      | 99      | 93      | 93      | 93      | 95      | 95      | 92      | 93      | 93      | 89      | 82      | 82      | 84      | 86      | 89      | 89      | 91      | 93      | 97      | 99      | 95      | 97      | 92·2    | 8·0               |     |
| 30               | 97      | 97      | 97      | 97      | 100     | 97      | 97      | 99      | 99      | 99      | 100     | 100     | 97      | 97      | 95      | 95      | 94      | 95      | 95      | 95      | 95      | 95      | 99      | 99      | 97·0    | 8·7               |     |
| 31               | 97      | 99      | 99      | 99      | 95      | 95      | 95      | 95      | 94      | 90      | 89      | 90      | 89      | 89      | 83      | 85      | 86      | 89      | 90      | 90      | 89      | 93      | 93      | 95      | 92·1    | 9·0               |     |
| Mean             | 91·2    | 91·6    | 91·6    | 91·4    | 91·0    | 91·1    | 90·9    | 91·0    | 90·0    | 87·6    | 85·8    | 83·1    | 81·1    | 80·7    | 80·9    | 83·0    | 85·5    | 87·3    | 88·1    | 88·5    | 88·5    | 88·8    | 89·7    | 90·7    | 87·9    | 8·0†              |     |
| Vapour Pressure* | mb. 7·7 | mb. 7·8 | mb. 7·7 | mb. 7·7 | mb. 7·7 | mb. 7·7 | mb. 7·7 | mb. 7·7 | mb. 7·7 | mb. 7·8 | mb. 7·9 | mb. 7·9 | mb. 8·0 | mb. 8·0 | mb. 8·1 | mb. 8·0 | mb. 8·0 | mb. 7·9 | mb. 7·9 | mb. 8·0 | mb. 7·8 | mb. 7·8 | mb. 7·7 | mb. 7·8 | mb. 7·8 | —                 |     |

**413. Richmond (Kew Observatory) :** North Wall Screen : *h<sub>t</sub>* = 3·0 metres.

**February, 1924.**

| Day. | 1. | 2. | 3. | 4. | 5. | 6. | 7. | 8. | 9. | 10. | 11. | Noon. | 13. | 14. | 15. | 16. | 17. | 18. | 19. | 20. | 21. | 22. | 23.  | 24. | Mean | Vapour Pressure.* |     |
|------|----|----|----|----|----|----|----|----|----|-----|-----|-------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|-----|------|-------------------|-----|
|      | %  | %  | %  | %  | %  | %  | %  | %  | %  | %   | %   | %     | %   | %   | %   | %   | %   | %   | %   | %   | %   | %   | %    | %   | %    | %                 | mb. |
| 1    | 94 | 95 | 95 | 99 | 83 | 77 | 82 | 87 | 84 | 79  | 74  | 70    | 60  | 62  | 59  | 57  | 64  | 71  | 79  | 83  | 87  | 85  | 88   | 91  | 79·5 | 6·8               |     |
| 2    | 91 | 87 | 89 | 91 | 89 | 87 | 91 | 90 | 88 | 84  | 81  | 76    | 71  | 71  | 73  | 70  | 75  | 79  | 80  | 87  | 87  | 83  | 82   | 82  | 82   | 82·8              | 7·2 |
| 3    | 86 | 84 | 81 | 87 | 88 | 89 | 89 | 95 | 93 | 89  | 70  | 72    | 70  | 70  | 70  | 69  | 73  | 71  | 72  | 75  | 75  | 72  | 72   | 75  | 78·7 | 7·4               |     |
| 4    | 79 | 83 | 87 | 86 | 90 | 87 | 83 | 85 | 80 | 75  | 74  | 73    | 73  | 76  | 77  | 79  | 82  | 81  | 84  | 84  | 83  | 81  | 85   | 88  | 81·2 | 7·7               |     |
| 5    | 89 | 92 | 89 | 89 | 82 | 82 | 88 | 86 | 87 | 79  | 73  | 69    | 69  | 69  | 72  | 75  | 73  | 73  | 73  | 76  | 79  | 79  | 81   | 79  | 81   | 79·0              | 7·7 |
| 6    | 82 | 84 | 85 | 86 | 87 | 87 | 83 | 85 | 85 | 88  | 85  | 85    | 86  | 85  | 77  | 77  | 79  | 77  | 83  | 83  | 79  | 81  | 79   | 79  | 82·8 | 9·6               |     |
| 7    | 78 | 80 | 76 | 71 | 76 | 79 | 68 | 76 | 79 | 82  | 81  | 81    | 73  | 77  | 73  | 72  | 75  | 74  | 66  | 76  | 73  | 75  | 71   | 70  | 75·2 | 7·5               |     |
| 8    | 77 | 76 | 79 | 79 | 77 | 82 | 77 | 77 | 73 | 73  | 75  | 71    | 77  | 69  | 70  | 71  | 73  | 78  | 79  | 77  | 80  | 77  | 79   | 77  | 75·8 | 7·0               |     |
| 9    | 74 | 79 | 79 | 82 | 85 | 81 | 81 | 85 | 80 | 87  | 93  | 91    | 89  | 89  | 89  | 84  | 85  | 85  | 87  | 90  | 93  | 91  | 93   | 91  | 85·7 | 8·2               |     |
| 10   | 93 | 93 | 94 | 95 | 95 | 93 | 94 | 93 | 93 | 90  | 87  | 87    | 89  | 85  | 85  | 89  | 90  | 89  | 91  | 91  | 91  | 91  | 91   | 91  | 91   | 91·1              | 8·9 |
| 11   | 89 | 87 | 87 | 88 | 86 | 83 | 84 | 83 | 84 | 83  | 87  | 89    | 84  | 83  | 83  | 81  | 83  | 81  | 81  | 81  | 80  | 80  | 81   | 81  | 83·9 | 6·4               |     |
| 12   | 81 | 81 | 84 | 83 | 85 | 85 | 89 | 91 | 90 | 91  | 88  | 88    | 88  | 95  | 94  | 94  | 97  | 97  | 97  | 97  | 93  | 91  | 93   | 94  | 89·8 | 7·4               |     |
| 13   | 93 | 91 | 93 | 91 | 92 | 89 | 87 | 87 | 88 | 88  | 79  | 79    | 77  | 75  | 76  | 73  | 65  | 63  | 60  | 61  | 61  | 63  | 63   | 61  | 78·0 | 5·5               |     |
| 14   | 62 | 61 | 66 | 67 | 62 | 61 | 64 | 57 | 57 | 59  | 62  | 62    | 64  | 63  | 63  | 62  | 63  | 65  | 63  | 63  | 67  | 67  | 67   | 73  | 63·3 | 3·9               |     |
| 15   | 77 | 80 | 75 | 71 | 77 | 79 | 79 | 81 | 81 | 83  | 79  | 82    | 89  | 89  | 86  | 85  | 91  | 92  | 93  | 96  | 96  | 97  | 93   | 93  | 84·8 | 4·8               |     |
| 16   | 99 | 97 | 95 | 91 | 93 | 96 | 95 | 89 | 73 | 67  | 67  | 66    | 59  | 53  | 52  | 51  | 59  | 62  | 66  | 67  | 69  | 73  | 81   | 80  | 75·3 | 4·8               |     |
| 17   | 76 | 73 | 73 | 80 | 83 | 84 | 77 | 81 | 74 | 69  | 62  | 81    | 71  | 79  | 80  | 79  | 87  | 86  | 86  | 93  | 89  | 89  | 93   | 89  | 80·4 | 4·5               |     |
| 18   | 89 | 79 | 79 | 81 | 79 | 83 | 83 | 91 | 85 | 85  | 89  | 89    | 97  | 95  | 84  | 73  | 72  | 74  | 73  | 71  | 70  | 73  | 76   | 81  | 81·5 | 5·6               |     |
| 19   | 80 | 80 | 79 | 81 | 82 | 82 | 83 | 85 | 82 | 81  | 73  | 72    | 76  | 80  | 71  | 75  | 79  | 80  | 80  | 84  | 89  | 91  | 85   | 83  | 80·5 | 5·7               |     |
| 20   | 87 | 91 | 83 | 85 | 81 | 79 | 79 | 77 | 75 | 73  | 76  | 76    | 77  | 75  | 76  | 75  | 76  | 77  | 76  | 77  | 76  | 75  | 75   | 77  | 83   | 78·2              | 5·4 |
| 21   | 89 | 89 | 89 | 87 | 93 | 93 | 93 | 91 | 91 | 87  | 81  | 85    | 82  | 83  | 87  | 84  | 85  | 87  | 90  | 91  | 89  | 87  | 80   | 87  | 87·4 | 5·7               |     |
| 22   | 85 | 87 | 85 | 84 | 83 | 80 | 80 | 79 | 77 | 74  | 71  | 70    | 72  | 79  | 67  | 69  | 68  | 71  | 71  | 71  | 76  | 77  | 79   | 81  | 76·6 | 6·0               |     |
| 23   | 85 | 87 | 85 | 87 | 87 | 87 | 91 | 87 | 85 | 79  | 77  | 73    | 62  | 65  | 61  | 59  | 62  | 64  | 66  | 68  | 72  | 73  | 77</ |     |      |                   |     |

*Percentages at exact hours Greenwich Mean Time. Determined as explained on page 14.*

**414. Richmond (Kew Observatory) : North Wall Screen :  $h_t$  (height of thermometer bulbs above the ground)=3.0 metres.**

**March, 1924.**

| Day.                 | 1.   | 2.   | 3.   | 4.   | 5.   | 6.   | 7.   | 8.   | 9.   | 10.  | 11.  | Noon. | 13.  | 14.  | 15.  | 16.  | 17.  | 18.  | 19.  | 20.  | 21.  | 22.  | 23.  | 24.  | Mean. | Vapour Pressure.* |      |
|----------------------|------|------|------|------|------|------|------|------|------|------|------|-------|------|------|------|------|------|------|------|------|------|------|------|------|-------|-------------------|------|
|                      | %    | %    | %    | %    | %    | %    | %    | %    | %    | %    | %    | %     | %    | %    | %    | %    | %    | %    | %    | %    | %    | %    | %    | %    | %     | %                 | mb.  |
| 1                    | 67   | 67   | 68   | 67   | 62   | 62   | 64   | 59   | 53   | 55   | 50   | 50    | 49   | 46   | 52   | 54   | 57   | 60   | 65   | 69   | 73   | 72   | 73   | 75   | 75    | 61.0              | 4.6  |
| 2                    | 75   | 77   | 85   | 87   | 87   | 87   | 80   | 84   | 71   | 64   | 80   | 60    | 57   | 56   | 52   | 74   | 89   | 89   | 93   | 95   | 91   | 89   | 93   | 93   | 93    | 79.9              | 5.7  |
| 3                    | 93   | 93   | 96   | 93   | 91   | 93   | 94   | 90   | 83   | 83   | 82   | 76    | 77   | 63   | 66   | 69   | 73   | 78   | 89   | 87   | 89   | 93   | 93   | 95   | 95    | 84.9              | 6.1  |
| 4                    | 88   | 85   | 85   | 89   | 91   | 91   | 93   | 95   | 93   | 83   | 75   | 63    | 60   | 56   | 53   | 58   | 62   | 67   | 73   | 76   | 83   | 89   | 83   | 89   | 89    | 78.5              | 5.8  |
| 5                    | 89   | 89   | 92   | 93   | 99   | 89   | 89   | 89   | 89   | 89   | 81   | 68    | 61   | 57   | 58   | 56   | 60   | 67   | 77   | 77   | 76   | 76   | 77   | 78   | 78    | 77.4              | 5.6  |
| 6                    | 90   | 91   | 93   | 93   | 95   | 95   | 95   | 90   | 93   | 88   | 81   | 77    | 78   | 79   | 74   | 81   | 81   | 79   | 80   | 81   | 85   | 90   | 87   | 87   | 87    | 85.7              | 7.1  |
| 7                    | 89   | 93   | 96   | 96   | 91   | 95   | 93   | 89   | 85   | 85   | 85   | 81    | 73   | 69   | 62   | 73   | 72   | 81   | 85   | 88   | 91   | 95   | 95   | 96   | 96    | 86.0              | 6.5  |
| 8                    | 89   | 89   | 85   | 87   | 86   | 81   | 81   | 81   | 83   | 83   | 83   | 75    | 57   | 51   | 49   | 43   | 45   | 57   | 61   | 62   | 68   | 68   | 66   | 73   | 71.4  | 5.4               |      |
| 9                    | 79   | 85   | 79   | 91   | 89   | 89   | 94   | 91   | 86   | 66   | 57   | 54    | 49   | 43   | 41   | 41   | 45   | 52   | 55   | 64   | 67   | 75   | 81   | 79   | 68.7  | 5.6               |      |
| 10                   | 79   | 89   | 89   | 93   | 95   | 96   | 99   | 96   | 91   | 73   | 70   | 58    | 53   | 57   | 55   | 57   | 60   | 66   | 68   | 76   | 77   | 81   | 88   | 88   | 88    | 77.3              | 5.8  |
| 11                   | 93   | 96   | 97   | 91   | 95   | 97   | 95   | 95   | 97   | 99   | 68   | 58    | 45   | 43   | 41   | 43   | 53   | 66   | 68   | 70   | 74   | 77   | 81   | 82   | 82    | 76.1              | 6.6  |
| 12                   | 85   | 85   | 90   | 93   | 89   | 95   | 88   | 85   | 77   | 68   | 62   | 60    | 56   | 54   | 51   | 55   | 57   | 59   | 70   | 73   | 71   | 73   | 74   | 79   | 79    | 72.9              | 6.8  |
| 13                   | 76   | 76   | 73   | 72   | 73   | 67   | 71   | 71   | 64   | 60   | 54   | 52    | 54   | 51   | 49   | 52   | 59   | 65   | 68   | 73   | 77   | 77   | 79   | 80   | 80    | 66.3              | 5.6  |
| 14                   | 79   | 79   | 77   | 79   | 75   | 71   | 71   | 73   | 66   | 62   | 54   | 52    | 48   | 45   | 39   | 41   | 43   | 51   | 62   | 71   | 76   | 87   | 83   | 89   | 89    | 65.3              | 5.4  |
| 15                   | 85   | 87   | 90   | 91   | 89   | 95   | 91   | 87   | 90   | 84   | 68   | 55    | 48   | 44   | 43   | 45   | 50   | 54   | 62   | 68   | 71   | 78   | 70   | 69   | 71.4  | 6.2               |      |
| 16                   | 71   | 73   | 71   | 71   | 78   | 73   | 77   | 77   | 73   | 63   | 59   | 51    | 49   | 57   | 59   | 63   | 66   | 61   | 62   | 67   | 74   | 79   | 79   | 83   | 83    | 67.9              | 6.5  |
| 17                   | 89   | 85   | 89   | 86   | 86   | 91   | 91   | 92   | 77   | 71   | 63   | 60    | 53   | 54   | 49   | 51   | 54   | 51   | 62   | 61   | 62   | 63   | 67   | 71   | 70.2  | 5.5               |      |
| 18                   | 73   | 76   | 81   | 81   | 82   | 80   | 79   | 77   | 67   | 60   | 56   | 57    | 49   | 49   | 49   | 49   | 51   | 56   | 66   | 77   | 81   | 81   | 81   | 86   | 86    | 68.2              | 5.3  |
| 19                   | 85   | 87   | 85   | 89   | 91   | 86   | 94   | 94   | 79   | 73   | 62   | 58    | 54   | 52   | 49   | 49   | 46   | 49   | 60   | 67   | 70   | 82   | 72   | 75   | 71.4  | 5.7               |      |
| 20                   | 81   | 84   | 85   | 83   | 87   | 85   | 85   | 79   | 72   | 67   | 65   | 62    | 62   | 62   | 60   | 63   | 65   | 69   | 72   | 77   | 77   | 76   | 73   | 71   | 73.5  | 5.7               |      |
| 21                   | 73   | 77   | 77   | 79   | 81   | 82   | 82   | 81   | 79   | 80   | 78   | 78    | 77   | 86   | 79   | 81   | 81   | 83   | 86   | 88   | 91   | 100  | 97   | 97   | 97    | 82.5              | 6.9  |
| 22                   | 95   | 95   | 97   | 99   | 97   | 99   | 96   | 93   | 92   | 93   | 86   | 77    | 72   | 64   | 62   | 64   | 65   | 69   | 82   | 86   | 91   | 95   | 91   | 91   | 91    | 85.6              | 10.2 |
| 23                   | 96   | 96   | 96   | 95   | 97   | 97   | 97   | 96   | 97   | 96   | 92   | 90    | 81   | 78   | 77   | 79   | 85   | 85   | 89   | 93   | 90   | 91   | 92   | 91   | 91    | 90.7              | 11.7 |
| 24                   | 91   | 89   | 89   | 89   | 89   | 89   | 89   | 85   | 83   | 84   | 81   | 77    | 75   | 64   | 70   | 73   | 75   | 81   | 86   | 89   | 93   | 97   | 100  | 97   | 97    | 84.1              | 10.8 |
| 25                   | 99   | 99   | 97   | 96   | 93   | 95   | 99   | 99   | 96   | 96   | 96   | 96    | 90   | 91   | 88   | 86   | 85   | 86   | 85   | 89   | 89   | 87   | 92   | 91   | 92    | 92.5              | 11.1 |
| 26                   | 91   | 95   | 100  | 99   | 99   | 97   | 97   | 99   | 95   | 93   | 91   | 89    | 90   | 87   | 86   | 86   | 89   | 89   | 91   | 95   | 94   | 95   | 95   | 95   | 95    | 93.1              | 8.8  |
| 27                   | 91   | 85   | 88   | 85   | 87   | 89   | 88   | 81   | 77   | 77   | 74   | 75    | 71   | 71   | 71   | 74   | 75   | 71   | 73   | 74   | 77   | 83   | 84   | 84   | 84    | 79.6              | 6.4  |
| 28                   | 79   | 81   | 85   | 83   | 83   | 81   | 80   | 80   | 77   | 74   | 70   | 67    | 65   | 62   | 60   | 63   | 59   | 59   | 61   | 59   | 66   | 71   | 75   | 75   | 71.0  | 5.7               |      |
| 29                   | 76   | 77   | 75   | 68   | 75   | 75   | 75   | 75   | 73   | 65   | 68   | 64    | 58   | 57   | 55   | 52   | 52   | 56   | 63   | 70   | 73   | 77   | 79   | 80   | 80    | 67.1              | 5.3  |
| 30                   | 79   | 77   | 77   | 80   | 80   | 81   | 79   | 72   | 66   | 62   | 60   | 56    | 59   | 59   | 55   | 59   | 54   | 54   | 59   | 65   | 65   | 75   | 77   | 79   | 79    | 68.0              | 5.3  |
| 31                   | 79   | 71   | 72   | 71   | 68   | 67   | 67   | 69   | 69   | 67   | 64   | 63    | 63   | 57   | 57   | 56   | 55   | 67   | 74   | 77   | 75   | 77   | 84   | 88   | 68.9  | 5.4               |      |
| Mean                 | 84.0 | 84.8 | 85.8 | 86.1 | 86.6 | 86.0 | 86.5 | 84.9 | 81.0 | 76.2 | 70.6 | 66.5  | 62.4 | 60.5 | 58.3 | 61.0 | 63.3 | 66.7 | 72.0 | 76.0 | 78.2 | 81.6 | 82.3 | 84.2 | 76.0  | 6.6†              |      |
| Vapour Pressure* ... | 6.3  | 6.3  | 6.2  | 6.1  | 6.1  | 6.0  | 6.0  | 6.3  | 6.4  | 6.5  | 6.7  | 6.6   | 6.6  | 6.7  | 6.5  | 6.6  | 6.6  | 6.5  | 6.5  | 6.5  | 6.4  | 6.4  | 6.4  | 6.4  | 6.4   | 6.4‡              |      |

**415. Richmond (Kew Observatory) : North Wall Screen :  $h_t$  = 3.0 metres.**

**April, 1924.**

|    | %  | %  | %  | %  | %  | %   | %  | %  | %  | %  | %  | %  | %  | %  | %  | %  | %  | %  | %  | %  | %  | %    | %  | %  | %    | %    | mb. |
|----|----|----|----|----|----|-----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|------|----|----|------|------|-----|
| 1  | 88 | 89 | 89 | 93 | 89 | 91  | 89 | 84 | 82 | 76 | 73 | 79 | 70 | 61 | 55 | 46 | 49 | 51 | 49 | 55 | 59 | 65   | 75 | 79 | 72.5 | 6.0  |     |
| 2  | 80 | 75 | 75 | 73 | 73 | 77  | 75 | 73 | 68 | 65 | 63 | 61 | 57 | 55 | 53 | 61 | 66 | 68 | 67 | 70 | 69 | 70   | 70 | 70 | 70   | 68.3 | 5.1 |
| 3  | 70 | 71 | 72 | 81 | 88 | 88  | 87 | 66 | 65 | 65 | 53 | 54 | 52 | 49 | 50 | 51 | 55 | 59 | 62 | 64 | 63 | 67   | 71 | 76 | 65.7 | 5.2  |     |
| 4  | 78 | 79 | 81 | 82 | 88 | 88  | 85 | 83 | 79 | 85 | 91 | 83 | 83 | 81 | 73 | 71 | 71 | 79 | 69 | 69 | 73 | 74   | 76 | 77 | 79.0 | 6.4  |     |
| 5  | 79 | 83 | 85 | 83 | 83 | 87  | 83 | 79 | 71 | 70 | 58 | 46 | 45 | 43 | 42 | 53 | 58 | 63 | 71 | 77 | 80 | 85   | 91 | 91 | 70.8 | 5.0  |     |
| 6  | 96 | 91 | 89 | 93 | 99 | 95  | 97 | 93 | 85 | 82 | 78 | 76 | 72 | 70 | 68 | 66 | 68 | 72 | 83 | 89 | 90 | 95   | 90 | 88 | 84.4 | 7.0  |     |
| 7  | 89 | 91 | 91 | 92 | 92 | 93  | 93 | 89 | 79 | 70 | 62 | 55 | 48 | 50 | 49 | 49 | 49 | 54 | 58 | 60 | 69 | 73   | 79 | 81 | 71.6 | 7.8  |     |
| 8  | 85 | 88 | 87 | 87 | 87 | 89  | 88 | 85 | 80 | 74 | 59 | 59 | 51 | 51 | 49 | 51 | 52 | 58 | 56 | 65 | 74 | 76   | 81 | 87 | 71.5 | 7.4  |     |
| 9  | 89 | 90 | 89 | 93 | 95 | 99  | 97 | 95 | 83 | 75 | 68 | 59 | 75 | 67 | 68 | 71 | 91 | 93 | 85 | 89 | 90 | 91   | 93 | 93 | 84.8 | 6.9  |     |
| 10 | 93 | 93 | 97 | 99 | 99 | 99  | 99 | 88 | 81 | 91 | 99 | 95 | 89 | 85 | 82 | 79 | 87 | 90 | 95 | 97 | 95 | 97   | 97 | 99 | 92.6 | 6.7  |     |
| 11 | 96 | 99 | 97 | 97 | 97 | 95  | 93 | 93 | 91 | 87 | 96 | 95 | 97 | 93 | 93 | 91 | 93 | 92 | 93 | 97 | 99 | 97   | 99 | 99 | 95.0 | 6.8  |     |
| 12 | 97 | 97 | 97 | 97 | 99 | 99  | 99 | 97 | 85 | 75 | 84 | 93 | 80 | 82 | 66 | 81 | 78 | 87 | 92 | 92 | 89 | 91   | 90 | 89 | 89.6 | 7.3  |     |
| 13 | 91 | 93 | 93 | 93 | 96 | 96  | 91 | 85 | 83 | 75 | 74 | 70 | 62 | 56 | 49 | 61 | 72 | 85 | 90 | 91 | 95 | 95   | 99 | 93 | 82.8 | 7.4  |     |
| 14 | 92 | 93 | 95 | 95 | 95 | 92  | 92 | 89 | 88 | 87 | 88 | 86 | 87 | 82 | 70 | 66 | 67 | 75 | 81 | 68 | 78 | 85   | 89 | 94 | 84.7 | 10.2 |     |
| 15 | 93 | 94 | 89 | 89 | 94 | 91  | 93 | 91 | 87 | 73 | 64 | 63 | 54 | 54 | 55 | 53 | 50 | 51 | 55 | 60 | 72 | 82   | 79 | 91 | 74.1 | 7.5  |     |
| 16 | 90 | 90 | 93 | 95 | 95 | 93  | 84 | 77 | 68 | 62 | 60 | 54 | 49 | 46 | 45 | 45 | 43 | 47 | 58 | 71 | 76 | 75   | 82 | 87 | 70.3 | 7.1  |     |
| 17 | 91 | 87 | 83 | 71 | 77 | 85  | 81 | 68 | 53 | 49 | 50 | 49 | 47 | 45 | 43 | 45 | 45 | 51 | 57 | 73 | 82 | 81   | 88 | 91 | 65.8 | 7.0  |     |
| 18 | 87 | 95 | 97 | 99 | 99 | 100 | 87 | 74 | 59 | 57 | 53 | 48 | 48 | 48 | 50 | 49 | 47 | 54 | 59 | 64 | 67 | 72   | 75 | 79 | 71.8 | 8.2  |     |
| 19 | 77 | 81 | 79 | 81 | 80 | 79  | 72 | 60 | 55 | 53 | 45 | 51 | 43 | 42 | 41 | 43 | 46 | 51 | 53 | 59 | 61 | 64   | 68 | 71 | 60.8 | 8.7  |     |
| 20 | 72 | 74 | 74 | 69 | 72 | 67  | 65 | 62 | 52 | 49 | 49 | 43 | 47 | 48 | 49 | 52 | 53 | 55 | 57 | 78 | 77 | 80   | 79 | 80 | 61.8 | 9.6  |     |
| 21 | 79 | 75 | 78 | 79 | 81 | 81  | 77 | 68 | 61 | 59 | 57 | 57 | 54 | 53 | 51 | 53 | 52 | 55 | 67 | 81 | 78 | 81   | 81 | 82 | 68.3 | 11.4 |     |
| 22 | 83 | 83 | 84 | 84 | 87 | 84  | 82 | 78 | 75 | 70 | 64 | 63 | 61 | 58 | 58 | 63 | 67 | 70 | 69 | 71 | 77 | 77   | 77 | 78 | 73.1 | 10.1 |     |
| 23 | 78 | 78 | 84 | 94 | 91 | 90  | 91 | 89 | 89 | 85 | 81 | 75 | 71 | 68 | 71 | 69 | 72 | 79 | 82 | 84 | 85 | 87   | 91 | 91 | 82.0 | 8.9  |     |
| 24 | 91 | 91 | 91 | 92 | 92 | 91  | 89 | 85 | 78 | 68 | 66 | 64 | 64 | 62 | 59 | 60 | 62 | 65 | 69 | 75 | 82 | 85</ |    |    |      |      |     |

Percentages at exact hours, Greenwich Mean Time. Determined as explained on page 14.

416. Richmond (Kew Observatory) : North Wall Screen :  $h_t$  (height of thermometer bulbs above the ground) = 3.0 metres.

May, 1924.

| Day.              | 1.       | 2.       | 3.       | 4.       | 5.       | 6.       | 7.       | 8.       | 9.       | 10.      | 11.      | Noon.    | 13.      | 14.      | 15.      | 16.      | 17.      | 18.      | 19.      | 20.      | 21.      | 22.      | 23.      | 24.      | Mean.     | Vapour Pressure.* |
|-------------------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|-----------|-------------------|
| 1                 | 88       | 91       | 95       | 95       | 93       | 97       | 96       | 99       | 97       | 89       | 83       | 91       | 74       | 77       | 66       | 76       | 69       | 68       | 77       | 84       | 83       | 79       | 81       | 86       | 84.9      | 10.7              |
| 2                 | 91       | 93       | 97       | 95       | 97       | 96       | 95       | 92       | 89       | 82       | 69       | 61       | 57       | 57       | 60       | 60       | 56       | 56       | 70       | 75       | 78       | 83       | 84       | 86       | 78.3      | 10.2              |
| 3                 | 89       | 92       | 88       | 87       | 87       | 87       | 85       | 81       | 73       | 70       | 67       | 68       | 63       | 55       | 67       | 77       | 64       | 72       | 75       | 82       | 84       | 89       | 92       | 93       | 78.5      | 10.3              |
| 4                 | 96       | 92       | 79       | 81       | 89       | 86       | 79       | 87       | 74       | 62       | 59       | 60       | 55       | 63       | 77       | 68       | 74       | 67       | 81       | 87       | 85       | 80       | 80       | 83       | 76.7      | 8.9               |
| 5                 | 79       | 81       | 83       | 85       | 89       | 84       | 83       | 69       | 64       | 59       | 57       | 57       | 51       | 57       | 51       | 47       | 55       | 61       | 60       | 65       | 72       | 76       | 81       | 83       | 68.7      | 7.3               |
| 6                 | 85       | 87       | 88       | 91       | 93       | 83       | 76       | 72       | 67       | 66       | 67       | 67       | 63       | 62       | 62       | 60       | 57       | 55       | 59       | 65       | 74       | 78       | 78       | 83       | 72.4      | 8.4               |
| 7                 | 80       | 85       | 81       | 87       | 83       | 83       | 77       | 76       | 65       | 60       | 63       | 61       | 53       | 61       | 55       | 57       | 52       | 58       | 66       | 65       | 67       | 73       | 79       | 78       | 69.5      | 8.0               |
| 8                 | 81       | 80       | 84       | 81       | 82       | 81       | 76       | 73       | 70       | 69       | 71       | 70       | 57       | 54       | 53       | 74       | 76       | 78       | 78       | 74       | 79       | 81       | 83       | 80       | 74.3      | 7.9               |
| 9                 | 74       | 75       | 81       | 84       | 85       | 81       | 73       | 66       | 57       | 50       | 50       | 50       | 48       | 51       | 46       | 50       | 54       | 60       | 62       | 67       | 74       | 77       | 81       | 83       | 65.7      | 8.2               |
| 10                | 88       | 89       | 91       | 93       | 92       | 93       | 88       | 83       | 80       | 77       | 71       | 72       | 86       | 89       | 91       | 90       | 91       | 91       | 93       | 93       | 95       | 96       | 97       | 93       | 88.2      | 11.9              |
| 11                | 95       | 95       | 92       | 93       | 93       | 88       | 87       | 76       | 71       | 67       | 66       | 61       | 65       | 61       | 61       | 58       | 62       | 67       | 71       | 89       | 95       | 95       | 97       | 97       | 79.2      | 10.9              |
| 12                | 100      | 97       | 100      | 97       | 100      | 100      | 92       | 82       | 77       | 74       | 71       | 67       | 67       | 65       | 64       | 66       | 68       | 71       | 74       | 78       | 86       | 87       | 93       | 95       | 82.2      | 11.6              |
| 13                | 93       | 93       | 93       | 94       | 94       | 94       | 89       | 83       | 83       | 80       | 77       | 72       | 70       | 69       | 72       | 66       | 65       | 62       | 66       | 81       | 87       | 95       | 95       | 97       | 82.0      | 13.2              |
| 14                | 93       | 92       | 96       | 95       | 95       | 87       | 87       | 83       | 81       | 74       | 69       | 65       | 57       | 60       | 59       | 59       | 63       | 70       | 74       | 81       | 82       | 84       | 87       | 79       | 78.6      | 14.0              |
| 15                | 78       | 83       | 86       | 86       | 88       | 86       | 76       | 69       | 60       | 55       | 49       | 53       | 55       | 51       | 51       | 49       | 52       | 59       | 62       | 61       | 69       | 68       | 70       | 78       | 66.5      | 10.6              |
| 16                | 76       | 81       | 88       | 91       | 89       | 87       | 78       | 69       | 59       | 58       | 57       | 51       | 53       | 50       | 51       | 48       | 48       | 52       | 57       | 61       | 64       | 72       | 76       | 78       | 66.4      | 9.5               |
| 17                | 83       | 81       | 90       | 93       | 87       | 83       | 84       | 72       | 62       | 58       | 57       | 51       | 48       | 47       | 43       | 48       | 47       | 47       | 57       | 65       | 61       | 63       | 67       | 65       | 65.3      | 9.7               |
| 18                | 66       | 72       | 79       | 81       | 80       | 78       | 77       | 79       | 76       | 73       | 66       | 59       | 54       | 56       | 55       | 56       | 74       | 78       | 78       | 78       | 80       | 85       | 87       | 81       | 72.1      | 11.9              |
| 19                | 93       | 96       | 96       | 96       | 97       | 93       | 90       | 87       | 84       | 80       | 75       | 75       | 66       | 62       | 61       | 53       | 55       | 60       | 75       | 81       | 91       | 89       | 93       | 95       | 80.8      | 16.0              |
| 20                | 97       | 97       | 96       | 96       | 99       | 96       | 92       | 78       | 66       | 65       | 65       | 65       | 66       | 67       | 67       | 71       | 70       | 75       | 85       | 91       | 85       | 92       | 83       | 93       | 81.6      | 15.2              |
| 21                | 93       | 96       | 95       | 99       | 95       | 94       | 82       | 70       | 61       | 63       | 60       | 56       | 58       | 57       | 60       | 57       | 57       | 60       | 64       | 77       | 88       | 86       | 83       | 87       | 75.0      | 14.9              |
| 22                | 87       | 89       | 89       | 90       | 90       | 87       | 83       | 77       | 70       | 70       | 63       | 61       | 62       | 62       | 64       | 68       | 73       | 74       | 75       | 80       | 78       | 80       | 85       | 85       | 76.8      | 14.2              |
| 23                | 86       | 87       | 85       | 85       | 82       | 78       | 75       | 67       | 65       | 63       | 59       | 63       | 67       | 70       | 63       | 61       | 78       | 82       | 79       | 85       | 85       | 86       | 86       | 86       | 75.9      | 12.0              |
| 24                | 85       | 87       | 91       | 91       | 92       | 89       | 82       | 85       | 91       | 84       | 78       | 75       | 74       | 77       | 70       | 64       | 69       | 67       | 73       | 77       | 77       | 79       | 81       | 82       | 79.7      | 10.8              |
| 25                | 83       | 82       | 83       | 84       | 83       | 81       | 74       | 72       | 80       | 71       | 71       | 68       | 61       | 55       | 67       | 70       | 61       | 59       | 58       | 66       | 76       | 78       | 83       | 83       | 72.0      | 10.7              |
| 26                | 84       | 84       | 85       | 87       | 89       | 83       | 84       | 74       | 73       | 67       | 59       | 53       | 51       | 57       | 49       | 53       | 51       | 56       | 61       | 65       | 67       | 68       | 75       | 78       | 69.0      | 10.4              |
| 27                | 82       | 83       | 86       | 91       | 89       | 84       | 76       | 73       | 65       | 63       | 61       | 59       | 57       | 59       | 57       | 58       | 55       | 55       | 60       | 70       | 79       | 85       | 87       | 92       | 71.6      | 11.6              |
| 28                | 94       | 94       | 95       | 99       | 96       | 92       | 85       | 73       | 66       | 59       | 56       | 54       | 48       | 49       | 51       | 49       | 51       | 60       | 66       | 65       | 69       | 71       | 72       | 71       | 71.0      | 12.1              |
| 29                | 73       | 77       | 78       | 77       | 78       | 73       | 68       | 66       | 61       | 58       | 56       | 56       | 56       | 53       | 53       | 61       | 67       | 67       | 70       | 83       | 89       | 91       | 89       | 88       | 70.8      | 13.5              |
| 30                | 88       | 88       | 89       | 86       | 85       | 81       | 81       | 78       | 71       | 70       | 65       | 64       | 59       | 62       | 59       | 62       | 62       | 61       | 73       | 76       | 80       | 83       | 83       | 78       | 74.5      | 14.2              |
| 31                | 73       | 86       | 94       | 91       | 82       | 84       | 82       | 77       | 67       | 67       | 80       | 77       | 75       | 72       | 71       | 69       | 69       | 74       | 82       | 90       | 94       | 93       | 93       | 93       | 80.3      | 15.9              |
| Mean ...          | 85.6     | 87.3     | 88.8     | 89.7     | 89.4     | 87.3     | 82.7     | 77.2     | 72.2     | 68.2     | 65.2     | 63.3     | 60.7     | 60.8     | 60.5     | 61.6     | 62.4     | 64.9     | 69.7     | 75.8     | 79.3     | 81.5     | 83.6     | 85.0     | 75.1      | 11.4†             |
| Vapour Pressure.* | mb. 10.8 | mb. 10.7 | mb. 10.7 | mb. 10.6 | mb. 10.6 | mb. 10.8 | mb. 11.0 | mb. 11.0 | mb. 11.0 | mb. 11.0 | mb. 11.1 | mb. 11.2 | mb. 11.3 | mb. 11.4 | mb. 11.4 | mb. 11.5 | mb. 11.3 | mb. 11.5 | mb. 11.5 | mb. 11.5 | mb. 11.3 | mb. 11.1 | mb. 11.1 | mb. 11.0 | mb. 11.1† |                   |

417. Richmond (Kew Observatory) : North Wall Screen :  $h_t$  = 3.0 metres.

June, 1924.

| Day. | 1. | 2. | 3. | 4. | 5. | 6. | 7. | 8. | 9. | 10. | 11. | Noon. | 13. | 14. | 15. | 16. | 17. | 18. | 19. | 20. | 21. | 22. | 23. | 24. | Mean. | Vapour Pressure.* | mb. |
|------|----|----|----|----|----|----|----|----|----|-----|-----|-------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-------|-------------------|-----|
| 1    | 93 | 93 | 89 | 88 | 86 | 81 | 75 | 75 | 72 | 72  | 71  | 67    | 65  | 66  | 85  | 81  | 79  | 72  | 71  | 80  | 85  | 90  | 92  | 92  | 80.0  | 13.1              |     |
| 2    | 87 | 88 | 91 | 85 | 79 | 79 | 72 | 83 | 77 | 78  | 80  | 88    | 88  | 73  | 77  | 70  | 63  | 85  | 89  | 90  | 92  | 85  | 84  | 83  | 82.1  | 11.3              |     |
| 3    | 84 | 83 | 86 | 89 | 92 | 86 | 83 | 81 | 73 | 65  | 63  | 61    | 59  | 55  | 62  | 65  | 71  | 75  | 87  | 88  | 91  | 91  | 91  | 92  | 77.8  | 10.8              |     |
| 4    | 90 | 91 | 92 | 90 | 87 | 88 | 86 | 81 | 78 | 78  | 84  | 84    | 86  | 88  | 87  | 91  | 93  | 92  | 93  | 95  | 93  | 93  | 93  | 92  | 88.3  | 12.7              |     |
| 5    | 91 | 92 | 90 | 92 | 89 | 89 | 87 | 84 | 76 | 72  | 67  | 65    | 65  | 65  | 64  | 66  | 64  | 69  | 68  | 71  | 75  | 78  | 83  | 84  | 77.1  | 11.1              |     |
| 6    | 89 | 87 | 89 | 89 | 82 | 86 | 79 | 79 | 68 | 61  | 59  | 59    | 56  | 54  | 55  | 57  | 59  | 65  | 68  | 71  | 73  | 76  | 81  | 83  | 71.9  | 11.4              |     |
| 7    | 86 | 90 | 91 | 89 | 91 | 89 | 82 | 77 | 75 | 69  | 68  | 63    | 60  | 63  | 65  | 64  | 67  | 70  | 69  | 74  | 88  | 92  | 94  | 95  | 77.7  | 14.6              |     |
| 8    | 95 | 91 | 88 | 89 | 89 | 90 | 85 | 77 | 69 | 65  | 57  | 62    | 73  | 57  | 51  | 68  | 56  | 75  | 73  | 73  | 76  | 78  | 80  | 81  | 75.2  | 12.5              |     |
| 9    | 81 | 81 | 81 | 80 | 82 | 80 | 81 | 74 | 69 | 63  | 65  | 63    | 61  | 59  | 59  | 51  | 69  | 72  | 74  | 78  | 82  | 82  | 92  | 92  | 72.2  | 12.4              |     |
| 10   | 94 | 91 | 89 | 91 | 89 | 86 | 85 | 77 | 68 | 61  | 59  | 61    | 66  | 65  | 66  | 66  | 66  | 66  | 66  | 69  | 74  | 78  | 81  | 84  | 75.6  | 12.9              |     |
| 11   | 83 | 81 | 81 | 80 | 82 | 83 | 82 | 87 | 89 | 89  | 92  | 84    | 83  | 77  | 75  | 66  | 63  | 63  | 66  | 74  | 80  | 86  | 88  | 87  | 80.0  | 13.2              |     |
| 12   | 90 | 92 | 92 | 91 | 88 | 89 | 88 | 79 | 81 | 73  | 76  | 76    | 69  | 69  | 62  | 68  | 86  | 71  | 77  | 78  | 83  | 89  | 88  | 85  | 80.9  | 13.0              |     |
| 13   | 86 | 83 | 87 | 87 | 87 | 89 | 85 | 85 | 82 | 83  | 84  | 80    | 77  | 71  | 69  | 63  | 60  | 60  | 63  | 66  | 67  | 69  | 70  | 66  | 76.2  | 10.0              |     |
| 14   | 68 | 67 | 73 | 73 | 73 | 69 | 69 | 68 | 65 | 65  | 64  | 63    | 65  | 61  | 59  | 59  | 57  | 62  | 76  | 77  | 85  | 89  | 91  | 91  | 68.9  | 8.8               |     |
| 15   | 95 | 93 | 95 | 93 | 95 | 93 | 95 | 89 | 81 | 79  | 71  | 64    | 56  | 54  | 51  | 54  | 58  | 58  | 58  | 67  | 80  | 84  | 91  | 91  | 76.9  | 12.7              |     |
| 16   | 91 | 93 | 96 | 96 | 96 | 89 | 87 | 82 | 75 | 72  | 62  | 53    | 55  | 46  | 45  | 45  | 49  | 48  | 47  | 55  | 50  | 69  | 73  | 74  | 69.0  | 13.6              |     |
| 17   | 74 | 81 | 83 | 85 | 86 | 83 | 77 | 69 | 63 | 63  | 60  | 60    | 58  | 58  | 54  | 51  | 51  | 54  | 59  | 62  | 63  | 70  | 83  | 85  | 67.8  | 15.2              |     |
| 18   | 82 | 92 | 89 | 89 | 86 | 82 | 78 | 72 | 65 | 61  | 61  | 61    | 54  | 54  | 52  | 50  | 53  | 49  | 53  | 61  | 79  | 78  | 89  | 91  | 69.9  | 14.2              |     |
| 19   | 95 | 94 | 92 | 94 | 94 | 91 | 86 | 81 | 73 | 65  | 63  | 57    | 52  | 52  | 51  | 52  | 51  | 46  | 51  | 58  | 66  | 74  | 78  | 87  | 71.0  | 13.5              |     |
| 20   | 80 | 85 | 89 | 90 | 89 | 88 | 83 | 77 | 72 | 70  | 59  | 63    | 59  | 56  | 49  | 53  | 63  | 68  | 64  | 67  | 75  | 76  | 82  | 85  | 72.6  | 12.8              |     |
| 21   | 88 | 84 | 83 | 83 | 81 | 77 | 64 | 63 | 62 | 58  | 54  | 53    | 48  | 49  | 45  | 51  | 59  | 60  | 61  | 67  | 73  | 75  | 80  | 84  | 66.8  | 11.7              |     |
| 22   | 87 | 90 | 91 | 92 | 92 | 90 | 83 | 68 | 61 | 61  | 57  | 54    | 47  | 49  | 49  | 47  | 43  | 42  | 45  | 52  | 61  | 78  | 82  | 86  | 67.3  | 12.3              |     |
| 23   | 86 | 89 | 92 | 91 | 88 | 86 | 76 | 64 | 58 | 51  | 47  | 51    | 52  | 47  | 47  | 46  | 47  | 47  | 51  | 58  | 61  | 67  | 70  | 75  | 64.7  | 12.9              |     |
| 24   | 81 | 86 | 88 | 87 |    |    |    |    |    |     |     |       |     |     |     |     |     |     |     |     |     |     |     |     |       |                   |     |

Percentages at exact hours, Greenwich Mean Time. Determined as explained on page 14.

**418. Richmond (Kew Observatory) : North Wall Screen :  $h_t$  (height of thermometer bulbs above the ground) = 3.0 metres.**

July, 1924.

| Day.              | 1.       | 2.       | 3.       | 4.       | 5.       | 6.       | 7.       | 8.       | 9.       | 10.      | 11.      | Noon.    | 13.      | 14.      | 15.      | 16.      | 17.      | 18.      | 19.      | 20.      | 21.      | 22.      | 23.      | 24.      | Mean.     | Vapour Pressure.* |     |
|-------------------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|-----------|-------------------|-----|
|                   | %        | %        | %        | %        | %        | %        | %        | %        | %        | %        | %        | %        | %        | %        | %        | %        | %        | %        | %        | %        | %        | %        | %        | %        | %         | %                 | mb. |
| 1                 | 78       | 76       | 78       | 81       | 79       | 76       | 73       | 66       | 54       | 51       | 51       | 49       | 49       | 55       | 49       | 48       | 44       | 47       | 47       | 55       | 62       | 64       | 68       | 63       | 61.2      | 10.0              |     |
| 2                 | 69       | 79       | 76       | 83       | 90       | 86       | 87       | 86       | 83       | 75       | 65       | 56       | 49       | 52       | 57       | 59       | 57       | 58       | 63       | 69       | 74       | 75       | 77       | 77       | 70        | 70.6              |     |
| 3                 | 79       | 80       | 81       | 85       | 82       | 83       | 83       | 83       | 76       | 72       | 69       | 63       | 64       | 70       | 77       | 90       | 84       | 78       | 76       | 70       | 73       | 69       | 66       | 69       | 73        | 75.6              |     |
| 4                 | 74       | 76       | 78       | 79       | 79       | 74       | 69       | 65       | 67       | 62       | 56       | 55       | 54       | 54       | 51       | 56       | 56       | 55       | 62       | 70       | 66       | 73       | 79       | 80       | 76        | 11.8              |     |
| 5                 | 79       | 82       | 82       | 83       | 80       | 74       | 70       | 63       | 58       | 60       | 61       | 55       | 51       | 49       | 53       | 49       | 49       | 59       | 59       | 69       | 69       | 77       | 77       | 77       | 77        | 66.3              |     |
| 6                 | 84       | 86       | 78       | 81       | 76       | 75       | 73       | 67       | 63       | 61       | 58       | 55       | 55       | 48       | 49       | 48       | 48       | 50       | 61       | 65       | 69       | 73       | 78       | 81       | 65.8      | 12.0              |     |
| 7                 | 85       | 88       | 86       | 88       | 87       | 81       | 74       | 69       | 76       | 74       | 76       | 65       | 60       | 59       | 56       | 55       | 53       | 57       | 61       | 67       | 74       | 82       | 86       | 89       | 72.7      | 13.9              |     |
| 8                 | 88       | 85       | 82       | 83       | 83       | 81       | 75       | 76       | 71       | 68       | 61       | 57       | 55       | 51       | 48       | 53       | 53       | 51       | 59       | 65       | 73       | 76       | 77       | 80       | 69.0      | 14.2              |     |
| 9                 | 84       | 87       | 91       | 91       | 93       | 89       | 86       | 86       | 80       | 75       | 61       | 53       | 42       | 47       | 47       | 44       | 44       | 43       | 48       | 66       | 65       | 72       | 81       | 83       | 69.0      | 14.4              |     |
| 10                | 87       | 89       | 86       | 88       | 89       | 84       | 80       | 76       | 85       | 63       | 59       | 53       | 52       | 42       | 51       | 51       | 53       | 56       | 57       | 64       | 74       | 79       | 82       | 82       | 69.1      | 15.2              |     |
| 11                | 84       | 87       | 87       | 89       | 89       | 85       | 81       | 77       | 75       | 73       | 65       | 52       | 45       | 43       | 45       | 41       | 35       | 36       | 53       | 60       | 65       | 79       | 73       | 78       | 66.6      | 15.5              |     |
| 12                | 81       | 84       | 87       | 91       | 87       | 80       | 71       | 61       | 55       | 53       | 47       | 43       | 40       | 40       | 38       | 42       | 43       | 43       | 46       | 50       | 59       | 64       | 71       | 74       | 60.5      | 17.7              |     |
| 13                | 76       | 77       | 81       | 82       | 80       | 81       | 73       | 67       | 59       | 59       | 58       | 51       | 45       | 70       | 50       | 48       | 46       | 43       | 47       | 55       | 62       | 68       | 73       | 79       | 63.6      | 13.3              |     |
| 14                | 82       | 85       | 86       | 87       | 87       | 81       | 78       | 72       | 67       | 56       | 49       | 49       | 41       | 43       | 43       | 41       | 39       | 41       | 49       | 56       | 61       | 69       | 72       | 81       | 63.1      | 13.0              |     |
| 15                | 86       | 87       | 88       | 90       | 88       | 75       | 73       | 64       | 51       | 49       | 47       | 49       | 48       | 44       | 46       | 47       | 45       | 46       | 45       | 51       | 62       | 75       | 81       | 84       | 63.3      | 13.5              |     |
| 16                | 85       | 87       | 78       | 73       | 75       | 78       | 71       | 67       | 63       | 67       | 70       | 60       | 56       | 47       | 47       | 47       | 47       | 46       | 47       | 53       | 60       | 69       | 73       | 74       | 64.4      | 13.3              |     |
| 17                | 77       | 80       | 81       | 83       | 84       | 81       | 75       | 72       | 61       | 59       | 57       | 58       | 63       | 60       | 67       | 73       | 78       | 89       | 93       | 91       | 94       | 93       | 92       | 90       | 76.8      | 12.4              |     |
| 18                | 87       | 86       | 85       | 88       | 87       | 86       | 81       | 77       | 67       | 61       | 59       | 57       | 53       | 59       | 60       | 58       | 54       | 54       | 57       | 64       | 69       | 74       | 80       | 84       | 70.4      | 11.7              |     |
| 19                | 83       | 85       | 85       | 89       | 88       | 87       | 83       | 75       | 65       | 59       | 59       | 68       | 61       | 55       | 51       | 54       | 54       | 60       | 60       | 69       | 73       | 77       | 89       | 88       | 71.5      | 12.9              |     |
| 20                | 89       | 90       | 92       | 96       | 96       | 92       | 86       | 77       | 69       | 59       | 61       | 59       | 57       | 52       | 54       | 55       | 57       | 53       | 53       | 69       | 69       | 68       | 74       | 76       | 71.2      | 13.5              |     |
| 21                | 79       | 81       | 82       | 88       | 87       | 88       | 93       | 92       | 91       | 93       | 90       | 92       | 86       | 79       | 76       | 80       | 65       | 53       | 53       | 64       | 84       | 88       | 92       | 95       | 81.7      | 16.0              |     |
| 22                | 93       | 89       | 95       | 96       | 95       | 94       | 90       | 87       | 74       | 66       | 57       | 58       | 59       | 61       | 83       | 78       | 78       | 77       | 83       | 89       | 93       | 93       | 94       | 97       | 82.4      | 14.2              |     |
| 23                | 95       | 94       | 95       | 93       | 91       | 89       | 87       | 85       | 76       | 72       | 68       | 63       | 61       | 63       | 58       | 54       | 56       | 56       | 63       | 68       | 69       | 70       | 74       | 78       | 74.5      | 13.9              |     |
| 24                | 81       | 83       | 84       | 83       | 71       | 75       | 71       | 68       | 61       | 61       | 57       | 57       | 55       | 55       | 55       | 52       | 49       | 45       | 51       | 53       | 57       | 67       | 68       | 72       | 63.9      | 11.1              |     |
| 25                | 78       | 78       | 81       | 81       | 79       | 73       | 67       | 61       | 53       | 55       | 58       | 55       | 55       | 57       | 64       | 84       | 49       | 45       | 51       | 93       | 93       | 96       | 96       | 96       | 75.0      | 12.0              |     |
| 26                | 95       | 96       | 94       | 95       | 95       | 91       | 89       | 85       | 81       | 75       | 69       | 71       | 70       | 57       | 80       | 70       | 71       | 72       | 71       | 80       | 88       | 90       | 91       | 90       | 82.0      | 12.9              |     |
| 27                | 92       | 92       | 92       | 91       | 91       | 87       | 80       | 75       | 65       | 63       | 56       | 53       | 50       | 54       | 51       | 51       | 48       | 61       | 65       | 72       | 72       | 84       | 90       | 92       | 71.9      | 12.1              |     |
| 28                | 94       | 96       | 95       | 94       | 94       | 93       | 92       | 94       | 95       | 92       | 92       | 92       | 92       | 93       | 94       | 91       | 90       | 94       | 94       | 90       | 92       | 92       | 92       | 94       | 92.9      | 15.1              |     |
| 29                | 93       | 96       | 96       | 95       | 99       | 96       | 93       | 83       | 81       | 72       | 83       | 86       | 74       | 87       | 74       | 84       | 83       | 75       | 85       | 85       | 92       | 92       | 97       | 95       | 87.4      | 14.4              |     |
| 30                | 97       | 97       | 93       | 97       | 97       | 97       | 96       | 95       | 93       | 89       | 81       | 78       | 71       | 69       | 65       | 67       | 69       | 71       | 64       | 66       | 74       | 74       | 77       | 82       | 81.9      | 14.9              |     |
| 31                | 84       | 87       | 89       | 91       | 89       | 89       | 82       | 79       | 73       | 69       | 67       | 66       | 63       | 55       | 57       | 58       | 58       | 67       | 69       | 75       | 81       | 84       | 86       | 87       | 75.1      | 13.9              |     |
| Mean ...          | 84.5     | 86.0     | 85.9     | 87.5     | 86.7     | 83.9     | 80.1     | 75.5     | 69.7     | 66.3     | 63.1     | 60.7     | 57.5     | 57.6     | 58.3     | 58.8     | 57.5     | 58.7     | 62.1     | 68.3     | 73.2     | 77.5     | 80.9     | 82.9     | 71.8      | 13.4†             |     |
| Vapour Pressure.* | mb. 13.1 | mb. 13.0 | mb. 12.7 | mb. 12.7 | mb. 12.8 | mb. 13.1 | mb. 13.1 | mb. 13.3 | mb. 13.3 | mb. 13.3 | mb. 13.4 | mb. 13.4 | mb. 13.1 | mb. 13.4 | mb. 13.6 | mb. 13.9 | mb. 13.5 | mb. 13.6 | mb. 13.7 | mb. 13.6 | mb. 13.4 | mb. 13.3 | mb. 13.3 | mb. 13.2 | mb. 13.3† |                   |     |

**419. Richmond (Kew Observatory) : North Wall Screen :  $h_t$  = 3.0 metres.**

August, 1924.

| Day. | 1. | 2. | 3. | 4. | 5. | 6. | 7. | 8. | 9. | 10. | 11. | Noon. | 13. | 14. | 15. | 16. | 17. | 18. | 19. | 20. | 21. | 22. | 23. | 24. | Mean. | Vapour Pressure.* |      |
|------|----|----|----|----|----|----|----|----|----|-----|-----|-------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-------|-------------------|------|
|      | %  | %  | %  | %  | %  | %  | %  | %  | %  | %   | %   | %     | %   | %   | %   | %   | %   | %   | %   | %   | %   | %   | %   | %   | %     | mb.               |      |
| 1    | 89 | 91 | 80 | 89 | 88 | 87 | 81 | 75 | 73 | 69  | 68  | 65    | 62  | 68  | 66  | 67  | 67  | 73  | 73  | 79  | 87  | 86  | 89  | 89  | 77.7  | 14.4              |      |
| 2    | 85 | 86 | 91 | 89 | 88 | 87 | 90 | 86 | 69 | 66  | 82  | 67    | 74  | 73  | 63  | 72  | 70  | 72  | 79  | 80  | 85  | 83  | 84  | 87  | 79.0  | 13.6              |      |
| 3    | 83 | 85 | 87 | 88 | 87 | 85 | 79 | 68 | 63 | 63  | 60  | 59    | 60  | 67  | 87  | 89  | 80  | 73  | 84  | 85  | 92  | 93  | 92  | 93  | 79.0  | 13.1              |      |
| 4    | 93 | 95 | 95 | 93 | 91 | 84 | 80 | 78 | 73 | 66  | 64  | 63    | 69  | 68  | 68  | 69  | 70  | 77  | 77  | 79  | 84  | 86  | 86  | 88  | 79.1  | 14.6              |      |
| 5    | 89 | 91 | 90 | 90 | 89 | 86 | 80 | 78 | 78 | 75  | 69  | 69    | 65  | 70  | 73  | 80  | 64  | 63  | 74  | 78  | 79  | 85  | 87  | 87  | 78.9  | 17.0              |      |
| 6    | 91 | 91 | 91 | 91 | 94 | 95 | 93 | 88 | 85 | 85  | 81  | 75    | 72  | 61  | 60  | 56  | 59  | 67  | 69  | 83  | 92  | 91  | 85  | 89  | 81.0  | 14.4              |      |
| 7    | 87 | 86 | 84 | 89 | 88 | 89 | 87 | 82 | 73 | 63  | 59  | 57    | 52  | 49  | 47  | 57  | 62  | 56  | 60  | 65  | 67  | 69  | 69  | 72  | 69.9  | 11.4              |      |
| 8    | 75 | 78 | 81 | 86 | 88 | 88 | 89 | 80 | 77 | 63  | 59  | 51    | 50  | 50  | 51  | 51  | 55  | 53  | 64  | 67  | 73  | 81  | 84  | 87  | 69.7  | 11.8              |      |
| 9    | 93 | 92 | 92 | 96 | 95 | 93 | 88 | 79 | 74 | 67  | 66  | 59    | 55  | 51  | 49  | 51  | 53  | 63  | 65  | 67  | 76  | 85  | 90  | 89  | 74.4  | 13.1              |      |
| 10   | 93 | 95 | 95 | 93 | 97 | 97 | 90 | 79 | 67 | 65  | 60  | 59    | 58  | 55  | 50  | 52  | 51  | 55  | 58  | 60  | 73  | 76  | 81  | 86  | 87    | 74.3              | 13.4 |
| 11   | 93 | 95 | 96 | 95 | 96 | 95 | 89 | 80 | 75 | 66  | 63  | 57    | 55  | 52  | 50  | 49  | 53  | 53  | 59  | 70  | 77  | 83  | 88  | 93  | 74.1  | 14.7              |      |
| 12   | 89 | 88 | 92 | 92 | 93 | 95 | 92 | 82 | 75 | 72  | 69  | 66    | 64  | 61  | 59  | 63  | 61  | 70  | 72  | 76  | 82  | 85  | 90  | 90  | 78.3  | 14.2              |      |
| 13   | 90 | 91 | 97 | 96 | 94 | 91 | 87 | 81 | 76 | 72  | 79  | 73    | 68  | 78  | 75  | 66  | 72  | 70  | 73  | 81  | 82  | 84  | 88  | 90  | 81.4  | 14.5              |      |
| 14   | 91 | 91 | 93 | 93 | 90 | 89 | 85 | 77 | 73 | 64  | 62  | 57    | 55  | 61  | 67  | 76  | 79  | 81  | 87  | 89  | 89  | 90  | 89  | 80  | 80.0  | 14.6              |      |
| 15   | 89 | 91 | 89 | 88 | 87 | 87 | 81 | 74 | 70 | 62  | 58  | 51    | 49  | 57  | 50  | 75  | 75  | 61  | 69  | 76  | 79  | 82  | 82  | 82  | 73.6  | 12.4              |      |
| 16   | 87 | 87 | 88 | 91 | 93 | 89 | 81 | 73 | 68 | 63  | 68  | 58    | 60  | 56  | 55  | 61  | 64  | 79  | 76  | 82  | 85  | 85  | 87  | 88  | 75.9  | 12.8              |      |
| 17   | 88 | 86 | 88 | 87 | 87 | 87 | 85 | 85 | 93 | 89  | 82  | 77    | 68  | 62  | 57  | 60  | 79  | 66  | 70  | 74  | 73  | 83  | 83  | 83  | 79.0  | 13.2              |      |
| 18   | 83 | 81 | 78 | 76 | 77 | 74 | 74 | 71 | 70 | 69  | 72  | 63    | 61  | 57  | 75  | 65  | 81  | 75  | 77  | 81  | 82  | 82  | 84  | 84  | 74.5  | 11.7              |      |
| 19   | 87 | 87 | 87 | 87 | 89 | 88 | 82 | 77 | 76 | 70  | 64  | 75    | 61  | 56  | 61  | 52  | 55  | 60  | 69  | 75  | 81  | 82  | 85  | 87  | 74.7  | 11.3              |      |
| 20   | 85 | 86 | 87 | 87 | 92 | 93 | 87 | 83 | 78 | 70  | 71  | 61    | 57  | 55  | 57  | 62  | 68  | 72  | 79  | 85  | 82  | 85  | 85  | 87  | 77.3  | 11.4              |      |
| 21   | 84 | 84 | 87 | 86 | 86 | 85 | 80 | 76 | 63 | 61  | 57  | 57    | 63  | 68  | 66  | 67  | 65  | 68  | 73  | 75  | 78  | 81  | 83  | 83  | 74.1  | 12.0              |      |
| 22   | 82 | 87 | 87 | 88 | 88 | 90 | 83 | 80 | 69 | 68  | 62  | 65    | 87  | 83  | 83  | 73  | 71  | 75  | 87  | 91  | 91  | 92  | 93  | 95  | 81.8  | 13.0              |      |
| 23   | 95 | 94 | 92 | 92 | 93 | 93 | 90 | 88 | 82 | 79  | 72  | 70    | 63  | 64  | 66  | 63  | 59  | 72  | 78  | 80  | 82  | 80  | 85  | 89  | 80.2  | 12.7              |      |
| 24   | 85 | 86 | 86 | 85 | 85 | 84 | 85 | 84 | 92 | 8   |     |       |     |     |     |     |     |     |     |     |     |     |     |     |       |                   |      |

Percentages at exact hours, Greenwich Mean Time. Determined as explained on page 14.

420. Richmond (Kew Observatory) : North Wall Screen : h<sub>t</sub> (height of thermometer bulbs above the ground) = 3.0 metres.

September, 1924.

Table with 26 columns (Days 1-24, Mean, Vapour Pressure) and 31 rows (Days 1-30, Mean). Data includes relative humidity percentages and vapour pressure in millibars.

421. Richmond (Kew Observatory) : North Wall Screen : h<sub>t</sub> = 3.0 metres.

October, 1924.

Table with 26 columns (Days 1-24, Mean, Vapour Pressure) and 31 rows (Days 1-30, Mean, Hour G.M.T.). Data includes relative humidity percentages, vapour pressure in millibars, and GMT hours.

\* Computed from the mean temperature and mean relative humidity.

† Mean of the column.

‡ Mean of the row.

Percentages at exact hours, Greenwich Mean Time. Determined as explained on page 14.

422. Richmond (Kew Observatory) : North Wall Screen :  $h_t$  (height of thermometer bulbs above the ground) = 3.0 metres.

November, 1924.

| Day.              | 1.      | 2.      | 3.      | 4.      | 5.      | 6.      | 7.      | 8.      | 9.      | 10.     | 11.     | Noon.   | 13.     | 14.     | 15.     | 16.     | 17.     | 18.     | 19.     | 20.     | 21.     | 22.     | 23.     | 24.     | Mean.   | Vapour Pressure.* |
|-------------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|-------------------|
| 1                 | 96      | 97      | 95      | 96      | 96      | 95      | 97      | 96      | 91      | 90      | 91      | 89      | 96      | 97      | 97      | 96      | 94      | 93      | 93      | 92      | 92      | 91      | 88      | 89      | 93.8    | 12.9              |
| 2                 | 80      | 76      | 76      | 76      | 78      | 79      | 77      | 77      | 78      | 75      | 68      | 70      | 69      | 67      | 67      | 63      | 67      | 71      | 73      | 73      | 75      | 78      | 79      | 81      | 74.0    | 10.9              |
| 3                 | 82      | 82      | 84      | 85      | 91      | 91      | 93      | 90      | 86      | 83      | 82      | 75      | 72      | 69      | 72      | 75      | 81      | 85      | 86      | 82      | 76      | 77      | 77      | 82      | 81.5    | 8.7               |
| 4                 | 84      | 89      | 83      | 83      | 83      | 87      | 85      | 93      | 75      | 75      | 73      | 71      | 68      | 66      | 68      | 71      | 76      | 83      | 87      | 87      | 89      | 97      | 96      | 96      | 81.6    | 6.4               |
| 5                 | 95      | 97      | 97      | 98      | 99      | 99      | 91      | 91      | 87      | 90      | 80      | 71      | 72      | 73      | 76      | 79      | 81      | 81      | 80      | 85      | 87      | 90      | 93      | 90      | 86.9    | 6.9               |
| 6                 | 87      | 91      | 92      | 94      | 93      | 91      | 93      | 91      | 86      | 82      | 72      | 69      | 65      | 62      | 65      | 70      | 72      | 71      | 75      | 78      | 78      | 76      | 82      | 79      | 80.0    | 9.0               |
| 7                 | 79      | 78      | 84      | 89      | 81      | 80      | 81      | 77      | 73      | 72      | 71      | 68      | 69      | 69      | 68      | 67      | 65      | 68      | 68      | 71      | 72      | 72      | 73      | 75      | 73.8    | 8.7               |
| 8                 | 76      | 79      | 78      | 78      | 73      | 74      | 76      | 74      | 73      | 71      | 77      | 78      | 78      | 79      | 79      | 83      | 82      | 85      | 86      | 87      | 87      | 88      | 87      | 90      | 79.6    | 9.4               |
| 9                 | 91      | 89      | 93      | 93      | 93      | 91      | 93      | 91      | 87      | 81      | 80      | 80      | 79      | 81      | 83      | 86      | 89      | 86      | 90      | 90      | 90      | 91      | 91      | 92      | 88.2    | 8.7               |
| 10                | 92      | 92      | 92      | 93      | 93      | 93      | 94      | 91      | 85      | 85      | 79      | 79      | 76      | 79      | 82      | 87      | 93      | 96      | 94      | 95      | 99      | 95      | 100     | 100     | 90.6    | 9.9               |
| 11                | 99      | 100     | 99      | 100     | 100     | 100     | 99      | 100     | 96      | 92      | 84      | 80      | 80      | 80      | 80      | 85      | 86      | 87      | 93      | 95      | 97      | 99      | 99      | 100     | 92.9    | 11.3              |
| 12                | 99      | 99      | 99      | 100     | 97      | 95      | 95      | 93      | 92      | 91      | 91      | 93      | 95      | 95      | 95      | 95      | 93      | 92      | 92      | 95      | 93      | 97      | 96      | 96      | 95.0    | 11.1              |
| 13                | 96      | 95      | 92      | 92      | 91      | 95      | 93      | 93      | 93      | 95      | 91      | 89      | 89      | 91      | 85      | 82      | 78      | 79      | 81      | 81      | 84      | 86      | 92      | 93      | 89.0    | 9.9               |
| 14                | 96      | 93      | 93      | 92      | 93      | 93      | 93      | 93      | 92      | 91      | 89      | 89      | 87      | 91      | 89      | 84      | 93      | 93      | 96      | 93      | 93      | 95      | 89      | 87      | 91.7    | 10.4              |
| 15                | 86      | 86      | 87      | 87      | 87      | 87      | 87      | 79      | 82      | 83      | 83      | 77      | 76      | 73      | 72      | 71      | 71      | 70      | 73      | 76      | 71      | 83      | 76      | 85      | 79.5    | 7.6               |
| 16                | 90      | 91      | 91      | 89      | 89      | 89      | 88      | 89      | 87      | 84      | 82      | 81      | 80      | 83      | 85      | 85      | 85      | 77      | 81      | 79      | 79      | 79      | 84      | 87      | 84.7    | 6.9               |
| 17                | 84      | 85      | 80      | 79      | 77      | 77      | 77      | 79      | 77      | 79      | 82      | 78      | 79      | 79      | 79      | 82      | 83      | 88      | 89      | 99      | 91      | 97      | 99      | 97      | 83.8    | 6.1               |
| 18                | 99      | 99      | 97      | 99      | 96      | 99      | 97      | 98      | 97      | 98      | 97      | 97      | 96      | 95      | 95      | 92      | 95      | 95      | 97      | 97      | 99      | 99      | 100     | 97.1    | 6.6     |                   |
| 19                | 100     | 100     | 97      | 97      | 97      | 95      | 97      | 95      | 97      | 94      | 94      | 89      | 86      | 85      | 86      | 90      | 91      | 91      | 95      | 95      | 97      | 95      | 95      | 95      | 95      | 8.8               |
| 20                | 99      | 99      | 99      | 97      | 99      | 99      | 99      | 97      | 95      | 91      | 86      | 82      | 75      | 76      | 76      | 83      | 83      | 88      | 91      | 93      | 89      | 89      | 91      | 73      | 90.0    | 9.5               |
| 21                | 75      | 81      | 80      | 80      | 83      | 83      | 83      | 83      | 83      | 79      | 78      | 74      | 76      | 76      | 81      | 83      | 78      | 72      | 74      | 75      | 70      | 76      | 77      | 76      | 78.1    | 8.4               |
| 22                | 76      | 78      | 78      | 80      | 78      | 78      | 76      | 76      | 76      | 72      | 71      | 71      | 72      | 72      | 72      | 74      | 75      | 73      | 73      | 75      | 75      | 76      | 77      | 76      | 75.0    | 9.0               |
| 23                | 77      | 80      | 82      | 83      | 85      | 84      | 83      | 84      | 81      | 81      | 76      | 75      | 76      | 77      | 74      | 78      | 77      | 78      | 74      | 77      | 78      | 79      | 79      | 77      | 78.9    | 10.3              |
| 24                | 77      | 79      | 81      | 80      | 78      | 84      | 82      | 77      | 79      | 80      | 80      | 80      | 76      | 80      | 80      | 82      | 83      | 83      | 87      | 87      | 86      | 89      | 87      | 89      | 81.6    | 8.5               |
| 25                | 89      | 94      | 95      | 97      | 96      | 97      | 96      | 93      | 91      | 92      | 91      | 92      | 91      | 89      | 87      | 89      | 87      | 91      | 90      | 89      | 90      | 92      | 92      | 88      | 91.6    | 11.0              |
| 26                | 90      | 91      | 88      | 90      | 89      | 89      | 90      | 91      | 89      | 84      | 86      | 84      | 84      | 84      | 87      | 92      | 91      | 89      | 86      | 83      | 84      | 86      | 82      | 85      | 87.3    | 11.2              |
| 27                | 79      | 71      | 84      | 85      | 85      | 83      | 85      | 81      | 77      | 74      | 85      | 86      | 77      | 74      | 73      | 76      | 81      | 79      | 83      | 83      | 85      | 85      | 88      | 91      | 81.1    | 9.2               |
| 28                | 95      | 92      | 95      | 91      | 91      | 93      | 87      | 85      | 88      | 89      | 87      | 91      | 86      | 85      | 82      | 87      | 88      | 91      | 93      | 89      | 87      | 91      | 96      | 96      | 89.7    | 8.2               |
| 29                | 97      | 97      | 97      | 95      | 91      | 92      | 92      | 92      | 92      | 92      | 85      | 81      | 82      | 84      | 85      | 86      | 86      | 86      | 89      | 91      | 89      | 89      | 89      | 88      | 89.7    | 11.6              |
| 30                | 87      | 86      | 90      | 88      | 88      | 87      | 87      | 89      | 84      | 81      | 78      | 80      | 76      | 83      | 79      | 84      | 87      | 92      | 89      | 93      | 88      | 92      | 95      | 93      | 86.4    | 11.2              |
| Mean              | 88.4    | 88.9    | 89.3    | 89.5    | 89.0    | 89.1    | 88.9    | 88.2    | 85.8    | 84.4    | 82.5    | 80.6    | 79.4    | 79.8    | 80.0    | 81.9    | 83.0    | 83.8    | 85.3    | 86.2    | 85.7    | 87.6    | 88.3    | 88.2    | 85.6    | †9.3              |
| Vapour Pressure.* | mb. 9.2 | mb. 9.2 | mb. 9.1 | mb. 9.1 | mb. 9.0 | mb. 9.0 | mb. 8.9 | mb. 8.9 | mb. 8.9 | mb. 9.1 | mb. 9.3 | mb. 9.4 | mb. 9.4 | mb. 9.5 | mb. 9.4 | mb. 9.5 | mb. 9.4 | mb. 9.2 | mb. 9.2 | mb. 9.1 | mb. 9.1 | mb. 9.2 | mb. 9.2 | mb. 9.2 | mb. 9.2 | †9.2              |

423. Richmond (Kew Observatory) : North Wall Screen :  $h_t$  = 3.0 metres.

December, 1924.

|    | 1. | 2. | 3. | 4. | 5. | 6. | 7. | 8.  | 9.  | 10. | 11. | Noon. | 13. | 14. | 15. | 16.  | 17. | 18. | 19. | 20. | 21. | 22. | 23. | 24. | Mean. | Vapour Pressure.* |
|----|----|----|----|----|----|----|----|-----|-----|-----|-----|-------|-----|-----|-----|------|-----|-----|-----|-----|-----|-----|-----|-----|-------|-------------------|
| 1  | 97 | 96 | 97 | 97 | 96 | 99 | 96 | 95  | 92  | 87  | 83  | 83    | 79  | 79  | 81  | 86   | 91  | 89  | 88  | 88  | 85  | 87  | 95  | 96  | 90.0  | 11.0              |
| 2  | 97 | 94 | 96 | 95 | 95 | 95 | 95 | 97  | 96  | 96  | 97  | 97    | 96  | 93  | 96  | 96   | 96  | 96  | 97  | 96  | 96  | 97  | 100 | 100 | 96.1  | 10.8              |
| 3  | 97 | 99 | 99 | 96 | 96 | 99 | 97 | 99  | 97  | 97  | 92  | 87    | 85  | 87  | 84  | 87   | 88  | 88  | 89  | 88  | 88  | 88  | 88  | 89  | 92.1  | 10.1              |
| 4  | 89 | 85 | 91 | 94 | 95 | 94 | 95 | 93  | 93  | 95  | 91  | 87    | 87  | 87  | 85  | 88   | 91  | 93  | 92  | 93  | 91  | 91  | 93  | 95  | 91.0  | 9.8               |
| 5  | 96 | 96 | 95 | 95 | 91 | 85 | 80 | 81  | 78  | 76  | 81  | 78    | 78  | 69  | 66  | 77   | 76  | 77  | 83  | 86  | 85  | 86  | 83  | 86  | 82.9  | 10.9              |
| 6  | 86 | 83 | 83 | 81 | 80 | 79 | 80 | 83  | 82  | 78  | 76  | 71    | 65  | 68  | 70  | 76   | 84  | 82  | 90  | 94  | 92  | 97  | 91  | 92  | 81.7  | 8.7               |
| 7  | 95 | 95 | 87 | 95 | 95 | 97 | 99 | 100 | 90  | 97  | 97  | 91    | 87  | 80  | 83  | 84   | 89  | 87  | 90  | 93  | 91  | 91  | 87  | 93  | 91.3  | 8.3               |
| 8  | 93 | 89 | 88 | 89 | 88 | 91 | 87 | 87  | 86  | 82  | 85  | 83    | 80  | 81  | 81  | 81   | 83  | 85  | 89  | 85  | 86  | 84  | 89  | 89  | 85.8  | 8.1               |
| 9  | 88 | 91 | 90 | 88 | 92 | 95 | 95 | 93  | 95  | 97  | 93  | 90    | 86  | 83  | 81  | 86   | 95  | 98  | 93  | 96  | 99  | 97  | 91  | 97  | 91.9  | 7.5               |
| 10 | 97 | 95 | 97 | 97 | 97 | 95 | 96 | 97  | 97  | 93  | 99  | 99    | 99  | 99  | 97  | 99   | 99  | 99  | 99  | 99  | 99  | 96  | 97  | 96  | 97.4  | 6.3               |
| 11 | 97 | 99 | 99 | 97 | 95 | 99 | 99 | 98  | 98  | 98  | 98  | 98    | 97  | 97  | 97  | 97   | 97  | 99  | 96  | 99  | 97  | 99  | 96  | 96  | 97.6  | 6.1               |
| 12 | 97 | 97 | 96 | 97 | 99 | 99 | 99 | 100 | 100 | 97  | 92  | 91    | 89  | 88  | 89  | 89   | 88  | 89  | 88  | 90  | 91  | 91  | 91  | 90  | 93.3  | 7.0               |
| 13 | 92 | 92 | 92 | 92 | 91 | 90 | 89 | 89  | 85  | 87  | 84  | 82    | 82  | 85  | 83  | 83   | 85  | 87  | 85  | 87  | 88  | 93  | 95  | 93  | 88.4  | 7.1               |
| 14 | 95 | 99 | 99 | 99 | 99 | 99 | 99 | 99  | 99  | 97  | 92  | 87    | 77  | 80  | 83  | 86   | 91  | 90  | 92  | 95  | 95  | 97  | 95  | 97  | 93.3  | 7.9               |
| 15 | 97 | 97 | 93 | 99 | 99 | 93 | 94 | 94  | 93  | 91  | 87  | 86    | 90  | 93  | 93  | 95   | 94  | 97  | 97  | 97  | 97  | 93  | 93  | 93  | 94.0  | 8.5               |
| 16 | 92 | 95 | 96 | 97 | 95 | 93 | 93 | 99  | 96  | 93  | 92  | 92    | 87  | 87  | 88  | 91   | 92  | 93  | 92  | 92  | 92  | 95  | 94  | 93  | 92.9  | 10.6              |
| 17 | 91 | 90 | 94 | 91 | 94 | 97 | 94 | 99  | 99  | 99  | 97  | 97    | 97  | 95  | 94  | 93   | 94  | 95  | 94  | 95  | 94  | 97  | 95  | 95  | 95.0  | 8.5               |
| 18 | 97 | 95 | 97 | 97 | 95 | 93 | 95 | 95  | 93  | 91  | 87  | 87    | 81  | 79  | 81  | 85   | 87  | 87  | 88  | 89  | 88  | 87  | 89  | 89  | 90.2  | 9.7               |
| 19 | 89 | 89 | 87 | 87 | 91 | 89 | 89 | 91  | 92  | 92  | 87  | 89    | 88  | 90  | 90  | 91   | 91  | 90  | 91  | 90  | 92  | 92  | 91  | 92  | 90.0  | 11.3              |
| 20 | 93 | 93 | 92 | 92 | 93 | 93 | 99 | 95  | 97  | 97  | 99  | 95    | 97  | 95  | 93  | 87   | 95  | 99  | 94  | 94  | 91  | 94  | 97  | 94  | 94.5  | 9.6               |
| 21 | 95 | 94 | 91 | 91 | 93 | 90 | 91 | 93  | 97  | 95  | 87  | 87    | 86  | 85  | 85  | 83   | 82  | 79  | 81  | 83  | 83  | 84  | 85  | 85  | 87.9  | 8.3               |
| 22 | 85 | 85 | 85 | 87 | 85 | 89 | 87 | 89  | 85  | 85  | 87  | 83    | 85  | 83  | 83  | 89   | 89  | 91  | 89  | 89  | 90  | 93  | 94  | 94  | 87.3  | 7.2               |
| 23 | 92 | 95 | 93 | 89 | 86 | 87 | 76 | 71  | 70  | 72  | 82  | 82    | 85  | 92  | 92  | 96   | 95  | 97  | 97  | 97  | 93  | 96  | 95  | 89  | 88.0  | 10.1              |
| 24 | 93 | 89 | 87 | 86 | 82 | 82 | 82 | 81  | 82  | 78  | 79  | 78    | 78  | 82  | 80  | 82   | 85  | 86  | 85  | 85  | 85  | 81  | 86  | 85  | 83.6  | 10.3              |
| 25 | 87 | 89 | 91 | 92 | 93 | 92 | 87 | 91  | 86  | 88  | 80  | 80    | 82  | 81  | 81  | 82   | 85  | 88  | 91  | 92  | 91  | 87  | 87  | 85  | 87.0  | 10.0              |
| 26 | 87 | 91 | 91 | 91 | 85 | 86 | 85 | 84  | 83  | 86  | 85  | 76    | 71  | 72  | 72  | 73</ |     |     |     |     |     |     |     |     |       |                   |

From the monthly means, for exact hours, Greenwich Mean Time.

424. Richmond (Kew Observatory) : North Wall Screen :  $h_t = 3.0$  metres.

1924.

| G.M.T.                           | 1.      | 2.      | 3.      | 4.      | 5.      | 6.      | 7.      | 8.      | 9.      | 10.     | 11.     | Noon     | 13.      | 14.      | 15.      | 16.      | 17.      | 18.      | 19.      | 20.      | 21.     | 22.     | 23.     | 24.     | Mean    |
|----------------------------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|----------|----------|----------|----------|----------|----------|----------|----------|----------|---------|---------|---------|---------|---------|
| Relative Humidity ...            | % 87.0  | % 87.7  | % 88.1  | % 88.6  | % 88.4  | % 87.8  | % 86.2  | % 83.6  | % 80.1  | % 76.7  | % 74.1  | % 71.9   | % 69.8   | % 69.0   | % 68.5   | % 69.9   | % 71.8   | % 74.0   | % 76.6   | % 79.8   | % 81.8  | % 83.7  | % 85.2  | % 86.3  | % 79.9  |
| Vapour Pressure in millibars ... | mb. 9.7 | mb. 9.6 | mb. 9.5 | mb. 9.5 | mb. 9.4 | mb. 9.5 | mb. 9.6 | mb. 9.7 | mb. 9.8 | mb. 9.9 | mb. 9.9 | mb. 10.0 | mb. 10.1 | mb. 10.2 | mb. 10.1 | mb. 10.1 | mb. 10.1 | mb. 10.1 | mb. 10.0 | mb. 10.0 | mb. 9.9 | mb. 9.8 | mb. 9.7 | mb. 9.7 | mb. 9.8 |

RELATIVE HUMIDITY : MONTHLY MEANS AND DIURNAL INEQUALITIES.

The departures from the mean of the day are adjusted for non-cyclic change.

425. Richmond (Kew Observatory) : North Wall Screen :  $h_t = 3.0$  metres.

1924.

| Month. | Mean   | Hour 1. | G.M.T. 2. | 3.     | 4.     | 5.     | 6.     | 7.     | 8.    | 9.    | 10.   | 11.   | Noon   | 13.    | 14.    | 15.    | 16.    | 17.    | 18.    | 19.   | 20.   | 21.   | 22.   | 23.   | 24.    |
|--------|--------|---------|-----------|--------|--------|--------|--------|--------|-------|-------|-------|-------|--------|--------|--------|--------|--------|--------|--------|-------|-------|-------|-------|-------|--------|
| Jan.   | % 87.9 | + 3.3   | + 3.7     | + 3.7  | + 3.5  | + 3.1  | + 3.2  | + 3.0  | + 3.1 | + 2.1 | - 0.3 | - 2.1 | - 4.7  | - 6.8  | - 7.2  | - 6.9  | - 4.9  | - 2.4  | - 0.6  | + 0.2 | + 0.7 | + 0.6 | + 1.0 | + 1.9 | + 2.8  |
| Feb.   | % 78.5 | + 2.3   | + 2.5     | + 2.3  | + 3.3  | + 3.5  | + 3.4  | + 3.9  | + 3.7 | + 2.2 | - 0.4 | - 2.2 | - 2.7  | - 3.7  | - 3.6  | - 5.0  | - 4.5  | - 2.3  | - 2.1  | - 1.7 | - 0.5 | + 0.3 | 0.0   | + 0.2 | + 1.0  |
| Mar.   | % 76.0 | + 8.3   | + 9.0     | + 10.0 | + 10.3 | + 10.8 | + 10.1 | + 10.6 | + 9.0 | + 5.1 | + 0.2 | - 5.4 | - 9.6  | - 13.7 | - 15.6 | - 17.8 | - 15.2 | - 12.9 | - 9.5  | - 4.2 | - 0.3 | + 1.9 | + 5.3 | + 5.9 | + 7.7  |
| April  | % 76.0 | + 9.1   | + 9.6     | + 9.7  | + 11.1 | + 12.2 | + 12.3 | + 10.1 | + 4.6 | - 1.1 | - 4.6 | - 6.8 | - 8.9  | - 11.0 | - 13.3 | - 15.3 | - 13.9 | - 12.0 | - 8.0  | - 5.3 | - 1.2 | + 2.5 | + 4.8 | + 7.2 | + 8.4  |
| May    | % 75.1 | + 10.5  | + 12.2    | + 13.7 | + 14.6 | + 14.3 | + 12.2 | + 7.6  | + 2.1 | - 2.9 | - 6.9 | - 9.9 | - 11.8 | - 14.4 | - 14.3 | - 14.7 | - 13.5 | - 12.7 | - 10.3 | - 5.4 | + 0.6 | + 4.2 | + 6.4 | + 8.4 | + 9.9  |
| June   | % 72.9 | + 12.1  | + 13.2    | + 14.1 | + 13.9 | + 13.1 | + 10.8 | + 6.7  | + 3.0 | - 1.9 | - 5.4 | - 8.0 | - 9.3  | - 10.9 | - 13.8 | - 14.8 | - 14.1 | - 13.0 | - 10.8 | - 8.7 | - 3.7 | + 1.9 | + 5.7 | + 8.9 | + 11.0 |
| July   | % 71.8 | + 12.8  | + 14.3    | + 14.3 | + 15.9 | + 15.0 | + 12.2 | + 8.3  | + 3.8 | - 2.0 | - 5.5 | - 8.7 | - 11.1 | - 14.3 | - 14.2 | - 13.5 | - 13.1 | - 14.3 | - 13.2 | - 9.8 | - 3.7 | + 1.2 | + 5.6 | + 9.0 | + 10.9 |
| Aug.   | % 78.1 | + 10.1  | + 10.9    | + 11.5 | + 11.9 | + 12.0 | + 11.3 | + 8.1  | + 2.7 | - 1.6 | - 6.6 | - 8.7 | - 12.4 | - 14.1 | - 15.4 | - 14.2 | - 13.4 | - 9.7  | - 8.0  | - 3.7 | + 1.1 | + 4.3 | + 6.4 | + 8.1 | + 9.6  |
| Sept.  | % 80.3 | + 7.6   | + 7.7     | + 7.4  | + 7.7  | + 7.8  | + 8.1  | + 7.1  | + 4.2 | - 0.3 | - 5.3 | - 7.8 | - 9.4  | - 11.1 | - 11.5 | - 12.9 | - 11.6 | - 8.2  | - 3.9  | + 0.3 | + 3.1 | + 4.1 | + 4.9 | + 5.6 | + 6.5  |
| Oct.   | % 86.0 | + 4.9   | + 5.4     | + 5.6  | + 5.9  | + 5.2  | + 5.9  | + 5.1  | + 4.4 | + 2.0 | - 1.9 | - 5.3 | - 6.8  | - 9.6  | - 10.1 | - 10.3 | - 8.4  | - 4.9  | - 1.6  | - 0.2 | + 1.1 | + 2.0 | + 2.5 | + 4.1 | + 4.8  |
| Nov.   | % 85.6 | + 2.8   | + 3.2     | + 3.6  | + 3.9  | + 3.4  | + 3.5  | + 3.3  | + 2.6 | + 0.2 | - 1.2 | - 3.1 | - 4.9  | - 6.1  | - 5.8  | - 5.6  | - 3.7  | - 2.5  | - 1.8  | - 0.3 | + 0.6 | + 0.1 | + 2.1 | + 2.8 | + 2.7  |
| Dec.   | % 89.3 | + 2.0   | + 1.9     | + 2.2  | + 2.6  | + 1.9  | + 2.0  | + 1.4  | + 2.0 | + 0.9 | + 0.2 | - 1.2 | - 3.3  | - 4.9  | - 4.6  | - 5.0  | - 2.9  | - 0.7  | - 0.6  | + 0.1 | + 1.1 | + 0.5 | + 1.6 | + 1.3 | + 1.5  |
| Year   | % 79.8 | + 7.1   | + 7.8     | + 8.2  | + 8.7  | + 8.5  | + 7.9  | + 6.3  | + 3.8 | + 0.2 | - 3.1 | - 5.8 | - 7.9  | - 10.1 | - 10.8 | - 11.3 | - 9.9  | - 8.0  | - 5.9  | - 3.2 | - 0.1 | + 2.0 | + 3.9 | + 5.3 | + 6.4  |

RAINFALL : ANNUAL TOTALS OF HOURLY VALUES.

Amounts, in millimetres ; durations, in hours for periods of sixty minutes between the exact hours, Greenwich Mean Time.

426. Richmond (Kew Observatory) :  $H_r$  (height of receiving surface above M.S.L.) =  $H$  (height of station above M.S.L.) +  $h_r$  (height of receiving surface above ground) = 5.5 metres + 0.53 metres.

1924.

| G.M.T.       | 0 to 1.  | 1 to 2.  | 2 to 3.  | 3 to 4.  | 4 to 5.  | 5 to 6.  | 6 to 7.  | 7 to 8.  | 8 to 9.  | 9 to 10. | 10 to 11. | 11 to Noon | Noon to 13. | 13 to 14. | 14 to 15. | 15 to 16. | 16 to 17. | 17 to 18. | 18 to 19. | 19 to 20. | 20 to 21. | 21 to 22. | 22 to 23. | 23 to 24. | 0 to 24.  |
|--------------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|-----------|------------|-------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| Amount ...   | mm. 34.5 | mm. 25.8 | mm. 26.7 | mm. 24.7 | mm. 26.1 | mm. 24.7 | mm. 23.0 | mm. 25.1 | mm. 30.1 | mm. 22.4 | mm. 32.0  | mm. 34.8   | mm. 33.5    | mm. 37.6  | mm. 36.2  | mm. 27.8  | mm. 40.9  | mm. 45.2  | mm. 43.4  | mm. 35.9  | mm. 48.0  | mm. 41.1  | mm. 37.0  | mm. 30.7  | mm. 787.2 |
| Duration ... | hr. 25.0 | hr. 21.1 | hr. 20.0 | hr. 21.4 | hr. 22.1 | hr. 19.4 | hr. 22.0 | hr. 16.9 | hr. 19.4 | hr. 16.6 | hr. 21.7  | hr. 20.9   | hr. 21.7    | hr. 23.3  | hr. 23.6  | hr. 22.6  | hr. 24.9  | hr. 30.7  | hr. 27.6  | hr. 27.4  | hr. 35.4  | hr. 34.1  | hr. 30.1  | hr. 27.9  | hr. 575.8 |

427. Richmond (Kew Observatory).

NOTES ON RAINFALL.

1924.

Dry Periods.

There were two outstanding dry periods in the year, one in March and the other in June. No precipitation at all was recorded from March 7th to 22nd (16 days), and from June 19th to July 1st (13 days). Not more than 0.1 millimetre fell on any day from January 25th to February 17th (24 days), or from March 27th to April 8th (13 days). From January 6th to March 1st the total rainfall for 36 days amounted to 11.6 millimetres, while for the 28 days from June 19th to July 16th the fall was only 6.1 millimetres.

Wet Periods.

The most persistent wet weather was from November 25th to December 6th, when rain fell every day. Rain also fell on every day except the 26th from August 12th to 31st, and again from May 31st to June 12th except on June 6th.

Rainfall Duration.

There were 63 calendar days on which the duration of rainfall was registered as 0.1 to 1.0 hour, 27 days with 1.1 to 2.0 hours, 65 days with 2.1 to 6.0 hours, 25 days with 6.1 to 12.0 hours, and four days with more than 12 hours. The day with the greatest duration was November 12th, when the duration was 15.6 hours, the amount falling being 16.7 millimetres. Other notable long falls were on Jan. 21st, 12.6 hours, amount 13.8 mm.; July 20th 13.4 hours, amount 16.5 mm.; Oct. 29th, 11.9 hours, amount 16.1 mm.; December 27th, 11.9 hours, amount 19.1 mm., and December 30th, 12.3 hours, amount 13.7 mm.

Continuous Falls.

On January 21st it rained continuously for 12.5 hours, producing 13 mm., and on December 23rd a continuous fall of 8.9 hours produced 13 mm.

Heavy Falls in Short Periods.

Falls of 5 mm. in less than an hour were recorded as follows:—April 30th, 22 mins.; May 14th, 36 mins.; June 1st, 15 mins.; July 17th, 33 mins.; July 29th, 24 mins.; August 22nd, 18 mins.; September 25th, 21 mins.; September 30th, 15 mins.; and October 6th, 10 mins. Falls of 10 mm. were registered on June 1st in 34 mins., July 10th in 94 mins. and October 6th in 95 mins.

Amounts, in millimetres, for periods of sixty minutes between the exact hours, Greenwich Mean Time.

428. Richmond (Kew Observatory) :  $H_r$  (height of receiving surface above M.S.L.) =  $H$  (height of station above M.S.L.) +  $h_r$  (height of receiving surface above ground) = 5.5 metres + 0.53 metres. January, 1924.

| Day.            | 0-1     | 1-2     | 2-3     | 3-4     | 4-5     | 5-6     | 6-7     | 7-8     | 8-9     | 9-10    | 10-11   | 11-12   | 12-13   | 13-14   | 14-15   | 15-16   | 16-17   | 17-18   | 18-19   | 19-20   | 20-21   | 21-22   | 22-23   | 23-24   | 0-24     | Duration.<br>0-24 |     |      |
|-----------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|----------|-------------------|-----|------|
|                 | mm.     | mm.     | mm.     | mm.     | mm.     | mm.     | mm.     | mm.     | mm.     | mm.     | mm.     | mm.     | mm.     | mm.     | mm.     | mm.     | mm.     | mm.     | mm.     | mm.     | mm.     | mm.     | mm.     | mm.     | mm.      | mm.               | hr. |      |
| 1               | 1.0     | .2      | .1      | ...     | ...     | .9      | .1      | ...     | ...     | ...     | ...     | ...     | ...     | (...)   | (.1)    | ...     | ...     | .4      | .7      | ...     | ...     | ...     | ...     | ...     | 2.4      | 3.3               |     |      |
| 2               | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...      | 1.1               | 1.0 |      |
| 3               | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...      | ...               | ... |      |
| 4               | (.4)    | (.1)    | (.4)    | (.4)    | (.4)    | (.4)    | (.4)    | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...      | 0.1               | ... |      |
| 5               | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...      | ...               | ... |      |
| 6               | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...      | ...               | ... |      |
| 7               | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...      | ...               | ... |      |
| 8               | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...      | ...               | ... |      |
| 9               | .3      | .2      | .2      | .2      | ...     | ...     | .1      | .2      | ...     | .2      | .1      | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | .3      | .3      | .3       | 1.5               | 4.0 |      |
| 10              | .5      | .4      | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | .6      | .8      | 2.1     | 3.6     | .6      | ...     | ...     | ...      | 0.9               | 4.0 |      |
| 11              | .5      | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...      | 1.0               | 0.7 |      |
| 12              | ...     | ...     | ...     | ...     | ...     | ...     | ...     | .1      | .1      | ...     | ...     | ...     | ...     | ...     | .2      | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...      | 0.4               | 0.7 |      |
| 13              | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...      | ...               | ... |      |
| 14              | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...      | ...               | ... |      |
| 15              | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...      | ...               | ... |      |
| 16              | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...      | ...               | ... |      |
| 17              | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...      | 0.6               | 3.2 |      |
| 18              | .1      | ...     | ...     | .1      | 2.1     | .7      | ...     | ...     | ...     | ...     | ...     | ...     | ...     | .3      | .1      | .1      | .1      | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...      | 6.3               | 5.2 |      |
| 19              | ...     | ...     | .6      | 1.1     | .1      | .1      | .8      | .8      | .2      | ...     | .2      | 1.5     | 1.3     | .3      | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...      | 6.3               | 6.6 |      |
| 20              | .4      | .8      | .1      | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | .2      | 1.5     | .6      | .2      | ...     | ...     | ...     | ...     | ...     | ...     | ...      | 1.3               | 1.1 |      |
| 21              | ...     | ...     | ...     | ...     | ...     | ...     | ...     | .5      | (...)   | (.1)    | (...)   | .1      | 1.2     | 1.2     | 1.0     | 1.2     | 1.0     | 1.4     | 1.6     | 1.2     | 1.2     | 1.1     | .7      | .3      | 13.8     | 12.6              |     |      |
| 22              | ...     | ...     | ...     | ...     | ...     | ...     | ...     | .1      | .3      | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...      | 6.5               | 7.4 |      |
| 23              | .4      | .7      | .5      | .3      | .2      | .6      | .1      | .1      | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...      | 2.9               | 6.1 |      |
| 24              | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...      | ...               | 8.4 | 10.1 |
| 25              | .5      | .2      | .1      | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...      | 0.8               | 2.5 |      |
| 26              | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...      | ...               | ... |      |
| 27              | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...      | ...               | ... |      |
| 28              | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...      | ...               | ... |      |
| 29              | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...      | ...               | 0.1 | 0.1  |
| 30              | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...      | ...               | ... |      |
| 31              | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | .1       | 0.1               | 0.1 |      |
| Sum.            | 3.7     | 2.6     | 1.6     | 1.7     | 2.4     | 2.3     | 1.1     | 1.8     | 0.6     | 0.3     | 0.3     | 1.7     | 2.5     | 2.5     | 2.0     | 3.9     | 2.6     | 5.2     | 4.2     | 5.2     | 6.0     | 3.8     | 2.7     | 3.1     | 63.8     | 75.0              |     |      |
| Total Duration. | hr. 6.3 | hr. 5.4 | hr. 3.8 | hr. 2.7 | hr. 2.0 | hr. 3.0 | hr. 2.1 | hr. 2.2 | hr. 0.8 | hr. 0.4 | hr. 0.4 | hr. 1.3 | hr. 2.0 | hr. 3.1 | hr. 3.5 | hr. 3.7 | hr. 3.1 | hr. 4.5 | hr. 4.0 | hr. 3.4 | hr. 4.0 | hr. 4.3 | hr. 4.2 | hr. 4.8 | hr. 75.0 |                   |     |      |

429. Richmond (Kew Observatory) :  $H_r = 5.5$  metres + 0.53 metres.

February, 1924.

|                 | mm.     | mm.     | mm.     | mm.     | mm.     | mm.     | mm.     | mm.     | mm.     | mm.     | mm.     | mm.     | mm.     | mm.     | mm.     | mm.     | mm.     | mm.     | mm.     | mm.     | mm.     | mm.     | mm.     | mm.     | hr.      |      |      |     |     |
|-----------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|----------|------|------|-----|-----|
| 1               | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...      | ...  |      |     |     |
| 2               | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...      | ...  |      |     |     |
| 3               | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...      | ...  |      |     |     |
| 4               | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...      | ...  |      |     |     |
| 5               | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...      | ...  |      |     |     |
| 6               | ...     | ...     | ...     | ...     | ...     | ...     | ...     | .2      | ...     | ...     | ...     | ...     | .1      | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...      | 0.9  | 0.7  |     |     |
| 7               | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...      | ...  | ...  |     |     |
| 8               | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...      | ...  | ...  |     |     |
| 9               | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...      | ...  | 0.6  | 1.9 |     |
| 10              | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...      | ...  | ...  |     |     |
| 11              | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...      | ...  | ...  |     |     |
| 12              | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | .1      | ...     | ...     | ...     | ...     | ...      | ...  | 0.1  | 0.1 |     |
| 13              | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...      | ...  | ...  |     |     |
| 14              | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...      | ...  | ...  |     |     |
| 15              | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | .1      | .1      | ...     | ...     | ...     | .2      | .4      | ...     | ...     | ...     | ...     | ...     | ...      | ...  | 0.8  | 2.1 |     |
| 16              | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...      | ...  | ...  |     |     |
| 17              | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...      | ...  | ...  |     |     |
| 18              | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | .1      | 1.0     | .4      | .1      | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...      | ...  | 1.6  | 2.4 |     |
| 19              | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...      | ...  | ...  |     |     |
| 20              | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...      | ...  | ...  |     |     |
| 21              | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...      | ...  | ...  |     |     |
| 22              | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...      | ...  | ...  |     |     |
| 23              | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...      | ...  | ...  |     |     |
| 24              | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...      | ...  | 1.5  | 1.9 |     |
| 25              | ...     | ...     | ...     | ...     | ...     | ...     | .2      | ...     | .3      | ...     | ...     | ...     | ...     | ...     | ...     | ...     | .3      | .5      | .7      | ...     | ...     | ...     | ...     | ...     | ...      | ...  | 1.5  | 1.6 |     |
| 26              | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...      | ...  | ...  |     |     |
| 27              | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...      | ...  | ...  |     |     |
| 28              | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...      | ...  | ...  |     |     |
| 29              | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | ...     | .1      | 1.3     | ...     | ...     | ...     | ...     | ...     | ...     | ...      | ...  | ...  | 1.4 | 0.4 |
| Sum.            | ...     | ...     | ...     | ...     | ...     | ...     | 0.4     | ...     | 0.3     | 0.7     | 0.1     | 0.2     | 1.2     | 0.6     | 0.2     | 0.8     | 2.2     | 1.6     | 0.1     | ...     | 0.7     | 0.9     | 0.5     | ...     | ...      | 10.5 | 13.4 |     |     |
| Total Duration. | hr. ... | hr. ... | hr. ... | hr. ... | hr. ... | hr. ... | hr. 0.3 | hr. ... | hr. 0.4 | hr. 0.4 | hr. 0.5 | hr. 0.8 | hr. 1.6 | hr. 1.6 | hr. 0.5 | hr. 0.9 | hr. 1.8 | hr. 2.2 | hr. 0.1 | hr. ... | hr. 0.8 | hr. 1.0 | hr. 0.5 | hr. ... | hr. 13.4 |      |      |     |     |
| G.M.T.          | 0-1     | 1-2     | 2-3     | 3-4     | 4-5     | 5-6     | 6-7     | 7-8     | 8-9     | 9-10    | 10-11   | 11-12   | 12-13   | 13-14   | 14-15   | 15-16   | 16-17   | 17-18   | 18-19   | 19-20   | 20-21   | 21-22   | 22-23   | 23-24   | 0-24     | —    |      |     |     |



Amounts, in millimetres, for periods of sixty minutes between the exact hours, Greenwich Mean Time.

430. Richmond (Kew Observatory) : Hr (height of receiving surface above M.S.L.)=H (height of station above M.S.L.)+hr (height of receiving surface above ground)=5.5 metres+0.53 metres. March, 1924.

Table for Richmond (Kew Observatory) in March 1924. Columns: Day (1-31), 0-1 to 23-24 (mm), 0-24 (mm), Duration (hr). Rows: Daily rainfall data and a summary row.

431. Richmond (Kew Observatory) : Hr = 5.5 metres+0.53 metres. April, 1924.

Table for Richmond (Kew Observatory) in April 1924. Columns: Day (1-30), 0-1 to 23-24 (mm), 0-24 (mm), Duration (hr), G.M.T. (0-1 to 24). Rows: Daily rainfall data and a summary row.

Amounts, in millimetres, for periods of sixty minutes, between the exact hours, Greenwich Mean Time.

432. Richmond (Kew Observatory) Hr (height of receiving surface above M.S.L.) = H (height of station above M.S.L. + hr (height of receiving surface above ground) = 5.5 metres + 0.53 metres. May, 1924.

Table with 25 columns (0-1 to 23-24) and 2 columns (0-24, Duration-0-24). Rows represent days from 1 to 31, with summary and total duration rows.

433. Richmond (Kew Observatory) : Hr = 5.5 metres + 0.53 metres.

June, 1924.

Table with 25 columns (0-1 to 23-24) and 2 columns (0-24, Duration-0-24). Rows represent days from 1 to 30, with summary and total duration rows.

Amounts, in millimetres, for periods of sixty minutes between the exact hours, Greenwich Mean Time.

434. Richmond (Kew Observatory) : H<sub>r</sub> (height of receiving surface above M.S.L.) - H (height of station above M.S.L.) + h<sub>r</sub> (height of receiving surface above ground) = 5.5 metres + 0.53 metres. July, 1924.

Table with 25 columns (0-1 to 23-24) and 31 rows (Day 1 to 31). Columns represent 60-minute intervals. Rows represent days. Values are in mm. Last two rows show totals for the month and total duration in hours.

435. Richmond (Kew Observatory) : H<sub>r</sub> = 5.5 metres + 0.53 metres. August, 1924.

Table with 25 columns (0-1 to 23-24) and 31 rows (Day 1 to 31). Columns represent 60-minute intervals. Rows represent days. Values are in mm. Last two rows show totals for the month and total duration in hours.

Amounts, in millimetres, for periods of sixty minutes, between the exact hours, Greenwich Mean Time.

436. Richmond (Kew Observatory) : H<sub>r</sub> (height of receiving surface above M.S.L.) = H (height of station above M.S.L.) + h<sub>r</sub> (height of receiving surface above ground) = 5.5 metres + 0.53 metres. September, 1924.

Table for Richmond (Kew Observatory) in September 1924. Columns: Day (1-30), time intervals (0-1 to 23-24), and Duration (0-24). Rows show rainfall in mm for each interval and total for each day. Summary row: Sum. 2.8, 4.0, 1.9, 2.2, 4.8, 9.1, 1.7, 1.0, 1.8, 1.2, 2.4, 1.4, 1.6, 1.9, 0.4, 2.0, 2.7, 7.8, 8.4, 4.3, 2.4, 2.6, 1.6, 5.0, 75.0, 53.4. Total Duration: 2.5, 2.4, 1.0, 1.2, 3.4, 3.7, 2.4, 1.0, 1.0, 1.0, 1.8, 1.2, 1.7, 0.9, 1.6, 2.0, 2.5, 2.0, 3.0, 3.5, 3.6, 3.2, 5.1, 53.4.

437. Richmond (Kew Observatory) : H<sub>r</sub> = 5.5 metres + 0.53 metres. October, 1924.

Table for Richmond (Kew Observatory) in October 1924. Columns: Day (1-31), time intervals (0-1 to 23-24), and Duration (0-24). Rows show rainfall in mm for each interval and total for each day. Summary row: Sum. 2.8, ..., 1.3, 1.0, 2.3, 1.4, 3.9, 1.8, 6.7, 2.9, 8.4, 1.3, 2.2, 3.7, 1.6, 4.5, 5.8, 4.3, 5.1, 6.8, 4.1, 3.7, 8.5, 8.2, 92.3, 68.7. Total Duration: 2.4, —, 1.1, 2.0, 2.5, 1.8, 3.0, 2.7, 4.0, 3.4, 4.4, 3.1, 2.7, 1.5, 1.9, 2.6, 2.9, 2.9, 4.3, 5.4, 5.1, 3.0, 3.8, 2.2, 68.7. G.T.M. row: 0-1, 1-2, 2-3, 3-4, 4-5, 5-6, 6-7, 7-8, 8-9, 9-10, 10-11, 11-12, 12-13, 13-14, 14-15, 15-16, 16-17, 17-18, 18-19, 19-20, 20-21, 21-22, 22-23, 23-24, 0-24, —.

Amounts, in millimetres, for periods of sixty minute, between the exact hours, Greenwich Mean Time.

438. Richmond (Kew Observatory) : H<sub>r</sub> (height of receiving surface above M.S.L.)=H (height of station above M.S.L.)+h<sub>r</sub> (height of receiving surface above ground) = 5·5 metres + 0·53 metres. November, 1924.

Table with 25 columns for hourly intervals (0-1 to 23-24) and 2 columns for totals and duration. Rows represent days 1 through 30 and a 'Sum.' row. Data is recorded in mm. for rain and hr. for duration.

439. Richmond (Kew Observatory) : H<sub>r</sub> = 5·5 metres + 0·53 metres.

December, 1924.

Table with 25 columns for hourly intervals and 2 columns for totals and duration. Rows represent days 1 through 31 and a 'Sum.' row. Includes entries for 'Total Duration.' and 'G.M.T.'. Some cells contain 'P' or 'D' in parentheses, possibly indicating specific conditions or measurements.

For periods of sixty minutes, between the exact hours of Local Apparent Time.

440. Richmond (Kew Observatory) : h<sub>s</sub> (Height of recorder above ground) = 13.3 metres.

January, 1924.

| Day. | 3 to 4. | 4 to 5. | 5 to 6. | 6 to 7. | 7 to 8. | 8 to 9. | 9 to 10. | 10 to 11. | 11 to Noon. | Noon to 13. | 13 to 14. | 14 to 15. | 15 to 16. | 16 to 17. | 17 to 18. | 18 to 19. | 19 to 20. | 20 to 21. | Total for Day. | Per cent. of Possible. | Radiation at Noon, Ångström Pyrheliometer. |         |           |     |  |
|------|---------|---------|---------|---------|---------|---------|----------|-----------|-------------|-------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|----------------|------------------------|--|---------|-----------|-----|--|
|      | hr.     | hr.     | hr.     | hr.     | hr.     | hr.     | hr.      | hr.       | hr.         | hr.         | hr.       | hr.       | hr.       | hr.       | hr.       | hr.       | hr.       | hr.       | hr.            | %                      | Sky.                                       | Total.  | Vertical. |     |  |
| 1    |         |         |         |         |         |         |          |           |             |             |           |           |           |           |           |           |           |           |                |                        |  |         |           |     |  |
| 2    |         |         |         |         |         |         |          |           |             |             |           |           |           |           |           |           |           |           |                | 0.3                    | 4  | ...     | ...       | ... |  |
| 3    |         |         |         |         |         |         |          |           |             |             |           |           |           |           |           |           |           |           |                | 4.3                    | 54   | Haze    | 36.4      | 10  |  |
| 4    |         |         |         |         |         |         |          |           |             |             |           |           |           |           |           |           |           |           |                |                        |  | ...     | ...       | ... |  |
| 5    |         |         |         |         |         |         |          |           |             |             |           |           |           |           |           |           |           |           |                | 5.1                    | 65   | Mist    | 31.6      | 9   |  |
| 6    |         |         |         |         |         |         |          |           |             |             |           |           |           |           |           |           |           |           |                | 5.8                    | 73   | ...     | ...       | ... |  |
| 7    |         |         |         |         |         |         |          |           |             |             |           |           |           |           |           |           |           |           |                | 3.2                    | 40   | Mist    | 29.0      | 8   |  |
| 8    |         |         |         |         |         |         |          |           |             |             |           |           |           |           |           |           |           |           |                |                        |  | ...     | ...       | ... |  |
| 9    |         |         |         |         |         |         |          |           |             |             |           |           |           |           |           |           |           |           |                |                        |  | ...     | ...       | ... |  |
| 10   |         |         |         |         |         |         |          |           |             |             |           |           |           |           |           |           |           |           |                |                        |  | ...     | ...       | ... |  |
| 11   |         |         |         |         |         |         |          |           |             |             |           |           |           |           |           |           |           |           |                | 4.3                    | 53   | Clear   | 65.6      | 19  |  |
| 12   |         |         |         |         |         |         |          |           |             |             |           |           |           |           |           |           |           |           |                |                        |  | ...     | ...       | ... |  |
| 13   |         |         |         |         |         |         |          |           |             |             |           |           |           |           |           |           |           |           |                | 1.8                    | 22   | ...     | ...       | ... |  |
| 14   |         |         |         |         |         |         |          |           |             |             |           |           |           |           |           |           |           |           |                |                        |  | ...     | ...       | ... |  |
| 15   |         |         |         |         |         |         |          |           |             |             |           |           |           |           |           |           |           |           |                | 3.3                    | 40   | Haze    | 37.4      | 11  |  |
| 16   |         |         |         |         |         |         |          |           |             |             |           |           |           |           |           |           |           |           |                | 0.1                    | 1  | ...     | ...       | ... |  |
| 17   |         |         |         |         |         |         |          |           |             |             |           |           |           |           |           |           |           |           |                |                        |  | ...     | ...       | ... |  |
| 18   |         |         |         |         |         |         |          |           |             |             |           |           |           |           |           |           |           |           |                |                        |  | ...     | ...       | ... |  |
| 19   |         |         |         |         |         |         |          |           |             |             |           |           |           |           |           |           |           |           |                | 3.4                    | 40   | Clear   | 67.1      | 21  |  |
| 20   |         |         |         |         |         |         |          |           |             |             |           |           |           |           |           |           |           |           |                | 4.9                    | 58   | ...     | ...       | ... |  |
| 21   |         |         |         |         |         |         |          |           |             |             |           |           |           |           |           |           |           |           |                |                        |  | ...     | ...       | ... |  |
| 22   |         |         |         |         |         |         |          |           |             |             |           |           |           |           |           |           |           |           |                | 0.1                    | 1  | ...     | ...       | ... |  |
| 23   |         |         |         |         |         |         |          |           |             |             |           |           |           |           |           |           |           |           |                |                        |  | ...     | ...       | ... |  |
| 24   |         |         |         |         |         |         |          |           |             |             |           |           |           |           |           |           |           |           |                |                        |  | ...     | ...       | ... |  |
| 25   |         |         |         |         |         |         |          |           |             |             |           |           |           |           |           |           |           |           |                | 6.3                    | 72   | Clear   | 53.7      | 18  |  |
| 26   |         |         |         |         |         |         |          |           |             |             |           |           |           |           |           |           |           |           |                | 0.1                    | 1  | ...     | ...       | ... |  |
| 27   |         |         |         |         |         |         |          |           |             |             |           |           |           |           |           |           |           |           |                | 6.1                    | 69   | ...     | ...       | ... |  |
| 28   |         |         |         |         |         |         |          |           |             |             |           |           |           |           |           |           |           |           |                | 5.0                    | 56   | Fr. Cu. | 58.7      | 20  |  |
| 29   |         |         |         |         |         |         |          |           |             |             |           |           |           |           |           |           |           |           |                |                        |  | ...     | ...       | ... |  |
| 30   |         |         |         |         |         |         |          |           |             |             |           |           |           |           |           |           |           |           |                |                        |  | ...     | ...       | ... |  |
| 31   |         |         |         |         |         |         |          |           |             |             |           |           |           |           |           |           |           |           |                |                        |  | ...     | ...       | ... |  |
| Sum. |         |         |         |         |         |         | 1.1      | 5.8       | 8.8         | 10.1        | 9.6       | 10.2      | 7.0       | 1.5       |           |           |           |           | 54.1           |                        |  |         |           |     |  |
| Mean |         |         |         |         |         |         | 0.04     | 0.19      | 0.28        | 0.33        | 0.31      | 0.35      | 0.23      | 0.05      |           |           |           |           | 1.75           |                        | 21   |         |           |     |  |

441. Richmond (Kew Observatory) : h<sub>s</sub> = 13.3 metres.

February, 1924.

| Hour L.A.T. | 3 to 4. | 4 to 5. | 5 to 6. | 6 to 7. | 7 to 8. | 8 to 9. | 9 to 10. | 10 to 11. | 11 to Noon. | Noon to 13. | 13 to 14. | 14 to 15. | 15 to 16. | 16 to 17. | 17 to 18. | 18 to 19. | 19 to 20. | 20 to 21. | Total for Day. | Per cent. of Possible. | Radiation at Noon, Ångström Pyrheliometer. |        |           |     |  |
|-------------|---------|---------|---------|---------|---------|---------|----------|-----------|-------------|-------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|----------------|------------------------|--|--------|-----------|-----|--|
|             | hr.     | hr.     | hr.     | hr.     | hr.     | hr.     | hr.      | hr.       | hr.         | hr.         | hr.       | hr.       | hr.       | hr.       | hr.       | hr.       | hr.       | hr.       | hr.            | %                      | Sky.                                       | Total. | Vertical. |     |  |
| 1           |         |         |         |         |         | .8      | 1.0      | 1.0       | 1.0         | 1.0         | 1.0       | 1.0       | .9        |           |           |           |           |           |                | 7.7                    | 85   | Clear  | 66.0      | 24  |  |
| 2           |         |         |         |         |         | .2      | .2       | .9        | .6          | .3          |           |           |           |           |           |           |           |           |                | 2.2                    | 24   | Clear  | 59.4      | 22  |  |
| 3           |         |         |         |         |         | .7      | 1.0      | 1.0       | .8          | .7          | .4        | .9        | .5        |           |           |           |           |           |                | 6.0                    | 65   | ...    | ...       | ... |  |
| 4           |         |         |         |         |         | .2      | .2       | .1        |             |             |           |           |           |           |           |           |           |           |                | 0.5                    | 5  | ...    | ...       | ... |  |
| 5           |         |         |         |         |         |         |          |           |             |             |           |           |           |           |           |           |           |           |                |                        |  | ...    | ...       | ... |  |
| 6           |         |         |         |         |         |         |          |           |             |             | .5        | .4        |           |           |           |           |           |           |                | 0.9                    | 10   | ...    | ...       | ... |  |
| 7           |         |         |         |         |         |         |          |           |             |             |           |           |           |           |           |           |           |           |                |                        |  | ...    | ...       | ... |  |
| 8           |         |         |         |         |         |         |          |           |             |             |           |           |           |           |           |           |           |           |                |                        |  | ...    | ...       | ... |  |
| 9           |         |         |         |         |         |         |          |           |             |             |           |           |           |           |           |           |           |           |                |                        |  | ...    | ...       | ... |  |
| 10          |         |         |         |         |         |         |          |           |             |             |           |           |           |           |           |           |           |           |                | 0.3                    | 3  | ...    | ...       | ... |  |
| 11          |         |         |         |         |         |         |          |           |             |             |           |           |           |           |           |           |           |           |                |                        |  | ...    | ...       | ... |  |
| 12          |         |         |         |         |         |         |          |           |             |             |           |           |           |           |           |           |           |           |                |                        |  | ...    | ...       | ... |  |
| 13          |         |         |         |         |         |         |          |           |             |             |           |           |           |           |           |           |           |           |                |                        |  | ...    | ...       | ... |  |
| 14          |         |         |         |         |         |         |          | .4        |             |             | .1        |           |           |           |           |           |           |           |                | 0.5                    | 5  | ...    | ...       | ... |  |
| 15          |         |         |         |         |         |         |          |           |             |             |           |           |           |           |           |           |           |           |                |                        |  | ...    | ...       | ... |  |
| 16          |         |         |         |         |         | .2      | .7       | .6        | .5          | .5          | .8        | .2        |           |           |           |           |           |           |                | 3.5                    | 35   | ...    | ...       | ... |  |
| 17          |         |         |         |         |         |         | .8       | .6        |             |             |           |           |           |           |           |           |           |           |                | 1.4                    | 14   | ...    | ...       | ... |  |
| 18          |         |         |         |         |         | .4      |          |           |             |             |           |           |           |           |           |           |           |           |                | 0.4                    | 4  | ...    | ...       | ... |  |
| 19          |         |         |         |         |         |         |          |           |             |             |           |           |           |           |           |           |           |           |                |                        |  | ...    | ...       | ... |  |
| 20          |         |         |         |         |         |         |          |           |             |             |           |           |           |           |           |           |           |           |                |                        |  | ...    | ...       | ... |  |
| 21          |         |         |         |         |         |         |          |           |             |             |           |           |           |           |           |           |           |           |                |                        |  | ...    | ...       | ... |  |
| 22          |         |         |         |         |         |         |          |           |             |             |           |           |           |           |           |           |           |           |                |                        |  | ...    | ...       | ... |  |
| 23          |         |         |         |         |         |         |          | .1        | .3          | .8          | .1        |           |           |           |           |           |           |           |                | 1.3                    | 13   | Clear  | 57.3      | 27  |  |
| 24          |         |         |         |         |         |         |          |           |             | .4          |           |           |           |           |           |           |           |           |                | 0.4                    | 4  | ...    | ...       | ... |  |
| 25          |         |         |         |         |         |         |          |           |             | .2          |           |           |           |           |           |           |           |           |                | 0.2                    | 2  | ...    | ...       | ... |  |
| 26          |         |         |         |         | .2      | .2      | .8       | .4        | .2          | .2          | .1        |           | .1        |           |           |           |           |           |                | 2.2                    | 21   | ...    | ...       | ... |  |
| 27          |         |         |         |         | .4      | .1      | .3       | 1.0       | .6          | .9          | .3        |           |           |           |           |           |           |           |                | 3.6                    | 34   | Clear  | 54.6      | 27  |  |
| 28          |         |         |         |         | .2      | 1.0     | 1.0      | 1.0       | .8          | .8          | .3        | .3        | .4        |           |           |           |           |           |                | 5.8                    | 54   | Clear  | 71.0      | 36  |  |
| 29          |         |         |         |         |         |         |          | .1        | .4          | .1          |           |           |           |           |           |           |           |           |                | 0.6                    | 6  | ...    | ...       | ... |  |
| Sum.        |         |         |         |         | 0.2     | 3.3     | 5.8      | 5.6       | 6.1         | 5.3         | 5.9       | 3.1       | 1.8       | 0.4       |           |           |           |           | 37.5           |                        |  |        |           |     |  |
| Mean        |         |         |         |         | 0.01    | 0.11    | 0.20     | 0.19      | 0.21        | 0.18        | 0.20      | 0.11      | 0.06      | 0.01      |           |           |           |           | 1.29           |                        | 13   |        |           |     |  |

DURATION OF BRIGHT SUNSHINE.

For periods of sixty minutes, between the exact hours of Local Apparent Time.

442. Richmond (Kew Observatory) : h<sub>s</sub> (Height of recorder above ground) = 13.3 metres.

March, 1924.

| Day. | 3 to 4. | 4 to 5. | 5 to 6. | 6 to 7. | 7 to 8. | 8 to 9. | 9 to 10. | 10 to 11. | 11 to Noon. | Noon to 13. | 13 to 14. | 14 to 15. | 15 to 16. | 16 to 17. | 17 to 18. | 18 to 19. | 19 to 20. | 20 to 21. | Total for Day. | Per cent. of Possible. | Radiation at Noon. Angström Pyrheliometer. |                    |                    |
|------|---------|---------|---------|---------|---------|---------|----------|-----------|-------------|-------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|----------------|------------------------|--|--------------------|--------------------|
|      |         |         |         |         |         |         |          |           |             |             |           |           |           |           |           |           |           |           |                |                        | Sky.                                       | Total.             | Vertical.          |
|      | hr.     | hr.     | hr.     | hr.     | hr.     | hr.     | hr.      | hr.       | hr.         | hr.         | hr.       | hr.       | hr.       | hr.       | hr.       | hr.       | hr.       | hr.       | hr.            | %                      |  | mw/cm <sup>2</sup> | mw/cm <sup>2</sup> |
| 1    | —       | —       | —       | ...     | .4      | 1.0     | 1.0      | .8        | 1.0         | 1.0         | 1.0       | .8        | ...       | ...       | ...       | ...       | ...       | ...       | 7.0            | 65                     | ...  | ...                | ...                |
| 2    | —       | —       | —       | ...     | ...     | .2      | .8       | .9        | 1.0         | .6          | ...       | ...       | ...       | ...       | ...       | ...       | ...       | ...       | 3.5            | 32                     | ...  | ...                | ...                |
| 3    | —       | —       | —       | ...     | ...     | .5      | .9       | 1.0       | .8          | 1.0         | 1.0       | .9        | ...       | ...       | ...       | ...       | ...       | ...       | 6.1            | 56                     | ...  | ...                | ...                |
| 4    | —       | —       | —       | ...     | ...     | ...     | .8       | 1.0       | 1.0         | 1.0         | 1.0       | 1.0       | .8        | .1        | ...       | ...       | ...       | ...       | 6.7            | 61                     | ...  | ...                | ...                |
| 5    | —       | —       | —       | ...     | ...     | .4      | 1.0      | 1.0       | .9          | .8          | .9        | 1.0       | 1.0       | .6        | ...       | ...       | ...       | ...       | 7.6            | 68                     | ...  | ...                | ...                |
| 6    | —       | —       | —       | ...     | ...     | ...     | ...      | .5        | ...         | ...         | ...       | .3        | ...       | ...       | ...       | ...       | ...       | ...       | 0.8            | 7                      | ...  | ...                | ...                |
| 7    | —       | —       | —       | ...     | ...     | ...     | ...      | .9        | 1.0         | 1.0         | 1.0       | 1.0       | .9        | .3        | ...       | ...       | ...       | ...       | 6.1            | 54                     | ...  | ...                | ...                |
| 8    | —       | —       | —       | ...     | ...     | ...     | ...      | .5        | 1.0         | 1.0         | 1.0       | 1.0       | 1.0       | .7        | ...       | ...       | ...       | ...       | 7.2            | 64                     | ...  | ...                | ...                |
| 9    | —       | —       | —       | ...     | .9      | 1.0     | 1.0      | 1.0       | 1.0         | 1.0         | .9        | .9        | 1.0       | .1        | ...       | ...       | ...       | ...       | 9.8            | 87                     | ...  | ...                | ...                |
| 10   | —       | —       | —       | ...     | ...     | .3      | 1.0      | 1.0       | 1.0         | 1.0         | 1.0       | .8        | .2        | ...       | ...       | ...       | ...       | ...       | 7.3            | 64                     | ...  | ...                | ...                |
| 11   | —       | —       | —       | ...     | ...     | ...     | ...      | .9        | 1.0         | 1.0         | 1.0       | 1.0       | .8        | ...       | ...       | ...       | ...       | ...       | 6.7            | 58                     | ...  | ...                | ...                |
| 12   | —       | —       | —       | ...     | ...     | .6      | 1.0      | 1.0       | 1.0         | 1.0         | 1.0       | 1.0       | .2        | ...       | ...       | ...       | ...       | ...       | 7.8            | 68                     | ...  | ...                | ...                |
| 13   | —       | —       | —       | ...     | .5      | 1.0     | 1.0      | 1.0       | 1.0         | 1.0         | 1.0       | 1.0       | .5        | ...       | ...       | ...       | ...       | ...       | 9.0            | 78                     | Haze                                       | 48.3               | 28                 |
| 14   | —       | —       | —       | ...     | .8      | 1.0     | 1.0      | 1.0       | 1.0         | 1.0         | 1.0       | 1.0       | .4        | ...       | ...       | ...       | ...       | ...       | 9.2            | 79                     | Haze                                       | 34.8               | 20                 |
| 15   | —       | —       | —       | ...     | ...     | ...     | ...      | .7        | .8          | .9          | 1.0       | 1.0       | .7        | .2        | ...       | ...       | ...       | ...       | 5.3            | 45                     | Ci.  | 34.2               | 20                 |
| 16   | —       | —       | —       | ...     | ...     | .3      | 1.0      | 1.0       | 1.0         | .6          | .4        | .2        | ...       | ...       | ...       | ...       | ...       | ...       | 4.5            | 38                     | ...  | ...                | ...                |
| 17   | —       | —       | —       | ...     | ...     | .9      | 1.0      | .9        | .9          | .7          | .9        | .9        | .8        | .1        | ...       | ...       | ...       | ...       | 7.1            | 60                     | ...  | ...                | ...                |
| 18   | —       | —       | —       | ...     | .8      | 1.0     | 1.0      | 1.0       | 1.0         | 1.0         | .6        | .4        | 1.0       | .3        | ...       | ...       | ...       | ...       | 8.1            | 67                     | Clear.                                     | 54.8               | 33                 |
| 19   | —       | —       | —       | ...     | .3      | 1.0     | 1.0      | 1.0       | 1.0         | 1.0         | 1.0       | 1.0       | 1.0       | .2        | ...       | ...       | ...       | ...       | 9.5            | 79                     | Haze.                                      | 71.5               | 44                 |
| 20   | —       | —       | —       | ...     | ...     | .7      | 1.0      | 1.0       | 1.0         | 1.0         | 1.0       | .6        | ...       | ...       | ...       | ...       | ...       | ...       | 6.3            | 52                     | Haze                                       | 43.2               | 27                 |
| 21   | —       | —       | ...     | ...     | ...     | ...     | ...      | ...       | ...         | ...         | ...       | ...       | ...       | ...       | ...       | ...       | ...       | ...       | ...            | ...                    | ...  | ...                | ...                |
| 22   | —       | —       | ...     | ...     | ...     | ...     | ...      | ...       | ...         | .5          | .9        | .6        | .6        | .7        | ...       | ...       | ...       | ...       | 3.3            | 27                     | ...  | ...                | ...                |
| 23   | —       | —       | ...     | ...     | ...     | ...     | ...      | ...       | ...         | .3          | .1        | .6        | ...       | ...       | ...       | ...       | ...       | ...       | 1.0            | 8                      | ...  | ...                | ...                |
| 24   | —       | —       | ...     | ...     | ...     | ...     | ...      | ...       | ...         | .1          | .5        | .6        | .2        | ...       | ...       | ...       | ...       | ...       | 1.4            | 11                     | ...  | ...                | ...                |
| 25   | —       | —       | ...     | ...     | ...     | ...     | ...      | ...       | ...         | ...         | ...       | ...       | ...       | ...       | ...       | ...       | ...       | ...       | ...            | ...                    | ...  | ...                | ...                |
| 26   | —       | —       | ...     | ...     | ...     | ...     | ...      | ...       | ...         | ...         | ...       | ...       | ...       | ...       | ...       | ...       | ...       | ...       | ...            | ...                    | ...  | ...                | ...                |
| 27   | —       | —       | ...     | ...     | ...     | ...     | ...      | ...       | ...         | ...         | ...       | ...       | ...       | ...       | ...       | ...       | ...       | ...       | ...            | ...                    | ...  | ...                | ...                |
| 28   | —       | —       | ...     | ...     | ...     | ...     | ...      | ...       | ...         | ...         | ...       | ...       | ...       | ...       | ...       | ...       | ...       | ...       | ...            | ...                    | ...  | ...                | ...                |
| 29   | —       | —       | ...     | .7      | 1.0     | .7      | .2       | .1        | ...         | .5          | .3        | .9        | .6        | .4        | ...       | ...       | ...       | ...       | 5.4            | 43                     | ...  | ...                | ...                |
| 30   | —       | —       | ...     | .9      | 1.0     | 1.0     | .6       | .6        | .7          | ...         | ...       | .2        | .6        | .8        | .3        | ...       | ...       | ...       | 6.7            | 53                     | ...  | ...                | ...                |
| 31   | —       | —       | ...     | ...     | ...     | ...     | ...      | ...       | ...         | ...         | ...       | .2        | .6        | ...       | ...       | ...       | ...       | ...       | 0.8            | 6                      | ...  | ...                | ...                |
| Sum. | —       | —       | ...     | 1.6     | 5.7     | 11.6    | 15.8     | 19.8      | 19.1        | 18.9        | 18.1      | 19.0      | 16.0      | 8.5       | 0.6       | ...       | ...       | ...       | 154.2          | —                      | ...  | ...                | ...                |
| Mean | —       | —       | ...     | 0.05    | 0.18    | 0.37    | 0.51     | 0.62      | 0.62        | 0.61        | 0.58      | 0.61      | 0.52      | 0.27      | 0.02      | ...       | ...       | ...       | 4.97           | 42                     | —  | —                  | —                  |

443. Richmond (Kew Observatory) : h<sub>s</sub> = 13.3 metres.

April, 1924.

| Day.        | 3 to 4. | 4 to 5. | 5 to 6. | 6 to 7. | 7 to 8. | 8 to 9. | 9 to 10. | 10 to 11. | 11 to Noon. | Noon to 13. | 13 to 14. | 14 to 15. | 15 to 16. | 16 to 17. | 17 to 18. | 18 to 19. | 19 to 20. | 20 to 21. | Total for Day. | Per cent. of Possible. | Radiation at Noon. Angström Pyrheliometer. |                    |                    |
|-------------|---------|---------|---------|---------|---------|---------|----------|-----------|-------------|-------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|----------------|------------------------|--|--------------------|--------------------|
|             |         |         |         |         |         |         |          |           |             |             |           |           |           |           |           |           |           |           |                |                        | Sky.                                       | Total.             | Vertical.          |
| Hour L.A.T. | hr.     | hr.     | hr.     | hr.     | hr.     | hr.     | hr.      | hr.       | hr.         | hr.         | hr.       | hr.       | hr.       | hr.       | hr.       | hr.       | hr.       | hr.       | hr.            | %                      |  | mw/cm <sup>2</sup> | mw/cm <sup>2</sup> |
| 1           | —       | —       | ...     | ...     | ...     | ...     | .1       | ...       | ...         | .1          | .6        | .4        | .5        | .4        | ...       | ...       | ...       | ...       | 2.1            | 16                     | ...  | ...                | ...                |
| 2           | —       | —       | ...     | .6      | 1.0     | .9      | .6       | ...       | ...         | .1          | .2        | .4        | .1        | ...       | ...       | ...       | ...       | ...       | 3.9            | 30                     | ...  | ...                | ...                |
| 3           | —       | —       | ...     | .7      | .2      | ...     | .4       | ...       | .2          | .3          | .8        | .6        | .2        | ...       | ...       | ...       | ...       | ...       | 3.4            | 26                     | ...  | ...                | ...                |
| 4           | —       | —       | ...     | ...     | ...     | ...     | ...      | ...       | ...         | ...         | ...       | ...       | ...       | ...       | ...       | ...       | ...       | ...       | ...            | ...                    | ...  | ...                | ...                |
| 5           | —       | —       | ...     | ...     | ...     | .2      | .5       | 1.0       | 1.0         | 1.0         | 1.0       | 1.0       | .8        | ...       | ...       | ...       | ...       | ...       | 7.5            | 57                     | Haze                                       | 46.4               | 33                 |
| 6           | —       | —       | ...     | ...     | ...     | .5      | .7       | .8        | .1          | .4          | 1.0       | .6        | .6        | .1        | ...       | ...       | ...       | ...       | 4.8            | 36                     | ...  | ...                | ...                |
| 7           | —       | —       | ...     | ...     | .6      | 1.0     | 1.0      | 1.0       | 1.0         | 1.0         | .9        | .8        | .1        | ...       | ...       | ...       | ...       | ...       | 7.4            | 56                     | Haze                                       | 50.3               | 36                 |
| 8           | —       | —       | ...     | ...     | .1      | .6      | .2       | .7        | .1          | ...         | ...       | ...       | .2        | .2        | ...       | ...       | ...       | ...       | 2.1            | 16                     | ...  | ...                | ...                |
| 9           | —       | —       | ...     | ...     | .4      | ...     | .6       | .3        | .7          | .5          | .5        | ...       | .5        | .1        | .1        | ...       | ...       | ...       | 3.7            | 28                     | ...  | ...                | ...                |
| 10          | —       | —       | ...     | ...     | ...     | ...     | ...      | ...       | ...         | ...         | ...       | .1        | ...       | ...       | ...       | ...       | ...       | ...       | 0.1            | 1                      | ...  | ...                | ...                |
| 11          | —       | —       | ...     | ...     | ...     | ...     | ...      | ...       | ...         | ...         | ...       | ...       | ...       | ...       | ...       | ...       | ...       | ...       | ...            | ...                    | ...  | ...                | ...                |
| 12          | —       | —       | ...     | ...     | .2      | .1      | ...      | ...       | .2          | .6          | .4        | .5        | .2        | .2        | ...       | ...       | ...       | ...       | 2.4            | 18                     | ...  | ...                | ...                |
| 13          | —       | —       | ...     | ...     | .2      | 1.0     | 1.0      | .8        | .4          | .3          | .6        | .1        | .3        | ...       | ...       | ...       | ...       | ...       | 4.7            | 35                     | ...  | ...                | ...                |
| 14          | —       | —       | ...     | ...     | ...     | ...     | ...      | ...       | ...         | ...         | ...       | ...       | 1.0       | 1.0       | 1.0       | .1        | ...       | ...       | 3.1            | 23                     | ...  | ...                | ...                |
| 15          | —       | —       | ...     | ...     | ...     | ...     | ...      | ...       | .1          | .4          | .2        | .3        | 1.0       | 1.0       | 1.0       | .2        | ...       | ...       | 4.2            | 30                     | ...  | ...                | ...                |
| 16          | —       | —       | ...     | ...     | .8      | 1.0     | .9       | .9        | 1.0         | 1.0         | 1.0       | 1.0       | .9        | 1.0       | 1.0       | .3        | ...       | ...       | 10.8           | 78                     | ...  | ...                | ...                |
| 17          | —       | —       | ...     | ...     | .3      | .6      | .9       | 1.0       | 1.0         | 1.0         | .9        | 1.0       | 1.0       | 1.0       | .8        | ...       | ...       | ...       | 10.5           | 76                     | Clear                                      | 59.4               | 45                 |
| 18          | —       | —       | ...     | ...     | .4      | 1.0     | 1.0      | 1.0       | 1.0         | 1.0         | 1.0       | 1.0       | 1.0       | .2        | ...       | ...       | ...       | ...       | 10.6           | 76                     | ...  | ...                | ...                |
| 19          | —       | —       | ...     | ...     | ...     | 1.0     | 1.0      | 1.0       | 1.0         | 1.0         | .9        | .1        | ...       | .3        | .1        | .5        | ...       | ...       | 6.9            | 49                     | ...  | ...                | ...                |
| 20          | —       | —       | ...     | ...     | .4      | .5      | .9       | 1.0       | 1.0         | 1.0         | .6        | ...       | ...       | ...       | ...       | ...       | ...       | ...       | 5.4            | 38                     | ...  | ...                | ...                |
| 21          | —       | —       | ...     | .5      | .9      | 1.0     | 1.0      | 1.0       | 1.0         | .8          | 1.0       | 1.0       | 1.0       | .7        | ...       | ...       | ...       | ...       | 11.9           | 84                     | ...  | ...                | ...                |
| 22          | —       | —       | ...     | ...     | ...     | ...     | ...      | ...       | .1          | ...         | .8        | .5        | .1        | ...       | ...       | ...       | ...       | ...       | 1.5            | 11                     | ...  | ...                | ...                |
| 23          | —       | —       | ...     | ...     | ...     | ...     | ...      | ...       | ...         | ...         | ...       | ...       | ...       | ...       | ...       | ...       | ...       | ...       | ...            | ...                    | ...  | ...                | ...                |
| 24          | —       | —       | ...     | ...     | ...     | ...     | ...      | ...       | ...         | ...         | ...       | ...       | ...       | ...       | ...       | ...       | ...       | ...       | 1.1            | 8                      | ...  | ...                | ...                |
| 25          | —       | —       | ...     | ...     | ...     | ...     | ...      | ...       | .4          | .4          | .7        | .4        | .7        | .8        | .9        | .2        | ...       | ...       | 4.5            | 31                     | ...  | ...                | ...                |
| 26          | —       | —       | ...     | .3      | .3      | ...     | ...      | ...       | ...         | ...         | ...       | ...       | .3        | .3        | .2        | .2        | ...       | ...       | 1.6            | 11                     | ...  | ...                | ...                |
| 27          | —       | —       | ...     | .1      | .5      | 1.0     | 1.0      | .1        | ...         | ...         | ...       | ...       | ...       | ...       | ...       | ...       | ...       | ...       | 2.7            | 19                     | ...  | ...                | ...                |
| 28          | —       | —       | ...     | ...     | .6      | .7      | .4       | .2        | .1          | .1          | ...       | ...       | ...       | .5        | ...       | ...       | ...       | ...       | 2.6            | 18                     | ...  | ...                | ...                |
| 29          | —       | —       | ...     | ...     | ...     | .7      | .7       | .1        | .6          | .8          | .1        | ...       | ...       | ...       | ...       | ...       | ...       | ...       | 3.0            | 21                     | ...  | ...                | ...                |
| 30          | —       | —       | ...     | .4      | ...     | ...     | ...      | .1        | .1          | .2          | ...       | ...       | ...       | ...       | ...       | ...       | ...       | ...       | 0.8            | 5                      | ...  | ...                | ...                |
| Sum.        | —       | —       | 1.3     | 3.9     | 9.9     | 12.3    | 12.7     | 10.6      | 11.7        | 12.6        | 11.3      | 10.4      | 10.7      | 9.5       | 5.5       | 0.9       | ...       | ...       | 123.3          | —                      | —  | —                  | —                  |
| Mean        | —       | —       | 0.04    | 0.13    | 0.33    | 0.41    | 0.42     | 0.35      | 0.39        | 0.42        | 0.38      | 0.35      | 0.36      | 0.32      | 0.18      | 0.03      | ...       | ...       | 4.11           | 30                     | —  | —                  | —                  |

For periods of sixty minutes, between the exact hours of Local Apparent Time.

444. Richmond (Kew Observatory) :  $h_s$  (Height of recorder above ground) = 13.3 metres.

May, 1924.

| Day. | 3 to 4. | 4 to 5. | 5 to 6. | 6 to 7. | 7 to 8. | 8 to 9. | 9 to 10. | 10 to 11. | 11 to Noon | Noon to 13. | 13 to 14. | 14 to 15. | 15 to 16. | 16 to 17. | 17 to 18. | 18 to 19. | 19 to 20. | 20 to 21. | Total for Day. | Per cent. of Possible. | Radiation at Noon. Ångström Pyrheliometer. |                    |                    |
|------|---------|---------|---------|---------|---------|---------|----------|-----------|------------|-------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|----------------|------------------------|--|--------------------|--------------------|
|      |         |         |         |         |         |         |          |           |            |             |           |           |           |           |           |           |           |           |                |                        | Sky.                                       | Total.             | Vertical.          |
|      | hr.     | hr.     | hr.     | hr.     | hr.     | hr.     | hr.      | hr.       | hr.        | hr.         | hr.       | hr.       | hr.       | hr.       | hr.       | hr.       | hr.       | hr.       | hr.            | %                      |  | mw/cm <sup>2</sup> | mw/cm <sup>2</sup> |
| 1    | —       | ...     | ...     | ...     | ...     | ...     | ...      | ...       | 1          | 2           | 3         | ...       | 1         | 4         | ...       | ...       | ...       | ...       | 1.3            | 9                      | ...  | ...                | ...                |
| 2    | —       | ...     | ...     | ...     | ...     | ...     | ...      | ...       | 7          | 5           | 8         | ...       | 8         | 7         | 6         | 1         | ...       | ...       | 5.6            | 38                     | ...  | ...                | ...                |
| 3    | —       | ...     | ...     | ...     | ...     | ...     | ...      | 1         | 3          | 4           | 7         | ...       | 1         | 3         | ...       | ...       | ...       | ...       | 3.2            | 21                     | ...  | ...                | ...                |
| 4    | —       | ...     | 1.0     | 8       | 4       | 7       | 1.0      | 4         | 4          | 6           | 1         | 2         | 7         | 1         | 5         | 2         | ...       | ...       | 7.1            | 48                     | ...  | ...                | ...                |
| 5    | —       | ...     | 7       | 1.0     | 1.0     | 1.0     | 1.0      | 8         | 7          | 8           | 9         | 1.0       | 6         | 1.0       | 4         | 1.0       | ...       | ...       | 11.9           | 79                     | ...  | ...                | ...                |
| 6    | —       | ...     | 8       | 1.0     | 9       | 6       | ...      | ...       | ...        | 4           | 5         | ...       | 2         | 5         | ...       | ...       | ...       | ...       | 4.9            | 32                     | ...  | ...                | ...                |
| 7    | —       | ...     | 2       | 9       | 4       | 5       | 3        | 2         | 7          | 1.0         | 8         | 2         | 7         | 8         | 6         | ...       | ...       | ...       | 7.3            | 48                     | ...  | ...                | ...                |
| 8    | —       | ...     | ...     | 2       | ...     | 2       | 3        | 8         | 6          | 9           | 8         | 6         | ...       | ...       | ...       | ...       | ...       | ...       | 4.4            | 29                     | ...  | ...                | ...                |
| 9    | —       | ...     | 1.0     | 1.0     | 1.0     | 1.0     | 1.0      | 1.0       | 1.0        | 1.0         | 6         | 2         | 3         | ...       | ...       | ...       | ...       | ...       | 9.1            | 60                     | Clear                                      | 87.9               | 73                 |
| 10   | —       | ...     | ...     | ...     | ...     | ...     | ...      | 3         | 2          | ...         | ...       | ...       | ...       | ...       | ...       | ...       | ...       | ...       | 0.5            | 3                      | ...  | ...                | ...                |
| 11   | —       | ...     | ...     | 1       | 5       | 9       | 1.0      | 8         | 8          | 8           | 6         | 1.0       | 1         | 2         | ...       | ...       | ...       | ...       | 6.8            | 44                     | ...  | ...                | ...                |
| 12   | —       | ...     | ...     | ...     | 5       | 1       | 3        | 1         | ...        | ...         | ...       | ...       | ...       | ...       | ...       | ...       | ...       | ...       | 1.0            | 6                      | ...  | ...                | ...                |
| 13   | —       | ...     | ...     | ...     | 1       | ...     | ...      | 1         | ...        | ...         | ...       | ...       | 5         | 9         | 5         | 1.0       | 1         | ...       | 3.2            | 21                     | ...  | ...                | ...                |
| 14   | —       | ...     | ...     | 6       | 1.0     | 1.0     | 1.0      | 1.0       | 8          | 4           | 3         | 6         | 1         | 2         | ...       | ...       | ...       | ...       | 7.0            | 45                     | ...  | ...                | ...                |
| 15   | —       | ...     | ...     | 6       | 3       | 9       | 1.0      | 1.0       | 9          | 7           | 3         | 2         | ...       | ...       | ...       | ...       | ...       | ...       | 5.9            | 38                     | ...  | ...                | ...                |
| 16   | —       | ...     | 3       | 6       | 1.0     | 1.0     | 1.0      | 1.0       | 9          | 9           | 1.0       | 9         | 9         | 9         | 7         | 5         | ...       | ...       | 11.6           | 74                     | ...  | ...                | ...                |
| 17   | —       | ...     | 8       | 1.0     | 1.0     | 1.0     | 1.0      | 1.0       | 1.0        | 1.0         | 1.0       | 9         | 9         | 2         | 6         | ...       | ...       | ...       | 11.5           | 74                     | Clear                                      | 81.6               | 69                 |
| 18   | —       | ...     | ...     | ...     | ...     | ...     | ...      | 1         | ...        | 8           | ...       | ...       | ...       | ...       | ...       | ...       | ...       | ...       | 2.7            | 17                     | ...  | ...                | ...                |
| 19   | —       | ...     | 7       | 1.0     | 5       | ...     | 4        | 8         | ...        | 1           | 3         | 4         | 8         | 4         | 4         | 3         | ...       | ...       | 6.1            | 39                     | ...  | ...                | ...                |
| 20   | —       | ...     | ...     | 5       | 1.0     | 1.0     | 7        | ...       | 3          | 2           | 5         | 7         | 6         | 2         | ...       | ...       | ...       | ...       | 5.7            | 36                     | ...  | ...                | ...                |
| 21   | —       | ...     | ...     | 1.0     | 9       | 1.0     | 9        | 1.0       | 2          | 1           | ...       | ...       | ...       | ...       | ...       | ...       | ...       | ...       | 5.1            | 32                     | ...  | ...                | ...                |
| 22   | —       | ...     | ...     | ...     | 3       | 6       | 2        | 4         | 8          | 2           | 2         | ...       | ...       | ...       | ...       | ...       | ...       | ...       | 2.5            | 16                     | ...  | ...                | ...                |
| 23   | —       | ...     | 4       | 4       | 9       | 9       | 9        | 1.0       | 6          | 5           | ...       | ...       | ...       | ...       | ...       | ...       | ...       | ...       | 5.6            | 35                     | ...  | ...                | ...                |
| 24   | —       | ...     | ...     | 1       | ...     | ...     | 4        | 6         | 5          | 2           | 3         | 3         | 5         | 5         | 4         | ...       | ...       | ...       | 3.8            | 24                     | ...  | ...                | ...                |
| 25   | —       | ...     | 1       | 8       | 7       | 1       | 2        | 6         | 5          | 8           | 1.0       | 5         | 2         | 4         | 8         | 7         | 1         | ...       | 7.5            | 47                     | ...  | ...                | ...                |
| 26   | —       | ...     | 9       | 1.0     | 1.0     | 9       | 1.0      | 9         | 6          | 6           | 5         | 9         | 4         | 1         | 4         | 1         | ...       | ...       | 9.3            | 58                     | ...  | ...                | ...                |
| 27   | —       | ...     | 7       | 1.0     | 9       | 1.0     | 9        | 2         | 2          | 9           | 4         | 4         | 6         | 8         | 8         | 9         | 1         | ...       | 9.8            | 61                     | ...  | ...                | ...                |
| 28   | ...     | ...     | ...     | ...     | 6       | 1.0     | 1.0      | 1.0       | 1.0        | 9           | 9         | 1.0       | 1.0       | 1.0       | 1.0       | 1.0       | 3         | ...       | 11.7           | 73                     | ...  | ...                | ...                |
| 29   | ...     | ...     | ...     | 2       | 1.0     | 3       | 1        | 9         | 1.0        | 6           | 8         | 2         | ...       | ...       | ...       | ...       | ...       | ...       | 5.1            | 32                     | ...  | ...                | ...                |
| 30   | ...     | ...     | 7       | ...     | ...     | 2       | 9        | 1.0       | 1.0        | 7           | 7         | ...       | 1         | 3         | 4         | 4         | ...       | ...       | 6.4            | 40                     | ...  | ...                | ...                |
| 31   | ...     | ...     | ...     | ...     | ...     | ...     | ...      | ...       | ...        | ...         | 2         | 3         | ...       | ...       | ...       | ...       | ...       | ...       | 0.5            | 3                      | ...  | ...                | ...                |
| Sum. | ...     | ...     | 8.3     | 13.8    | 15.9    | 15.9    | 16.7     | 17.9      | 16.5       | 16.5        | 15.1      | 12.2      | 10.4      | 9.6       | 8.5       | 6.2       | 0.6       | ...       | 184.1          | —                      | ...  | ...                | ...                |
| Mean | ...     | ...     | 0.27    | 0.45    | 0.51    | 0.51    | 0.54     | 0.58      | 0.53       | 0.53        | 0.49      | 0.39      | 0.34      | 0.31      | 0.27      | 0.20      | 0.02      | ...       | 5.94           | 38                     | ...  | ...                | ...                |

445. Richmond (Kew Observatory) :  $h_s$  = 13.3 metres.

June, 1924.

| Day.        | 3 to 4. | 4 to 5. | 5 to 6. | 6 to 7. | 7 to 8. | 8 to 9. | 9 to 10. | 10 to 11. | 11 to Noon | Noon to 13. | 13 to 14. | 14 to 15. | 15 to 16. | 16 to 17. | 17 to 18. | 18 to 19. | 19 to 20. | 20 to 21. | Total for Day. | Per cent. of Possible. | Radiation at Noon. Ångström Pyrheliometer. |  |                    |  |
|-------------|---------|---------|---------|---------|---------|---------|----------|-----------|------------|-------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|----------------|------------------------|--|--|--------------------|--|
|             |         |         |         |         |         |         |          |           |            |             |           |           |           |           |           |           |           |           |                |                        | Sky.                                       | Total.                                     | Vertical.          |  |
|             | hr.     | hr.     | hr.     | hr.     | hr.     | hr.     | hr.      | hr.       | hr.        | hr.         | hr.       | hr.       | hr.       | hr.       | hr.       | hr.       | hr.       | hr.       | hr.            | %                      |  | mw/cm <sup>2</sup>                         | mw/cm <sup>2</sup> |  |
| 1           | ...     | ...     | 7       | 1.0     | 1.0     | 1.0     | 1.0      | 1.0       | 7          | 7           | 5         | 3         | ...       | 1         | ...       | ...       | ...       | ...       | 8.0            | 49                     | ...  | ...  | ...                |  |
| 2           | ...     | ...     | ...     | ...     | ...     | ...     | ...      | ...       | ...        | ...         | 5         | 3         | ...       | 1         | ...       | ...       | ...       | ...       | 2.2            | 13                     | ...  | ...  | ...                |  |
| 3           | ...     | ...     | ...     | ...     | 5       | 5       | 9        | 9         | 9          | 1.0         | 3         | ...       | ...       | ...       | ...       | ...       | ...       | ...       | 5.0            | 31                     | ...  | ...  | ...                |  |
| 4           | ...     | ...     | ...     | ...     | ...     | ...     | ...      | ...       | ...        | ...         | ...       | ...       | ...       | ...       | ...       | ...       | ...       | ...       | ...            | ...                    | ...  | ...  | ...                |  |
| 5           | ...     | ...     | ...     | ...     | ...     | 4       | 5        | 1.0       | 1          | 1           | ...       | ...       | 1         | 5         | ...       | 7         | ...       | ...       | 3.4            | 21                     | ...  | ...  | ...                |  |
| 6           | ...     | ...     | ...     | ...     | ...     | 9       | 7        | ...       | 2          | ...         | 8         | 3         | 6         | 6         | ...       | ...       | ...       | ...       | 4.1            | 25                     | ...  | ...  | ...                |  |
| 7           | ...     | ...     | ...     | ...     | 1       | ...     | 4        | 2         | 4          | ...         | ...       | ...       | ...       | ...       | ...       | ...       | ...       | ...       | 1.1            | 7                      | ...  | ...  | ...                |  |
| 8           | ...     | ...     | ...     | 4       | 9       | 6       | 5        | 1.0       | 5          | 1           | 6         | 9         | 3         | 2         | 3         | 5         | 2         | ...       | 7.0            | 43                     | ...  | ...  | ...                |  |
| 9           | ...     | ...     | ...     | ...     | 4       | 8       | 7        | 1         | ...        | 3           | 3         | ...       | ...       | 4         | 2         | ...       | ...       | ...       | 3.2            | 20                     | ...  | ...  | ...                |  |
| 10          | ...     | ...     | ...     | 1       | 1       | 8       | 8        | 6         | 8          | 5           | 1         | ...       | ...       | ...       | ...       | ...       | ...       | ...       | 3.8            | 23                     | ...  | ...  | ...                |  |
| 11          | ...     | ...     | ...     | ...     | ...     | ...     | ...      | ...       | ...        | ...         | 8         | 7         | 4         | 3         | 4         | 6         | ...       | ...       | 3.2            | 19                     | ...  | ...  | ...                |  |
| 12          | ...     | ...     | ...     | 1       | 5       | 3       | 7        | ...       | ...        | 6           | 1         | 4         | 5         | ...       | 1         | 4         | ...       | ...       | 3.7            | 22                     | ...  | ...  | ...                |  |
| 13          | ...     | ...     | ...     | ...     | ...     | ...     | 1        | ...       | ...        | ...         | ...       | 3         | 8         | 6         | 6         | ...       | ...       | ...       | 2.4            | 15                     | ...  | ...  | ...                |  |
| 14          | ...     | ...     | ...     | ...     | ...     | ...     | 3        | 6         | 1.0        | 1.0         | 1.0       | 1.0       | 1.0       | 1.0       | 1.0       | 1.0       | 3         | ...       | 8.2            | 50                     | ...  | ...  | ...                |  |
| 15          | ...     | ...     | ...     | 4       | 9       | 1.0     | 1.0      | 1.0       | 1.0        | 1.0         | 9         | 1.0       | 1.0       | 1.0       | 1.0       | 1.0       | 3         | ...       | 11.5           | 70                     | ...  | ...  | ...                |  |
| 16          | ...     | ...     | 3       | 3       | 9       | 7       | 9        | 9         | 1.0        | 1.0         | 1.0       | 1.0       | 9         | 1         | 5         | ...       | ...       | ...       | 9.5            | 58                     | Haze                                       | 74.2                                       | 66                 |  |
| 17          | ...     | ...     | ...     | ...     | 7       | 8       | 2        | 1         | ...        | 1           | 2         | 3         | 1.0       | 8         | 9         | 2         | ...       | ...       | 5.3            | 32                     | ...  | ...  | ...                |  |
| 18          | ...     | ...     | 1       | ...     | 6       | ...     | ...      | 1         | 5          | 1.0         | 1.0       | 1.0       | 1.0       | 9         | 1.0       | 6         | 2         | ...       | 8.0            | 48                     | ...  | ...  | ...                |  |
| 19          | ...     | ...     | 5       | 1       | 9       | 9       | 9        | 8         | 9          | 1.0         | 1.0       | 1.0       | 1.0       | 9         | 9         | 1.0       | 7         | ...       | 12.5           | 75                     | ...  | ...  | ...                |  |
| 20          | ...     | ...     | ...     | ...     | ...     | ...     | 6        | 2         | 3          | 2           | 4         | 4         | 1         | ...       | 1         | 4         | ...       | ...       | 2.7            | 16                     | ...  | ...  | ...                |  |
| 21          | ...     | 7       | 1.0     | 1.0     | 1.0     | 1.0     | 9        | 1.0       | 6          | 9           | 1.0       | 1.0       | 9         | ...       | 4         | ...       | ...       | ...       | 11.4           | 69                     | ...  | ...  | ...                |  |
| 22          | ...     | ...     | ...     | 6       | 6       | 9       | 1.0      | 1.0       | 1.0        | 1.0         | 9         | 1.0       | 8         | 9         | 9         | 1.0       | 1         | ...       | 12.0           | 72                     | ...  | ...  | ...                |  |
| 23          | ...     | ...     | 6       | 1.0     | 1.0     | 1.0     | 1.0      | 1.0       | 1.0        | 9           | 1.0       | 1.0       | 8         | 4         | 7         | 1         | ...       | ...       | 11.5           | 69                     | Clear                                      | 61.1                                       | 54                 |  |
| 24          | ...     | 2       | 9       | 1.0     | 9       | 9       | 1.0      | 1.0       | 1.0        | 8           | 5         | 4         | 6         | 1.0       | 9         | 2         | ...       | ...       | 11.3           | 68                     | Clear                                      | ...  | ...                |  |
| 25          | ...     | ...     | ...     | 1       | 2       | ...     | 3        | 1.0       | 1.0        | 1.0         | 9         | 9         | 5         | 2         | 9         | 9         | 3         | ...       | 8.2            | 49                     | Clear                                      | 52.8                                       | 47                 |  |
| 26          | ...     | ...     | 9       | 1.0     | 1.0     | 1.0     | 1.0      | 1.0       | 1.0        | 1.0         | 1.0       | 1.0       | 1.0       | 1.0       | 1.0       | 9         | 9         | ...       | 14.7           | 89                     | ...  | ...  | ...                |  |
| 27          | ...     | ...     | ...     | ...     | 1.0     | 8       | 2        | 3         | ...        | ...         | 9         | 9         | 4         | ...       | ...       | ...       | ...       | ...       | 4.5            | 27                     | ...  | ...  | ...                |  |
| 28          | ...     | 5       | 1.0     | 1.0     | 1.0     | 8       | 1        | ...       | ...        | ...         | ...       | ...       | ...       | ...       | ...       | ...       | ...       | ...       | 4.4            | 27                     | ...  | ...  | ...                |  |
| 29          | ...     | ...     | 3       | 7       | 5       | ...     | 4        | 7         | 1.0        | 1.0         | 8         | 1.0       | 9         | 8         | 2         | ...       | ...       | ...       | 8.3            | 50                     | ...  | ...  | ...                |  |
| 30          | ...     | 3       | 6       | 8       | 3       | 7       | 3        | 1         | ...        | ...         | 5         | 9         | 9         | 1.0       | 4         | ...       | ...       | ...       | 6.8            | 41                     | ...  | ...  | ...                |  |
| Sum.        | ...     | 1.7     | 6.9     | 9.2     | 14.8    | 15.9    | 15.4     | 15.7      | 14.4       | 15.2        | 16.9      | 16.7      | 16.3      | 13.3      | 12.4      | 9.7       | 3.4       | ...       | 197.9          | —                      | ...  | ...  | ...                |  |
| Mean        | ...     | 0.06    | 0.23    | 0.31    | 0.49    | 0.53    | 0.51     | 0.52      | 0.48       | 0.51        | 0.56      | 0.56      | 0.54      | 0.44      | 0.41      | 0.32      | 0.11      | ...       | 6.60           | 40                     | ...  | ...  | ...                |  |
| Hour L.A.T. | 3 to 4. | 4 to 5. | 5 to 6. | 6 to 7. | 7 to 8. | 8 to 9. | 9 to 10. | 10 to 11. | 11 to Noon | Noon to 13. | 13 to 14. | 14 to 15. | 15 to 16. | 16 to 17. | 17 to 18. | 18 to 19. | 19 to 20. | 20 to 21. | Total for Day. | Per cent. of Possible. | Sky.                                       | Total.                                     | Vertical.          |  |
|             |         |         |         |         |         |         |          |           |            |             |           |           |           |           |           |           |           |           |                |                        |  | Radiation at Noon. Ångström Pyrheliometer. |                    |  |



For periods of sixty minutes, between the exact hours of Local Apparent Time.

446. Richmond (Kew Observatory) :  $h_s$  (Height of recorder above ground) = 13.3 metres.

July, 1924.

| Day.  | 3 to 4. | 4 to 5. | 5 to 6. | 6 to 7. | 7 to 8. | 8 to 9. | 9 to 10. | 10 to 11. | 11 to Noon. | Noon to 13. | 13 to 14. | 14 to 15. | 15 to 16. | 16 to 17. | 17 to 18. | 18 to 19. | 19 to 20. | 20 to 21. | Total for Day. | Per cent. of Possible. | Radiation at Noon. Angström Pyrheliometer. |      |                           |
|-------|---------|---------|---------|---------|---------|---------|----------|-----------|-------------|-------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|----------------|------------------------|--|------|---------------------------|
|       | hr.     | hr.     | hr.     | hr.     | hr.     | hr.     | hr.      | hr.       | hr.         | hr.         | hr.       | hr.       | hr.       | hr.       | hr.       | hr.       | hr.       | hr.       |                |                        | %  | Sky. | Total. mw/cm <sup>2</sup> |
| 1     | ...     | 2       | 1.0     | 1.0     | 1.0     | 1.0     | 1.0      | 9         | 7           | 8           | 9         | 9         | 9         | 7         | 5         | 7         | 1         | ...       | 12.3           | 75                     | ...  | ...  | ...                       |
| 2     | ...     | ...     | ...     | ...     | ...     | ...     | 2        | 5         | 9           | 9           | 6         | 1         | ...       | 3         | 6         | 1         | ...       | ...       | 4.2            | 25                     | ...  | ...  | ...                       |
| 3     | ...     | 1       | 1       | ...     | ...     | ...     | 2        | 7         | 9           | ...         | ...       | ...       | 1         | ...       | 1         | ...       | ...       | ...       | 1.6            | 10                     | ...  | ...  | ...                       |
| 4     | ...     | 1       | 9       | 1.0     | 1.0     | 4       | 7        | 9         | 9           | 9           | 2         | 8         | 5         | 6         | 1         | 7         | ...       | ...       | 9.7            | 59                     | ...  | ...  | ...                       |
| 5     | ...     | 6       | 1.0     | 1.0     | 1.0     | 9       | 7        | 3         | 4           | 1.0         | 1.0       | 9         | 1.0       | 9         | 1         | 3         | ...       | ...       | 11.1           | 68                     | ...  | ...  | ...                       |
| 6     | ...     | 2       | 4       | 3       | 8       | 9       | 6        | 6         | 9           | 6           | 9         | 8         | 1.0       | 1.0       | 6         | ...       | ...       | ...       | 9.6            | 58                     | ...  | ...  | ...                       |
| 7     | ...     | ...     | 1       | ...     | 1       | ...     | ...      | ...       | ...         | 6           | 4         | 5         | 8         | 9         | 9         | 3         | ...       | ...       | 4.6            | 28                     | ...  | ...  | ...                       |
| 8     | ...     | ...     | 2       | 7       | 9       | 1.0     | 6        | 1.0       | 1.0         | 9           | 1.0       | 1.0       | 7         | 9         | 9         | ...       | ...       | ...       | 10.8           | 66                     | Haze                                       | 48.9 | 43                        |
| 9     | ...     | ...     | ...     | ...     | ...     | ...     | 4        | 9         | 7           | 1.0         | 9         | 1.0       | 1.0       | 2         | 3         | 7         | ...       | ...       | 7.1            | 44                     | ...  | ...  | ...                       |
| 10    | ...     | ...     | ...     | 9       | 1.0     | 1.0     | 1.0      | 1.0       | 9           | 1.0         | 1.0       | 1.0       | 1.0       | 9         | 8         | 1.0       | 5         | ...       | 13.0           | 80                     | ...  | ...  | ...                       |
| 11    | ...     | ...     | ...     | 7       | 8       | 9       | 1.0      | 1.0       | 1.0         | 1.0         | 1.0       | 1.0       | 1.0       | 1.0       | 1.0       | 1.0       | 4         | ...       | 12.8           | 79                     | Clear                                      | 82.3 | 72                        |
| 12    | ...     | ...     | 8       | 1.0     | 1.0     | 1.0     | 1.0      | 1.0       | 1.0         | 1.0         | 1.0       | 1.0       | 1.0       | 9         | 1.0       | 1.0       | 1         | ...       | 13.8           | 85                     | ...  | ...  | ...                       |
| 13    | ...     | ...     | 1       | ...     | 7       | 5       | 3        | 4         | 9           | 1.0         | 2         | 1.0       | 9         | 1.0       | 1.0       | 1.0       | 5         | ...       | 9.5            | 59                     | ...  | ...  | ...                       |
| 14    | ...     | 1       | 1.0     | 1.0     | 1.0     | 1.0     | 1.0      | 9         | 9           | 1.0         | 1.0       | 1.0       | 1.0       | 1.0       | 1.0       | 1.0       | 5         | ...       | 14.4           | 89                     | ...  | ...  | ...                       |
| 15    | ...     | 2       | 1.0     | 1.0     | 1.0     | 1.0     | 1.0      | 1.0       | 1.0         | 1.0         | 1.0       | 5         | 7         | 8         | 1.0       | 1.0       | 5         | ...       | 13.7           | 85                     | Clear                                      | 83.8 | 73                        |
| 16    | —       | ...     | ...     | ...     | ...     | ...     | ...      | ...       | 4           | 8           | 8         | 9         | 9         | 1.0       | 9         | 7         | 4         | —         | 6.8            | 42                     | Clear                                      | 56.5 | 49                        |
| 17    | —       | 1       | 1.0     | 1.0     | 1.0     | 6       | 1        | ...       | ...         | ...         | ...       | ...       | ...       | ...       | ...       | ...       | ...       | ...       | 3.8            | 24                     | ...  | ...  | ...                       |
| 18    | —       | 1       | 1.0     | 3       | 4       | 9       | 6        | 8         | 1.0         | 4           | 1         | 4         | 1         | 3         | ...       | ...       | ...       | ...       | 6.4            | 40                     | Clear                                      | 86.7 | 75                        |
| 19    | —       | ...     | ...     | 1       | 6       | 8       | 5        | 4         | 3           | 9           | 6         | 9         | 7         | 2         | ...       | ...       | ...       | ...       | 6.0            | 37                     | ...  | ...  | ...                       |
| 20    | —       | ...     | 7       | 1.0     | 1.0     | 9       | 7        | 4         | 3           | 7           | 8         | 2         | ...       | ...       | ...       | ...       | ...       | ...       | 6.7            | 42                     | ...  | ...  | ...                       |
| 21    | —       | ...     | ...     | ...     | ...     | ...     | ...      | ...       | ...         | 2           | 1         | ...       | ...       | 7         | 1.0       | 1.0       | 6         | —         | 3.6            | 23                     | ...  | ...  | ...                       |
| 22    | —       | ...     | ...     | ...     | 3       | 9       | 1.0      | 1.0       | 3           | 3           | ...       | ...       | 4         | 2         | 7         | ...       | ...       | ...       | 5.1            | 32                     | ...  | ...  | ...                       |
| 23    | —       | ...     | ...     | ...     | ...     | ...     | 7        | 4         | 3           | 2           | ...       | 2         | 6         | 2         | 3         | ...       | ...       | ...       | 3.2            | 20                     | ...  | ...  | ...                       |
| 24    | —       | 2       | 1.0     | 1.0     | 1.0     | 9       | 4        | 3         | 4           | 7           | 2         | 4         | 5         | 5         | 7         | 7         | ...       | ...       | 8.9            | 56                     | ...  | ...  | ...                       |
| 25    | —       | 4       | 1.0     | 1.0     | 9       | 2       | 9        | 4         | 3           | ...         | ...       | ...       | ...       | ...       | ...       | ...       | ...       | ...       | 5.1            | 32                     | ...  | ...  | ...                       |
| 26    | —       | ...     | ...     | ...     | 6       | 2       | 7        | 6         | ...         | 2           | 4         | 1         | 2         | ...       | 2         | 4         | ...       | ...       | 3.6            | 23                     | ...  | ...  | ...                       |
| 27    | —       | ...     | 9       | 1.0     | 1.0     | 1.0     | 9        | 6         | 9           | 5           | 9         | 7         | 5         | 6         | ...       | ...       | ...       | ...       | 9.5            | 61                     | ...  | ...  | ...                       |
| 28    | —       | ...     | ...     | ...     | ...     | ...     | ...      | ...       | ...         | ...         | ...       | ...       | ...       | ...       | ...       | ...       | ...       | ...       | ...            | ...                    | ...  | ...  | ...                       |
| 29    | —       | ...     | 4       | 2       | 3       | 2       | 2        | ...       | 1           | 3           | 4         | ...       | ...       | ...       | 7         | 1         | ...       | ...       | 2.9            | 19                     | ...  | ...  | ...                       |
| 30    | —       | ...     | ...     | ...     | ...     | ...     | ...      | 1         | 3           | 3           | ...       | 8         | 3         | 5         | 1.0       | 1         | ...       | ...       | 3.4            | 22                     | ...  | ...  | ...                       |
| 31    | —       | ...     | ...     | 7       | 1.0     | 9       | 4        | 4         | 4           | 2           | 5         | 5         | 3         | ...       | ...       | 1         | ...       | ...       | 5.4            | 35                     | ...  | ...  | ...                       |
| Sum.  | ...     | 2.3     | 12.6    | 14.9    | 18.0    | 17.1    | 17.1     | 16.3      | 16.1        | 19.0        | 16.2      | 16.3      | 16.3      | 15.2      | 15.7      | 11.9      | 3.6       | ...       | 228.6          | —                      | —  | —    | —                         |
| Mean. | ...     | 0.07    | 0.41    | 0.48    | 0.58    | 0.55    | 0.55     | 0.53      | 0.52        | 0.61        | 0.52      | 0.53      | 0.53      | 0.49      | 0.51      | 0.38      | 0.12      | ...       | 7.38           | 46                     | —  | —    | —                         |

447. Richmond (Kew Observatory) :  $h_s$  = 13.3 metres.

August, 1924.

| Day.  | 3 to 4. | 4 to 5. | 5 to 6. | 6 to 7. | 7 to 8. | 8 to 9. | 9 to 10. | 10 to 11. | 11 to Noon. | Noon to 13. | 13 to 14. | 14 to 15. | 15 to 16. | 16 to 17. | 17 to 18. | 18 to 19. | 19 to 20. | 20 to 21. | Total for Day. | Per cent. of Possible. | Radiation at Noon. Angström Pyrheliometer. |      |                           |
|-------|---------|---------|---------|---------|---------|---------|----------|-----------|-------------|-------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|----------------|------------------------|--|------|---------------------------|
|       | hr.     | hr.     | hr.     | hr.     | hr.     | hr.     | hr.      | hr.       | hr.         | hr.         | hr.       | hr.       | hr.       | hr.       | hr.       | hr.       | hr.       | hr.       |                |                        | %  | Sky. | Total. mw/cm <sup>2</sup> |
| 1     | —       | ...     | 1       | 6       | 1       | 2       | ...      | ...       | ...         | ...         | ...       | ...       | ...       | ...       | ...       | ...       | ...       | ...       | 1.0            | 6                      | ...  | ...  | ...                       |
| 2     | —       | ...     | ...     | 1       | 4       | 6       | 1        | 3         | 4           | 5           | 6         | 3         | 5         | ...       | 1         | 9         | 2         | ...       | 5.0            | 33                     | ...  | ...  | ...                       |
| 3     | —       | 3       | 1.0     | 1.0     | 1.0     | 1.0     | 5        | 7         | ...         | 1           | ...       | ...       | ...       | ...       | ...       | ...       | ...       | ...       | 5.6            | 37                     | ...  | ...  | ...                       |
| 4     | —       | ...     | ...     | 1       | 3       | 8       | 8        | 5         | ...         | ...         | ...       | ...       | 1         | ...       | ...       | ...       | ...       | ...       | 2.6            | 17                     | ...  | ...  | ...                       |
| 5     | —       | ...     | ...     | ...     | 7       | ...     | ...      | 3         | 5           | 6           | 2         | ...       | ...       | ...       | 3         | 9         | 1         | ...       | 3.6            | 24                     | ...  | ...  | ...                       |
| 6     | —       | ...     | ...     | ...     | ...     | ...     | ...      | ...       | ...         | 9           | 5         | 6         | 5         | ...       | ...       | ...       | ...       | ...       | 2.5            | 17                     | ...  | ...  | ...                       |
| 7     | —       | ...     | ...     | ...     | ...     | 3       | 9        | 7         | 1.0         | 9           | 9         | 3         | 1         | 2         | 5         | ...       | ...       | ...       | 5.8            | 38                     | ...  | ...  | ...                       |
| 8     | —       | ...     | ...     | 5       | 1.0     | 1.0     | 1.0      | 9         | 9           | 9           | 8         | 4         | 3         | 2         | 4         | ...       | ...       | ...       | 8.3            | 55                     | ...  | ...  | ...                       |
| 9     | —       | ...     | 2       | 1.0     | 1.0     | 1.0     | 1.0      | 1.0       | 9           | 9           | 9         | 1.0       | 6         | 7         | ...       | ...       | ...       | ...       | 10.2           | 68                     | Haze                                       | 73.4 | 60                        |
| 10    | —       | ...     | ...     | 3       | 7       | 1.0     | 1.0      | 1.0       | 1.0         | 9           | 9         | 1.0       | 9         | 9         | ...       | ...       | ...       | ...       | 9.6            | 64                     | ...  | ...  | ...                       |
| 11    | —       | ...     | ...     | ...     | 1       | 8       | 1.0      | 1.0       | 1.0         | 1.0         | 7         | 1.0       | 9         | ...       | 6         | 8         | ...       | ...       | 8.9            | 60                     | ...  | ...  | ...                       |
| 12    | —       | ...     | ...     | ...     | 2       | 1       | ...      | ...       | 1           | ...         | 2         | 5         | 9         | 5         | ...       | ...       | ...       | ...       | 2.5            | 17                     | ...  | ...  | ...                       |
| 13    | —       | ...     | 4       | 9       | 3       | 5       | 3        | ...       | 2           | 2           | ...       | 4         | 6         | ...       | 6         | 3         | ...       | ...       | 4.7            | 32                     | ...  | ...  | ...                       |
| 14    | —       | ...     | ...     | 2       | 1.0     | 1.0     | 1.0      | 1.0       | 8           | 4           | 7         | 2         | ...       | ...       | ...       | ...       | ...       | ...       | 6.1            | 41                     | ...  | ...  | ...                       |
| 15    | —       | ...     | 6       | 1.0     | 1.0     | 1.0     | 1.0      | 1.0       | 1.0         | 1.0         | 2         | 7         | 2         | 1         | 9         | ...       | ...       | ...       | 9.7            | 66                     | ...  | ...  | ...                       |
| 16    | —       | ...     | 6       | 1.0     | 1.0     | 1.0     | 6        | 5         | 7           | 5           | 3         | 7         | 2         | ...       | ...       | ...       | ...       | ...       | 7.1            | 49                     | ...  | ...  | ...                       |
| 17    | —       | ...     | ...     | ...     | ...     | ...     | ...      | ...       | 2           | 7           | 9         | 8         | 2         | 2         | 5         | 5         | ...       | ...       | 4.0            | 28                     | ...  | ...  | ...                       |
| 18    | —       | ...     | ...     | 1       | 1       | 1       | ...      | ...       | 4           | 6           | 9         | 2         | 6         | 2         | 6         | 7         | ...       | ...       | 4.5            | 31                     | ...  | ...  | ...                       |
| 19    | —       | ...     | 1       | 1.0     | 1.0     | 7       | 9        | 2         | 4           | 6           | 8         | 5         | 9         | 1.0       | 6         | ...       | ...       | ...       | 8.8            | 61                     | ...  | ...  | ...                       |
| 20    | —       | ...     | ...     | 2       | ...     | 6       | 6        | 9         | 9           | 1.0         | 1.0       | 8         | 7         | 2         | 2         | ...       | ...       | ...       | 7.1            | 50                     | ...  | ...  | ...                       |
| 21    | —       | ...     | ...     | 1.0     | 1.0     | 1.0     | 1.0      | 5         | ...         | 2           | 3         | 8         | 5         | ...       | 2         | ...       | ...       | ...       | 6.5            | 45                     | ...  | ...  | ...                       |
| 22    | —       | ...     | 4       | 3       | ...     | 7       | 6        | 8         | 3           | ...         | 1         | 1         | 1.0       | 8         | 2         | ...       | ...       | ...       | 5.3            | 37                     | ...  | ...  | ...                       |
| 23    | —       | ...     | ...     | ...     | ...     | 2       | 9        | 5         | 7           | 9           | 3         | 8         | 5         | 6         | 1         | ...       | ...       | ...       | 5.5            | 39                     | ...  | ...  | ...                       |
| 24    | —       | ...     | ...     | ...     | ...     | ...     | ...      | ...       | ...         | ...         | ...       | ...       | 2         | 1         | ...       | ...       | ...       | ...       | 0.3            | 2                      | ...  | ...  | ...                       |
| 25    | —       | ...     | ...     | ...     | ...     | 1       | 1        | ...       | ...         | 2           | 1         | ...       | ...       | ...       | ...       | ...       | ...       | ...       | 0.5            | 4                      | ...  | ...  | ...                       |
| 26    | —       | ...     | ...     | ...     | ...     | ...     | ...      | ...       | ...         | ...         | ...       | ...       | ...       | ...       | 2         | ...       | ...       | ...       | 0.2            | 1                      | ...  | ...  | ...                       |
| 27    | —       | ...     | ...     | 9       | 1.0     | 4       | 4        | 9         | 6           | ...         | ...       | 8         | 6         | 4         | 1         | ...       | ...       | ...       | 6.1            | 44                     | ...  | ...  | ...                       |
| 28    | —       | ...     | ...     | ...     | 6       | ...     | ...      | ...       | 2           | ...         | ...       | ...       | ...       | ...       | ...       | ...       | ...       | ...       | 0.8            | 6                      | ...  | ...  | ...                       |
| 29    | —       | ...     | ...     | ...     | ...     | ...     | ...      | 3         | 5           | 2           | 1         | 1         | ...       | ...       | ...       | ...       | ...       | ...       | 1.2            | 9                      | ...  | ...  | ...                       |
| 30    | —       | ...     | ...     | ...     | ...     | ...     | ...      | 1         | ...         | 3           | 4         | 2         | 1         | 1         | ...       | ...       | ...       | ...       | 1.2            | 9                      | ...  | ...  | ...                       |
| 31    | —       | ...     | ...     | ...     | ...     | ...     | 5        | ...       | ...         | 4           | 5         | ...       | 1         | 3         | 1         | ...       | ...       | ...       | 1.9            | 14                     | ...  | ...  | ...                       |
| Sum.  | —       | 0.3     | 3.4     | 10.2    | 12.5    | 13.6    | 13.6     | 13.8      | 12.1        | 13.8        | 12.4      | 12.8      | 11.4      | 6.4       | 5.9       | 4.6       | 0.3       | ...       | 147.1          | —                      | —  | —    | —                         |
| Mean. | —       | 0.01    | 0.11    | 0.33    | 0.40    | 0.44    | 0.44     | 0.45      | 0.39        | 0.45        | 0.40      | 0.41      | 0.37      | 0.21      | 0.19      | 0.15      | 0.01      | ...       | 4.75           | 33                     | —  | —    | —                         |

| Hour L.A.T. | 3 to 4. | 4 to 5. | 5 to 6. | 6 to 7. | 7 to 8. | 8 to 9. | 9 to 10. | 10 to 11. | 11 to Noon. | Noon to 13. | 13 to 14. | 14 to 15. | 15 to 16. | 16 to 17. | 17 to 18. | 18 to 19. | 19 to 20. | 20 to 21. | Total for Day. | Per cent. of Possible. | Sky. | Total. | Vertical. |
|-------------|---------|---------|---------|---------|---------|---------|----------|-----------|-------------|-------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|----------------|------------------------|------|--------|-----------|
|-------------|---------|---------|---------|---------|---------|---------|----------|-----------|-------------|-------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|----------------|------------------------|------|--------|-----------|

Radiation at Noon. Angström Pyrheliometer.

For periods of sixty minutes, between the exact hours of Local Apparent Time.

448. Richmond (Kew Observatory) : h<sub>s</sub> (Height of recorder above ground)=13.3 metres.

September, 1924.

| Day.  | hr.     |         |         |         |         |         |          |           |            |             |           |           |           |           |           |           |           |           |      |        | Total for Day. | Per cent. of Possible. | Radiation at Noon. Angström Pyrheliometer. |      |     |
|-------|---------|---------|---------|---------|---------|---------|----------|-----------|------------|-------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|------|--------|----------------|------------------------|--|------|-----|
|       | 3 to 4. | 4 to 5. | 5 to 6. | 6 to 7. | 7 to 8. | 8 to 9. | 9 to 10. | 10 to 11. | 11 to Noon | Noon to 13. | 13 to 14. | 14 to 15. | 15 to 16. | 16 to 17. | 17 to 18. | 18 to 19. | 19 to 20. | 20 to 21. | Sky. | Total. |                |                        | Vertical.                                  |      |     |
| 1     | —       | —       | —       | —       | —       | —       | —        | —         | —          | —           | —         | —         | —         | —         | —         | —         | —         | —         | —    | —      | 0.5            | 4                      | ...  | ...  | ... |
| 2     | —       | —       | —       | —       | —       | —       | —        | —         | —          | —           | —         | —         | —         | —         | —         | —         | —         | —         | —    | —      | 0.1            | 1                      | ...  | ...  | ... |
| 3     | —       | —       | —       | —       | —       | —       | —        | —         | —          | —           | —         | —         | —         | —         | —         | —         | —         | —         | —    | —      | 2.4            | 18                     | ...  | ...  | ... |
| 4     | —       | —       | —       | —       | —       | —       | —        | —         | —          | —           | —         | —         | —         | —         | —         | —         | —         | —         | —    | —      | 0.4            | 3                      | ...  | ...  | ... |
| 5     | —       | —       | —       | —       | —       | —       | —        | —         | —          | —           | —         | —         | —         | —         | —         | —         | —         | —         | —    | —      | 3.5            | 26                     | ...  | ...  | ... |
| 6     | —       | —       | —       | —       | .3      | .1      | .8       | .9        | 1.0        | 1.0         | .9        | .2        | .4        | ...       | ...       | ...       | ...       | ...       | ...  | ...    | 5.6            | 42                     | Haze&Ci                                    | 36.4 | 26  |
| 7     | —       | —       | —       | —       | .2      | .1      | ...      | ...       | ...        | ...         | ...       | ...       | ...       | ...       | ...       | ...       | ...       | ...       | ...  | ...    | 0.3            | 2                      | ...  | ...  | ... |
| 8     | —       | —       | —       | —       | .9      | .4      | 1.0      | .9        | 1.0        | 1.0         | 1.0       | 1.0       | 1.0       | 1.0       | 1.0       | 1.0       | 1.0       | 1.0       | 1.0  | 1.0    | 10.9           | 83                     | ...  | ...  | ... |
| 9     | —       | —       | —       | —       | .6      | .1      | 1.0      | .1        | ...        | .4          | .2        | .7        | ...       | .4        | .1        | ...       | ...       | ...       | ...  | ...    | 2.6            | 20                     | ...  | ...  | ... |
| 10    | —       | —       | —       | —       | .1      | .8      | .7       | .9        | .9         | .9          | .9        | .7        | .8        | 1.0       | .7        | .6        | ...       | ...       | ...  | ...    | 9.0            | 69                     | Clear                                      | 83.2 | 57  |
| 11    | —       | —       | —       | —       | ...     | ...     | ...      | .2        | .4         | .2          | .2        | .2        | .6        | .9        | ...       | .2        | ...       | ...       | ...  | ...    | 2.9            | 22                     | ...  | ...  | ... |
| 12    | —       | —       | —       | —       | ...     | ...     | ...      | ...       | .2         | ...         | .5        | .3        | .1        | ...       | ...       | ...       | ...       | ...       | ...  | ...    | 1.1            | 9                      | ...  | ...  | ... |
| 13    | —       | —       | —       | —       | ...     | ...     | ...      | ...       | .1         | .8          | .6        | ...       | .9        | .1        | ...       | ...       | ...       | ...       | ...  | ...    | 2.7            | 21                     | ...  | ...  | ... |
| 14    | —       | —       | —       | —       | ...     | ...     | ...      | ...       | .3         | 1.0         | 1.0       | 1.0       | 1.0       | 1.0       | 1.0       | .8        | ...       | ...       | ...  | ...    | 9.9            | 78                     | ...  | ...  | ... |
| 15    | —       | —       | —       | —       | ...     | ...     | ...      | ...       | ...        | .4          | .5        | .4        | .4        | ...       | .1        | .2        | ...       | ...       | ...  | ...    | 2.0            | 16                     | ...  | ...  | ... |
| 16    | —       | —       | —       | —       | ...     | ...     | ...      | ...       | ...        | ...         | ...       | ...       | ...       | ...       | ...       | ...       | ...       | ...       | ...  | ...    | 2.9            | 23                     | ...  | ...  | ... |
| 17    | —       | —       | —       | —       | ...     | ...     | ...      | ...       | ...        | ...         | ...       | ...       | ...       | ...       | ...       | ...       | ...       | ...       | ...  | ...    | 0.1            | 1                      | ...  | ...  | ... |
| 18    | —       | —       | —       | —       | ...     | ...     | ...      | ...       | ...        | ...         | ...       | ...       | ...       | ...       | ...       | ...       | ...       | ...       | ...  | ...    | 8.9            | 71                     | Clear                                      | 76.8 | 50  |
| 19    | —       | —       | —       | —       | ...     | ...     | ...      | ...       | ...        | ...         | ...       | ...       | ...       | ...       | ...       | ...       | ...       | ...       | ...  | ...    | 2.6            | 21                     | ...  | ...  | ... |
| 20    | —       | —       | —       | —       | ...     | ...     | ...      | ...       | ...        | ...         | ...       | ...       | ...       | ...       | ...       | ...       | ...       | ...       | ...  | ...    | ...            | ...                    | ...  | ...  | ... |
| 21    | —       | —       | —       | —       | ...     | ...     | ...      | ...       | ...        | ...         | ...       | ...       | ...       | ...       | ...       | ...       | ...       | ...       | ...  | ...    | 7.8            | 64                     | ...  | ...  | ... |
| 22    | —       | —       | —       | —       | ...     | ...     | ...      | ...       | ...        | ...         | ...       | ...       | ...       | ...       | ...       | ...       | ...       | ...       | ...  | ...    | 8.2            | 67                     | Clear                                      | 93.1 | 58  |
| 23    | —       | —       | —       | —       | ...     | ...     | ...      | ...       | ...        | ...         | ...       | ...       | ...       | ...       | ...       | ...       | ...       | ...       | ...  | ...    | 1.4            | 12                     | Clear                                      | 86.6 | 54  |
| 24    | —       | —       | —       | —       | ...     | ...     | ...      | ...       | ...        | ...         | ...       | ...       | ...       | ...       | ...       | ...       | ...       | ...       | ...  | ...    | 10.2           | 84                     | Clear                                      | 73.2 | 44  |
| 25    | —       | —       | —       | —       | ...     | ...     | ...      | ...       | ...        | ...         | ...       | ...       | ...       | ...       | ...       | ...       | ...       | ...       | ...  | ...    | 0.1            | 1                      | ...  | ...  | ... |
| 26    | —       | —       | —       | —       | ...     | ...     | ...      | ...       | ...        | ...         | ...       | ...       | ...       | ...       | ...       | ...       | ...       | ...       | ...  | ...    | 0.1            | 1                      | ...  | ...  | ... |
| 27    | —       | —       | —       | —       | ...     | ...     | ...      | ...       | ...        | ...         | ...       | ...       | ...       | ...       | ...       | ...       | ...       | ...       | ...  | ...    | 6.7            | 56                     | ...  | ...  | ... |
| 28    | —       | —       | —       | —       | ...     | ...     | ...      | ...       | ...        | ...         | ...       | ...       | ...       | ...       | ...       | ...       | ...       | ...       | ...  | ...    | 6.0            | 51                     | ...  | ...  | ... |
| 29    | —       | —       | —       | —       | ...     | ...     | ...      | ...       | ...        | ...         | ...       | ...       | ...       | ...       | ...       | ...       | ...       | ...       | ...  | ...    | 6.4            | 55                     | Clear                                      | 76.0 | 45  |
| 30    | —       | —       | —       | —       | ...     | ...     | ...      | ...       | ...        | ...         | ...       | ...       | ...       | ...       | ...       | ...       | ...       | ...       | ...  | ...    | 2.0            | 17                     | ...  | ...  | ... |
| Sum.  | —       | —       | —       | —       | 2.3     | 7.1     | 8.7      | 11.8      | 12.8       | 12.3        | 12.2      | 12.8      | 12.9      | 12.3      | 8.7       | 3.4       | ...       | ...       | ...  | ...    | 117.3          | —                      | —  | —    | —   |
| Mean. | —       | —       | —       | —       | 0.08    | 0.24    | 0.29     | 0.39      | 0.43       | 0.41        | 0.41      | 0.43      | 0.43      | 0.41      | 0.29      | 0.11      | ...       | ...       | ...  | ...    | 3.91           | 31                     | —  | —    | —   |

449. Richmond (Kew Observatory) : h<sub>s</sub> =13.3 metres.

October, 1924.

| Day.  | hr.     |         |         |         |         |         |          |           |            |             |           |           |           |           |           |           |           |           |      |        | Total for Day. | Per cent. of Possible. | Radiation at Noon. Angström Pyrheliometer. |      |     |
|-------|---------|---------|---------|---------|---------|---------|----------|-----------|------------|-------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|------|--------|----------------|------------------------|--|------|-----|
|       | 3 to 4. | 4 to 5. | 5 to 6. | 6 to 7. | 7 to 8. | 8 to 9. | 9 to 10. | 10 to 11. | 11 to Noon | Noon to 13. | 13 to 14. | 14 to 15. | 15 to 16. | 16 to 17. | 17 to 18. | 18 to 19. | 19 to 20. | 20 to 21. | Sky. | Total. |                |                        | Vertical.                                  |      |     |
| 1     | —       | —       | —       | —       | —       | —       | —        | —         | —          | —           | —         | —         | —         | —         | —         | —         | —         | —         | —    | —      | ...            | ...                    | ...  | ...  | ... |
| 2     | —       | —       | —       | —       | —       | —       | —        | —         | —          | —           | —         | —         | —         | —         | —         | —         | —         | —         | —    | —      | 2.7            | 23                     | Haze                                       | 59.5 | 34  |
| 3     | —       | —       | —       | —       | —       | —       | —        | —         | —          | —           | —         | —         | —         | —         | —         | —         | —         | —         | —    | —      | 1.4            | 12                     | Mist                                       | 16.4 | 9   |
| 4     | —       | —       | —       | —       | —       | —       | —        | —         | —          | —           | —         | —         | —         | —         | —         | —         | —         | —         | —    | —      | 0.5            | 4                      | ...  | ...  | ... |
| 5     | —       | —       | —       | —       | —       | —       | —        | —         | —          | —           | —         | —         | —         | —         | —         | —         | —         | —         | —    | —      | 0.4            | 4                      | ...  | ...  | ... |
| 6     | —       | —       | —       | —       | ...     | ...     | ...      | ...       | ...        | ...         | ...       | ...       | ...       | ...       | ...       | ...       | ...       | ...       | ...  | ...    | 4.3            | 38                     | ...  | ...  | ... |
| 7     | —       | —       | —       | —       | ...     | ...     | ...      | ...       | ...        | ...         | ...       | ...       | ...       | ...       | ...       | ...       | ...       | ...       | ...  | ...    | 2.1            | 19                     | ...  | ...  | ... |
| 8     | —       | —       | —       | —       | ...     | ...     | ...      | ...       | ...        | ...         | ...       | ...       | ...       | ...       | ...       | ...       | ...       | ...       | ...  | ...    | 2.3            | 21                     | ...  | ...  | ... |
| 9     | —       | —       | —       | —       | ...     | ...     | ...      | ...       | ...        | ...         | ...       | ...       | ...       | ...       | ...       | ...       | ...       | ...       | ...  | ...    | 4.8            | 43                     | Clear                                      | 63.7 | 34  |
| 10    | —       | —       | —       | —       | ...     | ...     | ...      | ...       | ...        | ...         | ...       | ...       | ...       | ...       | ...       | ...       | ...       | ...       | ...  | ...    | 4.6            | 42                     | ...  | ...  | ... |
| 11    | —       | —       | —       | —       | ...     | ...     | ...      | ...       | ...        | ...         | ...       | ...       | ...       | ...       | ...       | ...       | ...       | ...       | ...  | ...    | ...            | ...                    | ...  | ...  | ... |
| 12    | —       | —       | —       | —       | ...     | ...     | ...      | ...       | ...        | ...         | ...       | ...       | ...       | ...       | ...       | ...       | ...       | ...       | ...  | ...    | 3.8            | 35                     | ...  | ...  | ... |
| 13    | —       | —       | —       | —       | ...     | ...     | ...      | ...       | ...        | ...         | ...       | ...       | ...       | ...       | ...       | ...       | ...       | ...       | ...  | ...    | 5.2            | 48                     | Haze                                       | 48.8 | 25  |
| 14    | —       | —       | —       | —       | ...     | ...     | ...      | ...       | ...        | ...         | ...       | ...       | ...       | ...       | ...       | ...       | ...       | ...       | ...  | ...    | 3.4            | 32                     | ...  | ...  | ... |
| 15    | —       | —       | —       | —       | ...     | ...     | ...      | ...       | ...        | ...         | ...       | ...       | ...       | ...       | ...       | ...       | ...       | ...       | ...  | ...    | ...            | ...                    | ...  | ...  | ... |
| 16    | —       | —       | —       | —       | ...     | ...     | ...      | ...       | ...        | ...         | ...       | ...       | ...       | ...       | ...       | ...       | ...       | ...       | ...  | ...    | ...            | ...                    | ...  | ...  | ... |
| 17    | —       | —       | —       | —       | ...     | ...     | ...      | ...       | ...        | ...         | ...       | ...       | ...       | ...       | ...       | ...       | ...       | ...       | ...  | ...    | 0.9            | 8                      | ...  | ...  | ... |
| 18    | —       | —       | —       | —       | ...     | ...     | ...      | ...       | ...        | ...         | ...       | ...       | ...       | ...       | ...       | ...       | ...       | ...       | ...  | ...    | 5.1            | 49                     | Haze                                       | 32.5 | 16  |
| 19    | —       | —       | —       | —       | ...     | ...     | ...      | ...       | ...        | ...         | ...       | ...       | ...       | ...       | ...       | ...       | ...       | ...       | ...  | ...    | ...            | ...                    | ...  | ...  | ... |
| 20    | —       | —       | —       | —       | ...     | ...     | ...      | ...       | ...        | ...         | ...       | ...       | ...       | ...       | ...       | ...       | ...       | ...       | ...  | ...    | ...            | ...                    | ...  | ...  | ... |
| 21    | —       | —       | —       | —       | ...     | ...     | ...      | ...       | ...        | ...         | ...       | ...       | ...       | ...       | ...       | ...       | ...       | ...       | ...  | ...    | ...            | ...                    | ...  | ...  | ... |
| 22    | —       | —       | —       | —       | ...     | ...     | ...      | ...       | ...        | ...         | ...       | ...       | ...       | ...       | ...       | ...       | ...       | ...       | ...  | ...    | 0.8            | 8                      | ...  | ...  | ... |
| 23    | —       | —       | —       | —       | ...     | ...     | ...      | ...       | ...        | ...         | ...       | ...       | ...       | ...       | ...       | ...       | ...       | ...       | ...  | ...    | 4.7            | 46                     | Haze                                       | 39.9 | 18  |
| 24    | —       | —       | —       | —       | ...     | ...     | ...      | ...       | ...        | ...         | ...       | ...       | ...       | ...       | ...       | ...       | ...       | ...       | ...  | ...    | 5.4            | 53                     | Haze                                       | 40.2 | 18  |
| 25    | —       | —       | —       | —       | ...     | ...     | ...      | ...       | ...        | ...         | ...       | ...       | ...       | ...       | ...       | ...       | ...       | ...       | ...  | ...    | ...            | ...                    | ...  | ...  | ... |
| 26    | —       | —       | —       | —       | ...     | ...     | ...      | ...       | ...        | ...         | ...       | ...       | ...       | ...       | ...       | ...       | ...       | ...       | ...  | ...    | ...            | ...                    | ...  | ...  | ... |
| 27    | —       | —       | —       | —       | ...     | ...     | ...      | ...       | ...        | ...         | ...       | ...       | ...       | ...       | ...       | ...       | ...       | ...       | ...  | ...    | 2.2            | 22                     | Clear                                      | 59.1 | 26  |
| 28    | —       | —       | —       | —       | ...     | ...     | ...      | ...       | ...        | ...         | ...       | ...       | ...       | ...       | ...       | ...       | ...       | ...       | ...  | ...    | 3.1            | 31                     | Clear                                      | 61.6 | 26  |
| 29    | —       | —       | —       | —       | ...     | ...     | ...      | ...       | ...        | ...         | ...       | ...       | ...       | ...       | ...       | ...       | ...       | ...       | ...  | ...    | 0.5            | 5                      | ...  | ...  | ... |
| 30    | —       | —       | —       | —       | ...     | ...     | ...      | ...       | ...        | ...         | ...       | ...       | ...       | ...       | ...       | ...       | ...       | ...       | ...  | ...    | 2.2            | 22                     | ...  | ...  | ... |
| 31    | —       | —       | —       | —       | ...     | ...     | ...      | ...       | ...        | ...         | ...       | ...       | ...       | ...       | ...       | ...       | ...       | ...       | ...  | ...    | 0.3            | 3                      | ...  | ...  | ... |
| Sum.  | —       | —       | —       | —       | 0.2     | 1.3     | 3.6      | 5.7       | 7.7        | 7.6         | 9.3       | 8.7       | 8.2       | 7.2       | 1.2       | ...       | ...       | ...       | ...  | 60.7   | —              | —                      | —  | —    |     |
| Mean. | —       | —       | —       | —       | 0.01    | 0.04    | 0.12     | 0.18      | 0.25       | 0.25        | 0.30      | 0.28      | 0.26      | 0.23      | 0.04      | ...       | ...       | ...       | ...  | 1.96   | 18             | —                      | —  | —    |     |

DURATION OF BRIGHT SUNSHINE.

For periods of sixty minutes, between the exact hours of Local Apparent Time.

450. Richmond (Kew Observatory) : h<sub>s</sub> (Height of recorder above ground) = 13.3 metres.

November, 1924.

| Day.  | 3 to 4. | 4 to 5. | 5 to 6. | 6 to 7. | 7 to 8. | 8 to 9. | 9 to 10. | 10 to 11. | 11 to Noon | Noon to 13. | 13 to 14. | 14 to 15. | 15 to 16. | 16 to 17. | 17 to 18. | 18 to 19. | 19 to 20. | 20 to 21. | Total for Day. | Per cent. of Possible. | Radiation at Noon, Angström Pyrheliometer. |      |                           |
|-------|---------|---------|---------|---------|---------|---------|----------|-----------|------------|-------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|----------------|------------------------|--|------|---------------------------|
|       | hr.     | hr.     | hr.     | hr.     | hr.     | hr.     | hr.      | hr.       | hr.        | hr.         | hr.       | hr.       | hr.       | hr.       | hr.       | hr.       | hr.       | hr.       |                |                        | %  | Sky. | Total. mw/cm <sup>2</sup> |
| 1     |         |         |         |         |         |         |          |           |            |             |           |           |           |           |           |           |           |           | 0.8            | 8                      |  |      |                           |
| 2     |         |         |         |         |         | 1       | 4        | 2         |            |             |           |           | 1         |           |           |           |           |           | 5.4            | 57                     |  |      |                           |
| 3     |         |         |         |         |         | 1       | 1.0      | 9         | 7          |             |           | 8         | 7         | 5         |           |           |           |           | 6.9            | 73                     | Clear                                      | 58.8 | 23                        |
| 4     |         |         |         |         |         | 1       | 1.0      | 1.0       | 1.0        | 1.0         | 1.0       | 1.0       | 8         |           |           |           |           |           | 6.9            | 73                     | Haze                                       | 39.3 | 15                        |
| 5     |         |         |         |         |         |         |          | 8         | 1.0        | 1.0         | 1.0       | 5         |           |           |           |           |           |           | 2.3            | 24                     |  |      |                           |
| 6     |         |         |         |         |         |         | 3        | 1.0       | 1.0        | 1.0         | 1.0       | 4         | 3         |           |           |           |           |           | 5.0            | 54                     | Haze                                       | 19.1 | 7                         |
| 7     |         |         |         |         |         |         | 1        |           |            |             |           |           |           |           |           |           |           |           | 0.1            | 1                      |  |      |                           |
| 8     |         |         |         |         |         |         |          |           |            |             |           |           |           |           |           |           |           |           | 3.3            | 36                     |  |      |                           |
| 9     |         |         |         |         |         |         | 6        | 1.0       | 1.0        | 1.0         | 1.0       | 7         | 3         |           |           |           |           |           | 4.6            | 50                     |  |      |                           |
| 10    |         |         |         |         |         |         | 1        | 9         | 5          | 5           | 1.0       |           |           |           |           |           |           |           | 3.0            | 33                     |  |      |                           |
| 11    |         |         |         |         |         | 3       | 7        | 6         | 2          |             |           |           |           |           |           |           |           |           | 1.8            | 20                     |  |      |                           |
| 12    |         |         |         |         |         |         |          |           |            |             |           |           |           |           |           |           |           |           |                |                        |  |      |                           |
| 13    |         |         |         |         |         |         |          |           |            |             |           |           |           |           |           |           |           |           |                |                        |  |      |                           |
| 14    |         |         |         |         |         |         |          |           |            |             |           |           |           |           |           |           |           |           |                |                        |  |      |                           |
| 15    |         |         |         |         |         |         |          |           |            |             |           |           |           |           |           |           |           |           |                |                        |  |      |                           |
| 16    |         |         |         |         |         |         |          | 8         | 1.0        | 6           | 1         |           |           |           |           |           |           |           | 2.5            | 28                     |  |      |                           |
| 17    |         |         |         |         |         |         |          |           |            |             |           |           |           |           |           |           |           |           |                |                        |  |      |                           |
| 18    |         |         |         |         |         |         |          |           |            |             |           |           |           |           |           |           |           |           |                |                        |  |      |                           |
| 19    |         |         |         |         |         |         |          |           |            |             |           |           |           |           |           |           |           |           |                |                        |  |      |                           |
| 20    |         |         |         |         |         |         |          |           |            | 1           | 1         |           |           |           |           |           |           |           | 0.2            | 2                      |  |      |                           |
| 21    |         |         |         |         |         |         |          |           |            |             |           |           |           |           |           |           |           |           |                |                        |  |      |                           |
| 22    |         |         |         |         |         |         |          |           |            |             |           |           |           |           |           |           |           |           |                |                        |  |      |                           |
| 23    |         |         |         |         |         |         |          |           |            |             |           | 1         |           |           |           |           |           |           | 0.1            | 1                      |  |      |                           |
| 24    |         |         |         |         |         |         |          |           |            |             |           | 1         | 6         |           |           |           |           |           | 0.7            | 8                      |  |      |                           |
| 25    |         |         |         |         |         |         |          |           |            |             |           |           |           |           |           |           |           |           |                |                        |  |      |                           |
| 26    |         |         |         |         |         |         |          |           |            |             |           |           |           |           |           |           |           |           |                |                        |  |      |                           |
| 27    |         |         |         |         |         |         |          |           |            |             |           |           |           |           |           |           |           |           | 0.6            | 7                      |  |      |                           |
| 28    |         |         |         |         |         |         | 1        | 2         |            | 2           |           |           | 1         |           |           |           |           |           |                |                        |  |      |                           |
| 29    |         |         |         |         |         |         | 3        | 6         | 8          | 2           | 2         | 1         |           |           |           |           |           |           | 2.2            | 27                     |  |      |                           |
| 30    |         |         |         |         |         |         | 4        | 1         |            |             | 1         | 5         |           |           |           |           |           |           | 1.1            | 13                     |  |      |                           |
| Sum.  |         |         |         |         |         | 0.6     | 5.0      | 8.3       | 8.3        | 6.7         | 5.8       | 4.1       | 1.8       |           |           |           |           |           | 40.6           |                        |  |      |                           |
| Mean. |         |         |         |         |         | 0.02    | 0.17     | 0.28      | 0.28       | 0.22        | 0.19      | 0.14      | 0.06      |           |           |           |           |           | 1.35           | 15.                    |  |      |                           |

December, 1924.

451. Richmond (Kew Observatory) : h<sub>s</sub> = 13.3 metres.

| Day.          | 3 to 4. | 4 to 5. | 5 to 6. | 6 to 7. | 7 to 8. | 8 to 9. | 9 to 10. | 10 to 11. | 11 to Noon | Noon to 13. | 13 to 14. | 14 to 15. | 15 to 16. | 16 to 17. | 17 to 18. | 18 to 19. | 19 to 20. | 20 to 21. | Total for Day. | Per cent. of Possible. | Radiation at Noon, Angström Pyrheliometer. |      |                           |
|---------------|---------|---------|---------|---------|---------|---------|----------|-----------|------------|-------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|----------------|------------------------|--|------|---------------------------|
|               | hr.     | hr.     | hr.     | hr.     | hr.     | hr.     | hr.      | hr.       | hr.        | hr.         | hr.       | hr.       | hr.       | hr.       | hr.       | hr.       | hr.       | hr.       |                |                        | %  | Sky. | Total. mw/cm <sup>2</sup> |
| 1             |         |         |         |         |         |         |          | 8         | 1          | 7           | 9         | 9         |           |           |           |           |           |           | 3.4            | 41                     | Clear                                      | 55.9 | 16                        |
| 2             |         |         |         |         |         |         |          |           |            |             |           |           |           |           |           |           |           |           |                |                        |  |      |                           |
| 3             |         |         |         |         |         |         |          |           |            |             |           |           |           |           |           |           |           |           |                |                        |  |      |                           |
| 4             |         |         |         |         |         |         |          |           |            |             |           |           |           |           |           |           |           |           |                |                        |  |      |                           |
| 5             |         |         |         |         |         |         | 8        | 8         | 9          | 7           | 2         | 7         |           |           |           |           |           |           | 4.1            | 51                     | Clear                                      | 56.7 | 16                        |
| 6             |         |         |         |         |         | 1       | 7        | 1.0       | 1.0        | 1.0         | 1.0       | 7         |           |           |           |           |           |           | 5.5            | 69                     | Haze                                       | 53.8 | 15                        |
| 7             |         |         |         |         |         |         | 3        | 2         | 7          |             | 2         | 1         |           |           |           |           |           |           | 1.5            | 19                     |  |      |                           |
| 8             |         |         |         |         |         |         |          |           |            |             |           |           |           |           |           |           |           |           |                |                        |  |      |                           |
| 9             |         |         |         |         |         |         |          |           |            | 5           | 9         | 8         |           |           |           |           |           |           | 2.2            | 28                     | Fog  | 26.6 | 7                         |
| 10            |         |         |         |         |         |         |          |           |            |             |           |           |           |           |           |           |           |           |                |                        |  |      |                           |
| 11            |         |         |         |         |         |         |          |           |            |             |           |           |           |           |           |           |           |           |                |                        |  |      |                           |
| 12            |         |         |         |         |         |         |          |           |            |             |           |           |           |           |           |           |           |           |                |                        |  |      |                           |
| 13            |         |         |         |         |         |         |          |           |            |             |           |           |           |           |           |           |           |           |                |                        |  |      |                           |
| 14            |         |         |         |         |         |         | 4        | 1.0       | 1.0        | 1.0         | 1.0       | 1.0       | 2         |           |           |           |           |           | 5.6            | 72                     |  |      |                           |
| 15            |         |         |         |         |         |         |          |           |            |             |           |           |           |           |           |           |           |           |                |                        |  |      |                           |
| 16            |         |         |         |         |         |         |          |           |            |             |           | 1         |           |           |           |           |           |           | 0.1            | 1                      |  |      |                           |
| 17            |         |         |         |         |         |         |          |           |            |             |           |           |           |           |           |           |           |           |                |                        |  |      |                           |
| 18            |         |         |         |         |         |         | 4        | 3         | 6          | 2           |           |           |           |           |           |           |           |           | 1.5            | 19                     |  |      |                           |
| 19            |         |         |         |         |         |         |          |           |            |             |           |           |           |           |           |           |           |           |                |                        |  |      |                           |
| 20            |         |         |         |         |         |         |          |           |            |             |           |           |           |           |           |           |           |           |                |                        |  |      |                           |
| 21            |         |         |         |         |         |         |          |           |            |             |           |           |           |           |           |           |           |           |                |                        |  |      |                           |
| 22            |         |         |         |         |         |         |          |           |            | 1           | 9         | 9         |           |           |           |           |           |           | 1.9            | 24                     |  |      |                           |
| 23            |         |         |         |         |         |         |          | 2         |            |             |           |           |           |           |           |           |           |           | 0.2            | 3                      |  |      |                           |
| 24            |         |         |         |         |         |         |          | 6         | 5          |             |           |           |           |           |           |           |           |           | 1.1            | 14                     |  |      |                           |
| 25            |         |         |         |         |         |         |          | 9         | 7          | 3           | 4         | 3         |           |           |           |           |           |           | 2.6            | 33                     |  |      |                           |
| 26            |         |         |         |         |         |         |          |           |            | 6           | 8         |           | 6         |           |           |           |           |           | 2.0            | 26                     |  |      |                           |
| 27            |         |         |         |         |         |         |          |           |            |             |           |           |           |           |           |           |           |           |                |                        |  |      |                           |
| 28            |         |         |         |         |         |         |          | 7         | 1.0        | 1.0         | 1.0       | 6         | 3         |           |           |           |           |           | 4.6            | 59                     |  |      |                           |
| 29            |         |         |         |         |         |         |          | 7         | 1.0        | 1.0         | 1.0       | 1.0       | 7         |           |           |           |           |           | 5.4            | 69                     |  |      |                           |
| 30            |         |         |         |         |         |         |          |           |            |             |           |           |           |           |           |           |           |           |                |                        |  |      |                           |
| 31            |         |         |         |         |         |         |          | 4         | 5          | 9           | 7         | 1.0       | 5         |           |           |           |           |           | 4.0            | 51                     | Clear                                      | 65.5 | 17                        |
| Sum.          |         |         |         |         |         | 0.1     | 4.8      | 7.9       | 8.6        | 8.6         | 7.8       | 7.2       | 0.7       |           |           |           |           |           | 45.7           |                        |  |      |                           |
| Mean.         |         |         |         |         |         | 0.00    | 0.15     | 0.25      | 0.28       | 0.28        | 0.25      | 0.23      | 0.02      |           |           |           |           |           | 1.47           | 19                     |  |      |                           |
| Annual Total. |         | 4.3     | 32.5    | 56.1    | 85.4    | 103.8   | 130.2    | 144.7     | 142.9      | 147.7       | 141.2     | 129.9     | 106.4     | 72.8      | 52.0      | 33.3      | 7.9       |           | 139.1          |                        |  |      |                           |
| Annual Mean.  |         | 0.01    | 0.09    | 0.15    | 0.23    | 0.28    | 0.36     | 0.40      | 0.39       | 0.40        | 0.39      | 0.35      | 0.29      | 0.20      | 0.14      | 0.09      | 0.02      |           | 3.80           | 31                     |  |      |                           |

Direction expressed in degrees from North (E = 90°, S = 180°, W = 270°, N = 360°) : Speed in metres per second.

452. Richmond (Kew Observatory) :

H<sub>a</sub> (height of cups of anemograph above M.S.L.) = Height of ground above.

| Day.     | 1.  |      | 2.  |      | 3.  |      | 4.  |      | 5.  |      | 6.  |      | 7.  |      | 8.  |      | 9.  |      | 10. |      | 11. |      | Noon. |      |
|----------|-----|------|-----|------|-----|------|-----|------|-----|------|-----|------|-----|------|-----|------|-----|------|-----|------|-----|------|-------|------|
|          | °   | m/s. | °   | m/s. | °   | m/s. | °   | m/s. | °   | m/s. | °   | m/s. | °   | m/s. | °   | m/s. | °   | m/s. | °   | m/s. | °   | m/s. | °     | m/s. |
| 1        | —   | 1·3  | 240 | 2·3  | 260 | 2·6  | 265 | 2·3  | 300 | 3·3  | 310 | 3·9  | 310 | 3·6  | 320 | 3·0  | 315 | 2·6  | 305 | 3·9  | 310 | 3·9  | 305   | 3·9  |
| 2        | 320 | 3·0  | 305 | 2·3  | 300 | 2·0  | 290 | 2·0  | 280 | 1·6  | —   | 1·0  | —   | 1·0  | 270 | 2·0  | —   | 1·3  | 265 | 2·3  | 260 | 2·0  | —     | 1·3  |
| 3        | 250 | 2·6  | 265 | 1·6  | 240 | 2·3  | 240 | 2·0  | 220 | 1·6  | 245 | 1·6  | 245 | 2·0  | 260 | 2·0  | —   | 1·3  | 250 | 3·3  | 290 | 5·2  | 295   | 4·6  |
| 4        | —   | 0·3  | —   | 0·3  | —   | 0·0  | —   | 0·3  | —   | 0·0  | —   | 0·3  | —   | 0·3  | —   | 0·3  | —   | 0·3  | —   | 0·3  | —   | 0·3  | —     | 0·3  |
| 5        | —   | 1·0  | —   | 0·7  | —   | 1·3  | —   | 0·7  | —   | 1·3  | 115 | 1·6  | 95  | 2·0  | —   | 1·0  | —   | 1·3  | —   | 0·3  | 205 | 1·6  | 190   | 2·0  |
| 6        | 175 | 2·6  | 185 | 2·0  | 180 | 2·0  | 170 | 1·6  | 160 | 1·6  | 160 | 1·6  | —   | 1·3  | 90  | 1·6  | 105 | 1·6  | 170 | 2·0  | 170 | 3·3  | 165   | 3·0  |
| 7        | 110 | 2·0  | 90  | 2·6  | —   | 1·3  | 75  | 2·0  | 85  | 2·0  | 80  | 2·3  | 85  | 2·3  | 75  | 2·6  | 90  | 3·3  | 85  | 3·3  | 75  | 2·6  | 95    | 3·3  |
| 8        | 80  | 3·3  | 85  | 3·3  | 90  | 5·2  | 80  | 4·9  | 80  | 4·3  | 90  | 3·9  | 90  | 3·3  | 90  | 3·3  | 95  | 5·2  | 95  | 6·2  | 95  | 4·9  | 95    | 5·2  |
| 9        | 70  | 12·5 | 65  | 11·5 | 60  | 10·8 | 55  | 10·5 | 50  | 9·5  | 45  | 7·2  | 40  | 6·9  | 40  | 7·5  | 40  | 7·5  | 45  | 7·9  | 50  | 7·5  | 45    | 6·2  |
| 10       | —   | 0·7  | —   | 0·7  | 145 | 3·0  | 140 | 2·3  | 95  | 2·6  | 130 | 2·6  | 155 | 3·0  | —   | 1·3  | 210 | 2·3  | 220 | 3·0  | 220 | 3·0  | 220   | 2·0  |
| 11       | 240 | 3·9  | 225 | 2·3  | 215 | 1·6  | 220 | 1·6  | 215 | 3·6  | 220 | 4·6  | 220 | 4·9  | 215 | 5·9  | 210 | 5·6  | 220 | 7·9  | 230 | 5·2  | 240   | 4·9  |
| 12       | 195 | 11·1 | 195 | 9·5  | 200 | 10·8 | 200 | 10·5 | 200 | 11·8 | 195 | 11·1 | 200 | 10·8 | 200 | 9·8  | 200 | 11·1 | 205 | 10·8 | 210 | 11·5 | 205   | 10·8 |
| 13       | 165 | 7·2  | 165 | 8·9  | 170 | 8·5  | 170 | 6·9  | 170 | 6·9  | 175 | 8·5  | 170 | 8·9  | 175 | 8·5  | 180 | 6·9  | 175 | 8·2  | 170 | 7·9  | 170   | 7·9  |
| 14       | 185 | 4·3  | 175 | 4·3  | 180 | 3·9  | 175 | 4·9  | 185 | 4·6  | 180 | 4·3  | 180 | 4·9  | 180 | 4·9  | 190 | 5·2  | 185 | 6·2  | 185 | 5·6  | 180   | 4·6  |
| 15       | 165 | 4·3  | 160 | 3·3  | 160 | 3·0  | 160 | 3·3  | 150 | 4·3  | 135 | 3·3  | 130 | 3·0  | 130 | 2·6  | 135 | 4·3  | 135 | 5·6  | 145 | 5·2  | 140   | 4·6  |
| 16       | 70  | 2·6  | 100 | 2·3  | 100 | 3·9  | 100 | 3·0  | 70  | 4·9  | 70  | 4·9  | 60  | 2·0  | 60  | 2·3  | 70  | 2·3  | 70  | 3·9  | 75  | 6·2  | 80    | 5·6  |
| 17       | 75  | 6·2  | 80  | 6·6  | 80  | 5·6  | 75  | 6·6  | 75  | 6·9  | 70  | 6·9  | 70  | 7·2  | 70  | 6·2  | 70  | 5·9  | 70  | 6·9  | 70  | 5·6  | 70    | 5·9  |
| 18       | 85  | 1·6  | 75  | 1·6  | 130 | 2·3  | 130 | 2·6  | 115 | 3·0  | 160 | 4·6  | 165 | 4·9  | 170 | 3·3  | 185 | 3·6  | 185 | 3·6  | 185 | 4·3  | 180   | 3·3  |
| 19       | 205 | 7·2  | 200 | 4·9  | 200 | 4·9  | 200 | 4·3  | 195 | 4·3  | 200 | 6·6  | 215 | 4·9  | 200 | 6·2  | 220 | 7·5  | 235 | 7·5  | 230 | 6·6  | 230   | 7·5  |
| 20       | 260 | 5·6  | 270 | 4·3  | 280 | 6·2  | 275 | 4·6  | 270 | 3·6  | 265 | 3·6  | 270 | 4·3  | 270 | 3·3  | 270 | 3·6  | 265 | 3·6  | 275 | 5·6  | 295   | 5·6  |
| 21       | —   | 1·0  | —   | 0·7  | —   | 1·3  | —   | 0·7  | —   | 0·0  | —   | 1·0  | —   | 1·0  | 180 | 1·6  | 185 | 2·6  | 185 | 2·0  | 190 | 3·3  | 190   | 3·3  |
| 22       | 195 | 2·3  | 190 | 2·3  | 180 | 2·3  | 180 | 2·0  | 185 | 3·3  | 190 | 3·6  | 180 | 3·6  | 165 | 2·6  | 170 | 3·0  | 160 | 3·9  | 160 | 2·6  | 155   | 3·9  |
| 23       | —   | 0·3  | —   | 0·7  | 340 | 1·6  | —   | 1·0  | —   | 0·7  | —   | 1·0  | —   | 1·0  | 35  | 2·3  | 35  | 2·0  | 30  | 2·0  | 60  | 2·0  | 30    | 1·6  |
| 24       | 220 | 2·0  | 225 | 2·0  | 215 | 2·0  | —   | 1·3  | —   | 1·0  | —   | 1·3  | 210 | 1·6  | 195 | 2·0  | 220 | 2·3  | 210 | 2·0  | 230 | 2·6  | 245   | 3·6  |
| 25       | 355 | 1·6  | 330 | 1·6  | 330 | 2·3  | 340 | 2·0  | 350 | 2·0  | 345 | 2·0  | 350 | 3·3  | 345 | 1·6  | 340 | 2·0  | 345 | 1·6  | 335 | 2·3  | 335   | 3·0  |
| 26       | —   | 1·3  | —   | 1·3  | —   | 1·3  | 250 | 2·0  | 235 | 1·6  | 240 | 1·6  | 225 | 2·0  | 230 | 3·3  | 245 | 3·0  | 265 | 3·0  | 260 | 3·3  | 255   | 3·0  |
| 27       | 245 | 3·9  | 240 | 3·9  | 230 | 3·6  | 250 | 3·9  | 255 | 3·9  | 280 | 4·6  | 285 | 3·3  | 315 | 3·3  | 325 | 3·0  | 340 | 4·6  | 335 | 6·9  | 335   | 5·9  |
| 28       | 280 | 1·6  | —   | 1·3  | 280 | 2·3  | 295 | 3·0  | 290 | 1·6  | —   | 1·0  | 295 | 2·3  | 320 | 2·6  | 340 | 3·3  | 345 | 5·6  | 350 | 5·9  | 355   | 5·2  |
| 29       | —   | 1·3  | 215 | 1·6  | 235 | 1·6  | —   | 1·3  | —   | 1·0  | —   | 1·3  | 225 | 1·6  | —   | 1·3  | 240 | 2·0  | 265 | 2·0  | 255 | 2·3  | 270   | 2·0  |
| 30       | —   | 1·0  | —   | 0·7  | 245 | 1·6  | —   | 1·0  | —   | 0·7  | —   | 0·3  | —   | 1·3  | —   | 1·3  | —   | 0·7  | —   | 1·0  | —   | 1·0  | —     | 1·0  |
| 31       | —   | 0·7  | —   | 0·7  | —   | 1·0  | —   | 0·7  | —   | 1·0  | —   | 0·7  | —   | 1·3  | —   | 1·0  | —   | 1·0  | 225 | 2·0  | 230 | 2·6  | 240   | 2·3  |
| Mean ... | —   | 3·2  | —   | 3·0  | —   | 3·3  | —   | 3·1  | —   | 3·2  | —   | 3·3  | —   | 3·3  | —   | 3·2  | —   | 3·4  | —   | 4·1  | —   | 4·8  | —     | 4·1  |

453. Richmond (Kew Observatory) : H<sub>a</sub> = 5 metres + 20 metres.

| Day. | 1.  |      | 2.  |      | 3.  |      | 4.  |      | 5.  |      | 6.  |      | 7.  |      | 8.  |      | 9.  |      | 10. |      | 11. |      | Noon. |      |
|------|-----|------|-----|------|-----|------|-----|------|-----|------|-----|------|-----|------|-----|------|-----|------|-----|------|-----|------|-------|------|
|      | °   | m/s. | °   | m/s. | °   | m/s. | °   | m/s. | °   | m/s. | °   | m/s. | °   | m/s. | °   | m/s. | °   | m/s. | °   | m/s. | °   | m/s. | °     | m/s. |
| 1    | —   | 1·3  | —   | 0·7  | 300 | 1·6  | —   | 1·3  | 5   | 3·0  | 5   | 2·3  | —   | 1·3  | —   | 1·3  | 320 | 2·0  | 325 | 2·6  | 335 | 3·6  | 360   | 4·3  |
| 2    | 250 | 2·3  | —   | 1·3  | 250 | 1·6  | 265 | 2·3  | 250 | 2·6  | 260 | 2·6  | 270 | 3·0  | 260 | 3·0  | 270 | 3·0  | 270 | 3·6  | 340 | 4·6  | 350   | 5·2  |
| 3    | 270 | 2·3  | 265 | 2·0  | 250 | 2·6  | 260 | 2·3  | 260 | 2·0  | 275 | 3·0  | 275 | 3·3  | 275 | 2·3  | 270 | 2·0  | 270 | 2·6  | 280 | 4·9  | 290   | 4·3  |
| 4    | 280 | 3·3  | 290 | 2·6  | 285 | 2·6  | 270 | 2·3  | 275 | 3·0  | 245 | 2·0  | 265 | 3·0  | 260 | 2·6  | 250 | 4·3  | 285 | 4·3  | 290 | 4·3  | 290   | 3·9  |
| 5    | 270 | 2·6  | 260 | 2·6  | 265 | 3·0  | 255 | 3·0  | 255 | 4·6  | 270 | 4·3  | 270 | 3·3  | 265 | 3·9  | 260 | 3·9  | 270 | 4·9  | 290 | 5·9  | 295   | 6·2  |
| 6    | 300 | 4·9  | 300 | 4·9  | 300 | 4·3  | 315 | 3·6  | 320 | 5·2  | 320 | 5·2  | 320 | 6·6  | 330 | 5·6  | 340 | 5·2  | 330 | 4·6  | 320 | 4·6  | 320   | 4·6  |
| 7    | 330 | 3·3  | 330 | 2·3  | 350 | 3·3  | 315 | 3·0  | 300 | 2·0  | 280 | 2·0  | 305 | 2·0  | 325 | 2·6  | —   | 1·3  | —   | 1·3  | 275 | 2·0  | 285   | 2·0  |
| 8    | —   | 1·0  | —   | 1·0  | 220 | 1·6  | —   | 1·0  | —   | 0·3  | —   | 1·0  | 145 | 1·6  | 190 | 2·0  | 180 | 2·3  | 175 | 3·6  | 185 | 4·6  | 190   | 4·9  |
| 9    | 155 | 6·9  | 145 | 6·6  | 150 | 7·9  | 145 | 7·5  | 125 | 5·9  | 125 | 5·6  | 145 | 5·9  | 160 | 8·2  | 155 | 9·2  | 145 | 9·8  | 160 | 8·5  | 200   | 8·9  |
| 10   | 185 | 1·6  | 150 | 1·6  | 130 | 2·6  | 140 | 1·6  | 145 | 1·6  | 130 | 2·0  | 140 | 2·6  | 140 | 1·6  | —   | 1·0  | 115 | 3·0  | 135 | 2·6  | 140   | 2·3  |
| 11   | 80  | 3·9  | 85  | 3·3  | 90  | 2·6  | 75  | 2·6  | 75  | 3·3  | 65  | 2·6  | 75  | 3·0  | 65  | 2·3  | 55  | 3·3  | 35  | 2·6  | 35  | 2·6  | 25    | 2·3  |
| 12   | 15  | 1·6  | —   | 1·3  | —   | 0·3  | —   | 0·7  | —   | 1·3  | —   | 0·7  | —   | 1·3  | 115 | 1·6  | 90  | 2·6  | 90  | 3·3  | 90  | 4·6  | 85    | 4·6  |
| 13   | 80  | 8·5  | 75  | 7·9  | 75  | 9·2  | 75  | 9·5  | 75  | 10·8 | 70  | 10·2 | 70  | 9·8  | 65  | 11·1 | 70  | 9·8  | 70  | 10·8 | 70  | 10·5 | 65    | 9·5  |
| 14   | 55  | 8·2  | 60  | 8·2  | 60  | 8·9  | 55  | 7·2  | 60  | 7·9  | 50  | 8·5  | 55  | 5·9  | 55  | 7·5  | 50  | 7·2  | 55  | 6·9  | 55  | 6·2  | 60    | 7·5  |
| 15   | —   | 0·6  | —   | 0·7  | —   | 0·7  | —   | 1·0  | —   | 1·2  | —   | 1·0  | —   | 1·1  | 195 | 1·7  | 200 | 1·8  | 235 | 2·0  | 220 | 2·6  | 230   | 3·3  |
| 16   | —   | 0·4  | —   | 0·7  | 75  | 1·7  | —   | 1·4  | —   | 1·4  | —   | 1·4  | —   | 1·0  | 80  | 3·3  | 95  | 4·3  | 110 | 5·2  | 90  | 4·3  | 90    | 4·6  |
| 17   | —   | 1·2  | 25  | 1·8  | 40  | 2·4  | 35  | 1·8  | —   | 0·6  | —   | 0·4  | —   | 0·7  | —   | 1·1  | —   | 1·0  | 20  | 2·0  | 85  | 2·0  | —     | 0·7  |
| 18   | 215 | 1·4  | 220 | 2·1  | 240 | 1·4  | 240 | 2·2  | 235 | 2·5  | 230 | 3·2  | 245 | 1·8  | 230 | 2·8  | 235 | 2·3  | 240 | 3·0  | 245 | 2·6  | 270   | 3·0  |
| 19   | 360 | 6·2  | 355 | 5·2  | 355 | 5·9  | 360 | 6·2  | 355 | 5·9  | 5   | 5·6  | 350 | 5·2  | 355 | 4·3  | 360 | 5·6  | 355 | 5·2  | 10  | 6·6  | 360   | 7·2  |
| 20   | 35  | 3·6  | 40  | 2·6  | 25  | 2·6  | 20  | 3·0  | 25  | 2·6  | 40  | 3·3  | 35  | 3·3  | 55  | 4·3  | 55  | 3·6  | 55  | 4·3  | 45  | 4·3  | 50    | 3·9  |
| 21   | —   | 0·0  | —   | 0·0  | —   | 0·0  | —   | 0·0  | —   | 0·0  | —   | 0·3  | —   | 0·7  | —   | 0·7  | —   | 0·7  | —   | 0·3  | —   | 1·0  | —     | 1·0  |
| 22   | 10  | 3·9  | 15  | 3·9  | 5   | 3·3  | 360 | 3·3  | 360 | 3·6  | 360 | 3·9  | 360 | 3·0  | 355 | 4·6  | 355 | 4·3  | 360 | 5·6  | 360 | 6·2  | 360   | 5·6  |
| 23   | 360 | 4·3  | 360 | 4·6  | 5   | 5·2  | 360 | 4·6  | 360 | 4·3  | 360 | 3·9  | 350 | 2·6  | 355 | 3·9  | 355 | 4·9  | 355 | 4·6  | 355 | 5·6  | 340   | 4·6  |
| 24   | 240 | 2·3  | 255 | 2·0  | 270 | 2·0  | 280 | 2·0  | 245 | 1·6  | 265 | 2·6  | 260 | 3·9  | 260 | 4·3  | 255 | 4·3  | 255 | 5·9  | 260 | 5·6  | 265   | 6·2  |
| 25   | 310 | 5·6  | 320 | 6·2  | 320 | 6·2  | 320 | 5·2  | 330 | 6·2  | 330 | 4·6  | 325 | 3·3  | 340 | 3·3  | 350 | 4·6  | 360 | 5·9  | 10  | 6·6  | 10    | 6·2  |
| 26   | 25  | 5·6  | 25  | 3·9  | 15  | 4·9  | 15  | 4·6  | 360 | 4·3  | 360 | 3·0  | 360 | 2·6  | 36  |      |     |      |     |      |     |      |       |      |

Averages for periods of sixty minutes, centered at the exact hours, Greenwich Mean Time.

M.S.L. +  $h_a$  (height of anemograph above ground) = 5 metres + 20 metres.

January, 1924.

| 13. |      | 14. |      | 15. |      | 16. |      | 17. |      | 18. |      | 19. |      | 20. |      | 21. |      | 22. |      | 23. |      | 24. |      | Mean | Day. |
|-----|------|-----|------|-----|------|-----|------|-----|------|-----|------|-----|------|-----|------|-----|------|-----|------|-----|------|-----|------|------|------|
| °   | m/s. | °   | m/s. | °   | m/s. | °   | m/s. | °   | m/s. | °   | m/s. | °   | m/s. | °   | m/s. | °   | m/s. | °   | m/s. | °   | m/s. | °   | m/s. | m/s. |      |
| 310 | 3.9  | 310 | 3.6  | 315 | 4.6  | 305 | 3.6  | 315 | 3.3  | 310 | 3.6  | 310 | 3.9  | 305 | 3.3  | 310 | 4.6  | 310 | 3.0  | 320 | 2.6  | 315 | 2.3  | 3.3  | 1    |
| 255 | 1.6  | 235 | 2.6  | 220 | 2.3  | 215 | 2.3  | 230 | 2.6  | 220 | 3.3  | 225 | 2.0  | 235 | 2.3  | 240 | 2.0  | 260 | 2.3  | 270 | 3.0  | 255 | 2.3  | 2.1  | 2    |
| 300 | 4.3  | 300 | 4.6  | 295 | 3.6  | 270 | 2.6  | 250 | 1.6  | 245 | 1.6  | —   | 1.3  | —   | 1.0  | —   | 1.0  | —   | 0.3  | —   | 1.0  | —   | 1.0  | 2.3  | 3    |
| —   | 0.7  | —   | 0.0  | 105 | 2.0  | 95  | 2.6  | 120 | 2.0  | 100 | 2.6  | 120 | 1.6  | —   | 1.0  | 145 | 2.0  | 170 | 2.0  | 160 | 1.6  | —   | 1.3  | 0.9  | 4    |
| 180 | 2.0  | 170 | 2.3  | 170 | 2.3  | 180 | 2.0  | 190 | 1.6  | 180 | 1.6  | 170 | 3.0  | 170 | 2.6  | 180 | 2.0  | —   | 1.0  | 185 | 2.0  | 185 | 2.6  | 1.6  | 5    |
| 165 | 3.9  | 160 | 4.9  | 150 | 3.3  | 140 | 3.3  | 155 | 3.0  | 145 | 2.3  | 150 | 1.6  | 125 | 4.6  | 130 | 3.6  | 140 | 3.0  | 125 | 2.3  | 125 | 2.0  | 2.6  | 6    |
| 95  | 3.6  | 100 | 3.0  | 100 | 3.3  | 100 | 2.6  | 75  | 2.0  | 60  | 1.6  | 75  | 3.0  | 85  | 3.9  | 85  | 3.3  | 90  | 3.3  | 85  | 3.3  | 85  | 3.3  | 2.7  | 7    |
| 85  | 6.2  | 80  | 5.2  | 90  | 6.9  | 85  | 7.2  | 85  | 7.5  | 90  | 9.2  | 90  | 11.1 | 85  | 13.1 | 80  | 12.1 | 75  | 11.1 | 75  | 12.5 | 70  | 11.8 | 6.8  | 8    |
| 40  | 6.6  | 35  | 6.2  | 15  | 5.9  | 15  | 5.6  | 20  | 5.6  | 10  | 3.9  | 10  | 4.3  | 20  | 3.9  | 30  | 2.6  | 35  | 3.0  | —   | 1.3  | —   | 1.0  | 6.7  | 9    |
| —   | 0.7  | —   | 1.3  | —   | 0.7  | 100 | 2.0  | —   | 1.3  | —   | 1.0  | —   | 1.3  | —   | 0.7  | —   | 1.3  | 335 | 1.6  | —   | 1.3  | 235 | 2.0  | 1.6  | 10   |
| 230 | 5.9  | 220 | 4.3  | 210 | 3.6  | 195 | 4.3  | 175 | 3.3  | 185 | 3.6  | 180 | 5.9  | 180 | 6.6  | 180 | 8.9  | 185 | 9.8  | 185 | 9.2  | 190 | 9.2  | 5.1  | 11   |
| 200 | 10.2 | 200 | 9.2  | 200 | 9.8  | 200 | 8.2  | 195 | 8.5  | 185 | 6.6  | 175 | 7.2  | 180 | 7.2  | 170 | 8.2  | 175 | 8.5  | 170 | 7.2  | 165 | 7.2  | 9.5  | 12   |
| 170 | 8.5  | 170 | 10.5 | 170 | 9.8  | 170 | 9.5  | 170 | 6.9  | 175 | 5.6  | 175 | 5.6  | 170 | 3.6  | 175 | 5.9  | 180 | 5.9  | 180 | 4.9  | 170 | 4.9  | 7.4  | 13   |
| 180 | 5.6  | 175 | 5.9  | 180 | 4.6  | 175 | 4.9  | 165 | 4.3  | 160 | 3.6  | 160 | 3.9  | 170 | 3.9  | 165 | 3.3  | 175 | 4.9  | 180 | 5.2  | 165 | 4.6  | 4.7  | 14   |
| 140 | 4.6  | 130 | 3.9  | 120 | 5.6  | 110 | 5.2  | 95  | 4.6  | 105 | 4.3  | 120 | 3.9  | 120 | 3.3  | 110 | 3.0  | 90  | 3.6  | 100 | 4.3  | 65  | 1.6  | 4.0  | 15   |
| 80  | 4.3  | 80  | 4.9  | 70  | 4.9  | 70  | 5.6  | 75  | 5.6  | 80  | 5.9  | 80  | 3.9  | 70  | 3.3  | 75  | 3.9  | 70  | 4.6  | 70  | 4.6  | 80  | 5.9  | 4.1  | 16   |
| 70  | 5.9  | 70  | 4.9  | 70  | 4.3  | 75  | 3.3  | 75  | 3.0  | 75  | 3.9  | 90  | 3.0  | 80  | 3.0  | 80  | 3.3  | 90  | 3.6  | 95  | 3.3  | 90  | 2.6  | 5.1  | 17   |
| 175 | 4.3  | 165 | 4.3  | 195 | 4.6  | 210 | 3.9  | 210 | 4.9  | 200 | 5.9  | 210 | 6.2  | 205 | 5.9  | 210 | 6.2  | 210 | 7.5  | 210 | 7.2  | 210 | 7.5  | 4.4  | 18   |
| 225 | 8.2  | 220 | 8.2  | 215 | 7.5  | 240 | 4.6  | 255 | 7.2  | 270 | 5.9  | 255 | 5.6  | 250 | 6.2  | 250 | 7.2  | 260 | 7.5  | 255 | 5.9  | 260 | 6.2  | 6.4  | 19   |
| 300 | 4.6  | 300 | 4.9  | 305 | 3.6  | 285 | 2.6  | 270 | 2.3  | 255 | 1.6  | 250 | 2.0  | 255 | 2.0  | 245 | 2.3  | 230 | 2.0  | 235 | 2.3  | —   | 1.3  | 3.7  | 20   |
| 190 | 3.9  | 200 | 3.6  | 205 | 3.6  | 200 | 3.6  | 200 | 3.3  | 200 | 5.6  | 205 | 4.6  | 220 | 4.3  | 220 | 3.3  | 210 | 2.6  | 210 | 2.6  | 205 | 3.3  | 2.6  | 21   |
| 160 | 3.0  | 170 | 2.6  | 175 | 2.0  | 190 | 3.6  | 200 | 1.6  | 130 | 1.6  | 115 | 1.6  | —   | 0.3  | —   | 1.0  | —   | 0.3  | —   | 0.0  | —   | 0.0  | 2.3  | 22   |
| —   | 1.3  | 60  | 1.6  | 125 | 2.3  | 150 | 1.6  | 150 | 2.0  | 150 | 1.6  | 150 | 2.6  | 145 | 2.6  | 150 | 2.0  | —   | 1.3  | —   | 1.0  | —   | 1.0  | 1.5  | 23   |
| 245 | 3.6  | 220 | 2.0  | 215 | 3.0  | 200 | 3.6  | 205 | 3.6  | 210 | 3.3  | 210 | 2.6  | 220 | 2.3  | —   | 1.3  | —   | 0.7  | 320 | 1.6  | 340 | 2.0  | 2.2  | 24   |
| 345 | 3.3  | 345 | 2.6  | 330 | 2.0  | —   | 1.0  | —   | 0.7  | —   | 1.0  | 275 | 1.6  | —   | 1.0  | —   | 1.3  | —   | 1.3  | 230 | 1.6  | —   | 1.0  | 1.8  | 25   |
| 255 | 3.6  | 260 | 4.3  | 250 | 5.2  | 260 | 4.6  | 250 | 3.0  | —   | 1.3  | 230 | 3.0  | 240 | 4.3  | 245 | 3.0  | 240 | 4.3  | 240 | 3.3  | 245 | 3.3  | 2.9  | 26   |
| 335 | 5.9  | 330 | 5.2  | 330 | 4.6  | 300 | 2.3  | 300 | 3.0  | 290 | 2.3  | 290 | 2.0  | 295 | 2.0  | 300 | 2.3  | 300 | 2.3  | 280 | 1.6  | —   | 1.3  | 3.6  | 27   |
| 360 | 3.9  | 360 | 3.9  | 360 | 3.3  | 350 | 2.6  | 330 | 2.3  | 315 | 1.6  | 320 | 2.0  | 335 | 2.6  | 340 | 2.3  | 350 | 2.6  | 355 | 2.3  | —   | 1.0  | 2.8  | 28   |
| 275 | 2.3  | 270 | 1.6  | 285 | 1.6  | 275 | 1.6  | 270 | 1.6  | 260 | 1.6  | —   | 1.0  | —   | 1.0  | 245 | 1.6  | —   | 1.3  | —   | 1.0  | —   | 0.7  | 1.5  | 29   |
| —   | 0.7  | —   | 1.3  | —   | 1.0  | —   | 0.7  | —   | 0.7  | —   | 0.3  | —   | 0.3  | —   | 1.0  | —   | 1.3  | —   | 0.7  | —   | 0.3  | —   | 0.3  | 0.9  | 30   |
| 235 | 2.6  | 235 | 2.0  | 225 | 2.6  | 230 | 2.0  | 235 | 2.3  | 240 | 3.0  | 250 | 2.0  | 250 | 2.3  | 255 | 2.3  | 225 | 2.0  | 270 | 1.6  | 275 | 1.6  | 1.7  | 31   |
| —   | 4.2  | —   | 4.1  | —   | 4.0  | —   | 3.7  | —   | 3.4  | —   | 3.3  | —   | 3.3  | —   | 3.4  | —   | 3.5  | —   | 3.5  | —   | 3.3  | —   | 3.1  | 3.5  |      |

February, 1924.

| 13. |      | 14. |      | 15. |      | 16. |      | 17. |      | 18. |      | 19. |      | 20. |      | 21. |      | 22. |      | 23. |      | 24. |      | Mean | Day. |
|-----|------|-----|------|-----|------|-----|------|-----|------|-----|------|-----|------|-----|------|-----|------|-----|------|-----|------|-----|------|------|------|
| °   | m/s. | °   | m/s. | °   | m/s. | °   | m/s. | °   | m/s. | °   | m/s. | °   | m/s. | °   | m/s. | °   | m/s. | °   | m/s. | °   | m/s. | °   | m/s. | m/s. |      |
| 360 | 3.6  | 335 | 3.6  | 330 | 3.3  | 335 | 2.6  | 305 | 1.6  | —   | 1.3  | —   | 1.3  | —   | 1.3  | 270 | 2.0  | 275 | 2.0  | 255 | 2.0  | 240 | 2.3  | 2.2  | 1    |
| 330 | 5.6  | 325 | 4.6  | 325 | 4.3  | 320 | 4.6  | 315 | 3.3  | 330 | 3.3  | 300 | 3.3  | 295 | 3.0  | 305 | 3.0  | 325 | 3.9  | 305 | 3.9  | 270 | 3.0  | 3.4  | 2    |
| 305 | 3.6  | 300 | 3.9  | 290 | 3.0  | 315 | 3.9  | 285 | 3.9  | 280 | 3.3  | 285 | 2.3  | 270 | 2.0  | 275 | 2.3  | 285 | 3.0  | 280 | 2.6  | 285 | 2.6  | 2.9  | 3    |
| 295 | 5.2  | 290 | 3.3  | 290 | 3.3  | 285 | 3.3  | 280 | 2.6  | 270 | 3.0  | 275 | 3.3  | 280 | 3.3  | 290 | 3.6  | 290 | 3.3  | 270 | 3.3  | 270 | 2.0  | 3.3  | 4    |
| 290 | 6.2  | 275 | 4.6  | 275 | 5.2  | 275 | 4.3  | 295 | 5.9  | 305 | 7.2  | 310 | 7.9  | 305 | 7.5  | 295 | 6.6  | 295 | 5.2  | 300 | 5.6  | 300 | 5.6  | 4.9  | 5    |
| 315 | 3.6  | 315 | 5.2  | 335 | 4.9  | 335 | 5.2  | 320 | 3.6  | 330 | 4.6  | 320 | 4.3  | 310 | 3.9  | 310 | 4.6  | 315 | 3.6  | 320 | 3.6  | 325 | 2.6  | 4.6  | 6    |
| 285 | 3.0  | 275 | 1.6  | —   | 1.3  | 280 | 2.0  | —   | 1.3  | —   | 0.7  | —   | 1.3  | —   | 0.7  | —   | 0.7  | —   | 1.3  | —   | 1.0  | —   | 1.0  | 1.8  | 7    |
| 195 | 4.3  | 200 | 4.6  | 190 | 4.3  | 180 | 3.9  | 180 | 3.9  | 165 | 4.3  | 165 | 4.9  | 165 | 5.9  | 165 | 5.2  | 160 | 6.2  | 155 | 5.2  | 155 | 5.6  | 3.4  | 8    |
| 205 | 6.9  | 215 | 8.2  | 240 | 7.2  | 250 | 5.2  | 230 | 4.3  | 225 | 3.3  | 215 | 2.6  | 210 | 1.6  | 205 | 2.6  | 210 | 1.6  | —   | 1.3  | 185 | 2.3  | 5.8  | 9    |
| 95  | 2.3  | 90  | 3.6  | 90  | 4.6  | 105 | 3.6  | 100 | 3.6  | 100 | 4.3  | 105 | 3.9  | 100 | 3.3  | 110 | 3.9  | 115 | 4.3  | 105 | 3.6  | 95  | 3.6  | 2.8  | 10   |
| 20  | 2.3  | 15  | 1.6  | 15  | 2.6  | 360 | 2.0  | 350 | 2.0  | —   | 1.3  | 350 | 2.0  | —   | 1.3  | 360 | 1.6  | 10  | 1.6  | —   | 1.3  | —   | 1.3  | 2.3  | 11   |
| 70  | 3.9  | 65  | 5.6  | 65  | 5.6  | 80  | 7.5  | 90  | 6.9  | 95  | 5.2  | 85  | 4.9  | 80  | 4.6  | 90  | 5.6  | 85  | 6.6  | 80  | 7.9  | 80  | 7.9  | 3.8  | 12   |
| 70  | 10.8 | 70  | 10.8 | 70  | 10.2 | 65  | 10.2 | 65  | 10.2 | 60  | 9.8  | 60  | 10.5 | 55  | 9.2  | 60  | 9.8  | 60  | 9.2  | 60  | 9.2  | 60  | 9.5  | 9.9  | 13   |
| 65  | 7.5  | 60  | 5.9  | 60  | 5.2  | 60  | 5.6  | 60  | 5.6  | 60  | 4.9  | 70  | 5.9  | 70  | 3.9  | 30  | 2.3  | —   | 1.0  | —   | 1.5  | —   | 0.7  | 6.0  | 14   |
| 220 | 3.3  | 215 | 3.9  | 220 | 3.0  | 220 | 2.0  | 210 | 2.0  | 185 | 1.6  | —   | 1.0  | —   | 0.6  | —   | 0.4  | —   | 0.9  | —   | 0.6  | —   | 0.4  | 1.6  | 15   |
| 95  | 5.6  | 80  | 5.9  | 65  | 4.9  | 60  | 4.3  | 65  | 4.6  | 70  | 5.2  | 65  | 3.6  | 25  | 2.6  | —   | 1.5  | —   | 1.0  | —   | 1.1  | —   | 1.4  | 3.0  | 16   |
| 120 | 1.6  | —   | 0.7  | —   | 0.7  | —   | 1.0  | —   | 0.3  | —   | 0.7  | —   | 0.0  | —   |      |     |      |     |      |     |      |     |      |      |      |

Direction expressed in degrees from North (E = 90°, S = 180°, W = 270°, N = 360°) : Speed in metres per second.

454. Richmond (Kew Observatory) :

H<sub>a</sub> (height of cups of anemograph above M.S.L.)=Height of ground above

Table with 14 columns (Day, 1-11, Noon) and 2 rows per day (m/s, °). Contains wind speed and direction data for Richmond (Kew Observatory) for 31 days.

455. Richmond (Kew Observatory) : H<sub>a</sub> + 5 metres = 20 metres.

Table with 14 columns (G.M.T., 1-11, Noon) and 2 rows per day (m/s, °). Contains wind speed and direction data for Richmond (Kew Observatory) at H<sub>a</sub> + 5 metres for 31 days.

Averages for periods of sixty minutes, centered at the exact hours, Greenwich Mean Time.

M.S.L. + h<sub>a</sub> (height of anemograph above ground) = 5 metres + 20 metres.

March, 1924.

Table with 14 columns (13-24) and 2 columns (Mean, Day). Rows contain wind speed data in m/s for various heights (260, 230, 225, 285, 200, 90, 185, 160, 95, 115, 80, 85, 205, 335, 10, 325, 220, 85, 320, 215, 225, 220, 360, 80, 55, 65, 55, 40, 45) across days 1-31.

April, 1924.

Table with 14 columns (13-24) and 2 columns (Mean, Day). Rows contain wind speed data in m/s for various heights (40, 45, 55, 65, 80, 265, 270, 305, 145, 360, 270, 215, 185, 360, 300, 345, 225, 260, 325, 325, 285, 115, 210, 220, 205, 155, 245, 260, 225) across days 1-30.

Direction expressed in degrees from North (E=90°, S=180°, W=270°, N=360°) : Speed in metres per second.

456. Richmond (Kew Observatory) :

H<sub>a</sub> (height of cups of anemograph above M.S.L.)=Height of ground above

| Day.     | 1.  |      | 2.  |      | 3.  |      | 4.  |      | 5.  |      | 6.  |      | 7.  |      | 8.  |      | 9.  |      | 10. |      | 11. |      | Noon. |      |   |      |
|----------|-----|------|-----|------|-----|------|-----|------|-----|------|-----|------|-----|------|-----|------|-----|------|-----|------|-----|------|-------|------|---|------|
|          | °   | m/s. | °   | m/s. | °   | m/s. | °   | m/s. | °   | m/s. | °   | m/s. | °   | m/s. | °   | m/s. | °   | m/s. | °   | m/s. | °   | m/s. | °     | m/s. | ° | m/s. |
| 1        | 345 | 2.3  | 5   | 2.3  | —   | 1.0  | —   | 0.3  | —   | 0.7  | —   | 0.3  | —   | 0.3  | —   | 0.3  | —   | 1.3  | —   | 1.0  | —   | 1.3  | —     | 1.0  | — |      |
| 2        | —   | 1.0  | —   | 1.0  | —   | 1.3  | 195 | 1.6  | 190 | 1.6  | 185 | 2.6  | 190 | 3.0  | 185 | 2.6  | 185 | 3.9  | 215 | 5.2  | 245 | 4.9  | 255   | 3.9  |   |      |
| 3        | 220 | 3.3  | 235 | 1.6  | 215 | 3.6  | 215 | 3.6  | 225 | 2.3  | 225 | 2.3  | 240 | 2.3  | 250 | 1.6  | 275 | 2.6  | 285 | 2.3  | 285 | 4.6  | 300   | 3.6  |   |      |
| 4        | 275 | 2.6  | 285 | 2.6  | 310 | 2.3  | 305 | 1.6  | —   | 1.3  | 265 | 1.6  | 270 | 2.0  | 270 | 2.0  | 245 | 2.0  | 265 | 2.3  | 275 | 3.3  | 275   | 3.3  |   |      |
| 5        | 270 | 2.6  | 270 | 2.3  | 250 | 2.3  | 235 | 2.6  | 230 | 3.0  | 245 | 3.3  | 245 | 3.9  | 275 | 4.6  | 270 | 5.6  | 260 | 7.5  | 255 | 5.1  | 265   | 4.6  |   |      |
| 6        | 240 | 2.0  | 230 | 2.3  | 225 | 1.6  | 215 | 1.6  | 200 | 2.6  | 200 | 3.9  | 205 | 5.2  | 215 | 6.6  | 225 | 5.9  | 220 | 5.6  | 205 | 5.9  | 200   | 6.6  |   |      |
| 7        | —   | 0.7  | —   | 0.3  | —   | 0.7  | —   | 1.0  | —   | 1.3  | —   | 1.3  | 265 | 2.6  | 275 | 3.6  | 275 | 3.6  | 280 | 4.3  | 265 | 4.3  | 250   | 4.3  |   |      |
| 8        | 220 | 3.3  | 225 | 3.6  | 220 | 4.6  | 215 | 5.2  | 215 | 6.2  | 215 | 6.9  | 225 | 6.6  | 235 | 7.2  | 240 | 8.2  | 245 | 5.9  | 245 | 5.9  | 235   | 5.9  |   |      |
| 9        | 270 | 3.9  | 265 | 3.0  | 275 | 3.9  | 270 | 2.6  | 260 | 2.0  | 265 | 2.0  | 285 | 3.6  | 295 | 3.0  | 295 | 3.6  | 290 | 4.3  | 260 | 3.3  | 255   | 3.0  |   |      |
| 10       | 180 | 3.9  | 180 | 4.6  | 180 | 4.6  | 185 | 3.9  | 185 | 4.6  | 185 | 4.6  | 195 | 5.9  | 195 | 7.2  | 195 | 7.5  | 200 | 9.2  | 200 | 9.5  | 195   | 7.5  |   |      |
| 11       | 215 | 4.6  | 220 | 4.3  | 225 | 3.3  | 225 | 3.0  | 225 | 3.3  | 230 | 4.3  | 240 | 4.6  | 250 | 5.2  | 245 | 5.2  | 255 | 4.9  | 240 | 5.9  | 245   | 5.9  |   |      |
| 12       | 125 | 2.6  | 130 | 2.0  | 165 | 2.0  | —   | 1.3  | —   | 1.3  | 245 | 1.6  | 290 | 3.0  | 300 | 3.0  | 320 | 3.6  | 310 | 3.6  | 310 | 2.6  | 300   | 2.3  |   |      |
| 13       | 205 | 3.3  | 205 | 3.3  | 210 | 4.3  | 190 | 3.6  | 190 | 3.6  | 190 | 4.3  | 200 | 6.6  | 200 | 6.9  | 210 | 6.9  | 210 | 9.2  | 215 | 8.5  | 220   | 7.2  |   |      |
| 14       | —   | 1.0  | —   | 1.0  | 110 | 2.0  | —   | 0.7  | 345 | 1.6  | 50  | 2.0  | 80  | 3.3  | 125 | 1.6  | 185 | 3.3  | 205 | 3.3  | 225 | 4.6  | 195   | 4.9  |   |      |
| 15       | —   | 1.3  | —   | 0.7  | —   | 1.0  | 270 | 1.6  | —   | 1.3  | —   | 1.0  | —   | 1.0  | —   | 0.7  | —   | 0.7  | 245 | 1.6  | 260 | 2.0  | —     | 1.3  |   |      |
| 16       | 240 | 1.6  | 245 | 2.6  | 225 | 2.0  | 220 | 3.0  | 235 | 2.3  | 240 | 2.6  | 255 | 4.6  | 260 | 4.3  | 270 | 4.6  | 260 | 6.2  | 260 | 5.9  | 275   | 5.9  |   |      |
| 17       | —   | 0.7  | —   | 0.7  | —   | 0.7  | —   | 0.7  | —   | 0.7  | —   | 0.7  | —   | 0.0  | 140 | 2.0  | 150 | 2.0  | 190 | 1.6  | 170 | 2.0  | 150   | 2.3  |   |      |
| 18       | 75  | 4.3  | 65  | 2.3  | 55  | 3.9  | 60  | 4.6  | 60  | 3.9  | 55  | 2.6  | 65  | 4.9  | 65  | 4.6  | 70  | 3.9  | 70  | 3.9  | 60  | 4.6  | 65    | 5.9  |   |      |
| 19       | 90  | 2.0  | —   | 0.7  | —   | 1.0  | —   | 1.0  | —   | 1.3  | 215 | 2.6  | 205 | 4.9  | 210 | 4.3  | 220 | 2.6  | 210 | 3.6  | —   | 1.3  | —     | 0.7  |   |      |
| 20       | —   | 0.3  | —   | 0.3  | —   | 0.3  | —   | 0.3  | —   | 0.3  | —   | 0.7  | —   | 0.7  | —   | 1.0  | —   | 0.7  | —   | 1.3  | 80  | 3.3  | 80    | 3.3  |   |      |
| 21       | —   | 1.3  | —   | 0.7  | —   | 0.0  | —   | 0.3  | —   | 0.3  | —   | 1.0  | —   | 1.0  | 140 | 2.3  | 155 | 3.3  | 180 | 3.9  | 190 | 4.3  | 175   | 4.9  |   |      |
| 22       | 190 | 2.3  | 185 | 2.3  | 185 | 2.3  | 185 | 3.3  | 185 | 3.0  | 195 | 3.6  | 210 | 3.9  | 200 | 5.9  | 205 | 5.9  | 200 | 6.9  | 205 | 6.6  | 205   | 6.9  |   |      |
| 23       | 215 | 3.3  | 215 | 3.9  | 210 | 3.9  | 215 | 4.3  | 220 | 3.9  | 220 | 5.6  | 220 | 6.6  | 220 | 7.5  | 225 | 6.9  | 205 | 9.5  | 210 | 8.5  | 190   | 7.9  |   |      |
| 24       | 215 | 2.6  | 195 | 2.3  | 180 | 2.0  | 165 | 2.0  | 125 | 2.0  | 110 | 2.6  | 125 | 3.9  | 135 | 3.6  | 145 | 2.6  | 175 | 6.9  | 185 | 9.2  | 190   | 8.2  |   |      |
| 25       | 200 | 4.9  | 200 | 4.3  | 200 | 5.2  | 195 | 4.6  | 195 | 4.6  | 200 | 5.9  | 205 | 6.2  | 210 | 5.9  | 210 | 6.6  | 220 | 5.2  | 220 | 6.6  | 240   | 4.3  |   |      |
| 26       | 225 | 2.6  | 235 | 2.3  | 235 | 1.6  | 235 | 1.6  | 235 | 2.3  | 235 | 2.0  | 245 | 2.0  | 270 | 3.0  | 285 | 2.3  | 250 | 3.6  | 270 | 3.9  | 275   | 3.6  |   |      |
| 27       | —   | 1.0  | 225 | 1.6  | 195 | 2.3  | 195 | 2.0  | —   | 1.3  | 205 | 3.6  | 205 | 4.6  | 210 | 4.6  | 220 | 4.6  | 225 | 6.2  | 220 | 5.6  | 215   | 4.9  |   |      |
| 28       | —   | 1.0  | —   | 0.7  | —   | 0.7  | —   | 0.3  | —   | 0.7  | —   | 0.3  | —   | 0.3  | —   | 0.3  | —   | 0.7  | 145 | 2.0  | 165 | 2.6  | 140   | 2.6  |   |      |
| 29       | 55  | 3.0  | 45  | 3.0  | 45  | 2.6  | 45  | 3.0  | 45  | 2.6  | 45  | 3.3  | 45  | 3.6  | 50  | 3.3  | 50  | 3.0  | 80  | 7.2  | 75  | 6.9  | 70    | 6.2  |   |      |
| 30       | 220 | 3.9  | 220 | 3.3  | 230 | 3.9  | 215 | 4.9  | 220 | 4.9  | 225 | 4.9  | 235 | 4.9  | 245 | 4.6  | 245 | 3.9  | 255 | 3.6  | 265 | 3.6  | 250   | 3.3  |   |      |
| 31       | 350 | 2.0  | 345 | 1.6  | 85  | 3.0  | 85  | 3.9  | 75  | 3.9  | 80  | 3.3  | 80  | 3.0  | 80  | 3.6  | 90  | 3.9  | 135 | 3.6  | 100 | 1.6  | 100   | 3.3  |   |      |
| Mean ... | —   | 2.4  | —   | 2.2  | —   | 2.4  | —   | 2.4  | —   | 2.4  | —   | 2.8  | —   | 3.5  | —   | 3.8  | —   | 3.9  | —   | 4.8  | —   | 4.8  | —     | 4.5  |   |      |

457. Richmond (Kew Observatory) : H<sub>a</sub>=5 metres+20 metres.

|    | °   | m/s. | °   | m/s. | °   | m/s. | °   | m/s. | °   | m/s. | °   | m/s. | °   | m/s. | °   | m/s. | °   | m/s. | °   | m/s. | °   | m/s. | °   | m/s. | ° | m/s. |
|----|-----|------|-----|------|-----|------|-----|------|-----|------|-----|------|-----|------|-----|------|-----|------|-----|------|-----|------|-----|------|---|------|
| 1  | 210 | 5.6  | 225 | 6.2  | 225 | 6.6  | 215 | 6.6  | 210 | 7.9  | 215 | 7.5  | 215 | 8.9  | 215 | 9.2  | 220 | 8.9  | 225 | 9.5  | 220 | 9.8  | 220 | 9.5  |   |      |
| 2  | 45  | 3.0  | 45  | 3.3  | 45  | 2.3  | 40  | 2.0  | 35  | 2.0  | 35  | 2.0  | 50  | 1.6  | —   | 0.7  | —   | 1.0  | 145 | 2.6  | —   | 1.3  | —   | 1.0  |   |      |
| 3  | 20  | 1.6  | 15  | 2.3  | —   | 1.3  | —   | 0.7  | 15  | 1.6  | —   | 1.0  | —   | 0.7  | —   | 1.0  | —   | 1.3  | 190 | 2.3  | 230 | 2.3  | 215 | 2.6  |   |      |
| 4  | 205 | 1.6  | 205 | 1.6  | —   | 1.3  | 205 | 2.0  | 230 | 2.0  | 210 | 2.0  | 210 | 2.3  | —   | 1.3  | —   | 1.3  | —   | 1.0  | 185 | 3.6  | 180 | 3.0  |   |      |
| 5  | 50  | 4.3  | 50  | 3.3  | 45  | 4.6  | 35  | 3.9  | 35  | 4.3  | 25  | 3.6  | 25  | 4.6  | 30  | 3.9  | 40  | 4.9  | 65  | 6.2  | 75  | 4.3  | 90  | 3.9  |   |      |
| 6  | —   | 0.7  | —   | 0.7  | —   | 0.0  | —   | 1.0  | —   | 1.0  | —   | 1.0  | —   | 1.3  | 150 | 3.0  | 170 | 3.6  | 165 | 4.9  | 165 | 4.9  | 165 | 4.6  |   |      |
| 7  | —   | 1.0  | —   | 0.0  | —   | 1.0  | —   | 0.7  | —   | 0.3  | —   | 1.0  | —   | 0.7  | —   | 1.0  | —   | 1.0  | —   | 1.3  | 175 | 2.0  | 180 | 3.6  |   |      |
| 8  | 195 | 1.6  | 225 | 3.0  | 210 | 3.0  | 220 | 3.0  | 220 | 2.6  | 255 | 3.6  | 240 | 4.9  | 245 | 5.2  | 260 | 4.3  | 270 | 6.9  | 255 | 6.2  | 255 | 5.6  |   |      |
| 9  | 230 | 3.6  | 235 | 4.6  | 245 | 4.3  | 245 | 4.6  | 245 | 3.9  | 240 | 3.6  | 235 | 3.6  | 240 | 4.6  | 245 | 4.3  | 265 | 4.6  | 265 | 3.9  | 270 | 3.6  |   |      |
| 10 | —   | 1.0  | 225 | 2.0  | 210 | 3.9  | 195 | 2.6  | 200 | 3.3  | 215 | 3.9  | 220 | 4.3  | 220 | 4.3  | 235 | 5.6  | 245 | 5.6  | 235 | 6.2  | 215 | 6.9  |   |      |
| 11 | 190 | 5.9  | 195 | 5.6  | 195 | 7.2  | 195 | 5.6  | 185 | 5.2  | 180 | 5.9  | 185 | 5.9  | 195 | 6.6  | 185 | 5.2  | 195 | 3.3  | 200 | 3.6  | 200 | 4.3  |   |      |
| 12 | 195 | 2.3  | 190 | 2.3  | 190 | 2.3  | 190 | 2.3  | 190 | 1.6  | 190 | 2.0  | 185 | 2.6  | 190 | 2.3  | 190 | 2.0  | 245 | 2.6  | —   | 1.3  | 55  | 2.3  |   |      |
| 13 | 5   | 4.6  | 360 | 4.6  | 355 | 4.6  | 350 | 3.9  | 350 | 4.6  | 350 | 4.3  | 350 | 3.9  | 345 | 5.9  | 350 | 6.2  | 350 | 8.5  | 350 | 6.9  | 350 | 7.5  |   |      |
| 14 | 10  | 3.9  | 5   | 3.3  | 345 | 2.0  | 330 | 2.0  | 345 | 2.0  | 350 | 3.3  | 350 | 3.6  | 350 | 2.6  | 350 | 2.3  | 20  | 2.6  | 10  | 2.6  | 10  | 2.3  |   |      |
| 15 | —   | 0.7  | —   | 1.0  | —   | 1.0  | 215 | 2.0  | 230 | 2.3  | 240 | 2.0  | 250 | 2.0  | 235 | 1.6  | 260 | 1.6  | 250 | 2.0  | 255 | 2.3  | 260 | 3.0  |   |      |
| 16 | —   | 0.7  | —   | 1.0  | —   | 0.7  | —   | 1.0  | —   | 0.3  | —   | 1.3  | —   | 0.3  | —   | 0.7  | —   | 1.3  | 190 | 3.0  | 170 | 3.0  | 175 | 3.0  |   |      |
| 17 | 85  | 3.9  | 85  | 3.3  | 85  | 4.3  | 85  | 5.2  | 90  | 4.6  | 90  | 3.3  | 85  | 3.6  | 95  | 4.9  | 100 | 4.9  | 100 | 4.9  | 130 | 3.9  | 85  | 5.6  |   |      |
| 18 | 230 | 1.6  | —   | 1.3  | —   | 1.3  | 230 | 1.6  | 195 | 2.3  | 180 | 3.0  | 180 | 3.6  | 185 | 4.3  | 205 | 4.9  | 195 | 6.9  | 190 | 5.2  | 190 | 5.9  |   |      |
| 19 | —   | 0.7  | —   | 0.3  | —   | 0.7  | —   | 0.7  | —   | 0.3  | —   | 0.3  | —   | 1.3  | 195 | 1.6  | 225 | 2.6  | 250 | 3.6  | 230 | 4.9  | 230 | 4.6  |   |      |
| 20 | 235 | 1.6  | 270 | 1.6  | —   | 1.0  | —   | 0.3  | —   | 0.7  | —   | 1.0  | —   | 0.7  | —   | 1.3  | —   | 1.0  | —   | 1.3  | —   | 1.0  | 335 | 2.0  |   |      |
| 21 | —   | 1.3  | —   | 0.7  | 270 | 1.6  | —   | 1.0  | 260 | 1.6  | —   | 1.0  | 285 | 2.0  | 295 | 2.3  | 285 | 2.6  | 260 | 2.3  | 240 | 3.3  | 255 | 2.6  |   |      |
| 22 | —   | 1.0  | —   | 1.3  | —   | 1.0  | —   | 1.0  | —   | 1.3  | —   | 1.0  | 340 | 2.0  | 15  | 2.6  | 15  | 3.0  | 360 | 3.3  | 5   | 3.0  | 350 | 3.3  |   |      |
| 23 | —   | 0.7  | —   | 0.7  | —   | 0.3  | —   | 0.3  | —   | 0.7  | —   | 0.7  | —   | 0.0  | —   | 0.7  | —   | 1.0  | 265 | 1.6  | 275 | 2.3  | 280 | 2.3  |   |      |
| 24 | —   | 1.0  | —   | 1.0  | —   | 1.3  | 255 | 2.0  | 245 | 1.6  | 245 | 2.0  | 280 | 2.6  | 270 | 3.6  | 265 | 3.0  | 270 | 3.3  | 270 | 3.0  | 270 | 2.6  |   |      |
| 25 | 265 | 1.6  | 250 | 1.6  | 250 | 2.0  | —   | 1.3  | 255 | 2.0  | 280 | 2.0  | 295 | 2.6  | 275 | 2.3  | 275 | 2.0  | 275 | 2.0  | 270 | 2.6  | 275 | 2.6  |   |      |
| 26 | —   | 0.7  | —   | 1.0  | 270 | 1.6  | 270 | 1.6  | —   | 1.3  | 255 | 1.6  | 280 | 1.6  | 290 | 1.6  | 270 | 1.6  | 235 | 3.3  | 235 | 3.3  | 235 | 3.3  |   |      |
| 27 | 220 | 3.6  | 220 | 3.3  | 225 | 3.6  | 245 | 3.3  | 270 | 3.6  | 280 |      |     |      |     |      |     |      |     |      |     |      |     |      |   |      |



Averages for periods of sixty minutes, centered at the exact hours, Greenwich Mean Time.

M.S.L. + h<sub>a</sub> (height of anemograph above ground) = 5 metres + 20 metres.

May, 1924.

Table for May 1924 showing wind speed and direction data for days 1-31. Columns include day numbers, wind speed in m/s, and other meteorological parameters.

June, 1924.

Table for June 1924 showing wind speed and direction data for days 1-30. Columns include day numbers, wind speed in m/s, and other meteorological parameters.

Direction expressed in degrees from North (E=90°, S=180°, W=270°, N=360°): Speed in metres per second.

458. Richmond (Kew Observatory) :

H<sub>a</sub> (height of cups of anemograph above M.S.L.)=Height of ground above

| Day.     | 1.  |      | 2.  |      | 3.  |      | 4.  |      | 5.  |      | 6.  |      | 7.  |      | 8.  |      | 9.  |      | 10. |      | 11. |      | Noon. |      |
|----------|-----|------|-----|------|-----|------|-----|------|-----|------|-----|------|-----|------|-----|------|-----|------|-----|------|-----|------|-------|------|
|          | °   | m/s. | °   | m/s. | °   | m/s. | °   | m/s. | °   | m/s. | °   | m/s. | °   | m/s. | °   | m/s. | °   | m/s. | °   | m/s. | °   | m/s. | °     | m/s. |
| 1        | —   | 1.3  | —   | 1.0  | 265 | 1.6  | —   | 1.3  | —   | 0.3  | —   | 1.3  | —   | 1.0  | —   | 0.7  | 325 | 1.6  | 290 | 2.0  | 230 | 2.0  | 250   | 2.3  |
| 2        | 195 | 2.3  | 185 | 2.3  | 185 | 2.6  | 185 | 2.0  | 200 | 4.3  | 210 | 5.2  | 205 | 5.2  | 205 | 5.6  | 225 | 5.9  | 220 | 7.9  | 245 | 6.2  | 245   | 6.2  |
| 3        | 210 | 4.6  | 210 | 3.9  | 210 | 4.6  | 205 | 3.3  | 200 | 4.3  | 195 | 3.9  | 200 | 5.2  | 210 | 5.9  | 215 | 6.9  | 205 | 7.9  | 195 | 7.9  | 190   | 8.2  |
| 4        | 235 | 6.9  | 240 | 5.6  | 225 | 5.6  | 220 | 6.2  | 225 | 6.6  | 225 | 6.6  | 230 | 7.2  | 225 | 7.5  | 230 | 4.6  | 215 | 8.9  | 215 | 6.9  | 215   | 8.5  |
| 5        | 220 | 5.9  | 220 | 5.2  | 220 | 4.3  | 225 | 3.9  | 225 | 4.3  | 225 | 5.2  | 230 | 5.9  | 240 | 6.6  | 240 | 6.6  | 220 | 7.2  | 235 | 5.9  | 215   | 7.9  |
| 6        | 200 | 7.2  | 210 | 6.2  | 220 | 6.6  | 220 | 6.2  | 215 | 7.5  | 225 | 7.2  | 245 | 6.9  | 240 | 8.2  | 250 | 5.6  | 255 | 6.2  | 260 | 6.9  | 260   | 6.6  |
| 7        | 210 | 3.6  | 205 | 2.3  | 220 | 2.6  | 210 | 3.6  | 205 | 4.3  | 210 | 5.6  | 220 | 5.6  | 220 | 6.9  | 220 | 5.9  | 230 | 6.9  | 250 | 5.2  | 245   | 6.2  |
| 8        | 250 | 3.0  | 255 | 3.9  | 255 | 4.9  | 245 | 2.6  | 245 | 1.6  | 245 | 1.6  | 270 | 2.3  | 280 | 2.0  | —   | 1.3  | 230 | 2.6  | 210 | 2.0  | 220   | 3.0  |
| 9        | —   | 1.0  | —   | 0.3  | —   | 0.0  | —   | 1.3  | —   | 1.0  | —   | 0.7  | —   | 0.7  | —   | 0.3  | —   | 0.7  | —   | 0.7  | —   | 1.3  | 275   | 1.6  |
| 10       | —   | 0.7  | —   | 1.3  | —   | 0.7  | —   | 1.0  | —   | 0.7  | —   | 1.0  | —   | 1.0  | —   | 1.3  | 225 | 3.0  | 240 | 3.6  | 235 | 5.2  | 220   | 5.2  |
| 11       | 235 | 2.0  | 235 | 2.0  | 235 | 1.6  | 235 | 1.6  | —   | 1.3  | —   | 1.3  | 220 | 1.6  | 265 | 2.3  | 245 | 1.6  | 220 | 2.3  | 190 | 2.3  | 195   | 2.0  |
| 12       | —   | 1.0  | —   | 0.7  | —   | 0.3  | —   | 0.3  | —   | 1.0  | 100 | 2.0  | 110 | 3.0  | 130 | 4.6  | 155 | 4.6  | 150 | 5.9  | 170 | 6.2  | 175   | 6.2  |
| 13       | 265 | 1.6  | 260 | 1.6  | 250 | 1.6  | 250 | 1.6  | 250 | 1.6  | 245 | 2.6  | 245 | 3.3  | 245 | 3.0  | 245 | 5.2  | 260 | 4.6  | 255 | 4.6  | 250   | 5.9  |
| 14       | —   | 1.3  | —   | 1.0  | 245 | 1.6  | —   | 1.3  | —   | 1.3  | 220 | 2.0  | —   | 1.3  | 230 | 1.6  | 235 | 1.6  | 240 | 2.3  | 225 | 3.3  | 210   | 3.0  |
| 15       | —   | 0.3  | —   | 0.3  | —   | 0.7  | —   | 0.0  | —   | 0.7  | —   | 0.7  | —   | 1.0  | —   | 1.0  | 200 | 2.0  | 205 | 3.3  | 200 | 3.0  | 200   | 3.9  |
| 16       | —   | 0.3  | —   | 0.3  | —   | 0.7  | —   | 0.7  | —   | 0.7  | —   | 0.7  | —   | 0.7  | 260 | 1.6  | 275 | 3.3  | 280 | 3.3  | 275 | 3.6  | 275   | 4.3  |
| 17       | 250 | 2.3  | —   | 1.3  | 240 | 1.6  | 240 | 2.0  | 240 | 2.0  | 240 | 2.3  | 245 | 2.3  | 240 | 3.0  | 230 | 4.3  | 225 | 4.6  | 225 | 3.9  | 210   | 3.9  |
| 18       | 340 | 5.9  | 315 | 3.6  | 305 | 3.3  | 295 | 3.3  | 295 | 4.3  | 290 | 3.0  | 300 | 3.9  | 300 | 4.9  | 310 | 5.9  | 295 | 4.3  | 290 | 5.9  | 280   | 6.2  |
| 19       | 225 | 3.0  | 225 | 2.0  | 220 | 2.3  | 220 | 1.6  | 230 | 2.3  | 245 | 2.6  | 255 | 2.6  | 265 | 3.3  | 280 | 3.3  | 260 | 4.3  | 260 | 2.6  | 245   | 3.3  |
| 20       | 230 | 1.6  | —   | 0.7  | —   | 0.7  | —   | 0.0  | —   | 0.3  | —   | 0.3  | —   | 0.3  | 190 | 2.0  | 145 | 2.0  | 170 | 2.0  | 180 | 2.0  | 170   | 3.0  |
| 21       | 75  | 5.6  | 80  | 4.3  | 70  | 4.9  | 55  | 3.3  | 50  | 2.6  | 45  | 2.6  | 45  | 1.6  | 45  | 4.3  | 75  | 3.9  | 70  | 5.6  | 60  | 4.3  | 95    | 3.0  |
| 22       | —   | 0.7  | —   | 0.3  | —   | 0.3  | —   | 0.7  | —   | 1.0  | —   | 1.0  | —   | 1.3  | —   | 1.3  | 360 | 2.3  | 360 | 2.0  | 45  | 2.0  | 40    | 1.6  |
| 23       | —   | 1.3  | 240 | 1.6  | —   | 1.3  | 255 | 1.6  | 245 | 2.6  | 275 | 2.3  | 270 | 3.0  | 275 | 3.0  | 285 | 3.0  | 275 | 3.6  | 270 | 3.3  | 260   | 3.6  |
| 24       | 240 | 5.2  | 250 | 3.6  | 295 | 3.3  | 295 | 3.0  | 320 | 3.3  | 285 | 4.3  | 280 | 4.9  | 290 | 5.2  | 285 | 6.2  | 270 | 6.9  | 270 | 5.9  | 270   | 5.2  |
| 25       | 240 | 2.6  | 260 | 3.6  | 260 | 2.3  | 265 | 3.0  | 265 | 2.6  | 275 | 3.6  | 290 | 4.6  | 305 | 4.3  | 300 | 4.6  | 290 | 4.9  | 280 | 3.9  | 280   | 4.3  |
| 26       | —   | 1.3  | 20  | 2.3  | 20  | 3.3  | 10  | 2.0  | —   | 1.3  | 355 | 1.6  | 330 | 2.0  | 335 | 2.3  | 300 | 3.6  | 280 | 4.6  | 300 | 3.3  | 310   | 3.3  |
| 27       | —   | 1.3  | —   | 1.0  | —   | 0.7  | 270 | 1.6  | —   | 1.3  | 270 | 1.6  | 270 | 2.0  | 285 | 3.0  | 300 | 2.3  | 295 | 2.6  | 295 | 2.0  | 275   | 3.3  |
| 28       | 175 | 2.0  | 175 | 1.6  | 165 | 2.6  | 160 | 3.9  | 160 | 4.3  | 155 | 4.3  | 155 | 5.6  | 140 | 3.0  | 150 | 3.6  | 170 | 6.6  | 170 | 6.6  | 165   | 6.2  |
| 29       | 185 | 2.0  | 185 | 1.6  | —   | 0.7  | —   | 0.7  | —   | 1.3  | 135 | 1.6  | 95  | 2.3  | 85  | 2.3  | 80  | 2.3  | 100 | 3.6  | 145 | 3.0  | 95    | 2.3  |
| 30       | —   | 0.3  | —   | 1.0  | —   | 1.0  | —   | 0.3  | —   | 0.3  | —   | 1.0  | —   | 1.0  | —   | 1.0  | —   | 0.7  | —   | 0.3  | —   | 1.3  | 260   | 1.6  |
| 31       | 230 | 2.6  | 230 | 2.0  | 230 | 2.0  | 225 | 2.6  | 225 | 2.3  | 225 | 2.3  | 235 | 3.0  | 245 | 4.3  | 245 | 3.6  | 235 | 4.3  | 235 | 3.9  | 235   | 4.3  |
| Mean ... | —   | 2.6  | —   | 2.2  | —   | 2.3  | —   | 2.1  | —   | 2.4  | —   | 2.7  | —   | 3.0  | —   | 3.4  | —   | 3.6  | —   | 4.4  | —   | 4.1  | —     | 4.4  |

459. Richmond (Kew Observatory) : H<sub>a</sub>=5 metres+20 metres.

| Day. | 1.  |      | 2.  |      | 3.  |      | 4.  |      | 5.  |      | 6.  |      | 7.  |      | 8.  |      | 9.  |      | 10. |      | 11. |      | Noon. |      |
|------|-----|------|-----|------|-----|------|-----|------|-----|------|-----|------|-----|------|-----|------|-----|------|-----|------|-----|------|-------|------|
|      | °   | m/s. | °   | m/s. | °   | m/s. | °   | m/s. | °   | m/s. | °   | m/s. | °   | m/s. | °   | m/s. | °   | m/s. | °   | m/s. | °   | m/s. | °     | m/s. |
| 1    | —   | 1.3  | 210 | 2.6  | 210 | 3.0  | 210 | 3.0  | 210 | 3.3  | 190 | 3.0  | 190 | 3.6  | 195 | 3.6  | 200 | 4.6  | 205 | 4.9  | 200 | 5.6  | 195   | 4.3  |
| 2    | 195 | 3.6  | 190 | 3.0  | 195 | 3.3  | 225 | 3.0  | 210 | 4.3  | 210 | 3.6  | 215 | 3.3  | 240 | 4.3  | 285 | 5.6  | 285 | 6.2  | 270 | 4.6  | 275   | 5.2  |
| 3    | 260 | 3.0  | 265 | 3.3  | 270 | 2.0  | 260 | 3.0  | 260 | 2.6  | 270 | 3.0  | 290 | 3.0  | 290 | 3.6  | 270 | 3.9  | 265 | 3.6  | 270 | 4.3  | 265   | 4.6  |
| 4    | 225 | 2.0  | 240 | 2.3  | 255 | 2.6  | 260 | 2.6  | 270 | 2.6  | 290 | 3.3  | 295 | 3.0  | 290 | 3.6  | 280 | 3.9  | 290 | 4.3  | 280 | 4.3  | 275   | 3.3  |
| 5    | 210 | 2.6  | 220 | 2.3  | 220 | 3.3  | 215 | 3.6  | 220 | 3.3  | 225 | 4.3  | 220 | 4.3  | 230 | 4.9  | 235 | 4.3  | 230 | 5.6  | 225 | 6.6  | 235   | 5.9  |
| 6    | 235 | 1.6  | 235 | 2.0  | 235 | 1.6  | —   | 1.0  | 260 | 2.0  | 270 | 2.0  | —   | 1.3  | —   | 1.3  | —   | 1.0  | —   | 1.3  | 245 | 1.6  | 210   | 2.0  |
| 7    | 360 | 2.3  | 355 | 2.0  | —   | 1.3  | —   | 1.3  | 340 | 1.6  | 310 | 2.0  | 295 | 1.6  | 335 | 2.6  | 355 | 3.3  | 355 | 4.3  | 345 | 5.2  | 345   | 3.9  |
| 8    | 345 | 2.3  | —   | 1.3  | —   | 1.3  | —   | 1.3  | 320 | 1.6  | —   | 1.0  | —   | 1.0  | —   | 1.3  | —   | 1.0  | 5   | 2.3  | 360 | 2.3  | 20    | 2.3  |
| 9    | —   | 0.0  | —   | 1.3  | —   | 0.7  | —   | 0.7  | —   | 0.0  | —   | 0.7  | —   | 0.3  | —   | 1.3  | —   | 1.3  | 230 | 2.0  | 200 | 1.6  | 215   | 1.6  |
| 10   | —   | 0.3  | —   | 0.3  | —   | 0.3  | —   | 0.3  | —   | 0.7  | —   | 0.3  | —   | 0.3  | —   | 1.3  | 130 | 3.0  | 135 | 3.9  | 145 | 3.3  | 145   | 2.6  |
| 11   | —   | 0.7  | —   | 0.3  | —   | 0.3  | —   | 0.3  | —   | 0.3  | —   | 0.3  | —   | 0.3  | —   | 0.3  | 120 | 1.6  | 180 | 2.6  | 190 | 3.6  | 185   | 3.9  |
| 12   | 200 | 2.0  | —   | 1.3  | —   | 1.3  | —   | 1.3  | —   | 1.0  | —   | 1.0  | 205 | 2.0  | 260 | 3.3  | 235 | 3.9  | 230 | 3.6  | 220 | 3.9  | 230   | 3.0  |
| 13   | 190 | 2.3  | —   | 1.3  | —   | 0.3  | 190 | 1.6  | 190 | 1.6  | 190 | 2.0  | 180 | 2.6  | 180 | 3.3  | —   | 1.3  | 265 | 2.3  | —   | 1.3  | 170   | 2.3  |
| 14   | —   | 1.0  | —   | 1.0  | —   | 0.7  | —   | 1.3  | —   | 1.0  | —   | 1.0  | —   | 1.0  | —   | 2.0  | 225 | 2.3  | 225 | 4.6  | 230 | 4.3  | 220   | 5.6  |
| 15   | 245 | 2.0  | 245 | 2.6  | 250 | 2.3  | 250 | 2.3  | 260 | 1.6  | 245 | 2.6  | 255 | 3.9  | 270 | 3.9  | 265 | 3.9  | 260 | 4.3  | 255 | 4.9  | 245   | 3.6  |
| 16   | —   | 1.3  | 190 | 1.6  | 190 | 1.6  | —   | 1.3  | 190 | 1.6  | 190 | 2.6  | 180 | 3.0  | 185 | 4.9  | 185 | 5.2  | 195 | 5.2  | 180 | 5.2  | 190   | 6.2  |
| 17   | 215 | 2.3  | 215 | 2.0  | 220 | 2.3  | 220 | 1.6  | —   | 1.0  | 210 | 1.6  | 190 | 2.0  | 170 | 2.3  | 165 | 4.9  | 175 | 5.2  | 175 | 6.9  | 195   | 6.6  |
| 18   | 240 | 4.9  | 235 | 4.9  | 240 | 4.9  | 235 | 5.6  | 235 | 6.9  | 240 | 5.9  | 240 | 5.6  | 245 | 6.9  | 255 | 6.2  | 265 | 6.6  | 255 | 4.6  | 265   | 5.6  |
| 19   | 240 | 2.3  | —   | 1.3  | 235 | 2.3  | 235 | 2.0  | 235 | 2.3  | 235 | 1.6  | 240 | 2.0  | 255 | 3.6  | 255 | 2.6  | 235 | 3.9  | 245 | 4.3  | 235   | 3.0  |
| 20   | 220 | 2.6  | 220 | 2.0  | 220 | 1.6  | —   | 1.0  | —   | 0.7  | —   | 0.3  | —   | 1.0  | 195 | 3.3  | 200 | 4.3  | 200 | 5.9  | 200 | 5.2  | 205   | 5.6  |
| 21   | 225 | 3.0  | 225 | 3.3  | 225 | 2.6  | 220 | 3.3  | 215 | 4.3  | 205 | 4.9  | 210 | 5.9  | 220 | 6.6  | 230 | 6.9  | 225 | 8.2  | 230 | 7.5  | 225   | 7.2  |
| 22   | 215 | 3.6  | 220 | 3.3  | 210 | 4.6  | 210 | 4.3  | 215 | 3.3  | 215 | 3.3  | 210 | 4.6  | 220 | 4.3  | 225 | 4.9  | 235 | 4.9  | 230 | 4.6  | 230   | 4.9  |
| 23   | 200 | 2.3  | 200 | 1.6  | 200 | 1.6  | 200 | 2.0  | 200 | 2.0  | 200 | 2.0  | 225 | 1.6  | 250 | 2.3  | 260 | 2.6  | 230 | 3.3  | 230 | 3.6  | 245   | 3.6  |
| 24   | 295 | 3.0  | 270 | 2.0  | 260 | 1.6  | 260 | 2.3  | 255 | 2.6  | 255 | 3.3  | 265 | 3.0  | 270 | 3.0  | 295 | 2.3  | 270 | 3.9  | 265 | 3.9  | 265   | 4.3  |
| 25   | 275 | 3.0  | 265 | 2.3  | 265 | 2.0  | 270 | 2.0  | 270 | 2.6  | 280 | 1.6  | 285 | 2.3  | 290 | 3.0  | 280 | 3.6  | 280 | 4.3  | 270 | 4.3  | 265   | 3.0  |
| 26   | —   | 1.0  | —   | 0.7  | —   | 0.7  | —   | 1.0  | —   | 1.0  |     |      |     |      |     |      |     |      |     |      |     |      |       |      |

Averages for periods of sixty minutes, centered at the exact hours, Greenwich Mean Time.

M.S.L. + h<sub>a</sub> (height of anemograph above ground) = 5 metres + 20 metres.

July, 1924.

| 13. |      | 14. |      | 15. |      | 16. |      | 17. |      | 18. |      | 19. |      | 20. |      | 21. |      | 22. |      | 23. |      | 24. |      | Mean | Day. |   |
|-----|------|-----|------|-----|------|-----|------|-----|------|-----|------|-----|------|-----|------|-----|------|-----|------|-----|------|-----|------|------|------|---|
| °   | m/s. | °   | m/s. | °   | m/s. | °   | m/s. | °   | m/s. | °   | m/s. | °   | m/s. | °   | m/s. | °   | m/s. | °   | m/s. | °   | m/s. | °   | m/s. | m/s. |      |   |
| 275 | 1.6  | 210 | 2.6  | 200 | 4.3  | 220 | 4.3  | 220 | 4.9  | 210 | 4.9  | 210 | 4.6  | 205 | 2.6  | 205 | 2.6  | 205 | 3.0  | 205 | 2.3  | 195 | 3.3  | 2.3  | 1    |   |
| 250 | 6.2  | 235 | 6.9  | 235 | 6.9  | 235 | 7.2  | 230 | 7.2  | 230 | 7.5  | 230 | 6.2  | 230 | 5.9  | 225 | 5.2  | 225 | 5.2  | 225 | 5.2  | 210 | 3.6  | 5.4  | 2    |   |
| 185 | 6.9  | 190 | 6.6  | 185 | 6.6  | 205 | 6.9  | 215 | 8.9  | 215 | 10.5 | 225 | 11.1 | 240 | 9.2  | 245 | 8.5  | 245 | 7.9  | 235 | 6.2  | 235 | 6.6  | 6.7  | 3    |   |
| 205 | 8.9  | 205 | 8.2  | 215 | 8.2  | 205 | 7.9  | 210 | 6.6  | 210 | 5.9  | 205 | 5.6  | 205 | 4.3  | 225 | 5.2  | 215 | 5.2  | 210 | 4.9  | 215 | 4.9  | 6.6  | 4    |   |
| 210 | 9.5  | 210 | 7.9  | 215 | 8.2  | 220 | 8.5  | 205 | 7.9  | 215 | 5.9  | 200 | 5.9  | 185 | 5.2  | 190 | 5.2  | 185 | 4.3  | 195 | 4.9  | 190 | 5.2  | 6.1  | 5    |   |
| 260 | 6.2  | 270 | 5.9  | 265 | 6.2  | 270 | 5.9  | 270 | 4.9  | 240 | 4.6  | 225 | 6.2  | 230 | 3.6  | 230 | 3.9  | 220 | 3.3  | 220 | 4.3  | 220 | 2.6  | 5.8  | 6    |   |
| 245 | 6.2  | 260 | 5.2  | 250 | 5.9  | 250 | 5.6  | 250 | 6.6  | 245 | 4.6  | 230 | 6.2  | 230 | 5.6  | 225 | 4.6  | 245 | 3.9  | 250 | 3.3  | 245 | 3.6  | 5.0  | 7    |   |
| 215 | 2.6  | 220 | 2.0  | 210 | 3.3  | 210 | 3.9  | 210 | 4.3  | 205 | 3.6  | 200 | 3.9  | 200 | 3.6  | 225 | 2.3  | 230 | 1.6  | —   | 1.3  | —   | 1.0  | 2.7  | 8    |   |
| 285 | 2.0  | 315 | 2.6  | 315 | 2.0  | 290 | 2.3  | —   | 1.3  | —   | 0.0  | —   | 1.0  | —   | 0.3  | —   | 0.3  | —   | 1.3  | —   | 1.0  | —   | 1.0  | 1.0  | 1.0  | 9 |
| 230 | 5.9  | 230 | 6.2  | 230 | 5.9  | 245 | 5.2  | 235 | 5.6  | 225 | 5.9  | 220 | 4.3  | 220 | 3.6  | 225 | 3.0  | 225 | 2.0  | 230 | 2.0  | 235 | 2.6  | 3.2  | 10   |   |
| 220 | 2.6  | —   | 1.3  | 170 | 3.0  | 205 | 2.3  | 185 | 2.6  | 195 | 2.6  | 195 | 3.0  | 185 | 2.0  | —   | 1.0  | —   | 0.7  | —   | 1.0  | —   | 1.3  | 1.9  | 11   |   |
| 170 | 7.2  | 165 | 6.2  | 160 | 6.6  | 170 | 6.2  | 165 | 5.6  | 180 | 4.3  | 190 | 3.3  | 220 | 3.3  | —   | 1.0  | 240 | 3.0  | 290 | 2.6  | 275 | 2.6  | 3.6  | 12   |   |
| 250 | 6.6  | 265 | 5.6  | 270 | 6.6  | 275 | 6.2  | 270 | 7.2  | 265 | 6.6  | 260 | 4.9  | 260 | 3.9  | 260 | 3.6  | 255 | 2.3  | 255 | 2.6  | 255 | 2.3  | 4.0  | 13   |   |
| 230 | 3.6  | 230 | 3.6  | 235 | 3.0  | 235 | 2.3  | 235 | 2.6  | 230 | 3.3  | 205 | 5.9  | 200 | 3.3  | 205 | 2.6  | —   | 1.0  | —   | 0.7  | —   | 0.7  | 2.3  | 14   |   |
| 210 | 4.3  | 205 | 4.3  | 195 | 4.6  | 195 | 4.3  | 185 | 4.3  | 185 | 4.9  | 190 | 3.3  | 190 | 2.0  | —   | 1.3  | —   | 1.0  | —   | 0.3  | —   | 0.3  | 2.2  | 15   |   |
| 265 | 5.2  | 265 | 3.9  | 280 | 5.2  | 280 | 5.6  | 290 | 5.6  | 290 | 5.6  | 285 | 3.6  | 285 | 3.0  | 290 | 2.3  | 280 | 2.3  | 265 | 1.6  | 260 | 1.6  | 2.7  | 16   |   |
| 195 | 4.9  | 195 | 5.2  | 180 | 4.9  | 145 | 4.3  | 95  | 5.2  | 85  | 5.9  | 95  | 7.9  | 90  | 5.2  | 60  | 4.6  | 350 | 6.9  | 350 | 6.6  | 350 | 6.6  | 4.1  | 17   |   |
| 280 | 5.9  | 275 | 6.2  | 280 | 3.9  | 275 | 3.0  | 285 | 4.3  | 285 | 3.6  | 285 | 3.3  | 270 | 3.3  | 255 | 2.3  | 245 | 2.6  | 235 | 2.6  | 230 | 2.3  | 4.2  | 18   |   |
| 260 | 4.3  | 270 | 3.9  | 270 | 3.6  | 270 | 3.9  | 275 | 3.9  | 270 | 2.3  | 280 | 1.6  | 265 | 1.6  | —   | 1.0  | —   | 1.3  | —   | 0.7  | —   | 1.3  | 2.6  | 19   |   |
| 165 | 3.3  | 155 | 3.0  | 150 | 3.3  | 145 | 3.3  | 150 | 3.3  | 120 | 3.9  | 105 | 3.3  | 95  | 4.3  | 80  | 5.9  | 80  | 6.6  | 75  | 5.6  | 65  | 5.6  | 2.7  | 20   |   |
| 70  | 4.9  | 75  | 4.3  | 75  | 4.6  | 120 | 2.0  | 215 | 2.3  | 205 | 3.6  | 215 | 2.3  | —   | 0.7  | —   | 0.3  | —   | 0.3  | —   | 0.0  | —   | 0.3  | 3.1  | 21   |   |
| 5   | 4.3  | 40  | 3.6  | —   | 1.0  | 255 | 3.3  | 260 | 2.0  | —   | 1.0  | —   | 1.3  | 240 | 1.6  | —   | 0.7  | —   | 1.0  | —   | 0.3  | —   | 1.0  | 1.5  | 22   |   |
| 255 | 3.6  | 255 | 3.3  | 250 | 3.6  | 260 | 4.6  | 270 | 4.9  | 260 | 4.9  | 265 | 4.9  | 265 | 5.2  | 260 | 4.9  | 240 | 4.6  | 230 | 4.6  | 230 | 5.2  | 3.4  | 23   |   |
| 265 | 6.6  | 275 | 5.6  | 280 | 6.9  | 285 | 6.6  | 285 | 6.9  | 285 | 5.9  | 280 | 4.3  | 285 | 4.9  | 285 | 3.6  | 260 | 2.6  | 255 | 2.6  | 240 | 2.6  | 4.9  | 24   |   |
| 285 | 4.3  | 275 | 3.3  | 260 | 3.0  | 245 | 2.6  | 250 | 3.0  | 250 | 2.0  | —   | 1.3  | —   | 0.7  | —   | 1.0  | —   | 1.0  | —   | 1.3  | —   | 1.3  | 2.9  | 25   |   |
| 290 | 3.0  | 295 | 2.6  | 300 | 4.3  | 350 | 3.0  | —   | 1.3  | —   | 1.3  | —   | 0.3  | —   | 0.0  | —   | 0.7  | —   | 1.0  | —   | 1.3  | —   | 1.0  | 2.1  | 26   |   |
| 270 | 3.0  | 245 | 2.6  | 240 | 3.3  | 240 | 3.0  | 235 | 3.6  | 210 | 4.6  | 210 | 4.6  | 210 | 3.0  | 210 | 2.3  | 210 | 1.6  | 205 | 1.6  | 180 | 2.0  | 2.4  | 27   |   |
| 165 | 7.5  | 160 | 6.2  | 165 | 6.6  | 165 | 6.2  | 165 | 6.2  | 170 | 5.2  | 170 | 3.9  | 175 | 3.3  | 180 | 2.6  | 200 | 3.0  | 200 | 2.3  | 190 | 2.6  | 4.4  | 28   |   |
| 135 | 2.6  | —   | 1.3  | 40  | 3.6  | —   | 1.3  | —   | 1.0  | —   | 1.3  | —   | 1.0  | —   | 1.3  | —   | 0.7  | —   | 0.3  | —   | 0.3  | —   | 1.0  | 1.7  | 29   |   |
| 265 | 2.6  | 245 | 2.0  | 230 | 2.6  | 230 | 2.0  | 225 | 1.6  | 220 | 1.6  | 270 | 2.3  | 275 | 3.3  | 265 | 3.0  | 250 | 2.6  | 240 | 2.6  | 230 | 3.0  | 1.6  | 30   |   |
| 250 | 3.6  | 250 | 3.9  | 265 | 3.3  | 255 | 3.0  | 260 | 3.9  | 245 | 3.0  | 225 | 3.3  | 225 | 2.3  | 225 | 2.0  | 220 | 2.3  | 205 | 2.3  | 205 | 1.6  | 3.0  | 31   |   |
| —   | 4.8  | —   | 4.4  | —   | 4.7  | —   | 4.4  | —   | 4.5  | —   | 4.2  | —   | 4.0  | —   | 3.3  | —   | 2.9  | —   | 2.8  | —   | 2.5  | —   | 2.6  | 3.4  |      |   |

August, 1924.

| 13. |      | 14. |      | 15. |      | 16. |      | 17. |      | 18. |      | 19. |      | 20. |      | 21. |      | 22. |      | 23. |      | 24. |      | Mean | Day. |
|-----|------|-----|------|-----|------|-----|------|-----|------|-----|------|-----|------|-----|------|-----|------|-----|------|-----|------|-----|------|------|------|
| °   | m/s. | °   | m/s. | °   | m/s. | °   | m/s. | °   | m/s. | °   | m/s. | °   | m/s. | °   | m/s. | °   | m/s. | °   | m/s. | °   | m/s. | °   | m/s. | m/s. |      |
| 215 | 5.6  | 220 | 3.9  | 225 | 3.9  | 205 | 4.3  | 210 | 5.2  | 200 | 3.6  | 210 | 3.3  | 200 | 3.0  | 205 | 2.0  | 195 | 3.9  | 200 | 3.0  | 205 | 2.6  | 3.6  | 1    |
| 290 | 4.9  | 275 | 4.9  | 280 | 3.6  | 285 | 4.3  | 295 | 2.3  | 315 | 3.3  | 255 | 1.6  | 250 | 2.0  | 245 | 2.3  | 245 | 2.3  | 255 | 3.0  | 260 | 2.0  | 3.6  | 2    |
| 250 | 5.2  | 245 | 3.6  | 245 | 2.0  | 220 | 3.0  | 225 | 3.6  | 215 | 4.3  | 205 | 4.6  | 195 | 3.9  | 185 | 3.3  | 190 | 3.3  | 200 | 3.0  | 205 | 2.0  | 3.4  | 3    |
| 250 | 3.3  | 245 | 3.0  | 245 | 3.0  | 240 | 2.0  | 245 | 3.3  | 240 | 3.0  | 215 | 3.3  | 210 | 3.3  | 200 | 3.3  | 200 | 3.3  | 205 | 3.6  | 205 | 3.0  | 3.1  | 4    |
| 235 | 6.9  | 235 | 7.2  | 240 | 6.6  | 235 | 6.2  | 240 | 5.2  | 260 | 5.6  | 260 | 4.3  | 245 | 3.0  | 260 | 3.9  | 255 | 2.6  | 250 | 2.6  | 230 | 1.6  | 4.5  | 5    |
| 220 | 2.0  | —   | 1.3  | 220 | 1.6  | 230 | 2.3  | —   | 1.3  | 225 | 1.6  | 330 | 3.6  | 10  | 3.0  | 20  | 1.6  | —   | 1.0  | —   | 2.0  | 10  | 2.3  | 1.7  | 6    |
| 345 | 4.9  | 340 | 4.3  | 340 | 4.6  | 340 | 5.6  | 345 | 3.0  | 325 | 3.9  | 320 | 3.0  | 320 | 2.0  | 325 | 3.0  | 330 | 2.6  | 330 | 3.3  | 345 | 2.6  | 3.1  | 7    |
| —   | 1.3  | —   | 1.3  | —   | 1.3  | —   | 1.0  | —   | 1.3  | —   | 1.3  | —   | 0.3  | —   | 1.3  | 115 | 1.6  | —   | 1.0  | —   | 0.3  | —   | 0.3  | 1.3  | 8    |
| —   | 1.3  | 245 | 1.6  | —   | 1.3  | —   | 1.0  | —   | 0.3  | 205 | 2.3  | 210 | 3.3  | 190 | 2.0  | —   | 1.0  | —   | 0.0  | —   | 0.3  | —   | 0.7  | 1.1  | 9    |
| 150 | 2.3  | 130 | 2.6  | 150 | 3.0  | 160 | 2.6  | 145 | 2.6  | 170 | 3.0  | 160 | 2.0  | 105 | 2.6  | 100 | 2.6  | —   | 1.3  | —   | 0.7  | —   | 0.3  | 1.8  | 10   |
| 190 | 4.9  | 185 | 5.2  | 195 | 4.9  | 195 | 5.2  | 195 | 4.9  | 190 | 4.3  | 190 | 3.6  | 190 | 2.6  | —   | 1.3  | —   | 1.0  | —   | 1.0  | —   | 0.7  | 2.2  | 11   |
| 220 | 3.0  | 210 | 3.9  | 200 | 4.9  | 205 | 6.2  | 255 | 3.3  | 230 | 2.3  | 215 | 2.6  | 215 | 2.0  | —   | 1.3  | 195 | 1.6  | 190 | 2.3  | 190 | 2.3  | 2.6  | 12   |
| 195 | 2.3  | 210 | 2.6  | 230 | 3.3  | 215 | 1.6  | —   | 1.0  | —   | 1.3  | —   | 0.7  | —   | 1.0  | —   | 0.7  | —   | 1.3  | —   | 1.0  | —   | 1.0  | 1.7  | 13   |
| 220 | 6.6  | 225 | 6.9  | 220 | 7.5  | 215 | 6.9  | 215 | 5.2  | 205 | 5.2  | 205 | 4.9  | 195 | 4.9  | 200 | 4.6  | 210 | 3.9  | 230 | 3.3  | 240 | 3.0  | 3.7  | 14   |
| 255 | 4.6  | 240 | 4.6  | 235 | 3.3  | 230 | 3.9  | 210 | 3.3  | 210 | 4.3  | 205 | 3.6  | 205 | 3.0  | 200 | 3.0  | 200 | 2.0  | 190 | 2.3  | 190 | 1.6  | 3.3  | 15   |
| 190 | 5.6  | 195 | 5.6  | 205 | 5.9  | 190 | 4.9  | 200 | 5.2  | 210 | 3.6  | 190 | 3.3  | 190 | 2.3  | 185 | 2.3  | 190 | 2.0  | 190 | 2.0  | 210 | 2.0  | 3.5  | 16   |
| 205 | 8.9  | 205 | 9.8  | 220 | 8.2  | 230 | 6.9  | 220 | 6.9  | 215 | 8.2  | 210 | 7.9  | 210 | 6.2  | 210 | 6.6  | 205 | 5.9  | 215 | 4.9  | 235 | 4.6  | 5.1  | 17   |
| 255 | 5.9  | 270 | 4.9  | 260 | 3.9  | 295 | 2.3  | 255 | 2.6  | 245 | 2.0  | 245 | 2.6  | 245 | 2.3  | 245 | 2.6  | 240 | 2.6  | 235 | 3.3  | 230 | 2.3  | 4.5  | 18   |
| 225 | 3.9  | 235 | 4.6  | 255 | 3.9  | 250 | 4.9  | 255 | 5.6  | 230 | 5.2  | 225 | 3.9  | 225 | 3.3  | 225 | 2.3  | 225 | 2.3  | 225 | 2.6  | 210 | 2.3  | 3.2  | 19   |
| 205 | 6.2  | 210 | 4.6  | 205 | 5.6  | 205 | 4.3  | 205 | 5.2  | 235 | 2.0  | 235 | 1.6  | 215 | 2.3  | 215 | 2.6  | 225 | 2.0  | 235 | 2.6  | 230 | 2.3  | 3.1  | 20   |
| 220 | 6.9  | 205 | 6.9  | 205 | 6.9  | 210 | 6.6  | 210 | 7.5  | 210 | 7.5  | 205 | 6.9  | 205 | 5.6  | 210 | 4.9  | 210 | 4.6  | 210 | 3.6  | 215 | 4.6  | 5.6  | 21   |
| 230 | 3.9  | 210 | 4.3  | 205 | 4.6  | 200 | 5.6  | 205 | 5.2  | 230 | 3.3  | 225 | 2.3  | 200 | 2.6  | 195 | 1.6  | 195 | 2.3  | 195 | 2.0  | 200 | 2.0  | 3.8  | 22   |
| 250 | 3.3  | 235 | 4.3  | 245 | 3.3  | 275 | 3.3  | 290 | 4.9  | 270 | 2.6  | 255 | 2.0  | 265 | 1.6  | 285 | 2.6  | 29  |      |     |      |     |      |      |      |

Directions expressed in degrees from North (E=90°, S=180°, W=270°, N=360°) : Speed in metres per second.

460. Richmond (Kew Observatory) :

H<sub>a</sub> (height of cups of anemograph above M.S.L.)=Height of ground above.

| Day.     | 1.  |      | 2.  |      | 3.  |      | 4.  |      | 5.  |      | 6.  |      | 7.   |      | 8.  |      | 9.  |      | 10. |      | 11. |      | Noon. |      |   |      |
|----------|-----|------|-----|------|-----|------|-----|------|-----|------|-----|------|------|------|-----|------|-----|------|-----|------|-----|------|-------|------|---|------|
|          | °   | m/s. | °   | m/s. | °   | m/s. | °   | m/s. | °   | m/s. | °   | m/s. | °    | m/s. | °   | m/s. | °   | m/s. | °   | m/s. | °   | m/s. | °     | m/s. | ° | m/s. |
| 1        | 230 | 1.6  | 230 | 1.6  | 230 | 2.3  | 240 | 2.6  | 245 | 2.6  | 235 | 2.3  | 240  | 3.6  | 250 | 3.9  | 255 | 4.3  | 245 | 5.2  | 250 | 4.6  | 255   | 4.3  |   |      |
| 2        | 280 | 2.3  | 280 | 2.3  | 280 | 2.6  | 285 | 2.0  | 290 | 2.3  | 295 | 1.6  | 285  | 2.0  | 300 | 2.3  | 315 | 2.3  | 320 | 3.6  | 335 | 2.0  | 335   | 1.6  |   |      |
| 3        | —   | 1.0  | —   | 1.3  | 35  | 1.6  | 5   | 2.0  | 355 | 3.0  | 355 | 3.6  | 360  | 4.6  | 360 | 4.3  | 10  | 5.2  | 15  | 6.2  | 15  | 5.9  | 20    | 4.9  |   |      |
| 4        | 15  | 3.9  | 20  | 3.3  | 15  | 3.3  | 5   | 3.3  | 10  | 3.9  | 20  | 4.9  | 30   | 3.9  | 30  | 5.2  | 30  | 4.6  | 35  | 5.2  | 30  | 3.9  | 15    | 4.3  |   |      |
| 5        | —   | 0.7  | —   | 0.7  | —   | 0.0  | —   | 0.3  | —   | 0.3  | —   | 0.3  | —    | 1.0  | —   | 0.7  | —   | 0.7  | 20  | 1.6  | —   | 1.3  | —     | 1.3  |   |      |
| 6        | 185 | 2.0  | —   | 0.0  | —   | 0.0  | —   | 0.3  | —   | 1.0  | —   | 1.0  | 1.75 | 1.6  | 100 | 2.3  | 95  | 2.6  | 90  | 3.6  | 85  | 3.6  | 100   | 3.9  |   |      |
| 7        | —   | 1.3  | —   | 1.0  | 100 | 2.0  | 100 | 2.6  | 100 | 1.6  | 100 | 2.3  | 100  | 3.0  | 100 | 3.9  | 120 | 3.9  | 120 | 2.3  | 110 | 3.0  | 110   | 2.6  |   |      |
| 8        | 195 | 1.6  | 170 | 2.3  | 205 | 2.3  | —   | 1.0  | 185 | 2.6  | 200 | 3.6  | 205  | 3.3  | 215 | 5.2  | 220 | 6.2  | 215 | 7.5  | 220 | 8.2  | 220   | 7.2  |   |      |
| 9        | 200 | 3.0  | 195 | 3.0  | 185 | 3.0  | 190 | 3.0  | 205 | 3.3  | 200 | 4.6  | 205  | 5.6  | 210 | 6.9  | 205 | 6.9  | 205 | 8.9  | 245 | 6.6  | 250   | 4.9  |   |      |
| 10       | 265 | 3.9  | 275 | 3.9  | 275 | 3.6  | 275 | 3.3  | 280 | 3.0  | 290 | 2.3  | 280  | 3.0  | 280 | 3.9  | 300 | 3.9  | 310 | 4.3  | 300 | 3.6  | 300   | 4.3  |   |      |
| 11       | 220 | 1.6  | 215 | 2.3  | 195 | 2.0  | 195 | 3.3  | 190 | 3.6  | 195 | 4.9  | 200  | 4.9  | 200 | 4.3  | 215 | 4.3  | 230 | 5.2  | 235 | 4.9  | 230   | 4.9  |   |      |
| 12       | 205 | 3.6  | 210 | 4.6  | 210 | 4.6  | 205 | 3.9  | 205 | 4.6  | 205 | 3.6  | 200  | 4.3  | 195 | 4.9  | 200 | 4.9  | 200 | 5.9  | 195 | 7.2  | 195   | 6.9  |   |      |
| 13       | 205 | 5.6  | 200 | 6.2  | 200 | 6.2  | 200 | 5.6  | 205 | 5.9  | 200 | 5.6  | 195  | 5.6  | 200 | 7.5  | 210 | 8.2  | 205 | 10.2 | 210 | 8.2  | 205   | 8.2  |   |      |
| 14       | 210 | 2.6  | 235 | 3.3  | —   | 1.3  | 305 | 2.3  | —   | 1.3  | 295 | 1.6  | 275  | 1.6  | 265 | 2.0  | 275 | 3.0  | 270 | 4.6  | 270 | 5.2  | 265   | 4.3  |   |      |
| 15       | 225 | 3.3  | 225 | 2.6  | 225 | 1.6  | 225 | 2.0  | 225 | 3.0  | 225 | 2.3  | 225  | 3.0  | 225 | 2.6  | 225 | 3.3  | 225 | 4.6  | 230 | 3.9  | 230   | 4.3  |   |      |
| 16       | 210 | 7.2  | 210 | 7.2  | 215 | 5.6  | 220 | 3.9  | 225 | 3.6  | 230 | 3.9  | 230  | 3.6  | 240 | 4.3  | 245 | 4.9  | 245 | 6.9  | 250 | 6.2  | 245   | 5.9  |   |      |
| 17       | 215 | 6.2  | 220 | 5.9  | 220 | 6.2  | 215 | 5.9  | 210 | 5.9  | 210 | 7.5  | 215  | 5.6  | 215 | 6.6  | 215 | 5.6  | 220 | 9.2  | 215 | 8.9  | 210   | 8.9  |   |      |
| 18       | 245 | 3.0  | 235 | 3.9  | 230 | 3.3  | 230 | 2.3  | 230 | 3.0  | 225 | 2.3  | 225  | 3.6  | 250 | 3.6  | 255 | 3.6  | 245 | 5.6  | 260 | 5.9  | 255   | 5.6  |   |      |
| 19       | —   | 0.7  | —   | 0.3  | —   | 0.3  | —   | 0.0  | —   | 0.0  | —   | 0.0  | —    | 0.0  | —   | 0.3  | —   | 1.0  | —   | 1.3  | 170 | 2.6  | 160   | 3.0  |   |      |
| 20       | 190 | 4.3  | 205 | 5.9  | 205 | 5.6  | 210 | 7.2  | 215 | 8.2  | 215 | 6.9  | 225  | 6.2  | 230 | 5.2  | 225 | 5.2  | 220 | 5.6  | 225 | 4.6  | 220   | 3.0  |   |      |
| 21       | 225 | 8.5  | 220 | 7.5  | 220 | 8.5  | 220 | 7.9  | 225 | 7.2  | 225 | 6.9  | 225  | 6.9  | 225 | 6.9  | 240 | 6.2  | 235 | 6.6  | 240 | 6.2  | 240   | 5.9  |   |      |
| 22       | —   | 1.3  | —   | 1.3  | —   | 1.0  | 190 | 2.3  | 190 | 2.6  | 200 | 2.6  | 205  | 2.6  | 235 | 4.9  | 240 | 5.9  | 240 | 8.2  | 245 | 7.5  | 240   | 7.2  |   |      |
| 23       | 165 | 5.2  | 170 | 7.2  | 175 | 7.2  | 175 | 7.2  | 180 | 7.5  | 185 | 3.9  | 185  | 4.6  | 185 | 3.6  | 185 | 3.3  | 195 | 3.3  | 195 | 5.6  | 185   | 5.2  |   |      |
| 24       | 205 | 6.2  | 205 | 5.9  | 205 | 5.9  | 210 | 5.2  | 215 | 4.9  | 220 | 4.3  | 225  | 4.9  | 230 | 5.2  | 240 | 5.2  | 245 | 5.2  | 245 | 5.2  | 235   | 5.6  |   |      |
| 25       | 190 | 1.6  | 145 | 2.0  | 125 | 3.6  | 115 | 3.3  | 110 | 3.9  | 105 | 3.6  | 100  | 4.6  | 100 | 6.2  | 100 | 4.6  | 105 | 8.9  | 115 | 5.6  | 105   | 5.9  |   |      |
| 26       | 70  | 4.9  | 70  | 4.6  | 70  | 4.3  | 55  | 4.3  | 60  | 3.9  | 65  | 3.6  | 65   | 3.6  | 60  | 3.0  | 60  | 2.0  | 70  | 4.3  | 60  | 3.6  | 40    | 4.6  |   |      |
| 27       | 350 | 5.2  | 350 | 5.2  | 350 | 4.9  | 350 | 5.2  | 350 | 5.6  | 350 | 4.9  | 360  | 4.3  | 360 | 4.6  | 360 | 4.9  | 360 | 4.9  | 360 | 4.3  | 360   | 5.9  |   |      |
| 28       | —   | 0.3  | —   | 0.3  | —   | 0.7  | —   | 0.7  | —   | 0.3  | —   | 0.7  | —    | 0.3  | —   | 0.7  | —   | 0.3  | —   | 0.3  | —   | 0.7  | 240   | 2.6  |   |      |
| 29       | 180 | 3.0  | 180 | 2.3  | 180 | 2.3  | 180 | 2.3  | 180 | 3.9  | 180 | 3.9  | 180  | 3.0  | 175 | 4.3  | 175 | 5.6  | 180 | 7.9  | 180 | 6.9  | 180   | 8.5  |   |      |
| 30       | 175 | 3.0  | 175 | 2.0  | 175 | 2.0  | 170 | 2.0  | 175 | 3.0  | 195 | 3.0  | 190  | 2.0  | 180 | 3.3  | 180 | 4.3  | 180 | 5.6  | 175 | 4.6  | 170   | 4.9  |   |      |
| Mean ... | —   | 3.3  | —   | 3.3  | —   | 3.3  | —   | 3.2  | —   | 3.5  | —   | 3.4  | —    | 3.6  | —   | 4.1  | —   | 4.2  | —   | 5.4  | —   | 5.0  | —     | 5.0  |   |      |

461. Richmond (Kew Observatory) : H<sub>a</sub>=5 metres+20 metres.

| Day. | 1.  |      | 2.  |      | 3.  |      | 4.  |      | 5.  |      | 6.  |      | 7.  |      | 8.  |      | 9.  |      | 10. |      | 11. |      | Noon. |      |   |      |
|------|-----|------|-----|------|-----|------|-----|------|-----|------|-----|------|-----|------|-----|------|-----|------|-----|------|-----|------|-------|------|---|------|
|      | °   | m/s. | °   | m/s. | °   | m/s. | °   | m/s. | °   | m/s. | °   | m/s. | °   | m/s. | °   | m/s. | °   | m/s. | °   | m/s. | °   | m/s. | °     | m/s. | ° | m/s. |
| 1    | 315 | 2.3  | 295 | 2.3  | 300 | 2.3  | 300 | 2.0  | 300 | 1.6  | 300 | 1.6  | —   | 1.3  | —   | 1.3  | —   | 1.0  | —   | 1.3  | 305 | 2.0  | 305   | 1.6  |   |      |
| 2    | —   | 0.7  | —   | 0.7  | —   | 0.7  | —   | 0.3  | —   | 0.7  | —   | 0.0  | —   | 0.0  | —   | 0.3  | —   | 0.0  | —   | 0.3  | —   | 1.3  | 300   | 1.6  |   |      |
| 3    | —   | 0.3  | —   | 0.3  | —   | 0.7  | —   | 0.3  | —   | 0.3  | —   | 0.3  | —   | 0.0  | —   | 0.3  | —   | 0.0  | —   | 1.3  | 95  | 2.3  | —     | 1.0  |   |      |
| 4    | —   | 1.0  | —   | 0.3  | —   | 1.0  | —   | 0.7  | —   | 0.3  | —   | 0.0  | —   | 0.0  | —   | 0.0  | —   | 0.3  | —   | 0.7  | 170 | 3.9  | 195   | 1.6  |   |      |
| 5    | —   | 1.3  | —   | 0.7  | —   | 0.7  | —   | 1.3  | —   | 1.3  | —   | 1.0  | —   | 0.3  | —   | 0.7  | —   | 1.0  | —   | 1.0  | 110 | 1.6  | 240   | 2.0  |   |      |
| 6    | 230 | 6.2  | 225 | 5.2  | 225 | 4.3  | 225 | 4.3  | 220 | 3.6  | 220 | 3.0  | 215 | 3.3  | 210 | 4.3  | 205 | 5.6  | 210 | 6.2  | 190 | 6.6  | 195   | 6.2  |   |      |
| 7    | 220 | 4.6  | 230 | 4.6  | 230 | 4.3  | 230 | 3.0  | 220 | 3.6  | 220 | 3.9  | 215 | 3.9  | 220 | 3.9  | 230 | 3.3  | 230 | 3.3  | 220 | 4.3  | 225   | 3.0  |   |      |
| 8    | 80  | 3.6  | 70  | 4.3  | 65  | 4.3  | 65  | 3.9  | 80  | 3.6  | 90  | 3.6  | 170 | 2.6  | —   | 0.7  | 215 | 2.0  | 280 | 3.3  | 315 | 6.6  | 300   | 6.9  |   |      |
| 9    | —   | 1.3  | —   | 1.0  | 235 | 2.3  | 230 | 2.6  | 250 | 3.0  | 240 | 2.3  | 235 | 2.6  | 240 | 3.0  | 250 | 3.9  | 270 | 4.3  | 265 | 4.6  | 260   | 5.2  |   |      |
| 10   | 215 | 5.6  | 215 | 5.9  | 215 | 5.6  | 220 | 5.2  | 215 | 5.9  | 210 | 5.9  | 210 | 5.2  | 205 | 5.6  | 215 | 7.5  | 220 | 9.5  | 215 | 6.9  | 220   | 6.2  |   |      |
| 11   | 195 | 4.6  | 190 | 4.3  | 200 | 3.9  | 185 | 3.0  | 190 | 3.3  | 190 | 3.0  | 190 | 3.3  | 105 | 3.6  | 190 | 3.3  | 190 | 4.9  | 190 | 3.3  | 215   | 2.3  |   |      |
| 12   | 180 | 2.0  | 180 | 2.0  | —   | 1.3  | —   | 1.0  | 180 | 1.6  | 180 | 2.6  | 180 | 2.3  | 180 | 2.0  | 180 | 2.0  | 180 | 2.6  | 175 | 3.0  | 155   | 2.6  |   |      |
| 13   | 85  | 2.0  | —   | 1.3  | —   | 1.3  | 85  | 2.0  | 85  | 2.6  | 85  | 2.0  | 85  | 1.6  | 85  | 2.0  | —   | 0.7  | —   | 0.0  | 100 | 3.3  | 90    | 3.3  |   |      |
| 14   | —   | 0.3  | —   | 0.7  | 95  | 1.6  | —   | 1.3  | 60  | 1.6  | —   | 1.3  | 60  | 1.6  | —   | 1.3  | —   | 1.3  | —   | 0.7  | —   | 0.0  | —     | 0.3  |   |      |
| 15   | 70  | 5.2  | 70  | 4.6  | 65  | 4.9  | 65  | 4.9  | 65  | 3.9  | 55  | 3.9  | 50  | 3.9  | 55  | 3.9  | 55  | 4.3  | 60  | 3.6  | 60  | 3.9  | 60    | 4.6  |   |      |
| 16   | —   | 0.3  | 100 | 2.0  | —   | 1.3  | —   | 1.3  | —   | 1.3  | 100 | 1.6  | 125 | 2.3  | —   | 1.0  | —   | 0.7  | —   | 0.7  | —   | 0.3  | —     | 0.3  |   |      |
| 17   | —   | 0.7  | —   | 0.3  | —   | 0.3  | —   | 0.3  | —   | 1.0  | —   | 1.3  | —   | 1.0  | —   | 1.3  | —   | 1.3  | 240 | 1.6  | 250 | 1.6  | 325   | 2.6  |   |      |
| 18   | —   | 0.3  | —   | 0.3  | —   | 0.7  | —   | 0.7  | —   | 0.7  | —   | 1.0  | —   | 0.7  | 315 | 1.6  | —   | 0.3  | —   | 1.0  | —   | 1.3  | 190   | 2.3  |   |      |
| 19   | —   | 0.3  | —   | 0.7  | —   | 0.7  | —   | 0.7  | —   | 0.7  | 190 | 2.6  | 190 | 2.6  | 190 | 2.6  | 190 | 2.6  | 185 | 3.6  | 185 | 4.3  | 190   | 4.3  |   |      |
| 20   | 255 | 2.6  | 225 | 3.0  | 220 | 2.3  | 220 | 2.0  | 220 | 2.3  | 220 | 2.6  | 220 | 2.6  | 220 | 2.0  | 225 | 2.3  | 225 | 3.6  | 230 | 3.0  | 240   | 3.6  |   |      |
| 21   | —   | 0.7  | —   | 1.0  | 250 | 2.0  | —   | 1.3  | 180 | 2.6  | 95  | 3.3  | 90  | 3.3  | 80  | 3.3  | 75  | 3.3  | 85  | 4.9  | 80  | 6.2  | 80    | 6.6  |   |      |
| 22   | 275 | 3.0  | 320 | 4.6  | 340 | 6.9  | 360 | 10.2 | 360 | 10.8 | 360 | 8.2  | 360 | 8.5  | 360 | 8.2  | 360 | 7.5  | 10  | 7.5  | 10  | 7.9  | 355   | 5.2  |   |      |
| 23   | —   | 0.7  | —   | 0.7  | 10  | 1.6  | —   | 0.3  | —   | 0.0  | —   | 0.7  | —   | 1.0  | —   | 0.7  | —   | 1.3  | 10  | 2.6  | 25  | 2.3  | 35    | 3.3  |   |      |
| 24   | —   | 0.7  | 30  | 2.0  | —   | 1.0  | —   | 1.3  | —   | 1.0  | —   | 1.0  | 20  | 1.6  | —   | 1.3  | —   | 1.3  | 90  | 5.9  | 80  | 10.8 | 65    | 8.5  |   |      |
| 25   | —   | 1.3  | —   | 0.7  | 65  | 1.6  | 55  | 2.0  | 55  | 2.0  | 55  | 1.6  | 55  | 1.6  | —   | 1.3  | 80  | 2.0  | 90  | 2.3  | 90  | 3.6  | 95    | 3.3  |   |      |
| 26   | 95  | 2.0  | 80  | 2.0  | 80  | 2.0  | 75  | 3.9  | 70  | 4.6  | 70  | 4.9  | 75  | 5.2  | 75  | 4.9  | 80  | 5.9  | 70  | 6.2  | 75  | 6.6  | 75    | 5.2  |   |      |
| 27   | 235 | 2.6  | 235 | 3.3  | 235 | 2.6  | 225 | 2.3  | 225 | 2.3  | 225 | 2.6  | 225 | 2.6  | 220 | 3.3  | 225 | 3.9  | 230 | 3.9  |     |      |       |      |   |      |

Averages for periods of sixty minutes, centered at the exact hours, Greenwich Mean Time.

M.S.L. + h<sub>a</sub> (height of anemograph above ground) = 5 metres + 20 metres.

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| 13. |      | 14. |      | 15. |      | 16. |      | 17. |      | 18. |      | 19. |      | 20. |      | 21. |      | 22. |      | 23. |      | 24. |      | Mean | Day. |  |  |
|-----|------|-----|------|-----|------|-----|------|-----|------|-----|------|-----|------|-----|------|-----|------|-----|------|-----|------|-----|------|------|------|--|--|
| °   | m/s. | °   | m/s. | °   | m/s. | °   | m/s. | °   | m/s. | °   | m/s. | °   | m/s. | °   | m/s. | °   | m/s. | °   | m/s. | °   | m/s. | °   | m/s. | °    | m/s. |  |  |
| 250 | 3.6  | 245 | 4.3  | 250 | 3.9  | 265 | 3.6  | 265 | 3.3  | 260 | 2.6  | 260 | 2.3  | 265 | 2.3  | 265 | 2.3  | 250 | 2.0  | 255 | 2.3  | 270 | 3.0  | 3.1  | 1    |  |  |
| 320 | 2.6  | 325 | 2.6  | 335 | 1.6  | 335 | 1.6  | —   | 1.3  | —   | 1.3  | 340 | 2.0  | 10  | 2.0  | 20  | 3.3  | 20  | 1.6  | 15  | 2.6  | 25  | 2.3  | 2.2  | 2    |  |  |
| 25  | 4.6  | 25  | 5.6  | 20  | 6.2  | 20  | 5.6  | 30  | 6.2  | 20  | 5.2  | 25  | 4.6  | 30  | 4.6  | 30  | 4.6  | 25  | 3.9  | 20  | 4.3  | 15  | 3.9  | 4.3  | 3    |  |  |
| 15  | 3.9  | 15  | 3.3  | 40  | 3.9  | 40  | 2.6  | 35  | 2.3  | 30  | 1.6  | 20  | 1.6  | 20  | 1.6  | 20  | 1.6  | 20  | 1.6  | 20  | 1.6  | —   | 1.3  | 3.2  | 4    |  |  |
| —   | 1.0  | —   | 1.3  | 190 | 2.0  | —   | 1.3  | 185 | 1.6  | —   | 1.3  | —   | 1.3  | —   | 1.0  | —   | 1.3  | —   | 1.0  | —   | 0.3  | —   | 0.7  | 1.0  | 5    |  |  |
| 100 | 4.3  | 110 | 3.6  | 110 | 4.3  | 140 | 3.6  | 120 | 3.0  | 120 | 2.3  | 110 | 2.6  | 85  | 3.9  | 85  | 3.0  | —   | 1.3  | 90  | 2.0  | 100 | 1.6  | 2.4  | 6    |  |  |
| 120 | 3.6  | 105 | 4.6  | 125 | 4.3  | 130 | 3.3  | 110 | 3.0  | 110 | 2.3  | 130 | 2.3  | 165 | 2.6  | 170 | 4.3  | 190 | 2.6  | 190 | 2.0  | 190 | 2.6  | 2.8  | 7    |  |  |
| 215 | 8.5  | 215 | 8.9  | 210 | 8.9  | 210 | 6.6  | 205 | 7.2  | 200 | 4.9  | 190 | 3.6  | 185 | 2.3  | 185 | 3.3  | 190 | 3.6  | 190 | 3.3  | 190 | 3.0  | 4.8  | 8    |  |  |
| 245 | 4.3  | 250 | 3.9  | 240 | 6.6  | 250 | 6.2  | 265 | 4.9  | 260 | 3.6  | 260 | 3.3  | 275 | 3.3  | 270 | 4.6  | 265 | 4.3  | 255 | 3.9  | 255 | 3.3  | 4.7  | 9    |  |  |
| 305 | 3.9  | 290 | 3.9  | 300 | 3.9  | 275 | 3.3  | 275 | 2.3  | 250 | 2.0  | —   | 1.3  | 230 | 2.0  | 225 | 2.3  | 220 | 2.0  | 220 | 3.0  | 220 | 1.6  | 3.1  | 10   |  |  |
| 245 | 4.3  | 245 | 3.9  | 245 | 5.2  | 240 | 5.6  | 235 | 4.9  | 235 | 3.0  | 225 | 2.3  | 220 | 2.3  | 225 | 2.6  | 215 | 3.9  | 215 | 3.9  | 210 | 3.9  | 3.8  | 11   |  |  |
| 200 | 8.5  | 195 | 8.2  | 200 | 8.2  | 195 | 5.6  | 190 | 4.9  | 190 | 6.2  | 195 | 6.6  | 300 | 5.6  | 195 | 5.6  | 200 | 7.2  | 200 | 4.9  | 200 | 5.9  | 5.6  | 12   |  |  |
| 210 | 7.9  | 205 | 8.5  | 205 | 8.2  | 205 | 7.2  | 205 | 6.2  | 205 | 5.6  | 200 | 3.9  | 195 | 2.6  | 190 | 2.3  | 190 | 2.0  | 195 | 2.0  | 205 | 2.0  | 6.0  | 13   |  |  |
| 260 | 5.6  | 270 | 4.9  | 260 | 4.6  | 260 | 4.9  | 260 | 4.6  | 255 | 3.3  | 240 | 2.6  | 230 | 2.6  | 230 | 2.6  | 225 | 3.0  | 225 | 2.3  | 225 | 3.3  | 3.2  | 14   |  |  |
| 210 | 6.9  | 210 | 5.6  | 215 | 6.2  | 215 | 6.9  | 210 | 7.2  | 210 | 5.6  | 210 | 6.2  | 210 | 5.6  | 210 | 5.6  | 210 | 3.9  | 215 | 6.9  | 205 | 7.5  | 4.6  | 15   |  |  |
| 240 | 4.6  | 225 | 4.6  | 225 | 4.3  | 220 | 5.2  | 210 | 5.6  | 205 | 5.9  | 210 | 5.9  | 210 | 5.9  | 205 | 5.9  | 210 | 6.9  | 215 | 5.6  | 220 | 6.2  | 5.4  | 16   |  |  |
| 210 | 9.2  | 205 | 9.8  | 215 | 8.2  | 215 | 7.2  | 215 | 7.5  | 210 | 7.2  | 215 | 6.6  | 235 | 3.6  | 235 | 4.3  | 230 | 4.3  | 230 | 3.9  | 230 | 3.9  | 6.6  | 17   |  |  |
| 270 | 4.9  | 260 | 4.3  | 265 | 2.3  | 270 | 3.0  | —   | 1.3  | 270 | 1.6  | —   | 0.7  | —   | 1.0  | —   | 1.0  | —   | 0.7  | —   | 1.3  | —   | 0.7  | 2.9  | 18   |  |  |
| 165 | 2.6  | 170 | 3.6  | 170 | 3.6  | 170 | 2.6  | 165 | 2.0  | 145 | 1.6  | —   | 1.3  | —   | 1.0  | —   | 1.0  | —   | 1.0  | —   | 0.0  | —   | 0.3  | 1.3  | 19   |  |  |
| 195 | 4.6  | 190 | 6.9  | 195 | 6.2  | 190 | 7.2  | 195 | 7.2  | 195 | 9.2  | 195 | 8.5  | 195 | 9.5  | 205 | 9.8  | 210 | 9.8  | 220 | 10.2 | 225 | 7.9  | 6.7  | 20   |  |  |
| 225 | 6.9  | 220 | 6.9  | 220 | 6.6  | 215 | 5.6  | 205 | 4.3  | 205 | 3.3  | 205 | 2.0  | —   | 1.3  | 205 | 1.6  | 190 | 1.6  | —   | 1.0  | —   | 1.3  | 5.5  | 21   |  |  |
| 245 | 6.6  | 250 | 8.2  | 260 | 5.9  | 260 | 5.2  | 240 | 3.0  | 225 | 3.0  | 210 | 2.6  | 190 | 2.6  | 180 | 3.0  | 180 | 3.6  | 170 | 2.6  | 165 | 4.3  | 4.0  | 22   |  |  |
| 195 | 4.6  | 195 | 5.9  | 200 | 5.9  | 205 | 6.9  | 205 | 5.9  | 195 | 5.6  | 185 | 3.9  | 185 | 3.9  | 180 | 3.6  | 190 | 6.9  | 195 | 6.2  | 200 | 6.6  | 5.4  | 23   |  |  |
| 235 | 4.6  | 225 | 5.2  | 225 | 4.9  | 220 | 5.2  | 205 | 3.6  | 195 | 3.0  | 190 | 2.3  | 190 | 1.6  | 190 | 2.0  | 185 | 2.3  | —   | 0.7  | —   | 1.0  | 4.3  | 24   |  |  |
| 110 | 4.9  | 120 | 6.2  | 105 | 5.6  | 105 | 5.2  | 95  | 5.2  | 140 | 2.3  | —   | 1.3  | 150 | 1.6  | 75  | 3.6  | 75  | 3.3  | 75  | 3.9  | 75  | 4.6  | 4.2  | 25   |  |  |
| 45  | 3.3  | 30  | 3.6  | 30  | 3.3  | 30  | 3.6  | 20  | 3.0  | 5   | 3.3  | 15  | 4.9  | 20  | 3.3  | 355 | 4.3  | 355 | 4.6  | 355 | 4.6  | 350 | 4.9  | 3.9  | 26   |  |  |
| 360 | 4.6  | 355 | 4.6  | 355 | 4.9  | 360 | 4.6  | 355 | 2.3  | 355 | 2.3  | —   | 1.3  | —   | 1.3  | —   | 0.3  | —   | 0.3  | —   | 0.7  | —   | 0.0  | 3.7  | 27   |  |  |
| 180 | 4.6  | 185 | 5.2  | 185 | 5.9  | 185 | 4.9  | 185 | 3.6  | 180 | 3.0  | 180 | 2.6  | 180 | 1.6  | 180 | 2.0  | 180 | 2.0  | 180 | 1.6  | 180 | 1.6  | 1.9  | 28   |  |  |
| 175 | 8.2  | 175 | 8.9  | 175 | 7.9  | 170 | 6.2  | 165 | 5.9  | 170 | 4.9  | 175 | 3.6  | 175 | 4.6  | 170 | 4.3  | 180 | 6.2  | 175 | 5.2  | 175 | 4.3  | 5.1  | 29   |  |  |
| 170 | 4.3  | 170 | 5.2  | 165 | 4.6  | 165 | 3.3  | 200 | 2.3  | —   | 0.7  | —   | 0.3  | —   | 0.7  | —   | 0.3  | —   | 1.6  | —   | 1.3  | 270 | 1.6  | 2.8  | 30   |  |  |
| —   | 5.1  | —   | 5.4  | —   | 5.3  | —   | 4.8  | —   | 4.2  | —   | 3.6  | —   | 3.1  | —   | 2.9  | —   | 3.2  | —   | 3.3  | —   | 3.1  | —   | 3.2  | 3.9  | Mean |  |  |

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| °   | m/s. | °   | m/s. | °   | m/s. | °   | m/s. | °   | m/s. | °   | m/s. | °   | m/s. | °   | m/s. | °   | m/s. | °   | m/s. | °   | m/s. | °   | m/s. | °   | m/s. | °   | m/s. | ° | m/s. | ° | m/s. | ° | m/s. | Mean | Day. |
|-----|------|-----|------|-----|------|-----|------|-----|------|-----|------|-----|------|-----|------|-----|------|-----|------|-----|------|-----|------|-----|------|-----|------|---|------|---|------|---|------|------|------|
| —   | 1.3  | —   | 1.3  | —   | 1.3  | 65  | 1.6  | —   | 1.3  | —   | 1.3  | —   | 0.7  | —   | 1.3  | —   | 1.0  | —   | 1.0  | —   | 1.0  | —   | 1.0  | —   | 1.0  | 1.0 | 1.5  | 1 |      |   |      |   |      |      |      |
| 170 | 2.0  | 190 | 3.0  | 185 | 2.6  | 185 | 2.0  | —   | 1.3  | 185 | 1.6  | —   | 1.0  | —   | 1.0  | —   | 0.3  | —   | 0.3  | —   | 0.3  | —   | 0.0  | —   | 0.0  | 1.0 | 0.9  | 2 |      |   |      |   |      |      |      |
| 70  | 1.6  | 60  | 2.0  | 60  | 2.0  | —   | 1.3  | 110 | 1.6  | —   | 1.6  | —   | 1.3  | —   | 1.0  | —   | 0.3  | —   | 1.3  | —   | 0.7  | —   | 0.7  | —   | 0.7  | 0.9 | 3    |   |      |   |      |   |      |      |      |
| —   | 0.7  | 140 | 1.6  | 90  | 3.3  | 100 | 3.9  | 100 | 3.6  | 90  | 2.0  | —   | 0.7  | —   | 1.0  | —   | 0.7  | —   | 1.0  | —   | 1.0  | —   | 1.0  | —   | 1.0  | 1.3 | 4    |   |      |   |      |   |      |      |      |
| 230 | 3.3  | 220 | 3.6  | 230 | 3.3  | 220 | 3.6  | 205 | 3.3  | 195 | 3.3  | 180 | 3.3  | 175 | 3.9  | 185 | 4.6  | 200 | 6.9  | 210 | 7.2  | 220 | 6.6  | 2.6 | 5    |     |      |   |      |   |      |   |      |      |      |
| 195 | 6.6  | 195 | 7.5  | 200 | 6.6  | 200 | 6.6  | 205 | 8.5  | 205 | 7.2  | 205 | 8.2  | 205 | 8.5  | 205 | 8.9  | 200 | 9.8  | 230 | 6.9  | 235 | 3.3  | 6.2 | 6    |     |      |   |      |   |      |   |      |      |      |
| 220 | 3.9  | 220 | 3.6  | 200 | 3.3  | —   | 1.3  | 195 | 1.6  | 195 | 2.0  | —   | 1.0  | —   | 1.0  | 95  | 3.0  | 90  | 4.3  | 85  | 4.6  | 85  | 3.0  | 3.3 | 7    |     |      |   |      |   |      |   |      |      |      |
| 295 | 6.9  | 280 | 5.2  | 285 | 6.2  | 270 | 3.6  | 255 | 2.6  | 245 | 3.0  | 240 | 3.0  | 235 | 2.6  | 235 | 2.6  | —   | 1.0  | —   | 1.0  | —   | 0.7  | 3.5 | 8    |     |      |   |      |   |      |   |      |      |      |
| 265 | 4.9  | 240 | 4.6  | 230 | 4.6  | 220 | 4.6  | 205 | 3.3  | 195 | 3.6  | 200 | 4.3  | 205 | 4.9  | 210 | 5.6  | 205 | 4.6  | 205 | 5.6  | 210 | 5.6  | 3.7 | 9    |     |      |   |      |   |      |   |      |      |      |
| 220 | 8.9  | 215 | 7.2  | 215 | 7.2  | 210 | 6.2  | 200 | 6.2  | 200 | 4.9  | 200 | 5.2  | 190 | 3.6  | 195 | 4.9  | 195 | 4.6  | 190 | 3.9  | 190 | 3.9  | 5.9 | 10   |     |      |   |      |   |      |   |      |      |      |
| 210 | 3.3  | 200 | 2.3  | 220 | 2.6  | 205 | 1.6  | 175 | 3.6  | 170 | 3.0  | 170 | 3.3  | 175 | 3.3  | 180 | 3.3  | 180 | 3.3  | 180 | 3.3  | 180 | 2.3  | 3.3 | 11   |     |      |   |      |   |      |   |      |      |      |
| 170 | 3.3  | 170 | 1.6  | 140 | 2.3  | 140 | 1.6  | 145 | 1.6  | 140 | 1.6  | 110 | 2.6  | 95  | 3.0  | 95  | 3.0  | 90  | 2.3  | 85  | 2.3  | 85  | 1.6  | 2.2 | 12   |     |      |   |      |   |      |   |      |      |      |
| 95  | 2.6  | 105 | 2.0  | 105 | 2.0  | —   | 1.3  | 105 | 1.6  | 205 | 2.0  | 105 | 2.0  | —   | 1.0  | —   | 1.0  | —   | 0.7  | —   | 0.0  | —   | 0.0  | 1.6 | 13   |     |      |   |      |   |      |   |      |      |      |
| 80  | 4.1  | 75  | 4.3  | 75  | 3.6  | 75  | 2.6  | 75  | 3.0  | 75  | 4.6  | 75  | 3.9  | 75  | 5.2  | 80  | 6.9  | 75  | 6.2  | 70  | 5.9  | 70  | 5.9  | 2.7 | 14   |     |      |   |      |   |      |   |      |      |      |
| 70  | 3.6  | 75  | 5.2  | 70  | 4.3  | 60  | 3.6  | 70  | 3.6  | 65  | 3.0  | 85  | 4.3  | 85  | 3.3  | 95  | 3.9  | 105 | 2.3  | 100 | 2.0  | —   | 1.3  | 3.9 | 15   |     |      |   |      |   |      |   |      |      |      |
| —   | 0.3  | —   | 1.0  | —   | 0.7  | —   | 1.0  | —   | 1.0  | —   | 1.0  | —   | 1.0  | —   | 1.3  | —   | 0.7  | —   | 0.3  | —   | 0.7  | —   | 1.0  | 1.0 | 1.0  | 16  |      |   |      |   |      |   |      |      |      |
| 350 | 2.6  | 360 | 2.3  | —   | 1.3  | —   | 1.3  | —   | 1.3  | —   | 1.3  | —   | 1.0  | —   | 0.3  | —   | 0.7  | —   | 1.0  | —   | 1.0  | —   | 0.7  | 1.2 | 17   |     |      |   |      |   |      |   |      |      |      |
| 180 | 2.3  | 180 | 2.3  | 185 | 2.3  | —   | 1.0  | 190 | 2.0  | 190 | 1.6  | 190 | 1.6  | —   | 0.7  | —   | 0.7  | —   | 0.3  | —   | 1.0  | —   | 0.7  | 1.1 | 18   |     |      |   |      |   |      |   |      |      |      |
| 190 | 4.6  | 195 | 3.9  | 195 | 3.9  | 205 | 3.9  | 205 | 4.3  | 210 | 3.9  | 205 | 4.6  | 215 | 3.9  | 240 | 3.6  | 255 | 2.6  | 255 | 2.3  | 255 | 2.0  | 2.9 | 19   |     |      |   |      |   |      |   |      |      |      |
| 240 | 3.6  | 260 | 3.0  | 260 | 2.3  | 255 | 2.0  | 250 | 1.6  | —   | 0.7  | —   | 1.0  | —   | 1.0  | —   | 0.3  | —   | 0.3  | —   | 0.3  | —   | 0.7  | 2.1 | 20   |     |      |   |      |   |      |   |      |      |      |
| 80  | 6.9  | 80  | 7.5  | 80  | 5.6  | 75  | 5.2  | 75  | 5.9  | 90  | 3.0  | 85  | 3.3  | 85  | 2.0  | —   | 1.0  | 105 | 1.6  | 155 | 1.6  | 205 | 2.3  | 3.5 | 21   |     |      |   |      |   |      |   |      |      |      |
| 360 | 5.9  | 360 | 6.2  | 5   | 6.2  | 360 | 4.6  | 360 | 4.3  | 360 | 3.0  | 355 | 4.3  | 355 | 3.0  | 340 | 2.3  | 340 | 2.0  | —   | 1.3  | —   | 1.0  | 5.6 | 22   |     |      |   |      |   |      |   |      |      |      |
| 55  | 3.9  | 70  | 3.9  | 70  | 3.9  | 70  | 3.3  | 60  | 3.0  | 50  | 2.3  | 50  | 3.6  | 60  | 3.3  | 45  | 2.3  | —   | 1.0  | —   | 0.7  | —   | 0.3  | 2.0 | 23   |     |      |   |      |   |      |   |      |      |      |
| 70  | 8.2  | 65  | 7.9  | 60  | 8.2  | 70  | 8.2  | 65  | 8.2  | 75  | 6.9  | 90  | 5.2  | 90  | 6.2  | 90  | 5.6  | 90  | 4.3  | 90  | 3.3  | 90  | 2.6  | 4.6 | 24   |     |      |   |      |   |      |   |      |      |      |
| 100 | 2.3  | 100 | 1.6  | 100 | 1.6  | —   | 1.3  | 100 | 2.0  | 100 | 1.6  | —   | 1.   |     |      |     |      |     |      |     |      |     |      |     |      |     |      |   |      |   |      |   |      |      |      |

Direction expressed in degrees from North (E = 90°, S = 180°, W = 270°, N = 360°) : Speed in metres per second.

462. Richmond (Kew Observatory) :

H<sub>a</sub> (height of cups of anemograph above M.S.L.) = Height of ground above.

Table with 23 columns (Day, 1-11, Noon) and 30 rows (1-30). Each cell contains wind speed in m/s and direction in degrees.

463. Richmond (Kew Observatory) : H<sub>a</sub> = 5 metres + 20 metres.

Table with 23 columns (Day, 1-11, Noon) and 31 rows (1-31). Each cell contains wind speed in m/s and direction in degrees.

Averages for periods of sixty minutes, centered at the exact hours, Greenwich Mean Time.

M.S.L. +  $h_a$  (height of anemograph above ground) = 5 metres + 20 metres.

November, 1924.

| 13. |      | 14. |      | 15. |      | 16. |      | 17. |      | 18. |      | 19. |      | 20. |      | 21. |      | 22. |      | 23. |      | 24. |      | Mean | Day. |
|-----|------|-----|------|-----|------|-----|------|-----|------|-----|------|-----|------|-----|------|-----|------|-----|------|-----|------|-----|------|------|------|
| °   | m/s. | °   | m/s. | °   | m/s. | °   | m/s. | °   | m/s. | °   | m/s. | °   | m/s. | °   | m/s. | °   | m/s. | °   | m/s. | °   | m/s. | °   | m/s. | m/s. |      |
| 185 | 2.3  | 165 | 1.6  | 170 | 1.6  | 200 | 3.3  | 215 | 7.5  | 215 | 7.2  | 210 | 8.5  | 210 | 7.9  | 210 | 9.2  | 220 | 7.2  | 225 | 7.5  | 230 | 5.9  | 4.2  | 1    |
| 230 | 8.2  | 230 | 8.2  | 235 | 8.9  | 235 | 8.2  | 235 | 7.9  | 235 | 7.5  | 235 | 7.9  | 230 | 6.6  | 230 | 6.6  | 235 | 5.2  | 225 | 5.2  | 225 | 4.6  | 6.9  | 2    |
| 330 | 2.3  | 340 | 2.6  | 360 | 3.0  | 360 | 2.3  | —   | 1.0  | 355 | 1.6  | 340 | 2.3  | 340 | 2.0  | 340 | 2.0  | 340 | 2.0  | 340 | 2.0  | 340 | 1.6  | 2.3  | 3    |
| 5   | 4.6  | 360 | 4.3  | 10  | 4.3  | 360 | 2.6  | 360 | 1.6  | —   | 0.7  | —   | 1.0  | —   | 1.3  | —   | 0.7  | —   | 0.7  | —   | 0.0  | —   | 0.7  | 2.0  | 4    |
| —   | 1.0  | —   | 0.7  | —   | 1.3  | —   | 0.7  | —   | 0.3  | —   | 0.7  | —   | 1.0  | —   | 1.0  | —   | 1.3  | —   | 1.0  | 335 | 2.0  | 30  | 2.0  | 0.7  | 5    |
| 40  | 5.9  | 35  | 6.9  | 30  | 5.6  | 30  | 5.2  | 25  | 5.2  | 30  | 4.6  | 25  | 5.6  | 25  | 5.9  | 30  | 5.2  | 30  | 4.9  | 30  | 5.6  | 35  | 4.6  | 4.3  | 6    |
| 40  | 6.2  | 40  | 4.9  | 45  | 7.9  | 45  | 5.2  | 45  | 6.6  | 50  | 6.2  | 40  | 5.6  | 45  | 6.6  | 40  | 6.2  | 50  | 4.9  | 55  | 5.9  | 50  | 4.3  | 5.5  | 7    |
| 75  | 7.5  | 75  | 7.9  | 80  | 8.2  | 75  | 8.2  | 70  | 7.9  | 75  | 9.5  | 75  | 10.8 | 85  | 10.5 | 85  | 10.5 | 90  | 5.9  | 95  | 6.2  | 85  | 5.9  | 7.5  | 8    |
| 145 | 3.6  | 160 | 2.6  | 175 | 3.9  | 175 | 2.3  | 150 | 3.3  | 135 | 2.6  | 130 | 3.3  | 135 | 2.6  | 130 | 2.6  | 120 | 2.3  | 120 | 2.0  | 115 | 2.0  | 3.0  | 9    |
| 185 | 2.6  | 180 | 2.0  | 220 | 2.0  | —   | 1.3  | —   | 0.7  | —   | 0.7  | —   | 1.0  | —   | 0.7  | —   | 0.3  | —   | 1.0  | —   | 1.3  | —   | 0.3  | 2.3  | 10   |
| 175 | 3.9  | 175 | 4.3  | 175 | 3.9  | 170 | 3.0  | 175 | 3.0  | 175 | 2.3  | 165 | 2.0  | —   | 1.3  | —   | 1.0  | 155 | 2.6  | 155 | 2.3  | —   | 1.3  | 2.2  | 11   |
| 350 | 4.9  | 350 | 4.9  | 350 | 5.6  | 350 | 6.9  | 355 | 5.9  | 355 | 6.2  | 355 | 6.6  | 355 | 4.9  | 360 | 4.6  | 360 | 4.6  | —   | 5    | 3.3 | 5    | 2.6  | 12   |
| 60  | 2.6  | 75  | 2.0  | 80  | 4.3  | 65  | 4.3  | 65  | 4.3  | 65  | 4.3  | 65  | 4.3  | 75  | 4.6  | 70  | 3.3  | 65  | 3.0  | 65  | 2.6  | —   | 1.3  | 3.6  | 13   |
| 115 | 3.6  | 100 | 3.6  | 80  | 3.3  | 100 | 3.3  | 80  | 4.3  | 95  | 2.6  | 105 | 2.3  | 105 | 3.0  | 100 | 2.6  | 100 | 3.3  | 95  | 3.3  | 95  | 3.6  | 3.2  | 14   |
| 60  | 5.2  | 60  | 5.2  | 60  | 5.2  | 65  | 3.6  | 45  | 4.6  | 45  | 4.6  | 75  | 3.6  | 75  | 2.6  | 55  | 3.6  | 30  | 2.6  | 70  | 3.0  | 80  | 1.6  | 4.4  | 15   |
| 15  | 4.9  | 10  | 3.9  | 10  | 4.9  | 5   | 4.6  | 5   | 4.9  | 15  | 4.9  | 20  | 5.2  | 25  | 4.3  | 30  | 5.2  | 35  | 5.2  | 5   | 3.6  | 360 | 3.9  | 3.8  | 16   |
| 65  | 2.6  | 60  | 1.6  | —   | 1.3  | 60  | 1.6  | —   | 1.3  | —   | 0.0  | —   | 0.0  | —   | 0.3  | —   | 0.0  | —   | 0.3  | —   | 0.3  | —   | 0.0  | 2.5  | 17   |
| —   | 1.3  | —   | 1.3  | —   | 1.0  | —   | 1.3  | —   | 1.3  | 210 | 1.6  | —   | 0.7  | —   | 0.7  | —   | 0.0  | —   | 1.0  | —   | 1.0  | 210 | 2.0  | 1.3  | 18   |
| 315 | 2.0  | 300 | 2.3  | 300 | 1.6  | —   | 1.3  | —   | 0.7  | —   | 0.7  | —   | 0.7  | —   | 0.7  | —   | 1.0  | —   | 1.0  | —   | 1.0  | —   | 1.3  | 1.4  | 19   |
| 320 | 3.3  | 310 | 2.0  | —   | 1.3  | —   | 1.3  | —   | 0.7  | —   | 0.7  | —   | 0.7  | —   | 1.0  | —   | 1.3  | —   | 1.3  | 270 | 2.0  | 290 | 3.3  | 1.7  | 20   |
| 220 | 3.0  | 240 | 2.6  | 235 | 3.0  | 225 | 3.3  | 230 | 3.9  | 225 | 3.0  | 220 | 3.9  | 220 | 3.6  | 240 | 3.0  | 230 | 3.0  | 220 | 3.9  | 225 | 3.6  | 2.7  | 21   |
| 225 | 6.2  | 225 | 5.9  | 230 | 5.2  | 225 | 6.2  | 225 | 5.6  | 225 | 5.6  | 215 | 6.9  | 210 | 4.9  | 210 | 5.6  | 210 | 6.2  | 215 | 5.6  | 215 | 5.6  | 5.5  | 22   |
| 220 | 5.9  | 225 | 3.9  | 220 | 4.3  | 220 | 4.6  | 215 | 5.9  | 215 | 5.2  | 215 | 5.6  | 220 | 5.2  | 230 | 4.6  | 220 | 3.6  | 210 | 4.3  | 210 | 3.6  | 4.9  | 23   |
| 180 | 3.3  | 180 | 2.6  | 180 | 2.6  | 175 | 2.3  | 155 | 2.6  | 150 | 2.6  | 150 | 2.6  | 155 | 3.6  | 165 | 3.9  | 150 | 3.3  | 135 | 2.6  | 120 | 2.6  | 3.3  | 24   |
| 125 | 3.3  | 110 | 3.3  | 115 | 3.3  | 115 | 3.3  | 120 | 3.0  | 115 | 2.6  | 130 | 3.9  | 140 | 4.3  | 140 | 4.6  | 150 | 5.2  | 135 | 6.6  | 135 | 5.9  | 3.3  | 25   |
| 100 | 4.3  | 95  | 3.9  | 95  | 6.9  | 105 | 5.6  | 110 | 4.9  | 125 | 6.9  | 135 | 6.6  | 110 | 5.9  | 100 | 6.2  | 115 | 6.6  | 145 | 7.9  | 150 | 7.2  | 5.2  | 26   |
| 205 | 13.4 | 215 | 10.5 | 210 | 9.5  | 215 | 7.9  | 235 | 6.6  | 220 | 4.6  | 225 | 3.0  | 210 | 2.0  | 210 | 1.6  | —   | 1.0  | —   | 1.0  | —   | 0.3  | 8.7  | 27   |
| 130 | 1.6  | 130 | 1.6  | 145 | 2.3  | 130 | 2.3  | 110 | 2.0  | 110 | 2.0  | 115 | 2.3  | 120 | 3.6  | 130 | 3.9  | 130 | 4.9  | 145 | 5.9  | 160 | 6.6  | 2.0  | 28   |
| 170 | 5.9  | 175 | 4.3  | 160 | 4.6  | 155 | 4.3  | 140 | 3.0  | 155 | 5.2  | 155 | 5.6  | 155 | 5.2  | 165 | 4.3  | 165 | 4.9  | 165 | 3.9  | 170 | 3.0  | 5.2  | 29   |
| 190 | 11.1 | 205 | 8.2  | 200 | 8.2  | 200 | 6.9  | 200 | 5.6  | 205 | 3.0  | 195 | 3.6  | 190 | 3.6  | 200 | 3.9  | 190 | 2.6  | 185 | 3.0  | 185 | 2.6  | 5.6  | 30   |
| —   | 4.5  | —   | 4.0  | —   | 4.3  | —   | 3.9  | —   | 3.9  | —   | 3.7  | —   | 3.9  | —   | 3.7  | —   | 3.6  | —   | 3.4  | —   | 3.5  | —   | 3.1  | 3.8  |      |

December, 1924.

|     |      |     |      |     |      |     |      |     |      |     |      |     |      |     |      |     |      |     |      |     |      |     |      |     |      | Mean | Day. |
|-----|------|-----|------|-----|------|-----|------|-----|------|-----|------|-----|------|-----|------|-----|------|-----|------|-----|------|-----|------|-----|------|------|------|
| °   | m/s. | °   | m/s. | °   | m/s. | °   | m/s. | °   | m/s. | °   | m/s. | °   | m/s. | °   | m/s. | °   | m/s. | °   | m/s. | °   | m/s. | °   | m/s. | °   | m/s. | m/s. |      |
| 155 | 3.9  | 145 | 3.0  | 140 | 2.6  | 140 | 2.3  | 135 | 3.6  | 130 | 2.0  | 115 | 2.0  | 85  | 2.6  | 85  | 3.9  | 85  | 3.3  | 65  | 3.9  | 60  | 1.6  | 3.2 | 1    |      |      |
| —   | 1.0  | —   | 1.0  | —   | 0.7  | —   | 1.0  | 340 | 1.6  | —   | 1.3  | —   | 1.3  | —   | 1.0  | —   | 0.3  | —   | 0.3  | —   | 0.7  | —   | 0.7  | 1.6 | 1.6  | 2    |      |
| 305 | 2.6  | 295 | 3.0  | 300 | 2.0  | 295 | 2.3  | 275 | 2.0  | —   | 1.3  | —   | 1.3  | 265 | 1.6  | 270 | 2.3  | 295 | 2.0  | —   | 1.3  | 285 | 2.0  | 1.6 | 3    |      |      |
| 175 | 4.6  | 180 | 4.9  | 180 | 5.6  | 185 | 5.2  | 175 | 5.6  | 175 | 7.2  | 175 | 7.9  | 175 | 8.2  | 175 | 9.2  | 180 | 8.9  | 180 | 8.5  | 185 | 8.2  | 4.1 | 4    |      |      |
| 225 | 5.2  | 255 | 5.9  | 240 | 4.6  | 220 | 4.9  | 205 | 5.6  | 205 | 6.2  | 205 | 6.6  | 210 | 5.9  | 210 | 7.2  | 210 | 7.5  | 205 | 7.5  | 210 | 5.9  | 6.2 | 5    |      |      |
| 270 | 4.6  | 270 | 4.6  | 260 | 3.0  | 255 | 2.3  | 230 | 2.3  | 250 | 1.6  | —   | 0.3  | —   | 0.7  | —   | 1.0  | —   | 0.0  | —   | 1.3  | —   | 0.7  | 3.2 | 6    |      |      |
| 190 | 4.6  | 190 | 4.9  | 190 | 3.6  | 190 | 3.0  | 190 | 2.0  | 185 | 3.0  | 180 | 3.0  | 180 | 2.3  | 180 | 2.6  | 180 | 3.0  | 180 | 2.3  | 185 | 3.0  | 2.2 | 7    |      |      |
| 165 | 3.0  | 160 | 3.6  | 165 | 3.6  | 150 | 3.3  | 145 | 3.0  | 135 | 2.0  | 130 | 2.0  | 130 | 2.0  | 130 | 2.6  | 130 | 1.6  | —   | 0.7  | —   | 1.0  | 2.8 | 8    |      |      |
| —   | 1.0  | —   | 0.7  | —   | 0.7  | —   | 1.0  | —   | 0.7  | —   | 0.3  | —   | 0.0  | —   | 0.0  | —   | 0.3  | —   | 0.0  | —   | 0.0  | —   | 0.0  | 0.6 | 9    |      |      |
| —   | 0.3  | —   | 0.3  | —   | 0.3  | —   | 0.3  | —   | 0.0  | —   | 0.3  | —   | 0.3  | —   | 0.3  | —   | 0.3  | —   | 0.3  | —   | 0.7  | —   | 0.3  | 0.3 | 10   |      |      |
| —   | 0.7  | —   | 0.7  | —   | 0.7  | —   | 0.7  | —   | 1.0  | —   | 0.7  | —   | 0.7  | —   | 0.7  | —   | 1.0  | —   | 1.0  | —   | 0.7  | —   | 0.3  | 0.5 | 11   |      |      |
| 185 | 3.0  | 190 | 3.0  | 200 | 1.6  | 215 | 2.0  | 205 | 2.3  | —   | 1.3  | 220 | 1.6  | 180 | 2.6  | 185 | 2.6  | 200 | 2.6  | 190 | 3.0  | 185 | 3.0  | 1.7 | 12   |      |      |
| 180 | 5.6  | 185 | 4.9  | 185 | 5.9  | 190 | 3.9  | 190 | 4.9  | 190 | 4.3  | 190 | 4.6  | 170 | 4.3  | 175 | 5.6  | 170 | 4.9  | 170 | 4.3  | 190 | 4.3  | 4.2 | 13   |      |      |
| 260 | 4.3  | 245 | 3.0  | 230 | 3.0  | 225 | 2.3  | 225 | 2.3  | 225 | 3.3  | 225 | 3.0  | 225 | 2.6  | 225 | 3.0  | 225 | 2.3  | 225 | 2.3  | —   | 1.3  | 2.2 | 14   |      |      |
| 160 | 8.2  | 160 | 8.9  | 160 | 7.9  | 150 | 7.5  | 150 | 8.2  | 150 | 5.6  | 155 | 5.6  | 160 | 5.2  | 165 | 3.9  | 165 | 4.6  | 165 | 4.9  | 160 | 5.2  | 4.8 | 15   |      |      |
| 220 | 1.6  | —   | 1.0  | —   | 1.0  | 280 | 1.6  | 340 | 3.0  | 340 | 2.3  | 340 | 1.6  | 330 | 2.6  | 325 | 2.0  | 330 | 2.0  | 320 | 2.0  | 310 | 2.0  | 2.6 | 16   |      |      |
| 195 | 2.0  | 190 | 1.6  | —   | 1.3  | 195 | 1.6  | 200 | 1.6  | 200 | 2.0  | 195 | 1.6  | 195 | 1.6  | 195 | 1.6  | —   | 1.0  | —   | 0.7  | —   | 1.0  | 1.4 | 17   |      |      |
| 200 | 6.2  | 205 | 5.9  | 205 | 3.9  | 200 | 4.9  | 195 | 4.6  | 200 | 3.6  | 200 | 4.6  | 200 | 4.3  | 200 | 4.6  | 200 | 4.6  | 200 | 4.9  | 200 | 5.2  |     |      |      |      |

464. Richmond (Kew Observatory) :  $H_a = 5$  metres + 20 metres.

1924.

| Day. | Jan.            |               | Feb.            |               | Mar.            |               | April           |               | May             |               | June            |               | July            |               | Aug.            |               | Sept.           |               | Oct.            |               | Nov.            |               | Dec.            |               |
|------|-----------------|---------------|-----------------|---------------|-----------------|---------------|-----------------|---------------|-----------------|---------------|-----------------|---------------|-----------------|---------------|-----------------|---------------|-----------------|---------------|-----------------|---------------|-----------------|---------------|-----------------|---------------|
|      | Max. in a Gust. | Time of Gust. | Max. in a Gust. | Time of Gust. | Max. in a Gust. | Time of Gust. | Max. in a Gust. | Time of Gust. | Max. in a Gust. | Time of Gust. | Max. in a Gust. | Time of Gust. | Max. in a Gust. | Time of Gust. | Max. in a Gust. | Time of Gust. | Max. in a Gust. | Time of Gust. | Max. in a Gust. | Time of Gust. | Max. in a Gust. | Time of Gust. | Max. in a Gust. | Time of Gust. |
|      | m/s.            | h. m.         | m/s.            | h. m.         | m/s.            | h. m.         | m/s.            | h. m.         | m/s.            | h. m.         | m/s.            | h. m.         | m/s.            | h. m.         | m/s.            | h. m.         | m/s.            | h. m.         | m/s.            | h. m.         | m/s.            | h. m.         | m/s.            | h. m.         |
| 1    | 7               | 15 30         | 8               | 12 10         | 16              | 8 50          | 15              | 17 10         | 6               | 14 50         | 17              | 13 30         | 9               | 15 20         | 10              | 12 25         | 9               | 11 35         | 5               | 2 30          | 14              | 20 35         | 8               | 10 50         |
| 2    | 6               | 16 40         | 10              | 12 35         | 14              | 15 40         | 16              | 20 35         | 13              | 17 15         | 8               | 16 50         | 13              | 15 5          | 14              | 12 45         | 6               | 23 30         | 5               | 13 15         | 19              | 15 25         | 6               | 4 5           |
| 3    | 9               | 12 0          | 8               | 10 55         | 11              | 5 50          | 16              | 11 0          | 11              | 15 30         | 7               | 15 0          | 20              | 18 20         | 9               | 13 55         | 11              | 10 15         | 5               | 16 10         | 9               | 0 15          | 5               | 12 0          |
| 4    | 4               | 16 25         | 9               | 13 5          | 11              | 14 40         | 10              | 19 20         | 7               | 16 50         | 9               | 21 40         | 14              | 10 40         | 8               | 11 15         | 11              | 15 35         | 7               | 15 45         | 10              | 11 35         | 14              | 20 5          |
| 5    | 4               | 23 50         | 15              | 18 25         | 10              | 16 35         | 9               | 11 50         | 14              | 14 0          | 9               | 2 40          | 14              | 15 45         | 14              | 12 45         | 4               | 14 55         | 13              | 22 55         | 5               | 12 20         | 13              | 22 20         |
| 6    | 8               | 14 15         | 12              | 6 50          | 7               | 22 20         | 6               | 12 45         | 11              | 8 0           | 9               | 13 55         | 14              | 2 25          | 7               | 19 0          | 8               | 13 25         | 17              | 22 55         | 12              | 13 50         | 14              | 3 20          |
| 7    | 6               | 13 35         | 8               | 3 0           | 7               | 17 40         | 8               | 14 45         | 12              | 17 0          | 7               | 12 55         | 12              | 12 25         | 10              | 15 50         | 8               | 8 30          | 9               | 2 15          | 12              | 20 5          | 10              | 13 25         |
| 8    | 21              | 20 25         | 10              | 11 55         | 10              | 15 30         | 10              | 13 35         | 13              | 15 40         | 16              | 17 55         | 9               | 2 55          | 5               | 11 20         | 14              | 13 50         | 13              | 12 40         | 17              | 20 25         | 7               | 10 45         |
| 9    | 19              | 0 35          | 17              | 8 25          | 8               | 10 45         | 13              | 15 25         | 9               | 17 35         | 9               | 2 45          | 6               | 13 35         | 6               | 19 10         | 16              | 16 40         | 11              | 12 15         | 9               | 1 10          | 4               | 2 40          |
| 10   | 7               | 3 25          | 7               | 15 25         | 11              | 18 25         | 8               | 11 45         | 14              | 10 5          | 14              | 15 5          | 11              | 15 20         | 9               | 14 15         | 9               | 8 0           | 14              | 11 30         | 8               | 7 45          | 1               | 10 35         |
| 11   | 18              | 22 0          | 6               | 1 25          | 9               | 14 5          | 8               | 9 50          | 12              | 12 5          | 13              | 7 55          | 6               | 14 50         | 9               | 14 0          | 12              | 15 5          | 8               | 1 40          | 7               | 11 50         | 2               | 13 55         |
| 12   | 21              | 4 5           | 11              | 16 40         | 12              | 16 35         | 14              | 15 35         | 9               | 17 55         | 8               | 20 35         | 11              | 12 55         | 9               | 16 40         | 15              | 13 20         | 6               | 11 50         | 10              | 11 30         | 5               | 21 55         |
| 13   | 16              | 14 45         | 20              | 22 40         | 13              | 17 45         | 10              | 15 50         | 14              | 11 25         | 13              | 8 45          | 13              | 13 30         | 6               | 13 50         | 16              | 10 25         | 5               | 12 10         | 8               | 5 20          | 11              | 13 10         |
| 14   | 10              | 10 5          | 19              | 0 15          | 10              | 14 40         | 18              | 14 20         | 11              | 15 35         | 7               | 1 55          | 8               | 18 55         | 13              | 15 35         | 10              | 12 45         | 10              | 21 50         | 7               | 10 55         | 8               | 12 35         |
| 15   | 12              | 14 50         | 7               | 14 15         | 3               | 19 15         | 7               | 16 10         | 5               | 18 35         | 8               | 16 10         | 9               | 12 40         | 13              | 16 55         | 14              | 23 25         | 8               | 14 20         | 11              | 8 30          | 17              | 13 0          |
| 16   | 9               | 17 40         | 10              | 12 35         | 11              | 14 35         | 9               | 12 55         | 12              | 11 50         | 8               | 21 5          | 11              | 17 10         | 10              | 11 55         | 13              | 1 5           | 3               | 4 0           | 9               | 12 5          | 9               | 0 45          |
| 17   | 11              | 1 55          | 4               | 3 0           | 7               | 22 0          | 3               | 13 40         | 10              | 21 20         | 10              | 12 35         | 14              | 22 55         | 17              | 16 45         | 16              | 15 0          | 5               | 12 50         | 8               | 4 35          | 3               | 18 50         |
| 18   | 12              | 22 35         | 13              | 16 5          | 6               | 11 25         | 11              | 12 25         | 10              | 13 45         | 11              | 12 35         | 12              | 13 55         | 12              | 8 10          | 11              | 11 55         | 4               | 14 55         | 4               | 9 40          | 11              | 13 35         |
| 19   | 19              | 9 5           | 13              | 11 40         | 8               | 13 0          | 11              | 11 5          | 9               | 7 35          | 9               | 14 0          | 9               | 13 55         | 10              | 11 35         | 6               | 13 20         | 7               | 14 5          | 4               | 13 45         | 9               | 11 5          |
| 20   | 10              | 0 15          | 8               | 7 55          | 16              | 13 35         | 6               | 15 30         | 10              | 13 50         | 8               | 17 40         | 10              | 20 30         | 10              | 15 5          | 19              | 21 20         | 6               | 13 55         | 6               | 12 30         | 5               | 1 35          |
| 21   | 9               | 18 20         | 8               | 21 55         | 14              | 0 55          | 9               | 19 20         | 9               | 13 40         | 9               | 16 15         | 8               | 1 0           | 15              | 14 40         | 15              | 2 5           | 11              | 13 40         | 7               | 23 10         | 6               | 14 5          |
| 22   | 7               | 12 20         | 12              | 15 10         | 14              | 13 30         | 8               | 17 45         | 12              | 11 40         | 6               | 13 50         | 8               | 13 40         | 10              | 12 5          | 14              | 13 50         | (16)            | 4 35          | 13              | 10 35         | 9               | 24 0          |
| 23   | 4               | 19 30         | 10              | 13 5          | 15              | 14 0          | 8               | 3 35          | 17              | 15 40         | 7               | 14 50         | 10              | 20 5          | 9               | 17 0          | 15              | 5 15          | 7               | 15 25         | 11              | 11 50         | 17              | 11 35         |
| 24   | 7               | 11 40         | 13              | 15 35         | 13              | 3 40          | 14              | 14 55         | 17              | 12 50         | 7               | 16 10         | 13              | 15 50         | 10              | 11 30         | 13              | 0 10          | 15              | 10 55         | 8               | 12 15         | 17              | 5 55          |
| 25   | 6               | 13 25         | 16              | 20 0          | 3               | 20 15         | 15              | 10 5          | 14              | 11 25         | 6               | 14 45         | 11              | 9 5           | 9               | 13 10         | 12              | 10 20         | 6               | 11 0          | 13              | 24 0          | 11              | 15 20         |
| 26   | 10              | 13 45         | 12              | 23 10         | 11              | 20 45         | 14              | 24 0          | 7               | 14 25         | 9               | 16 35         | 7               | 14 35         | 5               | 14 55         | 8               | 12 5          | 9               | 9 25          | 13              | 18 55         | 15              | 17 40         |
| 27   | 12              | 11 5          | 11              | 1 40          | 12              | 20 10         | 20              | 18 35         | 10              | 12 10         | 8               | 17 25         | 10              | 17 35         | 8               | 8 5           | 10              | 1 45          | 12              | 23 40         | 25              | 4 50          | 23              | 9 35          |
| 28   | 9               | 10 55         | 13              | 1 55          | 14              | 11 20         | 14              | 5 0           | 9               | 18 40         | 10              | 17 25         | 12              | 14 35         | 9               | 16 0          | 10              | 15 30         | 12              | 14 5          | 10              | 23 25         | 13              | 9 55          |
| 29   | 4               | 12 55         | 18              | 16 0          | 14              | 14 5          | 10              | 1 5           | 19              | 19 30         | 14              | 13 5          | 8               | 11 15         | 9               | 13 45         | 14              | 14 15         | 12              | 12 25         | 12              | 4 35          | 15              | 23 55         |
| 30   | 3               | 20 50         | —               | —             | 14              | 10 40         | 11              | 3 20          | 9               | 6 15          | 11              | 12 5          | 6               | 16 10         | 8               | 10 45         | 9               | 11 25         | 23              | 13 25         | 20              | 13 0          | 23              | 9 30          |
| 31   | 4               | 15 0          | —               | —             | 12              | 18 10         | —               | —             | 9               | 9 40          | —               | —             | 8               | 12 40         | 11              | 14 40         | —               | —             | 11              | 1 50          | —               | —             | 23              | 13 40         |

## DISTRIBUTION OF WIND SPEED: EXTREME VELOCITIES AS RECORDED BY THE DINES TUBE ANEMOGRAPH.\*

465. Richmond (Kew Observatory) :  $H_a = 5$  metres + 20 metres.

1924.

| Month.    | DISTRIBUTION OF WIND. |           |                   |           |                  |                 |                    |           | EXTREME VELOCITIES.  |        |            |               |              |  |
|-----------|-----------------------|-----------|-------------------|-----------|------------------|-----------------|--------------------|-----------|----------------------|--------|------------|---------------|--------------|--|
|           | More than 17·1 m/s.   |           | 10·8 to 17·1 m/s. |           | 5·5 to 10·7 m/s. | 1·6 to 5·4 m/s. | Less than 1·6 m/s. | No Record | Highest Hourly Wind. |        |            | Highest Gust. |              |  |
|           | Dates of Occurrence.  | Duration. | No. of Days.      | Duration. | Duration.        | Duration.       | Duration.          | Duration. | Veer from N.         | Speed. | Mid. Time. | Speed.        | Date.        |  |
|           | hr.                   |           | hr.               | hr.       | hr.              | hr.             | hr.                | hr.       | °                    | m/s.   | day. hour. | m/s.          | d. h. m.     |  |
| Jan. ...  | —                     | 0         | 3                 | 18        | 126              | 461             | 139                | 0         | 80                   | 13     | 8 20       | 21            | 12 4 5       |  |
| Feb. ...  | —                     | 0         | 1                 | 6         | 165              | 416             | 109                | 0         | 60                   | 11     | 13 17      | 19            | 13 22 40     |  |
| Mar. ...  | —                     | 0         | 1                 | 1         | 228              | 376             | 139                | 0         | 80                   | 11     | 20 13      | 17            | 1 8 50       |  |
| April ... | —                     | 0         | 2                 | 3         | 178              | 429             | 110                | 0         | 210                  | 11     | 14 15      | 20            | 27 18 35     |  |
| May ...   | —                     | 0         | 0                 | 0         | 145              | 475             | 124                | 0         | 200                  | 10     | 23 16      | 19            | 29 19 30     |  |
| June ...  | —                     | 0         | 0                 | 0         | 68               | 432             | 220                | 0         | 220                  | 9      | 1 17       | 17            | 1 13 30      |  |
| July ...  | —                     | 0         | 1                 | 1         | 139              | 408             | 196                | 0         | 215                  | 11     | 3 19       | 20            | 3 18 20      |  |
| Aug. ...  | —                     | 0         | 0                 | 0         | 52               | 509             | 183                | 0         | 205                  | 10     | 17 14      | 17            | 17 16 45     |  |
| Sept. ... | —                     | 0         | 0                 | 0         | 159              | 447             | 114                | 0         | 205                  | 10     | 20 22      | 19            | 20 21 20     |  |
| Oct. ...  | —                     | 0         | 1                 | 1         | 107              | 399             | 237                | 0         | 10                   | 11     | 22 5       | 23            | 30 13 25     |  |
| Nov. ...  | —                     | 0         | 1                 | 11        | 152              | 412             | 145                | 0         | 180                  | 13     | 27 5       | 25            | 27 4 50      |  |
| Dec. ...  | —                     | 0         | 2                 | 21        | 138              | 394             | 191                | 0         | 200                  | 13     | 27 14      | 23            | 27 9 35      |  |
| Year ...  | —                     | 0         | 12                | 62        | 1,657            | 5,158           | 1,907              | 0         | 180                  | 13     | Nov. 27 5  | 25            | Nov. 27 4 50 |  |

\* See page 285.



466. Richmond (Kew Observatory).

Readings, in degrees absolute, at 9h., Greenwich Mean Time.

1924.

| Day. | Jan.  |        | Feb.  |        | March. |        | April |        | May   |        | June  |        | July  |        | Aug.  |        | Sept. |        | Oct.  |        | Nov.  |        | Dec.  |        |
|------|-------|--------|-------|--------|--------|--------|-------|--------|-------|--------|-------|--------|-------|--------|-------|--------|-------|--------|-------|--------|-------|--------|-------|--------|
|      | 30 cm | 122 cm | 30 cm | 122 cm | 30 cm  | 122 cm | 30 cm | 122 cm | 30 cm | 122 cm | 30 cm | 122 cm | 30 cm | 122 cm | 30 cm | 122 cm | 30 cm | 122 cm | 30 cm | 122 cm | 30 cm | 122 cm | 30 cm | 122 cm |
|      | a.    | a.     | a.    | a.     | a.     | a.     | a.    | a.     | a.    | a.     | a.    | a.     | a.    | a.     | a.    | a.     | a.    | a.     | a.    | a.     | a.    | a.     | a.    | a.     |
| 1    | 76.8  | 79.1   | 77.9  | 79.4   | 75.1   | 78.2   | 77.1  | 79.2   | 83.5  | 81.6   | 89.4  | 85.2   | 89.9  | 87.6   | 89.9  | 88.0   | 88.7  | 87.5   | 86.5  | 86.6   | 83.5  | 84.6   | 81.2  | 82.6   |
| 2    | 78.0  | 79.1   | 76.8  | 79.3   | 75.2   | 78.2   | 77.0  | 79.2   | 83.5  | 81.7   | 88.4  | 85.2   | 90.0  | 87.6   | 89.6  | 88.0   | 88.7  | 86.5   | 85.7  | 86.6   | 84.0  | 84.7   | 81.4  | 82.6   |
| 3    | 78.0  | 79.1   | 76.8  | 79.3   | 75.2   | 78.2   | 77.0  | 79.2   | 83.5  | 81.8   | 87.9  | 85.2   | 89.8  | 87.6   | 89.7  | 88.1   | 88.5  | 87.6   | 85.2  | 86.6   | 83.6  | 84.7   | 81.1  | 82.6   |
| 4    | 76.6  | 79.1   | 76.9  | 79.3   | 75.5   | 78.1   | 77.0  | 79.0   | 84.0  | 82.0   | 88.1  | 85.3   | 89.0  | 87.6   | 89.6  | 88.0   | 88.6  | 87.6   | 85.0  | 86.5   | 81.9  | 84.6   | 81.0  | 82.6   |
| 5    | 75.9  | 79.2   | 77.0  | 79.2   | 75.5   | 78.1   | 77.0  | 79.0   | 83.6  | 82.2   | 87.6  | 85.5   | 89.0  | 87.6   | 90.1  | 88.0   | 88.5  | 87.6   | 85.0  | 86.4   | 80.0  | 84.6   | 81.3  | 82.6   |
| 6    | 75.2  | 79.2   | 77.6  | 79.2   | 75.6   | 78.1   | 77.3  | 79.1   | 83.2  | 82.2   | 87.4  | 85.5   | 89.0  | 87.4   | 89.9  | 88.0   | 88.9  | 87.7   | 84.9  | 86.2   | 80.2  | 84.4   | 80.1  | 82.6   |
| 7    | 75.0  | 79.1   | 78.3  | 79.2   | 76.0   | 78.1   | 77.6  | 79.0   | 83.2  | 82.2   | 88.0  | 85.6   | 89.1  | 87.4   | 90.2  | 88.0   | 89.6  | 87.7   | 84.8  | 86.2   | 80.8  | 84.2   | 79.6  | 82.6   |
| 8    | 74.8  | 78.9   | 78.1  | 79.2   | 76.2   | 78.1   | 78.8  | 79.0   | 83.2  | 82.2   | 88.8  | 85.5   | 89.4  | 87.5   | 89.5  | 88.1   | 89.8  | 87.7   | 85.0  | 86.2   | 81.2  | 84.1   | 79.1  | 82.6   |
| 9    | 74.9  | 79.0   | 77.7  | 79.3   | 76.0   | 78.2   | 79.1  | 79.1   | 83.0  | 82.3   | 88.6  | 85.7   | 90.1  | 87.5   | 90.0  | 88.1   | 89.4  | 87.7   | 84.7  | 86.1   | 81.0  | 84.0   | 78.8  | 82.5   |
| 10   | 74.7  | 78.8   | 78.0  | 79.3   | 75.9   | 78.2   | 78.5  | 79.1   | 84.3  | 82.3   | 88.8  | 85.7   | 90.9  | 87.4   | 90.4  | 88.2   | 88.4  | 87.7   | 85.4  | 86.0   | 81.0  | 83.9   | 78.0  | 82.2   |
| 11   | 74.8  | 78.7   | 78.3  | 79.3   | 75.5   | 78.2   | 78.0  | 79.2   | 84.2  | 82.3   | 88.6  | 85.7   | 91.1  | 87.5   | 90.5  | 88.1   | 87.9  | 87.7   | 85.9  | 85.9   | 81.0  | 83.8   | 77.8  | 82.2   |
| 12   | 76.1  | 78.6   | 77.7  | 79.3   | 75.9   | 78.2   | 77.5  | 79.2   | 84.9  | 82.4   | 88.2  | 85.9   | 92.1  | 87.7   | 90.6  | 88.2   | 88.0  | 87.7   | 85.9  | 86.0   | 82.0  | 83.6   | 77.5  | 82.1   |
| 13   | 77.2  | 78.5   | 77.8  | 79.3   | 75.9   | 78.2   | 77.9  | 79.3   | 85.1  | 82.6   | 88.5  | 85.9   | 92.2  | 87.8   | 89.9  | 88.1   | 88.5  | 87.7   | 85.9  | 85.9   | 82.0  | 83.6   | 77.8  | 81.9   |
| 14   | 77.8  | 78.5   | 76.5  | 79.3   | 75.9   | 78.2   | 79.0  | 79.2   | 85.4  | 83.0   | 87.0  | 86.0   | 91.4  | 87.9   | 89.9  | 88.2   | 88.8  | 87.8   | 85.8  | 86.0   | 81.8  | 83.6   | 77.8  | 81.9   |
| 15   | 78.2  | 78.7   | 75.8  | 79.3   | 75.6   | 78.2   | 79.6  | 79.2   | 86.2  | 82.9   | 87.7  | 86.1   | 91.7  | 88.1   | 90.0  | 88.3   | 88.0  | 87.7   | 85.9  | 86.0   | 81.6  | 83.6   | 77.0  | 81.6   |
| 16   | 77.5  | 78.8   | 75.2  | 79.3   | 76.6   | 78.3   | 79.6  | 79.3   | 86.7  | 83.0   | 89.0  | 86.0   | 91.8  | 88.0   | 89.7  | 88.2   | 88.0  | 87.7   | 85.6  | 86.0   | 80.2  | 83.4   | 78.5  | 81.5   |
| 17   | 76.8  | 78.9   | 75.0  | 79.2   | 76.6   | 78.3   | 79.9  | 79.4   | 86.4  | 83.2   | 89.9  | 86.1   | 91.4  | 88.1   | 89.3  | 88.2   | 88.4  | 87.7   | 85.2  | 86.0   | 79.4  | 83.4   | 79.1  | 81.3   |
| 18   | 76.8  | 78.9   | 74.6  | 79.1   | 76.6   | 78.3   | 80.2  | 79.8   | 87.0  | 83.3   | 90.0  | 86.1   | 89.6  | 88.2   | 89.0  | 88.2   | 88.0  | 87.6   | 84.4  | 85.9   | 78.0  | 83.2   | 78.8  | 81.2   |
| 19   | 78.4  | 79.0   | 74.5  | 78.9   | 76.6   | 78.4   | 81.1  | 79.7   | 87.0  | 83.5   | 90.1  | 86.2   | 90.0  | 88.2   | 88.2  | 88.1   | 87.5  | 87.6   | 84.1  | 86.0   | 78.6  | 83.1   | 79.5  | 81.3   |
| 20   | 78.6  | 79.1   | 74.5  | 78.7   | 76.9   | 78.3   | 81.9  | 79.9   | 87.9  | 83.8   | 90.1  | 86.2   | 90.1  | 88.2   | 88.0  | 88.1   | 88.0  | 87.6   | 84.0  | 85.8   | 78.6  | 83.0   | 80.2  | 81.3   |
| 21   | 78.1  | 79.1   | 74.6  | 78.6   | 76.9   | 78.4   | 83.0  | 80.2   | 87.9  | 84.0   | 89.7  | 86.4   | 90.3  | 88.2   | 88.4  | 88.1   | 88.0  | 87.5   | 84.3  | 85.7   | 79.5  | 82.7   | 79.7  | 81.3   |
| 22   | 78.9  | 79.2   | 74.6  | 78.5   | 77.2   | 78.4   | 84.1  | 80.2   | 88.5  | 84.0   | 90.2  | 86.5   | 89.8  | 88.2   | 88.0  | 88.1   | 87.5  | 87.5   | 84.4  | 85.6   | 79.9  | 82.6   | 79.2  | 81.4   |
| 23   | 79.0  | 79.2   | 75.0  | 78.4   | 78.9   | 78.4   | 84.0  | 80.3   | 88.0  | 84.3   | 90.6  | 86.7   | 89.7  | 88.1   | 87.9  | 88.1   | 86.9  | 87.3   | 82.9  | 85.6   | 80.5  | 82.5   | 79.0  | 81.4   |
| 24   | 79.0  | 79.2   | 76.3  | 78.3   | 80.0   | 78.4   | 83.1  | 80.7   | 87.1  | 84.3   | 91.1  | 86.8   | 90.0  | 88.2   | 88.0  | 88.0   | 86.2  | 87.3   | 81.5  | 85.3   | 81.0  | 82.5   | 79.9  | 81.4   |
| 25   | 79.0  | 79.4   | 75.8  | 78.3   | 80.2   | 78.7   | 83.5  | 80.9   | 86.9  | 84.5   | 91.6  | 87.0   | 89.4  | 88.1   | 87.5  | 87.9   | 85.9  | 87.1   | 81.0  | 85.2   | 80.6  | 82.5   | 80.0  | 81.3   |
| 26   | 77.8  | 79.4   | 75.5  | 78.3   | 80.5   | 78.9   | 83.5  | 81.1   | 86.9  | 84.6   | 92.1  | 87.0   | 89.2  | 88.1   | 87.7  | 87.7   | 85.9  | 87.1   | 81.1  | 85.2   | 81.5  | 82.5   | 79.9  | 81.4   |
| 27   | 77.8  | 79.5   | 75.0  | 78.2   | 79.6   | 79.1   | 83.1  | 81.2   | 87.1  | 84.6   | 92.3  | 87.1   | 89.0  | 88.1   | 87.9  | 87.7   | 86.0  | 87.0   | 82.2  | 85.0   | 81.6  | 82.6   | 79.9  | 81.3   |
| 28   | 77.0  | 79.5   | 75.0  | 78.2   | 78.6   | 79.2   | 82.5  | 81.3   | 87.1  | 84.7   | 91.6  | 87.3   | 89.5  | 88.0   | 87.5  | 87.6   | 85.5  | 87.0   | 83.0  | 84.7   | 80.6  | 82.6   | 80.0  | 81.3   |
| 29   | 76.9  | 79.4   | 74.9  | 78.1   | 78.0   | 79.2   | 82.9  | 81.3   | 88.2  | 84.8   | 90.8  | 87.4   | 88.7  | 88.0   | 87.9  | 87.6   | 85.7  | 86.8   | 83.6  | 84.7   | 80.5  | 82.7   | 78.5  | 81.3   |
| 30   | 77.3  | 79.3   | —     | —      | 77.6   | 79.2   | 83.6  | 81.3   | 88.4  | 84.9   | 90.6  | 87.5   | 88.9  | 88.0   | 88.2  | 87.5   | 86.2  | 86.6   | 84.0  | 84.7   | 81.2  | 82.6   | 79.0  | 81.2   |
| 31   | 77.6  | 79.3   | —     | —      | 77.1   | 79.2   | —     | —      | 89.1  | 84.9   | —     | —      | 89.6  | 88.0   | 88.8  | 87.6   | —     | —      | 83.6  | 84.6   | —     | —      | 79.0  | 81.2   |
| Mean | 77.1  | 79.1   | 76.3  | 78.9   | 76.9   | 78.4   | 80.1  | 79.8   | 85.8  | 83.2   | 89.4  | 86.1   | 90.1  | 87.9   | 89.1  | 88.0   | 87.8  | 87.5   | 84.4  | 85.8   | 80.9  | 83.5   | 79.3  | 81.8   |

The initial 2 or 3 of the readings is omitted; i.e., 275.0 degrees absolute is written 75.0. Annual Means: at 30 cm. 283.1; at 122 cm. 283.3

MINIMUM TEMPERATURE "ON THE GRASS" DURING THE INTERVAL 18H. TO 7H. G.M.T.

Readings, in degrees absolute.

467. Richmond (Kew Observatory).

1924.

| Day. | Jan. | Feb. | Mar. | Apr. | May  | June | July | Aug. | Sept. | Oct. | Nov. | Dec. |
|------|------|------|------|------|------|------|------|------|-------|------|------|------|
| 1    | 76.3 | 70.8 | 72.9 | 71.0 | 80.1 | 83.9 | 74.3 | 81.9 | 81.8  | 83.1 | 75.0 | 77.4 |
| 2    | 78.6 | 67.5 | 70.8 | 70.3 | 74.0 | 81.1 | 83.1 | 85.5 | 85.2  | 76.2 | 82.1 | 78.1 |
| 3    | 72.6 | 70.7 | 67.1 | 72.6 | 80.0 | 78.7 | 84.9 | 81.9 | 81.4  | 75.1 | 72.5 | 76.8 |
| 4    | 66.8 | 71.6 | 68.6 | 73.9 | 74.1 | 83.3 | 82.2 | 85.6 | 85.6  | 76.3 | 65.5 | 72.9 |
| 5    | 66.3 | 73.0 | 63.7 | 74.2 | 72.5 | 82.8 | 81.2 | 88.5 | 81.7  | 78.3 | 64.6 | 81.0 |
| 6    | 67.5 | 79.0 | 69.7 | 64.8 | 71.0 | 76.1 | 82.5 | 81.2 | 79.5  | 76.8 | 70.3 | 76.9 |
| 7    | 66.8 | 75.2 | 72.7 | 68.1 | 74.3 | 82.7 | 82.0 | 83.9 | 86.2  | 78.2 | 77.8 | 69.1 |
| 8    | 71.3 | 75.3 | 70.0 | 72.8 | 74.3 | 85.0 | 83.2 | 78.4 | 85.1  | 82.3 | 80.8 | 72.4 |
| 9    | 70.1 | 75.0 | 63.9 | 69.0 | 74.0 | 82.5 | 82.1 | 78.9 | 84.9  | 77.1 | 72.0 | 71.0 |
| 10   | 71.1 | 76.5 | 62.9 | 66.8 | 80.4 | 84.0 | 81.3 | 78.0 | 80.3  | 84.1 | 77.7 | 70.7 |
| 11   | 72.8 | 74.4 | 65.7 | 71.2 | 80.8 | 84.6 | 82.9 | 80.4 | 77.1  | 84.6 | 75.3 | 72.2 |
| 12   | 74.4 | 74.9 | 67.8 | 69.2 | 82.0 | 82.5 | 83.0 | 80.9 | 84.0  | 79.9 | 82.0 | 72.9 |
| 13   | 77.5 | 75.6 | 69.6 | 71.2 | 81.5 | 83.7 | 85.2 | 79.2 | 87.1  | 79.9 | 80.5 | 75.5 |
| 14   | 79.9 | 71.8 | 66.0 | 78.0 | 78.5 | 78.1 | 78.5 | 80.3 | 84.0  | 77.9 | 80.0 | 69.4 |
| 15   | 76.7 | 62.1 | 65.4 | 74.0 | 77.7 | 76.0 | 78.2 | 81.3 | 78.5  | 83.1 | 79.1 | 67.7 |
| 16   | 72.2 | 64.0 | 71.3 | 69.0 | 78.7 | 80.1 | 82.0 | 77.7 | 84.1  | 82.0 | 69.2 | 80.0 |
| 17   | 73.4 | 62.8 | 63.3 | 70.2 | 72.0 | 83.9 | 80.6 | 81.0 | 86.3  | 82.0 | 73.0 | 75.2 |
| 18   | 74.1 | 64.4 | 65.8 | 68.6 | 82.9 | 80.9 | 81.0 | 83.8 | 80.8  | 73.3 | 67.0 | 71.3 |
| 19   | 80.7 | 71.2 | 63.7 | 73.9 | 83.5 | 80.6 | 84.0 | 79.2 | 77.3  | 78.0 | 76.2 | 79.6 |
| 20   | 77.8 | 73.6 | 66.9 | 75.6 | 80.1 | 80.2 | 77.4 | 74.9 | 85.6  | 77.6 | 70.0 | 73.1 |
| 21   | 72.0 | 65.2 | 72.9 | 78.2 | 78.9 | 77.1 | 87.0 | 81.9 | 81.1  | 77.2 | 73.8 | 71.7 |
| 22   | 78.7 | 73.5 | 69.0 | 78.2 | 85.9 | 79.9 | 80.0 | 82.1 | 83.0  | 80.2 | 78.5 | 75.9 |
| 23   | 78.5 | 70.6 | 79.1 | 78.5 | 82.0 | 78.3 | 82.0 | 81.0 | 79.1  | 80.6 | 81.0 | 71.3 |
| 24   | 76.5 | 72.0 | 81.0 | 76.6 | 80.4 | 81.0 | 83.1 | 81.0 | 80.0  | 68.3 | 79.6 | 79.7 |
| 25   | 75.1 | 71.6 | 73.6 | 82.3 | 82.1 | 85.2 | 81.0 | 80.2 | 75.7  | 69.9 | 78.1 | 77.9 |
| 26   | 68.8 | 69.4 | 79.0 | 77.9 | 76.7 | 83.1 | 84.0 | 80.2 | 83.0  | 74.9 | 81.9 | 76.8 |
| 27   | 73.3 | 69.7 | 74.9 | 77.0 | 78.0 | 85.4 | 77.7 | 81.1 | 83.6  | 81.4 | 80.0 | 77.0 |
| 28   | 68.1 | 71.4 | 74.4 | 77.1 | 75.5 | 78.8 | 85.5 | 78.0 | 75.6  | 80.7 | 72.0 | 75.2 |
| 29   | 70.8 | 65.4 | 71.9 | 79.5 | 83.2 | 84.1 | 78.1 | 81.2 | 78.6  | 81.2 | 72.0 | 71.0 |
| 30   | 70.9 | —    | 71.6 | 79.5 | 83.9 | 83.5 | 80.9 | 85.0 | 84.2  | 81.0 | 79.6 | 75.7 |
| 31   | 77.0 | —    | 69.5 | —    | 85.5 | —    | 82.7 | 85.7 | —     | 80.8 | —    | 72.0 |
| Mean | 73.4 | 71.0 | 69.8 | 73.6 | 78.9 | 81.6 | 81.7 | 81.3 | 82.0  | 78.4 | 75.6 | 74.4 |

The initial 2 or 3 of the readings is omitted; i.e., 275.0 degrees absolute is

469. Richmond (Kew Obs.).

January, 1924.

| Day.                  | Cloud Forms.                          |  |                 | Cloud Amount (All Forms). |                |                 |                 |                 |                 | Weather.         |                             |                             |                             |                 |                             | Remarks.   |
|-----------------------|---------------------------------------|--|-----------------|---------------------------|----------------|-----------------|-----------------|-----------------|-----------------|------------------|-----------------------------|-----------------------------|-----------------------------|-----------------|-----------------------------|--|
|                       | 7 <sup>h</sup>                        | 13 <sup>h</sup>                                      | 18 <sup>h</sup> | 7 <sup>h</sup>            | 9 <sup>h</sup> | 13 <sup>h</sup> | 15 <sup>h</sup> | 18 <sup>h</sup> | 21 <sup>h</sup> | 7 <sup>h</sup>   | 9 <sup>h</sup>              | 13 <sup>h</sup>             | 15 <sup>h</sup>             | 18 <sup>h</sup> | 21 <sup>h</sup>             |  |
| 1                     | Nb. : Fr-Nb.<br>St-Cu.                | A-St. : St-Cu.<br>A-St. : A-Cu. :<br>St-Cu. : St-Cu. | St-Cu.<br>Nb.   | 10                        | 10             | 10              | 10              | 10              | 10              | ● <sup>0</sup>   | ● <sup>0</sup>              | ≡ <sup>0</sup>              | d <sub>0</sub> <sup>0</sup> | ≡ <sup>0</sup>  | ...                         | ● at intervals.<br>d <sub>0</sub> a : d <sub>0</sub> 16h. 30m., ● 17h. 5m. to 45m.<br>● p 18h. 38m. to 45m., bcn n : |
| 2                     | A-Cu. : St. : St-Cu.<br>St.<br>St-Cu. | St.<br>Ci.   | —               | 4                         | 8              | 5               | 2               | 0               | 0               | ≡ <sup>0</sup>   | ≡ <sup>0</sup>              | ...                         | ∞ <sup>0</sup>              | ∞ <sup>0</sup>  | ≡ <sup>0</sup>              | □ early a : fine p and n : ≡ 22 h.<br>≡ and ≡ <sup>0</sup> till about 17h, □ a : o n :                               |
| 3                     | St.                                   | —  | —               | 2                         | 0              | 0               | —               | 0               | 0               | ≡ <sup>0</sup>   | ≡ <sup>0</sup>              | ∞ <sup>0</sup>              | —                           | ...             | ≡ <sup>0</sup>              | b m x to b z a : b z p : b m x n :   |
| 4                     | Nb.                                   | St.  | St.             | 10                        | 10             | 10              | 10              | 10              | 10              | ≡ <sup>0</sup>   | ≡ <sup>0</sup>              | ≡ <sup>0</sup>              | ≡ <sup>0</sup>              | ≡ <sup>0</sup>  | ●                           | bm x early a : b f x at 9h., b z to b p : b x n :  |
| 5                     | St. : St-Cu.                          | A-St. : A-Cu.  | St.             | 7                         | 10             | 10              | 10              | 10              | 10              | q ≡ <sup>0</sup> | q ≡ <sup>0</sup>            | ≡ <sup>0</sup>              | ≡ <sup>0</sup>              | ≡ <sup>0</sup>  | ≡ <sup>0</sup>              | omr <sub>0</sub> to ofg a : ofd <sub>0</sub> p : omr, oqs n :  |
| 6                     | St.                                   | A-St.  | St.             | 2                         | 2              | 0               | 8               | 4               | 8               | ...              | ...                         | ∞ <sup>0</sup>              | ∞ <sup>0</sup>              | ...             | ≡ <sup>0</sup> q            | □ 9h. oms to om a : of to or p : ofr n :   |
| 7                     | St.                                   | A-Cu. : St-Cu.                                       | St-Cu.          | 10                        | 10             | 9               | 10              | 10              | 7               | q ≡ <sup>0</sup> | q ≡ <sup>0</sup>            | p <sub>0</sub> <sup>0</sup> | ...                         | ∞ <sup>0</sup>  | ...                         | ● early a : b to cz p : onqr n :   |
| 8                     | St-Cu.                                | Ci. : A-Cu. : St.                                    | St.             | 8                         | 6              | 7               | —               | 9               | 10              | q ≡ <sup>0</sup> | ...                         | ∞ <sup>0</sup>              | ...                         | ∞ <sup>0</sup>  | d <sub>0</sub> <sup>0</sup> | omqd to op a : op to o p : cq n :  |
| 9                     | St.                                   | St-Cu. : St.   | St-Cu.          | 10                        | 10             | 10              | 10              | 5               | 8               | ≡ <sup>0</sup>   | d <sub>0</sub> <sup>0</sup> | ≡ <sup>0</sup>              | ...                         | ...             | ...                         | czqd to cz a : cz to oz p : odom n :   |
| 10                    | St-Cu.                                | Ci.  | Ci.             | 1                         | 4              | 8               | 7               | 2               | 8               | p ≡ <sup>0</sup> | p ≡ <sup>0</sup>            | ∞ <sup>0</sup>              | ...                         | ...             | ...                         | om, odm, a : om, o p : cm to bw n :  |
| 11                    | St.                                   | Ci.  | Ci.             | 8                         | 8              | 6               | 6               | 6               | 9               | ≡ <sup>0</sup>   | ≡ <sup>0</sup>              | ≡ <sup>0</sup>              | ≡ <sup>0</sup>              | ≡ <sup>0</sup>  | ...                         | bw to cz a : c p : □ 18h. 30m., o c<br>f w x n :   |
| 12                    | St.                                   | Nb.  | Nb.             | 10                        | 10             | 10              | 10              | 10              | 10              | ≡ <sup>0</sup>   | ≡ <sup>0</sup>              | ≡ <sup>0</sup>              | ≡ <sup>0</sup>              | ≡ <sup>0</sup>  | ...                         | cx to bef a : bef p : om n :   |
| 13                    | A-St. : St-Cu.                        | Nb.  | St.             | 10                        | 10             | 10              | 10              | 10              | 9               | ...              | ...                         | ≡ <sup>0</sup>              | ≡ <sup>0</sup>              | ≡ <sup>0</sup>  | ...                         | omdu to ofdg a : ofdg p : of, oro n :  |
| 14                    | Nb.                                   | Fr-Cu.   | St-Cu. : Fr-Cu. | 10                        | 9              | 4               | 9               | 5               | 10              | ● : q            | ● : q                       | ...                         | u                           | ...             | ...                         | or, odm a : om p and n :   |
| 15                    | Ci. : A-Cu. : St.                     | Ci. : A-Cu. : Cu.                                    | A-Cu.           | 4                         | 8              | 9               | —               | 4               | 0               | ...              | ...                         | ...                         | ...                         | ...             | ...                         | oqr a : bc to oupp p : op n<br>oqr to bc a : cm to bm p : bmw to<br>omw n :  |
| 16                    | Nb.                                   | Nb.  | Nb.             | 10                        | 10             | 10              | 10              | 10              | 10              | ≡ <sup>0</sup>   | ≡ <sup>0</sup>              | ≡ <sup>0</sup>              | ≡ <sup>0</sup>              | ≡ <sup>0</sup>  | ...                         | orm all day.   |
| 17                    | St-Cu. : Nb.                          | High St-Cu.  | Nb. : St.       | 10                        | 10             | 10              | 10              | 10              | 10              | ≡ <sup>0</sup>   | ≡ <sup>0</sup>              | ...                         | ...                         | ...             | ...                         | om a : orm from 17h.   |
| 18                    | St.                                   | St.  | St.             | 10                        | 10             | 10              | 10              | 10              | 10              | ≡ <sup>0</sup>   | ≡ <sup>0</sup>              | ...                         | ...                         | ...             | ...                         | omd till 7h. 10m., omg p : om n :  |
| 19                    | St. : St-Cu.                          | St. : St-Cu.   | Nb              | 9                         | 9              | 10              | 10              | 10              | 10              | ≡ <sup>0</sup>   | ≡ <sup>0</sup>              | ...                         | ...                         | ...             | ...                         | □ early, om a : omr p and n :  |
| 20                    | St.                                   | —  | —               | 1                         | 0              | 0               | 0               | 0               | 0               | ...              | ...                         | ...                         | ...                         | ...             | ...                         | bm to bz : b f x n :   |
| 21                    | St. : St-Cu.                          | St. : St-Cu.   | A-St.           | 10                        | 10             | 10              | 9               | 7               | 0               | ≡ <sup>0</sup>   | ≡ <sup>0</sup>              | ...                         | ...                         | ...             | ...                         | omw to of a : om p : bw n :  |
| 22                    | Ci. : A-St. : St.                     | Ci. : A-St.  | —               | 7                         | 2              | 3               | —               | 0               | 0               | ≡ <sup>0</sup>   | ...                         | ...                         | ...                         | ...             | ...                         | bcw to b a : b p : b x n :   |
| 23                    | St. : Cu.                             | Cu. : St-Cu.   | A-St.           | 5                         | 2              | 7               | 7               | 3               | 2               | ≡ <sup>0</sup>   | ...                         | ...                         | ...                         | ...             | ...                         | bcmx to b a : cm p : bw to omw n :   |
| 24                    | Ci-St. : St.                          | A-St.  | St-Cu.          | 10                        | 10             | 10              | 10              | 10              | 3               | ≡ <sup>0</sup>   | ...                         | ...                         | ...                         | ...             | ...                         | omw to om a : om p : bcf n :   |
| 25                    | St.                                   | St.  | St.             | 10                        | 10             | 10              | 9               | 10              | 10              | ≡ <sup>0</sup>   | ≡ <sup>0</sup>              | ...                         | ...                         | ...             | ...                         | ofw to ofd <sub>0</sub> a : om of p : of n :   |
| 31                    | St.                                   | A-St.  | St-Cu.          | 10                        | 10             | 10              | 10              | 10              | 10              | ≡ <sup>0</sup>   | ...                         | ...                         | ...                         | ...             | ...                         | om of a : om p and n :   |
| Mean<br>Cloud<br>Am't |                                       |  |                 | 7.5                       | 7.5            | 7.4             | 8.2             | 6.9             | 6.7             |                  |                             |                             |                             |                 |                             |  |

470. Richmond (Kew Obs.).

February, 1924.

| Day.                  | Cloud Forms.         |                        |                      | Cloud Amount (All Forms). |                |                 |                 |                 |                 | Weather.         |                |                  |                 |                 |                  | Remarks.  |
|-----------------------|----------------------|------------------------|----------------------|---------------------------|----------------|-----------------|-----------------|-----------------|-----------------|------------------|----------------|------------------|-----------------|-----------------|------------------|---|
|                       | 7 <sup>h</sup>       | 13 <sup>h</sup>        | 18 <sup>h</sup>      | 7 <sup>h</sup>            | 9 <sup>h</sup> | 13 <sup>h</sup> | 15 <sup>h</sup> | 18 <sup>h</sup> | 21 <sup>h</sup> | 7 <sup>h</sup>   | 9 <sup>h</sup> | 13 <sup>h</sup>  | 15 <sup>h</sup> | 18 <sup>h</sup> | 21 <sup>h</sup>  |   |
| 1                     | St.                  | —                      | —                    | 1                         | 0              | 0               | 0               | 0               | 1               | ...              | ...            | ...              | ...             | ...             | ...              | □ a a n ≡ <sup>0</sup> n :  |
| 2                     | St.                  | Ci-Cu.                 | St-Cu.               | 3                         | 7              | 7               | 8               | 9               | 3               | ...              | ...            | ...              | ...             | ...             | ...              | □ a : bc a : c p : bc b n :   |
| 3                     | A-St. : St.          | Cu.                    | St-Cu. : St.         | 3                         | 2              | 8               | —               | 10              | 10              | ...              | ...            | ...              | ...             | ...             | ...              | bm x a : c p : o n :  |
| 4                     | St.                  | St. : St-Cu.           | St-Cu.               | 1                         | 8              | 10              | 10              | 10              | 4               | ...              | ...            | ...              | ...             | ...             | ...              | b to c a : o to bc : p & n :  |
| 5                     | St. : St-Cu.         | A-Cu. : A-St. : St-Cu. | St-Cu.               | 8                         | 10             | 10              | 10              | 10              | 5               | ...              | ...            | ...              | ...             | ...             | ...              | b to c a : o p : o to bcq n :   |
| 6                     | St.                  | St-Cu. : Nb.           | St-Cu.               | 10                        | 10             | 10              | 9               | 10              | 10              | ...              | ...            | ...              | ...             | ...             | ...              | p 7h.-7h. 10m., 9h.-9h 12m., o to c to o.   |
| 7                     | St-Cu.               | A-St. : St-Cu.         | A-St. : St-Cu.       | 9                         | 10             | 10              | 10              | 10              | 10              | ...              | ...            | ∞ <sup>0</sup>   | ∞ <sup>0</sup>  | ∞ <sup>0</sup>  | ∞ <sup>0</sup>   | o m-oz a, p & n :   |
| 8                     | St-Cu.               | A-St. : St-Cu.         | St. : Fr-St.         | 10                        | 10             | 10              | 5               | 9               | 2               | ...              | ...            | ∞ <sup>0</sup>   | ∞ <sup>0</sup>  | ∞ <sup>0</sup>  | ∞ <sup>0</sup>   | p <sub>0</sub> 9h. 30m. o, o to bc, bc to b.  |
| 9                     | St-Cu.               | St. : Nb.              | St.                  | 9                         | 10             | 10              | 10              | 10              | 10              | ...              | ...            | ...              | ...             | ...             | ...              | d <sub>0</sub> a, ● p o n :   |
| 10                    | St.                  | St-Cu.                 | St.                  | 10                        | 10             | 10              | —               | 10              | 10              | ...              | ...            | ...              | ...             | ...             | ...              | om to of a : of to om p :   |
| 11                    | St-Cu.               | St.                    | St.                  | 10                        | 10             | 10              | 10              | 10              | 10              | ...              | ...            | ...              | ...             | ...             | ...              | om to o a, p & n :  |
| 12                    | St. : St-Cu.         | St.                    | St.                  | 10                        | 10             | 10              | 10              | 10              | 10              | ...              | ...            | ...              | ...             | ...             | ...              | om to of g at 13h. omd to ofe n :   |
| 13                    | St.                  | St.                    | A-St. : St. : St-Cu. | 10                        | 10             | 10              | 10              | 10              | 10              | ≡ <sup>0</sup> q | q              | ≡ <sup>0</sup> q | q *             | 8 q             | q                | gust 16h. 35m. oq to oq g a : o, q,<br>m s to o q p & n :   |
| 14                    | St-Cu.               | St-Cu.                 | St-Cu.               | 10                        | 10             | 10              | 10              | 10              | 3               | ...              | ...            | ...              | ...             | ...             | ...              | o c o a & p : b c m n : □ n :   |
| 15                    | St.                  | Nb.                    | St.                  | 1                         | 2              | 10              | 9               | 10              | 10              | ...              | ...            | ∞ <sup>0</sup> * | ∞ <sup>0</sup>  | ...             | ...              | b m x a : o m s p : f n :   |
| 16                    | St-Cu.               | Cu.                    | —                    | 10                        | 2              | 5               | 7               | 0               | 2               | ...              | ...            | ∞ <sup>0</sup>   | ∞ <sup>0</sup>  | ...             | ...              | ≡ early a : of to om a : b c z to cy p :<br>b m n :   |
| 17                    | A-St.                | A-Cu. : St.            | —                    | 2                         | 2              | 7               | —               | 0               | 0               | ...              | ...            | ...              | ...             | ...             | ...              | b m x a : c f p : b f x n :   |
| 18                    | St.                  | Nb.                    | St-Cu.               | 1                         | 7              | 10              | 8               | 4               | 9               | ...              | ...            | ...              | ...             | ...             | ...              | b f x to c m x a : o m d to c m p :<br>b c m to o n : * 23h.-10m.   |
| 19                    | Nb. : St-Cu.         | A-St. : Nb.            | St-Cu.               | 10                        | 10             | 10              | 10              | 10              | 10              | *                | ...            | *                | ∞ <sup>0</sup>  | ∞ <sup>0</sup>  | ∞ <sup>0</sup> ● | * 4h. 45m. : * 0 p 12h. 35m.-13h.<br>15m. o so a : o m to o d p & n :   |
| 20                    | St-Cu.               | St.                    | St.                  | 10                        | 10             | 10              | 10              | 10              | 10              | ...              | ...            | ...              | ...             | ...             | ...              | o m a : o m g p : o m n :   |
| 21                    | St-Cu. : St.         | St.                    | St.                  | 8                         | 10             | 10              | 10              | 10              | 10              | ...              | ...            | ...              | ...             | ...             | ...              | o m x o f x a : o m to o f, p : o f n :   |
| 22                    | St-Cu.               | A-St. : Nb. : St-Cu.   | A-Cu. : St-Cu.       | 10                        | 10             | 10              | 9               | 10              | 8               | ...              | ...            | ...              | ...             | ...             | ...              | o, a : o r <sup>0</sup> p : o c n :   |
| 23                    | Ci-Cu. : St-Cu.      | A-Cu. : Cu. : Fr-Cu.   | A-St. : A-Cu.        | 3                         | 9              | 9               | 10              | 9               | 1               | ...              | ...            | ...              | ...             | ...             | ...              | b x c o, a & p : o b c b n : Δ about 11h.<br>d <sub>0</sub> 12h. 25m., R 15h. 30m.-16h. 40m.,<br>r 17h. 10m.-18h. and 21h. 03m. |
| 24                    | St-Cu.               | St-Cu.                 | A-St : Fr-Nb.        | 7                         | 10             | 10              | —               | 10              | 10              | ...              | ...            | ...              | ...             | ...             | ...              | r 6h. 15m., R 8h.-8h. 30m * 16h. 15m.<br>-35m., 17h. 25m.-58m.  |
| 25                    | St-Cu.               | M-Cu. : St-Cu. : Nb.   | Nb.                  | 10                        | 10             | 10              | 10              | 10              | 4               | ...              | ...            | ...              | ...             | ...             | ...              | b, bc, c to o s o * 15h. 05m. and<br>15h. 40m.  |
| 26                    | St-Cu. : St.         | A-Cu. : Cu. : St-Cu.   | St-Cu.               | 1                         | 6              | 8               | 10              | 10              | 10              | ...              | ...            | ...              | ∞ <sup>0</sup>  | ∞ <sup>0</sup>  | ∞ <sup>0</sup>   | o m x, b m, c a : o p h p : oz to oms n :   |
| 27                    | St-Cu.               | Ci. : Ci-St.           | A-St. : St-Cu. : St. | 10                        | 3              | 8               | 7               | 10              | 10              | ...              | ...            | ...              | ...             | ∞               | ∞ *              | Δ 17-18h, * 20h. 15m.-22h. 30m.<br>c to b c a : c p s bc b p : c ps, bc b n :   |
| 28                    | A-Cu. : St. : Fr-St. | Cu.                    | St-Cu.               | 7                         | 1              | 5               | 7               | 1               | 3               | ...              | ...            | ...              | ...             | ...             | ...              | * 15h. 40m. and 16h. 10m.-20m.  |
| 29                    | Ci. : A-Cu. : St-Cu. | St-Cu.                 | St. : Fr-St.         | 8                         | 10             | 9               | 10              | 10              | 9               | ...              | ...            | ...              | ...             | ...             | ...              | ● p <sub>0</sub> 14h. 10m., ● 15h. Line q,<br>● 15h. 58m.-16h. 10m.   |
| Mean<br>Cloud<br>Am't |                      |                        |                      | 7.0                       | 7.6            | 8.8             | 8.8             | 8.3             | 7.0             |                  |                |                  |                 |                 |                  |   |

471. Richmond (Kew Obs.).

March, 1924.

Table for Richmond (Kew Obs.) in March 1924. Columns include Day, Cloud Forms (7h, 13h, 18h), Cloud Amount (7h, 9h, 13h, 15h, 18h, 21h), Weather (7h, 9h, 13h, 15h, 18h, 21h), and Remarks. Includes a Mean Cloud Am't row at the bottom.

472. Richmond (Kew Obs.).

April, 1924.

Table for Richmond (Kew Obs.) in April 1924. Columns include Day, Cloud Forms (7h, 13h, 18h), Cloud Amount (7h, 9h, 13h, 15h, 18h, 21h), Weather (7h, 9h, 13h, 15h, 18h, 21h), and Remarks. Includes a Mean Cloud Am't row at the bottom.

\* Mean of 26 days.

† Mean of 25 days.

473. Richmond (Kew Obs.).

Table for Richmond (Kew Obs.) in May 1924. Columns include Day, Cloud Forms (7h, 13h, 18h), Cloud Amount (7h, 9h, 13h, 15h, 18h, 21h), Weather (7h, 9h, 13h, 15h, 18h, 21h), and Remarks. Data rows 1-31.

474. Richmond (Kew Obs.).

Table for Richmond (Kew Obs.) in June 1924. Columns include Day, Cloud Forms (7h, 13h, 18h), Cloud Amount (7h, 9h, 13h, 15h, 18h, 21h), Weather (7h, 9h, 13h, 15h, 18h, 21h), and Remarks. Data rows 1-30.

\* Mean of 27 days.

† Mean of 25 days.

475. Richmond (Kew Obs.).

July, 1924.

Table for Richmond (Kew Obs.) in July 1924. Columns include Day, Cloud Forms (7h, 13h, 18h), Cloud Amount (All Forms) (7h, 9h, 13h, 15h, 18h, 21h), Weather (7h, 9h, 13h, 15h, 18h, 21h), and Remarks. Rows 1-31 show daily observations with cloud types like St-Cu, Det-Cu, Ci., and weather symbols like p, q, and cloud amount numbers.

476. Richmond (Kew Obs.).

August, 1924.

Table for Richmond (Kew Obs.) in August 1924. Columns include Day, Cloud Forms (7h, 13h, 18h), Cloud Amount (All Forms) (7h, 9h, 13h, 15h, 18h, 21h), Weather (7h, 9h, 13h, 15h, 18h, 21h), and Remarks. Rows 1-31 show daily observations with cloud types like Ci-St, St-Cu, Fr-Cu, and weather symbols like p, q, and cloud amount numbers.

† Mean of 26 days

\* Mean of 27 days

477. Richmond (Kew Obs.).

September, 1924.

Table for Richmond (Kew Obs.) in September 1924. Columns include Day, Cloud Forms (7h, 13h, 18h), Cloud Amount (7h, 9h, 13h, 15h, 18h, 21h), Weather (7h, 9h, 13h, 15h, 18h, 21h), and Remarks. Includes a Mean Cloud Am't. row at the bottom.

478. Richmond (Kew Obs.).

October, 1924.

Table for Richmond (Kew Obs.) in October 1924. Columns include Day, Cloud Forms (7h, 13h, 18h), Cloud Amount (7h, 9h, 13h, 15h, 18h, 21h), Weather (7h, 9h, 13h, 15h, 18h, 21h), and Remarks. Includes a Mean Cloud Am't. row at the bottom.

\* Mean for 26 days only.

† Mean for 27 days only.

479. Richmond (Kew Obs.).

November, 1924.

Table for Richmond (Kew Obs.) in November 1924. Columns include Day, Cloud Forms (7h, 13h, 18h), Cloud Amount (All Forms) (7h, 9h, 13h, 15h, 18h, 21h), Weather (7h, 9h, 13h, 15h, 18h, 21h), and Remarks. Data rows 1-30 show various cloud and weather observations.

480. Richmond (Kew Obs.).

December, 1924.

Table for Richmond (Kew Obs.) in December 1924. Columns include Day, Cloud Forms (7h, 13h, 18h), Cloud Amount (All Forms) (7h, 9h, 13h, 15h, 18h, 21h), Weather (7h, 9h, 13h, 15h, 18h, 21h), and Remarks. Data rows 1-31 show various cloud and weather observations.

\* Mean of 25 days.

† Mean of 26 days.

481. Richmond (Kew Observatory).

| DAY.              | JANUARY.    |                                      |   |      | FEBRUARY.   |                                      |   |      | MARCH.      |                                      |   |      | APRIL.      |                                      |   |      | MAY.        |                                      |   |      | JUNE.       |                                      |   |      |
|-------------------|-------------|--------------------------------------|---|------|-------------|--------------------------------------|---|------|-------------|--------------------------------------|---|------|-------------|--------------------------------------|---|------|-------------|--------------------------------------|---|------|-------------|--------------------------------------|---|------|
|                   | Char-acter. | Air-Earth Current $\times 10^{16}$ . | Ionic Charge per cc. $\times 10^{16}$ . |      | Char-acter. | Air-Earth Current $\times 10^{16}$ . | Ionic Charge per cc. $\times 10^{16}$ . |      | Char-acter. | Air-Earth Current $\times 10^{16}$ . | Ionic Charge per cc. $\times 10^{16}$ . |      | Char-acter. | Air-Earth Current $\times 10^{16}$ . | Ionic Charge per cc. $\times 10^{16}$ . |      | Char-acter. | Air-Earth Current $\times 10^{16}$ . | Ionic Charge per cc. $\times 10^{16}$ . |      | Char-acter. | Air-Earth Current $\times 10^{16}$ . | Ionic Charge per cc. $\times 10^{16}$ . |      |
|                   |             |                                      | +                                       | -    |             |                                      | +                                       | -    |             |                                      | +                                       | -    |             |                                      | +                                       | -    |             |                                      | +                                       | -    |             |                                      | +                                       | -    |
|                   |             | Amp/cm <sup>2</sup>                  | Coulomb.                                |      |             | Amp/cm <sup>2</sup>                  | Coulomb.                                |      |             | Amp/cm <sup>2</sup>                  | Coulomb.                                |      |             | Amp/cm <sup>2</sup>                  | Coulomb.                                |      |             | Amp/cm <sup>2</sup>                  | Coulomb.                                |      |             | Amp/cm <sup>2</sup>                  | Coulomb.                                |      |
| 1                 | 1           | ...                                  | ...                                     | ...  | 0           | 0.67                                 | 0.43                                    | 0.36 | 0           | ...                                  | ...                                     | ...  | 1           | 1.52                                 | 0.14                                    | 0.51 | 1           | ...                                  | ...                                     | ...  | 2           | ...                                  | ...                                     | ...  |
| 2                 | 1           | 0.28                                 | 0.27                                    | ...  | 0           | ...                                  | ...                                     | ...  | 1           | ...                                  | ...                                     | ...  | 0           | 0.95                                 | 0.12                                    | 0.11 | 1           | 0.54                                 | 0.61                                    | 0.55 | 2           | 0.65                                 | 0.27                                    | ...  |
| 3                 | 0           | 0.29                                 | 0.40                                    | 0.27 | 0           | ...                                  | ...                                     | ...  | 1           | 0.83                                 | 0.27                                    | ...  | 0           | ...                                  | ...                                     | ...  | 1           | ...                                  | ...                                     | ...  | 1           | 0.78                                 | 0.06                                    | ...  |
| 4                 | 0           | 0.39                                 | 0.76                                    | ...  | 0           | ...                                  | 0.40                                    | 0.21 | 0           | 0.28                                 | ...                                     | 0.37 | 0           | ...                                  | ...                                     | ...  | 1           | ...                                  | ...                                     | ...  | 2           | ...                                  | ...                                     | ...  |
| 5                 | 0           | ...                                  | ...                                     | ...  | 0           | 1.18                                 | 0.35                                    | 0.29 | 0           | 1.22                                 | 0.43                                    | ...  | 0           | ...                                  | ...                                     | ...  | 1           | 1.45                                 | 0.61                                    | 0.61 | 0           | 0.49                                 | 0.13                                    | ...  |
| 6                 | 0           | ...                                  | ...                                     | ...  | 1           | ...                                  | 0.45                                    | ...  | 1           | 0.19                                 | 0.47                                    | 0.35 | 0           | ...                                  | ...                                     | ...  | 0           | 0.70                                 | ...                                     | 0.50 | 1           | ...                                  | ...                                     | ...  |
| 7                 | 0           | 0.36                                 | ...                                     | 0.21 | 0           | 0.41                                 | ...                                     | 0.36 | 0           | 1.03                                 | 0.23                                    | 0.14 | 0           | 0.41                                 | 0.06                                    | ...  | 1           | ...                                  | 0.86                                    | ...  | 1           | ...                                  | ...                                     | ...  |
| 8                 | 0           | ...                                  | ...                                     | ...  | 0           | 0.52                                 | 0.36                                    | ...  | 0           | ...                                  | ...                                     | ...  | 0           | 0.60                                 | 0.79                                    | 0.74 | 1           | 0.64                                 | ...                                     | 0.39 | 1           | ...                                  | ...                                     | ...  |
| 9                 | 1           | 1.11                                 | ...                                     | ...  | 1           | ...                                  | ...                                     | ...  | 0           | ...                                  | ...                                     | ...  | 2           | ...                                  | 0.25                                    | 0.45 | 0           | 0.40                                 | ...                                     | 0.36 | 1           | ...                                  | ...                                     | ...  |
| 10                | 2           | 0.30                                 | 0.53                                    | ...  | 0           | ...                                  | ...                                     | ...  | 0           | 0.30                                 | ...                                     | ...  | 2           | ...                                  | ...                                     | ...  | 2           | ...                                  | ...                                     | ...  | 1           | ...                                  | ...                                     | ...  |
| 11                | 1           | 0.16                                 | ...                                     | 0.21 | 0           | 0.41                                 | 0.53                                    | 0.43 | 0           | 0.90                                 | 0.53                                    | 0.38 | 1           | ...                                  | ...                                     | ...  | 1           | ...                                  | ...                                     | ...  | 1           | 0.94                                 | 0.33                                    | 0.36 |
| 12                | 1           | ...                                  | ...                                     | ...  | 0           | ...                                  | ...                                     | ...  | 0           | 0.71                                 | ...                                     | 0.25 | 2           | ...                                  | ...                                     | ...  | 1           | 0.90                                 | 0.25                                    | 0.02 | 2           | ...                                  | ...                                     | ...  |
| 13                | 0           | ...                                  | ...                                     | ...  | 0           | 0.31                                 | 0.18                                    | 0.21 | 0           | 1.02                                 | 0.36                                    | 0.49 | 2           | ...                                  | ...                                     | ...  | 1           | 0.83                                 | 0.63                                    | ...  | 0           | 1.30                                 | 0.35                                    | 0.43 |
| 14                | 0           | 0.41                                 | 0.29                                    | ...  | 0           | ...                                  | 0.43                                    | 0.49 | 0           | 0.78                                 | 0.53                                    | 0.36 | 2           | ...                                  | ...                                     | ...  | 1           | 0.46                                 | 0.47                                    | 0.37 | 0           | ...                                  | ...                                     | ...  |
| 15                | 0           | 1.32                                 | 0.36                                    | ...  | 1           | 0.75                                 | ...                                     | ...  | 1           | ...                                  | ...                                     | ...  | 0           | 1.20                                 | 0.08                                    | 0.06 | 0           | 0.76                                 | 0.39                                    | 0.34 | 0           | ...                                  | ...                                     | ...  |
| 16                | 0           | 0.21                                 | ...                                     | 1.01 | 0           | ...                                  | ...                                     | ...  | 0           | ...                                  | ...                                     | ...  | 0           | 1.12                                 | 0.41                                    | ...  | 0           | 0.28                                 | 0.49                                    | 0.35 | 0           | 0.35                                 | 0.88                                    | 0.21 |
| 17                | 1           | ...                                  | ...                                     | ...  | 0           | ...                                  | ...                                     | ...  | 0           | 0.92                                 | 0.23                                    | 0.21 | 1           | 0.77                                 | 0.49                                    | 0.21 | 0           | ...                                  | ...                                     | ...  | 1           | 1.48                                 | ...                                     | ...  |
| 18                | 2           | ...                                  | ...                                     | ...  | 1           | 0.52                                 | 0.49                                    | 0.06 | 0           | 0.68                                 | 0.14                                    | ...  | 0           | ...                                  | ...                                     | ...  | 1           | ...                                  | ...                                     | ...  | 1           | 1.61                                 | 0.86                                    | 0.37 |
| 19                | 2           | ...                                  | ...                                     | ...  | 1           | 0.82                                 | 0.31                                    | 0.13 | 1           | 0.69                                 | 0.40                                    | 0.16 | 0           | ...                                  | ...                                     | ...  | 1           | 1.10                                 | 0.74                                    | 0.41 | 1           | 0.90                                 | 0.39                                    | 0.40 |
| 20                | 1           | ...                                  | ...                                     | ...  | 0           | 0.54                                 | 0.31                                    | 0.37 | 0           | 0.87                                 | 0.84                                    | ...  | 0           | ...                                  | ...                                     | ...  | 1           | 1.14                                 | 0.31                                    | 0.16 | 1           | 0.73                                 | 0.63                                    | 0.41 |
| 21                | 1           | ...                                  | ...                                     | ...  | 0           | 0.33                                 | 0.61                                    | ...  | 0           | ...                                  | 0.16                                    | 0.88 | 0           | ...                                  | ...                                     | ...  | 1           | 1.40                                 | 0.76                                    | 0.56 | 0           | ...                                  | ...                                     | ...  |
| 22                | 2           | 0.83                                 | ...                                     | 0.10 | 0           | 0.46                                 | 0.29                                    | ...  | 1           | ...                                  | ...                                     | ...  | 0           | 1.20                                 | 0.74                                    | 0.54 | 0           | 0.86                                 | 0.56                                    | 0.39 | 0           | ...                                  | ...                                     | ...  |
| 23                | 1           | ...                                  | ...                                     | ...  | 0           | ...                                  | ...                                     | ...  | 1           | ...                                  | ...                                     | ...  | 0           | 0.45                                 | 0.32                                    | ...  | 1           | ...                                  | ...                                     | ...  | 0           | 1.04                                 | 0.37                                    | 0.31 |
| 24                | 2           | ...                                  | ...                                     | ...  | 1           | ...                                  | ...                                     | ...  | 1           | 1.09                                 | 0.40                                    | 0.43 | 0           | 1.17                                 | 0.61                                    | 0.67 | 1           | ...                                  | ...                                     | ...  | 0           | 0.46                                 | 0.68                                    | ...  |
| 25                | 1           | 0.92                                 | 0.27                                    | 0.10 | 2           | 0.50                                 | 0.18                                    | ...  | 1           | ...                                  | ...                                     | ...  | 1           | 1.29                                 | 1.03                                    | 0.45 | 1           | ...                                  | ...                                     | ...  | 0           | 0.57                                 | 0.43                                    | 0.25 |
| 26                | 0           | ...                                  | ...                                     | ...  | 0           | 0.64                                 | 0.16                                    | 0.14 | 1           | ...                                  | 0.38                                    | ...  | 2           | ...                                  | ...                                     | ...  | 0           | 0.63                                 | 0.53                                    | 0.23 | 0           | 1.61                                 | 0.85                                    | 0.43 |
| 27                | 0           | ...                                  | ...                                     | ...  | 1           | 0.50                                 | 0.39                                    | 0.34 | 0           | 0.74                                 | ...                                     | 0.07 | 2           | ...                                  | ...                                     | ...  | 0           | 1.03                                 | 0.79                                    | 0.35 | 1           | 0.87                                 | ...                                     | ...  |
| 28                | 0           | 0.64                                 | 0.10                                    | 0.16 | 0           | 0.30                                 | 0.34                                    | 0.49 | 0           | 0.82                                 | 0.22                                    | 0.25 | 1           | ...                                  | ...                                     | ...  | 0           | 0.57                                 | 0.27                                    | 0.09 | 0           | ...                                  | ...                                     | ...  |
| 29                | 0           | 0.30                                 | ...                                     | 0.14 | 1           | ...                                  | ...                                     | ...  | 0           | ...                                  | ...                                     | ...  | 1           | ...                                  | ...                                     | ...  | 1           | 0.83                                 | 0.23                                    | ...  | 0           | ...                                  | ...                                     | ...  |
| 30                | 1           | 0.21                                 | 0.41                                    | ...  | ...         | ...                                  | ...                                     | ...  | 0           | ...                                  | ...                                     | ...  | 2           | ...                                  | ...                                     | ...  | 0           | 1.07                                 | 0.59                                    | 0.43 | 0           | 0.45                                 | 0.56                                    | ...  |
| 31                | 0           | 0.41                                 | ...                                     | 0.10 | ...         | ...                                  | ...                                     | ...  | 0           | 1.10                                 | ...                                     | ...  | ...         | ...                                  | ...                                     | ...  | 2           | ...                                  | ...                                     | ...  | ...         | ...                                  | ...                                     | ...  |
| Mean              | 0.68        | 0.51                                 | 0.38                                    | 0.26 | 0.34        | 0.55                                 | 0.37                                    | 0.30 | 0.32        | 0.79                                 | 0.37                                    | 0.33 | 0.77        | 0.97                                 | 0.42                                    | 0.42 | 0.74        | 0.82                                 | 0.53                                    | 0.36 | 0.67        | 0.89                                 | 0.49                                    | 0.35 |
| No. of Days used. | 31          | 16                                   | 9                                       | 9    | 29          | 16                                   | 17                                      | 13   | 31          | 18                                   | 15                                      | 13   | 30          | 11                                   | 12                                      | 9    | 31          | 19                                   | 17                                      | 17   | 30          | 16                                   | 14                                      | 9    |
| DAY.              | JULY.       |                                      |   |      | AUGUST.     |                                      |   |      | SEPTEMBER.  |                                      |   |      | OCTOBER.    |                                      |   |      | NOVEMBER.   |                                      |   |      | DECEMBER.   |                                      |   |      |
|                   | Char-acter. | Air-Earth Current $\times 10^{16}$ . | Ionic Charge per cc. $\times 10^{16}$ . |      | Char-acter. | Air-Earth Current $\times 10^{16}$ . | Ionic Charge per cc. $\times 10^{16}$ . |      | Char-acter. | Air-Earth Current $\times 10^{16}$ . | Ionic Charge per cc. $\times 10^{16}$ . |      | Char-acter. | Air-Earth Current $\times 10^{16}$ . | Ionic Charge per cc. $\times 10^{16}$ . |      | Char-acter. | Air-Earth Current $\times 10^{16}$ . | Ionic Charge per cc. $\times 10^{16}$ . |      | Char-acter. | Air-Earth Current $\times 10^{16}$ . | Ionic Charge per cc. $\times 10^{16}$ . |      |
|                   |             |                                      | +                                       | -    |             |                                      | +                                       | -    |             |                                      | +                                       | -    |             |                                      | +                                       | -    |             |                                      | +                                       | -    |             |                                      | +                                       | -    |
|                   |             | Amp/cm <sup>2</sup>                  | Coulomb.                                |      |             | Amp/cm <sup>2</sup>                  | Coulomb.                                |      |             | Amp/cm <sup>2</sup>                  | Coulomb.                                |      |             | Amp/cm <sup>2</sup>                  | Coulomb.                                |      |             | Amp/cm <sup>2</sup>                  | Coulomb.                                |      |             | Amp/cm <sup>2</sup>                  | Coulomb.                                |      |
| 1                 | 0           | 0.86                                 | 0.50                                    | 0.18 | 1           | ...                                  | ...                                     | ...  | 0           | 0.06                                 | ...                                     | 0.31 | 1           | 0.21                                 | ...                                     | 0.07 | 1           | ...                                  | ...                                     | ...  | 1           | 0.29                                 | ...                                     | 0.18 |
| 2                 | 1           | 1.20                                 | 0.59                                    | 0.50 | 2           | ...                                  | ...                                     | ...  | 0           | ...                                  | ...                                     | ...  | 0           | ...                                  | ...                                     | ...  | 0           | ...                                  | ...                                     | ...  | 1           | ...                                  | ...                                     | ...  |
| 3                 | 1           | ...                                  | ...                                     | ...  | 1           | ...                                  | ...                                     | ...  | 0           | 1.46                                 | ...                                     | ...  | 0           | ...                                  | ...                                     | ...  | 0           | 0.43                                 | ...                                     | 0.13 | 0           | 1.71                                 | 0.40                                    | ...  |
| 4                 | 1           | 0.67                                 | 0.99                                    | 0.68 | 0           | ...                                  | ...                                     | ...  | 1           | ...                                  | ...                                     | ...  | 0           | 0.54                                 | 0.38                                    | ...  | 0           | 0.90                                 | 0.31                                    | ...  | 1           | 0.84                                 | ...                                     | 0.04 |
| 5                 | 1           | ...                                  | ...                                     | ...  | 0           | ...                                  | ...                                     | ...  | 0           | 0.97                                 | 0.38                                    | ...  | 1           | ...                                  | ...                                     | ...  | 0           | 0.74                                 | ...                                     | 0.18 | 1           | 1.44                                 | 0.45                                    | ...  |
| 6                 | 1           | ...                                  | ...                                     | ...  | 1           | 0.61                                 | 0.58                                    | ...  | 1           | ...                                  | ...                                     | ...  | 1           | 0.59                                 | ...                                     | 0.25 | 0           | 0.56                                 | 0.34                                    | ...  | 1           | ...                                  | ...                                     | ...  |
| 7                 | 1           | 0.78                                 | 0.76                                    | 0.43 | 1           | 0.49                                 | ...                                     | 0.11 | 1           | ...                                  | ...                                     | ...  | 1           | 0.83                                 | ...                                     | ...  | 0           | 0.25                                 | ...                                     | 0.16 | 0           | ...                                  | ...                                     | ...  |
| 8                 | 0           | 0.92                                 | 0.81                                    | 0.45 | 0           | 0.62                                 | 0.70                                    | ...  | 1           | 1.22                                 | ...                                     | 1.30 | 1           | 1.25                                 | 0.25                                    | ...  | 0           | ...                                  | ...                                     | ...  | 0           | ...                                  | ...                                     | 0.09 |
| 9                 | 1           | 0.89                                 | ...                                     | ...  | 0           | ...                                  | ...                                     | ...  | 1           | ...                                  | ...                                     | ...  | 1           | ...                                  | ...                                     | ...  | 0           | ...                                  | ...                                     | ...  | 1           | ...                                  | ...                                     | 0.49 |
| 10                | 0           | 0.95                                 | 0.65                                    | ...  | 0           | ...                                  | ...                                     | ...  | 0           | 0.72                                 | 0.83                                    | ...  | 0           | 1.86                                 | 0.34                                    | ...  | 0           | 0.38                                 | 0.34                                    | ...  | 1           | ...                                  | ...                                     | ...  |
| 11                | 0           | 1.10                                 | 0.37                                    | 0.38 | 0           | 1.46                                 | ...                                     | 0.38 | 1           | 0.83                                 | ...                                     | 0.56 | 0           | ...                                  | ...                                     | ...  | 1           | 1.51                                 | ...                                     | 0.20 | 0           | ...                                  | ...                                     | ...  |
| 12                | 0           | ...                                  | ...                                     | ...  | 1           | 1.03                                 | 0.72                                    | ...  | 0           | ...                                  | ...                                     | ...  | 0           | ...                                  | ...                                     | ...  | 2           | ...                                  | ...                                     | ...  | 0           | 1.52                                 | 0.32                                    | ...  |
| 13                | 1           | ...                                  | ...                                     | ...  | 1           | 2.11                                 | ...                                     | ...  | 0           | ...                                  | ...                                     | ...  | 0           | 0.25                                 | ...                                     | 0.31 | 2           | ...                                  | ...                                     | ...  | 1           | ...                                  | ...                                     | ...  |
| 14                | 0           | 0.84                                 | 1.08                                    | ...  | 0           | 1.78                                 | ...                                     | ...  | 1           | ...                                  | ...                                     | ...  | 0           | 0.84                                 | 0.27                                    | ...  | 0           | 0.13                                 | 0.63                                    | ...  | 1           | ...                                  | ...                                     | ...  |
| 15                | 0           | 1.06                                 | ...                                     | 0.45 | 1           | 0.41                                 | ...                                     | 0.54 | 1           | 0.82                                 | ...                                     | 0.59 | 0           | 0.18                                 | ...                                     | 0.27 | 0           | ...                                  | ...                                     | ...  | 2           | ...                                  | ...                                     | ...  |
| 16                | 1           | 0.63                                 | 0.77                                    | 0.49 | 1           | ...                                  | ...                                     | ...  | 1           | 0.67                                 | 0.50                                    | ...  | 0           | 1.15                                 | 0.36                                    | ...  | 0           | ...                                  | ...                                     | ...  | 1           | ...                                  | 0.31                                    | ...  |
| 17                | 2           | ...                                  | ...                                     | ...  | 1           | ...                                  | ...                                     | ...  | 0           | 0.79                                 | ...                                     | 0.31 | 0           | 0.34                                 | ...                                     | ...  | 0           | 0.54                                 | ...                                     | 0.25 | 0           | ...                                  | ...                                     | ...  |
| 18                | 1           | 0.83                                 | 0.63                                    | ...  | 1           | ...                                  | ...                                     | ...  | 0           | 0.24                                 | 0.29                                    | ...  | 0           | ...                                  | ...                                     | ...  | 0           | 0.18                                 | 0.47                                    | ...  | 0           | ...                                  | 0.31                                    | ...  |
| 19                | 1           | ...                                  | ...                                     | ...  | 1           | ...                                  | ...                                     | ...  | 1           | 1.04                                 | ...                                     | ...  | 0           | ...                                  | ...                                     | ...  | 0           | ...                                  | ...                                     | 0.22 | 0           | ...                                  | ...                                     | ...  |
| 20                | 0           | ...                                  | ...                                     | ...  | 1           | ...                                  | ...                                     | ...  | 1           | ...                                  | ...                                     | ...  | 0           | 0.27                                 | 0.22                                    | ...  | 0           | ...                                  | 0.22                                    | ...  | 0           | ...                                  | ...                                     | ...  |
| 21                | 2           | ...                                  | 0.27                                    | ...  | 1           | ...                                  | ...                                     | 0.40 | 1           | ...                                  | ...                                     | ...  | 1           | ...                                  | ...                                     | ...  | 0           | ...                                  | ...                                     | ...  | 0           | ...                                  | ...                                     | ...  |
| 22                | 2           | ...                                  | ...                                     | ...  | 2           | ...                                  | ...                                     | ...  | 1           | 1.77                                 |   |      |             |                                      |   |      |             |                                      |   |      |             |                                      |   |      |



Mean Values for periods of sixty minutes, centered at the exact hours, Greenwich Mean Time.

482. Richmond (Kew Observatory).

1924.

| Day.         | January. Factor 2.07 |     |      |      | February. Factor 2.02 |     |      |      | March. Factor 1.99. |     |      |      |         |  |  |  |
|--------------|----------------------|-----|------|------|-----------------------|-----|------|------|---------------------|-----|------|------|---------|--|--|--|
|              | 3h.                  | 9h. | 15h. | 21h. | 3h.                   | 9h. | 15h. | 21h. | 3h.                 | 9h. | 15h. | 21h. |         |  |  |  |
| 1            | 105                  | 210 | 160  | 210  | 345                   | 590 | 425  | 400  | 65                  | 215 | 205  | 700  |         |  |  |  |
| 2            | 145                  | 160 | 370  | 385  | 465                   | 465 | 360  | 435  | 125                 | 280 | 230  | 610  |         |  |  |  |
| 3            | 345                  | 475 | 345  | 450  | 205                   | 500 | 320  | 435  | z±                  | 330 | 330  | 510  |         |  |  |  |
| 4            | 490                  | 845 | 605  | 385  | 220                   | 425 | 270  | 410  | 140                 | 445 | 205  | 710  |         |  |  |  |
| 5            | 385                  | 685 | 555  | 635  | 320                   | 435 | 375  | 335  | 610                 | 775 | 305  | 610  |         |  |  |  |
| 6            | 210                  | 500 | 515  | 475  | 115                   | 205 | 335  | 245  | —                   | —   | 915  | 495  |         |  |  |  |
| 7            | 330                  | 605 | 530  | 715  | 205                   | 565 | 410  | 540  | —                   | —   | 495  | 455  |         |  |  |  |
| 8            | 475                  | 475 | 515  | 460  | 230                   | 590 | 410  | 385  | 290                 | 280 | 315  | 725  |         |  |  |  |
| 9            | 355                  | —   | 570  | 635  | 230                   | 295 | 195  | 670  | 485                 | 420 | 305  | 785  |         |  |  |  |
| 10           | —                    | 595 | 845  | 450  | 295                   | 555 | 410  | 410  | 345                 | 585 | 800  | 735  |         |  |  |  |
| 11           | 395                  | 410 | 500  | 290  | 180                   | 500 | 645  | 525  | 305                 | 585 | 405  | 840  |         |  |  |  |
| 12           | 90                   | 170 | 225  | 305  | 320                   | 490 | 435  | 465  | 420                 | 620 | 840  | 840  |         |  |  |  |
| 13           | 145                  | 240 | 290  | 225  | 310                   | 425 | 400  | 525  | 585                 | 890 | 940  | 635  |         |  |  |  |
| 14           | 120                  | 105 | 210  | 395  | 285                   | 655 | 525  | 820  | 595                 | 725 | 865  | 775  |         |  |  |  |
| 15           | 170                  | 420 | 355  | 490  | 645                   | 590 | 360  | 590  | 305                 | 485 | 430  | 420  |         |  |  |  |
| 16           | 500                  | 555 | 685  | 570  | 500                   | 645 | 555  | 1000 | 190                 | 190 | 190  | 510  |         |  |  |  |
| 17           | 330                  | 315 | —    | 580  | 680                   | 835 | 580  | 400  | 265                 | 620 | 265  | 840  |         |  |  |  |
| 18           | 250                  | 265 | 290  | 250  | 310                   | 580 | 580  | 425  | 215                 | 620 | 205  | 190  |         |  |  |  |
| 19           | 0                    | 55  | z±   | 200  | 165                   | 425 | 500  | 500  | 125                 | 470 | 190  | 230  |         |  |  |  |
| 20           | 105                  | 345 | 265  | 240  | 435                   | 490 | 615  | 490  | 280                 | 535 | 735  | 470  |         |  |  |  |
| 21           | 105                  | 90  | 55   | 55   | 465                   | 525 | 590  | 605  | 330                 | 560 | 115  | 345  |         |  |  |  |
| 22           | 210                  | 200 | 475  | z±   | 310                   | 490 | 360  | 465  | 150                 | 230 | 240  | 485  |         |  |  |  |
| 23           | 15                   | 210 | 265  | 420  | 245                   | 435 | 310  | 320  | 165                 | 75  | 180  | 215  |         |  |  |  |
| 24           | 240                  | 345 | 475  | 885  | 320                   | 285 | z±   | 335  | 100                 | 215 | 265  | 495  |         |  |  |  |
| 25           | 130                  | 595 | 385  | 410  | 155                   | 205 | 285  | 580  | 180                 | 405 | 355  | 485  |         |  |  |  |
| 26           | 355                  | 530 | 330  | 435  | 320                   | 615 | 540  | 760  | z-                  | 470 | 485  | 420  |         |  |  |  |
| 27           | 265                  | 370 | 305  | 500  | 360                   | 655 | 245  | z+   | 180                 | 510 | 585  | 545  |         |  |  |  |
| 28           | 290                  | 240 | 315  | 305  | 180                   | 410 | 285  | 285  | 315                 | 585 | 585  | 650  |         |  |  |  |
| 29           | 305                  | 435 | 435  | 395  | 270                   | 410 | 245  | 285  | 455                 | 560 | 675  | 660  |         |  |  |  |
| 30           | 385                  | 370 | 265  | 160  | —                     | —   | —    | —    | 420                 | 355 | 305  | 750  |         |  |  |  |
| 31           | 435                  | 685 | 635  | 555  | —                     | —   | —    | —    | 315                 | 785 | 510  | 570  |         |  |  |  |
| Means        | (a)                  | 271 | 396  | 403  | 399                   | 313 | 511  | 421  | 487                 | 295 | 476  | 434  | 571     |  |  |  |
|              | (b)                  | 260 | 397  | 343  | 339                   | 311 | 457  | 405  | 493                 | 295 | 482  | 416  | 586     |  |  |  |
| Mean for day | (a) 367              |     |      |      | (b) 335               |     |      |      | (a) 444             |     |      |      | (b) 445 |  |  |  |

| Day.         | April. Factor 2.21. |     |      |      | May. Factor 2.10 |     |      |      | June. Factor 2.13. |     |      |      |         |  |  |  |
|--------------|---------------------|-----|------|------|------------------|-----|------|------|--------------------|-----|------|------|---------|--|--|--|
|              | 3h.                 | 9h. | 15h. | 21h. | 3h.              | 9h. | 15h. | 21h. | 3h.                | 9h. | 15h. | 21h. |         |  |  |  |
| 1            | 170                 | 505 | 620  | 985  | 200              | 40  | 175  | 350  | 55                 | 120 | 245  | 245  |         |  |  |  |
| 2            | 435                 | 760 | 575  | 505  | 470              | 215 | 215  | 280  | 135                | 15  | 285  | 205  |         |  |  |  |
| 3            | 420                 | 800 | 730  | 605  | 135              | 200 | z+   | 320  | 380                | 405 | 165  | 95   |         |  |  |  |
| 4            | 505                 | 705 | 605  | 745  | 270              | 240 | z-   | 350  | 175                | 205 | 190  | 540  |         |  |  |  |
| 5            | 490                 | 630 | 505  | 480  | 190              | 215 | 535  | 270  | 215                | 500 | 420  | 325  |         |  |  |  |
| 6            | 195                 | 435 | 560  | 325  | 190              | 255 | 230  | 535  | 300                | 325 | 190  | 285  |         |  |  |  |
| 7            | 110                 | 240 | 140  | 195  | 190              | 215 | 160  | 255  | 205                | 270 | 175  | z-   |         |  |  |  |
| 8            | 210                 | 295 | 170  | 255  | 135              | 200 | 175  | 160  | 55                 | 150 | 150  | 95   |         |  |  |  |
| 9            | 225                 | 310 | z-   | 630  | 95               | 310 | 105  | 215  | —                  | 135 | 95   | 110  |         |  |  |  |
| 10           | 450                 | 785 | z±   | z±   | 55               | 135 | 0    | 775  | —                  | 190 | 135  | 175  |         |  |  |  |
| 11           | 605                 | 630 | 560  | 480  | 0                | 175 | 160  | 105  | 25                 | —   | 230  | 205  |         |  |  |  |
| 12           | 1055                | 185 | 550  | 210  | 80               | 280 | 200  | 295  | 95                 | 300 | 405  | z±   |         |  |  |  |
| 13           | 210                 | 140 | 255  | 505  | 55               | 135 | 120  | 400  | 110                | 215 | 270  | 350  |         |  |  |  |
| 14           | 40                  | 40  | —    | 350  | z±               | 215 | 175  | 215  | 70                 | 245 | 190  | 270  |         |  |  |  |
| 15           | 265                 | 675 | 435  | 925  | 215              | 400 | 145  | 295  | 135                | 120 | 110  | 120  |         |  |  |  |
| 16           | 450                 | 420 | 265  | 405  | 160              | 175 | 105  | 120  | 150                | 215 | 110  | 490  |         |  |  |  |
| 17           | z±                  | 845 | 185  | 210  | 200              | 320 | 105  | 295  | 245                | 475 | 205  | 205  |         |  |  |  |
| 18           | 240                 | 295 | 140  | 295  | 65               | 40  | 375  | 350  | 215                | 215 | 205  | 255  |         |  |  |  |
| 19           | 195                 | 185 | 170  | 225  | z±               | 230 | 120  | 240  | 460                | 245 | 165  | 325  |         |  |  |  |
| 20           | 195                 | 335 | 140  | 170  | 105              | 360 | 695  | 240  | 215                | 325 | 165  | 150  |         |  |  |  |
| 21           | 170                 | 280 | 170  | 265  | 295              | 270 | 215  | 0    | 205                | 205 | 110  | 135  |         |  |  |  |
| 22           | 310                 | 255 | 170  | 225  | 80               | 135 | 135  | 135  | 175                | 135 | 95   | 70   |         |  |  |  |
| 23           | 255                 | 265 | 295  | 480  | 135              | 120 | 120  | 25   | 165                | 365 | 120  | 135  |         |  |  |  |
| 24           | 280                 | 280 | 255  | 325  | 215              | 670 | 95   | —    | 95                 | 190 | 120  | 165  |         |  |  |  |
| 25           | 185                 | 265 | 265  | 405  | —                | —   | 240  | 215  | 190                | 245 | 165  | 205  |         |  |  |  |
| 26           | 240                 | 830 | 240  | 520  | 105              | 200 | 120  | 160  | 175                | 230 | 165  | 310  |         |  |  |  |
| 27           | 85                  | 255 | 30   | 210  | 215              | 215 | 160  | 240  | 120                | 205 | 120  | 245  |         |  |  |  |
| 28           | 110                 | 280 | 170  | 225  | 270              | 430 | 255  | 400  | 245                | 270 | 135  | 205  |         |  |  |  |
| 29           | 15                  | 295 | 240  | 505  | 200              | 415 | 280  | z±   | 110                | 120 | 110  | 215  |         |  |  |  |
| 30           | 140                 | 155 | z±   | 70   | 105              | 175 | 135  | 135  | 150                | 150 | 110  | 205  |         |  |  |  |
| 31           | —                   | —   | —    | —    | z±               | 495 | 455  | 135  | —                  | —   | —    | —    |         |  |  |  |
| Means        | (a)                 | 266 | 403  | 324  | 397              | 164 | 235  | 207  | 259                | 174 | 234  | 175  | 213     |  |  |  |
|              | (b)                 | 212 | 322  | 330  | 337              | 157 | 218  | 203  | 184                | 182 | 236  | 137  | 171     |  |  |  |
| Mean for day | (a) 347             |     |      |      | (b) 300          |     |      |      | (a) 216            |     |      |      | (b) 191 |  |  |  |
|              | (a) 347             |     |      |      | (b) 300          |     |      |      | (a) 199            |     |      |      | (b) 181 |  |  |  |

NOTE.—The Potential Gradient is reckoned as positive if the potential increases upwards. For indeterminate potential gradient the following notation is used : —z + Indeterminate, positive value ; z - Indeterminate, negative value ; z± Indeterminate in magnitude and sign.

(a) Mean from all positive readings.

(b) Mean from all complete days using both positive and negative readings.

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| Day          | July. Factor 2.13.    |      |      |      | August. Factor 2.26.   |      |      |      | September. Factor 2.46. |      |      |      |         |     |  |  |
|--------------|-----------------------|------|------|------|------------------------|------|------|------|-------------------------|------|------|------|---------|-----|--|--|
|              | 3 hr.                 | 9h.  | 15h. | 21h. | 3h.                    | 9h.  | 15h. | 21h. | 3h.                     | 9h.  | 15h. | 21h. |         |     |  |  |
| 1            | 245                   | 285  | 135  | 260  | 200                    | 185  | 175  | 300  | —                       | —    | 140  | 235  |         |     |  |  |
| 2            | 135                   | 165  | 205  | 230  | 85                     | 230  | z±   | 375  | 140                     | 190  | 155  | 315  |         |     |  |  |
| 3            | 150                   | 190  | 175  | 135  | 130                    | 200  | -420 | z±   | 155                     | 65   | 345  | 300  |         |     |  |  |
| 4            | 120                   | 135  | 150  | 230  | 60                     | 260  | 115  | 30   | 80                      | 360  | 190  | 265  |         |     |  |  |
| 5            | 165                   | 205  | 150  | 205  | —                      | 60   | 100  | 200  | 155                     | 155  | 140  | 205  |         |     |  |  |
| 6            | —                     | 150  | 135  | 190  | 330                    | 290  | 145  | 160  | 205                     | 250  | 205  | 125  |         |     |  |  |
| 7            | 110                   | 110  | 120  | 205  | 70                     | 330  | 185  | 130  | 15                      | 65   | 155  | —    |         |     |  |  |
| 8            | 95                    | 205  | 150  | 165  | 175                    | 330  | 175  | 185  | —                       | 155  | 155  | 125  |         |     |  |  |
| 9            | 40                    | 245  | 165  | 190  | 160                    | 245  | 130  | 130  | 65                      | 140  | -125 | 155  |         |     |  |  |
| 10           | 55                    | 220  | 165  | 245  | 115                    | 290  | 145  | 275  | —                       | 315  | 235  | 250  |         |     |  |  |
| 11           | 175                   | 205  | 190  | 395  | 275                    | 360  | 130  | 315  | 190                     | 250  | 190  | 285  |         |     |  |  |
| 12           | 205                   | 220  | 150  | 165  | 145                    | 175  | 145  | 260  | 155                     | 190  | 140  | 155  |         |     |  |  |
| 13           | 135                   | 110  | 95   | 120  | 175                    | 230  | 445  | 290  | 110                     | 155  | 125  | 175  |         |     |  |  |
| 14           | 205                   | 325  | 110  | 175  | 160                    | 315  | 145  | 145  | 0                       | 315  | 140  | 330  |         |     |  |  |
| 15           | 135                   | 300  | 150  | 220  | 130                    | 200  | 130  | 145  | 155                     | 285  | 220  | 110  |         |     |  |  |
| 16           | 70                    | 135  | 95   | 135  | 130                    | 145  | 115  | 175  | —                       | 235  | 175  | 110  |         |     |  |  |
| 17           | 135                   | 165  | 175  | -610 | 100                    | 145  | 100  | 115  | 110                     | 155  | 140  | 175  |         |     |  |  |
| 18           | 120                   | 285  | 175  | 165  | 70                     | 130  | z±   | 215  | 95                      | 285  | 155  | 205  |         |     |  |  |
| 19           | 150                   | 190  | 135  | 230  | 115                    | 215  | 200  | 245  | 220                     | 330  | 220  | 220  |         |     |  |  |
| 20           | 165                   | 190  | 110  | 245  | 200                    | 260  | 85   | 60   | 125                     | 220  | 65   | 110  |         |     |  |  |
| 21           | 25                    | 0    | 260  | 245  | 85                     | 145  | 130  | 215  | 80                      | 175  | 190  | 250  |         |     |  |  |
| 22           | 260                   | 490  | z±   | 410  | 115                    | 175  | -315 | 100  | 155                     | 250  | 235  | 425  |         |     |  |  |
| 23           | 55                    | 270  | 120  | 135  | 100                    | 145  | z±   | 175  | 80                      | -140 | 285  | 315  |         |     |  |  |
| 24           | 110                   | 190  | 135  | 165  | 130                    | -275 | 100  | 230  | 125                     | 300  | 175  | 410  |         |     |  |  |
| 25           | 150                   | 220  | 80   | 205  | 130                    | 200  | 115  | 275  | 140                     | 315  | 285  | z±   |         |     |  |  |
| 26           | z±                    | 270  | z±   | 135  | —                      | 300  | 145  | 185  | 190                     | 285  | 140  | -125 |         |     |  |  |
| 27           | 220                   | 260  | 95   | 120  | 115                    | 215  | 175  | 260  | 80                      | 265  | 205  | 250  |         |     |  |  |
| 28           | 55                    | -175 | 110  | 285  | 200                    | 315  | 160  | 160  | 440                     | 455  | 125  | 95   |         |     |  |  |
| 29           | 230                   | —    | —    | 260  | 60                     | 175  | 145  | 290  | —                       | —    | 175  | 220  |         |     |  |  |
| 30           | 55                    | 220  | 110  | 190  | 115                    | 145  | 145  | z±   | 110                     | 190  | 235  | -65  |         |     |  |  |
| 31           | 165                   | 205  | 150  | 245  | 0                      | 70   | —    | 130  | —                       | —    | —    | —    |         |     |  |  |
| Means (a)    | 135                   | 212  | 143  | 210  | 134                    | 216  | 151  | 199  | 135                     | 235  | 184  | 223  |         |     |  |  |
| Means (b)    | 127                   | 187  | 143  | 174  | 147                    | 214  | 133  | 195  | 140                     | 223  | 169  | 203  |         |     |  |  |
| Mean for day | (a) 175.              |      |      |      | (b) 158                |      |      |      | (a) 194                 |      |      |      | (b) 184 |     |  |  |
| Day.         | October. Factor 2.66. |      |      |      | November. Factor 2.61. |      |      |      | December. Factor 3.12.  |      |      |      |         |     |  |  |
|              | 3h.                   | 9h.  | 15h. | 21h. | 3h.                    | 9h.  | 15h. | 21h. | 3h.                     | 9h.  | 15h. | 21h. |         |     |  |  |
| 1            | —                     | —    | 290  | 170  | 230                    | 330  | 50   | 35   | 180                     | 355  | 340  | 445  |         |     |  |  |
| 2            | 270                   | 100  | 170  | 270  | 65                     | 215  | 200  | 180  | 305                     | 265  | 35   | 640  |         |     |  |  |
| 3            | 185                   | 375  | 745  | 235  | 165                    | 545  | 330  | 365  | 355                     | 480  | 535  | 320  |         |     |  |  |
| 4            | 204                   | 135  | 375  | 205  | 315                    | 415  | 395  | 280  | 340                     | 375  | 390  | 195  |         |     |  |  |
| 5            | 135                   | -185 | 205  | 135  | 180                    | 330  | 460  | 315  | 90                      | 285  | 410  | 425  |         |     |  |  |
| 6            | 100                   | 305  | 205  | 50   | 230                    | 330  | 560  | 460  | 215                     | 550  | 375  | 410  |         |     |  |  |
| 7            | 100                   | 375  | 320  | 255  | 380                    | 510  | 495  | 510  | 465                     | 480  | 425  | 480  |         |     |  |  |
| 8            | 50                    | 290  | 270  | 510  | 330                    | 445  | 445  | 395  | 285                     | 425  | 480  | 465  |         |     |  |  |
| 9            | 270                   | 270  | 235  | 205  | 315                    | 345  | 265  | 265  | 305                     | 410  | 500  | 660  |         |     |  |  |
| 10           | 70                    | 235  | 255  | 235  | 230                    | 265  | 280  | 265  | 480                     | 730  | 695  | 910  |         |     |  |  |
| 11           | 100                   | 205  | 235  | 320  | 100                    | —    | 315  | -215 | 1105                    | 1015 | 995  | 1085 |         |     |  |  |
| 12           | 205                   | 135  | 100  | —    | 65                     | -315 | 15   | -100 | 570                     | 625  | 535  | 410  |         |     |  |  |
| 13           | —                     | —    | 390  | 185  | 50                     | 100  | 675  | 595  | 195                     | 375  | 320  | -90  |         |     |  |  |
| 14           | —                     | 305  | 375  | 270  | 365                    | 230  | 365  | 330  | 375                     | 660  | 375  | 500  |         |     |  |  |
| 15           | —                     | 205  | 220  | —    | 100                    | 745  | 790  | 775  | 500                     | 410  | -515 | 90   |         |     |  |  |
| 16           | 185                   | 255  | 255  | 340  | 430                    | 530  | 530  | 645  | -35                     | 285  | 425  | 375  |         |     |  |  |
| 17           | 170                   | 340  | 270  | 270  | 315                    | 530  | 840  | 545  | 355                     | 550  | 285  | 425  |         |     |  |  |
| 18           | 305                   | 205  | 270  | —    | 1405                   | 975  | 610  | 415  | 375                     | 355  | 445  | 425  |         |     |  |  |
| 19           | —                     | —    | 170  | 70   | 395                    | 625  | 365  | 345  | 195                     | 250  | 320  | 570  |         |     |  |  |
| 20           | 170                   | 375  | 205  | 205  | 200                    | 380  | 460  | 395  | 320                     | 640  | 375  | 465  |         |     |  |  |
| 21           | —                     | —    | 355  | 270  | 280                    | 495  | 380  | 460  | 585                     | 320  | 465  | 355  |         |     |  |  |
| 22           | 35                    | 155  | 355  | 390  | 165                    | 330  | 280  | 380  | 140                     | 285  | 465  | 605  |         |     |  |  |
| 23           | 135                   | 425  | 610  | 780  | 130                    | 265  | 265  | 215  | 180                     | 285  | -425 | 140  |         |     |  |  |
| 24           | 270                   | 305  | 595  | 475  | 115                    | 265  | 415  | 365  | 125                     | 340  | 355  | 250  |         |     |  |  |
| 25           | 340                   | 320  | 270  | 320  | -115                   | 395  | 480  | -215 | 140                     | 375  | 285  | 340  |         |     |  |  |
| 26           | 255                   | —    | 170  | 70   | 130                    | 245  | —    | 395  | 180                     | 180  | 340  | 410  |         |     |  |  |
| 27           | 35                    | 290  | 185  | 255  | —                      | —    | 215  | 775  | 105                     | -20  | -20  | 250  |         |     |  |  |
| 28           | z±                    | 340  | 305  | 220  | 380                    | 460  | —    | 395  | 160                     | 355  | 425  | 535  |         |     |  |  |
| 29           | —                     | —    | 255  | -15  | -35                    | —    | 280  | 230  | 215                     | 515  | —    | —    |         |     |  |  |
| 30           | 155                   | 270  | 405  | 235  | 130                    | 200  | 230  | 215  | —                       | —    | -660 | 640  |         |     |  |  |
| 31           | 135                   | 440  | 405  | 320  | —                      | —    | —    | —    | 340                     | z±   | 355  | 465  |         |     |  |  |
| Means (a)    | 169                   | 277  | 305  | 269  | 274                    | 404  | 406  | 390  | 316                     | 435  | 421  | 458  |         |     |  |  |
| Means (b)    | 156                   | 264  | 329  | 301  | 253                    | 379  | 406  | 337  | 306                     | 416  | 344  | 432  |         |     |  |  |
| Mean for day | (a) 255               |      |      |      | (b) 263                |      |      |      | (a) 407                 |      |      |      | (b) 375 |     |  |  |
|              |                       |      |      |      |                        |      |      |      | Annual Means (a)        |      | 221  | 335  | 299     | 343 |  |  |
|              |                       |      |      |      |                        |      |      |      | (b)                     |      | 216  | 322  | 283     | 318 |  |  |
|              |                       |      |      |      |                        |      |      |      | (a) 300                 |      |      |      | (b) 285 |     |  |  |

(a) Mean from all positive readings.

(b) Mean from all complete days, using both positive and negative readings.

NOTE.—The Potential Gradient is reckoned as positive if the potential increases upwards. For indeterminate potential gradient the following notation is used: z + Indeterminate, positive value; z - Indeterminate, negative value; z ± Indeterminate in magnitude and sign.

The departures from the mean of the day are adjusted for non-cyclic change.

SELECTED QUIET DAYS.

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| Month and Season. | Hour |      | G.M.T. |      |      |      |      |      |     |      |     |       |     |     |     |     |     |     |      |      |      |     |     |       |                   |     |     |     |     |     | Mean values. |
|-------------------|------|------|--------|------|------|------|------|------|-----|------|-----|-------|-----|-----|-----|-----|-----|-----|------|------|------|-----|-----|-------|-------------------|-----|-----|-----|-----|-----|--------------|
|                   | 1    | 2    | 3      | 4    | 5    | 6    | 7    | 8    | 9   | 10   | 11  | Noon. | 13  | 14  | 15  | 16  | 17  | 18  | 19   | 20   | 21   | 22  | 23  | Midt. | Non-cyclic change | v/m | v/m |     |     |     |              |
| Jan.              | v/m  | v/m  | v/m    | v/m  | v/m  | v/m  | v/m  | v/m  | v/m | v/m  | v/m | v/m   | v/m | v/m | v/m | v/m | v/m | v/m | v/m  | v/m  | v/m  | v/m | v/m | v/m   | v/m               | v/m | v/m | v/m | v/m | v/m |              |
| Jan.              | -68  | -84  | -89    | -93  | -93  | -89  | -40  | +27  | +73 | +61  | +12 | +27   | +21 | +8  | +20 | +38 | +61 | +69 | +77  | +51  | +45  | +17 | -7  | -41   | +65               | 438 |     |     |     |     |              |
| Feb.              | -25  | -107 | -144   | -158 | -169 | -142 | -26  | +21  | +89 | +111 | +68 | +32   | +5  | +12 | +22 | +37 | +35 | +67 | +63  | +105 | +95  | +42 | -8  | -22   | +39               | 481 |     |     |     |     |              |
| Mar.              | -50  | -96  | -124   | -149 | -136 | -143 | -105 | -22  | +22 | +26  | +29 | -4    | -14 | +1  | +40 | +46 | +68 | +99 | +130 | +148 | +139 | +67 | +37 | -6    | +40               | 522 |     |     |     |     |              |
| April             | -62  | -67  | -90    | -106 | -114 | -54  | +38  | +74  | +82 | +37  | -6  | -21   | -28 | -29 | +6  | +11 | +23 | +54 | +71  | +85  | +78  | +15 | +13 | -10   | +53               | 382 |     |     |     |     |              |
| May               | -35  | -34  | -34    | +3   | +30  | +104 | +118 | +86  | +58 | -12  | -36 | -57   | -65 | -66 | -57 | -68 | -43 | -23 | +19  | +36  | +39  | +31 | +24 | -19   | +23               | 206 |     |     |     |     |              |
| June              | -36  | -32  | -31    | -13  | -20  | +21  | +57  | +105 | +52 | +20  | +14 | -4    | -6  | -22 | -21 | -28 | -31 | -25 | -20  | +2   | +44  | +24 | -20 | -29   | +20               | 188 |     |     |     |     |              |
| July              | -22  | -20  | -18    | -1   | +10  | +45  | +73  | +99  | +49 | +2   | -25 | -29   | -39 | -43 | -47 | -44 | -41 | -27 | -13  | +17  | +31  | +41 | +20 | -14   | ...               | 185 |     |     |     |     |              |
| Aug.              | -23  | -34  | -20    | -14  | +6   | +28  | +84  | +110 | +74 | +23  | -1  | -14   | -37 | -48 | -41 | -50 | -23 | -20 | +8   | +40  | +10  | -3  | -28 | -26   | ...               | 182 |     |     |     |     |              |
| Sept.             | -32  | -41  | -30    | -50  | -72  | -8   | +57  | +65  | +62 | +29  | -7  | -17   | -22 | -23 | -23 | -16 | -25 | +16 | +40  | +50  | +26  | +16 | -6  | -27   | ...               | 192 |     |     |     |     |              |
| Oct.              | -86  | -100 | -88    | -77  | -39  | -64  | -23  | +4   | -2  | -17  | +24 | +39   | +68 | +64 | +87 | +86 | +57 | +68 | +60  | +37  | +43  | +5  | -39 | -68   | +12               | 284 |     |     |     |     |              |
| Nov.              | -79  | -108 | -143   | -142 | -136 | -115 | -67  | +6   | +48 | +46  | +78 | +69   | +93 | +76 | +62 | +81 | +92 | +77 | +58  | +56  | +47  | +17 | -49 | -69   | -25               | 410 |     |     |     |     |              |
| Dec.              | -67  | -62  | -54    | -74  | -77  | -47  | -29  | +3   | +12 | +32  | +20 | -1    | -17 | -10 | +8  | +31 | +63 | +78 | +71  | +89  | +69  | +16 | -9  | -49   | -46               | 477 |     |     |     |     |              |
| Year              | -49  | -65  | -72    | -73  | -68  | -39  | +11  | +48  | +52 | +30  | +14 | +2    | -3  | -7  | +4  | +11 | +20 | +36 | +47  | +60  | +56  | +24 | -6  | -32   | ...               | 329 |     |     |     |     |              |
| Winter            | -60  | -90  | -108   | -117 | -119 | -98  | -40  | +14  | +56 | +62  | +44 | +32   | +26 | +22 | +28 | +47 | +63 | +73 | +67  | +75  | +64  | +23 | -18 | -45   | ...               | 451 |     |     |     |     |              |
| Eqnx.             | -57  | -76  | -83    | -95  | -90  | -67  | -8   | +30  | +41 | +19  | +10 | -1    | +1  | +3  | +27 | +32 | +31 | +59 | +75  | +80  | +72  | +26 | +1  | -28   | ...               | 345 |     |     |     |     |              |
| Sumr.             | -29  | -30  | -26    | -6   | +6   | +50  | +83  | +100 | +58 | +8   | -12 | -26   | -37 | -45 | -42 | -47 | -35 | -24 | -1   | +24  | +31  | +23 | -1  | -22   | ...               | 190 |     |     |     |     |              |

AIR POLLUTION : HOURLY MEANS FOR EACH MONTH (milligrams per cubic metre).

COMPLETE DAYS ONLY.

484. Richmond (Kew Observatory).

1924.

| Month and Season. | Hour              |                   | G.M.T.            |                   |                   |                   |                   |                   |                   |                   |                   |                   |                   |                   |                   |                   |                   |                   |                   |                   |                   |                   |                   |                   |                   |                   |                   |                   |                   |                   | No. of days used. |
|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|
|                   | 1                 | 2                 | 3                 | 4                 | 5                 | 6                 | 7                 | 8                 | 9                 | 10                | 11                | Noon.             | 13                | 14                | 15                | 16                | 17                | 18                | 19                | 20                | 21                | 22                | 23                | Midt.             | Mean              | mg/m <sup>3</sup> | mg/m <sup>3</sup> |                   |                   |                   |                   |
| Jan.              | mg/m <sup>3</sup> | mg/m <sup>3</sup> | mg m <sup>3</sup> | mg m <sup>3</sup> | mg/m <sup>3</sup> | mg/m <sup>3</sup> | mg/m <sup>3</sup> | mg/m <sup>3</sup> | mg/m <sup>3</sup> | mg/m <sup>3</sup> | mg/m <sup>3</sup> | mg/m <sup>3</sup> | mg/m <sup>3</sup> | mg/m <sup>3</sup> | mg/m <sup>3</sup> | mg/m <sup>3</sup> | mg/m <sup>3</sup> | mg/m <sup>3</sup> | mg/m <sup>3</sup> | mg/m <sup>3</sup> | mg/m <sup>3</sup> | mg/m <sup>3</sup> | mg/m <sup>3</sup> | mg/m <sup>3</sup> | mg/m <sup>3</sup> | mg/m <sup>3</sup> | mg/m <sup>3</sup> | mg/m <sup>3</sup> | mg/m <sup>3</sup> | mg/m <sup>3</sup> |                   |
| Jan.              | ·250              | ·224              | ·224              | ·237              | ·166              | ·195              | ·307              | ·374              | ·458              | ·458              | ·432              | ·416              | ·403              | ·416              | ·445              | ·458              | ·502              | ·502              | ·515              | ·515              | ·502              | ·432              | ·349              | ·278              | ·378              | 23                |                   |                   |                   |                   |                   |
| Feb.              | ·259              | ·259              | ·234              | ·221              | ·259              | ·272              | ·320              | ·394              | ·432              | ·442              | ·442              | ·442              | ·432              | ·432              | ·442              | ·432              | ·454              | ·467              | ·480              | ·506              | ·432              | ·381              | ·333              | ·259              | ·377              | 26                |                   |                   |                   |                   |                   |
| Mar.              | ·307              | ·333              | ·346              | ·358              | ·346              | ·394              | ·480              | ·602              | ·602              | ·579              | ·493              | ·406              | ·368              | ·358              | ·333              | ·346              | ·419              | ·432              | ·528              | ·554              | ·566              | ·528              | ·454              | ·368              | ·437              | 26                |                   |                   |                   |                   |                   |
| April             | ·266              | ·266              | ·224              | ·208              | ·237              | ·266              | ·349              | ·362              | ·333              | ·333              | ·362              | ·362              | ·307              | ·333              | ·333              | ·349              | ·374              | ·390              | ·374              | ·416              | ·445              | ·333              | ·320              | ·278              | ·326              | 23                |                   |                   |                   |                   |                   |
| May               | ·160              | ·160              | ·160              | ·160              | ·192              | ·304              | ·336              | ·320              | ·336              | ·304              | ·288              | ·288              | ·256              | ·272              | ·272              | ·224              | ·272              | ·256              | ·288              | ·288              | ·288              | ·256              | ·208              | ·170              | ·252              | 20                |                   |                   |                   |                   |                   |
| June              | ·211              | ·198              | ·189              | ·198              | ·230              | ·266              | ·288              | ·310              | ·320              | ·310              | ·266              | ·253              | ·243              | ·221              | ·189              | ·166              | ·189              | ·189              | ·211              | ·275              | ·275              | ·266              | ·253              | ·230              | ·239              | 29                |                   |                   |                   |                   |                   |
| July              | ·186              | ·186              | ·246              | ·259              | ·246              | ·301              | ·288              | ·310              | ·288              | ·269              | ·269              | ·246              | ·195              | ·186              | ·176              | ·208              | ·208              | ·195              | ·208              | ·246              | ·259              | ·237              | ·208              | ·195              | ·234              | 31                |                   |                   |                   |                   |                   |
| Aug.              | ·131              | ·160              | ·160              | ·205              | ·234              | ·336              | ·349              | ·349              | ·336              | ·320              | ·304              | ·304              | ·291              | ·291              | ·291              | ·304              | ·304              | ·304              | ·320              | ·320              | ·291              | ·246              | ·205              | ·189              | ·272              | 22                |                   |                   |                   |                   |                   |
| Sept.             | ·134              | ·099              | ·112              | ·134              | ·173              | ·198              | ·282              | ·307              | ·307              | ·307              | ·272              | ·246              | ·186              | ·208              | ·221              | ·272              | ·282              | ·294              | ·272              | ·259              | ·198              | ·147              | ·147              | ·220              | 26                |                   |                   |                   |                   |                   |                   |
| Oct.              | ·269              | ·218              | ·218              | ·230              | ·230              | ·218              | ·307              | ·371              | ·448              | ·461              | ·397              | ·358              | ·358              | ·346              | ·384              | ·371              | ·371              | ·371              | ·410              | ·410              | ·358              | ·307              | ·282              | ·230              | ·331              | 25                |                   |                   |                   |                   |                   |
| Nov.              | ·266              | ·253              | ·230              | ·211              | ·230              | ·230              | ·243              | ·365              | ·429              | ·451              | ·410              | ·397              | ·365              | ·265              | ·365              | ·387              | ·429              | ·464              | ·464              | ·486              | ·442              | ·429              | ·410              | ·330              | ·360              | 29                |                   |                   |                   |                   |                   |
| Dec.              | ·426              | ·374              | ·320              | ·346              | ·346              | ·374              | ·346              | ·400              | ·506              | ·560              | ·560              | ·480              | ·426              | ·426              | ·454              | ·454              | ·426              | ·480              | ·480              | ·506              | ·534              | ·534              | ·454              | ·454              | ·445              | 12                |                   |                   |                   |                   |                   |
| Year              | ·239              | ·227              | ·222              | ·231              | ·241              | ·279              | ·325              | ·372              | ·400              | ·399              | ·375              | ·350              | ·319              | ·321              | ·325              | ·327              | ·352              | ·361              | ·381              | ·399              | ·388              | ·346              | ·302              | ·261              | ·323              | 292               |                   |                   |                   |                   |                   |
| Winter            | ·300              | ·277              | ·252              | ·254              | ·250              | ·268              | ·304              | ·383              | ·456              | ·478              | ·461              | ·434              | ·407              | ·410              | ·426              | ·433              | ·453              | ·478              | ·485              | ·503              | ·477              | ·444              | ·387              | ·330              | ·390              | 90                |                   |                   |                   |                   |                   |
| Eqnx.             | ·287              | ·299              | ·285              | ·283              | ·291              | ·330              | ·415              | ·482              | ·467              | ·456              | ·428              | ·384              | ·337              | ·346              | ·333              | ·347              | ·397              | ·411              | ·451              | ·485              | ·505              | ·431              | ·387              | ·323              | ·382              | 49                |                   |                   |                   |                   |                   |
| Spring            | ·201              | ·159              | ·165              | ·182              | ·202              | ·208              | ·294              | ·339              | ·378              | ·384              | ·334              | ·302              | ·272              | ·277              | ·303              | ·296              | ·321              | ·327              | ·352              | ·341              | ·309              | ·252              | ·215              | ·189              | ·276              | 51                |                   |                   |                   |                   |                   |
| Sumr.             | ·172              | ·176              | ·189              | ·205              | ·226              | ·302              | ·315              | ·322              | ·320              | ·301              | ·282              | ·273              | ·246              | ·242              | ·232              | ·226              | ·243              | ·236              | ·257              | ·282              | ·278              | ·251              | ·219              | ·198              | ·249              | 102               |                   |                   |                   |                   |                   |

AIR POLLUTION : DIURNAL INEQUALITIES (milligrams per cubic metre).

The departures from the mean of the day are adjusted for non-cyclic change.

485. Richmond (Kew Observatory).

1924.

| Month and Season. | Hour              |                   | G.M.T.            |                   |                   |                   |                   |                   |                   |                   |                   |                   |                   |                   |                   |                   |                   |                   |                   |                   |                   |                   |                   |                   |                   |                   |                   |                   | Range.            |                   |
|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|
|                   | 1                 | 2                 | 3                 | 4                 | 5                 | 6                 | 7                 | 8                 | 9                 | 10                | 11                | Noon              | 13                | 14                | 15                | 16                | 17                | 18                | 19                | 20                | 21                | 22                | 23                | Midt.             | Non-cyclic change | mg/m <sup>3</sup> | mg/m <sup>3</sup> |                   |                   |                   |
| Jan.              | mg/m <sup>3</sup> | mg/m <sup>3</sup> | mg/m <sup>3</sup> | mg/m <sup>3</sup> | mg/m <sup>3</sup> | mg/m <sup>3</sup> | mg/m <sup>3</sup> | mg/m <sup>3</sup> | mg/m <sup>3</sup> | mg/m <sup>3</sup> | mg/m <sup>3</sup> | mg/m <sup>3</sup> | mg/m <sup>3</sup> | mg/m <sup>3</sup> | mg/m <sup>3</sup> | mg/m <sup>3</sup> | mg/m <sup>3</sup> | mg/m <sup>3</sup> | mg/m <sup>3</sup> | mg/m <sup>3</sup> | mg/m <sup>3</sup> | mg/m <sup>3</sup> | mg/m <sup>3</sup> | mg/m <sup>3</sup> | mg/m <sup>3</sup> | mg/m <sup>3</sup> | mg/m <sup>3</sup> | mg/m <sup>3</sup> | mg/m <sup>3</sup> | mg/m <sup>3</sup> |
| Jan.              | -141              | -166              | -165              | -151              | -220              | -190              | -077              | -009              | -076              | +078              | +053              | +038              | +026              | +040              | +071              | +085              | +130              | +131              | +145              | +147              | +135              | +066              | -016              | -080              | -020              | ·367              |                   |                   |                   |                   |
| Feb.              | -146              | -143              | -166              | -176              | -136              | -120              | -070              | +007              | +047              | +060              | +063              | +065              | +057              | +060              | +073              | +065              | +090              | +105              | +121              | +149              | +078              | +029              | -016              | -088              | -061              | ·325              |                   |                   |                   |                   |
| Mar.              | -130              | -104              | -091              | -079              | -091              | -043              | +043              | +165              | +165              | +142              | +056              | -031              | -069              | -079              | -104              | -091              | -018              | -005              | +091              | +117              | +129              | +091              | +017              | -060              | ·000              | ·295              |                   |                   |                   |                   |
| April             | -066              | -065              | -107              | -122              | -093              | +020              | +034              | +005              | +006              | +036              | +036              | -019              | +008              | +009              | +025              | +051              | +067              | +052              | +094              | +124              | +012              | ·006              | -042              | ·013              | ·246              |                   |                   |                   |                   |                   |
| May               | -085              | -085              | -086              | -087              | -055              | +056              | +087              | +071              | +086              | +053              | +037              | +036              | +019              | +018              | -031              | +017              | ·000              | +031              | +031              | +030              | +003              | ·051              | -084              | +016              | ·174              |                   |                   |                   |                   |                   |
| June              | -028              | -041              | -050              | -041              | -009              | +027              | +049              | +071              | +081              | +071              | +027              | +014              | +004              | -018              | -050              | -073              | -050              | -050              | -028              | +036              | +036              | +027              | +014              | -009              | ·000              | ·154              |                   |                   |                   |                   |
| July              | -048              | -048              | +012              | +025              | +012              | +067              | +054              | +076              | +054              | +035              | +035              | +012              | -039              | -048              | -058              | -026              | -026              | -039              | -026              | +012              | +025              | +003              | -026              | -030              | ·000              | ·134              |                   |                   |                   |                   |
| Aug.              | -128              | -100              | -101              | -057              | -030              | +071              | +083              | +082              | +068              | +050              | +033              | +032              | +018              | +017              | +015              | +027              | +026              | +025              | +040              | +038              | +008              | -038              | -080              | -097              | +020              | ·211              |                   |                   |                   |                   |
| Sept.             | -080              | -116              | -103              | -082              | -043              | -019              | +065              | +089              | +089              | +088              | +052              | +026              | -034              | -013              | -001              | -001              | +049              | +059              | +070              | +048              | +034              | -027              | -079              | -079              | -013              | ·205              |                   |                   |                   |                   |
| Oct.              | -086              | -135              | -132              | -118              | -116              | -126              | -035              | +031              | +111              | +126              | +064              | +027              | +029              | +019              | +059              | +049              | +051              | +053              | +094              | +096              | +046              | -002              | -025              | -075              | ·052              | ·261              |                   |                   |                   |                   |
| Nov.              | -085              | -                 |                   |                   |                   |                   |                   |                   |                   |                   |                   |                   |                   |                   |                   |                   |                   |                   |                   |                   |                   |                   |                   |                   |                   |                   |                   |                   |                   |                   |

Departures from the mean of the day corrected for non-cyclic change.

| Month and Season.                             | Hour.   |       | G.M.T. |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |
|---|---|-------|--------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
|   | 1   | 2     | 3      | 4     | 5     | 6     | 7     | 8     | 9     | 10    | 11    | Noon  | 13    | 14    | 15    | 16    | 17    | 18    | 19    | 20    | 21    | 22    | 23    | Midt. |
|   | DECLINATION (Measured positive towards the West) (Ordinary Days). |       |        |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |
| <b>486. Richmond (Kew Observatory). 1924.</b> |   |       |        |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |
| Jan.  | -0.80   | -0.47 | -0.31  | -0.38 | -0.17 | -0.21 | -0.29 | -0.62 | -0.46 | +0.37 | +1.31 | +1.91 | +2.22 | +1.62 | +0.84 | +0.70 | +0.53 | -0.08 | -0.22 | -0.74 | -1.37 | -1.13 | -1.09 | -1.12 |
| Feb.  | -0.66   | -0.55 | -0.48  | -0.37 | -0.43 | -0.53 | -0.56 | -0.79 | -0.87 | -0.11 | +1.24 | +2.16 | +2.65 | +2.66 | +1.68 | +0.78 | +0.47 | +0.09 | -0.34 | -0.91 | -1.26 | -1.25 | -1.54 | -1.08 |
| March   | -1.21   | -0.88 | -0.58  | -0.88 | -0.89 | -1.19 | -1.88 | -2.75 | -2.49 | -0.89 | +1.68 | +3.88 | +4.80 | +4.60 | +3.37 | +1.82 | +0.56 | +0.08 | -0.74 | -1.14 | -1.49 | -1.32 | -1.32 | -1.21 |
| April   | -0.82   | -0.86 | -1.11  | -1.17 | -1.65 | -2.25 | -2.95 | -3.67 | -3.18 | -1.40 | -1.39 | +3.84 | +5.54 | +5.24 | +3.75 | +2.29 | +1.14 | +0.23 | -0.31 | -0.53 | -0.67 | -0.87 | -1.02 | -0.96 |
| May   | -1.08   | -1.01 | -0.84  | -1.07 | -1.78 | -2.49 | -3.45 | -3.34 | -2.27 | -0.22 | +2.15 | +3.8c | +4.76 | +4.05 | +3.24 | +1.84 | +0.89 | +0.13 | -0.27 | -0.52 | -0.49 | -0.55 | -0.71 | -0.92 |
| June  | -0.60   | -0.81 | -1.08  | -1.89 | -2.91 | -3.81 | -4.40 | -4.33 | -3.55 | -1.46 | +1.35 | +3.8c | +5.20 | +5.40 | +4.51 | +3.21 | +2.07 | +0.73 | +0.14 | -0.04 | -0.22 | +0.01 | -0.50 | -0.78 |
| July  | -1.22   | -1.24 | -1.34  | -1.82 | -2.71 | -3.83 | -4.47 | -4.34 | -3.37 | -1.03 | +1.74 | +4.25 | +5.47 | +5.36 | +4.36 | +3.10 | +2.27 | +1.11 | +0.30 | -0.14 | -0.19 | -0.59 | -0.74 | -0.98 |
| Aug.  | -1.34   | -1.47 | -1.47  | -1.91 | -2.59 | -3.21 | -3.92 | -3.84 | -2.67 | -0.28 | +2.43 | +4.79 | +5.75 | +5.30 | +4.06 | +2.09 | +0.82 | +0.03 | -0.12 | -0.18 | -0.19 | -0.10 | -0.68 | -1.34 |
| Sept.   | -1.85   | -2.02 | -1.78  | -2.20 | -2.15 | -2.28 | -2.40 | -2.46 | -1.75 | +0.25 | +2.83 | +5.0c | +5.79 | +5.14 | +3.49 | +1.89 | +0.94 | +0.41 | -0.08 | -0.47 | -1.34 | -1.43 | -1.65 | -1.93 |
| Oct.  | -1.29   | -1.01 | -0.82  | -0.93 | -0.87 | -1.16 | -1.72 | -2.83 | -2.83 | -1.14 | +1.62 | +3.56 | +4.43 | +4.21 | +2.92 | +1.83 | +1.08 | +0.68 | +0.08 | -0.42 | -1.07 | -1.37 | -1.36 | -1.69 |
| Nov.  | -1.17   | -0.58 | -0.23  | -0.28 | -0.28 | -0.43 | -0.47 | -0.98 | -1.15 | -0.11 | +1.49 | +2.45 | +2.75 | +2.36 | +1.79 | +1.41 | +0.93 | +0.49 | -0.15 | -0.88 | -1.33 | -1.86 | -1.78 | -1.91 |
| Dec.  | -0.73   | -0.56 | -0.38  | -0.25 | -0.39 | -0.44 | -0.37 | -0.78 | -0.49 | +0.17 | +1.02 | +1.60 | +1.96 | +1.49 | +0.99 | +0.79 | +0.67 | +0.42 | +0.02 | -0.44 | -0.95 | -1.11 | -1.16 | -1.15 |
| Year  | -1.06   | -0.96 | -0.87  | -1.10 | -1.40 | -1.82 | -2.24 | -2.56 | -2.09 | -0.49 | +1.69 | +3.43 | +4.28 | +3.95 | +2.92 | +1.81 | +1.03 | +0.36 | -0.14 | -0.53 | -0.88 | -0.96 | -1.13 | -1.26 |
| Winter  | -0.84   | -0.54 | -0.35  | -0.32 | -0.32 | -0.40 | -0.42 | -0.79 | -0.74 | +0.08 | +1.27 | +2.03 | +2.39 | +2.03 | +1.32 | +0.92 | +0.65 | +0.23 | -0.17 | -0.74 | -1.23 | -1.34 | -1.39 | -1.31 |
| Eqnx.   | -1.29   | -1.19 | -1.07  | -1.29 | -1.39 | -1.72 | -2.24 | -2.93 | -2.56 | -0.79 | +1.88 | +4.07 | +5.14 | +4.80 | +3.38 | +1.96 | +0.93 | +0.35 | -0.26 | -0.64 | -1.14 | -1.25 | -1.34 | -1.45 |
| Sumr.   | -1.06   | -1.13 | -1.18  | -1.67 | -2.50 | -3.33 | -4.06 | -3.96 | -2.97 | -0.75 | +1.92 | +4.18 | +5.29 | +5.03 | +4.04 | +2.56 | +1.51 | +0.50 | +0.01 | -0.22 | -0.27 | -0.31 | -0.66 | -1.01 |

DECLINATION (Quiet days).

487. Richmond (Kew Observatory).

1924.

|        |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |
|--------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Jan.   | -0.80 | -0.54 | -0.03 | +0.08 | +0.13 | -0.03 | -0.32 | -0.61 | -0.28 | +0.56 | +1.13 | +1.54 | +1.53 | +1.08 | +0.44 | +0.09 | +0.12 | +0.07 | -0.13 | -0.50 | -0.71 | -0.70 | -1.12 | -1.11 |
| Feb.   | -0.55 | -0.48 | -0.62 | -0.30 | -0.35 | -0.45 | -0.69 | -1.12 | -1.38 | -0.54 | +0.91 | +2.11 | +2.71 | +2.40 | +1.38 | +0.26 | -0.11 | +0.13 | -0.29 | -0.56 | -0.68 | -0.62 | -0.53 | -0.59 |
| March  | -0.34 | -0.43 | -0.52 | -0.87 | -0.80 | -0.97 | -1.64 | -2.41 | -2.38 | -0.79 | +1.66 | +3.45 | +3.94 | +3.47 | +2.12 | +0.51 | -0.36 | -0.41 | -0.46 | -0.57 | -0.56 | -0.61 | -0.42 | -0.49 |
| April  | -0.66 | -0.42 | -0.85 | -1.25 | -1.79 | -2.33 | -2.75 | -3.59 | -3.06 | -1.10 | +1.64 | +4.12 | +5.52 | +4.60 | +2.70 | +1.37 | +0.57 | -0.07 | -0.31 | -0.27 | -0.19 | -0.38 | -0.56 | -0.84 |
| May    | -0.58 | -0.72 | -0.85 | -1.14 | -1.74 | -2.23 | -3.12 | -2.90 | -1.95 | -0.24 | +1.8c | +4.11 | +4.90 | +3.88 | +2.47 | +1.12 | +0.36 | -0.33 | -0.52 | -0.46 | -0.43 | -0.54 | -0.38 | -0.41 |
| June   | -0.38 | -0.46 | -0.65 | -1.15 | -2.12 | -3.28 | -3.91 | -4.18 | -4.08 | -1.90 | +0.79 | +3.58 | +5.01 | +5.15 | +3.92 | +2.72 | +1.77 | +0.66 | +0.08 | -0.21 | -0.39 | -0.12 | -0.24 | -0.43 |
| July   | -0.55 | -0.83 | -0.92 | -1.44 | -2.37 | -3.51 | -4.96 | -5.12 | -4.03 | -1.43 | +2.08 | +4.9c | +5.54 | +5.01 | +4.13 | +2.56 | +1.26 | +0.11 | -0.17 | 0.0c  | +0.02 | +0.33 | -0.17 | -0.48 |
| Aug.   | -0.94 | -1.11 | -1.27 | -1.51 | -2.05 | -2.64 | -3.74 | -4.02 | -2.52 | +0.33 | +2.67 | +4.55 | +5.37 | +4.91 | +3.70 | +1.44 | +0.04 | -0.64 | -0.47 | -0.41 | -0.23 | -0.11 | -0.5c | -0.80 |
| Sept.  | -1.55 | -1.59 | -1.52 | -1.57 | -2.01 | -2.54 | -3.35 | -3.59 | -2.48 | -0.29 | +2.83 | +5.56 | +6.53 | +5.49 | +3.20 | +1.03 | +0.17 | -0.18 | -0.09 | -0.21 | -0.64 | -0.67 | -1.01 | -1.46 |
| Oct.   | -0.67 | -0.63 | -0.55 | -0.67 | -0.79 | -1.20 | -1.58 | -2.72 | -3.08 | -1.54 | +1.22 | +3.34 | +4.18 | +4.20 | +2.86 | +1.70 | +0.82 | +0.30 | -0.19 | -0.75 | -1.01 | -1.11 | -0.99 | -1.05 |
| Nov.   | -0.61 | -0.50 | -0.17 | -0.32 | -0.39 | -0.62 | -0.68 | -1.07 | -1.12 | -0.11 | +1.42 | +2.05 | +2.24 | +1.77 | +1.06 | +0.75 | +0.36 | +0.06 | -0.39 | -0.72 | -0.75 | -0.82 | -0.69 | -0.80 |
| Dec.   | -0.18 | +0.11 | +0.04 | +0.04 | +0.13 | -0.02 | -0.13 | -0.86 | -0.89 | -0.33 | +0.50 | +1.31 | +1.48 | +0.99 | +0.63 | +0.48 | +0.39 | +0.16 | -0.29 | -0.68 | -0.82 | -0.81 | -0.68 | -0.67 |
| Year   | -0.65 | -0.63 | -0.66 | -0.84 | -1.18 | -1.65 | -2.24 | -2.68 | -2.27 | -0.62 | +1.55 | +3.39 | +4.08 | +3.58 | +2.38 | +1.17 | +0.45 | -0.02 | -0.27 | -0.44 | -0.53 | -0.51 | -0.61 | -0.76 |
| Winter | -0.53 | -0.35 | -0.19 | -0.12 | -0.12 | -0.28 | -0.45 | -0.91 | -0.92 | -0.10 | +0.99 | +1.75 | +1.99 | +1.56 | +0.88 | +0.40 | +0.19 | +0.08 | -0.27 | -0.61 | -0.74 | -0.74 | -0.75 | -0.79 |
| Eqnx.  | -0.81 | -0.77 | -0.86 | -1.09 | -1.35 | -1.76 | -2.33 | -3.08 | -2.75 | -0.93 | +1.84 | +4.12 | +5.04 | +4.44 | +2.72 | +1.15 | +0.30 | -0.09 | -0.26 | -0.45 | -0.60 | -0.69 | -0.75 | -0.96 |
| Sumr.  | -0.61 | -0.78 | -0.92 | -1.31 | -2.07 | -2.92 | -3.93 | -4.06 | -3.15 | -0.83 | +1.83 | +4.3c | +5.20 | +4.74 | +3.55 | +1.96 | +0.86 | -0.05 | -0.27 | -0.27 | -0.26 | -0.11 | -0.32 | -0.53 |

HORIZONTAL FORCE (Quiet days).

488. Richmond (Kew Observatory).

1924.

|        |       |       |       |       |       |       |       |        |        |        |        |        |        |        |       |       |        |        |        |        |        |        |       |       |
|--------|-------|-------|-------|-------|-------|-------|-------|--------|--------|--------|--------|--------|--------|--------|-------|-------|--------|--------|--------|--------|--------|--------|-------|-------|
| Jan.   | - 6.8 | - 5.9 | - 4.7 | - 3.3 | - 1.7 | + 0.3 | + 2.2 | + 4.4  | + 6.4  | + 2.8  | - 0.1  | - 0.6  | + 0.8  | + 1.2  | + 0.5 | + 0.3 | + 2.6  | + 4.3  | + 3.3  | + 2.2  | + 1.2  | + 0.7  | + 2.6 | + 5.4 |
| Feb.   | - 2.9 | - 4.4 | - 4.2 | - 3.8 | - 0.8 | + 1.5 | + 4.9 | + 6.0  | + 2.3  | - 5.5  | - 9.4  | - 9.2  | - 6.1  | - 1.5  | + 1.9 | + 0.6 | + 3.5  | + 6.8  | + 6.8  | + 4.2  | + 3.1  | + 2.9  | + 2.9 | + 0.6 |
| March  | + 0.5 | - 0.9 | - 0.7 | - 1.4 | - 1.3 | - 0.2 | + 1.5 | + 1.3  | - 3.5  | - 9.3  | - 9.8  | - 6.9  | - 3.2  | - 2.0  | + 1.2 | + 2.0 | + 2.7  | + 5.0  | + 5.3  | + 5.1  | + 4.5  | + 4.7  | + 3.4 | + 2.2 |
| April  | - 0.2 | - 0.9 | + 0.3 | - 0.3 | - 0.5 | - 0.8 | - 3.1 | - 3.9  | - 11.3 | - 17.0 | - 17.7 | - 10.1 | - 2.1  | + 3.6  | + 7.1 | + 7.2 | + 7.6  | + 9.2  | + 8.0  | + 6.8  | + 6.7  | + 5.6  | + 3.8 | + 2.7 |
| May    | + 1.5 | - 0.4 | - 0.5 | - 1.3 | - 1.5 | - 3.3 | - 1.9 | - 6.0  | - 12.4 | - 14.8 | - 14.5 | - 10.1 | - 5.9  | - 2.6  | + 0.4 | + 4.9 | + 9.8  | + 12.9 | + 11.9 | + 9.5  | + 9.2  | + 8.1  | + 4.3 | + 2.8 |
| June   | + 3.8 | + 3.6 | + 3.3 | + 4.5 | + 4.5 | + 1.9 | 0.0   | - 6.2  | - 16.6 | - 23.1 | - 22.8 | - 19.2 | - 15.0 | - 10.2 | - 3.8 | + 3.7 | + 10.9 | + 15.3 | + 16.2 | + 15.4 | + 13.6 | + 10.2 | + 6.2 | + 4.8 |
| July   | + 3.5 | + 2.3 | + 1.5 | + 3.1 | + 4.2 | + 2.2 | - 1.3 | - 11.1 | - 24.1 | - 28.2 | - 22.5 | - 15.7 | - 6.6  | + 0.1  | + 3.8 | + 9.5 | + 14.1 | + 14.9 | + 13.6 | + 10.4 | + 9.3  | + 7.0  | + 4.5 | + 3.1 |
| Aug.   | + 2.4 | + 1.1 | + 0.6 | - 0.1 | - 1.4 | - 3.3 | - 3.8 | - 10.4 | - 17.0 | - 17.7 | - 13.0 | - 8.4  | - 4.6  | - 1.4  | + 2.4 | + 5.6 | + 8.6  | + 10.0 | + 10.6 | + 10.4 | + 10.2 | + 8.7  | + 5.8 | + 4.2 |
| Sept.  | + 3.3 | + 2.2 | + 1.4 | + 2.2 | + 2.6 | - 0.2 | + 4.9 | - 13.1 | - 20.4 | - 23.4 | - 21.3 | - 12.4 | - 0.4  | + 6.5  | + 7.6 | + 8.6 | + 9.3  | + 10.7 | + 10.9 | + 8.7  | + 6.5  | + 6.0  | + 4.7 | + 4.5 |
| Oct.   | + 2.0 | + 0.8 | + 1.2 | + 0.9 | + 1.7 | + 2.6 | + 1.6 | + 1.5  | + 7.4  | - 15.2 | - 16.1 | - 12.6 | - 6.3  | - 2.4  | - 1.0 | + 0.4 | + 4.9  | + 7.2  | + 8.4  | + 7.2  | + 7.2  | + 7.2  | + 5.8 | + 3.0 |
| Nov.   | + 3.6 | + 3.5 | - 1.4 | - 0.2 | + 2.4 | + 4.5 | + 5.1 | + 4.0  | + 0.4  | - 5.8  | - 8.6  | - 7.8  | - 6.0  | - 4.2  | - 2.8 | + 0.2 | + 4.0  | + 5.6  | + 5.4  | + 4.4  | + 4.2  | + 3.3  | + 1.1 | - 1.4 |
| Dec.   | - 4.9 | - 4.7 | - 3.5 | - 2.2 | - 0.3 | + 0.6 | + 2.5 | + 5.4  | + 4.0  | - 1.7  | - 3.5  | - 1.0  | + 0.6  | + 1.1  | 0.0   | - 0.8 | + 1.8  | + 3.8  | + 4.1  | + 2.0  | + 0.5  | + 0.3  | - 1.2 | - 3.1 |
| Year   | - 0.1 | - 0.9 | - 0.6 | - 0.2 | + 0.7 | + 0.5 | + 0.2 | - 2.6  | - 8.3  | - 13.1 | - 13.3 | - 9.5  | - 4.6  | - 1.0  | + 1.4 | + 3.5 | + 6.7  | + 8.8  | + 8.7  | + 7.2  | + 6.3  | + 5.3  | + 3.2 | + 1.5 |
| Winter | - 4.5 | - 4.6 | - 3.5 | - 2.4 | - 0.1 | + 1.7 | + 3.7 | + 4.9  | + 3.3  | - 2.6  | - 5.4  | - 4.6  | - 2.7  | - 0.9  | - 0.3 | + 0.1 | + 3.0  | + 5.1  | + 4.9  | + 3.2  | + 2.3  | + 1.5  | + 0.1 | - 2.3 |
| Eqnx.  | + 1.4 | + 0.3 | + 0.6 | + 0.4 | + 0.6 | + 0.4 | - 1.2 | - 4.3  | - 10.7 | - 16.2 | - 16.2 | - 10.6 | - 3.0  | + 1.4  | + 3.7 | + 4.6 | + 6.1  | + 8.0  | + 8.1  | + 6.9  | + 6.2  | + 5.9  | + 4.4 | + 3.1 |
| Sumr.  | + 2.8 | + 1.7 | + 1.2 | + 1.5 | + 1.5 | - 0.6 | - 1.8 | - 8.4  | - 17.5 | - 20.5 | - 18.2 | - 13.4 | - 8.0  | - 3.5  | + 0.7 | + 5.9 | + 10.9 | + 13.3 | + 13.1 | + 11.4 | + 10.6 | + 8.5  | + 5.2 | + 3.7 |

489. Richmond (Kew Observatory).

1924.

| Month, Season or Year. | ELEMENT.                                     |              |                   | FORCE. |       |           |        | RANGE OF INEQUALITY. |             |       | AVERAGE DEPARTURE.   |             |      |     |
|------------------------|--|--------------|-------------------|--------|-------|-----------|--------|----------------------|-------------|-------|----------------------|-------------|------|-----|
|                        | Quiet days D and H, absolute observations I. |              |                   | North. | West. | Vertical. | Total. | "Ordinary" Days. D'. | Quiet days. |       | "Ordinary" Days. D'. | Quiet days. |      |     |
|                        | Declination (West).                          | Inclination. | Horizontal Force. |        |       |           |        |                      | D.          | H.    |                      | D.          | H.   |     |
| January ...            | 13   | 50.4         | 66 58.3           | 18391  | 17857 | 4399      | 43268  | 47014                | 3.59        | 2.66  | 13.2                 | 0.79        | 0.57 | 2.7 |
| February ...           | 13   | 49.4         | 66 57.0           | 18395  | 17862 | 4395      | 43230  | 46981                | 4.20        | 4.09  | 16.2                 | 0.98        | 0.82 | 4.0 |
| March ...              | 13   | 48.6         | 66 56.2           | 18392  | 17861 | 4390      | 43195  | 46948                | 7.55        | 6.35  | 15.1                 | 1.74        | 1.26 | 3.3 |
| April ...              | 13   | 47.2         | 66 55.4           | 18398  | 17868 | 4384      | 43180  | 46937                | 9.21        | 9.11  | 26.9                 | 1.95        | 1.71 | 5.7 |
| May ...                | 13   | 46.5         | 66 56.5           | 18400  | 17871 | 4381      | 43227  | 46980                | 8.21        | 8.02  | 27.7                 | 1.75        | 1.55 | 6.3 |
| June ...               | 13   | 45.9         | 66 57.5           | 18395  | 17867 | 4377      | 43248  | 46998                | 9.80        | 9.33  | 39.3                 | 2.20        | 1.97 | 9.8 |
| July ...               | 13   | 44.7         | 66 56.6           | 18392  | 17865 | 4370      | 43209  | 46960                | 9.94        | 10.66 | 41.1                 | 2.33        | 2.17 | 8.9 |
| August ...             | 13   | 44.0         | 66 56.3           | 18388  | 17862 | 4365      | 43191  | 46942                | 9.67        | 9.39  | 28.3                 | 2.11        | 1.92 | 6.7 |
| September ...          | 13   | 42.9         | 66 56.5           | 18387  | 17863 | 4359      | 43196  | 46947                | 8.25        | 10.12 | 34.3                 | 2.15        | 2.07 | 8.0 |
| October ...            | 13   | 41.6         | 66 55.9           | 18386  | 17863 | 4352      | 43172  | 46924                | 7.26        | 7.28  | 24.5                 | 1.71        | 1.55 | 5.2 |
| November ...           | 13   | 40.2         | 66 56.0           | 18387  | 17866 | 4345      | 43177  | 46929                | 4.66        | 3.36  | 14.2                 | 1.14        | 0.81 | 3.7 |
| December ...           | 13   | 39.3         | 66 55.6           | 18390  | 17870 | 4341      | 43170  | 46924                | 3.12        | 2.37  | 10.3                 | 0.76        | 0.53 | 2.2 |
| Winter ...             | 13   | 44.8         | 66 56.7           | 18391  | 17864 | 4370      | 43211  | 46962                | 3.78        | 2.91  | 10.5                 | 0.91        | 0.66 | 2.8 |
| Equinox ...            | 13   | 45.1         | 66 56.0           | 18391  | 17864 | 4371      | 43186  | 46939                | 8.07        | 8.12  | 24.3                 | 1.88        | 1.63 | 5.2 |
| Summer ...             | 13   | 45.3         | 66 56.7           | 18394  | 17866 | 4373      | 43219  | 46970                | 9.35        | 9.26  | 33.8                 | 2.09        | 1.87 | 7.7 |
| Year 1924              | 13   | 45.1         | 66 56.5           | 18392  | 17865 | 4372      | 43205  | 46957                | 6.84        | 6.76  | 22.1                 | 1.62        | 1.38 | 4.5 |
| 1923                   | 13   | 57.3         | 66 57.0           | 18394  | 17851 | 4436      | 43230  | 46980                | 6.23        | 5.87  | 21.3                 | 1.50        | 1.23 | 4.3 |
| 1922                   | 14   | 8.8          | 66 57.6           | 18394  | 17836 | 4495      | 43251  | 47000                | 6.55        | 6.68  | 22.3                 | 1.67        | 1.40 | 4.7 |
| 1921                   | 14   | 19.9         | 66 57.7           | 18399  | 17827 | 4555      | 43266  | 47016                | 7.51        | 7.07  | 22.6                 | 1.83        | 1.47 | 4.8 |
| 1920                   | 14   | 31.0         | 66 57.9           | 18410  | 17822 | 4615      | 43297  | 47049                | 8.12        | 7.91  | 28.3                 | 2.10        | 1.83 | 6.5 |
| 1919                   | 14   | 40.9         | 66 57.7           | 18416  | 17815 | 4667      | 43395  | 47058                | 8.73        | 8.52  | 28.0                 | 2.26        | 1.84 | 6.3 |
| 1918                   | 14   | 50.4         | 66 58.4           | 18429  | 17814 | 4720      | 43361  | 47115                | 9.31        | 9.23  | 30.1                 | 2.28        | 1.91 | 7.7 |
| 1917                   | 14   | 59.6         | 66 58.0           | 18437  | 17809 | 4770      | 43366  | 47122                | —           | 10.18 | 34.0                 | —           | 2.16 | 8.3 |
| 1916                   | 15   | 8.8          | 66 57.5           | 18457  | 17816 | 4823      | 43395  | 47156                | —           | 8.73  | 30.0                 | —           | 1.84 | 7.0 |
| 1915                   | 15   | 18.4         | 66 56.6           | 18463  | 17808 | 4874      | 43376  | 47141                | —           | 7.30  | 24.8                 | —           | 1.60 | 5.7 |
| 1914                   | 15   | 27.8         | 66 55.8           | 18488  | 17818 | 4929      | 43406  | 47179                | —           | 6.13  | 22.2                 | —           | 1.30 | 4.9 |

MAGNETIC CHARACTER OF EACH DAY.

490. Richmond (Kew Observatory).

1924.

| Date         | Jan. | Feb. | March. | April. | May. | June. | July. | Aug. | Sept. | Oct. | Nov. | Dec. | Year |
|--------------|------|------|--------|--------|------|-------|-------|------|-------|------|------|------|------|
| 1            | 0    | 0    | 0      | 0      | 0    | 0     | 1     | 0    | 1     | 0    | 1    | 0    | —    |
| 2            | 0    | 0    | 1      | 0      | 0    | 0     | 0     | 0    | 0     | 0    | 1    | 0    | —    |
| 3            | 1    | 0    | 1      | 1      | 0    | 0     | 0     | 0    | 0     | 0    | 1    | 0    | —    |
| 4            | 0    | 0    | 0      | 0      | 0    | 0     | 0     | 1    | 0     | 1    | 0    | 0    | —    |
| 5            | 0    | 2    | 0      | 0      | 0    | 0     | 0     | 1    | 1     | 1    | 0    | 0    | —    |
| 6            | 0    | 1    | 1      | 1      | 0    | 0     | 0     | 1    | 1     | 0    | 1    | 0    | —    |
| 7            | 1    | 1    | 2      | 1      | 0    | 0     | 0     | 1    | 2     | 1    | 0    | 0    | —    |
| 8            | 0    | 0    | 1      | 1      | 0    | 0     | 0     | 0    | 2     | 0    | 0    | 0    | —    |
| 9            | 0    | 0    | 1      | 0      | 1    | 1     | 2     | 0    | 1     | 0    | 1    | 0    | —    |
| 10           | 1    | 1    | 1      | 0      | 0    | 2     | 1     | 0    | 0     | 0    | 1    | 0    | —    |
| 11           | 1    | 1    | 0      | 0      | 1    | 2     | 0     | 0    | 0     | 0    | 0    | 1    | —    |
| 12           | 0    | 0    | 1      | 0      | 1    | 1     | 0     | 0    | 2     | 0    | 0    | 2    | —    |
| 13           | 0    | 0    | 0      | 0      | 1    | 1     | 0     | 0    | 1     | 0    | 1    | 1    | —    |
| 14           | 0    | 0    | 0      | 0      | 0    | 0     | 0     | 0    | 0     | 0    | 1    | 1    | —    |
| 15           | 1    | 0    | 0      | 0      | 0    | 0     | 1     | 0    | 0     | 0    | 1    | 1    | —    |
| 16           | 0    | 0    | 0      | 0      | 1    | 1     | 0     | 0    | 0     | 1    | 0    | 0    | —    |
| 17           | 1    | 0    | 0      | 1      | 0    | 0     | 1     | 2    | 0     | 0    | 1    | —    | —    |
| 18           | 0    | 0    | 0      | 0      | 0    | 2     | 1     | 2    | 0     | 1    | 0    | 0    | —    |
| 19           | 0    | 0    | 1      | 0      | 0    | 2     | 0     | 0    | 1     | 0    | 2    | 0    | —    |
| 20           | 0    | 2    | 1      | 0      | 0    | 2     | 1     | 0    | 0     | 1    | 0    | 2    | —    |
| 21           | 0    | 1    | 1      | 0      | 2    | 1     | 1     | 0    | 0     | 0    | 1    | 2    | —    |
| 22           | 1    | 1    | 1      | 0      | 2    | 1     | 0     | 0    | 0     | 0    | 0    | 0    | —    |
| 23           | 2    | 1    | 1      | 0      | 2    | 1     | 0     | 0    | 2     | 2    | 0    | 1    | —    |
| 24           | 1    | 1    | 0      | 1      | 1    | 0     | 0     | 0    | 2     | 2    | 2    | 0    | —    |
| 25           | 1    | 1    | 0      | 1      | 1    | 0     | 1     | 0    | 1     | 2    | 1    | 0    | —    |
| 26           | 1    | 1    | 0      | 1      | 0    | 0     | 1     | 0    | 0     | 0    | 1    | 0    | —    |
| 27           | 0    | 0    | 0      | 0      | 0    | 1     | 2     | 0    | 2     | 1    | 0    | 0    | —    |
| 28           | 0    | 0    | 0      | 0      | 1    | 0     | 1     | 0    | 1     | 1    | 0    | 0    | —    |
| 29           | 2    | 0    | 0      | 1      | 0    | 0     | 0     | 1    | 0     | 0    | 0    | 0    | —    |
| 30           | 2    | —    | 2      | 0      | 0    | 1     | 0     | 1    | 0     | 0    | 0    | 0    | —    |
| 31           | 1    | —    | 1      | —      | 0    | —     | 0     | 0    | —     | 1    | —    | 0    | —    |
| No. of o's.  | 17   | 17   | 16     | 21     | 20   | 16    | 19    | 23   | 16    | 19   | 16   | 22   | 222  |
| No. of r's.  | 11   | 10   | 13     | 9      | 8    | 9     | 10    | 6    | 8     | 9    | 12   | 6    | 111  |
| No. of 2's.  | 3    | 2    | 2      | 0      | 3    | 5     | 2     | 2    | 6     | 3    | 2    | 3    | 33   |
| Mean Chrctr. | 0.55 | 0.48 | 0.55   | 0.30   | 0.45 | 0.63  | 0.45  | 0.32 | 0.67  | 0.48 | 0.53 | 0.39 | 0.48 |

NON-CYCLIC CHANGE  
(24h.-0h.).

491. Richmond (Kew Observatory).  
1924.

| Month, Season or Year. | Ordinary Days. D'. | Quiet Days. |      |
|------------------------|--------------------|-------------|------|
|                        |                    | D.          | H.   |
| Jan. ...               | +0.01              | +0.78       | +2.6 |
| Feb. ...               | 0.00               | +0.08       | +2.5 |
| Mar. ...               | +0.02              | +0.24       | +4.7 |
| April ...              | -0.01              | +0.52       | +1.7 |
| May ...                | +0.01              | +0.32       | +2.9 |
| June ...               | -0.32              | +0.34       | +3.4 |
| July ...               | +0.12              | -0.12       | +4.5 |
| Aug. ...               | -0.07              | -0.06       | +0.3 |
| Sept. ...              | +0.01              | -0.16       | +4.3 |
| Oct. ...               | -0.02              | -0.02       | +0.1 |
| Nov. ...               | +0.27              | +0.22       | +3.2 |
| Dec. ...               | -0.04              | +0.20       | +1.7 |
| Winter                 | +0.06              | +0.32       | +2.5 |
| Equinox                | 0.00               | +0.14       | +2.7 |
| Summer                 | -0.06              | +0.12       | +2.8 |
| Year 1924              | 0.00               | +0.19       | +2.7 |
| 1923                   | -0.04              | -0.03       | +1.8 |
| 1922                   | +0.01              | +0.13       | +2.4 |
| 1921                   | +0.03              | +0.07       | +3.6 |
| 1920                   | +0.04              | +0.16       | +3.3 |
| 1919                   | -0.11              | +0.04       | +5.4 |
| 1918                   | -0.04              | -0.11       | +4.0 |
| 1917                   | —                  | +0.13       | +4.0 |
| 1916                   | —                  | -0.02       | +3.0 |
| 1915                   | —                  | -0.21       | +2.6 |
| 1914                   | —                  | +0.03       | +1.1 |

MEAN VALUES, FOR THE YEARS SPECIFIED, OF THE MAGNETIC ELEMENTS AT OBSERVATORIES WHOSE PUBLICATIONS ARE RECEIVED AT KEW OBSERVATORY, RICHMOND.

| Place.                          | Latitude. | Longitude. | 1924.        |              |                   |                 | 1923.        |              |                   |                 | 1922.        |              |                   |                 |
|---------------------------------|-----------|------------|--------------|--------------|-------------------|-----------------|--------------|--------------|-------------------|-----------------|--------------|--------------|-------------------|-----------------|
|                                 |           |            | Declination. | Inclination. | Horizontal Force. | Vertical Force. | Declination. | Inclination. | Horizontal Force. | Vertical Force. | Declination. | Inclination. | Horizontal Force. | Vertical Force. |
|                                 | N.        | ° ' "      | ° ' "        | ° N.         | γ                 | γ               | ° ' "        | ° N.         | γ                 | γ               | ° ' "        | ° N.         | γ                 | γ               |
| Sodankylä, Finland ...          | 67 22     | 26 39E.    | 1 41·1E.     | 75 45·4      | 12490             | 49204           | 1 30·6E.     | 75 42·6      | 12529             | 49188           | 1 22·7E.     | 75 40·5      | 12561             | 49187           |
| Lerwick, Shetland Islands ...   | 60 9      | 1 11W.     | 15 30·6W.    | 72 35·7      | 14642             | 46708           | 15 44·5W.    | 72 33·6      | 14655             | 46652           | ...          | ...          | ...               | ...             |
| Pavlovsk, Leningrad, Russia     | 59 41     | 30 29E.    | 3 16·1E.     | 71 23·3      | 15818             | 46970           | 3 7·1E.      | 71 20·1      | 15858             | 46943           | 2 58·9E.     | 71 17·3      | 15895             | 46927           |
| Sitka, Alaska ...               | 57 3      | 135 20W.   | 30 28·7E.    | 74 22·0      | 15536             | 55519           | 30 28·9E.    | 74 22·1      | 15549             | 55573           | 30 29·1E.    | 74 22·4      | 15560             | 55631           |
| Ekaterinburg, Russia ...        | 56 50     | 60 36E.    | 11 0·8E.     | 71 58·4      | 16578             | 50942           | 11 0·7E.     | 71 54·2      | 16638             | 50915           | 11 1·4E.     | 71 50·4      | 16692             | 50890           |
| Rude Skov, Denmark ...          | 55 51     | 12 27E.    | 7 10·4W.     | 69 5·1       | 17053             | 44621           | 7 22·6W.     | 69 3·5       | 17073             | 44615           | 7 33·8W.     | 69 2·6       | 17087             | 44614           |
| Kasan, Russia ...               | 55 50     | 48 51E.    | 8 53·5E.     | 70 7·6       | 17310             | ...             | 8 50·4E.     | 70 2·4       | 17367             | ...             | 8 44·5E.     | 70 0·2       | 17401             | ...             |
| Eskdalemuir, Scotland ...       | 55 19     | 3 12W.     | 16 1·2W.     | 69 38·7      | 16673             | 44938           | 16 13·8W.    | 69 38·8      | 16676             | 44954           | 16 25·8W.    | 69 40·0      | 16680             | 45012           |
| Stoneyok, Alberta ...           | 54 37     | 113 21W.   | 27 17·7E.    | 77 53·6      | 12866             | 59984           | 27 23·3E.    | 77 53·2      | 12881             | 60025           | 27 28·5E.    | 77 53·3      | 12902             | 60126           |
| Manhourst, Lancs., England      | 53 51     | 2 28W.     | 15 5·4W.     | 68 41·7      | 17276             | 44281           | 15 17·6W.    | 68 41·6      | 17308             | 44377           | 15 30·9W.    | 68 42·4      | 17305             | 44402           |
| Potsdam, Prussia ...            | 52 23     | 13 4E.     | 6 45·0W.     | 66 38·0      | 18550             | 42935           | 6 56·9W.     | 66 36·5      | 18565             | 42920           | 7 7·6W.      | 66 35·7      | 18577             | 42918           |
| Seddin, Prussia ...             | 52 17     | 13 1E.     | 6 46·3W.     | 66 35·0      | 18588             | 42920           | 6 58·2W.     | 66 33·5      | 18603             | 42905           | 7 8·9W.      | 66 32·7      | 18615             | 42903           |
| De Bilt, Utrecht, Holland ...   | 52 5      | 5 11E.     | 10 38·3W.    | 66 52·7      | 18372             | 43024           | 10 50·2W.    | 66 52·6      | 18378             | 43038           | 11 1·9W.     | 66 52·8      | 18382             | 43054           |
| Valencia, Cahirciveen, Ireland  | 51 56     | 10 15W.    | 18 34·9W.    | 68 0·1       | 17854             | 44214           | 18 46·5W.    | 68 1·5       | 17852             | 44242           | 18 57·0W.    | 68 3·0       | 17849             | 44289           |
| Kew, Richmond, Surrey, England. | 51 28     | 0 19W.     | 13 45·1W.    | 66 56·5      | 18392             | 43205           | 13 57·3W.    | 66 57·0      | 18394             | 43230           | 14 8·8W.     | 66 57·6      | 18394             | 43251           |
| Greenwich, London, England      | 51 28     | 0 0        | 13 22·8W.    | 66 51·6      | 18426             | 43112           | 13 35·1W.    | 66 51·9      | 18431             | 43137           | 13 46·7W.    | 66 52·3      | 18447             | 43176           |
| Val Joyeux, near Paris, France  | 48 49     | 2 1E.      | 12 7·9W.     | 64 38·9      | 19663             | 41501           | 12 20·2W.    | 64 39·0      | 19664             | 41504           | 12 31·5W.    | 64 39·6      | 19661             | 41517           |
| Nantes, France ...              | 47 1      | 1 34W.     | 13 11·6W.    | 63 41·6      | 20240             | 40940           | 13 23·5W.    | 63 46·8      | 20212             | 41009           | ...          | ...          | ...               | ...             |
| Agincourt, Ontario ...          | 43 47     | 79 16W.    | 7 5·8W.      | 74 44·3      | 15752             | 57733           | 7 0·9W.      | 74 44·3      | 15784             | 57849           | 6 56·2W.     | 74 44·6      | 15809             | 57961           |
| Tortosa, Spain ...              | 40 49     | 0 30E.     | 11 20·2W.    | 57 30·5      | 23359             | 36678           | 11 30·6W.    | 57 32·7      | 23328             | 36680           | 11 39·7W.    | 57 35·5      | 23314             | 37225           |
| Coimbra, Portugal ...           | 40 12     | 8 25W.     | ...          | ...          | ...               | ...             | 14 54·2W.    | 58 18·9      | 23110             | 37433           | 15 4·7W.     | 58 17·0      | 23096             | 37369           |
| Cheltenham, Maryland ...        | 38 44     | 76 50W.    | 6 35·8W.     | 70 59·2      | 18924             | 54918           | 6 32·0W.     | 70 58·3      | 18975             | 55018           | 6 27·7W.     | 70 57·6      | 19020             | 55115           |
| San Fernando, Spain ...         | 36 28     | 6 12W.     | 13 23·5W.    | 53 46·8      | 25016             | ...             | 13 32·6W.    | 53 48·7      | 25027             | ...             | 13 41·6W.    | 53 50·1      | 25033             | ...             |
| Tucson, Arizona ...             | 32 15     | 110 50W.   | 13 46·4E.    | 59 29·4      | 26745             | 45386           | 13 47·3E.    | 59 28·8      | 26794             | 45450           | 13 47·5E.    | 59 29·0      | 26839             | 45533           |
| Lukiapang, Shanghai, China      | 31 19     | 121 2E.    | ...          | ...          | ...               | ...             | ...          | ...          | ...               | ...             | 3 25·1W.     | 45 30·5      | 33205             | 33799           |
| Dehra Dun, near Simla, India    | 30 19     | 78 3E.     | ...          | ...          | ...               | ...             | 1 38·6E.     | 45 12·6      | 32926             | 33168           | 1 43·2E.     | 45 8·6       | 32927             | 33091           |
| Hongkong, China ...             | 22 18     | 114 10E.   | 0 23·8W.     | 30 42·8      | 37277             | 22145           | 0 23·2W.     | 30 44·7      | 37284             | 22177           | 0 21·5W.     | 30 46·0      | 37279             | 22194           |
| Honolulu, Hawaii ...            | 21 19     | 158 4W.    | 10 0·2E.     | 39 24·5      | 28745             | 23618           | 9 58·9E.     | 39 23·9      | 28772             | 23635           | 9 57·1E.     | 39 24·4      | 28794             | 23658           |
| Teoluyucan, Mexico ...          | 19 45     | 99 11W.    | ...          | ...          | ...               | ...             | 9 14·0E.     | ...          | ...               | ...             | ...          | ...          | ...               | ...             |
| Toungoo, Burma ...              | 18 56     | 96 27E.    | ...          | ...          | ...               | ...             | ...          | ...          | ...               | ...             | 0 29·7W.     | 23 7·2       | 39156             | 16717           |
| Alibag, Bombay, India ...       | 18 39     | 72 52E.    | ...          | ...          | ...               | ...             | 0 7·9E.      | 25 8·4       | 37017             | 17376           | 0 12·6E.     | 25 5·0       | 36967             | 17303           |
| Vieques, Porto Rico ...         | 18 9      | 65 26W.    | 4 14·9W.     | 51 41·9      | 27570             | 34908           | 4 8·3W.      | 51 38·1      | 27629             | 34902           | 4 0·9W.      | 51 33·1      | 27695             | 34880           |
| Kodai-Kanal, India ...          | 10 14     | 77 28E.    | ...          | ...          | ...               | ...             | ...          | ...          | ...               | ...             | 1 58·7W.     | 4 40·1       | 37878             | 3093            |
| Batavia, Java ...               | 6 11      | 106 49E.   | 0 52·9E.     | 32 4·3       | 36821             | 23073           | 0 52·2E.     | 32 0·9       | 36805             | 23012           | 0 49·3E.     | 32 0·3       | 36784             | 22990           |
| Apia, Samoa ...                 | 13 48     | 171 46W.   | 10 19·2E.    | 30 7·5       | 35249             | 20453           | 10 16·3E.    | 30 6·6       | 35248             | 20440           | 10 13·6E.    | 30 5·6       | 35241             | 20423           |
| Mauritius ...                   | 20 6      | 57 33E.    | 10 59·7W.    | 52 32·2      | 22943             | 29940           | 10 49·2W.    | 52 33·7      | 22982             | 30017           | 10 39·9W.    | 52 36·2      | 23019             | 30112           |
| Vassouras, Brazil ...           | 22 24     | 43 39W.    | ...          | ...          | ...               | ...             | 11 42·8W.    | 15 53·7      | 24407             | 6950            | 11 34·1W.    | 15 44·2      | 24431             | 6884            |
| Watheroo, Australia ...         | 30 19     | 115 53E.   | 4 18·3W.     | 64 5·2       | 24750             | 50941           | 4 19·5W.     | 64 3·0       | 24777             | 50914           | ...          | ...          | ...               | ...             |
| Pilar, Cordova, Argentina ...   | 31 40     | 63 53W.    | ...          | ...          | ...               | ...             | ...          | ...          | ...               | ...             | 7 31·9E.     | 25 39·1      | 25178             | 12091           |
| Christchurch, New Zealand...    | 43 32     | 172 37E.   | 17 16·4E.    | 68 12·7      | 22188             | 55508           | 17 11·7E.    | 68 12·0      | 22209             | 55526           | 17 8·3E.     | 68 11·2      | 22217             | 55507           |

ADDITIONAL VALUES FOR EARLIER YEARS.

| Place.                           | Latitude. | Longitude. | 1921.        |              |                   |                 | 1920.        |              |                   |                 | 1919.        |              |                   |                 |
|----------------------------------|-----------|------------|--------------|--------------|-------------------|-----------------|--------------|--------------|-------------------|-----------------|--------------|--------------|-------------------|-----------------|
|                                  |           |            | Declination. | Inclination. | Horizontal Force. | Vertical Force. | Declination. | Inclination. | Horizontal Force. | Vertical Force. | Declination. | Inclination. | Horizontal Force. | Vertical Force. |
|                                  | N.        | ° ' "      | ° ' "        | ° N.         | γ                 | γ               | ° ' "        | ° N.         | γ                 | γ               | ° ' "        | ° N.         | γ                 | γ               |
| Ekaterinburg, Russia ...         | 56 50     | 60 36E.    | ...          | ...          | ...               | ...             | 11 1·9E.     | 71 42·1      | 16812             | 50843           | 11 2·8E.     | 71 38·2      | 16872             | 50823           |
| Kasan, Russia ...                | 55 50     | 48 51E.    | 8 43·1E.     | 69 56·5      | 17458             | ...             | 8 39·6E.     | 69 48·1      | 17530             | ...             | 8 37·8E.     | 69 45·6      | 17570             | ...             |
| Zui, near Irkutsk, Siberia ...   | 52 28     | 104 2E.    | ...          | ...          | ...               | ...             | 1 2·3E.      | 71 6·6       | 19277             | 56337           | 1 6·9E.      | 71 5·8       | 19307             | 56382           |
| Munich, Bavaria ...              | 48 9      | 11 37E.    | 7 53·6W.     | ...          | ...               | ...             | 8 3·8W.      | ...          | ...               | ...             | 8 13·7W.     | ...          | ...               | ...             |
| Pola, Istria ...                 | 44 52     | 13 51E.    | 6 38·6W.     | 60 10·3      | 22094             | 38537           | ...          | ...          | ...               | ...             | 7 1·6W.      | 60 9·3       | 22111             | 38539           |
| Tsingtau, Kianchow, China...     | 36 4      | 120 19E.   | ...          | ...          | ...               | ...             | 4 12·9W.     | 52 7·0       | 30817             | 39610           | 4 9·9W.      | 52 7·4       | 30812             | 39613           |
| Lukiapang, Shanghai, China       | 31 49     | 121 2E.    | 3 24·0W.     | 45 30·5      | 33189             | 33784           | 3 21·4W.     | 45 30·7      | 33175             | 33773           | 3 20·0W.     | 45 31·0      | 33187             | 33790           |
| Helwan, Egypt ...                | 29 52     | 31 21E.    | ...          | ...          | ...               | ...             | 1 23·7W.     | 41 12·8      | 29956             | 26236           | 1 30·6W.     | 41 9·6       | 29941             | 26175           |
| Antipolo, Manila, Philippine Is. | 14 36     | 121 10E.   | 0 34·2E.     | 16 7·8       | 38116             | 11028           | 0 35·9E.     | 16 11·7      | 38100             | 11065           | 0 36·1E.     | 16 10·1      | 38107             | 11048           |
| Toolangi, Melbourne, Australia.  | 37 32     | 145 28E.   | ...          | ...          | ...               | ...             | 8 0·8E.      | 67 55·1      | 22874             | 56384           | ...          | ...          | ...               | ...             |
|                                  | N.        | ° ' "      | ° ' "        | ° N.         | γ                 | γ               | ° ' "        | ° N.         | γ                 | γ               | ° ' "        | ° N.         | γ                 | γ               |
| Ekaterinburg, Russia ...         | 56 50     | 60 36E.    | 11 3·3E.     | 71 33·9      | 16936             | ...             | 11 3·7E.     | 71 29·8      | 17000             | ...             | 11 3·8E.     | 71 25·6      | 17070             | ...             |
| Kasan, Russia ...                | 55 50     | 48 51E.    | 8 32·9E.     | 69 43·9      | 17640             | ...             | 8 31·3E.     | 69 37·1      | 17696             | ...             | 8 27·9E.     | 69 32·8      | 17760             | ...             |
| Irkutsk, Siberia ...             | 52 16     | 104 19E.   | 1 2·1E.      | 70 54·0      | 19491             | ...             | 1 8·3E.      | 70 49·7      | 19545             | ...             | 1 13·6E.     | 70 48·5      | 19577             | ...             |
| Zui, near Irkutsk, Siberia ...   | 52 28     | 104 2E.    | 1 10·6E.     | 71 4·6       | 19332             | ...             | 1 15·5E.     | 71 3·6       | 19361             | ...             | 1 20·7E.     | 71 2·5       | 19396             | ...             |
|                                  | N.        | ° ' "      | ° ' "        | ° N.         | γ                 | γ               | ° ' "        | ° N.         | γ                 | γ               | ° ' "        | ° N.         | γ                 | γ               |
| Ekaterinburg, Russia ...         | 56 50     | 60 36E.    | 11 2·6E.     | 71 21·2      | 17142             | ...             | 11 0·1E.     | 71 16·2      | 17219             | ...             | 10 57·4E.    | 71 12·1      | 17290             | ...             |
| Kasan, Russia ...                | 55 50     | 48 51E.    | 8 24·3E.     | 69 28·8      | 17829             | ...             | ...          | ...          | ...               | ...             | ...          | ...          | ...               | ...             |
| Irkutsk, Siberia ...             | 52 16     | 104 19E.   | 1 19·3E.     | 70 46·5      | 19624             | ...             | 1 24·6E.     | 70 43·8      | 19671             | ...             | 1 29·7E.     | 70 40·4      | 19715             | ...             |

Air Ministry  
METEOROLOGICAL OFFICE

THE  
OBSERVATORIES' YEAR BOOK  
1924

Comprising the meteorological and geophysical results obtained from autographic records and eye observations at the observatories at Lerwick, Aberdeen, Eskdalemuir, Cahirciveen (Valencia Observatory), and Richmond (Kew Observatory), and the results of soundings of the upper atmosphere by means of registering balloons.

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AEROLOGICAL SECTION

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Published by the authority of the  
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LONDON

PUBLISHED BY HIS MAJESTY'S STATIONERY OFFICE.

1927





## AEROLOGICAL SECTION.

| Station.           | Latitude.  | Longitude. | Height above<br>Sea Level. |
|--------------------|------------|------------|----------------------------|
| Kew .. ..          | 51° 28' N. | 0° 19' W.  | 7 metres.                  |
| Sealand .. ..      | 53° 14' N. | 3° 0' W.   | 5 metres.                  |
| English Channel .. | 50° 38' N. | 0° 21' E.  | 0 metres.                  |

## INTRODUCTION.

**Notes on the tables of Upper Air Temperatures obtained from soundings with registering balloons at Richmond, Sealand and the English Channel. 1924.**

The tables are presented in the same form as those appearing in the Observatories' Year Book for 1923. The Dines pattern meteorograph was employed solely as before, the instruments being mainly constructed in the Observatory workshop supplemented by a few purchased from outside contractors.

The method of operation remained substantially the same as that described in the Computer's Handbook.\*

In the computation of pressure-height a value of gravity constant with height has been assumed, and equal to 981.2; the effect of humidity on the density of the air has been neglected.

A total of 56 soundings were made during the year, 36 from the Distributive Station of the Meteorological Office at Sealand Aerodrome, 19 from Kew Observatory and one from a vessel in the English Channel. Of these, 45 instruments were found and returned; one had only reached a negligible height and three others failed to give good records through instrumental defects. The choice of station from which an ascent was made was generally determined in view of the probable direction and run of the balloon, and in consequence the percentage of returns has been high. The average height reached was appreciably greater than in the previous year.

In most cases the mean of the records on the ascent and descent was employed entirely in computing the published figures. In one case where the difference between the two was greater than usual the colder record was used alone in the upper part of the ascent; in a few other cases where the difference was pronounced near the ground only, what was judged to be the ascending record was alone employed for this particular layer, the rest being determined from the mean as usual. As a general rule the difference between the two records of temperature did not exceed 5 degrees, the mean having about half of this value. Whenever direct evidence could be obtained it was almost always found that in the troposphere the descending record was the colder of the two. In the case of high ascents made during the daytime a pronounced rise of temperature was sometimes observed over about a kilometer at the extreme top, particularly so on the record of the descent immediately after the balloon had burst. There is good evidence that this is a fictitious effect caused by insolation, and that the ascent is a great deal more affected by it than the descent. The rise of temperature has accordingly been ignored and greater weight given to the descent than to the ascent at the extreme top.

The ventilation of the meteorograph is effected solely by the natural draught produced by its vertical velocity. During the year a new type of case was designed for the instrument and gradually taken into use, the ends of which were coned out in order to induce a greater draught of air over the instrument within. The vertical

\* MO. 223, Section II, Sub-section II.

velocity of the rising balloon was of the order 200 meters per minute in rather more than half of the soundings, and 300 metres per minute or more in the remainder. After the balloon had burst the instrument fell at the rate of about 700 or 800 meters per minute.

The figures given in the table of lapse rates do not in every case agree with the temperatures appearing in the table of temperature-heights. The reason is that both were determined independently from the original data, which can sometimes profitably be read to .5 degree, and then rounded off to the nearest whole degree.

The method used in the previous year of making the pressure-temperature marks in the calibration of the meteorograph was maintained as the regular practice. For a description of the process see the *Meteorological Magazine*, August, 1923, page 165.

All new meteorographs, and all old ones used again after repair, were seasoned in a vacuum chamber before use by being subjected to several slow reductions of pressure. This process has been found to reduce greatly the chance of a systematic difference occurring between the results of a fast and a slow calibration. More detail is given in the Introduction to the tables for 1923, and within the limits of accuracy at present attainable in the measurement of upper air pressures the results of the fast reduction of pressure in the calibration test may be taken as applying to the slow reduction in an actual flight.

Some modified forms of aneroid box were employed during the year, but while they possessed the advantage of a more uniform scale value at low pressures, the lag, or difference in reading as between a falling and a rising pressure, remained as before at about 6 or 7 mb. in the middle region of a high ascent, falling off to something less than this on either side. If a correction be applied to the recorded temperature-pressures to allow for the error, it results for an average sounding in the troposphere in an increase in the difference between the temperatures recorded at any pressure on the ascent and descent.

The effect is to make the recorded temperatures on the descent too high by about one degree at a height of 5 or 6 kilometers, with a tendency for the error to fall off above and below. When the mean of the two records is employed the resultant error is halved and ceases to be serious.

When soundings were made from Sealand Aerodrome, meteorographs calibrated beforehand at Kew Observatory were forwarded by post to Sealand, and there is reason to suppose that the zero readings were sometimes disturbed before the sounding was made by shocks encountered in transit. Serious cases were readily discoverable and if necessary the results were rejected; minor ones, however, were not, and the general standard of accuracy attained in the soundings from Sealand was somewhat lowered in consequence.

In Table 494 occur the entries "Types of Tropopause" and " $H_c$  = Height of Tropopause." These are defined as follows:—Type 1. The stratosphere commences with an inversion, and  $H_c$  is the height of the first point of zero temperature gradient. Type 2. The stratosphere begins with an abrupt transition to a temperature gradient below 2a. per kilometer without inversion, and  $H_c$  is the height of the abrupt transition. Type 3. There is no abrupt change of temperature gradient, and the base of the stratosphere is taken at the point where the mean fall of temperature for the kilometer next above is 2a. or less, provided that it does not exceed 2a. for any subsequent kilometer.

## SOUNDINGS WITH REGISTERING BALLOONS, 1924.

Sealand: Lat. 53° 14' N.; Long. 3° 00' W.

Kew: Lat. 51° 28' N.; Long. 0° 19' W.

494.  $T$  = Temperature in Degrees absolute above 200a.  $P$  = Pressure in millibars.  $H$  = Height in kilometres above M.S.L.

| No.                                  | 467.                | 469.             | 471.              | 472.                      | 473.                 | 476.                | 478.                   | 479.                     | 480.                  | 481.                    | 482.        | 484.             | 485.                      |
|--------------------------------------|---------------------|------------------|-------------------|---------------------------|----------------------|---------------------|------------------------|--------------------------|-----------------------|-------------------------|-------------|------------------|---------------------------|
| Date.                                | Jan. 1.             | Jan. 3.          | Feb. 9.           | Feb. 13.                  | Feb. 27.             | Mar. 5.             | Mar. 7.                | Mar. 8.                  | Mar. 17.              | Mar. 18.                | Mar. 19.    | Mar. 21.         | Mar. 22.                  |
| Station.                             | Sealand.            | Sealand.         | Kew.              | Kew.                      | Sealand.             | Sealand.            | Kew.                   | Kew.                     | Sealand.              | Sealand.                | Sealand.    | Kew.             | Sealand.                  |
| Start G.M.T. ...                     | 16 h. 10 m.         | 16 h. 39 m.      | 10 h. 30 m.       | 14 h. 43 m.               | 17 h. 23 m.          | 17 h. 30 m.         | 17 h. 26 m.            | 17 h. 30 m.              | 07 h. 15 m.           | 07 h. 20 m.             | 07 h. 20 m. | 08 h. 16 m.      | 11 h. 32 m.               |
| $H_t$ = Greatest Height ...          | 12.87 km.           | 12.32 km.        | 17.35 km.         | 3.77 km.                  | 15.59 km.            | 14.11 km.           | 18.00 km.              | 12.22 km.                | 11.55 km.             | 19.30 km.               | 18.83 km.   | 7.50 km.         | 10.55 km.                 |
| $T_t$ = Corresponding Temperature... | 220 a.              | 220 a.           | 223 a.            | 257 a.                    | 219 a.               | 217 a.              | 215 a.                 | 211 a.                   | 211 a.                | 223 a.                  | 222 a.      | 236 a.           | 220 a.                    |
| $P_t$ = Corresponding Pressure ...   | 171 mb.             | 181 mb.          | 82 mb.            | 618 mb.                   | 106 mb.              | 127 mb.             | 71 mb.                 | 179 mb.                  | 200 mb.               | 64 mb.                  | 64 mb.      | 374 mb.          | 235 mb.                   |
| Place of Fall ...                    | Hednesford, Staffs. | Frome, Somerset. | Braughing, Herts. | Englefield Green, Surrey. | Sheldon, Birmingham. | Derwent, Sheffield. | W. Peckham, Maidstone. | Great Leigh, Chelmsford. | Ladywood, Birmingham. | Northfield, Birmingham. | Stafford.   | Cheshunt, Herts. | Matlock Moor, Derbyshire. |
| Distance ...                         | 88 km.              | 227 km.          | 53 km.            | 17 km.                    | 117 km.              | 87 km.              | 53 km.                 | 69 km.                   | 113 km.               | 113 km.                 | 76 km.      | 38 km.           | 98 km.                    |
| Bearing ...                          | 130°                | 169°             | 26°               | 262°                      | 135°                 | 79°                 | 118°                   | 56°                      | 139°                  | 142°                    | 129°        | 43°              | 97°                       |
| Geostrophic Wind—<br>Speed ...       | 11 m/s.             | ? 7 m/s.         | 25 m/s.           | 22 m/s.                   | 15 m/s.              | ? 11 m/s.           | 7 m/s.                 | 8 m/s.                   | ?                     | ?                       | 11 m/s.     | 9 m/s.           | 13 m/s.                   |
| Degrees from N. ...                  | 330°                | 300°             | 160°              | 100°                      | 360°                 | 140°                | 150°                   | 160°                     | ?                     | ?                       | 290°        | 110°             | 240°                      |
| Wind (Anemograph)—<br>Speed ...      | 9 m/s.              | —                | 7 m/s.            | 9 m/s.                    | 9 m/s.               | 7 m/s.              | 4 m/s.                 | 3 m/s.                   | 0 m/s.                | 0 m/s.                  | 1 m/s.      | 4 m/s.           | 7 m/s.                    |
| Degrees from N. ...                  | 292°                | —                | 112°              | 68°                       | 304°                 | 158°                | 90°                    | 158°                     | —                     | —                       | 225°        | 90°              | 202°                      |
| Humidity at Surface ...              | 93%                 | 87%              | 97%               | 80%                       | 86%                  | 95%                 | 84%                    | 50%                      | 95%                   | 98%                     | 98%         | 81%              | 72%                       |
| Type of Tropopause ...               | I.                  | I.               | I.                | —                         | I.                   | III.                | I.                     | I.                       | ?                     | I.                      | I.          | —                | II.                       |
| $H_c$ = Height of ,, ...             | 11.65 km.           | 11.14 km.        | 8.91 km.          | —                         | 9.08 km.             | 8.04 km.            | 11.25 km.              | 11.09 km.                | ?                     | 10.72 km.               | 10.63 km.   | —                | 10.17 km.                 |
| $P_c$ = Pressure at ,, ...           | 207 mb.             | 218 mb.          | 298 mb.           | —                         | 292 mb.              | 330 mb.             | 210 mb.                | 215 mb.                  | ?                     | 227 mb.                 | 230 mb.     | —                | 250 mb.                   |
| $T_c$ = Temp. at ...                 | 218 a.              | 213 a.           | 226 a.            | —                         | 217 a.               | 219 a.              | 205 a.                 | 209 a.                   | ?                     | 211 a.                  | 213 a.      | —                | 220 a.                    |
| $P_9$ = Pressure at 9 km. ...        | 311 mb.             | 304 mb.          | 294 mb.           | —                         | 295 mb.              | 284 mb.             | 303 mb.                | 300 mb.                  | 300 mb.               | 298 mb.                 | 297 mb.     | —                | 299 mb.                   |
| $P_s$ (Pressure at M.S.L.) ...       | 1023 mb.            | 1017 mb.         | 983 mb.           | 1004 mb.                  | 1019 mb.             | 1010 mb.            | 1031 mb.               | 1027 mb.                 | 1021 mb.              | 1019 mb.                | 1011 mb.    | 1002 mb.         | 1002 mb.                  |
| $T_m$ (Mean Temp. 1 to 9 km.) ...    | 257 a.              | 253 a.           | 252 a.            | —                         | 246 a.               | 241 a.              | 249 a.                 | 248 a.                   | 249 a.                | 248 a.                  | 249 a.      | —                | 252 a.                    |

495.

## NOTES.

| No.  | Time.  | Date.    | Notes.  |
|------|--------|----------|---|
| 467. | 16.10  | 1.1.24.  | Weather overcast with rain. St. and Fr-St. cloud sheet at about 250 m. Marked inversion 0.67 km. to 1.04 km. Temps. 276½ a. to 281½ a. Small isothermal patch 2.74 km. to 2.96 km. Temp. 271½ a.<br><i>Pressure distribution.</i> Type IV. Secondary low centred at Iceland, displacing wedge of high pressure over British Isles.  |
| 469. | 16.39. | 3.1.24.  | Weather overcast. St. from S.W. A-Cu. and Ci-Cu. from NNW, very fast. Exceptionally long run of balloon. Isothermal patches 2.43 km. to 2.77 km. at 265½ a. and 3.95 km. to 4.06 km. at 260½ a.<br><i>Pressure distribution.</i> Type IV.a. Low centred W. of Iceland, breaking down to small secondaries. Irregular distribution over England.   |
| 471. | 10.30. | 9.2.24.  | Weather overcast with slight rain and pressure falling rather fast. St-Nb cloud sheet at about 200 m. Isothermal patches 0.41 km. to 0.65 km. at 277 a. and 1.00 km. to 1.20 km. at 275½ a.<br><i>Pressure distribution.</i> Type V.a. Secondary developing over S. Ireland.  |
| 472. | 14.43. | 13.2.24. | Weather overcast. St. sheet at about 300 m. Pronounced inversion 1.12 km. to 1.31 km. Temps. 264½ a. to 270½ a.<br><i>Pressure distribution.</i> Type VII.a. Straight isobars; low over Bay, High over N. Sea.  |
| 473. | 17.23. | 27.2.24. | Weather overcast with rain. Cloud sheet at about 250 m. Nb. and Fr-St. Small isothermal patch at 4.3 km. The stratosphere contained many minor variations of temp. shewn on both traces alike.<br><i>Pressure distribution.</i> Type XII. After passage of secondary V. trough.   |
| 476. | 17.30. | 5.3.24.  | Weather overcast, following rain. Fr-St. at about 300 m. with Nb. above it.<br><i>Pressure distribution.</i> Type XIV. (?). Left front of secondary Low travelling towards S.E. and near centre.  |
| 478. | 17.26. | 7.3.24.  | Weather hazy, without cloud. Cold East wind undercutting a warmer Westerly current. Up and down traces very distinct. In version on up trace 0.97 km. to 1.12 km. Temps. 272½ a. to 275 a. On down trace small inversion at about same level and another 0.59 km. to 0.81 km. Temps. 274 a. to 276 a.<br><i>Pressure distribution.</i> Type VI. High pressure over Denmark.   |
| 479. | 17.30. | 8.3.24.  | Weather fair. Cirrus moving slowly, no low clouds. Inversion 1.06 km. to 1.25 km. Temps. 273 a. to 275 a.<br><i>Pressure distribution.</i> Type VI. High pressure over Central Europe.  |
| 480. | 7.15.  | 17.3.24. | Weather fair and frosty. Cirrus moving rather fast from NW. No low clouds. Inversion near ground.<br><i>Pressure distribution.</i> Type X. High centred between Iceland and British Isles. Lows over Western Russia and Azores.   |
| 481. | 7.20.  | 18.3.24. | Weather calm and frosty with fog. Cirrus at 11.25 moving rather fast from N.W. Inversion near ground.<br><i>Pressure distribution.</i> Type X. Situated in ill-defined region of high pressure.   |
| 482. | 7.20.  | 19.3.24. | Weather frosty morning with mist. Ci Cu 1/10 moving fast from NW. Inversion near ground. Inversion 1.57 km. to 1.85 km. Temps. 267 a. to 268 a.<br><i>Pressure distribution.</i> Type II. (?). General fall of pressure since previous day. A high off West of Ireland and a low between Scotland and Norway.   |
| 484. | 8.16.  | 21.3.24. | Weather overcast with St. sheet. Inversion, upper limit 0.60 km. and temp. max. 278 a.<br><i>Pressure distribution.</i> Type ?. Low over Atlantic, high over Central Europe, with a row of small lows lying on a N-S. line between them.  |
| 485. | 11.32. | 22.3.24. | Weather overcast with slight showers. Fr-St cloud at about 300 m., St-Cu at about 1200 m. A-Cu moving from W. Small inversion 1.57 to 1.77 km.; Temp. 273 a. to 274 a. Another smaller one at 3.30 km. Some uncertainty in the temperatures in this ascent as the figures did not agree with the surface temperature. Finally + 3 a. was added to all temperatures as read on the records.<br><i>Pressure distribution.</i> Type VII. Low off Ireland with S. to SW. gradient over England. |

## SOUNDINGS WITH REGISTERING BALLOONS, 1924.

English Channel: Lat. 50° 38' N.; Long. 0° 21' E.

494.

 $T$  = Temperature in Degrees absolute above 200a.  $P$  = Pressure in millibars.  $H$  = Height in kilometres above M.S.L.

| No.                                | 486.                 | 488.                | 490.                            | 491.                       | 492.                            | 493.                           | 494.                  | 495.              | 496.           | 497.                      | 498.                           | 499.                      | 501.                       | 502.             |
|------------------------------------|----------------------|---------------------|---------------------------------|----------------------------|---------------------------------|--------------------------------|-----------------------|-------------------|----------------|---------------------------|--------------------------------|---------------------------|----------------------------|------------------|
| Date.                              | May 7.               | May 9.              | May 23.                         | May 25.                    | June 5.                         | June 16.                       | July 14.              | July 15.          | July 16.       | July 17.                  | July 18.                       | July 19.                  | Aug. 7.                    | Sept. 3.         |
| Station.                           | Sealand.             | Sealand.            | Sealand.                        | Sealand.                   | Sealand.                        | English Channel.               | Sealand.              | Sealand.          | Kew.           | Sealand.                  | Sealand.                       | Sealand.                  | Kew.                       | Sealand.         |
| Start G.M.T. ...                   | 19 h. 05 m.          | 19 h. 12 m.         | 19 h. 05 m.                     | 09 h. 40 m.                | 18 h. 30 m.                     | 17 h. 54 m.                    | 07 h. 20 m.           | 07 h. 15 m.       | 11 h. 15 m.    | 07 h. 15 m.               | 07 h. 25 m.                    | 07 h. 15 m.               | 18 h. 10 m.                | 07 h. 22 m.      |
| $H_t$ = Greatest Height ...        | 17.65 km.            | 13.54 km.           | 17.27 km.                       | 10.66 km.                  | 17.84 km.                       | 5.44 km.                       | 20.57 km.             | 20.70 km.         | 8.76 km.       | 17.41 km.                 | 15.98 km.                      | 16.53 km.                 | 11.05 km.                  | 16.46 km.        |
| $T_t$ = Corresponding Temperature. | 226 a.               | 219 a.              | 225 a.                          | 238 a.                     | 225 a.                          | 262 a.                         | 231 a.                | 229 a.            | 243 a.         | 232 a.                    | 233 a.                         | 233 a.                    | 228 a.                     | 218 a.           |
| $P_t$ = Corresponding Pressure.    | 80 mb.               | 149 mb.             | 85 mb.                          | 234 mb.                    | 78 mb.                          | 520 mb.                        | 56 mb.                | 54 mb.            | 330 mb.        | 89 mb.                    | 110 mb.                        | 101 mb.                   | 228 mb.                    | 101 mb.          |
| Place of Fall ...                  | Harwood, nr. Bolton. | Wortley, Sheffield. | Hawks-wick, nr. Skipton, Yorks. | Hooton Roberts, Rotherham. | Clifton Ash-bourne, Derbyshire. | 4 Miles S.S.E. of East-bourne. | Thurlston, nr. Derby. | Todmorton, Yorks. | Dunmow, Essex. | Worksop, Nottinghamshire. | Wood-house Eves, Loughborough. | Checkley, Stoke-on-Trent. | Patcham, Brighton, Sussex. | Pantydwr Radnor. |
| Distance ...                       | 53 km.               | 99 km.              | 103 km.                         | 118 km.                    | 87 km.                          | 9 km.                          | 113 km.               | 81 km.            | 63 km.         | 126 km.                   | 130 km.                        | 75 km.                    | 67 km.                     | 101 km.          |
| Bearing ...                        | 44°                  | 74°                 | 38°                             | 75°                        | 107°                            | 351°                           | 110°                  | 48°               | 46°            | 86°                       | 115°                           | 116°                      | 180°                       | 199°             |
| Geostrophic Wind—Speed ...         | 18 m/s.              | 13 m/s.             | 13 m/s.                         | 13 m/s.                    | 6 m/s.                          | 9 m/s.                         | 7 m/s.                | 7 m/s.            | 7 m/s.         | 9 m/s.                    | 13 m/s.                        | 9 m/s.                    | 9 m/s.                     | 11 m/s.          |
| Degrees from N. ...                | 290°                 | 200°                | 230°                            | 300°                       | 200°                            | 120°                           | 260°                  | 210°              | 290°           | 225°                      | 320°                           | 315°                      | 10°                        | 80°              |
| Wind (Anemograph)—Speed ...        | 9 m/s.               | 7 m/s.              | 9 m/s.                          | 9 m/s.                     | 3 m/s.                          | —                              | 4 m/s.                | 4 m/s.            | 4 m/s.         | 4 m/s.                    | 9 m/s.                         | 4 m/s.                    | 4 m/s.                     | 4 m/s.           |
| Degrees from N. ...                | 259°                 | 158°                | 202°                            | 259°                       | 225°                            | —                              | 248°                  | 135°              | 270°           | 202°                      | 292°                           | 270°                      | 315°                       | 22°              |
| Humidity at Surface ...            | 69%                  | 80%                 | 66%                             | 84%                        | 90%                             | —                              | 62%                   | 79%               | 68%            | 75%                       | 77%                            | 84%                       | 69%                        | 89%              |
| Type of Tropopause                 | I.                   | I.                  | I.                              | II.                        | I.                              | —                              | I.                    | I.                | —              | I.                        | I.                             | I.                        | II.                        | II.              |
| $H_c$ = Height of „                | 7.76 km.             | 10.74 km.           | 8.89 km.                        | 7.54 km.                   | 11.81 km.                       | —                              | 12.61 km.             | 12.78 km.         | —              | 10.65 km.                 | 9.51 km.                       | 10.03 km.                 | 9.52 km.                   | 12.74 km.        |
| $P_c$ = Pressure at „              | 350 mb.              | 233 mb.             | 300 mb.                         | 370 mb.                    | 200 mb.                         | —                              | 189 mb.               | 183 mb.           | —              | 244 mb.                   | 285 mb.                        | 264 mb.                   | 287 mb.                    | 181 mb.          |
| $T_c$ = Temp. at „                 | 227 a.               | 211 a.              | 225 a.                          | 234 a.                     | 210 a.                          | —                              | 221 a.                | 217 a.            | —              | 229 a.                    | 230 a.                         | 227 a.                    | 228 a.                     | 217 a.           |
| $P_9$ (Pressure at 9 km.) ...      | 290 mb.              | 306 mb.             | 295 mb.                         | 298 mb.                    | 310 mb.                         | —                              | 323 mb.               | 323 mb.           | —              | 312 mb.                   | 307 mb.                        | 308 mb.                   | 310 mb.                    | 320 mb.          |
| $P_s$ (Pressure at M.S.L.) ...     | 1002 mb.             | 1017 mb.            | 1003 mb.                        | 997 mb.                    | 1017 mb.                        | 1014 mb.                       | 1025 mb.              | 1020 mb.          | 1011 mb.       | 1010 mb.                  | 1010 mb.                       | 1013 mb.                  | 1023 mb.                   | 1026 mb.         |
| $T_m$ (Mean Temp. 1 to 9 km.)      | 247 a.               | 254 a.              | 250 a.                          | 253 a.                     | 256 a.                          | —                              | 265 a.                | 266 a.            | —              | 260 a.                    | 256 a.                         | 256 a.                    | 256 a.                     | 262 a.           |

495.

## NOTES.

| No.  | Time.  | Date.    |   |
|------|--------|----------|---|
| 486. | 19.5   | 7.5.24.  | Weather cloudy; rain in sight. Clouds at all levels from Ci-Cu to Fr-St., moving from about W.<br><i>Pressure distribution.</i> Type XV. Secondary over N. Sea, low centred over S. Scotland moving East.   |
| 488. | 19.12. | 9.5.24.  | Weather overcast with rain. Clouds Fr-Nb at about 500 m. and A-St.<br><i>Pressure distribution.</i> Type IV.a. Depression to the W. coming in slowly.   |
| 490. | 19.5.  | 23.5.24. | Weather fine. Clouds Fr-Cu, Cu-Nb, and Ci-St. Ci. moving at moderate rate from WSW.; lower clouds from about the same direction.<br><i>Pressure distribution.</i> Type IV.a. Depression off NW. Ireland moving slowly E.  |
| 491. | 9.40.  | 25.5.24. | Weather overcast with showers and squalls. Clouds Nb, Cu-Nb, and St-Cu. Lowest cloud at about 800 m. Inversion (small) at 1.29 km. on up trace only.<br><i>Pressure distribution.</i> Type I.a. Depression moving E. across Scotland.   |
| 492. | 18.30. | 5.6.24.  | Weather overcast. Clouds St-Cu and Fr-St. Base of cloud layer at about 1100 m. Ci. later moving fast from W. Traces of small isothermal patches at 2.8 and 4.0 km.<br><i>Pressure distribution.</i> Type VII. Large depression far out over Atlantic spreading N. and NE.   |
| 493. | 17.54. | 16.6.24. | Ascent from ship.<br><i>Pressure distribution.</i> Type XI.a. Low over Spain, high over Germany.  |
| 494. | 7.20.  | 14.7.24. | Weather fine. Clouds St-Cu low, and Ci-Cu. Wind at upper level from WNW. Inversions 1.65 km. to 2.08 km. Temps 278 a. to 280 a. 3.37 km. to 3.87 km. Temps 274 a. to 274½ a. and traces of a small inversion on both traces at about 8 km.<br><i>Pressure distribution.</i> Type V. Low centred near Iceland, anticyclone spreading over England from France. |
| 495. | 7.15.  | 15.7.24. | Weather fine and cloudless. Wind at all levels except the surface from about SW. Balloon followed by theodolite till it burst. Approximate rate of ascent 275 m/min., of fall 830 m/min. Very small inversions at 1.15 km. and 2.18 km.<br><i>Pressure distribution.</i> Type V. Low centred South of Iceland, anticyclone over Central Europe.               |
| 496. | 11.15. | 16.7.24. | Weather overcast. Clouds St-Cu from W'S., A-Cu and Ci. from WSW. Marked insolation effect on up trace from 5 km. upwards, very little below. Small inversion 0.82 km. to 1.08 km. Temps 287 a. to 287½ a.<br><i>Pressure distribution.</i> Type II. A trough of low pressure associated with a depression S. of Iceland was moving across the British Isles.  |
| 497. | 7.15.  | 17.7.24. | Weather overcast with some rain. Clouds Fr-St. at about 800 m. and St-Cu. at about 1600 m. Inversions 2.10 km. to 2.34 km. Temp. 273½ a. to 274 a. with an isothermal patch at 274 a. above it to 2.66 km.<br><i>Pressure distribution.</i> Type XIV. (?). A secondary to a large depression near Iceland, lately developed SW. of Ireland and moving E.      |
| 498. | 7.25.  | 18.7.24. | Weather cloudy with showers and squalls. Barometer rising fast. Clouds St, St-Cu. and A-Cu. A-Cu. moving fast from N'W.<br><i>Pressure distribution.</i> Type I.a. The secondary noted on 17.7.24 had moved up the Channel and was over Holland.  |
| 499. | 7.15.  | 19.7.24. | Weather overcast with showers. Cloud sheet St., and St-Cu. at 600 m.<br><i>Pressure distribution.</i> Type IV. Ridge of high pressure covering SW. part of the British Isles.   |
| 501. | 18.10. | 7.8.24.  | Weather fine. Clouds trace of Cu. in East. Small inversion 2.35 km. to 2.65 km. Temp. 269½ a. to 270½ a.<br><i>Pressure distribution.</i> Type I.a. Anticyclone spreading in from SW. towards the British Isles.  |
| 502. | 7.22.  | 3.9.24.  | Weather fine and misty. Clouds trace of Cu. at 1300 m. Inversion 1.14 km. to 1.69 km. Temp. 278 a. to 280 a.<br><i>Pressure distribution.</i> Type VII. c. An extension of a Scandinavian High covered most of the British Isles. Low centres near Iceland and in Central Mediterranean.  |

## SOUNDINGS WITH REGISTERING BALLOONS, 1924.

494.  $T$  = Temperature in Degrees absolute above 200a.  $P$  = Pressure in millibars.  $H$  = Height in kilometres above M.S.L.

| No.                                | 504.                  | 505.                           | 507.                            | 509.                           | 510.                              | 511.                     | 512.                         | 513.                         | 514.                      | 515.                             | 516.                        | 517.                      | 519.                            | 521.                       |
|------------------------------------|-----------------------|--------------------------------|---------------------------------|--------------------------------|-----------------------------------|--------------------------|------------------------------|------------------------------|---------------------------|----------------------------------|-----------------------------|---------------------------|---------------------------------|----------------------------|
| Date.                              | Sept. 4.              | Sept. 4.                       | Sept. 4.                        | Sept. 4.                       | Sept. 4.                          | Sept. 5.                 | Oct. 2.                      | Nov. 6.                      | Nov. 11.                  | Nov. 11.                         | Nov. 12.                    | Nov. 12.                  | Nov. 13.                        | Dec. 4.                    |
| Station.                           | Kew.                  | Sealand.                       | Sealand.                        | Kew.                           | Kew.                              | Kew.                     | Sealand.                     | Sealand.                     | Kew.                      | Sealand.                         | Sealand.                    | Sealand.                  | Sealand.                        | Kew.                       |
| Start G.M.T. ... ..                | 07 h. 00 m.           | 07 h. 30 m.                    | 11 h. 10 m.                     | 18 h. 51 m.                    | 23 h. 00 m.                       | 18 h. 35 m.              | 17 h. 35 m.                  | 17 h. 28 m.                  | 07 h. 15 m.               | 17 h. 30 m.                      | 07 h. 55 m.                 | 17 h. 45 m.               | 17 h. 30 m.                     | 12 h. 25 m.                |
| $H_t$ = Greatest Height ...        | 9.84 km.              | 13.38 km.                      | 14.34 km.                       | 13.94 km.                      | 17.53 km.                         | 16.87 km.                | 19.59 km.                    | 14.12 km.                    | 16.71 km.                 | 12.71 km.                        | 10.44 km.                   | 14.50 km.                 | 12.68 km.                       | 13.98 km.                  |
| $T_t$ = Corresponding Temperature. | 225 a.                | 229 a.                         | 227 a.                          | 223 a.                         | 223 a.                            | 219 a.                   | 221 a.                       | 211 a.                       | 216 a.                    | 224 a.                           | 218 a.                      | 221 a.                    | 218 a.                          | 211 a.                     |
| $P_t$ = Corresponding Pressure.    | 272 mb.               | 162 mb.                        | 138 mb.                         | 144 mb.                        | 85 mb.                            | 91 mb.                   | 59 mb.                       | 138 mb.                      | 91 mb.                    | 171 mb.                          | 241 mb.                     | 130 mb.                   | 173 mb.                         | 140 mb.                    |
| Place of Fall ... ..               | Bagshot Park, Surrey. | Tryfan, Cupelcurig, Carnarvon. | Llansannan, Abergele, N. Wales. | Scotswood, Sunningdale, Berks. | East Hampstead, Bracknell, Berks. | 1 mile N.E. of Ramsgate. | Ulpha, Broughton-in-Furness. | Mynytho, Pwllheli, N. Wales. | Woolwich Arsenal, London. | Catterick Camp, Richmond, Yorks. | Wrightington, Wigan, Lancs. | Norton Runcorn, Cheshire. | Northwick, Weaverham, Cheshire. | Royan-court, Oise, France. |
| Distance ... ..                    | 17 km.                | 62 km.                         | 40 km.                          | 22 km.                         | 30 km.                            | 122 km.                  | 121 km.                      | 101 km.                      | 28 km.                    | 125 km.                          | 43 km.                      | 24 km.                    | 28 km.                          | 270 km.                    |
| Bearing ... ..                     | 246°                  | 258°                           | 262°                            | 253°                           | 257°                              | 96°                      | 352°                         | 248°                         | 83°                       | 35°                              | 26°                         | 63°                       | 87°                             | 139°                       |
| Geostrophic Wind—Speed ... ..      | 11 m/s.               | 11 m/s.                        | 11 m/s.                         | 9 m/s.                         | 7 m/s.                            | ?                        | ?                            | 9 m/s.                       | 7 m/s.                    | ?                                | 6 m/s.                      | 9 m/s.                    | 9 m/s.                          | 13 m/s.                    |
| Degrees from N. ...                | 40°                   | 80°                            | 100°                            | 45°                            | 70°                               | ?                        | ?                            | 110°                         | 180°                      | ?                                | 360°                        | 30°                       | 160°                            | 210°                       |
| Wind (Anemograph)—Speed ... ..     | 7 m/s.                | 1 m/s.                         | 4 m/s.                          | 3 m/s.                         | 1 m/s.                            | 1 m/s.                   | 3 m/s.                       | 1 m/s.                       | 1 m/s.                    | 1 m/s.                           | 3 m/s.                      | 3 m/s.                    | 1 m/s.                          | 4 m/s.                     |
| Degrees from N. ...                | 45°                   | 315°                           | 68°                             | 360°                           | 45°                               | 180°                     | 158°                         | 360°                         | 135°                      | 180°                             | 326°                        | 349°                      | 135°                            | 180°                       |
| Humidity at Surface ...            | 93%                   | 93%                            | 60%                             | 96%                            | 95%                               | 85%                      | 87%                          | 98%                          | 98%                       | 96%                              | 94%                         | 92%                       | 92%                             | 92%                        |
| Type of Tropopause                 | ?                     | I.                             | I.                              | I.                             | I.                                | I.                       | I.                           | I.                           | II.                       | II.                              | ?                           | I.                        | I.                              | I.                         |
| $H_c$ = Height of ,, ...           | 9.58 km.              | 10.04 km.                      | 10.51 km.                       | 10.02 km.                      | 10.04 km.                         | 10.75 km.                | 11.03 km.                    | 11.81 km.                    | 11.29 km.                 | 9.05 km.                         | 9.81 km.                    | 10.33 km.                 | 11.53 km.                       | 11.69 km.                  |
| $P_c$ = Pressure at ,, ...         | 283 mb.               | 268 mb.                        | 248 mb.                         | 263 mb.                        | 265 mb.                           | 235 mb.                  | 224 mb.                      | 200 mb.                      | 215 mb.                   | 300 mb.                          | 266 mb.                     | 248 mb.                   | 208 mb.                         | 202 mb.                    |
| $T_c$ = Temp. at ,, ...            | 225 a.                | 223 a.                         | 219 a.                          | 220 a.                         | 223 a.                            | 221 a.                   | 217 a.                       | 212 a.                       | 214 a.                    | 224 a.                           | 219 a.                      | 219 a.                    | 209 a.                          | 215 a.                     |
| $P_0$ (Pressure at 9 km.) ...      | 309 mb.               | 314 mb.                        | 312 mb.                         | 308 mb.                        | 310 mb.                           | 307 mb.                  | 306 mb.                      | 311 mb.                      | 307 mb.                   | 302 mb.                          | 301 mb.                     | 304 mb.                   | 310 mb.                         | 307 mb.                    |
| $P_s$ (Pressure at M.S.L.) ...     | 1019 mb.              | 1023 mb.                       | 1022 mb.                        | 1017 mb.                       | 1016 mb.                          | 1010 mb.                 | 1005 mb.                     | 1033 mb.                     | 1019 mb.                  | 1020 mb.                         | 1031 mb.                    | 1033 mb.                  | 1025 mb.                        | 1009 mb.                   |
| $T_m$ (Mean Temp. 1 to 9 km.)      | 256 a.                | 258 a.                         | 257 a.                          | 256 a.                         | 257 a.                            | 256 a.                   | 256 a.                       | 254 a.                       | 255 a.                    | 251 a.                           | 248 a.                      | 250 a.                    | 255 a.                          | 257 a.                     |

495.

## NOTES.

| No.  | Time.  | Date.     | Description   |
|------|--------|-----------|---|
| 504. | 7.00.  | 4.9.24.   | Weather overcast, with Stratus at about 250 m. and trace of A-St. Small inversion 3.86 km. to 4.09 km. Temp. 263 a. to 264 a. Pressure distribution. Type VIIc. Scandinavian anticyclone almost stationary, low over Western Mediterranean.   |
| 505. | 7.30.  | 4.9.24.   | Weather overcast. Stratus at 600 m., St-Cu. at 1200 m. Isothermal patch 1.72 km. to 2.26 km. at 277 a. Pressure distribution. Type VIIc. See foregoing.   |
| 507. | 11.10. | 4.9.24.   | Weather cloudy. Cu. at 1000 m. A-Cu. from E. Isothermal patch 1.90 km. to 2.48 km. at 274 a. Pressure distribution. Type VIIc. See foregoing.   |
| 509. | 18.51. | 4.9.24.   | Weather overcast with low St at about 300 m. and St-Cu. Small isothermal patch 2.60 km. to 2.81 km. at Temp. 272 a. Pressure distribution. Type VIIc. Same as foregoing, but signs of a depression appearing W. of Ireland.   |
| 510. | 23.00. | 4.9.24.   | Weather overcast with Stratus cloud. Isothermal patch 1.39 km. to 1.78 km. at 278 a. Pressure distribution. Type VIIc. Little change since morning, but pressure falling generally and gradients becoming less steep.   |
| 511. | 18.35. | 5.9.24.   | Weather fine, with some St-Cu. Isothermal patch 2.15 km. to 2.52 km. at Temp. 273½ a. (Instrument recovered from the sea.) Pressure distribution. Type VIIa. Depression out in Atlantic, High region from Iceland to W. Russia, pressure gradient light over British Isles.   |
| 512. | 17.35. | 2.10.24.  | Weather overcast. Clouds St and St-Cu. Lowest cloud 750 m. Pressure distribution. Type XII. Irregular shallow trough of low pressure over British Isles.  |
| 513. | 17.28. | 6.11.24.  | Weather thick wet fog. Inversion 0.94 km. to 1.30 km. Temp. 275 a. to 277½ a. Isothermal 6.32 km. to 6.47 km. at 245 a. Pressure distribution. Type VIIIa. Anticyclone centred to W. of Scotland, depression over Spain.  |
| 514. | 7.15.  | 11.11.24. | Weather cloudy with St-Cu. at about 700 m. Small inversion near ground. Pressure distribution. Type Va. Low S.W. of Iceland, High over Baltic. Secondary trough affecting W. England. Above the surface distribution a pronounced current from N. existed over S. England.  |
| 515. | 17.30. | 11.11.24. | Weather overcast with rain. Clouds St. at 600 m. Pressure distribution. Type Va. Development of foregoing, a shallow secondary now affecting the English Channel. Upper Northerly current not in evidence in N. England.  |
| 516. | 7.55.  | 12.11.24. | Weather fine. Clouds St-Cu., A-Cu. and Ci-Cu. Barometer rising fast. Small inversion 3.59 km. to 3.77 km. Temp. 257½ a. to 278 a. Pressure distribution. Type XI. Indefinite gradients over N. England.   |
| 517. | 17.45. | 12.11.24. | Weather fine with trace of St-Cu. Trace of an inversion near ground. Inversion 2.88 km. to 3.01 km. Temp. 264 a. to 265 a. Pressure distribution. Type IXa. Small low over N. France, shallow elongated high centred over N.W. Scotland. Above 3 km. S.S.W. winds prevailed.  |
| 519. | 17.30. | 13.11.24. | Weather overcast. Stratus cloud sheet at 600 m. from S.E.'S. Some trace of inversion near ground. Well marked inversion at 1.98 km. Temp. 270 a. to 271 a. Well marked inversion at 2.84 km. Temp. 266 a. to 269 a. Isothermal patch 3.75 km. to 4.25 km. at 264 a. Pressure distribution. Type VIIb. Large anticyclone covering most of Western Europe and a large depression centred S.W. of Iceland.   |
| 521. | 12.25. | 4.12.24.  | Weather overcast with St sheet. Balloon fell in France and did not burst. Up and down traces differed but little, and the mean was used. Inversion on up trace at 3.45 km. Temp. 263½ a. to 265½ a. Inversion on down trace at 4.35 km. Temp. 259½ a. to 261½ a. Very rapid fall of temperature in lower part of the Stratosphere just above the initial inversion. Pressure distribution. Type Va. Large depression coming in from Atlantic. Above the surface distribution a pronounced N. or N.W. current existed over S. England. |

T = Temperature in Degrees Absolute.

P = Pressure in millibars.

H = Height in kilometres above M.S.L.

Table with 14 columns for stations (No., Date, Station, Start) and 14 columns for heights (467-485). Rows include station details and start times.

496. HEIGHTS AND TEMPERATURES CORRESPONDING WITH ISOBARIC SURFACES. 1924.

Table with 26 columns (Pressure, H, T) and 14 pairs of columns for stations 467-485. Rows show pressure levels from 100 to 1000 millibars.

497. PRESSURES AND TEMPERATURES AT GIVEN HEIGHTS. 1924.

Table with 26 columns (Heights, P, T) and 14 pairs of columns for stations 467-485. Rows show pressure and temperature at various heights from 20 to 12 kilometres.

Note.—The temperatures are derived from the original tabulations which are generally made to the nearest half-degree and are shown to the nearest whole degree.

LAPSE RATE OF TEMPERATURE BETWEEN GIVEN HEIGHTS.

Degrees absolute per kilometre.

498. 1924.

Table with 14 columns for height intervals (Kilometres) and 14 columns for stations 467-485. Rows show lapse rates for intervals from 19 to 0.5 kilometres.

Note.—The lapse rates are derived from the original tabulations which are generally made to the nearest half-degree.



T = Temperature in Degrees Absolute. P = Pressure in millibars. H = Height in kilometres above M.S.L.

Table with columns for No., Date, Station, Start (G.M.T.), and various numbered columns (504-521) representing different sounding stations.

496. HEIGHTS AND TEMPERATURES CORRESPONDING WITH ISOBARIC SURFACES—continued. 1924.

Table showing heights and temperatures corresponding with isobaric surfaces. Columns include Pressure (Millibars) and temperature (H, T) for various pressure levels from 1000 to 200.

497. PRESSURES AND TEMPERATURES AT GIVEN HEIGHTS—continued. 1924.

Table showing pressures and temperatures at given heights. Columns include Heights (Kilometres) and pressure/temperature (P, T) for various height levels from 1018 to 200.

Note.—The temperatures are derived from the original tabulations which are generally made to the nearest half-degree and are shown to the nearest whole degree.

LAPSE RATE OF TEMPERATURE BETWEEN GIVEN HEIGHTS—continued.

498. Degrees absolute per kilometre. 1924.

Table showing the lapse rate of temperature between given heights. Columns include height intervals (Kilometres) and the corresponding lapse rate in degrees absolute per kilometre.

Note.—The lapse rates are derived from the original tabulations which are generally made to the nearest half-degree.



