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RESULTS OF THE MAGNETIC & METEOROLOGICAL OBSERVATIONS

MADE AT THE
ABINGER MAGNETIC STATION, SURREY
AND
THE ROYAL OBSERVATORY, GREENWICH
RESPECTIVELY

IN THE YEAR

1928

UNDER THE DIRECTION OF
SIR FRANK DYSON, K.B.E., Sc.D., LL.D., F.R.S.,
ASTRONOMER ROYAL.

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ERRATA

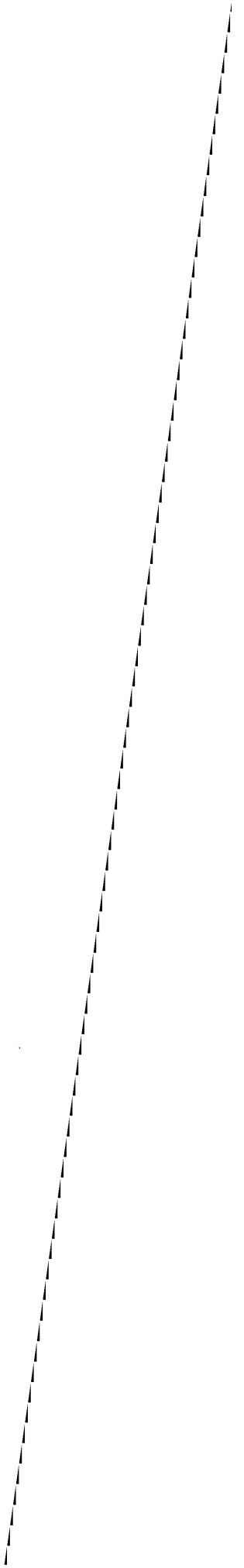
RESULTS OF MAGNETIC OBSERVATIONS.

1926	p. D 44	Table (A) IX	}	Description, line 1: for $\sin T$ read $\sin nT$
1927	p. D 50	Table IX		
1926	p. E 45	Table A XII	}	delete γ
1927	p. D 51	Table XII		

RESULTS OF METEOROLOGICAL OBSERVATIONS.

Monthly Mean Reading of the Barometer.

1903	p. lxii	November	13 ^h :	for 26.863	read 29.863
1916	p. E 68	February	24 ^h :	„ 29.597	„ 29.579
1919	p. E 76	October	17 ^h :	„ 29.863	„ 29.963
1920	p. E 76	October	23 ^h :	„ 29.606	„ 29.806
1921	p. E 74	October	5 ^h :	„ 29.955	„ 29.995
1924	p. E 70	January	0 ^h :	„ 29.735	„ 29.785
		June	24 ^h :	„ 29.751	„ 29.851
1925	p. E 100	October	13 ^h :	„ 29.959	„ 29.759



THE ROYAL OBSERVATORY, GREENWICH
AND
ABINGER MAGNETIC STATION, SURREY.

MAGNETIC AND METEOROLOGICAL
OBSERVATIONS, 1928.

INTRODUCTION.

In the present volume a brief account is given of the instruments and methods of reduction now in use. Other information, principally of an historical nature, may be found in the Introductions to the volumes for 1909 and previous years.

Personal Establishment and Arrangements.

During the year 1928 the staff employed in the Magnetic and Meteorological Department of the Royal Observatory consisted of W. M. Witchell, Superintendent, W. Stevens, G. F. Wells, H. F. Finch, P. L. Rickerby and three computers. Computers employed during the year were :—D. Oliver, F. W. Reece and Miss E. W. Clack.

In consequence of the electrification of the railways in the neighbourhood of Greenwich, magnetic observations are now carried on at an out-station about six miles from the town of Dorking in Surrey, and one and a half miles from the village of Abinger.

The general plan of working at Abinger is similar to that adopted at Greenwich for many years. It is found possible, however, to increase the number of absolute observations very considerably, and smoother base-line values are to be anticipated from this circumstance.

Mr. Stevens, resident observer and assistant-in-charge at the Abinger Magnetic Station was assisted by Mr. Finch until the middle of June, and after June 18, by Mr. Rickerby.

THE NEW MAGNETIC STATION AT ABINGER, NEAR DORKING, SURREY.

The Abinger magnetic station for observing and recording magnetic phenomena was erected in 1924 on a site on the northern slope of Leith Hill. The station is capable of being maintained in frequent contact with Greenwich, and the possibility of its being seriously affected by electric traction is small. The nearest railway track approaches to about $2\frac{1}{2}$ miles. The distance on a straight line from the Royal Observatory is approximately 26 miles in a direction a little south of south-west. The geographical position is Latitude $51^{\circ} 11' 5''$ N., Longitude $0^{\circ} 23' 12''$ W. ; and the height above sea level is approximately 800 feet.

The buildings, equipment and general arrangement of the instruments were closely copied from those at Greenwich, except that the recording house is due east of the observing pavilion and is oriented at right angles to the direction adopted at Greenwich. The effect of this variation is that the relative orientation of the recording instruments from one another has been similarly altered, so that, for example, the horizontal force variometer is east of the declination variometer instead of north as at Greenwich ; also the needles of the vertical force variometer point east-west instead of north-south.

A small power-house with storage battery and alternating generator for the supply of electric current required in lighting and heating is situated about 125 yards south of the pavilions.

General Description of the Buildings and Instruments of the Magnetic Observatory.

The pavilion for absolute observations is constructed of carefully chosen non-magnetic materials, and measures approximately 28 feet by 15 feet. It contains four circular tables stoutly built of hard wood into concrete piers which are free from contact with the floor. On the north pier is mounted the declination instrument, on the central pier the coil magnetometer for observing horizontal force, on the south-east pier the unifilar magnetometer*, and on the south-west pier the dip inductor.

The Magnetograph House stands 50 feet east of the Magnetic Pavilion in which the absolute magnetic observations are made. The recording instruments are situated in an inner chamber 15 feet long, 12 feet wide, and 8 feet high. This chamber is supported on small concrete piers and surrounded by an outer chamber, whose walls of non-conducting material are nearly 2 feet thick. Between the walls of the two chambers is an air space of from 2 to 3 feet. The inner chamber is

* From the middle of August the south-east pier was occupied by the new Vertical Force coil-magnetometer.

electrically heated by about 50 suitably insulated low-temperature non-magnetic metallic resistance strips, each consuming 25 watts. The current used is alternating, and is therefore without effect upon the magnetic registration.

The temperature is controlled by a thermostat placed in the centre of the room, at the same level as the magnetic instruments. This actuates a relay, which switches the electric current into or out of the heating circuits. The departure from a mean temperature is not more than $0^{\circ}2$ C.

The centres of the three instrument piers are situated as follows: For the horizontal force instrument, 2 feet west and 2 feet 6 inches south of the north-east angle of the room; for the declination instrument, 5 feet 6 inches west and 5 feet south of the same angle; for the vertical force instrument, 2 feet east and 3 feet north of the south-west angle. The two piers which support the recording mechanism occupy the north-west and south-east corners of the room, their longer sides being in the direction at right angles to the meridian. The clocks can be wound and the recording drums inserted or removed through shuttered openings in the wall of the inner chamber. The temperature in the chamber is read daily from a thermometer attached to the horizontal force instrument.

The horizontal force and declination instruments record on the south-east drum; the vertical force instrument on the other drum. Both drums are horizontal and are 10 inches long by $5\frac{1}{2}$ inches in diameter. Their normal period of revolution is 30 hours and the time scale 15 mm. to the hour. The registering beams of light are focussed on the drum by an adjustable cylindrical lens. Two horizontal straight-filament lamps mounted at suitable heights on the north and south walls of the chamber provide the time-registration for the photographic sheets. The lamps are illumined for a period of one second centred at each exact hour of Greenwich mean time, the current being controlled by a relay connected to a Mean Solar clock in the computing room. The effect is to produce narrow dark hour-lines right across the photographic records.

The error of the clock is observed daily by comparison with a "radio" time signal from one of the official sending stations. Correction is made by magnetically altering the rate until the observed error has been removed. The error thus seldom exceeds one second.

It should be mentioned that in order to dispense with the necessity of continuously running an alternator in circuit with the storage battery, the illuminating lamps for the recording drums, and also the hourly-signal lamps are lit by *direct*

current, special care being taken with the return circuit. Alternating current for heating the chamber or for general illumination is supplied as required, the alternating generator being started and stopped automatically by the thermostat at the same time as the heating circuit is switched in and out. Very considerable saving in running cost is effected by this device.

A small pavilion containing three concrete piers was erected in 1926 for the testing and standardising of magnetic instruments, work formerly carried on at Kew Observatory. The pavilion is situated about 50 feet south-east of the absolute observation pavilion.

THE INSTRUMENTS AT ABINGER.

DECLINATION MAGNET FOR ABSOLUTE DETERMINATIONS.—A hollow cylindrical magnet with scale and collimating lens (by Messrs. Elliott Brothers) is used in conjunction with a telescope (by E. R. Watts & Son) mounted independently on the same pier. The telescope has a six-inch circle on which azimuths are read by means of two microscope-micrometers to 1" of arc. An azimuth mark is fixed to the stem of a large tree situated approximately 80 yards from the telescope to the north. Frequent determinations of the azimuth of this mark are made by means of observations of Polaris, and the values are found to be substantially constant.

In observing Polaris, both direct and reflected view of the star is taken during each observation. Reflection is obtained from the surface of mercury contained in a shallow copper dish, the effect of error of level of the telescope being entirely eliminated by this means.

The magnet is suspended by tungsten wire, of diameter 0.02 mm. Frequent reversals are made to eliminate the collimation error of the magnet from the results, and the position of torsional zero of the suspension wire is also frequently checked. 90° of torsion deflects the magnet about 3' of arc.

ABSOLUTE HORIZONTAL FORCE INSTRUMENTS.

THE SCHUSTER-SMITH COIL MAGNETOMETER.—This instrument has been loaned to the Observatory by the Director of the National Physical Laboratory. It is the second constructed of the type and is rather smaller than the original instrument, a detailed description of which is to be found in *Philosophical Transactions of the Royal Society*, Vol. 223 (1923), pp. 175–200. It is erected on a pier in the centre of the absolute observation pavilion and was brought into use as the standard instrument for observation of horizontal force on 1927, February 1. In general, four independent determinations are made each week-day.

The following is a brief description of the instrument and the method employed in measuring Horizontal Force :—

A hollow marble cylinder of 50 cms. diameter rests, with its axis horizontal, on a brass support which can be turned in azimuth. The azimuth may be read to 10" of arc from a graduated circle on the base-plate by the usual vernier attachment. On the periphery of the cylinder, near each end and at a mean distance of 25 cms. from each other, are two windings, in series, of ten turns of bare silver wire, the method of winding the ten loops in a double spiral being that adopted in the original instrument referred to above. The whole forms a Helmholtz-Gaugain system at the centre of which a very uniform magnetic field parallel to the axis exists when an electric current is passing through the coils.

A chromium-steel magnet, 15 mm. long and 2 mm. square in cross section is supported horizontally in a light vertical aluminium frame, which frame carries also a small concave mirror and a damping vane, and is suspended by a single silk fibre in a suspension tube passing through a hole in the upper surface of the cylinder. A square box with optically-plane glass sides supports the tube and encloses the magnet frame, allowing the mirror to project an image of a source of light during observation. The suspension fibre is adjusted so that the magnet hangs at the centre of the coil system.

To afford an easy means of reading the azimuth of the cylinder and the indications of the magnet, graduated ivorine scales are placed horizontally on stands at a distance of a little over 7 feet from the pier, and spots of light are reflected to them by small concave mirrors in the instrument.

At the south end of the observing pavilion a storage battery of 25 cells produces the current required for the observation, the circuit passing through a "current balance" in which by means of a variable resistance and a Broca galvanometer the amount of current employed is very accurately adjusted to a specific quantity. Every precaution is taken to eliminate accidental magnetic fields in arranging the circuits.

Theory of the observation :—

If a horizontal magnetic field whose intensity is slightly greater than that of the earth is imposed at an angle of nearly 180° with the earth's field, a position angle can be found at which the resultant of the two forces becomes directed at right

angles to the earth's field. The intensity F , of the imposed field, and its angle α with the earth's field being known, the horizontal intensity of the earth's field can then be calculated from the simple relation : $H = F \cos \alpha$.

An observation proceeds as follows :—

Torsion having been eliminated from the suspension thread by substituting a copper piece for the magnet, the magnet is replaced and allowed to hang freely in the earth's field. The position, on the appropriate scale, of the spot of light reflected by the magnet-mirror is noted. This scale is normally on the west side of the instrument. By optical methods, reference marks on two other scales placed respectively to the magnetic north and south of the instrument are adjusted accurately to points 90° from the spot reflected by the magnet-mirror. A current is next passed round the coil in the direction which produces a field augmenting that of the earth, and the coil is turned in azimuth until the addition of the imposed field produces no alteration in the direction of the magnet. The axis of the coil is then accurately parallel to the earth's field, and the coil-mirror can be adjusted so that it reflects a spot of light to the reference mark, *i.e.*, to the zero graduation of the north scale, as already set.

The current is now reversed in the coil by a commutator switch and the coil is turned until the resultant force on the magnet is in a direction at right angles to the earth's field. This is indicated on either the north or south scale by the magnet-mirror which is carried round 90° by the magnet. The azimuth angle through which the coil has been turned is read from the north scale, and the coil is then turned to an approximately equal angle on the opposite side of the magnetic meridian. This reverses the direction of the resultant force ; and a further small adjustment of the coil brings the spot of light reflected by the magnet-mirror accurately to the reference mark on the opposite scale to that last used. A second reading of the azimuth of the coil then completes the observation.

The suspension box and tube are turned by the observer as the magnet turns, so that no torsional change is introduced. The effect of any small error in the assumed direction of the earth's horizontal field, due, say, to residual torsion on the suspension thread, is eliminated on taking the mean of the two angles.

Throughout these operations a second observer ensures the maintenance of the current at a steady fixed value, adjusting the variable resistance, if necessary, according to the indications of the galvanometer of the balance.

The constants of the coil and of the current balance at various standard temperatures have been precisely determined by the National Physical Laboratory and will be checked from time to time. The electrical constants on which the reduction of observations made in 1928 is based were determined in June, 1928, and verified in the following November.

If F be the factor of the coil and i be the current passing in ampères, then the intensity of the field at the centre of the coil in γ units is $Fi \times 10^4$. The adopted value of the factor "F" of the coil is $3.59570(1 - 4.3t \times 10^{-6})$, t being temperature Centigrade.

The observed values of horizontal force obtained with this instrument are subject to a correction of -2.5γ for the effect of the field of the declination magnet which is suspended permanently at a distance of about 12 feet geographically to the north. The effect was determined experimentally by reversal of the magnet. The application of the correction is made in the deduction of the base-line values of the horizontal force magnetograms. The correction was applied in 1927, although specific reference to it was overlooked in the Introduction to the 1927 "Results."

A KEW-PATTERN UNIFILAR MAGNETOMETER by Messrs. C. F. Casella & Co. (No. 181) is also in use to determine absolute horizontal force.* Deflection observations are made at three distances, namely, 22.5 cms., 30 cms. and 40 cms., and normally two observations are taken each week. 26 observations of the moment of inertia of the collimator magnet were made during the year 1928. The magnet having become rather rusty, it was re-polished on August 18. The mean observed value of $\log. K$ was 2.42478 (C.G.S. units); after August 18, 2.42392. These values have been used in the reductions and are based on the Greenwich Standard Inertia Cylinder. (See Appendix II of the Magnetic Results, 1926.)

The results agree closely with those obtained by the Coil magnetometer, the mean difference for the year, as indicated by base-line determinations, being 2.1γ in excess.

ABSOLUTE INCLINATION INSTRUMENT.—An Earth Inductor by The Cambridge Instrument Co., in conjunction with a Broca galvanometer, is used to determine magnetic inclination. About twelve determinations are made each week. Observations are made in four positions to eliminate any small errors arising from slight asymmetry in the instrument. After the first adjustment, the coil-support is reversed

* On August 9 the unifilar magnetometer was removed from the south-east pier of the absolute observation pavilion to one of the concrete piers in the pavilion for the testing and standardising of magnetic instruments (see p. D 10).

about a horizontal axis and a second adjustment obtained : the instrument is then reversed in azimuth and two further adjustments are made. The circle for the measurement of inclination is 8 inches in diameter, and is read by means of screw micrometers to one second of arc. The levels on the base can likewise be read to one second. A detailed description of the dip inductor will be found in the volume for 1915.

VERTICAL FORCE COIL-MAGNETOMETER.—This instrument, designed by Dr. D. W. Dye, F.R.S., for direct measurement of vertical force, and constructed under his supervision at the National Physical Laboratory, Teddington, has been temporarily loaned to the Royal Observatory by the Director of the National Physical Laboratory.

It was erected on the south-east pier of the observing pavilion at Abinger in the middle of August, 1928—the unifilar magnetometer being removed to a pier in the testing hut to make room for it—and regular observations began on August 23.

A full description of the instrument is published in *Proceedings of the Royal Society*, Vol. 117 (1928), pp. 434-458.

In brief, the instrument consists of a Helmholtz-Gaugain Coil wound on a marble cylinder, the axis of which is vertical as truly as can be determined, together with accessory apparatus for accurately controlling and measuring the current passed through the coil, and for testing the resultant field at its centre.

The observation consists in an adjustment of the current until the artificial field imposed at the centre of the coil exactly annuls the vertical component of the earth's field. The intensity of this component is then easily calculable from a knowledge of the dimensions of the coil and the amount of current indicated by potentiometer measurement.

The special feature of the instrument is the means adopted for ascertaining when the vertical component of the earth's field is exactly annulled.

This consists of a diamond-shaped vibrating test-coil about 2 cms. long suspended by bronze strip stretched horizontally between two supports. The coil carries a light plane mirror.

A weak alternating current supplied from a generator at some distance from the instrument, passes through the test coil. The reaction between this current and the

magnetic field causes the coil to receive an alternating rotatory force. The resulting vibration is brought to a maximum by adjustment of the generator frequency to synchronism with the natural frequency of the coil (about 15 per second), and high sensitivity is thus obtained. Microscopic vibration is exhibited by projection, from the mirror, of an image of cross wires to a distant screen.

Observations with the instrument, in number from six to eight each week day, showed an average weekly range of about 9γ in the daily mean base-line values, the probable error of a single observation being $\pm 1.4\gamma$. Included in the range is the effect of small irregular drifts or fluctuations, originating in the variometer, which it should now be possible to follow with some certainty.

A systematic difference was found to exist between the results from the Coil and the Inductor, the Inductor giving values larger by 21γ in the mean.*

Results of the first sixteen months observations of Vertical Force with this instrument will be published in the volume for 1929.

THE DECLINATION VARIOMETER.—The magnet is a single short needle of chromium steel, 10 mm. long and 0.4 mm. in diameter. The mirror for reflecting a beam of light on to the recording drum is of platinised quartz, $2\frac{1}{2}$ mm. square, and is fastened by shellac to a small piece of stout aluminium foil. The foil is shaped above the mirror to form two small V hooks, by which it is hung on to the magnet. Rough adjustment is obtained by bending the foil; and for fine adjustment recourse is made to the illuminating lamp, which has sliding attachment to a vertical wooden pillar capable of being fixed in any desired position in the room. A small mica damping vane is fixed to the foil below the mirror, and the needle is rendered aperiodic by adjusting brass damping plates on either side of the vane.

A very fine quartz filament .003 mm. in diameter forms the suspension-thread and the displacement produced by revolving the torsion head 360° is only a fraction of a minute of arc.

The focussing lens is mounted in the side of the magnet chamber and a plane glass window admits light through the brass covering-cylinder. A base-line mirror similar to the magnet-mirror is mounted within the magnet chamber on a small brass prism resting on a shelf fixed to the back plate of the chamber in such a position that it is at the same height as the magnet-mirror and about one centimetre to the right. Adjustment is obtained by two point-ended screws passing through the back

* The discordance was traced subsequently to the development of a small amount of wear in the bearings of the rotating coil of the Inductor not hitherto suspected, but fully capable of explaining the excess in observed values of Dip indicated by the magnetometer observations.

plate and forming two of the supports of a three point system. The distance of the magnet-mirror from the recording cylinder is such that the geometric scale-value at the centre of the photographic sheet is $0' \cdot 610$ per mm. As the beam is not normal to the drum, however, the scale value varies from $0' \cdot 605$ at the top of the sheet to $0' \cdot 615$ at the bottom. Expressed as magnetic force the corresponding mean scale-value would be $3 \cdot 30\gamma$ per mm. at the present time.

THE HORIZONTAL FORCE VARIOMETER.—In setting up this variometer the decision was taken to revert to the former Greenwich practice of recording horizontal force instead of the north component (recorded from 1915 to 1926). The general construction of the instrument is in all respects similar to that of the declination variometer. The suspension filament is of quartz $\cdot 012$ mm. diameter. The needle is adjusted to a position at right angles to the magnetic meridian by means of the torsion head in the following manner. Orientation marks have been drawn on the western wall of the room subtending successive degrees of azimuth at the centre of the variometer pier. An ordinary magnetometer distance-bar securely held beneath the base of the variometer in a wooden frame is by this means easily set at right angles to the magnetic meridian, and upon it is placed, about 25 cms. from the variometer, the usual carrier with a magnet mounted in position. A relatively strong magnetic field is thus imposed at right angles to that of the earth, and the torsion head is adjusted until the needle of the variometer is negligibly disturbed by the removal of the imposed field. The magnet is then transferred to an equal distance on the opposite side of the variometer, and the experiment is repeated. Any error due to imperfect correspondence of the centre of the distance-bar with the point of suspension of the variometer needle is eliminated by setting the torsion head to the mean position.

An adjustment of orientation intended to cover the period 1927–1929 was made on August 24, 1927.

The scale value of the variometer is determined from the deflections produced electro-magnetically by passing measured current through a Helmholtz coil of 50 cms. radius which envelopes the instrument. The factor for the coil is determined absolutely, by using the coil in the same manner to deflect the needle of the declination variometer. The horizontal force at the time of the experiment being known, the strength of the field necessary to produce the observed deflection is readily computed.

The adopted scale value was $2 \cdot 60\gamma$ per mm. from January 1 to April 10 and from December 6 to 31 ; and $2 \cdot 58\gamma$ per mm. for the remainder of the period.

THE QUARTZ-THREAD VERTICAL FORCE VARIOMETER.—For a detailed description of this instrument reference may be made to the *Philosophical Magazine*, vol. vii., sixth series (1904), p. 393. The base of the instrument consists of a metal casting with uprights at the two ends, carrying attachments for the ends of the quartz fibre which supports the magnet system. By an ingenious arrangement the length of the frame carrying the horizontal quartz fibre which suspends the magnet system is defined by quartz tubes. The metal rods composing the sides of the frame pass through these tubes, and, by the reaction of stiff springs, press the ends of the frame firmly on to the ends of the quartz tubes. Alteration in temperature does not, by this means, give rise to a change in tension of the suspension thread, which different co-efficients of expansion would otherwise produce. The instrument was carefully adjusted at Greenwich for elimination of other temperature effects, in the manner explained in the description given in the *Philosophical Magazine*, but a small effect has developed since the reduction in sensitivity referred to below.

The magnet system consists of two magnets, 8 cms. long and 1 mm. in diameter, which are attached by small platinum stirrups to two rods of fused quartz; these are fused to a quartz plate, the upper surface of which is optically worked and platinised to form a plane mirror. The quartz rods are drawn out at their other ends into fibres of about 0.008 to 0.010 cm. diameter; one of these is fused to a coiled quartz spring. The quartz spring and the other fibre are soldered to small brass rods fitting into clamps at the two ends of the metal base. The thread is under sufficient tension to stretch the spring through about two millimetres. A right-angled prism is supported in a frame above the mirror, so as to reflect the light in a horizontal direction; a single lens is placed beneath to focus the light on the recording drum. The prism frame is adjustable in azimuth in order to enable the trace to be brought to any desired part of the sheet. An adjustable mirror beneath the quartz fibre and adjacent to the mirror of the magnet system serves to give a base line.

The sensitiveness of the instrument is varied by raising or lowering the centre of gravity of the magnet system. Coarse adjustment is obtained by means of small aluminium discs centrally pierced to allow them to rest on a slender vertical quartz pin provided for this purpose at one side of the mirror. To obtain fine adjustment a small vertical screw is fixed at the opposite side of the mirror and a small piece of aluminium can be moved up and down the screw.

The degree of sensitivity to which the variometer was at first adjusted was rather high and seemed to be gradually increasing. It was diminished to about one-third

on 1926, September 14. The scale value is obtained by electro-magnetic deflections. The radius of the coil used in these experiments is 30·15 cms. The mean of the scale values adopted in 1928 is 2·38 γ per mm. Slight deviations from this value occur when the standard temperature of the room is raised or lowered from the mean. The value is sensibly uniform over the range allowed by the photographic sheet.

MAGNETIC REDUCTIONS.

The time used is Greenwich Mean Time.

The mean ordinates of the photographic traces for each hour are measured from the base-lines by the aid of an etched glass scale, the hour being the period of sixty minutes *commencing* at the time named in the table—and from the tables of these measures are obtained the mean monthly values for each hour of the day, and the mean daily value of the element for each day of the month. The daily mean is taken from the 24 hourly mean ordinates.

Base-line values are adopted from smooth curves drawn through points plotted on a chart, each point representing the mean result from several independent observations.

In the case of declination, ten observations are made, on an average, each week-day, and four in the case of horizontal force. The base-line value for vertical force traces is computed from absolute observations of inclination combined with simultaneous values of horizontal force taken from the magnetograms. Usually two determinations are made each week-day.

The magnetograph chamber being maintained at a sensibly constant temperature, no temperature corrections are required in general. When the seasonal changes are made in the temperature at which the chamber is maintained, new values are adopted from the hour at which control is observed to be established, and during the period of change interpolated values are applied at hourly intervals.

One day in the year 1928, namely July 8, is classed as a day of great disturbance. Days of lesser disturbance in conformity with the list issued by the International Committee from De Bilt Observatory, Holland, are March 11–12; May 27–28–29; August 26–27; September 7–8; October 18–19, 24–25. Where two days are mentioned together, it is to be understood that the reference is to a series of 24 consecutive hours comprising parts of two consecutive days.

Commencing with the year 1926—the first full working year at the Abinger Station—some changes in the tabulation of the results were introduced, and as from 1927 the detailed description of significant movements in the traces is discontinued.

Tables I to III contain the hourly results for declination, horizontal force and vertical force respectively.

Table IV gives for each element the mean daily value, the maximum and minimum values with the times of their occurrence, and the daily range.

Then follow in Tables V to VII the monthly and annual mean diurnal inequalities for all days, and for quiet and disturbed days as selected by the International Committee. In addition to monthly and annual values there are also given mean values of the diurnal inequalities grouped into the seasonal periods, Winter (that is January, February, November, December), Equinox (March, April, September, October) and Summer (May, June, July, August).

From the inequalities in declination, horizontal force and vertical force, corresponding inequalities in north force, west force and inclination have been computed and appear at the same opening of the page.

The inequalities in north force, west force and vertical force (that is in X, -Y, Z) have been subjected to harmonic analysis, the results being given in Tables VIII and IX. In the case of the International Quiet and Disturbed Days, the inequalities were adjusted for non-cyclic change before analysis, but in analysing the results for "All" Days the non-cyclic change was ignored. The phase angles in Table IX are corrected to refer to Abinger Local Mean Time.

In Table X is given the mean diurnal range in declination, horizontal force and vertical force for each month, for the year and for the seasons. The corresponding results for quiet and disturbed days are also given. The quantities are derived from Tables V to VII.

Table XI gives in similar arrangement the non-cyclic change 24^h minus 0^h . The quantities were computed from Tables I to III, the value for 0^h or 24^h being taken as the mean of the last value on one day and the first on the next.

Table XII contains the mean monthly and annual values of the components of magnetic force collected together.

Tables XIII to XV contain the daily values of the base lines of the magnetograms deduced from absolute observations of declination, horizontal force and inclination.

Reduced copies of the magnetograms for certain disturbed days have been printed in each volume since 1882. The list of these days since the year 1889 has been selected so that the two observatories of Val Joyeux (formerly of the Parc Saint Maur) and Greenwich should, in general, publish the magnetic registers for the same days of disturbance with a view to the comparison of the results. In principle the days of disturbance are now those selected by the International Committee, the limits of the trace being determined in consultation with the Director of Val Joyeux Observatory. The same procedure is continued as regards the Abinger registers.

The plates are preceded by a brief descriptive summary of significant magnetic motions (superposed on the ordinary diurnal movement) recorded during the year.

With regard to the plates, on each day three distinct registers are given, viz. : declination, horizontal force, and vertical force.

At the foot of each plate, scales, in C.G.S. measure, are given for each of the magnetic registers.

On p. D 5⁹ is printed a table giving the mean annual values of Magnetic Elements determined at the Royal Observatory, Greenwich, over the whole period of observation, together with those determined at the Abinger Station since 1925.

F. W. DYSON.

ROYAL OBSERVATORY, GREENWICH.

1929, *October 5.*

ROYAL OBSERVATORY, GREENWICH.

Results of Magnetic
Observations

1928

GREENWICH MAGNETIC AND METEOROLOGICAL RESULTS 1928

TABLE I.—HOURLY MEANS OF MAGNETIC DECLINATION AT THE ABINGER MAGNETIC STATION.

	0h	1h	2h	3h	4h	5h	6h	7h	8h	9h	10h	11h	Noon	13h	14h	15h	16h	17h	18h	19h	20h	21h	22h	23h	24h	
January.																										
<i>12° + Tabular Quantities.</i>																										
1**	52.8	51.4	52.0	51.5	51.6	51.6	51.6	51.3	51.3	51.3	52.4	54.3	57.9	57.0	55.7	54.5	53.3	53.2	53.4	53.3	53.1	52.5	44.5	47.7	50.2	
2	51.8	52.4	52.6	52.2	52.1	51.6	51.6	51.6	50.7	49.8	51.8	54.3	55.4	56.3	56.3	54.6	53.4	52.8	53.1	51.8	52.8	51.8	50.9	51.6	51.9	
3	51.9	52.7	52.4	52.0	52.0	52.0	51.9	50.9	49.6	50.0	51.4	52.6	52.6	54.2	55.1	55.0	53.8	53.0	52.8	52.8	52.3	52.0	52.0	52.0	52.2	
4	52.3	53.1	53.1	53.1	52.5	52.1	51.8	51.1	50.1	50.1	52.1	54.1	54.1	54.6	57.0	56.0	53.8	53.1	53.0	52.6	51.8	52.0	51.5	51.5	49.7	
5	50.1	51.3	52.1	52.4	52.7	52.1	51.4	51.4	49.7	49.2	51.1	52.2	52.2	54.5	55.9	55.5	54.2	53.1	52.6	52.4	51.7	51.6	51.6	50.4	51.6	
6	51.9	52.2	52.2	52.3	52.2	51.7	51.3	50.8	50.2	50.2	52.8	54.8	54.8	55.8	55.3	54.3	53.4	52.3	52.4	52.3	51.8	51.3	50.8	50.3	50.8	
7	51.3	51.6	54.4	52.4	52.2	51.1	51.0	50.5	49.5	50.5	51.7	52.5	52.5	54.4	54.2	53.3	52.6	52.6	52.3	52.2	51.7	51.7	51.7	51.3	49.2	
8	49.6	51.3	52.0	52.1	52.7	52.7	51.7	50.8	50.4	50.7	51.8	53.8	53.8	55.9	54.9	53.6	52.8	52.7	52.4	52.2	51.9	51.8	51.5	51.8	51.6	
9	51.8	51.0	51.9	52.0	52.0	51.6	51.4	51.0	50.1	51.2	52.3	54.4	54.4	55.1	55.6	54.5	54.0	53.0	53.7	52.5	52.0	51.0	49.0	50.0	50.7	
10	51.3	51.7	52.0	52.0	51.9	51.4	51.2	51.0	50.0	50.2	52.0	52.9	52.9	53.9	54.4	53.9	53.7	53.7	53.3	52.1	52.1	50.6	49.7	50.3	50.6	
11*	51.1	51.6	52.0	52.1	52.0	51.5	51.9	50.2	49.6	51.0	52.2	53.1	53.1	54.3	54.3	52.9	52.6	52.7	52.6	52.1	52.0	51.3	51.0	50.7	51.0	
12*	51.2	51.6	51.7	51.6	51.4	51.1	51.1	51.1	50.7	51.5	52.3	53.6	53.6	55.1	55.2	54.2	53.3	52.9	52.7	52.1	52.0	51.6	51.2	51.1	51.3	
13*	51.2	51.1	51.4	51.7	51.6	51.1	51.1	50.9	50.4	51.2	52.6	53.9	53.9	54.7	54.9	53.1	52.1	52.1	52.1	52.6	52.3	52.0	51.8	50.9	50.9	
14*	50.9	50.9	51.2	51.2	51.2	50.7	50.4	50.6	50.8	51.8	53.2	54.7	54.7	55.3	56.0	54.5	53.3	53.4	53.2	52.6	52.3	51.9	51.2	50.9	51.2	
15	51.3	51.3	51.5	51.5	51.4	51.3	51.2	50.7	49.4	50.1	52.3	53.9	53.9	55.3	54.9	53.7	52.7	52.3	52.3	52.2	51.8	52.1	50.9	51.3	51.0	
16	51.7	52.1	52.4	52.3	52.2	51.6	51.4	51.2	50.1	51.5	53.3	54.0	54.0	55.3	55.4	54.4	53.4	52.5	52.4	52.3	52.0	51.4	51.4	51.4	51.5	
17	51.9	52.1	52.2	52.4	52.2	51.5	51.1	50.5	49.7	51.3	53.3	54.5	54.5	54.5	54.5	53.5	52.5	52.6	52.6	52.3	52.1	51.7	51.6	51.7	50.0	
18	50.5	51.2	51.8	52.3	52.4	51.5	51.4	50.9	50.7	51.5	53.5	54.5	54.5	55.6	58.0	55.5	54.1	53.1	52.5	51.5	51.0	50.5	50.4	51.1	51.1	
19	51.6	51.6	52.6	52.6	51.9	50.5	50.6	50.8	50.6	51.7	52.6	54.4	54.4	56.3	56.9	56.2	54.4	52.7	52.5	52.2	52.3	49.3	50.4	51.3	51.7	
20	49.8	49.8	51.2	51.8	51.8	51.0	51.2	50.5	49.7	50.6	52.2	54.8	54.8	56.3	57.4	57.6	56.8	55.8	53.3	52.4	51.8	51.7	51.2	51.5	52.0	
21†	52.3	53.2	53.4	52.5	51.9	51.9	51.9	51.3	50.4	50.4	51.9	54.2	54.2	55.5	56.8	55.9	54.8	53.5	53.0	52.3	50.4	49.9	50.9	—	—	
22†	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
23**	51.5	52.5	51.5	51.7	51.1	51.5	51.5	52.8	50.3	51.1	52.0	54.1	54.1	56.9	58.2	58.1	57.1	54.1	53.2	52.2	51.2	50.5	50.3	50.5	50.7	
24	51.1	51.5	52.1	52.1	52.3	52.1	51.3	50.7	49.2	50.1	52.6	53.7	53.7	56.1	57.5	56.5	55.5	54.1	53.1	52.7	52.1	51.4	51.0	50.3	50.7	
25	50.1	50.1	51.5	52.0	51.9	51.9	51.4	50.7	50.2	50.6	52.4	55.1	55.1	58.7	59.3	57.8	56.0	54.9	54.1	53.6	53.2	51.8	51.3	51.1	51.0	
26	50.7	50.1	51.8	52.1	52.1	51.8	51.3	50.8	49.8	49.4	51.1	52.8	52.8	54.5	55.1	55.0	54.1	53.4	53.1	52.6	53.2	53.9	50.5	48.5	49.6	
27**	49.5	46.6	48.0	46.5	50.2	44.3	48.4	49.3	49.9	50.4	52.0	53.8	53.8	58.7	59.5	58.2	56.0	53.6	52.4	50.9	50.4	50.0	48.1	51.0	50.8	
28**	51.0	51.3	51.6	52.0	52.2	52.2	52.0	51.1	50.3	50.5	52.0	52.8	52.8	54.5	55.7	56.0	54.5	53.0	49.0	49.8	51.2	49.5	50.0	50.1	48.7	
29**	50.7	51.9	51.5	53.3	52.6	51.3	51.5	51.3	50.1	50.4	52.2	53.9	53.9	56.8	58.4	56.9	54.9	53.9	51.4	49.4	51.1	48.5	49.2	48.2	49.3	
30	50.3	50.9	51.9	53.9	51.9	50.8	51.4	51.2	51.0	51.8	53.1	54.3	54.3	55.2	55.4	54.4	53.2	52.6	51.0	47.5	50.5	50.1	50.9	51.4	51.2	
31*	51.7	51.4	51.3	51.3	51.4	51.4	51.2	51.0	50.7	51.0	51.9	53.9	53.9	55.3	55.9	55.7	54.3	53.0	52.7	52.6	52.6	51.9	51.4	51.4	51.2	
Mean	51.16	51.38	51.91	51.96	51.92	51.30	51.27	50.90	50.14	50.81	52.42	54.02	54.02	55.58	56.13	55.17	54.01	53.19	52.62	52.03	51.90	51.22	50.52	50.66	50.77	
Mean*	51.22	51.32	51.52	51.58	51.52	51.16	51.14	50.76	50.44	51.30	52.44	53.84	53.84	54.94	55.26	54.08	53.12	52.82	52.66	52.40	52.22	51.74	51.32	51.00	51.12	
Mean**	51.10	50.74	50.92	51.00	51.54	50.18	51.00	51.16	50.38	50.96	52.50	54.50	54.50	56.78	57.50	56.74	55.16	53.56	51.88	51.12	51.40	50.20	48.42	49.50	49.94	
February.																										
<i>12° + Tabular Quantities.</i>																										
1	51.5	51.1	51.9	50.3	50.2	51.0	50.7	50.5	50.1	50.1	52.4	53.8	56.3	56.9	55.4	54.3	53.2	52.5	52.5	52.3	46.9	50.9	51.7	51.0	51.0	
2	51.0	52.1	51.7	51.3	51.1	50.9	50.8	50.4	50.4	50.9	52.7	54.3	55.9	56.9	55.1	53.9	52.0	51.9	51.9	51.9	45.2	49.3	50.9	48.8	46.0	
3	48.5	49.8	49.9	50.8	53.8	51.7	50.3	50.1	49.9	50.5	52.7	56.3	58.4	58.7	56.4	56.0	54.5	54.3	52.4	51.3	49.4	50.9	51.0	51.0	51.0	
4	50.2	51.6	52.0	52.6	52.6	51.6	50.6	50.6	51.4	51.1	53.1	55.1	57.3	57.9	55.2	53.3	52.5	52.3	51.6	51.7	51.1	50.9	51.2	51.1	51.1	
5	51.6	52.3	52.0	52.3	53.1	51.6	50.1	50.2	48.9	48.7	50.9	53.3	55.5	55.5	56.1	54.6	53.1	52.4	51.8	51.5	51.1	50.6	49.6	50.1	50.8	
6	51.2	51.7	51.8	51.6	51.5	50.8	50.6	49.6	48.6	49.1	50.6	52.6	54.9	55.8	55.1	53.5	52.9	52.4	51.7	50.8	50.7	50.6	50.7	50.7	50.7	
7	51.9	53.3	51.7	51.5	50.7	50.0	50.7	49.7	49.0	49.7	51.5	53.2	54.4	54.8	53.5	52.7	52.8	53.3	52.8	52.8	51.4	48.8	50.2	50.4	50.8	
8*	50.9	51.1	50.2	50.2	49.8	50.0	50.5	50.4	49.8	50.0	51.9	53.6	55.8	55.8	54.8	53.5	51.7	52.9	53.7	52.7	51.6	50.3	49.2	49.0	49.0	
9*	50.1	50.7	51.3	51.1	51.6	51.7	50.6	50.4	50.2	51.9	52.6	54.1	55.1	55.1	54.9	53.9	52.4	52.2	52.1	51.6	51.1	50.7	50.7	50.2	50.2	
10*	50.8	51.4	51.4	51.3	51.2	51.0	50.6	50.5	48.8	48.2	50.7	52.3	55.0	56.9	57.0	56.3	54.0	53.8	54.2	54.2	53.1	52.2	51.2	51.1	50.0	
11*	49.2	49.4	50.2	50.3	50.8	50.4	50.2	49.6	48.8	49.3	51.2	53.1	54.5	55.1	55.5	55.1	55.2	54.2	52.7	52.1	51.1	50.7	50.7	50.7	50.7	
12	49.9	51.1	51.5	51.4	51.3	51.1	50.8	49.9	49.8	50.2	53.0	54.0	55.9	56.5	56.3	55.1	54.1	53.8	53.9	52.4	49.5	48.0	46.1	48.9	48.9	
13**	51.0	51.6	51.0	50.7	50.7	50.7	50.3	49.8	49.6	50.7	51.9	54.0	55.3	54.4	55.5	54.8	52.8	53.4	53.1	53.8	51.8	49.8	48.4	48.4	48.4	
14	48.8	48.2	46.7	47.3	47.9	49.3	49.9	49.9	51.1	51.9	52.9	53.1	56.7	55.4	56.6	56.0	53.6	52.0	54.0	53.3	50.6	49.1	50.2	49.5	49.5	
15	49.0	49.6	50.6	50.9	50.8	50.0	50.0	50.4	50.1	50.0	51.0	52.8	53.4	54.7	54.6	54.7	53.5	53.2	52.4	52.2	52.1	50.5	48.2	46.1	46.1	
16	47.2	46.9	47.0	48.8	48.2	48.3	49.7	49.5	49.8	51.2	52.2	53.2	54.3	55.1												

TABLE I.—HOURLY MEANS OF MAGNETIC DECLINATION AT ABINGER—*continued.*

	0h	1h	2h	3h	4h	5h	6h	7h	8h	9h	10h	11h	Noon	13h	14h	15h	16h	17h	18h	19h	20h	21h	22h	23h	24h		
March.																											
12° + Tabular Quantities.																											
1	50.6	50.2	50.1	50.0	50.0	49.9	49.9	49.1	48.1	48.1	49.5	52.1	54.2	55.4	54.6	53.9	51.9	51.5	51.1	51.0	51.0	50.9	50.9	50.4			
2*	50.6	50.6	50.4	50.2	49.8	50.0	49.6	49.0	47.5	48.0	49.3	51.8	53.3	53.6	52.9	51.7	51.0	51.0	51.0	51.0	50.6	50.3	50.2	50.5	50.5		
3	50.3	50.5	50.7	50.3	50.1	49.6	49.1	48.2	47.1	47.1	48.9	51.1	52.8	53.1	52.8	51.9	50.8	51.1	50.9	50.4	50.2	50.3	50.5	50.3	50.3		
4*	50.7	50.9	50.7	50.3	49.2	49.2	49.2	48.0	46.3	46.9	48.4	52.2	54.2	54.8	54.5	53.2	52.0	51.1	50.8	50.3	50.3	50.3	50.6	50.6	50.6		
5*	50.6	50.5	50.5	50.4	50.0	49.5	49.2	47.6	46.0	46.5	48.4	51.8	54.5	55.1	53.6	52.5	51.5	51.4	51.4	50.9	50.6	50.5	50.5	50.5	50.5		
6	50.4	50.5	50.6	50.4	49.9	49.4	48.2	46.5	44.9	45.9	49.2	53.1	56.2	56.6	55.5	53.6	51.2	50.6	50.6	49.9	49.6	49.9	50.4	50.5			
7	50.4	50.5	50.3	50.1	49.6	49.2	48.5	47.3	45.9	46.2	48.9	52.7	56.6	57.9	56.6	54.6	52.0	51.6	50.1	50.5	48.6	48.6	49.4	49.6			
8	50.1	50.1	50.1	49.9	49.1	49.1	49.3	47.6	46.3	46.5	49.4	53.1	56.3	58.0	57.2	55.2	52.5	51.4	51.0	51.6	50.8	49.8	49.8	49.5			
9*	47.9	47.1	47.9	49.4	49.9	49.5	49.4	48.3	46.5	46.0	47.9	51.6	55.3	57.3	57.4	55.8	53.3	52.1	51.3	50.7	50.3	50.2	50.1	49.6			
10	49.2	49.2	49.2	49.1	49.2	48.9	48.6	48.1	46.5	47.1	48.0	51.7	55.3	57.6	58.3	56.2	54.3	52.1	50.9	50.7	50.9	50.5	48.9	46.0			
11**	48.0	49.2	49.8	50.0	49.9	49.9	49.7	48.5	46.7	47.6	52.7	58.7	60.0	60.9	63.5	61.4	56.6	60.0	55.8	52.8	51.3	49.3	44.2	44.5			
12**	40.2	43.2	45.4	50.2	50.0	46.6	48.6	47.0	46.8	47.9	50.0	52.9	57.1	58.1	57.9	53.7	51.8	51.9	48.3	48.3	49.9	47.4	45.7	48.3			
13**	49.9	50.6	49.1	49.0	50.7	47.9	48.0	47.0	45.7	45.6	48.0	51.4	55.5	59.3	58.9	56.5	56.7	48.5	49.6	46.3	44.7	43.6	42.5	43.5			
14**	39.5	45.1	46.9	46.9	48.2	47.4	47.5	47.2	46.4	46.6	49.7	54.3	56.8	58.8	59.3	56.0	51.8	46.3	47.6	48.0	48.3	48.7	48.3	49.1			
15	51.8	52.0	50.3	50.8	49.3	48.5	47.3	46.0	44.6	45.8	49.3	54.3	57.9	60.3	59.3	57.3	54.2	48.8	48.3	49.4	49.2	47.4	47.4	49.2			
16	49.3	50.0	49.7	49.4	49.3	48.5	48.0	46.4	45.1	45.4	47.5	51.8	55.5	58.4	58.2	56.3	54.3	52.3	51.4	50.4	49.3	46.4	49.4	49.6			
17	49.5	49.3	49.3	49.2	49.2	48.5	48.5	47.3	46.1	45.9	48.4	52.5	56.6	59.3	58.5	56.7	53.9	51.6	50.4	50.2	50.6	50.7	49.7	47.7			
18	49.2	49.2	48.1	47.8	47.5	47.7	47.9	46.9	46.3	47.4	49.8	52.8	56.2	56.9	56.9	55.0	53.2	50.9	50.1	49.8	47.9	48.3	49.9	50.2			
19	48.3	48.9	49.5	49.5	50.0	48.8	49.1	47.5	46.2	46.0	48.0	50.3	54.3	54.3	55.1	53.6	51.7	51.4	51.1	50.1	49.1	49.4	50.2	50.1			
20	50.2	49.8	49.1	48.3	48.2	48.2	48.0	46.1	44.4	45.3	48.7	52.2	55.3	56.3	56.3	54.3	51.3	50.8	50.4	49.7	49.9	50.1	49.6	48.4			
21	49.2	49.6	52.0	48.1	47.4	47.4	46.8	46.3	44.9	46.3	47.4	42.4	56.6	58.5	57.8	55.7	53.3	51.4	51.1	49.5	49.1	48.5	47.5	46.3			
22	45.6	47.0	49.1	48.7	48.6	47.6	47.6	46.5	45.7	46.7	49.9	54.7	58.2	58.8	58.5	56.9	54.7	53.4	51.5	50.8	49.4	47.3	45.6	42.8			
23**	42.8	42.3	42.6	41.6	42.3	43.6	44.8	46.5	49.8	51.7	52.3	53.9	57.8	58.9	57.5	54.9	52.5	52.3	52.0	51.2	51.0	49.9	46.6	48.8			
24	48.7	49.9	49.8	50.0	49.8	48.7	47.0	46.5	45.6	46.8	49.8	55.0	55.2	56.0	55.2	53.1	51.5	51.1	50.9	51.0	50.1	48.6	49.2	49.0			
25	49.0	50.2	48.6	48.3	48.2	48.3	48.2	46.6	45.3	46.4	51.0	53.5	56.2	57.2	56.0	53.1	50.7	50.3	50.3	50.1	48.7	49.2	49.9	49.3			
26	49.5	49.1	49.1	50.5	50.1	49.1	47.9	46.5	46.3	47.9	50.4	54.4	55.3	56.6	55.9	53.9	50.1	49.3	50.1	49.1	48.3	49.3	49.5	49.5			
27	50.1	49.3	49.3	49.3	48.5	48.3	46.9	45.2	44.3	45.5	48.3	51.3	54.4	56.1	55.3	53.8	51.5	50.4	50.3	50.6	50.5	50.2	50.1	50.2			
28	50.5	50.1	49.9	49.4	49.0	48.4	47.4	45.2	43.9	44.3	46.6	50.5	55.9	55.5	54.4	52.8	50.9	49.8	49.3	49.4	50.4	50.5	50.4	50.0			
29	49.5	49.3	49.3	49.5	49.3	49.0	47.4	46.0	44.7	45.4	47.4	53.0	55.8	57.0	55.8	53.5	50.9	50.3	50.4	50.6	50.3	49.8	50.4	50.5			
30	50.0	49.8	49.4	48.8	48.4	48.1	47.9	46.9	46.4	47.3	50.3	53.0	55.1	55.4	53.6	51.4	49.6	49.3	49.4	49.9	50.0	46.4	48.4	50.4			
31*	49.8	49.6	49.3	48.9	48.8	48.3	47.3	46.0	45.5	47.3	51.4	55.1	57.3	56.6	54.5	51.5	50.5	50.2	50.4	50.5	50.4	50.2	50.4	49.8			
Mean	48.76	49.15	49.23	49.17	49.02	48.49	48.15	47.03	45.97	46.69	49.19	52.55	55.86	57.05	56.51	54.52	52.33	51.10	50.57	50.14	49.71	49.11	48.92	48.86			
Mean*	49.92	49.74	49.76	49.84	49.54	49.30	48.94	47.78	46.36	46.94	49.08	52.50	54.92	55.48	54.58	52.94	51.66	51.16	50.98	50.60	50.38	50.30	50.42	50.20			
Mean**	44.08	46.08	46.76	47.54	48.22	47.08	47.72	47.24	47.08	47.88	50.54	54.24	57.44	59.20	59.42	56.50	53.88	51.80	50.66	49.32	49.04	47.78	45.46	46.84			
April.																											
12° + Tabular Quantities.																											
1**	49.4	49.5	49.3	48.4	47.5	46.5	46.3	46.4	44.6	45.9	51.3	56.3	60.4	58.4	57.9	55.5	52.2	51.0	50.3	49.4	48.8	48.0	46.4	46.2			
2	47.3	49.0	49.0	48.5	48.3	50.3	47.3	43.6	43.4	46.0	49.4	53.9	58.4	57.1	55.2	51.4	49.4	48.8	50.1	50.5	50.4	49.4	47.7	45.4			
3	44.6	45.9	47.8	47.8	47.4	46.6	44.7	42.7	42.9	46.8	52.9	58.6	59.4	57.7	55.1	52.5	48.5	49.0	48.5	47.2	48.4	49.5	46.5	46.5			
4	47.6	47.5	48.0	50.0	47.2	47.0	44.3	43.6	44.3	47.0	51.1	55.3	59.3	59.2	57.2	55.9	52.3	50.8	47.5	47.5	48.3	47.8	45.3	44.6			
5	45.6	46.6	50.7	48.7	47.3	46.2	43.4	43.4	42.7	45.9	51.1	57.2	60.4	59.3	57.8	54.7	51.1	49.9	49.7	49.6	49.7	49.4	46.4	48.7			
6	47.3	47.7	48.1	48.4	48.1	48.2	46.3	44.1	42.9	43.3	48.0	52.3	55.4	56.2	55.9	53.5	51.7	50.5	48.8	50.4	46.6	47.0	47.0	47.5			
7**	42.1	43.6	46.1	47.5	43.6	46.1	43.3	43.1	43.5	48.7	52.6	56.5	58.6	58.9	55.1	53.1	51.6	51.6	51.6	50.1	50.1	44.1	40.7	47.1			
8	45.5	39.9	45.3	47.4	47.7	47.5	45.6	43.1	43.1	44.6	49.5	54.6	59.2	60.7	58.9	57.1	54.2	52.0	51.7	50.5	49.8	48.9	48.7	49.2			
9	48.8	48.3	48.5	48.3	48.1	47.6	45.7	42.9	42.2	44.0	48.5	55.0	59.0	60.7	58.9	55.9	53.6	51.1	50.6	50.7	50.2	46.4	48.3	48.7			
10**	47.6	47.8	48.5	48.2	47.9	49.5	48.6	43.5	42.5	47.6	49.6	53.3	57.7	60.5	58.7	55.2	51.7	49.3	47.7	48.6	49.3	45.5	47.7	48.3			
11	47.8	47.8	48.4	48.8	48.5	48.0	46.1	43.5	42.8	44.3	48.9	54.4	57.8	58.8	56.8	53.8	51.2	49.9	49.7	49.8	50.0	49.2	49.8	49.9			
12*	49.3	48.8	48.8	48.2	48.5	47.8	45.8	43.3	42.3	43.8	47.8	52.7	55.8	57.0	55.5	53.7	51.6	50.5	50.7	50.6	50.2	50.0	49.8	49.8			
13*	49.6	49.5	48.9	48.8	48.4	47.4	45.7	43.9	43.7	46.2	50.5	54.9	57.2	57.5	55.2	52.9	51.0	50.7	50.5	50.8	50.1	49.9	49.9	49.6			
14	49.4	48.9	48.9	48.6	48.1	47.5	45.9	44.1	43.9	45.9	49.9	54.3	57.1	57.9	56.9	54.8	52.4	50.9	50.5	50.6	50.8	49.5	49.8	49.9			
15	49.8	49.8	49.0	48.8	49.0	47.8	44.1	41.8	43.7	46.9	49.7	53.2	56.1	57.9													

TABLE I.—HOURLY MEANS OF MAGNETIC DECLINATION AT ABINGER—continued.

	0h	1h	2h	3h	4h	5h	6h	7h	8h	9h	10h	11h	Noon	13h	14h	15h	16h	17h	18h	19h	20h	21h	22h	23h	24h		
12° + Tabular Quantities.																											
May.																											
1*	47.6	48.0	47.8	47.2	46.7	46.0	44.2	42.6	43.3	46.3	50.9	53.9	55.8	55.8	54.4	52.9	51.6	50.1	50.1	49.9	49.8	49.4	48.7	48.2			
2*	48.8	48.1	47.8	47.2	47.1	46.0	44.5	43.7	43.5	44.9	49.2	52.9	55.6	56.1	55.8	53.3	51.8	49.9	49.3	49.6	49.7	49.3	48.9	48.6	48.6		
3*	48.5	48.0	48.2	47.4	46.6	44.7	43.0	42.2	41.9	42.7	45.1	49.2	52.9	53.8	52.7	51.0	49.6	48.0	47.9	48.5	48.9	48.9	48.5	48.2	48.2		
4	48.3	48.3	47.8	47.3	46.4	44.2	42.7	42.5	42.9	44.1	47.3	52.8	55.1	57.1	56.1	53.1	51.5	50.1	49.2	48.5	48.4	48.2	46.2	45.2			
5†	47.0	47.4	47.4	47.3	52.2	44.7	42.0	42.2	43.2	44.2	48.2	[55.6]															
6†													[53.8]	54.7	55.6	53.0	51.2	49.2	48.3	48.5	48.6	48.5	47.5	48.4			
7	48.5	48.4	48.4	47.2	46.6	45.4	43.4	41.9	40.4	40.7	44.5	50.5	56.3	59.3	58.4	55.4	53.6	48.8	48.1	49.0	49.4	47.3	45.9	48.4			
8	47.4	46.4	46.7	44.1	43.5	43.1	45.9	48.1	46.3	47.0	49.0	52.0	54.7	56.0	54.9	52.9	51.0	48.6	46.9	47.7	48.4	48.4	48.1	47.8			
9	47.7	47.6	46.9	46.7	45.6	44.9	44.6	43.5	42.7	45.2	48.4	51.6	53.8	54.9	54.4	52.4	51.2	49.5	48.3	48.3	48.4	48.9	48.8	48.2			
10**	47.6	47.2	47.5	47.1	45.4	44.1	43.6	43.1	43.3	45.2	48.3	51.9	55.8	59.0	56.7	57.3	56.7	50.6	49.0	50.1	47.5	44.4	40.9	37.9			
11	40.5	47.3	47.1	45.8	43.3	44.3	45.8	42.9	43.2	44.8	48.7	52.3	54.8	55.5	55.5	52.8	53.3	46.8	46.3	47.8	46.8	42.9	39.1	42.9			
12**	43.8	34.8	44.9	45.0	43.8	43.8	41.6	40.0	42.8	47.7	54.3	57.4	56.9	54.8	52.8	51.7	50.1	48.6	44.1	47.9	49.7	49.8	49.7	48.6			
13	48.8	46.0	49.8	52.9	51.4	49.8	47.3	46.0	47.0	47.8	50.1	52.8	54.7	56.1	55.8	54.0	50.8	49.2	47.1	46.9	46.3	46.8	47.8	46.8			
14	48.9	49.6	48.9	44.6	42.9	41.7	40.1	41.5	44.9	46.9	48.1	50.7	53.3	54.8	54.1	53.0	49.1	48.2	47.7	47.9	47.9	48.4	46.9	44.1			
15	40.2	42.9	46.8	47.0	44.6	43.0	40.9	42.5	44.5	46.2	49.3	51.2	53.4	54.0	54.7	52.9	51.5	49.4	48.6	48.9	49.0	49.8	46.3	44.6			
16	41.0	45.3	47.1	46.1	45.0	43.1	42.0	42.0	43.7	45.0	48.0	52.0	53.0	53.2	53.0	53.0	51.0	48.9	47.5	44.2	38.5	43.0	48.0	49.7			
17	49.6	51.2	46.2	44.0	44.0	43.2	43.3	45.0	45.8	48.0	49.8	53.9	55.5	54.4	53.4	52.1	50.0	48.5	48.0	48.4	48.4	48.5	49.0	48.9	48.8		
18	48.1	47.6	47.6	48.5	52.4	50.3	46.5	43.9	42.5	45.9	48.9	52.4	54.6	55.7	56.2	51.9	51.2	48.6	45.7	41.7	47.6	47.9	47.9	48.0			
19	49.9	51.9	49.4	46.7	44.8	43.7	43.8	44.1	45.1	46.1	47.8	49.8	53.1	55.1	53.9	52.2	50.0	48.4	46.8	46.1	46.6	47.4	48.6	48.1			
20	49.5	48.0	46.8	46.2	46.1	44.6	43.0	42.7	43.4	45.2	48.9	50.9	53.0	53.9	53.0	51.5	50.0	49.7	49.1	48.1	48.0	48.0	48.0	47.1			
21	48.1	48.0	48.0	47.0	46.9	46.8	44.0	43.8	43.4	45.8	49.2	51.8	53.6	54.6	54.1	51.6	50.2	49.7	49.5	48.9	49.0	48.1	48.1	47.6			
22*	47.4	47.2	47.1	47.2	46.2	44.7	43.5	43.0	43.9	45.5	47.7	50.2	51.5	52.1	51.5	50.7	49.0	48.2	48.2	48.4	48.4	48.4	48.6	48.4	48.2		
23	48.3	47.8	47.2	46.9	45.5	44.2	43.2	42.7	43.2	45.2	50.1	51.9	53.0	53.0	53.2	52.0	49.4	48.1	47.2	47.6	48.2	48.4	48.2	48.2			
24	47.8	48.2	48.2	47.3	47.1	45.9	44.2	43.1	43.2	45.7	47.2	50.2	52.6	54.2	54.2	52.5	50.8	48.8	48.3	48.2	47.3	45.8	47.2	48.6			
25	48.2	47.8	47.2	46.6	45.3	44.0	43.7	45.4	43.8	44.2	46.7	51.2	53.0	52.7	51.6	51.5	49.2	48.8	48.5	48.8	48.6	48.2	48.5	48.2			
26*	48.2	47.7	47.7	46.4	44.2	42.2	41.2	42.2	43.4	45.8	47.1	49.1	51.0	52.8	52.8	51.3	50.2	49.2	48.5	48.6	48.7	48.8	48.4	48.1			
27**	47.5	46.5	46.2	45.7	44.0	41.3	39.3	38.8	40.1	44.3	48.5	53.1	55.0	56.0	56.4	61.4	62.5	51.5	51.6	51.7	53.5	40.5	41.3	45.5			
28**	43.3	42.0	43.4	47.7	49.2	53.8	58.1	52.4	50.2	54.7	54.5	55.9	55.6	53.3	54.2	53.7	53.5	51.1	42.8	44.4	46.2	43.4	43.8	39.6			
29**	42.9	38.6	43.2	43.5	43.0	45.0	44.0	40.4	40.0	42.3	47.3	50.2	51.8	52.9	51.8	50.6	50.8	49.7	48.7	43.9	41.7	46.9	46.7	47.0			
30	46.8	50.3	44.4	44.0	43.7	41.4	40.5	40.1	40.0	43.6	47.8	50.8	52.8	53.3	53.4	52.3	50.5	48.7	47.1	47.0	47.0	45.0	45.2	45.5			
31	45.4	45.2	45.2	45.5	44.0	42.3	40.2	39.4	40.6	42.6	45.9	48.3	52.1	53.7	54.0	52.7	51.0	49.0	47.0	48.0	48.0	48.5	48.1	46.8			
Mean	46.85	46.78	47.03	46.54	45.92	44.74	43.67	43.02	43.41	45.45	48.56	51.88	53.93	54.76	54.29	52.89	51.41	49.13	47.85	47.77	47.82	47.28	46.95	46.77			
Mean*	48.10	47.80	47.72	47.08	46.16	44.72	43.28	42.74	43.20	45.04	48.00	51.06	53.36	54.12	53.44	51.84	50.44	49.08	48.80	49.00	49.10	49.00	48.58	48.28			
Mean**	45.02	41.82	45.04	45.80	45.08	45.60	45.32	42.94	43.28	46.84	50.58	53.70	55.02	55.20	54.38	54.94	54.72	50.30	47.24	47.60	47.72	45.00	44.48	43.72			
12° + Tabular Quantities.																											
June.																											
1	46.9	45.3	48.6	45.9	44.0	42.9	41.3	41.4	42.0	44.0	47.9	49.2	51.1	53.8	54.6	54.0	54.4	55.7	52.3	46.8	48.1	47.1	45.7	44.1			
2	47.3	47.1	46.7	44.7	43.1	42.0	41.7	41.2	41.6	44.1	47.5	51.2	53.4	53.9	53.9	54.1	53.4	51.5	49.6	46.6	46.6	46.0	45.7	46.6			
3	46.5	47.0	47.8	50.5	46.7	45.0	43.5	42.4	41.3	42.1	45.2	48.5	53.1	55.8	56.1	55.5	52.8	50.4	46.8	44.5	45.1	45.1	45.5	44.6			
4	45.7	46.4	46.6	45.4	45.4	46.4	43.4	40.6	40.6	41.8	45.4	49.4	53.1	54.7	55.0	53.7	50.4	47.2	46.4	45.9	44.4	46.3	47.7	48.2			
5	48.6	48.2	51.2	54.4	47.5	45.0	43.4	44.0	45.4	43.9	45.8	49.6	54.3	55.8	56.2	54.4	52.5	50.2	49.5	46.8	45.5	46.4	39.8	42.4			
6	45.8	44.4	45.2	45.5	43.5	41.8	41.0	40.5	41.1	43.3	43.5	46.9	51.0	53.6	54.8	55.2	53.3	51.9	49.9	47.0	45.8	45.9	45.5	46.6			
7**	46.8	46.8	46.6	46.1	45.6	45.4	45.5	44.4	44.3	44.9	47.2	50.4	54.7	56.0	57.7	52.0	53.2	50.7	46.6	48.3	46.6	46.4	47.1	47.3			
8	47.7	51.8	47.2	44.9	43.7	42.9	42.1	40.9	38.9	43.1	47.0	51.6	53.6	55.9	55.9	53.9	52.2	49.4	48.7	48.2	48.2	48.0	46.9	43.9			
9	41.9	41.9	47.5	44.6	43.5	42.2	41.3	41.3	42.8	43.0	45.2	48.7	51.2	51.9	51.6	50.7	49.3	48.2	47.4	46.9	46.9	47.4	47.9	47.6			
10*	47.6	46.1	45.9	45.2	45.1	43.9	43.2	42.3	42.9	42.9	44.9	48.6	50.9	52.4	51.5	50.0	48.7	47.7	47.9	48.1	47.7	48.0	48.0	47.9			
11*	47.6	46.9	46.5	45.8	44.9	43.6	43.1	43.7	44.8	45.8	47.8	50.4	51.6	52.7	52.9	51.6	50.7	49.9	49.6	48.8	48.6	48.8	48.3	48.3			
12**	46.6	43.7	44.7	43.7	45.6	43.7	46.7	44.6	43.7	45.6	48.5	52.6	54.6	53.6	53.5	51.9	50.3	48.5	47.6	47.7	48.7	48.5	47.4	47.1			
13**	46.1	45.5	46.6	44.5	41.4	41.4	41.4	42.1	44.9	46.4	48.2	55.9	54.5	54.6	54.4	52.6	51.4	50.2	49.2	48.4	49.1	46.8	47.9	47.2			
14	46.5	51.3	45.7	43.5	42.5	42.7	45.9	43.3	43.4	45.4	47.5	48.1	50.3	51.2	52.3	50.3	47.6	48.1	47.7	48.2	48.1	48.3	46.0	43.5			
15	45.1	47.5	48.5	45.7	44.4	44.0																					

TABLE I.—HOURLY MEANS OF MAGNETIC DECLINATION AT ABINGER—*continued.*

	0h	1h	2h	3h	4h	5h	6h	7h	8h	9h	10h	11h	Noon	13h	14h	15h	16h	17h	18h	19h	20h	21h	22h	23h	24h		
July.																											
<i>12° + Tabular Quantities.</i>																											
1	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	
2**	47.1	46.7	46.3	45.1	43.5	41.5	41.8	40.8	40.8	42.8	45.3	48.8	52.4	53.4	53.3	52.1	49.4	47.8	46.4	46.2	46.1	46.0	46.9	46.9	46.7	46.7	46.9
3	47.5	47.1	47.0	46.0	44.0	41.9	41.0	41.1	40.5	43.7	49.3	53.6	56.8	58.0	59.1	50.6	54.6	52.7	50.2	49.1	49.1	47.8	46.4	46.4	45.4	45.4	45.4
4	46.1	45.1	43.8	44.1	45.8	44.7	43.1	43.1	43.8	42.8	43.1	40.1	49.1	51.0	(51.6)	50.6	49.3	47.6	45.9	45.9	44.3	39.6	44.4	45.4	43.9	43.9	43.9
5	44.6	46.1	44.1	43.1	42.7	42.9	43.3	41.9	43.2	44.6	45.6	50.3	52.8	54.6	54.8	54.9	51.0	49.7	48.8	46.9	46.9	45.8	45.9	43.9	43.9	43.9	43.9
6	40.4	40.3	42.7	42.8	42.6	46.8	42.6	41.6	43.0	43.4	45.4	47.9	51.4	55.9	50.6	54.0	52.4	49.1	48.8	47.6	47.6	47.8	48.1	47.1	46.4	46.4	
7**	46.4	45.9	46.2	50.1	45.4	42.9	42.5	42.2	42.1	43.1	44.1	47.2	51.3	52.8	53.2	52.9	51.1	48.8	47.6	47.0	46.8	45.3	46.4	46.2	46.2	46.2	
8	45.6	47.1	47.4	45.4	43.4	42.1	41.8	41.3	40.9	41.4	44.3	48.8	51.8	51.2	52.1	50.7	48.8	47.1	45.1	45.8	46.7	44.8	39.5	42.1	42.1	42.1	
9**	54.1	38.1	29.1	34.1	39.1	37.1	44.1	41.1	43.1	44.1	52.1	47.5	51.1	48.5	47.6	47.5	46.1	40.5	47.0	48.9	46.2	46.6	40.7	40.0	40.0	40.0	
10	46.1	48.1	46.7	46.1	47.1	45.1	42.1	39.3	40.8	41.1	44.3	47.1	48.4	48.3	49.0	47.3	46.7	46.3	45.3	45.7	44.8	46.0	45.1	40.1	40.1	40.1	
11	48.1	48.0	44.0	43.1	41.8	42.0	42.7	41.0	40.9	41.0	42.5	45.9	48.5	52.1	50.8	48.3	47.9	47.3	45.3	46.8	46.6	45.3	46.0	47.6	47.6	47.6	
12	45.2	46.2	45.1	45.7	43.1	40.8	42.9	44.2	42.7	41.6	41.8	43.2	45.9	48.4	49.8	48.1	47.6	47.0	46.2	46.3	44.4	45.1	44.6	44.2	44.2	44.2	
13*	42.2	43.2	44.0	44.2	44.2	42.2	40.7	41.2	42.1	44.0	47.5	48.9	49.2	49.2	49.3	47.6	45.3	45.9	45.4	46.2	46.9	46.6	46.2	45.6	45.6	45.6	
14	45.4	44.3	44.3	43.8	42.3	40.6	39.6	38.8	39.3	40.8	43.3	45.8	47.5	48.4	48.2	47.1	46.3	45.1	45.9	46.2	45.9	45.6	40.1	45.7	45.7	45.7	
15*	45.9	46.7	45.1	44.3	44.0	43.6	43.3	42.8	43.3	44.7	47.3	50.3	51.2	51.2	50.5	48.6	47.7	47.0	46.4	46.4	46.4	46.8	40.5	45.4	45.4	45.4	
16*	44.7	45.2	45.3	43.8	40.7	39.6	38.7	39.9	40.6	42.1	45.1	49.1	52.2	52.5	52.0	49.6	46.8	45.1	44.7	45.1	45.3	46.2	46.2	46.1	46.1	46.1	
17*	45.8	45.2	45.1	44.5	43.3	40.8	40.8	41.4	42.4	44.4	47.4	50.9	54.1	54.8	54.1	51.2	47.7	46.0	45.2	46.0	46.0	46.4	45.9	45.3	45.3	45.3	
18	44.7	44.6	44.4	43.6	42.1	39.6	39.6	40.1	42.2	45.3	47.7	52.4	55.7	57.1	54.4	51.9	49.1	47.0	46.4	45.9	46.9	45.9	46.8	46.8	46.8	46.8	
19	41.7	41.3	43.9	44.6	44.9	43.7	41.4	40.2	42.3	44.2	45.9	48.7	51.7	52.4	52.9	50.9	49.1	47.5	46.1	44.8	45.5	45.8	45.8	45.1	45.1	45.1	
20*	45.1	44.7	45.2	45.9	46.3	44.2	41.8	39.0	38.0	39.9	42.4	46.0	51.1	54.0	54.7	53.2	51.4	50.2	48.6	47.2	46.2	46.2	46.0	46.8	46.8	46.8	
21	44.1	44.0	44.3	43.3	42.5	41.1	40.6	40.3	41.3	42.5	43.9	47.0	51.3	54.3	55.4	53.8	52.3	50.0	47.6	47.3	46.4	45.3	45.3	44.8	44.8	44.8	
22**	48.2	45.8	40.5	47.3	40.8	47.2	48.2	41.3	39.3	39.5	41.5	46.3	50.4	53.1	54.6	53.5	51.9	49.3	45.1	45.4	46.3	45.0	42.9	45.5	45.5	45.5	
23	42.5	40.3	39.7	42.0	43.2	42.0	41.0	41.4	41.7	43.6	44.7	46.7	49.3	52.4	53.1	52.0	50.0	48.1	46.9	46.8	46.7	46.2	44.1	42.7	42.7	42.7	
24	40.7	42.0	44.8	42.1	42.9	41.9	39.9	38.5	38.9	41.2	45.9	49.4	52.9	55.0	55.2	53.9	52.4	49.1	47.5	47.5	46.0	44.0	44.0	44.0	44.0	44.0	
25	45.3	44.4	44.1	43.4	43.7	40.6	40.4	40.1	39.9	41.2	44.6	48.7	52.7	55.5	54.9	53.4	51.3	49.1	47.3	44.3	43.6	45.3	45.6	45.6	45.6	45.6	
26	43.9	43.3	42.4	43.2	43.1	40.3	41.2	40.1	39.3	41.3	44.3	49.2	54.4	56.4	55.6	53.9	51.4	48.5	47.5	46.5	46.8	47.5	47.5	44.4	44.4	44.4	
27	45.6	44.6	43.5	42.5	41.5	40.4	39.6	40.0	40.9	43.4	46.3	48.6	50.7	52.5	52.5	50.8	48.0	46.8	46.6	46.8	47.5	47.5	46.9	47.5	47.5		
28	48.5	46.6	44.8	44.4	43.3	46.0	44.8	41.3	43.0	45.2	47.2	48.0	49.8	53.1	54.1	51.8	50.0	49.1	47.9	47.9	49.5	45.3	47.3	46.8	46.8		
29	45.0	44.6	44.7	45.4	45.0	43.9	42.1	41.8	41.3	42.5	45.1	47.4	50.3	51.4	50.5	48.7	48.1	47.5	47.1	45.7	45.8	46.6	46.6	46.3	46.3		
30	45.4	45.0	44.6	44.4	43.2	42.1	42.0	42.1	42.4	44.9	47.1	49.2	49.7	50.0	50.3	49.2	48.8	48.8	49.9	49.1	48.7	47.5	47.3	46.6	46.6		
31**	43.5	44.4	40.2	40.5	41.0	39.1	38.7	38.0	39.3	42.8	45.4	48.5	52.3	53.7	53.1	49.2	49.0	48.8	47.6	41.2	41.3	44.3	41.6	43.9	43.9		
Mean	45.29	44.62	43.79	43.95	43.38	42.17	41.65	40.82	41.28	42.77	45.36	48.26	51.12	52.57	52.62	50.99	49.29	47.88	46.83	46.38	46.18	45.89	45.62	45.27	45.27		
Mean*	45.54	44.72	44.80	44.30	42.98	41.14	39.98	39.72	40.16	42.00	44.78	48.06	50.74	51.66	51.38	49.72	47.76	46.40	45.98	46.04	46.14	46.10	46.18	45.74	45.74		
Mean**	46.18	46.50	44.36	45.06	44.32	43.08	42.36	40.20	40.16	41.70	44.96	48.86	51.94	52.86	53.58	51.46	50.20	48.84	46.66	45.44	45.64	45.58	43.10	44.86	44.86		
August.																											
<i>12° + Tabular Quantities.</i>																											
1	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	
2	44.3	41.3	43.1	42.1	41.9	40.8	40.3	40.8	42.9	44.4	46.9	49.4	50.9	50.8	49.4	48.4	48.0	48.0	47.9	46.5	48.0	46.5	43.5	42.3	42.3		
3	43.0	42.7	42.5	43.6	42.0	42.1	41.1	42.9	43.7	44.0	45.5	48.6	50.9	51.2	50.6	48.6	47.5	47.1	46.3	45.8	46.4	44.0	43.9	44.7	44.7		
4**	45.1	44.1	43.4	44.0	43.5	41.3	39.9	39.7	40.8	42.9	45.9	49.4	51.8	53.3	52.9	50.3	48.0	46.4	45.2	45.3	45.5	44.0	43.9	44.7	44.7		
5**	44.7	44.5	44.7	45.8	43.9	41.6	40.3	40.3	41.8	43.9	46.1	49.8	53.5	55.2	55.4	52.8	50.6	51.1	49.8	48.9	44.8	44.6	44.8	42.2	42.2		
6	39.2	39.2	42.2	42.8	42.6	49.1	50.4	47.4	42.6	42.4	44.5	48.7	53.1	55.6	56.6	57.7	56.1	51.8	47.6	48.3	46.1	48.7	45.6	44.6	44.6		
7**	44.3	43.3	43.0	43.0	42.5	42.1	42.2	43.0	42.7	43.3	46.0	49.3	52.0	51.8	50.9	49.5	46.5	45.9	46.0	44.5	38.9	37.3	38.7	41.5	41.5		
8	42.3	47.7	43.0	42.5	43.8	46.9	41.6	44.4	44.1	46.5	47.1	48.9	50.1	50.4	50.4	49.0	47.9	46.8	46.3	45.8	45.6	44.8	45.1	45.1	45.1		
9	45.0	45.3	44.8	45.3	44.8	41.8	40.9	40.9	41.8	43.5	45.4	47.9	49.9	52.2	52.1	50.9	49.1	46.9	45.1	45.1	45.5	46.0	46.0	46.4	46.4		
10*	43.9	42.6	43.4	44.4	44.0	43.2	42.2	41.9	41.5	44.0	47.0	49.7	52.0	52.0	51.0	48.5	46.3	45.9	45.8	46.1	46.5	46.6	46.6	46.9	46.9		

TABLE I.—HOURLY MEANS OF MAGNETIC DECLINATION AT ABINGER—continued.

	0h	1h	2h	3h	4h	5h	6h	7h	8h	9h	10h	11h	Noon	13h	14h	15h	16h	17h	18h	19h	20h	21h	22h	23h	24h
September.																									
12° + Tabular Quantities.																									
1	42.1	43.0	43.7	43.3	42.1	41.2	40.9	40.9	41.7	43.5	47.5	51.2	54.3	53.9	51.7	48.8	46.3	44.3	44.2	45.2	45.3	45.3	44.3	41.2	
2	42.2	36.3	34.5	32.7	39.0	39.3	39.1	37.8	38.3	42.5	48.3	53.7	56.5	54.4	52.0	48.8	46.1	44.9	44.9	45.1	44.7	45.2	44.8	45.2	
3**	43.6	42.7	41.5	41.8	40.0	38.4	38.1	38.4	40.4	45.1	52.3	56.5	61.3	63.5	58.6	55.1	50.1	42.0	43.3	40.6	43.8	43.8	44.8	45.0	
4	45.2	45.3	45.0	44.5	43.6	42.3	41.8	40.7	41.4	43.4	47.2	50.7	53.1	54.3	52.7	49.4	46.9	45.7	45.9	46.0	45.3	44.8	44.7	44.5	
5	44.5	44.1	43.8	43.2	42.7	41.1	42.3	42.4	42.8	44.7	47.7	50.8	52.3	51.6	49.9	48.1	45.8	37.8	42.1	44.8	45.7	44.9	44.3	44.4	
6	44.8	44.4	43.5	43.5	42.6	41.3	40.3	39.6	41.0	44.3	47.7	50.3	52.3	51.7	50.4	47.8	46.7	45.3	43.0	38.8	40.8	43.5	43.8	44.6	
7**	44.5	43.7	43.3	43.0	42.8	42.0	40.9	40.9	41.6	43.7	45.7	48.9	50.7	52.6	51.7	54.7	49.5	44.7	38.4	40.8	44.5	40.9	36.6	38.3	
8**	40.8	45.7	44.6	39.8	40.2	44.8	42.7	42.0	41.3	45.5	47.0	50.9	53.3	53.3	52.3	49.9	45.5	42.7	43.1	40.9	40.9	37.8	35.8	33.7	
9	36.4	37.3	35.6	36.3	40.7	39.7	40.8	40.8	42.0	43.7	46.3	49.8	51.2	51.5	50.2	48.6	47.0	46.6	46.0	45.1	40.0	42.7	43.3	43.8	
10	42.8	40.2	37.9	38.6	39.9	41.7	43.3	43.2	45.1	45.3	45.8	48.6	49.6	49.5	48.7	46.9	45.8	43.3	42.8	44.2	43.3	43.3	44.2	43.6	
11	43.5	42.5	42.2	41.7	41.5	41.5	41.9	41.6	43.2	42.4	44.6	48.9	50.7	51.2	50.2	48.0	46.0	43.7	42.5	42.8	40.0	40.0	42.0	42.2	
12*	43.0	42.5	43.5	45.6	43.4	42.5	41.4	40.1	39.2	40.4	42.8	46.2	48.4	49.0	48.3	47.2	46.2	45.1	44.5	43.8	43.7	44.3	41.5	41.9	
13	43.5	43.1	43.5	43.0	43.0	41.9	40.3	39.1	38.8	40.3	43.9	48.1	51.8	52.9	53.4	53.4	50.9	47.9	46.6	45.7	44.9	44.1	43.4	44.0	
14	43.8	43.5	43.5	45.5	44.6	39.0	39.2	39.3	38.9	40.7	44.3	48.3	51.5	52.4	51.9	50.0	47.4	45.7	44.6	43.8	43.9	43.1	43.8	40.8	
15	42.8	43.8	48.0	42.9	41.1	41.3	40.3	39.9	40.8	43.2	45.9	49.5	51.9	52.0	51.0	49.5	47.7	45.1	44.7	44.5	44.2	44.0	43.8	44.0	
16*	44.0	43.9	43.8	43.5	43.0	41.9	41.0	39.2	39.9	41.8	44.8	48.2	50.7	50.8	50.1	48.2	46.8	46.0	45.3	44.3	44.0	43.8	44.0	44.0	
17*	44.0	43.7	43.4	43.2	42.5	42.4	42.3	41.3	41.2	42.5	45.3	49.1	51.8	53.0	52.3	50.6	48.1	46.4	46.1	45.4	45.0	44.9	44.3	44.3	
18**	44.0	43.3	43.2	42.0	41.1	41.3	41.0	40.1	41.0	43.3	47.1	51.6	54.0	53.0	51.6	49.9	50.6	51.0	49.1	46.9	42.1	39.1	39.3	30.7	
19	40.9	43.2	42.9	42.8	41.9	42.4	39.6	38.9	39.9	43.1	47.1	50.6	54.7	53.7	53.4	54.6	50.4	46.0	43.1	43.6	40.9	43.1	43.2	43.9	
20	44.0	44.8	43.8	43.0	43.4	43.1	41.9	41.2	41.4	42.7	43.9	47.6	49.8	51.0	50.3	49.1	43.0	43.3	44.5	44.7	43.8	43.4	42.8	42.8	
21*	45.3	42.8	42.8	42.7	43.4	43.2	42.5	41.5	41.1	41.7	43.6	47.0	48.5	49.1	49.3	48.2	46.6	45.0	45.2	43.9	42.4	42.0	43.3	42.6	
22	42.8	42.8	43.3	42.3	43.2	42.9	41.2	39.0	37.6	38.8	41.4	44.8	49.6	52.2	50.5	49.5	48.0	46.6	46.1	45.6	45.3	45.0	43.6	43.4	
23	41.0	40.7	42.7	41.7	40.7	41.7	40.3	39.3	39.7	41.2	44.7	48.2	51.2	52.3	52.4	49.0	47.3	46.7	45.9	44.6	42.6	41.4	42.1	41.3	
24	40.7	42.7	39.7	42.0	41.3	42.0	40.3	38.6	39.2	40.7	44.7	48.3	51.0	52.3	51.4	49.2	48.9	48.6	47.4	46.1	44.9	43.2	38.5	33.5	
25**	34.6	41.3	40.2	39.2	40.1	40.2	39.9	40.6	41.3	45.9	50.6	52.6	53.7	56.2	52.7	49.9	44.7	45.2	42.3	41.2	38.7	38.7	37.7	39.3	
26	39.8	41.7	43.4	42.9	42.0	41.9	41.8	42.3	42.4	42.9	45.6	48.8	50.5	49.8	48.9	46.8	45.7	40.8	42.2	44.2	44.3	44.3	44.3	44.4	
27	43.8	44.3	44.0	43.5	43.8	43.3	41.9	39.9	40.3	42.7	45.5	49.0	51.5	52.0	51.2	45.5	45.8	45.3	43.6	44.0	43.0	43.7	43.1	43.3	
28*	43.7	43.5	43.6	43.5	43.3	43.0	41.3	40.0	40.2	41.9	45.4	48.9	50.9	51.0	49.4	47.3	45.8	45.0	45.2	44.4	44.2	43.8	43.6	43.3	
29	43.5	43.4	43.3	43.1	42.9	42.4	41.4	39.8	39.1	40.3	44.1	47.4	50.0	51.0	51.5	50.1	47.9	46.5	45.8	45.2	44.5	43.3	43.5	42.9	
30	42.8	44.7	44.2	43.7	43.4	41.8	39.6	40.3	42.9	42.1	45.4	50.5	50.3	51.4	49.2	47.4	46.3	45.7	45.1	44.2	43.6	43.2	43.0	43.1	
Mean	42.61	42.83	42.61	42.15	42.11	41.72	40.98	40.29	40.79	42.68	45.87	49.50	51.90	52.42	51.24	49.38	47.13	45.10	44.45	44.01	43.34	43.02	42.60	42.00	
Mean*	44.00	43.28	43.42	43.70	43.12	42.60	41.70	40.42	40.32	41.66	44.38	47.88	50.06	50.58	49.88	48.30	46.70	45.50	45.26	44.36	43.86	43.76	43.46	43.22	
Mean**	41.50	43.34	42.56	41.16	40.84	41.34	40.52	40.40	41.12	44.70	48.54	52.10	54.60	55.72	53.38	51.90	48.08	45.12	43.24	42.08	42.00	40.06	38.84	37.40	
October.																									
12° + Tabular Quantities.																									
1	43.4	43.3	43.2	43.1	42.8	42.4	40.7	39.0	39.0	40.8	43.8	47.2	49.9	50.4	50.2	48.6	48.4	47.4	46.3	45.3	42.1	41.3	41.9	42.5	
2**	42.8	43.2	43.1	43.0	43.1	42.6	41.8	43.2	42.4	46.6	49.6	52.1	55.2	56.3	54.5	52.0	50.3	46.4	44.9	38.4	41.9	42.1	42.4	42.1	
3	41.4	43.9	43.9	43.4	43.4	43.9	42.9	43.4	42.9	44.9	48.1	52.2	53.9	54.4	51.3	48.2	43.5	44.9	45.5	44.9	44.3	44.1	43.0	41.7	
4	38.4	41.1	42.6	42.3	43.4	44.2	42.9	41.3	41.3	43.1	46.1	49.3	50.9	50.3	48.9	46.4	45.2	44.7	42.6	41.9	41.9	43.9	44.1	43.6	
5	42.4	41.9	42.4	43.0	46.4	43.2	41.8	42.0	41.5	41.4	46.0	51.7	53.6	50.7	50.7	49.5	49.3	44.0	40.8	38.4	39.4	39.8	41.7	42.9	
6	43.2	44.8	44.7	41.4	41.8	41.7	40.8	40.8	39.2	41.6	44.6	48.1	49.3	49.3	48.0	43.9	40.9	42.7	42.6	43.7	43.3	42.9	42.3	42.7	
7	43.6	41.7	37.9	43.4	46.4	45.3	45.1	44.5	43.5	44.0	47.5	50.1	51.8	50.3	48.2	46.2	43.6	43.1	43.2	40.0	37.4	40.4	42.1	42.7	
8	39.0	40.9	41.2	41.2	41.1	41.3	40.6	39.8	38.3	40.0	44.1	46.5	49.0	49.5	49.5	47.4	44.5	42.2	43.4	43.5	42.2	40.6	41.4	42.2	
9*	42.7	43.4	44.0	43.6	42.8	42.3	41.5	40.4	39.7	41.2	44.0	46.7	47.7	47.7	47.1	45.7	44.3	43.8	43.7	43.4	43.3	43.2	43.2	43.1	
10*	43.1	43.2	43.2	43.0	42.7	42.5	41.7	40.2	39.2	40.5	43.5	47.5	48.5	50.0	49.7	48.6	46.3	45.6	44.7	44.1	43.6	43.4	40.1	39.9	
11*	41.3	42.6	40.2	41.2	40.6	40.3	40.3	38.9	37.2	40.3	42.7	46.8	48.6	49.1	48.4	47.1	45.4	44.9	44.0	43.7	43.0	42.4	42.4	41.0	
12	40.5	40.8	40.8	42.0	40.9	41.4	40.9	39.9	39.5	40.9	44.0	47.0	48.5	48.0	47.0	45.9	44.3	43.8	43.5	43.1	43.1	42.1	42.3	42.2	
13	42.7	42.7	42.2	41.8	41.6	41.0	40.1	38.6	38.0	41.1	46.0	50.1	52.0	53.7	54.6	52.0	50.1	48.3	45.8	42.1	39.1	42.0	41.9	39.1	
14	35.8	36.5	38.7	41.9	42.2	40.5	41.1	40.2	39.7	42.6	44.8	47.8	50.2	50.8	50.5	49.2	46.4	46.1	45.6	45.0	43.9	43.7	43.5	43.4	
15	43.0	42.5	43.8	47.0	44.2	42.5	42.2	41.0	41.0	43.0	46.8	49.2	51.7	50.8	50.3	48.6	46.8	46.3	45.9	45.7	43.3	42.8	42.4	37.5	
16	34.1	38.7	40.9	42.0	41.1	40.9	43.9	41.4	40.6	42.2	45.6	48.3	47.7	52.3	50.9	50.5	46.9	45.5	43.9	44.4	42.3	42.4	42.0	42.2	
17	42.5	42.0	42.3	42.4	42.4	42.3	41.5	40.4	39.6	40.7	43.7	46.7	49.1	49.2	47.6	47.0	45.9	45.9	40.8	43.1	42.3	40.8	42.7	43.3	
18	43.5	43.4	42.9	42.9	42.8	42.4	41.4	39.9	35.6	42.1	47.4	54.4	51.5	56.5	58.8	48.5	41.3	32.0	45.6	39.9	37.9	39.6	41.6	41.4	
19**	41.9	42.7	42.2	41.7	41.4	41																			

TABLE I.—HOURLY MEANS OF MAGNETIC DECLINATION AT ABINGER—*continued.*

	0h	1h	2h	3h	4h	5h	6h	7h	8h	9h	10h	11h	Noon	13h	14h	15h	16h	17h	18h	19h	20h	21h	22h	23h	24h		
November.																											
12° + Tabular Quantities.																											
I	40.9	43.5	42.2	41.9	42.9	43.1	42.9	41.9	40.9	41.9	44.4	46.9	48.1	47.9	47.7	46.6	46.0	45.3	44.9	44.9	43.6	41.4	39.9	42.3			
2**	42.4	42.8	41.5	43.1	43.4	46.9	46.2	44.3	43.5	43.8	45.1	47.3	49.0	51.2	50.4	48.7	46.7	40.2	40.1	40.6	35.2	40.0	41.0	42.6			
3**	39.2	39.5	37.8	41.4	40.9	44.1	44.0	41.2	41.9	43.3	44.0	47.4	48.5	49.0	48.1	48.7	43.4	46.0	37.4	31.9	38.1	40.7	39.6	42.0			
4	41.3	41.5	43.9	41.8	41.9	46.5	44.4	41.7	42.3	42.6	44.5	47.1	48.8	49.2	47.2	45.6	45.2	44.2	42.5	37.7	41.2	42.2	42.3	42.4			
5	42.6	42.4	42.7	42.9	42.8	42.0	42.0	41.6	41.4	41.8	43.5	45.4	46.1	46.9	46.1	45.1	43.6	43.8	43.2	42.6	42.9	42.4	42.0	42.0			
6	41.5	42.0	43.0	43.3	42.5	42.0	42.2	42.8	43.2	43.8	45.0	46.4	46.5	46.9	46.4	45.5	45.4	44.5	44.0	43.4	41.3	39.7	39.9	39.6			
7	41.3	43.0	43.6	42.6	42.0	42.0	42.0	42.4	42.4	43.5	46.0	45.5	46.1	46.0	45.5	45.0	45.1	45.0	45.0	45.5	42.5	43.0	43.5	42.4			
8*	41.8	42.0	40.4	41.4	42.3	42.5	42.3	41.7	41.7	42.5	43.8	44.7	45.3	45.1	44.4	44.4	44.3	44.2	43.9	43.3	42.9	42.8	42.6	42.4			
9*	42.3	42.5	42.3	42.3	42.3	42.3	41.9	41.7	40.9	40.9	42.4	43.8	44.9	45.0	44.9	44.7	44.9	43.9	43.8	43.9	43.5	42.9	42.8	42.9			
10	43.2	43.4	43.6	43.9	43.2	42.9	42.9	43.0	42.8	42.7	45.7	47.9	50.5	53.5	53.9	53.7	46.3	43.8	42.9	42.8	42.3	41.4	39.9	40.9			
11	40.8	41.8	42.4	42.9	42.4	42.1	41.9	41.5	40.9	41.5	42.9	44.6	45.9	46.4	45.9	44.9	44.8	44.6	44.3	43.9	38.9	41.0	39.6	38.2			
12	34.0	39.1	41.3	41.8	45.3	42.1	42.2	41.6	41.3	42.6	44.6	45.7	47.0	47.4	46.1	45.5	44.5	44.3	44.1	43.1	40.5	40.1	36.8	37.8			
13**	40.1	40.3	44.2	38.7	42.6	43.2	43.2	43.3	44.6	43.4	47.3	47.5	48.5	49.3	46.0	46.9	49.0	47.4	39.4	38.9	40.7	40.4	40.4	40.5			
14	40.4	38.5	37.9	38.5	40.5	40.9	41.2	40.6	41.0	42.0	44.5	46.8	47.0	45.5	46.3	46.5	43.9	43.6	42.6	42.4	41.9	41.8	41.2	39.4			
15**	43.5	36.5	40.0	42.5	40.6	40.5	41.5	41.5	41.5	42.2	43.0	44.1	44.7	46.0	49.3	49.5	46.9	44.5	43.7	39.7	37.8	41.2	31.7	40.0			
16	38.8	38.7	39.7	37.8	40.1	40.5	40.3	40.7	40.3	42.2	43.1	44.5	46.4	47.5	44.8	44.5	44.1	43.8	42.5	43.0	40.0	37.3	38.9	36.1			
17**	38.8	40.5	40.5	40.5	41.5	41.8	41.4	42.0	41.5	45.5	44.6	46.5	46.4	44.7	44.8	44.4	38.7	43.7	42.4	40.8	40.5	39.9	39.0	40.8			
18	39.4	38.3	39.9	42.3	41.9	42.6	43.1	44.5	43.6	43.0	43.0	43.8	45.8	45.4	44.4	44.0	44.4	38.9	40.7	40.7	40.9	39.6	40.8	42.5			
19	42.8	43.6	42.7	41.9	41.9	42.2	42.4	41.8	41.4	41.0	43.0	45.0	45.4	44.8	44.1	44.4	43.8	41.4	43.9	42.4	41.4	40.4	39.0	40.4			
20	41.3	42.1	42.3	42.2	42.0	41.9	41.7	41.5	40.7	40.3	42.1	44.0	45.5	44.8	43.3	43.6	43.1	43.0	42.5	42.6	42.0	41.9	41.1	41.5			
21	42.9	41.2	41.5	41.6	41.3	41.2	41.1	41.2	41.0	40.9	42.2	44.1	45.1	45.1	43.9	43.6	43.0	42.6	42.7	42.5	42.2	41.9	42.0	41.9			
22*	42.0	42.1	42.2	42.2	42.1	42.0	41.6	41.3	41.0	41.7	43.7	45.3	45.7	45.3	44.5	44.2	44.2	43.7	43.0	42.7	43.1	41.7	41.3	40.9			
23	40.9	40.9	41.2	41.4	41.2	41.8	42.7	43.9	43.5	43.8	45.0	46.4	47.3	46.6	46.3	45.8	44.1	43.2	42.5	42.2	41.4	41.1	41.2	41.4			
24	41.9	42.1	42.4	42.4	42.3	42.0	42.4	42.5	43.1	43.4	45.8	47.8	46.2	48.2	47.4	45.1	43.7	43.0	42.3	42.5	42.0	41.2	34.7	36.9			
25	38.2	37.2	42.7	42.8	42.7	42.6	43.7	42.8	41.7	42.2	44.0	45.1	47.1	46.0	44.5	43.6	43.1	42.6	42.1	41.7	41.6	41.5	41.6	42.4			
26	42.5	42.7	43.5	42.8	42.6	41.9	41.7	41.9	42.3	42.9	44.4	45.5	46.9	47.4	47.5	46.3	44.2	43.2	42.8	41.9	39.8	41.1	41.9	42.4			
27	42.4	42.9	43.0	43.0	43.2	42.6	42.5	42.2	42.2	42.1	44.1	45.5	46.6	47.4	46.2	45.8	44.4	43.8	43.2	42.3	40.9	39.9	40.7	38.9			
28*	39.4	41.7	43.1	42.8	42.7	42.7	42.0	41.3	40.7	40.5	41.6	42.9	45.0	45.4	44.7	44.4	43.5	42.9	41.9	41.8	41.8	41.8	41.2	40.6			
29*	41.7	42.9	43.2	43.3	42.9	42.3	42.1	42.0	41.6	42.1	43.2	44.6	45.6	45.7	45.2	44.3	43.5	42.9	42.9	42.5	42.1	42.1	42.0	42.0			
30	42.0	42.3	43.0	43.0	42.5	42.5	41.7	42.0	42.0	42.1	43.1	44.5	45.5	45.0	46.4	45.9	44.8	43.8	43.4	43.1	42.1	42.0	38.1	39.5			
Mean	41.01	41.27	41.92	41.97	42.23	42.46	42.37	42.08	41.90	42.41	43.99	45.55	46.58	46.82	46.21	45.71	44.45	43.61	42.69	41.91	41.17	41.15	40.22	40.79			
Mean*	41.44	42.24	42.24	42.40	42.46	42.36	41.98	41.60	41.18	41.54	42.94	44.26	45.30	45.30	44.74	44.40	44.24	43.64	43.10	42.84	42.68	42.26	41.98	41.76			
Mean**	40.80	39.92	40.80	41.24	41.80	43.30	43.26	42.46	42.60	43.64	44.80	46.56	47.42	48.04	47.72	47.64	44.94	44.36	40.60	38.38	38.46	40.44	38.34	41.18			
December.																											
12° + Tabular Quantities.																											
1**	41.4	40.8	40.6	39.2	39.5	45.2	47.4	44.8	44.3	44.3	42.2	43.2	44.6	44.8	44.5	44.3	43.3	42.8	42.3	42.0	41.7	41.4	41.3	41.3			
2	41.8	41.4	42.7	41.8	41.8	42.0	42.3	42.3	42.1	42.5	44.0	44.0	44.4	44.4	44.8	44.0	43.8	42.9	42.4	42.5	42.1	40.1	39.9	41.0			
3	40.7	41.7	42.8	42.5	42.5	42.0	41.8	41.8	41.4	41.5	42.0	43.4	44.0	44.1	44.1	43.9	43.0	43.0	43.3	42.2	42.2	41.5	41.5	41.2			
4*	41.4	41.9	41.9	41.8	41.9	41.5	41.3	41.5	41.9	42.7	43.9	45.3	45.5	45.4	45.2	44.7	44.5	43.5	42.8	42.2	42.0	41.8	41.3	40.7			
5**	40.1	40.6	40.9	41.4	41.4	41.8	41.9	42.0	42.1	42.2	43.7	43.7	45.2	45.5	45.3	44.2	43.7	44.6	43.3	43.2	42.5	41.6	36.5	23.6			
6**	35.2	39.6	43.0	37.7	37.5	41.2	41.7	42.5	43.2	42.3	44.2	45.1	45.6	46.2	43.5	38.7	41.2	37.0	33.5	37.9	37.9	39.4	38.3	42.7			
7	39.2	37.1	38.5	41.1	40.9	41.6	42.2	42.2	42.2	42.4	44.4	44.9	45.5	45.0	44.1	44.1	41.1	40.9	42.4	41.6	38.6	38.7	41.0	42.1			
8	42.0	42.3	42.0	42.0	42.0	43.0	42.3	42.0	40.9	40.9	42.3	43.3	44.9	44.8	43.6	43.2	43.4	42.5	42.5	42.0	38.9	39.0	40.7	41.8			
9	42.6	42.4	42.3	42.2	42.4	42.2	42.3	41.8	40.7	40.7	42.3	44.5	46.7	45.6	44.9	43.4	41.4	41.5	41.3	41.7	40.9	41.1	41.4	41.4			
10	41.7	41.7	41.7	41.7	41.9	41.9	41.6	41.1	40.3	40.7	42.2	44.6	44.4	45.8	43.3	44.2	43.3	42.6	42.6	42.3	38.3	39.1	40.4	40.9			
11	41.5	41.3	41.7	41.7	41.5	41.7	41.7	41.2	40.5	40.6	42.4	43.9	44.8	45.2	44.2	43.7	4										

TABLE II.—HOURLY MEANS OF HORIZONTAL COMPONENT OF MAGNETIC FORCE AT ABINGER.

	0h	1h	2h	3h	4h	5h	6h	7h	8h	9h	10h	11h	Noon	13h	14h	15h	16h	17h	18h	19h	20h	21h	22h	23h	24h	
January.																										
18000 γ + Tabular Quantities (in γ).																										
1**	573	574	577	576	574	574	574	574	574	565	562	543	566	587	584	582	578	579	581	587	572	551	553	560		
2	567	564	566	569	571	574	572	566	564	551	547	558	566	566	569	569	564	566	569	570	572	574	576	575		
3	576	574	577	574	574	575	576	574	569	561	558	561	564	566	569	571	574	577	580	582	583	585	582	579		
4	579	581	581	582	585	588	590	590	585	574	567	559	558	566	564	572	574	576	574	572	572	578	578	583		
5	583	573	574	575	574	582	582	577	572	564	562	564	566	569	569	574	577	577	574	575	577	575	575	579		
6	577	578	578	578	579	579	580	581	572	566	563	568	571	573	572	574	574	573	574	572	570	580	579	579		
7	579	578	585	585	577	579	581	579	576	569	567	569	574	577	579	576	577	577	577	579	582	579	580	584		
8	581	579	579	582	582	581	586	587	579	567	564	569	579	581	583	583	582	581	580	583	582	582	580	579		
9	585	579	577	584	583	584	585	584	577	571	568	571	572	572	559	567	566	569	574	577	576	574	574	574		
10	579	579	582	585	587	586	585	584	581	579	574	573	574	577	577	574	569	571	566	565	567	567	577	579		
11*	578	579	578	579	582	582	580	579	574	570	566	567	571	576	576	580	580	581	583	583	582	582	582	581		
12*	580	580	579	580	582	584	584	581	578	573	569	562	561	568	574	577	580	581	584	586	584	583	580	576		
13*	577	578	578	580	581	582	581	580	577	575	571	571	577	583	588	589	588	587	589	589	586	584	578	578		
14*	576	577	578	580	583	585	584	583	580	573	565	564	564	572	580	581	578	579	581	581	581	581	582	584		
15	582	580	582	585	585	585	585	585	580	570	561	562	567	579	588	594	591	596	593	588	583	582	586	590		
16	589	587	585	586	588	592	593	593	583	571	565	563	571	576	580	586	585	582	585	585	588	588	586	585		
17	584	584	584	585	588	590	589	587	576	564	559	562	570	582	587	589	588	587	588	589	589	587	584	582		
18	579	579	581	583	585	589	589	590	587	578	569	563	563	571	570	575	576	581	582	584	582	579	579	581		
19	579	575	572	574	576	579	579	576	569	561	556	553	557	569	579	580	582	579	573	575	581	584	579	580		
20	582	573	574	574	575	581	578	575	572	568	568	566	562	562	570	575	573	576	579	581	583	583	584	583		
21	582	582	584	581	587	594	594	587	577	565	556	553	556	569	577	579	573	577	579	574	579	581	589	583		
22	581	580	581	581	583	587	585	583	578	570	563	554	560	563	570	574	570	568	568	568	567	574	577	578		
23**	581	586	586	583	583	587	590	594	588	569	554	547	554	564	562	568	564	568	568	562	568	573	573	575		
24	574	576	581	583	583	583	584	581	573	564	562	560	560	562	575	574	564	574	573	580	580	582	579	577		
25	581	582	581	581	582	584	586	585	581	569	559	557	561	559	557	572	575	579	579	576	576	574	574	578		
26	575	574	577	580	583	588	589	590	585	569	560	559	564	569	574	580	587	593	596	588	572	559	566	567		
27**	576	588	582	580	606	619	592	596	598	590	557	527	514	504	528	543	546	541	530	553	550	548	560	558		
28**	556	557	558	559	563	566	567	569	567	553	541	523	530	523	553	559	557	561	560	567	581	577	573	566		
29**	572	567	567	572	577	572	577	575	569	561	548	536	538	554	543	557	551	552	563	560	567	570	579	576		
30	574	572	573	567	574	580	585	581	576	563	555	554	550	554	562	567	567	570	579	577	572	578	577	574		
31*	575	576	575	577	577	579	580	582	579	574	567	560	557	561	569	574	578	580	580	581	578	580	578	578		
Mean	578	577	578	579	581	584	583	582	577	568	561	558	561	566	571	575	574	576	576	577	577	577	577	578		
Mean*	577	578	578	579	581	582	582	581	578	573	568	565	566	572	577	580	581	582	583	584	582	582	580	579		
Mean**	572	574	574	574	581	584	580	582	579	568	552	535	540	546	554	562	559	560	560	566	568	564	568	567		
February.																										
18000 γ + Tabular Quantities (in γ).																										
1	579	578	576	576	574	577	588	587	583	568	563	556	559	570	573	573	574	578	580	578	576	575	580	579		
2	579	581	580	580	579	582	581	581	578	573	566	564	567	577	582	582	573	564	570	580	562	572	580	579		
3	566	571	569	570	572	576	580	585	570	560	553	556	545	549	562	563	548	554	567	569	569	577	575	577		
4	576	574	574	576	576	577	585	585	573	567	561	554	543	549	561	574	574	574	568	576	578	580	577	577		
5	575	579	578	580	585	587	586	586	573	562	548	553	555	559	563	572	574	576	579	580	579	573	574	576		
6	580	578	579	580	581	583	582	580	574	567	561	561	564	565	570	571	577	581	574	572	575	578	579	578		
7	582	584	580	581	585	588	590	594	587	577	565	559	564	569	574	577	577	578	581	581	570	574	578	578		
8*	578	578	576	573	577	580	580	580	572	567	563	571	572	577	578	577	572	569	574	578	572	572	574	574		
9*	576	579	579	581	583	584	585	584	581	576	569	563	562	566	569	575	578	582	583	584	582	582	579	579		
10*	582	582	584	586	586	586	586	584	586	573	571	566	568	565	568	576	578	578	578	580	578	584	584	580		
11*	579	576	579	578	579	581	580	581	577	573	569	571	571	570	571	572	573	571	573	575	580	579	578	580		
12	580	577	577	577	578	580	581	591	594	588	584	578	573	571	577	589	592	594	590	570	579	575	580	572		
13**	571	573	571	572	577	578	578	576	577	567	570	571	572	565	573	571	576	569	558	557	567	569	568	565		
14	567	570	577	572	592	569	570	572	561	563	559	562	568	562	567	567	559	569	565	572	579	572	567	570		
15	570	570	571	571	572	577	572	574	580	580	576	567	572	570	569	575	578	575	577	582	566	565	593	566		
16	572	574	578	576	575	573	573	578	572	567	563	557	563	565	566	570	575	578	583	578	578	573	572	572		
17	569	577	570	573	577	574	578	580	577	569	564	562	562	565	567	569	567	567	579	583	580	576	581	583		
18**	582	583	587	580	579	588	593	594	593	581	573	559	552	557	563	563	565	563	557	566	567	562	567	575		
19**	580	583	582	572	585	593	577	587	574	573	559	552	547	546	562	569	568	569	570	571	578	580	580	580		
20	580	579	579	579	581	584	584	586	582	568	549	552	547	550	555	561	571	577	573	565	565	573	553	556		
21**	566	565	565	568	572	578	586	588	584	577	568	559	543	555	576	579	576	577	566	567	568	582	571	577		
22	569	573	585	578	576	585	580	582	548	561	557	555	559	565	565	572	573	574	578	576	576	582	565	565		
23	571	576	571	576	576	587	587	586	578	573	557	547	551	554	565	565	572	574	576	577	576	578	578	578		
24*	578	585	580	582	583	585	586	581																		

TABLE II.—HOURLY MEANS OF HORIZONTAL COMPONENT OF MAGNETIC FORCE AT ABINGER—*continued*.

	0h	1h	2h	3h	4h	5h	6h	7h	8h	9h	10h	11h	Noon	13h	14h	15h	16h	17h	18h	19h	20h	21h	22h	23h	24h	
March. 18000 γ + Tabular Quantities (in γ).																										
1	578	578	577	577	578	580	582	581	574	567	559	556	559	564	562	562	561	569	576	578	580	581	581	582	581	581
2*	581	581	580	584	582	585	587	588	583	576	574	569	569	567	567	567	571	571	575	580	581	582	582	582	581	581
3	579	581	581	581	581	582	584	585	581	575	574	573	574	574	575	575	576	579	582	585	587	589	587	587	586	586
4*	586	586	586	589	585	586	587	584	574	562	556	558	561	565	567	569	574	577	579	583	584	585	584	585	584	585
5*	587	586	587	585	586	587	587	584	575	564	559	562	566	573	576	581	584	585	587	587	587	588	589	589	589	589
6	589	587	586	586	584	585	587	582	574	562	555	556	553	561	569	573	578	581	584	581	578	584	584	584	584	
7	584	582	582	582	584	583	588	586	574	565	556	556	563	569	572	585	581	582	571	575	567	572	579	579	579	
8	581	582	583	584	586	583	583	582	571	563	560	561	566	576	579	579	578	582	585	582	578	581	582	582	582	
9*	588	584	583	583	585	585	585	585	578	566	554	549	555	566	575	578	577	578	582	584	583	583	583	583	583	
10	584	582	582	582	583	585	588	585	577	569	558	557	559	562	568	573	581	574	579	584	591	590	590	597	597	
11**	588	585	587	589	592	594	598	599	595	569	543	532	529	534	548	497	525	552	516	546	528	542	544	527	527	
12**	538	538	560	554	555	563	545	549	540	532	517	517	523	530	545	530	556	553	569	575	566	580	567	556	556	
13**	560	562	566	566	573	571	573	574	563	551	542	531	537	552	554	560	560	557	576	558	553	560	558	568	568	
14**	565	544	558	558	554	549	544	532	528	518	498	498	513	524	530	545	539	554	570	554	568	576	573	573	573	
15	579	575	567	565	563	566	566	561	550	536	523	518	521	530	537	553	559	562	573	576	575	573	573	575	575	
16	573	572	570	569	570	573	576	578	567	562	554	547	544	549	557	562	562	567	577	580	580	578	580	577	577	
17	578	575	575	575	579	586	586	580	569	544	541	541	550	549	561	565	570	570	575	576	576	575	576	571	571	
18	570	570	570	580	583	577	577	577	573	569	564	562	559	560	563	557	561	564	572	578	580	583	582	582	581	
19	582	579	576	576	577	582	583	585	573	572	566	566	565	561	566	560	563	564	572	583	581	582	582	584	583	
20	585	581	579	579	580	585	584	579	565	552	546	549	561	566	568	571	568	569	577	578	579	581	591	590	590	
21	582	585	593	584	583	580	582	580	572	559	557	566	568	568	566	566	572	570	571	574	574	577	577	574	574	
22	579	577	577	579	577	575	574	571	571	562	559	566	573	578	579	581	577	570	575	568	566	564	561	564	564	
23**	566	571	577	581	589	584	573	574	563	556	565	568	569	558	574	576	579	586	586	586	589	576	576	584	584	
24	581	584	584	583	588	586	591	583	580	568	559	556	537	563	568	574	577	581	582	581	581	582	582	580	581	
25	589	596	584	581	580	577	575	577	569	557	541	541	554	568	561	550	574	580	582	583	584	585	579	579	579	
26	581	580	577	576	576	579	580	579	571	555	536	548	550	560	570	571	571	574	579	581	582	582	582	582	582	
27	585	586	576	580	580	581	581	575	566	555	549	546	546	554	562	570	575	579	581	583	583	581	580	582	582	
28	588	585	586	583	585	586	585	586	576	560	555	551	560	559	575	581	583	589	585	579	586	587	588	589	589	
29	586	585	583	585	588	590	588	583	572	560	557	557	557	570	580	585	586	584	584	583	587	586	586	586	586	
30	584	583	583	583	583	583	581	577	568	556	553	557	563	567	573	575	580	583	588	578	589	591	581	583	583	
31*	584	582	583	582	583	583	581	577	569	562	564	568	571	579	581	581	582	581	583	585	587	588	587	587	587	
Mean	581	580	581	581	582	582	582	580	572	561	553	553	556	562	567	568	573	576	578	580	580	582	581	581	581	
Mean*	585	584	584	585	584	585	585	584	576	566	561	561	564	570	573	575	578	578	581	584	584	585	585	585	585	
Mean**	563	560	570	570	573	572	567	566	558	545	533	529	534	540	550	542	555	564	560	567	563	569	564	562	562	
April. 18000 γ + Tabular Quantities (in γ).																										
1**	585	586	586	585	578	580	580	584	572	570	561	554	565	565	571	568	569	574	587	580	575	579	579	569	569	
2	577	573	573	574	576	575	577	570	554	540	529	537	551	554	556	566	573	576	581	581	581	582	577	564	564	
3	555	557	567	570	572	572	564	553	538	527	515	529	548	575	579	566	555	560	569	568	587	589	586	568	568	
4	575	580	569	582	579	573	573	567	551	531	526	545	558	567	572	586	576	573	576	580	578	567	573	572	572	
5	570	572	576	573	572	572	567	559	554	538	519	526	534	541	556	564	577	582	581	581	582	583	585	585	585	
6	585	582	576	576	581	579	582	568	554	535	526	533	539	548	556	566	572	585	591	590	584	577	580	577	577	
7**	582	569	572	592	590	573	565	565	549	533	517	524	544	560	574	572	584	576	578	580	591	602	570	560	560	
8	572	568	554	561	561	565	564	558	554	535	521	507	531	554	563	571	574	593	573	576	574	571	567	569	569	
9	569	570	571	573	571	570	566	557	545	531	524	528	537	542	549	559	571	567	581	580	583	583	573	580	580	
10**	604	581	572	580	581	581	566	569	558	531	526	535	539	531	547	565	578	580	580	575	579	584	574	586	586	
11	577	570	570	569	570	573	571	564	547	531	526	529	531	543	555	570	584	581	581	580	578	579	577	578	578	
12*	583	578	574	573	571	579	577	570	557	545	537	533	540	551	562	575	582	580	578	583	583	583	583	581	581	
13*	581	581	581	580	581	581	580	574	563	547	534	532	543	557	574	584	589	588	588	586	588	583	584	584	584	
14	583	581	581	582	585	587	586	579	569	555	545	549	554	562	570	574	586	594	600	600	599	596	594	594	594	
15	593	591	587	581	585	595	590	581	567	558	544	546	543	546	556	574	588	601	612	613	595	582	582	592	592	
16	594	578	584	581	585	588	581	578	568	552	543	548	560	559	565	567	578	580	561	591	582	583	583	568	568	
17	561	570	584	565	566	566	566	561	548	535	538	535	538	546	561	562	575	586	585	587	582	584	577	575	575	
18	574	572	570	572	573	575	579	574	558	552	551	555	562	569	572	573	572	572	575	579	580	582	583	582	582	
19	583	580	583	580	579	581	575	567	557	551	552	558	567	575	581	581	582	581	586	588	582	577	579	582	582	
20**	595	551	553	581	578	565	557	545	532	520	517	528	542	554	566	579	581	581	581	586	579	571	575	581	581	
21**	586	589	589	588	589	586	584	573	554	542	542	550	568	575	578	576	571	575	583	576	581	581	581	580	580	
22	577	574	572	574	574	573	571	563	556	546	537															

TABLE II.—HOURLY MEANS OF HORIZONTAL COMPONENT OF MAGNETIC FORCE AT ABINGER—*continued.*

	0h	1h	2h	3h	4h	5h	6h	7h	8h	9h	10h	11h	Noon	13h	14h	15h	16h	17h	18h	19h	20h	21h	22h	23h	24h
May.																									
18000 γ + Tabular Quantities (in γ).																									
1*	591	589	588	586	585	583	580	571	564	561	557	554	557	562	571	580	590	598	603	605	603	601	604	604	598
2*	598	594	593	591	593	590	583	575	566	559	557	554	559	562	567	578	588	594	601	600	601	601	601	601	600
3*	596	592	592	590	585	584	581	577	568	560	554	552	549	557	567	575	586	596	597	595	592	595	594	592	
4	592	594	594	592	590	587	585	578	571	564	560	567	561	569	573	564	578	586	600	592	595	591	595	595	
5†	583	584	588	603	590	608	589	563	557	555	555	—	—	—	—	—	—	—	—	—	—	—	—	—	
6†	—	—	—	—	—	—	—	—	—	—	—	—	—	552	560	560	578	583	585	585	586	588	587	588	
7	583	580	583	583	584	581	576	567	557	549	542	542	543	550	564	566	586	573	583	570	594	592	587	575	
8	587	592	609	597	588	575	573	576	542	529	536	534	523	522	532	557	576	578	586	586	583	583	582	580	
9	579	579	578	577	577	576	570	563	551	545	539	534	554	561	572	570	580	587	583	586	585	584	580	579	
10**	579	579	581	581	581	580	582	578	566	556	546	547	564	592	573	611	628	600	582	593	586	562	551	541	
11	548	545	556	568	560	563	545	542	537	537	532	536	534	524	557	578	595	590	580	568	563	568	542	545	
12**	564	552	553	557	563	542	552	544	528	480	485	516	528	552	544	550	552	572	585	581	574	573	573	597	
13	602	570	559	570	581	578	552	511	527	516	515	514	516	527	548	561	570	581	576	578	574	585	575	571	
14	573	581	583	579	565	559	544	529	521	522	529	544	539	539	537	558	572	577	579	582	578	582	584	593	
15	589	567	564	571	571	569	563	553	543	542	550	543	553	551	566	571	582	589	596	589	588	590	629	622	
16	592	583	579	579	579	576	563	553	547	551	552	560	550	558	574	595	592	580	598	625	595	567	570	583	
17	584	579	578	568	569	566	555	551	535	539	549	564	558	568	574	555	570	584	586	589	584	585	586	590	
18	592	586	584	590	578	576	578	561	558	551	538	540	543	556	558	561	573	582	591	599	577	582	585	584	
19	578	574	578	577	577	575	572	565	545	544	549	548	550	547	549	559	559	576	582	589	583	582	580	581	
20	589	584	575	573	577	567	560	553	549	540	545	554	562	565	569	562	576	585	589	590	588	587	587	584	
21	589	590	587	584	587	579	574	564	550	546	541	545	558	569	577	576	596	605	601	600	596	588	587	585	
22*	585	586	586	587	588	585	585	577	566	558	548	552	560	564	574	582	580	591	601	596	591	588	587	591	
23	587	583	578	578	581	581	575	568	563	559	553	542	553	558	577	578	564	581	592	590	587	588	587	586	
24	586	586	586	585	588	584	581	578	568	554	556	555	558	562	565	577	585	591	594	600	602	586	583	586	
25	591	589	583	584	587	580	567	560	563	562	550	547	552	555	552	574	583	596	595	593	589	588	585	581	
26**	578	578	578	579	579	576	574	568	562	549	543	549	550	558	567	585	596	602	605	603	603	602	601	600	
27**	600	598	597	596	598	592	582	567	556	560	554	566	575	577	594	670	695	652	642	602	582	567	527	543	
28**	548	555	566	577	562	525	516	464	430	433	447	476	537	532	569	594	616	639	627	588	513	475	497	512	
29**	520	515	525	522	542	517	510	499	497	466	470	487	486	489	502	519	555	591	589	564	583	566	563	550	
30	546	507	559	541	552	541	525	525	517	511	511	527	535	525	525	538	553	565	570	588	582	571	564	562	
31	560	556	555	556	561	559	550	529	527	527	524	519	525	540	540	550	571	574	614	600	598	596	593	582	
Mean	580	577	577	577	577	571	564	553	544	540	539	540	546	551	560	572	584	590	594	591	585	580	579	579	
Mean*	590	588	587	587	586	584	581	574	565	557	552	552	555	561	569	580	588	596	601	600	598	597	597	596	
Mean**	562	560	564	567	569	551	548	530	515	499	500	518	538	548	556	589	600	611	605	586	568	549	542	549	
June.																									
18000 γ + Tabular Quantities (in γ).																									
1	587	572	578	569	566	562	557	555	550	545	534	546	561	569	571	575	593	611	600	603	603	587	581	571	
2	576	578	568	568	568	561	553	550	551	554	563	563	563	564	580	590	598	590	593	576	591	581	579	575	
3	574	576	578	583	580	581	569	558	547	533	526	526	540	555	567	603	602	590	585	580	572	572	575	579	
4	568	563	567	569	572	562	566	563	554	544	543	543	547	550	582	586	582	579	586	593	578	569	570	567	
5	571	569	570	575	574	582	577	570	570	566	548	546	550	555	560	566	576	593	621	613	592	597	581	566	
6	573	574	567	573	580	578	566	559	552	544	541	543	547	547	552	572	573	579	584	587	592	595	581	569	
7**	573	574	576	579	585	578	568	558	548	544	541	536	529	539	602	607	620	602	584	591	586	573	567	567	
8	566	560	572	569	570	564	560	550	536	518	508	518	557	560	565	565	573	579	580	586	585	585	591	588	
9	585	565	571	570	572	568	564	567	560	554	544	537	540	544	552	565	584	573	593	591	588	580	579	583	
10*	579	571	570	570	574	571	567	562	553	547	539	534	543	553	564	570	578	580	585	585	577	579	578	577	
11*	580	571	571	572	576	577	575	570	564	557	547	547	549	557	568	575	583	594	596	595	589	593	590	591	
12**	607	596	583	580	576	577	581	593	570	548	505	515	531	563	564	562	558	562	571	577	584	582	576	573	
13**	570	573	580	584	580	573	571	561	555	534	520	515	529	552	557	563	558	562	569	576	583	583	581	582	
14	580	584	580	577	585	566	542	555	547	545	547	534	550	552	557	583	569	567	575	581	583	584	579	571	
15	569	570	570	572	570	564	558	541	535	531	544	550	565	570	572	580	575	560	572	578	581	581	582	580	
16*	579	580	572	573	575	572	566	553	544	551	555	556	563	569	575	582	580	583	583	583	583	585	580	580	
17*	581	575	578	573	575	579	568	558	548	542	539	538	553	569	585	564	577	583	581	578	580	583	579	580	
18	580	579	577	574	574	573	573	565	555	539	536	539	539	556	567	591	591	580	598	582	585	584	585	583	
19	585	585	585	586	583	575	566	552	549	551	545	538	556	565	576	579	574	592	593	596	588	587	587	588	
20	587	585	588	590	588	584	570	561	565	565	564	564	552	568	577	591	591	602	587	611	598	596	591	576	
21	582	578	584	580	570	573	566	556	545	542	549	551	549	564	562	575	579	586	593	587	582	580	579	583	
22**	590	589	583	580	589	593	589	566	456	544	504	558	557	526	536	553	569	580	584	576	583	610	575	574	
23**	565	569	560	553	562	540	557	556	551	542	535	531	534	542	580	587	573	579	596	602	610	582	574	587	
24	569																								

TABLE II.—HOURLY MEANS OF HORIZONTAL COMPONENT OF MAGNETIC FORCE AT ABINGER—*continued.*

	0h	1h	2h	3h	4h	5h	6h	7h	8h	9h	10h	11h	Noon	13h	14h	15h	16h	17h	18h	19h	20h	21h	22h	23h	24h	
18000 γ + Tabular Quantities (in γ).																										
July.																										
1	586	582	582	578	580	575	570	565	564	560	557	558	560	562	568	571	575	580	598	607	591	580	578	581		
2**	580	582	580	578	574	571	570	569	562	565	567	573	589	567	560	566	563	593	591	592	600	593	590	592		
3	592	594	591	576	587	588	591	584	575	567	562	552	547	547	555	582	588	595	608	597	596	596	571	569		
4	576	585	587	576	574	569	569	571	558	556	555	550	538	549	558	599	588	599	593	592	584	584	586	590		
5	582	570	572	576	570	585	579	565	549	546	539	549	552	559	555	582	590	597	597	591	584	584	585	586		
6	581	576	576	574	582	583	571	556	549	538	536	548	552	546	574	590	597	606	604	590	590	583	579	577		
7**	573	576	580	586	580	576	554	530	534	538	533	529	521	532	546	564	569	577	592	593	616	604	610	693		
8†	—	—	(530)	(563)	—	(371)	—	—	—	—	—	—	389	403	414	449	470	479	558	551	568	544	527	516	512	
9**	521	528	515	517	492	502	487	490	482	481	484	489	515	524	555	550	565	543	547	551	550	549	541	535		
10	539	541	545	551	541	533	532	522	522	514	471	479	503	518	526	537	556	558	553	563	560	563	550	547		
11	544	541	541	535	542	535	520	516	530	519	517	516	514	520	530	542	550	559	564	558	561	562	564	550		
12	550	539	547	543	530	539	539	536	537	542	540	535	549	555	537	550	559	558	566	564	562	562	566	554		
13*	550	548	545	544	547	549	544	540	535	524	521	523	523	528	542	556	559	562	559	560	557	560	558	537		
14	555	556	558	555	554	546	540	539	533	529	540	549	553	555	555	542	558	561	561	561	563	565	566	569		
15*	559	548	552	557	560	554	540	532	532	532	526	529	530	542	550	557	568	571	571	570	573	569	568	563		
16*	556	556	552	564	562	563	556	549	537	528	528	537	547	549	551	557	562	560	560	567	570	569	564	562		
17*	560	560	560	561	560	558	554	549	544	545	541	541	553	562	571	568	571	577	579	582	572	575	575	576		
18	575	573	573	572	570	565	557	545	537	540	551	555	553	563	558	563	569	573	573	572	575	570	577	561		
19	550	547	554	560	557	551	546	543	530	527	530	524	535	532	560	584	569	564	567	565	563	563	565	564		
20*	562	562	561	561	564	567	562	556	547	534	532	531	534	539	558	573	571	580	578	579	578	573	571	581		
21	569	564	569	573	571	574	574	570	562	559	557	553	558	564	571	576	585	587	588	590	587	589	596	577		
22**	592	561	577	567	543	549	582	548	526	517	517	505	515	520	534	548	563	565	589	586	561	554	539	542		
23	545	551	545	542	552	551	546	546	530	509	512	518	528	533	548	553	548	551	553	563	560	567	562	558		
24	552	549	561	554	555	557	561	559	543	526	512	525	525	533	546	553	558	566	570	568	552	563	558	562		
25	555	554	555	552	557	555	554	550	542	530	530	530	531	521	520	539	563	568	565	571	568	564	567	561		
26	555	562	560	547	558	564	570	563	548	531	526	523	537	521	524	532	543	558	567	569	570	573	571	576		
27	584	573	577	573	571	568	564	555	546	540	544	551	554	552	557	571	556	561	570	579	578	575	574	576		
28	577	571	571	571	578	564	557	555	558	550	540	543	534	541	535	537	559	571	558	571	572	566	562	564		
29	564	552	559	559	573	564	561	554	548	550	548	548	557	545	540	547	546	555	556	560	563	565	568	565		
30	562	561	558	558	560	558	558	554	548	550	547	544	550	549	552	556	555	560	586	588	580	573	571	571		
31**	572	568	568	572	580	560	553	546	540	552	552	536	550	541	551	555	585	599	592	572	576	557	568	550		
Mean	564	561	562	561	561	559	555	549	542	537	533	535	540	542	550	561	566	572	575	576	574	572	570	570		
Mean*	557	555	554	557	559	558	551	545	539	533	530	532	537	544	554	562	566	570	569	572	570	569	567	568		
Mean**	568	563	564	564	554	552	549	537	529	531	527	526	538	537	549	557	569	575	582	579	581	571	570	582		
18000 γ + Tabular Quantities (in γ).																										
August.																										
1	565	556	552	556	550	552	545	538	541	545	553	553	553	554	555	561	568	573	591	578	574	571	581	568		
2	557	560	564	574	573	562	554	551	552	549	545	552	554	555	554	562	565	572	568	575	575	578	571	571		
3	567	569	565	565	568	567	560	551	539	527	523	529	534	546	561	576	579	582	580	579	598	581	577	568		
4**	568	570	569	571	569	566	561	553	545	535	536	542	560	569	562	563	573	596	582	596	594	582	581	586		
5**	591	560	537	563	540	551	550	543	540	527	523	528	528	534	564	597	608	599	591	581	571	575	540	540		
6	570	564	564	564	558	554	552	535	528	531	529	523	524	538	554	565	568	571	569	578	563	550	534	549		
7**	554	556	565	553	556	560	560	545	527	509	501	529	537	537	548	547	555	561	571	568	564	564	560	560		
8	557	557	558	559	555	558	552	538	543	534	534	540	544	543	545	556	567	576	575	576	572	570	570	568		
9	570	555	557	561	562	565	567	564	558	546	536	541	552	549	553	555	559	565	568	572	571	570	572	568		
10*	566	564	563	562	562	561	559	554	548	543	538	541	542	545	548	561	554	564	572	575	576	579	576	570		
11	572	571	575	572	583	575	572	560	565	566	564	558	554	544	545	548	548	557	563	576	579	579	579	573		
12	572	573	575	573	566	572	568	546	547	559	547	530	546	543	542	558	585	595	566	563	560	557	558	559		
13	562	559	574	580	576	558	561	559	551	540	537	548	560	550	550	548	559	560	570	568	570	570	566	568		
14*	568	567	563	558	557	555	551	544	538	536	535	537	540	541	544	550	559	566	574	571	572	571	572	576		
15*	568	566	566	566	563	559	553	542	533	528	532	540	546	558	560	561	567	570	577	573	575	572	571	568		
16†	568	—	—	—	—	—	—	—	—	—	—	—	525	526	535	552	560	565	569	579	581	579	584	578		
17	578	579	586	573	569	568	563	556	546	541	534	539	545	552	563	568	568	576	580	573	573	570	570	575		
18	575	568	568	568	569	568	561	550	537	529	525	534	546	553	557	556	571	569	578	568	572	575	571	568		
19	571	560	565	565	568	565	558	551	541	530	521	527	536	543	552	557	560	564	566	573	572	569	568	568		
20*	570	571	571	572	571	566	561	553	543	535	531	534	547	560	570	580	578	565	569	571	573	574	568	566		
21	566	570	568	570	571	569	565	(556)																		

TABLE II.—HOURLY MEANS OF HORIZONTAL COMPONENT OF MAGNETIC FORCE AT ABINGER—continued.

	0h	1h	2h	3h	4h	5h	6h	7h	8h	9h	10h	11h	Noon	13h	14h	15h	16h	17h	18h	19h	20h	21h	22h	23h	24h
September.																									
18000 γ + Tabular Quantities (in γ).																									
1	566	573	569	561	562	558	553	544	535	530	536	550	561	562	562	561	565	569	571	576	579	579	576	578	578
2	594	575	574	560	567	555	545	532	518	508	504	528	554	566	566	558	557	558	558	554	566	570	570	567	587
3**	570	576	572	575	579	570	570	557	537	499	510	528	541	543	560	557	558	558	554	556	550	546	542	548	
4	549	550	553	553	554	553	543	535	522	512	507	505	522	534	544	548	553	557	562	573	563	566	562	562	
5	562	560	563	564	562	551	549	555	550	541	538	534	541	545	547	553	559	565	562	559	567	569	565	563	
6	562	563	565	570	570	563	560	547	539	518	527	532	532	538	553	562	563	563	562	573	564	564	563	565	
7**	566	564	563	564	566	566	560	551	544	539	531	529	531	550	563	566	563	563	562	573	564	564	563	565	
8**	544	543	548	558	547	543	508	520	506	510	502	499	503	508	522	525	546	570	558	557	535	548	526	517	
9	522	533	539	539	538	531	523	522	527	530	530	533	539	544	542	543	534	545	540	542	535	536	546	561	
10	551	545	549	552	556	559	561	554	543	535	531	543	535	556	540	536	540	535	552	556	557	561	563	564	
11	561	563	557	550	555	557	563	555	543	532	526	518	523	541	536	538	546	541	548	556	563	559	559	564	
12*	561	556	556	561	554	564	561	550	539	526	525	531	537	540	546	548	552	556	564	561	569	567	575	568	
13	567	567	568	568	568	569	569	564	551	540	533	532	541	551	565	562	543	553	565	570	569	569	567	573	
14	573	581	577	581	578	591	567	550	535	528	523	528	526	538	549	548	552	561	561	562	564	567	577	572	
15	555	557	559	563	558	554	548	536	527	523	523	531	534	547	557	563	563	559	562	559	562	565	565	564	
16*	565	563	564	564	564	560	555	546	537	529	525	531	544	549	555	554	559	562	567	568	569	569	569	568	
17*	568	568	567	566	567	562	563	558	547	538	537	547	556	566	571	568	566	564	570	574	572	573	575	573	
18**	570	570	575	572	567	564	563	552	541	543	531	539	553	558	563	575	596	587	586	597	563	558	531	544	
19	544	553	554	559	553	549	548	543	538	529	496	494	507	515	520	526	522	529	541	561	569	576	560	558	
20	560	557	559	560	558	552	550	548	540	531	523	531	534	533	539	537	552	565	565	566	561	558	556	556	
21*	563	562	554	556	559	560	560	559	555	543	536	532	533	544	551	554	560	562	564	570	573	583	575	572	
22	570	567	571	570	570	573	572	565	560	550	528	524	532	550	536	556	560	567	579	576	574	577	568	573	
23	570	560	561	565	565	563	557	547	536	532	528	534	536	548	555	545	560	564	572	571	568	584	574	574	
24	609	579	558	552	559	553	550	546	541	535	532	536	552	560	563	564	580	570	582	585	585	587	586	576	
25**	553	564	579	565	568	568	559	550	526	494	483	507	515	521	520	519	516	540	541	552	539	584	557	543	
26	552	544	542	549	548	545	534	532	533	529	524	526	534	534	547	547	553	557	565	562	562	565	564	566	
27	570	565	563	559	558	562	559	544	523	525	526	527	530	531	532	539	550	557	558	566	563	574	571	566	
28*	565	566	566	567	568	568	562	551	541	533	531	538	543	547	549	549	555	559	560	565	567	568	569	568	
29	567	571	570	570	570	566	566	560	550	537	539	543	551	558	567	570	570	570	572	579	581	582	583	589	
30	589	585	581	579	572	570	567	547	542	533	537	540	541	551	546	557	562	567	567	568	568	570	572	571	
Mean	564	563	563	563	562	559	555	547	538	528	524	529	536	545	549	551	555	558	562	565	563	567	563	564	
Mean*	564	563	561	563	562	563	560	553	544	534	531	536	543	549	554	555	558	561	565	568	570	572	573	570	
Mean**	561	563	567	567	565	557	552	546	531	517	511	520	529	537	546	548	550	557	558	559	544	556	538	538	
October.																									
18000 γ + Tabular Quantities (in γ).																									
1	571	570	570	570	573	574	570	557	539	524	518	523	537	552	561	568	561	563	567	569	564	583	578	567	
2**	569	569	569	570	572	575	572	561	533	524	509	505	524	535	532	532	546	538	537	573	554	554	553	550	
3	557	555	558	559	560	561	556	552	537	516	511	512	527	525	537	540	548	547	556	565	567	572	571	567	
4	571	563	562	560	558	563	562	555	545	528	515	518	534	550	557	562	562	565	564	573	575	577	577	576	
5	577	576	567	579	604	594	573	574	559	527	520	515	509	527	542	547	537	523	529	530	543	539	553	558	
6	555	558	571	555	553	559	557	531	529	527	528	533	526	532	540	531	545	543	544	558	562	566	563	570	
7	573	579	571	558	558	582	576	553	538	519	517	518	529	529	538	541	544	544	547	540	542	554	564	564	
8	588	564	560	561	564	571	569	564	548	538	526	523	532	535	546	555	551	552	562	564	566	564	563	563	
9*	561	561	558	563	563	563	560	555	544	534	529	532	537	544	552	556	555	562	569	572	576	576	572	572	
10*	570	570	571	571	571	571	569	562	554	544	539	530	541	547	553	561	568	569	574	576	577	579	577	571	
11*	570	575	577	570	568	570	565	563	564	550	542	542	547	547	553	558	565	571	572	572	573	576	576	577	
12	578	563	564	566	568	571	570	560	558	549	543	547	558	562	564	563	562	565	568	568	571	568	567	565	
13	564	565	565	567	571	567	565	555	545	531	530	529	539	547	554	548	538	553	543	557	564	557	567	565	
14	572	566	555	555	555	553	551	547	542	538	534	537	534	539	547	537	545	555	557	556	552	559	561	562	
15	562	562	558	564	567	571	571	563	554	542	531	518	541	550	561	558	559	564	567	562	580	567	566	567	
16	570	559	561	562	565	564	556	565	551	530	524	529	522	538	531	536	540	555	561	564	563	565	561	558	
17	560	561	563	563	563	562	560	555	549	538	532	533	537	541	547	558	558	561	566	541	527	569	574	565	
18	567	569	570	573	571	574	571	581	532	521	483	452	449	450	437	436	516	462	447	491	520	496	511	500	
19**	565	512	516	516	514	514	509	501	492	479	474	480	490	481	498	519	529	525	537	536	539	542	539	535	
20	539	539	535	537	537	537	541	526	512	499	491	496	514	523	529	531	538	547	552	552	549	556	557	544	
21	581	541	529	536	541	547	543	540	530	523	521	513	521	524	534	541	545	547	555	555	559	559	558	551	
22**	552	558	552	542	543	547	549	545	519	529	536	533	530	528	531	527	543	540	554	562	564	544	545	547	
23*	550	547	549	552	554	558	547	549	547	544	539	519	525	529	539	544	549	553	557	558	558	560	558	559	
24**	559	557	569	561	554	555	559	564	521	532	538	523	515	529	528	528	544	556	559	556	557	555	541	569	
25**	520																								

TABLE II.—HOURLY MEANS OF HORIZONTAL COMPONENT OF MAGNETIC FORCE AT ABINGER—continued.

	0h	1h	2h	3h	4h	5h	6h	7h	8h	9h	10h	11h	Noon	13h	14h	15h	16h	17h	18h	19h	20h	21h	22h	23h	24h	
November.																										
18000 γ + Tabular Quantities (in γ).																										
1	553	553	559	559	561	566	563	564	556	543	538	536	533	540	543	553	507	570	575	573	555	550	557	504	555	504
2**	504	504	503	505	581	548	553	551	527	527	518	519	520	514	504	525	530	502	522	523	515	541	549	549	545	555
3**	554	538	546	549	546	545	547	547	548	522	502	526	531	491	(525)	515	504	481	511	510	510	528	528	532	532	532
4	535	539	545	542	544	554	550	545	547	538	523	512	513	521	541	544	530	529	537	550	537	552	555	550	550	550
5	550	549	548	550	552	558	555	552	547	539	533	531	530	531	529	532	541	544	544	544	554	554	554	554	554	554
6	562	555	555	559	566	567	565	569	562	555	550	548	546	542	540	544	552	556	555	553	547	545	554	554	559	559
7	553	557	559	559	558	560	563	567	566	557	552	546	552	553	555	552	554	555	553	544	552	552	564	564	560	560
8*	560	564	561	559	562	564	565	562	(559)	(554)	549	549	552	552	555	555	559	562	564	565	567	568	567	567	567	567
9*	567	566	566	565	566	567	570	567	560	552	554	554	554	555	555	559	567	568	574	574	573	572	570	572	572	572
10	570	569	571	576	580	578	585	600	582	563	549	545	540	553	512	487	516	532	533	542	545	541	537	537	537	536
11	548	549	549	549	556	559	556	554	544	532	521	526	536	545	546	543	549	566	567	554	572	554	606	549	549	549
12	547	547	557	564	574	572	572	570	559	551	544	539	540	539	539	543	(564)	564	562	555	541	531	539	547	547	547
13**	552	554	559	563	557	552	550	541	539	518	506	516	516	516	511	513	515	513	512	512	510	523	533	531	531	531
14	544	546	536	533	537	537	537	538	540	531	525	532	528	543	536	539	527	539	547	555	550	557	547	547	547	547
15**	549	537	544	549	553	549	552	554	550	544	541	536	539	548	551	526	531	549	539	543	534	571	534	534	534	534
16	546	541	570	559	551	557	561	557	547	539	517	537	541	539	547	557	557	554	550	555	550	547	550	570	570	570
17**	568	554	558	557	554	559	559	566	533	516	536	534	536	540	553	533	566	549	545	559	579	555	549	562	562	562
18	567	558	552	549	558	555	545	541	541	540	541	541	540	541	543	546	551	548	561	557	572	559	551	555	555	555
19	553	555	557	557	556	556	559	560	554	547	550	550	549	551	555	560	548	554	553	557	557	558	557	557	557	557
20	555	556	557	559	561	562	562	564	555	546	546	543	546	552	547	558	563	564	565	565	565	573	563	563	563	563
21	573	564	563	563	568	568	567	568	560	554	552	550	555	562	565	565	568	570	571	571	571	571	570	568	568	568
22*	568	567	568	569	571	572	571	568	562	553	547	550	554	563	567	571	572	573	575	576	568	569	570	570	570	570
23	576	569	570	568	569	565	558	557	566	560	559	553	548	547	550	556	559	561	563	566	567	567	567	567	567	567
24	565	566	567	569	574	575	567	565	565	558	544	547	543	540	534	548	555	559	552	552	556	560	564	564	564	564
25	546	555	559	559	567	568	569	571	555	558	553	547	550	541	533	548	560	562	563	563	563	562	562	562	562	562
26	563	563	569	573	568	571	571	567	565	560	552	543	549	542	531	534	550	559	552	547	553	564	565	565	565	565
27	565	564	565	567	569	572	572	565	560	560	555	552	554	543	549	556	559	562	563	563	558	555	560	560	560	560
28*	565	563	565	567	571	570	568	569	567	560	555	555	558	560	562	563	567	568	568	565	566	566	566	566	566	566
29*	568	568	568	571	571	573	573	572	567	563	560	560	563	561	562	562	566	570	570	571	569	569	568	568	568	568
30	569	569	571	570	574	574	573	570	567	565	562	560	563	565	569	571	574	580	578	568	559	559	568	568	568	568
Mean	559	557	559	560	563	562	562	561	555	547	541	541	543	542	544	545	551	552	555	555	554	556	558	558	558	558
Mean*	566	566	566	566	568	569	569	568	563	556	553	554	556	558	560	562	566	568	570	570	567	568	568	569	569	569
Mean**	557	549	554	557	558	551	552	552	539	525	521	526	528	522	529	522	529	510	526	529	531	544	530	546	546	546
December.																										
18000 γ + Tabular Quantities (in γ).																										
1**	568	566	588	569	580	566	600	579	561	559	563	550	553	552	556	560	561	565	565	561	561	563	564	566	566	566
2	566	565	571	567	570	576	571	569	567	564	561	558	561	560	568	568	569	572	572	574	565	565	569	565	565	565
3	561	560	561	560	565	564	565	563	561	557	553	554	556	560	563	564	569	574	565	561	567	566	567	564	564	564
4*	566	561	564	565	567	570	568	565	561	559	556	556	561	569	563	559	564	568	571	573	573	571	569	574	574	574
5**	566	564	564	564	564	567	569	569	569	564	557	552	554	564	573	575	586	591	578	582	568	561	543	566	566	566
6**	547	546	549	572	559	560	543	539	529	526	518	520	529	520	533	526	535	521	552	532	538	546	573	551	551	551
7	553	549	541	549	549	553	549	551	551	535	536	538	536	533	546	546	545	559	559	554	563	559	558	560	560	560
8	559	559	557	562	561	564	570	570	559	549	542	546	554	550	542	556	559	563	562	562	556	560	562	564	564	564
9	566	564	563	565	565	569	570	568	559	548	544	549	554	549	555	551	552	556	553	553	557	558	561	564	564	564
10	563	563	564	564	566	567	567	568	562	556	551	556	554	554	546	555	562	567	567	563	557	559	556	563	563	563
11	561	562	559	560	564	569	573	569	564	556	549	553	558	566	565	564	561	572	568	560	557	549	575	562	562	562
12**	556	559	556	553	560	579	579	573	554	535	523	525	532	548	558	557	554	548	556	558	560	570	567	562	562	562
13**	549	551	549	552	557	568	570	564	565	552	546	555	557	544	542	551	556	557	567	565	564	554	562	560	560	560
14	554	552	557	559	562	565	567	564	559	557	549	519	556	559	553	549	553	555	564	563	575	563	567	563	563	563
15	566	560	559	559	560	562	571	563	557	545	542	546	550	555												

TABLE III.—HOURLY MEANS OF VERTICAL COMPONENT OF MAGNETIC FORCE AT ABINGER.

	0h	1h	2h	3h	4h	5h	6h	7h	8h	9h	10h	11h	Noon	13h	14h	15h	16h	17h	18h	19h	20h	21h	22h	23h	24h	
January.																										
42000 γ + Tabular Quantities (in γ).																										
1**	923	921	918	916	917	917	918	918	916	916	918	913	913	920	922	921	920	918	919	920	920	925	925	922	922	922
2	920	918	918	918	918	918	918	921	918	917	920	921	922	923	925	925	923	923	923	923	923	923	923	921	921	921
3	920	919	915	915	917	918	919	922	922	920	922	919	914	918	921	924	922	921	920	919	919	919	919	919	919	919
4	919	918	917	917	917	917	915	915	915	915	916	916	917	922	923	922	922	919	919	921	922	922	920	919	919	919
5	918	917	918	918	918	918	918	920	922	920	918	913	910	919	925	925	922	921	921	922	921	921	921	921	921	922
6	921	920	920	920	918	920	920	919	919	919	922	918	915	922	925	925	923	923	922	921	923	923	919	919	919	919
7	920	917	917	914	915	919	919	919	916	916	917	916	916	921	924	924	924	924	922	922	922	920	920	920	920	919
8	920	920	920	920	920	920	920	921	919	917	914	907	912	920	925	925	924	923	922	921	920	920	920	918	919	919
9	921	921	921	920	921	922	921	920	920	918	918	916	916	923	928	928	930	929	929	926	924	923	923	922	922	922
10	922	922	919	922	922	922	922	922	919	917	919	918	919	924	927	927	927	927	927	927	929	928	928	925	924	924
11*	923	923	922	923	923	924	924	925	921	918	916	916	917	922	928	926	925	925	924	924	923	923	922	922	920	920
12*	921	921	921	922	923	924	924	923	923	922	920	916	914	919	925	926	925	925	925	925	924	924	923	922	922	922
13*	924	923	923	924	925	926	926	926	923	923	923	919	918	924	926	926	925	924	926	925	926	925	925	925	925	925
14*	924	924	924	924	925	925	925	925	923	921	923	923	921	926	932	930	928	928	929	929	929	929	929	928	926	926
15	924	924	923	923	923	923	924	924	924	924	922	923	925	927	928	925	922	923	923	924	924	925	924	924	923	923
16	922	920	920	921	922	924	924	927	928	924	923	926	927	928	928	928	926	926	925	926	925	925	924	923	923	923
17	923	923	923	923	923	924	924	925	925	923	929	930	928	927	927	924	924	923	923	924	924	924	924	923	924	924
18	925	924	923	923	923	923	923	924	925	923	926	926	924	926	929	929	929	929	929	929	929	929	929	929	929	928
19	926	926	926	927	926	926	926	927	927	926	926	927	930	929	932	930	927	927	929	929	929	928	926	926	926	926
20	927	926	926	926	925	926	925	927	927	930	924	924	924	926	931	933	932	932	931	930	928	927	927	927	927	927
21	925	925	922	923	923	924	922	923	927	927	931	930	933	932	934	932	931	931	930	930	931	928	925	925	925	925
22	927	927	928	928	927	928	927	928	928	928	923	923	926	936	938	937	934	934	934	933	933	932	928	928	928	928
23**	926	923	923	925	926	926	925	923	926	923	926	923	925	928	933	937	937	948	937	936	936	934	933	931	931	931
24	932	932	931	930	930	930	929	931	932	929	929	928	927	929	938	939	937	938	937	935	934	932	931	931	931	931
25	931	930	929	929	929	929	927	927	926	927	922	917	919	927	934	937	935	934	934	934	934	934	932	932	932	932
26	932	933	933	932	932	931	930	929	928	925	923	922	923	928	933	933	931	931	930	930	933	939	940	939	939	939
27**	937	927	928	927	925	903	907	910	910	909	912	917	923	933	939	949	953	949	959	952	945	945	940	936	936	936
28**	936	936	936	936	937	938	937	936	933	932	933	932	936	939	939	937	939	943	945	942	939	933	932	932	932	932
29**	929	928	929	929	926	929	931	931	929	926	923	928	929	931	941	947	948	947	950	945	943	941	936	932	932	932
30	932	931	931	931	930	933	933	933	932	929	930	930	931	937	942	940	940	939	940	938	937	936	933	933	933	933
31*	933	931	931	931	931	932	932	933	933	932	929	928	930	932	936	936	935	935	934	935	935	935	934	934	934	934
Mean	925	924	924	924	924	924	924	924	924	922	923	921	922	926	930	931	930	930	930	929	928	928	927	926	926	926
Mean*	925	925	924	925	925	926	926	926	925	923	922	920	920	925	929	929	928	927	928	927	927	927	926	925	925	925
Mean**	930	927	927	927	926	923	924	924	923	921	922	923	925	930	935	938	939	941	942	939	937	936	933	930	930	930
February.																										
42000 γ + Tabular Quantities (in γ).																										
1	934	932	933	931	932	934	932	933	932	930	928	928	924	929	933	935	934	934	934	935	935	938	937	935	935	934
2	933	931	930	932	931	931	931	931	932	932	930	932	929	929	929	929	933	934	934	935	937	936	935	935	935	930
3	930	928	925	926	926	928	930	932	933	930	930	934	938	941	945	945	946	948	945	943	943	939	939	936	936	936
4	935	934	933	933	931	933	933	930	932	930	930	930	936	941	942	945	942	942	941	939	936	935	934	934	934	934
5	936	936	934	934	934	929	929	931	932	929	925	928	929	936	943	942	937	937	936	935	934	934	936	936	936	936
6	935	934	935	935	935	935	933	932	931	928	925	921	923	931	937	940	938	936	936	938	937	935	935	934	934	934
7	935	932	930	932	933	935	933	930	931	926	926	926	928	934	941	942	942	938	937	937	939	939	938	936	936	936
8*	937	937	937	937	937	937	935	933	935	934	929	928	929	934	939	941	942	942	942	942	941	940	940	939	939	939
9*	939	938	938	938	938	937	935	934	934	932	930	932	933	939	943	945	943	942	940	938	938	936	936	935	935	935
10*	935	935	936	936	936	937	936	936	935	930	926	925	927	931	937	939	941	941	941	943	943	941	939	938	938	938
11*	939	938	938	937	937	938	937	937	935	932	932	932	932	933	947	943	942	942	944	945	942	940	938	937	937	937
12	936	936	935	936	937	938	937	936	931	926	921	921	921	928	936	939	938	937	938	943	948	946	945	941	941	941
13**	940	939	939	939	939	939	938	938	934	929	922	920	925	929	939	942	945	944	948	952	954	952	950	948	948	948
14	946	944	940	933	924	928	933	936	935	934	935	935	938													

TABLE III.—HOURLY MEANS OF VERTICAL COMPONENT OF MAGNETIC FORCE AT ABINGER—*continued.*

	0h	1h	2h	3h	4h	5h	6h	7h	8h	9h	10h	11h	Noon	13h	14h	15h	16h	17h	18h	19h	20h	21h	22h	23h	24h	
March.																										
42000 γ + Tabular Quantities (in γ).																										
1	940	939	939	939	939	939	939	941	943	943	937	932	931	936	939	941	946	944	944	943	941	941	941	941	941	941
2*	940	939	939	938	937	938	936	939	941	939	934	933	934	940	942	941	943	941	941	939	939	939	939	940	941	941
3	940	939	939	939	938	938	936	938	938	934	927	924	928	934	930	937	937	938	938	937	937	937	938	938	939	939
4*	939	938	938	937	936	936	936	941	939	932	929	927	929	931	935	939	941	940	939	939	937	937	938	938	938	938
5*	938	937	937	937	936	936	936	938	936	933	930	924	926	931	935	939	937	934	934	934	934	934	934	934	935	935
6	936	936	935	935	935	935	934	936	934	926	922	918	919	924	929	934	938	937	938	937	936	936	935	935	935	935
7	936	935	936	936	935	935	934	935	936	932	924	917	917	922	929	936	941	941	942	942	944	943	941	939	939	939
8	939	938	938	936	935	936	935	936	935	936	935	931	924	925	926	930	939	940	939	939	939	938	937	936	936	936
9*	936	935	936	935	936	936	936	936	934	929	924	916	916	923	929	935	939	938	937	936	935	934	934	934	934	934
10	934	934	935	934	934	934	934	934	934	932	927	925	920	924	926	928	934	941	942	941	939	936	934	933	928	928
11**	927	929	929	930	931	929	929	928	924	920	913	912	925	930	950	980	987	988	980	980	983	974	903	958	958	958
12**	942	932	917	912	920	927	932	933	932	924	918	918	924	932	939	950	959	954	953	946	945	937	933	933	933	933
13**	936	936	936	936	931	934	936	939	939	935	930	927	922	929	941	946	958	962	961	960	952	949	941	933	933	933
14**	921	922	924	926	932	936	938	936	933	927	921	917	919	925	938	949	954	962	955	954	941	939	936	934	934	934
15	934	924	925	929	932	936	938	939	937	932	924	914	920	927	934	943	949	951	949	944	941	940	939	936	936	936
16	934	933	932	933	934	934	935	936	933	927	919	916	918	923	929	936	940	939	936	936	935	936	935	933	933	933
17	932	932	931	931	930	930	930	933	933	928	920	912	913	918	927	933	940	943	942	940	938	938	936	936	936	936
18	935	933	933	931	929	926	927	931	929	924	918	916	916	922	928	934	941	941	940	938	937	935	933	933	933	933
19	931	930	930	930	929	929	931	933	931	923	920	916	914	922	929	935	940	936	934	933	935	933	933	933	932	932
20	931	930	930	930	927	926	929	933	931	922	915	912	912	922	927	931	936	935	933	933	932	932	932	932	927	927
21	928	927	923	920	923	924	925	927	925	922	911	905	905	907	913	923	933	938	937	937	935	934	934	934	934	934
22	932	930	930	930	930	930	930	930	925	920	908	903	906	910	916	927	936	939	941	942	943	943	941	939	939	939
23**	937	933	932	927	924	919	918	919	916	915	912	910	910	915	926	931	934	932	932	931	930	930	932	930	930	930
24	929	929	929	929	927	927	930	929	925	918	913	910	912	918	925	929	932	932	930	931	930	931	930	930	930	930
25	926	925	921	921	924	926	929	932	930	922	915	918	921	926	933	940	941	938	933	933	931	928	926	926	926	926
26	927	925	926	927	926	928	929	928	922	918	912	911	915	920	924	931	937	938	936	933	933	931	929	927	927	927
27	926	923	924	924	926	929	931	931	926	918	909	904	905	910	917	924	929	929	931	929	928	927	927	927	927	927
28	924	921	921	921	923	924	927	927	921	912	902	892	894	903	913	923	926	927	929	929	928	926	926	925	925	925
29	923	922	922	923	921	924	926	927	922	914	905	894	895	905	913	919	924	924	924	924	924	924	924	924	924	924
30	922	920	921	921	922	923	923	924	921	916	910	907	908	914	921	923	925	922	923	923	925	923	923	923	922	922
31*	923	922	920	921	922	923	925	923	920	913	906	903	903	910	915	920	920	920	920	920	920	922	922	922	923	923
Mean	932	931	930	930	930	931	931	933	930	925	919	915	916	922	929	936	940	940	939	938	937	936	934	933	933	933
Mean*	935	934	934	934	933	934	934	935	934	929	925	921	922	927	931	935	936	935	934	934	933	933	934	934	934	934
Mean**	933	930	928	926	928	929	931	931	929	924	919	917	920	928	941	951	958	960	956	954	950	945	941	938	938	938
April.																										
42000 γ + Tabular Quantities (in γ).																										
1**	922	922	921	919	920	922	925	923	918	908	893	888	890	893	902	915	920	927	931	930	930	930	925	926	926	926
2	925	923	923	923	923	920	918	917	910	903	901	899	900	908	920	929	928	926	922	921	922	922	924	925	925	925
3	924	924	924	924	924	925	930	930	923	912	901	893	901	919	935	940	944	940	936	932	930	926	925	923	923	923
4	919	918	920	919	914	919	922	919	914	906	899	894	895	907	915	929	937	939	942	935	931	930	927	923	923	923
5	921	919	917	915	919	924	926	925	919	907	900	893	896	905	917	927	935	932	929	926	923	922	924	922	922	922
6	917	917	917	918	919	921	922	919	914	905	897	892	895	907	914	922	925	927	930	929	927	926	924	914	914	914
7**	908	912	916	914	908	912	918	918	914	906	896	896	897	907	918	923	925	929	926	926	925	921	901	915	915	915
8	911	891	907	915	919	921	926	925	914	906	897	897	901	909	920	929	937	935	932	930	928	928	920	925	925	
9	923	923	924	924	923	925	929	928	917	906	898	888	898	908	923	933	941	940	937	931	930	929	929	926	926	
10**	924	910	923	926	928	930	923	920	915	917	914	907	905	911	924	927	937	942	944	940	935	930	927	920	920	
11	919	921	924	925	926	929	934	934	926	914	899	900	899	908	919	926	934	933	930	929	929	926	926	924	924	
12*	925	923	923	925	925	926	929	927	920	911	899	891	894	903	914	921	926	925	925	925	925	925	923	923	923	923
13*	924	924	923	923	923	926	927	927	921	911	904	899	899	904	911	918	921	922	923	924	924	926	925	924	924	
14	925	923	923	923	923	925	925	923	917	908	901	896	894	904	912	918	921	923	924	923	923	923	923	921	921	921
15	922	922	921	921	922	924	926	923	917	907	901	897	892	897	905	912	915	918	920	922	925	927	927	927	927	927
16	917	915	914	913	914	913	916	921	919	914	908	907	908	906	909	911	917	932	937	937	930	928	925	920	920	
17	916	915	902	910	914	917	920	922	917	909	907	900	898	906	914	919	926	926	927	926	926	927	924	922	922	
18	922	922	922	922	922	922	923	925	920	913	911	905	904	912	920	925	927	927	924	923	922	922	922	923	924	924
19	925	923	923	921	921	924	924	922	914	903	897	897	900	909	919	925	928	929	929	931	932	933	931	928	928	
20**	911	909	913	910	907	917	922	924	922	914	9															

TABLE III.—HOURLY MEANS OF VERTICAL COMPONENT OF MAGNETIC FORCE AT ABINGER—*continued.*

	0 ^h	1 ^h	2 ^h	3 ^h	4 ^h	5 ^h	6 ^h	7 ^h	8 ^h	9 ^h	10 ^h	11 ^h	Noon	13 ^h	14 ^h	15 ^h	16 ^h	17 ^h	18 ⁿ	19 ^h	20 ^h	21 ^h	22 ^h	23 ^h	24 ^h		
May.																											
42000 γ + Tabular Quantities (in γ).																											
1*	921	921	921	921	922	923	921	918	913	905	895	888	890	902	911	915	917	920	920	920	922	923	921	921	921	921	
2*	921	920	921	921	922	920	918	915	912	897	884	884	889	896	901	910	916	920	922	920	920	920	920	920	920	920	
3*	921	922	921	920	923	925	925	923	918	911	900	894	898	906	913	918	921	924	925	922	920	920	919	920	920		
4	920	920	920	920	923	923	923	914	909	903	897	890	889	901	915	925	927	927	927	925	924	923	923	920	920		
5†	920	921	923	923	921	906	903	902	900	904	898	—	—	—	—	—	—	—	—	—	—	—	—	—	—		
6†	—	—	—	—	—	—	—	—	—	—	—	—	—	899	910	915	923	926	925	923	923	923	923	923	923		
7	921	923	923	923	925	925	923	920	912	902	886	879	883	894	911	920	934	937	935	928	925	925	923	922	922		
8	921	920	914	906	911	912	915	909	908	901	898	898	901	903	918	928	931	934	935	930	926	925	924	923	923		
9	923	921	923	925	928	928	928	924	915	907	898	898	897	901	911	920	925	929	928	927	925	922	921	920	920		
10**	920	920	921	923	925	925	923	915	908	903	897	896	896	901	908	925	942	958	957	949	935	925	908	889	889		
11	903	912	906	908	916	923	921	918	918	911	908	906	909	918	931	953	971	988	981	966	951	935	925	925	925		
12**	919	920	919	925	929	929	934	933	916	905	898	902	907	924	931	934	938	942	950	941	932	929	926	920	920		
13	903	905	910	909	903	903	905	908	910	908	905	911	917	922	930	937	948	955	954	948	939	932	926	925	925		
14	925	916	909	906	913	917	916	915	912	904	899	897	901	916	925	933	940	938	932	929	927	926	927	921	921		
15	914	911	914	919	922	926	924	922	917	909	906	901	902	907	917	923	929	936	937	932	929	927	918	910	910		
16	909	916	918	920	923	925	924	916	913	906	899	896	899	907	916	924	928	932	935	940	928	925	925	923	923		
17	920	902	904	912	921	921	924	921	917	912	904	903	908	917	924	926	934	934	931	927	926	924	924	925	925		
18	925	924	925	923	922	913	913	910	911	905	904	905	908	919	930	942	939	938	940	948	935	930	928	926	926		
19	926	923	922	926	928	928	928	926	922	921	914	909	909	913	921	931	935	940	940	941	935	928	926	927	927		
20	926	921	923	926	928	930	930	928	919	906	904	902	906	914	919	932	930	924	924	929	928	927	927	927	927		
21	927	926	926	926	927	928	929	926	920	913	897	893	900	912	921	926	930	934	931	930	929	927	927	926	926		
22*	926	926	927	929	931	931	927	924	920	910	900	897	902	902	919	930	933	936	934	931	927	925	924	924	924		
23	924	923	925	927	930	927	926	919	912	905	897	897	902	907	920	926	931	936	938	933	927	924	923	923	923		
24	922	923	923	925	927	929	929	926	917	907	897	896	902	907	909	919	925	932	931	929	929	929	927	924	924		
25	922	920	921	924	928	929	926	924	916	909	907	906	902	910	919	926	933	937	936	934	932	929	927	926	926		
26*	925	925	925	925	929	929	926	925	921	917	909	897	897	907	914	921	929	936	938	936	933	926	924	924	924		
27**	921	921	921	924	927	929	926	917	911	905	900	902	907	908	921	938	948	972	980	972	970	952	930	934	934		
28**	934	938	934	912	900	901	876	872	878	889	902	929	978	1014	1035	1046	1051	1026	1012	970	953	952	941	922	922		
29**	899	892	892	875	894	907	921	931	937	950	956	958	958	967	980	985	987	995	993	986	980	964	953	942	942		
30	942	937	924	936	943	942	939	934	935	939	929	922	922	924	932	936	939	946	950	951	949	947	946	943	943		
31	940	938	938	938	938	941	940	937	933	921	909	905	905	914	921	932	941	943	948	951	952	947	945	940	940		
Mean	921	920	920	920	923	924	923	920	916	910	903	902	906	915	925	934	940	944	944	940	935	931	927	924	924		
Mean*	923	923	923	923	925	926	923	921	917	908	898	892	895	903	912	919	923	927	928	926	924	923	922	922	922		
Mean**	919	918	917	912	915	918	916	914	910	910	911	917	929	943	955	966	973	979	978	964	954	944	932	921	921		
June.																											
42000 γ + Tabular Quantities (in γ).																											
1	938	936	935	933	938	940	937	935	926	924	916	916	920	928	932	933	942	950	955	969	963	955	952	941	941		
2	940	929	931	940	943	943	942	938	928	921	916	909	911	914	918	926	934	938	938	943	946	941	940	938	938		
3	938	938	938	935	934	939	939	936	930	921	916	911	918	927	936	949	959	969	973	967	958	950	943	933	933		
4	933	935	939	943	946	946	942	942	937	930	925	917	916	917	927	941	948	957	958	955	951	944	941	938	938		
5	939	938	938	929	930	934	934	935	938	929	913	905	908	914	921	932	938	948	951	948	943	938	924	928	928		
6	931	930	935	937	939	938	937	935	929	925	914	905	908	911	921	934	937	941	944	946	946	939	929	930	930		
7**	933	935	936	936	938	936	934	931	926	917	913	908	918	925	948	967	977	981	975	962	952	945	941	937	937		
8	937	931	929	933	937	938	937	932	924	922	922	924	933	930	942	950	951	948	946	944	939	937	936	933	933		
9	928	925	928	929	934	935	932	930	929	923	916	914	916	921	929	938	945	947	949	946	945	940	938	933	933		
10*	929	931	932	934	936	935	932	934	932	924	914	913	917	920	929	938	941	941	938	938	939	937	936	935	935		
11*	931	931	932	934	937	937	937	934	933	929	920	917	917	920	925	930	934	937	939	939	937	935	932	932	932		
12**	929	919	921	924	926	921	920	914	912	899	899	908	916	924	931	933	934	938	938	938	938	935	935	936	936		
13**	936	934	929	926	930	929	928	927	924	915	912	919	930	941	944	945	949	945	948	949	947	945	941	940	940		
14	939	936	914	923	926	924	925	929	930	918	911	915	931	934	940	951	948	947	944	941	940	939	936	934	934		
15	932	935	933	934	937	938	939	939	936	928	922	920	926	931	933	937	942	945	941	938	938	936	936	936	936		
16*	936	936	936	937	939	935	933	931	930	924	919	910	917	924	928	934	937	938	938	938	938	936	935	934	935		
17*	934	932	931	929	932	932	932	932	930	923	910	904	909	919	930	936	942	943	938	935	933	933	933	933	933		
18	935	935	934	935	935	935	936	935	929	919	912	908	914	922	930	941	944	944	947	947	943	938	936	935	935		
19	936	936	936	938	940	940	939	938	928	920	907	904	914	923	932	940	941	944	944	945	944	939	935	935	935		
20	934	935	935	938	941	942	942	938	930	921	917	912	912	917	923	933	934	941	942	943	941	940	937	925	925		
21	925	930	932	936	935	936	937	937																			

TABLE III.—HOURLY MEANS OF VERTICAL COMPONENT OF MAGNETIC FORCE AT ABINGER—continued.

	0h	1h	2h	3h	4h	5h	6h	7h	8h	9h	10h	11h	Noon	13h	14h	15h	16h	17h	18h	19h	20h	21h	22h	23h	24h	
September.																										
42000 γ + Tabular Quantities (in γ).																										
1	957	956	948	950	955	956	958	956	953	944	937	939	944	949	956	965	967	962	958	956	956	954	953	954	951	954
2	952	941	934	929	933	936	949	952	950	944	937	940	944	952	953	958	964	962	959	956	956	955	955	955	951	951
3**	947	946	947	951	953	954	956	955	951	944	937	938	947	958	980	1000	1018	1034	1000	987	968	965	963	963	963	
4	962	962	962	962	964	967	965	962	956	949	943	937	939	943	952	960	962	961	959	960	960	958	957	957	957	
5	956	956	957	956	958	958	961	957	950	945	944	944	949	954	956	964	964	972	980	971	964	962	959	957	957	
6	956	956	956	957	958	960	960	959	951	946	947	946	950	952	958	964	964	965	967	970	965	961	961	958	958	
7**	956	955	955	956	956	960	961	960	955	948	943	938	937	948	972	996	1022	1038	1029	1003	1007	991	966	972	972	
8**	966	958	926	937	939	941	944	946	946	945	951	958	963	975	992	1002	1003	1005	990	982	972	972	960	952	952	
9	951	944	938	950	953	959	964	969	964	957	950	947	953	957	962	968	978	987	986	983	979	975	973	966	966	
10	959	949	956	957	959	959	960	959	959	954	955	958	959	969	972	974	973	974	975	971	970	970	967	966	966	
11	962	958	956	960	961	962	966	965	962	958	953	948	953	962	967	970	974	979	977	973	972	968	965	964	964	
12*	962	961	961	958	958	960	963	962	963	962	956	953	956	959	962	964	967	966	964	963	963	962	962	960	960	
13	959	960	960	959	958	958	961	961	958	954	949	947	951	953	958	969	976	973	968	964	962	961	961	959	959	
14	959	958	957	955	946	936	939	944	943	944	946	946	946	947	951	956	956	957	958	957	956	956	955	948	948	
15	950	952	946	948	950	954	955	953	947	939	937	936	937	942	948	953	959	960	961	959	957	955	954	953	953	
16*	954	954	954	954	954	954	956	956	949	941	934	928	927	933	942	949	951	951	952	953	952	951	950	950	950	
17*	951	951	952	951	952	952	951	949	943	934	925	921	918	922	929	941	949	952	952	952	952	952	951	951	950	
18**	951	951	951	950	951	952	951	948	946	938	930	927	925	934	943	953	957	954	949	956	964	967	966	947	947	
19	954	958	960	960	955	955	957	957	956	946	936	945	950	967	968	978	983	987	982	974	968	958	955	956	956	
20	956	955	955	955	956	959	959	955	951	945	941	936	933	937	944	957	967	968	963	962	962	959	956	956	956	
21*	952	948	950	951	953	954	955	954	951	948	945	940	938	941	944	950	957	960	957	957	956	953	950	949	949	
22	949	949	949	949	950	950	955	953	950	945	936	933	930	936	940	947	950	952	953	953	952	953	953	953	953	
23	952	951	951	949	949	950	952	953	946	941	936	926	925	930	936	949	954	954	954	955	956	948	947	946	946	
24	938	923	931	939	943	946	948	946	941	936	933	931	930	927	930	939	948	945	948	948	948	950	940	948	948	
25**	944	948	943	940	942	944	947	945	937	930	927	933	944	953	972	980	986	975	972	970	968	954	930	937	937	
26	929	957	942	948	950	950	951	950	944	942	943	946	951	955	963	965	963	964	961	955	955	952	952	952	952	
27	950	947	945	946	947	951	953	953	949	947	943	946	947	952	960	971	967	961	958	957	957	954	946	948	948	
28*	951	952	952	951	950	950	951	953	952	947	937	934	939	944	950	953	954	950	952	950	950	950	950	950	950	
29	953	951	951	951	950	950	953	954	951	943	935	934	936	939	944	947	949	947	948	949	948	947	948	946	946	
30	945	945	940	942	943	945	950	951	948	946	936	928	933	941	947	948	951	951	949	949	949	949	946	945	945	
Mean	953	952	950	951	952	953	955	955	951	945	941	939	942	948	955	963	968	969	966	963	962	959	955	954	954	
Mean*	954	953	954	953	953	954	955	955	952	946	939	935	936	940	945	951	956	956	955	955	955	954	953	952	952	
Mean**	953	952	944	947	948	950	952	951	947	941	938	930	943	954	972	986	997	1001	988	980	976	970	957	954	954	
October.																										
42000 γ + Tabular Quantities (in γ).																										
1	948	950	949	948	948	947	951	953	948	942	940	939	939	940	945	956	958	954	953	953	952	947	941	944	944	
2**	946	947	948	948	947	948	950	948	942	941	936	928	936	947	960	968	980	988	985	975	956	956	955	953	953	
3	952	952	952	954	950	956	957	959	958	951	947	946	955	958	968	980	989	978	970	966	962	960	958	958	958	
4	956	952	955	955	957	957	957	958	957	953	949	948	949	956	958	961	959	957	958	958	956	952	951	950	950	
5	949	947	948	950	945	935	943	950	950	951	945	944	947	956	964	972	977	982	982	979	972	968	964	960	960	
6	956	955	939	942	948	954	958	958	956	947	944	942	948	951	957	965	977	977	971	965	961	958	956	955	955	
7	950	942	937	936	934	936	938	942	946	940	940	949	955	960	963	967	972	969	968	970	972	967	961	956	956	
8	947	942	945	948	949	950	950	951	952	948	938	938	941	944	951	956	961	962	960	958	956	955	955	953	953	
9*	951	951	948	948	949	951	952	954	952	949	948	944	942	944	948	954	954	953	952	951	951	950	950	950	950	
10*	951	950	949	948	948	948	949	951	947	940	932	923	930	937	942	948	951	950	950	949	950	951	951	951	951	
11*	951	949	942	942	943	945	949	953	950	941	940	939	941	943	949	954	956	954	953	952	952	952	951	953	953	
12	950	949	951	951	950	950	949	951	948	942	937	937	939	943	948	951	951	951	951	951	950	951	953	952	952	
13	952	952	952	952	950	950	951	954	950	944	941	943	946	951	960	967	970	973	972	970	963	962	958	958	958	
14	955	951	950	950	950	950	951	950	946	937	930	927	932	943	952	959	963	961	958	957	958	957	955	953	953	
15	952	950	951	947	945	946	946	947	947	945	942	945	951	952	956	959	957	955	956	956	954	951	952	949	949	
16	946	945	945	945	947	947	948	948	947	944	939	943	945	949	956	967	963	960	958	956	954	954	952	953	953	
17	953	953	953	951	952	952	954	956	956	950	946	945	944	947	950	957	958	957	961	963	968	965	951	951	951	
18	951	951	951	951	951	951	950	950	950	942	934	956	984	1007	1043	1045	1067	1105	1067	1025	987	972	975	971	971	
19**	974	972	971	971	973	973	976	977	974	966	962	964	965	973	978	975	974	974	975	971	971	969	968	966	966	
20	965	962	963	961	960	963	965	968	969	960	952	951	952	956	959	964	965	965	963	964	966	965	958	958	958	
21	951	940	947	952	956	962	963	965	962	957	955	952	951	955	963	965	965	965	965	965	964	964	963	961	961	
22**	961	945	940	945	952	956	957	958	958	955	954	952	951	957	967	973	975	972	972	967	958	959	9			

TABLE III.—HOURLY MEANS OF VERTICAL COMPONENT OF MAGNETIC FORCE AT ABINGER—continued.

	0h	1h	2h	3h	4h	5h	6h	7h	8h	9h	10h	11h	Noon	13h	14h	15h	16h	17h	18h	19h	20h	21h	22h	23h	24h		
November.																											
42000 γ + Tabular Quantities (in γ).																											
1	951	945	946	949	950	952	952	954	952	947	945	945	947	952	957	959	957	954	952	952	954	955	955	952			
2**	951	951	951	949	936	936	934	940	943	947	948	951	953	960	977	980	975	986	990	982	976	971	956	952			
3**	925	933	942	945	943	947	949	951	953	950	951	956	965	980	975	976	986	996	998	982	972	968	964	960			
4	951	947	943	944	947	947	943	949	950	950	950	954	961	963	963	963	966	967	971	964	963	960	957	955			
5	957	955	954	954	953	954	954	957	957	952	946	944	948	951	955	959	961	962	961	962	960	958	955	952			
6	950	949	949	949	947	947	947	946	946	941	939	941	943	945	949	949	951	952	953	956	958	961	950	951			
7	948	949	947	947	948	948	947	947	947	948	945	945	943	945	946	947	951	953	954	957	961	959	953	951			
8*	952	951	946	948	946	947	948	950	951	949	948	949	951	951	(949)	(947)	945	945	946	945	945	946	946	946			
9*	946	945	943	943	942	942	942	944	945	942	937	940	940	944	944	948	949	947	944	944	943	942	942	943	942		
10	943	942	942	941	939	938	938	935	933	936	934	936	947	955	966	978	977	972	975	972	959	958	957	958			
11	958	956	954	954	953	951	949	949	950	946	944	945	948	948	953	953	952	952	949	952	954	951	946	929			
12	937	942	946	947	945	944	945	943	945	946	947	950	954	957	960	960	960	957	953	953	959	954	961	960			
13**	959	956	951	940	941	939	941	942	943	940	940	944	949	961	982	986	990	998	1001	977	982	979	973	970			
14	968	959	958	959	959	961	960	959	957	954	952	952	954	958	962	963	971	968	966	963	962	961	961	963			
15**	961	968	960	963	959	960	960	957	957	954	953	953	956	962	968	973	974	972	972	975	974	953	952	957			
16	957	960	962	953	957	958	956	956	958	954	953	956	961	963	968	963	963	963	964	965	965	967	965	963			
17**	956	956	957	955	955	955	955	954	949	951	952	950	955	962	962	970	975	969	968	968	958	950	959	959			
18	953	950	953	956	957	957	956	955	953	951	952	953	953	955	960	960	963	966	966	965	957	956	957	957			
19	957	955	953	955	957	959	959	960	960	958	954	953	955	957	958	959	964	965	965	964	963	962	960	958			
20	958	957	957	958	958	958	958	958	959	959	955	953	953	956	961	964	962	960	960	959	959	958	955	955			
21	953	952	954	954	954	956	955	954	956	956	952	952	955	958	959	957	959	958	957	957	957	957	956	956			
22*	956	955	955	955	955	955	956	957	957	956	955	955	960	961	960	958	958	957	957	959	960	963	960	960			
23	957	956	955	955	956	956	957	958	956	952	951	954	956	961	963	963	965	964	965	964	963	963	961	960			
24	960	959	957	957	957	955	955	956	956	950	950	955	951	962	962	966	966	964	962	963	963	962	959	957			
25	954	951	953	954	955	955	954	951	953	955	955	958	959	960	964	968	965	963	960	959	958	958	958	958			
26	959	959	957	954	953	954	954	953	952	949	947	949	950	958	964	967	969	966	964	964	964	961	959	957			
27	957	956	955	955	955	953	953	950	950	948	947	948	950	958	960	960	960	960	958	955	957	957	958	958			
28*	950	951	951	951	952	951	951	950	949	946	945	947	947	953	955	955	956	955	953	952	951	951	951	949			
29*	951	950	950	950	950	950	949	947	945	944	941	943	946	950	952	953	953	953	952	950	949	948	947	947			
30	949	949	948	948	949	949	949	947	945	944	942	942	941	946	948	948	951	950	949	949	951	954	946	948			
Mean	953	952	952	951	951	951	951	951	951	949	948	949	952	956	960	962	963	963	963	961	960	958	956	955			
Mean*	951	950	949	949	949	949	949	950	949	947	945	947	949	952	953	952	952	951	950	950	949	950	949	949			
Mean**	950	953	952	950	947	947	948	949	949	948	949	951	956	965	973	977	980	984	986	977	972	965	961	960			
December.																											
42000 γ + Tabular Quantities (in γ).																											
1**	947	950	942	942	945	945	939	935	940	940	942	944	947	947	949	951	953	954	953	954	954	952	952	951			
2	950	950	947	945	947	949	949	948	950	950	949	950	950	950	950	950	951	952	952	952	952	953	954	953			
3	953	953	952	952	952	953	953	952	952	952	949	948	949	951	952	953	955	955	955	955	955	954	954	953			
4*	952	951	952	951	952	952	952	952	950	950	952	950	952	954	953	953	954	954	954	954	953	953	952	951	951		
5**	950	949	949	949	949	950	950	950	950	950	950	944	947	947	948	945	947	948	945	946	948	954	955	934			
6**	935	935	935	916	925	931	932	937	943	945	949	958	957	959	971	972	972	969	969	961	963	959	966	945			
7	940	938	941	944	945	947	949	950	952	949	947	950	950	955	962	959	972	971	968	967	966	964	964	962			
8	962	962	961	960	959	959	958	958	962	959	958	957	958	962	964	965	964	961	961	961	961	964	961	961			
9	959	959	959	958	958	957	957	957	958	958	955	956	962	964	965	963	965	964	962	962	963	962	962	961			
10	959	958	957	957	956	956	955	956	957	955	955	955	955	957	960	961	961	958	957	956	959	960	960	959			
11	958	958	957	957	957	956	955	955	955	954	950	950	952	952	955	958	956	956	957	963	964	965	966	969			
12**	959	957	954	955	955	950	945	945	946	947	953	958	958	958	961	962	964	963	963	963	964	963	962	957			
13**	961	959	959	959	955	955	952	952	950	945	944	947	949	949	962	963	964	963	962	961	959	959	957	956			
14	956	957	956	956	955	956	955	954	954	950	944	945	950	953	955	961	963	962	962	959	957	953	953	948			
15	949	950	952	953	954	953	952	952	954	953	952	953	957	959	961	959	959	958	957	955	955	952	952	950			
16	950	952	952	952	952	952	951	950	951	950	949	951	951	954	955	957	957	958	955	955	955	954	953	951			
17*	951	950	951	951	950	950	950	950	951	948	945	948	945	950	954	955	955	955	955	955	955	952	950	951			
18	950	949	948	949	950	950	950	950	951	947	949	950	950	950	952	955	954	955	957	962	960	959	957	954			
19*	952	951	950	950	950	951	951	951	951	952	951	951	950	950	952	953	951	950	950	950	950	950	950	949			
20*	949	949	949	949	949	947	948	950	952	955	957	955	946	948	952	952	952	952	952	952	952	952	951	948			
21	947	946	945	945	945	946	947	947	947	944	944	944	942	947	952	951	955	959	967	962	958	957	945	944			
22	947	946	946	947	947	947	947	950	952	952	950	948	950	957	957	959	957	959	957	957	956	955	953	953			
23*																											

TABLE IV.—DAILY MEAN AND EXTREME VALUES OF MAGNETIC ELEMENTS—continued.

Date.	DECLINATION WEST.						HORIZONTAL FORCE.						VERTICAL FORCE.					
	Mean Value for the Day.	Maximum.		Minimum.		Range.	Mean Value for the Day.	Maximum.		Minimum.		Range.	Mean Value for the Day.	Maximum.		Minimum.		Range.
	12° +	G.M.T. h m	12° +	12° +	G.M.T. h m		18000γ +	G.M.T. h m	18000γ +	18000γ +	G.M.T. h m	γ	42000γ +	G.M.T. h m	42000γ +	42000γ +	G.M.T. h m	γ
MAR. 1	51° 0'	13 16	56° 0'	47° 7'	8 54	8° 3'	573	7 6	586	556	11 17	30	940	16 40	951	934	12 0	17
2	50° 6'	13 31	53° 9'	47° 0'	9 2	6° 9'	578	7 22	591	565	13 56	26	939	16 10	949	938	11 30	11
3	50° 3'	13 50	53° 5'	46° 1'	8 54	7° 4'	580	21 6	592	573	11 0	19	936	18 10	944	929	11 30	15
4	50° 6'	13 48	54° 9'	46° 2'	8 40	8° 7'	577	3 36	592	552	11 0	40	936	16 33	948	929	10 55	19
5	50° 6'	13 28	55° 2'	45° 4'	8 45	9° 8'	581	23 1	595	559	10 5	36	934	15 47	946	929	11 40	17
6	50° 6'	13 18	56° 7'	44° 0'	8 38	12° 7'	577	0 22	593	552	12 39	41	933	17 6	944	920	12 2	24
7	50° 7'	13 35	58° 4'	45° 2'	8 41	13° 2'	576	7 5	593	552	10 48	41	934	20 43	950	919	12 2	31
8	51° 0'	13 31	58° 4'	45° 5'	8 35	12° 9'	578	4 13	590	550	10 55	34	935	16 28	947	928	10 52	19
9	50° 6'	14 33	57° 6'	45° 4'	9 14	12° 2'	577	0 41	594	549	11 23	45	932	16 46	946	917	12 1	29
10	50° 7'	14 21	59° 0'	45° 7'	23 32	13° 3'	579	22 36	612	558	10 35	54	933	18 0	949	923	11 32	26
11	52° 5'	15 21	68° 6'	41° 5'	22 24	27° 1'	557	8 30	603	444	15 45	159	946	16 7	1000	912	10 58	88
12	49° 5'	14 18	58° 8'	38° 4'	0 42	20° 4'	548	19 3	600	514	10 57	86	934	16 21	964	908	12 53	56
13	49° 5'	13 40	60° 1'	38° 7'	22 48	21° 4'	559	18 19	590	526	11 11	64	940	17 49	972	924	12 33	48
14	49° 4'	14 58	60° 2'	34° 7'	0 51	25° 5'	546	20 3	593	492	11 43	101	935	17 21	971	919	11 41	52
15	50° 8'	13 40	60° 9'	44° 3'	8 7	16° 6'	557	0 38	597	516	11 16	81	935	18 0	959	917	11 32	42
16	50° 5'	13 26	60° 5'	44° 4'	8 49	16° 1'	568	6 20	582	543	12 11	39	932	16 7	947	920	11 41	27
17	50° 8'	13 25	59° 6'	45° 5'	8 3	14° 1'	568	5 31	593	534	9 52	59	931	17 9	948	915	11 36	33
18	50° 3'	13 0	57° 6'	45° 3'	20 55	12° 3'	571	4 38	588	553	15 26	35	930	16 45	948	914	11 58	34
19	50° 1'	14 20	55° 7'	45° 2'	9 36	10° 5'	575	20 46	593	555	15 55	38	930	16 40	945	918	12 43	27
20	50° 0'	14 29	57° 3'	44° 2'	9 0	13° 1'	573	22 44	611	545	10 30	66	928	16 50	942	915	12 0	27
21	49° 7'	13 48	59° 2'	44° 0'	8 45	15° 2'	574	2 20	597	557	10 34	40	925	18 14	944	909	12 0	35
22	50° 2'	13 20	60° 2'	42° 0'	23 40	18° 2'	572	15 40	589	555	10 34	34	928	20 12	949	908	11 24	41
23	49° 5'	13 20	59° 5'	40° 9'	3 19	18° 6'	576	21 40	599	554	13 40	45	925	0 2	944	913	12 32	31
24	50° 4'	14 8	58° 6'	45° 0'	8 23	13° 6'	576	6 37	599	520	12 17	79	926	17 16	938	910	11 52	28
25	50° 2'	13 42	57° 9'	43° 5'	8 55	14° 4'	573	1 50	608	531	11 0	77	928	16 3	948	914	10 59	34
26	50° 3'	13 24	57° 3'	45° 3'	8 12	12° 0'	572	0 50	591	528	10 42	63	926	17 46	945	914	11 30	31
27	50° 0'	13 36	56° 3'	44° 3'	8 30	12° 0'	572	1 20	590	546	12 6	44	923	7 23	937	907	12 0	30
28	49° 8'	12 46	57° 4'	43° 4'	8 45	14° 0'	579	0 1	597	550	11 40	47	919	20 0	935	894	11 40	41
29	50° 2'	13 16	57° 4'	44° 4'	8 33	13° 0'	579	6 3	594	547	10 46	47	919	7 24	932	894	12 4	38
30	49° 8'	13 6	56° 4'	44° 4'	21 33	12° 0'	577	21 38	600	555	10 0	45	920	19 44	932	911	11 36	21
31	50° 4'	12 55	57° 7'	45° 3'	8 5	12° 4'	580	20 54	593	560	9 41	33	918	7 0	950	906	12 0	24
Mean	50° 3'	—	58° 1'	44° 0'	—	14° 1'	574	—	595	542	—	53	931	—	949	916	—	32
No. of Days used.	31	—	31	31	—	31	31	—	31	31	—	31	31	—	31	31	—	31
APRIL 1	50° 3'	12 22	61° 4'	43° 5'	8 44	17° 9'	571	18 45	603	547	11 44	56	917	20 0	935	885	10 55	50
2	49° 6'	12 41	59° 1'	42° 4'	7 45	16° 7'	567	21 10	585	526	10 33	59	918	17 0	927	896	12 3	31
3	49° 1'	12 9	59° 8'	41° 8'	8 27	18° 0'	561	22 48	602	509	10 4	93	924	17 23	945	891	11 40	54
4	49° 5'	12 40	60° 5'	42° 3'	6 29	18° 2'	568	15 30	591	518	10 20	73	920	18 29	943	894	11 37	49
5	49° 8'	12 43	61° 0'	41° 7'	7 0	19° 3'	564	23 59	594	512	10 21	82	918	16 20	935	887	11 26	48
6	49° 0'	13 0	56° 9'	40° 2'	24 0	16° 7'	568	19 10	602	521	10 18	81	917	19 5	934	890	11 0	44
7	48° 5'	14 30	59° 5'	36° 3'	21 47	23° 2'	568	22 1	642	504	10 47	138	914	17 5	934	885	22 19	49
8	49° 8'	13 54	61° 7'	38° 8'	1 40	22° 0'	559	0 50	585	502	11 33	83	918	17 2	939	889	1 39	50
9	50° 1'	13 36	61° 4'	41° 6'	8 10	19° 8'	562	21 16	590	517	10 40	73	922	16 44	943	886	11 33	57
10	49° 8'	14 6	61° 9'	40° 7'	8 14	21° 2'	567	0 52	617	517	13 45	100	924	18 30	943	896	11 46	47
11	49° 8'	14 3	59° 1'	41° 9'	8 13	17° 2'	564	16 25	591	522	12 6	69	922	7 22	935	893	11 20	42
12	49° 7'	13 22	57° 1'	41° 8'	8 15	15° 3'	569	19 30	585	533	11 25	52	919	7 5	930	889	11 43	41
13	50° 1'	13 7	58° 2'	42° 8'	7 50	15° 4'	573	20 12	592	530	10 55	62	919	8 0	928	897	12 0	31
14	50° 3'	13 39	58° 4'	43° 1'	8 8	15° 3'	579	20 30	602	541	10 48	61	918	6 30	926	893	12 20	33
15	50° 0'	13 35	58° 6'	41° 1'	7 30	17° 5'	579	19 0	616	538	12 20	78	916	23 34	929	888	12 20	41
16	47° 7'	12 46	56° 7'	36° 3'	23 12	20° 4'	573	0 5	609	539	10 30	70	918	19 0	942	903	14 0	39
17	48° 8'	14 20	56° 4'	40° 1'	0 21	16° 3'	565	2 3	607	531	11 0	76	916	17 0	928	895	12 4	33
18	49° 4'	13 40	57° 1'	43° 7'	8 30	13° 4'	571	21 43	584	547	10 4	37	920	16 48	927	901	12 40	26
19	49° 1'	12 36	56° 6'	38° 5'	23 55	18° 1'	575	23 58	613	548	9 40	65	920	21 36	935	894	10 40	41
20	48° 0'	12 46	57° 6'	34° 8'	1 0	22° 8'	562	0 3	615	513	10 0	102	918	15 30	929	899	1 20	30
21	50° 1'	14 3	60° 4'	42° 4'	7 46	18° 0'	575	16 3	617	533	8 43	84	926	17 50	947	906	11 50	41
22	49° 6'	14 26	56° 9'	42° 4'	7 36	14° 5'	569	20 12	600	531	11 0	69	924	18 18	936	902	13 30	34
23	49° 3'	13 19	55° 5'	43° 4'	8 35	12° 1'	574	0 34	600	544	10 23	56	924	18 10	944	898	12 39	46
24	49° 3'	13 32	55° 2'	44° 0'	7 53	11° 2'	573	21 3	595	531	11 46	64	924	18 30	932	905	12 0	27
25	49° 1'	14 0	52° 9'	44° 3'	8 54	8° 6'	580	18 52	598	546	11 14	52	923	18 50	934	903	11 50	31
26	49° 6'	14 0	56° 1'	44° 5'	8 42	11° 6'	578	19 45	597	550	12 36	47	924	21 2	935	902	12 32	33
27	48° 9'	14 0	53° 8'	43° 3'	8 34	10° 5'	577	18 34	592	549	11 7	43	923	17 47	940	893	11 40	47
28	49° 5'	13 43	53° 7'	44° 4'	7 55	9° 3'	581	18 28	592	558	10 19	34	923	17 42	931	902	12 24	29
29	49° 1'	13 5	53° 7'	44° 2'	8 30	9° 5'	580	19 0	593	558	10 35	35	922	5 12	930	902	11 51	28
30	49° 2'	13 20	57° 1'	41° 2'	8 12	15° 9'	583	23 0	601	549	11 1	52	918	19 0	929	888	12 0	41
Mean	49° 4'	—	57° 8'	41° 6'	—	16° 2'	571	—	600	532	—	68	920	—	935	895	—	40
No. of Days used.	30	—	30	30	—	30	30	—	30	30	—	30	30	—	30	30	—	30

TABLE IV.—DAILY MEAN AND EXTREME VALUES OF MAGNETIC ELEMENTS—continued.

Date.	DECLINATION WEST.					HORIZONTAL FORCE.					VERTICAL FORCE.							
	Mean Value for the Day.	Maximum.	Minimum.	Range.	G.M.T. h m	Mean Value for the Day.	Maximum.	Minimum.	Range.	G.M.T. h m	Mean Value for the Day.	Maximum.	Minimum.	Range.	G.M.T. h m			
MAY	12° +	G.M.T. h m	12° +	12° +	G.M.T. h m	18000γ +	G.M.T. h m	18000γ +	18000γ +	G.M.T. h m	γ	42000γ +	G.M.T. h m	42000γ +	42000γ +	G.M.T. h m	γ	
1	49.2	13 4	56.3	42.0	8 0	14.3	583	22 8	613	552	11 0	61	915	22 3	925	885	12 0	40
2	49.2	13 20	56.2	43.1	7 56	13.1	584	22 29	603	553	11 0	50	912	4 8	925	883	11 2	42
3	47.8	13 45	54.1	41.5	8 42	12.6	580	18 18	598	546	12 17	52	917	18 40	927	893	11 37	34
4	48.5	13 44	57.3	41.9	7 4	15.4	582	18 47	603	553	12 40	50	916	18 47	928	889	12 39	39
5	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
6	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
7	48.6	13 43	60.1	39.6	8 54	20.5	571	22 6	602	537	11 29	65	917	16 50	940	878	11 57	62
8	48.5	13 26	57.0	42.1	6 10	14.9	568	2 45	617	508	13 43	109	916	18 31	936	896	10 17	40
9	48.4	14 0	55.3	42.2	8 26	13.1	570	18 0	598	528	11 20	70	918	17 53	930	896	10 55	34
10	48.3	13 36	60.5	34.9	23 54	25.6	577	16 22	641	520	23 47	121	924	17 50	961	882	23 36	79
11	47.1	14 31	56.9	35.8	0 2	21.1	555	16 46	622	506	13 40	116	929	17 29	991	895	0 0	96
12	47.7	11 58	58.8	30.6	1 20	28.2	551	23 25	606	461	9 41	145	925	18 40	952	892	10 59	60
13	49.6	13 18	57.0	44.1	7 25	12.9	557	0 22	624	501	10 10	123	921	17 30	958	896	0 39	62
14	47.7	13 28	55.1	39.5	6 51	15.6	560	23 29	599	516	8 21	83	919	16 44	945	894	11 40	51
15	47.6	14 0	56.2	39.6	0 40	16.6	573	22 17	645	535	11 5	110	919	18 9	941	900	11 2	41
16	46.8	12 2	54.3	34.0	20 26	20.3	575	19 44	656	538	12 46	118	919	19 36	945	891	11 35	54
17	48.7	1 4	57.4	41.9	6 14	15.5	569	1 0	598	527	8 24	71	919	17 50	937	896	1 31	41
18	48.8	14 23	57.4	36.6	19 4	20.8	572	19 10	612	533	10 54	79	924	19 11	954	901	9 50	53
19	48.3	13 42	55.7	42.3	5 34	13.4	567	19 20	593	526	8 0	67	926	19 20	943	906	12 12	37
20	48.1	13 18	54.7	41.8	6 50	12.9	571	0 31	599	530	9 43	69	922	15 30	934	900	11 20	34
21	48.7	14 7	55.4	42.7	6 48	12.7	578	17 11	607	535	10 50	72	922	17 50	934	892	10 43	42
22	47.8	13 59	52.2	42.6	7 28	9.6	580	18 32	602	544	10 15	58	922	17 50	936	897	11 57	39
23	48.0	14 20	53.5	42.2	7 40	11.3	575	18 29	594	537	11 19	57	921	18 10	940	894	10 40	46
24	48.2	14 45	54.3	42.3	8 13	12.0	579	19 46	610	550	10 0	60	920	17 30	934	893	10 35	41
25	48.0	12 28	53.2	41.8	6 10	11.4	575	17 26	601	540	11 47	61	923	17 20	938	902	12 45	36
26	47.7	14 6	53.2	40.6	6 15	12.6	579	18 10	608	541	10 26	67	922	18 30	938	895	12 6	43
27	48.4	15 50	65.4	31.1	21 41	34.3	591	15 49	736	515	22 21	221	931	18 56	987	896	10 23	91
28	49.5	5 56	61.6	30.8	18 24	30.8	533	18 31	710	401	8 29	309	949	16 59	1066	862	6 52	204
29	46.0	2 59	52.8	36.1	1 16	16.7	526	17 20	620	454	9 24	166	946	17 19	1002	856	3 27	146
30	46.7	15 0	53.7	39.3	8 8	14.4	546	19 36	593	502	9 50	91	938	19 20	955	917	13 13	38
31	46.8	14 45	54.8	38.3	7 25	16.5	559	18 30	627	516	12 40	111	934	18 13	950	904	12 18	46
Mean	48.1	—	56.2	39.4	—	16.8	569	—	619	521	—	98	923	—	950	892	—	58
No. of Days used.	29	—	29	29	—	29	29	—	29	29	—	29	29	—	29	29	—	29
JUNE	12° +	h m	12° +	12° +	h m		18000γ +	h m	18000γ +	18000γ +	h m	γ	42000γ +	h m	42000γ +	42000γ +	h m	γ
1	47.8	17 20	56.4	39.9	6 42	16.5	573	17 46	623	524	10 50	99	938	19 30	972	914	10 46	58
2	47.5	15 35	54.7	40.5	7 53	14.2	572	17 49	613	546	9 17	67	932	20 16	947	908	11 40	39
3	47.6	14 37	57.1	40.3	8 53	16.8	570	15 33	613	523	10 50	90	940	18 46	977	912	11 20	65
4	47.1	14 32	58.1	38.4	7 35	19.7	567	19 6	599	540	11 20	59	939	18 11	964	915	12 21	49
5	48.4	14 4	56.5	38.5	22 45	18.0	575	17 57	633	535	11 6	98	932	17 51	956	901	11 54	55
6	46.8	15 30	55.4	37.5	7 32	17.9	568	21 43	615	533	10 52	82	931	20 11	949	904	11 28	45
7	48.4	14 33	59.2	42.8	8 28	16.4	572	14 41	643	509	13 4	134	940	17 30	984	905	11 14	79
8	47.8	14 08	56.7	37.3	8 28	19.4	563	23 19	598	495	10 58	103	936	16 50	954	919	10 50	35
9	46.3	14 0	52.3	39.1	0 53	13.2	568	17 36	606	534	11 48	72	932	18 30	952	913	11 13	39
10	47.0	13 40	52.9	39.9	7 54	13.0	567	19 13	588	531	11 1	57	931	17 0	943	911	11 0	32
11	48.0	14 50	53.0	42.8	6 0	10.2	574	21 36	602	543	10 44	59	931	19 7	941	915	11 0	26
12	47.9	12 36	55.8	41.7	5 44	14.1	566	0 36	614	499	10 50	115	925	19 24	941	894	10 14	47
13	48.0	11 45	60.6	36.1	5 23	24.5	563	21 52	598	500	11 51	98	935	16 19	954	907	10 34	47
14	47.0	1 48	55.5	40.3	5 43	15.2	566	2 2	616	522	11 9	94	932	15 30	956	907	11 6	49
15	48.0	14 50	55.9	41.1	8 10	14.8	565	16 0	593	527	9 24	66	935	17 30	946	917	11 18	29
16	47.0	14 23	51.7	40.7	7 19	11.0	572	21 36	588	539	8 17	49	932	4 4	941	908	11 40	33
17	47.2	14 34	55.1	39.0	7 54	16.1	569	14 36	593	533	11 0	60	929	16 51	947	903	11 20	44
18	47.8	13 30	56.2	39.9	8 31	16.3	571	18 36	602	533	12 39	69	933	16 47	949	907	11 5	42
19	47.9	13 4	55.7	41.4	8 40	14.3	574	18 51	602	535	11 36	67	933	19 35	946	899	10 43	47
20	47.2	14 30	54.5	38.7	23 40	15.8	581	19 40	633	544	22 10	89	932	19 33	950	909	12 0	41
21	47.4	14 4	54.3	40.3	0 0	14.0	571	18 20	597	537	9 18	60	934	18 13	951	913	11 53	38
22	47.3	13 31	57.0	35.3	21 7	21.7	568	21 20	667	429	8 39	238	939	17 14	963	912	10 58	51
23	48.1	13 11	55.3	39.5	1 50	15.8	565	20 40	627	517	5 13	110	939	16 30	964	903	0 28	61
24	48.1	14 2	55.3	41.3	5 54	14.0	564	18 46	599	513	11 48	86	945	15 35	971	927	11 46	44
25	45.8	15 8	53.8	38.1	5 55	15.7	572	19 34	599	543	9 56	56	943	17 20	965	926	2 20	39
26	47.1	15 0	52.7	41.2	6 20	11.5	566	18 34	600	531	12 23	69	947	20 0	959	917	10 28	42
27	46.2	13 22	51.7	39.7	8 0	12.0	573	18 30	602	544	11 31	58	945	20 4	959	919	11 31	40
28	46.4	14 14	53.7	38.8	7 9	14.9	573	22 21	615	534	12 43	81	947	20 0	963	935	12 40	28
29	47.0	14 10	54.0	40.9	8 20	13.1	577	20 6	621	547	11 26	74	942	20 3	960	918	11 23	42
30	47.5	13 11	55.0	39.1	6 39	15.9												

TABLE IV.—DAILY MEAN AND EXTREME VALUES OF MAGNETIC ELEMENT.—*continued.*

Date.	DECLINATION WEST.					HORIZONTAL FORCE.						VERTICAL FORCE.						
	Mean Value for the Day.	Maximum.		Minimum.		Range.	Mean Value for the Day.	Maximum.		Minimum.		Range.	Mean Value for the Day.	Maximum.		Minimum.		Range.
	I2° +	G.M.T. h m	I2° +	I2° +	G.M.T. h m		I8000y +	G.M.T. h m	I8000y +	I8000y +	G.M.T. h m	γ	42000y +	G.M.T. h m	42000y +	42000y +	G.M.T. h m	γ
SEPT.																		
1	45.3	12 56	55.1	38.8	23 8	16.3	562	23 10	590	525	9 25	65	954	16 30	970	933	10 55	37
2	44.0	12 24	58.1	31.7	3 15	26.4	556	0 32	610	497	9 53	113	948	16 19	967	927	3 18	40
3	46.3	13 34	65.6	35.3	17 37	30.3	557	19 51	593	485	9 32	108	965	17 23	1054	931	10 55	123
4	46.0	13 28	55.6	39.5	7 41	16.1	545	19 12	580	501	11 25	79	957	5 32	970	933	11 22	37
5	45.1	12 43	53.3	36.4	17 17	16.9	555	17 10	584	524	11 55	60	959	17 42	988	940	10 38	48
6	44.7	12 50	53.3	37.3	19 22	16.0	555	19 47	580	510	9 55	70	958	19 32	974	941	9 4	33
7	44.4	15 34	58.7	32.4	22 35	26.3	549	13 53	610	502	17 59	108	972	17 21	1048	934	12 25	114
8	43.9	1 50	55.5	31.2	23 14	24.3	530	17 17	582	489	11 30	93	964	17 9	1011	920	2 20	91
9	43.6	13 17	52.1	33.3	3 15	18.8	536	23 42	589	505	0 57	84	963	18 37	993	935	2 35	58
10	44.1	13 36	50.8	37.3	2 21	13.5	549	13 34	569	522	10 16	47	964	18 33	980	945	1 25	35
11	44.0	13 45	52.0	38.1	21 1	13.9	548	20 41	576	508	11 40	68	964	17 50	984	946	11 57	38
12	43.9	13 20	49.5	38.4	8 30	11.1	553	22 33	585	519	9 54	66	961	16 25	971	949	11 42	22
13	45.3	14 59	54.8	37.8	8 20	17.0	559	15 7	581	527	17 3	54	960	16 23	983	944	11 4	39
14	44.6	12 59	53.7	36.3	5 42	17.4	558	5 16	597	517	12 20	80	951	22 25	965	934	5 39	31
15	45.1	12 55	52.9	39.4	7 40	13.5	551	16 13	570	519	10 24	51	950	17 49	967	932	11 56	35
16	44.7	12 35	51.2	38.2	7 49	13.0	556	19 51	573	519	10 28	54	948	7 44	963	925	12 40	38
17	45.6	13 28	53.5	40.6	8 15	12.9	563	22 28	580	535	10 1	45	944	4 26	955	915	12 37	40
18	44.9	12 47	54.4	24.4	23 24	30.0	563	16 12	635	507	23 16	128	948	21 2	974	920	12 18	54
19	45.2	15 30	56.5	36.3	0 0	20.2	539	21 35	585	456	10 58	129	961	17 12	994	928	10 38	66
20	44.6	13 17	52.1	39.9	8 14	12.2	550	18 53	570	515	10 14	55	954	16 59	973	928	12 2	45
21	44.3	14 29	49.8	40.7	8 54	9.1	558	21 6	589	527	11 40	62	951	17 24	963	935	12 29	28
22	44.4	13 30	54.6	35.9	8 44	18.7	561	19 3	590	512	10 53	78	948	21 15	958	926	12 22	32
23	44.1	13 30	54.4	38.1	8 14	16.3	557	21 10	609	519	10 5	90	946	7 14	965	923	12 0	42
24	44.0	13 46	54.3	31.7	23 10	22.0	560	0 47	624	522	11 7	102	940	16 25	966	922	1 41	44
25	43.6	13 57	58.7	33.7	21 58	25.0	540	21 40	627	471	10 11	156	951	16 24	993	922	10 41	71
26	44.2	12 39	52.0	38.6	1 3	13.4	546	0 0	575	518	9 25	57	952	15 52	972	926	0 33	46
27	44.8	12 58	53.0	39.0	7 33	14.0	551	21 39	588	516	8 42	72	952	15 32	977	940	10 41	37
28	44.7	12 44	51.8	39.0	7 55	12.8	557	23 5	572	528	10 37	44	949	15 50	957	930	11 38	27
29	44.7	15 26	52.3	38.1	8 25	14.2	566	23 12	599	531	9 40	68	947	7 11	957	929	10 59	28
30	44.8	11 42	52.9	38.0	7 10	14.9	562	0 12	598	528	12 5	70	945	7 11	958	925	11 47	33
Mean	44.6	—	54.1	36.5	—	17.6	553	—	590	512	—	78	954	—	975	931	—	44
No. of Days used.	30	—	30	30	—	30	30	—	30	30	—	30	30	—	30	30	—	30
OCT.																		
1	44.3	14 0	51.4	37.8	8 12	13.6	560	22 4	597	513	10 20	84	948	16 5	958	936	12 56	22
2	45.8	13 43	57.3	33.5	19 18	23.8	548	19 36	608	(491)	11 56	117	954	17 6	993	925	11 35	68
3	45.6	13 4	56.4	39.4	0 23	17.0	548	21 14	574	504	11 45	70	960	16 30	994	942	11 5	52
4	44.2	12 17	52.0	36.5	0 23	15.5	557	23 4	579	511	11 14	68	955	19 10	963	944	11 56	19
5	44.4	12 36	55.4	36.7	19 43	18.7	550	4 43	612	504	12 10	108	958	18 0	986	935	5 27	51
6	43.5	13 15	50.8	37.8	8 30	13.0	547	2 6	579	520	9 58	59	956	16 50	979	936	2 40	43
7	44.3	12 16	52.9	34.8	20 13	18.1	549	0 1	584	507	10 49	77	953	20 20	977	931	4 24	46
8	42.9	12 37	50.1	37.3	8 43	12.8	555	0 23	609	511	10 56	98	951	17 30	965	936	10 51	29
9	43.7	13 43	48.2	39.4	8 30	8.8	557	22 23	580	528	10 4	52	950	8 0	956	942	12 40	14
10	44.0	14 5	50.2	37.7	22 30	12.5	563	21 36	586	510	11 11	76	946	12 28	954	918	11 10	36
11	43.0	13 23	49.6	36.3	8 43	13.3	564	1 50	585	534	10 4	51	948	16 0	956	937	9 36	19
12	43.0	12 40	49.2	38.0	8 14	11.2	564	0 16	599	538	10 44	61	948	16 13	953	935	11 40	18
13	44.4	14 40	55.6	35.9	20 16	19.7	554	20 4	585	526	11 0	59	956	18 0	976	939	10 24	37
14	43.8	12 29	52.2	31.6	0 19	20.6	550	0 11	586	519	12 58	67	950	16 11	968	925	11 23	43
15	44.9	12 30	53.0	29.5	23 58	23.5	559	20 33	585	511	11 20	74	951	15 55	958	940	10 58	18
16	43.8	13 41	53.9	30.1	0 0	23.8	551	0 10	600	513	12 19	87	951	15 29	970	935	10 33	35
17	43.5	13 27	50.5	35.0	21 42	15.5	554	21 51	591	519	20 11	72	954	21 7	973	942	12 10	31
18	43.9	14 5	66.0	13.3	8 29	52.7	512	7 52	575	402	13 39	173	984	17 20	1127	892	8 35	235
19	44.0	13 19	55.8	38.2	8 22	17.6	512	21 13	660	464	13 35	196	971	13 45	985	958	10 38	27
20	43.3	13 21	50.0	35.9	21 39	14.1	533	21 50	620	482	10 35	138	961	20 50	975	948	11 12	27
21	43.2	14 8	52.9	34.0	1 19	18.9	541	0 33	601	503	10 52	98	959	15 21	970	933	1 12	37
22	42.3	13 40	50.3	34.5	2 40	15.8	543	20 3	607	509	8 39	98	959	18 30	981	937	2 10	44
23	43.4	14 2	48.5	39.0	8 24	9.5	547	19 53	645	509	11 50	136	955	16 47	963	940	10 50	23
24	43.0	11 22	51.3	23.6	23 47	27.7	547	19 10	635	497	19 16	138	951	20 40	977	923	23 46	54
25	40.9	18 7	49.4	17.0	0 30	32.4	516	16 59	610	397	2 12	213	951	20 18	995	841	2 4	154
26	44.2	15 3	50.5	39.9	8 32	10.6	546	20 6	597	513	13 20	84	961	20 5	968	948	16 55	20
27	43.8	7 37	52.1	35.6	18 40	16.5	542	5 55	580	507	12 24	73	960	13 8	973	949	6 48	24
28	43.2	12 29	49.5	38.7	7 44	10.8	549	3 2	576	525	4 56	51	960	14 59	966	947	9 54	19
29	43.8	13 27	50.5	35.1	22 36	15.4	552	12 44	605	508	14 20	97	955	15 3	970	935	11 38	35
30	43.0	12 38	51.1	32.9	19 59	18.2	550	7 38	575	516	9 45	59	951	17 8	970			

TABLE IV.—DAILY MEAN AND EXTREME VALUES OF MAGNETIC ELEMENTS—*continued.*

Date.	DECLINATION WEST.					HORIZONTAL FORCE.					VERTICAL FORCE.							
	Mean Value for the Day.	Maximum.		Minimum.		Range.	Mean Value for the Day.	Maximum.		Minimum.		Range.	Mean Value for the Day.	Maximum.		Minimum.		Range.
	12° +	G.M.T. h m	12° +	12° +	G.M.T. h m		18000γ +	G.M.T. h m	18000γ +	18000γ +	G.M.T. h m	γ	42000γ +	G.M.T. h m	42000γ +	42000γ +	G.M.T. h m	γ
NOV.																		
1	43.8	13 10	48.8	38.7	22 4	10.1	556	18 46	581	527	12 52	54	951	15 10	963	942	11 20	21
2	44.0	14 14	53.1	33.1	17 59	20.0	537	4 27	610	459	17 43	151	958	17 59	1004	929	4 42	75
3	42.4	13 17	54.1	22.9	19 28	31.2	527	0 2	579	445	17 50	134	961	18 0	1022	919	0 34	103
4	43.7	12 50	51.3	33.5	18 58	17.8	539	19 1	585	493	11 57	93	955	18 48	976	941	6 7	35
5	43.2	13 49	47.8	40.7	8 55	7.1	546	23 32	567	524	14 40	43	955	19 17	965	942	11 39	23
6	43.4	13 35	47.6	36.8	21 18	10.8	554	7 20	574	528	20 57	46	949	21 40	968	935	11 1	33
7	43.8	10 45	48.1	39.1	0 8	9.0	556	22 31	573	534	10 55	39	949	20 10	964	940	10 54	24
8	43.0	12 44	45.7	39.6	2 28	6.1	560	1 43	568	545	10 59	23	948	—	—	—	—	—
9	43.1	13 27	45.7	40.1	8 44	5.6	565	18 55	579	548	9 44	31	943	—	—	—	—	—
10	44.9	15 2	58.3	39.0	22 43	19.3	551	7 44	603	480	15 18	123	951	16 2	983	929	8 50	54
11	42.7	23 4	46.9	32.2	23 35	14.7	551	22 39	565	507	23 20	58	950	0 11	961	917	23 16	44
12	42.5	13 4	49.0	32.7	0 40	16.3	553	20 59	589	518	21 27	71	951	20 52	971	932	0 1	39
13	43.6	14 5	52.6	29.5	18 34	23.1	530	2 59	577	463	18 26	114	962	18 18	1020	937	5 16	83
14	42.3	12 8	48.8	37.1	1 35	11.7	540	19 10	564	513	15 43	51	960	16 52	973	947	10 30	26
15	42.2	15 14	52.2	27.1	22 23	25.1	545	21 14	624	515	15 40	109	962	19 27	979	941	22 12	38
16	41.5	13 4	49.4	33.5	23 50	15.9	550	23 59	595	496	10 14	99	960	2 15	973	947	10 11	26
17	42.1	12 5	49.9	32.2	15 57	17.7	551	21 4	607	492	15 46	115	959	16 0	984	945	11 32	39
18	42.2	12 44	46.7	37.0	0 47	9.7	551	20 4	609	523	9 2	86	957	17 30	971	946	10 20	25
19	42.6	12 4	46.5	34.5	17 25	12.0	555	17 30	576	526	17 18	50	959	17 28	971	951	11 15	20
20	42.4	12 36	46.3	39.5	9 5	6.8	558	21 42	586	540	9 3	46	958	15 7	967	951	12 57	16
21	42.4	13 46	45.6	40.2	8 54	5.4	565	0 19	582	547	10 55	35	956	13 30	962	948	10 51	14
22	42.8	13 4	46.4	40.1	23 50	6.3	566	23 58	581	544	10 37	37	958	21 24	964	951	11 14	13
23	43.2	12 32	48.2	40.4	0 52	7.8	561	0 5	586	542	13 12	44	959	18 13	968	948	10 5	20
24	43.0	13 49	49.6	31.9	22 30	17.7	557	4 40	578	529	14 0	49	959	16 10	969	945	9 57	24
25	42.7	13 17	48.1	35.5	1 14	12.6	557	7 14	581	518	14 43	63	957	15 33	972	948	1 11	24
26	43.3	14 18	48.1	38.7	20 9	9.4	557	3 10	577	526	14 40	51	958	16 8	972	945	10 19	27
27	43.2	13 44	48.6	37.3	23 30	11.3	561	23 7	590	538	13 13	52	955	16 55	964	943	9 42	21
28	42.4	13 4	45.9	38.8	0 7	7.1	564	23 43	573	550	10 54	23	951	16 51	959	939	10 20	20
29	43.1	13 39	46.0	41.0	0 2	5.0	567	6 4	578	558	14 58	20	949	16 8	957	939	11 4	18
30	43.0	15 59	46.6	37.0	22 31	9.6	568	21 59	589	550	21 46	39	948	21 50	958	939	12 19	19
Mean	42.9	—	48.7	36.0	—	12.7	553	—	584	519	—	65	955	—	973	941	—	33
No. of Days used.	30	—	30	30	—	30	30	—	30	30	—	30	30	—	28	28	—	28
DEC.																		
1	42.8	5 57	50.9	37.5	2 51	13.4	566	6 36	614	541	9 15	73	947	1 50	955	933	7 53	22
2	42.5	14 58	45.0	38.6	21 46	6.4	567	5 46	587	550	23 42	37	950	22 2	957	944	2 56	13
3	42.4	13 4	44.7	40.2	0 5	4.5	563	17 44	579	548	18 51	31	953	19 17	961	944	11 37	17
4	42.8	12 59	46.4	40.0	23 28	6.4	566	23 35	579	553	11 20	26	952	12 59	958	946	9 43	12
5	41.7	13 6	46.1	14.7	23 34	31.4	567	17 47	598	529	22 47	69	948	22 52	960	945	10 18	15
6	40.6	2 52	49.9	26.5	18 6	23.4	540	3 33	582	491	17 41	91	950	18 12	980	910	3 25	70
7	41.7	12 15	46.1	35.5	1 14	10.6	549	20 30	579	525	9 53	54	955	17 10	976	935	1 13	41
8	42.2	13 10	46.3	35.1	20 51	11.2	558	7 4	580	533	14 2	47	961	7 3	967	955	11 30	12
9	42.4	12 23	47.9	39.2	17 1	8.7	558	6 37	573	542	10 50	31	960	16 13	969	952	10 46	17
10	42.0	13 43	46.0	36.1	20 30	9.9	560	21 20	572	538	14 10	34	958	14 58	964	953	12 15	11
11	42.2	18 22	46.7	34.8	23 59	11.9	562	22 32	599	533	19 55	66	957	12 29	971	946	10 40	25
12	41.8	12 30	48.8	32.2	2 27	16.6	555	5 40	591	513	11 21	78	957	16 15	968	939	8 24	29
13	41.6	13 14	48.1	33.0	23 2	15.1	557	22 22	588	533	13 59	55	956	16 50	968	941	10 0	27
14	41.5	14 2	47.1	34.7	19 50	12.4	558	20 14	589	507	11 30	82	955	17 59	966	942	10 43	24
15	42.4	13 17	46.4	38.2	22 26	8.2	560	22 38	590	536	10 10	54	954	14 20	965	947	0 44	18
16	42.1	13 56	45.5	35.8	21 50	9.7	562	22 7	583	541	10 14	42	953	17 33	961	946	10 13	15
17	42.3	13 26	44.5	40.1	8 49	4.4	566	6 8	578	554	11 2	24	951	16 27	959	945	12 35	14
18	42.2	13 11	46.4	39.7	19 6	6.7	561	6 38	575	534	19 3	41	952	19 20	964	943	9 40	21
19	41.7	13 7	44.3	40.3	1 12	4.0	568	17 51	579	552	10 50	27	951	14 50	955	947	23 55	8
20	41.4	13 27	46.2	37.9	23 10	8.3	566	5 4	580	551	14 57	29	951	10 13	959	942	12 38	17
21	41.6	14 48	46.3	35.5	18 6	10.8	566	22 1	611	533	17 47	78	949	18 31	970	938	12 3	32
22	41.9	12 53	46.1	35.7	17 40	10.4	560	6 20	579	523	13 13	56	952	17 49	962	944	0 18	18
23	41.9	12 42	45.7	40.0	21 34	5.7	566	6 56	584	551	15 26	33	952	16 15	957	945	12 23	12
24	41.6	11 34	45.7	36.0	21 24	9.7	562	7 34	586	529	17 14	57	951	17 48	962	943	9 36	19
25	41.4	13 12	45.4	35.0	1 35	10.4	568	18 4	591	550	12 0	41	946	14 10	955	940	3 29	15
26	41.4	1 24	46.4	35.8	2 22	10.6	561	1 48	603	534	15 25	69	951	15 50	963	933	2 4	30
27	41.5	12 22	45.2	39.0	23 51	6.2	567	4 58	580	544	16 25	36	951	17 7	960	945	8 32	15
28	41.9	12 46	45.8	39.0	1 40	6.8	572	13 47	583	557	10 55	26	948	18 11	953	942	11 39	11
29	41.5	16 29	44.1	32.9	23 57	11.2	574	20 13	584	540	23 50	44	948	16 19	957	937	11 58	20
30	41.2	12 58	44.8	32.7	0 0	12.1	567	21 13	604	547	11 50	57	951	18 32	957	940	8 50	17
31	41.3</																	

TABLE V.—MEAN DIURNAL INEQUALITIES OF THE MAGNETIC ELEMENTS—DECLINATION, INCLINATION AND HORIZONTAL FORCE.

“All” Days.

DECLINATION WEST.

Table with columns for Month and Season (1928), Greenwich Mean Time (0-11), Hour commencing (Noon-23), and values for Declination West. Rows include Jan, Feb, Mar, April, May, June, July, Aug, Sept, Oct, Nov, Dec, Year, Winter, Equinox, Summer.

INCLINATION.

Table with columns for Month and Season (1928) and values for Inclination. Rows include Jan, Feb, Mar, April, May, June, July, Aug, Sept, Oct, Nov, Dec, Year, Winter, Equinox, Summer.

HORIZONTAL FORCE.

Table with columns for Month and Season (1928) and values for Horizontal Force. Rows include Jan, Feb, Mar, April, May, June, July, Aug, Sept, Oct, Nov, Dec, Year, Winter, Equinox, Summer.

TABLE V.—continued—MEAN DIURNAL INEQUALITIES OF GEOGRAPHICAL COMPONENTS OF MAGNETIC FORCE.

“All” Days.

NORTH COMPONENT.

Month and Season, 1928.	Greenwich Mean Time.											Hour commencing—												
	0.	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	Noon.	13.	14.	15.	16.	17.	18.	19.	20.	21.	22.	23.
Jan.	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
Feb.	+4.4	+3.4	+3.5	+4.3	+6.5	+9.9	+9.6	+9.0	+5.1	-4.5	-13.1	-18.4	-17.1	-12.8	-7.5	-2.3	-2.0	+0.4	+1.8	+2.8	+3.3	+4.0	+4.6	+4.6
March	+5.1	+5.9	+4.9	+4.5	+6.6	+9.3	+10.2	+12.2	+6.6	-0.7	-9.9	-16.9	-19.9	-16.6	-11.7	-6.9	-3.7	-1.5	+0.6	+1.5	+3.5	+6.9	+5.9	+5.4
April	+9.2	+7.6	+7.9	+8.0	+9.2	+10.5	+10.5	+9.9	+3.1	-8.4	-18.6	-23.0	-24.1	-19.8	-13.7	-10.6	-3.5	+1.0	+4.1	+6.1	+6.8	+9.3	+8.8	+8.4
May	+12.2	+7.8	+6.7	+8.4	+9.3	+9.6	+9.2	+5.8	-4.5	-18.8	-31.2	-33.8	-29.2	-22.0	-12.2	-3.7	+4.6	+8.5	+12.5	+13.7	+13.3	+12.8	+11.2	+10.2
June	+12.0	+9.4	+9.2	+9.5	+10.5	+5.9	+0.7	-8.9	-18.4	-24.4	-29.5	-32.2	-29.2	-24.9	-16.0	-2.3	+11.4	+19.7	+25.0	+22.3	+16.4	+12.2	+11.0	+11.1
July	+9.6	+6.4	+6.0	+6.3	+9.1	+6.8	+2.3	-2.6	-12.6	-17.7	-25.1	-30.5	-27.7	-21.3	-11.8	-1.2	+4.2	+10.0	+16.9	+18.7	+17.3	+15.5	+12.1	+10.0
Aug.	+6.8	+4.8	+7.1	+5.7	+6.1	+5.9	+2.9	-2.8	-10.1	-16.8	-23.2	-25.1	-23.3	-23.0	-15.4	-3.2	+4.3	+11.7	+16.0	+17.0	+15.3	+13.7	+12.4	+13.1
Sept.	+10.7	+7.6	+8.1	+8.6	+7.6	+5.9	+2.3	-4.9	-12.1	-21.6	-26.1	-24.1	-19.8	-17.4	-11.1	-3.9	+4.3	+9.8	+14.4	+15.4	+13.5	+13.4	+11.2	+10.5
Oct.	+13.0	+11.6	+11.7	+12.2	+11.8	+9.5	+6.1	-0.4	-10.5	-21.7	-29.7	-29.3	-25.3	-17.7	-12.0	-7.8	-0.9	+4.3	+9.0	+12.7	+11.4	+15.9	+12.3	+13.9
Nov.	+15.0	+9.9	+9.0	+11.5	+11.4	+14.9	+11.8	+8.1	-2.9	-15.0	-24.3	-30.2	-27.5	-23.5	-16.5	-10.9	-1.9	+0.4	+3.7	+8.6	+10.9	+11.4	+13.5	+13.3
Dec.	+7.4	+5.2	+7.0	+7.6	+9.8	+9.5	+9.1	+8.9	+2.9	-5.7	-13.2	-14.9	-14.8	-13.6	-13.3	-11.6	-4.0	-1.8	+1.5	+2.4	+2.8	+4.6	+7.5	+7.6
Year	+1.6	+2.6	+2.5	+3.4	+6.2	+8.0	+8.8	+6.8	+2.4	-4.1	-9.7	-11.9	-11.1	-9.5	-6.6	-5.4	-3.1	-0.2	+1.6	+1.8	+3.6	+3.9	+5.2	+4.0
Winter	+8.9	+6.8	+7.0	+7.5	+8.7	+8.8	+6.9	+3.4	-4.3	-13.3	-21.2	-24.2	-22.4	-18.5	-12.3	-5.8	+0.8	+5.2	+8.9	+10.2	+9.8	+10.3	+9.6	+9.3
Equinox	+4.6	+4.3	+4.5	+4.9	+7.3	+9.2	+9.4	+9.2	+4.2	-3.8	-11.5	-15.5	-15.7	-13.1	-9.8	-6.6	-3.2	-0.8	+1.4	+2.1	+3.3	+4.8	+5.8	+5.4
Summer	+12.4	+9.2	+8.8	+10.0	+10.4	+11.1	+9.4	+5.9	-3.7	-16.0	-26.0	-29.1	-26.5	-20.8	-13.6	-8.3	-0.4	+3.6	+7.3	+10.3	+10.6	+12.4	+11.5	+14.0
Summer	+9.8	+7.1	+7.6	+7.5	+8.3	+6.1	+2.1	-4.8	-13.3	-20.1	-26.0	-28.0	-25.0	-21.7	-13.6	-2.7	+6.1	+12.8	+18.1	+18.4	+15.6	+13.7	+11.7	+11.2

WEST COMPONENT.

Jan.	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
Feb.	-4.8	-3.8	-0.9	-0.4	-0.1	-2.8	-3.0	-5.2	-10.3	-8.8	-1.8	+5.9	+14.8	+18.9	+14.7	+9.5	+5.0	+2.4	-0.6	-1.1	-4.7	-8.5	-7.6	-7.0
Mar.	-9.0	-5.5	-4.3	-3.5	-1.6	-4.3	-4.3	-6.3	-10.9	-12.3	-4.5	+6.7	+16.9	+22.3	+21.3	+16.2	+9.2	+6.5	+3.1	+0.2	-4.7	-8.7	-11.1	-11.3
April	-6.7	-4.9	-4.4	-4.7	-5.2	-7.9	-9.8	-16.1	-23.6	-22.2	-10.7	+7.0	+25.2	+32.7	+31.1	+20.8	+10.3	+4.5	+2.2	+0.3	-1.9	-4.7	-5.9	-6.3
May	-8.6	-7.7	-4.4	-3.9	-7.2	-10.0	-18.5	-29.3	-33.7	-25.9	-8.1	+13.9	+31.3	+36.3	+32.6	+23.4	+14.2	+7.0	+4.5	+4.1	+2.8	-1.9	-4.6	-6.0
June	-4.3	-5.2	-3.9	-6.6	-9.8	-17.4	-24.5	-30.3	-30.3	-20.3	-4.2	+13.6	+25.7	+31.2	+30.7	+26.0	+20.9	+10.2	+4.3	+3.2	+2.1	-1.8	-3.9	-4.9
July	-3.0	-4.0	-4.4	-7.6	-14.1	-21.0	-26.0	-30.5	-31.1	-23.2	-11.1	+7.3	+22.4	+30.6	+33.7	+28.4	+21.6	+16.1	+11.1	+5.7	+3.2	+1.2	-0.9	-4.1
Aug.	-2.4	-6.6	-10.6	-10.1	-13.2	-19.9	-23.5	-29.4	-28.5	-21.8	-8.8	+6.8	+23.1	+31.2	+33.2	+27.0	+19.2	+13.1	+8.2	+6.0	+4.5	+2.5	+0.7	-1.1
Sept.	-6.8	-8.3	-8.9	-10.2	-13.0	-16.5	-22.2	-25.5	-24.1	-15.1	-2.0	+15.2	+29.9	+34.3	+31.5	+23.2	+14.2	+7.8	+3.3	+3.3	+0.5	+0.2	-3.3	-5.9
Oct.	-8.1	-7.2	-8.4	-10.9	-11.2	-13.9	-18.8	-24.1	-23.6	-15.6	+0.2	+20.5	+34.7	+39.3	+34.1	+24.7	+13.8	+3.7	+1.2	-0.4	-4.5	-5.2	-8.4	-11.3
Nov.	-10.6	-8.6	-5.7	-3.9	-4.1	-5.7	-7.7	-12.9	-20.5	-14.1	+0.5	+15.7	+25.5	+29.1	+26.7	+18.1	+10.0	+5.3	+3.3	-2.6	-9.5	-9.1	-8.9	-10.0
Dec.	-9.1	-8.1	-4.1	-3.7	-1.8	-0.6	-1.2	-2.8	-5.2	-4.3	+2.8	+11.0	+16.8	+18.4	+15.1	+12.7	+7.4	+4.0	-1.1	-5.2	-9.2	-8.9	-13.5	-10.3
Year	-7.9	-5.5	-4.3	-2.9	-2.9	+0.3	+1.9	-0.7	-3.3	-2.7	+1.7	+6.9	+13.2	+14.1	+11.8	+7.6	+5.7	+3.1	-0.0	-1.9	-5.5	-8.1	-9.1	-10.7
Winter	-6.8	-6.3	-5.4	-5.7	-7.0	-10.0	-13.1	-17.8	-20.4	-15.5	-3.8	+10.9	+23.3	+28.2	+26.4	+19.8	+12.6	+7.0	+3.3	+1.0	-2.2	-4.4	-6.4	-7.4
Equinox	-7.7	-5.7	-3.4	-2.6	-1.6	-1.9	-1.7	-3.8	-7.4	-7.0	-0.5	+7.6	+15.4	+18.4	+15.7	+11.5	+6.8	+4.0	+0.4	-2.0	-6.0	-8.6	-10.3	-9.8
Summer	-8.5	-7.1	-5.7	-5.9	-6.9	-9.4	-13.7	-20.6	-25.4	-19.5	-4.5	+14.3	+29.2	+34.4	+31.1	+21.8	+12.1	+5.1	+2.8	+0.4	-3.3	-5.2	-7.0	-8.4
Summer	-4.1	-6.0	-7.0	-8.6	-12.5	-18.7	-24.1	-28.9	-28.5	-20.1	-6.5	+10.7	+25.3	+31.8	+32.3	+26.2	+19.0	+11.8	+6.7	+4.6	+2.6	+0.5	-1.9	-4.0

VERTICAL COMPONENT.

Jan.	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
Feb.	-0.5	-1.6	-2.1	-2.0	-2.0	-2.1	-1.5	-2.1	-3.4	-3.3	-4.4	-3.7	+0.6	+4.5	+4.8	+3.9	+3.8	+3.8	+3.2	+2.6	+2.3	+0.8	+0.0	+0.0
Mar.	+1.2	-0.4	-0.9	-1.5	-1.6	-1.2	-1.7	-1.4	-4.6	-8.7	-9.8	-8.0	-3.7	+1.5	+4.3	+6.4	+5.9	+5.9	+6.0	+5.7	+4.3	+3.1	+1.6	+1.6
April	+1.5	-0.1	-0.8	-1.1	-0.9	-0.2	+0.7	+1.9	-0.3	-5.7	-12.1	-16.1	-14.3	-8.3	-1.5	+4.8	+9.4	+9.4	+8.4	+7.5	+6.2	+4.8	+3.7	+2.5
May	+1.9	+0.4	+1.2	+1.7	+2.2	+4.0	+5.3	+4.3	-1.1	-9.3	-17.0	-21.5	-20.6	-12.9	-3.8	+2.9	+7.8	+10.2	+10.4	+9.0	+7.9	+7.0	+5.3	+3.8
June	-2.1	-3.2	-3.7	-3.6	-0.7	+0.4	-0.6	-3.8	-7.9	-13.7	-20.0	-21.3	-17.1	-8.5	+1.5	+10.4	+16.3	+20.4	+20.2	+16.1	+11.4	+7.2	+3.4	+0.5
July	-1.0	-2.0	-2.5	-1.4	+0.8	+1.1	+0.9	-0.5	-4.6	-10.4	-16.9	-19.7	-15.1	-9.2	-0.9	+6.7	+10.7	+13.3	+13.7	+13.2	+11.2	+6.9	+3.7	+1.2
Aug.	+0.1	-8.4	-4.8	-3.7	-7.1	-4.3	-9.2	-9.9	-11.2	-12.9	-12.9	-13.7	-12.1	-6.4	+2.7	+10.7	+14.8	+17.7	+18.6	+16.3	+13.5	+9.9	+7.1	+4.8
Sept.	+0.3	-1.9	-3.6	-3.2	-1.2	-0.2	-0.4	-3.3	-8.3	-12.5	-16.3	-15.8	-8.8	-0.6	+7.1	+11.8	+13.5	+11.8	+10.1	+8.7	+6.0	+4.4	+2.7	+2.7
Oct.	-1.3	-2.4	-4.6	-3.4	-2.6	-1.4	+0.9	+0.5	-3.4	-8.7	-13.4	-14.7	-12.3	-6.4	+0.9	+8.9	+13.9	+15.2	+11.9	+9.1	+7.4	+4.7	+1.2	-0.3
Nov.	-3.0	-5.5	-6.9	-6.6	-4.9	-3.7	-2.4	-0.6	-2.3	-6.3	-9.9	-9.8	-5.8	-1.2	+5.1	+9.7	+12.3	+12.7	+10.5	+8.3	+5.5	+3.9	+1.6	-0.4
Dec.	-2.1	-2.8	-3.3	-3.5	-4.0	-3.8	-4.0	-3.9	-4.0	-5.7	-7.2	-5.8	-2.9	+1.5	+5.3	+6.9	+8.2	+8.1	+7.9	+6.0	+5.0	+3.4	+1.1	-0.2
Year	-1.0	-1.6	-2.6	-3.1	-2.8	-2.7	-3.1	-3.4	-2.8	-3.1	-2.8	-2.3	+0.4	+3.1	+3.7	+4.8	+4.7	+4.3	+3.8	+3.6	+2.7	+2.0	-0.2	-0.2
Winter	-0.5	-2.5	-2.9	-2.6	-2.1	-1.2	-1.3	-1.6	-3.7	-7.7	-11.4	-13.0	-10.8	-5.2	+1.5	+6.7	+10.0	+11.2	+10.6	+9.1	+7.4	+5.3	+3.1	+1.3
Equinox	-0.6	-1.6	-2.2	-2.5	-2.6	-2.4	-2.7	-2.6	-2.7	-4.2	-5.5	-5.7	-4.2	-0.3	+3.6	+4.9	+5.8	+5.6	+5.5	+4.8	+4.2	+3.2	+1.8	+0.3
Summer	-0.2	-1.9	-2.8	-2.4	-1.6	-0.3	+1.1	+1.5	-1.8	-7.5	-13.1	-15.5	-13.3	-7.2	+0.2	+6.6	+10.9	+11.9	+10.3	+8.5	+6.8	+5.1	+3.0	+1.4
Summer	-0.7	-3.9	-3.7	-3.0	-2.1	-0.8	-2.2	-3.7	-6.8	-11.3	-15.6	-17.8	-15.0	-8.2	+0.7	+8.7	+13.4	+16.2	+16.1	+13.9	+11.2	+7.5	+4.7	+2.3

TABLE VI.—MEAN DIURNAL INEQUALITIES OF THE MAGNETIC ELEMENTS—DECLINATION, INCLINATION AND HORIZONTAL FORCE.

International Quiet Days.

DECLINATION WEST.

Table with columns for Month and Season (1928), Greenwich Mean Time (0-23), and Declination West values for each hour.

INCLINATION.

Table with columns for Month and Season (1928) and Inclination values for each hour.

HORIZONTAL FORCE.

Table with columns for Month and Season (1928) and Horizontal Force values for each hour.

TABLE VI.—continued—MEAN DIURNAL INEQUALITIES OF GEOGRAPHICAL COMPONENTS OF MAGNETIC FORCE.

International Quiet Days.

NORTH COMPONENT,

Month and Season, 1928.	Greenwich Mean Time.											Hour commencing—												
	0.	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	Noon.	13.	14.	15.	16.	17.	18.	19.	20.	21.	22.	23.
Jan.	+0.4	+1.1	+0.4	+1.9	+3.7	+5.5	+5.0	+4.7	+1.7	-3.8	-10.4	-14.8	-15.0	-9.5	-2.8	+1.0	+2.0	+3.0	+5.0	+5.8	+4.7	+5.0	+3.8	+2.7
Feb.	+4.1	+5.1	+4.6	+4.9	+6.4	+8.1	+8.7	+7.9	+6.1	-1.9	-9.2	-15.3	-14.4	-13.2	-9.7	-6.0	-3.7	-3.2	-1.7	+1.8	+4.1	+5.6	+5.7	+6.2
Mar.	+7.4	+6.2	+6.2	+6.9	+6.8	+8.1	+8.7	+8.4	+2.5	-7.8	-14.9	-19.2	-18.9	-14.2	-10.0	-6.0	-2.2	-0.8	+2.2	+5.2	+6.0	+6.9	+6.8	+6.8
April	+6.9	+6.0	+6.0	+5.9	+6.4	+7.8	+8.9	+7.2	-1.0	-12.9	-25.5	-30.6	-27.0	-20.7	-10.3	-0.9	+6.0	+9.5	+10.4	+10.4	+11.1	+9.0	+8.5	+9.1
May	+8.8	+7.4	+7.1	+7.1	+7.6	+7.0	+5.8	-0.4	-9.2	-19.0	-28.0	-31.3	-31.3	-26.7	-17.5	-5.1	+4.4	+14.0	+19.4	+17.6	+15.8	+15.3	+15.8	+15.0
June	+7.9	+3.9	+2.4	+2.3	+5.6	+6.9	+3.7	-1.9	-10.6	-14.9	-22.6	-28.8	-24.7	-16.7	-6.4	-2.8	+4.5	+13.2	+15.8	+15.2	+12.4	+15.2	+10.4	+9.6
July	+2.3	+0.7	-0.2	+3.8	+6.5	+8.3	+2.9	-2.6	-9.2	-17.7	-23.9	-25.3	-23.5	-18.1	-7.7	+1.9	+8.2	+13.5	+13.5	+15.5	+13.9	+13.1	+11.1	+12.2
Aug.	+8.4	+7.6	+7.7	+7.0	+7.0	+5.3	+2.2	-4.6	-12.2	-19.3	-24.9	-26.1	-23.0	-17.1	-12.1	-2.9	+1.9	+7.2	+14.9	+15.1	+16.7	+16.0	+12.9	+12.2
Sept.	+7.8	+7.3	+5.6	+7.2	+6.9	+7.9	+6.5	+0.8	-7.9	-19.2	-25.4	-24.8	-20.7	-14.9	-9.0	-6.9	-1.3	+2.3	+6.9	+10.5	+13.4	+15.5	+16.4	+14.0
Oct.	+4.6	+5.0	+7.3	+8.8	+7.7	+10.4	+4.5	+3.3	-0.9	-11.6	-21.1	-27.7	-23.6	-20.2	-12.9	-7.4	-0.4	+5.0	+8.8	+11.2	+12.0	+12.6	+13.0	+12.8
Nov.	+2.9	+1.9	+1.9	+2.3	+4.2	+5.3	+6.0	+4.6	+0.7	-6.2	-11.2	-12.2	-10.9	-9.0	-6.3	-4.2	+0.1	+2.8	+5.4	+5.7	+3.2	+3.9	+4.2	+6.0
Dec.	+0.3	-0.5	+0.9	+2.0	+4.6	+6.6	+6.0	+5.4	+0.8	-5.1	-9.0	-9.6	-8.2	-6.3	-7.6	-7.3	-1.2	+2.9	+3.6	+2.6	+5.2	+4.3	+3.8	+6.0
Year	+5.2	+4.3	+4.2	+5.0	+6.1	+7.3	+5.8	+2.7	-3.3	-11.6	-18.8	-22.1	-20.1	-15.6	-9.4	-3.9	+1.5	+5.8	+8.7	+9.7	+9.9	+10.2	+9.4	+9.4
Winter	+1.9	+1.9	+2.0	+2.8	+4.7	+6.4	+6.4	+5.7	+2.3	-4.3	-10.0	-13.0	-12.1	-9.5	-6.6	-4.1	-0.7	+1.4	+3.1	+4.0	+4.3	+4.7	+4.4	+5.2
Equinox	+6.7	+6.1	+6.3	+7.2	+7.0	+8.6	+7.2	+4.9	-1.8	-12.9	-21.7	-25.6	-22.6	-17.5	-10.6	-5.3	+0.5	+4.0	+7.1	+9.3	+10.6	+11.0	+11.2	+10.7
Summer	+6.9	+4.9	+4.3	+5.0	+6.7	+6.9	+3.7	-2.4	-10.3	-17.7	-24.9	-27.9	-25.6	-19.7	-10.9	-2.2	+4.8	+12.0	+15.9	+15.8	+14.7	+14.9	+12.6	+12.3

WEST COMPONENT.

Jan.	-4.9	-4.2	-3.2	-2.6	-2.5	-4.1	-4.3	-6.5	-8.9	-5.4	-0.6	+6.2	+12.2	+15.3	+10.2	+5.8	+4.3	+3.7	+2.7	+1.9	-1.1	-3.3	-5.4	-5.0
Feb.	-6.8	-4.8	-4.2	-4.1	-3.3	-3.4	-5.3	-7.9	-13.8	-15.8	-6.0	+2.0	+13.3	+19.0	+18.8	+15.1	+7.7	+7.1	+6.8	+3.5	-0.5	-4.1	-5.8	-7.9
Mar.	-2.1	-3.4	-3.3	-2.7	-4.3	-5.4	-7.2	-13.8	-23.0	-22.1	-11.8	+6.2	+19.7	+23.9	+19.8	+11.6	+5.4	+2.9	+2.6	+1.2	+0.2	-0.1	+0.5	-0.7
April	-0.1	-1.6	-2.4	-4.0	-6.0	-9.5	-16.1	-24.7	-30.3	-24.9	-10.0	+6.0	+19.2	+24.9	+21.4	+16.2	+11.2	+7.6	+6.1	+5.9	+4.8	+2.4	+1.8	+1.7
May	+0.7	+1.3	+1.8	+5.3	+10.3	+18.4	+26.7	+31.1	+30.6	-22.6	-8.2	+8.0	+20.8	+26.0	+24.4	+18.3	+12.7	+7.4	+7.0	+7.7	+7.9	+7.2	+5.0	+3.1
June	+3.0	+0.7	-3.2	-7.3	-10.9	-20.4	-26.4	-31.4	-29.0	-23.7	-10.5	+6.7	+19.2	+26.7	+27.3	+19.6	+13.5	+10.7	+8.9	+8.2	+5.1	+4.3	+4.9	+4.7
July	+0.8	-4.1	-3.9	-5.8	-12.4	-22.2	-29.9	-32.6	-31.7	-23.4	-9.4	+8.5	+23.8	+30.1	+30.9	+23.9	+14.5	+8.1	+5.8	+6.6	+6.8	+6.4	+6.4	+4.2
Aug.	+1.3	-2.4	-4.4	-7.7	-13.1	-19.2	-24.5	-27.0	-27.0	-17.6	-3.6	+15.0	+28.5	+33.2	+29.4	+22.4	+10.0	+1.2	+0.1	+2.7	+3.6	+3.2	+0.7	+2.8
Sept.	+1.8	-5.9	-5.5	-3.6	-6.9	-9.5	-14.8	-23.3	-25.8	-20.9	-7.2	+12.3	+25.4	+29.6	+27.0	+18.7	+11.1	+5.3	+5.0	+0.8	-1.3	-1.4	-2.8	-4.7
Oct.	-4.1	-0.4	-1.3	-3.3	-4.9	-6.8	-9.7	-17.3	-24.0	-17.7	-4.0	+10.0	+18.2	+22.0	+20.5	+14.6	+8.9	+6.2	+4.4	+2.4	+1.5	-2.0	-6.9	-6.5
Nov.	-7.3	-3.1	-3.1	-2.1	-1.3	-1.6	-3.6	-6.0	-9.2	-8.8	-2.2	+4.9	+11.0	+11.4	+8.9	+7.5	+7.6	+4.9	+2.5	+1.1	-0.3	-2.5	-4.0	-4.8
Dec.	-5.0	-4.2	-2.9	-3.2	-2.2	-2.8	-2.1	-3.9	-6.1	-4.8	0.0	+4.1	+10.8	+13.3	+11.9	+8.5	+6.3	+3.7	+1.3	-1.4	-3.9	-4.4	-6.0	-7.4
Year	-2.4	-3.0	-3.3	-4.3	-6.5	-10.3	-14.2	-18.8	-21.5	-17.3	-6.1	+7.5	+18.5	+23.0	+20.9	+15.2	+9.4	+5.7	+4.4	+3.4	+1.9	+0.5	-1.0	-2.2
Winter	-6.0	-4.1	-3.4	-3.0	-2.3	-3.0	-3.8	-6.1	-9.5	-8.7	-2.2	+4.3	+11.8	+14.8	+12.5	+9.2	+6.5	+4.9	+3.3	+1.3	-1.5	-3.6	-5.3	-6.3
Equinox	-2.0	-2.8	-3.1	-3.4	-5.5	-7.8	-12.0	-19.8	-25.8	-21.4	-8.3	+8.6	+10.6	+25.1	+22.2	+15.3	+9.2	+5.5	+4.5	+2.6	+1.3	-0.3	-1.9	-2.6
Summer	+0.8	-2.1	-3.3	-6.5	-11.7	-20.1	-26.9	-30.5	-29.3	-21.8	-7.9	+9.6	+23.1	+29.0	+28.0	+21.1	+12.7	+6.9	+5.5	+6.3	+5.9	+5.3	+4.3	+2.3

VERTICAL COMPONENT.

Jan.	-0.4	-1.0	-1.2	-0.6	0.0	+0.8	+0.8	+1.0	-0.8	-2.2	-3.2	-5.0	-5.4	-0.8	+4.0	+3.4	+2.2	+2.0	+2.2	+2.0	+2.0	+1.6	+0.8	0.0
Feb.	+0.5	-0.7	-0.3	-0.5	-0.1	+0.3	-0.9	-1.3	-1.3	-4.1	-8.1	-8.1	-6.9	-2.7	+3.7	+4.9	+5.5	+5.1	+4.7	+4.5	+3.3	+1.7	+0.5	-0.7
Mar.	+3.2	+2.2	+2.0	+1.6	+1.4	+1.8	+1.8	+3.4	+2.0	-2.8	-7.4	-11.4	-10.4	-5.0	-0.8	+2.8	+4.0	+2.6	+2.2	+1.6	+1.0	+1.2	+1.6	+2.2
April	+5.2	+4.8	+4.4	+4.8	+5.2	+6.2	+6.0	+4.8	+0.2	-7.6	-15.2	-20.6	-20.4	-14.6	-5.8	0.0	+3.2	+5.2	+6.2	+6.2	+6.0	+6.2	+5.6	+4.8
May	+5.0	+5.0	+5.2	+5.4	+7.6	+7.8	+5.6	+3.2	-1.0	-9.8	-20.2	-25.8	-22.6	-15.2	-6.2	+1.0	+5.4	+9.4	+10.0	+8.0	+6.6	+5.0	+3.8	+4.0
June	+1.9	+1.7	+1.7	+2.5	+4.7	+3.7	+2.9	+2.7	+1.0	-6.9	-15.7	-20.7	-16.5	-10.3	-3.3	+3.1	+6.5	+8.5	+7.7	+7.7	+6.3	+5.1	+3.3	+2.9
July	+5.4	+5.4	+5.8	+5.4	+6.0	+6.0	+4.4	+3.2	-1.6	-6.0	-11.4	-16.8	-16.6	-14.6	-7.6	-2.4	+2.2	+5.4	+6.6	+6.0	+4.6	+4.0	+3.6	+2.0
Aug.	+1.4	+1.8	+1.8	+2.8	+4.4	+5.2	+4.4	+2.4	+1.8	-6.6	-11.0	-14.6	-13.4	-8.8	-2.6	+4.0	+7.0	+7.6	+5.6	+3.4	+2.4	+1.4	+1.4	+1.4
Sept.	+3.6	+2.8	+3.4	+2.6	+3.0	+3.6	+4.8	+4.4	+1.2	-4.0	-11.0	-15.2	-14.8	-10.6	-5.0	+1.0	+5.2	+5.8	+4.6	+4.6	+4.2	+3.2	+2.2	+1.4
Oct.	+2.1	+1.7	-0.5	-2.3	-1.3	-0.7	+0.7	+2.9	+0.7	-4.3	-7.3	-9.5	-6.5	-3.5	+0.3	+4.5	+5.1	+4.1	+3.1	+2.3	+2.3	+2.3	+2.1	+2.3
Nov.	+1.4	+0.8	-0.6	-0.2	-0.6	-0.6	-0.4	0.0	-0.2	-2.2	-4.4	-2.8	-0.8	+2.2	+3.2	+2.8	+2.2	+1.2	+0.8	+0.2	-0.2	+0.4	-0.2	+0.8
Dec.	-0.1	-0.9	-0.9	-1.3	-1.5	-1.7	-1.3	-1.7	-0.7	+0.1	+0.5	-0.3	-2.9	-0.5	+1.3	+2.1	+2.1	+1.9	+1.9	+1.7	+1.7	+0.7	-0.1	-0.9
Year	+2.4	+2.0	+1.7	+1.7	+2.4	+2.7	+2.4	+2.1	-0.3	-4.7	-9.5	-12.6	-11.4	-7.0	-1.6	+2.3	+4.2	+4.9	+4.6	+4.0	+3.5	+2.7	+2.1	+1.6
Winter	+0.4	-0.5	-0.8	-0.7	-0.6	-0.3	-0.5	-0.5	-0.8	-2.1	-3.8	-4.1	-4.0	-0.5	+3.1	+3.3	+3.0	+2.6	+2.4	+2.1	+1.7	+1.1	+0.3	-0.6
Equinox	+3.5	+2.9	+2.3	+1.7	+2.1	+2.7	+3.3	+3.9	+1.0	-4.7	-10.2	-14.2	-13.0	-8.4	-2.8	+2.1	+4.4	+4.4	+4.0	+3.7	+3.4	+3.2	+2.9	+2.7
Summer	+3.4	+3.5	+3.6	+4.0	+5.7	+5.7	+4.3	+2.9	-1.1	-7.3	-14.6	-19.5	-17.3	-12.2	-4.9	+1.4	+5.3	+7.7	+7.5	+6.3	+5.0	+3.9	+3.0	+2.6

TABLE VII.—MEAN DIURNAL INEQUALITIES OF THE MAGNETIC ELEMENTS—DECLINATION, INCLINATION AND HORIZONTAL FORCE.

International Disturbed Days.

DECLINATION WEST.

Greenwich Mean Time. Hour commencing—

Table with columns for Month and Season (1928), Greenwich Mean Time (0-23), and Hour commencing (Noon, 13-23). Rows include monthly data (Jan-Dec), Year, Winter, Equinox, and Summer.

INCLINATION.

Table with columns for Month and Season (1928) and Greenwich Mean Time (0-23). Rows include monthly data (Jan-Dec), Year, Winter, Equinox, and Summer.

HORIZONTAL FORCE.

Table with columns for Month and Season (1928) and Greenwich Mean Time (0-23). Rows include monthly data (Jan-Dec), Year, Winter, Equinox, and Summer.

TABLE VII.—continued—MEAN DIURNAL INEQUALITIES OF GEOGRAPHICAL COMPONENTS OF MAGNETIC FORCE.

International Disturbed Days.

NORTH COMPONENT.

Month and Season, 1928.	Greenwich Mean Time. Hourcommencing—																							
	0.	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	Noon.	13.	14.	15.	16.	17.	18.	19.	20.	21.	22.	23.
Jan.	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
Feb.	+7.1	+10.3	+9.7	+9.6	+15.4	+20.0	+15.5	+16.8	+15.4	+3.4	-13.3	-32.2	-30.1	-25.1	-16.8	-7.3	-7.9	-4.9	-3.8	+1.1	+4.3	+2.8	+5.2	+4.0
Mar.	+7.4	+7.3	+6.1	+3.3	+6.3	+14.0	+14.1	+16.7	+12.9	+3.7	-5.3	-17.6	-27.1	-21.3	-12.3	-9.1	-6.2	-5.6	-4.4	-5.4	+1.8	+7.3	+5.1	+7.1
April	+13.3	+7.5	+16.1	+15.1	+17.3	+18.2	+12.0	+11.6	+4.2	-9.1	-24.2	-32.3	-31.3	-28.1	-18.0	-22.9	-6.9	+4.2	+2.2	+10.1	+6.5	+14.7	+11.8	+8.2
May	+25.1	+10.0	+6.8	+16.6	+16.7	+10.8	+5.2	+4.5	+8.9	-25.5	-38.5	-36.0	-27.2	-22.6	-11.8	-3.9	+3.1	+6.8	+11.6	+9.5	+11.3	+17.1	+10.1	+7.6
June	+9.5	+11.0	+11.6	+12.8	+16.2	-1.9	-4.3	-19.0	-34.1	-54.3	-57.4	-43.6	-26.1	-16.3	-7.4	+23.5	+43.7	+50.5	+48.6	+29.2	+11.5	-3.8	-8.4	-2.2
July	+14.5	+16.9	+12.5	+11.4	+14.9	+10.1	+10.7	+5.4	-25.3	-22.4	-32.7	-39.5	-37.8	-30.5	-7.6	+1.1	+3.1	+6.3	+12.3	+16.3	+21.6	+20.5	+8.2	+9.9
Aug.	+11.0	+6.1	+9.7	+8.8	-0.2	-0.9	-2.4	-12.1	-19.6	-19.7	-27.5	-32.4	-24.8	-27.1	-15.8	-6.1	+7.5	+15.4	+24.7	+22.8	+24.3	+15.4	+16.6	+27.0
Sept.	+21.9	+7.5	+9.6	+17.6	+7.7	+2.8	-5.4	-9.1	-19.3	-39.0	-41.0	-31.5	-22.6	-20.1	-10.3	-2.5	+10.1	+20.3	+22.1	+25.2	+19.2	+20.7	+6.2	+10.9
Oct.	+16.2	+16.7	+21.6	+22.7	+21.7	+13.3	+9.0	+3.3	-12.4	-30.1	-40.2	-35.7	-30.7	-23.7	-12.7	-8.2	+3.6	+8.8	+11.4	+13.8	-0.8	+13.9	-2.4	-1.1
Nov.	+13.4	+1.8	+1.3	+14.7	+4.1	+8.1	+7.8	+7.2	-10.8	-13.9	-17.9	-26.8	-25.9	-24.3	-18.6	-11.0	+3.7	+5.6	+9.4	+17.5	+14.5	+11.8	+10.9	+18.0
Dec.	+21.7	+15.0	+18.4	+20.4	+21.3	+12.1	+13.7	+14.3	+2.0	-12.9	-19.0	-15.6	-14.5	-21.7	-14.5	-20.6	-10.8	-20.2	-8.9	-2.7	+1.4	+8.7	+6.3	+10.5
Year	+4.3	+2.6	+6.8	+7.0	+10.1	+10.6	+13.1	+6.3	-2.5	-10.6	-17.2	-17.8	-16.3	-15.7	-7.8	-4.7	-0.4	-0.8	+8.0	+2.9	+2.2	+3.2	+7.9	+8.4
Winter	+13.8	+9.4	+10.9	+13.3	+12.6	+9.8	+7.4	+3.8	-8.2	-19.2	-27.8	-30.1	-26.2	-23.0	-12.8	-6.0	+3.5	+7.2	+11.1	+11.7	+9.6	+11.0	+6.5	+9.0
Equinox	+10.1	+8.8	+10.3	+10.1	+13.3	+14.2	+14.1	+13.5	+7.0	-4.1	-13.7	-20.8	-22.0	-21.0	-12.9	-10.4	-6.3	-7.9	-2.3	-1.0	+1.7	+5.5	+6.1	+7.5
Summer	+17.0	+9.0	+11.5	+17.3	+15.0	+12.6	+8.5	+6.7	-7.0	-19.7	-29.7	-32.7	-28.8	-24.7	-15.3	-11.5	+0.9	+6.4	+8.7	+12.7	+7.9	+14.4	+7.6	+8.2
Year	+14.2	+10.4	+10.9	+12.7	+9.7	+2.5	-0.4	-8.7	-24.6	-33.9	-39.7	-36.8	-27.8	-23.5	-10.3	+4.0	+16.1	+23.1	+26.9	+23.4	+19.2	+13.2	+5.7	+11.4

WEST COMPONENT.

Jan.	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
Feb.	-3.4	-4.7	-3.8	-3.4	+0.9	-5.6	-2.1	-0.9	-5.5	-5.1	-0.3	+6.5	+19.6	+24.7	+22.4	+15.8	+6.8	-1.8	-5.8	-3.1	-9.1	-19.3	-12.8	-10.6
Mar.	-11.6	-6.0	-6.1	-6.4	+2.8	-6.4	-6.2	-6.7	-10.9	-12.8	-3.7	+12.4	+20.8	+22.3	+27.8	+21.8	+13.9	+8.4	-1.7	+2.9	-5.0	-17.7	-15.1	-14.8
April	-30.3	-20.5	-14.8	-10.7	-6.4	-12.5	-10.4	-13.1	-15.7	-14.3	-2.9	+15.7	+33.7	+44.2	+47.7	+30.4	+19.5	+10.5	+3.7	-1.9	-4.3	-9.4	-23.0	-16.1
May	-15.3	-17.3	-6.9	-1.3	-11.0	-12.5	-17.8	-29.4	-34.4	-23.7	-5.0	+18.2	+39.5	+43.9	+42.3	+29.3	+17.5	+5.6	+5.4	+3.6	+3.1	-11.6	-14.9	-6.8
June	-14.2	-31.6	-13.6	-9.1	-12.3	-13.6	-15.7	-32.2	-33.8	-18.6	+1.4	+21.9	+33.2	+37.0	+33.9	+44.0	+47.4	+24.4	+7.0	+4.6	+1.2	-17.3	-21.5	-24.1
July	-1.5	-15.5	-13.5	-13.9	-15.0	-21.8	-20.0	-25.7	-29.5	-13.2	-10.7	+10.4	+25.5	+31.3	+36.0	+27.8	+24.3	+16.4	+7.2	+5.9	+4.3	-5.4	-2.7	-1.1
Aug.	+2.6	+3.3	-7.8	-4.1	-10.3	-17.3	-21.6	-35.8	-37.8	-29.2	-12.9	+7.6	+26.4	+31.0	+37.6	+28.0	+24.1	+18.4	+8.4	+1.2	+2.7	+0.3	-13.2	-1.1
Sept.	-22.3	-19.7	-24.6	-27.5	-18.6	-5.1	-15.0	-18.3	-25.2	-10.6	-2.7	+13.9	+31.3	+38.3	+38.1	+33.1	+25.1	+18.3	+11.5	+9.0	-2.6	-2.6	-9.0	-14.4
Oct.	-13.6	-3.2	-6.5	-14.0	-16.0	-15.1	-20.6	-22.6	-22.2	-6.4	+12.7	+33.4	+48.4	+56.3	+45.8	+38.6	+20.1	+4.8	-5.0	-10.9	-14.7	-22.1	-32.6	-40.3
Nov.	-23.4	-22.1	-9.9	-13.6	-12.3	-11.0	-10.4	-11.3	-17.1	-6.9	+6.1	+19.1	+29.6	+33.3	+28.1	+21.5	+18.5	+17.3	+13.2	-0.6	-13.6	-14.3	-7.8	-12.0
Dec.	-6.8	-13.2	-7.6	-4.7	-1.4	+4.9	+5.0	+0.7	-1.3	+1.1	+6.1	+16.7	+21.7	+26.2	+23.4	+21.5	+8.8	+8.1	-14.9	-26.8	-25.1	-11.8	-24.0	-7.2
Year	-17.7	-10.2	-10.3	-7.7	-12.4	+3.3	+11.4	+8.0	+5.0	+3.0	+5.9	+9.4	+17.8	+18.2	+13.9	+6.7	+8.7	+1.4	-5.2	-0.4	-3.8	-5.7	-12.6	-27.6
Winter	-13.1	-13.4	-10.5	-9.7	-9.3	-9.4	-10.3	-15.6	-19.0	-11.4	-0.5	+15.4	+29.0	+33.9	+33.1	+26.5	+19.6	+11.0	+2.0	-1.4	-5.6	-11.4	-15.8	-14.7
Equinox	-9.9	-8.5	-7.0	-5.6	-2.5	-1.0	+2.0	+0.3	-3.2	-3.5	+2.0	+11.3	+20.0	+22.9	+21.9	+16.5	+9.6	+4.0	-6.9	-6.9	-10.8	-13.6	-16.1	-15.1
Summer	-20.7	-15.8	-9.5	-9.9	-11.4	-12.8	-14.8	-19.1	-22.4	-12.8	+2.7	+21.6	+37.8	+44.4	+41.0	+30.0	+18.9	+9.6	+4.3	-2.5	-7.4	-14.4	-19.6	-18.8
Year	-8.9	-15.9	-14.9	-13.7	-14.1	-14.5	-18.1	-28.0	-31.6	-17.9	-6.2	+13.5	+29.1	+34.4	+36.4	+33.2	+30.2	+19.4	+8.5	+5.2	+1.4	-6.3	-11.6	-10.2

VERTICAL COMPONENT.

Jan.	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
Feb.	+0.2	-3.0	-3.2	-3.4	-3.8	-7.4	-6.4	-6.4	-7.2	-8.8	-7.6	-7.4	-4.8	+0.2	+4.8	+8.2	+9.4	+11.0	+12.0	+9.0	+6.6	+5.6	+3.2	+0.2
Mar.	0.0	-0.8	-1.0	-1.8	-2.2	-4.2	-3.6	-2.8	-2.8	-6.2	-11.8	-13.8	-9.4	-5.6	-0.6	+4.0	+8.0	+8.2	+9.6	+9.4	+9.2	+8.0	+6.0	+4.0
April	-3.4	-5.6	-8.4	-9.8	-8.4	-7.0	-5.4	-5.0	-7.2	-11.8	-17.2	-19.2	-16.0	-8.0	+4.6	+15.2	+22.4	+23.6	+20.2	+18.2	+14.2	+9.2	+5.0	+1.6
May	-1.6	-4.0	0.0	-0.8	-2.2	+1.2	+3.0	+2.4	-1.6	-7.2	-16.2	-20.2	-18.4	-10.2	-1.2	+4.2	+9.4	+14.2	+13.8	+11.6	+9.8	+8.6	+2.4	+3.2
June	-15.4	-15.8	-16.6	-22.2	-19.0	-15.8	-18.0	-20.4	-24.0	-23.6	-23.4	-16.6	-4.8	+8.8	+21.0	+31.6	+39.2	+44.6	+44.4	+29.6	+20.0	+10.4	-2.4	-12.6
July	-7.4	-8.4	-8.6	-6.2	-4.0	-5.0	-4.4	-7.8	-12.4	-15.2	-20.0	-19.0	-11.8	-2.8	+10.0	+16.2	+19.8	+21.0	+17.6	+14.6	+6.8	+3.8	+1.2	
Aug.	+2.3	-1.9	-6.9	-10.3	-10.1	-8.3	-6.9	-7.5	-9.7	-13.5	-17.5	-20.5	-15.9	-7.1	+5.7	+14.5	+18.3	+22.1	+23.9	+18.9	+14.9	+7.9	+4.7	+3.3
Sept.	-9.0	-19.6	-28.0	-25.6	-19.2	-19.2	-18.0	-13.4	-12.2	-10.8	-10.0	-9.0	-9.8	+2.0	+12.0	+21.0	+26.0	+30.4	+24.2	+21.8	+23.2	+18.0	+13.6	+11.4
Oct.	-7.1	-8.3	-15.5	-13.1	-11.7	-9.7	-8.1	-9.1	-12.9	-18.9	-22.3	-21.1	-16.7	+6.3	+11.9	+26.3	+37.3	+41.3	+28.1	+19.7	+15.9	+9.9	-2.9	-5.7
Nov.	-9.1	-15.1	-20.1	-16.5	-8.1	-2.5	-0.1	+1.1	-0.5	-3.5	-7.3	-9.3	-5.7	-0.3	+6.7	+9.7	+12.9	+14.3	+14.1	+12.9	+10.9	+9.1	+6.1	-0.5
Dec.	-10.0	-7.6	-8.2	-10.0	-13.6	-13.0	-12.6	-11.6	-11.4	-12.0	-11.6	-9.6	-4.8	+4.6	+12.4	+16.6	+19.6	+23.8	+25.4	+16.4	+12.0	+5.0	+0.4	-0.8
Year	-1.2	-1.6	-3.8	-7.4	-5.8	-5.4	-8.0	-7.8	-5.8	-6.2	-4.0	-1.4	0.0	+1.4	+6.6	+7.0	+8.4	+7.8	+6.8	+5.4	+6.0	+5.8	+6.8	-3.0
Winter	-5.1	-7.6	-10.0	-10.6	-9.0	-8.0	-7.4	-7.4	-9.0	-11.5	-14.1	-13.9	-9.8	-1.9	+7.8	+14.5	+19.2	+21.9	+20.3	+15.9	+13.1	+8.7	+3.9	+0.2
Equinox	-2.8	-3.3	-4.1	-5.7	-6.4	-7.5	-7.7	-7.2	-6.8	-8.3	-8.8	-8.1	-4.8	+0.2	+5.8	+9.0	+11.4	+12.7	+13.5	+10.1	+8.5	+6.1	+4.1	+0.1
Summer	-5.3	-8.3	-11.0	-10.1	-7.6	-4.5	-2.7	-2.7	-5.6	-10.4	-15.8	-17.5	-14.2	-6.2	+5.5	+13.9	+20.5	+23.4	+19.1	+15.6	+12.7	+9.2	+2.7	-0.4
Year	-7.4	-11.4	-15.0	-16.1	-13.1	-12.1	-11.8	-12.3	-14.6	-15.8	-17.7	-16.3	-10.6	+0.2	+12.2	+20.8	+25.8	+29.5	+28.4	+22.0	+18.2	+10.8	+4.9	+0.8

TABLE VIII.—HARMONIC COMPONENTS of the DIURNAL INEQUALITY of MAGNETIC FORCE.

Values of a_n, b_n in the series Σ (a_n cos nt + b_n sin nt), t being reckoned in hours from Greenwich Mean Midnight and converted into arc at the rate of 15° to each hour.

Table with columns for Month and Season, North Force (a1-a4), West Force (a1-a4), and Vertical Force (a1-a4). Rows include 1928, W. Eq. S., and sub-sections for 'ALL' DAYS, 'QUIET' DAYS, and 'DISTURBED' DAYS.

TABLE IX.—HARMONIC COMPONENTS of the DIURNAL INEQUALITY of MAGNETIC FORCE.

Values of c_n, a_n in the series Σ (c_n sin nT + a_n), T being reckoned in hours from Midnight, Abinger Local Mean Time, and converted into arc at the rate of 15° to each hour.

New phase-angles expressing the inequalities relative to apparent local time may be obtained from the tabulated angles by applying corrections a, 2a, 3a, 4a, to a_1, a_2, a_3, a_4, respectively, where a has the following values:—

Table of phase-angle corrections for months: January (+2 19), February (+3 28), March (+2 12), April (+0 4), May (-0 51), June (+0 5), July (+1 22), August (-0 59), September (-1 12), October (-3 28), November (-3 42), December (-1 6), Winter (+0 12), Equinox (-0 36), Summer (+0 24).

Table with columns for Month and Season, North Force (c1-a4), West Force (c1-a4), and Vertical Force (c1-a4). Rows include 1928, W. Eq. S., and sub-sections for 'ALL' DAYS, 'QUIET' DAYS, and 'DISTURBED' DAYS.

TABLE X.—RANGE of MEAN DIURNAL INEQUALITIES for the MONTHS, YEAR and SEASONS of 1928.

Month and Season.	" All " Days.			Quiet Days.			Disturbed Days.			" All " Days.			Quiet Days.			Disturbed Days.		
	D.	I.	H.	D.	I.	H.	D.	I.	H.	N.	W.	V.	N.	W.	V.	N.	W.	V.
January ...	5.99	1.66	25.6	4.82	1.08	19.2	9.08	3.25	43.2	28.3	29.2	9.2	20.8	24.2	9.4	52.2	44.0	20.8
February ...	6.95	1.58	26.2	6.74	1.26	21.8	9.00	2.28	36.6	30.1	34.6	16.2	24.0	34.8	13.6	43.8	45.5	23.4
March ...	11.08	1.61	29.4	9.12	1.35	24.2	15.34	2.62	43.4	34.6	56.3	25.5	27.9	46.9	15.4	50.5	78.0	42.8
April ...	13.33	2.37	46.4	10.76	2.01	40.4	14.68	3.47	52.6	47.5	70.0	31.9	41.7	55.2	26.8	53.6	78.3	34.4
May ...	11.74	2.63	55.0	11.38	2.46	49.6	13.48	5.60	111.8	57.2	61.5	41.7	50.7	57.1	35.8	107.9	81.2	68.6
June ...	11.94	2.24	47.6	11.08	2.14	44.0	11.76	3.04	58.2	49.2	64.8	33.4	44.6	58.7	29.2	61.1	65.5	41.0
July ...	11.80	2.01	42.5	11.94	2.33	42.0	13.42	3.15	56.0	42.1	62.6	32.3	40.8	63.5	23.4	59.4	75.4	44.4
August ...	11.29	2.17	41.6	11.36	2.47	42.2	13.40	3.82	67.2	41.5	59.8	29.8	42.8	60.2	22.2	66.2	65.8	58.4
September ...	12.13	2.38	43.2	10.26	2.44	41.8	18.32	3.57	56.0	45.6	63.4	29.9	41.8	55.4	21.0	62.9	96.6	63.6
October ...	9.78	2.47	39.3	9.08	2.13	36.8	11.76	2.45	38.8	45.1	49.6	22.6	40.7	46.0	14.6	44.3	56.7	34.4
November ...	6.60	1.54	21.4	4.12	1.02	17.2	9.70	2.74	39.4	24.7	31.9	15.4	18.2	20.6	7.6	43.4	53.0	39.0
December ...	5.02	1.30	19.1	4.22	1.04	14.6	9.24	2.25	30.8	20.7	24.8	8.2	16.2	20.7	5.0	30.9	45.8	16.4
Year ...	9.34	1.64	31.7	8.52	1.64	30.1	10.11	2.46	38.4	34.5	48.6	24.2	32.3	44.5	17.5	43.9	52.9	36.0
Winter ...	5.95	1.42	22.3	4.86	1.05	17.3	8.01	2.19	32.3	25.1	28.7	11.5	19.4	24.3	7.4	36.2	39.0	22.3
Equinox ...	11.45	2.08	37.2	9.81	1.89	33.7	13.44	2.73	43.1	43.1	59.8	27.4	36.8	50.9	18.6	50.0	60.2	40.9
Summer ...	11.65	2.22	45.9	11.45	2.28	42.9	10.46	3.29	68.2	46.4	61.2	34.0	43.8	59.5	27.2	66.6	68.0	47.2

TABLE XI.—NON-CYCLIC CHANGE (24^h—0^h).

Month. 1928.	" All " Days.			Quiet Days.			Disturbed Days.		
	Declination West.	Horizontal Force.	Vertical Force.	Declination West.	Horizontal Force.	Vertical Force.	Declination West.	Horizontal Force.	Vertical Force.
January ...	+0.02	γ	γ	+0.06	γ	γ	-0.16	γ	γ
February ...	-0.02	0.0	+0.2	-0.12	+2.4	-0.8	+0.32	+0.6	+1.8
March ...	-0.04	+0.2	-0.6	+0.02	+0.6	-1.0	+1.90	+0.2	-0.4
April ...	-0.05	+0.2	0.0	-0.04	+2.4	-0.4	+1.24	-9.4	+1.4
May ...	-0.13	-0.3	+0.5	+0.10	+4.6	-1.6	-0.86	-8.2	-3.0
June ...	+0.01	+0.1	+0.2	+0.28	+3.4	-0.8	+0.26	-6.2	+2.4
July ...	-0.10	+0.9	+0.2	+0.12	+5.6	-3.6	-0.02	-6.0	-9.6
August ...	-0.10	+0.2	+0.1	-0.48	+1.6	+0.2	+0.62	-9.6	+10.4
September ...	+0.07	+0.2	-0.3	-0.24	+5.0	-1.8	-2.34	-24.2	-0.8
October ...	-0.07	-0.6	+0.2	-0.16	+6.6	-0.4	+0.72	-1.0	+2.0
November ...	-0.02	+0.4	-0.1	+0.54	+2.8	-2.4	+0.26	-9.0	+0.8
December ...	-0.01	-0.0	+0.2	-0.28	+4.0	-1.4	+0.44	-4.0	-2.6

TABLE XII.—MEAN MONTHLY and ANNUAL VALUES of TERRESTRIAL MAGNETIC ELEMENTS at the ABINGER MAGNETIC STATION.

Month. 1928.	Declination (West).	Inclination.	Horizontal Force.	North Force.	West Force.	Vertical Force.
January ...	12° 52.2	66° 36.1	.18575	.18108	.04137	.42926
February ...	51.4	36.6	.18573	.18107	.04133	.42939
March ...	50.3	36.3	.18574	.18110	.04127	.42931
April ...	49.4	36.2	.18571	.18108	.04122	.42920
May ...	48.1	36.4	.18569	.18107	.04115	.42923
June ...	47.4	36.7	.18570	.18109	.04111	.42936
July ...	46.0	37.9	.18558	.18099	.04101	.42951
August ...	45.6	37.9	.18559	.18100	.04099	.42954
September ...	44.6	38.4	.18553	.18096	.04092	.42954
October ...	43.7	38.8	.18547	.18091	.04086	.42955
November ...	42.9	38.3	.18553	.18099	.04084	.42955
December ...	41.9	37.7	.18562	.18108	.04080	.42952
Year 1928	12 47.0	66 37.3	.18564	.18104	.04107	.42941

TABLE XIII.—DAILY MEAN VALUE of the BASE-LINE of the DECLINATION MAGNETOGRAMS
at ABINGER MAGNETIC STATION.

1928. Day.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.
1	12. 31.3	12. 33.9	12. 33.7	12. 34.5	12. 34.7	12. 35.9	12. 35.9	12. 37.0	12. 37.4	12. 35.2	12. 40.0	12. 38.4
2	31.9	33.9	34.1	34.5	34.7	35.5	36.0	37.4	37.3	$\frac{35.2}{34.9}$	39.7	38.6
3	32.0	33.7	34.2	34.5	35.4	35.6	36.1	37.4	37.2	34.9	39.4	38.4
4	32.3	33.6	34.4	34.5	35.2	35.3	36.1	37.3	37.3	34.9	39.2	38.5
5	32.0	33.6	34.5	34.7	35.3	35.3	35.8	37.1	37.1	35.0	39.0	$\frac{38.7}{38.1}$
6	32.1	33.8	34.7	35.2	35.6	35.5	36.3	36.8	37.3	35.3	39.0	38.2
7	32.8	33.5	34.6	35.1	35.2	35.9	36.1	37.2	37.4	35.7	39.0	38.2
8	33.1	34.0	34.4	35.1	35.2	36.0	36.2	37.5	37.2	36.2	38.9	37.7
9	33.0	34.0	34.3	35.5	34.2	35.8	35.9	37.6	37.2	36.3	39.0	37.3
10	33.1	34.3	34.1	35.7	33.8	35.9	36.0	37.3	37.3	36.2	38.7	37.2
11	33.0	34.1	33.5	35.8	33.9	35.6	36.1	37.5	37.3	36.4	38.9	37.0
12	33.2	33.8	32.5	35.8	33.7	35.4	36.2	38.3	37.2	36.6	39.1	37.2
13	33.2	33.8	32.6	35.9	33.8	35.5	36.4	38.1	37.0	36.5	39.4	37.2
14	33.2	33.9	32.4	35.8	34.1	35.7	36.6	37.7	36.9	36.1	39.6	37.1
15	33.6	34.0	32.2	35.6	34.1	35.4	36.8	37.8	37.0	35.8	39.5	37.1
16	33.4	34.3	32.3	34.7	34.0	35.1	37.0	37.5	37.0	35.9	39.5	37.1
17	33.5	34.4	32.6	34.4	34.1	34.9	36.8	36.8	37.1	$\frac{36.2}{39.2}$	39.4	$\frac{37.0}{35.5}$
18	33.5	34.3	32.9	33.9	33.9	34.8	36.9	37.2	37.1	39.5	39.4	35.5
19	33.8	34.5	33.0	33.4	33.9	35.3	36.9	37.2	37.2	39.8	39.4	35.5
20	33.9	34.0	33.4	33.5	34.1	35.6	37.2	36.9	36.8	40.0	39.7	35.5
21	34.0	33.9	33.4	33.3	34.2	35.6	37.3	36.9	36.2	39.9	39.5	35.9
22	34.3	33.9	33.7	33.5	34.4	35.7	37.3	36.9	35.9	39.6	39.8	35.6
23	34.1	33.8	34.0	33.3	34.0	35.8	37.6	37.1	35.5	39.4	39.9	36.0
24	34.2	33.9	34.0	33.5	34.1	35.8	38.3	37.1	35.5	39.6	39.7	36.1
25	34.0	34.0	34.4	33.6	34.2	35.7	38.2	37.3	35.8	39.7	39.6	36.4
26	34.1	33.9	34.2	34.2	34.4	35.7	38.3	37.5	35.8	39.9	39.3	36.4
27	33.8	33.8	34.3	34.4	34.4	35.8	38.7	37.6	35.6	39.9	39.0	36.6
28	(34.2)	33.9	34.3	34.5	34.8	35.7	38.1	37.6	35.9	40.0	38.5	36.6
29	33.7	33.9	34.3	34.8	$\frac{35.1}{35.8}$	35.7	37.1	37.5	36.3	39.8	37.9	36.4
30	33.9		34.5	35.1	36.0	35.6	36.8	37.3	36.1	39.9	38.0	36.2
31	33.8		34.5		36.0		36.7	37.2		39.8		36.0

TABLE XIV—RESULTS OF DETERMINATIONS of the ABSOLUTE VALUE of HORIZONTAL FORCE from OBSERVATIONS made with the SCHUSTER-SMITH COIL MAGNETOMETER in the MAGNETIC PAVILION at ABINGER; with the DEDUCED VALUES of the BASE-LINE of the HORIZONTAL FORCE MAGNETOGRAMS.

Greenwich Mean Time, 1928.				No. of Obs.	Observed Horizontal Force.	Deduced Value of Base-line.	Greenwich Mean Time, 1928.				No. of Obs.	Observed Horizontal Force.	Deduced Value of Base-line.		
h m h m					γ	γ	h m h m					γ	γ		
Jan.	2.	15	45-15	54	4	18573	18647	Mar.	9.	15	3-15	13	4	18582	18644
	3.	15	52-16	2	4	18579	18649		10.	12	27-12	40	4	18567	18648
	5.	15	51-16	14	4	18581	18647		12.	12	50-13	0	4	18531	18648
	6.	12	26-12	41	8	18579	18651		13.	16	0-16	8	4	18581	18649
	7.	11	44-11	51	4	18578	18650		14.	12	49-12	58	4	18514	18650
	9.	22	1-22	12	4	18581	18644		15.	15	55-16	3	4	18562	18649
	10.	11	3-11	16	6	18579	18647		16.	16	15-16	25	5	18566	18648
	10.	11	22-11	28	3	18578	18648		17.	11	22-11	30	4	18548	18648
	11.	15	24-15	43	7	18583	18645		19.	16	29-16	36	4	18566	18646
	12.	12	42-12	58	6	18568	18647		20.	14	15-14	22	4	18574	18647
	13.	18	49-19	5	6	18590	18644		21.	12	51-12	59	4	18571	18647
	14.	10	40-10	49	4	18568	18646		22.	11	12-11	20	4	18565	18646
	16.	15	17-15	32	7	18590	18644		23.	14	34-14	48	4	18578	18645
	17.	15	6-15	16	5	18594	18645		24.	11	33-11	41	4	18570	18644
	18.	16	19-16	32	5	18581	18646		26.	12	1-12	12	4	18548	18642
	19.	10	48-11	20	8	18556	18643		27.	14	30-14	38	4	18566	18643
	20.	15	52-16	4	6	18576	18643		28.	16	14-16	22	4	18585	18642
	21.	10	43-10	54	4	18561	18644		29.	12	15-12	23	4	18557	18643
	21.	11	48-12	2	3	18558	18642		30.	15	33-15	41	4	18578	18643
	23.	12	21-12	35	6	18561	18644		31.	10	35-10	45	4	18570	18644
	23.	15	5-15	13	4	18573	18644	April	2.	15	27-15	34	4	18576	18643
	25.	16	31-16	39	4	18580	18642		3.	16	2-16	8	4	18563	18642
	25.	16	43-16	53	4	18581	18641		4.	12	53-13	0	4	18561	18642
	26.	11	48-11	56	4	18563	18639		5.	11	14-11	22	4	18528	18642
	26.	12	5-12	12	4	18565	18640		7.	10	18-10	28	5	18528	18643
	27.	11	5-11	12	4	18541	18640		9.	10	20-10	28	4	18533	18645
	28.	15	5-15	13	4	18563	18641		10.	15	31-15	36	4	18569	18668
	30.	11	57-12	4	4	18557	18641		11.	15	43-15	54	4	18580	18668
	31.	10	18-10	26	4	18571	18641		12.	15	48-15	55	4	18585	18668
Feb.	1.	12	47-12	55	4	18561	18642		13.	16	30-16	45	4	18591	18668
	2.	12	35-12	42	4	18572	18643		14.	12	51-13	0	4	18560	18669
	3.	12	24-12	32	4	18550	18643		17.	14	49-14	55	4	18566	18673
	4.	15	12-15	21	4	18580	18643		18.	14	29-14	38	4	18579	18674
	6.	12	4-12	12	4	18567	18641		19.	15	15-15	23	4	18586	18674
	7.	12	25-12	33	4	18568	18642		20.	15	25-15	34	3	18592	18675
	8.	14	14-14	23	4	18583	18643		21.	10	51-10	59	4	18545	18675
	9.	12	23-12	30	4	18566	18641		23.	15	24-15	31	4	18584	18675
	10.	11	10-11	18	4	18569	18639		24.	14	2-14	8	4	18568	18675
	11.	11	28-11	41	6	18575	18641		25.	9	53-10	0	4	18566	18675
	13.	15	48-15	3	4	18572	18640		26.	11	47-12	1	4	18561	18674
	14.	11	21-11	40	6	18567	18640		27.	17	41-17	43	1	18588	18674
	15.	11	44-11	58	6	18574	18640		30.	14	56-15	3	4	18587	18675
	16.	15	18-15	31	4	18574	18640	May	1.	15	4-15	11	4	18582	18673
	17.	12	18-12	32	4	18565	18639		2.	14	14-14	20	4	18573	18674
	18.	10	49-11	6	6	18563	18639		3.	14	41-14	48	4	18574	18672
	20.	15	14-15	25	4	18564	18646		4.	14	4-14	9	4	18579	18673
	22.	15	45-15	52	4	18575	18645		5.	9	56-10	3	4	18557	18670
	23.	12	24-12	34	6	18556	18646		7.	10	57-11	3	4	18541	18668
	24.	11	47-12	0	4	18551	18645		8.	14	37-14	44	4	18538	18669
	25.	11	10-11	22	4	18557	18646		9.	14	13-14	21	4	18572	18672
	27.	16	58-17	9	4	18567	18644		10.	13	32-13	40	4	18613	18671
	28.	11	28-11	36	4	18551	18645		11.	10	10-10	16	4	18536	18672
	29.	16	38-16	55	4	18576	18645		12.	9	30-9	40	4	(18468)	(18668)
Mar.	1.	15	20-15	28	4	18567	18644		14.	14	26-14	33	4	18540	18672
	2.	12	56-13	9	4	18571	18643		15.	10	46-10	53	4	18551	18671
	5.	11	54-12	2	4	18570	18644		16.	15	19-15	26	4	18603	18673
	6.	15	58-16	6	4	18584	18646		17.	13	31-13	37	4	18572	18672
	8.	15	51-15	59	4	18578	18643		18.	14	43-14	50	4	18562	18672
								May	19.	9	40-9	46	4	18555	18672
									21.	11	8-11	16	5	18545	18672
									22.	14	33-14	49	7	18584	18673
									23.	9	40-9	47	4	18561	18671
									24.	15	5-15	12	4	18579	18672
									25.	13	22-13	29	4	18558	18671
									26.	10	9-10	21	4	18547	18670
									28.	10	4-10	16	3	(18436)	(18671)
									29.	8	53-9	6	6	18480	18669
									30.	10	4-10	17	7	18513	18697
									31.	18	38-18	45	4	18618	18697
								June	1.	10	53-11	5	7	18530	18697
									2.	8	0-8	11	6	18555	18698
									2.	8	54-9	2	4	18556	18695
									4.	14	44-15	14	6	18599	18699
									5.	13	38-13	45	4	18560	18699
									6.	14	57-15	6	5	18556	18699
									7.	14	52-15	1	5	18628	18700
									8.	13	37-13	44	4	18563	18698
									9.	11	58-12	5	4	18540	18699
									11.	13	59-14	9	6	18567	18699
									12.	14	43-14	52	4	18570	18699
									13.	14	24-14	34	4	18562	18699
									14.	11	54-12	5	5	18555	18700
									14.	15	16-15	29	4	18590	18701
									15.	10	3-10	15	7	18545	18700
									16.	11	13-11	20	4	18556	18699
									18.	14	45-15	1	5	18580	18700
									19.	9	46-10	2	6	18553	18699
									28.	14	17-14	29	6	18555	18699
									29.	11	19-11	31	5	18551	18698
									2						

TABLE XIV.—RESULTS OF DETERMINATIONS of the ABSOLUTE VALUE of HORIZONTAL FORCE from OBSERVATIONS made with the SCHUSTER-SMITH COIL MAGNETOMETER in the MAGNETIC PAVILION at ABINGER; with the DEDUCED VALUES of the BASE-LINE of the HORIZONTAL FORCE MAGNETOGRAMS—*continued*.

Greenwich Mean Time, 1928.	No. of Obs.	Observed Horizontal Force.	Deduced Value of Base-line.	Greenwich Mean Time, 1928.	No. of Obs.	Observed Horizontal Force.	Deduced Value of Base-line.	Greenwich Mean Time, 1928.	No. of Obs.	Observed Horizontal Force.	Deduced Value of Base-line.
h m h m		γ	γ	h m h m		γ	γ	h m h m		γ	γ
July 24.	6	18516	18628	Sept. 12.	6	18527	18622	Oct. 31.	6	18538	18605
25.	6	18528	18629	13.	6	18533	18622	Nov. 1.	4	18540	18604
25.	3	18557	18636	14.	6	18525	18623	2.	5	18531	18605
15 7-15 12				15.	6	18524	18623	3.	6	18502	18603
15 23-15 31	4	18563	18636	17.	4	18570	18624	3.	6	18527	18613
19 24-19 35	6	18578	18639	18.	6	18537	18623	5.	6	18542	18612
26. 9 54-10 1	5	18530	18637	19.	6	18476	18621	6.	6	18552	18615
15 8-15 18	4	18531	18638	20.	6	18547	18624	6.	6	18542	18614
27. 13 51-13 59	4	18557	18639	21.	6	18535	18625	7.	8	18551	18613
28. 11 44-11 52	5	18551	18638	22.	6	18534	18624	20.	5	18560	18616
30. 7 53- 8 1	5	18554	18640	25.	6	18484	18626	21.	5	18567	18617
30. 14 6-14 14	5	18556	18631	26.	3	18549	18628	22.	5	18511	18617
31. 13 48-14 7	6	18556	18628	27.	5	18537	18627	23.	5	18558	18618
Aug. 1.	6	18564	18631	28.	4	18553	18618	24.	6	18548	18618
2.	5	18556	18630	29.	6	18552	18616	26.	4	18552	18616
3.	6	18588	18632	Oct. 1.	5	18544	18615	27.	6	18555	18616
4.	5	18547	18630	1.	6	18571	18617	28.	5	18557	18617
6.	6	18530	18629	2.	4	18515	18615	29.	11	18563	18618
7.	6	18531	18629	2.	4	18515	18615	30.	6	18565	18618
8.	6	18543	18627	2.	4	18525	18597	30.	3	18575	18619
10.	6	18544	18628	3.	6	18537	18599	Dec. 1.	6	18557	18616
10.	4	18560	18630	3.	4	18514	18599	3.	4	18559	18618
11.	9	18553	18626	4.	6	18566	18598	3.	6	18565	18618
13.	5	18543	18627	5.	6	18516	18597	4.	6	18564	18619
14.	5	18537	18623	6.	5	18527	18597	5.	5	18557	18618
15.	4	18563	18625	8.	6	18529	18598	5.	3	18566	18596
16.	6	18525	—	9.	10	18538	18599	6.	6	18535	18593
16.	5	18527	18627	10.	6	18539	18594	6.	5	18536	18594
17.	7	18544	18627	11.	6	18547	18594	7.	5	18538	18593
18.	5	18628	18629	12.	4	18549	18592	7.	5	18550	18592
20.	6	18543	18627	12.	5	18563	18593	8.	5	18555	18593
21.	6	18531	18621	13.	5	18538	18593	10.	5	18557	18593
23.	4	18542	18623	13.	5	18544	18593	11.	4	18562	18592
24.	5	18569	18623	15.	5	18539	18593	12.	4	18565	18594
25.	5	18545	18621	15.	4	18560	18593	13.	8	18560	18593
26.	4	18577	18625	16.	6	18530	18592	14.	8	18550	18593
27.	5	18490	18624	17.	6	18544	18594	15.	10	18550	18595
28.	5	18553	18625	18.	6	18467	18605	17.	5	18566	18594
29.	6	18549	18626	19.	6	18479	18603	18.	6	18563	18587
30.	5	18577	18626	19.	5	18522	18605	19.	4	18559	18587
31.	6	18546	18625	20.	6	18516	18604	19.	8	18572	18589
Sept. 1.	4	18559	18624	22.	6	18530	18605	20.	8	18562	18586
3.	4	18510	18623	23.	7	18530	18606	20.	8	18562	18586
4.	6	18512	18624	23.	4	18556	18605	20.	4	18555	18586
5.	5	18531	18624	24.	6	18513	18605	21.	5	18547	18588
6.	6	18537	18623	25.	4	18516	18605	22.	6	18553	18586
7.	4	18538	18625	26.	6	18533	18604	24.	5	18568	18586
8.	5	18502	18624	27.	6	18512	18604	26.	5	18561	18586
10.	6	18541	18622	29.	5	18534	18605	27.	6	18559	18584
11.	6	18517	18622	29.	4	18542	18606	28.	7	18579	18587
				30.	6	18545	18605	29.	6	18577	18586
				30.	4	18550	18607	31.	5	18569	18586

NOTE: The observed values of horizontal force are subject to a correction of -2.5γ for the effect of the field of the declinometer magnet. This correction has been applied in deducing the base-line values.

July 25. Temperature raised to 22° C.

July 30. Temperature lowered to 20° C.

October 2. Temperature lowered to 15° C.

December 5. Temperature lowered to 10° C.

TABLE XIV (A).—RESULTS of the DETERMINATIONS of the ABSOLUTE VALUE of HORIZONTAL FORCE from OBSERVATIONS made with the UNIFILAR MAGNETOMETER CASELLA 181 in the MAGNETIC PAVILION and TESTING HUT at ABINGER; with the DEDUCED VALUES of the BASE-LINE of the HORIZONTAL FORCE MAGNETOGRAMS.

(Observations made in the Testing Hut are distinguished by an asterisk.)

Greenwich Mean Time, 1928.		Observed Horizontal Force.	Deduced Value of Base-line.	Greenwich Mean Time, 1928.		Observed Horizontal Force.	Deduced Value of Base-line.	Greenwich Mean Time, 1928.		Observed Horizontal Force.	Deduced Value of Base-line.			
h	m	h	m	h	m	h	m	h	m	h	m			
Jan.	3.	12 8-12 47	18568	18651	Mar.	27.	11 32-12 16	18549	18646	July	6.	13 54-15 16	18578	18695
	4.	10 54-11 43	18560	18647		28.	10 59-11 37	18549	18641					
	5.	11 54-12 31	18566	18648		30.	10 47-11 21	18557	18646		11.	9 14-10 23	18522	18638
	6.	10 31-11 28	18569	18650							12.	10 7-11 12	18547	18642
	7.	9 57-10 43	18571	18650	April	4.	15 47-16 29	18583	18649		14.	20 1-21 23	18559	18627
	9.	14 32-15 18	18561	18648		5.	11 34-12 21	18535	18645		17.	19 34-20 51	18577	18631
	10.	9 59-10 44	18573	18646							18.	14 7-15 14	18565	18636
	11.	10 12-11 8	18565	18646		12.	10 51-11 42	18538	18672		20.	14 1-14 57	18563	18633
	12.	11 1-11 43	18561	18644		13.	11 22-12 10	18542	18676		25.	10 51-11 35	18534	18636
	13.	10 32-11 17	18564	18639		14.	11 18-12 3	18551	18668		25.	13 51-14 49	18512	18627
	14.	10 53-11 36	18560	18642		17.	15 9-15 42	18568	18679					
	16.	10 35-11 18	18562	18645		18.	11 15-11 58	18561	18678		26.	11 0-12 0	18522	18637
	17.	10 35-11 27	18562	18647		20.	11 40-12 32	18541	18677		27.	9 6-10 0	18537	18635
	18.	10 27-11 13	18568	18647		25.*	14 0-14 44	18581	18685		28.	10 3-11 22	18536	18634
	19.	14 17-14 58	18584	18649		27.*	13 25-14 11	18570	18684					
	20.	10 32-11 15	18560	18635		28.*	10 2-10 44	18570	18685		31.	9 41-10 57	18537	18626
	23.	15 18-16 6	18566	18643		30.*	11 19-12 5	18562	18678					
	25.	10 15-11 1	18565	18649	May	3.*	10 7-10 50	18558	18676	Aug.	2.	10 17-11 21	18542	18625
	26.	12 20-13 4	18571	18647		4.*	10 37-11 28	18568	18676		3.	11 13-12 15	18523	18624
	30.*	10 34-11 21	18555	18642		8.*	10 29-11 14	18539	18675		7.	10 7-11 0	(18505)	(18637)
	31.*	12 17-13 7	18570	18654		9.*	10 53-11 37	18536	18675		8.	10 29-11 14	18542	18635
Feb.	1.*	10 16-11 0	18574	18653		10.*	10 38-11 17	18547	18676		21.*	10 49-12 8	18537	18625
	2.*	9 51-10 38	18579	18653		15.*	13 57-14 41	(18580)	(18688)		22.*	14 1-14 59	18546	18616
	3.	14 36-15 0	(18571)	(18648)		16.*	11 8-11 50	18562	18672		30.*	11 18-12 13	18555	18617
	4.	10 33-11 24	18563	18647		17.*	13 56-14 41	18583	18681		31.*	14 1-14 57	18570	18619
	6.	12 21-13 6	18561	18640		22.*	13 40-14 27	18576	18684	Oct.	3.*	14 55-16 12	18529	18591
	7.	10 45-11 28	18554	18639		24.*	13 40-14 35	18569	18677		8.*	15 11-16 13	18548	18593
	7.*	14 39-15 22	18585	18651		25.*	8 50- 9 34	18569	18676		9.*	10 46-11 54	18539	18604
	11.*	10 49-11 37	18579	18651		31.*	8 47- 9 33	18525	18695		10.*	14 53-16 0	18559	18594
	11.	12 13-12 52	18575	18645	June	1.*	11 6-11 50	18555	18705		12.*	15 1-16 9	18559	18589
	13.	10 38-11 38	18574	18644		5.*	9 34-10 19	18566	18704	Nov.	1.*	11 44-13 0	18515	18587
	14.	9 50-10 35	18555	18636		6.*	14 28-15 8	18561	18707		2.*	10 59-12 24	18512	18600
	14.*	15 28-16 10	18579	18653		7.*	8 44- 9 26	18546	18701		6.*	11 32-12 54	18541	18608
	15.*	11 30-12 23	18572	18644		8.*	13 51-14 33	18563	18710					
	16.*	11 57-12 48	18569	18646		9.*	10 37-11 18	18547	18707		8.*	15 46-17 0	18546	18604
	17.*	10 41-11 21	18565	18642		11.*	9 55-10 36	18556	18706		9.*	15 18-16 41	18562	18614
	18.*	10 40-11 22	18578	18652		12.*	11 16-12 1	18522	18705		10.*	10 57-12 13	18531	18602
	18.	11 33-12 12	18549	18634		13.*	9 58-10 42	18518	18699		12.*	15 23-16 15	18552	18618
	20.	10 44-11 22	18546	18644		15.*	13 4-13 45	18577	18706		13.*	12 22-13 15	18513	18614
	23.	11 9-11 55	18549	18648		19.*	10 24-11 25	18548	18707		14.*	12 19-13 22	18527	18613
	24.	12 5-12 46	18561	18652		19.*	18 23-20 18	18588	18691		15.*	12 24-13 22	18537	18611
	25.	12 4-12 39	18544	18650		20.*	11 21-12 30	18558	18704		16.*	12 20-13 29	18540	18615
	27.	11 38-12 37	18558	18648		21.	10 59-11 42	18563	18710		20.*	10 50-11 56	18535	18609
	28.	11 58-12 45	18547	18646		21.	14 54-16 28	18575	18699		23.*	15 11-16 24	18552	18618
	29.	11 16-12 15	18555	18646		22.	9 0-10 41	18549	18697		28.*	11 7-12 28	18548	18610
Mar.	2	10 47-11 27	18574	18645		23.	9 3-10 21	18550	18710		30.*	10 19-11 15	18556	18612
	8.	10 26-11 7	(18546)	(18632)		25.	14 3-15 20	18572	18705	Dec.	4.*	10 48-11 50	18551	18616
	9.	12 22-13 1	18562	18649		26.	9 44-10 56	18550	18704					
	13.	12 16-12 52	18535	18647		27.*	11 18-12 2	18556	18707		7.*	12 2-12 58	18534	18591
	16.	10 36-11 13	18550	18647		27.*	13 58-15 12	18564	18699		14.*	12 10-13 21	18555	18591
	17.	10 14-10 54	18539	18646		28.*	10 30-11 37	18557	18699					
	20.	11 5-11 47	18548	18646		29.*	9 23-10 44	18569	18703		18.*	11 7-12 16	18551	18584
	21.	10 34-11 43	18566	18650	July	3.*	10 31-11 42	18564	18699		19.*	11 19-12 20	18554	18584
	24.	11 47-12 40	18539	18651		4.*	10 9-11 33	18557	18697		28.*	11 9-12 7	18573	18585
	26.	12 22-13 3	18560	18649										

April 10. Temperature raised to 15° C.
 May 29. " " " 20° C.
 July 25. " " " 22° C.

July 30. Temperature lowered to 20° C.
 October 2. " " " 15° C.
 December 5. " " " 10° C.

TABLE XV.—DAILY VALUE of the BASE-LINE of the VERTICAL FORCE MAGNETOGRAMS at ABINGER MAGNETIC STATION. deduced from OBSERVATIONS of INCLINATION made with the DIP INDUCTOR.

1928. Day.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.
1	γ 43121	γ 43132	γ 43170	γ 43153	γ 43203	γ 43130	γ 43177	γ 43179	γ 43220	γ 43254	γ 43247	γ 43150
2	104	147	156	155	201	129	173	181	—	—	239	—
3	119	137	—	154	204	—	$\frac{175}{137}$	179	224	258	248	167
4	133	123	—	142	200	126	136	184	217	238	249	160
5	157	—	157	144	197	140	145	192	214	237	262	145
6	126	138	151	151	—	128	144	189	213	246	246	112
7	132	136	159	152	213	142	161	185	232	222	250	118
8	—	134	163	—	191	126	—	191	236	234	249	120
9	092	146	—	152	205	139	154	199	216	243	140	118
10	138	151	—	181	205	157	161	200	218	242	129	136
11	128	149	160	183	201	142	141	175	224	254	127	116
12	127	152	153	190	198	147	143	—	217	234	135	118
13	128	145	154	189	202	133	146	205	235	228	136	131
14	118	145	152	184	203	147	153	181	230	—	134	136
15	—	152	164	181	208	139	136	190	228	233	130	116
16	128	147	167	190	211	140	156	193	230	244	126	119
17	151	158	155	193	217	137	142	176	249	236	130	130
18	148	148	163	189	206	149	149	(236)	238	231	146	138
19	145	—	165	194	210	145	138	189	251	240	139	128
20	138	170	154	196	—	162	150	211	253	240	145	141
21	142	151	153	198	225	150	155	215	239	230	146	132
22	—	161	145	190	227	173	—	202	241	241	131	114
23	122	156	150	204	222	168	138	187	242	239	147	—
24	140	144	144	189	222	—	149	209	257	234	146	124
25	—	151	—	201	222	157	$\frac{155}{169}$	211	252	231	—	130
26	141	—	148	206	227	171	173	201	247	237	142	126
27	—	157	152	206	220	162	201	209	251	239	163	125
28	157	158	158	203	—	158	181	206	255	217	148	111
29	143	158	146	210	$\frac{229}{263}$	177	169	209	270	240	149	127
30	152	—	148	208	264	173	187	214	—	237	154	—
31	142	—	154	—	256	—	172	201	—	240	—	126

April 10. Temperature raised to 15° C.
May 29. " " " 20° C.

July 25. Temperature raised to 22° C.
July 30. " " lowered to 20° C.

Oct. 2. Temperature lowered to 15° C.
Dec. 5. " " " 10° C.

MEAN ANNUAL VALUES OF MAGNETIC ELEMENTS DETERMINED AT THE ROYAL OBSERVATORY, GREENWICH,
FOR THE YEARS 1841-1925.

Year.	Declination West.	Horizontal Force.	Vertical Force.	Dip.	Year.	Declination West.	Horizontal Force.	Vertical Force.	Dip.
1841	23 16.2	C.G.S. Unit. ...	C.G.S. Unit. ...	...	1883	18 15.0	0.1812	0.4381	67 31.7
1842	23 14.6	...	...	...	1884	18 7.6	0.1814	0.4379	67 29.7
1843	23 11.7	...	...	69 0.6	1885	18 1.7	0.1817	0.4380	67 28.0
1844	23 15.3	...	...	69 0.3	1886	17 54.5	0.1818	0.4377	67 27.1
1845	22 56.7	...	...	68 57.5	1887	17 49.1	0.1819	0.4380	67 26.6
1846	22 49.6	0.1731	...	68 58.1	1888	17 40.4	0.1822	0.4383	67 25.6
1847	22 51.3	0.1736	...	68 59.0	1889	17 34.9	0.1823	0.4380	67 24.3
1848	22 51.8	0.1731	...	68 54.7	1890	17 28.6	0.1825	0.4381	67 23.0
1849	22 37.8	0.1733	...	68 51.3	1891	17 23.4	0.1827	0.4380	67 21.5
1850	22 23.5	0.1738	...	68 46.9	1892	17 17.4	0.1829	0.4379	67 20.0
1851	22 18.3	0.1744	...	68 40.4	1893	17 11.4	0.1831	0.4373	67 17.9
1852	22 17.9	0.1745	...	68 42.7	1894	17 4.6	0.1831	0.4374	67 17.4
1853	22 10.1	0.1748	...	68 44.6	1895	16 57.4	0.1834	0.4378	67 16.1
1854	22 0.8	0.1749	...	68 47.7	1896	16 51.7	0.1835	0.4382	67 15.1
1855	21 48.4	0.1756	...	68 44.6	1897	16 45.8	0.1838	0.4377	67 13.5
1856	21 43.5	0.1759	...	68 43.5	1898	16 39.2	0.1840	0.4377	67 12.1
1857	21 35.4	0.1769	...	68 31.1	1899	16 34.2	0.1843	0.4380	67 10.5
1858	21 30.3	0.1762	...	68 28.3	1900	16 29.0	0.1846	0.4380	67 8.8
1859	21 23.5	0.1761	...	68 26.9	1901	16 26.0	0.1850	0.4381	67 6.4
1860	21 14.3	...	...	68 30.1	1902	16 22.8	0.1852	0.4377	67 3.8
1861	21 5.5	0.1773	...	68 24.6	1903	16 19.1	0.1852	0.4368	67 1.2
1862	20 52.6	0.1759	...	68 15.8	1904	16 15.0	0.1854	0.4359	66 57.6
1863	20 45.9	0.1763	0.4403	68 9.6	1904	16 9.9	0.1854	0.4355	66 56.3
1864	...	0.1764	0.4396	68 7.0	1906	16 3.6	0.1854	0.4353	66 55.6
1865	20 33.9	0.1767	0.4393	68 4.1	1907	15 59.8	0.1855	0.4357	66 56.2
1866	20 28.0	0.1767	0.4388	68 2.7	1908	15 53.5	0.1854	0.4356	66 56.3
1867	20 20.5	0.1773	0.4397	68 1.3	1909	15 47.6	0.1854	0.4348	66 54.1
1868	20 13.1	0.1777	0.4392	67 57.2	1910	15 41.2	0.1855	0.4345	66 52.8
1869	20 4.1	0.1779	0.4395	67 56.5	1911	15 33.0	0.1855	0.4342	66 52.1
1870	19 53.0	0.1782	0.4396	67 54.8	1912	15 24.3	0.1855	0.4340	66 51.8
1871	19 41.9	0.1784	0.4392	67 52.5	1913	15 15.2	0.1853	0.4333	66 50.5
1872	19 36.8	0.1786	0.4389	67 50.3	1914	15 6.3	0.1853	0.4333	66 50.8
1873	19 33.4	0.1789	0.4383	67 47.8	1915	14 56.5	0.1851	0.4331	66 51.6
1874	19 28.9	0.1793	0.4386	67 45.8	1916	14 46.9	0.1848	0.4326	66 52.2
1875	19 21.2	0.1797	0.4387	67 43.6	1917	14 37.1	0.1848	0.4330*	66 53.0
1876	19 8.3	0.1797	0.4383	67 42.4	1918	14 27.8	0.1846	0.4325	66 52.8
1877	18 57.2	0.1799	0.4383	67 41.0	1919	14 18.2	0.1845	0.4324	66 53.3
1878	18 49.3	0.1800	0.4381	67 39.7	1920	14 8.6	0.1845	0.4325	66 53.6
1879	18 40.5	0.1802	0.4382	67 38.2	1921	13 57.6	0.1845	0.4322	66 53.0
1880	18 32.6	0.1805	0.4382	67 37.0	1922	13 46.7	0.1844	0.4318	66 52.3
1881	18 27.1	0.1805	0.4380	67 35.7	1923	13 35.1	0.1843	0.4314	66 51.9
1882	18 22.3	0.1807	0.4379	67 34.7	1924	13 22.8	0.1843	0.4311	66 51.6
		0.1806	0.4375	67 34.2	1925	13 9.9	0.1841	0.4308	66 51.4

MAGNETIC ELEMENTS OBSERVED AT THE ABINGER MAGNETIC STATION.

1925	13 22.7	0.18597	0.42946	66 35.1	1927	12 58.4	0.18575	0.42932	66 36.2
1926	13 10.4	0.18581	0.42947	66 36.3	1928	12 47.0	0.18564	0.42941	66 37.3

In 1861 new Unifilar Apparatus for absolute Horizontal Force and the Airy Dip-Circle were introduced, both sets of apparatus being used in that year. In 1864 the excavation of the Magnetic Basement caused the suspension of complete Declination Observations. From 1914 the Dip was determined with the Inductor.

N.B. In the above table the values of Vertical Force were, for the years 1862-1913 inclusive, computed from the corresponding values of Horizontal Force and Dip, the values of Dip being the mean of all the absolute observations taken in any year, and the time of observation approximating to noon on the average. Beginning with 1914 the values of Dip have been computed from the corresponding annual mean values of Horizontal and Vertical Force.

* Mean of ten months, March to December.

MAGNETIC DISTURBANCES.

The following notes briefly summarise, month by month, the salient features of magnetic conditions as shown by the traces of Declination, Horizontal Force and Vertical Force recorded at the Abinger Magnetic Station in the year 1928.

January.—Excepting isolated small movements on 1st, 4th, 14th and 20th, quiet conditions prevailed until 22nd, after which very small irregularities in H.F. and Decl. persisted until 27th. The only marked disturbance of the month took place on 27th. It was of short duration, consisting merely of a wave (+60γ) in H.F. between 4^h and 6^h (which was accompanied by a rapid decrease in V.F. -30γ) and an irregular decrease of 100γ between 9^h and 13^h. Further small irregularities in Dec. and H.F. continued till the evening of 30th.

The range in declination during the month was from 12° 42'·0 to 13° 2'·6, both on 1st; in horizontal force, from ·18493 to ·18643 both on 27th; in vertical force, from ·42905 to ·42966 both on 27th.

February.—The month was, in general, rather less quiet than January. Minor disturbance was shown throughout the first five days, and the traces were seldom quite smooth during the succeeding five. On 12th at 7^h 20^m a small sudden movement introduced a period of minor irregular disturbance which lasted till the end of 14th. Detached bays in the H.F. trace occurred on 15th and 16th. Unsteady conditions were resumed about noon on 18th and persisted, with a short intermission on 20th, till the evening of 23rd. A wave of +15' in Dec. between 3^h and 5½^h on 19th, and another of -15' between 20^h and 22^h on 21st, were the chief movements occurring during this period. After 36 hours of steady conditions small irregular disturbances began again at about 4^h on 25th. These died away during 28th, the 29th being practically undisturbed.

The range in declination during the month was from 12° 38'·4 on 26th to 13° 2'·3 on 21st; in horizontal force, from ·18514 on 26th to ·18620 on 15th; in vertical force, from ·42922 (which value was reached on three separate days, 12th, 13th and 19th) to ·42968 on 26th.

March.—During the first ten days of March magnetic conditions were uniformly quiet. At 8^h on 11th disturbed conditions began to appear on the records and during the ensuing 24 hours the movements were very irregular. The traces are reproduced in Plate I. Traces remained moderately disturbed in general, until the end of 14th. After a quiet period of about 24 hours small irregular movements set in, chiefly in H.F., and persisted almost continuously till 26th, but without noteworthy features. From 27th to 31st there was a return to generally quiet conditions,—the prevailing characteristic of the month.

The range in declination during the month was from 12° 34'·7 on 14th to 13° 8'·6 on 11th; in horizontal force, from ·18444 on 11th to ·18612 on 10th; in vertical force, from ·42894 on 28th and 29th to ·43000 on 11th.

April.—The month opened with slightly disturbed conditions, numerous small and rather rapid oscillations appearing on the Dec. and H.F. traces during the first twelve days. Towards the end of 6th larger movements were interspersed, and between 21^h and 23^h on 7th there was a noteworthy disturbance of all traces, that in H.F. concluding with a double wave of ±50γ, corresponding to which there was an irregular wave of -15' in Dec. The small oscillations died out during 12th, a quiet interval of nearly three days succeeding. The oscillations then re-appeared, interspersed as before with occasional larger movements at irregular intervals. The most prominent of these was a bay of -12' in the Dec. trace between 22½^h on 16th and 1^h on 17th, soon after which practically quiet conditions again supervened. A short-lived disturbance occurred between 23^h on 19th and 3^h on 20th, characterised by a temporary decrease in Dec. of 15', followed by a rapid recovery, while there was an irregular double wave in H.F. ±50γ. For an interval of 16 hours commencing soon after noon on 21st the rapid oscillations in H.F. were very marked, their period averaging 20 minutes and amplitude 10γ. Similar slightly unsteady conditions prevailed until the middle of 27th, and then a quiet period lasted through the remainder of the month.

The range in declination during the month was from 12° 34'·8 on 20th to 13° 1'·9 on 10th; in horizontal force, from ·18502 on 8th to ·18642 on 7th; in vertical force, from ·42885 on 1st and 7th to ·42947 on 21st.

May.—Slight disturbance began in the H.F. trace about noon on 4th, and increased in the early hours of the next day, when the Dec. trace also showed disturbance with a wave of +12' as the most prominent feature. Further disturbance took place in Dec. and H.F. on 8th, still of a minor character, though the latter trace showed a diminution of 100γ in about six hours. From noon on 10th to noon on 13th all traces were in a state of moderate disturbance, greatest activity occurring during the night. In particular, there was a bay of -20' in the Dec. trace between 0^h and 2^h on 12th and marked diminution in H.F. during the mornings of 12th and 13th. Also diurnal variation in V.F. was largely increased in amplitude on 10th and 11th. Conditions remained disturbed in lesser degree until 21st. Short periods of increased activity were apparent in the H.F. trace between 21^h and 24^h on 16th and between 18^h and 21^h on 17th. From 21st to about 9^h on 27th the quietest magnetic conditions of the month supervened. The period ended rather abruptly with the development of the largest disturbance since October, 1927. The traces are reproduced in Plates II and III. The disturbance ultimately died away in a series of comparatively rapid oscillations and by 4^h on 30th the traces were normally steady. There was, however, a relatively rapid increase in H.F. (70γ) about 18^h on 31st.

The range in declination during the month was from 12° 30'·6 on 12th to 13° 5'·4 on 27th; in horizontal force, from ·18401 on 28th to ·18736 on 27th; in vertical force, from ·42856 on 29th to ·43066 on 28th.

June.—Traces were moderately active with irregular movements for the first six days. Between 13^h and 15^h on 7th there occurred a rapid temporary increase of 130 γ in H.F., accompanied by one of 50 γ in V.F. but by no marked change of Dec. During the 8th and 9th movements gradually diminished in frequency and by 10th had practically ceased. Activity was renewed on 12th when a temporary decrease of about 100 γ in H.F. took place at 9^h. Many small oscillatory movements appeared on the traces throughout 13th, 14th and 15th. A quiet period then ensued between 16th and 19th, though there were a few isolated waves in H.F., and this trace showed increased activity towards the end of 20th. The most remarkable disturbance of the month occurred between 7^h and 9 $\frac{1}{2}$ ^h on 22nd, in the form of a very rapid decrease in H.F., amounting to 150 γ in 1 $\frac{1}{2}$ hours and almost completely recovering during the next hour. The movement was succeeded immediately by a similar though smaller wave in Dec. (+15'), and approximately 12 hours later there were inverted movements in both traces about two-thirds of the amplitude of the first movements respectively. A wave in V.F. (-50 γ) occurred between 0^h and 2^h on 23rd. The traces remained in a state of general moderate disturbance till the 25th and were then fairly steady till the end of the month, apart from a few isolated movements in H.F.

The range in declination during the month was from 12° 35'·3 on 22nd to 13° 0'·6 on 13th; in horizontal force, from ·18429 to ·18667, both on 22nd; in vertical force, from ·42894 on 12th to ·42984 on 7th.

July.—The first disturbance began with a "sudden commencement" at 8^h 35^m on 2nd which affected all traces. There was a steady increase in Dec. (+25'), and oscillatory movements of about 75 γ showed in H.F. during the next 10 hours, but no storm developed. Slightly disturbed conditions were recorded during the next four days and these developed very rapidly after 22^h on 7th. By 0^h on 8th a "great" disturbance was in progress which, though comparatively short-lived, was characterised by unusual violence. Much of the H.F. trace was lost on this account, a further part being missed because the trace passed right off the sheet. The range in Dec. was 83'; in H.F. more than 550 γ (recorded); and in V.F. 470 γ . The traces are reproduced as far as possible in Plate V. The main disturbance ceased abruptly in Dec. and V.F. at 11^h 6^m on 8th, but H.F. was much longer in returning to normal conditions, and a value considerably below the average persisted for about 27 hours beyond this point. Rather unsteady conditions in H.F. prevailed until 12th. Then a period of almost unbroken quiet set in for eight days. Late on 20th the H.F. trace began to show activity again, and from 21st till the end of the month, with the exception of 29th, minor disturbance was more or less continuous in all traces.

The range in declination during the month was from 12° 15'·6 to 13° 39'·1 both on 8th; in H.F. from an unknown value less than ·18370 to ·18917 both on 8th; in V.F. from ·42602 to ·43073 both on 8th.

August.—The opening days of August were practically quiet. At 12^h on 4th the H.F. trace—and about five hours later the Dec. trace—began to show moderate activity, characterised by irregular oscillation. Between 0^h and 5^h on 5th disturbance was rather marked in V.F., and there was a diminution of 75 γ in less than two hours, which, however, recovered in about the same time. The prevailing disturbance also caused a general increase in both H.F. and V.F. between 12^h and 15^h on 5th, amounting to 150 γ and 100 γ respectively. This soon declined, but a condition of moderate unsteadiness remained until noon on 7th. The middle period of the month was quiet in general, some small movements, chiefly in H.F., appearing on 8th, 11th, 18th, 23rd and 24th, with a short-lived minor disturbance between 10^h and 21^h on 12th. About 22 $\frac{1}{2}$ ^h on 25th oscillatory movements commenced in Dec. and H.F., which lasted till 10^h on 27th, becoming more irregular as the disturbance proceeded. Part of the H.F. trace was lost through failure of illumination. The chief feature of the disturbance was the diminution in Dec. between 0^h and 9^h on 27th, coinciding with a diminution in V.F. but without any special change in H.F. It was not of special interest and has not been reproduced in the Plates. Irregular movements continued in lesser degree until the end of 28th, after which nearly quiet conditions prevailed.

The range in declination during the month was from 12° 26'·1 on 27th to 13° 0'·1 on 5th; in horizontal force, from ·18454 on 27th to ·18647 on 5th; in vertical force from ·42869 on 27th to ·43031 on 5th.

September.—On the first three days the diurnal variation was unusually large, amounting to over 20' in Dec. There was also a moderate disturbance on 3rd between 8^h and 21^h which affected the V.F. most considerably and caused a steady though temporary increase of about 120 γ in that component. Slight unsteadiness of traces continued through the next few days. At 13^h 47^m on 7th a moderately active disturbance set in with "sudden commencement" in all traces, and lasted with diminishing intensity for about 40 hours. The main part is shown on Plate V. Small movements in the H.F. and Dec. traces continued to appear at intervals until the end of the 14th, when the first quiet period of the month was established. This lasted nearly four days, and was terminated by a disturbance with sudden commencement occurring at 15^h 43^m on 18th. Apart from two corresponding waves in Dec. and H.F. at 20 $\frac{1}{2}$ ^h and 23 $\frac{1}{2}$ ^h this disturbance had no significance and died out in a number of small oscillations about 21^h on 19th. Three quiet days succeeded, which ended at 9^h on 22nd with the commencement of short, nearly continuous oscillation in Dec. and H.F. This gradually increased in amplitude. At the time of maximum activity (6^h to 8^h on 25th), the period was remarkably regular, oscillations being twelve to fifteen per hour, and amplitude 20 γ . Superimposed on this disturbance was another which had a quite distinct and typical sudden commencement at 16^h 26^m on 24th. The subsequent movements were not so distinct, but consisted, apparently, of a temporary diminution of Dec. between 22^h on 24th and 2^h on 25th, and a similar diminution in H.F. between 8^h and 12^h on 25th, together with two rather large oscillations in both traces between 21^h and 23^h on 25th. The disturbances died out together early on 26th. Quiet conditions then supervened for the rest of the month, broken, however, by a further period of short rapid oscillation in H.F. during the afternoon and evening of 29th.

The range in declination during the month was from 12° 24'·4 on 18th to 13° 5'·6 on 3rd; in horizontal force, from ·18456 on 19th to ·18635 on 18th; in vertical force, from ·42915 on 17th to ·43054 on 3rd.

October.—There was slight irregular disturbance at intervals during the first seven days. Then quiet conditions prevailed, in general, until the evening of 13th when minor activity commenced again at about 18^h. This died out during 16th. At 18^h on 17th a short-lived disturbance of moderate intensity was recorded, lasting till 22½^h. The traces were then steady until 18^d 7^h 20^m when the first of the two major disturbances of the month began "suddenly." The traces of this disturbance are reproduced in Plate VI. Continuous minor disturbance persisted from 19th to 24th inclusive with a short quiet interval in the last ten hours of the period. The second considerable disturbance of the month began at about 19^h on 24th. It is reproduced in Plate VII. Rather rapid oscillation in the H.F. trace continued irregularly throughout 26th, and then conditions tended to quietness, though one or two waves appeared on both Dec. and H.F. traces each day till the end of the month.

The range in declination during the month was from 12° 13'·3 to 13° 6'·0 both on 18th; in horizontal force, from ·18397 on 25th to ·18660 on 19th; in vertical force, from ·42841 on 25th to ·43127 on 18th.

November.—There was considerable disturbance during the first four days, the culmination being reached at about 18^h on 3rd. Conditions were then quiet except for a few unimportant movements from 5th to 9th. On 10th between 7^h and 15^h there was a steady diminution of H.F. amounting to more than 100γ. A second period of disturbance began towards the end of 11th and was maintained with only short intermissions until the end of 19th. The largest movements occurred between 22^h and 24^h on 11th (an oscillation of 150γ in H.F.), between 17^h and 20^h on 13th (several irregular oscillations in Dec. and H.F.), and between 20^h and 23^h on 15th. On 16th and 17th the oscillation, though small, was specially rapid and continuous between 6^h and 12^h. From 20th to the end of the month quiet conditions prevailed in general, but at 21½^h on 30th there were signs of their termination.

The range in declination during the month was from 12° 22'·9 on 3rd to 12° 58'·3 on 10th; in horizontal force, from ·18445 on 3rd to ·18624 on 15th; in vertical force, from ·42917 on 11th to ·43022 on 3rd. Owing to a discontinuity in the record of vertical force, the maximum and minimum values were not estimated on 8th and 9th, but as these were quiet days, magnetically, it has been assumed that the values lay within the extremes for the month.

December.—A short lived disturbance on the morning of 1st was succeeded by a resumption of the quiet conditions with which the last month ended. These terminated about 18^h on 5th, when irregular movement in H.F. was followed at 22^h by a large wave diminishing Dec. 30', and lasting three hours. Oscillation of the traces continued throughout 6th, at first rapid but after 15^h more slowly and with much greater amplitude, finally dying out about midnight. Another period of general disturbance set in on the afternoon of 11th and lasted until the end of 14th. It was characterised by more or less regular oscillation of the traces and decreasing frequency. From 15th to 24th, and again from 27th to 31st, conditions were quiet, though occasional isolated waves showed on the traces; while on 25th and 26th these movements were frequent enough to constitute a slight disturbance.

The range in declination during the month was from 12° 14'·7 on 5th to 12° 50'·9 on 1st; in horizontal force, from ·18491 on 6th to ·18614 on 1st; in vertical force, from ·42910 to ·42980 both on 6th.

EXPLANATION OF THE PLATES.

The magnetic changes figured on the Plates are those for days of disturbance selected by the International Committee:—March 11^d 8^h—12^d 8^h; May 27^d 9^h—28^d 9^h; May 28^d 9^h—29^d 9^h; July 7^d 21^h—8^d 21^h; September 7^d 12^h—8^d 12^h; October 18^d 6^h—19^d 6^h; October 24^d 18^h—25^d 18^h. August 26^d has been omitted on account of partial failure of registration.

The time is Greenwich Mean Time (commencing at midnight and counting the hours from 0 to 24).

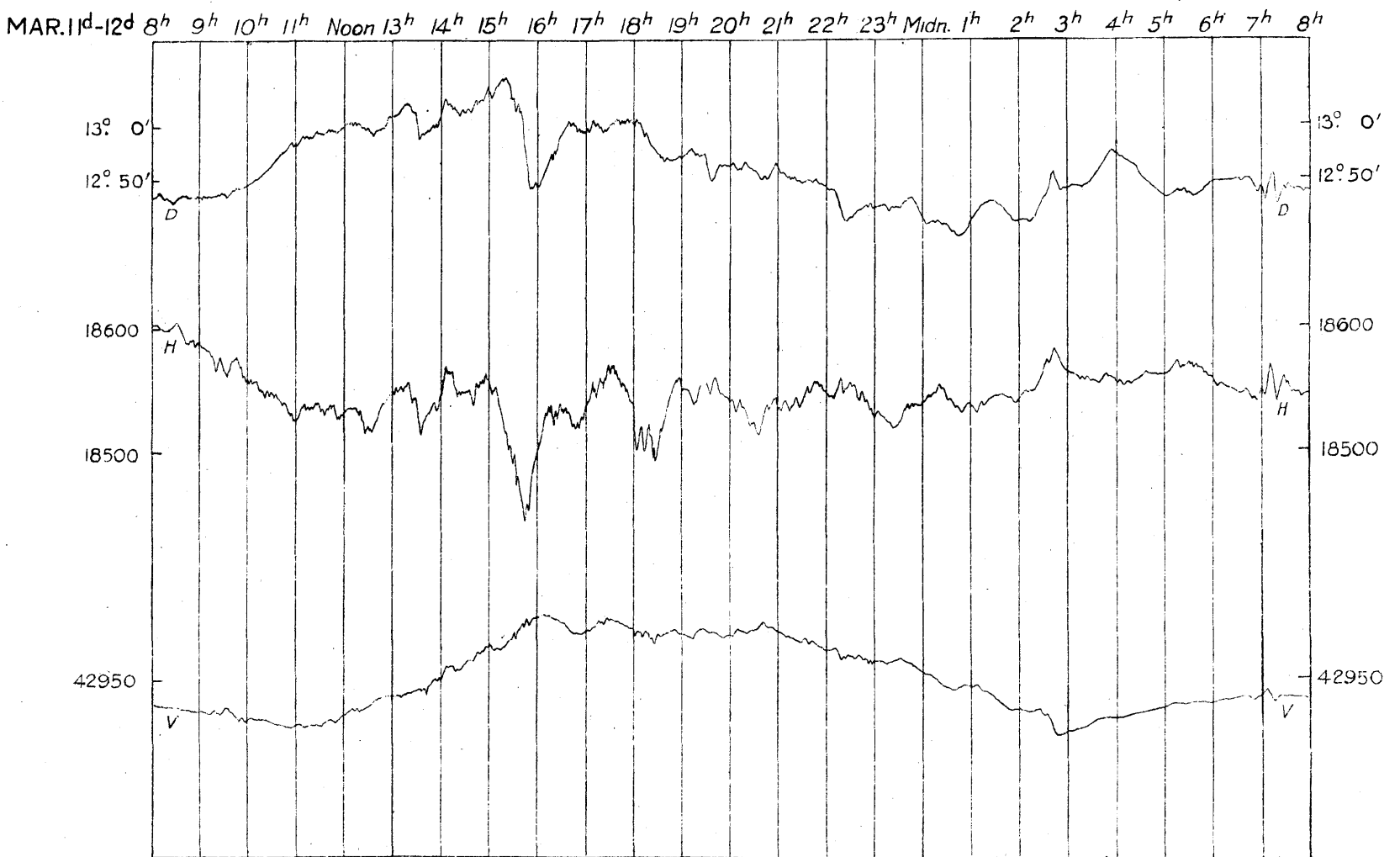
Magnetic declination, horizontal force and vertical force are indicated by the letters D, H, and V respectively.

Scales for reading the traces in units of γ (·00001 C.G.S.) are given at the foot of each page, and a datum line is marked for each trace at the sides of the diagram.

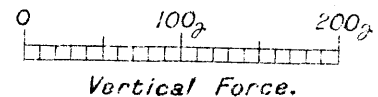
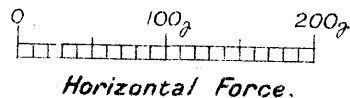
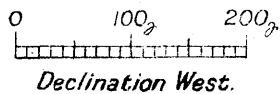
Declination may be read in arc by the scale at the side of the diagram.

Upward motion indicates increase of declination west, and increase of force in all cases.

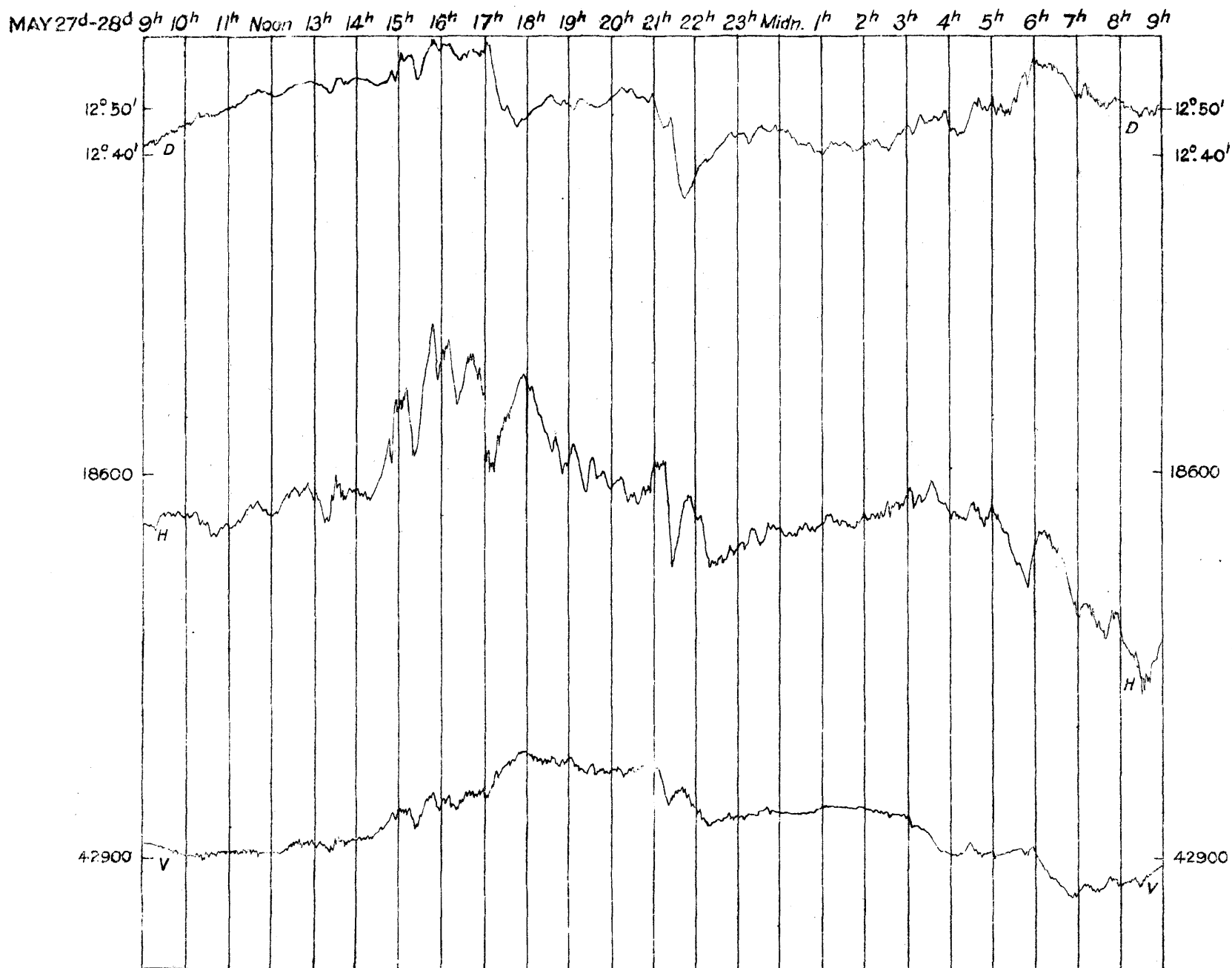
MAGNETIC DISTURBANCES AS RECORDED AT THE ABINGER (Surrey)
MAGNETIC STATION IN THE YEAR 1928.



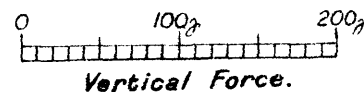
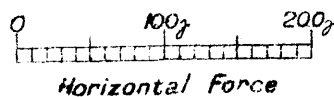
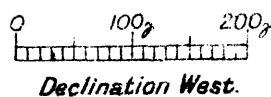
SCALES FOR MAGNETIC ELEMENTS IN C. G. S. UNITS.



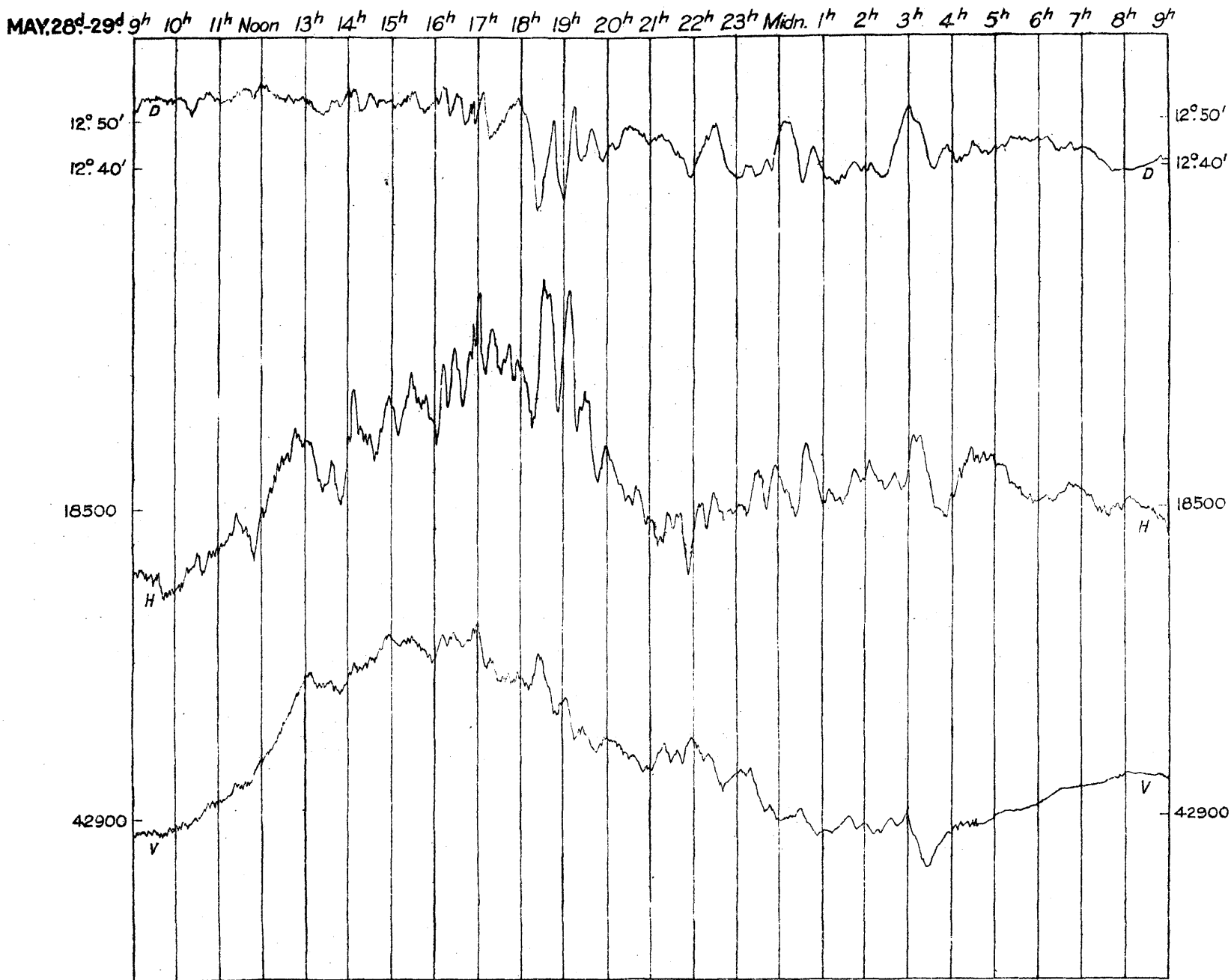
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MAGNETIC STATION IN THE YEAR 1928.



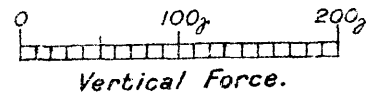
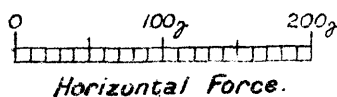
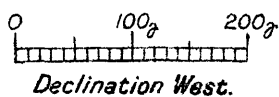
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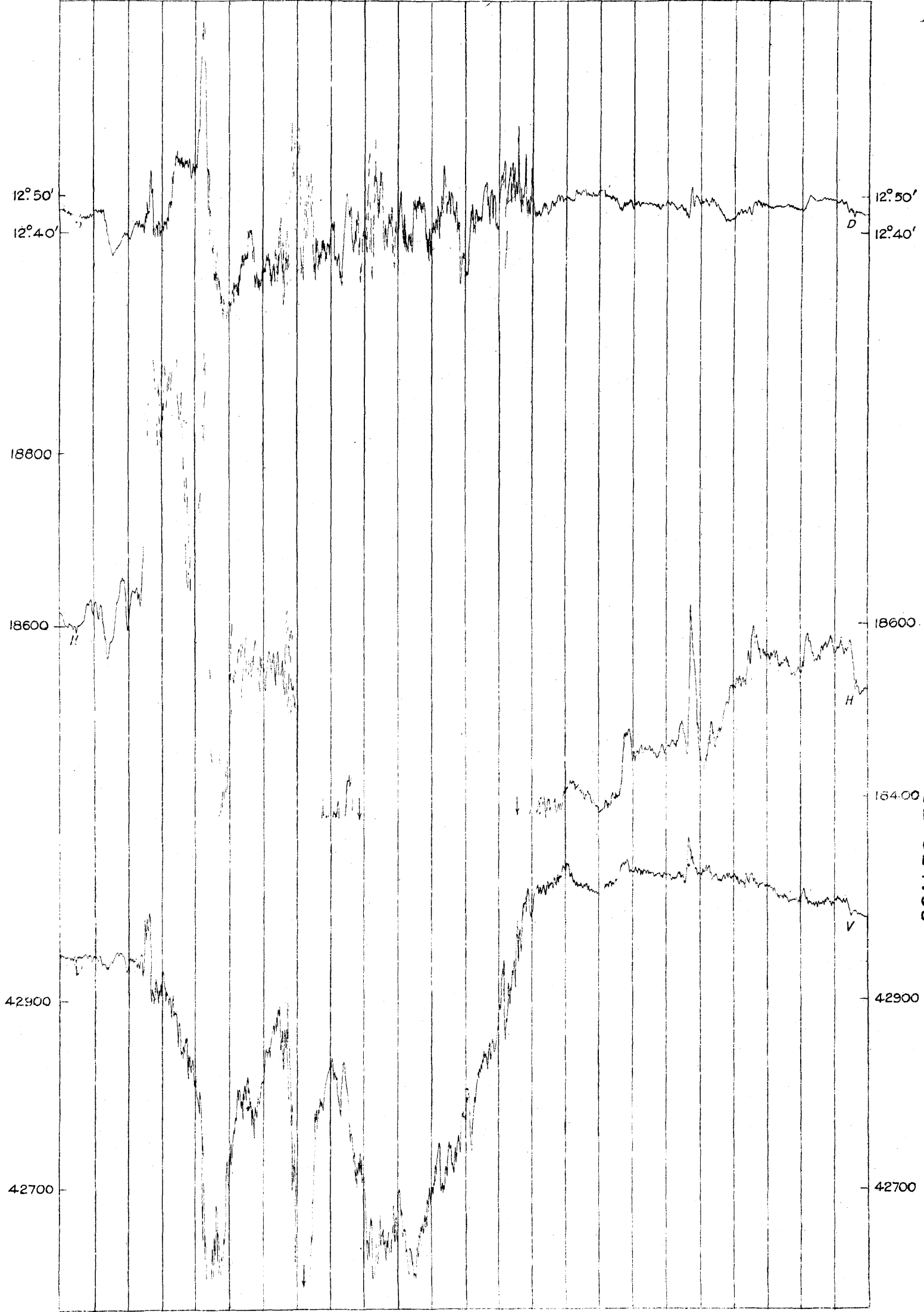
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MAGNETIC STATION IN THE YEAR 1928.



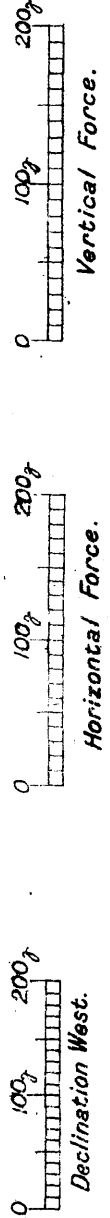
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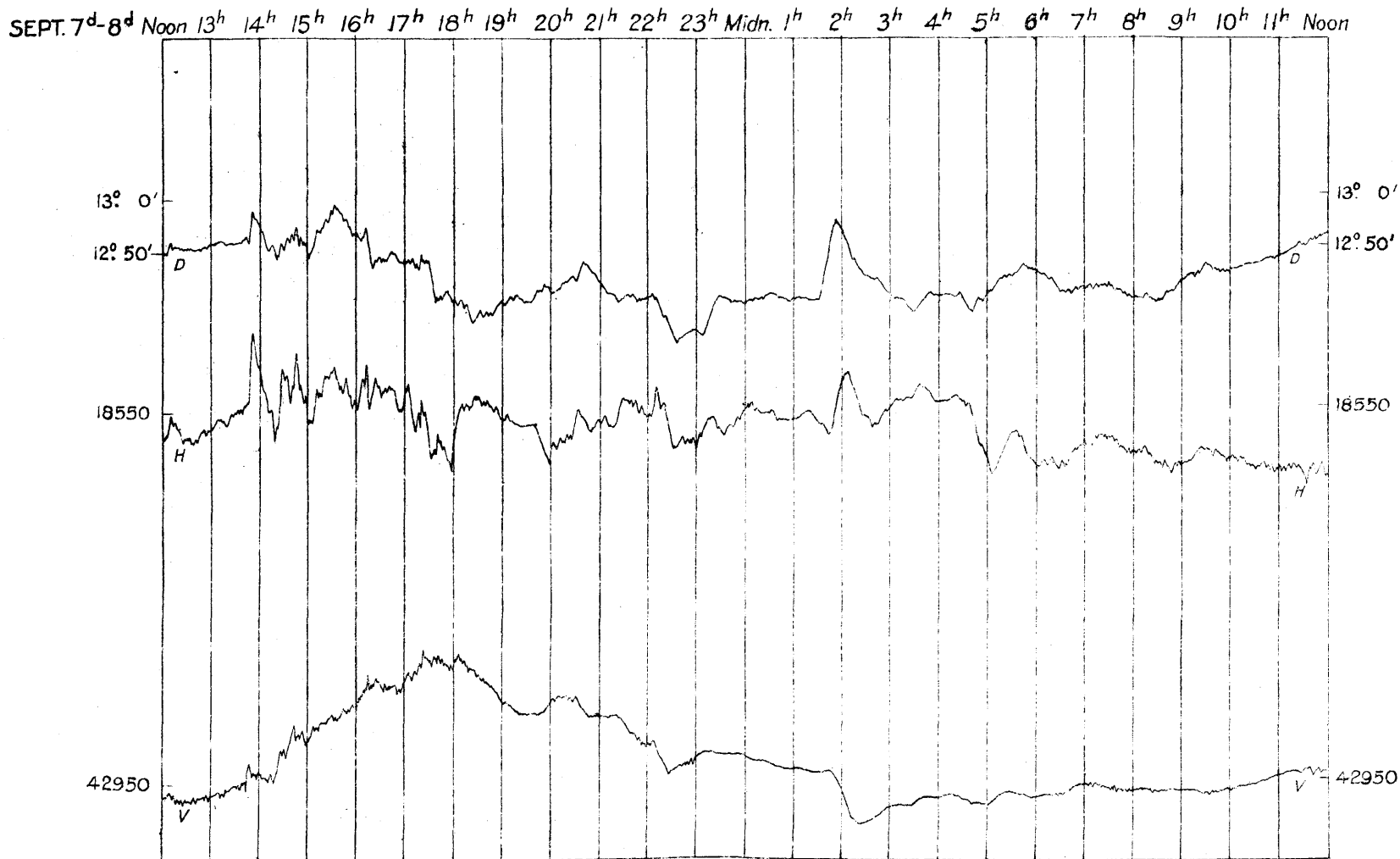
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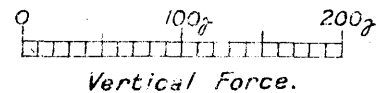
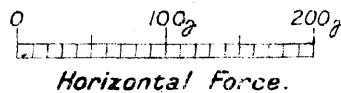
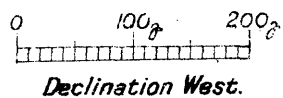
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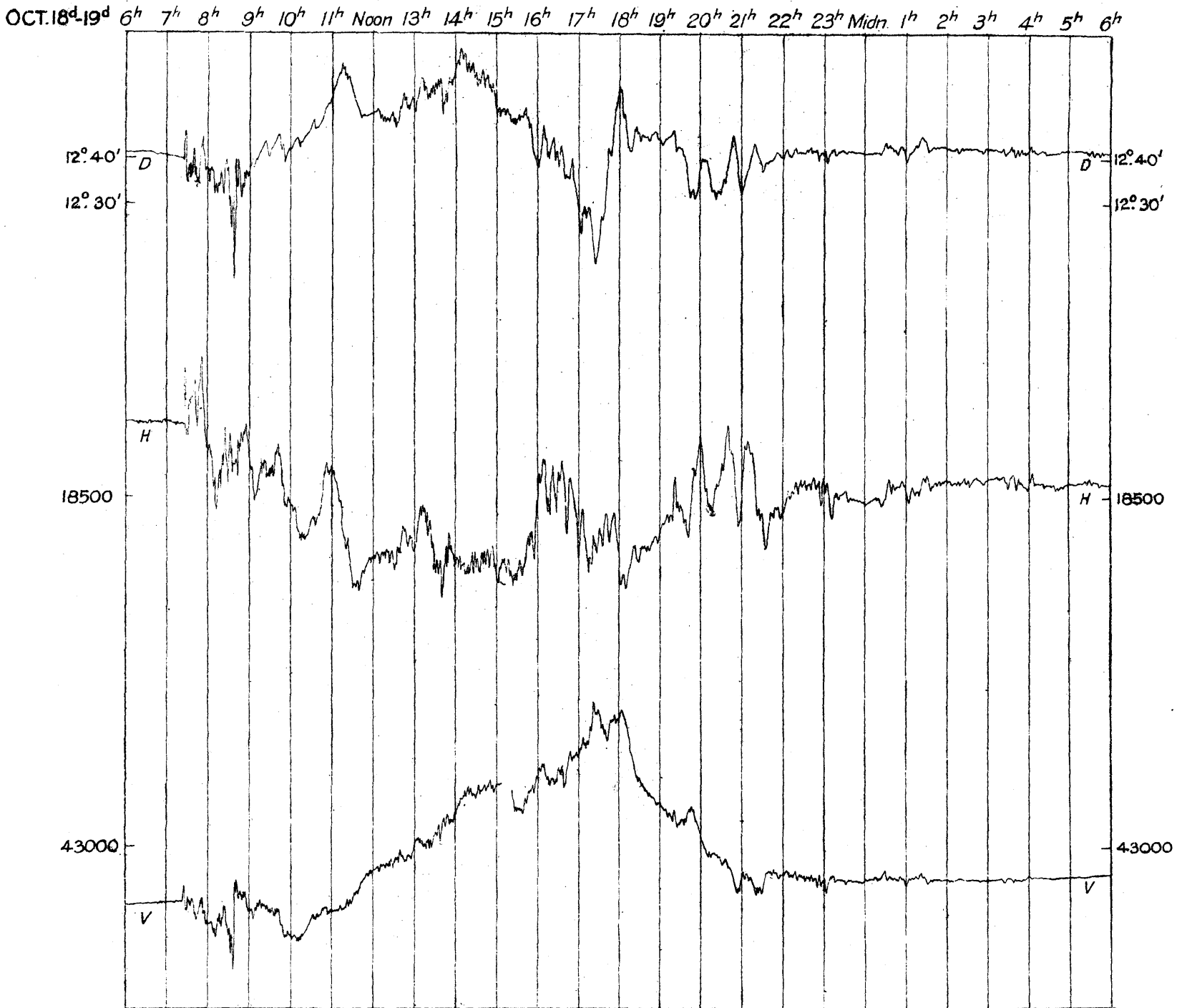
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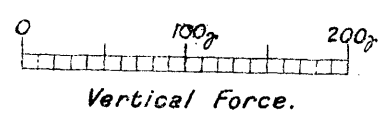
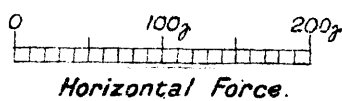
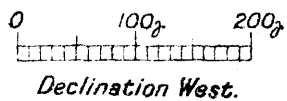
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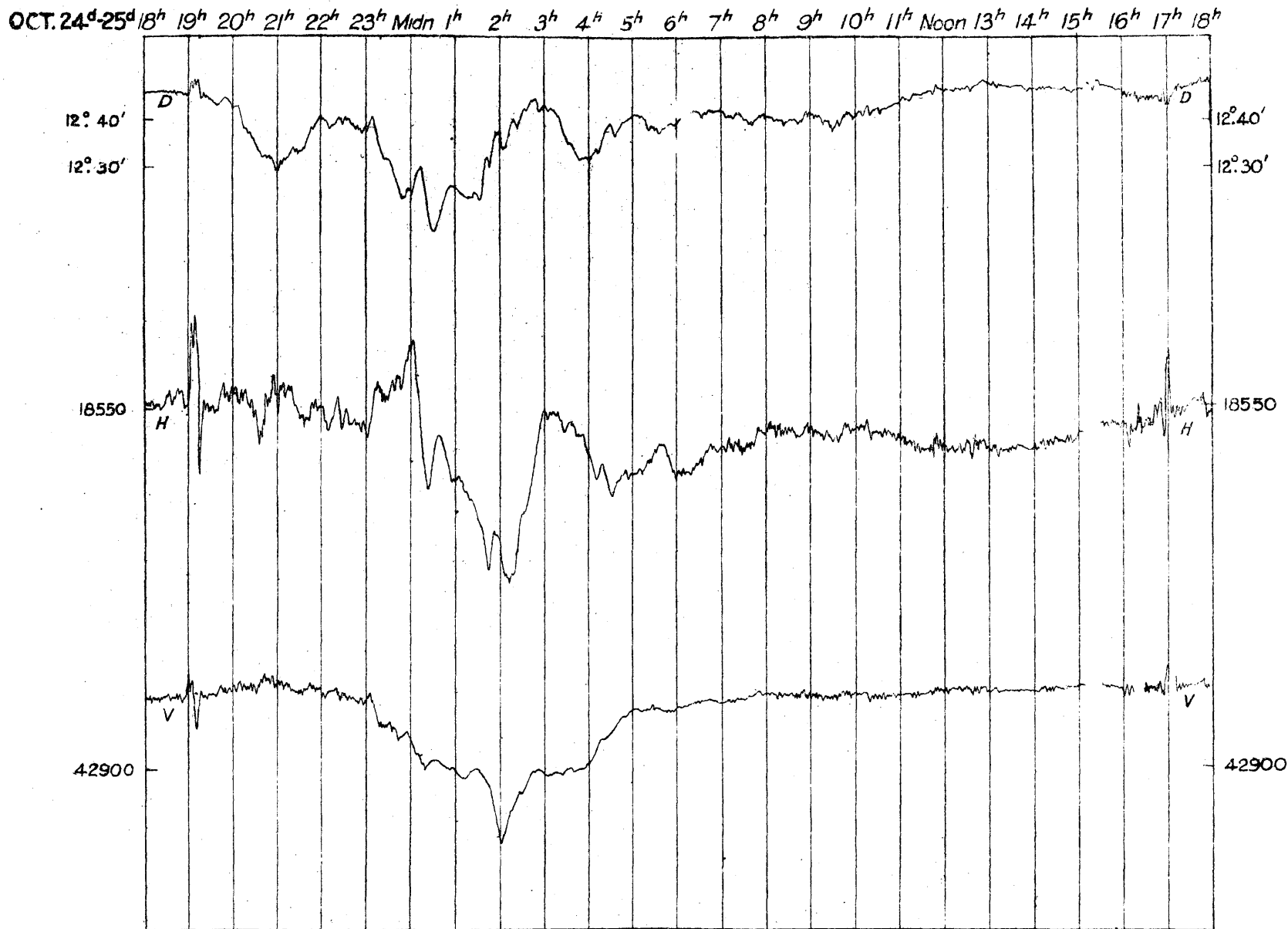
**MAGNETIC DISTURBANCES AS RECORDED AT THE ABINGER (Surrey)
MAGNETIC STATION IN THE YEAR 1928.**



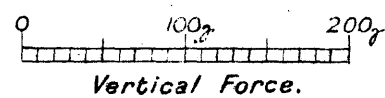
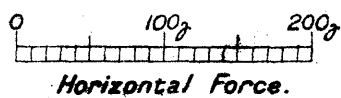
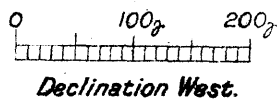
SCALES FOR MAGNETIC ELEMENTS IN C. G. S. UNITS.



**MAGNETIC DISTURBANCES AS RECORDED AT THE ABINGER (Surrey)
MAGNETIC STATION IN THE YEAR 1928.**



SCALES FOR MAGNETIC ELEMENTS IN C.G.S. UNITS.



GREENWICH METEOROLOGICAL OBSERVATIONS, 1928.

INTRODUCTION.

Meteorological Instruments.

The majority of the meteorological instruments are situated in an enclosure in Greenwich Park, 350 yards to the east of the Astronomical Observatory. In the enclosure there are two sets of thermometers used for ordinary eye observations, the photographic wet-bulb and dry-bulb thermometers, thermometers for solar and terrestrial radiation, two earth thermometers, and two rain-gauges.

The anemometers, the self-registering rain-gauge and the sunshine recorder are fixed above the roof of the Octagon Room (the ancient part of the Observatory).

Subjects of Observation in the year 1928.

The observations comprise eye observations of the ordinary meteorological instruments, including the barometer, dry- and wet-bulb thermometers, radiation and earth thermometers ; continuous photographic record of the variations of the barometer, dry- and wet-bulb thermometers, and atmospheric potential gradient ; continuous automatic record of the direction, pressure and velocity of the wind, and of the amount of rain ; registration of the duration of sunshine, and, at night, of the visibility of stars near the Pole ; general record of ordinary atmospheric changes of weather, including numerical estimation of the amount of cloud, special cloud observations in connection with the International Balloon-ascents, estimations of "visibility," and occasional phenomena.

Greenwich mean time, reckoning from midnight to midnight, and counting from 0 to 24 hours, has been employed throughout the meteorological section, except in regard to the sunshine registers (see p. E 7).

STANDARD BAROMETER.—The standard barometer is Newman No. 64. Its tube is $0^{\text{in}} \cdot 565$ in diameter, and the depression of the mercury due to capillary action is $0^{\text{in}} \cdot 002$, but no correction is applied on this account. The cistern is of glass, and the graduated scale and attached rod are of brass; at its lower end the rod terminates in a point of ivory, which in observation is made just to meet the reflected image of the point as seen in the mercury. The scale is divided to $0^{\text{in}} \cdot 05$, subdivided by vernier to $0^{\text{in}} \cdot 002$. The barometer was mounted in 1840 on the southern wall of the western arm of the Upper Magnet Room at a height above mean sea level of 159 feet. It was transferred to the New Magnetograph House on 1917 April 3, where the height above mean sea level is 152 feet. (See also p. E 9.)

The barometer is read at 9^h, 12^h (noon), 15^h, 21^h every day. Each reading is corrected by application of an index-correction, and reduced to the temperature 32°F. The readings thus found are used to determine the value of the instrumental base-line on the photographic record.

THE PHOTOGRAPHIC BAROMETER.—A siphon barometer is employed which, at its open end, operates a plunger resting on the surface of the mercury. On account of the optical magnification associated with a moving mirror at some distance from the recording drum, the motion of the plunger must be mechanically reduced in being transferred to the arm which carries the mirror. In the actual arrangement two levers are used. One is connected to the stem of the plunger resting on the free surface of the mercury and is 12 inches long from plunger to pivot. A pin with a rounded conical point is screwed into this lever at a distance of 1 inch from the pivot. On this pin rests the plane under-surface of a shorter lever, which is 4 inches long from its pivots to this pin, and is set at right angles to the first lever. Both levers are approximately horizontal in their mean position. On the short lever is mounted the moving mirror of the instrument horizontally in a suitable frame attached to the lever, just above the pivots of the latter. The first lever lies east and west, so that the axis about which the mirror turns is in the same direction. The recording drum is horizontal and the motion of the beam of light is transformed so as to be horizontal by a fixed right-angled prism supported above the mirror. A lens of suitable focus is mounted in a vertical plane in front of the prism, and brings the beam of light from the straight-filament lamp to a focus on the drum. A base-line mirror, similar to the moving mirror, is mounted in a vertical plane behind the lower half of this lens. Provision is made for all necessary adjustments of the directions of the two beams of light. The weight of the plunger and lever mechanism is relieved

by a balance weight on the far side of the pivot, so that the plunger rests on the mercury surface without appreciably depressing it.

The instrument is 12 feet from the recording drum. At this distance the calculated scale value of the record is 3 in. on the sheet for 1 in. change of height of the mercury column of the standard barometer. (Both arms are, near the surface of the mercury, of the same bore, so that the plunger moves through one half the change of the indication of the standard barometer.)

The scale value of the instrument is, in effect, determined experimentally by comparison with the readings of the standard barometer. The base-line values corresponding to the four daily readings of the latter are represented graphically by points on a chart. The adopted value at any time is read from a smooth curve drawn through the points.

The photographic sheets being $9\frac{1}{4}$ inches wide, a range of over 3 inches barometric motion can be included, and change of zero is unnecessary.

DRY- AND WET-BULB THERMOMETERS.—The standard dry- and wet-bulb thermometers and maximum and minimum self-registering thermometers, both dry and wet, are mounted on a revolving frame planned by Sir George Airy. This, together with details of the thermometers and the corrections applicable to them, may be found fully described in the volumes for 1912 and previous years.

Since 1899 January 4 this stand has stood in an open position in the Magnetic Pavilion enclosure.

The corrections to be applied to the thermometers in ordinary use are determined, usually once each year for the whole extent of scale actually employed, by observations at 32° in pounded ice and by comparison with the standard thermometer No. 515, kindly supplied to the Royal Observatory by the Kew Committee of the Royal Society.

The dry-bulb thermometer used throughout the year was Negretti and Zambra, No. 45354. The correction $-0^{\circ}\cdot4$ has been applied to the readings of this thermometer. The wet-bulb thermometer used throughout the year was Negretti and Zambra, No. 94737. The correction $-0^{\circ}\cdot2$ has been applied to the readings of this thermometer.

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The dry- and wet-bulb thermometers are read at 9^h, 12^h (noon), 15^h, 21^h every day. Readings of the maximum and minimum thermometers are taken at 9^h, 15^h, and 21^h every day. Those of the dry- and wet-bulb thermometers are employed to correct the indications of the photographic dry- and wet-bulb thermometers.

PHOTOGRAPHIC DRY-BULB AND WET-BULB THERMOMETERS.—The apparatus, which has been in use since 1887, was designed by Sir William Christie. Until 1917 it stood in substantially the same position in the Observatory grounds, to the north of the “New Observatory.” It was transferred to the Magnetic Pavilion Enclosure on 1917 February 21. It is placed in a shed 8 feet square, standing upon posts about 8 feet high, and open to the north. The apparatus is screened from the direct rays of the sun, without impeding the circulation of the air. The recording mechanism is similar in general plan to that described in connection with the magnetometers. The traces consist of broad bands, due to the free passage of light (above the mercury column of the dry-bulb thermometer, and through an air bubble in that of the wet-bulb thermometer) to the drum, crossed by fine lines caused by the shadows of the graduations of the thermometer tubes. The two traces fall on the same part of the cylinder as regards time scale. The stems of the thermometers are placed close together, each being covered by a vertical metal plate having a fine vertical slit, so that light passes through only at such parts of the bore of the tube as do not contain mercury. Further details of the thermometers and recording arrangements may be found in the volume for 1912. The scale value of the records is approximately 10° per inch.

RADIATION THERMOMETERS.—These thermometers are placed in the Magnetic Pavilion enclosure, in an open position about 50 feet south-west of the building. The thermometer for solar radiation is a mercurial maximum thermometer with its bulb blackened and enclosed in a glass sphere from which the air has been exhausted. The thermometer employed was Negretti and Zambra, No. K2254. The thermometer for radiation to the sky is a spirit minimum thermometer, Negretti and Zambra, No. D11197. The thermometers are laid on short grass and freely exposed to the sky ; they require no correction for index error.

EARTH THERMOMETERS.—There are two thermometers now in use, the bulbs of which are sunk to depths of 4 feet and 1 foot respectively below the surface. Both thermometers are read daily at noon, the readings of the former being given in the daily results.

OSLER'S ANEMOMETER.—This self-registering anemometer, devised by Mr. A. F. Osler, for continuous registration of the direction and pressure of the wind and of the amount of rain, is fixed above the north-western turret of the ancient part

of the Observatory. The direction of the wind is registered by means of a large vane (9ft. 2in. in length), connected by gearing with a rack-work carrying a pencil; the latter marks on a flat horizontally moving sheet of paper. The vane is 25 feet above the roof of the Octagon Room, 60 feet above the adjacent ground, and 215 feet above the mean level of the sea. A fixed mark on the north-eastern turret, in a known azimuth, as determined by celestial observation, is used for examining at any time the position of the direction plate over the registering table, to which reference is made by means of a direction pointer when adjusting a new sheet on the travelling board.

A circular pressure plate with an area of 192 square inches is attached 2 feet below the vane; moving with the latter, it is always kept directed against the wind. A light wind causes the plate to compress slender springs, the motion being registered on the horizontal sheet by a pencil connected with the plate by a flexible brass chain, which is always in tension. Higher wind pressures bring stiffer springs into play behind the plate, and the two sets of springs are adjusted by screws and clamps so as to afford fixed scales on the sheet, the scale for light winds being double that for heavy winds. The scale is determined experimentally in lbs. per square foot from time to time.

The recording sheet is changed daily at noon. The time scale, ordinarily 15mm. to the hour can be increased 24-fold by altering the gearing.

A self-registering rain gauge of peculiar construction forms part of the apparatus; this is described under the heading "Rain Gauges" in previous volumes.

ROBINSON'S ANEMOMETER.—This instrument, for registration of the horizontal movement of the air, is mounted above the roof of the Octagon Room. It was brought into use in 1866, and is of smaller size than that now usual, the four hemispherical cups being 5 inches in diameter, the centre of each cup being 15 inches distant from the vertical axis of rotation. The cups are 21 feet above the roof of the Octagon Room, 56 feet above the adjacent ground, and 211 feet above the mean level of the sea. A motion of the recording pencil through 1 inch corresponds to horizontal motion of the air through 100 miles. The time scale is the same as for the Osler Anemometer and the sheet is changed daily at noon.

The values of wind velocity V given in the tables are three times the actual velocity v of the cups. From tests made by Mr. W. H. Dines at Hershams in

1889, on his whirling machine, it would appear that the relation between V and v is more correctly given by

$$V = 4.0 + 2.0 v,$$

and that the instrument fails to record wind velocities less than 4 miles per hour. The values of the wind velocity given by the formula $V = 3 v$ would thus be too high when V exceeds 12. Since the two formulæ agree, however, for $V = 12$, the mean values of the wind velocity (which seldom differ much from 12) will be approximately correct in either case; therefore, for the sake of continuity and simplicity, the formula $V = 3 v$ is retained in use. In this volume, however, the greatest hourly measures (p. E 46) are given according to both formulæ, and the least hourly measures are omitted.

RAIN GAUGES.—During the year 1928 three rain gauges were employed, placed at different elevations above the ground.

The gauge No. 1 forms part of the Osler Anemometer apparatus, and is self-registering, the record being made on the sheet on which the direction and pressure of the wind are recorded. The apparatus is fully described in volumes previous to 1914.

Gauge No. 6 is an 8-inch circular gauge placed with the receiving surface 5 inches above the ground in the Magnetic Pavilion enclosure, about 10 feet north-west of the thermometer stand. No. 8 is a newer gauge of the same diameter, but of the modified Snowdon pattern adopted by the Meteorological Office, having its receiving surface 1 foot above the ground. It was brought into use 1908 January 1, being fixed SW by W from No. 6 with a clear space of 6 feet between the rims. No. 6 is the standard gauge, and is read daily at 9^h, 15^h, and 21^h Greenwich Mean Time. No. 8 is used as a check on the readings of No. 6 and is read at 9^h only as a rule.

The present height of the Standard Gauge above mean sea-level is 5 feet 9 inches less than in its old position in the Observatory Grounds, before its removal to the Pavilion Enclosure.

The gauges are also read at midnight on the last day of each calendar month.

The monthly amounts of rain collected in gauges Nos. 6 and 8 are given on page E 46 of the Meteorological Results.

ELECTROMETER.—The instrument was out of use during a considerable part of the year and no results for 1928 are published.

SUNSHINE RECORDER.—The hourly results relate to *apparent* time. The instrument in use is of the Campbell-Stokes pattern, with 4-inch glass globe. It was examined at the Meteorological Office on September 13, 1926, and was found to be in satisfactory condition. It now bears the serial number M.O. 113. The recorded durations are those of *bright* sunshine, no register being obtained when the sun shines faintly through fog or cloud, or is very near the horizon.

It was noticed at the Meteorological Office, Air Ministry, that the monthly totals of sunshine recorded at the Royal Observatory had shown a tendency to diminish in comparison with the totals at other observing stations. At the suggestion of the Director of the Meteorological Office a selection of sunshine cards with traces much broken by cloud was made at random from previous years' records, and the traces were re-measured by Meteorological Office observers according to the standards in use by them.

The years for which comparisons were made were 1901, 1902, 1912, 1913, 1920, 1921, 1925, 1926. Ten specimens were examined from each year and the result of the comparison was that in the earlier years the Greenwich estimated total on days of intermittent sunshine was consistently about 8 per cent. in excess of that obtained according to present Meteorological Office standards, while in the four later years the totals were similarly about 13 per cent. in excess.

In the same period the change at Kew Observatory appeared to have been from about 4 per cent. excess in the early years to practical agreement during the later years.

It seemed desirable that conformity with Meteorological Office standards should be established and maintained as far as possible, and with this in view independent measures of selected sunshine cards taken five from each of the months of January, June and September, 1928, have been made at the Meteorological Office. These show an excess of about 2 per cent. on the part of Greenwich estimations.

Similar comparisons will be made annually in future.

NIGHT-SKY RECORDER.—The object of this instrument is to supplement the daily sunshine record, in so far as it gives an indication of the amount of cloud.

It consists of a small camera constructed of wood, mounted on a brick pier in the courtyard, to the north of the Transit Pavilion, and permanently directed towards the Celestial Pole.

The lens is of 18·8 inches focal length and 0·8 inch aperture. The actual camera is enclosed in a larger box about twice its length, extending nine inches beyond the lens. The lens itself is further surrounded by a hood. Adequate protection from dew is thus obtained and also from rain, except when driven hard from the north. The photographic plates used are ordinary quarter-plate ($3\frac{1}{4}$ inches by $4\frac{1}{4}$). Exposure is intended to be made during the period that the sun remains more than 10° below the horizon. The period thus centres approximately to apparent midnight, but in practice the mean times of commencing and ending the exposure are not varied at intervals of less than seven days.

The traces of Polaris and of δ Ursæ Minoris are those selected for measurement. The measurement is effected by means of a glass scale, on which pairs of concentric circles are photographically imprinted. The radii of these circles are slightly greater and slightly less than the radius of the trace to be measured, and the circles are divided into a time scale of hour-angle, with ten-minute units. The plate is placed over the scale in a measuring frame, and adjusted so that the trace is concentric with the containing circles on the scale. The hour-angle of the star, according to the scale, at the commencement and ending of the various portions of the trace is then read off to the nearest minute of time.

The correction for error of orientation of the plate is made during the computation of mean time corresponding to hour-angle of star, in the following manner :—Whenever the sky is seen to be clear at the commencement of exposure, the difference between the hour-angle given by the scale for the beginning of the trace and the corresponding mean time noted by the observer, is taken as the quantity to be applied to the scale readings throughout the night, due allowance being made for the acceleration of sidereal time over mean time. When the sky is not clear at commencement, an adopted mean value is used. Variations in the error of orientation are found seldom to exceed two or three minutes of time, and are unimportant to the records.

Meteorological Reductions.

The results given in the Meteorological Section refer to the civil day, commencing at midnight, except in the case of the Night-Sky Recorder, for which they relate to the period from dusk on the day named, to dawn of the following day.

All results in regard to atmospheric pressure, temperature of the air and of evaporation, with deductions therefrom, are derived from the photographic records, excepting that the maximum and minimum values of air temperature are those given by eye-observation of the ordinary maximum and minimum thermometers at 9^h, 15^h, and 21^h, reference being made, however, to the photographic register when necessary to obtain the values corresponding to the civil day from midnight to midnight. The hourly readings for the elements mentioned are measured direct from the photographic curves, and reduced so as to be based fundamentally, both as regards scale and zero, on the readings of the standard barometer and dry- and wet-bulb thermometers.

The barometer results are not reduced to sea-level, neither are they corrected for the effect of gravity, by reduction to the latitude of 45°. The monthly mean barometer reading is, however, corrected for the effect of the change of site of April, 1917 before deducing the deviation from the mean of sixty-five years 1841-1905 (pp. E 14-36). This correction, amounting to $-.007$ inch, was by oversight omitted in the years 1917-1926.

From 1926 January 1 the mean daily temperature of the dew-point and degree of humidity have been deduced from the mean daily temperatures of the air and of evaporation by use of *Hygrometric Tables* issued by the Meteorological Office, Air Ministry.

In the same way the mean hourly values of the dew-point temperature and degree of humidity in each month (pages E 41 and E 42) have been calculated from the corresponding mean hourly values of air and evaporation temperatures (pages E 40 and E 41).

The excess of the mean temperature of the air on each day above the average of sixty-five years, given in the "Daily Results of the Meteorological Observations," is found by comparing the numbers contained in column 6 with a table of average daily temperatures found by smoothing the accidental irregularities of the daily means deduced from the observations for the sixty-five years 1841-1905. In this series the mean daily temperature from 1841 to 1847 depends usually on 12 observations daily, in 1848 on 6 observations daily, and from 1849 to 1905 on 24

E 10 INTRODUCTION TO GREENWICH METEOROLOGICAL OBSERVATIONS, 1928.

hourly readings from the photographic record. The smoothed numbers are given in Table VII, *Reduction of the Greenwich Meteorological Observations*, Part IV and also in the Introduction for 1910.

The daily register of rain contained in column 16 is that recorded by the gauge No. 6, whose receiving surface is 5 inches above the ground. This gauge is read at 9^h, 15^h, and 21^h Greenwich Mean Time. The continuous record of Osler's self-registering gauge shows whether the amounts measured at 9^h are to be placed to the same, or to the preceding civil day; and in cases in which rain fell both before and after midnight, also gives the means of ascertaining the proper proportion of the 9^h amount which should be placed to each civil day. The number of days of rain given in the footnotes, and in the abstract tables, pages E 39 and E 46, is formed from the records of this gauge. In this numeration only those days are counted on which the fall amounted to or exceeded 0^m.005.

No particular explanation of the anemometric results seems necessary. It may be understood generally that the greatest pressures usually occur in gusts of short duration. The "Mean of 24 Hourly Measures" was in former years the mean of 24 measures of pressure taken *at* each hour; but commencing with 1887 January 1, it is the mean of measures, each one of which is the average pressure during the hour of which the nominal hour is the middle point.

The mean amount of cloud given in the footnotes on the right-hand pages E 15 to E 37, and in the abstract table, page E 39, is the mean found from observations made at 9^h, 12^h (noon), 15^h, and 21^h of each civil day.

For understanding the divisions of time under the heading "Clouds and Weather," the following remarks are necessary:—The day is divided by columns into two parts (from midnight to noon, and from noon to midnight), and each of these parts is subdivided into two or three parts by colons (:). Thus, when there is a single colon in the first column, it denotes that the indications before it apply (roughly) to the interval from midnight to 6^h, and those following it to the interval from 6^h to noon. When there are two colons in the first column, it is to be understood that the twelve hours are divided into three nearly equal parts of four hours each. And similarly for the second column.

As regards the notation for clouds and weather, the following are the symbols which denote actual phenomena :—

a,	<i>aurora</i>	glm,	<i>gloom</i>	s,	<i>stratus</i>
ci,	<i>cirrus</i>	h,	<i>haze</i>	sc,	<i>scud</i>
cl,	<i>clouds</i>	ha,	<i>halo</i>	sh, shs,	<i>shower (s)</i>
co,	<i>corona</i>	hl,	<i>hail</i>	sl,	<i>sleet</i>
cu,	<i>cumulus</i>	l,	<i>lightning</i>	sm,	<i>storm</i>
d,	<i>dew</i>	m,	<i>mist</i>	sn,	<i>snow</i>
f,	<i>fog</i>	n,	<i>nimbus</i>	sq, sqs,	<i>squall (s)</i>
fr,	<i>frost</i>	prh,	<i>parhelion</i>	t,	<i>thunder</i>
fr.-cu,	<i>fracto cumulus</i>	prs,	<i>paraselene</i>	w,	<i>wind</i>
g,	<i>gale</i>	r,	<i>rain</i>		

The following are qualifying symbols used in conjunction with the above :—

c,	<i>continued</i>	li,	<i>light</i>	so,	<i>solar</i>
fq,	<i>frequent</i>	lu,	<i>lunar</i>	st,	<i>strong</i>
fr,	<i>frozen</i>	m,	<i>misty,</i>	th,	<i>thin</i>
gt,	<i>great</i>	oc,	<i>occasional</i>	tk,	<i>thick</i>
ho,	<i>hoar</i>	p,	<i>partial (ly)</i>	v,	<i>variable</i>
hy,	<i>heavy</i>	slt,	<i>slight</i>	vv,	<i>very variable</i>

These symbols are used in combination : thus c-hy-r denotes continued heavy rain ; t-sm, thunderstorm ; p-cl, partially cloudy ; m-r, misty rain ; and so on. In regard to clouds, cl is omitted when the type is specified : thus ci-cu denotes cirro-cumulus clouds.

Howard's nomenclature is used for clouds, and the figure indicates the proportion of sky covered by cloud, an overcast sky being represented by 10.

F. W. DYSON.

ROYAL OBSERVATORY, GREENWICH.
1929, October 5.

ROYAL OBSERVATORY, GREENWICH.

Results of
Meteorological Observations
1928.

GREENWICH MAGNETIC AND METEOROLOGICAL RESULTS 1928

MONTH and DAY, 1928.	BARO-METER. Mean of 24 Hourly Values (corrected and reduced to 32° Fahrenheit).	TEMPERATURE.							Difference between the Air Temperature and Dew Point Temperature.			Degree of Humidity (Saturation = 100).	TEMPERATURE.			Rain collected in Gauge No. 6, whose receiving surface is 5 inches above the Ground.	Daily Duration of Sunshine.	Sun above Horizon.
		Of the Air.					Of Evapo-ration.	Of the Dew Point.	Mean.	Greatest.	Least.		Of Radiation.		Of the Earth 4 ft. below the Surface of the Soil.			
		Highest.	Lowest.	Daily Range.	Mean of 24 Hourly Values.	Excess above Average of 65 Years.	Mean of 24 Hourly Values.	Deduced Mean Daily Value.					Highest in Sun's Rays.	Lowest on the Grass.				
Jan. 1	30.132	36.6	31.8	4.8	34.2	- 4.4	33.4	32.0	2.2	4.5	1.2	92	46.4	27.9	43.9	0.000	2.9	7.9
2	29.713	41.8	37.2	4.6	40.0	+ 1.6	39.2	37.9	2.1	4.2	0.8	93	43.5	32.8	43.8	0.529	0.0	7.9
3	29.835	42.1	34.4	7.7	38.5	+ 0.2	37.1	35.0	3.5	5.8	1.3	87	48.0	29.3	43.5	0.000	0.0	7.9
4	29.921	49.2	32.0	17.2	41.6	+ 3.3	39.9	37.4	4.2	8.0	0.8	85	51.0	28.3	43.2	0.007	0.0	7.9
5	29.941	47.0	38.9	8.1	42.1	+ 3.9	39.3	35.0	7.1	11.1	3.6	76	60.4	30.2	43.1	0.029	3.3	7.9
6	29.660	55.9	39.6	16.3	47.9	+ 9.8	44.7	40.7	7.2	16.9	2.8	76	69.9	31.1	43.2	0.182	1.9	7.9
7	29.794	52.9	37.4	15.5	45.9	+ 7.9	44.2	42.0	3.9	5.5	2.5	86	54.0	28.2	43.3	0.000	0.0	8.0
8	29.689	52.1	42.0	10.1	47.3	+ 9.4	44.1	40.1	7.2	14.7	3.5	76	70.1	33.9	43.3	0.000	3.1	8.0
9	29.719	50.6	37.6	13.0	44.0	+ 6.1	42.1	39.6	4.4	8.4	0.8	85	70.2	28.1	43.5	0.013	2.3	8.0
10	29.636	50.6	37.2	13.4	43.7	+ 5.8	41.9	39.5	4.2	5.9	2.1	85	70.0	28.5	43.6	0.059	0.6	8.1
11	29.790	46.0	33.0	13.0	40.2	+ 2.3	37.9	34.4	5.8	9.0	1.9	79	73.2	25.0	43.7	0.088	2.5	8.1
12	29.743	48.9	29.9	19.0	40.4	+ 2.5	38.9	36.7	3.7	5.4	1.2	87	48.2	21.8	43.8	0.145	0.0	8.1
13	29.505	50.5	40.8	9.7	46.3	+ 8.3	43.4	39.7	6.6	10.1	3.0	78	75.8	34.1	43.7	0.071	3.4	8.2
14	29.549	49.3	39.9	9.4	44.2	+ 6.2	42.6	40.6	3.6	6.9	1.4	87	71.1	32.7	43.7	0.033	0.4	8.2
15	29.370	47.4	40.1	7.3	43.4	+ 5.3	40.8	36.9	6.5	14.1	2.1	79	75.1	32.8	43.8	0.003	5.8	8.3
16	29.303	44.9	40.0	4.9	43.5	+ 5.2	41.4	38.4	5.1	7.1	2.5	83	47.1	34.4	43.8	0.077	0.0	8.3
17	29.665	41.1	28.7	12.4	36.4	- 2.1	35.1	32.8	3.6	5.9	0.0	87	40.1	21.1	43.8	0.000	0.0	8.3
18	29.837	46.6	27.5	19.1	36.2	- 2.4	35.6	34.6	1.6	4.2	0.4	94	47.9	19.3	43.7	0.271	0.0	8.4
19	29.872	48.6	35.5	13.1	41.9	+ 3.2	39.4	35.6	6.3	12.2	1.6	78	66.6	27.1	43.6	0.156	5.1	8.4
20	30.089	48.0	33.1	14.9	42.2	+ 3.4	41.6	40.9	1.3	3.5	0.3	95	56.9	25.0	43.6	0.071	0.0	8.4
21	29.866	52.3	47.2	5.1	49.4	+10.6	48.5	47.6	1.8	4.9	0.8	93	60.0	45.0	43.5	0.004	0.0	8.5
22	29.631	47.4	38.1	9.3	44.0	+ 5.2	41.9	39.1	4.9	8.4	2.0	83	54.1	30.2	43.7	0.062	0.0	8.5
23	29.888	46.9	32.1	14.8	40.6	+ 1.7	39.1	36.9	3.7	6.5	0.5	87	59.4	25.4	43.6	0.233	0.0	8.6
24	29.650	53.6	38.2	15.4	46.8	+ 7.9	44.8	42.4	4.4	10.2	1.6	84	58.9	31.6	43.8	0.102	0.0	8.6
25	30.025	47.9	37.5	10.4	42.6	+ 3.5	39.5	34.9	7.7	12.6	2.9	74	77.0	30.6	43.8	0.062	4.2	8.7
26	29.705	46.7	35.2	11.5	42.8	+ 3.5	41.2	38.9	3.9	5.7	2.1	86	52.9	29.6	43.8	0.368	0.0	8.7
27	29.790	39.3	31.9	7.4	36.1	- 3.4	34.3	31.3	4.8	7.6	2.1	82	44.1	24.0	43.7	0.024	0.0	8.8
28	29.863	45.3	29.0	16.3	38.5	- 1.1	37.5	35.8	2.7	5.3	1.2	91	46.9	21.4	43.7	0.221	0.0	8.8
29	29.408	45.8	40.3	5.5	42.7	+ 3.0	40.8	38.0	4.7	12.4	1.2	84	87.0	36.2	43.6	0.038	2.5	8.9
30	29.445	45.9	36.3	9.6	40.4	+ 0.7	38.5	35.7	4.7	11.5	1.8	83	68.6	32.2	43.5	0.051	2.3	9.0
31	29.609	48.5	36.2	12.3	41.0	+ 1.3	39.4	37.1	3.9	12.5	1.6	86	82.6	29.0	43.5	0.093	3.4	9.0
Means	29.730	47.4	36.1	11.3	42.1	+ 3.5	40.3	37.7	4.4	8.4	1.7	84.5	60.5	29.3	43.6	Sum 2.992	1.4	8.3
Number of Column for Reference.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	18	19

The results apply to the civil day, except Columns 20 to 23 (Record of the Night Sky), which relate to the period extending from dusk on the civil day named, to dawn of the following day.

The mean reading of the Barometer (Column 1) and the mean temperatures of the Air and Evaporation (Columns 5 and 7) are deduced from the photographic records. The average temperature (Column 6) is deduced from the 65 years' observations, 1841-1905. The temperature of the Dew Point (Column 8) and the Degree of Humidity (Column 12) are deduced from the corresponding temperatures of the Air and Evaporation by means of Hygrometrical Tables supplied by the Air Ministry. The mean difference between the Air and Dew Point Temperatures (Column 9) is the difference between the numbers in Columns 5 and 8, and the Greatest and Least Differences (Columns 10 and 11) are deduced from the 24 hourly photographic measures of the Dry-bulb and Wet-bulb Thermometers. The readings in Column 15 are taken daily at noon.

The values given in Columns 2, 3, 4, 13, and 14 are derived from eye-readings of self-registering thermometers.

The mean reading of the Barometer for the month was 29ⁱⁿ.730, being 0ⁱⁿ.071 lower than the average for the 65 years, 1841-1905.

TEMPERATURE OF THE AIR.

The highest in the month was 55°9 on January 6; the lowest in the month was 27°5, on January 18; and the range was 28°4. The mean of all the highest daily readings in the month was 47°4, being 4°3 higher than the average for the 65 years, 1841-1905. The mean of all the lowest daily readings in the month was 36°1, being 2°4 higher than the average for the 65 years, 1841-1905. The mean of the daily ranges was 11°3, being 1°9 greater than the average for the 65 years, 1841-1905. The mean for the month was 42°1, being 3°5 higher than the average for the 65 years, 1841-1905.

MONTH and DAY, 1928.	RECORD OF THE NIGHT SKY.				WIND AS DEDUCED FROM SELF-REGISTERING ANEMOMETERS.					CLOUDS AND WEATHER.		
	POLARIS.		δ URSÆ MINORIS.		OSLER'S.				ROBINSON'S.		A.M.	P.M.
	Duration.	Fraction of Total Exposure.	Duration.	Fraction of Total Exposure.	General Direction.		Pressure on the Square Foot.		Horizontal Movement of the Air.			
					A.M.	P.M.	Greatest.	Mean of 24 Hourly Measures.		miles.		
Jan. 1	0·0	0·00	0·0	0·00	Calm	S : SSE	1·9	0·09	177	IO	: 10, oc.-th.-cl : th.-cl, h	9, th.-cl, n : 10, oc.-th.-cl : 10, s.-cu, n, fq.-th.-cl
2	4·1	0·29	3·0	0·22	S	S : NNW	4·0	0·73	471	IO, W	: 10, m.-r, sh, w : 10, slt.-r, r, w	IO, C.-r, W : IO, C.-r : IO, sh, m
3	2·4	0·18	1·3	0·09	NW:WSW:NNW	NNW	0·5	0·04	226	9, m	: IO : 10, m, slt.-sh	IO, m : 10, oc.-th.-cl, m : 10, oc.-th.-cl, m
4	7·1	0·51	6·7	0·49	SW	SW : WSW	5·2	0·86	522	IO, slt.-f	: IO : 10, slt.-sh, w	10, slt.-m.-r, w : 10, slt.-sh, st.-w, w : IO, r
5	1·5	0·11	0·8	0·06	W : WSW	WNW : WSW	4·0	0·53	502	7, r, w	: 0, slt.-ho.-fr : 0, slt.-h, w	9, th.-cl, ci.-s, slt.-h, w : IO, th.-cl : 10, th.-cl, s, n
6	7·4	0·54	6·9	0·50	SW : WSW	W : WNW : NW	27·8	2·55	773	IO, C.-r, W	: 10, w, st.-w : 10, n, st.-w, g	p.-cl, s.-cu, g, st.-g : p.-cl, g, st.-w : I, h, w
7	1·5	0·11	1·3	0·10	SSW	SW	4·4	0·53	406	5	: IO : 10, s, slt.-sh	IO, W : IO, W
8	7·0	0·51	6·6	0·48	SW : WSW	W : WSW	4·1	0·66	493	10, w, slt.-sh	: 6, w : I, w	8, th.-cl, ci.-s : 5, th.-cl : 10, th.-cl, lu.-ha,
9	13·0	0·95	13·0	0·95	WSW : SW : SSW	SW : WSW	3·3	0·33	341	IO, d	: I, th.-cl : 8, n, s.-cu	v.-cl, sh, r, w : 0, d [slt.-d
10	12·0	0·87	11·7	0·85	SW : SSW	SW : WSW	10·4	1·01	510	0, d	: 0 : 9, s.-cu, n, w	10, oc.-m.-r, r, st.-w, w : I, W
11	13·7	1·00	13·7	1·00	SW	WNW : WSW	1·9	0·17	300	I	: 6, m.-r : p.-cl, cu, r	p.-cl, cu, h : 0, h, ho.-fr : 0, h, ho.-fr
12	3·7	0·27	3·4	0·25	WSW : SSW	SSW	9·1	1·06	514	0, ho.-fr	: 5, ho.-fr. : 10, th.-cl, w, r	IO, r, w : 10, fq.-shs, w : IO, r, w
13	10·8	0·78	10·5	0·76	SW : WSW	WSW	6·1	0·86	584	9, r, lu.-ha, w	: 0, w : p.-cl, w	7, w : I, w : 0, d
14	8·5	0·64	7·9	0·60	WSW : SSW	SSW : WSW	3·6	0·56	448	3, d	: 9, fr.-cu, s.-cu	10, slt.-sh, w : 10, oc.-m.-r, m.-r, r, w : 6, r
15	6·9	0·52	6·9	0·52	WSW : SW	SW : SSW	4·6	0·58	433	2, d	: 0, d : 0, slt.-m, w	3, cu, w : 0, d : 3, slt.-sh, w
16	4·7	0·35	3·7	0·28	SSW : SW	WNW : WSW	3·6	0·59	460	p.-cl	: 9, slt.-sh : 10, n, m.-r, r, shs	10, oc.-m.-r, glm, w : IO : IO
17	5·1	0·38	2·0	0·15	WSW	Calm	1·0	0·04	181	8, ho.-fr	: 0, m, ho.-fr, slt.-f	r, slt.-f, m, h : 0, f, ho.-fr : 0, f, ho.-fr
18	1·8	0·14	1·7	0·13	Calm : ESE	SE : SSE	1·2	0·08	185	3, f, ho.-fr	: 10, f, ho.-fr : 10, n, s, f, m, m.-r	10, slt.-sh, sh, fq.-slt.-r : IO, r : IO, r
19	12·0	0·91	10·0	0·76	WSW : W : WNW	WNW : SW	5·9	0·62	458	IO, r, w	: 4, w : 0	0, h : 0, m, ho.-fr : 0, slt.-m, slt.-ho.-fr
20	0·0	0·00	0·0	0·00	SSW : S	SSW	2·2	0·15	293	I, ho.-fr	: IO, s, n	10, n, r, slt.-r : 10, oc.-m.-r : IO, slt.-sh
21	0·0	0·00	0·0	0·00	SSW	SSW : S	4·0	0·73	448	10, slt.-sh, m	: IO : 10, n, oc.-slt.-m.-r	10, n, oc.-slt.-m.-r, w : IO, W : IO, w, slt.-sh
22	12·1	0·95	11·6	0·91	S : SW : NW	WNW : W	3·2	0·65	440	10, m.-r, sh, w	: IO, r, w : 10, fq.-slt.-r, w, m	8, m, w : 2, m : I, m
23	0·0	0·00	0·0	0·00	WSW : SSW	SSW	6·8	0·52	405	2, ho.-fr	: I, ho.-fr : 8, th.-cl, m	10, s, n, th.-cl, so.-ha. : 10, m.-r, r, w : IO, r, w
24	12·7	0·99	12·7	0·99	SSW : SW	SW : WSW	7·2	1·59	649	IO, m.-r, w	: IO, w : 10, m.-r, r, w	10, n, hy.-sh, sq, r, hl, glm, w : I, w, st.-w : 0, w [r, shs, st.-w, w
25	3·3	0·26	2·3	0·18	WSW : SW	SW : SSW	11·2	1·10	564	0, ho.-fr, w	: I, cu, ci, th.-cl	8, th.-cl, ci.-s, ci.-cu, p.-so.-ha [v.-cl, fq.-slt.-m.-r, w : 10, m.
26	7·2	0·56	6·9	0·54	SW : SSW	SSW : SW : WSW	4·1	0·53	427	8, w	: 9, slt.-sh : IO, s, n	10, s.-cu, n, r, w : 10, c.-r, hy.-r : p.-cl
27	12·2	0·96	11·3	0·89	SW : SSW : NW	NNW:NW:WSW	2·5	0·14	268	2	: 2 : 10, oc.-th.-cl, sh	9, n, m : 0, h, m, ho.-fr : 0, m, ho.-fr
28	0·5	0·04	0·5	0·04	SW : SSW	SSW	4·6	0·51	408	0, ho.-fr	: IO : 10, s.-cu, n, oc.-th.-cl, slt.-r, r	IO, r, w : IO, r, w : 10, r, m.-r, oc.-m.-r
29	0·5	0·04	0·5	0·04	S : SSE	S	3·5	0·33	368	IO, m.-r	: IO, r, m.-r : 10, n, th.-cl, m.-r, p.-so.-ha	9, fq.-th.-cl : IO : 9, slt.-sh, m.-r
30	4·0	0·32	3·6	0·28	S : WNW : WSW	WSW : SSW	1·0	0·09	227	IO, m.-r, r	: 10, m.-r, m : 5, m, h	5, m, h : 9, m, lu.-ha : 7, m
31	1·8	0·14	0·8	0·07	SW : WSW	SW : SSW	5·5	0·39	338	8, slt.-sh	: 7, m : 6, cu, th.-cl, m	8, th.-cl, ci.-s, s, m.-r : IO, r, m.-r, w
Means	5·7	0·43	5·2	0·39	...	...	...	0·60	414			
Number of Column for Reference.	20	21	22	23	24	25	26	27	28	29	30	

The mean *Temperature of Evaporation* for the month was 40°·3, being 3°·1 higher than the average for the 65 years, 1841-1905.
 The mean *Temperature of the Dew Point* for the month was 37°·7, being 2°·6 higher than
 The mean *Degree of Humidity* for the month was 84·5, being 2·3 less than
 The mean *Elastic Force of Vapour* for the month was 0·1228, being 0·023 greater than
 The mean amount of *Cloud* for the month (a clear sky being represented by 0 and an overcast sky by 10) was 7·4.
 The mean proportion of *Sunshine* for the month (constant sunshine being represented by 1) was 0·169. The maximum daily amount of *Sunshine* was 5·8 hours on January 15.
 The highest reading of the *Solar Radiation Thermometer* was 87°·0 on January 29; and the lowest reading of the *Terrestrial Radiation Thermometer* was 19°·3 on January 18.
 The *Proportions of Wind* referred to the cardinal points were N.2, E.0, S.15, W.13. One day was calm.
 The *Greatest Pressure of the Wind* in the month was 27·8 lbs. on the square foot on January 6. The mean daily *Horizontal Movement of the Air* for the month was 414 miles; the greatest daily value was 773 miles on January 6, and the least daily value was 177 miles on January 1.
Rain (0·1 or over) fell on 24 days in the month, amounting to 2·1992, as measured by gauge No. 6 partly sunk below the ground; being 1·111 greater than the average fall for the 65 years, 1841-1905.

MONTH and DAY, 1928.	BARO-METER. Mean of 24 Hourly Values (corrected and reduced to 32° Fahrenheit).	TEMPERATURE.							Difference between the Air Temperature and Dew Point Temperature.			Degree of Humidity (Saturation = 100).	TEMPERATURE.			Rain collected in Gauge No. 6, whose receiving surface is 5 inches above the ground.	Daily Duration of Sunshine.	Sun above Horizon.
		Of the Air.					Of Evaporation. Mean of 24 Hourly Values.	Of the Dew Point. Deducted Mean Daily Value.	Mean.	Greatest.	Least.		Of Radiation.		Of the Earth 4 ft. below the Surface of the Soil.			
		Highest.	Lowest.	Daily Range.	Mean of 24 Hourly Values.	Excess above Average of 65 Years.							Highest in Sun's Rays.	Lowest on the Grass.				
Feb. 1	29.440	50.2	36.2	14.0	45.6	+ 6.0	42.0	36.9	8.7	18.2	2.3	72	84.0	29.1	43.5	0.017	3.5	9.1
2	29.633	47.8	34.0	13.8	39.3	- 0.2	36.7	32.4	6.9	15.3	1.9	77	81.1	28.0	43.5	0.408	3.2	9.1
3	29.730	43.0	33.3	9.7	38.0	- 1.5	35.5	31.3	6.7	9.8	3.6	76	57.0	25.0	43.4	0.002	1.9	9.2
4	30.053	49.7	31.0	18.7	40.6	+ 1.1	39.4	37.7	2.9	6.5	1.2	89	55.2	22.8	43.3	0.010	0.0	9.2
5	29.827	50.0	36.1	13.9	46.2	+ 6.6	44.6	42.7	3.5	7.3	2.1	87	71.8	30.5	43.2	0.173	0.7	9.3
6	30.197	46.8	34.3	12.5	39.7	+ 0.1	37.1	32.8	6.9	12.6	2.6	77	76.4	28.0	43.2	0.001*	6.2	9.4
7	30.316	50.8	37.9	12.9	44.9	+ 5.4	42.1	38.1	6.8	9.7	2.8	77	65.5	31.2	43.2	0.000	0.0	9.4
8	30.235	51.7	48.2	3.5	49.3	+10.0	47.6	45.7	3.6	5.7	3.3	87	62.0	46.6	43.2	0.000	0.0	9.4
9	30.040	50.6	40.8	9.8	47.0	+ 7.9	42.9	37.4	9.6	17.3	3.3	69	86.8	35.0	43.2	0.011	1.6	9.5
10	29.510	48.1	35.0	13.1	40.4	+ 1.5	38.5	35.7	4.7	9.1	1.3	83	53.3	26.2	43.3	0.121	0.0	9.5
11	29.073	45.6	39.9	5.7	43.4	+ 4.6	38.6	30.9	12.5	17.9	5.0	61	67.2	34.2	43.4	0.015	2.0	9.6
12	29.410	45.0	37.9	7.1	40.9	+ 2.1	38.6	35.1	5.8	13.5	1.1	79	64.4	32.1	43.5	0.083	0.0	9.7
13	29.338	54.2	38.9	15.3	45.1	+ 6.1	43.7	41.8	3.3	9.0	1.3	89	60.7	37.1	43.5	0.176	0.1	9.8
14	29.602	53.0	42.2	10.8	47.4	+ 8.1	45.8	43.9	3.5	8.3	1.0	88	82.0	36.5	43.5	0.074	0.2	9.8
15	29.797	55.9	51.9	4.0	53.2	+13.8	51.5	49.9	3.3	5.4	2.2	88	66.9	48.7	43.6	0.005	0.0	9.9
16	29.746	54.0	45.8	8.2	51.6	+12.1	49.2	46.6	5.0	10.9	2.0	83	65.1	39.4	43.9	0.042	0.2	9.9
17	29.917	48.4	38.3	10.1	43.7	+ 4.1	38.6	30.3	13.4	20.4	5.0	59	88.1	31.1	44.0	0.007	6.0	10.0
18	30.195	50.7	36.1	14.6	42.5	+ 3.0	39.5	35.0	7.5	12.4	2.4	74	89.5	29.0	44.0	0.000	4.3	10.1
19	30.245	51.1	35.1	16.0	43.0	+ 3.5	40.0	35.7	7.3	14.3	1.6	75	80.0	24.2	44.2	0.000	5.0	10.2
20	30.356	53.6	30.2	23.4	40.7	+ 1.2	38.8	36.0	4.7	11.3	0.9	83	83.8	23.1	44.1	0.000	2.8	10.2
21	30.306	53.1	31.3	21.8	42.0	+ 2.4	39.8	36.5	5.5	13.0	0.0	81	93.0	23.8	44.1	0.000	7.0	10.3
22	30.338	46.6	28.2	18.4	38.0	- 1.7	36.6	34.5	3.5	7.0	0.3	87	57.0	22.2	43.9	0.000	0.9	10.3
23	30.257	46.3	32.3	14.0	39.0	- 0.8	38.2	36.9	2.1	5.5	0.0	93	65.3	23.2	43.8	0.005*	0.1	10.4
24	30.087	43.2	37.3	5.9	39.3	- 0.7	37.6	35.1	4.2	8.8	1.6	85	86.0	33.3	43.7	0.000	1.9	10.5
25	30.159	56.5	34.4	22.1	41.7	+ 1.6	39.8	37.0	4.7	14.7	0.5	83	112.0	25.0	43.7	0.000	6.2	10.5
26	30.159	56.3	31.0	25.3	42.2	+ 2.0	39.3	34.9	7.3	15.2	0.3	75	106.1	21.0	43.6	0.000	9.5	10.6
27	30.116	57.1	32.8	24.3	43.8	+ 3.5	39.4	32.4	11.4	30.1	0.8	65	112.2	19.7	43.5	0.000	9.6	10.7
28	29.865	53.6	32.0	21.6	42.4	+ 2.1	39.4	34.9	7.5	18.8	0.5	74	107.1	20.8	43.5	0.002*	8.5	10.7
29	29.689	56.0	38.9	17.1	45.4	+ 5.1	42.8	39.3	6.1	11.5	3.5	80	107.1	29.8	43.4	0.003	1.0	10.8
Means	29.918	50.7	36.6	14.1	43.3	+3.8	40.8	37.2	6.2	12.4	1.9	79.2	78.8	29.5	43.6	Sum 1.155	2.8	9.9
Number of Column for Reference.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	18	19

The results apply to the civil day, except Columns 20 to 23 (Record of the Night Sky), which relate to the period extending from dusk on the civil day named, to dawn of the following day.

The mean reading of the Barometer (Column 1) and the mean temperatures of the Air and Evaporation (Columns 5 and 7) are deduced from the photographic records. The average temperature (Column 6) is deduced from the 65 years' observations, 1841-1905. The temperature of the Dew Point (Column 8) and the Degree of Humidity (Column 12) are deduced from the corresponding temperatures of the Air and Evaporation by means of Hygrometrical Tables supplied by the Air Ministry. The mean difference between the Air and Dew Point Temperatures (Column 9) is the difference between the numbers in Columns 5 and 8, and the Greatest and Least Differences (Columns 10 and 11) are deduced from the 24 hourly photographic measures of the Dry-bulb and Wet-bulb Thermometers. The readings in Column 15 are taken daily at noon.

The values given in Columns 2, 3, 4, 13, and 14 are derived from eye-readings of self-registering thermometers.

*Rainfall (Column 16). The amounts entered on February 6, 23 and 28 are derived from fog or frost.

The mean reading of the *Barometer* for the month was 29in.918, being 0in.109 *higher* than the average for the 65 years, 1841-1905.

TEMPERATURE OF THE AIR.

The highest in the month was 57°1 on February 27; the lowest in the month was 28°2 on February 22; and the range was 28°9. The mean of all the highest daily readings in the month was 50°7, being 5°5 *higher* than the average for the 65 years, 1841-1905. The mean of all the lowest daily readings in the month was 36°6, being 2°4 *higher* than the average for the 65 years, 1841-1905. The mean of the daily ranges was 14°1, being 3°1 *greater* than the average for the 65 years, 1841-1905. The mean for the month was 43°3, being 3°8 *higher* than the average for the 65 years, 1841-1905.

MONTH and DAY, 1928.	RECORD OF THE NIGHT SKY.				WIND AS DEDUCED FROM SELF-REGISTERING ANEMOMETERS.					CLOUDS AND WEATHER.					
	POLARIS.		δ URSÆ MINORIS.		OSLER'S.			Robinson's.							
	Duration	Fraction of Total Exposure.	Duration	Fraction of Total Exposure.	General Direction.		Pressure on the Square Foot.								
					A.M.	P.M.	Greatest.	Mean of 24 Hourly Measures.	Horizontal Movement of the Air.	A.M.	P.M.				
Feb. 1	12.5	1.00	12.5	1.00	SW : WSW	WSW	6.0	0.84	569	9, w	9, w, sh	9, s.-cu, ci.-s, w	3, s.-cu, w	3, th.-cl	1
2	6.1	0.48	5.2	0.42	WSW : SW	SSW : SW	13.2	0.88	518	0, ho.-fr	1, th.-cl	1, ci.-s, s.-cu, w	9, cu.-n, p.-so.-ha,	10, c.-r, hy.-r,	10, ho.-fr
3	11.3	0.90	10.9	0.87	SW : WSW	WNW : SW	3.3	0.22	367	5, ho.-fr	1, th.-cl	8, n, s, ci.-cu, silt.-sh	10, silt.-shs	7, m	1, m
4	0.0	0.00	0.0	0.00	SW : SSW : S	S : SSW	5.2	0.48	414	1, ho.-fr	1	10, oc.-th.-cl, oc.-silt.-m.-r	10, m.-r, w	10, w, m.-r	10, w
5	11.5	0.96	11.4	0.95	SSW	W : SW	6.8	0.72	473	10, m.-r, r, w	10, oc.-m.-r, w	10, m.-r, silt.-r, w	9, r, silt.-m	5	1, th.-cl
6	10.9	0.74	10.3	0.70	WSW	WSW : SW	3.4	0.22	397	0, ho.-fr	0, m, ho.-fr	0, m	5, m, h, w	5	8, lu.-ha, m, d
7	0.0	0.00	0.0	0.00	SW	SW	3.5	0.55	501	7, th.-cl, lu.-ha, h	th.-cl	9, n, w	10, n, w	10, w	10, m.-r, w
8	0.4	0.03	0.2	0.02	SW	SW	7.4	0.75	532	10, w	10, w	10, s, n, oc.-silt.-m.-r	10, n, w	10, silt.-m.-r, w	10, m.-r, w
9	7.1	0.59	6.0	0.50	SW : W	WSW : SW	9.5	0.82	524	10, w	10, r, w	8, s	9, w	9	9, s
10	9.5	0.80	8.9	0.74	SSW	SSW : SW	21.8	0.61	449	9, d	9	10, n, oc.-silt.-m.-r	10, oc.-m.-r, w	6, hy.-sq, glm, hl, w	7, w, r, st.-w, g
11	3.9	0.34	2.4	0.21	SW : WSW	WSW : W : WNW	22.7	3.11	1003	7, g, st.-g	7, g	8, g, st.-g, hy-g	10, n, st.-g, g, r	9, g, st.-w	9, m.-r, st.-w
12	1.0	0.09	0.3	0.03	WNW : W : WSW	WSW : SW : Calm	2.9	0.28	363	8, sh	8, m	5, th.-cl, n, s, so.-ha	10, th.-cl, n, s, h	10, c.-r	9, s, n
13	9.8	0.85	9.1	0.80	SW : Calm : S	WSW : SW	4.2	0.17	321	10	10, silt.-r	10, r, m.-r, m	10, w	1	0, d
14	0.0	0.00	0.0	0.00	SW	SW : SSW	2.5	0.24	393	1, d	8	10, n	10, oc.-th.-cl, m.-r.-sh	10, m.-r	10, r, m.-r
15	0.0	0.00	0.0	0.00	SW	SW	5.0	0.70	560	10, m.-r.-shs	10, sh, w	10, w	10, n, w	10, n, w	
16	9.1	0.79	9.1	0.79	SW	SW : WSW	8.0	1.45	658	10, w	10, w	10, m.-r, oc.-m.-r, w, st.-w	10, n, s, fq.-m.-r, w	9, w, st.-w	p.-cl, st.-w, w
17	9.4	0.82	8.9	0.78	W	WNW : WSW	11.6	1.40	722	8, sh, st.-w	1, st.-w	3, cu, fr.-cu, st.-w	v.-cl, s.-cu, n, st.-w	v.-cl, w	2, sh, w
18	4.8	0.42	4.6	0.40	WSW	WSW	2.0	0.11	303	0, d	2, th.-cl, m	2, ci, ci.-s, fr.-cu	6, n, s	9	6
19	9.6	0.83	9.2	0.80	WSW	WSW : Calm	0.6	0.05	191	9, ho.-fr, m	1, m	5, th.-cu, m, h	8, th.-cl, m, h	0, silt.-f, tk.-h	0, f, ho.-fr
20	8.1	0.70	6.4	0.56	Calm	Calm : SSE	0.2	0.00	115	0, ho.-fr	5, ho.-fr, m	3, th.-cl, m, so.-ha	9, th.-cl, m, so.-ha	9	3, th.-cl
21	5.9	0.51	5.4	0.47	Calm : SE	S : Calm	0.5	0.01	125	2, th.-cl, m, ho.-fr	p.-cl, m, ho.-fr	1, alt.-cu, m, h	0, h	0, m, silt.-f	0, silt.-f, ho.-fr, tk.-f
22	7.7	0.67	7.0	0.61	Calm	Calm : ENE	0.0	0.00	79	0, tk.-f, ho.-fr	0, tk.-f, ho.-fr	0, tk.-f, f	0, f, m	0, m, f	4, f, m
23	0.0	0.00	0.0	0.00	Calm : ENE	ENE	1.2	0.08	207	0, ho.-fr, f	10, f, silt.-m		10, n	10	
24	0.0	0.00	0.0	0.00	ENE	ENE : E	1.7	0.19	299	10	10, n		8, cu, th.-cu	9	10
25	11.0	1.00	11.0	1.00	E : Calm	E	1.0	0.05	166	10, m, f	10, f	5, f, m, h	0, m, h	0, h, prha	0, ho.-fr
26	11.0	1.00	11.0	1.00	Calm	SE : ESE	0.9	0.05	157	0, ho.-fr	1, s.-cu, cu, silt.-m		0	0, d, silt.-ho.-fr	
27	10.5	0.96	10.5	0.96	Calm : ENE	SE : E	2.1	0.08	185	0, ho.-fr	0, ho.-fr, m, silt.-m		0	0, m, d	
28	8.9	0.81	8.2	0.75	Calm : E	E : SE : ESE	2.3	0.14	246	0, m	0, f, m, ho.-fr	0, silt.-h	1, cu	1, alt.-s	1
29	0.0	0.00	0.0	0.00	E	E	1.0	0.07	205	p.-cl	9	10, alt.-cu, s.-cu	10, s, p.-so.-ha	10, oc.-m.-r	10, r, sh
Means	6.2	0.53	5.8	0.50	...	...	...	0.49	381						
Number of Column for Reference.	20	21	22	23	24	25	26	27	28		29				30

The mean *Temperature of Evaporation* for the month was 40°·8, being 3°·1 higher than
 The mean *Temperature of the Dew Point* for the month was 37°·2, being 2°·2 higher than
 The mean *Degree of Humidity* for the month was 79·2, being 4·4 less than
 The mean *Elastic Force of Vapour* for the month was 0·223, being 0·019 greater than
 The mean amount of *Cloud* for the month (a clear sky being represented by 0 and an overcast sky by 10) was 6·3.
 The mean proportion of *Sunshine* for the month (constant sunshine being represented by 1) was 0·287. The maximum daily amount of *Sunshine* was 9·6 hours on February 27.
 The highest reading of the *Solar Radiation Thermometer* was 112°·2 on February 27; and the lowest reading of the *Terrestrial Radiation Thermometer* was 19°·7 on February 27.
 The *Proportions of Wind* referred to the cardinal points were N. 1, E. 5, S. 8, W. 11. Four days were calm.
 The *Greatest Pressure of the Wind* in the month was 22·7 lbs. on the square foot on February 11. The mean daily *Horizontal Movement of the Air* for the month was 381 miles; the greatest daily value was 1003 miles on February 11; and the least daily value was 79 miles on February 22.
Rain (0·005 or over) fell on 13 days in the month, amounting to 1·155 as measured by gauge No. 6 partly sunk below the ground; being 0·325 less than the average fall for the 65 years, 1841-1905.

the average for the 65 years, 1841-1905.

MONTH and DAY, 1928.	BARO-METER. Mean of 24 Hourly Values (corrected and reduced to 32° Fahrenheit).	TEMPERATURE.							Difference between the Air Temperature and Dew Point Temperature.			Degree of Humidity (Saturation = 100).	TEMPERATURE.			Rain collected in Gauge No. 6, whose receiving surface is 8 inches above the Ground.	Daily Duration of Sunshine.	Sun above Horizon.
		Of the Air.					Of Evaporation.	Of the Dew Point.	Mean.	Greatest.	Least.		Of Radiation.		Of the Earth 4 ft. below the Surface of the Soil.			
		Highest.	Lowest.	Daily Range.	Mean of 24 Hourly Values.	Excess above Average of 65 Years.	Mean of 24 Hourly Values.	Deducted Mean Daily Value.					Highest in Sun's Rays.	Lowest on the Grass.				
Mar. 1	29.717	52.1	44.8	7.3	47.7	+ 7.3	46.6	45.2	2.5	4.3	1.4	91	65.8	38.5	43.4	0.040	0.0	10.8
2	29.818	51.9	42.1	9.8	48.1	+ 7.7	46.9	45.5	2.6	5.7	0.5	91	64.6	33.0	43.4	0.087	0.0	10.9
3	29.878	61.3	40.0	21.3	48.7	+ 8.2	46.6	44.2	4.5	12.6	0.5	84	108.9	28.9	43.6	0.000	4.5	11.0
4	29.934	68.0	37.7	30.3	49.9	+ 9.2	46.1	41.6	8.3	22.2	1.0	73	124.3	28.0	43.8	0.000	9.6	11.1
5	29.898	65.2	36.0	29.2	49.4	+ 8.5	44.5	38.1	11.3	22.7	1.1	65	112.0	24.0	43.9	0.092	7.5	11.1
6	29.803	47.5	40.8	6.7	45.4	+ 4.4	43.8	41.7	3.7	7.6	1.4	87	57.4	36.6	43.8	0.027	0.0	11.2
7	29.802	46.6	37.8	8.8	42.2	+ 1.2	40.8	38.8	3.4	4.4	1.5	88	58.5	32.2	43.9	0.008	0.0	11.2
8	29.832	43.1	36.9	6.2	39.7	- 1.4	37.4	33.9	5.8	8.1	2.9	79	64.7	32.0	43.9	0.000	0.0	11.3
9	29.835	42.1	31.6	10.5	35.6	- 5.4	33.9	31.1	4.5	11.2	0.8	83	89.9	27.2	43.9	0.179	1.7	11.4
10	29.849	41.3	26.5	14.8	32.7	- 8.2	30.6	26.4	6.3	19.3	1.2	79	100.4	22.5	43.9	0.015	5.7	11.4
11	29.837	33.1	26.0	7.1	29.1	- 11.9	27.9	25.3	3.8	11.4	0.0	84	49.0	22.0	43.6	0.018	0.4	11.5
12	29.768	38.0	24.8	13.2	31.6	- 9.5	30.0	27.2	4.4	12.8	0.0	83	87.3	22.4	43.6	0.006	6.8	11.6
13	29.878	39.1	31.4	7.7	34.5	- 6.8	31.8	26.7	7.8	11.7	2.7	73	85.6	28.1	43.5	0.000	1.0	11.6
14	29.984	41.2	33.9	7.3	36.7	- 4.8	34.5	30.8	5.9	10.9	2.4	78	64.1	27.1	43.1	0.000	0.1	11.7
15	30.040	47.6	30.9	16.7	39.3	- 2.4	36.2	31.1	8.2	16.2	1.1	72	88.7	21.4	43.1	0.000	1.0	11.8
16	30.122	54.8	29.0	25.8	42.2	+ 0.3	38.3	32.1	10.1	18.7	0.4	67	105.5	19.0	43.1	0.000	8.7	11.8
17	29.962	57.2	42.1	15.1	47.8	+ 5.8	41.3	31.5	16.3	26.6	10.1	52	109.1	34.0	43.1	0.000	6.4	11.9
18	29.762	61.3	44.0	17.3	50.7	+ 8.7	45.4	38.5	12.2	19.3	2.3	64	120.7	37.7	43.2	0.002	6.7	12.0
19	29.688	59.7	45.5	14.2	51.7	+ 9.8	48.9	45.8	5.9	10.9	2.1	81	102.2	39.9	43.2	0.006	0.6	12.0
20	29.469	61.2	46.8	14.4	53.3	+ 11.4	47.2	39.8	13.5	19.1	6.7	60	122.7	41.5	43.4	0.000	6.1	12.1
21	29.258	47.5	40.6	6.9	43.4	+ 1.5	39.7	34.2	9.2	18.3	0.4	70	64.5	37.3	43.5	0.063	0.0	12.2
22	29.205	58.4	44.5	13.9	49.0	+ 7.0	46.4	43.5	5.5	12.5	2.5	81	113.1	36.6	43.8	0.002	3.6	12.2
23	29.139	56.9	41.3	15.6	48.8	+ 6.6	47.0	45.0	3.8	8.5	1.3	86	99.9	31.1	44.0	0.093	1.4	12.3
24	29.222	55.2	39.5	15.7	45.7	+ 3.3	44.0	41.8	3.9	8.7	0.5	86	80.4	29.1	44.1	0.197	1.0	12.4
25	29.325	58.2	38.0	20.2	46.9	+ 4.2	44.1	40.7	6.2	12.2	0.0	78	109.3	29.5	44.1	0.000	4.6	12.4
26	29.658	60.4	41.0	19.4	49.4	+ 6.4	44.1	37.0	12.4	24.0	5.5	63	113.0	28.6	44.4	0.000	8.8	12.5
27	29.546	53.8	39.9	13.9	46.0	+ 2.7	44.2	41.9	4.1	13.4	1.0	86	90.6	26.9	44.4	0.039	0.1	12.6
28	29.388	53.2	36.4	16.8	42.2	- 1.5	39.2	34.6	7.6	17.4	1.3	74	97.0	27.1	44.5	0.003	2.6	12.6
29	29.137	51.2	32.2	19.0	43.3	- 0.8	41.7	39.5	3.8	8.6	0.8	87	61.0	23.1	44.5	0.247	0.0	12.7
30	28.821	53.8	40.6	13.2	45.4	+ 0.9	42.6	38.7	6.7	11.6	3.9	78	113.9	33.2	44.5	0.219	4.8	12.8
31	28.943	56.9	38.0	18.9	44.3	- 0.6	42.5	40.2	4.1	13.2	0.4	85	115.4	32.0	44.6	0.270	3.3	12.8
Means	29.630	52.2	37.4	14.7	43.9	+ 2.0	41.1	37.2	6.7	13.7	1.9	77.7	91.6	30.0	43.8	1.613	3.1	11.8
Number of Column for Reference.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	18	19

The results apply to the civil day, except Columns 20 to 23 (Record of the Night Sky), which relate to the period extending from dusk on the civil day named, to dawn of the following day.

The mean reading of the Barometer (Column 1) and the mean temperatures of the Air and Evaporation (Columns 5 and 7) are deduced from the photographic records. The average temperature (Column 6) is deduced from the 65 years' observations, 1841-1905. The temperature of the Dew Point (Column 8) and the Degree of Humidity (Column 12) are deduced from the corresponding temperatures of the Air and Evaporation by means of Hygrometrical Tables supplied by the Air Ministry. The mean difference between the Air and Dew Point Temperatures (Column 9) is the difference between the numbers in Columns 5 and 8, and the Greatest and Least Differences (Columns 10 and 11) are deduced from the 24 hourly photographic measures of the Dry-bulb and Wet-bulb Thermometers. The readings in Column 15 are taken daily at noon.

The values given in Columns 2, 3, 4, 13, and 14 are derived from eye-readings of self-registering thermometers.

The mean reading of the *Barometer* for the month was 29^m.630, being 0^m.123 lower than the average for the 65 years, 1841-1905.

TEMPERATURE OF THE AIR.

The highest in the month was 68° on March 4; the lowest in the month was 24° on March 12; and the range was 43° 2.
 The mean of all the highest daily readings in the month was 52° 2, being 2° 4 higher than the average for the 65 years, 1841-1905.
 The mean of all the lowest daily readings in the month was 37° 4, being 2° 3 higher than the average for the 65 years, 1841-1905.
 The mean of the daily ranges was 14° 7, being the same as the average for the 65 years, 1841-1905.
 The mean for the month was 43° 9, being 2° 0 higher than the average for the 65 years, 1841-1905.

MONTH and DAY, 1928.	RECORD OF THE NIGHT SKY.				WIND AS DEDUCED FROM SELF-REGISTERING ANEMOMETERS.					CLOUDS AND WEATHER.				
	POLARIS.		S URSÆ MINORIS.		OSLER'S.					ROBINSON'S.				
	Duration.	Fraction of Total Exposure.	Duration.	Fraction of Total Exposure.	General Direction.		Pressure on the Square Foot.			Horizontal Movement of the Air.	A.M.		P.M.	
					A.M.	P.M.	Greatest.	Mean of 24 Hourly Measures.	miles.					
Mar. 1	0.1	0.01	0.1	0.01	E : SE : SSE	SSE : S	1.0	0.06	171	IO, slt.-sh : IO, r, slt.-r	IO, n, s	IO, oc.-m.-r : IO	IO, d	
2	9.2	0.83	7.7	0.70	Calm : ESE	SE : Calm	1.5	0.09	170	IO, r, slt.-r : IO, slt.-r, oc.-m.-r	IO, fq.-slt.-r	IO, s, n, fq.-slt.-m.-r : 9	IO, m, d	
3	10.5	1.00	10.5	1.00	Calm	SE : Calm	0.2	0.01	117	7, d : 9, m	6, ci.-cu, s.-cu, [alt.-cu	p.-cl, ci.-s : I	IO, m, d	
4	10.5	1.00	10.5	1.00	Calm	SSE : Calm	0.6	0.02	114	0, m : 0, m, ho.-fr	2, alt.-cu, m	3, alt.-cu, ci : 0, m	IO, m, d	
5	0.4	0.04	0.4	0.04	Calm	Calm : VAR	0.6	0.01	102	0, m, ho.-fr : 0, m, hy.-d	0, m	5, th.-cl, n, tk.-h : IO, OC.-m.-r	IO, m.-r, hy.-sh	
6	0.0	0.00	0.0	0.00	Calm : N	NNE : Calm	0.6	0.04	152	9, r, m.-r : IO, r	IO	IO, s.-cu, n	IO, fq.-th.-cl, d	
7	1.3	0.13	0.7	0.07	Calm	Calm : SW : NW	1.0	0.00	104	IO	IO, m.-r	IO, oc.-m.-r	IO	
8	1.7	0.16	1.4	0.13	N : NNE	NNE : NE	1.5	0.16	317	IO, oc.-th.-cl	IO, n, s	IO, slt.-sh : IO	IO	
9	8.8	0.84	7.1	0.68	NNE : ENE	ENE : NE : NNE	2.7	0.15	288	9	IO, m.-r, sn, sl, r	IO, sl, sn	IO, cu.-n, oc.-sn : 9, glm, sn, sl	7
10	8.0	0.80	7.2	0.72	NNE : NE	NE : N	5.2	0.28	386	7	IO	6, n, cu.-n, w	v.-cl, oc.-slt.-sn, sn.-sh : 3, hy.-sn.-sh : I	
11	0.3	0.03	0.1	0.01	N	N : NNE	1.0	0.09	249	5	9	IO, cu, n, sn	IO, slt.-sn, sn : IO, fq.-th.-cl	IO, sn, sn.-sh
12	1.5	0.15	0.0	0.00	Calm : SSE	SE : ESE	0.5	0.02	135	IO	8	2, cu	9, sn, slt.-sn : 9	IO
13	0.0	0.00	0.0	0.00	Calm : NNW : NNE	N : NNW	0.8	0.08	211	IO, sn.-shs : IO	9, cu, cu.-n, h	IO, oc.-th.-cl, p.-so.-ha, slt.-glm : IO	IO	
14	0.3	0.03	0.2	0.02	Calm	Calm : ESE	0.0	0.00	109	IO, m	IO, m	IO, n, m, glm, h	IO, fq.-th.-cl, h, m, glm : IO	9
15	10.0	1.00	9.9	0.99	Calm	SSE : ESE	0.5	0.00	130	IO	IO, m	IO, s.-cu, n	9, p.-so.-ha : 2	IO, ho.-fr
16	7.2	0.72	3.7	0.37	ESE : SE : SSE	SSE : SE	2.1	0.15	240	0, ho.-fr : 0, f, m, ho.-fr	0, h	th.-cl, ci, ci.-s : 8	6	
17	4.5	0.46	3.1	0.32	SSE	SSE : SE	2.0	0.20	285	3	IO	8, th.-cl, ci.-cu, ci.-s	9, th.-cl, so.-ha : p.-cl	5
18	2.9	0.30	1.8	0.19	SSE : S : SW	SW : SSW : SSE	2.5	0.27	342	9, th.-cl	IO, sh	6, cu	p.-cl, cu, n : p.-cl, th.-cl	8, th.-cl
19	1.3	0.13	0.9	0.10	S : SSE	SE : SSE	1.5	0.18	279	IO, th.-cl, slt.-sh : IO, sh	IO, n, alt.-cu, th.-cl	9, alt.-s, s.-cu : IO, th.-cl	6, cu, alt.-cu	
20	0.0	0.00	0.0	0.00	SSE : SE	SE	6.1	0.62	414	9	6	8, s.-cu, ci.-s, w	7, th.-cl, ci.-s, ci.-cu, w	IO, oc.-th.-cl
21	2.8	0.29	2.2	0.23	SE : E	E : SE : S	3.5	0.26	316	IO, shs	IO, s, n, so.-ha	IO, fq.-m.-r : IO, r	IO, r, m.-r	
22	2.1	0.22	2.0	0.21	S : SSW	S : SE	1.5	0.18	273	9	8	9, cu.-n, shs	9, cu.-n : 4	9
23	9.0	0.92	7.9	0.81	SE : SSE : S	SSW : S	4.1	0.27	346	IO, m.-r.-sh	IO, r, fq.-m.-r : 9, m.-r, m.-r.-shs	9, n, m.-r.-shs	V.-cl	0
24	6.2	0.67	5.2	0.56	S : SSE	SSW : Calm	2.0	0.07	218	p.-cl	IO	IO, oc.-m.-r	IO, cu.-n, r, hy.-r : I	IO, th.-cl, ho.-fr
25	0.0	0.00	0.0	0.00	Calm : N	N : NNW	1.6	0.09	211	8, m	IO, th.-cl, slt.-f, d : 9, th.-cl, cu.-n	9, cu.-n, fr.-cu : 8	IO	
26	9.1	0.99	7.9	0.85	NNW	VAR : SW	0.9	0.08	201	IO, sh	9, m	2, ci.-s, cu, h	6, cu, h : 6	3, cu, th.-cl, h
27	5.8	0.62	4.9	0.53	SSW : S	SSW : WSW	2.9	0.16	301	r, th.-cl, slt.-ho.-fr	8, th.-cl	IO, n, ci.-s	IO, fq.-m.-r : IO, oc.-th.-cl	9, th.-cl
28	9.2	0.99	9.1	0.98	WSW : SW : W	W : NW : SW	2.0	0.05	231	I, ho.-fr : 8	IO, n, slt.-r	9, cu.-n, s.-cu, slt.-sh, so.-ha : I	I	
29	...	...	...	...	SSW : S	SSW : SW	5.5	0.51	457	0, ho.-fr : 5	IO, m, fq.-m.-r, w	IO, n, m.-r, tk.-m.-r, w : IO, r, m.-r	IO, r, m.-r, hy.-sh	
30	4.5	0.49	3.9	0.42	SSW : SW	SSW : S	4.3	0.43	429	4, r, w	p.-cl, w	9, r, m, hy.-r, w	9, fq.-shs, hy.-sh, hl, t : I	3, sh
31	1.8	0.25	1.6	0.22	SSE : SE	SE : E : NE	2.3	0.15	247	9, shs	7, sh	8, r, m.-r	IO, n, slt.-shs, r : 9	9, th.-cl
Means	4.3	0.44	3.7	0.37	...	...	...	0.15	243					
Number of Column for Reference.	20	21	22	23	24	25	26	27	28	29			30	

The mean *Temperature of Evaporation* for the month was $41^{\circ}.1$, being $1^{\circ}.7$ higher than
 The mean *Temperature of the Dew Point* for the month was $37^{\circ}.2$, being $1^{\circ}.6$ higher than
 The mean *Degree of Humidity* for the month was 77.7 , being 0.4 less than
 The mean *Elastic Force of Vapour* for the month was 0.1223 , being 0.014 greater than
 The mean amount of *Cloud* for the month (a clear sky being represented by 0 and an overcast sky by 10) was 7.7 .
 The mean proportion of *Sunshine* for the month (constant sunshine being represented by 1) was 0.264 . The maximum daily amount of *Sunshine* was 9.6 hours on March 4.
 The highest reading of the *Solar Radiation Thermometer* was $124^{\circ}.3$ on March 4; and the lowest reading of the *Terrestrial Radiation Thermometer* was $19^{\circ}.0$ on March 16.
 The *Proportions of Wind* referred to the cardinal points were N. 6, E. 7, S. 10, W. 2. Six days were calm.
 The *Greatest Pressure of the Wind* in the month was 6.1 lbs. on the square foot on March 20. The mean daily *Horizontal Movement of the Air* for the month was 243 miles; the greatest daily value was 457 miles on March 29; and the least daily value was 102 miles on March 5.
Rain (0.1005 or over) fell on 17 days in the month, amounting to 1.613 , as measured by gauge No. 6 partly sunk below the ground; being 0.093 greater than the average fall for the 65 years, 1841-1905.

MONTH and DAY, 1928.	BAROMETER. Mean of 24 Hourly Values (corrected and reduced to 32° Fahrenheit).	TEMPERATURE.							Difference between the Air Temperature and Dew Point Temperature.			Degree of Humidity (Saturation = 100).	TEMPERATURE.			Rain collected in Gauge No. 6, whose receiving surface is 8 inches above the Ground.	Daily Duration of Sunshine.	Sun above Horizon.
		Of the Air.					Of Evaporation.	Of the Dew Point.	Mean.	Greatest.	Least.		Of Radiation.		Of the Earth 4 ft. below the Surface of the Soil.			
		Highest.	Lowest.	Daily Range.	Mean of 24 Hourly Values.	Excess above Average of 65 Years.	Mean of 24 Hourly Values.	Deducted Mean Daily Value.					Highest in Sun's Rays.	Lowest on the Grass.				
Apr. 1	29.364	47.7	40.7	7.0	44.9	-0.4	43.5	41.6	3.3	5.3	1.5	88	62.0	35.2	44.6	0.164	0.0	12.9
2	29.751	52.5	36.8	15.7	44.1	-1.6	41.1	36.8	7.3	14.3	1.1	75	109.6	28.0	44.8	0.000	3.9	12.9
3	29.627	51.7	39.7	12.0	46.5	+0.5	44.9	43.1	3.4	4.5	1.8	87	66.7	29.6	44.8	0.155	0.0	13.0
4	29.444	54.0	38.0	16.0	45.9	-0.3	42.6	38.1	7.8	16.7	3.3	74	87.1	30.7	44.8	0.010	1.1	13.1
5	29.572	54.4	35.8	18.6	44.5	-1.8	41.1	36.1	8.4	17.0	1.9	73	114.0	28.0	44.8	0.059	7.0	13.2
6	29.730	60.2	32.3	27.9	45.3	-1.0	41.4	35.7	9.6	19.5	0.7	69	120.4	24.9	45.0	0.000	7.6	13.2
7	29.594	57.9	35.8	22.1	47.4	+1.1	43.1	37.3	10.1	25.5	1.1	68	109.9	25.1	45.0	0.010	4.9	13.3
8	29.407	61.6	46.1	15.5	51.9	+5.8	47.8	43.2	8.7	15.7	1.8	72	125.8	36.2	45.0	0.023	8.0	13.3
9	29.490	67.9	47.6	20.3	57.4	+11.4	51.6	45.7	11.7	22.3	4.8	65	121.2	38.0	45.1	0.000	4.6	13.4
10	29.284	64.2	48.0	16.2	54.1	+8.2	50.7	47.3	6.8	14.6	2.1	78	119.0	43.2	45.3	0.103	1.7	13.5
11	29.294	62.0	42.9	19.1	52.6	+6.8	49.4	45.9	6.7	15.9	0.4	78	124.3	30.5	45.4	0.105	5.9	13.6
12	29.415	56.5	46.9	9.6	50.3	+4.4	48.9	47.4	2.9	5.8	1.4	90	88.5	44.0	46.6	0.159	0.1	13.6
13	29.635	55.9	45.0	10.9	48.4	+2.3	47.0	45.4	3.0	7.8	0.4	89	105.1	45.0	46.0	0.000	1.0	13.7
14	29.585	47.2	40.1	7.1	43.2	-3.2	41.2	38.3	4.9	9.0	1.9	84	50.1	38.8	46.0	0.000	0.0	13.7
15	29.457	42.5	37.2	5.3	40.2	-6.6	36.8	31.4	8.8	12.8	6.4	69	69.6	36.4	46.0	0.000	0.0	13.8
16	29.447	41.0	34.1	6.9	36.8	-10.4	35.2	32.5	4.3	9.1	0.9	84	46.0	32.1	46.0	0.462	0.0	13.8
17	29.789	50.8	34.0	16.8	40.1	-7.5	36.9	31.7	8.4	15.0	5.2	71	109.6	27.9	46.0	0.015	5.4	13.9
18	29.794	49.0	28.3	20.7	38.4	-9.6	35.2	29.8	8.6	20.2	0.0	70	99.5	20.1	45.9	0.034	5.9	14.0
19	29.685	51.8	31.9	19.9	40.4	-7.9	36.8	31.1	9.3	21.2	1.8	68	104.2	24.0	45.8	0.000	9.0	14.1
20	29.715	51.2	32.5	18.7	41.3	-7.2	37.2	30.5	10.8	22.2	1.3	65	113.6	24.2	45.7	0.003	5.3	14.1
21	29.705	50.6	32.1	18.5	39.8	-8.9	37.4	33.6	6.2	20.5	1.0	78	117.2	24.8	45.6	0.097	3.7	14.2
22	29.938	53.8	34.0	19.8	42.8	-5.9	38.9	32.7	10.1	20.2	2.0	68	119.9	28.6	45.6	0.000	7.2	14.2
23	30.093	56.3	36.7	19.6	47.4	-1.2	43.1	37.3	10.1	14.9	6.7	68	105.2	26.2	45.4	0.000	3.5	14.3
24	30.036	64.8	40.6	24.2	53.1	+4.5	46.0	36.8	16.3	26.8	5.5	54	127.3	31.2	45.5	0.000	13.2	14.4
25	29.776	70.9	43.9	27.0	57.0	+8.4	49.8	41.7	15.3	27.3	4.5	57	135.4	30.2	45.6	0.000	7.9	14.4
26	29.552	73.3	46.2	27.1	59.2	+10.6	53.1	47.3	11.9	28.1	3.1	64	133.7	35.9	45.9	0.000	3.8	14.5
27	29.466	62.7	46.9	15.8	55.0	+6.3	50.6	46.0	9.0	16.1	2.2	71	112.6	34.5	46.0	0.000	0.9	14.5
28	29.704	67.6	39.1	28.5	54.4	+5.6	50.0	45.4	9.0	22.7	0.4	71	125.3	27.2	46.2	0.000	12.1	14.6
29	29.621	63.8	45.6	18.2	53.5	+4.5	50.6	47.6	5.9	13.8	1.0	80	102.4	39.2	46.4	0.019	0.0	14.7
30	29.519	55.0	46.9	8.1	49.9	+0.8	48.3	46.5	3.4	6.4	1.4	88	65.6	45.6	46.7	0.046	0.0	14.7
Means	29.616	56.6	39.5	17.1	47.5	+0.3	44.0	39.5	8.1	16.4	2.3	73.9	103.0	32.2	45.5	1.464	4.1	13.8
Number of Column for Reference.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	18	19

The results apply to the civil day, except Columns 20 to 23 (Record of the Night Sky), which relate to the period extending from dusk on the civil day named, to dawn of the following day.

The mean reading of the Barometer (Column 1) and the mean temperatures of the Air and Evaporation (Columns 5 and 7) are deduced from the photographic records. The average temperature (Column 6) is deduced from the 65 years' observations, 1841-1905. The temperature of the Dew Point (Column 8) and the Degree of Humidity (Column 12) are deduced from the corresponding temperatures of the Air and Evaporation by means of Hygrometrical Tables supplied by the Air Ministry. The mean difference between the Air and Dew Point Temperatures (Column 9) is the difference between the numbers in Columns 5 and 8, and the Greatest and Least Differences (Columns 10 and 11) are deduced from the 24 hourly photographic measures of the Dry-bulb and Wet-bulb Thermometers. The readings in Column 15 are taken daily at noon.

The values given in Columns 2, 3, 4, 13, and 14 are derived from eye-readings of self-registering thermometers.

The mean reading of the Barometer for the month was 29.616, being 0.139 lower than the average for the 65 years, 1841-1905.

TEMPERATURE OF THE AIR.

The highest in the month was 73.3 on April 26; the lowest in the month was 28.3 on April 18; and the range was 45.0. The mean of all the highest daily readings in the month was 56.6, being 0.6 lower than the average for the 65 years, 1841-1905. The mean of all the lowest daily readings in the month was 39.5, being 0.5 higher than the average for the 65 years, 1841-1905. The mean of the daily ranges was 17.1, being 1.1 less than the average for the 65 years, 1841-1905. The mean for the month was 47.5, being 0.3 higher than the average for the 65 years, 1841-1905.

MONTH and DAY, 1928.	RECORD OF THE NIGHT SKY.				WIND AS DEDUCED FROM SELF-REGISTERING ANEMOMETERS.						CLOUDS AND WEATHER.							
	POLARIS.		δURSÆ MINORIS.		OSLER'S.				ROBINSON'S.		A.M.	P.M.						
	Duration.	Fraction of Total Exposure.	Duration.	Fraction of Total Exposure.	General Direction.		Pressure on the Square Foot.		Greatest.	Mean of 24 Hourly Measures.			Horizontal movement of the Air.					
					A.M.	P.M.	lbs.	lbs.			miles.							
Apr. 1	5.0	0.72	2.7	0.31	NE : NNE	NNE : N	2.2	0.15	315	10, slt.-sh	10, sh, slt.-sh, r	10, n, r, slt.-r	10, m.-r, fq.-slt.-m.-r	10, r, oc.-m.-r	10, lu.-ha			
2	7.3	0.83	4.4	0.51	N : Calm	SSW	0.3	0.03	157	6	:	8	:	8, th.-cu, h	9, th.-cu, s.-cu	7, m	9, m, lu.-ha	
3	8.1	0.92	7.6	0.87	SSW	SSW : SW : WSW	4.0	0.38	389	9	:	10, th.-r	:	10, n, th.-r	10, r, slt.-r, w	10, oc.-th.-cl	v.-cl	
4	8.7	1.00	8.7	1.00	SW : SSW	W : WSW	2.7	0.17	328	3	:	9	:	9, n, alt.-cu, shs	10, ci.-s, cu.-n, sh, t	6, sh	0	
5	7.8	0.89	7.3	0.84	SW	SW : WSW	2.1	0.11	262	0, ho.-fr	:	1	:	v.-cl, hy.-shs, bl	v.-cl, ci, alt.-cu, cu.-n, sh	10, th.-cl	5	
6	8.7	1.00	8.4	0.96	SSW : Calm	SSW : S : SE	0.6	0.03	166	3, th.-cl, ho.-fr	:	2	:	5, cu	7, s.-cu, cu	0	1, p.-lu.-ha, ho.-fr	
7	0.0	0.00	0.0	0.00	SE : E	E : ESE	5.2	0.33	284	0, lu.-ha, ho.-fr	:	0, m, h	:	5, th.-cl, so.-ha	10, so.-ha, w	10	10, r	
8	6.9	0.83	6.4	0.78	SE : SSW	SSW : SSE	2.0	0.17	273	10, r, m.-r.-sh	:	8, cu, cu.-n	:	8, cu.-n	2	1, ci, cu		
9	5.7	0.69	3.5	0.42	SSE : S	S : SE	3.9	0.34	298	5	:	10	:	10, s, n, oc.-th.-cl	8, th.-cl, ci.-cu, h, w	6	2, th.-cl	
10	2.4	0.29	2.3	0.28	SE : SSE : SSW	SSW : Calm	2.7	0.24	272	5	:	10	:	8, th.-cl, s, n, ci.-s	10, s, n, r	10, r, m.-r	10	
11	0.3	0.04	0.2	0.02	S : Calm : SSE	SE : ENE	1.5	0.09	218	3, slt.-sh	:	1, m	:	8, th.-cl, shs	8, ci.-cu, alt.-cu, ci.-s	10, hy.-sh, slt.-sh, r	10, n, cu.-n, r, hy.-r	10, oc.-th.-cl, d
12	0.0	0.00	0.0	0.00	NE : NNE	ENE : E	0.8	0.03	171	10, shs, m	:	10, n, s.-cu	:	10, n, s.-cu	10, oc.-m.-r, w	10, w	10	
13	0.0	0.00	0.0	0.00	E : ENE	ENE : E	1.3	0.09	225	10, m	:	10, cu, fr.-cu	:	9, cu, s.-cu, slt.-r	10	10		
14	0.0	0.00	0.0	0.00	E : ENE	ENE	6.8	1.08	554	10	:	10, w, slt.-sh	:	10, w	10, w	10, w		
15	0.0	0.00	0.0	0.00	ENE : NE	ENE : NE	7.7	0.83	546	10, w	:	10, slt.-sn, slt.-sl, m.-r, w	:	10, oc.-m.-r, w	10, w	10		
16	0.6	0.07	0.4	0.06	NE : NNE	NNE : N : NNW	6.4	0.63	502	10, C.-r, w	:	10, r, sl, sn, w	:	10, n, r, sl, oc.-	10, slt.-m.-r, w	10, m.-r.-shs, w	10, slt.-m.-r	
17	3.6	0.46	3.4	0.44	NNW	NNW : NNE	1.7	0.12	240	10	:	5	:	9, cu, cu.-n	10, slt.-shs, r	10, oc.-m.-r	10, slt.-r	
18	6.1	0.78	5.6	0.73	Calm : WSW	W : WSW	2.7	0.09	248	2, ho.-fr	:	1, m	:	6, alt.-cu, cu.-n, h	9, s.-cu	9, slt.-glm, r	0, slt.-m, d, h	
19	7.7	1.00	7.7	1.00	W : WNW	WNW : NNW	5.7	0.30	392	6, ho.-fr	:	3, m, ho.-fr	:	9, fr.-cu, s.-cu	8, cu, fr.-cu	v.-cl, shs	2	
20	7.2	0.92	6.8	0.87	WSW	W : NW	4.2	0.12	310	0, ho.-fr, m	:	7, alt.-cu, s.-cu, h	:	8, cu, cu.-n, h	10, slt.-sh, oc.-slt.-m.-r	v.-cl	10, r	
21	6.6	0.95	6.2	0.88	WSW : WNW	VAR : Calm : NNW	1.8	0.06	221	v.-cl, m, ho.-fr	:	7	:	9, s.-cu, h	10, r	10, r, sh	5, fr.-cu	
22	2.9	0.42	2.5	0.36	N : NNW	NNW : Calm	1.8	0.12	235	0, ho.-fr	:	5, m	:	7, cu, n, slt.-sh	8	10, oc.-th.-cl, slt.-sh	10, d	
23	1.1	0.16	1.0	0.15	SW	SW : SSW	2.4	0.17	291	2	:	1, th.-cl	:	9, s.-cu, cu.-n	10, s.-cu, n	9, m.-r	10, m.-r	
24	7.0	1.00	7.0	1.00	S	SSE : SE : ESE	2.1	0.19	257	v.-cl, th.-cl	:	1, s	:	1, s	p.-cl, th.-cl	1, th.-cl	0	
25	3.1	0.44	2.2	0.31	SE : SSE	S : SE : E	1.1	0.10	201	1	:	6, th.-cl, m	:	7, th.-cl	8, th.-cl, so.-ha	10, th.-cl, so.-ha	10, s, th.-cl	
26	3.7	0.52	2.1	0.31	Calm : ESE	SE : E : ENE	1.7	0.09	177	7, th.-cl, m	:	9, th.-cl, so.-ha	:	9, th.-cl, ci.-s, so.-ha	10, s, fr.-cu, ci	8	7, lu.-ha, th.-cl	
27	7.0	1.00	6.2	0.89	ENE	ENE : SE : SSE	3.4	0.25	282	7, th.-cl	:	8, m	:	9, s.-cu, n	10, n	10	8, th.-cl, lu.-ha, d	
28	4.9	0.76	4.5	0.69	Calm : N	NNW : NNE	0.7	0.06	146	0, d, m	:	2, m	:	1, cu, h	0	p.-cl	1	
29	0.7	0.12	0.5	0.07	N	NNE : NNW	1.9	0.25	308	8, th.-cl	:	10	:	10, oc.-th.-cl	10, s, n, oc.-th.-cl	10, r	10, slt.-sh	
30	0.0	0.00	0.0	0.00	NNW	NNW : NW	2.8	0.37	342	10, slt.-sh, m	:	10	:	10, s, n	10, slt.-r, oc.-r	10, fq.-slt.-m.-r	10	
Means	4.1	0.53	3.6	0.46	...	...	...	0.23	287								
Number of Column for Reference.	20	21	22	23	24	25	26	27	28	29	30							

The mean *Temperature of Evaporation* for the month was 44°.0, being 0°.1 higher than
 The mean *Temperature of the Dew Point* for the Month was 39°.5, being 0°.1 lower than
 The mean *Degree of Humidity* for the month was 73.9, being 0.6 less than
 The mean *Elastic Force of Vapour* for the month was 0.244, being equal to
 The mean amount of *Cloud* for the month (a clear sky being represented by 0 and an overcast sky by 10) was 8.1.
 The mean proportion of *Sunshine* for the month (constant sunshine being represented by 1) was 0.298. The maximum daily amount of *Sunshine* was 13.2 hours on April 24.
 The highest reading of the *Solar Radiation Thermometer* was 135°.4 on April 25; and the lowest reading of the *Terrestrial Radiation Thermometer* was 20°.1 on April 18.
 The *Proportions of Wind* referred to the cardinal points were N. 8, E. 7, S. 7, W. 5. Three days were calm.
 The *Greatest Pressure of the Wind* in the month was 7.7 lbs. on the square foot on April 15. The mean daily *Horizontal Movement of the Air* for the month was 287 miles; the greatest daily value was 554 miles on April 14; and the least daily value was 146 miles on April 28.
Rain (0.1 or over) fell on 15 days in the month, amounting to 1.464, as measured by gauge No. 6 partly sunk below the ground; being 0.102 less than the average fall for the 65 years, 1841-1905.

MONTH and DAY 1923.	BARO-METER. Mean of 24 Hourly Values (corrected and reduced to 32° Fahrenheit).	TEMPERATURE.							Difference between the Air Temperature and Dew Point Temperature.			Degree of Humidity (Saturation = 100).	TEMPERATURE.			Rain collected in Gauge No. 6, whose receiving surface is 5 inches above the Ground.	Daily Duration of Sunshine.	Sun above Horizon.
		Of the Air.					Of Evaporation.	Of the Dew Point.	Mean.	Greatest.	Least.		Of Radiation.		Of the Earth 4 ft. below the Surface of the Soil.			
		Highest.	Lowest.	Daily Range.	Mean of 24 Hourly Values.	Excess above Average of 65 Years.	Mean of 24 Hourly Values.	Deducted Mean Daily Value.					Highest in Sun's Rays.	Lowest on the Grass.				
May 1	29.660	63.0	49.0	14.0	54.4	+ 5.1	52.0	49.7	4.7	10.1	1.2	84	92.3	39.0	46.9	0.000	0.1	14.8
2	29.654	59.0	49.9	9.1	53.7	+ 4.2	51.6	49.6	4.1	7.3	1.8	86	109.9	39.7	47.0	0.000	0.3	14.8
3	29.484	72.9	50.2	22.7	59.4	+ 9.6	56.6	54.3	5.1	13.9	0.8	83	134.2	49.1	47.3	0.308	4.4	14.9
4	29.476	65.9	51.1	14.8	58.2	+ 8.2	53.5	49.2	9.0	15.0	2.4	72	128.4	45.1	47.5	0.000	12.3	15.0
5	29.588	69.6	47.7	21.9	57.9	+ 7.6	52.0	46.1	11.8	18.8	4.7	64	129.6	36.0	47.8	0.000	12.9	15.0
6	29.617	70.2	42.3	27.9	56.3	+ 5.8	49.2	41.2	15.1	33.5	4.0	57	137.2	26.1	48.0	0.000	13.6	15.1
7	29.618	67.2	41.1	26.1	54.3	+ 3.6	47.0	37.8	16.5	32.8	0.4	54	137.1	26.4	48.1	0.000	12.5	15.1
8	29.719	61.3	38.6	22.7	46.4	- 4.6	41.7	35.0	11.4	19.4	3.5	64	129.2	25.2	48.3	0.000	4.2	15.2
9	29.883	53.4	34.9	18.5	43.5	- 7.7	38.1	29.4	14.1	23.9	5.3	57	112.1	25.0	48.2	0.000	9.2	15.2
10	29.930	57.2	36.9	20.3	46.6	- 4.9	41.2	33.0	13.6	22.2	5.4	59	126.1	23.9	48.4	0.000	3.0	15.3
11	29.952	57.2	40.0	17.2	47.1	- 4.7	41.9	34.4	12.7	24.1	2.1	61	144.3	27.0	48.4	0.003	11.3	15.3
12	29.979	62.4	44.2	18.2	51.8	- 0.3	47.3	42.1	9.7	18.0	4.1	69	124.1	34.9	48.4	0.000	3.9	15.4
13	29.992	59.9	47.4	12.5	52.6	+ 0.2	49.2	45.5	7.1	16.3	2.6	77	99.0	43.1	48.4	0.000	0.1	15.4
14	29.875	60.2	40.2	20.0	48.3	- 4.3	46.6	44.7	3.6	11.2	1.0	87	131.2	31.1	48.4	0.059	1.1	15.5
15	29.729	59.4	36.9	22.5	47.8	- 5.0	43.8	38.5	9.3	17.9	2.1	70	115.8	27.6	48.4	0.005	6.0	15.5
16	29.349	50.4	40.5	9.9	44.4	- 8.6	42.8	40.8	3.6	8.3	2.3	87	104.7	36.8	48.3	0.318	0.5	15.6
17	29.368	59.0	40.7	18.3	46.8	- 6.3	43.7	39.8	7.0	16.7	2.9	76	125.7	34.9	48.4	0.016	1.2	15.6
18	29.353	53.2	39.9	13.3	45.7	- 7.6	44.1	42.0	3.7	7.7	1.5	87	98.9	29.5	48.3	0.777	0.2	15.7
19	29.570	59.8	37.0	22.8	45.8	- 7.7	43.3	40.1	5.7	16.7	0.0	80	134.2	25.2	48.3	0.331	6.0	15.7
20	29.584	58.5	40.3	18.2	47.7	- 6.1	44.8	41.3	6.4	16.5	0.3	78	135.2	29.7	49.0	0.000	3.0	15.8
21	29.733	59.2	42.3	16.9	48.9	- 5.3	47.1	45.1	3.8	9.7	0.8	86	120.4	33.7	48.4	0.409	2.0	15.8
22	29.815	51.7	43.7	8.0	47.1	- 7.5	43.9	39.9	7.2	11.7	3.1	76	91.4	40.4	48.3	0.000	0.0	15.9
23	29.729	46.1	41.2	4.9	44.0	-10.9	42.4	40.4	3.6	6.3	1.0	87	54.5	37.3	48.4	0.246	0.0	15.9
24	29.838	60.6	43.1	17.5	50.4	- 4.9	47.2	43.5	6.9	14.8	0.4	77	116.4	29.3	48.5	0.013	2.6	15.9
25	30.071	66.2	40.1	26.1	52.3	- 3.2	49.3	46.0	6.3	17.0	0.0	79	135.2	26.6	48.5	0.000	10.4	16.0
26	30.104	70.3	40.0	30.3	56.7	+ 0.9	50.4	43.7	13.0	23.0	0.0	62	129.2	28.9	48.6	0.000	5.1	16.0
27	29.905	74.3	51.3	23.0	62.7	+ 6.7	55.2	48.4	14.3	30.6	3.5	59	143.3	41.9	48.9	0.000	11.9	16.1
28	29.791	79.6	47.2	32.4	63.9	+ 7.7	56.7	50.5	13.4	24.9	0.6	62	144.3	35.0	49.0	0.000	5.3	16.1
29	29.841	74.9	55.9	19.0	63.1	+ 6.7	57.7	53.3	9.8	16.1	4.0	71	136.2	50.2	49.2	0.000	2.9	16.2
30	29.932	73.8	54.9	18.9	63.1	+ 6.4	56.7	51.2	11.9	20.9	4.4	66	149.7	47.1	49.5	0.000	8.1	16.2
31	29.927	58.2	48.3	9.9	52.4	- 4.7	49.1	45.5	6.9	11.9	3.2	78	110.0	40.1	49.6	0.000	1.5	16.2
Means	29.744	62.4	43.8	18.6	52.0	- 1.0	47.9	43.3	8.8	17.3	2.2	72.7	121.9	34.4	48.3	2.485	5.0	15.6
Number of Column for Reference.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	18	19

The results apply to the civil day, except Columns 20 to 23 (Record of the Night Sky), which relate to the period extending from dusk on the civil day named, to dawn of the following day.

The mean reading of the Barometer (Column 1) and the mean temperatures of the Air and Evaporation (Columns 5 and 7) are deduced from the photographic records. The average temperature (Column 6) is deduced from the 65 years' observations, 1841-1905. The temperature of the Dew Point (Column 8) and the Degree of Humidity (Column 12) are deduced from the corresponding temperatures of the Air and Evaporation by means of Hygrometrical Tables supplied by the Air Ministry. The mean difference between the Air and Dew Point Temperatures (Column 9) is the difference between the numbers in Columns 5 and 8, and the Greatest and Least Differences (Columns 10 and 11) are deduced from the 24 hourly photographic measures of the Dry-bulb and Wet-bulb Thermometers. The readings in Column 15 are taken daily at noon.

The values given in Columns 2, 3, 4, 13, and 14 are derived from eye-readings of self-registering thermometers.

The mean reading of the Barometer for the month was 29ⁱⁿ.744, being 0ⁱⁿ.057 lower than the average for the 65 years, 1841-1905.

TEMPERATURE OF THE AIR.

The highest in the month was 79°·6 on May 28; the lowest in the month was 34°·9 on May 9; and the range was 44°·7. The mean of all the highest daily readings in the month was 62°·4, being 1°·5 lower than the average for the 65 years, 1841-1905. The mean of all the lowest daily readings in the month was 43°·8, being 0°·1 higher than the average for the 65 years, 1841-1905. The mean of the daily ranges was 18°·6, being 1°·6 less than the average for the 65 years, 1841-1905. The mean for the month was 52°·0, being 1°·0 lower than the average for the 65 years, 1841-1905.

MONTH and DAY 1928.	RECORD OF THE NIGHT SKY.				WIND AS DEDUCED FROM SELF-REGISTERING ANEMOMETERS.						CLOUDS AND WEATHER.						
	POLARIS.		8URSÆ MINORIS.		OSLER'S.			Robin- son's.									
	Duration.	Fraction of Total Exposure.	Duration.	Fraction of Total Exposure.	General Direction.								Pressure on the Square Foot.				
					A.M.	P.M.	Greatest.	Mean of 24 Hourly Measures.	Horizontal Move- ment of the Air.	A.M.	P.M.						
May 1	0·0	0·00	0·0	0·00	WNW : WSW	NNW: Calm: NNE	0·5	0·05	187	10			10, s, n	10, s, n	0	10, d	
2	0·0	0·00	0·0	0·00	NNE : ENE	NE : Calm : NNE	0·5	0·03	157	10			10, m	10	7	9	
3	0·8	0·12	0·0	0·00	NNW : NNE : NE	ENE : NE	1·4	0·08	191	10, m-r, slt.-sh			10, m	9, s, m	7, s.-cu, h	8	9, hy.-t.-sm, hy.-r, hl
4	5·9	0·91	5·2	0·80	NE	NE : ENE	3·7	0·37	368	7			6, m	2, ci, ci.-s	0	p.-cl	p.-cl
5	6·0	1·00	6·0	1·00	ENE : NE	ENE : NE	2·1	0·22	268	1			3	1	0	0	
6	5·9	0·98	5·8	0·97	NNE : NE	ENE : ESE	1·0	0·07	179	0			0, m	0	0	0, d	
7	4·9	0·82	4·4	0·73	Calm : NE : ENE	NE : NNE	3·2	0·18	263	1, d			1, m	1, ci.-cu	2, s.-cu, fr.-cu	1	p.-cl
8	6·0	1·00	6·0	1·00	NNE : NNW	NW : N : NNW	3·8	0·18	281	7			6, th.-cl, so.-ha	9, cu, ci.-s, fq.-so.-ha	10, cu.-n, ci.-s, h, slt.-sh, w	10, w	0
9	5·3	0·89	5·1	0·85	NNW	N : NNE : NNW	2·0	0·19	304	0			1	8	8, cu, alt.-cu, h	9	1
10	0·7	0·12	0·6	0·11	NNW : N	Var : Calm	1·7	0·08	188	5			8	8, s.-cu, ci.-cu	10, s.-cu, alt.-cu	10, slt.-sh	10, m
11	0·4	0·06	0·2	0·03	NNE	N : NNW : SSW	1·0	0·08	209	9, slt.-sh			6	7, cu, n	7, cu	6	9
12	0·0	0·00	0·0	0·00	SW : WSW : NW	NNW: NNE: Calm	1·2	0·04	190	10			8, m	6, cu.-n, s	10, cu.-n, slt.-glm, slt.-sh	10	
13	0·0	0·00	0·0	0·00	Calm	N : E : Calm	0·2	0·02	115	10			10, m	10, th.-cl, alt.-cu	10, cu.-n	10, n, s	
14	5·5	0·99	5·5	0·99	Calm	NE : NNE	2·5	0·10	199	10			10, m, r	10, r, m, t, hy.-sh	10, s, n, slt.-shs	10, slt.-shs	1, ci.-s, d
15	1·1	0·19	0·8	0·14	N : NNW	NW : WSW	2·9	0·20	300	1, d			0	9, s.-cu, n	10, s.-cu, n	10, slt.-shs	9, shs
16	...	...	...	...	WNW : NNW	NNW	7·0	0·38	384	10, sh			10, r	10, r, oc.-r	10, cu.-n, shs, hy.-r, sq	9, sh, slt.-sh	
17	0·2	0·03	0·2	0·03	NNW : WSW	SSW : SE : E	3·1	0·15	251	8, slt.-sh			10, sh	10, cu.-n, h	10, cu.-n, ci.-s, slt.-r	9, sh	
18	5·4	0·98	5·0	0·92	ENE : NE	NNE	4·0	0·23	336	10, m-r, r, oc.-hy.-r			10, r, hy.-r	10, r, slt.-r, hy.-sh, t	10, fq.-shs, hl	10, shs, r	0
19	1·3	0·25	0·7	0·13	Calm : WSW	SSW : SW	3·5	0·06	178	6			p.-cl, m	p.-cl, cu.-n, ci.-s	9, oc.-t, -l, r	10, r, oc.-m-r	10, r, m-r
20	3·2	0·61	3·1	0·59	Calm	SSE : NNE : NE	0·8	0·02	137	8			10	8, s, n, slt.-sh	10, s.-cu, sh	9	p.-cl, fr.-cu, n
21	0·0	0·00	0·0	0·00	NNE : NE	NE	4·6	0·22	324	9			10, slt.-sh	10, r, hy.-shs, hl	10, hy.-sh, hl, t, l, shs	10, hy.-shs	10, oc.-m-r, sh
22	0·3	0·05	0·3	0·05	NE : NNE	N : NNW	3·5	0·44	408	10			10, w		10, n, s	10, oc.-th.-cl, slt.-sh	
23	0·0	0·00	0·0	0·00	NW : WNW	WNW	2·1	0·18	330	10			10, r	10, r, slt.-m	10, r, slt.-r, slt.-m	10, r, m-r	10, m-r
24	4·3	0·82	4·1	0·78	WSW : NW : N	N : NE : E	0·8	0·10	199	10, sh, m			10, m	10, sh, slt.-m	7, cu.-n, s.-cu	5	0, hy.-d, m
25	5·3	1·00	5·3	1·00	Calm	E : ESE : Calm	1·1	0·05	119	0, m, f, d			0, f, m	2, cu	2, cu	1	0, d
26	0·3	0·06	0·2	0·05	Calm : SSW	S : Calm	1·2	0·07	157	0, d, m			10, th.-cl, so.-ha		10, th.-cl, so.-ha	10, s, s.-cu	10, slt.-sh
27	4·9	0·98	4·5	0·90	Calm : S : SSE	SE : Calm	0·7	0·06	131	10, m			9	p.-cl, ci.-cu,	2, h	p.-cl	p.-cl, th.-cl, lu.-ha
28	0·0	0·00	0·0	0·00	Calm : SE	SSE : Calm	1·0	0·05	103	7			p.-cl, so.-ha	9, th.-cl	8, ci.-cu, s.-cu	9	9, s.-cu
29	1·2	0·24	0·9	0·17	Calm : ENE	ENE	0·9	0·09	151	10			9	9, alt.-cu, cu.-n, slt.-sh	8, alt.-cu, s.-cu	9	9, s.-cu
30	3·6	0·66	2·2	0·40	NNE : NE	ENE : NE	4·6	0·50	348	10, m			9	9, s.-cu, ci.-s	2, alt.-cu, ci.-cu, w	1, th.-cl, w	p.-cl
31	0·0	0·00	0·0	0·00	NE : NNE	NNE : NE	2·1	0·31	343	6, m			10	10, s, n	9, s.-cu, n	9	10, n
Means	2·4	0·43	2·2	0·39	...	...	...	0·15	235								
Number of Column for Reference.	20	21	22	23	24	25	26	27	28	29							30

The mean *Temperature of Evaporation* for the month was 47°·9, being 1°·1 lower than
 The mean *Temperature of the Dew Point* for the month was 43°·3, being 1°·5 lower than
 The mean *Degree of Humidity* for the month was 72·7, being 1·2 less than
 The mean *Elastic Force of Vapour* for the month was 0·281, being 0·017 less than
 The mean amount of *Cloud* for the month (a clear sky being represented by 0 and an overcast sky by 10) was 7·1.
 The mean proportion of *Sunshine* for the month (constant sunshine being represented by 1) was 0·323. The maximum daily amount of *Sunshine* was 13·6 hours on May 6.
 The highest reading of the *Solar Radiation Thermometer* was 149°·7 on May 30; and the lowest reading of the *Terrestrial Radiation Thermometer* was 23°·9 on May 10.
 The *Proportions of Wind* referred to the cardinal points were N. 11, E. 7, S. 2, W. 4. Seven days were calm.
 The *Greatest Pressure of the Wind* in the month was 7·0 lbs. on the square foot on May 16. The mean daily *Horizontal Movement of the Air* for the month was 235 miles; the greatest daily value was 408 miles on May 22; and the least daily value was 103 miles on May 28.
Rain (0·005 or over) fell on 10 days in the month, amounting to 2·485, as measured by gauge No. 6 partly sunk below the ground; being 0·570 greater than the average fall for the 65 years, 1841-1905.

MONTH and DAY, 1928.	BARO-METER. Mean of 24 Hourly Values (corrected to 32° and Fahrenheit).	TEMPERATURE. Of the Air.							Difference between the Air Temperature and Dew Point Temperature.			Degree of Humidity (Saturation = 100).	TEMPERATURE. Of Radiation.			Rain collected in Gauge No. 6, whose receiving surface is 5 inches above the Ground.	Daily Duration of Sunshine.	Sun above Horizon.
		Highest.	Lowest.	Daily Range.	Mean of 24 Hourly Values.	Excess above Average of 65 Years.	Of Evaporation. Mean of 24 Hourly Values.	Of the Dew Point. De-duced Mean Daily Value.	Mean.	Greatest.	Least.		Highest in Sun's Rays.	Lowest on the Grass.	Of the Earth 4 ft. below the Surface of the Soil.			
June 1	29.904	61.5	49.1	12.4	55.3	- 2.1	51.1	46.8	8.5	16.3	3.0	74	122.3	38.4	50.0	0.000	5.2	16.2
2	30.072	62.3	44.9	17.4	54.5	- 3.3	47.9	40.1	14.4	23.2	5.1	58	137.5	31.1	50.1	0.000	15.0	16.3
3	30.034	68.3	40.0	28.3	56.0	- 2.1	48.0	38.0	18.0	30.3	1.6	51	144.1	24.7	50.3	0.000	14.8	16.3
4	29.743	64.9	42.1	22.8	54.1	- 4.2	49.6	44.9	9.2	20.8	0.6	71	97.1	25.1	50.3	0.017	0.2	16.3
5	29.734	63.3	49.7	13.6	54.2	- 4.2	51.2	48.3	5.9	11.6	2.2	80	128.2	46.8	50.3	0.002	0.8	16.3
6	29.617	76.3	45.2	31.1	60.3	+ 2.0	55.2	50.6	9.7	23.4	0.5	71	152.7	32.1	50.6	0.003	8.0	16.4
7	29.367	69.8	51.1	18.7	57.9	- 0.3	54.7	51.9	6.0	15.2	0.6	80	138.1	34.9	50.6	0.311	3.6	16.4
8	29.327	70.6	53.0	17.6	59.0	+ 0.9	55.1	51.7	7.3	18.9	1.1	77	133.4	45.4	50.8	0.159	6.1	16.4
9	29.244	69.1	54.1	15.0	59.9	+ 1.9	56.1	52.9	7.0	16.5	1.2	78	145.9	47.7	51.0	0.193	8.7	16.4
10	29.343	65.8	46.2	19.6	57.2	- 0.9	52.8	48.7	8.5	14.6	2.0	73	132.1	34.0	51.0	0.040	6.1	16.5
11	29.811	65.8	43.0	22.8	53.6	- 4.6	48.0	41.5	12.1	20.3	1.4	64	138.1	29.4	51.2	0.031	10.0	16.5
12	30.067	68.3	41.2	27.1	54.3	- 4.1	48.6	42.1	12.2	23.1	1.8	64	152.0	28.1	51.5	0.000	8.7	16.5
13	29.827	77.6	50.1	27.5	63.3	+ 4.8	56.7	51.0	12.3	24.4	1.8	65	149.2	44.6	51.7	0.137	9.3	16.5
14	29.588	71.6	46.4	25.2	56.7	- 2.0	53.9	51.4	5.3	14.2	1.0	82	147.3	42.6	51.7	0.093	2.4	16.5
15	29.990	66.1	43.4	22.7	53.0	- 5.8	47.8	41.7	11.3	20.2	3.4	65	143.3	36.2	51.9	0.000	11.7	16.5
16	30.005	60.6	41.5	19.1	51.2	- 7.7	46.1	39.7	11.5	19.0	1.8	65	126.5	27.5	52.0	0.000	7.4	16.5
17	29.902	64.0	37.0	27.0	52.2	- 6.8	46.2	38.6	13.6	23.2	0.3	60	134.6	23.9	52.0	0.000	7.9	16.6
18	29.734	67.0	47.3	19.7	54.9	- 4.3	51.1	47.3	7.6	15.2	1.5	75	126.1	39.9	52.0	0.076	0.7	16.6
19	29.560	68.2	51.3	16.9	57.6	- 1.9	54.5	51.8	5.8	14.4	0.6	81	143.2	48.4	52.0	0.015	4.3	16.6
20	29.718	69.2	50.2	19.0	59.3	- 0.6	53.1	47.1	12.2	25.2	1.2	64	141.1	36.2	52.0	0.017	10.9	16.6
21	29.929	66.4	43.7	22.7	56.3	- 4.0	53.1	50.1	6.2	16.5	0.9	80	120.0	29.6	52.0	0.001	2.9	16.6
22	29.874	70.4	53.1	17.3	61.4	+ 0.8	57.3	54.1	7.3	12.7	2.7	76	125.2	43.5	52.4	0.000	1.2	16.6
23	29.894	74.1	48.5	25.6	60.4	- 0.5	54.3	48.7	11.7	22.3	1.8	65	150.5	37.2	52.6	0.000	10.9	16.6
24	29.931	75.1	49.0	26.1	61.3	+ 0.1	54.5	48.1	13.2	24.0	1.3	62	147.0	36.1	52.5	0.000	12.9	16.6
25	29.730	76.8	48.2	28.6	64.0	+ 2.6	56.6	50.2	13.8	25.4	1.0	61	145.5	35.4	52.8	0.002	13.5	16.6
26	29.416	66.7	53.4	13.3	58.4	- 3.1	55.2	52.5	5.9	9.7	1.8	80	133.2	48.0	52.8	0.047	2.2	16.5
27	29.924	68.9	49.6	19.3	57.0	- 4.6	51.1	45.0	12.0	21.6	4.2	64	137.7	42.0	53.0	0.121	8.1	16.5
28	30.007	70.6	48.7	21.9	58.2	- 3.4	53.3	48.8	9.4	18.2	0.4	71	146.7	36.1	53.0	0.000	5.3	16.5
29	29.807	72.2	50.7	21.5	60.1	- 1.5	54.3	49.1	11.0	22.8	4.1	67	151.5	41.0	53.2	0.002	7.9	16.5
30	29.843	69.3	49.1	20.2	57.3	- 4.2	51.6	45.7	11.6	22.6	3.8	65	146.1	39.4	53.2	0.024	12.0	16.5
Means	29.765	68.7	47.4	21.3	57.3	- 2.1	52.3	47.3	10.0	19.5	1.8	69.6	137.9	36.8	51.7	2.291	7.3	16.5
Number of Column for Reference.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	18	19

The results apply to the civil day, except Columns 20 to 23 (Record of the Night Sky), which relate to the period extending from dusk on the civil day named, to dawn of the following day.

The mean reading of the Barometer (Column 1) and the mean temperatures of the Air and Evaporation (Columns 5 and 7) are deduced from the photographic records. The average temperature (Column 6) is deduced from the 65 years' observations, 1841-1905. The temperature of the Dew Point (Column 8) and the Degree of Humidity (Column 12) are deduced from the corresponding temperatures of the Air and Evaporation by means of Hygrometrical Tables, supplied by the Air Ministry. The mean difference between the Air and Dew Point Temperatures (Column 9) is the difference between the numbers in Columns 5 and 8, and the Greatest and Least Differences (Columns 10 and 11) are deduced from the 24 hourly photographic measures of the Dry-bulb and Wet-bulb Thermometers. The readings in Column 15 are taken daily at noon.

The values given in Columns 2, 3, 4, 13, and 14 are derived from eye-readings of self-registering thermometers.

The mean reading of the *Barometer* for the month was 29ⁱⁿ.765, being 0ⁱⁿ.057 *lower* than the average for the 65 years, 1841-1905.

TEMPERATURE OF THE AIR.

The highest in the month was 77°·6 on June 13; the lowest in the month was 37°·0 on June 17; and the range was 40°·6.

The mean of all the highest daily readings in the month was 68°·7, being 2°·0 *lower* than the average for the 65 years, 1841-1905.

The mean of all the lowest daily readings in the month was 47°·4, being 2°·5 *lower* than the average for the 65 years, 1841-1905.

The mean of the daily ranges was 21°·3, being 0°·5 *greater* than the average for the 65 years, 1841-1905.

The mean for the month was 57°·3, being 2°·1 *lower* than the average for the 65 years, 1841-1905.

MONTH and DAY, 1928.	RECORD OF THE NIGHT SKY.				WIND AS DEDUCED FROM SELF-REGISTERING ANEMOMETERS.							CLOUDS AND WEATHER.		
	POLARIS.		URSÆ MINORIS.		OSLER'S.			ROBINSON'S.						
	Duration.	Fraction of Total Exposure.	Duration.	Fraction of Total Exposure.	General Direction.		Pressure on the Square Foot.		Horizontal Movement of the Air.		A.M.		P.M.	
					A.M.	P.M.	Greatest.	Mean of 24 Hourly Measures.						
hours.		hours.				lbs.	lbs.	miles.						
June 1	5.0	1.00	5.0	1.00	NE : ENE	ENE : NE	6.2	0.60	425	10	: 10	: 10, n, w	10, cu-n, s.-cu, w : 1, w	: 0
2	4.5	1.00	4.5	1.00	NE : ENE	ENE	10.4	0.81	430	0	:	0, w	0, w	: 0
3	4.5	1.00	4.5	1.00	ENE : Calm : E	ESE	1.5	0.10	194	0, m	:	0	0	: 1
4	0.0	0.00	0.0	0.00	Calm : ENE	ESE : Calm : ENE	2.0	0.05	163	6, m, d	: 8	: 10, s, n	10, sh, slt.-r	: 10, n, r, slt.-r : 10, n, s
5	1.5	0.34	1.4	0.31	ENE : E	ESE : Calm	0.9	0.07	187	10, r, slt.-sh	: 10	: 10, s, n	10, alt.-cu, n	: 10, alt.-cu, cu-n, slt.-sh
6	2.3	0.50	2.3	0.50	Calm : S	SSW : Calm	1.0	0.05	145	v.-cl	: 9, slt.-sh, r	: 8, cu-n, cu,	7, s.-cu, cu-n	: 2 : 3
7	1.3	0.25	0.8	0.18	Calm : SW	SW : SSW	3.7	0.34	278	9, m	: 10, f, r, hy.-r	: 9, slt.-r	8, cu-n, ci.-s, slt.-sh	: v.-cl : 5, cu, s.-cu
8	0.0	0.00	0.0	0.00	SSW : Calm : SW	SW : S	3.3	0.20	239	10	: 10, m.-r, r	: 10, alt.-cu, cu-n	8, fr.-cu, sh	: 7 : 10, fq.-r
9	1.8	0.41	1.4	0.32	S : SW	SW : SSW	7.8	0.83	441	10, fq.-r	: 10, fq.-r	: v.-cl, s.-cu, w	v.-cl, cu, cu-n, w	: 8, shs, oc.-m.-r, w : 6, d
10	4.4	0.99	4.4	0.99	SSW : SW	SW : WNW : WSW	5.8	0.80	454	9, sh	: 8, r, w	: 9, oc.-slt.-r, w	10, cu, n, w	: 10, sh : 1
11	4.5	1.00	4.5	1.00	WSW : SW	WSW : WNW	3.2	0.15	289	0, m, d	: 5, p.-so.-ha	: 9, shs, hy.-sh	9, cu-n, slt.-sh, s, t	: 5, sh : 3
12	0.2	0.04	0.1	0.03	WSW : SW	SW : SSW : Calm	1.2	0.08	198	0	:	: 2, ci.-cu, ci.-s, th.-cl, so.-ha	10, th.-cl, so.-ha	: 10 : 10, n
13	0.0	0.00	0.0	0.00	Calm : S	S	1.7	0.11	195	10, m	: 8	: 7, th.-cl	8, th.-cl, so.-ha	: 10, oc.-th.-cl, slt.-r : 10, r, hy.-r
14	0.7	0.17	0.6	0.14	S : SW	SW : N : NNW	5.0	0.62	431	10, r, hy.-r	: 10, w	: 10, n, cu-n, w	9, sh, r, hy.-r, w	: 10, r, oc.-m.-r : 10, sh
15	3.9	0.87	3.8	0.85	NW : WSW	SW : WSW	3.0	0.30	368	6	: 1, m	: 8, h	7, shs, h	: v.-cl : 1
16	4.5	1.00	4.4	0.98	WNW : NW	NNW : Calm	2.3	0.16	279	1	: 1, m	: 8, alt.-cu, cu-n, h	9, r, h	: 9, h : p.-cl, m
17	2.6	0.59	2.4	0.54	SW : WSW	WSW : W	4.0	0.28	348	1, m	: 1, th.-cl	: 10, ci.-cu, s.-cu	10, s.-cu, w	: 9, w : v.-cl, th.-cl
18	0.0	0.00	0.0	0.00	WSW	WSW : W : Calm	1.3	0.08	241	9	: 10, slt.-sh	: 10, cu-n	10, cu, n, s.-cu	: 10, oc.-slt.-r, c.-r : 10, m.-r, oc.-r,
19	1.1	0.25	0.9	0.19	Calm : SW	SSW : SW : WSW	1.8	0.10	228	10, oc.-r	: 9	: 9, cu-n, ci.-cu	9, cu-n, ci.-cu	: 10, m.-r : 8, s, cu-n, alt.-cu
20	3.5	0.78	3.4	0.75	WSW : NW	NW : NNW	2.3	0.16	286	9, sh	: 8, m	: 7, cu, cu-n, h	7, alt.-cu, h	: 7, th.-cl : 7, th.-cl
21	0.3	0.07	0.2	0.06	Calm : SW	SW : SSW	2.8	0.14	257	1, d, m	: 3, d	: 10, s, fq.-m.-r	10, n, s, oc.-m.-r	: 10, oc.-m.-r : 10
22	4.5	1.00	4.5	1.00	SSW : SW	SW : SSW : WSW	2.6	0.34	347	10	:	: 10, n	10	[cu-n] : 3
23	...	...	...	...	WSW : SW	WSW	1.7	0.16	298	0	: 1, m	: 7, cu, ci	9, ci.-s, alt.-cu	: 9, th.-cl, p.-so.-ha : 9, th.-cl, d
24	2.9	0.65	2.6	0.59	WSW : W : NW	W : WSW : SSW	1.0	0.09	213	2, th.-cl	: 0, m	: p.-cl, cu, h	7, slt.-h	: 6 : 1, d
25	0.6	0.12	0.5	0.10	SSW : S	SSW	2.2	0.18	264	v.-cl	: 0	: p.-cl, fr.-cu	1, s.-cu	: 5 : 10, n, slt.-sh
26	0.0	0.00	0.0	0.00	SSW : SW	SW : WSW : WNW	8.0	0.97	534	p.-cl, slt.-sh	: 10	: 10, oc.-slt.-r, w	10, n, s.-cu, w	: 9, fq.-m.-r, w : 10, sh, w
27	3.0	0.67	2.9	0.64	WNW	WNW : WSW	3.6	0.33	411	9, w	: 5	: 9, s.-cu, n	9, fr.-cu, ci.-s	: 8, hy.-sh, sh : 8
28	3.1	0.68	3.0	0.66	SW	SW : SSW	5.8	0.60	407	1	: 6, th.-cl, m	: 8, th.-cl, fr.-cu, ci.-s	10, s, n, w	: 9, m.-r, shs, w : 8, w
29	4.5	1.00	4.5	1.00	SSW	SSW : SW	11.3	0.98	489	7	:	: 8, s.-cu, n, th.-cl	3, ci.-s, ci.-cu, w	: 10, oc.-slt.-r : 1, th.-cl
30	1.6	0.36	1.4	0.31	SW	SW : WSW	5.2	0.38	424	3, th.-cl	:	: 7, s.-cu, cu-n,	8, cu, n, shs	: p.-cl, lu.-ha
Means	2.3	0.51	2.2	0.49	...	...	...	0.34	315					
Number of Column for Reference.	20	21	22	23	24	25	26	27	28	29			30	

The mean *Temperature of Evaporation* for the month was 52°·3, being 2°·6 lower than
 The mean *Temperature of the Dew Point* for the month was 47°·3, being 3°·5 lower than
 The mean *Degree of Humidity* for the month was 69·6, being 3·6 less than
 The mean *Elastic Force of Vapour* for the month was 0·11328, being 0·00047 less than
 The mean amount of *Cloud* for the month (a clear sky being represented by 0 and an overcast sky by 10) was 7·2.
 The mean proportion of *Sunshine* for the month (constant sunshine being represented by 1) was 0·442. The maximum daily amount of *Sunshine* was 15·0 hours on June 2.
 The highest reading of the *Solar Radiation Thermometer* was 152°·7 on June 6; and the lowest reading of the *Terrestrial Radiation Thermometer* was 23°·9 on June 17.
 The *Proportions of Wind* referred to the cardinal points were N. 3, E. 4, S. 10, W. 10. Three days were calm.
 The *Greatest Pressure of the Wind* in the month was 11·3 lbs. on the square foot on June 29. The mean daily *Horizontal Movement of the Air* for the month was 315 miles; the greatest daily value was 534 miles on June 26; and the least daily value was 145 miles on June 6.
Rain (0·11 or over) fell on 14 days in the month, amounting to 2·11291, as measured by gauge No. 6 partly sunk below the ground; being 0·11253 greater than the average fall for the 65 years, 1841-1905.

MONTH and DAY, 1928.	BARO-METER. Mean of 24 Hourly Values (corrected and reduced to 32° Fahrenheit).	TEMPERATURE.							Difference between the Air Temperature and Dew Point Temperature.			Degree of Humidity (Saturation = 100).	TEMPERATURE.			Rain collected in Gauge No. 6, whose receiving surface is 5 inches above the ground.	Daily Duration of Sunshine.	Sun above Horizon.
		Of the Air.					Of Evaporation.	Of the Dew Point.	Mean.	Greatest.	Least.		Of Radiation.		Of the Earth 4 ft. below the Surface of the Soil.			
		Highest.	Lowest.	Daily Range.	Mean of 24 Hourly Values.	Excess above Average of 65 Years.	Mean of 24 Hourly Values.	Deducted Mean Daily Value.					Highest in Sun's Rays.	Lowest on the Grass.				
July 1	29.942	72.0	51.3	20.7	58.9	- 2.6	52.8	46.9	12.0	21.7	3.8	64	150.2	41.3	53.5	0.000	10.2	16.5
2	29.878	75.9	52.0	23.9	61.9	+ 0.3	57.0	52.9	9.0	21.2	2.2	72	150.4	44.6	53.5	0.000	7.8	16.5
3	29.824	73.0	49.7	23.3	59.8	- 2.0	55.4	51.5	8.3	19.4	0.2	74	150.1	37.4	53.6	0.445	6.3	16.5
4	29.878	72.8	53.0	19.8	60.9	- 1.2	54.5	48.6	12.3	21.7	0.4	64	153.4	49.5	53.6	0.051	9.8	16.4
5	29.742	75.1	55.0	20.1	62.7	+ 0.4	57.3	52.8	9.9	16.0	1.0	70	153.0	51.6	54.0	0.030	8.8	16.4
6	29.714	67.8	53.0	14.8	59.8	- 2.6	55.0	50.6	9.2	15.6	0.8	72	130.4	47.6	53.9	0.000	4.5	16.4
7	29.999	73.2	54.4	18.8	60.9	- 1.5	55.2	50.1	10.8	23.4	2.2	68	145.1	40.5	54.0	0.000	7.5	16.4
8	30.003	76.4	50.2	26.2	62.9	+ 0.5	57.2	52.5	10.4	20.9	1.6	69	154.0	36.4	54.1	0.000	10.5	16.3
9	29.950	77.4	56.4	21.0	65.6	+ 3.2	58.8	53.4	12.2	26.7	1.3	65	150.1	45.3	54.3	0.020	9.7	16.3
10	30.078	82.1	50.6	31.5	65.1	+ 2.6	57.0	49.9	15.2	32.3	1.8	58	153.3	37.9	54.5	0.000	12.3	16.3
11	30.079	86.3	53.9	32.4	69.3	+ 6.6	58.1	48.4	20.9	34.8	4.4	47	154.9	40.8	54.6	0.000	14.9	16.3
12	30.036	87.3	52.1	35.2	70.6	+ 7.7	59.9	51.1	19.5	33.5	2.6	50	160.9	37.0	54.9	0.000	15.3	16.2
13	30.052	85.0	53.2	31.8	70.3	+ 7.2	60.2	52.2	18.1	28.7	4.5	53	157.1	36.7	55.0	0.000	14.8	16.2
14	30.107	89.1	56.7	32.4	72.6	+ 9.3	59.9	49.3	23.3	36.4	6.2	44	158.7	41.9	55.1	0.000	15.0	16.1
15	30.020	91.1	56.2	34.9	74.7	+ 11.3	62.1	52.5	22.2	32.2	5.0	46	150.1	43.9	55.2	0.000	13.6	16.1
16	30.127	80.4	58.7	21.7	68.7	+ 5.3	61.0	55.2	13.5	19.7	2.2	62	152.6	48.0	55.4	0.000	10.2	16.1
17	30.250	76.7	50.9	25.8	63.2	- 0.2	57.5	52.8	10.4	21.4	1.4	69	158.1	37.3	55.5	0.000	10.1	16.1
18	30.103	87.9	48.4	39.5	69.0	+ 5.7	58.6	49.8	19.2	37.9	1.2	51	158.1	35.4	55.8	0.000	14.2	16.0
19	30.045	75.2	60.0	15.2	66.0	+ 2.8	58.2	51.7	14.3	23.0	7.6	60	129.2	52.0	55.8	0.000	7.5	16.0
20	30.004	78.5	60.0	18.5	67.9	+ 4.7	60.1	54.1	13.8	23.3	6.7	61	127.2	49.6	55.9	0.000	8.7	15.9
21	30.013	80.4	56.8	23.6	68.0	+ 4.8	60.3	54.4	13.6	24.6	6.2	61	141.1	47.1	56.0	0.000	13.4	15.9
22	29.996	92.0	51.0	41.0	71.0	+ 7.9	59.6	50.2	20.8	42.0	1.5	47	164.1	37.5	56.2	0.000	10.6	15.8
23	29.959	83.0	60.4	22.6	70.2	+ 7.2	62.2	56.4	13.8	22.2	5.9	62	153.1	47.1	56.2	0.000	4.7	15.8
24	29.877	86.0	62.6	23.4	72.4	+ 9.5	64.4	59.0	13.4	30.6	4.8	63	149.7	58.2	56.3	0.000	7.9	15.8
25	29.872	82.5	62.0	20.5	70.8	+ 8.1	65.1	61.5	9.3	18.9	3.3	72	132.4	55.2	56.4	0.000	4.1	15.7
26	29.843	83.9	60.6	23.3	69.4	+ 6.9	63.9	60.3	9.1	23.2	2.8	72	152.0	53.7	56.7	0.000	7.4	15.7
27	29.546	73.1	60.0	13.1	64.3	+ 1.9	62.1	60.6	3.7	9.3	1.0	88	111.1	51.2	56.7	0.128	0.7	15.6
28	29.464	70.5	52.1	18.4	59.8	- 2.5	53.6	47.7	12.1	26.8	1.2	64	136.8	45.0	56.8	0.562	11.0	15.6
29	29.607	73.1	48.6	24.5	59.7	- 2.6	52.7	45.6	14.1	29.5	2.8	60	147.1	40.0	56.9	0.000	12.7	15.5
30	29.716	73.6	50.1	23.5	59.6	- 2.7	54.3	49.5	10.1	19.8	2.5	69	132.5	38.4	56.9	0.069	3.9	15.5
31	29.736	69.4	56.5	12.9	61.4	- 0.8	58.4	56.1	5.3	16.9	0.0	83	120.0	55.0	56.9	0.346	1.6	15.4
Means	29.918	79.1	54.7	24.3	65.7	+ 3.1	58.5	52.5	13.2	25.0	2.9	63.2	146.3	44.6	55.3	1.651	9.3	16.0
Number of Column for Reference.	I	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	18	19

The results apply to the civil day, except Columns 20 to 23 (Record of the Night Sky), which relate to the period extending from dusk on the civil day named, to dawn of the following day.

The mean reading of the Barometer (Column 1) and the mean temperatures of the Air and Evaporation (Columns 5 and 7) are deduced from the photographic records. The average temperature (Column 6) is deduced from the 65 years' observations, 1841-1905. The temperature of the Dew Point (Column 8) and the Degree of Humidity (Column 12) are deduced from the corresponding temperatures of the Air and Evaporation by means of Hygrometrical Tables supplied by the Air Ministry. The mean difference between the Air and Dew Point Temperatures (Column 9) is the difference between the numbers in Columns 5 and 8, and the Greatest and Least Differences (Columns 10 and 11) are deduced from the 24 hourly photographic measures of the Dry-bulb and Wet-bulb Thermometers. The readings in Column 15 are taken daily at noon.

The values given in Columns 2, 3, 4, 13, and 14 are derived from eye-readings of self-registering thermometers.

The mean reading of the *Barometer* for the month was 29.918, being 0.112 higher than the average for the 65 years, 1841-1905.

TEMPERATURE OF THE AIR.

The highest in the month was 92.0 on July 22; the lowest in the month was 48.4 on July 18; and the range was 43.6. The mean of all the highest daily readings in the month was 79.1, being 4.9 higher than the average for the 65 years, 1841-1905. The mean of all the lowest daily readings in the month was 54.7, being 1.4 higher than the average for the 65 years, 1841-1905. The mean of the daily ranges was 24.3, being 3.4 greater than the average for the 65 years, 1841-1905. The mean for the month was 65.7, being 3.1 higher than the average for the 65 years, 1841-1905.

MONTH and DAY, 1928.	RECORD OF THE NIGHT SKY.				WIND AS DEDUCED FROM SELF-REGISTERING ANEMOMETERS.						CLOUDS AND WEATHER.				
	POLARIS.		8URSÆ MINORIS.		OSLER'S.				ROBINSON'S.		A.M.		P.M.		
	Duration.	Fraction of Total Exposure.	Duration.	Fraction of Total Exposure.	General Direction.		Pressure on the Square Foot.		Greatest.	Mean of 24 Hourly Measures.	Horizontal Movement of the Air.	A.M.		P.M.	
					A.M.	P.M.	lbs.	miles.							
July 1	4.5	1.00	4.5	1.00	SW	SW : SSW	3.3	0.43	396	10	7, th.-cl	8, s.-cu, ci.-cu	9, th.-cl, so.-ha	p.-cl, th.-cl	1, ci.-s
2	3.8	0.85	3.6	0.81	SSW : SW	SW	2.7	0.25	341	1, th.-cl	5	p.-cl, s.-cu, fr.-cu	5, n	7	5
3	0.0	0.00	0.0	0.00	WSW : Calm : NE	NNE	1.2	0.06	160	p.-cl	5, th.-cl, h	9, alt.-cu, ci.-[cu, s.-cu, h	10, h	10, m.-r, c.-r	10, r, hy.-r
4	0.0	0.00	0.0	0.00	Calm : NW : WSW	SW : SSW	1.5	0.13	249	10, r	2, cu, fr.-cu, h	8, so.-ha, h	9	10	
5	0.0	0.00	0.0	0.00	SSW : SW	SSW	4.8	0.59	424	10	3	6, th.-cl, w	8, ci.-s, fr.-cu, alt.-cu, w	9	10, r, slt.-r
6	1.1	0.25	0.5	0.10	SSW : WSW	WSW	3.0	0.42	452	10, slt.-sh	p.-cl	10, cu.-n, s.-cu, slt.-sh	10, s.-cu, w	9, w	v.-cl
7	5.0	1.00	5.0	1.00	WSW : NNW	Calm : SSW	1.0	0.09	166	9	7	8, s.-cu, cu.-n	8, cu, cu.-n	6	1, s.-cu, cu.-n, d
8	0.0	0.00	0.0	0.00	SSW : SW	SSW : SW	2.3	0.26	273	0, a, d	0, m	6, s.-cu, ci.-cu	p.-cl, cu, s, ci	8	10, slt.-sh
9	5.0	1.00	5.0	1.00	SW : WSW : W	W : WSW	3.0	0.31	339	10	10, slt.-sh, r, m	2, fr.-cu	1, fr.-cu	8, th.-cl, so.-ha	1
10	4.5	0.90	4.5	0.90	WSW : SW	WSW : SW	1.9	0.18	266	2	1	8, th.-cl, ci, ci.-cu, h	9, s.-cu, ci.-s, th.-cl	9, th.-cl	8, th.-cl
11	5.0	1.00	5.0	1.00	SW	SW	2.0	0.13	259	8, m	7, th.-cl	p.-cl, ci.-s, ci.-cu	1, ci.-s	0	0
12	5.0	1.00	5.0	1.00	SW : Calm : WSW	SW	1.2	0.05	188	0	0, m	0, h	0	0	0
13	5.0	1.00	5.0	1.00	SW : Calm	W : WSW	0.9	0.06	175	1, m	1, m	5, th.-cl, h	8, th.-cl	3	0
14	5.2	1.00	5.2	1.00	WSW : SW	WSW : Calm	0.8	0.03	154	0, m	0, h	0, h	0, h	0	0
15	5.2	1.00	5.2	1.00	Calm	Calm : WSW : W	0.8	0.04	137	2	p.-cl	0, tk.-h	0, h	0	0
16	4.5	0.86	4.4	0.84	N	N : NNE : E	1.0	0.13	213	0	0, m	1, fr.-cu, h	9, s.-cu, cu.-n, h	1, h	2, alt.-cu, d
17	5.2	1.00	5.2	1.00	NE : ENE	ESE : Calm	1.0	0.05	168	9, d	8	6, th.-cl, oc.-so.-ha	2, ci.-cu, h	1, h	0, d
18	1.9	0.37	1.7	0.33	Calm : WSW	W : NW : N	2.6	0.22	292	0	1, m, h	1, ci.-cu, ci.-s, h	1, ci, ci.-s	1	4
19	1.3	0.25	1.1	0.22	NNW : NW	NNW	2.3	0.18	261	9	9	9, h	7, fr.-cu, h	p.-cl	9
20	2.1	0.40	1.4	0.27	Calm : W : NW	NW : N : NNW	1.8	0.15	249	9	9, m	9, s.-cu, n, h	1, h	8	
21	5.7	1.00	5.7	1.00	NW : NNW	NNW	0.9	0.11	209	8, m	4	1, fr.-cu, h	1, cu, h	1	0
22	1.3	0.22	0.9	0.16	Calm : WSW	W : NNW : SW	3.3	0.19	246	0, m	1, th.-cl	1, ci.-s, ci.-cu	5	9	10
23	0.7	0.13	0.5	0.08	Calm : N : NW	WNW : W	1.6	0.07	208	8	7, m	9, s.-cu, alt.-cu, cu.-n	8, alt.-cu, h	9	10
24	3.3	0.57	3.2	0.55	WSW : W	WNW : W	3.1	0.40	377	10	10	8, ci.-s, ci.-cu	7, ci.-cu, s.-cu	9	8, cu.-n, s.-cu
25	4.2	0.73	4.0	0.70	W : WSW	WSW	4.5	0.33	401	4, m	10, m	10, n, s.-cu	10, s.-cu, alt.-cu	3	1
26	3.1	0.55	2.4	0.42	WSW : SW	WSW : SW : SSW	1.4	0.15	258	7, m	7	9, s.-cu, cu.-n	6, fr.-cu, ci.-s	8, so.-ha	6, cu, s.-cu
27	0.0	0.00	0.0	0.00	SSW : Calm	Calm : NW : SW	0.7	0.04	146	6, oc.-r	10, oc.-r, t, m	8, S, n, m	10, sh, slt.-glm,	10, m.-r	10, m.-r
28	6.2	0.99	6.2	0.99	NNW : NW	WNW : WSW	1.8	0.17	268	10, r, hy.-r	p.-cl, ci.-cu, cu, n	6, fr.-cu, alt.-cu	v.-cl	2	
29	5.9	0.95	5.5	0.89	WSW	WSW : SW	3.7	0.23	340	1	1	5, cu, fr.-cu	7, alt.-cu, cu.-n	4	0, d
30	0.0	0.00	0.0	0.00	SW	SSW	3.0	0.22	292	4, d	7	9, cu.-n, ci.-s	10, s.-cu, n	10, r, slt.-r, sh	
31	0.0	0.00	0.0	0.00	SW : NNW	Calm : SE	1.2	0.07	170	10, r, hy.-r	10	9, th.-cl, ci.-s, alt.-cu, oc.-slt.-r	10, n, slt.-shs	10	10, m.-r
Means	3.1	0.58	2.9	0.56	...	...	...	0.19	261						
Number of Column for Reference.	20	21	22	23	24	25	26	27	28	29					30

The mean *Temperature of Evaporation* for the month was 58°.5, being 0°.6 higher than
 The mean *Temperature of the Dew Point* for the month was 52°.5, being 1°.6 lower than
 The mean *Degree of Humidity* for the month was 63.2, being 10.0 less than
 The mean *Elastic Force of Vapour* for the month was 0.1397, being 0.024 less than
 The mean amount of *Cloud* for the month (a clear sky being represented by 0 and an overcast sky by 10) was 5.6.
 The mean proportion of *Sunshine* for the month (constant sunshine being represented by 1) was 0.583. The maximum daily amount of *Sunshine* was 15.3 hours on July 12.
 The highest reading of the *Solar Radiation Thermometer* was 164°.1 on July 22; and the lowest reading of the *Terrestrial Radiation Thermometer* was 35°.4 on July 18.
 The *Proportions of Wind* referred to the cardinal points were N. 5, E. 1, S. 8, W. 13. Four days were calm.
 The *Greatest Pressure of the Wind* in the month was 4.8 lbs. on the square foot on July 5. The mean daily *Horizontal Movement of the Air* for the month was 261 miles; the greatest daily value was 452 miles on July 6; and the least daily value was 137 miles on July 15.
Rain (0.1005 or over) fell on 8 days in the month, amounting to 1.651, as measured by gauge No. 6 partly sunk below the ground; being 0.1748 less than the average fall for the 65 years, 1841-1905.

MONTH and DAY, 1928.	BARO-METER. Mean of 24 Hourly Values (corrected and reduced to 32° Fahrenheit).	TEMPERATURE.							Difference between the Air Temperature and Dew Point Temperature.			Degree of Humidity (Saturation = 100).	TEMPERATURE.			Rain collected in Gauge No. 6, whose receiving surface is 5 inches above the ground.	Daily Duration of Sunshine.	Sun above Horizon.
		Of the Air.					Of Evaporation. Mean of 24 Hourly Values.	Of the Dew Point. Deducted Mean Daily Value.	Mean.	Greatest.	Least.		Of Radiation.		Of the Earth 4 ft. below the Surface of the Soil.			
		Highest.	Lowest.	Daily Range.	Mean of 24 Hourly Values.	Excess above Average of 65 Years.							Highest in Sun's Rays.	Lowest on the Grass.				
Aug. 1	29.775	75.0	56.3	18.7	63.4	+ 1.2	61.5	60.1	3.3	7.0	0.9	89	124.1	54.8	56.9	0.526	1.2	15.4
2	29.989	69.4	54.4	15.0	59.9	- 2.2	56.4	53.5	6.4	14.9	1.5	79	142.0	46.2	56.9	0.007	4.9	15.3
3	29.895	61.7	53.7	8.0	57.7	- 4.4	54.3	51.1	6.6	12.2	0.9	79	80.9	47.6	56.9	0.322	0.0	15.2
4	29.769	61.1	49.7	11.4	55.1	- 7.0	53.1	51.1	4.0	12.2	1.0	87	99.1	40.5	56.8	0.988	2.9	15.2
5	30.000	75.0	45.9	29.1	60.4	- 1.7	54.7	49.6	10.8	24.3	0.6	68	133.0	34.9	57.0	0.000	13.5	15.1
6	30.074	79.0	47.1	31.9	61.9	- 0.3	56.8	52.5	9.4	21.3	0.0	71	141.1	33.9	57.0	0.000	6.7	15.1
7	29.904	79.1	56.1	23.0	67.3	+ 5.1	61.3	56.8	10.5	20.8	4.8	70	146.5	47.5	56.9	0.000	2.5	15.0
8	29.869	73.9	56.2	17.7	64.2	+ 1.9	58.4	53.8	10.4	21.9	1.2	69	130.4	46.1	56.9	0.127	7.5	15.0
9	29.995	74.9	51.8	23.1	61.7	- 0.6	56.1	51.1	10.6	20.5	1.8	69	130.6	42.8	57.0	0.000	8.9	14.9
10	29.977	72.5	49.8	22.7	60.1	- 2.2	55.9	52.3	7.8	18.1	1.0	75	128.3	36.7	57.0	0.007	3.2	14.9
11	29.747	83.7	56.6	27.1	68.7	+ 6.3	62.3	57.7	11.0	19.9	2.7	68	142.7	48.0	57.0	0.000	9.1	14.8
12	29.495	75.6	55.4	20.2	64.6	+ 2.1	60.1	56.8	7.8	20.8	1.0	76	130.3	46.6	57.0	0.089	5.9	14.7
13	29.565	72.2	55.0	17.2	61.8	- 0.7	56.6	52.2	9.6	19.0	1.8	71	128.3	46.1	57.0	0.035	8.0	14.7
14	29.604	72.5	55.5	17.0	62.1	- 0.4	56.7	52.1	10.0	18.5	2.9	70	135.0	46.9	57.1	0.016	11.8	14.6
15	29.683	73.2	53.7	19.5	61.6	- 0.8	55.2	49.4	12.2	20.4	2.2	65	136.2	45.7	57.2	0.000	8.6	14.6
16	29.887	69.6	50.0	19.6	59.0	- 3.3	53.0	47.2	11.8	17.1	2.6	65	127.2	37.6	57.2	0.000	4.9	14.5
17	29.973	71.0	51.7	19.3	59.6	- 2.5	53.2	47.0	12.6	20.5	3.2	63	130.2	38.8	57.2	0.000	7.2	14.5
18	29.927	75.2	47.4	27.8	59.5	- 2.4	54.3	49.5	10.0	21.6	1.0	70	138.0	35.9	57.3	0.000	6.7	14.4
19	29.686	75.9	45.0	30.9	61.7	+ 0.0	56.0	50.9	10.8	21.8	0.7	68	139.1	31.9	57.2	0.000	6.8	14.3
20	29.524	73.2	51.9	21.3	59.2	- 2.3	55.2	51.7	7.5	23.8	1.2	77	139.0	45.4	57.2	0.208	8.7	14.3
21	29.623	70.7	50.0	20.7	59.1	- 2.2	54.2	49.7	9.4	18.3	2.0	71	126.0	42.1	57.2	0.002	6.9	14.2
22	29.700	72.3	54.2	18.1	61.0	- 0.1	57.3	54.3	6.7	17.2	1.8	79	130.1	48.5	57.1	0.054	4.5	14.1
23	29.731	72.8	56.3	16.5	63.4	+ 2.5	60.7	58.7	4.7	10.5	1.1	85	100.2	46.2	57.1	0.071	0.5	14.1
24	29.558	77.2	55.3	21.9	64.5	+ 3.7	61.5	59.3	5.2	13.0	0.8	83	125.6	44.8	57.1	0.089	3.1	14.0
25	29.647	73.8	56.1	17.7	63.4	+ 2.7	58.4	54.4	9.0	18.6	1.7	73	125.3	47.9	57.2	0.000	9.6	14.0
26	29.609	70.7	54.2	16.5	60.9	+ 0.2	59.0	57.6	3.3	12.4	0.2	89	108.0	45.4	57.2	0.594	1.9	13.9
27	29.504	72.2	54.6	17.6	62.2	+ 1.6	58.4	55.4	6.8	14.7	0.8	78	130.8	48.1	57.3	0.024	11.6	13.8
28	29.644	74.5	55.1	19.4	62.7	+ 2.3	57.6	53.4	9.3	20.4	2.0	72	132.1	46.7	57.3	0.000	13.0	13.8
29	29.740	70.8	53.6	17.2	60.5	+ 0.2	56.0	52.2	8.3	17.4	1.0	74	121.1	43.1	57.3	0.000	9.4	13.7
30	29.886	71.1	50.1	21.0	59.2	- 0.9	53.5	48.1	11.1	22.3	1.4	67	132.6	41.4	57.3	0.002	10.0	13.7
31	30.050	66.7	46.2	20.5	55.5	- 4.4	53.5	51.7	3.8	10.7	0.4	87	117.5	34.7	57.3	0.018	0.8	13.6
Means	29.775	72.8	52.5	20.2	61.4	- 0.3	56.8	52.9	8.4	17.8	1.5	74.4	127.5	43.3	57.1	3.279	6.5	14.5
Number of Column for Reference.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	18	19

The results apply to the civil day, except Columns 20 to 23 (Record of the Night Sky), which relate to the period extending from dusk on the civil day named, to dawn of the following day.

The mean reading of the Barometer (Column 1) and the mean temperatures of the Air and Evaporation (Columns 5 and 7) are deduced from the photographic records. The average temperature (Column 6) is deduced from the 65 years' observations, 1841-1905. The temperature of the Dew Point (Column 8) and the Degree of Humidity (Column 12) are deduced from the corresponding temperatures of the Air and Evaporation by means of Hygrometrical Tables supplied by the Air Ministry. The mean difference between the Air and Dew Point Temperatures (Column 9) is the difference between the numbers in Columns 5 and 8, and the Greatest and Least Differences (Columns 10 and 11) are deduced from the 24 hourly photographic measures of the Dry-bulb and Wet-bulb Thermometers. The readings in Column 15 are taken daily at noon.

The values given in Columns 2, 3, 4, 13, and 14 are derived from eye-readings of self-registering thermometers.

The mean reading of the *Barometer* for the month was 29ⁱⁿ.775, being 0ⁱⁿ.015 lower than the average for the 65 years, 1841-1905.

TEMPERATURE OF THE AIR.

The highest in the month was 83°·7 on August 11; the lowest in the month was 45°·0 on August 19; and the range was 38°·7. The mean of all the highest daily readings in the month was 72°·8, being 0°·1 higher than the average for the 65 years, 1841-1905. The mean of all the lowest daily readings in the month was 52°·5, being 0°·5 lower than the average for the 65 years, 1841-1905. The mean of the daily ranges was 20°·2, being 0°·5 greater than the average for the 65 years, 1841-1905. The mean for the month was 61°·4, being 0°·3 lower than the average for the 65 years, 1841-1905.

MONTH and DAY, 1928.	RECORD OF THE NIGHT SKY.				WIND AS DEDUCED FROM SELF-REGISTERING ANEMOMETERS.					CLOUDS AND WEATHER.					
	POLARIS.		δURSÆ MINORIS.		OSLER'S.			Robinson's.							
	Duration.	Fraction of Total Exposure.	Duration.	Fraction of Total Exposure.	General Direction.		Pressure on the Square Foot.								
					A.M.	P.M.	Greatest.	Mean of 24 Hourly Measures.	A.M.	P.M.					
Aug. 1	0·0	0·00	0·0	0·00	S : SSW	NNW	0·8	0·09	195	10	: 10, r, slt.-r, hy.-r	: 10, hy.-r, slt.-r	10, hy.-sh, hl	: 9	: 10
2	1·7	0·27	1·3	0·22	NNE : NE	E : ENE	2·3	0·16	255	10, r	: 10	: 10, s, oc.-m.-r	8, ci.-cu, s.-cu	: 2	: 8, d
3	0·0	0·00	0·0	0·00	ENE	ENE : NE	2·8	0·22	305	9	: 10, slt.-sh	: 10, slt.-sh	10, s, n, slt.-sh	: 10, oc.-m.-r, r, hy.-r	: 10, r
4	6·7	0·99	6·7	0·99	NE : NNE	NNE : N : NNW	3·8	0·41	366	10, r	: 10, r, hy.-r	: 10, hy.-r, r	10, s, n, slt.-r	: 1, ci.-s, d	
5	6·8	1·00	6·8	1·00	NW : Calm : NNW	NNW : N : Calm	0·8	0·03	154	1, m, d	: 0, h	[slt.-r]	0	: 0	
6	1·2	0·18	1·1	0·17	Calm : S	SSW : S	1·2	0·04	133	0, m, hy.-d	: 5, th.-cl	: 8, ci.-cu, ci.-s, [so.-ha]	10, alt.-cu, s.-cu	: 10	: 8 th.-cl
7	0·0	0·00	0·0	0·00	S : SSW	SSW : SW	4·3	0·43	346	9	: 9	: 10, s.-cu, n	9, s.-cu, alt.-cu	: 9	: 10
8	6·8	1·00	6·8	1·00	WSW : W	WSW	2·8	0·22	375	10, r	: 9	: 9, fr.-cu, ci.-cu, h	9	: 1	: 1
9	6·8	1·00	6·8	1·00	WSW	WSW	3·0	0·22	350	0, d	: 1, m	: 9, cu, ci.-cu, [so.-ha]	10	: 1	
10	0·1	0·02	0·1	0·02	Calm : SW	SW : Calm : S	0·3	0·01	138	0, d	: 3, m	: 10, s.-cu, n, slt.-r	10, fq.-slt.-r	: 10, slt.-r	: 10
11	3·5	0·48	3·2	0·45	S : Calm : SSW	SW : S : SSE	0·6	0·03	179	10	: 8	: 9, th.-cl, so.-ha	7, cu, so.-ha	: 8, th.-cl	: 3, th.-cl
12	7·3	1·00	7·3	1·00	Calm : SW	SW : SSW	4·0	0·20	284	9, hy.-r, t.-sm	: 9	: 10, s, n, fq.-slt.-r	10, n, cu	: 5	: 0
13	6·5	0·90	6·4	0·88	SSW : SW	SSW	7·3	0·50	417	1	: p.-cl	: 9, n, cu.-n, shs, r	8, cu.-n, so.-ha, shs, w	: 1, d	
14	6·5	0·89	6·3	0·86	SSW : SW	SW : SSW	4·6	0·38	367	p.-cl, sh	: v.-cl, slt.-sh	: v.-cl, sh	v, cl, fr.-cu, cu.-n, w	: p.-cl	: 1
15	6·1	0·84	6·0	0·83	SSW : SW	WSW : NW	1·1	0·10	255	1, d	: 2	: 7, cu.-n, alt.-cu	9	: 8	: 2
16	3·0	0·41	2·9	0·40	WSW : NW	NW	1·5	0·08	267	2	: 7, m	: 9, cu.-n, s.-cu, h	9, n, cu.-n, s.-cu	: 9	: 8
17	5·2	0·72	5·2	0·71	NNW : WSW : NW	WNW : W : Calm	1·0	0·08	224	7	: 7	: 9, s.-cu	8, ci.-s, s.-cu	: 8	: 6
18	8·0	1·00	7·9	0·99	SW : Calm	SW : Calm	0·6	0·02	118	7, d	: 9, m	: 8, s.-cu, ci.-cu	6, s.-cu, alt.-cu	: 2	: 0
19	0·5	0·06	0·1	0·02	Calm	SE : Calm	1·1	0·05	147	0, d	: 3, m	: p.-cl, s.-cu, fr.-cu	9, fr.-cu	: 8	: 9, slt.-sh
20	6·4	0·80	6·3	0·78	SW : WSW	WSW : SW	5·6	0·53	435	10, hy.-r, t, l	: v.-cl, w	: 6, s.-cu, n, w	6, s.-cu, sh, w	: 10, slt.-sh, oc.-r	: 6
21	2·9	0·37	2·8	0·35	SW	WSW : SW	4·8	0·30	394	0	: 1, m	: 7, ci, cu, so.-ha	10, n, slt.-sh	: 10, sh	: 9
22	0·0	0·00	0·0	0·00	SW : WSW	SW : SSW	2·7	0·22	326	8	: 7	: 8, alt.-cu, s.-cu, n	10, n, s, slt.-r	: 10, slt.-shs, sh	: 10, sh
23	7·9	0·98	7·8	0·97	SSW	SSW : S : SSE	2·0	0·10	245	10, r	: 10, m.-r	: 10, s.-cu, n	10, s, n	: 1, hy.-d	
24	4·0	0·50	3·6	0·45	SSE : Calm	S : SSW	1·5	0·08	185	2, d	: 7, m	: 10, n, fq.-r, hy.- [shs, l, oc.-t]	7, ci.-cu, n, fq.-r	: 8	: 9
25	6·5	0·81	6·1	0·76	SSW : SW	SW : SSW	3·6	0·37	341	3, m, d	: 2	: 6, ci.-cu, cu.-n, sh	9, fr.-cu, slt.-sh	: 9, th.-cl	: p.-cl
26	3·5	0·44	3·3	0·41	S : SSW	SSE : Calm : WSW	1·5	0·10	228	1	: 7, oc.-shs	: 10, n	10, r, slt.-r	: 10, fq.-shs	: 10, hy.-r
27	7·1	0·89	7·0	0·87	SW	SSW : SW	5·1	0·60	403	2	: 2	: 7, cu, s.-cu, slt.-shs	8, cu.-n, sh, w	: 3	: 4
28	7·7	0·96	7·6	0·95	SW	SW : SSW	3·2	0·31	336	0, d	: 1	: 5, cu, fr.-cu	6	: 1, d	: 0, d
29	7·8	0·98	7·7	0·97	SSW : SW	SSW : SW	1·9	0·11	246	1, th.-cl, d	: 1, m	: 2	10, slt.-sh	: p.-cl	: 1, d
30	6·5	0·82	6·2	0·78	SW : W : NW	NW : WNW : Calm	2·1	0·17	288	0, d, m	: 3	: p.-cl, fr.-cu	4, cu	: 7, slt.-r	: 7, h, d
31	2·9	0·36	2·6	0·33	Calm	ESE : Calm	0·8	0·01	137	5, d	: 9, m	: 10, s.-cu, n, m	10, n, shs	: 10	
Means	4·5	0·60	4·4	0·59	...	...	...	0·20	272						
Number of Column for Reference.	20	21	22	23	24	25	26	27	28	29				30	

The mean Temperature of Evaporation for the month was 56°·8, being 0°·7 lower than
 The mean Temperature of the Dew Point for the month was 52°·9, being 1°·4 lower than
 The mean Degree of Humidity for the month was 74·4, being 2·4 less than
 The mean Elastic Force of Vapour for the month was 0·1403, being 0·021 less than
 The mean amount of Cloud for the month (a clear sky being represented by 0 and an overcast sky by 10) was 7·4.
 The mean proportion of Sunshine for the month (constant sunshine being represented by 1) was 0·446. The maximum daily amount of Sunshine was 13·5 hours on August 5.
 The highest reading of the Solar Radiation Thermometer was 146°·5 on August 7; and the lowest reading of the Terrestrial Radiation Thermometer was 31°·9 on August 19.
 The Proportions of Wind referred to the cardinal points were N. 3, E. 3, S. 11, W. 10. Four days were calm.
 The Greatest Pressure of the Wind in the month was 7·3 lbs. on the square foot on August 13. The mean daily Horizontal Movement of the Air for the month was 272 miles; the greatest daily value was 435 miles on August 20; and the least daily value was 118 miles on August 18.
 Rain (0·1 or over) fell on 16 days in the month, amounting to 3·279, as measured by gauge No. 6 partly sunk below the ground; being 0·1935 greater than the average fall for the 65 years, 1841-1905.

MONTH and DAY, 1923.	BARO-METER. Mean of 24 Hourly Values (corrected and reduced to 32° Fahrenheit).	TEMPERATURE.							Difference between the Air Temperature and Dew Point Temperature.			Degree of Humidity (Saturation = 100).	TEMPERATURE.			Rain collected in Gauge No. 6, whose receiving surface is 5 inches above the ground.	Daily Duration of Sunshine.	Sun above Horizon.
		Of the Air.					Of Evaporation.	Of the Dew Point.	Mean.	Greatest.	Least.		Of Radiation.		Of the Earth 4 ft. below the Surface of the Soil.			
		Highest.	Lowest.	Daily Range.	Mean of 24 Hourly Values.	Excess above Average of 65 Years.	Mean of 24 Hourly Values.	Deducted Mean Daily Value.					Highest in Sun's Rays.	Lowest on the Grass.				
Sept. 1	30.014	68.2	48.0	20.2	57.8	- 2.0	53.9	50.3	7.5	15.8	0.2	76	123.1	35.3	57.3	0.000	10.9	13.5
2	30.027	68.9	44.0	24.9	56.4	- 3.3	51.7	47.0	9.4	21.6	0.0	71	126.2	29.2	57.2	0.000	12.2	13.5
3	30.031	76.0	44.2	31.8	60.0	+ 0.4	53.4	47.0	13.0	25.3	0.0	62	131.7	30.1	57.1	0.000	8.7	13.4
4	29.945	81.3	52.1	29.2	64.5	+ 5.0	56.2	48.9	15.6	30.7	3.7	57	134.9	38.2	57.1	0.000	12.3	13.4
5	29.771	83.0	48.2	34.8	65.5	+ 6.1	57.4	50.4	15.1	35.0	2.6	58	137.1	35.1	57.0	0.000	10.7	13.3
6	29.895	71.8	54.9	16.9	62.2	+ 3.0	56.5	51.5	10.7	24.5	1.2	69	130.5	44.4	57.1	0.000	7.2	13.2
7	29.999	72.2	49.0	23.2	59.8	+ 0.8	54.8	50.2	9.6	22.3	0.6	71	134.2	33.7	57.0	0.000	11.0	13.1
8	29.848	82.7	49.3	33.4	64.3	+ 5.5	58.7	54.3	10.0	25.1	0.8	70	140.5	33.1	57.1	0.000	9.7	13.1
9	29.891	72.9	52.9	20.0	60.7	+ 2.1	58.5	56.8	3.9	10.8	0.2	87	108.1	46.2	57.0	0.320	0.2	13.0
10	30.038	72.6	50.1	22.5	60.3	+ 1.9	56.7	53.8	6.5	14.8	0.0	79	130.5	38.1	57.0	0.005	8.2	13.0
11	30.085	72.0	51.7	20.3	60.4	+ 2.3	55.9	52.1	8.3	18.6	1.7	74	126.1	39.6	57.0	0.000	9.3	12.9
12	30.131	69.6	46.3	23.3	56.2	- 1.8	52.6	49.2	7.0	17.5	0.0	77	127.8	32.0	57.0	0.000	8.7	12.9
13	30.150	68.0	44.1	23.9	54.9	- 2.9	50.8	46.6	8.3	19.6	0.0	74	129.2	30.2	57.0	0.000	7.8	12.8
14	30.109	69.1	47.1	22.0	57.4	- 0.3	52.7	48.2	9.2	24.2	3.5	71	130.0	32.0	56.9	0.000	10.5	12.7
15	30.159	67.1	48.9	18.2	57.1	- 0.5	54.1	51.4	5.7	13.7	0.8	82	112.8	35.8	56.9	0.000	4.5	12.6
16	30.150	69.2	49.6	19.6	57.2	- 0.3	54.5	52.2	5.0	15.2	0.4	83	127.6	36.8	56.7	0.000	4.9	12.6
17	30.074	74.0	46.4	27.6	58.1	+ 0.9	53.5	49.3	8.8	22.0	0.4	72	132.3	34.0	56.7	0.000	4.3	12.5
18	30.008	72.6	48.9	23.7	58.3	+ 1.4	54.5	51.0	7.3	19.0	1.4	77	126.2	35.2	56.6	0.000	7.6	12.4
19	30.020	67.0	44.8	22.2	56.1	- 0.4	50.5	44.7	11.4	26.3	0.8	65	122.1	30.3	56.5	0.001	6.1	12.4
20	30.061	64.1	37.8	26.3	51.3	- 4.9	46.5	40.8	10.5	22.4	1.3	67	110.8	26.9	56.4	0.000	7.4	12.3
21	30.111	63.4	36.7	26.7	50.9	- 5.0	46.2	40.5	10.4	23.2	0.5	67	121.4	24.8	56.3	0.000	7.1	12.3
22	30.134	62.3	41.3	21.0	51.7	- 3.9	46.8	41.1	10.6	19.3	3.3	67	118.7	28.0	56.1	0.000	8.7	12.2
23	30.021	62.1	42.9	19.2	50.2	- 5.2	46.1	41.2	9.0	18.2	1.4	71	120.4	35.0	56.0	0.000	4.7	12.1
24	29.702	58.1	42.9	15.2	50.3	- 5.0	47.2	43.7	6.6	12.0	2.7	78	90.8	32.4	55.8	0.011	0.9	12.0
25	29.714	59.2	44.8	14.4	50.8	- 4.4	47.8	44.5	6.3	16.1	2.0	79	110.7	34.7	55.7	0.135	4.9	12.0
26	29.895	63.5	40.4	23.1	49.7	- 5.5	46.6	43.0	6.7	17.7	0.0	78	126.5	28.2	55.5	0.000	7.8	11.9
27	29.698	65.1	34.0	31.1	50.5	- 4.6	47.2	43.4	7.1	17.5	0.0	77	110.0	24.1	55.3	0.000	8.3	11.8
28	29.481	58.8	49.5	9.3	54.0	- 0.9	51.9	49.8	4.2	8.2	2.3	86	67.3	39.8	55.1	0.158	0.0	11.8
29	29.665	59.0	48.6	10.4	53.4	- 1.3	51.0	48.7	4.7	8.4	0.6	84	75.1	46.1	55.0	0.035	0.0	11.7
30	29.797	56.3	41.2	15.1	48.4	- 6.0	44.6	39.7	8.7	17.0	1.9	72	102.4	31.1	55.0	0.023	6.4	11.7
Means	29.954	68.3	46.0	22.3	56.3	- 1.0	52.0	47.7	8.6	19.4	1.1	73.4	119.5	34.0	56.5	0.688	7.0	12.6
Number of Column for Reference.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	18	19

The results apply to the civil day, except Columns 20 to 23 (Record of the Night Sky), which relate to the period extending from dusk on the civil day named, to dawn of the following day.

The mean reading of the Barometer (Column 1) and the mean temperatures of the Air and Evaporation (Columns 5 and 7) are deduced from the photographic records. The average temperature (Column 6) is deduced from the 65 years' observations, 1841-1905. The temperature of the Dew Point (Column 8) and the Degree of Humidity (Column 12) are deduced from the corresponding temperatures of the Air and Evaporation by means of Hygrometrical Tables supplied by the Air Ministry. The mean difference between the Air and Dew Point Temperatures (Column 9) is the difference between the numbers in Columns 5 and 8, and the Greatest and Least Differences (Columns 10 and 11) are deduced from the 24 hourly photographic measures of the Dry-bulb and Wet-bulb Thermometers. The readings in Column 15 are taken daily at noon.

The values given in Columns 2, 3, 4, 13, and 14 are derived from eye-readings of self-registering thermometers.

The mean reading of the Barometer for the month was 29.954, being 0.136 higher than the average for the 65 years, 1841-1905.

TEMPERATURE OF THE AIR.

The highest in the month was 83.0 on September 5; the lowest in the month was 34.0 on September 27; and the range was 49.0. The mean of all the highest daily readings in the month was 68.3, being 1.0 higher than the average for the 65 years, 1841-1905. The mean of all the lowest daily readings in the month was 46.0, being 3.1 lower than the average for the 65 years, 1841-1905. The mean of the daily ranges was 22.3, being 4.1 greater than the average for the 65 years, 1841-1905. The mean for the month was 56.3, being 1.0 lower than the average for the 65 years, 1841-1905.

MONTH and DAY 1928.	RECORD OF THE NIGHT SKY.				WIND AS DEDUCED FROM SELF-REGISTERING ANEMOMETERS.					CLOUDS AND WEATHER.					
	POLARIS.		δ URSAE MINORIS.		OSLER'S.			Pressure on the Square Foot.	Robin-son's.						
	Duration.	Fraction of Total Exposure.	Duration.	Fraction of Total Exposure.	General Direction.		Greatest.							Mean of 24 Hourly Measures.	Horizontal Movement of the Air.
					A.M.	P.M.		A.M.	P.M.						
Sept. 1	8.5	1.00	8.5	1.00	Calm : ESE	E : ESE	1.4	0.08	184	3	I, m	p.-cl, cu, cu.-n	5, slt.-h	o, slt.-h	o, hy.-d
2	8.3	0.98	8.2	0.96	Calm : E	E : Calm	1.0	0.06	163	o, f, hy.-d	o		o, hy.-d		
3	7.8	0.92	7.7	0.91	Calm : SSW	SSW	1.3	0.09	172	o, m, hy.-d	8, m	3, ci.-s	2, ci.-s, ci.-cu	9	6, ci.-s, alt.-cu, d
4	8.5	1.00	8.5	1.00	SSW : SW	SW : S	1.8	0.12	261	o, d	o		o	o, d	
5	3.9	0.45	3.0	0.35	Calm : SSW	SSW	2.5	0.09	187	o, d, m	o	I, ci.-s	1, ci.-s	6	7, fr.-cu
6	8.5	1.00	8.5	1.00	SSW : SW : W	WSW : SW	4.4	0.32	396	9	10	2, cu, fr.-cu	5	6, shs	o, d
7	8.5	1.00	8.5	1.00	SSW : S	S : SSE : SE	1.9	0.10	222	o, m, d	I	7, ci, fr.-cu	5	3	o, d
8	5.7	0.62	5.6	0.60	SE : SSE	SSE : S : SSW	3.2	0.08	206	o, d	I	6, ci.-s, ci.-cu	p.-cl, ci.-s, p.-so.-ha	8	6
9	7.3	0.79	7.2	0.78	S : SSW	SW : VAR : SW	3.3	0.08	192	7	9	10, s, n, slt.-shs	10, oc.-th.-cl, r, hy.-r	5, oc.-m.-r	
10	6.3	0.68	6.2	0.67	SW : SSW : SW	SW : SSW	3.2	0.18	303	o	I, d	v.-cl, cu, fr.-cu	7, s.-cu, cu.-n	9, oc.-th.-cl, oc.-slt.-r	9
11	9.0	0.97	9.0	0.97	SW : W : WSW	WSW : NNW : NE	0.6	0.08	188	2	o, d	8, alt.-cu, n, h	7, fr.-cu, cu	p.-cl	o, d
12	9.2	1.00	9.2	1.00	Calm : ENE	E : ENE	0.4	0.04	104	o, m, f, d	o, d, f	p.-cl, f, h	p.-cl, h	I	o, d
13	7.9	0.86	7.5	0.82	Calm : NE	ENE : E : NE	1.0	0.05	172	o, m, f, d	2, so.-ha	p.-cl, ci.-s, m	p.-cl, cu.-n, s.-cu	I	3, d
14	9.1	0.98	9.1	0.98	NE : NNE : E	ESE : ENE : NE	3.4	0.12	260	v.-cl, d	3, m	2, cu, fr.-cu	2, cu, fr.-cu	I	o, d
15	4.8	0.49	4.7	0.48	N : NNE : NNW	N : NNE	2.1	0.11	193	I, d	7, d, m	v.-cl, s, n, s.-cu	10, n, alt.-cu, ci.-cu	v.-cl	o, d
16	8.0	0.82	7.5	0.77	NNE : N	Calm	0.5	0.03	124	10, m, d	10	8, fr.-cu	p.-cl, h	2, h, tk.-h	3, tk.-h, hy.-d
17	9.6	0.99	9.4	0.97	Calm : SW	SW : SSW	1.0	0.08	194	7, th.-cl, d	p.-cl, m	9, oc.-th.-cl, alt.-cu, ci.-s	10, oc.-th.-cl	10, th.-cl, slt.-h	o, slt.-h, d
18	5.2	0.53	5.1	0.52	SW : Calm : WSW	SW	1.0	0.03	184	o, hy.-d	10, oc.-th.-cl, m	6, fr.-cu	2, fr.-cu, cu	I	2, d, slt.-m
19	9.7	1.00	9.7	1.00	Calm : NNW	NNW : Calm	1.4	0.04	152	8	10, oc.-th.-cl, m, slt.-sh	6, ci.-s, ci.-cu, h	3, ci.-s, s.-cu, h	3, so.-ha, h	o, d
20	9.7	1.00	9.7	1.00	Calm	NNW	0.6	0.02	130	o	o, m, f	7, cu.-n, alt.-cu, m	3, s.-cu, fr.-cu	o, m, d	
21	7.1	0.73	7.0	0.72	Calm : N	NNE	0.8	0.04	165	o, d, m	4, ci, m, h		4, fr.-cu, s.-cu, h	2	
22	9.0	0.88	8.9	0.87	N	NNE : N	2.9	0.20	285	2, d	o, m, d	I, cu, fr.-cu	5, slt.-sh	o, d	
23	5.8	0.57	4.5	0.44	N : NNW	N : NNW	2.1	0.14	247	5, d	10, m	p.-cl, cu, alt.-cu, slt.-sh	6, ci, ci.-s, alt.-cu	9, th.-cl	10, oc.-th.-cl
24	1.0	0.10	0.9	0.09	NW : WSW	W : NW	1.3	0.07	214	th.-cl, d	9, m	10, m.-r, r	10, cu, cu.-n	9, m	9, d, m
25	10.2	1.00	10.2	1.00	N	N : NNE	1.4	0.08	215	10, r, slt.-r, slt.-m	10, slt.-m	8, cu, fr.-cu, h	p.-cl, cu, fr.-cu, h	p.-cl, r	o
26	10.2	1.00	10.2	1.00	Calm : NNE	ENE : E	1.3	0.04	173	I, hy.-d	o, f	I, fr.-cu, alt.-cu	p.-cl, s.-cu, fr.-cu	I, m	o, hy.-d, m
27	3.5	0.34	3.5	0.34	Calm : ENE	E : ENE	1.6	0.07	191	3, m	I, m, f, hy.-d, ho.-fr	I, ci.-cu, m, h	o, h	3	9, th.-cl
28	0.0	0.00	0.0	0.00	ENE : NE	ENE : NE : NNE	4.1	0.36	385	9, th.-cl	10, oc.-slt.-r	10, n, r, w	10, n, r, oc.-slt.-r, w	10	
29	0.3	0.03	0.2	0.02	NE : NNE	NNE	1.2	0.11	297	10, m.-r, shs	10	10, s.-cu, n, slt.-shs	10, s, n	9	10, r, slt.-r
30	10.7	1.00	10.7	1.00	NNE : N	N : NNW	2.8	0.16	297	10, r	5	p.-cl, cu.-n, s.-cu, fr.-cu	8, n, fr.-cu	p.-cl, slt.-h	o, h, d
Means	7.1	0.76	7.0	0.74	...	...	...	0.10	215						
Number of Column for Reference.	20	21	22	23	24	25	26	27	28	29	30				

The mean *Temperature of Evaporation* for the month was 52°.0, being 2°.1 lower than
 The mean *Temperature of the Dew Point* for the month was 47°.7, being 3°.4 lower than
 The mean *Degree of Humidity* for the month was 73.4, being 6.5 less than
 The mean *Elastic Force of Vapour* for the month was 0.333 being 0.046 less than
 The mean amount of *Cloud* for the month (a clear sky being represented by 0 and an overcast sky by 10) was 4.4.
 The mean proportion of *Sunshine* for the month (constant sunshine being represented by 1) was 0.558. The maximum daily amount of *Sunshine* was 12.3 hours on September 4.
 The highest reading of the *Solar Radiation Thermometer* was 140°.5 on September 8; and the lowest reading of the *Terrestrial Radiation Thermometer* was 24°.1 on September 27.
 The *Proportions of Wind* referred to the cardinal points were N. 8, E. 6, S. 5, W. 4. Seven days were calm.
 The *Greatest Pressure of the Wind* in the month was 4.4 lbs. on the square foot on September 6. The mean daily *Horizontal Movement of the Air* for the month was 215 miles; the greatest daily value was 396 miles on September 6; and the least daily value was 104 miles on September 12.
Rain (0.1005 or over) fell on 7 days in the month, amounting to 0.1688, as measured by gauge No. 6 partly sunk below the ground; being 1.1460 less than the average fall for the 65 years, 1841-1905.

MONTH and DAY, 1928.	BARO-METER. Mean of 24 Hourly Values (Corrected and reduced to 32° Fahrenheit).	TEMPERATURE.							Difference between the Air Temperature and Dew Point Temperature.			Degree of Humidity (Saturation = 100).	TEMPERATURE.			Rain collected in Gauge No. 6, whose receiving surface is 5 inches above the Ground.	Daily Duration of Sunshine.	Sun above Horizon.
		Of the Air.					Of Evaporation.	Of the Dew Point.	Mean.	Greatest.	Least.		Of Radiation.		Of the Earth 4 ft. below the Surface of the Soil.			
		Highest.	Lowest.	Daily Range.	Mean of 24 Hourly Values.	Excess above Average of 65 Years.	Mean of 24 Hourly Values.	Deducted Mean Daily Value.					Highest in Sun's Rays.	Lowest on the Grass.				
Oct. 1	30.029	55.5	37.8	17.7	45.2	- 8.9	40.3	32.8	12.4	20.5	3.7	62	98.8	23.6	54.9	0.000	9.2	II.6
2	30.045	57.3	37.8	19.5	47.1	- 6.6	44.7	41.8	5.3	9.8	2.5	82	73.3	24.1	54.7	0.000	0.0	II.5
3	30.112	63.0	34.0	29.0	49.5	- 3.8	45.3	40.1	9.4	20.2	0.0	70	123.1	23.0	54.6	0.000	7.5	II.4
4	29.972	60.6	39.9	20.7	49.6	- 3.4	45.6	40.8	8.8	19.6	0.8	72	110.2	21.3	54.5	0.000	9.9	II.4
5	29.847	67.0	39.8	27.2	53.5	+ 0.7	51.5	49.6	3.9	11.3	0.5	87	98.3	27.2	54.2	0.000	0.6	II.3
6	30.031	66.5	50.4	16.1	56.8	+ 4.3	53.1	49.6	7.2	17.1	1.9	77	115.9	39.9	54.0	0.000	7.6	II.3
7	30.077	68.0	44.2	23.8	55.6	+ 3.3	53.1	50.8	4.8	12.2	0.0	84	97.3	31.3	54.0	0.000	2.6	II.2
8	29.768	67.9	52.6	15.3	58.7	+ 6.7	56.1	53.8	4.9	11.5	1.7	84	113.0	44.2	54.0	0.000	2.4	II.1
9	29.393	65.3	48.7	16.6	56.2	+ 4.6	54.0	52.2	4.0	11.2	1.2	86	111.9	39.1	54.0	0.146	3.4	II.1
10	29.580	59.5	47.1	12.4	52.1	+ 0.8	50.5	48.9	3.2	9.2	0.0	89	86.2	34.7	54.0	0.000	0.9	II.0
11	29.503	64.2	48.5	15.7	55.3	+ 4.4	52.3	49.5	5.8	13.1	1.5	81	103.2	39.6	54.0	0.060	5.0	IO.9
12	29.664	53.9	41.1	12.8	48.4	- 2.2	46.3	43.9	4.5	10.2	1.0	84	76.3	32.9	53.9	0.057	0.0	IO.9
13	29.999	54.2	33.9	20.3	42.6	- 7.7	39.7	35.4	7.2	18.5	0.2	75	92.1	22.3	53.9	0.000	1.9	IO.8
14	30.005	56.3	29.3	27.0	43.6	- 6.5	40.7	36.5	7.1	19.1	0.0	76	102.0	20.5	53.9	0.233	6.7	IO.8
15	29.797	55.9	47.2	8.7	50.7	+ 0.8	49.7	48.7	2.0	6.5	0.2	93	72.0	45.4	53.6	0.323	0.0	IO.7
16	29.942	59.6	48.1	11.5	54.5	+ 4.7	53.3	52.3	2.2	6.3	0.6	92	68.8	43.7	53.4	0.009	0.0	IO.6
17	29.870	66.4	47.2	19.2	57.8	+ 8.2	56.0	54.5	3.3	5.5	0.7	89	101.5	36.6	53.1	0.199	1.4	IO.5
18	29.664	62.0	44.3	17.7	53.2	+ 3.9	51.2	49.4	3.8	7.8	0.6	87	91.1	31.8	53.3	0.121	2.4	IO.5
19	29.520	60.4	50.4	10.0	54.6	+ 5.5	50.8	46.9	7.7	15.3	1.8	75	89.6	42.9	53.2	0.137	1.3	IO.4
20	29.322	59.6	44.5	15.1	52.5	+ 3.7	50.2	47.9	4.6	9.5	1.8	84	100.0	36.2	53.2	0.402	2.7	IO.3
21	29.449	57.7	41.0	16.7	48.1	- 0.5	46.0	43.7	4.4	10.8	1.4	84	98.1	31.1	53.2	0.050	6.1	IO.3
22	29.356	56.9	43.9	13.0	48.6	+ 0.3	47.3	45.8	2.8	8.9	0.5	90	103.1	34.8	53.1	0.933	2.0	IO.2
23	29.386	57.6	44.0	13.6	50.3	+ 2.2	47.6	44.6	5.7	17.0	0.7	81	103.6	35.1	53.0	0.027	6.9	IO.2
24	29.457	61.6	50.9	10.7	56.0	+ 8.1	52.6	49.4	6.6	13.9	1.1	78	99.3	42.7	53.0	0.221	5.8	IO.1
25	29.665	62.0	45.3	16.7	51.9	+ 4.2	48.9	45.7	6.2	15.6	1.9	79	106.2	35.7	52.9	0.000	7.2	IO.1
26	29.232	57.1	41.3	15.8	49.0	+ 1.4	47.6	46.0	3.0	10.7	0.2	89	83.1	29.5	52.9	0.290	0.3	IO.0
27	29.074	57.2	49.1	8.1	53.1	+ 5.6	51.9	48.6	4.5	4.6	1.2	92	78.0	46.8	52.8	0.152	0.1	9.9
28	29.558	54.5	42.0	12.5	50.2	+ 2.8	47.8	45.1	5.1	11.3	2.0	83	85.2	32.6	52.6	0.012	3.1	9.8
29	29.702	56.6	39.9	16.7	48.0	+ 0.7	46.5	44.7	3.3	6.4	1.4	89	69.1	29.8	52.5	0.040	0.0	9.8
30	29.537	60.0	45.7	14.3	53.2	+ 6.0	49.8	46.2	7.0	16.3	2.0	78	100.1	36.7	52.5	0.035	4.9	9.7
31	29.520	57.4	42.2	15.2	48.8	+ 1.7	46.9	44.7	4.1	8.8	0.0	86	95.2	29.0	52.4	0.004	5.5	9.7
Means	29.680	60.1	43.6	16.4	51.4	+ 1.5	48.9	46.1	5.3	12.2	1.1	82.5	95.0	33.7	53.5	3.451	3.5	IO.6
Number of Column for Reference.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	18	19

The results apply to the civil day, except Columns 20 to 23 (Record of the Night Sky), which relate to the period extending from dusk on the civil day named, to dawn on the following day.

The mean reading of the Barometer (Column 1) and the mean temperatures of the Air and Evaporation (Columns 5 and 7) are deduced from the photographic records. The average temperature (Column 6) is deduced from the 65 years' observations, 1841-1905. The temperature of the Dew Point (Column 8) and the Degree of Humidity (Column 12) are deduced from the corresponding temperatures of the Air and Evaporation by means of Hygrometrical Tables supplied by the Air Ministry. The mean difference between the Air and Dew Point Temperatures (Column 9) is the difference between the numbers in Columns 5 and 8, and the Greatest and Least Differences (Columns 10 and 11) are deduced from the 24 hourly photographic measures of the Dry-bulb and Wet-bulb Thermometers. The readings in Column 15 are taken daily at noon.

The values given in Columns 2, 3, 4, 13, and 14 are derived from eye-readings of self-registering thermometers.

The mean reading of the Barometer for the month was 29.680, being 0.004 lower than the average for the 65 years, 1841-1905.

TEMPERATURE OF THE AIR.

The highest in the month was 68.0 on October 7; the lowest in the month was 29.3 on October 14; and the range was 38.7. The mean of all the highest daily readings in the month was 60.1, being 2.6 higher than the average for the 65 years, 1841-1905. The mean of all the lowest daily readings in the month was 43.6, being 0.4 higher than the average for the 65 years, 1841-1905. The mean of the daily ranges was 16.4, being 2.1 greater than the average for the 65 years, 1841-1905. The mean for the month was 51.4, being 1.5 higher than the average for the 65 years, 1841-1905.

MONTH and DAY, 1928.	RECORD OF THE NIGHT SKY.				WIND AS DEDUCED FROM SELF-REGISTERING ANEMOMETERS.					CLOUDS AND WEATHER.		
	POLARIS.		δURSÆ MINORIS.		OSLER'S.			Robinson's.	A.M.	P.M.		
	Duration.	Fraction of Total Exposure.	Duration.	Fraction of Total Exposure.	General Direction.		Pressure on the Square Foot.					
					A.M.	P.M.	Greatest.	Mean of 24 Hourly Measures.	Horizontal Movement of the Air.			
Oct. 1	9.1	0.85	8.7	0.81	NNW : NW	NW : WSW	0.6	0.03	201	0, d	0, h	0, m, f, ho.-fr
2	8.6	0.78	8.3	0.77	WSW	NNW : NE	0.5	0.03	204	0, m	10, m	10, s, n
3	8.7	0.81	8.7	0.81	Calm : ENE	E : ESE	1.3	0.05	171	3, d	0, m, f, ho.-fr	0
4	9.8	0.91	9.2	0.85	E : ESE	E : ESE	2.3	0.16	217	0, d	0, m	1, fr.-cu
5	6.4	0.59	6.2	0.58	Calm : ESE	S : SW	1.8	0.09	199	p.-cl, ho.-fr	9	10, s, alt.-s
6	11.2	0.99	11.2	0.99	SW : WSW : W	WSW : SW	1.5	0.12	291	10	8	p.-cl, ci.-s, fr.-cu
7	3.9	0.34	2.2	0.20	SSW : SW	SW : SSW : S	1.8	0.10	239	0, d	5	8, ci.-s, alt.-cu, s.-cu
8	5.3	0.47	4.4	0.39	S : SSW	SSW : S	2.0	0.18	292	9	10, fq.-th.-cl, slt.-sh	9, s.-cu, alt.-cu, slt.-shs
9	7.0	0.63	6.6	0.59	S : SSW	SW : SSW	1.5	0.12	246	9	9, hy.-sh	9, alt.-cu, cu.-n, shs
10	0.4	0.04	0.4	0.04	Calm : WNW : NNW	NNW : Calm : SE	0.4	0.02	153	v.-cl	8, m	10, cu.-n, n
11	7.3	0.65	7.2	0.64	SE : S : WSW	WSW	5.0	0.42	391	10, slt.-shs, sh	10, fq.-m.-r	v.-cl, cu, cu.-n, w
12	11.1	0.99	11.1	0.99	Calm : E	ENE : NE	5.0	0.27	291	8, r, m.-r	10, r, m.-r	10, s, s.-cu, m.-r
13	11.0	0.96	10.3	0.89	NE : NNW : Calm	NNW : Calm	1.8	0.03	174	0, ho.-fr	0, m, f, ho.-fr	9, fr.-cu, cu.-n
14	0.0	0.00	0.0	0.00	Calm	SSW : SSE : S	1.6	0.03	167	0, f, ho.-fr	r, th.-cl, f, m	p.-cl, th.-cl, fr.-cu, ci.-cu
15	0.0	0.00	0.0	0.00	S : WSW : NW	NNW : Calm	2.0	0.09	237	10, r, hy.-r	10, r, m	10, alt.-cu, m
16	0.8	0.07	0.7	0.06	Calm : S	SSW : SW	1.8	0.15	258	10	10, s, slt.-sh	10
17	10.8	0.94	10.6	0.92	SW	SW : NW	2.3	0.17	328	10	10, oc.-slt.-r	10, slt.-r, r, m.-r
18	7.3	0.64	6.6	0.57	SW : S	S : SW	7.9	0.40	392	1, d	2	7, ci.-s.-cu
19	0.0	0.00	0.0	0.00	SW	SW : S : SSW	13.0	0.47	446	3 [r, st.-w, w	8 [hy.-r	9, th.-cl, ci.-s, ci.-
20	11.3	0.94	11.2	0.93	SSW	SSW : S	15.1	0.66	409	10, fq.-r, oc.-hy.-	10, fq.-r, oc.-	8, slt.-r, sh, so.-ha
21	10.0	0.83	9.8	0.81	S : SSW	SSW : S	3.0	0.15	308	1, d	2	p.-cl, s, ci.-s, so.-ha
22	1.6	0.13	1.1	0.09	S : SSW	SSW : SE : S	2.0	0.10	254	2	10, r	7, s, alt.-cu, r
23	3.1	0.26	3.0	0.25	NW : WSW : SW	SSW : S	3.2	0.26	358	9	9, m	p.-cl, th.-cl, alt.-cu, ci.-cu, ci
24	11.3	0.94	10.6	0.88	SSW : SW	SW : SSW	3.9	0.68	496	5, sh	9, m.-r	v.-cl, fr.-cu, ci, [sh, w
25	12.0	1.00	12.0	1.00	SSW : SW	SSW : S	2.0	0.21	311	5, d	1, d	p.-cl, alt.-cu, ci.-cu
26	0.0	0.00	0.0	0.00	S	S : SSW : SW	5.9	0.43	393	1, hy.-d	9, s, ci.-s, oc.-so.-ha, sh	10, r, slt.-r
27	0.0	0.00	0.0	0.00	SE : ENE	ENE : NE : N	3.8	0.21	297	10, r	10, r	10, fq.-r, slt.-r, w
28	12.4	0.99	12.4	0.99	N : NNW	NW : WSW	5.0	0.44	383	10, sh, slt.-shs	10	8, cu, fr.-cu
29	1.5	0.12	1.0	0.08	SW	SW : SSW	2.7	0.14	301	p.-cl, m, d	7, m	10, s, alt.-s, s.-cu, m
30	12.4	0.99	12.4	0.99	SSW : SW	SW : SSW	4.3	0.27	380	9	8	10, slt.-shs, r, glm
31	4.1	0.33	3.5	0.28	SSW : S	S : Calm	2.8	0.15	279	0, d	1	6, s.-cu, sh, slt.-sh
Means	6.4	0.55	6.1	0.53	...	...	...	0.21	292			
Number of Column for Reference.	20	21	22	23	24	25	26	27	28	29		30

The mean *Temperature of Evaporation* for the month was 48°·9, being 1°·0 higher than
 The mean *Temperature of the Dew Point* for the month was 46°·1, being 0°·5 higher than
 The mean *Degree of Humidity* for the month was 82·5, being 2·4 less than
 The mean *Elastic Force of Vapour* for the month was 0ⁱⁿ·314, being 0ⁱⁿ·006 greater than
 the average for the 65 years, 1841-1905.

The mean amount of *Cloud* for the month (a clear sky being represented by 0 and an overcast sky by 10) was 6·5.
 The mean proportion of *Sunshine* for the month (constant sunshine being represented by 1) was 0·326. The maximum daily amount of *Sunshine* was 9·9 hours on October 4.
 The highest reading of the *Solar Radiation Thermometer* was 123°·1 on October 3; and the lowest reading of the *Terrestrial Radiation Thermometer* was 20°·5 on October 14.
 The *Proportions of Wind* referred to the cardinal points were N. 3, E. 4, S. 14, W. 7. Three days were calm.
 The *Greatest Pressure of the Wind* in the month was 15·1 lbs. on the square foot on October 20. The mean daily *Horizontal Movement of the Air* for the month was 292 miles; the greatest daily value was 496 miles on October 24; and the least daily value was 153 miles on October 10.
Rain (0ⁱⁿ·005 or over) fell on 19 days in the month, amounting to 3ⁱⁿ·451, as measured by gauge No. 6 partly sunk below the ground; being 0ⁱⁿ·669 greater than the average fall for the 65 years, 1841-1905.

MONTH and DAY 1928.	BARO-METER. Mean of 24 Hourly Values (corrected and reduced to 32° Fahrenheit).	TEMPERATURE.							Difference between the Air Temperature and Dew Point Temperature.			Degree of Humidity (Saturation = 100).	TEMPERATURE.			Rain collected in Gauge No. 6, whose receiving surface is 5 inches above the Ground.	Daily Duration of Sunshine.	Sun above Horizon.
		Of the Air.					Of Evaporation.	Of the Dew Point.	Mean.	Greatest.	Least.		Of Radiation.		Of the Earth 4 ft. below the Surface of the Soil.			
		Highest.	Lowest.	Daily Range.	Mean of 24 Hourly Values.	Excess above Average of 65 Years.	Mean of 24 Hourly Values.	Deducted Mean Daily Value.					Highest in Sun's Rays.	Lowest on the Grass.				
Nov. 1	29.673	54.1	44.7	9.4	49.6	+ 2.6	47.0	44.1	5.5	11.4	1.0	81	72.6	33.7	52.3	0.000	0.0	9.6
2	29.613	48.6	42.6	6.0	46.2	- 0.6	44.0	41.3	4.9	9.3	2.0	83	59.0	40.0	52.0	0.020	0.0	9.6
3	29.613	49.4	39.7	9.7	44.5	- 2.1	42.6	40.1	4.4	8.0	0.8	85	72.2	32.2	52.0	0.000	2.6	9.5
4	29.597	57.0	35.8	21.2	44.4	- 2.0	42.7	40.5	3.9	12.8	0.0	86	90.6	23.1	52.0	0.010	3.6	9.4
5	29.605	52.5	33.3	19.2	41.1	- 5.0	40.2	39.0	2.1	10.7	0.0	92	88.7	21.1	51.9	0.002*	5.4	9.4
6	29.635	45.4	33.6	11.8	39.4	- 6.4	39.3	39.1	0.3	1.2	0.0	99	52.0	25.3	51.5	0.000	0.0	9.3
7	29.566	52.9	38.3	14.6	43.9	- 1.5	42.5	40.8	3.1	8.9	0.3	88	79.4	32.9	51.3	0.000	2.1	9.3
8	29.658	49.1	40.8	8.3	44.6	- 0.4	42.4	39.4	5.2	9.9	2.6	82	61.0	33.9	51.1	0.001	0.1	9.2
9	29.955	49.6	33.0	16.6	42.9	- 1.7	40.1	35.9	7.0	15.5	0.8	76	83.0	24.2	51.0	0.000	6.1	9.2
10	29.949	52.7	27.5	25.2	40.1	- 4.2	38.5	36.2	3.9	11.4	0.0	86	78.4	19.0	50.9	0.075	2.0	9.1
11	29.796	56.4	50.0	6.4	53.6	+ 9.6	52.4	51.2	2.4	3.2	0.4	92	65.9	44.6	50.8	0.197	0.0	9.1
12	29.735	58.9	54.8	4.1	56.7	+ 13.0	55.4	54.4	2.3	3.8	1.0	91	64.7	52.8	50.6	0.031	0.0	9.0
13	29.755	60.1	49.4	10.7	54.9	+ 11.4	52.9	50.9	4.0	9.6	2.8	87	79.8	42.6	50.6	0.012	2.9	8.9
14	29.747	55.0	41.7	13.3	48.9	+ 5.6	46.2	43.2	5.7	11.9	0.7	80	83.7	29.1	50.6	0.055	5.7	8.9
15	29.166	55.9	47.4	8.5	51.9	+ 8.8	50.0	48.1	3.8	5.9	2.2	87	71.8	42.5	50.8	0.218	0.4	8.8
16	28.925	59.0	43.8	15.2	50.5	+ 7.7	47.6	44.3	6.2	11.5	0.6	80	82.0	38.2	50.8	0.255	1.2	8.8
17	29.168	51.9	43.2	8.7	47.1	+ 4.5	43.8	39.6	7.5	13.8	2.0	75	72.8	35.0	50.7	0.013	5.0	8.7
18	29.681	54.0	41.4	12.6	46.9	+ 4.5	44.5	41.6	5.3	10.7	3.6	81	79.7	32.7	50.6	0.000	...	...
19	29.593	58.2	46.0	12.2	51.9	+ 9.6	49.4	46.6	5.3	8.8	2.4	82	81.3	36.8	50.7	0.030	0.3	8.6
20	29.932	57.5	44.9	12.6	49.9	+ 7.7	46.6	42.7	7.2	13.1	2.5	76	87.5	34.5	50.6	0.000	4.2	8.6
21	29.843	57.4	47.1	10.3	53.9	+ 11.8	52.6	51.4	2.5	5.6	1.5	91	63.6	39.8	50.5	0.210	0.0	8.5
22	29.639	56.0	50.2	5.8	52.6	+ 10.5	50.3	48.0	4.6	7.5	2.0	84	57.3	45.7	50.4	0.098	0.0	8.5
23	29.208	57.8	45.3	12.5	51.2	+ 9.2	48.1	44.7	6.5	14.5	1.4	78	57.0	38.7	50.4	0.194	0.0	8.5
24	29.265	51.1	45.1	6.0	47.9	+ 5.9	43.8	38.3	9.6	13.0	8.0	69	66.1	38.1	50.5	0.000	0.4	8.4
25	29.046	55.6	45.0	10.6	49.4	+ 7.5	46.3	42.6	6.8	13.8	1.7	77	56.8	38.4	50.5	0.308	0.4	8.4
26	29.375	49.3	38.2	11.1	44.5	+ 2.7	40.7	35.0	9.5	13.7	3.7	69	64.4	29.3	50.3	0.000	3.3	8.3
27	29.539	43.2	37.5	5.7	40.7	- 1.0	38.0	33.7	7.0	8.5	3.3	76	55.4	29.8	50.1	0.000	0.3	8.3
28	30.027	41.6	35.9	5.7	38.1	- 3.4	34.7	29.0	9.1	11.2	6.4	68	49.0	27.8	50.0	0.000	0.2	8.2
29	30.126	46.3	32.9	13.4	39.4	- 1.8	37.6	34.9	4.5	7.3	0.0	84	56.3	26.0	49.8	0.025	0.0	8.2
30	30.042	53.5	46.3	7.2	49.8	+ 8.8	48.4	46.8	3.0	6.4	1.0	90	61.0	42.1	49.7	0.000	0.0	8.1
Means	29.616	53.0	41.8	11.2	47.2	+ 3.7	45.0	42.1	5.1	9.8	1.8	82.5	69.8	34.3	50.8	1.754	1.6	8.8
Number of Column for Reference.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	18	19

The results apply to the civil day, except Columns 20 to 23 (Record of the Night Sky), which relate to the period extending from dusk on the civil day named, to dawn of the following day.

The mean reading of the Barometer (Column 1) and the mean temperatures of the Air and Evaporation (Columns 5 and 7) are deduced from the photographic records. The average temperature (Column 6) is deduced from the 65 years' observations, 1841-1905. The temperature of the Dew Point (Column 8) and the Degree of Humidity (Column 12) are deduced from the corresponding temperatures of the Air and Evaporation by means of Hygrometrical Tables supplied by the Air Ministry. The mean difference between the Air and Dew Point Temperatures (Column 9) is the difference between the numbers in Columns 5 and 8, and the Greatest and Least Differences (Columns 10 and 11) are deduced from the 24 hourly photographic measures of the Dry-bulb and Wet-bulb Thermometers. The readings in Column 15 are taken daily at noon.

The values given in Columns 2, 3, 4, 13, and 14 are derived from eye-readings of self-registering thermometers.

*Rainfall (Column 16). The amount entered on November 5 is derived from fog.

The mean reading of the Barometer for the month was 29.616, being 0.149 lower than the average for the 65 years, 1841-1905.

TEMPERATURE OF THE AIR.

The highest in the month was 60.1 on November 13; the lowest in the month was 27.5 on November 8; and the range was 32.6. The mean of all the highest daily readings in the month was 53.0, being 4.0 higher than the average for the 65 years, 1841-1905. The mean of all the lowest daily readings in the month was 41.8, being 3.9 higher than the average for the 65 years, 1841-1905. The mean of the daily ranges was 11.2, being 0.1 greater than the average for the 65 years, 1841-1905. The mean for the month was 47.2, being 3.7 higher than the average for the 65 years, 1841-1905.

MONTH and DAY, 1928.	RECORD OF THE NIGHT SKY.				WIND AS DEDUCED FROM SELF-REGISTERING ANEMOMETERS.							CLOUDS AND WEATHER.				
	POLARIS.		URSÆ MINORIS.		OSLER'S.					ROBINSON'S.						
	Duration.	Fraction of Total Exposure.	Duration.	Fraction of Total Exposure.	General Direction.		Pressure on the Square Foot.			Greatest.	Mean of 24 Hourly Measures.	Horizontal Movement of the Air.	A.M.		P.M.	
					A.M.	P.M.	lbs.	lbs.	miles.							
Nov. 1	0.0	0.00	0.0	0.00	Calm : NNE	NNE : N	4.2	0.23	336	10, lu.-ha, d	: 10, m	: 10, s.-cu, alt.-s	10, s.-cu, n	: 10	: 10, m.-r-shs	
2	1.7	0.13	1.1	0.08	N	N : NNE	2.3	0.20	334	10, sh	: 10, sh	: 10, s.-cu, alt.-s, sh, fq.-m.-r	10	: 10, m.-r	: 10, m.-r	
3	1.1	0.08	0.8	0.06	NNE	NNE : NE	0.6	0.05	216	9, lu.-ha, d	: 9, m	: 8, ci.-cu, fr.-cu	9, s	: 9	: 9	
4	10.1	0.81	9.8	0.78	NE : Calm	SSE : Calm	0.3	0.01	133	10	: 10, r, slt.-f	: p.-cl	6	: 0, m, slt.-f	: 0, ho.-fr, slt.-m	
5	3.5	0.28	1.4	0.11	Calm	Calm	0.0	0.00	96	0, f, ho.-fr	: f	: 0, f, m	0	: 0	: 3, f, ho.-fr	
6	0.0	0.00	0.0	0.00	Calm	ENE	0.8	0.03	156	10, tk.-f, ho.-fr	: 10, tk.-f	: 10, tk.-f	10, tk.-f, f, slt.-f	: 10, slt.-f, f	: 10, f, slt.-m.-r	
7	10.7	0.86	10.0	0.80	NNE : NE	ENE : NE	3.2	0.18	274	10, f	: 10, f, d	: 10, oc.-th.-cl, alt.-cu	7, ci.-cu, s.-cu, fr.-cu	: 1	: 2, d	
8	9.8	0.79	9.1	0.73	NNE	NE : NNE	3.7	0.48	448	1, d	: 7, d, oc.-m.-r	: 10, s.-cu, alt.-cu, w	9, alt.-cu, s.-cu, w	: 2, w, m.-r	: p.-cl	
9	9.9	0.79	9.1	0.73	NNE	NNE : Calm	3.0	0.26	317	v.-cl, slt.-sh	: 1	: 3, s.-cu, fr.-cu	2, s.-cu	: 6, m, ho.-fr	: 0, m, ho.-fr	
10	0.0	0.00	0.0	0.00	Calm : SSW	SSW : SW : WSW	3.3	0.23	278	0, m, tk.-f, ho.-fr	: tk.-f	: 9, th.-cl, alt.-cu, slt.-f	10, s, slt.-r	: 10, r, m.-r	: 10, n, s	
11	0.0	0.00	0.0	0.00	WSW : SW	SSW : SW	2.8	0.14	298	10, m, sh	: 10, m	: 10, s, m	10, s, slt.-m, slt.-r	: 10, fq.-r		
12	0.0	0.00	0.0	0.00	SW	SW	3.9	0.60	442	10, r	: 10	: 10	10	: 10, w, oc.-m.-r	: 10	
13	2.9	0.22	2.8	0.21	SW : SSW	SW	3.0	0.39	349	10	: 10	: 9	3	: 8	: 10, slt.-sh, r	
14	1.6	0.12	1.3	0.10	SW	SW : SSW	5.6	0.24	318	6, r	: 1, d	: 6, th.-cl, ci.-cu, fr.-cu	9, alt.-s, alt.-cu, s.-cu	: 9	: 10, r, oc.-r, w	
15	9.8	0.76	8.3	0.64	SSW	SW	14.2	1.19	544	10, oc.-r, w	: 10, hy.-sh, oc.-r, w	: 10, alt.-s, n, [oc.-r, w	10, s.-cu, slt.-sh	: v.-cl	: p.-cl	
16	5.6	0.43	4.7	0.37	SW : S	SW : WSW	47.0	3.84	714	v.-cl	: 10, fr.-s, alt.-cu, r, w		v.-cl, oc.-slt.-r	: 9, r, oc.-slt.-r	: 7, g, w	
17	13.5	1.00	13.5	1.00	WSW : WNW	W : WSW	3.7	0.84	504	8, w	: 9, sh	: 7, th.-cl, ci.-cu, alt.-cu, w	6, cu, fr.-cu, ci.-cu, w	: 0, w	: 0, w	
18	3.9	0.29	3.3	0.24	WSW	WSW : SW : SSW	2.0	0.30	380	0, d	: 2, d	: p.-cl, ci.-cu, alt.-cu, h [alt.-cu, ci, w	7, oc.-th.-cl	: 10	: 8, d	
19	11.3	0.84	11.3	0.84	SSW	SSW : SW	16.1	1.15	534	6, m.-r, r	: 10, sh, w	: 10, alt.-s,	10, s, alt.-s, shs, w	: 10, sh, st.-w, w	: 1, w	
20	2.8	0.21	1.6	0.12	SW : SSW	SW : SSW : S	3.2	0.37	337	0, d	: 2, th.-cl	: 8, th.-cl, ci.-cu, alt.-cu	10, ci, alt.-cu	: 9	: 8, d	
21	3.9	0.29	2.7	0.20	SSE : S	S : SSW	7.0	1.04	462	8, sh	: 10, shs	: 10, r, oc.-m.-r, w [m.-r, fq.-slt.-r	10, oc.-m.-r, r, w	: 10, r, w	: 9, m.-r, w	
22	3.3	0.24	2.5	0.19	SW	SW : WSW	11.9	1.71	579	9, slt.-sh, sh, w	: 9, w	: 10, s, w, slt.-	10, fq.-slt.-r, w	: 10, fq.-slt.-r, w	: 8, sh, w	
23	10.2	0.75	9.6	0.71	WSW : SW : SSW	SW : WSW	22.3	3.65	752	10	: 10, r	: 10, r, oc.-m.-r, w, st.-w	9, s.-cu, oc.-m.-r, st.-w, g	: v.-cl, sh, g	: p.-cl, g, st.-w	
24	3.3	0.25	3.0	0.22	WSW : W	W : WSW	16.1	3.96	811	8, st.-w	: 8, g	: 8, fr.-cu, st.-w	8, fr.-cu, st.-w	: 9, w, lu.-ha		
25	8.1	0.60	7.2	0.54	SW : WSW	WNW	23.5	3.63	821	10, r	: 10, r, hy.-r, w, st.-w	: 10, oc.-m.-r, st.-w	v.-cl, sq.-r, st.-g	: v.-cl, g, st.-w	: v.-cl, st.-w	
26	6.8	0.51	6.3	0.46	WNW	WNW : WSW	7.0	1.43	557	v.-cl, w	: v.-cl, w	: v.-cl, fr.-cu, s.-cu, alt.-cu	v.-cl, fr.-cu, w	: 0, m	: 3, ci.-cu, m, d	
27	12.6	0.94	12.6	0.94	WNW : NW	WNW : NW	6.0	1.00	509	8, m	: 3	: 8, fr.-cu, s.-cu, alt.-cu, w	8, ci.-cu, alt.-cu, s	: 6, m	: 0, d, m	
28	10.1	0.75	8.8	0.66	NW : NNW	NNW	2.6	0.32	359	0, ho.-fr, slt.-m	: 0, slt.-ho.-fr	: 5, s.-cu, alt.-cu	p.-cl, ci.-cu, alt.-cu	: 1	: 7, th.-cl, lu.-ha	
29	0.0	0.00	0.0	0.00	NNW : NW : SW	SW : WSW	1.6	0.05	233	8, lu.-ha, ho.-fr, m	: 9, m, ho.-fr	: 10, alt.-cu, fr.-s, m	9, m	: 10, c.-m.-r	: 10, m	
30	0.5	0.04	0.2	0.01	WSW : NW : NNW	NNW : NW	1.4	0.14	278	10, m	: 10, m	: 10, s.-cu, fr.-s, m	8, s.-cu, alt.-cu	: 10	: 10, d	
Means	5.2	0.41	4.7	0.36	...	...	...	0.92	412						
Number of Column for Reference.	20	21	22	23	24	25	26	27	28	29			30			

The mean Temperature of Evaporation for the month was 45°·0, being 3°·1 higher than the average for the 65 years, 1841-1905.
 The mean Temperature of the Dew Point for the month was 42°·1, being 2°·4 higher than
 The mean Degree of Humidity for the month was 82·5, being 4·1 less than
 The mean Elastic Force of Vapour for the month was 0·270, being 0·024 greater than
 The mean amount of Cloud for the month (a clear sky being represented by 0 and an overcast sky by 10) was 7·6.
 The mean proportion of Sunshine for the month (constant sunshine being represented by 1) was 0·180. The maximum daily amount of Sunshine was 6·1 hours on November 9.
 The highest reading of the Solar Radiation Thermometer was 90°·6 on November 4; and the lowest reading of the Terrestrial Radiation Thermometer was 19°·0 on November 10.
 The Proportions of Wind referred to the cardinal points were N. 7, E. 2, S. 8, W. 11. Two days were calm.
 The Greatest Pressure of the Wind in the month was 47·0 lbs. on the square foot on November 16. The mean daily Horizontal Movement of the Air for the month was 412 miles; the greatest daily value was 821 miles on November 25; and the least daily value was 96 miles on November 5.
 Rain (0·005 or over) fell on 16 days in the month, amounting to 1·754, as measured by gauge No. 6 partly sunk below the ground; being 0·466 less than the average fall for the 65 years, 1841-1905.

MONTH and DAY, 1928.	BARO-METER. Mean of 24 Hourly Values (corrected and reduced to 32° Fahrenheit).	TEMPERATURE.							Difference between the Air Temperature and Dew Point Temperature.			Degree of Humidity (Saturation = 100).	TEMPERATURE.			Rain collected in Gauge No. 6, whose receiving surface is 9 inches above the Ground.	Daily Duration of Sunshine.	Sun above Horizon.
		Of the Air.					Of Evaporation.	Of the Dew Point.	Mean.	Greatest.	Least.		Of Radiation.		Of the Earth 4 ft. below the Surface of the Soil.			
		Highest.	Lowest.	Daily Range.	Mean of 24 Hourly Values.	Excess above Average of 65 Years.	Mean of 24 Hourly Values.	Deducted Mean Daily Value.					Highest in Sun's Rays.	Lowest on the Grass.				
Dec. 1	30·158	52·9	45·4	7·5	50·1	+ 9·2	47·8	45·2	4·9	9·7	4·1	84	59·0	37·6	49·5	0·000	0·0	8·1
2	30·194	46·6	39·5	7·1	42·8	+ 1·9	40·7	37·5	5·3	10·8	2·4	82	46·0	34·1	49·1	0·000	0·0	8·1
3	30·155	48·3	42·4	5·9	45·1	+ 4·0	43·9	42·4	2·7	5·5	1·2	91	49·9	38·7	49·2	0·086	0·0	8·1
4	30·256	45·2	35·0	10·2	40·3	- 1·0	39·5	38·2	2·1	4·4	0·3	93	61·0	26·0	49·1	0·000	0·6	8·0
5	30·164	49·6	31·4	18·2	42·7	+ 1·2	41·4	39·6	3·1	6·9	0·0	89	54·1	25·7	49·1	0·000	0·2	8·0
6	29·923	50·9	28·8	22·1	41·2	- 0·3	39·8	38·1	3·1	9·2	0·4	88	57·7	24·2	49·0	0·069	0·0	8·0
7	29·819	42·7	28·8	13·9	37·5	- 3·8	35·3	31·7	5·8	10·3	1·1	79	61·5	17·4	48·9	0·000	6·0	8·0
8	29·899	36·4	26·6	9·8	30·3	-10·7	29·4	27·6	2·7	8·6	0·0	89	43·1	15·3	48·5	0·001*	0·8	7·9
9	29·824	36·3	24·1	12·2	30·1	-10·5	28·8	26·0	4·1	8·8	0·0	84	47·0	13·9	48·2	0·000	5·2	7·9
10	29·317	37·6	33·2	4·4	35·3	- 5·1	32·9	28·8	6·5	10·3	3·6	76	60·8	29·4	48·0	0·000	4·3	7·9
11	29·089	38·5	34·7	3·8	36·1	- 4·1	34·8	32·5	3·6	5·1	1·6	87	43·0	32·3	47·7	0·018	0·0	7·9
12	29·333	37·4	33·4	4·0	36·1	- 4·2	35·4	34·2	1·9	3·6	1·1	93	39·0	31·3	47·4	0·268	0·0	7·8
13	29·701	39·7	32·8	6·9	37·2	- 3·3	35·8	33·6	3·6	6·4	2·1	87	45·6	27·2	47·0	0·010	0·0	7·8
14	29·784	34·7	27·0	7·7	30·9	- 9·8	30·0	28·1	2·8	3·8	0·0	90	44·4	17·7	46·9	0·000	0·1	7·8
15	30·066	31·0	23·9	7·1	28·3	-12·5	27·9	26·7	1·6	2·8	0·0	93	35·3	17·0	46·6	0·000	0·0	7·8
16	29·988	47·3	28·5	18·8	38·6	- 2·1	37·4	35·5	3·1	9·8	0·0	89	46·2	26·9	46·4	0·100	0·0	7·8
17	30·020	48·0	39·4	8·6	43·8	+ 3·4	42·0	39·6	4·2	7·8	1·2	85	54·8	31·6	46·3	0·058	2·1	7·8
18	30·302	40·9	33·0	7·9	36·0	- 4·0	35·6	34·9	1·1	6·6	0·0	96	37·7	22·7	46·0	0·001*	0·0	7·8
19	30·227	47·1	32·4	14·7	40·1	+ 0·6	39·4	38·2	1·9	2·6	0·6	94	57·0	32·0	46·0	0·036	0·1	7·8
20	29·952	47·0	38·9	8·1	42·9	+ 3·9	41·5	39·5	3·4	7·4	1·0	88	48·0	32·1	46·0	0·133	0·0	7·8
21	30·096	39·2	32·0	7·2	35·7	- 3·0	34·5	32·4	3·3	5·8	0·3	88	43·1	24·8	45·9	0·000	0·3	7·8
22	30·074	46·7	30·2	16·5	40·6	+ 2·2	39·5	37·9	2·7	5·5	1·0	90	49·2	22·0	45·9	0·067	0·0	7·8
23	30·151	43·9	34·6	9·3	40·1	+ 1·9	39·2	37·7	2·4	5·2	0·0	92	51·7	28·1	45·8	0·002*	0·5	7·8
24	29·980	50·7	37·7	13·0	45·9	+ 7·7	44·9	43·7	2·2	4·0	1·1	92	51·0	32·7	45·7	0·183	0·0	7·8
25	29·952	50·0	37·0	13·0	43·8	+ 5·4	41·8	39·1	4·7	10·4	1·8	84	55·7	29·4	45·6	0·020	1·3	7·8
26	29·722	54·7	37·1	17·6	49·0	+10·4	47·6	46·0	3·0	5·7	1·0	89	53·0	30·5	45·8	0·251	0·0	7·8
27	29·954	42·2	34·1	8·1	38·6	- 0·2	37·1	34·9	3·7	6·1	2·4	86	51·9	28·1	45·6	0·191	0·8	7·8
28	29·630	40·9	36·0	4·9	38·8	- 0·1	38·0	36·7	2·1	2·9	1·1	92	42·0	33·4	45·6	0·472	0·0	7·8
29	29·470	44·2	34·1	10·1	39·8	+ 0·8	38·1	35·5	4·3	9·7	0·8	85	63·0	25·2	45·5	0·046	5·4	7·8
30	29·015	38·1	32·6	5·5	35·7	- 3·2	34·9	33·5	2·2	4·3	0·8	92	38·1	27·0	45·3	0·389	0·0	7·8
31	29·426	38·8	32·9	5·9	36·5	- 2·2	35·3	33·1	3·4	8·4	0·8	88	43·0	29·5	45·3	0·023	0·0	7·8
Means	29·859	43·5	33·5	10·0	39·0	- 0·9	37·7	35·8	3·3	6·7	1·0	88·2	49·4	27·2	47·0	2·424	0·9	7·9
Number of Column for Reference.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	18	19

The results apply to the civil day, except Columns 20 to 23 (Record of the Night Sky), which relate to the period extending from dusk on the civil day named, to dawn of the following day.

The mean reading of the Barometer (Column 1) and the mean temperatures of the Air and Evaporation (Columns 5 and 7) are deduced from the photographic records. The average temperature (Column 6) is deduced from the 65 years' observations, 1841-1905. The temperature of the Dew Point (Column 8) and the Degree of Humidity (Column 12) are deduced from the corresponding temperatures of the Air and Evaporation by means of Hygrometrical Tables supplied by the Air Ministry. The mean difference between the Air and Dew Point Temperatures (Column 9) is the difference between the numbers in Columns 5 and 8, and the Greatest and Least Differences (Columns 10 and 11) are deduced from the 24 hourly photographic measures of the Dry-bulb and Wet-bulb Thermometers. The readings in Column 15 are taken daily at noon.

The values given in Columns 2, 3, 4, 13, and 14 are derived from eye-readings of self-registering thermometers.

*Rainfall (Column 16). The amounts entered on December 8, 18 and 23 are derived from dew, frost or fog.

The mean reading of the Barometer for the month was 29·859, being 0·067 higher than the average for the 65 years, 1841-1905.

TEMPERATURE OF THE AIR.

The highest in the month was 54·7 on December 26; the lowest in the month was 23·9 on December 15; and the range was 30·8. The mean of all the highest daily readings in the month was 43·5, being 0·7 lower than the average for the 65 years, 1841-1905. The mean of all the lowest daily readings in the month was 33·5, being 1·5 lower than the average for the 65 years, 1841-1905. The mean of the daily ranges was 10·0, being 0·8 greater than the average for the 65 years, 1841-1905. The mean for the month was 39·0, being 0·9 lower than the average for the 65 years, 1841-1905.

MONTH and DAY, 1928.	RECORD OF THE NIGHT SKY.				WIND AS DEDUCED FROM SELF-REGISTERING ANEMOMETERS.							CLOUDS AND WEATHER.			
	POLARIS.		δURSÆ MINORIS.		OSLER'S.					ROBINSON'S.		A.M.		P.M.	
	Duration.	Fraction of Total Exposure.	Duration.	Fraction of Total Exposure.	General Direction.		Pressure on the Square Foot.			Greatest.	Mean of 24 Hourly Measures.	Horizontal Movement of the Air.	A.M.	P.M.	
					A.M.	P.M.	lbs.	lbs.	miles.						
Dec. 1	1 7 0 12	1 6 0 12	NW : NNW	NNW : NNE	2 7 0 25	3 12	10	10, s, fr-s	10, s, fr-s, slt-shs : 9	10, s, cu, alt.-cu, s, d					
2	0 0 0 00	0 0 0 00	NNW : WSW	W : WSW	1 0 0 06	2 12	10	9 : 9, s.-cu, alt.-cu, slt.-f, f	10, s, slt.-f : 10, slt.-f	10, m					
3	4 6 0 33	2 9 0 21	WSW	NW : N : NNE	1 0 0 06	2 12	10, r, m	10, m : 10, s, m.-r, f	10, f, fq.-m.-r : 10	9, s					
4	6 2 0 45	3 9 0 28	NE : Calm	Calm : SSW	0 2 0 00	1 12	7, ho.-fr	8, f : 9, f, slt.-f	8, d, slt.-f : v.-cl, slt.-f, f	th.-cl, f, m, ho.-fr					
5	9 7 0 71	7 8 0 57	SW : WSW	WSW : NNW : SW	1 0 0 06	2 10	th.-cl, ho.-fr, m	10, ho.-fr, m : 10, s.-cu, s, m	p.-cl, s.-cu, alt.-cu, ci, m : 6, m, slt.-f	o, tk.-f, ho.-fr					
6	9 9 0 72	9 3 0 68	Calm : SSW	SSW : W : WSW	6 0 0 18	3 05	4, f, ho.-fr, slt.-f	9, m, slt.-f : 10, s, fr.-s, alt.-s	10, oc.-th.-cl, slt.-sh : 10, r	th.-cl					
7	12 4 0 90	9 6 0 70	SW : WSW	WSW : NW	2 6 0 23	3 33	0, ho.-fr	0, ho.-fr : 0, h	1, cu, h : 0, f	0, f, ho.-fr					
8	12 2 0 88	8 2 0 59	WSW : NW	NW : WNW : WSW	0 6 0 02	1 96	0, ho.-fr	0, slt.-f, ho.-fr : 1, ho.-fr, alt.-cu, h	2, cu, ci.-cu, ho.-fr, m : 0, slt.-f, ho.-fr, f	0, f, ho.-fr					
9	6 7 0 49	5 9 0 43	WSW : SW	SW : S	0 3 0 00	2 04	0, ho.-fr, slt.-f	0, ho.-fr, slt.-f : 0, h, f, ho.-fr	1, ci, ci.-cu, ho.-fr, slt.-f	p.-cl, slt.-f : 8, ho.-fr					
10	0 0 0 00	0 0 0 00	S : SSE	SSE : ESE	2 6 0 23	2 99	9, slt.-sh, ho.-fr	8, ho.-fr : 7, th.-cl, so.-ha	8, th.-cl, s.-cu, fr.-s : 10	10, s					
11	0 0 0 00	0 0 0 00	ESE : E	ESE : Calm	1 2 0 08	2 05	10	10, m : 10, s, m	10, s, slt.-r, m.-r, m : 10, s, m, slt.-sh						
12	0 0 0 00	0 0 0 00	NE	NE : NNE	1 8 0 11	2 92	10, slt.-m.-r, sl.-r, slt.-m	10, r, slt.-m	10, s, slt.-r, fq.-m.-r, slt.-m : 10, C.-m.-r, slt.-m						
13	4 3 0 31	3 6 0 26	NE : NNE	NE	1 9 0 14	2 91	10, sh, m.-r, slt.-m	10, m : 10, n, fr.-s, s.-cu	10, n, fr.-s, s.-cu : 10, s.-cu						
14	12 5 0 91	8 9 0 65	Calm	NNW	0 3 0 02	1 15	7, ho.-fr	7, f : 2, s, s.-cu, f	9, s.-cu, f : 2, f, ho.-fr	0, ho.-fr, f					
15	0 0 0 00	0 0 0 00	NNW : Calm : WSW	WSW : Calm	0 2 0 00	1 30	0, ho.-fr	2, f, ho.-fr : 10, s, f, ho.-fr	10, s, f, ho.-fr : 10, f, ho.-fr	tk.-f, ho.-fr					
16	2 5 0 18	2 1 0 15	Calm : SE : SSE	S : SSW	5 4 0 57	3 57	10, f, slt.-f	10 : 10, n, alt.-s, w	10, alt.-s, n, w : 10, n, m.-r, r	10, r, m.-r, sh					
17	7 9 0 57	3 4 0 24	SW : NNW : NW	NNW : NW	2 3 0 18	2 99	10, r	5 : 2, cu, alt.-cu, h	1, h : v.-cl, m	7, m, d					
18	0 0 0 00	0 0 0 00	NW : WSW : Calm	Calm	0 2 0 00	1 04	0, m, tk.-m, ho.-fr	8, f, tk.-f : 10, s, tk.-f, glm	10, tk.-f, glm : 10, tk.-f	10, tk.-f					
19	0 0 0 00	0 0 0 00	Calm	S : SSW	1 0 0 05	1 41	10, f, tk.-f	10, n, alt.-s, s.-cu, f, m	10, s.-cu, alt.-cu, m : 10, m.-r, m	10, m.-r, m					
20	5 1 0 37	4 7 0 33	SSW : SW : NW	NNW	2 0 0 17	2 62	9, m, slt.-m	10 : 10, m.-r, r, m, glm	10, n, s.-cu : 10, m.-r, sh	10					
21	3 8 0 27	3 4 0 24	NNW	Calm	0 8 0 04	1 48	6, ho.-fr	1, m, h, ho.-fr : 0, f, h, ho.-fr	0, f, tk.-h, ho.-fr : 10, f, ho.-fr	7, f, m, ho.-fr					
22	1 5 0 11	1 2 0 09	SSW	SSW : SW : WSW	1 8 0 13	2 71	p.-cl, m, ho.-fr	10, m : 10, n, s.-cu, oc.-m.-r	10, s, fr.-s, oc.-m.-r : 10, r, slt.-r	9					
23	5 8 0 42	3 0 0 21	NW : NNW	Calm : SSW : S	0 9 0 03	1 57	8	9, d, m : p.-cl, m, slt.-f, h	10, f : 10, oc.-th.-cl, f	7, th.-cl, f, slt.-f					
24	4 8 0 35	4 3 0 31	SSW	SSW	4 0 0 54	4 19	5	6 : 10, s, fr.-s, n, m.-r	10, n, m.-r : 10, tk.-m.-r, w	10, m.-r, r, w					
25	0 4 0 03	0 2 0 01	SW : SSW	SW : S : SSW	7 5 0 46	3 75	9, r	v.-cl, f, slt.-ho.-fr : 9, ci, alt.-cu, slt.-f	5, ci.-s, alt.-cu : 10	10, slt.-sh, w, st.-w					
26	11 8 0 84	9 3 0 66	SW : WSW	WNW : WSW	11 2 1 59	5 35	10, r, m.-r, st.-w	10, m.-r, st.-w, w : 10, r, m.-r, f, glm	10, m.-r, f : th.-cl, d	0, lu.-ha, d					
27	0 0 0 00	0 0 0 00	WSW : SW	Calm : E	0 7 0 05	1 96	th.-cl, lu.-ha, ho.-fr	2, lu.-ha, ho.-fr : th.-cl, oc.-so.-ha, slt.-f	th.-cl, d, slt.-f, oc.-so.-ha : 10, slt.-f	10, slt.-r, r, hy.-r					
28	3 7 0 26	3 5 0 25	E : ENE	Calm : SSE	6 6 0 30	2 73	10, hy.-r, r	10, r, slt.-r : 10, s, fr.-s	10, n, slt.-m.-r : 10, oc.-m.-r	10, m.-r					
29	4 7 0 34	4 3 0 31	SSE : SW : SSW	SW : SSW : S	3 1 0 25	3 37	10, r	0 : p.-cl, cu, alt.-cu, slt.-sh	3, cu, fr.-cu : 0	9, ho.-fr					
30	0 0 0 00	0 0 0 00	SSE : Calm : NW	W : WSW : NNE	2 0 0 14	2 54	10, r, hy.-r	10, s, n	10, m.-r, sh : 10, oc.-m.-r	10, sn					
31	3 0 0 22	2 7 0 19	NE : NNE	NNE : NE	7 0 0 91	5 12	10, sn, m.-r	10, slt.-r, w : 10, n, s, slt.-r, w	10, n, oc.-slt.-r, st.-w : 10, oc.-slt.-r, w	9, s.-cu, w					
Means	4 4 0 32	3 3 0 24	...	...	...	0 22	260					
Number of Column for Reference.	20	21	22	23	24	25	26	27	28	29	30				

The mean *Temperature of Evaporation* for the month was 37°·7, being 0°·8 lower than
 The mean *Temperature of the Dew Point* for the month was 35°·8, being 0°·6 lower than
 The mean *Degree of Humidity* for the month was 88·2, being 0·7 greater than
 The mean *Elastic Force of Vapour* for the month was 0·211, being 0·005 less than
 The mean amount of *Cloud* for the month (a clear sky being represented by 0 and an overcast sky by 10) was 8·0.
 The mean proportion of *Sunshine* for the month (constant sunshine being represented by 1) was 0·114. The maximum daily amount of *Sunshine* was 6·0 hours on December 7.
 The highest reading of the *Solar Radiation Thermometer* was 63°·0 on December 29; and the lowest reading of the *Terrestrial Radiation Thermometer* was 13°·9 on December 9.
 The *Proportions of Wind* referred to the cardinal points were N. 6, E. 3, S. 9, W. 8. Five days were calm.
 The *Greatest Pressure of the Wind* in the month was 11·2 lbs. on the square foot on December 26. The mean daily *Horizontal Movement of the Air* for the month was 260 miles; the greatest daily value was 535 miles on December 26; and the least daily value was 104 miles on December 18.
Rain (0·1 or over) fell on 18 days in the month, amounting to 2·424, as measured by gauge No. 6 partly sunk below the ground; being 0·597 greater than the average fall for the 65 years, 1841-1905.

HIGHEST and LOWEST READINGS of the BAROMETER, reduced to 32° FAHRENHEIT, as extracted from the PHOTOGRAPHIC RECORDS.

MAXIMA.		MINIMA.		MAXIMA.		MINIMA.		MAXIMA.		MINIMA.	
Greenwich Mean Time, 1928.	Reading.	Greenwich Mean Time, 1928.	Reading.	Greenwich Mean Time, 1928.	Reading.	Greenwich Mean Time, 1928.	Reading.	Greenwich Mean Time, 1928.	Reading.	Greenwich Mean Time, 1928.	Reading.
January.		January.		April.		April.		September.		September.	
d. h. m.	in.	d. h. m.	in.	d. h. m.	in.	d. h. m.	in.	d. h. m.	in.	d. h. m.	in.
1. 10. 25	30·204	2. 15. 0	29·580	17. 23. 20	29·913	19. 15. 10	29·648	7. 7. 20	30·075	6. 3. 0	29·659
4. 2. 10	30·085	4. 19. 50	29·751	20. 0. 0	29·749	20. 17. 15	29·671	13. 9. 10	30·176	8. 14. 35	29·819
5. 19. 50	30·064	6. 12. 45	29·422	23. 23. 5	30·116	27. 10. 55	29·412	15. 22. 0	30·191	14. 16. 30	30·084
7. 3. 10	29·985	8. 2. 0	29·561	28. 10. 30	29·734	30. 7. 55	29·482	22. 9. 45	30·151	18. 16. 10	29·977
8. 20. 0	29·782	9. 14. 20	29·647	May.		May.		26. 9. 0	29·928	24. 23. 40	29·612
10. 2. 55	29·787	10. 15. 30	29·474	May.		May.		26. 9. 0	29·928	28. 6. 40	29·420
12. 2. 15	29·958	13. 1. 30	29·409	1. 22. 0	29·715	3. 16. 30	29·438	October.		October.	
14. 2. 0	29·675	16. 5. 15	29·184	10. 7. 0	29·977	10. 19. 0	29·879	3. 9. 5	30·157	5. 16. 0	29·786
18. 10. 20	29·935	19. 0. 30	29·560	13. 7. 40	30·030	16. 7. 35	29·304	7. 1. 0	30·147	9. 15. 30	29·323
20. 7. 55	30·136	22. 5. 30	29·418	17. 0. 0	29·462	18. 3. 0	29·214	10. 20. 25	29·707	11. 9. 10	29·356
23. 8. 20	29·971	24. 12. 0	29·532	22. 9. 25	29·833	23. 17. 0	29·716	14. 0. 55	29·584	15. 4. 35	29·606
25. 11. 0	30·145	26. 18. 50	29·499	26. 2. 50	30·145	28. 11. 20	29·777	16. 8. 25	29·977	17. 13. 0	29·808
28. 0. 30	30·065	30. 1. 20	29·309	31. 0. 0	29·963	June.		18. 1. 28	29·929	18. 16. 10	29·413
31. 10. 5	29·726	February.		June.		June.		19. 10. 10	29·606	20. 1. 40	29·210
February.		February.		June.		June.		21. 21. 15	29·476	22. 21. 25	29·180
2. 10. 0	29·761	1. 3. 20	29·367	2. 22. 0	30·116	1. 5. 0	29·869	23. 12. 5	29·472	24. 0. 45	29·356
4. 7. 40	30·143	2. 18. 30	29·454	5. 9. 15	29·764	4. 16. 50	29·664	25. 10. 0	29·713	27. 2. 10	28·859
6. 23. 50	30·348	5. 11. 0	29·687	8. 18. 25	29·393	8. 5. 50	29·255	29. 7. 20	29·743	31. 5. 25	29·473
9. 11. 20	30·111	9. 3. 45	29·963	12. 9. 0	30·101	9. 6. 33	29·198	November.		November.	
10. 17. 5	29·214	10. 16. 26	29·133	15. 11. 0	30·042	14. 3. 7	29·434	1. 10. 15	29·697	2. 16. 0	29·576
12. 11. 25	29·517	11. 15. 45	29·025	21. 13. 0	29·914	19. 14. 55	29·536	6. 8. 25	29·659	7. 14. 0	29·537
15. 22. 0	29·861	13. 13. 0	29·142	24. 10. 15	29·954	22. 17. 0	29·848	9. 21. 50	30·053	12. 13. 47	29·718
20. 11. 10	30·382	16. 18. 35	29·667	28. 5. 10	30·062	26. 13. 40	29·290	14. 9. 0	29·820	15. 14. 5	29·014
22. 9. 45	30·372	21. 17. 0	30·255	July.		July.		16. 2. 15	29·180	16. 16. 45	28·639
25. 21. 30	30·192	24. 15. 0	30·062	1. 9. 57	29·969	3. 15. 33	29·775	18. 19. 5	29·761	19. 18. 25	29·433
March.		March.		4. 13. 20	29·926	6. 2. 15	29·613	20. 20. 10	30·058	22. 0. 50	29·645
4. 23. 30	29·958	6. 5. 20	29·774	7. 23. 40	30·066	9. 4. 0	29·902	22. 9. 0	29·764	23. 15. 48	28·847
10. 21. 35	29·888	12. 5. 0	29·734	11. 8. 35	30·107	12. 17. 40	29·984	24. 20. 40	29·470	25. 12. 0	28·825
16. 8. 55	30·166	18. 3. 20	29·686	14. 8. 0	30·136	15. 16. 0	29·965	26. 17. 30	29·474	27. 1. 30	29·392
18. 20. 0	29·816	21. 22. 0	29·152	17. 7. 50	30·285	28. 4. 45	29·408	29. 4. 35	30·203	30. 4. 0	29·989
22. 12. 0	29·238	23. 7. 40	29·082	30. 11. 50	29·741	31. 4. 0	29·653	December.		December.	
26. 20. 30	29·698	28. 15. 10	29·335	August.		August.		1. 22. 50	30·248	3. 4. 0	30·092
29. 0. 5	29·432	30. 8. 5	28·777	2. 10. 55	30·027	4. 6. 0	29·699	4. 9. 20	30·290	6. 16. 0	29·756
April.		April.		6. 11. 0	30·090	8. 0. 55	29·764	8. 21. 0	29·932	11. 5. 50	29·051
2. 19. 45	29·807	4. 16. 20	29·350	9. 8. 20	30·015	12. 4. 15	29·442	15. 23. 20	30·184	16. 21. 50	29·774
6. 21. 50	29·794	8. 3. 30	29·278	17. 20. 50	29·993	20. 2. 3	29·412	18. 20. 0	30·339	20. 13. 0	29·903
9. 10. 15	29·534	10. 11. 25	29·242	23. 9. 5	29·756	24. 16. 0	29·476	21. 20. 50	30·175	22. 18. 0	29·997
13. 20. 10	29·675	15. 2. 40	29·414	25. 23. 50	29·749	26. 22. 10	29·379	23. 14. 50	30·208	25. 0. 10	29·801
15. 13. 13	29·518	16. 4. 20	29·362	31. 9. 40	30·084	August.		25. 10. 40	30·083	26. 4. 50	29·627
April.		April.		August.		August.		27. 10. 35	30·028	28. 5. 15	29·567
April.		April.		August.		August.		28. 17. 10	29·646	30. 15. 50	28·935

The readings in the above table are accurate, but the times are occasionally liable to uncertainty, as the barometer will sometimes remain at its extreme reading without sensible change for a considerable interval of time. In such cases the time given is the middle of the stationary period.

The time is Greenwich Mean Time.

The height of the barometer cistern above mean sea level is 152 feet; no correction has been applied to the readings to reduce to sea level.

HIGHEST and LOWEST READINGS of the BAROMETER in each MONTH for the YEAR 1928.

	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.
	in.	in.	in.	in.	in.	in.	in.	in.	in.	in.	in.	in.
Highest	30·204	30·382	30·166	30·116	30·145	30·116	30·285	30·090	30·191	30·157	30·203	30·339
Lowest	29·184	29·025	28·777	29·242	29·214	29·198	29·408	29·379	29·420	28·859	28·639	28·935
Range	1·020	1·357	1·389	0·874	0·931	0·918	0·877	0·711	0·771	1·298	1·564	1·404

The highest reading in the year was 30ⁱⁿ·382.

The lowest reading in the year was 28ⁱⁿ·639.

The range of reading in the year was 1ⁱⁿ·743.

MONTHLY RESULTS OF METEOROLOGICAL ELEMENTS for the YEAR 1928.

MONTH, 1928.	Mean Reading of the Barometer.	TEMPERATURE OF THE AIR.								Mean Temperature of Evaporation.	Mean Temperature of the Dew Point.	Mean Degree of Humidity. (Saturation = 100.)
		Highest.	Lowest.	Range in the Month.	Mean of all the Highest.	Mean of all the Lowest.	Mean of the Daily Ranges.	Monthly Mean.	Excess of Mean above the Average of 65 years.			
January	in. 29·730	° 55·9	° 27·5	° 28·4	° 47·4	° 36·1	° 11·3	° 42·1	° +3·5	° 40·3	° 37·7	° 84·5
February.....	29·918	57·1	28·2	28·9	50·7	36·6	14·1	43·3	+3·8	40·8	37·2	79·2
March	29·630	68·0	24·8	43·2	52·2	37·4	14·7	43·9	+2·0	41·1	37·2	77·7
April	29·616	73·3	28·3	45·0	56·6	39·5	17·1	47·5	+0·3	44·0	39·5	73·9
May.....	29·744	79·6	34·9	44·7	62·4	43·8	18·6	52·0	-1·0	47·9	43·3	72·7
June	29·765	77·6	37·0	40·6	68·7	47·4	21·3	57·3	-2·1	52·3	47·3	69·6
July	29·918	92·0	48·4	43·6	79·1	54·7	24·3	65·7	+3·1	58·5	52·5	63·2
August.....	29·775	83·7	45·0	38·7	72·8	52·5	20·2	61·4	-0·3	56·8	52·9	74·4
September	29·954	83·0	34·0	49·0	68·3	46·0	22·3	56·3	-1·0	52·0	47·7	73·4
October.....	29·680	68·0	29·3	38·7	60·1	43·6	16·4	51·4	+1·5	48·9	46·1	82·5
November	29·616	60·1	27·5	32·6	53·0	41·8	11·2	47·2	+3·7	45·0	42·1	82·5
December	29·859	54·7	23·9	30·8	43·5	33·5	10·0	39·0	-0·9	37·7	35·8	88·2
Means.....	29·767	Highest 92·0	Lowest 23·9	Annual Range 68·1	59·6	42·7	16·8	50·6	+1·0	47·1	43·3	76·8

MONTH, 1928.	Mean Elastic Force of Vapour.	Mean Tempera- ture at Noon of the Earth 4 feet below the surface of the soil.	Mean Amount of Cloud (0-10).	RAIN.		WIND.											From Robin- son's Anemo- meter.	
				Number of Rainy Days (0·005 in. or over).	Amount collected in Gauge No. 6, whose receiving Surface is 5 inches above the Ground.	From Osler's Anemometer.												From Mean Daily Horizontal Move- ment of the Air.
						Number of Hours of Prevalence of each Wind referred to different Points of Azimuth.								Number of Calm or nearly Calm Hours.	Mean Daily Pressure on the Square Foot.			
						N.	N.E.	E.	S.E.	S.	S.W.	W.	N.W.					
January	in. 0·228	° 43·6	7·4	24	in. 2·992	h 16	h 0	h 0	h 24	h 181	h 322	h 125	h 46	h 30	lbs. 0·60	miles. 414		
February.....	0·223	43·6	6·3	13	1·155	0	24	99	30	52	276	109	17	89	0·49	381		
March	0·223	43·8	7·7	17	1·613	90	57	61	128	150	71	16	24	147	0·15	243		
April.....	0·244	45·5	8·1	15	1·464	111	80	86	67	105	102	38	58	73	0·23	287		
May.....	0·281	48·3	7·1	10	2·485	126	209	60	23	24	36	38	64	164	0·15	235		
June.....	0·328	51·7	7·2	14	2·291	20	44	47	14	105	275	95	47	73	0·34	315		
July.....	0·397	55·3	5·6	8	1·651	69	17	12	8	43	270	139	90	96	0·19	261		
August.....	0·403	57·1	7·4	16	3·279	30	37	31	23	121	278	70	57	97	0·20	272		
September	0·333	56·5	4·4	7	0·688	132	86	71	21	83	104	25	30	168	0·10	215		
October.....	0·314	53·5	6·5	19	3·451	40	32	49	43	195	246	36	40	63	0·21	292		
November	0·270	50·8	7·6	16	1·754	84	84	8	9	81	252	89	56	57	0·92	412		
December	0·211	47·0	8·0	18	2·424	69	71	24	31	115	174	62	75	123	0·22	260		
Sums .....	...	...	...	177	25·247	787	741	548	421	1255	2406	842	604	1180	...	...
Means	0·288	49·7	6·9	...	...	...	...	...	...	...	...	...	...	...	0·32	298

The greatest recorded pressure of the wind on the square foot in the year was 47·0 lbs. on November 16.
 The greatest recorded daily horizontal movement of the air in the year was 1003 miles on February 11.
 The least recorded daily horizontal movement of the air in the year was 79 miles on February 22.

MONTHLY MEAN READING OF THE BAROMETER AT EVERY HOUR OF THE DAY, AS DEDUCED FROM THE PHOTOGRAPHIC RECORDS.

1928.

Hour, Greenwich Mean Time.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Yearly Means.
Midnight	29.743	29.918	29.648	29.617	29.747	29.778	29.927	29.772	29.962	29.688	29.626	29.866	29.774
1 ^h	29.741	29.917	29.646	29.613	29.744	29.774	29.924	29.769	29.959	29.685	29.625	29.857	29.771
2	29.741	29.919	29.639	29.609	29.741	29.770	29.920	29.766	29.954	29.680	29.625	29.856	29.768
3	29.743	29.915	29.634	29.608	29.737	29.764	29.915	29.764	29.950	29.677	29.623	29.855	29.765
4	29.739	29.915	29.630	29.605	29.737	29.761	29.916	29.763	29.946	29.676	29.618	29.851	29.763
5	29.732	29.919	29.627	29.608	29.740	29.762	29.919	29.766	29.949	29.675	29.621	29.850	29.764
6	29.731	29.921	29.630	29.616	29.744	29.765	29.923	29.772	29.955	29.676	29.617	29.849	29.767
7	29.732	29.926	29.634	29.623	29.747	29.768	29.927	29.777	29.962	29.680	29.618	29.853	29.771
8	29.738	29.931	29.638	29.626	29.750	29.771	29.930	29.781	29.968	29.686	29.624	29.860	29.775
9	29.745	29.935	29.642	29.629	29.751	29.772	29.931	29.784	29.970	29.689	29.625	29.869	29.778
10	29.748	29.935	29.640	29.627	29.751	29.772	29.931	29.784	29.968	29.691	29.624	29.873	29.779
11	29.742	29.933	29.637	29.622	29.749	29.771	29.930	29.784	29.964	29.688	29.615	29.870	29.775
Noon	29.724	29.922	29.633	29.617	29.745	29.766	29.925	29.781	29.957	29.680	29.605	29.859	29.768
13 ^h	29.714	29.910	29.623	29.613	29.742	29.761	29.921	29.778	29.950	29.673	29.599	29.852	29.761
14	29.711	29.903	29.614	29.606	29.738	29.756	29.914	29.775	29.944	29.672	29.592	29.851	29.756
15	29.712	29.899	29.610	29.600	29.735	29.751	29.907	29.773	29.936	29.666	29.588	29.854	29.753
16	29.715	29.897	29.608	29.599	29.733	29.746	29.902	29.771	29.934	29.667	29.589	29.856	29.751
17	29.718	29.902	29.610	29.602	29.731	29.746	29.899	29.768	29.936	29.673	29.597	29.859	29.753
18	29.723	29.908	29.619	29.607	29.734	29.750	29.898	29.770	29.943	29.680	29.605	29.860	29.758
19	29.725	29.914	29.626	29.617	29.740	29.755	29.902	29.774	29.952	29.682	29.615	29.864	29.764
20	29.728	29.922	29.629	29.627	29.750	29.763	29.909	29.780	29.957	29.684	29.624	29.865	29.770
21	29.730	29.923	29.632	29.631	29.757	29.774	29.918	29.782	29.960	29.685	29.631	29.867	29.774
22	29.729	29.927	29.632	29.634	29.758	29.779	29.922	29.783	29.960	29.684	29.637	29.864	29.776
23	29.727	29.928	29.631	29.636	29.759	29.780	29.923	29.784	29.960	29.678	29.638	29.864	29.776
24	29.723	29.928	29.629	29.632	29.757	29.779	29.921	29.780	29.960	29.678	29.643	29.859	29.774
Means { 0 ^h .-23 ^h .	29.730	29.918	29.630	29.616	29.744	29.765	29.918	29.775	29.954	29.680	29.616	29.859	29.767
{ 1 ^h .-24 ^h .	29.729	29.919	29.629	29.617	29.745	29.765	29.918	29.775	29.954	29.680	29.616	29.859	29.767
No. of Days Employed	31	29	31	30	31	30	31	31	30	31	30	31	...

MONTHLY MEAN TEMPERATURE OF THE AIR AT EVERY HOUR OF THE DAY, AS DEDUCED FROM THE PHOTOGRAPHIC RECORDS.

1928.

Hour, Greenwich Mean Time.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Yearly Means.
Midnight	40.9	41.3	41.0	43.8	47.2	51.6	59.1	56.6	50.6	48.5	45.4	38.4	47.2
1 ^h	40.5	41.1	40.3	43.0	46.5	50.9	58.0	55.9	50.1	48.1	45.1	38.0	46.5
2	40.1	40.5	39.9	42.3	45.9	50.2	57.0	55.0	49.4	47.7	44.8	37.7	45.9
3	39.7	40.1	39.7	41.8	45.5	49.8	56.1	54.6	48.9	47.1	44.6	37.7	45.5
4	39.6	39.7	39.6	41.2	44.9	49.2	55.4	54.3	48.3	46.6	44.3	37.4	45.0
5	39.5	39.1	39.8	41.0	45.4	50.2	56.0	54.2	48.5	46.9	44.5	37.5	45.2
6	39.8	39.3	40.1	41.6	46.8	52.6	58.2	55.7	48.6	47.1	44.7	37.5	46.0
7	39.9	39.7	40.8	44.1	49.1	55.5	61.6	58.5	50.9	47.8	44.9	37.5	47.5
8	40.3	40.3	42.5	47.0	51.6	58.2	64.6	61.3	54.6	49.9	45.3	37.7	49.4
9	41.3	41.9	44.6	49.8	54.3	59.9	67.7	64.0	58.5	52.4	46.3	38.6	51.6
10	42.3	43.9	46.7	51.3	56.3	61.5	70.2	66.0	61.4	54.5	47.8	39.6	53.5
11	43.6	46.0	47.8	52.1	57.5	62.7	72.0	67.2	63.6	56.1	49.6	40.5	54.9
Noon	44.7	47.5	48.8	53.3	58.0	64.1	73.6	67.8	65.1	57.1	50.8	41.4	56.0
13 ^h	45.3	48.6	49.5	53.9	58.8	64.4	74.7	68.6	65.8	57.7	51.2	41.7	56.7
14	45.4	48.9	49.4	53.8	58.6	64.8	75.3	68.7	66.0	57.5	51.3	41.5	56.8
15	44.9	48.8	49.0	53.7	58.3	64.4	75.6	68.2	65.4	56.7	50.9	40.9	56.4
16	44.2	48.0	47.8	52.7	57.7	63.9	75.1	67.7	64.2	55.7	49.9	40.4	55.6
17	43.6	46.1	47.1	51.6	57.3	62.3	73.6	66.5	62.0	53.8	48.8	39.9	54.4
18	43.2	44.9	45.5	50.2	55.8	61.3	72.0	64.6	59.6	52.5	48.2	39.5	53.1
19	42.7	44.2	44.2	48.5	53.8	59.1	69.3	62.5	57.0	51.3	47.9	39.3	51.7
20	42.4	43.3	43.3	47.2	51.7	57.1	66.3	60.5	55.1	50.6	47.5	38.9	50.3
21	42.2	42.7	42.6	46.2	50.2	55.2	63.5	59.1	53.6	50.0	47.0	38.7	49.3
22	42.1	42.1	41.8	45.5	48.9	53.7	61.9	58.0	52.3	49.6	46.6	38.3	48.4
23	41.8	41.7	41.5	44.8	48.2	52.6	60.6	57.0	51.2	49.2	46.1	38.2	47.7
24	41.5	41.2	40.9	44.0	47.3	51.6	59.4	56.4	50.2	48.7	45.6	37.9	47.1
Means { 0 ^h .-23 ^h .	42.1	43.3	43.9	47.5	52.0	57.3	65.7	61.4	56.3	51.4	47.2	39.0	50.6
{ 1 ^h .-24 ^h .	42.1	43.3	43.9	47.5	52.0	57.3	65.8	61.4	56.3	51.5	47.2	39.0	50.6
No. of Days Employed	31	29	31	30	31	30	31	31	30	31	30	31	...

MONTHLY MEAN TEMPERATURE OF EVAPORATION AT EVERY HOUR OF THE DAY, AS DEDUCED FROM THE PHOTOGRAPHIC RECORDS.

1928.

Hour, Greenwich Mean Time.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Yearly Means.
Midnight	39.4	39.7	39.1	41.7	45.1	49.2	55.7	54.7	49.2	47.2	43.6	37.3	45.2
1 ^h	39.0	39.5	38.6	41.1	44.5	49.0	55.0	54.1	48.8	46.8	43.4	36.9	44.7
2	38.7	38.9	38.2	40.6	44.2	48.5	54.4	53.6	48.3	46.4	43.0	36.7	44.3
3	38.4	38.4	38.0	40.1	43.8	48.3	53.9	53.3	47.8	45.7	42.7	36.6	43.9
4	38.3	38.0	38.0	39.7	43.5	47.8	53.4	53.0	47.2	45.3	42.5	36.2	43.6
5	38.2	37.6	38.3	39.7	44.0	48.6	53.7	53.0	47.4	45.6	42.7	36.3	43.8
6	38.4	37.8	38.6	40.3	45.0	50.3	55.1	54.1	47.5	45.9	43.0	36.3	44.4
7	38.6	38.1	39.3	42.0	46.5	52.0	56.9	55.9	49.3	46.5	43.3	36.5	45.4
8	39.0	38.5	40.7	44.0	48.1	53.1	58.3	57.5	52.0	48.1	43.9	36.6	46.6
9	39.9	39.8	42.2	45.5	49.7	53.9	59.6	58.6	54.3	50.0	44.7	37.5	48.0
10	40.8	41.3	43.3	46.3	50.6	54.5	60.5	59.3	55.3	51.2	45.8	38.2	48.9
11	41.7	42.7	43.8	46.7	51.1	55.0	60.9	59.7	56.0	51.9	47.0	38.8	49.6
Noon	42.3	43.6	44.2	47.3	51.2	55.8	61.9	60.0	56.4	52.3	47.5	39.6	50.2
13 ^h	42.4	44.2	44.5	47.5	51.7	55.9	62.1	60.0	56.6	52.5	47.6	39.9	50.4
14	42.4	44.5	44.5	47.4	51.5	56.1	62.4	60.1	56.5	52.4	47.5	39.7	50.4
15	42.0	44.4	44.3	47.4	51.5	56.1	62.5	60.9	56.2	52.2	47.2	39.3	50.3
16	41.6	44.0	43.8	47.1	51.0	55.6	62.4	59.7	55.5	51.5	46.8	39.0	49.8
17	41.4	42.7	43.2	46.5	50.6	54.8	61.8	58.9	54.4	50.4	46.2	38.7	49.1
18	41.1	42.2	42.3	46.0	50.1	54.4	61.3	57.9	53.6	49.8	45.9	38.4	48.6
19	40.9	41.8	41.6	45.2	49.1	53.1	60.1	57.1	52.7	49.2	45.8	38.1	47.9
20	40.6	41.3	41.0	44.5	48.1	52.2	59.0	56.6	51.9	48.8	45.3	37.6	47.2
21	40.5	40.8	40.4	43.7	47.3	51.1	58.1	56.0	51.0	48.4	45.0	37.4	46.6
22	40.5	40.5	39.9	43.1	46.4	50.2	57.4	55.5	50.2	48.1	44.6	37.1	46.1
23	40.1	40.1	39.6	42.4	45.8	49.6	56.7	54.9	49.5	47.9	44.1	37.0	45.6
24	39.9	39.6	39.1	41.9	45.2	49.2	56.1	54.5	48.7	47.5	43.7	36.8	45.2
Means { 0 ^h .-23 ^h .	40.3	40.8	41.1	44.0	47.9	52.3	58.5	56.8	52.0	48.9	45.0	37.7	47.1
Means { 1 ^h .-24 ^h .	40.3	40.8	41.1	44.0	47.9	52.3	58.5	56.8	52.0	48.9	45.0	37.7	47.1
No. of Days Employed	31	29	31	30	31	30	31	31	30	31	30	31	...

MONTHLY MEAN TEMPERATURE OF THE DEW POINT AT EVERY HOUR OF THE DAY, AS DEDUCED FROM THE CORRESPONDING AIR AND EVAPORATION TEMPERATURES.

1928.

Hour, Greenwich Mean Time.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Yearly Means.
Midnight	37.2	37.4	36.3	38.8	42.7	46.6	52.9	53.2	47.7	45.7	41.3	35.5	42.9
1 ^h	36.8	37.2	36.1	38.3	42.0	46.9	52.4	52.6	47.4	45.3	41.2	35.1	42.6
2	36.7	36.6	35.7	38.1	42.0	46.6	52.2	52.4	47.1	44.9	40.7	35.0	42.3
3	36.4	35.9	35.5	37.6	41.6	46.6	52.1	52.2	46.6	44.0	40.2	34.8	42.0
4	36.3	35.5	35.7	37.5	41.6	46.2	51.6	51.9	45.9	43.7	40.2	34.3	41.7
5	36.2	35.4	36.1	37.9	42.1	46.8	51.7	52.0	46.1	44.1	40.4	34.4	41.9
6	36.3	35.6	36.4	38.5	42.9	48.0	52.2	52.7	46.3	44.5	40.8	34.4	42.4
7	36.6	35.8	37.1	39.2	43.6	48.6	53.1	53.8	47.6	44.9	41.2	34.8	43.0
8	37.1	35.8	38.0	40.3	44.3	48.2	53.3	54.5	49.6	46.1	42.0	34.8	43.7
9	37.9	36.6	38.9	40.3	44.8	48.4	53.2	54.3	50.5	47.5	42.8	35.7	44.2
10	38.6	37.6	38.9	40.2	44.6	47.9	52.7	54.1	49.8	47.9	43.5	36.1	44.3
11	39.1	38.2	38.5	40.1	44.4	47.9	52.2	53.9	49.3	47.7	44.1	36.3	44.3
Noon	39.0	38.4	38.1	40.1	44.0	48.4	53.0	54.0	48.7	47.6	43.8	36.9	44.3
13 ^h	38.3	38.4	38.0	39.8	44.3	48.3	52.5	53.3	48.5	47.4	43.5	37.2	44.1
14	38.2	38.8	38.1	39.7	44.0	48.2	52.7	53.4	48.0	47.4	43.2	37.0	44.1
15	37.8	38.7	38.1	39.8	44.4	48.7	52.6	53.5	47.8	47.9	43.0	37.0	44.1
16	37.9	38.7	38.5	40.3	43.9	48.1	52.9	53.4	47.5	47.3	43.2	36.9	44.0
17	38.3	38.1	38.0	40.3	43.5	47.9	52.8	52.8	47.3	46.9	43.3	36.8	43.8
18	38.0	38.4	37.8	41.1	44.0	47.9	53.1	52.5	48.0	46.9	43.3	36.6	44.0
19	38.2	38.5	37.9	41.1	44.0	47.4	52.9	52.6	48.6	46.9	43.4	36.2	44.0
20	37.9	38.4	37.6	41.3	44.1	47.4	53.2	53.4	48.9	46.8	42.8	35.6	43.9
21	38.0	38.0	37.1	40.6	44.0	47.0	53.8	53.5	48.5	46.5	42.7	35.4	43.8
22	38.2	38.2	37.1	39.9	43.7	46.6	53.9	53.4	48.1	46.3	42.1	35.2	43.6
23	37.6	37.8	36.8	39.1	43.1	46.4	53.5	53.2	47.7	46.5	41.6	35.1	43.2
24	37.6	37.3	36.4	39.1	42.8	46.6	53.4	53.0	47.0	46.1	41.3	35.1	43.0
Means { 0 ^h .-23 ^h .	37.6	37.4	37.3	39.6	43.5	47.5	52.8	53.2	48.0	46.3	42.3	35.7	43.4
Means { 1 ^h .-24 ^h .	37.6	37.4	37.3	39.6	43.5	47.5	52.8	53.2	48.0	46.3	42.3	35.7	43.4

MONTHLY MEAN DEGREE of HUMIDITY (Saturation=100) at every HOUR of the DAY, as deduced from the Corresponding AIR and EVAPORATION TEMPERATURES.

Hour, Greenwich Mean Time.	1928.												Yearly Means.	
	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.		
Midnight	87	86	83	83	84	83	80	88	90	90	86	90	86	
1 ^h	87	86	85	84	84	87	82	88	91	90	86	90	87	
2	87	86	85	85	86	88	84	91	92	90	85	91	87	
3	88	85	85	85	86	89	86	91	92	89	85	90	88	
4	88	85	86	87	88	90	87	91	92	90	85	89	88	
5	88	86	86	89	89	88	85	92	92	90	85	89	89	
6	87	86	87	89	86	84	81	90	92	91	86	89	87	
7	88	86	87	83	81	77	73	84	88	90	87	91	85	
8	88	84	84	77	76	70	67	78	83	87	89	90	81	
9	88	82	80	69	70	65	60	71	75	83	87	90	77	
10	87	79	74	66	65	61	55	65	66	79	85	87	73	
11	84	75	70	64	62	58	49	62	60	74	81	85	69	
Noon	80	71	67	61	60	57	48	61	55	71	77	84	66	
13 ^h	77	68	65	59	59	56	46	58	54	69	75	84	64	
14	76	68	65	59	59	55	45	58	53	69	74	84	64	
15	77	68	66	59	60	57	45	60	53	72	74	86	65	
16	79	70	70	63	60	56	46	60	55	74	78	87	67	
17	82	74	70	65	60	59	48	61	58	78	80	89	69	
18	83	79	75	70	64	61	51	65	65	82	83	90	72	
19	84	80	79	75	69	65	56	70	73	85	84	89	76	
20	84	84	81	79	75	70	63	78	80	87	83	88	79	
21	85	84	81	81	80	74	71	81	83	88	85	88	82	
22	86	86	83	81	81	77	74	85	86	89	84	89	83	
23	85	86	83	80	82	79	77	87	88	90	84	89	84	
24	86	86	84	83	84	83	80	88	89	91	85	90	86	
Means	0 ^h .-23 ^h .	84	80	78	75	74	71	65	76	76	83	83	88	78
	1 ^h .-24 ^h .	84	80	78	75	74	71	65	76	76	83	83	88	78

TOTAL AMOUNT of SUNSHINE registered in each HOUR of the DAY in each MONTH, as derived from the RECORDS of the CAMPBELL-STOKES SELF-REGISTERING INSTRUMENT for the YEAR 1928.

Month, 1928.	Registered duration of Sunshine in the Hour ending :-																Total Registered Duration of Sunshine in each Month.	Corre- sponding aggregate Period during which the Sun was above the Horizon.	Proportion of Sunshine.	Mean Altitude of the Sun at Noon.
	3 ^h	6 ^h	7 ^h	8 ^h	9 ^h	10 ^h	11 ^h	Noon.	13 ^h	14 ^h	15 ^h	16 ^h	17 ^h	18 ^h	19 ^h	20 ^h				
January	—	—	—	—	0.8	5.0	8.0	10.1	8.7	8.1	3.0	0.0	—	—	—	—	43.7	258.3	0.169	18
February	—	—	—	2.5	7.6	12.0	11.9	11.2	11.4	9.3	8.6	5.6	2.3	—	—	—	82.4	287.1	0.287	26
March	—	—	0.2	4.5	8.9	11.3	12.0	12.3	11.8	9.4	10.3	8.5	6.5	1.3	—	—	97.0	366.9	0.264	37
April	—	2.8	9.3	13.1	14.2	11.9	10.5	12.7	10.3	9.7	8.9	8.9	6.2	4.0	1.2	—	123.7	414.6	0.298	48
May	1.2	6.9	10.5	11.7	13.2	14.2	12.4	11.4	12.5	11.8	12.8	11.7	10.8	8.6	5.6	0.3	155.6	482.2	0.323	57
June	9.3	15.7	16.2	16.7	15.2	16.7	16.8	16.9	15.7	14.9	14.6	13.5	12.4	12.3	8.5	3.3	218.7	494.4	0.442	62
July	5.4	14.7	20.7	21.9	24.1	22.2	21.4	20.9	21.2	21.8	20.9	19.2	19.4	18.3	14.6	3.0	289.7	497.3	0.583	60
August	—	10.6	16.1	18.4	16.6	17.6	17.2	15.6	13.6	14.3	12.4	12.1	14.1	13.3	8.3	0.1	200.3	449.4	0.446	52
September ...	—	0.6	6.8	11.7	18.5	21.5	23.0	22.0	21.6	21.4	20.2	20.7	16.4	6.5	0.1	—	211.0	378.1	0.558	41
October	—	—	0.0	5.2	11.4	12.3	12.4	13.4	14.7	11.9	11.3	10.6	4.2	—	—	—	107.4	329.1	0.326	30
November	—	—	—	0.1	1.9	4.4	7.7	6.8	7.6	8.5	6.8	2.4	—	—	—	—	46.2	256.4	0.180	20
December	—	—	—	—	0.7	3.6	4.6	5.7	6.7	4.6	1.6	0.2	—	—	—	—	27.7	243.9	0.114	16
For the Year	15.9	51.3	79.8	105.8	133.1	152.7	157.9	159.0	155.8	145.7	131.4	113.4	92.3	64.3	38.3	6.7	1603.4	4457.7	0.360	...

The hours are reckoned from " apparent " midnight.

READINGS of THERMOMETERS on the ORDINARY STAND in the MAGNETIC PAVILION ENCLOSURE in the YEAR 1928.
(The readings of the maximum and minimum thermometers apply to the twenty-four hours ending 21^h.)

Days of the Month.	Dry-Bulb Thermometers, 4 ft. above the Ground.					Wet-Bulb Thermometers, 4 ft. above the Ground.				Days of the Month.	Dry-Bulb Thermometers, 4 ft. above the Ground.					Wet-Bulb Thermometers, 4 ft. above the Ground.					
	Maxi- mum.	Mini- mum.	9 ^h	Noon.	15 ^h	21 ^h	9 ^h	Noon.	15 ^h		21 ^h	Maxi- mum.	Mini- mum.	9 ^h	Noon.	15 ^h	21 ^h	9 ^h	Noon.	15 ^h	21 ^h
JANUARY.										MARCH.											
d										d											
1	36.6	31.8	31.9	35.6	35.1	36.6	31.8	35.3	34.2	35.0	52.1	44.8	47.6	50.6	51.2	46.6	46.9	49.4	49.8	45.7	
2	41.8	36.3	39.8	41.1	41.8	41.6	39.3	40.3	41.0	40.9	51.9	44.9	49.6	51.1	50.8	46.5	48.9	49.3	48.3	45.2	
3	42.1	34.4	38.3	40.9	41.6	38.0	37.5	39.1	39.3	36.8	61.3	40.0	48.2	56.8	59.7	45.6	46.8	52.2	53.6	44.9	
4	48.9	32.0	40.5	44.0	45.4	48.6	38.3	40.8	43.8	46.4	68.0	37.7	46.5	63.8	65.3	45.8	44.9	54.4	54.5	44.5	
5	49.2	38.9	40.1	43.1	43.6	40.6	37.7	39.7	39.3	38.7	65.2	36.0	50.3	61.5	60.3	50.3	45.4	51.2	51.0	44.9	
6	55.9	40.6	53.5	54.5	51.5	43.4	51.1	50.7	44.5	40.1	50.6	42.4	45.9	45.8	46.6	42.6	44.8	43.9	43.0	40.8	
7	52.9	37.4	44.7	50.1	51.4	50.0	42.6	48.7	49.1	48.6	46.6	37.8	40.8	43.5	44.8	44.3	39.6	41.8	43.6	43.4	
8	52.1	42.0	47.5	48.7	46.6	43.1	44.9	42.6	41.5	39.9	45.0	37.0	40.0	40.5	42.3	38.0	38.4	37.8	39.5	35.8	
9	50.6	37.6	40.5	48.1	48.9	42.6	39.9	45.8	45.5	40.9	42.1	33.0	36.2	38.3	37.9	33.3	35.8	37.0	35.2	31.1	
10	50.6	37.2	43.3	49.1	49.3	43.5	42.0	46.3	47.4	41.3	41.3	28.6	34.7	37.2	37.6	28.6	32.7	34.7	33.8	27.3	
11	46.0	35.5	40.9	44.9	43.8	35.6	39.8	42.6	40.0	33.9	33.1	26.0	29.1	30.3	32.6	29.5	27.7	28.8	30.9	28.7	
12	47.0	29.9	39.6	44.2	44.9	46.9	37.2	42.2	42.9	45.9	38.0	24.8	31.5	37.6	32.7	32.5	29.8	33.0	31.9	30.3	
13	50.5	41.8	45.5	48.4	47.6	41.9	42.9	44.2	43.4	39.5	39.1	31.4	33.7	37.3	36.9	35.1	30.9	33.1	33.3	33.5	
14	48.5	39.9	42.0	47.5	46.6	48.5	40.6	45.3	44.6	47.9	41.2	33.9	35.2	38.4	40.5	37.1	33.6	35.8	36.5	35.0	
15	49.3	40.1	41.7	45.7	45.6	43.4	39.7	40.9	40.3	40.4	47.6	34.8	41.0	44.2	44.8	35.9	38.1	38.9	38.8	33.9	
16	45.0	41.0	44.6	43.6	44.6	42.3	41.9	42.8	42.5	39.8	54.8	29.0	45.5	52.9	51.7	44.0	42.4	45.1	43.9	39.0	
17	42.3	30.7	35.5	34.8	40.1	30.7	34.8	34.3	37.6	30.4	57.2	42.1	49.0	56.0	55.7	43.6	42.7	46.3	45.7	38.6	
18	43.6	27.5	32.9	39.6	40.6	43.6	31.9	38.8	40.1	43.0	61.3	43.6	51.9	58.0	57.9	46.4	48.1	49.6	49.3	44.5	
19	48.6	36.0	40.1	44.0	44.6	36.6	37.6	39.8	39.9	35.1	59.7	44.0	52.6	55.6	57.2	54.0	50.3	51.4	51.8	49.6	
20	48.0	33.1	43.4	46.9	45.7	46.8	43.0	45.4	44.9	46.5	61.2	46.8	50.6	59.0	59.4	51.8	46.7	50.5	50.2	44.8	
21	52.3	46.8	50.6	51.7	50.8	49.7	49.6	50.4	49.8	47.8	52.2	40.6	42.6	44.8	43.0	42.1	37.5	39.3	39.0	41.9	
22	50.2	39.2	42.2	44.6	45.4	39.6	40.4	42.9	42.0	37.5	58.4	41.8	50.0	52.6	54.8	45.7	47.7	49.2	49.0	44.5	
23	46.0	32.1	36.8	43.9	45.8	45.2	36.2	41.5	43.2	44.2	56.9	45.0	49.6	54.4	53.6	44.7	48.7	51.8	49.8	43.5	
24	53.6	39.0	50.6	52.6	47.2	39.3	49.8	50.6	43.4	36.6	55.2	39.5	48.8	53.3	47.3	39.8	47.8	49.8	46.5	39.3	
25	47.7	37.5	39.3	45.6	46.8	47.6	37.4	41.3	42.3	44.3	58.2	38.0	47.3	53.8	53.8	48.0	44.9	48.8	48.4	45.4	
26	47.9	39.5	41.5	45.0	45.3	39.7	39.8	42.6	43.3	38.2	60.4	43.9	50.0	52.7	58.4	46.6	44.7	45.2	48.2	42.0	
27	39.9	32.8	36.8	37.4	38.7	34.9	35.9	36.0	36.7	33.0	53.8	39.9	50.7	50.7	48.7	46.2	47.4	47.4	48.3	43.5	
28	44.6	29.0	37.8	41.8	42.4	44.6	36.1	40.6	41.6	44.1	53.2	37.2	43.6	47.2	48.4	39.6	41.7	40.7	41.0	37.7	
29	45.8	40.3	42.6	44.1	42.5	40.3	41.8	40.8	38.1	38.6	50.9	32.2	45.1	44.3	48.6	49.9	42.5	43.0	47.8	48.9	
30	45.9	36.3	39.6	42.2	44.7	38.2	38.4	39.9	40.1	36.8	53.8	40.6	48.9	48.1	47.6	44.1	45.2	45.3	44.4	42.1	
31	44.8	36.2	36.6	41.7	43.2	44.6	35.6	38.8	39.8	43.7	56.9	38.0	46.0	51.1	48.7	42.3	44.1	46.3	44.3	41.8	
Means	47.4	36.5	41.3	44.7	44.9	42.2	39.9	42.3	42.0	40.5	Mean	52.5	37.9	44.6	48.8	40.0	42.6	42.2	44.2	44.3	40.4
FEBRUARY.										APRIL.											
d										d											
1	50.2	38.7	45.6	47.9	48.0	38.7	42.0	43.4	40.6	36.1	47.7	42.3	44.6	47.2	46.7	44.2	43.8	44.9	44.5	42.7	
2	47.8	34.0	39.3	46.0	40.3	36.3	35.9	40.4	38.9	35.3	52.5	36.8	44.7	50.8	49.8	41.4	41.8	44.8	44.2	39.6	
3	43.0	33.3	36.3	40.5	42.2	38.6	34.3	37.4	38.8	35.8	51.7	39.7	48.5	49.0	50.1	48.0	46.9	47.9	48.9	45.8	
4	48.5	31.0	38.1	44.6	44.8	48.5	36.3	42.6	43.8	47.6	54.0	40.0	48.8	50.8	50.7	40.7	46.4	46.8	43.6	38.8	
5	50.0	39.8	48.3	46.7	49.3	40.0	47.3	45.6	45.1	38.5	54.4	35.8	49.1	51.6	52.2	45.0	44.2	46.9	45.9	41.4	
6	46.8	34.3	37.1	44.5	45.6	39.4	35.3	40.5	40.9	37.1	60.2	32.3	50.0	53.7	58.8	40.7	45.4	47.1	48.8	39.8	
7	50.8	37.6	44.9	47.6	49.6	47.3	41.6	44.0	45.2	45.6	57.9	35.8	52.6	56.4	52.1	50.3	47.1	45.5	45.8	46.3	
8	51.7	46.6	49.8	50.7	49.0	49.0	48.8	48.6	47.4	47.4	61.6	46.1	53.6	57.6	57.4	48.6	49.0	50.6	50.8	45.2	
9	50.6	43.0	46.7	47.4	47.1	43.1	41.0	41.4	41.2	39.3	67.9	46.9	58.4	53.4	67.2	57.6	52.8	54.8	55.9	52.6	
10	48.1	35.0	40.6	43.6	47.8	37.9	39.1	42.7	45.2	35.6	64.2	48.6	58.3	61.8	55.6	48.8	52.6	54.8	52.0	47.6	
11	45.6	37.8	42.8	45.1	45.3	42.2	37.5	38.9	39.9	40.5	62.0	42.9	56.3	58.4	59.7	50.6	51.8	53.4	52.9	49.6	
12	45.0	37.9	39.9	43.0	44.1	38.3	37.4	39.2	40.0	37.9	56.5	47.2	49.3	55.0	53.6	48.9	48.2	51.9	51.8	47.8	
13	54.2	38.0	40.8	46.9	53.7	47.5	40.6	46.1	51.1	45.9	55.9	45.0	47.6	53.6	53.5	47.6	45.8	50.2	50.4	46.8	
14	52.4	42.2	45.2	48.5	50.6	52.0	43.0	45.4	48.3	51.6	47.9	41.1	43.1	42.4	41.9	41.8	41.3	40.7	39.6	38.8	
15	55.9	51.9	53.9	55.2	54.0	52.7	52.7	52.6	51.7	50.8	42.5	37.2	39.9	42.0	41.3	40.6	35.8	37.5	37.4	37.8	
16	54.0	49.0	52.5	51.6	51.6	49.1	49.8	49.9	49.8	44.6	41.0	34.1	36.8	37.7	38.6	36.8	35.5	35.7	35.8	34.7	
17	49.1	38.3	41.6	46.5	48.2	43.5	36.6	38.8	40.6	40.7	50.8	34.0	43.2	45.3	43.7	38.7	37.6	39.8	39.9	36.2	
18	50.7	36.1	38.7	47.6	48.1	43.7	37.6	42.9	42.8	40.5	49.0	28.3	42.6	45.6	47.1	35.6	38.0	38.4	39.4	34.7	
19	51.1	37.1	43.7	48.6	50.7	39.1	40.3	43.9	45.2	37.4	51.8	31.9	40.9	46.1	50.6	40.5	37.1	39.4	41.6	37.3	
20	53.6	30.2	36.4	49.6	51.8	40.8	34.7	45.5	46.9	39.8	51.2	32.5	43.7	48.6	50.1	38.2	39.4	40.5	41.8	36.7	
21	53.1	35.6	38.6	51.9	51.8	37.7	38.3	46.3	46.4	36.6	50.6	32.1	44.2	48.6	41.4	40.3	40.0	41.3	39.6	38.4	
22	46.6	28.2	32.5	43.3	46.2	41.3	32.1	41.5	42.1	40.0	53.8	34.0	44.2	47.6	52.8	43.8	39.6	40.9	44.6	40.6	
23	46.3	32.3	39.2	40.6	44.8	40.1	38.9	40.2	42.5	38.8	56.3	36.7	51.0	51.8	54.8	48.5	45.0	46.2	48.1	45.7	
24	43.2	37.9	39.1	40.9	41.6	38.0	37.3	38.4	38.8	37.3	64.8	40.6	57.8	62.7	61.8	50.0	49.8	51.9	49.6	43.6	
25	56.5	35.6	37.1	49.8	54.0	38.6	37.1	45.9	48.0	37.8	70.9	43.9	58.3	68.2	68.9	56.3	52.2	57.0	55.3	49.8	
26	56.3	31.0	40.6	51.6	54.5	42.9	38.8	46.6	47.8	39.6	73.3	46.2	64.4	70.1	69.9	56.2	54.7	56.8	60.0	52.6	
27	57.1	32.8	41.6	55.0	56.2	40.6	39.2	44.8	44.7	39.0	62.7	50.0	59.0	60.6	59.6	50.4	52.0	53.2	53.4	4	

READINGS OF THERMOMETERS on the ORDINARY STAND in the MAGNETIC PAVILION ENCLOSURE—*continued.*
(The readings of the maximum and minimum thermometers apply to the twenty-four hours ending 21^h.)

Days of the Month.	Dry-Bulb Thermometers, 4 ft. above the Ground.					Wet-Bulb Thermometers, 4 ft. above the Ground.				Days of the Month.	Dry-Bulb Thermometers, 4 ft. above the Ground.					Wet-Bulb Thermometers, 4 ft. above the Ground.					
	Maxi- mum.	Mini- mum.	9 ^h	Noon.	15 ^h	21 ^h	9 ^h	Noon.	15 ^h		21 ^h	Maxi- mum.	Mini- mum.	9 ^h	Noon.	15 ^h	21 ^h	9 ^h	Noon.	15 ^h	21 ^h
MAY.										JULY.											
d	63.0	48.2	54.6	58.0	60.4	54.0	52.0	54.1	54.9	52.5	d	72.0	51.2	62.6	66.6	68.2	54.6	55.2	56.8	57.4	51.3
1	59.0	49.9	52.1	53.8	56.2	55.2	50.4	51.8	53.2	53.9	1	75.9	52.0	66.7	71.6	67.6	61.8	60.3	60.6	60.9	58.8
2	72.9	50.2	54.5	68.4	68.8	61.1	53.2	62.9	62.5	57.8	3	73.0	49.7	66.0	70.2	66.0	54.9	58.1	59.8	57.4	54.5
3	65.9	51.1	60.0	61.9	64.6	54.6	55.0	55.8	56.5	50.7	4	72.8	53.0	63.5	67.6	68.8	58.4	54.3	57.4	57.9	51.8
4	69.6	47.7	61.8	66.2	65.4	53.8	56.5	57.8	55.8	48.7	5	75.1	55.0	66.1	70.4	71.1	60.4	58.6	62.3	62.8	57.9
5	70.2	42.3	60.9	69.6	68.8	50.5	52.0	55.7	55.6	47.3	6	67.8	53.0	63.1	62.2	63.7	58.2	55.7	55.8	56.4	53.9
6	67.2	41.1	60.2	64.8	65.0	50.2	51.9	52.0	52.5	44.9	7	73.2	54.6	63.0	63.5	68.6	57.0	55.8	55.3	57.1	54.7
7	61.3	39.2	51.7	54.6	50.4	41.9	45.8	46.7	45.5	37.5	8	76.4	50.2	66.7	70.6	73.3	61.9	57.5	60.5	62.3	58.5
8	53.4	34.9	47.0	48.6	49.5	42.6	40.4	40.7	41.6	38.4	9	77.4	59.1	64.0	72.6	75.2	62.4	57.9	60.3	61.0	56.7
9	57.2	36.9	46.6	54.9	51.9	48.2	41.1	46.4	44.5	44.3	10	82.1	50.6	69.2	76.0	77.7	62.1	60.4	62.7	61.4	55.1
10	57.2	40.0	49.4	51.0	54.4	44.4	42.8	42.8	45.3	41.1	11	86.3	53.9	70.4	81.3	84.0	65.8	59.9	62.5	64.9	56.8
11	62.4	43.9	56.8	56.6	55.6	50.8	50.0	50.0	50.6	48.3	12	87.3	52.1	75.6	83.8	85.6	67.4	63.5	65.4	66.6	58.2
12	59.9	47.9	57.7	56.8	56.4	49.0	52.0	50.9	50.8	47.3	13	85.0	53.2	71.4	80.2	83.6	69.6	61.8	66.0	65.2	61.9
13	60.2	43.9	50.7	52.4	51.3	44.0	49.3	49.3	48.9	41.2	14	89.1	56.7	75.7	84.2	86.9	67.1	60.7	64.3	66.1	57.9
14	59.4	36.9	48.4	50.9	58.4	50.5	43.7	45.6	49.9	46.8	15	91.1	56.2	78.5	84.9	90.7	74.3	65.5	66.3	70.1	60.2
15	50.8	40.5	42.2	46.2	42.8	43.4	41.3	43.2	41.9	42.0	16	80.4	59.4	70.6	76.1	77.3	63.5	61.1	64.9	65.4	60.5
16	59.0	40.7	48.6	52.8	53.8	44.9	44.3	47.3	47.6	42.9	17	76.7	51.0	64.8	70.9	76.3	58.0	57.8	61.2	63.8	54.2
17	53.2	42.2	43.8	47.2	49.2	44.7	43.2	45.6	46.2	43.2	18	87.9	48.4	72.8	83.8	87.6	67.1	62.8	65.2	66.8	60.9
18	59.8	37.0	52.8	53.6	46.4	44.6	47.8	46.3	45.6	43.8	19	75.2	60.0	64.7	69.6	71.6	66.2	58.2	59.4	60.4	58.0
19	58.5	40.3	52.4	55.4	51.1	45.0	48.7	47.6	46.8	43.4	20	78.5	60.0	65.9	72.2	76.7	67.3	58.8	62.8	63.9	60.8
20	59.2	42.3	51.9	51.8	55.3	50.4	49.1	48.9	50.6	49.2	21	80.4	56.8	68.4	74.3	78.8	67.7	61.2	63.8	65.6	59.8
21	51.7	45.0	48.0	49.6	47.9	45.3	43.7	44.8	43.8	42.6	22	92.0	51.0	74.0	85.6	84.6	71.3	62.3	66.2	62.4	60.8
22	46.1	41.2	43.0	44.4	45.3	45.6	41.8	42.9	43.9	44.1	23	83.0	60.4	70.7	76.6	77.6	70.5	62.9	65.6	65.8	63.8
23	60.6	44.8	49.6	54.6	59.9	47.0	47.4	49.7	52.4	46.0	24	86.0	62.6	70.8	79.4	84.4	72.6	62.7	64.9	69.1	67.0
24	66.2	40.1	55.5	64.3	63.6	48.8	52.3	55.8	57.0	48.1	25	82.5	65.1	70.6	74.6	78.8	66.6	65.0	66.4	66.8	64.0
25	70.3	40.0	63.1	66.5	67.5	56.0	56.4	56.8	56.8	49.8	26	83.9	60.6	71.4	73.5	82.0	65.7	64.8	66.0	68.8	63.2
26	74.3	51.3	68.6	71.6	72.8	58.7	58.3	59.0	59.2	55.6	27	73.1	60.0	65.8	72.5	68.9	62.1	64.5	67.1	63.0	61.1
27	79.6	47.2	70.6	75.6	76.3	60.6	61.9	61.8	62.0	56.8	28	70.5	52.1	60.0	63.2	65.8	59.6	54.7	54.7	54.2	52.2
28	74.9	55.9	66.2	72.5	70.4	59.9	60.7	64.1	63.3	54.3	29	73.1	48.6	64.4	67.4	70.9	55.7	55.2	55.3	57.0	51.9
29	73.8	56.0	65.0	70.6	72.0	59.4	59.8	60.0	60.8	54.7	30	73.6	50.1	62.3	68.6	66.5	58.3	55.2	58.7	58.9	56.7
30	59.6	48.3	50.9	52.0	56.6	51.5	49.3	49.5	51.0	48.8	31	69.4	56.5	58.4	67.6	66.0	60.4	56.0	59.7	59.6	59.2
Means	62.5	44.1	54.3	58.0	58.3	50.2	49.7	51.2	51.5	47.3	Means	79.1	54.0	67.7	73.6	75.6	63.5	59.6	61.0	62.5	58.1
JUNE.										AUGUST.											
d	61.5	51.1	55.9	58.3	57.6	53.3	52.6	52.6	52.9	47.8	d	75.0	59.2	63.1	71.4	68.0	59.8	62.9	68.3	64.2	57.5
1	62.3	48.0	58.5	60.1	60.6	50.5	48.8	50.8	50.6	45.2	1	69.4	55.1	59.2	64.3	68.6	56.8	56.2	59.1	60.3	54.5
2	68.3	40.0	61.5	66.4	67.2	53.9	51.1	52.5	53.9	47.8	2	61.7	53.7	60.5	59.6	59.8	54.2	55.2	54.2	53.7	53.4
3	64.9	42.1	57.7	62.5	61.2	55.6	53.7	54.1	53.9	50.4	3	61.1	52.0	53.4	54.3	57.8	52.9	52.8	52.7	54.8	49.9
4	63.3	49.7	52.6	55.6	61.6	53.7	49.7	51.7	55.8	51.7	4	75.0	45.9	62.6	72.3	73.9	58.0	56.6	61.8	62.3	55.5
5	76.3	45.2	63.5	68.0	71.0	57.4	58.9	60.6	60.6	53.8	5	79.0	47.1	67.6	72.3	73.2	60.7	62.1	62.7	62.7	57.6
6	69.8	51.1	57.4	62.5	62.9	55.0	56.7	57.8	56.8	52.4	6	79.1	56.1	70.4	74.3	76.6	68.0	62.9	63.7	64.8	64.5
7	70.6	53.0	59.0	66.8	67.4	56.6	57.1	60.4	58.8	52.1	7	73.9	58.0	65.4	70.9	68.0	59.7	59.6	59.9	58.3	54.4
8	69.1	54.1	58.8	63.8	65.6	57.4	57.0	56.0	57.6	53.8	8	74.9	51.8	64.6	68.8	69.6	60.0	58.5	59.8	59.8	54.8
9	65.8	51.3	63.1	61.7	61.6	51.6	56.0	56.3	54.5	47.8	9	72.5	49.8	64.5	64.5	71.6	59.4	57.0	58.1	61.8	57.1
10	65.8	43.0	60.7	63.6	59.1	52.6	50.8	53.3	52.3	47.3	10	83.7	56.6	70.8	77.4	81.7	66.5	62.7	65.2	68.8	63.8
11	68.3	41.2	59.6	64.8	63.6	51.8	51.7	54.2	54.8	48.4	11	75.6	59.0	66.4	66.7	71.4	59.4	63.3	60.7	59.8	55.6
12	77.6	50.1	70.6	74.6	73.6	60.1	61.6	62.0	60.2	57.6	12	72.2	55.0	65.8	61.8	67.0	59.5	58.0	59.3	57.8	55.6
13	71.6	47.0	58.5	64.7	59.5	48.2	54.2	58.0	57.4	46.0	13	72.5	56.0	65.1	65.6	68.5	57.9	58.9	58.7	58.7	54.6
14	66.1	43.4	57.2	57.3	61.6	51.9	51.4	48.8	52.8	47.9	14	73.2	53.7	62.7	66.6	67.2	62.4	57.0	57.4	56.9	54.6
15	60.6	44.5	52.9	58.5	55.9	44.6	46.1	50.3	48.6	42.7	15	69.6	50.0	62.7	66.9	61.8	59.6	55.2	56.9	54.0	52.7
16	64.0	37.0	58.6	59.9	59.4	53.3	50.3	50.4	51.0	46.5	16	71.0	52.0	60.4	64.3	67.6	55.0	54.2	55.7	56.8	50.9
17	67.0	47.3	55.4	60.3	63.3	53.4	51.0	53.8	55.7	52.4	17	75.2	47.4	61.8	70.5	71.9	57.6	56.6	59.7	59.8	54.3
18	68.2	51.3	58.4	63.6	63.6	57.8	54.4	56.3	58.2	55.8	18	75.9	45.0	69.6	75.4	72.3	62.3	61.8	64.0	61.5	58.8
19	69.2	54.2	58.8	61.5	66.5	58.3	52.0	53.1	55.2	50.7	19	73.2	53.8	61.5	65.4	62.2	53.9	56.7	55.6	55.8	51.8
20	66.4	43.7	61.6	63.1	59.7	59.5	53.0	57.9	56.8	57.6	20	70.7	50.0	63.4	67.7	65.7	58.6	57.3	57.7	56.9	55.4
21	70.4	56.6	63.7	66.2	66.2	59.0	59.6	60.8	61.4	52.8	21	72.3	54.2	64.4	67.4	63.2	61.4	57.6	59.3	59.4	59.8
22	74.1	48.5	63.7	68.4	68.7	58.5	56.4	58.6	58.9	55.0	22	72.8	58.2	65.2	69.5	68.0	58.3	61.8	63.4	63.4	57.3
23	75.1	49.0	63.0	70.6	72.7	59.3	55.5	58.8	59.4	54.5	23	77.2	55.3	67.2	68.5	75.0	63.6	63.9	67.5	69.0	60.8
24	76.8	48.2	66.8	73.5	75.2	66.1	55.7	61.6	61.3	59.7	24	73.8	56.1	67.2	69.2	70.9	60.4	60.5	60.0	61.3	57.1
25	66.7	54.9	58.3																		

READINGS of THERMOMETERS on the ORDINARY STAND in the MAGNETIC PAVILION ENCLOSURE—concluded.
(The readings of the maximum and minimum thermometers apply to the twenty-four hours ending 21^h.)

Days of the Month.	Dry-Bulb Thermometers, 4 ft. above the Ground.					Wet-Bulb Thermometers, 4 ft. above the Ground.				Days of the Month.	Dry-Bulb Thermometers, 4 ft. above the Ground.					Wet-Bulb Thermometers, 4 ft. above the Ground.					
	Maximum.	Minimum.	9 ^h	Noon.	15 ^h	21 ^h	9 ^h	Noon.	15 ^h		21 ^h	Maximum.	Minimum.	9 ^h	Noon.	15 ^h	21 ^h	9 ^h	Noon.	15 ^h	21 ^h
SEPTEMBER.										NOVEMBER.											
d										d											
1	68.2	48.1	63.0	64.9	65.8	55.6	58.7	57.3	57.4	52.3	1	54.1	44.4	49.6	52.8	53.6	50.5	47.0	49.8	48.4	48.0
2	68.9	44.0	62.0	67.8	67.6	51.1	55.1	57.9	56.6	50.5	2	50.8	42.6	43.3	46.1	47.1	48.5	40.8	43.4	44.8	47.5
3	76.0	44.2	65.1	72.7	74.4	59.3	57.8	58.9	61.6	54.1	3	49.4	39.7	42.1	47.2	46.5	43.4	41.6	44.0	43.5	41.4
4	81.3	52.1	69.3	76.7	78.7	58.8	59.2	61.5	62.0	54.8	4	57.0	38.2	44.9	53.8	52.1	38.2	43.9	49.8	47.1	37.8
5	83.0	48.2	72.0	80.1	79.6	63.4	62.0	64.2	61.4	60.4	5	52.5	33.3	38.1	49.7	50.6	41.9	38.1	47.5	45.9	41.0
6	71.8	57.4	61.6	67.7	65.9	57.6	54.0	55.1	55.8	55.4	6	45.4	33.6	35.0	38.8	44.9	43.8	35.0	38.8	44.4	43.8
7	72.2	49.0	65.0	70.9	69.0	54.3	59.8	60.8	57.4	50.5	7	52.9	38.3	42.0	49.4	50.8	42.9	41.4	46.9	46.8	41.9
8	82.7	49.3	70.6	78.8	79.3	60.4	64.0	66.6	67.4	58.0	8	49.1	41.9	44.5	48.4	48.1	42.0	43.6	44.6	44.7	40.0
9	72.9	55.1	64.3	67.5	70.7	55.8	60.0	62.9	64.8	55.1	9	49.6	39.0	43.1	48.4	47.0	39.7	40.0	42.4	42.2	38.5
10	72.6	50.1	62.6	68.6	71.6	59.6	57.9	60.7	62.8	57.9	10	49.7	27.5	32.0	47.3	46.7	49.6	31.2	42.0	42.9	48.8
11	72.0	52.1	62.6	68.7	67.4	57.8	58.8	59.0	58.6	55.4	11	56.4	49.6	52.5	55.7	55.9	54.6	51.3	53.7	54.6	53.8
12	69.6	46.3	57.7	66.4	66.6	51.4	56.9	58.2	57.6	49.4	12	58.9	54.3	57.2	58.0	58.3	56.9	55.8	56.5	56.5	55.2
13	68.0	44.1	58.2	65.5	63.9	52.7	54.0	55.5	56.3	50.5	13	60.1	52.4	54.8	56.7	58.1	52.8	53.0	54.7	53.3	50.0
14	69.1	47.1	62.9	67.6	64.4	54.6	58.2	57.2	56.2	51.8	14	55.0	41.7	46.5	53.8	52.5	49.1	44.7	48.3	47.7	47.8
15	67.1	48.9	58.9	66.0	63.9	55.8	56.3	58.8	57.8	53.5	15	55.9	48.8	52.0	54.6	54.5	50.5	51.1	52.3	51.6	48.6
16	69.2	51.6	56.1	63.6	66.2	52.2	54.8	58.3	58.8	51.8	16	59.0	43.8	51.1	58.2	54.7	50.4	50.8	54.3	49.8	46.0
17	74.0	46.4	63.1	69.1	68.8	55.9	58.8	57.8	58.9	53.5	17	51.9	45.0	46.6	50.0	51.2	45.4	45.1	44.8	44.9	42.6
18	72.6	51.0	56.6	68.1	70.6	51.9	54.9	59.2	60.2	51.6	18	54.0	41.4	44.6	50.6	51.7	50.0	42.6	47.1	48.4	48.4
19	67.0	48.1	56.5	64.3	64.8	48.7	51.7	52.4	53.3	45.8	19	58.2	47.7	53.3	56.5	54.4	48.2	51.8	53.4	51.5	45.0
20	64.1	37.8	54.7	60.6	62.5	51.9	50.7	51.3	51.6	47.1	20	57.5	44.9	46.6	55.0	53.6	50.6	43.8	50.6	47.8	48.9
21	63.4	36.7	50.7	61.5	62.5	51.6	48.4	52.8	51.7	46.0	21	57.4	47.1	55.1	55.7	56.6	56.0	54.1	54.8	55.8	53.5
22	62.3	41.3	52.8	60.6	60.0	49.5	48.3	51.7	50.9	46.5	22	56.0	50.2	50.7	52.3	52.0	52.6	49.6	48.8	50.1	49.8
23	62.1	42.9	48.5	56.4	56.6	50.6	46.9	50.3	48.0	45.8	23	57.8	45.9	50.5	56.8	57.6	46.6	49.8	54.8	54.1	42.1
24	58.1	42.9	50.6	52.7	56.6	51.4	47.4	50.4	51.2	49.4	24	51.1	45.1	49.2	49.9	50.1	46.3	45.4	45.7	45.1	43.0
25	59.2	44.8	46.7	57.4	57.5	48.6	45.4	51.9	50.0	46.3	25	55.6	45.1	53.6	55.6	50.4	47.6	52.6	51.8	44.5	43.9
26	63.5	40.4	51.0	59.6	60.2	47.6	48.7	52.1	52.0	46.1	26	49.3	38.8	45.5	48.4	48.2	39.4	41.3	42.8	42.8	37.8
27	65.1	34.0	50.3	63.6	62.6	51.9	48.3	54.8	53.9	49.6	27	43.2	38.2	41.3	42.0	42.4	39.5	38.2	38.8	38.8	37.4
28	58.8	49.1	57.5	56.6	54.9	53.4	54.7	54.2	53.3	51.2	28	41.6	35.9	37.1	40.6	40.8	37.3	33.6	36.3	36.8	34.5
29	59.0	50.1	54.5	57.7	57.6	51.3	51.9	53.7	53.3	49.8	29	44.4	32.9	36.5	40.2	43.5	44.4	34.1	37.0	40.7	44.0
30	56.3	43.7	49.7	51.6	51.7	44.2	45.5	45.8	44.7	41.1	30	53.5	44.2	50.6	52.6	51.8	50.6	49.2	49.8	49.6	49.2
Means	68.3	46.6	58.5	65.1	65.4	53.6	54.3	56.4	56.2	51.0	Means	52.9	42.4	46.3	50.8	50.9	47.0	44.7	47.5	47.2	45.0
OCTOBER.										DECEMBER.											
d										d											
1	55.5	37.8	46.6	53.6	54.6	38.7	41.7	44.8	46.5	37.1	1	52.9	45.4	51.2	52.4	51.6	46.6	48.9	49.6	49.8	43.4
2	57.3	37.8	48.0	53.6	55.7	48.7	45.0	49.8	51.3	47.7	2	47.0	39.5	42.1	41.0	40.7	42.8	40.8	40.2	39.9	40.5
3	63.0	34.0	51.6	59.6	58.6	50.6	46.3	52.0	51.8	45.5	3	48.3	42.1	44.5	47.6	47.4	45.2	44.0	46.8	45.4	43.7
4	60.6	39.9	54.7	59.2	58.0	43.5	49.9	50.9	50.3	42.1	4	45.3	35.0	38.8	43.8	43.5	39.4	38.6	42.8	42.1	39.0
5	67.0	39.8	52.4	60.6	65.1	55.1	51.0	56.5	59.9	53.3	5	49.6	35.2	45.6	48.6	48.6	35.2	44.6	47.3	47.4	35.2
6	66.5	52.2	56.9	60.6	62.3	52.6	53.9	53.8	55.3	51.0	6	50.9	28.8	42.0	47.6	50.6	43.3	41.0	45.4	48.8	39.7
7	68.0	44.2	58.4	64.4	64.3	55.6	55.8	58.4	58.8	54.6	7	43.3	33.2	37.4	41.9	40.9	33.2	35.7	38.8	36.9	32.3
8	67.9	52.6	60.2	66.6	63.4	55.8	56.1	60.8	59.6	55.2	8	36.4	26.6	28.8	35.5	35.0	28.6	28.1	32.8	32.2	28.0
9	65.3	51.5	56.6	60.8	62.1	52.6	55.3	55.5	55.9	51.8	9	36.3	24.1	27.8	34.9	36.1	30.6	27.0	32.2	33.6	29.6
10	59.5	47.1	51.6	58.3	56.5	50.6	50.2	53.2	52.9	49.8	10	37.6	30.2	34.3	36.7	34.3	34.1	31.8	33.2	31.8	32.6
11	64.2	49.8	56.3	59.9	59.7	52.6	55.8	53.9	53.7	49.8	11	38.5	33.9	36.6	38.1	36.8	36.4	35.3	36.8	36.1	34.9
12	53.9	44.4	49.9	52.7	51.7	44.7	49.4	49.2	46.8	42.2	12	37.4	33.4	37.3	36.6	36.8	36.5	36.6	35.8	36.0	35.8
13	54.2	33.9	42.8	51.1	50.3	39.0	41.2	43.9	43.9	37.2	13	39.7	35.8	38.0	38.8	38.8	36.4	36.8	36.8	36.6	34.4
14	56.3	29.3	44.9	53.6	52.9	48.1	42.7	47.4	45.8	46.9	14	36.4	27.0	27.8	34.6	32.4	29.8	27.2	32.1	31.8	29.4
15	55.9	46.3	52.4	55.6	52.2	50.0	51.0	51.9	50.5	49.6	15	31.0	23.9	25.9	30.6	30.9	30.2	25.5	30.0	30.5	30.0
16	59.1	48.1	53.9	57.9	57.8	58.5	52.2	54.8	56.4	58.1	16	44.9	28.5	39.8	42.2	39.8	44.8	37.3	38.4	38.8	44.2
17	66.4	50.3	59.3	61.0	65.6	50.6	58.3	60.7	62.0	48.5	17	48.0	39.4	41.5	45.1	45.1	43.2	39.8	42.6	42.8	41.6
18	62.0	44.3	56.6	61.2	60.9	53.2	53.6	58.3	59.9	50.6	18	43.2	33.0	34.7	36.6	36.6	35.3	34.7	36.2	36.4	35.2
19	60.4	50.4	55.3	58.6	57.7	57.5	50.8	51.5	52.0	54.7	19	45.7	32.4	36.3	44.4	45.0	45.6	35.9	43.1	43.7	45.4
20	60.2	47.1	51.3	54.6	54.4	47.8	50.8	52.1	50.8	45.6	20	47.1	38.9	43.8	42.6	41.9	39.6	42.8	41.0	38.9	37.7
21	57.7	41.0	51.8	53.7	55.4	46.7	47.8	49.4	50.5	45.9	21	39.8	32.0	34.7	38.7	33.6	34.8	33.9	36.9	32.8	34.0
22	56.9	43.9	47.6	53.4	51.6	48.7	46.5	49.8	49.4	48.2	22	46.4	30.2	40.3	43.0	44.4	46.4	38.3	41.8	43.7	45.8
23	57.6	44.0	46.6	54.5	55.0	53.1	45.0	49.0	48.4	51.7	23	46.7	34.6	41.6	42.8	37.3	35.4	40.0	40.8	37.1	35.0
24	61.6	52.3	58.2	60.4	54.9	53.4	53.7	54.6	53.7	49.8	24	50.7	35.1	46.0	47.6	50.0	49.6	44.8	46.9	49.0	49.1
25	62.0	46.9	54.5	59.3	55.6	48.1	50.9	52.3	51.9	46.6	25	50.3	37.0	38.0	42.7	43.0	47.4	37.2	39.9	39.6	45.2
26	57.1	41.3	51.5	54.6	51.7	50.6	49.0	50.7	49.9	49.4	26	54.7	40.6	54.4	50.8	48.0	40.6	52.5	50.6	46.8	38.7
27	57.2	49.1																			

AMOUNT OF RAIN COLLECTED in each MONTH of the YEAR 1928.

Gauges partly sunk in the Ground in the Magnetic Pavilion Enclosure.	Monthly Amount of Rain collected in each Gauge.														Height of Receiving Surface.	
	Number of Gauge.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Sums.	Above the Ground.	Above Mean Sea Level.
		in.	in.	in.	in.	in.	in.	in.	in.	in.	in.	in.	in.	in.	ft. in.	ft. in.
6	2.992	1.155	1.613	1.464	2.485	2.291	1.651	3.279	0.688	3.451	1.754	2.424	25.247	0 5	149 6	
8	3.022	1.223	1.609	1.412	2.446	2.311	1.690	3.171	0.700	3.529	1.765	2.477	25.355	1 0	150 1	
Number of Rainy Days (0.005 in. or over).	...	24	13	17	15	10	14	8	16	7	19	16	18	177	...	...

MEAN HOURLY MEASURES of the HORIZONTAL MOVEMENT of the AIR in each MONTH, and GREATEST HOURLY MEASURES, as derived from the RECORDS of ROBINSON'S ANEMOMETER.

Hour ending.	1928.												Mean for the Year.
	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	
1h	15.5	14.1	9.1	10.1	8.4	10.4	9.5	9.6	7.1	11.0	15.1	10.6	10.9
2	15.6	14.6	8.6	9.6	8.2	10.9	9.2	9.1	6.8	10.9	14.7	10.7	10.7
3	14.7	14.6	8.5	10.0	8.2	10.2	8.9	8.6	6.8	11.0	15.0	10.7	10.6
4	13.9	14.6	8.5	10.4	8.3	10.0	8.9	8.9	7.2	10.5	14.4	10.2	10.5
5	14.2	15.1	8.7	10.2	7.9	9.8	9.1	9.5	8.0	10.6	14.6	10.3	10.7
6	14.5	14.7	8.9	10.3	7.6	10.3	8.9	9.4	7.6	10.4	14.6	9.5	10.6
7	15.0	14.8	8.9	10.4	8.6	10.7	9.2	9.8	7.1	10.9	14.9	10.0	10.9
8	15.3	14.6	9.3	11.3	8.5	11.9	9.5	10.4	7.4	11.0	16.0	10.0	11.3
9	16.2	15.1	9.8	12.1	9.0	12.9	10.1	10.9	8.0	11.5	15.6	10.5	11.8
10	16.6	15.8	11.1	13.0	9.4	13.9	10.5	11.5	9.5	12.9	16.7	11.0	12.7
11	17.7	17.3	12.0	13.7	10.1	14.8	11.4	12.8	10.7	13.9	18.1	11.0	13.6
Noon	20.0	18.9	12.9	14.9	11.1	16.6	12.5	14.5	11.9	15.0	19.9	12.4	15.0
13h	20.6	18.1	12.2	15.9	12.1	16.8	12.8	15.0	11.4	15.0	19.7	12.0	15.1
14	20.2	19.3	12.7	15.3	11.6	16.6	12.6	14.5	11.4	15.0	20.2	12.5	15.2
15	21.2	18.7	11.7	15.0	12.0	15.6	12.6	14.9	11.4	14.9	19.4	11.7	14.9
16	20.3	18.3	11.2	14.3	12.3	16.1	13.1	14.5	12.2	14.2	19.0	11.1	14.7
17	19.8	17.2	10.8	13.8	12.0	16.4	13.7	14.1	11.3	12.9	18.8	11.1	14.3
18	18.8	15.9	10.3	12.5	11.0	15.5	12.7	13.8	10.5	11.7	18.6	10.5	13.5
19	18.4	16.0	10.2	11.3	10.8	15.1	12.7	11.8	9.4	12.2	19.1	11.0	13.2
20	17.6	15.7	10.4	10.4	10.2	14.2	11.4	10.6	8.8	12.0	19.4	10.9	12.6
21	17.9	14.8	9.7	10.9	10.1	12.1	11.4	9.8	8.2	11.7	18.0	11.2	12.2
22	16.7	14.0	9.7	10.6	9.6	11.8	10.3	9.2	8.0	11.5	17.3	10.8	11.6
23	16.8	14.2	9.2	10.5	9.2	11.3	10.2	9.5	7.9	11.3	17.1	10.2	11.4
Midnight	15.9	14.5	9.1	10.3	9.2	11.5	9.4	9.6	6.9	10.8	16.1	10.3	11.1
Means ...	17.2	15.9	10.1	12.0	9.8	13.1	10.9	11.3	9.0	12.2	17.2	10.8	12.5
Greatest Hourly Measures	(1) 55	57	30	30	25	31	26	29	25	34	58	34	...
	(2) 41	42	24	24	21	25	21	23	21	27	43	27	...

(1) Deduced from the motion of the cups by the formula $V=3v$;
 (2) $V=2v+4$;
 where v is the "hourly motion of the cups in" miles. See Introduction.

