

RESULTS

OF THE

MAGNETICAL AND METEOROLOGICAL OBSERVATIONS

MADE AT

THE ROYAL OBSERVATORY, GREENWICH,

IN THE YEAR

1900:

UNDER THE DIRECTION OF

W. H. M. CHRISTIE, C.B., M.A., F.R.S.,

ASTRONOMER ROYAL.

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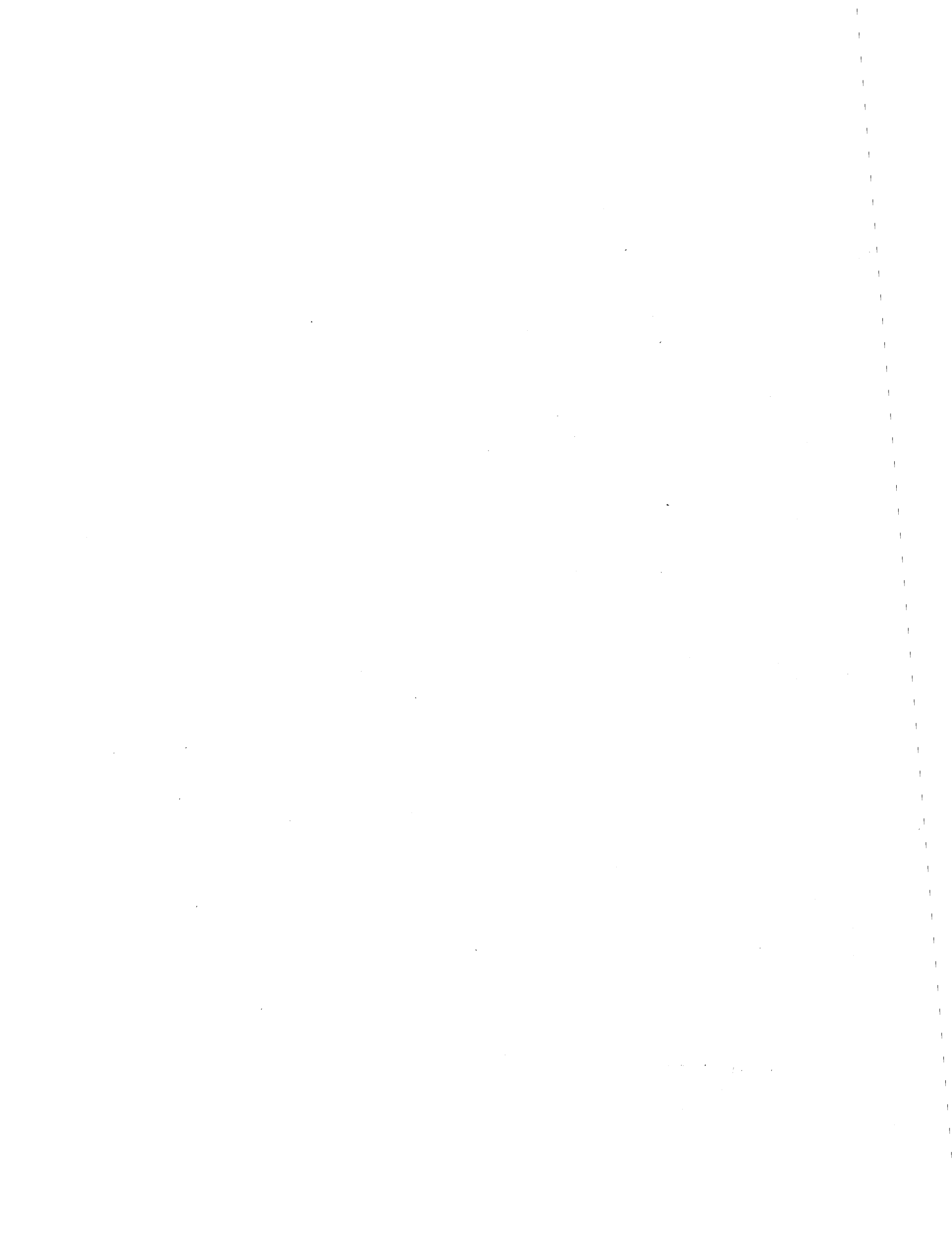
ROYAL OBSERVATORY, GREENWICH.

RESULTS

OF

MAGNETICAL AND METEOROLOGICAL
OBSERVATIONS.

1900.



GREENWICH MAGNETICAL AND METEOROLOGICAL OBSERVATIONS, 1900.

INTRODUCTION.

§ 1. *Personal Establishment and Arrangements.*

During the year 1900 the personal establishment in the Magnetical and Meteorological Department of the Royal Observatory consisted of William Carpenter Nash, Superintendent, aided by one Established Computer, David J. R. Edney, and four Computers. The Computers employed during the year were :—Charles William Jeffries, Thomas Henry Clarke, Charles William Ralph, and Albert Edward Showell.

Mr. Nash controls and superintends the whole of the work of the Department. The routine magnetical and meteorological observations are in general made by the Computers.

§ 2. *General Description of the Buildings and Instruments of the Magnetical and Meteorological Observatory.*

The Magnetical and Meteorological Observatory was erected in the year 1838. Its northern face is distant about 170 feet south-south-east from the nearest point of the South-East Dome and about 20 feet south of the new Altazimuth Pavilion. On its east stands the New Library (now used as a store-room), erected at the end of the year 1881), in the construction of which non-magnetic bricks were used, and every care was taken to exclude iron. The Magnetical and Meteorological Observatory is based on concrete and built of wood, united for the most part by pegs of bamboo ; no iron was intentionally admitted in its construction, or in subsequent alterations. Its form is that of a cross, the arms of the cross being nearly in the direction of the cardinal magnetic points as they were in 1838. The northern arm is longer than the others, and is separated from them by a partition, and used as a Computing Room ; the stove which warms this room, and its flue, are of copper. The remaining portion, consisting of the eastern, southern, and western arms, is known as the Upper Magnet Room. The upper declination magnet and its theodolite, for determination of absolute declination, were formerly placed in the southern arm, an opening in the roof allowing circumpolar stars to be observed by the theodolite, for determination of its reading for the

astronomical meridian. Both the magnet and its theodolite were supported on piers built from the ground. In the eastern arm is placed the Thomson electrometer for photographic record of the variations of atmospheric electricity; its water cistern rests on four glass insulators supported by a platform fixed to the western side of the southern arm, near the ceiling. The Standard barometer is suspended near the junction of the southern and western arms. The sidereal clock, Grimalde and Johnson, is fixed at the junction of the eastern and southern arms, and there is in addition a mean solar chronometer, M^cCabe No. 649, for general use. A mean solar clock (Molyneux), transferred from the Astronomical Department, was set up in the northern arm during the year 1883. It was returned to the Time Department in August 1900.

Until the year 1863 the horizontal and vertical force magnets were also located in the Upper Magnet Room, the declination magnet being up to that time employed for photographic record of the variations of declination, as well as for absolute measure of the element. But experience having shown that the horizontal and vertical force magnets were exposed in the upper room to large variations of temperature, a room known as the Magnet Basement (in which the variations of temperature are very much smaller) was excavated in the year 1864 below the Upper Magnet Room, and the horizontal and vertical force magnets, as well as a new declination magnet for photographic record of declination, were mounted therein. The Magnet Basement is of the same dimensions as the Upper Magnet Room. The lower declination magnet and the horizontal force and vertical force magnets, as now located in the Basement, are used entirely for record of the variations of the respective magnetic elements. The declination magnet is suspended in the southern arm, immediately beneath the position formerly occupied by the upper declination magnet; the horizontal and vertical force magnets are placed in the eastern and western arms respectively, in positions nearly underneath those which they occupied when in the Upper Magnet Room. All are mounted on or suspended from supports carried by piers built from the ground. A photographic barometer is fixed to the northern wall of the Basement, and an apparatus for photographic registration of earth currents is placed near the southern wall of the eastern arm. A mean solar clock of peculiar construction for interruption of the photographic traces at each hour is fixed on the north side of the central pier. Another mean solar clock for general use is attached to the western wall of the southern arm. For better ascertaining the variations of temperature of the Basement, a Richard metallic thermograph was added in February 1886. It is placed on the pier carrying the horizontal force magnet, and gives a continuous register of temperature on a scale of 5° to 1 inch, the scale for time being 24 hours to 5½ inches. On the northern wall, near the photographic barometer, is fixed the Sidereal Standard clock of the Astronomical Observatory, Dent 1906,

communicating with the chronograph and with clocks of the Astronomical Department by means of underground wires. This clock is placed in the Magnet Basement, because of its nearly uniform temperature.

The Basement is warmed, when necessary, by a gas stove (of copper), and ventilated by means of a large copper tube nearly two feet in diameter, which receives the flues from the stove and all gas-lights, and passes through the Upper Magnet Room to a revolving cowl above the roof. Another gas stove provided with the object of maintaining a higher temperature during the winter, and so rendering the Basement temperature more uniform throughout the year, is placed near the middle of the western wall of the western arm. Each of the arms of the Basement has a well window facing the south, but these wells are usually closely stopped up with bags packed with straw or jute. In January 1886 a line of 9-inch pipes was laid underground from the Basement southward to a distance of about 155 feet, at which point there is an inlet from the atmosphere, for the purpose of ventilating the Basement by air which has acquired the temperature of the soil at a depth of several feet below the surface, and of thus obtaining greater uniformity of temperature. The depth of the line of pipes below the surface varies from 5 feet at the inlet in the south ground to 11 feet 6 inches at the entrance to the Basement.

A platform erected above the roof of the Magnet House is used for the observation of meteors. A rain gauge is placed on a table on this platform, and there are also thermometers (placed in a louvre-boarded shed or screen, with free circulation of air) for observation of the temperature of the air in an exposed situation at a height of 20 feet above the ground.

An apparatus for naphthalizing the gas used for the photographic registration is mounted in a small detached zinc-built room adjacent to the Computing Room on its western side, but it has not been in use for several years.

To the south of the Magnet House, in what is known as the Magnet Ground, is an open shed, on the west side of the earth thermometers, consisting principally of a roof supported on four posts, under which is placed the photographic dry-bulb and wet-bulb thermometer apparatus. On the roof of this shed there is fixed an ozone box and a rain gauge. About 20 feet south of the southern arm of the Magnet House are placed the earth thermometers, the upper portions of which, projecting above the ground, are protected by a small wooden hut, and at about the same distance south-east of the southern arm of the Magnet House is situated a Stevenson screen containing dry-bulb, wet-bulb, and maximum and minimum thermometers, and a few feet further east there are two rain gauges.

The Magnet Ground is bounded on its western side by a range of seven rooms, known as the Magnetic Offices.

In the South Ground stands the new Observatory Building erected in the years 1891 to 1898, and on the north side of the Magnetical Observatory stands the new Altazimuth Pavilion erected in 1894 to 1895. In both of these buildings considerable masses of iron have been introduced.

The Magnetic Pavilion, in an enclosure in Greenwich Park, at a distance of about 350 yards from the Observatory, on the East side, was completed at the end of 1898 September, and the instruments for absolute determinations of magnetic declination, dip and horizontal force are installed there. The greatest care was taken to exclude all iron in building the Magnetic Pavilion, and the site was selected so that there should be no suspicion of magnetic disturbance from iron in the neighbourhood. The revolving stand carrying the thermometers used for ordinary eye observations, the thermometers for solar and terrestrial radiation, and the standard rain gauge, were moved to an open position in the Magnetic Pavilion enclosure at the beginning of 1899, and a Stevenson screen was added on 1900 March 31.

The Anemometers are fixed above the roof of the Octagon Room (the ancient part of the Observatory):—Osler's, for continuous record of direction and pressure of wind, and amount of rain above the north-western turret, and Robinson's for continuous record of velocity, above the small wooden building on the southern side of the roof of the Octagon Room. Since 1896 February 6 the sunshine instrument has also been mounted on the building which carries the Robinson Anemometer.

Regular observation of the principal magnetical and meteorological elements was commenced in the autumn of the year 1840, and has been continued, with some additions to the subjects of observation, to the present time. Until the end of the year 1847 observations were in general made every two hours, but at the beginning of the year 1848 these were superseded by the introduction of the method of photographic registration, by which means a continuous record of the various elements is obtained.

For information on many particulars concerning the history of the Magnetical and Meteorological Observatory, especially in regard to alterations not recited in this volume, which have been made from time to time, the reader is referred to the Introductions to the Magnetical and Meteorological Observations for preceding years, and to the Descriptions of the Buildings and Grounds, with accompanying Plans, given in the volumes of Astronomical Observations for the years 1845 and 1862.

§ 3. *Subjects of Observation in the year 1900.*

The observations comprise determinations of absolute magnetic declination, horizontal force, and dip; continuous photographic record of the variations of declination, horizontal force, and vertical force, and of the earth currents indicated in two distinct lines of wire; eye observations of the ordinary meteorological instruments, including the barometer, dry and wet-bulb thermometers, radiation and earth thermometers, and of thermometers placed on the roof of the Magnet House; continuous photographic record of the variations of the barometer, dry and wet-bulb thermometers, and electrometer (for atmospheric electricity); 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 amount of ozone; observations of some of the principal meteor showers; general record of ordinary atmospheric changes of weather, including numerical estimation of the amount of cloud, and occasional phenomena.

From the beginning of the year 1885, Greenwich civil time, reckoning from midnight to midnight, and counting from 0 to 24 hours, has been employed throughout the magnetical and meteorological sections. In previous years the time used throughout the magnetic section was Greenwich astronomical time, reckoning from noon to noon; and generally, in the meteorological section, Greenwich civil time, reckoning from midnight to midnight.

§ 4. *Magnetic Instruments.*

DECLINATION MAGNET FOR ABSOLUTE DETERMINATIONS. — For determination of magnetic declination in the Magnetic Pavilion, the hollow cylindrical magnet, Elliot No. 75, has been mounted in conjunction with the theodolite formerly used with the upper declination magnet in the Observatory, the aperture of the viewing telescope being reduced to that of the magnet collimator (0·3 inch) and a low-power eye-piece being provided. Since 1899 January 1 regular observations of declination have been made in the Magnetic Pavilion, alternating with determinations with the upper declination magnet in the Magnet House, to determine the correction required to the results found at the latter site, representing the effect of the iron in the Observatory Buildings. This correction was found from observations made in 1899 to be $-10'8$. The upper declination magnet, formerly employed until the end of the year 1898 for the determination of absolute declination, was finally dismantled at the end of the year 1900.

The theodolite, by which the position of the declination magnet is observed, is by Troughton and Simms. It is planted about 2 feet south of the magnet. The radius of

its horizontal circle is 8.3 inches, and the circle is divided to 5', and read, by three verniers, to 5". The theodolite has three foot-screws, which rest in brass channels let into the capping stone cemented to the concrete pier which rises from the ground. The length of the telescope is 21 inches, and the aperture of its object-glass 2 inches: it is carried by a horizontal transit-axis $10\frac{1}{2}$ inches long, supported on Y's carried by the central vertical axis of the theodolite. The eye-piece has one fixed horizontal wire and one vertical wire moved by a micrometer-screw, the field of view in the observation of stars being illuminated through the pivot of the transit-axis on that side of the telescope which carries the micrometer-head. The value of one division of the level is 1".15. By opening the North door of the Magnetic Pavilion observation of circumpolar stars can be made for determination of the reading of the horizontal circle of the theodolite corresponding to the astronomical meridian.

The inequality of the pivots of the axis of the theodolite telescope was determined on 1898 November 25 and 1898 December 5, and the correction was found to be $-6^{\text{div}}\cdot 0$, which is equivalent to $-6''\cdot 9$.

The value in arc of one revolution of the telescope-micrometer is $1'.34''\cdot 2$.

The adopted reading for the line of collimation of the theodolite telescope throughout the year was $100^{\circ}\cdot 280$.

No correction was found for effect of the plane glass in front of the box of the declination magnet.

The error of collimation of the magnet collimator is found by observing the position of the magnet, first with the collimator in the usual position with its scale direct, then with the collimator with its scale reversed, repeating the observations several times. This value was found from seventeen determinations during the year to be $3'. 30''\cdot 7$.

The effect of torsion of the silk suspending thread is eliminated by turning the torsion-circle until the brass torsion weight inserted in place of the magnet, rests in the plane of the magnetic meridian. The weight is inserted usually about once a week, and whenever the adjustment is found not to have been sufficiently close, the observed positions of the magnet are corrected for displacement of the magnet from the meridian by the torsion of the thread. Such correction is determined experimentally, with the magnet in position, by changing the reading of the torsion-circle by a definite amount, usually 90° , thus giving the suspension thread that amount of azimuthal twist, and observing, with the theodolite, the change in the position of the magnet thereby produced, from which is derived the ratio of the couple due to torsion of the thread to the

couple due to the earth's horizontal magnetic force. This ratio was found from the mean of five determinations to be $\frac{1}{1543}$.

The reading of the azimuthal circle of the theodolite corresponding to the astronomical meridian is determined about twice in each month by observations of Polaris.

In regard to the manner of making observations with the declination magnet:—The observer, on looking into the theodolite telescope, sees the image of the scale of the magnet collimator vibrating alternately right and left. At the pre-arranged time of observation, by means of the tangent screw, the vertical wire carried by the telescope-micrometer is made to bisect the central division of the scale: repeating the operation if found necessary. The verniers of the theodolite-circle are then read. The mean circle-reading being adopted, and corrected for collimation of the magnet, the concluded circle reading corresponding to the position of the magnet is found. The difference between this reading and the adopted reading of the circle for the north astronomical meridian gives, when (as is usually the case) no correction for torsion of the skein is necessary, the observed value of absolute declination, afterwards used for determining the value of the photographed base line on the photographic register of the lower declination magnet. The times of observation of the declination magnet are usually 9^h, 12^h (noon), 15^h, and 21^h of Greenwich civil time, reckoning from midnight.

LOWER DECLINATION MAGNET.—The lower declination magnet suspended in the Magnet Basement is used simply for the purpose of obtaining photographic register of the variations of magnetic declination. It is by Troughton and Simms, and is 2 feet long, $1\frac{1}{2}$ inches broad, and $\frac{1}{4}$ inch thick.

The magnet is suspended by a skein of silk passing over two brass suspension pulleys carried by a small pier built on crossed slates resting on brick piers rising from the ground. The length of free suspending skein is about 6 feet. The position of the azimuthal plane in which the brass torsion bar rests, when substituted for the magnet, is examined from time to time, and adjustment made as necessary, to keep this plane in or near the magnetic meridian.

The magnet is enclosed in a double rectangular wooden box (one box within another), covered externally and internally with gilt paper, placed upon the pier; and to destroy the small accidental vibrations to which the magnet would be otherwise liable, it is encircled by a damper consisting of a copper bar, about 1 inch square, which is bent into a long oval form, the plane of the oval being

vertical; a lateral bend is made in the upper bar of the oval to avoid interference with the suspension piece of the magnet. The effect of the damper is to reduce the amplitude of the oscillation after every complete or double vibration of the magnet in the proportion of 5 : 2 nearly.

In regard to photographic arrangements, it may be convenient, before proceeding to speak of the details peculiar to each instrument, to remark that the general principle adopted for obtaining continuous photographic record is the same for all instruments. For the register of each indication a cylinder of ebonite is provided, the axis of the cylinder being placed parallel to the direction of the change of indication to be registered. If, as is usually the case, there are two indications whose movements are in the same direction, both may be registered on the same cylinder: thus, the movements in the case of magnetic declination and horizontal magnetic force, being both horizontal, can be registered on different parts of one cylinder with axis horizontal: so, also, can two different galvanic earth currents. The movements in the case of vertical magnetic force, and of the barometer, being both vertical, can similarly be registered on different parts of one cylinder having its axis vertical, as also can the indications of the dry-bulb and wet-bulb thermometers. In the electrometer, the movement being horizontal, a horizontal cylinder is provided.

The cylinder is in each case driven by chronometer or accurate clock-work to ensure uniform motion. The pivots of the horizontal cylinders turn on anti-friction wheels; the vertical cylinders rest each on a circular plate turning on anti-friction wheels, the driving mechanism being placed below. A sheet of sensitized paper being wrapped round the cylinder, and held by a slender brass clip, the cylinder thus prepared is placed in position, and connected with the clock-movement: it is then ready to receive the photographic record, the optical arrangements for producing which will be found explained in the special description of each particular instrument. The sheets are removed from the cylinders, and fresh sheets supplied every day, usually at noon. On each sheet a reference line is also photographed, the arrangements for which will be more particularly described in each special case. All parts of the apparatus and all parts of the paths of light are protected, as found necessary, by wood or zinc casings or tubes, blackened on the inside, in order to prevent stray light from reaching the photographic paper.

In June 1882 the photographic process employed for many years was discarded, and a dry paper process introduced, the argentic-gelatino-bromide paper, as prepared by Messrs. Morgan and Kidd of Richmond (Surrey), being used with ferrous oxalate development. The greater sensitiveness of this paper permits diminution of the

effective surface of the magnet mirrors, and allows also the use of smaller gas flames. In the case of the vertical force magnet the old and comparatively heavy mirror has been replaced by a small and light mirror with manifest advantage, as will be seen in the description of the vertical force magnet. The new paper acts equally well at all seasons of the year, and any loss of register on account of photographic failure is now extremely rare.

Referring now specially to the lower declination magnet, there is attached to the magnet carrier, for the purpose of obtaining photographic register of the motions of the magnet, a concave mirror of speculum metal, 5 inches in diameter (reduced by a stop, on the introduction of the new photographic paper, to an effective diameter of about 1 inch), which thus partakes in all the angular movements of the magnet. The revolving ebonite cylinder is $11\frac{1}{2}$ inches long and $14\frac{1}{4}$ inches in circumference. It is supported, in an approximately east and west position, on brass uprights carried by a metal plate, the whole being planted on a firm wooden platform, the supports of which rest on blocks driven into the ground. The platform is placed midway between the declination and horizontal force magnets, in order that the variations of magnetic declination and horizontal force may both be registered on the same cylinder, which makes one complete revolution in 26 hours.

The light used for obtaining the photographic record is that given by a flame of coal gas, charged occasionally with the vapour of coal naphtha. A vertical slit, about $0^{\text{in}}.3$ long and $0^{\text{in}}.01$ wide, placed close to the light, is firmly supported on the pier which carries the magnet. It stands slightly out of the straight line joining the mirror of the magnet and the registering cylinder, and its distance from the mirror is about 25 inches. The distance of the axis of the registering cylinder from the mirror is 134.4 inches. Immediately above the cylinder, and parallel to its axis, are placed two long reflecting prisms (each 11 inches in length), extending from end to end of the cylinder, and facing opposite ways towards the mirrors carried by the declination and horizontal force magnets respectively. The front surface of each prism is convex, being a portion of a horizontal cylinder. The light of the declination lamp, after passing through the vertical slit, falls on the concave mirror, and is thence reflected as a converging beam to form an image of the slit on the convex surface of the reflecting prism, by the action of which it is reflected downwards to the paper on the cylinder as a small spot of light. The concave mirror can be so adjusted in azimuth on the magnet, that the spot shall fall, not at the centre of the cylinder, but rather towards its western side, in order that the declination trace shall not interfere with that of horizontal force, which is made to fall towards the eastern side of the cylinder. The special advantage of the arrangement here described is that the registers of both magnets are made at the same part of the circumference of

the cylinder, a line joining the two spots being parallel to its axis, so that when the traces on the paper are developed, the parts of the two registers which appear in juxtaposition correspond to the same Greenwich time.

By means of a small prism, fixed near the registering cylinder, the light from another lamp is made to form a spot of light on the cylinder in a fixed position, so that, as the cylinder revolves, a reference or base line is traced out on the paper, from which, in the interpretation of the records, the ordinates are measured.

A clock of special construction, arranged by Messrs. E. Dent and Co., acting upon a small shutter placed near the declination slit, cuts off the light from the mirror two minutes before each hour, and admits it again two minutes after the hour, thus producing at each hour a visible interruption in the trace, and so ensuring accuracy as regards time scale. By means of another shutter the observer occasionally cuts off the light for a few minutes, registering the times at which it was cut off and admitted again. The visible interruptions thus made at definite times in the trace obviate any possibility of error being made by wrong numeration of the hourly breaks.

The usual hour of changing the photographic sheet is noon, but on Sundays, and occasionally on other days, this rule is not strictly followed. To obviate any uncertainty that might arise on such occasions from the interference of the two ends of a trace slightly longer than 24 hours, it has been arranged that one revolution of the cylinder should be made in 26 hours. The actual length of 24 hours on the sheet is about 13·3 inches.

The scale for measurement of ordinates of the photographic curve is thus determined. The distance from the concave mirror carried by the magnet to the surface of the cylinder, in the actual path of the ray of light through the prism, is practically the same as the horizontal distance of the centre of the cylinder from the mirror, 134·4 inches. A movement of 1° of the mirror produces a movement of 2° in the reflected ray. From this it is found that 1° of movement of the mirror, representing a change of 1° of magnetic declination, is equal to 4·691 inches on the photographic paper. A small strip of cardboard is therefore prepared, graduated on this scale to degrees and minutes. The ordinates of the curve, as referred to the base line, being measured for the times at which absolute values of declination were determined, usually four times daily, the apparent value of the base line, as inferred from each observation, is found. The process assumes that the movements of the two declination magnets are precisely similar. The separate base line values being divided into groups, usually monthly, a mean base line value is adopted for use through each group. This adopted base line value is written upon every sheet. Then, with the cardboard scale, there is laid down,

conveniently near to the photographic trace, a new base line, whose ordinate represents some whole number of degrees or other convenient quantity. Thus every sheet carries its own scale of magnetic measure. From the new base line the hourly ordinates (see page *xxix*) are measured.

HORIZONTAL FORCE MAGNET.—The horizontal force magnet, for measure of the variations of horizontal magnetic force, was made by Meyerstein of Göttingen, and like the lower declination magnet, is 2 feet long, $1\frac{1}{2}$ inches broad, and about $\frac{1}{4}$ inch thick. For support of its suspension skein, the back and sides of its brick pier rise through the eastern arm of the Magnet Basement to the Upper Magnet Room, being there covered by a slate slab, to the top of which a brass plate is attached, carrying, immediately above the magnet, two brass pulleys, with their axes in the same east and west line; and at the back of the pier, and opposite to these pulleys, two others, with their axes similarly in an east and west line: these constitute the upper suspension piece, and support the upper portions of the two branches of the suspension skein. The two lower pulleys, having their axes in the same horizontal plane, and their grooves in the same vertical plane, are attached to a small horizontal bar which forms the upper portion of the torsion-circle: it carries the verniers for reading the torsion-circle, and can be turned independently of the lower and graduated portion of the torsion-circle, below which, and in rigid connexion with it, is the magnet carrier.

The suspension skein is led under the two pulleys carried by the upper portion of the torsion-circle; its two branches then rise up and pass over the front pulleys of the upper suspension piece, thence to and over the back pulleys, thence descending to a single pulley, round which the two branches are tied: from this pulley a cord goes to a small windlass fixed to the back of the pier. The effective length of each of the two branches of the suspension skein is about $7^{\text{ft}}\ 6^{\text{in}}$. The distance between the branches of the skein, where they pass over the upper pulleys, is $1^{\text{in}}\ 14$; at the lower pulleys the distance between the branches is $0^{\text{in}}\ 80$. The two branches are not intended to hang in one plane, but are to be so twisted that their torsion will maintain the magnet in a direction very nearly east and west magnetic, the marked end being west. In this state an increase of horizontal magnetic force draws the marked end of the magnet towards the north, whilst a diminution of horizontal force allows the marked end to recede towards the south under the influence of torsion. An oval copper bar, exactly similar to that used with the lower declination magnet, is applied also to the horizontal force magnet, for the purpose of diminishing the small accidental vibrations.

Below the magnet carrier there is attached a small plane mirror, to which is directed a small telescope for the purpose of observing by reflexion the graduations of a horizontal opal glass scale attached to the southern wall of the eastern arm of the

basement. The magnet, with its plane mirror, hangs within a double rectangular box, covered externally and internally with gilt paper. The numbers of the fixed scale increase from east to west, so that when the magnet is inserted in its usual position, with its marked end towards the west, increasing readings of the scale, as seen in the telescope, denote increasing horizontal force. The normal to the scale that meets the centre of the plane mirror is situated at the division 51 of the scale nearly, the distance of the scale from the centre of the plane mirror being 90.84 inches. The angle between the normal to the scale, which coincides nearly with the normal to the axis of the magnet, and the axis of the fixed telescope, is about 38° , the plane of the mirror being therefore inclined about 19° to the axis of the magnet.

To adjust the magnet so that it shall be truly transverse to the magnetic meridian, which position is necessary in order that the indications of the instrument may apply truly to changes in the magnitude of horizontal magnetic force, without regard to changes of direction, the time of vibration of the magnet and the reading of the fixed scale are determined for different readings of the torsion-circle. In regard to the interpretation of such experiments, the following explanation may be premised.

Suppose that the magnet is suspended in its carrier with its marked end in a magnetic westerly direction, not exactly west, but in any westerly direction, and suppose that, by means of the fixed telescope, the reading of the scale is taken. The position of the axis of the magnet is thereby defined. Now let the magnet be taken out of its carrier, and replaced with its marked end easterly. The terrestrial magnetic force will now act, as regards torsion, in the direction opposite to that in which it acted before, and the magnet will take up a different position. But by turning the torsion-circle so as to reverse the direction of the torsion produced by the oblique tension of the two branches of the suspending skein, the magnet may be made to take the same position as before, but with poles reversed, which will be proved by the reading of the scale, as seen in the fixed telescope, being the same. We thus obtain two readings of the torsion-circle corresponding to the same direction of the magnet axis, but with the marked end opposite ways, without, however, possessing any information as to whether the magnet axis is accurately transverse to the magnetic meridian, inasmuch as the same operation can be performed whether the magnet axis be transverse or not.

But there is another observation which will indicate whether the magnet axis is or is not accurately transverse. Let, in addition, the time of vibration be taken in each position of the magnet. Resolve the terrestrial magnetic forces acting on the poles of the magnet each into two parts, one transverse to the magnet, the other longitudinal. In the two positions of the magnet, marked end westerly and marked end easterly,

the magnitude of the transversal force is the same, and the changes which the torsion undergoes in a vibration of given extent are the same, and if there were no other force, the time of vibration would also be the same. But there is another force, the longitudinal force, and when the marked end is northerly this tends from the centre of the magnet's length, and when it is southerly it tends towards the centre of the magnet's length; and in a vibration of given extent this force, in one case increases that due to the torsion, and in the other case diminishes it. The times of vibration will therefore be different. There is only one exception to this, which is when the magnet axis is transverse to the magnetic meridian, in which case the longitudinal force vanishes, and the times of vibration in both positions of the magnet become the same.

The criterion, then, of the position truly transverse to the meridian is this. Find the readings of the torsion-circle which, with the magnet in reversed positions, will give the same readings of the scale and the same time of vibration for the magnet. With such readings of the torsion-circle the magnet is, in either position, transverse to the meridian, and the difference of circle-readings is the difference between the position in which the terrestrial magnetism acting on the magnet twists it one way, and the position in which the same force twists it the opposite way, and is therefore double of the angle of torsion of the suspending lines for which, in either position, the force of terrestrial magnetism is neutralized by the torsion.

The suspension skein in use till 1900 July 1, was mounted on 1880 December 30.

On 1900 January 1 the following observations were made for determination of the angle of torsion:—

1900. Day.	The Marked End of the Magnet.							
	West.				East.			
	Torsion-Circle Reading.	Scale-Reading.	Difference of Scale-Readings for change of 1° of Torsion-Circle Reading.	Mean of the Times of Vibration.	Torsion-Circle Reading.	Scale-Reading.	Difference of Scale-Readings for change of 1° of Torsion-Circle Reading.	Mean of the Times of Vibration.
Jan. 1	146 ^o	div. 49°31	div.	^s 21°30	232 ^o	div. 46°70	div.	^s 20°86
	147	56°49	7°18	21°12	233	54°68	7°98	20°98
	148	64°91	8°42	21°00	234	62°29	7°61	21°20

From these observations it appeared that the times of vibration and scale-readings were sensibly the same when the torsion-circle read 147°.16', marked end west, and 232°.32', marked end east, the difference being 86°.16'. Half this difference, or 43°.8', is therefore the angle of torsion when the magnet is transverse to the meridian.

The value adopted in the reduction of the observations from January 1 to June 30, was $43^{\circ}.0'$.

On 1900 July 2 the suspension skein gave way. A new suspension was mounted on 1900 July 9, and the following observations for determination of the angle of torsion were made on July 11.

1900. Day.	The Marked End of the Magnet.							
	West.				East.			
	Torsion-Circle Reading.	Scale-Reading.	Difference of Scale-Readings for change of 1° of Torsion-Circle Reading.	Mean of the Times of Vibration.	Torsion-Circle Reading.	Scale-Reading.	Difference of Scale-Readings for change of 1° of Torsion-Circle Reading.	Mean of the Times of Vibration.
July 11	145°	div. 50.80	div.	$21^{\text{s}}.38$	229°	div. 46.93	div.	$20^{\text{s}}.32$
	146	58.70	7.90	$21^{\text{s}}.22$	230	54.64	7.71	$20^{\text{s}}.58$
	147	66.56	7.86	$21^{\text{s}}.00$	231	62.95	8.31	$20^{\text{s}}.74$
	148	75.34	8.78	$20^{\text{s}}.76$	232	70.89	7.94	$21^{\text{s}}.00$
					233	79.58	8.69	$21^{\text{s}}.20$

From these observations it appeared that the times of vibration and scale-readings were sensibly the same when the torsion-circle read $147^{\circ}.16'$, marked end west, and $231^{\circ}.44'$, marked end east, the difference being $84^{\circ}.28'$. Half this difference, or $42^{\circ}.14'$ is therefore the angle of torsion when the magnet is transverse to the meridian.

The value adopted in the reduction of the observations from July 11 to the end of the year was $42^{\circ}.10'$ being a mean of the determinations made on 1900 July 11 and 1901 January 1.

The adopted reading of torsion-circle, for transverse position of the magnet, the marked end being west, was 146° throughout the year.

The angle through which the magnet turns to produce a change of one division of scale-reading, and the corresponding variation of horizontal force in terms of the whole horizontal force, is thus found.

The length of $30^{\text{div}}.85$ of the fixed scale is exactly 12 inches, and the distance of the centre of the face of the plane mirror from the scale, 90.84 inches; consequently, the angle at the mirror subtended by one division of the scale is $14'.43''.2$, or for change of one division of scale-reading the magnet is turned through an angle of $7'.21''.6$.

The variation of horizontal force, in terms of the whole horizontal force, producing angular motion of the magnet corresponding to change of one division of scale-

reading = cotan angle of torsion \times value of one division in terms of radius. Using the numbers above given, the change of horizontal force corresponding to change of one division of scale-reading until June 30 was found to be 0.002296, and from July 11 to the end of the year it was found to be 0.002364; and these values have been used for conversion of the observed scale-readings into parts of the whole horizontal force.

In regard to the manner of making observations with the horizontal force magnet a fine vertical wire is fixed in the field of view of the observing telescope, across which the graduations of the fixed scale, as reflected by the plane mirror carried by the magnet, are seen to pass alternately right and left as the magnet oscillates, and the scale-reading for the extreme points of vibration is easily taken. The hours of observation are usually 9^h 30^m, 12^h 30^m, 15^h 30^m, and 20^h 30^m of Greenwich civil time (reckoning from midnight).

A thermometer, the bulb of which reaches considerably below the attached scale, is so planted in a nearly upright position on the outer magnet box, that the bulb projects into the interior of the inner box containing the magnet. Readings of this thermometer are usually taken at 9^h, 10^h, 11^h, 12^h, 13^h, 14^h, 15^h, 16^h, and 21^h Greenwich civil time. An index correction of $-0^{\circ}.3$ has been applied to all readings.

The photographic record of the movements of the horizontal force magnet is made on the same revolving cylinder as is used for record of the motions of the lower declination magnet, and, as described for that magnet, there is also attached to the carrier of the horizontal force magnet a concave mirror, 4 inches in diameter, reduced by a stop since 1882 to an effective diameter of about 1 inch. The arrangements, as regards lamp, slit, and other parts, are precisely similar to those for the lower declination magnet already described, and may be perfectly understood by reference to that description (pages *xi* and *xii*), in which was incidentally included an explanation of some parts specially referring to register of horizontal force. The distance of the vertical slit from the concave mirror of the magnet is about 21 inches, and the distance of the axis of the registering cylinder from the concave mirror is 136.8 inches, the slit standing slightly out of the straight line joining the mirror and the registering cylinder. The same base line is used for measure of the horizontal force ordinates, and the register is similarly interrupted at each hour by the clock, and occasionally by the observer, for determination of time scale, the length of which is, of course, the same as that for declination.

The scale for measure of ordinates of the photographic curve is thus constructed. The distance from the concave mirror to the surface of the cylinder, in the actual path

of the ray of light through the prism, is (as for declination) practically the same as the horizontal distance of the centre of the cylinder from the mirror, or 136·8 inches. But, because of the reflexion at the concave mirror, the double of this measure, or 273·6 inches, is the distance that determines the extent of motion on the cylinder of the spot of light, which, in inches, for a change of 0·01 part of the whole horizontal force, will therefore be $273·6 \times \tan \text{angle of torsion} \times 0·01$. Taking for angle of torsion $43^{\circ}·0'$, till June 30 the movement of the spot of light on the cylinder for a change of 0·01 of horizontal force is found to be 2·551 inches; from July 11 to December 31, with adopted angle of torsion $42^{\circ}·10'$, the measurement for the scale is found to be 2·478 inches; and with these units the cardboard scales for measure of the ordinates were prepared. The ordinates being measured for the times at which eye observations were made, combination of the measured ordinates with the observed scale-readings converted into parts of the whole horizontal force, gives an apparent value of the base line for each observation. These being divided into groups, mean base line values are adopted, written on the sheets, and new base lines laid down, from which the hourly ordinates (see page *xxix*) are measured, exactly in the same way as described for declination.

The indications of horizontal force are in a slight degree affected by the small changes of temperature to which the Magnet Basement is subject. The temperature coefficient of the magnet was determined by artificially heating the Magnet Basement to different temperatures, and observing the change of position of the magnet thereby produced. This process seems preferable to others in which was observed the effect which the magnet, when enclosed within a copper trough or box, and artificially heated by hot water or hot air to different temperatures, produced on another suspended magnet, since the result obtained includes the entire effect of temperature upon all the various parts of the mounting of the magnet, as well as on the magnet itself. Referring to previous volumes for details, it is sufficient here to state that, from a series of experiments made between January 3 and February 21 of the year 1868, on the principle mentioned, in temperatures ranging from $48^{\circ}·2$ to $61^{\circ}·5$, it appeared that when the marked end of the horizontal force magnet was to the west (its ordinary position), a change of 1° of temperature (Fahrenheit) produced an apparent change of ·000174 of the whole horizontal force, a smaller number of observations made with the marked end of the magnet east, in temperatures ranging from $49^{\circ}·0$ to $60^{\circ}·9$, indicating that a change of 1° of temperature produced an apparent change of ·000187 of horizontal force, increase of temperature in both cases being accompanied by decrease of magnetic force. It was concluded that an increase of 1° of temperature produces an apparent decrease of ·00018 of horizontal force. In the years 1885 and 1886 further observations on the same general plan were made, with the result that the decrease of horizontal

force for increase of 1° of temperature was found to be somewhat greater at the higher than at the lower temperatures. A discussion of all the observations taken in 1885 and 1886, details of which are given at the end of the Introduction for 1886, shows that the correction for reduction to temperature 32° (expressed in terms of the horizontal force) is $(t - 32) \times .0000936 + (t - 32)^2 \times .000002074$, in which t is the temperature in degrees Fahrenheit. The decrease of horizontal force for an increase of 1° of temperature would thus be .00021 at 60° , .00023 at 65° , and .00025 at 70° .

VERTICAL FORCE MAGNET.—The vertical force magnet, for measure of the variations of vertical magnetic force, is by Troughton and Simms. It is 1 ft. 6 in. long and lozenge-shaped, being broad at the centre and pointed at the ends; it is mounted on a solid brick pier capped with stone, situated in the western arm of the Basement, its position being nearly symmetrical with that of the horizontal force magnet in the eastern arm. The supporting frame consists of two pillars, connected at their bases, on whose tops are the agate planes upon which rest the extreme parts of the continuous steel knife edge, attached to the magnet carrier by clamps and pinching screws. The knife edge, 8 inches long, passes through an aperture in the magnet. The axis of the magnet is approximately transverse to the magnetic meridian, its marked end being east; its axis of vibration is thus nearly north and south magnetic. The magnet carrier is of iron; at its southern end there is fixed a small plane mirror for use in eye observations, whose plane makes with the vertical plane through the magnet an angle of $52\frac{3}{4}^\circ$ nearly. A telescope, fixed to the west side of the central brick pier, is directed to the mirror for observation by reflexion of the divisions of a vertical opal glass scale fixed to the pier that carries the telescope, very near to the telescope itself. The numbers of this fixed scale increase downwards, so that when the magnet is placed in its usual position with the marked end east, increasing readings of the scale, as seen in the telescope, denote increasing vertical force.

The magnet is placed excentrically between the bearing parts of its knife edge, nearer to the southern side, leaving a space of about 4 inches in the northern part of the iron frame, in which the concave mirror used for the photographic register is planted. Two steel screw stalks, carrying adjustable screw weights, are fixed to the magnet carrier, near its northern side; one stalk is horizontal, and a change in the position of the weight affects the position of equilibrium of the magnet; the other stalk is vertical, and change in the position of its weight affects the delicacy of the balance, and so varies the magnitude of its change of position produced by a given change in the vertical force of terrestrial magnetism.

In the year 1882 Messrs. Troughton and Simms substituted for the old mirror of 4 inches diameter a much lighter mirror of 1 inch diameter, and also lowered the

position of the knife-edge bar with respect to the magnet, so as to permit of a diminution of the adjustable counterpoise weights, which, as well as the mirror, appear to largely affect the temperature-correction of this balance magnet. The use of a smaller and much lighter mirror was rendered possible by the greater sensitiveness of the photographic paper introduced in 1882 June.

The whole is enclosed in a rectangular box, resting upon the pier before mentioned, and having apertures, covered with glass, opposite to the two mirrors carried by the magnet.

The time of vibration of the magnet in the vertical plane is observed usually about once in each week. From 62 observations made during the course of the year this was found to be $18^s.081$.

The time of vibration of the magnet in the horizontal plane is determined by suspending the magnet with all its attached parts from a tripod stand, its broad side being in a plane parallel to the horizon, so that its moment of inertia is the same as when in observation. A telescope, with a wire in its focus, being directed to the plane mirror carried by the magnet, a scale of numbers is placed on the floor, at right angles to the long axis of the magnet, so as to be seen, by reflexion, in the fixed telescope. The magnet is observed only when swinging through a small arc. Observations made in the way described on 1897 December 30 gave for the time of vibration of the magnet in the horizontal plane $16^s.509$. This value has been used throughout for the year 1900.

The length of the normal to the fixed vertical scale that meets the face of the plane mirror is 186.07 inches, and $30^{\text{div}}.85$ of the scale correspond to 12 inches. Consequently the angle which one division of the scale subtends, as seen from the mirror, is $7'.11''.2$, or the angular movement of the normal to the mirror, corresponding to a change of one division of scale-reading, is $3'.35''.6$.

But the angular movement of the normal to the mirror is equal to the angular movement of the magnet multiplied by the sine of the angle which the plane of the mirror makes with a vertical plane through the magnet. This angle, as already stated, is $52\frac{3}{4}^\circ$. Therefore, dividing the result just obtained, $3'.35''.6$, by $\sin 52\frac{3}{4}^\circ$, the angular motion of the magnet corresponding to a change of one division of scale-reading is found to be $4'.30''.9$.

The variation of vertical force, in terms of the whole vertical force, producing angular motion of the magnet corresponding to a change of one division of scale-reading = $\cotan \text{ dip} \times \left(\frac{T'}{T}\right)^2 \times \text{value of one division in terms of radius, in which}$

T' is the time of vibration of the magnet in the horizontal plane, and T that in the vertical plane. Assuming $T' = 16^s.509$, $T = 18^s.081$, and dip = $67^\circ.8'.27''$, the change of vertical force corresponding to change of one division of scale-reading was found to be 0.0004616, and this value has been used throughout the year 1900 for conversion of the observed scale-readings into parts of the whole vertical force.

The hours of observation of the vertical force magnet are the same as those for the horizontal force magnet, and the method of observation is precisely similar, the time of vertical vibration being substituted for that of horizontal. The wire in the fixed telescope is here horizontal, and as the magnet oscillates, the divisions of the scale are seen to pass upwards and downwards in the field of view.

As in the case of the horizontal force magnet, a thermometer is provided whose bulb projects into the interior of the magnet box. Readings are taken usually at 9^h, 10^h, 11^h, 12^h, 13^h, 14^h, 15^h, 16^h, and 21^h Greenwich civil time. An index-correction of $-0^{\circ}.3$ has been applied to all readings.

The photographic register of the movements of the vertical force magnet is made on a cylinder of the same size as that used for declination and horizontal force, driven also by chronometer movement. The cylinder is here placed vertical instead of horizontal, and the variations of the barometer are also registered on it. The slit is horizontal, and other arrangements are generally similar to those already described for declination and horizontal force. The concave mirror carried by the magnet is 1 inch in diameter, and the slit is distant from it about 22 inches, being placed a little out of the straight line joining the mirror and the registering cylinder. There is a slight deviation in the further optical arrangements. Instead of falling on a reflecting prism (as for declination and horizontal force), the converging horizontal beam from the concave mirror falls on a system of plano-convex cylindrical lenses, placed in front of the cylinder, with their axes parallel to that of the cylinder. The trace is made on the western side of the cylinder, the position of the magnet being so adjusted, that the spot of light shall fall on the lower part of the sheet to avoid interference with the barometer trace. A base line is photographed, and the record is interrupted at each hour by the clock, and occasionally by the observer, for establishment of time scale, in the same way as for the other magnets. The length of the time scale is the same as that for the other magnetic registers.

The scale for measure of ordinates of the photographic curve is determined as follows:—The distance from the concave mirror of the magnet to the surface of the registering cylinder is 100.2 inches. But the double of this measure, or 200.4 inches, is the distance that determines the extent of motion on the cylinder of the spot of

light, which, in inches, for a change of 0·01 part of the whole vertical force, will therefore be $= 200\cdot4 \times \tan \text{dip} \times \left(\frac{T}{T'}\right)^2 \times 0\cdot01$. Using the values of T , T' , and of dip before given (page *xxi*), the movement of the spot of light on the cylinder for a change of 0·01 of vertical force is thus found to be 5·702 inches, and with this unit the scale for measure of the ordinates was constructed for use throughout the year. Base line values were then determined and written on the sheets, and new base lines laid down, from which the hourly ordinates (see page *xxix*) were measured, exactly in the same way as was described for declination.

In regard to the temperature-correction of the vertical force magnet, it is only necessary here to say that, according to a series of experiments made 1882 October 17 to 23, in a similar manner to those for the horizontal force magnet (page *xviii*), and in temperatures ranging from 59°·3 to 64°·9, it appeared that an increase of 1° of temperature (Fahrenheit) produced an apparent increase of 0·00020 of vertical force, a value which succeeding experiments have closely confirmed. The value of the coefficient is thus much less than was found in the old state of the magnet with the large mirror, although still not following the ordinary law of increase of temperature producing loss of magnetic power. Further observations made in the years 1885 and 1886, of which particulars are given at the end of the Introduction for 1886, showed that through the range of temperature to which the magnet is usually exposed the increase of vertical force for increase of 1° of temperature is uniformly 0·000212, no term depending on the square of the temperature being here necessary, as in the case of horizontal force.

DIP INSTRUMENT.—The instrument with which the observations of magnetic dip are made is that which is known as Airy's instrument. It was constructed by Messrs. Troughton and Simms, and is mounted in the Magnetic Pavilion on a slate slab supported by a braced wooden stand built up from the ground independently of the floor. The plan of the instrument was arranged by the late Sir G. B. Airy so that the points of the needles should be viewed by microscopes, and, if necessary, observed whilst the needles were in a state of vibration; that there should be power of employing needles of different lengths; and that the field of view of each microscope should be illuminated from the side opposite to the observer, in such way that the needle point should form a dark image in the bright field.

The instrument is adapted to the observation of needles of 9 inches, 6 inches, and 3 inches in length. The main portion of the instrument, that in which the needle under observation is placed, consists of a square box made of gun metal (carefully selected to ensure freedom from iron), with back and front of glass. Six microscopes, so planted as to command the points of the three different lengths of needles, turn on a

horizontal axis so as to follow the points of the needles in the different positions which in observation they take up. The needle pivots rest on agate bearings. The object-glasses and field-glasses of the microscopes are within the front glass plate, their eye-glasses being outside, and turning with them on the same axis. Upon the plane side of each field-glass (the side next the object-glass and on which the image of the needle point is formed) a scale is etched, by means of which the position of the needle points is noted. And on the inner side of the front glass plate is etched the graduated circle, $9\frac{3}{4}$ inches in diameter, divided to $10'$, and read by two verniers to $10''$. The verniers (thin plates of metal, with notches instead of lines, for use with transmitted light) are carried by the horizontal axis, inside the front glass plate, their reading lenses, attached to the same axis, being outside. A suitable clamp with slow motion is provided. The microscopes and verniers can be illuminated by one gas lamp, the light from which, falling on eight corresponding prisms, is thereby directed to each separate microscope and vernier. The prisms are carried behind the back glass plate on a circular frame in such a way that, on reversion of the instrument in azimuth, the whole set of prisms can at one motion of the frame be shifted so as to bring each one again opposite to its proper microscope or vernier.

Artificial light has not been employed for some years in making the observation.

The whole of the apparatus is planted upon a circular horizontal plate, admitting of rotation in azimuth. A graduated circle near the circumference of the plate is read by two fixed verniers.

A brass zenith-point needle, having points corresponding in position to the three different lengths of dip needles, is used to determine the zenith-point for each particular length of needle.

The instrument carries two levels—one parallel to the plane of the vertical circle, the other at right angles to that plane—by means of which the instrument is adjusted in level from time to time. The readings of the first-mentioned level are also regularly employed to correct the apparent value of dip for any small outstanding error of level; the correction seldom exceeds a very few seconds of arc.

Observations are made only in the plane of the magnetic meridian, and the following is a description of the method of proceeding. The needle to be used is first magnetised by double touch, giving it nine strokes on each of its sides: it is then placed in position in the instrument, the microscope scale-readings are taken, and the verniers of the vertical graduated circle are read: the readings of the level parallel to the plane of this circle are also read. The instrument is then reversed in azimuth, and a second

observation made. The needle pivots are then reversed on the agate bearings, and two observations in reversed positions of the instrument again made. The needle is then removed from the instrument and re-magnetised, so as to reverse the direction of its poles, and four more observations are made in the way just described. The mean of the eight partial values of dip thus found, corrected for error of level, gives the final value of dip which appears in the printed results.

The needles in regular use in 1900 are of the ordinary construction; they are the 3-inch needles, D_1 and D_2 .

DEFLEXION INSTRUMENT.—The observations of deflexion of a magnet in combination with observations of vibration of the deflecting magnet, for determination of the absolute measure of horizontal magnetic force, are made with a *Unifilar Instrument*, Gibson No. 3, which, with the exception of some slight modification of the mechanical arrangements, is similar to those issued from the Kew Observatory. The instrument is adapted to the determination of horizontal force in British (foot-grain-second) measure. It is mounted in the Magnetic Pavilion on a slate slab in the same way as the Dip instrument.

The deflected magnet, used merely to ascertain the ratio which the power of the deflecting magnet at a given distance bears to the power of terrestrial magnetism, is 3 inches long, and carries a small plane mirror, to which is directed a telescope fixed to, and rotating with, the frame that carries also the suspension piece of the deflected magnet: a scale fixed to the telescope is seen by reflexion at the plane mirror. The deflecting magnet is a hollow cylinder 4 inches long, containing in its internal tube a collimator, by means of which in another apparatus its time of vibration is observed. In observations of deflexion the deflecting magnet is placed on the transverse deflexion rod, carried by the rotating frame, at the distances 1.0 foot and 1.3 foot of the engraved scale from the deflected magnet, and with one end towards the deflected magnet. Observations are made at the two distances mentioned, with the deflecting magnet both east and west of the deflected magnet, and also with its poles in reversed positions. The fixed horizontal circle is 10 inches in diameter: it is graduated to $10'$, and read by two verniers to $10''$.

It will be convenient in this case to include with the description of the instrument an account of the method of reduction employed, in which the Kew precepts, and generally the Kew notation, are followed. Previous to the establishment of the instrument at the Royal Observatory, the values of the various instrumental constants, as determined at the Kew Observatory, were kindly communicated by the late Professor Balfour Stewart, and these have been since used in reduction of all observations made with the instrument at Greenwich.

The instrumental constants as thus furnished are as follows :—

The increase in the magnetic moment of the deflecting magnet produced by the inductive action of unit magnetic force in the English system of absolute measurement = $\mu = 0.00015587$.

The correction for decrease of the magnetic moment of the deflecting magnet required in order to reduce to the temperature 35° Fahrenheit = $c = 0.00013126(t - 35) + 0.000000259(t - 35)^2$; t representing the temperature (in degrees Fahrenheit) at which the observation is made.

Moment of inertia of the deflecting magnet = K . At temperature 30° , $\log. K = 0.66643$; at temperature 90° , $\log. K = 0.66679$.

The distance on the deflexion rod from $1^{\text{ft}}.0$ east to $1^{\text{ft}}.0$ west of the engraved scale, at temperature 62° , is too long by 0.0034 inch, and the distance from $1^{\text{ft}}.3$ east to $1^{\text{ft}}.3$ west is too long by 0.0053 inch. The coefficient of expansion of the scale for 1° is $.00001$.

The adopted value of K was confirmed in the year 1878 by a new and entirely independent determination made at the Royal Observatory, giving $\log. K$ at temperature $30^\circ = 0.66727$.

Let m = Magnetic moment of deflecting or vibrating magnet.

X = Horizontal component of Earth's magnetic force.

Then, if in the two deflexion observations, r_1, r_2 , be the apparent distances of centre of deflecting magnet from deflected magnet, corrected for scale-error and temperature (about 1.0 and 1.3 foot),

u_1, u_2 the observed angles of deflexion,

$$A_1 = \frac{1}{2} r_1^3 \sin u_1 \left\{ 1 + \frac{2\mu}{r_1^3} + c \right\}$$

$$A_2 = \frac{1}{2} r_2^3 \sin u_2 \left\{ 1 + \frac{2\mu}{r_2^3} + c \right\}$$

$P = \frac{A_1 - A_2}{\frac{A_1}{r_1^2} - \frac{A_2}{r_2^2}}$ [P being a constant depending on the distribution of magnetism in the deflecting and deflected magnets],

we have, using for reduction of the observations a mean value of P :—

$$\frac{m}{X} = A_1 \left(1 - \frac{P}{r_1^2} \right), \text{ from observation at distance } r_1.$$

$$\frac{m}{X} = A_2 \left(1 - \frac{P}{r_2^2} \right), \text{ from observation at distance } r_2.$$

The mean of these is adopted as the true value of $\frac{m}{X}$.

In calculating the value of P as well as the values of the four factors within brackets, the distances r_1 and r_2 are taken as being equal to 1.0 ft. and 1.3 ft. respectively. The expression for P is not convenient for logarithmic computation, and, in practice, its value for each observation has, since the year 1877, been calculated from the expression

$$\frac{\text{Log. } A_1 - \text{Log. } A_2}{\text{modulus}} \times \frac{r_1^2 \times r_2^2}{r_2^2 - r_1^2} = (\text{Log. } A_1 - \text{Log. } A_2) \times 5.64.$$

For determination, from the observed vibrations, of the value of mX :—let T_1 = time of vibration of the deflecting magnet, corrected for rate of chronometer and arc of vibration,

$\frac{H}{F}$ = ratio of the couple due to torsion of the suspending thread to the couple due to the Earth's magnetic force. [This is obtained from the formula $\frac{H}{F} = \frac{\theta}{90^\circ - \theta}$, where θ = the angle through which the magnet is deflected by a twist of 90° in the thread.]

$$\text{Then } T^2 = T_1^2 \left\{ 1 + \frac{H}{F} + \mu \frac{X}{m} - c \right\}$$

$$\text{and } mX = \frac{\pi^2 K}{T^2}$$

The corrected time of vibration of the deflecting magnet, printed in the tables of results, is the mean of 100 vibrations observed immediately before, and of 100 vibrations observed immediately after the observations of deflexion, corrected for temperature, rate of chronometer, semi-arc of vibration, induction, and torsion force.

From the combination of the values of $\frac{m}{X}$ and mX , m and X are immediately found. The computation is made with reference to English measure, taking as units of length and weight the foot and grain, but it is desirable to express X also in metric measure. If the English foot be supposed equal to α times the millimètre, and the grain equal to β times the milligramme, then, for reduction to metric measure, $\frac{m}{X}$ and mX must be multiplied by α^3 and $\alpha^2\beta$ respectively, or X must be multiplied by $\sqrt{\frac{\beta}{\alpha}}$. Taking the mètre as equal to 39.37079 inches, and the gramme as equal to 15.432349 grains, the factor by which X is to be multiplied in order to obtain X in metric (millimètre-milligramme-second) measure is $0.46108 = \frac{1}{2.1689}$. The values of X in metric measure thus derived from those in English measure are given in the proper table. Values of X in terms of the centimètre and gramme, known as the C.G.S. unit (centimètre-gramme-second unit), are readily obtained by dividing those referred to the millimètre and milligramme by 10.

EARTH CURRENT APPARATUS.—For observation of the spontaneous galvanic currents, which, in some measure, are almost always discoverable in the earth, and which are

occasionally very powerful, two insulated wires having earth connexions at Angerstein Wharf (on the bank of the River Thames near Charlton) and Lady Well for one circuit, and at the Morden College end of the Blackheath Tunnel and the North Kent East Junction of the South-Eastern Railway for the other circuit, have been employed. The connecting wires, which are special and used for no other purpose, pass from the Royal Observatory to the Greenwich Station of the South-Eastern Railway, and thence, by kind permission of the Directors of the South-Eastern Railway Company, along the lines of the Railway to the respective earths, in each case a copper plate. The direct distance between the earth plates of the Angerstein Wharf—Lady Well circuit is 3 miles, and the azimuth of the line, reckoning from magnetic north towards east, 49° ; in the Blackheath—North Kent East Junction circuit the direct distance is $2\frac{1}{2}$ miles, and the azimuth, from magnetic north towards west, 47° . The actual lengths of wire in the circuitous courses which the wires necessarily take in order to reach the Observatory registering apparatus are about $7\frac{1}{2}$ miles and 5 miles respectively. The identity of the four branches is tested from time to time as appears necessary.

In each circuit at the Royal Observatory there is placed a horizontal galvanometer, having its magnet suspended by a hair. Each galvanometer coil contains 150 turns of No. 29 copper wire, or the double coil of each instrument consists of 300 turns of wire, the resistance, as found by direct measurement, being 7.3 ohms. For registration of the larger earth currents, a portion only of the current is allowed to pass through the galvanometer, while the greater part flows through a shunt, consisting of a short coil of fine copper wire, the resistance of which is 1.33 ohms. The amplitude of the movement, having regard to the diminution of resistance in the circuit due to the shunt, is by this reduced in the ratio of 6.3 to 1 nearly in both circuits. On a few days in each month in former years registers on a large scale, for determination of the small diurnal inequality in earth currents, were obtained by removing the shunts, but no discussion of these registers has been made, on account of the difficulty of eliminating the effect of certain small dislocations of the Angerstein Wharf—Lady Well register, which occur usually shortly after sunset and before sunrise. It is suspected that these are due to electric lighting in the neighbourhood of the Angerstein Wharf earth plate. The galvanometers are placed on opposite sides of the registering cylinder, which is horizontal. One galvanometer stands towards one end of the cylinder, and the other towards the other end, and each carries, on a light stalk extending downwards from its magnet, a small plane mirror. Immediately above the cylinder are placed two long reflecting prisms, which, except that they are each but half the length of the cylinder, and are placed end to end, are generally similar to those used for magnetic declination and horizontal force, the front convex surfaces facing opposite ways, each

towards the mirror of its respective galvanometer. In each case the light of a gas lamp, passing through a vertical slit and a cylindrical lens having its axis vertical, falls upon the galvanometer mirror, which reflects the converging beam to the convex surface of the reflecting prism, by whose action it is made to form on the paper on the cylinder a small spot of light; thus all the azimuthal motions of the galvanometer magnet are registered. The extent of trace for each galvanometer is thus confined to half the length of the cylinder, which is of the same size as those used for the magnetic registers. The arrangements for turning the cylinder, automatically determining the time scale, and forming a base line, are similar to those which have been before described. When the traces on the paper are developed, the parts of the registers which appear in juxtaposition correspond, as for declination and horizontal force, to the same Greenwich time, and the scale of time is of the same length as for the magnetic registers.

Towards the end of the year 1890 serious disturbances began to be experienced in both earth current registers. These interruptions were found in the early part of the year 1891 to be due to the passage of trains on the City and South London Electric Railway, distant about $2\frac{1}{2}$ miles from the nearest earth plate (at the North Kent East Junction of the South-Eastern Railway), and about $4\frac{1}{2}$ miles from the Observatory. The abnormal excursions recorded indicate frequent changes of potential, varying from a small fraction of a volt to one-third of a volt or more, and the amount of change is approximately the same both in the Blackheath—North Kent East Junction circuit, which is perpendicular to the course of the electric railway, and in the Angerstein Wharf—Lady Well circuit, which is parallel to the line of railway, with one earth plate (Angerstein Wharf) near the river. At night when the trains are not running, the interruptions entirely cease.

§ 5. *Magnetic Reductions.*

The results given in the Magnetic Section refer to the civil day, commencing at midnight.

Before the photographic records of magnetic declination, horizontal force, and vertical force are discussed, they are divided into two groups—one including all days on which the traces show no particular disturbance, and which, therefore, are suitable for the determination of diurnal inequality; the other comprising days of unusual and violent disturbance, when the traces are so irregular that it appears impossible to treat them except by the exhibition of every motion of each magnet through the day. Following the principle of separation hitherto adopted, there are no days in the year 1900

which are classed as days of great disturbance. Other days of lesser disturbance are January 14-15, 19-20, 20-21; February 4-5; March 8-9, 9-10, 13-14; May 5-6. When two days are mentioned, it is to be understood that the reference is usually to one set of photographic sheets extending from noon to noon, and including the last half and the first half respectively of two consecutive civil days.

Through each photographic trace, including those on days of lesser disturbance, a pencil line was drawn, representing the general form of the curve without its petty irregularities. The ordinates of these pencil curves were then measured, with the proper pasteboard scales, at every hour, the measures being entered in a form having double argument—the vertical argument ranging through the 24 hours of the civil day (0^h to 23^h), and the horizontal argument through the days of a calendar month; the means of the numbers standing in the vertical columns giving the mean daily value of the element, and the means of the numbers in the horizontal columns the mean monthly value at each hour of the day. Tables I. and II. contain the results for declination, Tables III. to VI. those for horizontal force, with corresponding tables of temperature, and Tables VII. to X. those for vertical force, with corresponding tables of temperature. In the formation of diurnal inequalities it is unimportant whether a day omitted be a complete civil day, or the parts of two successive civil days making together a whole day, although in the latter case the results are not available for daily values. No omissions have been made on account of disturbed days, in the formation of these Tables; but from other causes there are omitted in Tables I. and II. for declination, April 28, August 13, December 14; in Tables III. to VI. for horizontal force, April 28; July 1 to 12; August 5, 13, 29; December 14; in Tables VII. to X. for vertical force, there are no omissions.

Table XI. gives the collected monthly values for declination, horizontal force, and vertical force, and Table XII. the mean diurnal inequalities for the year.

The temperature of the horizontal and vertical force magnets was maintained so nearly uniform through each day, that the determination of the diurnal inequalities of horizontal and vertical force should possess great exactitude. By means of the additional stove placed in the western arm of the Basement, as mentioned on page *v*, the temperature of the Basement has also been kept nearly constant throughout the year, the endeavour being to keep the temperature as near to 67° as possible. In years preceding 1883 the results for horizontal and vertical force were given uncorrected for temperature, leaving the correction to be applied when the results for series of years are collected for discussion; but from

the beginning of the year 1883 it has been considered desirable to add also, in Tables III., V., VII., and IX., results corrected for temperature, in order to render them more immediately available. In Tables XI. and XII., only results corrected for temperature are given. The corrected mean daily and mean hourly values of horizontal force given in Tables III. and V. respectively are obtained by applying to the uncorrected values the correction $(t-32) \times .0000936 + (t-32)^2 \times .000002074$ (page *xix*), where t is the temperature in degrees Fahrenheit; and to those of vertical force, Tables VII. and IX., the correction $-(t-32) \times .000212$ (page *xxii*). The corrections applied are founded on the daily and hourly values of temperature given in Tables IV., VI., VIII., and X.

In regard to the formation of the tables of temperature, the hourly readings of the Richard Thermograph were entered into a form having double arguments as for the magnets, the mean hourly values deduced therefrom giving for each month the variation through the day, and the mean daily values the variation through the month. To adapt these to represent the temperature within the horizontal and vertical force magnet boxes respectively, the monthly means of the thermograph-readings at 9^h, 10^h, 11^h, 12^h, 13^h, 14^h, 15^h, 16^h, and 21^h were compared with the corresponding means of the eye readings of the thermometers whose bulbs are within the respective magnet boxes, giving corrections to the thermograph-readings at these hours, which were very accordant, and from which, by interpolation, corrections were obtained for the remaining hours. The nine daily observations gave also the means of reducing the daily thermograph values to the temperature of the interior of the respective magnet boxes. The results are given in Tables IV., VI., VIII., and X.

In order to economise space, the daily values, as exhibited in Tables III. and VII., both uncorrected and corrected, have been diminished by constants. The division

 in these Tables and in Table XI. indicates that the instrument has been disturbed for experiment or adjustment, or that for some reason the continuity of the values has been broken, the constants deducted being different before and after each break. In the interval between two breaks the values of u and c are each comparable throughout, remarking only that in certain cases it is to be understood that the values are to be taken 1000 greater or less for comparison with adjacent values. See, for example, u in Table III. on June 19, which should be taken as 1006 for comparison with the preceding value, and similarly in other cases. The excess of the value of c above that of u on any day (supposing c , when the smaller value, to be increased by 1000) shows the correction for temperature that has been actually applied. In Tables II., V., IX., and XII. the separate hourly values of the different elements have been simply diminished by the smallest hourly value.

The variations of declination are given in the sexagesimal division of the circle, and those of horizontal and vertical force in terms of '00001 of the whole horizontal and vertical forces respectively taken as units. In Tables XI. and XII. they have been also expressed in terms of '00001 of Gauss's absolute unit, as referred to the metrical system of the millimètre-milligramme-second.

The factors for conversion from the former to the latter system of measures are as follows:—

For variation of declination, expressed in minutes, the factor is

$$\text{H.F. in metrical measure} \times \sin 1' = 1.8441 \times \sin 1' = 0.0005364.$$

For variation of horizontal force, the factor is

$$\text{H.F. in metrical measure} = 1.8441,$$

and for variation of vertical force

$$\begin{aligned} \text{V.F. in metrical measure} &= \text{H.F. in metrical measure} \times \tan \text{dip}, \\ &= 1.8441 \times \tan 67^\circ.8'.27'' = 4.3743. \end{aligned}$$

The measures as referred to the millimètre-milligramme-second system are readily convertible into measures on the centimètre-gramme-second (C.G.S.) system by dividing by 10.

Table XIII. exhibits the diurnal range of declination and horizontal force on each separate day, as determined from the 24 hourly ordinates of each element measured from the photographic register (as explained on page *xxix*), and the monthly means of these numbers, the results for horizontal force being corrected for temperature. The first portion of Table XIV. contains the difference between the greatest and least hourly mean values in each month, for declination, horizontal force, and vertical force, as extracted from Table II. and columns *c* of Tables V. and IX. In the second portion of the table there are given for each month the numerical sums of the deviations of the 24 hourly values from the mean, taken without regard to sign.

The magnetic diurnal inequalities of declination, horizontal force, and vertical force, for each month and for the year, as given in Tables II., V., and IX., have been treated by the method of harmonic analysis, and the results are given in Tables XV. and XVI. The values of the coefficients contained in Table XV. have been thus computed, 0 representing the value at 0^h (midnight), 1 that at 1^h, and so on.

$$\begin{aligned} m &= \frac{1}{24}(0+1+2 \dots \dots 22+23). \\ 12 a_1 &= 0-12 + \{ (1+23) - (11+13) \} \cos 15^\circ + \{ (2+22) - (10+14) \} \cos 30^\circ \\ &\quad + \{ (3+21) - (9+15) \} \cos 45^\circ + \{ (4+20) - (8+16) \} \cos 60^\circ \\ &\quad + \{ (5+19) - (7+17) \} \cos 75^\circ. \end{aligned}$$

$$\begin{aligned}
 12 b_1 &= 6-18 + \{ (5+7) - (17+19) \} \sin 75^\circ + \{ (4+8) - (16+20) \} \sin 60^\circ \\
 &\quad + \{ (3+9) - (15+21) \} \sin 45^\circ + \{ (2+10) - (14+22) \} \sin 30^\circ \\
 &\quad + \{ (1+11) - (13+23) \} \sin 15^\circ. \\
 12 a_2 &= (0+12) - (6+18) + \{ (1+11+13+23) - (5+7+17+19) \} \cos 30^\circ \\
 &\quad + \{ (2+10+14+22) - (4+8+16+20) \} \cos 60^\circ. \\
 12 b_2 &= (3+15) - (9+21) + \{ (2+4+14+16) - (8+10+20+22) \} \sin 60^\circ \\
 &\quad + \{ (1+5+13+17) - (7+11+19+23) \} \sin 30^\circ. \\
 12 a_3 &= (0+8+16) - (4+12+20) + \{ (1+7+9+15+17+23) - (3+5+11+13+19+21) \} \cos 45^\circ. \\
 12 b_3 &= (2+10+18) - (6+14+22) + \{ (1+3+9+11+17+19) - (5+7+13+15+21+23) \} \sin 45^\circ. \\
 12 a_4 &= (0+6+12+18) - (3+9+15+21) \\
 &\quad + \{ (1+5+7+11+13+17+19+23) - (2+4+8+10+14+16+20+22) \} \cos 60^\circ. \\
 12 b_4 &= \{ (1+2+7+8+13+14+19+20) - (4+5+10+11+16+17+22+23) \} \sin 60^\circ.
 \end{aligned}$$

The values of the coefficient c_1 and of the constant angles α contained in Table XVI. are then determined by means of the following relations:—

$$\frac{a_1}{b_1} = \tan \alpha \qquad c_1 = \frac{a_1}{\sin \alpha} = \frac{b_1}{\cos \alpha}.$$

Similarly for $c_2, \beta, \&c.$

Finally, the values of the angles $\alpha', \beta', \&c.$ were thus found. Calling the Sun's hour-angle east at mean midnight = h , then—

$$\begin{aligned}
 \alpha' &= \alpha + h \\
 \beta' &= \beta + 2h \\
 \&c. &= \&c.,
 \end{aligned}$$

a mean value of h for the month being employed.

The values of α_5 and b_5 for the diurnal inequalities for the year were also calculated, but could not be conveniently included in Table XV. They are as follows:—

1900.	α_5 .	b_5 .
Declination	-0.07	-0.01
Horizontal Force	+0.7	-1.0
Vertical Force	+1.1	+0.1

In order to give some indication of the accuracy with which the results of observation are represented by the harmonic formula, the sums of squares of residuals remaining after the introduction of m and of each successive pair of terms of the expression on page (xii), corresponding to the single terms of the expressions on page (xiii), have been calculated for the mean diurnal inequalities for the year

(columns 1, 2, and 3 of Table XII.). The respective sums of squares of residuals are as follows :—

SUMS OF SQUARES OF RESIDUALS OF DIURNAL INEQUALITIES.

For the Year 1900.	Declination.	Horizontal Force.	Vertical Force.
Sums of Squares of Observed Values (Table XII.)	183'44	186155'1	13213'9
Sums of Squares of Residuals after the introduction of m	72'41	29774'6	1921'2
" " α_1 and b_1	30'81	8617'8	1102'4
" " α_2 and b_2	6'46	1930'0	283'6
" " α_3 and b_3	0'99	475'0	54'6
" " α_4 and b_4	0'07	30'9	15'5
" " α_5 and b_5	0'01	13'8	1'9

The unit in the case of horizontal and vertical force being '00001 of the whole horizontal and vertical forces respectively, it thus appears that there would be no advantage in carrying the approximation (Table XV.) beyond the determination of α_4 , b_4 .

As regards Magnetic Dip, the result of each complete observation of dip with each of the needles in ordinary use, is given in Table XVII.; and in Table XVIII., the concluded monthly and yearly values for each needle.

The results of the observations for Absolute Measure of Horizontal Force contained in Table XIX. require no special remark, the method of reduction and all necessary explanation having been given with the description of the instrument employed. The observed result in each month has been also given as reduced to the mean value for the month, by application of the difference between the horizontal force ordinate at the time of observation and the mean value for the month, as obtained from the photographic register.

In order to facilitate the comparison of the diurnal inequalities of magnetism at the different British and other magnetic observatories, an arrangement has been made with the Sub-Committee of the Kew Committee of the Royal Society, by which five quiet days are to be selected at Greenwich in each month of every year for adoption

at all these observatories for determination of the monthly diurnal inequalities of declination, horizontal force, and vertical force, thus providing for further discussion results which should be strictly comparable. The particular days selected are given on page (xviii), and the results found for Greenwich are contained in Tables XX., XXI., and XXII., which it is interesting to compare with the values found from the records of all days, as given in Tables II., V., IX., and XII.

No numerical discussion of Earth Current records is contained in the present volume.

In the treatment of disturbed days it was formerly the custom to measure out for each element all salient points of the curves, and to print the numerical values. But, since the year 1882, it has been considered preferable to give instead of these tables reduced copies of the actual photographic curves (reproduced by photo-lithography from full-sized tracings of the original photographs), adding thereto copies of the corresponding earth current curves. In the present year no copies of earth current curves have been given because of the interruption produced by the trains running on the City and South London Electric Railway. The registers thus exhibited are those for the days of lesser disturbance mentioned on page *xxix*.

The list of these days since the year 1889 has been selected in concert with M. Mascart, so that the two Observatories of the Parc Saint Maur and Greenwich should publish the magnetic registers for the same days of disturbance with a view to the comparison of the results. It is proposed to follow this plan in future years, and if other magnetic observatories should eventually join in the scheme for concerted action, in regard to the publication of their registers, the discussion of magnetic perturbations would be much facilitated.

The plates are preceded by a brief description of *all* other significant magnetic motions (superposed on the ordinary diurnal movement) recorded throughout the year. These, in combination with the plates, give very complete information on magnetic disturbances during the year 1900, affording thereby, it is hoped, facilities for making comparison with solar phenomena.

In regard to the plates, it may be remarked that on each day three distinct registers are usually given, viz.: declination, horizontal force, and vertical force; all necessary information for proper understanding of the plates being added in the notes on page (xxx).

PLATES OF MAGNETIC DISTURBANCES: SCALE VALUES OF MAGNETIC ELEMENTS. *xxxv*

An additional plate (IV.) exhibits the registers of declination, horizontal force, and vertical force on four quiet days, which may be taken as types of the ordinary diurnal movement at four seasons of the year. These are given for the civil day as exhibiting more clearly the character of the diurnal movement. The earth currents on these days are very small.

The indications of horizontal and vertical force are given precisely as registered; they are therefore affected, slightly as compared with the amount of motion on disturbed days, by the small recorded changes of temperature of the magnets. The recorded hourly temperatures being inserted on the plates, reference to the temperature-correction of the magnets, given at page *xxx*, will show the effect produced. Briefly, an increase of about $4\frac{1}{2}^{\circ}$ of temperature throws the horizontal force curve upward by 0.001 of the whole horizontal force; an increase of about 5° of temperature throws the vertical force curve downward by 0.001 of the whole vertical force.

The original photographs have been reduced in the proportion of 20 to 11 on the plates, and the corresponding scale values are:—

—	LENGTH IN INCHES.							
	Of 1° of Declination.		Of 0.001 of Horizontal Force.				Of 0.001 of Vertical Force.	
			January 1 to June 30.		July 11 to December 31.			
	in.	mm.	in.	mm.	in.	mm.	in.	mm.
On the Photographs -	4.691	119.15	2.551	64.80	2.478	62.94	5.702	144.83
On the Plates -	2.580	65.53	1.403	35.64	1.363	34.62	3.136	79.66

The scales actually attached to the plates are, however, so arranged as to correspond with the tables of the magnetic section—that is to say, the units for horizontal force and vertical force are 0.0001 of the whole horizontal and vertical forces respectively, the numbers being in some cases increased by 1000 to avoid negative quantities. At the foot of each plate equivalent scales, in C.G.S. measure, are given for each of the magnetic registers. (See page *xxxvi*.)

Since the preceding scale values are not immediately comparable for the different elements, it therefore becomes desirable to refer them all to the same unit, say 0.01 of the horizontal force.

Now, the transverse force represented by a variation of 1° of Declination
 = 0175 of Horizontal Force,
 and Vertical Force = Horizontal Force × tan dip [adopted dip = 67°.8'.27"]
 = Horizontal Force × 2.3720 ;

whence we have the following equivalent scale values for the different elements :—

—	LENGTH OF UNIT, EQUIVALENT TO 0.01 OF HORIZONTAL FORCE.							
	For Declination Curve.		For Horizontal Force Curve.				For Vertical Force Curve.	
			January to June.		July to December.			
	in.	mm.	in.	mm.	in.	mm.	in.	mm.
On the Photographs -	2.68	68.1	2.55	64.8	2.48	62.9	2.40	61.1
On the Plates -	1.47	37.4	1.40	35.6	1.36	34.6	1.32	33.6

It may be convenient to give also comparative scale values for the different systems of absolute measurement, viz. :—

Foot-grain-second, or British unit, in terms of which Mean H.F. for 1900 = 3.9995
 Millimètre-milligramme-second, or Metric unit, " " " = 1.8441
 Centimètre-gramme-second, or C.G.S. unit, " " " = 0.18441

Dividing, therefore, the scale values last given by 3.9995, 1.8441, and 0.18441 respectively, the following comparative scale values for each of the elements on the photographs and on the plates as referred to 0.01 of these units respectively are found :—

UNIT.	LENGTH OF 0.01 OF UNIT.															
	Declination.				Horizontal Force.								Vertical Force.			
					January to June.				July to December.							
	On the Photo-graphs.		On the Plates.		On the Photo-graphs.		On the Plates.		On the Photo-graphs.		On the Plates.		On the Photo-graphs.		On the Plates.	
in.	mm.	in.	mm.	in.	mm.	in.	mm.	in.	mm.	in.	mm.	in.	mm.	in.	mm.	
British -	0.67	17.0	0.37	9.4	0.64	16.2	0.35	8.9	0.62	15.7	0.34	8.7	0.60	15.3	0.33	8.4
Metric -	1.45	36.9	0.80	20.3	1.39	35.2	0.76	19.4	1.34	34.1	0.74	18.8	1.30	33.1	0.72	18.2
C.G.S. -	14.5	369	8.0	203	13.9	352	7.6	194	13.4	341	7.4	188	13.0	331	7.2	182

Slight interruptions in the traces on the plates are due to various causes. In the originals there are breaks at each hour for time scale, so slight, however, that in the copies the traces could usually be made continuous without fear of error: in a few cases, however, this could not be done. Further, to check the numeration of hours, the observer interrupts the register at definite times for about five minutes, usually at or near 9^h 30^m, 12^h 30^m, and 20^h 30^m Greenwich civil time, and at somewhat different times on Sundays.

The original photographic records were first traced on thin paper, the separate records on each day being arranged one under another on the same sheet, and great attention being paid to accuracy as regards the scale of time. Each sheet containing the records for one or more days was then reduced by photo-lithography, in the proportion of 20 to 11, to bring it to a convenient size for insertion in the printed volume.

§ 6. *Meteorological Instruments.*

STANDARD BAROMETER.—The standard barometer, mounted in 1840 on the southern wall of the western arm of the Upper Magnet Room, is Newman No. 64. Its tube is 0ⁱⁿ·565 in diameter, and the depression of the mercury due to capillary action is 0ⁱⁿ·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 0ⁱⁿ·05, sub-divided by vernier to 0ⁱⁿ·002.

The readings of this barometer, until 1866 August 20, are considered to be coincident with those of the Royal Society's flint-glass standard barometer. It then became necessary to remove the sliding rod for repair of its slow motion screw, which was completed on August 30. Before the removal of the rod the barometer had been compared with three other barometers, one of which, during repair of the rod, was used for the daily readings. After restoration of the rod, a comparison was again made with the same three barometers, from which it appeared that the readings of the standard, in its new state, required a correction of -0ⁱⁿ·006, all three auxiliary barometers giving accordant results. This correction has been applied to every observation since 1866 August 30.

An elaborate comparison of the standard barometers of the Greenwich and Kew Observatories, made in the spring of the year 1877, under the direction of the Kew Committee, by the late Mr. Whipple, showed that the difference between the two

barometers (after applying to the Greenwich barometer-readings the correction $-0^{\text{m}}\cdot006$) did not exceed $0^{\text{m}}\cdot001$. (*Proceedings of the Royal Society*, vol. xxvii, page 76.)

The height of the barometer cistern above the mean level of the sea is 159 feet, being $5^{\text{ft}}\cdot 2^{\text{in}}\cdot$ above Mr. Lloyd's reference mark in Bradley's Transit room adjoining the present Transit-circle room. (*Philosophical Transactions*, 1831.)

The barometer is read at 9^{h} , 12^{h} (noon), 15^{h} , 21^{h} (civil reckoning) on week days; and at 10^{h} , noon, and 20^{h} on Sundays. Each reading is corrected by application of the index-correction above mentioned, and reduced to the temperature 32° by means of Table II. of the "Report of the Committee of Physics" of the Royal Society. The readings thus found are used to determine the value of the instrumental base line on the photographic record.

PHOTOGRAPHIC BAROMETER.—The barometric record is made on the same cylinder as is used for magnetic vertical force, the register being arranged to fall on the upper half of the cylinder, on its eastern side. A siphon barometer fixed to the northern wall of the Magnet Basement is employed, the bore of the upper and lower extremities of the tube being about 1·1 inch, and that of the intermediate portion 0·3 inch. A metallic plunger, floating on the mercury in the shorter arm of the siphon, is partly supported by a counterpoise acting on a light lever, leaving a definite part of its weight to be supported by the mercury. The lever carries at its other end a vertical plate of blackened mica, having a small horizontal slit, whose distance from the fulcrum is about eight times that of the point of connexion with the float, and whose vertical movement is therefore about four times that of the ordinary barometric column. The light of a gas lamp, passing through this slit and falling on a cylindrical lens, forms a spot of light on the paper. The barometer can, by screw action, be raised or lowered so as to keep the photographic trace in a convenient part of the sheet. A base line is traced on the sheet, and the record is interrupted at each hour by the clock, and occasionally by the observer, in the same way as for the magnetic registers. The length of the time scale is also the same.

The barometric scale is determined by experimentally comparing the measured movement on the paper with the observed movement of the standard barometer; one inch of barometric movement is thus found = $4^{\text{in}}\cdot39$ on the paper. Ordinates measured for the times of observation of the standard barometer, combined with the corrected readings of the standard barometer, give apparent values of the base line, from which mean values for each day are formed; these are written on the sheets and new base lines drawn, from which the hourly ordinates (see page *li*) are measured as for the magnetic registers. As the diurnal change of temperature in

the Basement is very small, no appreciable differential effect is produced on the photographic register by the expansion of the column of mercury.

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 the late Sir G. B. Airy. A vertical axis, fixed in the ground, carries the frame, which consists of a horizontal board as base, of a vertical board projecting upwards from it and connected with one edge of the horizontal board, and of two parallel inclined boards (separated about 3 inches) connected at the top with the vertical board and at the bottom with the other edge of the horizontal board: the outer inclined board is covered with zinc, and the air passes freely between all the boards. The dry and wet bulb thermometers are mounted near the centre of the vertical board, with their bulbs about 4 feet from the ground; the maximum and minimum thermometers for air temperature are placed towards one side of the vertical board, and those for evaporation temperature towards the other side, with their bulbs at about the same level as those of the dry and wet bulb thermometers. A small roof projecting from the frame protects the thermometers from rain. The frame is turned in azimuth several times during the day (whether cloudy or clear), so as to keep the inclined side always towards the sun. In 1878 September a circular board, 3 feet in diameter, was fixed, below the frame, round the supporting post, at a height of 2 feet 6 inches above the ground, with the object of protecting the thermometers from radiation from the ground. In the summer of 1886 experiments were made on days of extreme heat, with the view of determining the effect of the circular board in this respect, an account of which will be found at the end of the Introduction to the volume for the year 1887. The effect of radiation with the circular board removed was found to be insensible.

On 1899 January 4 the thermometer stand was moved to the Magnetic Pavilion enclosure, where the thermometers are set up in an open position, about 40 feet south-west of the building.

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, which required a correction of $-0^{\circ}.3$. The wet bulb thermometer used until February 8 was Negretti and Zambra, No. 45355, but this thermometer having been

accidentally broken, it was replaced by a similar thermometer Negretti and Zambra, No. 45356 transferred from the roof of the Magnet House. The correction $-0^{\circ}\cdot3$ has been applied to the readings of both these thermometers.

The self-registering thermometers for temperature of air and evaporation are all by Negretti and Zambra. The maximum thermometers are on Negretti and Zambra's principle, the minimum thermometers are of Rutherford's construction. To the readings of Negretti and Zambra, No. 83760, for maximum temperature of the air, a correction has been applied of $-0^{\circ}\cdot1$; and to those of Negretti and Zambra, No. 38338, for minimum temperature of the air, a correction of $+0^{\circ}\cdot2$ has been applied. The readings of Negretti and Zambra, No. 79224, for maximum temperature of evaporation, required no correction, and to those of Negretti and Zambra, No. 2048, for minimum temperature of evaporation, a correction of $+0^{\circ}\cdot7$ has been applied throughout.

The dry and wet bulb thermometers are read at 9^h, 12^h (noon), 15^h, 21^h (civil reckoning) on week days, and at 10^h, noon, and 20^h on Sundays. Readings of the maximum and minimum thermometers are taken at 9^h and 21^h on week days, and at 10^h and 20^h on Sundays. Those of the dry and wet bulb thermometers are employed to correct the indications of the photographic dry and wet bulb thermometers.

In the year 1887, four thermometers—a dry-bulb, and a wet-bulb with maximum and minimum thermometers for air temperature were mounted in a Stevenson screen, with double louvre-boarded sides, of the pattern adopted by the Royal Meteorological Society, which is fully described in the *Quarterly Journal* of the Society, vol. x. page 92. The screen is planted in the Magnet ground 20 feet east-north-east of the photographic thermometers, and its internal dimensions are, length 18 inches, width 11 inches, and height 15 inches, the bulbs of the thermometers placed in it being at a height of about 4 feet above the ground. The dry-bulb thermometer is Hicks No. 262495, to the readings of which a correction of $-0^{\circ}\cdot1$ has been applied. The wet-bulb is Hicks No. 268525, to the readings of which a correction of $+0^{\circ}\cdot1$ has been applied. The maximum thermometer is Negretti and Zambra, No. 85059, which required no correction. To the readings of the minimum thermometer, Negretti and Zambra, No. 68873, a correction of $+0^{\circ}\cdot3$ has been applied. The observation of the dry and wet bulb thermometers is omitted on Sundays and a few other days.

Experiments were made in the summer of the year 1887 on days of extreme heat, to determine whether, with the door of the screen open, the thermometers were in any way influenced by radiation from external objects, an account of which will be found

at the end of the Introduction to the volume for 1887. The effect of radiation with the door of the screen open was found to be insensible.

At the beginning of the year 1886 three thermometers were mounted on the platform above the Magnet House, in a louvre-boarded shed or screen, so constructed as to give free circulation of air with protection from radiation. The thermometer for eye-observation of the temperature of the air, used till February 8, was Negretti and Zambra, No. 45356, and a correction of $-0^{\circ}3$ has been applied to its readings. Afterwards Hicks, No. 268524 was employed which required no correction. No. 37467, also by Negretti and Zambra, is a self-registering maximum thermometer, to the readings of which a correction of $-0^{\circ}5$ has been applied. No. 342663, by Hicks, is a self-registering minimum thermometer, to the readings of which corrections have been applied as follow: 20° to $33^{\circ} - 0^{\circ}1$, 33° to $40^{\circ} 0^{\circ}0$, 40° to $46^{\circ} + 0^{\circ}1$, 46° to $53^{\circ} + 0^{\circ}2$, 53° to $58^{\circ} + 0^{\circ}3$, 58° to $62^{\circ} + 0^{\circ}4$, and above $62^{\circ} + 0^{\circ}5$. The bulbs of all these thermometers are 4 feet above the platform, and about 20 feet above the ground. The eye-observation of the thermometer for temperature of the air is omitted on Sundays and a few other days.

On 1900 March 31, an additional Stevenson screen similar to the screen already mounted in the Magnet ground, was erected in the Magnetic Pavilion enclosure, 15 feet north-east of the open stand. The dry and wet bulb thermometers mounted in this screen are Negretti and Zambra, Nos. 94713 and 94714 which required no correction to their readings. To the readings of the maximum thermometer, Negretti and Zambra, No. 85066, no correction is required, and to those of the minimum thermometer, Negretti and Zambra, No. 85080, a correction of $+ 0^{\circ}2$ has been applied.

PHOTOGRAPHIC DRY-BULB AND WET-BULB THERMOMETERS.—The apparatus now in use was constructed in the year 1884 by Messrs. Negretti & Zambra from designs furnished by me, and was mounted in the year 1885, but from various causes it was not brought into regular use until 1887 January 1. Until February 1891 it stood nearly in the centre of the South Ground: it was then removed to the Magnet Ground, being placed in the position formerly occupied by the old apparatus, which had been previously dismantled. It is placed under a shed, 8 feet square, standing upon posts about 8 feet high. On 1899 May 16 and 17, the shed was shifted 15 feet westwards. This shed is open to the north, and is generally similar to that provided for the old apparatus, excepting that the roof inclines somewhat towards the south, and that the protecting boards (fixed as far as necessary on the eastern, southern, and western sides) are double, with spaces between to ensure a free circulation of air while screening the thermometers from the direct rays of the sun. The thermometers are further protected from sky and ground radiation by boards on the thermometer stand as described below. The

photographic register is received on paper placed on a vertical ebonite cylinder $11\frac{1}{2}$ inches high and $14\frac{1}{4}$ inches in circumference, and I have arranged that the dry and wet bulb traces shall fall on the same part of the cylinder, as regards time scale, a long air-bubble in the wet-bulb thermometer column giving the means of registering the indications of the wet bulb (as well as of such degrees and decades of its scale as fall within the bubble), just below the trace of the dry-bulb thermometer, without any interference of the two records, an arrangement which admits of the time scale being made equal to that of all the other registers. 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. Two gas lamps, each at a distance of 21 inches, are placed at such an angle that the light from each, after passing through its corresponding slit and thermometer tube, falls on the photographic paper in one and the same vertical line. Degree lines etched upon the thermometer stems, and painted, interrupt the light sufficiently to produce a clear and sharp indication on the photographic sheet, the line at each tenth degree being thicker than the others, as well as those at 32° , 52° , 72° , &c. The length of scale is from 0° to 120° for each thermometer, the length of 1° being about 0.1 inch, and the air-bubble in the wet-bulb thermometer is about 12° in length, so that it will always include one of the ten-degree lines. The bulbs, which are 2 inches long and of about $\frac{1}{2}$ an inch in internal bore, are separated horizontally by 5 inches, the tubes of the thermometers having a double bend above the bulbs, which are placed about 4 feet above the ground. The thermometers are carried by a vertical frame with independent vertical adjustment for each thermometer, so that the register in summer or winter can be brought to a convenient part of the photographic sheet. The revolving cylinder is driven by a pendulum clock contained within the brass case covering the whole apparatus, excepting the thermometer bulbs which project below. It makes one revolution in 26 hours, and the time scale is the same as that for all the other registers. As the cylinder revolves, the light passing through the portion of the thermometer tubes not occupied by mercury imprints on the paper a broad band of photographic trace, corresponding to the dry-bulb register, whose breadth in the vertical direction varies with the height of the mercury in the tube, and a narrower band below, corresponding to the wet bulb. When these are developed, the traces are seen to be crossed by thin white lines, the horizontal lines corresponding to degrees, and the vertical lines to hours, the lower boundary of each trace indicating the thermometric record corresponding to the upper surface of the thermometric column.

The driving clock is made to interrupt the light for a short time at each hour, producing on the sheet the hour lines above mentioned; the observer

also occasionally interrupts the register for a short time for proper identification of the hourly breaks.

The bulbs of the thermometers were at first completely protected from radiation by vertical or inclined boards fixed to the thermometer stand, two on the south side, two on the north side, one at the east end, one at the west end, and one below, but with proper spaces for free circulation of air. Experiments made in the summer of the year 1886, an account of which is given at the end of the Introduction for 1887, showed that the north and south boards were unnecessary, and the two south boards and one north board were in consequence removed before commencing regular work with the instrument at the beginning of the year 1887.

For a description of the apparatus formerly employed, reference may be made to the Introduction for 1887 and previous years. A comparison of the results given by the old and new apparatus will be found at the end of the Introduction to the year 1887.

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 self-registering mercurial maximum thermometer on Negretti and Zambra's principle, with its bulb blackened, and the thermometer enclosed in a glass sphere from which the air has been exhausted. The thermometer employed throughout the year was Negretti and Zambra, No. 72540. The thermometer for radiation to the sky is a self-registering spirit minimum thermometer of Rutherford's construction, by Horne and Thornthwaite, No. 3120. The thermometers are laid on short grass, and freely exposed to the sky; they require no correction for index-error.

EARTH THERMOMETERS.—These thermometers were made by Adie, of Edinburgh, under the superintendence of Professor J. D. Forbes. They are placed about 20 feet south of the Magnet House.

The thermometers are four in number, placed in one hole in the ground, the diameter of which in its upper half is 1 foot and in its lower half about 6 inches, each thermometer being attached in its whole length to a slender piece of wood. The thermometer No. 1 was dropped into the hole to such a depth that the centre of its bulb was 24 French feet (25·6 English feet) below the surface; then dry sand was poured in till the hole was filled to nearly half its height. Then No. 2 was dropped in till the centre of its bulb was 12 French feet below the surface; Nos. 3 and 4 till the centres of their bulbs were respectively 6 and 3 French feet below the surface; and the hole was then completely filled with dry sand. The upper parts of the tubes carrying the scales were left projecting above the surface; No. 1 by

27·5 inches, No. 2 by 28·0 inches, No. 3 by 30·0 inches, and No. 4 by 32·0 inches. Of these lengths, 8·5, 10·0, 11·0, and 14·5 inches respectively are in each case tube with narrow bore. The length of 1° on the scales is 1·9 inch, 1·1 inch, 0·9 inch, and 0·5 inch in each case respectively. The ranges of the scales are for No. 1, 46°·0 to 55°·5; No. 2, 43°·0 to 58°·0; No. 3, 44°·0 to 62°·0; and for No. 4, 36°·9 to 68°·0.

The bulbs of the thermometers are cylindrical, 10 or 12 inches long, and 2 or 3 inches in diameter. The bore of the principal part of each tube, from the bulb to the graduated scale, is very small; in that part to which the scale is attached it is larger; the fluid in the tubes is alcohol tinged red; the scales are of opal glass.

The ranges of scale having in previous years been found insufficient, fluid has at times been removed from or added to the thermometers as necessary, corresponding alterations being made in the positions of the attached scales. Information in regard to these changes will be found in previous Introductions.

The parts of the tubes above the ground are protected by a small wooden hut fixed to the ground; the sides of the hut are perforated with numerous holes, and it has a double roof; in the north face is a plate of glass, through which the readings are taken. Within the hut are two small thermometers—one, No. 5, with bulb 1 inch in the ground; another, No. 6, whose bulb is freely exposed in the centre of the hut.

These thermometers are read every day at noon, and the readings are given without correction. The index-errors of Nos. 1, 2, 3, and 4 are unknown; No. 5 appears to read too high by 0°·2, and No. 6 by 0°·4, but no corrections have been applied.

OSLER'S ANEMOMETER.—This self-registering anemometer, devised by A. Follett 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. For the direction of the wind a large vane (9^{ft.} 2^{in.} in length), from which a vertical shaft proceeds down to the registering table within the turret, gives motion, by a pinion fixed at its lower end, to a rack-work carrying a pencil. A collar on the vane shaft bears upon anti-friction rollers running in a cup of oil, rendering the vane very sensitive to changes of direction in light winds. The pencil marks a paper fixed to a board moved horizontally and uniformly by a clock, in a direction transverse to that of the motion of the pencil. The paper carries lines corresponding to the positions of N., E., S., and W. of the vane, with transversal hour lines. 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. The vane, which had been in use since the year 1841, began in the autumn of 1891 to show signs of weakness; it was taken down in December 1891 and thoroughly repaired. It was satisfactory to find that the anti-friction bearings of the vane, on which the sensitiveness of its motion depends, were in excellent condition, after having been continuously in action for 25 years.

For the pressure of the wind the construction is as follows:—At a distance of 2 feet below the vane there is placed a circular pressure plate (with its plane vertical) having an area of $1\frac{1}{2}$ square feet, or 192 square inches, which, moving with the vane in azimuth, and being thereby kept directed towards the wind, acts against a combination of springs in such way that, with a light wind, slender springs are first brought into action, but, as the wind increases, stiffer springs come into play. For a detailed account of the arrangement adopted, the reader is referred to the Introduction for the year 1866. [Until 1866 the pressure plate was a square plate, 1 foot square, for which in that year a circular plate, having an area of 2 square feet, was substituted and employed until the spring of the year 1880, when the present circular plate, having an area of $1\frac{1}{2}$ square feet, was introduced.] A short flexible snake chain, fixed to a cross bar in connexion with the pressure plate, and passing over a pulley in the upper part of the shaft, is attached to a brass chain (formerly a copper wire) running down the centre of the shaft to the registering table, just before reaching which the chain communicates with a short length of silk cord, which, led round a pulley, gives horizontal motion to the arm carrying the pressure pencil. The substitution, in the year 1882, of the flexible brass chain for the copper wire, has greatly increased the delicacy of movement of the pressure pencil, every small movement of the pressure plate being now registered. The scale for pressure, in lbs. on the square foot, is experimentally determined from time to time as appears necessary; the pressure pencil is brought to zero by a light spiral spring.

Whilst the action of the pressure apparatus has been satisfactory for moderate winds, it is believed that the record of occasional very large pressures in years preceding 1882 was due principally to irregular action, in excessive gusts, of the connecting copper wire, but the brass chain being always in tension, the movements of the recording pencil have since been in complete sympathy with those of the pressure plate, and in this condition of the apparatus—that is, since the year 1882—few pressures greater than 30 lbs. have been recorded.

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

A new sheet of paper is applied to the instrument every day at noon. The scale of time is ordinarily the same as that of the magnetic registers, but by means of a special gearing applied to the clock by Mr. Kullberg in 1894 the table carrying the record can either be driven at the usual rate, or 24 times as fast, in order to give a largely increased time scale for the register of wind pressure during gales, the ordinary sheet thus giving a register for 1 hour instead of 24.

ROBINSON'S ANEMOMETER.—This instrument, made by Mr. Browning, is constructed on the principle described by the late Dr. Robinson in the *Transactions of the Royal Irish Academy*, vol. xxii., for registration of the horizontal movement of the air, and is mounted above the small building on the roof of the Octagon Room. It was brought into use in 1866 October. The motion is given by the pressure of the wind on four hemispherical cups, each 5 inches in diameter, the centre of each cup being 15 inches distant from the vertical axis of rotation. The foot of the axis is a hollow flat cone bearing upon a sharp cone, which rises up from the base of a cup of oil. An endless screw acts on a train of wheels furnished with indices for reading off the amount of motion of the air in miles, and a pinion on the axis of one of the wheels draws upwards a rack, to which is attached a rod passing down to the pencil which marks the paper placed on the vertical revolving cylinder in the chamber below. A motion of the pencil upwards through a space of 1 inch represents horizontal motion of the air through 100 miles. The revolving hemispherical 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.

The cylinder is driven by a clock in the usual way, and makes one revolution in 24 hours. A new sheet of paper is applied every day at noon. The scale of time is the same as that of the magnetic registers.

It is assumed, in accordance with the experiments made by Dr. Robinson, that the horizontal motion of the air is three times the space described by the centres of the cups. To verify this conclusion, experiments were made in the year 1860 in Greenwich Park with the anemometer by Negretti and Zambra, which was in use from 1859 until the introduction of the larger instrument by Browning in 1866 October. The instrument was fixed to the end of a horizontal arm, which was made to revolve round a vertical axis. For more detailed account of these experiments see the Introduction for 1880 and for previous years. With the arm revolving in the direction N., E., S., W., opposite to the direction of rotation of the cups, for movement of the instrument through 1 mile, 1.15 was registered ; with the arm revolving in the direction

N., W., S., E., in the same direction as the rotation of the cups, 0·97 was registered. This was considered to confirm sufficiently the accuracy of the assumption. The hemispherical cups of the instrument with which these experiments were made were each $3\frac{3}{4}$ inches in diameter, the distance between the centres of the opposite cups being 13·45 inches.

From 1889 April 22 to May 8, both of the above instruments were sent to Mr. W. H. Dines, who kindly tested them on his whirling machine then erected at Hershams. The particulars of these experiments are given at the end of the Introduction for 1889. The results appear to show that the instrumental results in the case of high velocities of the wind are too great for both anemometers, but it has been thought better, for the sake of continuity, not to apply any corrections to the recorded values, which consequently indicate velocities corresponding to three times the space described by the centres of the cups.

RAIN GAUGES.—During the year 1900 eight rain gauges were employed, placed at different elevations above the ground, complete information in regard to which will be found at page (cvi) of the Meteorological Section.

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 receiving surface is a rectangular opening 10×20 inches (200 square inches in area). The collected water passes into a vessel suspended by spiral springs, which lengthen as the water accumulates, until 0·25 inch is collected. The water then discharges itself by means of the following modification of the siphon. A vertical copper tube, open at both ends, is fixed in the receiver, with one end just projecting below the bottom. Over this tube a larger tube, closed at the top, is loosely placed. The accumulating water, having risen to the top of the inner tube, begins to flow off into a small tumbling bucket, fixed in a globe placed underneath, and carried by the receiver. When full, the bucket falls over, throwing the water into a small exit pipe at the lower part of the globe—the only outlet. This creates a partial vacuum in the globe sufficient to cause the longer leg of the siphon to act, and the whole remaining contents of the receiver then run off, through the globe, to a waste pipe. The spiral springs at the same time shorten, and raise the receiver. The gradual descent of the water vessel as the rain falls, and the immediate ascent on discharge of the water, act upon a pencil, and cause a corresponding trace to be made on the paper fixed to the moving board of the anemometer. The rain scale on the paper was determined experimentally by passing a known quantity of water through the receiver. The continuous record thus gives complete information on the rate of the fall of rain.

Gauge No. 2 is a ten-inch circular gauge, placed close to gauge No. 1, its receiving surface being precisely at the same level. The gauge is read daily at 9^h Greenwich civil time.

Gauges Nos. 3, 4, and 5 are 8-inch circular gauges, placed respectively on the roof of the Octagon Room, over the roof of the Magnetic Observatory, and on the roof of the Photographic Thermometer Shed. All are read daily at 9^h Greenwich civil time.

Gauge No. 6 is an 8-inch circular gauge placed on the ground in the Magnetic Pavilion enclosure, about 10 feet north-west of the thermometer stand, and gauges Nos. 7, and 8 also 8-inch circular gauges, are placed on the ground south-east of the Magnetic Observatory; No. 6 is the Standard gauge, No. 7 the old monthly gauge, and No. 8 an additional gauge brought into use in July 1881 as a check on the readings of Nos. 6 and 7. No. 6 is read daily, usually at 9^h, 15^h, and 21^h Greenwich civil time, and Nos. 7 and 8 at 9^h only.

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

ELECTROMETER.—The electric potential of the atmosphere is measured by means of a Thomson self-recording electrometer, constructed by White, of Glasgow.

For a full description of the principle of the electrometer, reference may be made to Sir William Thomson's "Report on Electrometers and Electrostatic Measurements," contained in the *British Association Report* for the year 1867. It will be sufficient here to give a general description of the instrument which, with its registering apparatus, is planted in the Upper Magnet Room on the slate slab which carries the suspension pulleys of the Horizontal Force Magnet. A thin flat needle of aluminium, carrying immediately above it a small light mirror, is suspended, on the bifilar principle, by two silk fibres from an insulated support within a large Leyden jar. A little strong sulphuric acid is placed in the bottom of the jar, and from the lower side of the needle depends a platinum wire, kept stretched by a weight, which connects the needle with the sulphuric acid—that is, with the inner coating of the jar. A positive charge of electricity being given to the needle and jar, this charge is easily maintained at a constant potential by means of a small electric machine or replenisher forming part of the instrument, and by which the charge can be either increased or diminished at pleasure. A gauge is provided for the purpose of indicating at any moment the amount of charge. The needle hangs within four insulated quadrants, which may be supposed to be formed by cutting a circular flat brass box into quarters, and then slightly separating them. The opposite quadrants are placed in metallic connexion.

Sir William Thomson's water-dropping apparatus is used to collect the atmospheric electricity. For this purpose a rectangular cistern of copper, capable of holding above

30 gallons of water, is placed near the ceiling on the west side of the south arm of the Upper Magnet Room. The cistern rests on four pillars of glass, each one encircled and nearly completely enclosed by a glass vessel containing sulphuric acid. A pipe passing out from the cistern, through the south face of the building, extends about 6 feet into the atmosphere, the nozzle (about 10 feet above the ground) having a very small hole, through which the water passes and breaks almost immediately into drops. The cistern is thus brought to the same electrical potential as that of the atmosphere, near the nozzle, and this potential is communicated by means of a connecting wire to one of the pairs of electrometer quadrants, the other pair being connected to earth. The varying atmospheric potential thus influences the motions of the included needle, causing it to be deflected from zero in one direction or the other, according as the atmospheric potential is greater or less than that of the earth—that is, according as it is positive or negative.

The small mirror carried by the needle is used for the purpose of obtaining photographic record of its motions. The light of a gas lamp, passing through a slit and falling upon the mirror, is thence reflected, and by means of a plano-convex cylindrical lens is brought to a focus at the surface of a horizontal cylinder of ebonite, nearly 7 inches long and 16 inches in circumference, which is turned by clock-work. A second fixed mirror, by means of the same gas lamp, causes a reference line to be traced round the cylinder. The actual zero is found by cutting off the cistern communication, and placing the pairs of quadrants in metallic connexion with each other and with earth. The break of register at each hour is made by the driving-clock of the electrometer cylinder itself. Other photographic arrangements are generally similar to those which have been described for other instruments.

The scale of time is the same as that of the magnetic registers.

Interruptions sometimes occur through cobwebs making connexion between the cistern or its pipe and the walls of the building, and in winter, from the occasional freezing of the water in the exit pipe.

SUNSHINE RECORDER.—Until the end of the year 1886 the instrument with which the record given in the printed volume was made was that presented to the Royal Observatory by the late Mr. J. F. Campbell, by whom this method of record was devised. This instrument is fully described in the Introductions to previous volumes. Commencing with the year 1887, the record is that of a modification of the Campbell form of instrument, as arranged by Sir G. G. Stokes for use at the observing stations of the Meteorological Office. By employing this instrument, the manipulation of which is more simple, there is the further advantage that the Greenwich results become strictly com-

parable with those of the Meteorological Office Stations. A very complete account of the Campbell-Stokes instrument is given in the *Quarterly Journal of the Royal Meteorological Society*, vol. vi. page 83. The recording cards are supported by carriers no larger than is required for keeping them in proper position; one straight card serves for the equinoctial periods of the year, and another, curved, for the solstitial periods, the only difference between the summer and winter cards being that the summer cards are the longer: grooves are provided so that the cards are placed in position with great readiness. The daily record is transferred to a sheet of paper specially ruled with equal vertical spaces to represent hours, each sheet containing the record for one calendar month. The daily sums, and sums for each hour (reckoning from *apparent* midnight) through the month, are thus readily formed. The recorded durations are to be understood as indicating the amount of *bright* sunshine, no register being obtained when the sun shines faintly through fog or cloud, or when the sun is very near the horizon. Until 1896 February 5 the instrument was placed on a table upon the platform above the Magnetic Observatory, about 21 feet above the ground, and 176 feet above mean sea level. On account of the extension of the buildings in the south ground, it was found necessary on 1896 February 6 to remove the sunshine recorder from the roof of the Magnetic Observatory to a commanding position on the stage carrying the Robinson anemometer, on the roof of the Octagon Room, about 50 feet above the ground. A clear view of the sun is obtained in this position from sunrise to sunset, but some inconvenience is caused by the smoke from neighbouring chimneys. Very little record is obtained near to sunrise at any part of the year.

It was pointed out by Mr. Marriott, Secretary of the Royal Meteorological Society, towards the end of 1896, that the record by the Campbell-Stokes instrument exhibited a notable falling off. This, though not very marked till 1896, had certainly begun in 1894, and it was found to be due to opacity in the glass globe, which appears to have deteriorated. On 1897 January 1 a globe of clearer glass, presented to the Royal Observatory in 1881 by the late Mr. Campbell, was substituted for the defective globe.

The deterioration of the old ball is fully discussed by Mr. Curtis in the *Quarterly Journal of the Royal Meteorological Society*, vol. xxiv.

OZONOMETER.—This apparatus is fixed on the south-west corner of the roof of the Photographic Thermometer shed, at a height of about 10 feet from the ground. The box in which the papers are exposed is of wood: it is about 8 inches square, blackened inside, and so constructed that there is free circulation of air through the box, without exposure of the paper to light. The papers exposed at 9^h, 15^h, and 21^h are collected respectively at 15^h, 21^h, and 9^h, and the degree of tint produced is compared with a scale of graduated tints, numbered from 0 to 10. The value of ozone for the civil day is determined by taking the degree of tint obtained at each hour

of collection as proportional to the period of exposure. Thus, to form the value for any given civil day, three-fourths of the value registered at 9^h, the values registered at 15^h and 21^h, and one-fourth of that registered at the following 9^h, are added together, the resulting sum (which appears in the tables of "Daily Results of the Meteorological Observations") being taken as the value referring to the civil day on a scale of 0 to 30. The means of the 9^h, 15^h, and 21^h values, as observed, are also given for each month in the footnotes.

§ 7. *Meteorological Reductions.*

The results given in the Meteorological Section refer to the civil day, commencing at midnight.

All results in regard to atmospheric pressure, temperature of the air and of evaporation with deductions therefrom, and atmospheric electricity, 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 and 21^h (civil reckoning), 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 of the photographic traces for the elements mentioned are entered into a form having double argument, the horizontal argument ranging through the 24 hours of the civil day (0^h to 23^h), and the vertical argument through the days of a calendar month. Then for all the photographic elements, the means of the numbers standing in the vertical columns of the monthly forms, into which the values are entered, give the mean monthly photographic values for each hour of the day, the means of the numbers in the horizontal columns giving the mean daily value. It should be mentioned that before measuring out the electrometer ordinates, a pencil line was first drawn through the trace to represent the general form of the curve, in the way described for the magnetic registers (page *xxix*), excepting that no day has been omitted on account of unusual electrical disturbance, as it has been found difficult to decide on any limit of disturbance beyond which it would seem proper, as regards determination of diurnal inequality, to reject the results. In measuring the electrometer ordinates a scale of inches is used, and the values given in the tables which follow are expressed in thousandths of an inch, positive and negative potential being denoted by positive and negative numbers respectively. The scale has not been determined in terms of any electrical unit.

To correct the photographic indications of barometer and dry and wet bulb thermometers for small instrumental error, the means of the photographic readings at 9^h, 12^h (noon), 15^h, and 21^h in each month are compared with the corresponding corrected mean readings of the standard barometer and standard dry and wet bulb thermometers,

as given by eye observation. A correction applicable to the photographic reading at each of these hours is thus obtained, and, by interpolation, corrections for the intermediate hours are found. The mean of the twenty-four hourly corrections in each month is adopted as the correction applicable to each mean daily value in the month. Thus mean hourly and mean daily values of the several elements are obtained for each month. The process of correction is equivalent to giving photographic indications in terms of corrected standard barometer, and in terms of the standard dry and wet bulb thermometers exposed on the free stand. 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 mean daily temperature of the dew-point and degree of humidity are deduced from the mean daily temperatures of the air and of evaporation by use of Glaisher's *Hygrometrical Tables*. The factors by which the dew-point given in these tables is calculated were found by Mr. Glaisher from the comparison of a great number of dew-point determinations obtained by use of Daniell's hygrometer, with simultaneous observations of dry and wet bulb thermometers, combining observations made at the Royal Observatory, Greenwich, with others made in India and at Toronto. The factors are given in the following table.

TABLE OF FACTORS by which the DIFFERENCE between the READINGS of the DRY-BULB and WET-BULB THERMOMETERS is to be MULTIPLIED in order to PRODUCE the CORRESPONDING DIFFERENCE between the DRY-BULB TEMPERATURE and that of the DEW-POINT.

Reading of Dry-bulb Thermometer.	Factor.	Reading of Dry-bulb Thermometer.	Factor.	Reading of Dry-bulb Thermometer.	Factor.	Reading of Dry-bulb Thermometer.	Factor.
10°	8.78	33°	3.01	56°	1.94	79°	1.69
11	8.78	34	2.77	57	1.92	80	1.68
12	8.78	35	2.60	58	1.90	81	1.68
13	8.77	36	2.50	59	1.89	82	1.67
14	8.76	37	2.42	60	1.88	83	1.67
15	8.75	38	2.36	61	1.87	84	1.66
16	8.70	39	2.32	62	1.86	85	1.65
17	8.62	40	2.29	63	1.85	86	1.65
18	8.50	41	2.26	64	1.83	87	1.64
19	8.34	42	2.23	65	1.82	88	1.64
20	8.14	43	2.20	66	1.81	89	1.63
21	7.88	44	2.18	67	1.80	90	1.63
22	7.60	45	2.16	68	1.79	91	1.62
23	7.28	46	2.14	69	1.78	92	1.62
24	6.92	47	2.12	70	1.77	93	1.61
25	6.53	48	2.10	71	1.76	94	1.60
26	6.08	49	2.08	72	1.75	95	1.60
27	5.61	50	2.06	73	1.74	96	1.59
28	5.12	51	2.04	74	1.73	97	1.59
29	4.63	52	2.02	75	1.72	98	1.58
30	4.15	53	2.00	76	1.71	99	1.58
31	3.70	54	1.98	77	1.70	100	1.57
32	3.32	55	1.96	78	1.69		

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

The excess of the mean temperature of the air on each day above the average of 50 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 fifty years 1841-1890. 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 1890 on 24 hourly readings from the photographic record. The smoothed numbers are given in the following table.

ADOPTED VALUES of MEAN TEMPERATURE of the AIR, deduced from the OBSERVATIONS for the Fifty Years 1841-1890.

Day of the Month.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.
1	38.5	39.7	40.2	45.4	49.2	57.2	61.3	62.2	59.7	54.1	46.7	40.6
2	38.5	39.7	40.4	45.7	49.4	57.7	61.4	62.1	59.7	53.8	46.5	40.6
3	38.5	39.7	40.5	46.0	49.7	58.0	61.7	62.1	59.6	53.5	46.3	40.8
4	38.4	39.8	40.7	46.2	50.0	58.2	61.9	62.2	59.4	53.2	46.1	41.1
5	38.3	39.8	40.9	46.2	50.3	58.3	62.1	62.3	59.3	53.0	45.9	41.3
6	38.2	39.7	41.1	46.2	50.6	58.3	62.2	62.4	59.1	52.7	45.5	41.3
7	38.1	39.4	41.0	46.1	50.8	58.2	62.1	62.5	58.9	52.5	45.1	41.0
8	38.0	39.1	40.9	45.9	51.0	58.2	62.0	62.5	58.7	52.1	44.6	40.6
9	37.9	38.7	40.8	45.6	51.2	58.2	62.0	62.5	58.5	51.7	44.0	40.3
10	37.9	38.4	40.7	45.5	51.5	58.2	62.1	62.5	58.3	51.3	43.6	39.9
11	37.9	38.3	40.6	45.5	51.7	58.4	62.3	62.5	58.1	51.0	43.2	39.8
12	37.9	38.5	40.7	45.7	52.0	58.6	62.6	62.5	58.0	50.6	42.9	39.9
13	38.0	38.8	40.9	46.0	52.3	58.8	62.9	62.4	57.9	50.3	42.8	40.1
14	38.2	39.2	41.2	46.4	52.6	58.9	63.1	62.3	57.8	50.1	42.6	40.2
15	38.3	39.6	41.4	46.9	52.8	59.0	63.2	62.1	57.7	49.9	42.5	40.3
16	38.5	39.8	41.5	47.3	53.1	59.0	63.2	62.0	57.5	49.8	42.4	40.2
17	38.5	39.8	41.6	47.7	53.3	59.1	63.1	61.8	57.3	49.6	42.3	40.0
18	38.5	39.7	41.6	48.1	53.6	59.2	63.0	61.6	56.9	49.5	42.2	39.7
19	38.5	39.6	41.5	48.3	53.9	59.5	63.0	61.4	56.5	49.3	42.2	39.3
20	38.4	39.5	41.4	48.5	54.2	59.9	63.0	61.3	56.1	49.0	42.1	39.0
21	38.3	39.5	41.4	48.5	54.6	60.3	63.0	61.1	55.7	48.8	42.1	38.8
22	38.3	39.6	41.5	48.5	55.0	60.7	62.9	61.0	55.4	48.5	42.2	38.6
23	38.4	39.8	41.8	48.4	55.3	61.0	62.8	60.9	55.2	48.2	42.1	38.4
24	38.5	39.9	42.1	48.4	55.6	61.2	62.6	60.8	55.1	47.9	42.1	38.3
25	38.8	40.0	42.4	48.4	55.7	61.3	62.4	60.8	55.0	47.6	42.0	38.3
26	39.0	40.1	42.9	48.4	55.9	61.4	62.3	60.8	54.9	47.4	41.9	38.4
27	39.3	40.1	43.3	48.5	56.0	61.4	62.3	60.7	54.9	47.3	41.6	38.4
28	39.5	40.2	43.7	48.6	56.0	61.3	62.3	60.6	54.8	47.2	41.3	38.5
29	39.7		44.1	48.8	56.2	61.2	62.3	60.3	54.6	47.0	41.0	38.6
30	39.8		44.6	49.0	56.5	61.2	62.3	60.1	54.4	47.0	40.7	38.6
31	39.8		45.0		56.8		62.3	59.9		46.8		38.6
Means	38.5	39.5	41.7	47.2	53.1	59.4	62.4	61.6	57.2	50.0	43.2	39.7

The mean of the twelve monthly values is 49°.5.

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 usually read at 9^h, 15^h, and 21^h Greenwich civil 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 (lix) and (cvi), is formed from the records of this gauge. In this numeration only those days are counted on which the fall amounted to or exceeded 0ⁱⁿ.005.

The indications of atmospheric electricity are derived from Thomson's Electrometer. Occasionally, during interruption of photographic registration, the results depend on eye observations.

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 (xxxiii) to (lv), and in the abstract table, page (lix), is the mean found from observations made usually at 9^h, 12^h (noon), 15^h, and 21^h of each civil day.

For understanding the divisions of time under the headings, "Clouds and Weather" and "Electricity," the following remarks are necessary:—In regard to Clouds and Weather, 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. In regard to Electricity, the results are included in one column; in this case the colons divide the whole period of 24 hours (midnight to midnight).

The notation employed for Clouds and Weather is as follows, it being understood that for clouds Howard's Nomenclature is used. The figure denotes the proportion of sky covered by cloud, an overcast sky being represented by 10.

METEOROLOGICAL RESULTS.

lv

a	denotes <i>aurora borealis</i>	oc-m-r	denotes <i>occasional misty rain</i>
ci	... <i>cirrus</i>	oc-r	... <i>occasional rain</i>
ci-cu	... <i>cirro-cumulus</i>	sh-r	... <i>shower of rain</i>
ci-s	... <i>cirro-stratus</i>	shs-r	... <i>showers of rain</i>
cu	... <i>cumulus</i>	slt-r	... <i>slight rain</i>
cu-s	... <i>cumulo-stratus</i>	oc-slt-r	... <i>occasional slight rain</i>
d	... <i>dew</i>	th-r	... <i>thin rain</i>
hy-d	... <i>heavy dew</i>	fq-th-r	... <i>frequent thin rain</i>
f	... <i>fog</i>	oc-th-r	... <i>occasional thin rain</i>
slt-f	... <i>slight fog</i>	hy-sh	... <i>heavy shower</i>
tk-f	... <i>thick fog</i>	slt-sh	... <i>slight shower</i>
fr	... <i>frost</i>	fq-shs	... <i>frequent showers</i>
ho-fr	... <i>hoar frost</i>	hy-shs	... <i>heavy showers</i>
g	... <i>gale</i>	fq-hy-shs	... <i>frequent heavy showers</i>
hy-g	... <i>heavy gale</i>	oc-hy-shs	... <i>occasional heavy showers</i>
glm	... <i>gloom</i>	li-shs	... <i>light showers</i>
gt-glm	... <i>great gloom</i>	oc-shs	... <i>occasional showers</i>
h	... <i>haze</i>	s	... <i>stratus</i>
slt-h	... <i>slight haze</i>	sc	... <i>scud</i>
hl	... <i>hail</i>	li-sc	... <i>light scud</i>
l	... <i>lightning</i>	sl	... <i>sleet</i>
li-cl	... <i>light clouds</i>	sn	... <i>snow</i>
lu-co	... <i>lunar corona</i>	oc-sn	... <i>occasional snow</i>
lu-ha	... <i>lunar halo</i>	slt-sn	... <i>slight snow</i>
m	... <i>mist</i>	so-ha	... <i>solar halo</i>
slt-m	... <i>slight mist</i>	sq	... <i>squall</i>
n	... <i>nimbus</i>	sqqs	... <i>squalls</i>
p-cl	... <i>partially cloudy</i>	fq-sqs	... <i>frequent squalls</i>
prh	... <i>parhelion</i>	hy-sqs	... <i>heavy squalls</i>
prs	... <i>paraselene</i>	fq-hy-sqs	... <i>frequent heavy squalls</i>
r	... <i>rain</i>	oc-sqs	... <i>occasional squalls</i>
c-r	... <i>continued rain</i>	t	... <i>thunder</i>
fr-r	... <i>frozen rain</i>	t-sm	... <i>thunder storm</i>
fq-r	... <i>frequent rain</i>	th-cl	... <i>thin clouds</i>
hy-r	... <i>heavy rain</i>	v	... <i>variable</i>
c-hy-r	... <i>continued heavy rain</i>	vv	... <i>very variable</i>
m-r	... <i>misty rain</i>	w	... <i>wind</i>
fq-m-r	... <i>frequent misty rain</i>	st-w	... <i>strong wind</i>

The following is the notation employed for Electricity:—

N denotes <i>negative</i>	w denotes <i>weak</i>
P ... <i>positive</i>	s ... <i>strong</i>
m ... <i>moderate</i>	v ... <i>variable</i>

The duplication of the letter denotes intensity of the modification described—thus, ss is very strong; vv, very variable. 0 indicates zero potential, and a dash, “—,” accidental failure of the apparatus.

The remaining columns in the tables of “Daily Results” seem to require no special remark; all necessary explanation regarding the results therein contained will be found in the notes at the foot of the left-hand page, or in the descriptions of the several instruments given in § 6.

In regard to the comparisons of the extremes and means, &c. of meteorological elements with average values, contained in the footnotes, it may be mentioned that comparison is in all cases made with mean values determined from the observations for the fifty years 1841–1890.

The tables following the “Daily Results” require no lengthened explanation. They consist of tables giving the highest and lowest readings of the barometer through the year; monthly abstracts of the principal meteorological elements; hourly values in each month of barometer-reading, of temperature of air, evaporation, and dew-point, and of degree of humidity; sunshine results; observations of thermometers in a Stevenson screen in the Observatory Grounds, on the roof of the Magnet House, and in another Stevenson screen in the Magnetic Pavilion Enclosure; readings of the earth thermometers; changes of direction of the wind; hourly values in each month of the horizontal movement of the air derived from Robinson’s Anemometer; results derived from the Thomson Electrometer; rain results; and observations of meteors.

In the tables of mean values of meteorological elements at each hour for the different months of the year, the mean values have, in previous years, been given for the hours 0^h to 23^h only. But since 1886 the mean for the 24th hour (the following midnight) has been added, thus indicating the amount of non-periodic variation. The monthly means have also been given since 1886 for the 24 hours, 1^h to 24^h, as well as for the hours, 0^h (midnight) to 23^h, which were given in former years.

It may be pointed out that the monthly means, 0^h to 23^h, for barometer and temperature of the air and of evaporation contained in these tables, pages (lx) and (lxi), do not in some cases agree with the monthly means given in the daily results.

pages (xxxii) to (liv), and in the table on page (lix), in consequence of occasional interruption of the photographic register, at which times daily values to complete the daily results could be supplied from the eye observations, as mentioned in the footnotes; but hourly values, for the diurnal inequality tables, could not be so supplied. In such cases, however, the means given with these tables are the proper means to be used in connexion with the numbers standing immediately above them, for formation of the actual diurnal inequality.

The table, "Abstract of the Changes of the Direction of the Wind," as derived from Osler's Anemometer, page (xcii), exhibits every change of direction of the wind occurring throughout the year, whenever such change amounted to two nautical points or $22\frac{1}{2}^{\circ}$. It is to be understood that the change from one direction to another during the interval between the times mentioned in each line of the table was generally gradual. All complete turnings of the vane which were evidently of accidental nature, and which in the year 1881 and in previous years had been included, are here omitted. Between any time given in the second column and that next following in the first column, no change of direction in general occurred varying from that given by so much as one point or $11\frac{1}{4}^{\circ}$. From the numbers given in this table the monthly and yearly excess of motion, page (c), is formed. By direct motion it is to be understood that the change of direction occurred in the order N, E, S, W, N, &c., and by retrograde motion that the change occurred in the order N, W, S, E, N, &c.

In regard to Electric Potential of the Atmosphere, in addition to giving the hourly values in each month, including all available days, the days in each month have been (since the year 1882) further divided into two groups, one containing all days on which the rainfall amounted to or exceeded $0^{\text{in}}.020$, the other including only days on which no rainfall was recorded, the values of daily rainfall given in column 16 of the "Daily Results of the Meteorological Observations" being adopted in selecting the days. These additional tables are given on pages (civ) and (cv) respectively.

In regard to the observations of Luminous Meteors, it is simply necessary to say that, in general, only special meteor showers are watched for, such as those of April, August, and November. The observers of meteors in the year 1900 were Mr. Nash, Mr. Crommelin, Mr. Edney, Mr. Bischlager, Mr. Clarke, Mr. Jeffries, Mr. Ralph, Mr. A. Showell and Mr. Wilkin. Their observations are distinguished by the initials N, A.C., E, G.B., C, J, R, S, and W, respectively.

W. H. M. CHRISTIE.

ROYAL OBSERVATORY, GREENWICH,
1902, September.

ROYAL OBSERVATORY, GREENWICH.

R E S U L T S

OF

MAGNETICAL OBSERVATIONS,

1900.

(ii)

RESULTS OF OBSERVATIONS OF MAGNETIC DECLINATION AND HORIZONTAL FORCE

TABLE I.—MEAN MAGNETIC DECLINATION WEST FOR EACH CIVIL DAY.
(Each result is the mean of 24 hourly ordinates from the photographic register.)

1900.												
Day of Month.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.
d	16°	16°	16°	16°	16°	16°	16°	16°	16°	16°	16°	16°
1	32°0	31°2	31°2	30°2	30°4	29°0	28°8	28°8	27°9	28°6	26°3	27°9
2	31°7	31°4	30°0	29°4	29°1	28°8	27°6	28°6	27°7	28°2	26°5	27°8
3	31°9	31°2	30°5	29°3	29°8	28°6	28°7	28°5	27°8	29°0	26°8	27°4
4	31°8	29°9	30°8	28°9	29°3	29°2	28°0	28°5	28°2	28°4	27°1	27°2
5	32°3	30°4	30°3	28°7	32°9	29°0	29°0	27°7	28°2	27°2	26°9	27°0
6	31°1	31°1	30°8	28°8	28°3	29°7	28°0	28°0	28°4	27°8	26°5	27°0
7	31°4	31°1	30°6	28°6	29°1	28°5	28°2	28°4	28°3	27°3	27°5	28°1
8	31°5	31°5	31°6	28°5	28°5	30°2	28°3	28°5	28°2	27°8	27°5	26°4
9	31°7	30°5	30°6	27°9	28°6	29°2	28°7	27°5	29°1	27°2	27°7	26°2
10	31°8	31°0	29°5	28°9	29°0	30°0	29°2	28°3	28°5	28°0	27°9	26°8
11	31°4	30°8	29°9	29°8	29°3	29°1	28°9	28°2	28°0	28°7	28°1	25°4
12	31°1	30°9	29°8	30°0	29°0	29°5	28°7	27°7	28°6	28°7	27°8	25°2
13	31°2	31°2	31°6	30°4	29°5	29°8	29°1	...	28°6	29°1	27°0	25°2
14	30°5	31°7	29°6	30°9	28°8	29°4	29°3	27°1	28°0	29°2	27°5	...
15	30°9	31°3	29°5	31°1	29°3	29°0	28°6	28°2	28°5	28°7	27°8	27°9
16	31°2	30°3	30°0	30°6	29°5	29°3	28°8	28°8	27°6	27°5	26°7	26°9
17	31°5	30°6	30°3	30°7	29°5	29°3	29°7	27°9	28°1	26°7	26°4	26°8
18	31°2	30°5	30°7	30°3	29°7	29°2	29°5	27°9	29°5	26°9	27°7	26°8
19	30°2	30°6	30°2	30°0	30°3	28°7	29°0	28°0	30°2	27°1	27°0	27°0
20	29°2	30°3	30°6	30°4	29°9	28°8	29°6	27°3	29°9	27°7	27°1	27°1
21	32°0	30°7	30°4	30°0	29°5	28°2	29°7	27°9	29°8	27°3	27°2	27°6
22	31°1	30°8	30°3	29°5	28°8	28°1	29°4	28°0	29°2	27°6	27°7	28°4
23	31°5	31°0	30°6	30°0	29°0	28°7	29°6	28°4	29°2	27°2	27°2	28°1
24	31°1	31°1	30°0	29°6	28°8	28°0	28°2	27°6	29°1	26°7	26°7	28°2
25	31°5	30°8	30°4	29°8	29°1	28°9	29°2	28°3	28°9	26°6	27°2	28°5
26	31°3	30°7	30°8	29°8	28°8	29°1	28°7	28°1	28°9	26°1	27°3	28°0
27	31°4	30°3	30°8	29°3	29°7	28°4	29°5	28°1	28°9	26°2	27°1	27°5
28	31°0	30°6	30°4	...	29°6	28°5	29°1	28°5	30°6	26°0	26°5	27°6
29	31°4		30°5	29°8	28°9	28°7	29°4	28°1	28°5	26°6	27°0	28°3
30	31°4		29°7	27°7	28°3	28°4	29°1	28°4	28°7	27°0	27°3	28°0
31	31°5		31°2		28°6		29°0	28°0		26°4		28°2

TABLE II.—MONTHLY MEAN DIURNAL INEQUALITY OF MAGNETIC DECLINATION WEST.
(The results in each month are diminished by the smallest hourly value.)

1900.												
Hour, Greenwich Civil Time.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.
Midn.	0°5	0°0	0°7	2°9	2°6	3°4	3°1	2°6	1°3	1°3	0°3	0°7
1 ^h	1°0	0°4	1°0	3°0	2°8	3°4	2°9	2°6	1°3	1°5	0°5	1°0
2	1°5	0°8	1°2	2°8	2°9	3°3	2°8	2°5	1°3	1°8	0°7	1°3
3	1°7	0°7	1°0	2°7	2°7	2°9	2°5	2°2	1°1	1°8	0°9	1°4
4	1°6	0°7	0°9	2°5	2°2	2°3	2°1	1°7	0°9	1°8	0°9	1°4
5	1°7	0°7	1°0	2°2	1°4	1°3	0°9	1°0	0°7	1°9	0°8	1°4
6	1°9	0°7	1°0	1°7	0°4	0°5	0°2	0°3	0°5	1°9	0°6	1°3
7	1°9	0°7	0°6	0°7	0°0	0°0	0°0	0°0	0°3	1°6	0°5	1°1
8	1°7	0°8	0°0	0°0	0°3	0°1	0°2	0°3	0°0	0°4	0°2	0°9
9	1°8	0°8	0°2	0°3	1°3	1°0	0°9	1°8	0°7	0°0	0°4	0°8
10	2°4	1°5	1°4	2°0	3°1	3°0	2°9	4°0	2°7	1°1	1°2	1°5
11	3°3	2°8	3°5	4°5	5°3	5°9	5°4	6°4	5°1	3°5	2°5	2°5
Noon.	4°2	3°7	5°6	7°0	7°3	8°3	7°7	8°5	6°8	5°4	3°3	2°9
13 ^h	4°6	4°5	6°8	8°4	8°2	9°1	8°7	9°2	7°0	5°9	3°2	3°0
14	3°8	4°2	6°7	8°2	8°0	9°2	8°4	8°4	5°8	5°5	2°4	2°5
15	3°1	3°2	5°2	6°8	6°8	8°4	7°4	6°9	4°1	4°5	1°6	1°8
16	2°4	2°2	3°8	5°5	5°3	7°0	6°0	5°0	2°7	3°2	1°5	1°5
17	2°1	2°1	2°8	4°4	4°5	5°5	4°8	3°6	2°0	2°6	1°3	1°2
18	1°7	1°8	2°4	3°6	3°9	4°6	4°2	3°1	2°1	2°4	1°1	1°1
19	0°5	1°2	1°9	3°4	3°6	4°1	3°9	3°2	2°2	2°2	0°8	0°8
20	0°0	0°8	1°2	3°1	3°5	3°8	4°0	3°0	2°0	2°0	0°5	0°5
21	0°1	0°2	0°9	2°9	3°3	3°8	3°7	2°7	1°8	1°5	0°2	0°2
22	0°0	0°0	0°6	2°9	2°8	3°6	3°5	2°6	1°6	1°1	0°0	0°0
23	0°3	0°0	0°6	2°7	2°5	3°4	3°1	2°7	1°4	1°1	0°1	0°2
Means	1°82	1°44	2°13	3°51	3°53	4°08	3°72	3°51	2°31	2°33	1°06	1°29

TABLE III.—MEAN HORIZONTAL MAGNETIC FORCE (diminished by a Constant) FOR EACH CIVIL DAY.

(Each result is the mean of 24 hourly ordinates from the photographic register, expressed in terms of the whole Horizontal Force, the unit in the table being 00001 of the whole Horizontal Force. The letters u and c indicate respectively values uncorrected for, and corrected for temperature.)

1900.

Day of Month.	January.		February.		March.		April.		May.		June.		July.		August.		September.		October.		November.		December.	
	u	c	u	c	u	c	u	c	u	c	u	c	u	c	u	c	u	c	u	c	u	c	u	c
d																								
1	596	195	681	263	745	317	756	328	792	374	808	390	...	...	912	562	950	554	753	318	788	365	707	282
2	705	292	672	249	748	320	734	318	787	374	814	413	...	...	916	520	955	535	756	321	744	324	663	231
3	723	307	682	257	736	330	760	361	760	373	824	435	...	...	923	527	914	489	716	293	737	333	658	230
4	739	304	653	225	735	317	793	401	793	399	832	431	...	...	930	493	990	546	708	290	791	347	707	291
5	642	217	611	205	763	338	736	349	689	295	853	452	...	...	...	...	931	518	682	269	743	347	722	306
6	640	212	681	261	765	361	788	360	666	272	877	473	...	...	865	481	927	514	731	320	733	332	744	336
7	642	234	723	256	737	324	749	317	716	310	885	505	...	...	908	509	932	497	733	339	718	300	755	320
8	667	232	744	269	737	317	722	314	757	339	910	530	...	...	895	494	859	494	763	359	688	270	730	317
9	698	292	753	272	602	189	730	341	766	353	914	530	...	...	861	472	936	549	845	434	687	300	787	388
10	675	250	740	238	687	267	762	332	792	381	895	511	...	...	923	517	913	526	876	451	687	229	708	290
11	702	250	693	253	716	303	745	356	813	376	909	554	...	...	965	535	911	493	812	375	584	137	695	279
12	669	244	695	270	730	331	745	370	810	390	911	558	...	...	960	547	962	520	819	365	530	112	725	314
13	658	214	751	288	473	055	788	375	746	335	972	590	575	212	...	...	941	518	753	337	548	176	715	321
14	624	201	777	321	597	165	815	409	726	318	985	560	595	223	922	550	960	520	694	259	604	184	...	...
15	579	180	750	289	651	247	836	442	740	303	956	603	633	253	865	483	908	504	631	213	591	180	681	268
16	647	219	754	317	642	234	810	378	716	312	989	583	615	270	895	503	904	510	662	234	585	167	666	246
17	645	225	758	347	680	240	831	418	757	339	977	593	586	263	932	555	910	530	690	291	603	161	677	242
18	671	241	774	346	723	293	782	388	817	418	991	580	583	258	924	559	886	509	709	303	586	142	648	244
19	620	209	799	407	755	339	832	416	774	356	006	586	635	297	860	497	890	470	741	340	480	067	642	207
20	556	164	801	385	754	343	838	403	744	350	963	559	675	373	910	535	828	422	764	324	528	110	641	216
21	591	159	756	319	770	338	792	405	756	388	009	569	682	388	878	506	744	355	678	255	587	143	599	186
22	672	280	767	356	775	359	825	402	816	471	992	572	740	436	850	458	772	402	636	213	575	133	628	176
23	677	283	814	420	802	365	825	414	895	475	949	533	792	503	880	467	814	427	656	243	617	173	593	128
24	720	312	789	419	770	338	822	394	852	441	941	521	823	539	980	564	808	402	729	323	591	147	532	114
25	698	297	812	396	768	343	814	406	863	457	932	545	696	428	979	547	729	313	631	227	610	199	557	149
26	680	276	811	393	808	350	799	362	862	427	951	538	655	387	885	501	743	332	626	189	653	240	569	156
27	637	224	786	378	779	339	742	317	813	426	018	588	724	440	861	479	753	381	593	146	623	210	535	151
28	632	224	757	358	789	359	...	...	838	451	047	615	755	453	914	496	795	375	545	144	648	225	511	107
29	628	246	...	...	785	365	824	392	844	433	085	665	762	445	...	...	789	376	620	219	615	207	510	075
30	679	273	...	...	749	319	835	465	801	373	031	627	759	434	948	525	753	337	653	240	670	247	566	143
31	652	251	...	...	755	335	...	...	796	371	...	...	832	484	917	494	...	...	696	309	...	...	563	114

The suspension thread of the Horizontal Force Magnet gave way on July 2 and was renewed on July 12, thereby breaking the continuity of the series. The series was again broken by the adjustment of the magnet at the end of the year.

(iv)

RESULTS OF OBSERVATIONS OF HORIZONTAL MAGNETIC FORCE

TABLE IV.—MEAN TEMPERATURE for each CIVIL DAY within the box inclosing the HORIZONTAL FORCE MAGNET.

1900.												
Day of Month.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.
d												
1	67°7	67°0	66°6	66°6	67°0	67°0	...	69°8	67°9	66°3	66°8	66°7
2	67°2	66°8	66°6	67°1	67°2	67°7	...	67°9	66°9	66°3	66°9	66°4
3	67°1	66°7	67°5	67°8	68°3	68°2	...	67°9	66°7	66°8	67°6	66°6
4	66°3	66°6	67°0	68°1	68°0	67°7	...	66°2	65°9	67°0	65°9	67°1
5	66°7	67°5	66°7	68°3	68°0	67°7	...	...	67°2	67°2	67°9	67°1
6	66°6	66°9	67°6	66°6	68°0	67°6	...	68°4	67°2	67°3	67°7	67°4
7	67°4	64°9	67°2	66°4	67°5	68°6	...	67°8	66°3	68°0	67°0	66°3
8	66°3	64°6	66°9	67°4	67°0	68°6	...	67°7	69°2	67°6	67°0	67°2
9	67°5	64°3	67°2	68°2	67°2	68°4	...	68°2	68°3	67°3	68°3	67°8
10	66°7	63°4	66°9	66°5	67°3	68°4	...	67°5	68°3	66°7	65°3	67°0
11	65°6	66°1	67°2	68°2	66°2	69°6	...	66°5	67°0	66°2	65°8	67°1
12	66°7	66°7	67°8	68°8	66°9	69°7	...	67°2	66°0	65°5	67°0	67°3
13	65°9	65°1	67°0	67°2	67°3	68°5	69°3	...	66°8	67°1	68°9	68°0
14	66°8	65°4	66°4	67°5	67°4	66°7	68°9	68°9	66°1	66°3	66°9	...
15	67°8	65°2	67°6	68°0	66°2	69°7	68°6	68°5	67°6	67°0	67°3	67°2
16	66°6	66°2	67°4	66°4	67°6	67°5	70°0	68°1	68°0	66°6	67°0	66°9
17	66°9	67°3	66°1	67°2	67°0	68°4	70°9	68°7	68°6	67°8	66°0	66°3
18	66°5	66°6	66°5	68°0	67°8	67°3	70°8	69°2	68°7	67°5	65°9	67°6
19	67°3	68°1	67°1	67°1	67°0	66°9	70°3	69°3	66°9	67°7	67°2	66°3
20	68°1	67°1	67°3	66°3	68°0	67°6	71°7	68°8	67°5	66°1	67°0	66°7
21	66°4	66°2	66°4	68°3	69°1	66°1	72°0	68°9	68°2	66°8	65°9	67°2
22	68°1	67°3	67°1	66°8	70°0	66°9	71°6	68°1	69°0	66°8	66°0	65°6
23	68°0	68°0	66°2	67°3	66°9	67°1	72°2	67°2	68°3	67°2	65°9	65°0
24	67°4	69°0	66°4	66°6	67°3	66°9	72°4	67°1	67°5	67°5	65°9	67°0
25	67°7	67°1	66°7	67°4	67°5	68°3	73°0	66°4	67°1	67°6	67°3	67°4
26	67°6	67°0	65°3	66°2	66°3	67°2	73°0	68°4	67°3	66°2	67°2	67°2
27	67°2	67°4	66°1	66°7	68°3	66°5	72°4	68°5	68°9	65°8	67°2	68°4
28	67°4	67°8	66°5	...	68°3	66°4	71°7	67°0	66°9	67°7	66°8	67°6
29	68°5		66°9	66°4	67°3	66°9	71°1	...	67°2	67°7	67°4	66°3
30	67°5		66°5	69°0	66°6	67°6	70°8	66°8	67°1	67°2	66°8	66°8
31	67°7		66°9		66°7		69°9	66°8		68°3		65°7
Means	67°14	66°51	66°83	67°32	67°46	67°72	71°08	67°92	67°49	67°00	66°86	66°91

TABLE V.—MONTHLY MEAN DIURNAL INEQUALITY OF HORIZONTAL MAGNETIC FORCE.

(The results are expressed in terms of the whole Horizontal Force, diminished in each case by the smallest hourly value, the unit in the table being 00001 of the whole Horizontal Force. The letters u and c indicate respectively values uncorrected for, and corrected for temperature.)

1900.																								
Hour, Greenwich Civil Time.	January.		February.		March.		April.		May.		June.		July.		August.		September.		October.		November.		December.	
	u	c	u	c	u	c	u	c	u	c	u	c	u	c	u	c	u	c	u	c	u	c	u	c
Midnight.	31	50	28	59	110	129	124	148	128	135	124	136	121	147	118	135	124	138	112	119	27	39	7	24
1 ^h	30	49	28	57	111	130	123	144	122	129	118	130	111	134	117	132	117	131	111	118	30	42	9	26
2	35	52	26	50	112	128	115	134	118	125	118	128	101	124	117	132	113	125	116	123	33	45	13	27
3	43	57	28	47	112	124	110	126	116	120	116	126	94	112	118	130	111	120	117	121	38	48	23	37
4	49	61	36	51	115	124	112	124	117	121	116	123	95	111	114	124	112	121	121	123	52	60	29	41
5	61	70	45	57	123	127	113	120	107	109	113	118	89	102	103	111	110	117	124	126	59	64	35	45
6	73	80	59	71	125	127	111	115	84	86	96	101	72	82	88	93	99	104	126	128	60	63	46	56
7	74	81	60	70	114	116	101	105	54	56	70	75	51	56	61	66	77	79	115	115	53	56	48	58
8	67	74	47	57	78	78	75	77	27	29	48	50	29	32	29	32	45	47	82	82	39	42	39	46
9	46	53	20	25	32	32	33	35	9	11	20	22	5	5	2	2	19	19	35	35	17	17	26	33
10	23	25	0	0	4	4	1	1	0	0	0	0	0	0	0	0	0	0	5	5	0	0	8	13
11	0	0	1	1	0	0	0	0	6	6	8	8	20	23	27	27	10	10	0	0	3	1	1	3
Noon.	17	19	10	10	15	12	26	28	24	24	25	25	63	68	78	78	60	60	15	15	12	10	0	0
13 ^h	36	41	26	29	43	43	57	64	56	58	61	63	95	103	108	111	101	103	45	45	20	18	14	14
14	49	56	34	44	79	88	96	108	93	95	103	108	123	136	124	127	115	120	70	72	21	24	12	14
15	49	61	36	55	101	117	125	137	126	128	140	145	132	148	131	139	115	122	84	88	23	31	10	17
16	37	49	22	41	99	118	132	144	150	152	162	169	131	149	125	133	111	118	95	99	24	34	15	25
17	41	55	18	40	91	112	132	144	162	162	171	178	131	152	124	134	118	127	109	113	36	48	23	35
18	40	57	23	50	94	113	140	152	174	174	186	191	137	158	145	155	132	141	125	127	47	59	24	38
19	39	53	22	51	100	119	146	155	175	172	195	200	153	176	163	173	151	160	134	136	41	53	22	36
20	39	51	23	54	104	120	146	155	172	167	193	198	154	177	158	168	157	166	132	132	35	45	12	24
21	35	44	28	57	115	129	143	152	163	155	175	180	155	178	146	158	147	156	128	128	24	34	5	17
22	32	41	29	58	119	131	138	150	150	145	158	163	152	175	135	147	134	143	124	124	26	36	5	17
23	36	53	30	59	110	124	130	146	133	133	145	152	148	171	122	134	128	137	120	122	25	35	0	14
Means corrected for Temperature.	51·3		45·5		97·7		111·0		103·8		116·2		113·3		110·0		106·8		95·7		37·7		27·5	

TABLE VI.—MONTHLY MEAN TEMPERATURE at each HOUR of the DAY within the box inclosing the HORIZONTAL FORCE MAGNET.

1900.														
Hour, Greenwich Civil Time.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	For the Year.	
Midnight.	67·5	67·1	67·2	67·9	67·7	68·0	71·5	68·3	67·8	67·2	67·1	67·2	67·87	
1 ^h	67·5	67·0	67·2	67·8	67·7	68·0	71·4	68·2	67·8	67·2	67·1	67·2	67·84	
2	67·4	66·8	67·1	67·7	67·7	67·9	71·4	68·2	67·7	67·2	67·1	67·1	67·78	
3	67·3	66·6	66·9	67·6	67·6	67·9	71·2	68·1	67·6	67·1	67·0	67·1	67·67	
4	67·2	66·4	66·8	67·4	67·6	67·8	71·1	68·0	67·6	67·0	66·9	67·0	67·57	
5	67·1	66·3	66·6	67·2	67·5	67·7	71·0	67·9	67·5	67·0	66·8	66·9	67·46	
6	67·0	66·3	66·5	67·1	67·5	67·7	70·9	67·8	67·4	67·0	66·7	66·9	67·40	
7	67·0	66·2	66·5	67·1	67·5	67·7	70·7	67·8	67·3	66·9	66·7	66·9	67·36	
8	67·0	66·2	66·4	67·0	67·5	67·6	70·6	67·7	67·3	66·9	66·7	66·8	67·31	
9	67·0	66·0	66·4	67·0	67·5	67·6	70·5	67·6	67·2	66·9	66·6	66·8	67·26	
10	66·8	65·8	66·4	66·9	67·4	67·5	70·5	67·6	67·2	66·9	66·6	66·7	67·19	
11	66·7	65·8	66·4	66·9	67·4	67·5	70·6	67·6	67·2	66·9	66·5	66·6	67·17	
Noon.	66·8	65·8	66·3	67·0	67·4	67·5	70·7	67·6	67·2	66·9	66·5	66·5	67·18	
13 ^h	66·9	65·9	66·4	67·2	67·5	67·6	70·8	67·7	67·3	66·9	66·5	66·5	67·27	
14	67·0	66·2	66·8	67·4	67·5	67·7	71·0	67·7	67·4	67·0	66·7	66·6	67·42	
15	67·2	66·6	67·1	67·4	67·5	67·7	71·1	67·9	67·5	67·1	66·9	66·8	67·57	
16	67·2	66·6	67·2	67·4	67·5	67·8	71·2	67·9	67·5	67·1	67·0	66·9	67·61	
17	67·3	66·7	67·3	67·4	67·4	67·8	71·3	68·0	67·6	67·1	67·1	67·0	67·67	
18	67·4	66·9	67·2	67·4	67·4	67·7	71·3	68·0	67·6	67·0	67·1	67·1	67·68	
19	67·3	67·0	67·2	67·3	67·3	67·7	71·4	68·0	67·6	67·0	67·1	67·1	67·67	
20	67·2	67·1	67·1	67·3	67·2	67·7	71·4	68·0	67·6	66·9	67·0	67·0	67·62	
21	67·1	67·0	67·0	67·3	67·1	67·7	71·4	68·1	67·6	66·9	67·0	67·0	67·60	
22	67·1	67·0	66·9	67·4	67·2	67·7	71·4	68·1	67·6	66·9	67·0	67·0	67·61	
23	67·4	67·0	67·0	67·6	67·4	67·8	71·4	68·1	67·6	67·0	67·0	67·1	67·70	

TABLE VII.—MEAN VERTICAL MAGNETIC FORCE (diminished by a Constant) FOR EACH CIVIL DAY.

(Each result is the mean of 24 hourly ordinates from the photographic register, expressed in terms of the whole Vertical Force, the unit in the table being 00001 of the whole Vertical Force. The letters u and c indicate respectively values uncorrected for, and corrected for temperature.)

1900.

Day of Month.	January.		February.		March.		April.		May.		June.		July.		August.		September.		October.		November.		December.	
	u	c	u	c	u	c	u	c	u	c	u	c	u	c	u	c	u	c	u	c	u	c	u	c
d																								
1	199	434	123	387	125	379	023	273	036	300	074	326	142	375	263	440	146	383	069	333	974	238	846	119
2	207	454	098	356	114	376	007	259	058	324	073	314	150	391	177	427	148	408	063	325	990	229	844	112
3	212	462	088	350	112	353	014	245	060	297	096	314	129	400	159	409	124	386	062	318	008	253	844	102
4	169	440	101	344	108	362	041	278	066	309	103	350	140	358	131	427	084	361	048	302	987	264	840	106
5	176	442	120	361	085	345	045	265	154	393	100	354	155	394	150	366	087	345	044	302	988	233	849	111
6	183	437	096	354	083	328	021	277	140	377	091	349	133	410	150	391	093	345	048	298	997	244	858	120
7	192	433	050	342	079	324	040	279	116	374	095	340	116	387	117	373	072	343	060	293	994	254	838	115
8	176	442	020	314	093	353	061	287	105	378	105	348	095	355	117	377	111	320	079	318	975	246	852	104
9	202	449	996	292	076	334	073	293	093	347	108	345	123	341	137	378	119	345	078	319	986	233	871	106
10	174	430	965	276	064	322	048	314	094	344	114	336	122	344	120	378	125	358	075	337	928	228	869	131
11	138	406	012	272	095	324	037	308	078	342	145	341	138	350	104	370	103	359	043	318	924	211	862	118
12	161	413	028	275	114	353	042	281	070	324	169	361	167	365	108	364	064	341	996	288	940	187	870	113
13	138	406	004	287	183	428	040	285	074	317	192	412	163	375	144	368	058	314	021	243	983	207	885	126
14	134	392	997	282	108	358	057	302	079	331	159	409	180	396	162	386	066	337	010	260	962	207	864	122
15	164	407	008	281	120	365	052	281	045	311	179	384	180	398	188	414	082	321	989	228	950	197	860	110
16	143	395	038	296	108	353	022	286	062	312	177	410	204	392	178	411	102	335	969	219	943	195	857	128
17	147	392	055	309	080	334	037	284	035	276	187	401	228	403	181	397	126	346	972	198	927	193	841	112
18	139	418	058	318	064	316	055	275	035	291	173	416	241	418	202	409	137	359	989	213	907	192	823	073
19	145	403	085	335	058	314	052	312	027	266	177	422	230	413	232	437	134	390	987	230	945	182	792	071
20	174	415	070	326	071	329	033	312	049	292	184	427	255	411	223	439	112	353	955	232	907	157	805	069
21	123	385	061	334	063	323	059	306	069	289	175	437	271	423	223	439	107	331	955	198	888	146	816	072
22	190	425	073	314	056	306	068	339	089	318	162	426	257	419	213	444	124	327	955	211	890	156	796	077
23	186	421	092	337	049	324	071	329	046	314	147	405	265	406	183	439	135	355	950	191	876	136	775	056
24	177	429	123	368	034	300	064	332	039	286	148	408	291	424	164	418	119	352	969	204	891	138	787	047
25	168	420	104	377	040	287	060	307	059	302	167	410	324	432	149	415	103	357	999	244	933	155	802	054
26	196	439	106	370	018	286	034	296	056	314	149	407	297	428	159	390	077	322	967	246	924	180	806	051
27	184	429	130	377	020	278	040	285	080	319	109	373	276	417	162	391	095	315	950	216	875	129	831	055
28	165	406	142	385	017	269	032	279	090	340	103	376	263	423	126	386	088	340	981	218	867	123	829	087
29	180	413			006	253	000	273	068	330	130	403	264	435	121	366	075	322	993	228	877	129	795	066
30	153	396			022	278	047	276	058	320	135	382	266	435	121	383	071	316	967	217	859	130	779	039
31	153	398			014	253			066	309			260	425	125	389			981	214			777	045

At the end of the year the magnet was readjusted, thus breaking the continuity of the values.

TABLE VIII.—MEAN TEMPERATURE for each CIVIL DAY within the box inclosing the VERTICAL FORCE MAGNET.

1900.												
Day of Month.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.
d												
1	68°1	66°7	67°2	67°4	66°7	67°3	68°2	70°8	68°0	66°7	66°7	66°3
2	67°5	67°0	66°8	67°3	66°6	67°8	67°8	67°4	66°9	66°8	67°9	66°5
3	67°4	66°8	67°8	68°3	68°0	68°9	66°4	67°4	66°8	67°1	67°6	67°0
4	66°4	67°7	67°2	68°0	67°7	67°5	68°9	65°2	66°1	67°2	66°1	66°6
5	66°6	67°8	66°9	68°8	67°9	67°2	67°9	69°0	67°0	67°0	67°6	66°8
6	67°2	67°0	67°6	67°1	68°0	67°0	66°1	67°8	67°3	67°4	67°5	66°8
7	67°8	65°4	67°6	67°9	67°0	67°6	66°4	67°1	66°4	68°2	66°9	66°1
8	66°6	65°3	66°9	68°5	66°3	67°7	66°9	66°9	69°3	67°9	66°4	67°3
9	67°5	65°2	67°0	68°8	67°2	68°0	68°9	67°8	68°5	67°8	67°5	68°1
10	67°1	64°5	67°0	66°6	67°4	68°7	68°7	67°0	68°2	66°8	65°0	66°8
11	66°5	66°9	68°4	66°4	66°7	69°9	69°2	66°6	67°1	66°2	65°6	67°1
12	67°3	67°5	67°9	67°9	67°2	70°1	69°8	67°1	66°1	65°4	67°5	67°7
13	66°5	65°8	67°6	67°6	67°7	68°8	69°2	68°6	67°1	68°7	68°6	67°8
14	67°0	65°7	67°4	67°6	67°3	67°4	69°0	68°6	66°4	67°4	67°6	67°0
15	67°7	66°3	67°6	68°4	66°6	69°5	68°9	68°5	67°9	67°9	67°5	67°4
16	67°3	67°0	67°6	66°7	67°4	68°2	70°3	68°2	68°2	67°4	67°3	66°4
17	67°6	67°2	67°2	67°5	67°8	69°1	70°9	69°0	68°8	68°5	66°6	66°4
18	66°0	66°9	67°3	68°8	67°1	67°7	70°8	69°4	68°7	68°6	65°7	67°4
19	67°0	67°4	67°1	66°9	67°9	67°6	70°5	69°5	67°1	67°7	68°0	66°0
20	67°8	67°1	67°0	66°0	67°7	67°7	71°8	69°0	67°8	66°1	67°4	66°7
21	66°8	66°3	66°9	67°5	68°8	66°8	72°0	69°0	68°6	67°7	67°0	67°1
22	68°1	67°8	67°4	66°4	68°4	66°7	71°5	68°3	69°6	67°1	66°6	65°9
23	68°1	67°6	66°2	67°0	66°5	67°0	72°5	67°1	68°8	67°8	66°9	65°9
24	67°3	67°6	66°6	66°5	67°5	66°9	72°9	67°2	68°2	68°1	67°5	66°9
25	67°3	66°3	67°5	67°5	67°7	67°7	74°1	66°6	67°2	67°6	68°7	67°3
26	67°7	66°7	66°5	66°8	67°0	67°0	73°0	68°3	67°6	66°0	67°1	67°6
27	67°6	67°5	67°0	67°6	67°9	66°7	72°5	68°4	68°8	66°6	67°2	68°6
28	67°8	67°7	67°3	67°5	67°4	66°3	71°6	66°9	67°3	68°0	67°1	67°0
29	68°2		67°5	66°3	66°8	66°3	71°1	67°6	67°5	68°1	67°3	66°4
30	67°7		67°1	68°4	66°8	67°5	71°2	66°8	67°6	67°4	66°4	66°9
31	67°6		67°9		67°7		71°4	66°7		68°2		66°5
Means	67°33	66°74	67°26	67°47	67°38	67°75	70°01	67°86	67°70	67°40	67°09	66°91

TABLE IX.—MONTHLY MEAN DIURNAL INEQUALITY OF VERTICAL MAGNETIC FORCE.

(The results are expressed in terms of the whole Vertical Force, diminished in each case by the smallest hourly value, the unit in the table being .00001 of the whole Vertical Force. The letters u and c indicate respectively values uncorrected for, and corrected for temperature.)

Table with 13 columns for months (January-December) and 24 rows for hours (Midnight-23). Each month has two sub-columns: 'u' (uncorrected) and 'c' (corrected). A 'Means corrected for Temperature' row is at the bottom.

TABLE X.—MONTHLY MEAN TEMPERATURE at each HOUR of the DAY within the box inclosing the VERTICAL FORCE MAGNET.

Table with 13 columns for months (January-December) and 24 rows for hours (Midnight-23). A 'For the Year' column is at the end. Each cell contains a temperature value with a degree symbol.

TABLE XI.—MEAN MAGNETIC DECLINATION, HORIZONTAL FORCE, and VERTICAL FORCE in each MONTH.

(The results for Horizontal Force and Vertical Force are corrected for Temperature.)

Month, 1900.	DECLINATION WEST in Arc.	HORIZONTAL FORCE in terms of the whole Horizontal Force (diminished by a Constant).	VERTICAL FORCE in terms of the whole Vertical Force (diminished by a Constant).	DECLINATION diminished by 16° and expressed as Westerly Force	HORIZONTAL FORCE (diminished by a Constant)	VERTICAL FORCE (diminished by a Constant)
				in terms of GAUSS'S METRICAL UNIT.		
January	16. 31'3	242	420	167.9	446	1837
February	16. 30.8	313	329	165.2	577	1439
March	16. 30.4	305	326	163.1	562	1426
April	16. 29.6	377	291	158.8	695	1273
May	16. 29.3	377	321	157.2	695	1404
June	16. 29.0	540	379	155.6	996	1658
July	16. 28.9	372	398	155.0	686	1741
August	16. 28.1	513	401	150.7	946	1754
September	16. 28.7	464	346	154.0	856	1514
October	16. 27.5	289	257	147.5	533	1124
November	16. 27.2	217	192	145.9	400	840
December	16. 27.3	228	091	146.4	420	398
Means	16. 29.0	...	...	155.6	...	...
Number of Column	1	2	3	4	5	6

The units in columns 2 and 3 are '00001 of the whole Horizontal and Vertical Forces respectively; in columns 4, 5, and 6 the unit is '00001 of the Millimètre-Milligramme-Second Unit, or '000001 of the Centimètre-Gramme-Second (C.G.S.) Unit, in terms of which units the values of the whole Horizontal Force (applicable to columns 4 and 5) are 1.8441 and 0.18441 respectively for the year, and of whole Vertical Force (applicable to column 6) are 4.3743 and 0.43743 respectively for the year.

HORIZONTAL FORCE.—The continuity of the values was broken at the end of June by the giving way and subsequent renewal of the suspension thread; and again at the end of the year by the re-adjustment of the magnet.

VERTICAL FORCE.—At the end of the year the magnet was readjusted, thus breaking the continuity of the values.

TABLE XII.—MEAN DIURNAL INEQUALITIES OF MAGNETIC DECLINATION, HORIZONTAL FORCE, and VERTICAL FORCE
for the YEAR 1900.

(Each result is the mean of the twelve monthly mean values, the annual means for each element being diminished by the smallest hourly value. The results for Horizontal Force and Vertical Force are corrected for temperature.)

Hour, Greenwich Civil Time.	Inequality of			Inequality of		
	DECLINATION WEST in Arc.	HORIZONTAL FORCE in terms of the whole Horizontal Force.	VERTICAL FORCE in terms of the whole Vertical Force.	DECLINATION expressed as WESTERLY FORCE	HORIZONTAL FORCE	VERTICAL FORCE
				in terms of GAUSS'S METRICAL UNIT.		
Midnight.	1'21	100'9	22'6	64'9	186'1	98'9
1 ^h	1'37	97'8	20'6	73'5	180'4	90'1
2	1'50	95'4	18'6	80'5	175'9	81'4
3	1'39	93'3	18'3	74'6	172'1	80'0
4	1'17	94'7	20'7	62'8	174'6	90'5
5	0'84	93'2	22'7	45'1	171'9	99'3
6	0'51	88'2	23'6	27'4	162'6	103'2
7	0'21	73'7	24'6	11'3	135'9	107'6
8	0'00	49'8	23'3	0'0	91'8	101'9
9	0'42	20'1	18'1	22'5	37'1	79'2
10	1'82	0'0	10'6	97'6	0'0	46'4
11	3'81	2'6	3'0	204'4	4'8	13'1
Noon.	5'48	25'1	0'0	294'0	46'3	0'0
13 ^h	6'14	53'7	6'2	329'4	99'0	27'1
14	5'68	78'7	18'1	304'7	145'1	79'2
15	4'57	95'0	27'2	245'1	175'2	119'0
16	3'43	98'6	31'2	184'0	181'8	136'5
17	2'67	104'3	32'3	143'2	192'3	141'3
18	2'26	113'9	32'6	121'2	210'0	142'6
19	1'91	119'7	32'2	102'5	220'7	140'9
20	1'62	117'4	31'9	86'9	216'5	139'5
21	1'36	111'7	29'5	73'0	206'0	129'0
22	1'15	106'8	27'2	61'7	196'2	119'0
23	1'10	102'7	25'5	59'0	189'4	111'5
Means	2'15	80'7	21'7	115'4	148'8	94'9
Number of Column	1	2	3	4	5	6

The units in columns 2 and 3 are '00001 of the whole Horizontal and Vertical Forces respectively; in columns 4, 5, and 6 the unit is '00001 of the Millimètre-Milligramme-Second Unit, or '00001 of the Centimètre-Gramme-Second (C.G.S.) Unit, in terms of which units the values of whole Horizontal Force (applicable to columns 4 and 5) are 1'8441 and 0'18441 respectively, and of whole Vertical Force (applicable to column 6) are 4'3743 and 0'43743 respectively.

TABLE XIII.—DIURNAL RANGE OF DECLINATION AND HORIZONTAL FORCE, on each CIVIL DAY, as deduced from the TWENTY-FOUR HOURLY MEASURES of ORDINATES of the PHOTOGRAPHIC REGISTER.

(The Declination is expressed in minutes of arc ; the unit for Horizontal Force is '00001 of the whole Horizontal Force. The results for Horizontal Force are corrected for temperature.)

1900.																								
Day of Month.	January.		February.		March.		April.		May.		June.		July.		August.		September.		October.		November.		December.	
	Dec.	H.F.	Dec.	H.F.	Dec.	H.F.	Dec.	H.F.	Dec.	H.F.	Dec.	H.F.	Dec.	H.F.	Dec.	H.F.	Dec.	H.F.	Dec.	H.F.	Dec.	H.F.	Dec.	H.F.
d																								
1	2.3	117	2.3	105	7.7	168	9.0	214	11.4	364	10.2	266	6.5	...	13.3	167	8.6	270	6.6	204	6.9	157	4.2	80
2	3.7	93	4.5	159	7.0	186	8.7	138	6.5	233	10.7	318	8.2	...	6.3	83	7.9	165	6.6	199	7.8	104	4.0	123
3	3.2	39	4.0	127	7.9	229	10.2	215	14.8	284	10.5	234	9.9	...	8.4	155	6.9	247	6.0	187	4.7	215	3.2	66
4	2.2	86	14.7	243	3.7	146	11.3	275	8.6	153	10.3	216	9.4	...	6.6	73	8.8	216	7.0	160	4.4	80	2.7	58
5	10.0	234	11.8	139	6.0	302	10.5	299	16.0	650	9.2	219	9.4	...	5.8	...	8.0	181	8.0	227	3.9	98	2.3	111
6	4.3	117	3.7	77	6.2	142	7.8	148	4.1	191	8.8	221	10.8	...	5.8	152	8.3	137	4.6	125	5.0	157	2.1	53
7	2.8	62	3.9	66	4.8	156	6.2	152	5.7	232	8.7	188	9.1	...	9.3	181	8.9	154	5.3	121	6.3	177	7.0	133
8	3.8	138	6.0	230	15.1	305	7.1	141	6.2	207	10.0	166	11.8	...	12.1	139	9.3	313	6.3	175	4.2	32	4.0	102
9	3.2	94	6.5	246	15.8	274	9.9	181	4.6	153	7.2	158	7.2	...	10.3	168	10.6	207	7.4	123	5.2	53	3.3	68
10	6.0	88	5.3	170	8.8	154	10.7	123	6.1	163	8.6	208	9.1	...	10.7	230	10.1	182	9.3	136	2.9	108	4.8	277
11	5.3	65	8.2	180	5.4	87	9.0	167	7.7	155	8.0	255	8.7	...	10.3	341	9.5	202	5.9	213	3.4	59	3.6	100
12	8.6	123	4.1	126	7.5	180	7.7	263	5.6	222	11.3	245	9.9	...	9.1	251	7.9	166	7.0	175	6.0	131	2.6	65
13	6.1	73	3.8	73	18.8	722	10.4	181	8.4	282	9.4	233	8.9	179	...	...	7.7	289	8.5	227	5.7	151	3.7	90
14	8.3	111	5.0	109	12.1	318	10.8	213	8.6	99	10.6	264	10.4	204	10.4	175	5.5	117	6.7	175	4.4	140	...	...
15	8.5	275	11.1	150	6.7	110	10.6	201	8.4	148	9.7	208	10.7	282	10.6	187	7.5	167	7.7	235	3.6	87	2.1	70
16	5.4	142	7.4	112	9.4	174	7.8	218	8.1	203	9.9	220	9.2	222	10.5	299	8.1	199	6.4	210	3.0	83	2.1	87
17	6.8	157	5.7	119	8.1	178	9.6	222	10.6	229	10.3	273	9.3	205	7.7	226	3.7	170	5.1	143	3.5	69	4.0	56
18	3.6	55	3.6	24	9.9	250	10.2	210	11.1	204	8.9	275	8.3	271	7.9	153	6.9	135	7.0	138	2.9	157	3.3	89
19	14.3	378	3.3	40	7.7	160	6.8	219	11.3	234	9.2	215	6.1	195	9.6	274	5.0	138	6.4	170	3.5	111	2.4	68
20	15.3	262	3.4	104	7.2	79	8.8	230	10.7	273	10.1	210	11.3	247	11.3	277	4.7	142	9.4	150	3.3	102	3.7	2
21	20.3	285	7.0	128	6.2	172	9.1	212	12.5	301	8.8	325	9.1	245	10.4	219	8.0	173	6.6	203	1.7	87	2.1	92
22	4.4	89	3.9	60	6.5	160	8.0	161	8.2	263	10.9	175	7.5	164	10.7	180	9.1	212	6.3	160	4.8	86	2.7	74
23	3.4	112	3.5	133	7.9	194	7.4	162	7.7	163	11.2	172	7.4	179	8.8	250	9.9	108	8.5	221	3.2	96	2.6	77
24	5.9	75	9.0	182	6.1	166	8.7	114	7.5	175	8.6	147	8.0	244	6.5	260	7.4	192	8.2	182	3.9	68	2.6	90
25	7.2	270	5.6	130	8.8	173	6.7	143	8.5	174	11.5	221	12.6	291	13.3	234	8.7	248	7.2	351	4.2	41	4.0	98
26	7.0	282	4.6	94	10.9	179	5.6	123	7.4	162	10.3	217	11.1	325	8.5	236	7.0	182	7.5	234	2.6	124	2.4	63
27	6.6	170	6.2	153	9.6	177	9.6	204	10.1	201	9.9	168	8.3	194	14.2	213	7.7	179	8.7	165	3.3	198	10.5	245
28	6.5	68	5.2	100	7.2	154	...	...	9.1	190	10.5	292	10.4	205	11.3	238	12.4	287	7.9	20	2.6	45	5.5	105
29	7.2	106	...	...	8.5	172	8.2	279	10.2	219	11.2	171	10.8	124	9.5	...	5.5	172	4.0	121	4.4	164	3.4	139
30	3.2	71	...	...	10.0	230	8.7	155	10.4	283	9.7	160	9.0	207	11.9	264	7.1	204	7.7	215	3.6	131	2.0	82
31	4.9	127	...	...	10.9	233	...	...	9.9	228	...	...	8.7	197	10.3	224	...	...	6.2	163	...	...	4.5	88
Means.....	6.5	141	5.8	128	8.7	204	8.8	192	8.9	227	9.8	221	9.3	220	9.7	209	7.9	192	7.0	178	4.2	110	3.6	95

The mean of the twelve monthly values is, for Declination 7.52, and for Horizontal Force 176.4.

TABLE XIV.—MONTHLY MEAN DIURNAL RANGE, and SUMS of HOURLY DEVIATIONS from MEAN, for DECLINATION, HORIZONTAL FORCE, and VERTICAL FORCE, as deduced from the Monthly Mean Diurnal Inequalities, Tables II., V., and IX.

(The Declination is expressed in minutes of arc ; the units for Horizontal Force and Vertical Force are '00001 of the whole Horizontal and Vertical Forces respectively. The results for Horizontal Force and Vertical Force are corrected for temperature.)

Month, 1900.	Difference between the Greatest and Least of the 24 Hourly Values.			Sums of the 24 Hourly Deviations from the Mean Value.		
	Declination.	Horizontal Force.	Vertical Force.	Declination.	Horizontal Force.	Vertical Force.
January	4.6	81	28	22.8	290	200
February.....	4.5	71	16	25.9	345	120
March.....	6.8	131	39	39.4	851	221
April.....	8.4	155	55	40.6	940	278
May.....	8.2	174	75	42.1	1138	383
June.....	9.2	200	46	50.9	1189	252
July.....	8.7	178	40	46.5	1105	207
August.....	9.2	173	42	47.7	945	202
September.....	7.0	166	35	36.0	864	149
October.....	5.9	136	37	28.4	844	188
November.....	3.3	64	15	17.3	348	85
December.....	3.0	58	7	14.0	302	31
Means.....	6.57	132.2	36.2	34.30	763.4	193.0

TABLE XV.—VALUES of the CO-EFFICIENTS in the PERIODICAL EXPRESSION

$$V_t = m + a_1 \cos t + b_1 \sin t + a_2 \cos 2t + b_2 \sin 2t + a_3 \cos 3t + b_3 \sin 3t + a_4 \cos 4t + b_4 \sin 4t$$

(in which t is the time from Greenwich mean midnight converted into arc at the rate of 15° to each hour, and V_t the mean value of the magnetic element at the time t for each month and for the year, as given in Tables II., V., IX., and XII., the values for Horizontal Force and Vertical Force being corrected for temperature).

The values of the co-efficients for Declination are given in minutes of arc; the units for Horizontal Force and Vertical Force are 00001 of the whole Horizontal and Vertical Forces respectively.

Month, 1900.	m	a_1	b_1	a_2	b_2	a_3	b_3	a_4	b_4
DECLINATION WEST.									
January	1'82	- 1'50	+ 0'17	+ 0'39	+ 0'76	- 0'20	- 0'08	+ 0'22	+ 0'09
February	1'44	- 1'48	- 0'57	+ 0'40	+ 0'71	- 0'35	- 0'14	+ 0'17	+ 0'24
March	2'13	- 1'85	- 1'21	+ 0'81	+ 1'31	- 0'54	- 0'55	+ 0'30	+ 0'35
April	3'51	- 1'32	- 1'73	+ 1'15	+ 1'60	- 0'71	- 0'68	+ 0'30	+ 0'21
May	3'53	- 1'55	- 1'90	+ 1'37	+ 1'26	- 0'79	- 0'23	+ 0'02	+ 0'16
June	4'08	- 1'65	- 2'44	+ 1'58	+ 1'60	- 0'64	- 0'39	+ 0'07	+ 0'07
July	3'72	- 1'52	- 2'30	+ 1'51	+ 1'27	- 0'73	- 0'38	+ 0'05	+ 0'16
August	3'51	- 2'08	- 1'71	+ 1'90	+ 1'11	- 0'86	- 0'30	+ 0'12	+ 0'16
September	2'31	- 1'71	- 1'09	+ 1'39	+ 0'63	- 0'95	- 0'32	+ 0'37	+ 0'20
October	2'33	- 1'22	- 0'81	+ 0'55	+ 1'10	- 0'68	- 0'55	+ 0'41	+ 0'33
November	1'06	- 0'94	- 0'23	+ 0'42	+ 0'50	- 0'46	0'00	+ 0'28	+ 0'04
December	1'29	- 0'81	+ 0'11	+ 0'30	+ 0'54	- 0'33	+ 0'01	+ 0'22	+ 0'10
For the Year	2'15	- 1'47	- 1'14	+ 0'98	+ 1'03	- 0'60	- 0'30	+ 0'21	+ 0'18
HORIZONTAL FORCE.									
January	51'3	+ 6'8	+ 6'4	- 16'6	+ 4'9	+ 8'6	- 8'5	- 1'0	+ 7'4
February	45'5	+ 17'3	+ 0'4	- 11'7	+ 3'0	+ 7'3	- 12'3	+ 0'9	+ 7'6
March	97'7	+ 47'3	- 10'2	- 24'7	+ 17'9	+ 11'0	- 16'6	- 2'6	+ 5'9
April	111'0	+ 50'0	- 30'2	- 24'3	+ 18'2	+ 10'7	- 14'2	- 1'2	+ 8'2
May	103'8	+ 51'7	- 48'1	- 25'2	+ 21'6	+ 0'3	- 4'5	0'0	+ 0'2
June	116'2	+ 53'3	- 54'4	- 32'5	+ 16'4	+ 1'2	- 8'5	- 2'3	+ 3'0
July	113'3	+ 46'8	- 55'9	- 7'5	+ 18'9	- 4'0	- 18'4	+ 1'5	+ 4'0
August	110'0	+ 41'8	- 43'6	- 10'8	+ 24'9	- 11'9	- 13'8	+ 3'7	+ 9'4
September	106'8	+ 44'2	- 34'9	- 13'9	+ 18'6	- 6'7	- 17'1	+ 3'2	+ 11'4
October	95'7	+ 47'9	- 9'9	- 29'5	+ 10'4	+ 4'6	- 11'7	+ 2'0	+ 8'0
November	37'7	+ 14'7	+ 2'7	- 18'3	+ 6'3	+ 0'6	- 3'3	+ 4'7	+ 3'4
December	27'5	+ 4'8	+ 9'3	- 17'0	+ 1'2	+ 4'3	- 0'5	+ 2'2	+ 3'7
For the Year	80'7	+ 35'5	- 22'4	- 19'3	+ 13'5	+ 2'2	- 10'8	+ 0'9	+ 6'0
VERTICAL FORCE.									
January	11'3	- 2'6	- 11'5	- 3'2	- 1'2	+ 0'8	- 1'7	- 3'0	+ 0'7
February	8'5	- 1'8	- 2'3	- 5'7	- 2'5	+ 2'7	- 1'1	- 2'1	+ 0'4
March	21'0	+ 3'5	- 10'0	- 10'3	- 2'0	+ 4'3	+ 0'6	- 2'9	- 0'6
April	36'5	+ 14'6	- 5'7	- 13'6	- 3'2	+ 5'4	- 0'1	- 2'1	- 0'4
May	42'8	+ 14'1	- 17'1	- 14'8	+ 4'2	+ 8'7	- 2'3	- 2'7	- 1'2
June	30'4	+ 12'3	- 4'9	- 11'9	- 1'2	+ 4'1	- 1'4	- 0'5	- 0'1
July	27'0	+ 6'4	- 0'5	- 12'6	- 0'8	+ 4'8	- 1'9	- 1'4	- 0'9
August	28'6	+ 9'0	- 2'8	- 10'8	+ 2'7	+ 6'4	- 1'6	- 1'5	+ 0'8
September	25'1	+ 7'0	- 0'3	- 6'8	- 1'6	+ 5'5	- 2'2	- 2'7	+ 0'6
October	23'9	+ 7'2	- 7'0	- 6'6	- 2'9	+ 5'1	- 0'9	- 2'3	+ 1'2
November	8'5	+ 3'3	- 3'7	- 1'5	0'0	+ 1'2	- 1'8	0'0	+ 1'2
December	3'8	+ 0'5	- 0'9	- 0'9	+ 0'7	+ 1'1	- 0'5	- 0'3	+ 0'2
For the Year	21'7	+ 6'1	- 5'6	- 8'2	- 0'6	+ 4'2	- 1'2	- 1'8	+ 0'2

TABLE XVI.—VALUES of the CO-EFFICIENTS and CONSTANT ANGLES in the PERIODICAL EXPRESSIONS

$$V_t = m + c_1 \sin(t + a) + c_2 \sin(2t + \beta) + c_3 \sin(3t + \gamma) + c_4 \sin(4t + \delta)$$

$$V_{t'} = m + c_1 \sin(t' + a') + c_2 \sin(2t' + \beta') + c_3 \sin(3t' + \gamma') + c_4 \sin(4t' + \delta')$$

(in which t and t' are the times from Greenwich mean midnight and apparent midnight respectively, converted into arc at the rate of 15° to each hour, and $V_t, V_{t'}$ the mean value of the magnetic element at the time t or t' for each month and for the year, as given in Tables II., V., IX., and XII., the values for Horizontal Force and Vertical Force being corrected for temperature).

The values of the co-efficients for Declination are given in minutes of arc: the units for Horizontal Force and Vertical Force are .00001 of the whole Horizontal and Vertical Forces respectively.

Month, 1900.	m	c_1	a	a'	c_2	β	β'	c_3	γ	γ'	c_4	δ	δ'
DECLINATION WEST.													
January	1.82	1.51	276.29	278.51	0.85	27.19	32.3	0.22	246.58	254.4	0.23	68.12	77.40
February	1.44	1.59	248.52	252.22	0.82	29.17	36.17	0.38	247.58	258.28	0.30	34.14	48.14
March	2.13	2.21	236.52	239.3	1.54	31.47	36.9	0.77	224.34	231.7	0.46	40.52	49.36
April	3.51	2.17	217.23	217.26	1.97	35.49	35.55	0.99	226.14	226.23	0.37	55.29	55.41
May	3.53	2.45	219.12	218.20	1.86	47.13	45.29	0.82	254.2	251.26	0.16	5.59	2.31
June	4.08	2.95	214.5	214.10	2.25	44.37	44.47	0.75	238.53	239.8	0.10	45.58	46.18
July	3.72	2.76	213.28	214.50	1.98	49.54	52.38	0.82	242.14	246.20	0.17	17.26	22.54
August	3.51	2.70	230.34	231.31	2.20	59.42	61.36	0.91	250.43	253.34	0.20	38.9	41.57
September	2.31	2.03	237.26	236.12	1.53	65.48	63.20	1.00	251.23	247.41	0.43	61.44	56.48
October	2.33	1.46	236.29	233.0	1.23	26.42	19.44	0.88	230.53	220.26	0.53	50.55	36.59
November	1.06	0.97	256.24	252.43	0.65	40.0	32.38	0.46	270.0	258.57	0.28	82.41	67.57
December	1.29	0.81	277.42	276.39	0.62	29.5	26.59	0.33	271.27	268.18	0.24	65.3	60.51
For the Year	2.15	1.86	232.7	232.7	1.42	43.29	43.29	0.67	243.21	243.21	0.28	50.28	50.28
HORIZONTAL FORCE.													
January	51.3	9.4	47.1	49.23	17.3	286.21	291.5	12.1	134.30	141.36	7.5	352.1	1.29
February	45.5	17.3	88.37	92.7	12.0	284.19	291.19	14.3	149.29	159.59	7.6	6.35	20.35
March	97.7	48.4	102.10	104.21	30.5	305.53	310.15	19.9	146.30	153.3	6.5	336.25	345.9
April	111.0	58.4	121.7	121.10	30.4	306.54	307.0	17.8	143.3	143.12	8.2	351.35	351.47
May	103.8	70.6	132.58	132.6	33.2	310.33	308.49	4.6	176.32	173.56	0.2	10.53	7.25
June	116.2	76.2	135.37	135.42	36.4	296.49	296.59	8.6	172.13	172.28	3.7	322.14	322.34
July	113.3	72.9	140.3	141.25	20.4	338.29	341.13	18.9	192.11	196.17	4.3	21.14	26.42
August	110.0	60.4	136.13	137.10	27.2	336.34	338.28	18.2	220.47	223.38	10.1	21.26	25.14
September	106.8	56.3	128.15	127.1	23.3	323.13	320.45	18.3	201.21	197.39	11.8	15.31	10.35
October	95.7	48.9	101.38	98.9	31.3	289.22	282.24	12.6	158.43	148.16	8.3	14.18	0.22
November	37.7	14.9	79.39	75.58	19.3	289.9	281.47	3.4	168.50	157.47	5.8	54.14	39.30
December	27.5	10.5	27.12	26.9	17.0	274.6	272.0	4.3	96.3	92.54	4.3	30.1	25.49
For the Year	80.7	42.0	122.10	122.10	23.6	305.1	305.1	11.0	168.44	168.44	6.1	8.47	8.47
VERTICAL FORCE.													
January	11.3	11.8	192.49	195.11	3.4	249.28	254.12	1.9	155.1	162.7	3.1	283.35	293.3
February	8.5	3.0	218.9	221.39	6.2	246.27	253.27	2.9	112.19	122.49	2.1	281.45	295.45
March	21.0	10.6	160.56	163.7	10.5	259.6	263.28	4.4	82.32	89.5	2.9	257.16	266.0
April	36.5	15.6	111.17	111.20	14.0	256.45	256.51	5.4	90.37	90.46	2.1	258.15	258.27
May	42.8	22.2	140.34	139.42	15.4	285.46	284.2	9.0	105.3	102.27	2.9	246.31	243.3
June	30.4	13.3	111.31	111.36	12.0	264.28	264.38	4.3	109.21	109.36	0.5	254.11	254.31
July	27.0	6.4	94.20	95.42	12.6	266.21	269.5	5.2	111.18	115.24	1.7	238.33	244.1
August	28.6	9.4	107.28	108.25	11.1	284.7	286.1	6.6	104.22	107.13	1.7	297.11	300.59
September	25.1	7.0	92.40	91.26	7.0	256.47	254.19	5.9	111.34	107.52	2.7	282.10	277.14
October	23.9	10.1	134.4	130.35	7.2	246.11	239.13	5.2	99.46	89.19	2.6	298.8	284.12
November	8.5	5.0	138.45	135.4	1.5	268.43	261.21	2.2	145.8	134.5	1.2	0.0	345.16
December	3.8	1.1	149.48	148.45	1.2	309.48	307.42	1.2	112.27	109.18	0.4	306.36	302.24
For the Year	21.7	8.3	132.16	132.16	8.3	265.34	265.34	4.4	106.39	106.39	1.8	275.17	275.17

TABLE XVII.—RESULTS of OBSERVATIONS of MAGNETIC DIP made in the MAGNETIC PAVILION in the YEAR 1900.

Greenwich Civil Time, 1900.	3-inch Needle.	Magnetic Dip.	Observer.	Greenwich Civil Time, 1900.	3-inch Needle.	Magnetic Dip.	Observer.	Greenwich Civil Time, 1900.	3-inch Needle.	Magnetic Dip.	Observer.			
	d h				d h				d h					
Jan.	5. 11	D ₁	67. 11. 7	E	May	8. 15	D ₂	67. 8. 57	E	Sept.	1. 13	D ₂	67. 7. 43	N
	9. 12	D ₂	67. 10. 23	E		11. 12	D ₁	67. 9. 32	N		4. 16	D ₁	67. 9. 0	N
	10. 12	D ₁	67. 10. 56	E		14. 15	D ₂	67. 8. 57	E		11. 15	D ₂	67. 6. 49	N
	10. 13	D ₂	67. 10. 25	E		14. 15	D ₁	67. 9. 3	E		11. 16	D ₁	67. 7. 8	N
	17. 11	D ₁	67. 11. 48	E		18. 11	D ₂	67. 8. 0	N		14. 12	D ₂	67. 6. 46	N
	17. 12	D ₂	67. 10. 15	E		18. 12	D ₁	67. 8. 25	N		14. 13	D ₁	67. 7. 28	N
	22. 14	D ₁	67. 11. 6	E		24. 15	D ₂	67. 7. 52	N		19. 11	D ₂	67. 7. 42	E
	24. 14	D ₂	67. 10. 5	N		29. 11	D ₁	67. 8. 6	E		19. 12	D ₁	67. 8. 13	E
	24. 15	D ₁	67. 10. 32	N		29. 12	D ₂	67. 9. 7	E		25. 14	D ₂	67. 7. 40	E
	25. 14	D ₂	67. 9. 52	N		31. 15	D ₁	67. 9. 35	E		25. 15	D ₁	67. 8. 54	E
											28. 11	D ₁	67. 8. 11	E
											28. 11	D ₂	67. 8. 11	E
Feb.	6. 11	D ₁	67. 10. 45	E	June	6. 12	D ₂	67. 7. 59	E					
	6. 12	D ₂	67. 8. 29	E		8. 11	D ₁	67. 9. 55	E					
	8. 16	D ₂	67. 8. 55	N		8. 12	D ₂	67. 8. 54	E	Oct.	8. 16	D ₁	67. 8. 8	N
	9. 16	D ₁	67. 10. 6	N		11. 15	D ₁	67. 8. 58	E		9. 15	D ₂	67. 8. 17	N
	13. 12	D ₂	67. 8. 39	E		13. 15	D ₂	67. 7. 42	E		9. 16	D ₁	67. 8. 2	N
	13. 12	D ₁	67. 9. 55	E		18. 15	D ₁	67. 9. 16	E		11. 14	D ₂	67. 8. 51	N
	22. 15	D ₂	67. 8. 59	N		20. 15	D ₂	67. 8. 31	E		15. 16	D ₂	67. 8. 1	N
	23. 16	D ₁	67. 9. 22	N		22. 15	D ₁	67. 9. 30	E		16. 14	D ₁	67. 7. 48	N
	28. 11	D ₂	67. 9. 37	E		27. 14	D ₂	67. 8. 58	E		19. 11	D ₂	67. 8. 28	E
	28. 12	D ₁	67. 10. 8	E		27. 15	D ₁	67. 9. 50	E		19. 11	D ₁	67. 8. 23	E
						29. 14	D ₂	67. 7. 23	E		24. 10	D ₂	67. 8. 19	E
						29. 15	D ₁	67. 8. 50	E		24. 11	D ₁	67. 7. 29	E
Mar.	1. 14	D ₂	67. 8. 29	N	July	6. 15	D ₁	67. 8. 18	N	Nov.	5. 15	D ₂	67. 7. 36	N
	8. 15	D ₁	67. 10. 7	N		13. 16	D ₂	67. 8. 46	N		7. 15	D ₁	67. 7. 19	N
	8. 16	D ₂	67. 8. 23	N		13. 16	D ₁	67. 7. 45	N		13. 12	D ₂	67. 7. 29	E
	14. 15	D ₁	67. 10. 0	N		17. 14	D ₁	67. 7. 5	N		19. 14	D ₁	67. 7. 6	N
	16. 15	D ₂	67. 9. 3	E		19. 14	D ₂	67. 8. 4	N		20. 10	D ₂	67. 7. 45	E
	20. 14	D ₁	67. 10. 52	E		19. 15	D ₁	67. 6. 37	N		20. 11	D ₁	67. 7. 30	E
	21. 12	D ₂	67. 7. 53	E		24. 11	D ₁	67. 7. 18	N		23. 10	D ₂	67. 6. 32	E
	27. 11	D ₁	67. 9. 59	E		24. 13	D ₂	67. 7. 16	N		23. 11	D ₁	67. 7. 16	E
	27. 11	D ₂	67. 8. 32	E		28. 12	D ₂	67. 6. 51	N		27. 11	D ₂	67. 6. 5	N
	29. 14	D ₁	67. 8. 40	E		28. 13	D ₁	67. 7. 30	N		27. 12	D ₁	67. 6. 10	N
	30. 15	D ₂	67. 8. 33	E		31. 16	D ₂	67. 7. 22	N		29. 14	D ₂	67. 6. 33	E
											30. 16	D ₁	67. 7. 0	N
Apr.	2. 15	D ₂	67. 8. 59	N	Aug.	3. 14	D ₁	67. 8. 32	E					
	2. 16	D ₁	67. 8. 31	N		8. 11	D ₂	67. 6. 45	E	Dec.	1. 11	D ₁	67. 8. 24	N
	9. 15	D ₂	67. 9. 14	E		8. 11	D ₁	67. 8. 0	E		3. 15	D ₂	67. 6. 40	N
	12. 13	D ₁	67. 9. 25	N		14. 11	D ₂	67. 6. 51	E		4. 11	D ₂	67. 7. 40	N
	18. 16	D ₂	67. 8. 0	N		14. 12	D ₁	67. 7. 49	E		7. 14	D ₁	67. 7. 7	N
	19. 11	D ₁	67. 9. 39	N		16. 11	D ₂	67. 7. 21	E		14. 14	D ₂	67. 6. 19	N
	19. 12	D ₂	67. 9. 18	N		20. 15	D ₁	67. 6. 57	N		19. 14	D ₁	67. 6. 48	E
	20. 11	D ₁	67. 10. 17	E		22. 16	D ₂	67. 8. 34	N		19. 15	D ₂	67. 7. 0	E
	20. 11	D ₂	67. 9. 28	E		25. 11	D ₁	67. 7. 52	N		19. 15	D ₁	67. 7. 45	E
	26. 15	D ₁	67. 9. 12	E		25. 12	D ₂	67. 7. 29	N		21. 15	D ₁	67. 7. 45	E
	26. 15	D ₂	67. 9. 30	E		27. 16	D ₁	67. 8. 25	N		28. 14	D ₂	67. 6. 59	E
	30. 15	D ₁	67. 9. 32	E		28. 11	D ₂	67. 8. 13	N		31. 12	D ₁	67. 7. 36	E
May	2. 14	D ₂	67. 9. 24	E										
	8. 15	D ₁	67. 9. 46	E										

The initials N and E are those of Mr Nash and Mr Edney.

TABLE XVIII.—MONTHLY and YEARLY MEANS of MAGNETIC DIP in the YEAR 1900.

Monthly Means of Magnetic Dip.				
Month, 1900.	D ₁ , 3-inch Needle.	Number of Observations.	D ₂ , 3-inch Needle.	Number of Observations.
January	67° 11' 6"	5	67° 10' 12"	5
February	67° 10' 3"	5	67° 8' 56"	5
March	67° 9' 56"	5	67° 8' 29"	6
April	67° 9' 26"	6	67° 9' 5"	6
May	67° 9' 5"	6	67° 8' 43"	6
June	67° 9' 23"	6	67° 8' 14"	6
July	67° 7' 26"	6	67° 7' 40"	5
August	67° 7' 56"	6	67° 7' 32"	6
September	67° 8' 9"	6	67° 7' 29"	6
October	67° 7' 57"	6	67° 8' 21"	6
November	67° 7' 4"	6	67° 7' 0"	6
December	67° 7' 32"	5	67° 6' 56"	5
Means	67° 8' 42"	Sum 68	67° 8' 11"	Sum 68
Mean Annual Dip	67° 8' 27"			

The monthly means have been formed without reference to the hour at which the observation on each day was made.
In combining the monthly results to form annual means, weights have been given proportional to the number of observations.

TABLE XIX.—DETERMINATIONS of the ABSOLUTE VALUE of HORIZONTAL MAGNETIC FORCE in the YEAR 1900.

Abstract of the Observations of Deflexion of a Magnet for Absolute Measure of Horizontal Force made with the Gibson Instrument in the Magnetic Pavilion.

Greenwich Civil Time, 1900.	Distances of Centres of Magnets.	Temperature Fahrenheit.	Observed Deflexion.	Mean of the Times of Vibration of Deflecting Magnet.	Number of Vibrations.	Temperature Fahrenheit.	Observer.
January 12. 16 ^{d h}	1'0 1'3	46'1	9. 47. 20 4. 26. 42	5'787 5'786	100 100	46'1 46'8	N
January 26. 15	1'0 1'3	50'0	9. 47. 10 4. 26. 47	5'790 5'792	100 100	50'0 50'7	N
February 21. 15	1'0 1'3	47'0	9. 47. 28 4. 26. 42	5'783 5'788	100 100	45'6 48'0	N
March 12. 15	1'0 1'3	53'2	9. 46. 6 4. 26. 10	5'787 5'793	100 100	51'3 54'2	N
March 26. 15	1'0 1'3	42'9	9. 47. 26 4. 26. 42	5'780 5'788	100 100	41'6 43'4	N
April 11. 16	1'0 1'3	55'6	9. 45. 50 4. 25. 57	5'792 5'792	100 100	56'2 56'3	N
April 20. 16	1'0 1'3	68'8	9. 44. 25 4. 25. 21	5'796 5'796	100 100	68'6 69'1	N
May 11. 15	1'0 1'3	62'9	9. 45. 1 4. 25. 36	5'794 5'789	100 100	61'7 63'8	N
May 22. 16	1'0 1'3	59'5	9. 45. 7 4. 25. 50	5'790 5'793	100 100	59'8 58'7	N
June 19. 15	1'0 1'3	73'4	9. 43. 34 4. 24. 58	5'797 5'793	100 100	72'5 73'4	N
July 23. 16	1'0 1'3	79'1	9. 42. 16 4. 24. 0	5'800 5'800	100 100	78'3 79'3	N
August 15. 16	1'0 1'3	72'6	9. 42. 51 4. 24. 52	5'796 5'798	100 100	71'9 72'6	N
August 24. 16	1'0 1'3	69'6	9. 43. 24 4. 24. 45	5'794 5'797	100 100	68'8 69'7	N
September 6. 16	1'0 1'3	67'9	9. 43. 15 4. 24. 50	5'793 5'792	100 100	66'2 69'2	N
September 20. 15	1'0 1'3	67'4	9. 43. 9 4. 24. 52	5'792 5'793	100 100	65'3 68'2	N
October 10. 15	1'0 1'3	59'3	9. 44. 17 4. 25. 22	5'790 5'793	100 100	58'8 59'4	N
October 24. 15	1'0 1'3	57'7	9. 43. 41 4. 25. 5	5'785 5'785	100 100	56'9 58'5	N
November 26. 15	1'0 1'3	51'2	9. 45. 35 4. 25. 58	5'784 5'785	100 100	50'1 51'8	N
December 20. 15	1'0 1'3	51'9	9. 45. 16 4. 25. 40	5'787 5'783	100 100	51'0 52'4	N

The deflecting magnet is placed on the east side of the suspended magnet, with its marked pole alternately east and west, and on the west side with its marked pole also alternately east and west: the deflexion given in the table above is the mean of the four deflexions observed in these positions of the magnets.

The initial N is that of Mr Nash.

In the subsequent calculations every observation is reduced to the temperature 35° Fahrenheit.

TABLE XIX.—*continued*—COMPUTATION of the VALUES of HORIZONTAL FORCE in ABSOLUTE MEASURE.

From Observations made with the Gibson Instrument in the Magnetic Pavilion.

Greenwich Civil Time, 1900.	In English Measure.									In Metric Measure.	
	Apparent Value of A ₁ .	Apparent Value of A ₂ .	Apparent Value of P.	Mean Value of P.	Log $\frac{m}{X}$.	Corrected Time of Vibration of Deflecting Magnet.	Log. mX .	Value of m .	Value of Horizontal Force X .	Value of Horizontal Force	
										As observed.	Reduced to Mean of Month.
d h						s					
Jan. 12. 16	0.08515	0.08527	- 0.00344		8.93164	5.7915	0.13523	0.3415	3.9976	1.8432	1.8440
Jan. 26. 15	0.08519	0.08536	- 0.00491		8.93195	5.7942	0.13487	0.3415	3.9945	1.8418	1.8420
Feb. 21. 15	0.08519	0.08529	- 0.00293		8.93176	5.7908	0.13534	0.3416	3.9975	1.8432	1.8432
Mar. 12. 15	0.08508	0.08521	- 0.00367		8.93128	5.7930	0.13508	0.3413	3.9985	1.8437	1.8421
Mar. 26. 15	0.08512	0.08523	- 0.00305		8.93145	5.7923	0.13509	0.3414	3.9978	1.8433	1.8421
Apr. 11. 16	0.08509	0.08519	- 0.00271		8.93126	5.7946	0.13484	0.3412	3.9975	1.8432	1.8430
Apr. 20. 16	0.08507	0.08518	- 0.00316		8.93118	5.7930	0.13515	0.3413	3.9993	1.8440	1.8431
May 11. 15	0.08507	0.08517	- 0.00293		8.93116	5.7918	0.13530	0.3414	4.0001	1.8444	1.8443
May 22. 16	0.08503	0.08519	- 0.00468		8.93113	5.7959	0.13465	0.3411	3.9972	1.8431	1.8400
June 19. 15	0.08502	0.08513	- 0.00316	-0.00328	8.93091	5.7910	0.13549	0.3414	4.0021	1.8453	1.8440
July 23. 16	0.08492	0.08490	+ 0.00045		8.93009	5.7934	0.13517	0.3409	4.0044	1.8464	1.8428
Aug. 15. 16	0.08490	0.08508	- 0.00519		8.93050	5.7930	0.13518	0.3411	4.0026	1.8455	1.8456
Aug. 24. 16	0.08494	0.08500	- 0.00175		8.93038	5.7927	0.13520	0.3410	4.0032	1.8458	1.8441
Sept. 6. 16	0.08489	0.08500	- 0.00321		8.93025	5.7903	0.13557	0.3411	4.0055	1.8469	1.8453
Sept. 20. 15	0.08486	0.08500	- 0.00395		8.93020	5.7903	0.13555	0.3411	4.0056	1.8469	1.8468
Oct. 10. 15	0.08491	0.08504	- 0.00378		8.93043	5.7920	0.13524	0.3411	4.0031	1.8458	1.8430
Oct. 24. 15	0.08480	0.08493	- 0.00372		8.92985	5.7850	0.13629	0.3412	4.0107	1.8493	1.8487
Nov. 26. 15	0.08498	0.08512	- 0.00400		8.93078	5.7872	0.13590	0.3415	4.0046	1.8465	1.8464
Dec. 20. 15	0.08494	0.08503	- 0.00254		8.93048	5.7878	0.13584	0.3413	4.0057	1.8470	1.8466
Means ...	...	...	...	...	...	...	...	...	4.0014	1.8450	1.8441

The value of X in English Measure is referred to the Foot-Grain-Second Unit, and in Metric Measure to the Millimètre-Milligramme-Second Unit. To obtain X in the Centimètre-Gramme-Second (C.G.S.) Unit, the values in Metric Measure must be divided by 10.

MONTHLY MEAN DIURNAL INEQUALITIES OF MAGNETIC ELEMENTS FROM HOURLY ORDINATES, ON FIVE SELECTED DAYS IN EACH MONTH.

Each result is the mean of the corresponding hourly ordinates from the photographic register, on five quiet days in each month, selected for comparison with results at other British Observatories. The days included are January 3, 8, 9, 30, 31, February 3, 6, 7, 13, 28, March 5, 11, 21, 27, 28, April 3, 8, 15, 22, 25, May 9, 10, 14, 21, 28, June 10, 11, 16, 20, 25, July 14, 15, 18, 22, 30, August 6, 9, 10, 23, 30, September 2, 7, 21, 25, 26, October 2, 7, 13, 19, 31, November 5, 6, 11, 16, 30, December 3, 6, 15, 23, 24.

The results for Declination are given in minutes of arc: those for Horizontal Force and Vertical Force are given both in terms of the whole Horizontal or Vertical Force and in terms of the Millimetre-Milligramme-Second (Metric) Unit. The letter f indicates values in terms of the whole Horizontal or Vertical Force, and the letter m values in terms of the Metric Unit, the unit for the former values being .00001 of the whole Horizontal or Vertical Force, and for the latter .00001 of the Metric Unit, or .000001 of the Centimetre-Gramme-Second (C.G.S.) Unit. The values of the whole Horizontal and Vertical Forces expressed in terms of the Metric Unit are 1.8441 and 4.3743 respectively for the year.

TABLE XX.—MONTHLY MEAN DIURNAL INEQUALITY OF MAGNETIC DECLINATION WEST.

(The results are in each case diminished by the smallest hourly value.)

1900.

Table with 14 columns: Hour, Greenwich Civil Time; January; February; March; April; May; June; July; August; September; October; November; December; For the Year. Rows include hourly data from Midnight to 24h, and summary rows for means of 0h-23h and 1h-24h.

TABLE XXI.—MONTHLY MEAN DIURNAL INEQUALITY OF HORIZONTAL MAGNETIC FORCE.

(The results are corrected for temperature, and in each case diminished by the smallest hourly value.)

1900.

Hour, Green- wich Civil Time.	January.		February.		March.		April.		May.		June.		July.		August.		September.		October.		November.		December.		For the Year.	
	f	m	f	m	f	m	f	m	f	m	f	m	f	m	f	m	f	m	f	m	f	m	f	m	f	m
Midn.	57	105	58	107	119	219	132	243	108	199	150	277	161	297	156	288	160	295	121	223	83	153	31	57	105.3	194.2
1 ^h	47	87	52	96	121	223	126	232	100	184	134	247	154	284	154	284	147	271	113	208	85	157	36	66	99.7	183.9
2	50	92	53	98	119	219	122	225	90	166	132	243	146	269	144	266	137	253	113	208	83	153	35	65	96.0	177.1
3	54	100	48	89	118	218	121	223	88	162	128	236	141	260	137	253	133	245	117	216	85	157	39	72	94.8	174.9
4	60	111	54	100	115	212	121	223	84	155	133	245	139	256	131	242	128	236	126	232	86	159	41	76	95.5	176.3
5	70	129	53	98	117	216	114	210	74	136	131	242	128	236	127	234	119	219	134	247	94	173	43	79	94.3	173.9
6	69	127	58	107	108	199	112	207	50	92	106	195	105	194	110	203	105	194	140	258	87	160	43	79	85.1	156.9
7	78	144	56	103	99	183	110	203	28	52	82	151	93	172	78	144	78	144	132	243	69	127	34	63	72.1	133.1
8	68	125	50	92	75	138	92	170	10	18	64	118	60	111	30	55	44	81	104	192	40	74	34	63	49.9	92.1
9	37	68	21	39	39	72	56	103	0	0	30	55	24	44	0	0	16	30	48	89	10	18	34	63	20.2	37.4
10	6	11	0	0	4	7	10	18	20	37	0	0	0	0	8	15	0	0	6	11	0	0	18	33	0.0	0.0
11	0	0	0	0	0	0	0	0	31	57	14	26	16	30	52	96	9	17	0	0	12	22	0	0	5.2	9.7
Noon.	16	30	0	0	18	33	32	59	33	61	34	63	61	112	113	208	55	101	16	30	26	48	0	0	27.7	51.1
13 ^h	46	85	7	13	42	77	81	149	53	98	70	129	97	179	147	271	94	173	56	103	43	79	6	11	55.8	102.9
14	67	124	30	55	82	151	126	232	64	118	113	208	128	236	155	286	113	208	94	173	56	103	12	22	80.7	148.7
15	69	127	36	66	110	203	150	277	82	151	152	280	150	277	176	325	116	214	119	219	75	138	31	57	99.5	183.5
16	55	101	36	66	121	223	155	286	91	168	160	295	167	308	172	317	122	225	138	254	79	146	39	72	105.3	194.1
17	59	109	48	89	126	232	155	286	113	208	172	317	171	315	166	306	128	236	146	269	92	170	45	83	112.4	207.3
18	57	105	55	101	132	243	156	288	150	277	185	341	182	336	172	317	140	258	158	291	98	181	45	83	121.5	224.1
19	64	118	60	111	142	262	160	295	160	295	196	361	190	350	190	350	153	282	162	299	98	181	41	76	128.7	237.3
20	70	129	64	118	143	264	152	280	150	277	192	354	198	365	190	350	149	275	164	302	98	181	31	57	127.4	235.0
21	69	127	67	124	132	243	146	269	141	260	188	347	202	373	182	336	133	245	158	291	92	170	25	46	121.9	224.9
22	63	116	67	124	132	243	140	258	133	245	174	321	196	361	180	332	123	227	156	288	84	155	25	46	116.7	215.3
23	63	116	69	127	135	249	141	260	137	253	156	288	190	350	178	328	130	240	156	288	82	151	23	42	115.7	213.3
24	63	116	68	125	142	262	147	271	142	262	150	277	184	339	185	341	129	238	152	280	78	144	25	46	116.1	214.1
Means 0 ^h —23 ^h	53.9	99.4	43.4	80.1	97.9	180.4	112.9	208.2	82.9	152.9	120.7	222.5	129.1	238.1	131.2	241.9	105.5	194.5	111.5	205.6	69.0	127.3	29.6	54.6	84.6	156.1
1 ^h —24 ^h	54.2	99.9	43.8	80.9	98.8	182.2	113.5	209.3	84.3	155.5	120.7	222.5	130.1	239.9	132.4	244.1	104.2	192.2	112.8	208.0	68.8	127.0	29.4	54.2	85.1	157.0

TABLE XXII.—MONTHLY MEAN DIURNAL INEQUALITY OF VERTICAL MAGNETIC FORCE.

(The results are corrected for temperature, and in each case diminished by the smallest hourly value.)

1900.

Hour, Green- wich Civil Time.	January.		February.		March.		April.		May.		June.		July.		August.		September.		October.		November.		December.		For the Year.	
	f	m	f	m	f	m	f	m	f	m	f	m	f	m	f	m	f	m	f	m	f	m	f	m	f	m
Midn.	9	39	14	61	16	70	41	179	44	192	21	92	22	96	41	179	45	197	38	166	22	96	19	83	23.4	101.9
1 ^h	9	39	14	61	18	79	37	162	44	192	27	118	24	105	39	171	43	188	40	175	16	70	13	57	22.7	99.2
2	11	48	12	52	17	74	37	162	44	192	27	118	24	105	39	171	45	197	36	157	12	52	15	66	22.3	97.3
3	9	39	14	61	15	66	39	171	42	184	29	127	29	127	37	162	47	206	30	131	12	52	15	66	22.2	97.1
4	9	39	14	61	23	101	41	179	44	192	34	149	39	171	35	153	50	219	30	131	16	70	15	66	24.9	108.7
5	9	39	17	74	23	101	39	171	46	201	38	166	43	188	37	162	52	227	26	114	14	61	17	74	25.8	112.6
6	14	61	17	74	29	127	39	171	48	210	38	166	47	206	42	184	56	245	30	131	21	92	11	48	28.4	124.0
7	17	74	21	92	29	127	42	184	46	201	42	184	51	223	36	157	60	262	32	140	21	92	11	48	29.7	129.8
8	17	74	15	66	38	166	38	166	40	175	44	192	44	192	32	140	54	236	32	140	27	118	11	48	28.4	123.8
9	22	96	15	66	36	157	26	114	26	114	36	157	32	140	22	96	44	192	30	131	21	92	3	13	21.8	95.1
10	24	105	9	39	22	96	20	87	16	70	20	87	22	96	16	70	30	131	20	87	17	74	0	0	13.7	59.6
11	12	52	5	22	9	39	10	44	4	17	4	17	0	0	0	0	24	105	6	26	9	39	2	9	2.8	11.9
Noon.	18	79	7	31	1	4	0	0	0	0	0	0	3	13	10	44	12	52	0	0	0	0	1	4	0.0	0.0
13 ^h	27	118	7	31	3	13	9	39	14	61	4	17	13	57	22	96	0	0	8	35	8	35	3	13	5.5	24.0
14	44	192	12	52	0	0	21	92	36	157	17	74	25	109	32	140	28	122	26	114	14	61	5	22	17.4	75.7
15	40	175	16	70	10	44	35	153	55	241	23	101	33	144	40	175	35	153	34	149	10	44	9	39	24.0	105.1
16	34	149	18	79	14	61	39	171	65	284	37	162	39	171	44	192	35	153	40	175	10	44	7	31	27.5	120.4
17	28	122	8	35	14	61	39	171	71	311	41	179	40	175	44	192	35	153	36	157	11	48	9	39	27.0	118.0
18	26	114	10	44	14	61	41	179	67	293	47	206	38	166	44	192	31	136	42	184	12	52	11	48	27.6	120.7
19	32	140	8	35	14	61	40	175	63	276	43	188	30	131	42	184	35	153	44	192	12	52	11	48	26.9	117.4
20	28	122	8	35	16	70	36	157	59	258	39	171	34	149	44	192	37	162	44	192	12	52	9	39	26.2	114.4
21	22	96	6	26	20	87	36	157	61	267	37	162	32	140	42	184	35	153	42	184	10	44	13	57	25.4	110.8
22	14	61	2	9	16	70	40	175	57	249	39	171	34	149	44	192	33	144	44	192	12	52	9	39	24.4	106.4
23	6	26	0	0	20	87	38	166	55	241	37	162	32	140	44	192	35	153	44	192	14	61	9	39	23.5	102.7
24	0	0	2	9	8	35	40	175	52	227	37	162	30	131	40	175	29	127	42	184	14	61	11	48	21.1	92.3
Means 0 ^h -23 ^h	20.0	87.5	11.2	49.0	17.4	75.9	32.6	142.7	43.6	190.8	30.2	131.9	30.4	133.0	34.5	150.8	37.5	164.1	31.4	137.3	13.9	60.5	9.5	41.5	21.7	94.9
1 ^h -24 ^h	19.7	85.8	10.7	46.8	17.0	74.5	32.6	142.5	44.0	192.2	30.8	134.8	30.7	134.5	34.5	150.7	36.9	161.2	31.6	138.0	13.5	59.1	9.2	40.0	21.6	94.5

ROYAL OBSERVATORY, GREENWICH.

MAGNETIC DISTURBANCES

AND

EARTH CURRENTS.

1900.

MAGNETIC DISTURBANCES in DECLINATION, HORIZONTAL FORCE, and VERTICAL FORCE,
recorded at the ROYAL OBSERVATORY, GREENWICH, in the Year 1900.

The following notes give a brief description of all magnetic movements (superposed on the ordinary diurnal movement) exceeding 3' in Declination, 0.0010 in Horizontal Force, or 0.0003 in Vertical Force, as taken from the photographic records of the respective Magnetometers. The movements in Horizontal and Vertical Force are expressed in parts of the whole Horizontal and Vertical Forces respectively. When any one of the three elements is not specifically mentioned, it is to be understood that the movement, if any, was insignificant. Any failure or want of register is specially indicated.

The term "wave" is used to indicate a movement in one direction and return; "double wave" a movement in one direction and return with continuation in the opposite direction and return; "two successive waves" consecutive wave movements in the same direction; "fluctuations" a number of movements in both directions. The extent and direction of the movement are indicated in brackets, + denoting an increase, and - a decrease of the magnetic element. In the case of fluctuations the sign \pm denotes positive and negative movements of generally equal extent.

Magnetic movements which do not admit of brief description in this way are exhibited on accompanying plates.

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

1900.

- January
- 2^d 2^h Small wave in Dec. (+ 2').
 - 3^d 22^h $\frac{1}{2}$ to 23^h Decrease of V.F. (- 0.0004).
 - 4^d 18^h to 20^h Two small waves in Dec. (- 2') and (- 2 $\frac{1}{2}$ ').
 - 5^d 9^h to 11^h Small fluctuations in H.F. 11 $\frac{1}{2}$ ^h to 14^h Two successive waves in Dec. (+ 8') and (+ 4'): wave in H.F. (- 0.0010). 16 $\frac{1}{2}$ ^h to 17 $\frac{1}{4}$ ^h Wave in Dec. (- 10'): double wave in H.F. (- 0.0010 to + 0.0015): decrease of V.F. (- 0.0003), followed, till 18 $\frac{1}{2}$ ^h by small wave in Dec. (+ 3'): in H.F. (+ 0.0010).
 - 6^d 2^h to 4^h Small double wave in Dec. (+ 2' to - 3'): wave in H.F. (+ 0.0010). 19^h to 20 $\frac{1}{2}$ ^h Two small waves in Dec. (- 2') and (- 2').
 - 10^d 19 $\frac{1}{2}$ ^h to 21^h Wave in Dec. (- 9'): small fluctuations in H.F.
 - 11^d 21^h to 22^h Serrated wave in Dec. (- 3'): in V.F. small.
 - 12^d 2 $\frac{1}{2}$ ^h to 4 $\frac{1}{2}$ ^h Double wave in Dec. (+ 3' to - 3'): shallow wave in H.F. (+ 0.0007). 5^h to 7^h Small fluctuations in Dec. and H.F. 12 $\frac{1}{2}$ ^h to 13^h Wave in Dec. (+ 3'). 15 $\frac{1}{2}$ ^h to 16 $\frac{1}{2}$ ^h Wave in Dec. (- 5'): in H.F. (- 0.0017). 19 $\frac{1}{2}$ ^h to 22^h Flat-crested wave in Dec. (- 8'): double wave in H.F. (+ 0.0010 to - 0.0016), followed by small fluctuations till 23^h.
 - 13^d 16^h to 17^h Wave in Dec. (- 4'): in H.F. (- 0.0016). 20 $\frac{1}{2}$ ^h to 23^h Small fluctuations in Dec. and H.F.
 - 14^d 1 $\frac{1}{2}$ ^h to 2^h Small wave in Dec. (+ 3'). 4^h to 5^h Shallow wave in Dec. (+ 3').
 - 14^d 12^h to 15^d 12^h. See Plate I.
 - 15^d 15 $\frac{1}{2}$ ^h to 16 $\frac{1}{2}$ ^h Wave in H.F. (- 0.0014). 16^h to 17 $\frac{1}{2}$ ^h Wave in Dec. (- 4'). 18 $\frac{1}{2}$ ^h to 20^h Wave in Dec. (- 6'): serrated wave in H.F. (+ 0.0020). 21^h to 22^h Fluctuations in H.F. 21^h to 24^h Double wave in Dec. (- 5' to + 4'). 22^h to 23^h Wave in H.F. (- 0.0010), followed by small fluctuations till 24^h. 22^h to 24^h Shallow wave in V.F. (+ 0.0003).
 - 16^d 0^h to 2^h Small fluctuations in Dec. and H.F. 2^h to 3 $\frac{1}{2}$ ^h Shallow wave in H.F. (+ 0.0010). 3 $\frac{1}{2}$ ^h to 5^h Wave in Dec. (+ 5'). 9^h to 10^h Wave in H.F. (- 0.0014). 10^h to 11^h Serrated wave in Dec. (+ 3'). 12 $\frac{1}{2}$ ^h to 13 $\frac{1}{2}$ ^h Wave in Dec. (+ 3'). 16^h to 16 $\frac{1}{2}$ ^h Wave in H.F. (- 0.0010), followed by small fluctuations in Dec. and H.F. till 18^h. 18^h to 19^h Two successive waves in Dec. (- 3') and (- 5'): in H.F. small. 20 $\frac{1}{2}$ ^h to 21 $\frac{1}{2}$ ^h Two successive waves in Dec. (- 4') and (- 3'): wave in H.F. (+ 0.0018). 16^d 23 $\frac{1}{2}$ ^h to 17^d 0 $\frac{1}{2}$ ^h Wave in Dec. (+ 5'): in H.F. (+ 0.0014): decrease of V.F. (- 0.0003).
 - 17^d 4^h to 6^h Small fluctuations in Dec. and H.F. 13 $\frac{1}{2}$ ^h to 14 $\frac{1}{2}$ ^h Decrease of Dec. (- 5'). 14 $\frac{1}{2}$ ^h to 15^h Increase of H.F. (+ 0.0010). 15^h to 15 $\frac{1}{2}$ ^h Decrease of V.F. (- 0.0003). 18 $\frac{1}{2}$ ^h to 19^h Wave in Dec. (- 3'), followed by small fluctuations in Dec. and H.F. till 22^h. 22^h to 22 $\frac{1}{2}$ ^h Wave in H.F. (+ 0.0010).
 - 18^d 18^h to 19^h Wave in Dec. (- 5'): in H.F. (- 0.0010).
 - 19^d 5^h to 5 $\frac{1}{2}$ ^h Wave in Dec. (+ 4'). 8^h to 9^h Wave in H.F. (+ 0.0014): in Dec. small, followed by small fluctuations in Dec., H.F., and V.F. till 12^h.

1900.

- January** 19^d 12^h to 21^d 12^h. See Plate I.
 21^d 13^h to 15^h Wave in H.F. (- '0010): in Dec. small. 18^h to 20^h Fluctuations in H.F.
 22^d 19^h to 20^h Sharp wave in Dec. (- 9'): in H.F. (- '0015): in V.F. small.
 23^d 1^h to 2^h Wave in Dec. (+ 4'): in H.F. small.
 24^d 20^h to 23^h Two successive waves in Dec. (- 4') and (- 3'): in H.F. small.
 25^d 22^h to 24^h Prolonged wave in Dec. (- 3'): small fluctuations in H.F.
 26^d 4^h to 10^h Small fluctuations in Dec. and H.F. 10^h to 12^h Wave in H.F. (- 0026): in Dec. small. 12^h to 16^h Loss of Dec. and H.F. registers. 18^h to 18^h Decrease of Dec. (- 5'), followed till 19^h by a sharp wave (- 9'). 18^h to 21^h Double wave in H.F. (+ '0010 to - '0010), followed by fluctuations in Dec. and H.F. till 23^h.
 27^d 1^h to 2^h Small wave in Dec. (- 3'). 17^h to 22^h Fluctuations in Dec. and H.F.
 28^d 16^h to 17^h Wave in Dec. (- 5'). 21^h to 22^h Shallow wave in Dec. (- 3'): in H.F. (- '0010). 23^h to 24^h Wave in H.F. (+ '0012).
 29^d 19^h to 20^h Sharp wave in Dec. (- 5').

- February** 4^d 12^h to 5^d 12^h. See Plate II.
 8^d 23^h to 9^d 0^h Sharp wave in Dec. (+ 6'). 8^d 23^h to 9^d 1^h Serrated wave in H.F. (+ '0030): decrease of V.F. (- '0007).
 9^d 1^h to 6^h Small fluctuations in Dec., H.F., and V.F. 12^h to 15^h Loss of Dec. and H.F. registers. 18^h to 19^h Wave in H.F. (- '0010). 21^h to 22^h Two successive waves in Dec. (- 7') and (- 4'): serrated wave in H.F. (+ 0028): decrease of V.F. (- '0004).
 10^d 3^h to 5^h Long shallow wave in Dec. (- 4'): in H.F. small. 14^h to 16^h Small fluctuations in H.F.
 11^d 2^h to 4^h Small double wave in Dec. (- 3' to + 2'): wave in H.F. (- '0012). 4^h to 5^h Wave in Dec. (+ 3'). 12^h to 13^h Wave in H.F. (- '0010). 17^h to 18^h Increase of H.F. (+ '0010). 20^h to 21^h Sharp wave in Dec. (- 8'): in H.F. (+ '0010): in V.F. small.
 12^d 11^h to 15^h Loss of Dec. and H.F. registers. 21^h to 22^h Wave in Dec. (- 4'): in H.F. (+ '0010).
 14^d 14^h to 17^h Shallow wave in V.F. (+ '0003). 16^h to 23^h Small fluctuations in Dec. and H.F.
 15^d 2^h to 3^h Small wave in Dec. (+ 3'). 2^h to 4^h Loss of V.F. register. 16^h to 19^h Long serrated wave in H.F. (- '0016). 17^h to 18^h Small fluctuations in Dec. 20^h to 23^h Irregular wave in H.F. (- '0026): two successive waves in Dec. (- 5') and (- 3'). 22^h to 23^h Decrease of V.F. (- '0003).
 17^d 3^h to 9^h Loss of V.F. register. 20^h to 21^h Wave in Dec. (- 4').
 21^d 3^h to 4^h Small wave in Dec. (+ 3'). 5^h to 6^h Shallow wave in H.F. (+ '0007). 19^h to 21^h Wave in Dec. (- 3'). 21^h to 22^h Small double wave in Dec. (- 2' to + 2'): serrated wave in H.F. (+ '0014).
 22^d 0^d to 2^h Two successive small waves in H.F. (+ '0007) and (+ '0007). 1^h to 2^h Wave in Dec. (+ 3').
 23^d 23^h to 24^h Decrease of Dec. (- 5').
 24^d 0^h to 6^h Small fluctuations in Dec. and H.F. 8^h to 9^h Wave in H.F. (- '0015). 9^h to 10^h Wave in Dec. (+ 5'). 20^h to 21^h Wave in Dec. (- 4').
 25^d 0^h to 1^h Small waves in Dec. and H.F. 19^h to 19^h Wave in Dec. (- 3'): in H.F. small.
 26^d 1^h to 3^h Wave in Dec. (+ 5'): in H.F. (+ '0009). 23^h to 24^h Small double wave in H.F. 23^h to 24^h Decrease of Dec. (- 2').
 27^d 18^h to 19^h Two successive waves in Dec. (- 4') and (- 3'): in H.F. small.

- March** 1^d 12^h to 16^h Fluctuations in Dec., H.F., and V.F. 16^h to 18^h Wave in Dec. (- 5'). 16^h to 19^h Prolonged wave in H.F. (- '0017): in V.F. small.
 2^d 0^h to 2^h Sharp double wave in Dec. (- 7' to + 6'): double wave in H.F. (+ '0012 to - '0010). 1^h to 2^h Wave in V.F. (+ '0004). 8^h to 14^h Small fluctuations in Dec. H.F. and V.F. 16^h to 18^h Serrated wave in Dec. (- 5'): in H.F. (- 0010). 19^h to 20^h Wave in Dec. (- 2'). 21^h to 22^h Wave in H.F. (+ '0010).
 3^d 1^h to 2^h Wave in Dec. (+ 3'). 5^h to 6^h Wave in Dec. (+ 4'): in H.F. small. 19^h to 20^h Small wave in Dec. (- 3'). 20^h to 22^h Sharp wave in Dec. (- 7'): in H.F. (+ 0019).
 4^d 6^h to 8^h Small wave in Dec. (+ 2'). 7^h to 9^h Wave in H.F. (+ 0010).

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- March**
- 6^d 19^h to 23^h Small fluctuations in H.F. 19^h to 21^h Wave in Dec. (- 3'). 23^h Decrease of Dec. (- 2').
23^h Decrease of H.F. (- 0010).
- 7^d 0^h to 2^h Wave in H.F. (+ 0010). 19^h Decrease of Dec. (- 2').
- 8^d 9^h to 11^h Small fluctuations in Dec., H.F., and V.F.
- 8^d 12^h to 10^d 12^h. See Plate II.
- 10^d 22^h to 24^h Small fluctuations in Dec. and H.F.
- 12^d 14^h to 16^h Loss of Dec., H.F., and V.F. registers. 18^h to 19^h Wave in Dec. (- 3'). 19^h to 21^h Small fluctuations in H.F. 22^h to 23^h Wave in Dec. (- 5'): in H.F. (+ 0012).
- 13^d 0^h to 2^h Small fluctuations in H.F.
- 13^d 2^h to 14^d 2^h. See Plate III.
- 14^d 14^h to 16^h Decrease of Dec. (- 8'). 18^h to 19^h Wave in Dec. (- 4'): in H.F. (+ 0016). 20^h Decrease of Dec. (- 5'). 20^h to 22^h Wave in H.F. (+ 0024). 21^h to 22^h Wave in V.F. (- 0003).
- 15^d 1^h to 3^h Double wave in Dec. (+ 3' to - 3'). 2^h to 4^h Wave in H.F. (+ 0010). 3^h to 4^h Wave in V.F. (- 0003). 4^h to 5^h Small waves in Dec. and H.F. 19^h to 20^h Small wave in Dec. (- 3'). 22^h to 24^h Wave in Dec. (- 3').
- 16^d 1^h to 2^h Wave in H.F. (+ 0010). 1^h to 3^h Double wave in Dec. (- 3' to + 2'). 15^h to 17^h Small fluctuations in Dec. and H.F.
- 17^d 18^h Decrease of Dec. (- 3').
- 18^d 23^h to 19^d 0^h Wave in Dec. (- 4'): in H.F. (+ 0010).
- 20^d 12^h to 16^h Loss of Dec. and H.F. registers. 20^h to 20^h Wave in Dec. (- 3'). 21^h Decrease of V.F. (- 0003).
- 22^d 18^h to 20^h Wave in H.F. (- 0010).
- 23^d 7^h to 8^h Decrease of Dec. (- 3'). 7^h to 8^h Decrease of H.F. (- 0016).
- 24^d 0^h to 2^h Two successive waves in Dec. (+ 3') and (+ 3'): wave in H.F. (+ 0010): decrease of V.F. (- 0003). 4^h to 5^h Wave in H.F. (- 0010): in Dec. small. 22^h to 23^h Wave in Dec. (- 3'): small fluctuations in H.F.
- 25^d 16^h to 21^h Small fluctuations in Dec. and H.F. 25^d 23^h to 26^d 0^h Wave in Dec. (- 3'): in H.F. (+ 0010).
- 29^d 4^h to 10^h Small fluctuations in Dec. and H.F.
- 30^d 1^h to 2^h Double wave in Dec. (+ 3' to - 2'): in H.F. small, followed by small fluctuations in Dec. and H.F. till 8^h. 19^h to 21^h Irregular wave in Dec. (- 7'): two successive waves in H.F. (- 0012) and (- 0014): wave in V.F. (+ 0003). 30^d 21^h to 31^d 3^h Prolonged double wave in Dec. (- 4' to + 3'): small fluctuations in H.F.
- 31^d 21^h to 23^h Two successive waves in H.F. (+ 0010) and (+ 0010): small double wave in Dec. (- 2' to + 2').
- April**
- 4^d 21^h to 23^h Sharp serrated wave in H.F. (+ 0026): double wave in Dec. (+ 4' to - 5'): wave in V.F. (- 0003).
- 5^d 2^h to 3^h Wave in Dec. (- 3'): in H.F. small. 7^h to 8^h Wave in H.F. (- 0010). 14^h to 17^h Small fluctuations in H.F., followed by a long wave till 20^h (- 0010). 19^h to 20^h Wave in Dec. (- 3'). 20^h to 22^h Small fluctuations in H.F.
- 7^d 0^h to 1^h Wave in H.F. (+ 0010): in Dec. (+ 2'): small decrease of V.F.
- 9^d 1^h to 2^h Small fluctuations in Dec. and H.F. 2^h to 4^h Decrease of Dec. (- 5'). 4^h to 6^h Wave in H.F. (+ 0010): in Dec. small. 19^h to 21^h Wave in Dec. (- 3'): in H.F. (- 0010).
- 10^d 2^h to 3^h Small fluctuations in Dec., H.F., and V.F. 3^h to 4^h Wave in Dec. (+ 4'): in H.F. (+ 0010): decrease of V.F. (- 0003). 5^h to 7^h Wave in Dec. (+ 4'). 5^h to 7^h Wave in H.F. (+ 0010). 15^h to 16^h Wave in H.F. with superposed fluctuations (- 0010). 17^h to 19^h Wave in Dec. (- 6'): in H.F. small. 20^h to 22^h Wave in Dec. (- 8'): small fluctuations in H.F.
- 11^d 1^h to 2^h Wave in Dec. (+ 4'): in H.F. small: decrease of V.F. (- 0003). 5^h to 8^h Shallow wave in Dec. (+ 4'): in H.F. (+ 0010). 17^h to 18^h Small waves in Dec. and H.F.
- 12^d 0^h to 3^h Two successive waves in Dec. (- 3') and (- 3'): in H.F. (+ 0007) and (+ 0010): small decrease of V.F. 18^h to 21^h Small fluctuations in Dec. and H.F.
- 13^d 15^h to 15^h Small wave in H.F. 16^h to 17^h Wave in H.F. (- 0010): in Dec. small. 19^h to 21^h Prolonged wave in H.F. (- 0010). 20^h to 21^h Wave in Dec. (- 3').

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- April 14^d 2½^h to 3½^h Wave in Dec. (+ 4'): in H.F. small.
 15^d 6^h to 8^h Very small fluctuations in Dec. and H.F.
 16^d 1^h to 2^h Wave in H.F. (+ .0012): decrease of Dec. (- 3').
 17^d 1^h to 2^h Small wave in Dec. (+ 2'): slight increase of H.F. 13^h to 23^h Fluctuations in H.F. (± .0007).
 18^d 0^h to 4^h Small fluctuations in Dec., H.F., and V.F. 12^h to 21^h Small fluctuations in H.F.
 19^d 19^h to 20^h Small wave in Dec. (- 2').
 21^d 0^h to 1^h Wave in Dec. (- 3'): in H.F. (+ .0010). 3½^h to 4½^h Small double waves in Dec. and H.F.
 23^d 20½^h to 21½^h Small wave in Dec. (- 2').
 24^d 12^h to 15^h Small fluctuations in Dec. and H.F.
 26^d 11^h to 18^h Small fluctuations in Dec. and H.F.
 27^d 17^h to 18½^h Small wave in H.F. (- .0008). 19¾^h to 20½^h Wave in Dec. (- 3'): in H.F. small.
 27^d 22^h to 28^d 11^h Loss of Dec. and H.F. registers.
 29^d 11^h to 24^h Small fluctuations in H.F.
 30^d 0^h to 2^h Double wave in Dec. (+ 3' to - 6'): double wave in H.F. (+ .0012 to - .0012): wave in V.F. (- .0003), followed by small fluctuations in Dec. and H.F. till 16^h. 16½^h to 17^h Decrease of V.F. (- .0003). 16½^h to 18½^h Wave in H.F. (- .0010): in Dec. (- 2'). 30^d 23½^h to May 1^d 2½^h Double wave in Dec. (- 3' to + 4'): fluctuations in H.F.
- May 1^d 3^h to 3½^h Wave in Dec. (- 3'). 4^h to 5^h Wave in H.F. (- .0024). 4½^h to 5½^h Wave in Dec. (+ 5'): in V.F. (+ .0003). 7½^h to 8½^h Decrease of H.F. (- .0022). 9^h to 11^h Small fluctuations in Dec. and H.F. 16^h to 17^h Wave in H.F. (+ .0010): in Dec. small. 17½^h to 18^h Wave in H.F. (+ .0010): in Dec. small, followed by small fluctuations in Dec. and H.F. till 23^h.
 2^d 15½^h to 16½^h Wave in H.F. (+ .0010). 17¾^h to 19½^h Long shallow wave in H.F. (- .0010). 19^h to 21^h Small fluctuations in Dec., followed by a shallow wave till 23½^h (- 2').
 3^d 2^h to 3^h Serrated wave in Dec. (+ 3'): in H.F. small. 20^h to 24^h Long wave in Dec. (- 6') with superposed fluctuations. 21^h to 23½^h Two successive waves in H.F. (+ .0016) and (+ .0010).
 4^d 14^h to 15^h Wave in H.F. (+ .0010). 21½^h to 22^h Small wave in Dec. (- 2'). 21½^h to 23^h Two successive waves in H.F. (+ .0010) and (+ .0007).
 5^d 1^h to 6^d 1^h. See Plate III.
 6^d 6^h to 7½^h Small fluctuations in Dec. and H.F. 20^h to 21^h Sharp wave in H.F. (+ .0016): in Dec. small. 21½^h to 24^h Two successive waves in Dec. (- 5') and (- 4'): fluctuations in H.F. (± .0007).
 7^d 16^h to 23^h Small fluctuations in H.F.
 12^d 19½^h to 22^h Serrated wave in H.F. (- .0010), followed by small fluctuations till 23^h. 20½^h to 23^h Wave in Dec. (- 6').
 13^d 0^h to 1½^h Small fluctuations in H.F. 0½^h to 1^h Wave in Dec. (+ 4'): decrease of H.F. (- .0003). 1½^h to 2^h Decrease of H.F. (- .0016). 1½^h to 2½^h Double wave in Dec. (- 2' to + 3'). 7^h to 9^h Small fluctuations in Dec. and H.F.
 18^d 15^h to 21^h Small fluctuations in H.F. 21½^h to 24^h Wave in Dec. (- 4'). 22½^h to 24^h Flat-crested wave in H.F. (- .0010).
 19^d 3^h to 4^h Shallow wave in Dec. (+ 2'): in H.F. (+ .0007). 12^h to 18^h Small fluctuations in H.F.
 26^d 4^h to 8^h Prolonged wave in Dec. (- 3').
 29^d 14^h to 22^h Small fluctuations in H.F. 22^h to 23½^h Wave in Dec. (- 3'): in H.F. small.
 30^d 0½^h to 3^h Wave in Dec. (+ 4'): small double wave in H.F. 30^d 22^h to 31^d 1^h Wave in Dec. (- 5').
- June 1^d 1½^h to 2^h Very small positive wave in Dec. 16½^h to 17^h Small wave in H.F. (+ .0007). 21^h to 21½^h Decrease of V.F. (- .0003). 22½^h to 24^h Flat-crested wave in Dec. (- 2'): in H.F. (+ .0010).
 2^d 18½^h to 19^h Wave in H.F. (+ .0010). 20^h to 21^h Decrease of Dec. (- 3'). 2^d 23½^h to 3^d 3^h Double wave in Dec. (- 3' to + 3').
 3^d 1½^h to 3^h Wave in H.F. (+ .0010).

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- June
- 4^d 3^h to 4^h Shallow wave in Dec. (+ 2').
- 5^d 11^h to 18^h Small fluctuations in H.F. 22^h to 22^½^h Small wave in H.F. (+ .0010). 22^h to 23^½^h Wave in Dec. (- 4').
- 6^d 14^h to 23^h Small fluctuations in H.F.
- 8^d 15^h to 18^h Double wave in H.F. with superposed fluctuations (+ .0010 to - .0008).
- 9^d 13^h to 18^h Small fluctuations in H.F.
- 10^d 14^h to 16^h Small wave in H.F.
- 14^d 15^½^h to 16^½^h Wave in H.F. (- .0010).
- 17^d 15^h to 15^½^h Small wave in H.F. (+ .0007).
- 18^d 10^h to 16^h Loss of Dec., H.F., and V.F. registers.
- 19^d 12^h to 19^h Small fluctuations in H.F.
- 21^d 15^h to 21^h Prolonged shallow wave in H.F. (+ .0010).
- 22^d 10^h to 23^d 13^h Loss of V.F. register. 22^d 12^h to 22^d 16^h Loss of Dec. and H.F. registers.
- 23^d 13^½^h to 14^h Small wave in H.F. (+ .0008).
- 26^d 12^h to 17^½^h Loss of Dec., H.F., and V.F. registers.
- 27^d 10^h to 16^h Loss of Dec., H.F., and V.F. registers. 17^h to 18^h Small fluctuations in H.F. 18^h to 19^½^h Double wave in H.F. (+ .0010 to - .0010). 21^¾^h to 22^½^h Wave in H.F. (+ .0010): small double wave in Dec.
- 28^d 2^½^h to 3^h Wave in Dec. (+ 3'). 2^½^h to 4^h Wave in H.F. (+ .0012). 6^h to 8^h Small fluctuations in Dec. and H.F. 10^h to 15^h Loss of Dec., H.F., and V.F. registers. 15^h to 19^h Small fluctuations in H.F.
- 29^d 5^h to 9^h Small fluctuations in Dec. 10^h to 15^h Loss of Dec., H.F., and V.F. registers. 15^h to 21^h Small fluctuations in H.F.
- 30^d 4^h to 5^h Wave in Dec. (+ 4').

- July
- 2^d 11^h to 17^¾^h Loss of Dec. and V.F. registers.
- 2^d 11^h to 12^d 9^h Loss of H.F. register: suspension thread broken.
- 4^d 12^h to 17^½^h Loss of Dec. and V. F. registers.
- 6^d 18^h to 7^d 12^h Loss of V.F. register.
- 10^d 11^½^h to 15^h Loss of V.F. register.
- 12^d 12^h to 16^h Loss of Dec. and H.F. registers.
- 17^d 14^h to 18^h Small fluctuations in H.F.
- 18^d 2^h to 8^h Small fluctuations in Dec. 20^h to 20^½^h Small wave in H.F. (+ .0010).
- 19^d 18^h to 22^h Small fluctuations in H.F.
- 20^d 11^h to 21^h Small fluctuations in H.F. 21^½^h to 22^½^h Wave in Dec. (- 5'): in H.F. (+ .0008).
- 21^d 0^h to 1^h Wave in Dec. (+ 2'): in H.F. (+ .0010). 18^h to 22^h Small fluctuations in H.F.
- 24^d 15^½^h to 16^½^h Wave in H.F. (+ .0015). 16^½^h to 18^h Double wave in H.F. (+ .0010 to - .0010): in Dec. small, followed by fluctuations in H.F. till 22^h. 21^h to 21^½^h Decrease of Dec. (- 4'). 22^h to 24^h Irregular wave in H.F. (+ .0010). 23^h to 24^h Wave in Dec. (- 6').
- 25^d 0^½^h to 1^h Wave in Dec. (- 3'). 4^½^h to 6^h Shallow wave in Dec. (+ 2'). 7^h to 10^h Small fluctuations in Dec. and H.F.
- 26^d 13^½^h to 27^d 12^½^h Loss of V.F. register. 26^d 23^½^h to 24^h Wave in Dec. (+ 3'): in H.F. (+ .0010).
- 27^d 17^h to 21^h Small fluctuations in H.F.
- 28^d 12^h to 16^h Small fluctuations in H.F. 16^½^h to 18^h Wave in H.F. (+ .0010).
- 29^d 12^h to 19^h Small fluctuations in H.F.
- 31^d 14^h to 16^h Wave in V.F. (+ .0004). 22^½^h to 24^h Wave in Dec. (- 3'): in H.F. small. 31^d 23^h to August 1^d 16^h Loss of V.F. register.

- August
- 1^d 2^h to 4^h Double wave in Dec. (+ 2' to - 3'): small double wave in H.F. 5^½^h to 6^½^h Small wave in H.F. (+ .0008). 14^½^h to 17^½^h Double wave in H.F. (+ .0010 to - .0014). 15^½^h to 16^½^h Decrease of Dec. (- 6'). 20^h to 22^h Wave in Dec. (- 3').

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- August
- 2^d 14 $\frac{1}{2}$ ^h to 16^h Two successive small waves in H.F. (- '0008) and (- '0008).
- 3^d 13^h to 20^h Small fluctuations in H.F.
- 4^d 22^h to 5^d 11^h Loss of Dec. and H.F. registers.
- 7^d 6^h to 8^h Wave in Dec. (+ 3'): in H.F. small. 14 $\frac{3}{4}$ ^h to 15 $\frac{1}{2}$ ^h Wave in H.F. (- '0010), followed by fluctuations till 20^h (\pm '0007).
- 8^d 4^h to 11^h Small fluctuations in Dec. and H.F. 13^h to 14^h Small wave in H.F. (+ '0008), followed by small fluctuations till 21^h.
- 9^d 11^h to 16 $\frac{1}{2}$ ^h Loss of V.F. register.
- 12^d 14^h to 20^h Small fluctuations in H.F. 12^d 21^h to 13^d 16 $\frac{1}{2}$ ^h Loss of Dec. and H.F. registers.
- 13^d 21^h to 22^h Wave in H.F. (+ '0010).
- 14^d 8^h to 11 $\frac{1}{2}$ ^h Loss of Dec. and H.F. registers.
- 15^d 13^h to 16^h Long irregular wave in H.F. (+ '0010).
- 17^d 1^h to 2 $\frac{1}{2}$ ^h Wave in Dec. (+ 3'): in H.F. (+ '0010).
- 18^d 17 $\frac{1}{2}$ ^h to 19 $\frac{1}{2}$ ^h Irregular wave in H.F. (+ '0010). 21 $\frac{1}{2}$ ^h to 22^h Wave in H.F. (+ '0010). 21 $\frac{1}{2}$ ^h to 23 $\frac{1}{2}$ ^h Wave in Dec. (- 4').
- 19^d 18^h to 19^h Small wave in H.F. (+ '0012), followed by small fluctuations till 23^h. 19^d 23 $\frac{1}{2}$ ^h to 20^d 0 $\frac{1}{2}$ ^h Wave in Dec. (- 3'): in H.F. (+ '0008).
- 20^d 1 $\frac{1}{2}$ ^h to 3^h Wave in H.F. (+ '0010): decrease of V.F. (- '0002). 1 $\frac{1}{2}$ ^h to 4 $\frac{1}{2}$ ^h Double wave in Dec. (+ 3' to - 3'). 12^h to 18^h Fluctuations in H.F. (\pm '0006). 19 $\frac{1}{2}$ ^h to 21^h Sharp double-crested wave in Dec. (- 5').
- 21^d 14^h to 16 $\frac{1}{2}$ ^h Wave in H.F. (+ '0008). 22 $\frac{1}{2}$ ^h to 23 $\frac{1}{2}$ ^h Wave in Dec. (+ 3'): in H.F. (+ '0007).
- 22^d 2 $\frac{1}{2}$ ^h to 3 $\frac{1}{2}$ ^h Wave in Dec. (+ 3').
- 25^d 14 $\frac{1}{2}$ ^h to 22^h Fluctuations in H.F. (\pm '0005).
- 27^d 15^h to 16 $\frac{1}{2}$ ^h Wave in H.F. (+ '0010). 17 $\frac{1}{2}$ ^h to 19 $\frac{1}{2}$ ^h Prolonged wave in H.F. (+ '0016). 20 $\frac{3}{4}$ ^h to 22^h Double-crested wave in Dec. (- 5'): double wave in H.F. (- '0010 to + '0020): decrease of V.F. (- '0003).
- 28^d 11 $\frac{1}{2}$ ^h to 16 $\frac{1}{2}$ ^h and 28^d 23^h to 29^d 9 $\frac{1}{2}$ ^h Loss of Dec. and H.F. registers.
- September
- 3^d 0 $\frac{1}{2}$ ^h to 1 $\frac{1}{2}$ ^h Wave in H.F. (+ '0008): in Dec. small. 22 $\frac{1}{2}$ ^h to 23^h Small wave in H.F. (+ '0008).
- 4^d 3^h to 4 $\frac{1}{2}$ ^h Wave in Dec. (- 3'): in H.F. (- '0010), followed by decrease of Dec. till 5^h (- 3'). 9^h to 10^h Small fluctuations in Dec. and H.F. 15^h to 17^h Small fluctuations in H.F.
- 5^d 9^h to 11^h Small fluctuations in H.F. 14^h to 15^h Wave in Dec. (+ 2'). 14 $\frac{1}{2}$ ^h to 16^h Wave in H.F. (- '0010). 20^h to 22 $\frac{1}{2}$ ^h Wave in Dec. (- 3'), followed by a smaller wave till 24^h. 21^h to 23^h Wave in H.F. (- '0010).
- 9^d 12^h to 16^h Small fluctuations in H.F.
- 10^d 3^h to 4^h Wave in Dec. (+ 2'): small increase of H.F.
- 13^d 16^h to 18^h Small fluctuations in H.F. 21^h to 22 $\frac{1}{2}$ ^h Small double wave in H.F. 21 $\frac{1}{2}$ ^h to 23 $\frac{1}{2}$ ^h Wave in Dec. (- 2').
- 15^d 15^h to 19^h Fluctuations in H.F. (\pm '0010): in Dec. and V.F. small.
- 16^d 1 $\frac{1}{2}$ ^h to 4^h Double wave in Dec. (+ 4' to - 3'): shallow wave in H.F. (+ '0010). 2^h to 3 $\frac{1}{2}$ ^h Wave in V.F. (- '0003).
- 17^d 0^h to 1 $\frac{1}{2}$ ^h Double wave in Dec. (+ 3' to - 2'): decrease of V.F. (- '0003). 0^h to 2^h Irregular wave in H.F. (+ '0010).
- 18^d 0 $\frac{1}{2}$ ^h to 1^h Wave in Dec. (+ 2').
- 22^d 22 $\frac{1}{2}$ ^h to 23^d 1^h Two successive waves in Dec. (- 3') and (- 3'): in H.F. (- '0010) and (- '0010): in V.F. small.
- 23^d 5 $\frac{1}{2}$ ^h to 8^h Wave in Dec. (+ 5'): in H.F. small.
- 27^d 15 $\frac{1}{2}$ ^h Sudden decrease of Dec. (- 2'): of H.F. (- '0010): of V.F. small.
- 28^d 6^h to 7 $\frac{1}{2}$ ^h Small wave in Dec. (+ 2').
- 29^d 3^h to 4 $\frac{1}{2}$ ^h Serrated wave in Dec. (+ 3'): in H.F. and V.F. small.
- 30^d 20 $\frac{3}{4}$ ^h to 21 $\frac{1}{2}$ ^h Wave in H.F. (+ '0010).

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- October 4^d 12 $\frac{1}{2}$ ^h to 16 $\frac{1}{2}$ ^h Loss of Dec. and H.F. registers. 17^h to 18^h Small fluctuations in Dec. and H.F. 18 $\frac{1}{2}$ ^h to 20 $\frac{1}{2}$ ^h Two successive waves in H.F. ($- \cdot 0010$) and ($- \cdot 0010$). 22^h to 22 $\frac{1}{2}$ ^h Flat-crested wave in Dec. ($- 6'$): sharp wave in H.F. ($+ \cdot 0012$): in V.F. small.
- 5^d 1 $\frac{1}{2}$ ^h to 3 $\frac{1}{2}$ ^h Shallow wave in H.F. ($+ \cdot 0010$): in V.F. ($- \cdot 0003$). 2^h to 5^h Prolonged wave in Dec. ($- 4'$).
- 8^d 19^h to 22^h Small fluctuations in H.F. 21 $\frac{1}{2}$ ^h to 22^h Decrease of Dec. ($- 3'$).
- 9^d 19^h to 23 $\frac{1}{2}$ ^h Small fluctuations in Dec. and H.F.
- 10^d 21^h to 23^h Double wave in H.F. ($+ \cdot 0008$ to $- \cdot 0008$). 21 $\frac{1}{2}$ ^h to 23 $\frac{1}{2}$ ^h Wave in Dec. ($- 4'$).
- 12^d 0^h to 0 $\frac{1}{2}$ ^h Wave in Dec. ($+ 2'$).
- 16^d 22 $\frac{1}{2}$ ^h to 23 $\frac{1}{2}$ ^h Wave in Dec. ($- 3'$): in H.F. ($+ \cdot 0010$).
- 18^d 18^h to 19 $\frac{1}{2}$ ^h Wave in Dec. ($- 3'$).
- 20^d 10^h to 13^h Small fluctuations in Dec., H.F., and V.F. 13^h to 13 $\frac{1}{2}$ ^h Wave in Dec. ($- 4'$): in H.F. ($- \cdot 0014$).
- 21^d 19^h to 20^h Wave in Dec. ($- 3'$).
- 23^d 23^h to 23 $\frac{1}{2}$ ^h Wave in Dec. ($+ 2'$): in H.F. small.
- 24^d 11 $\frac{1}{4}$ ^h to 15 $\frac{1}{2}$ ^h Loss of Dec. and H.F. registers.
- 25^d 3^h to 5 $\frac{1}{2}$ ^h Small sharp fluctuations in Dec. and H.F. 6^d to 7^h Wave in H.F. ($- \cdot 0010$). 6 $\frac{1}{2}$ ^h to 7 $\frac{1}{2}$ ^h Wave in Dec. ($+ 3'$). 8^h to 8 $\frac{1}{2}$ ^h Wave in Dec. ($- 3'$). 8^h to 9^h Wave in H.F. ($- \cdot 0016$). 9^h to 11^h Serrated wave in Dec. ($- 5'$). 9 $\frac{1}{2}$ ^h to 10^h Sharp wave in H.F. ($+ \cdot 0016$). 11 $\frac{1}{2}$ ^h to 12^h Wave in Dec. ($+ 3'$): in H.F. ($+ \cdot 0010$). 12 $\frac{1}{2}$ ^h to 13 $\frac{1}{2}$ ^h Wave in H.F. ($+ \cdot 0010$): in Dec. small. 19^h to 23^h Small fluctuations in Dec. and H.F.
- 26^d 1 $\frac{1}{2}$ ^h to 2 $\frac{1}{2}$ ^h Flattened wave in Dec. ($+ 3'$): wave in H.F. ($+ \cdot 0020$): decrease of V.F. ($- \cdot 0003$). 5 $\frac{1}{2}$ ^h to 8^h Sharp wave in Dec. ($+ 10'$): in H.F. ($+ \cdot 0010$). 6^h to 8 $\frac{1}{2}$ ^h Wave in V.F. ($- \cdot 0004$), followed by small fluctuations in Dec., H.F., and V.F. till 14^h. 18^h to 19 $\frac{1}{2}$ ^h Sharp wave in Dec. ($- 5'$): in H.F. ($+ \cdot 0012$).
- 27^d 3^h to 5^h Fluctuations in Dec. ($\pm 2'$): in H.F. ($\pm \cdot 0008$). 6^h to 7 $\frac{1}{2}$ ^h Wave in H.F. ($- \cdot 0008$). 8^h to 10^h Wave in H.F. ($- \cdot 0010$). 20 $\frac{1}{2}$ ^h to 21 $\frac{1}{2}$ ^h Serrated wave in Dec. ($- 4'$): in H.F. ($+ \cdot 0010$).
- 29^d 1 $\frac{1}{2}$ ^h to 2 $\frac{1}{2}$ ^h Wave in Dec. ($+ 2'$).
- 30^d 19 $\frac{1}{2}$ ^h to 20 $\frac{1}{2}$ ^h Flat-crested wave in Dec. ($- 5'$): in H.F. small.

- November 1^d 19^h to 21^h Double wave in Dec. ($+ 3'$ to $- 6'$): Double wave in H.F. ($+ \cdot 0012$ to $- \cdot 0014$).
- 2^d 18 $\frac{1}{2}$ ^h to 20^h Wave in Dec. ($- 5'$): in H.F. ($- \cdot 0010$): in V.F. small, followed till 22 $\frac{1}{2}$ ^h by a smaller wave in Dec. ($- 3'$).
- 12^d 17^h to 23^h Small fluctuations in Dec. and H.F. 23^h to 24^h Wave in Dec. ($- 3'$).
- 13^d 1 $\frac{1}{2}$ ^h to 2 $\frac{1}{2}$ ^h Shallow wave in H.F. ($+ \cdot 0010$). 15 $\frac{1}{2}$ ^h to 16 $\frac{1}{2}$ ^h Shallow wave in Dec. ($+ 3'$).
- 14^d 18 $\frac{1}{2}$ ^h Small decrease of Dec. ($- 2'$). 18^h to 23 $\frac{1}{2}$ ^h Prolonged double wave in H.F. ($- \cdot 0013$ to $+ \cdot 0012$). 21 $\frac{1}{2}$ ^h to 23 $\frac{1}{2}$ ^h Irregular wave in Dec. ($- 3'$).
- 18^d 18 $\frac{1}{2}$ ^h to 21^h Wave in V.F. ($- \cdot 0003$). 20 $\frac{1}{2}$ ^h to 21 $\frac{1}{2}$ ^h Wave in Dec. ($+ 3'$). 20 $\frac{1}{2}$ ^h to 22^h Wave in H.F. ($- \cdot 0010$).
- 19^d 2 $\frac{1}{2}$ ^h to 3 $\frac{1}{2}$ ^h Wave in Dec. ($+ 2'$).
- 23^d 9^h to 13^h Loss of Dec., H.F., and V.F. registers. 20 $\frac{1}{2}$ ^h to 21^h Wave in Dec. ($- 3'$).
- 24^d 19 $\frac{1}{2}$ ^h to 20 $\frac{1}{2}$ ^h Wave in Dec. ($- 4'$).
- 25^d 2 $\frac{1}{2}$ ^h to 3 $\frac{1}{2}$ ^h Wave in Dec. ($+ 2'$). 25^d 18^h to 26^d 11^h Loss of V.F. register. 25^d 23^h to 24^h Wave in H.F. ($+ \cdot 0010$): in Dec. small.

- December 2^d 14^h to 16^h Wave in H.F. ($- \cdot 0015$): small fluctuations in Dec.
- 3^d 21 $\frac{1}{2}$ ^h to 22^h Small wave in H.F. ($+ \cdot 0007$).
- 7^d 16^h to 17 $\frac{1}{2}$ ^h Small fluctuations in Dec., H.F., and V.F.
- 10^d 5^h to 6 $\frac{1}{2}$ ^h Wave in Dec. ($+ 3'$). 5 $\frac{1}{2}$ ^h to 8 $\frac{1}{2}$ ^h Wave in H.F. ($+ \cdot 0010$).

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- December 11^d 19^h to 20^h Serrated wave in Dec. (- 4'): in H.F. (+ .0010).
- 13^d 22^h to 14^d 11^h Loss of Dec. and H.F. registers.
- 14^d 20¹/₂^h to 21¹/₂^h Wave in Dec. (- 3'): in H.F. and V.F. small.
- 17^d 10^h to 14¹/₂^h Loss of Dec., H.F., and V.F. registers.
- 18^d 12^h to 16¹/₂^h Loss of Dec. register.
- 19^d 10^h to 15^h Loss of Dec., H.F., and V.F. registers.
- 20^d 9^h to 13^h Loss of Dec., H.F., and V.F. registers.
- 22^d 16^h to 20¹/₂^h Loss of Dec. and V.F. registers.
- 27^d 2¹/₂^h to 3¹/₂^h Sharp wave in Dec. (+ 5'): in H.F. (+ .0012): decrease of V.F. (- .0003). 19¹/₂^h to 23¹/₂^h
Prolonged wave in Dec. (- 8'): in H.F. (- .0010), both with superposed fluctuations.
- 28^d 0¹/₂^h to 1¹/₂^h Wave in Dec. (+ 7'): in H.F. (+ .0014): decrease of V.F. (- .0004). 18^h to 21¹/₂^h Fluctuations
in Dec and H.F. 21¹/₂^h to 22¹/₂^h Wave in Dec. (- 4'): in H.F. (+ .0013).

EXPLANATION OF THE PLATES.

The magnetic motions figured on the Plates are :—

- (1.) Those for days of great disturbance—None in 1900.
- (2.) Those for days of lesser disturbance—January 14-15, 19-20, 20-21, February 4-5, March 8-9, 9-10, 13^d 2^h to 14^d 2^h, May 5^d 1^h to 6^d 1^h.
- (3.) Those for four quiet days—February 6, April 25, August 30, November 5—which are given as types of the ordinary diurnal movement at four seasons of the year.

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

The magnetic declination, horizontal force, and vertical force are indicated by the letters D., H., and V. respectively; the declination (west) is expressed in minutes of arc, the units for horizontal and vertical force are 0.0001 of the whole horizontal and vertical forces respectively, the corresponding scales being given on the sides of each diagram. Equal changes of amplitude in the several registers correspond nearly to equal changes of absolute magnetic force, 0.001 of a C.G.S. unit being represented by $0^{\text{m}}.80 = 20.3$ in the declination curve, by $0^{\text{m}}.74 = 18.8$ in the horizontal force curve, and by $0^{\text{m}}.72 = 18.2$ in the vertical force curve.

Downward motion indicates increase of declination and of horizontal and vertical force.

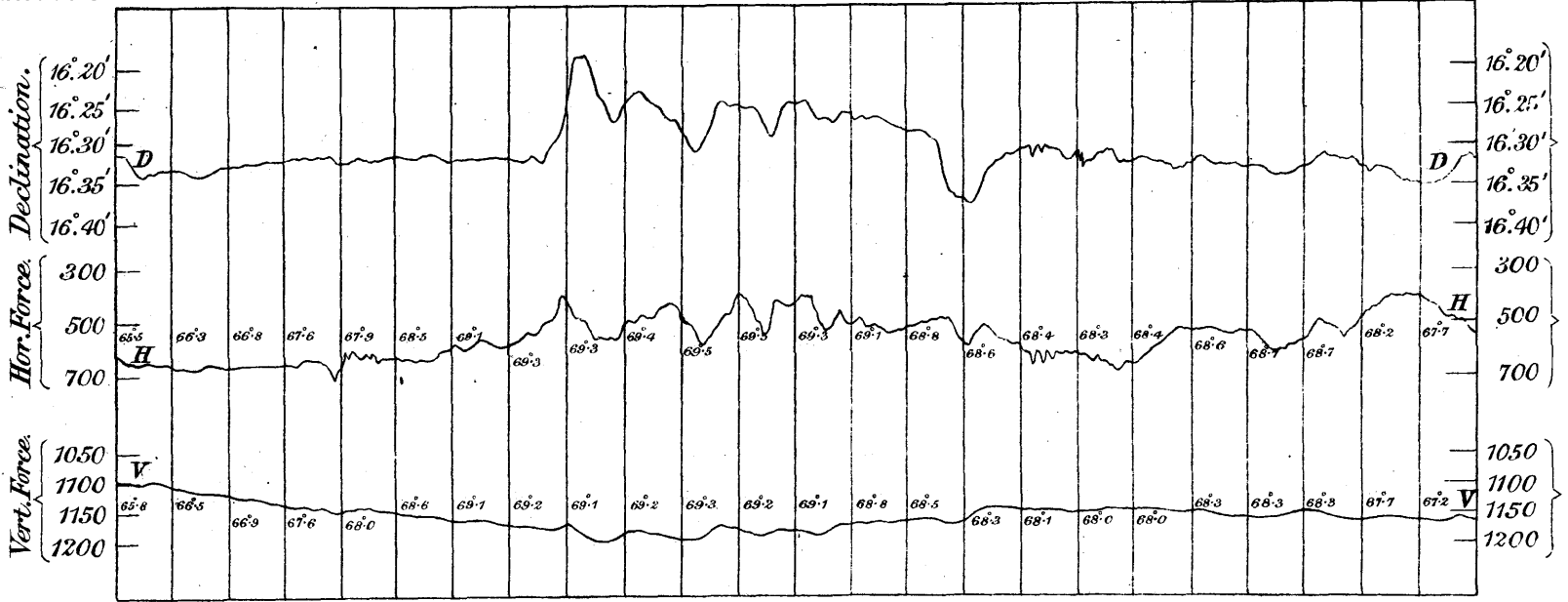
The earth current registers are not given on the plates in consequence of interference with the records caused by the running of trains on the City and South London Electric Railway.

An arrow (↑) indicates that the register was out of range of registration in the direction of the arrow head.

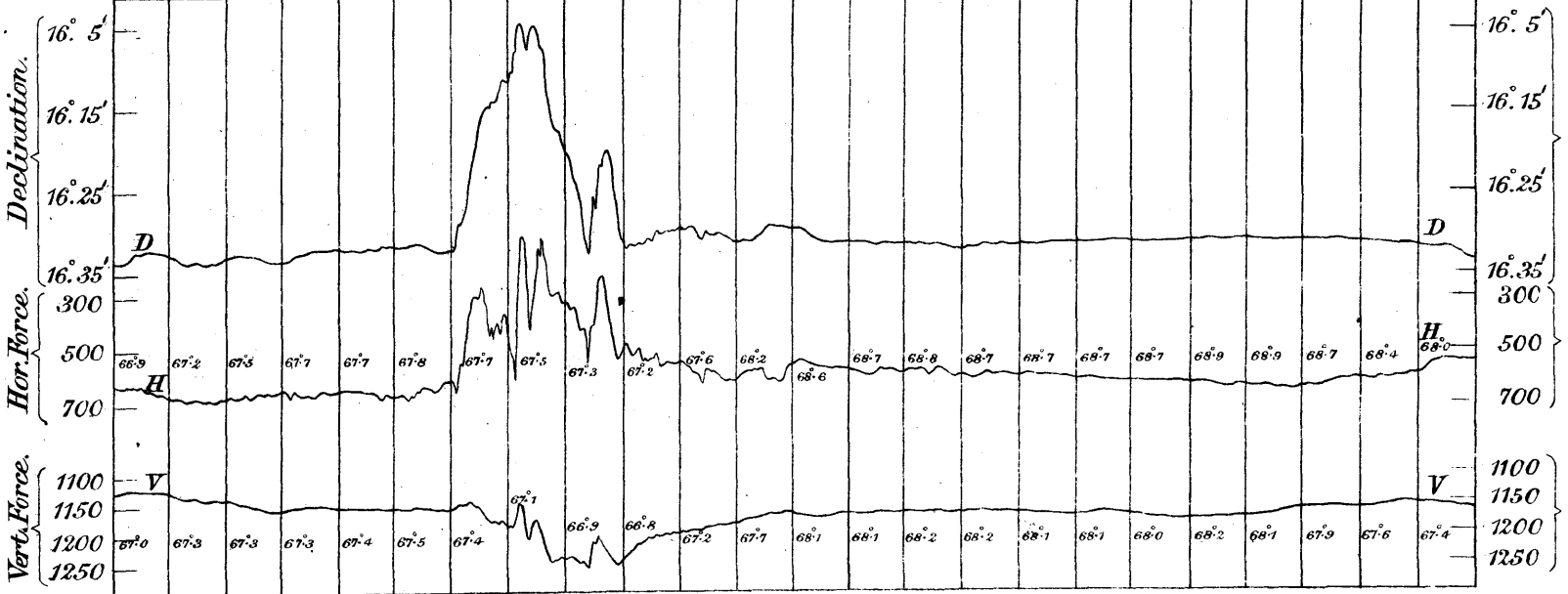
The temperatures (Fahrenheit) of the horizontal and vertical force magnets at each hour are given in small figures on the Diagrams.

Magnetic Disturbances recorded at the Royal Observatory, Greenwich, 1900.

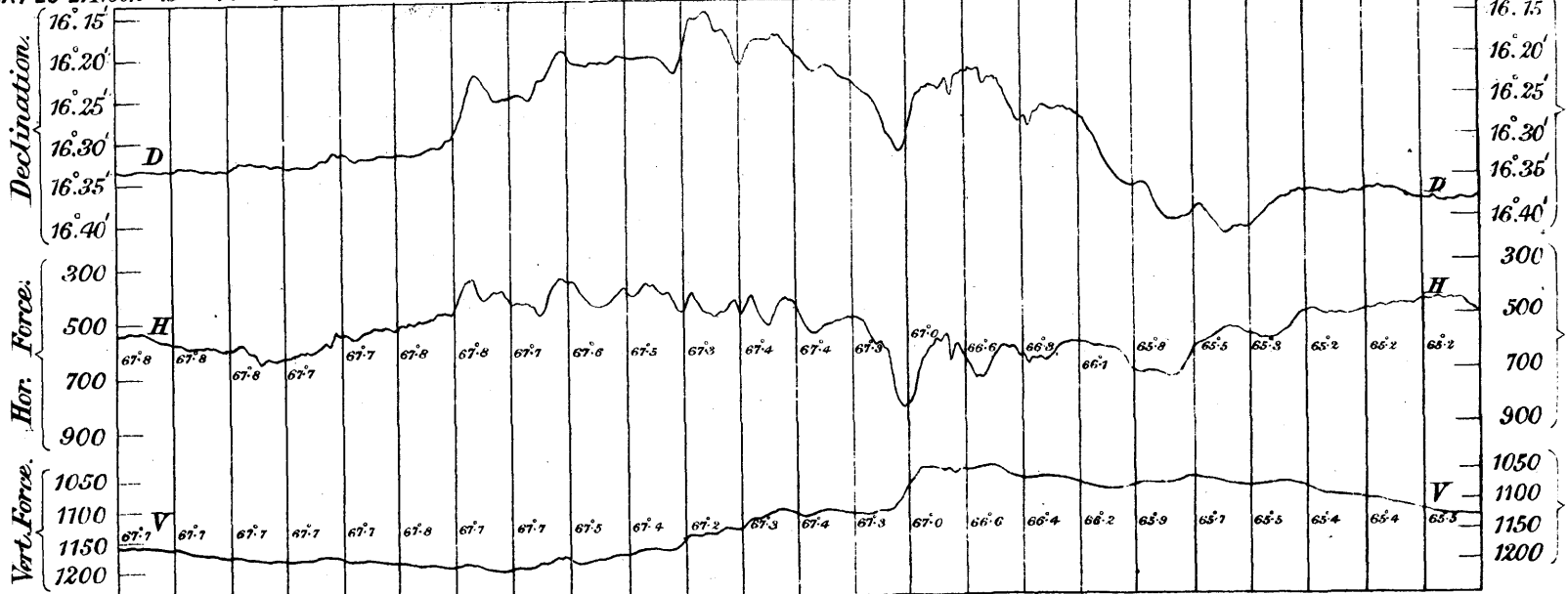
JANUARY 14-15 Noon 13h 14h 15h 16h 17h 18h 19h 20h 21h 22h 23h Midn. 1h 2h 3h 4h 5h 6h 7h 8h 9h 10h 11h Noon



JANUARY 19-20 Noon 13h 14h 15h 16h 17h 18h 19h 20h 21h 22h 23h Midn. 1h 2h 3h 4h 5h 6h 7h 8h 9h 10h 11h Noon



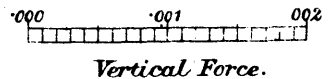
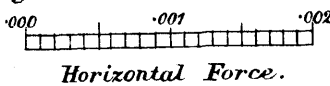
JANUARY 20-21 Noon 13h 14h 15h 16h 17h 18h 19h 20h 21h 22h 23h Midn. 1h 2h 3h 4h 5h 6h 7h 8h 9h 10h 11h Noon



E. Weiler & Grahams, Ltd Litho. London.

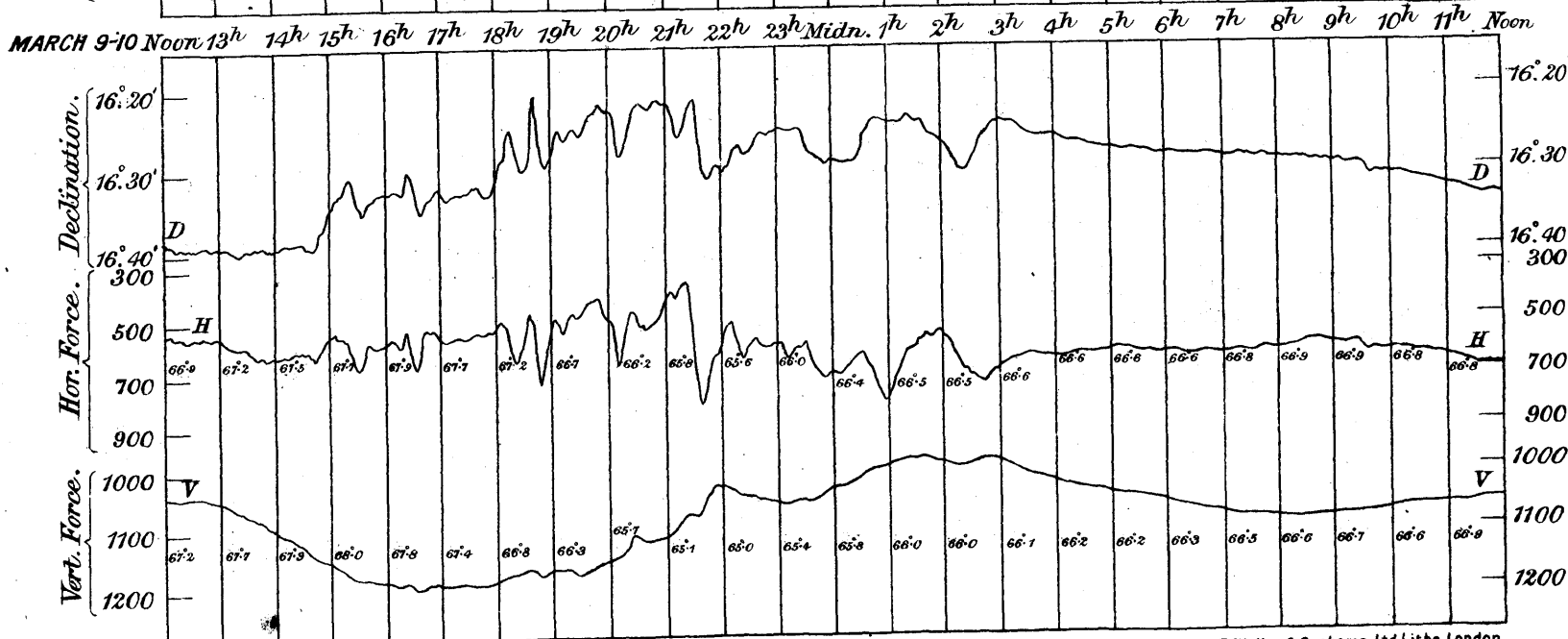
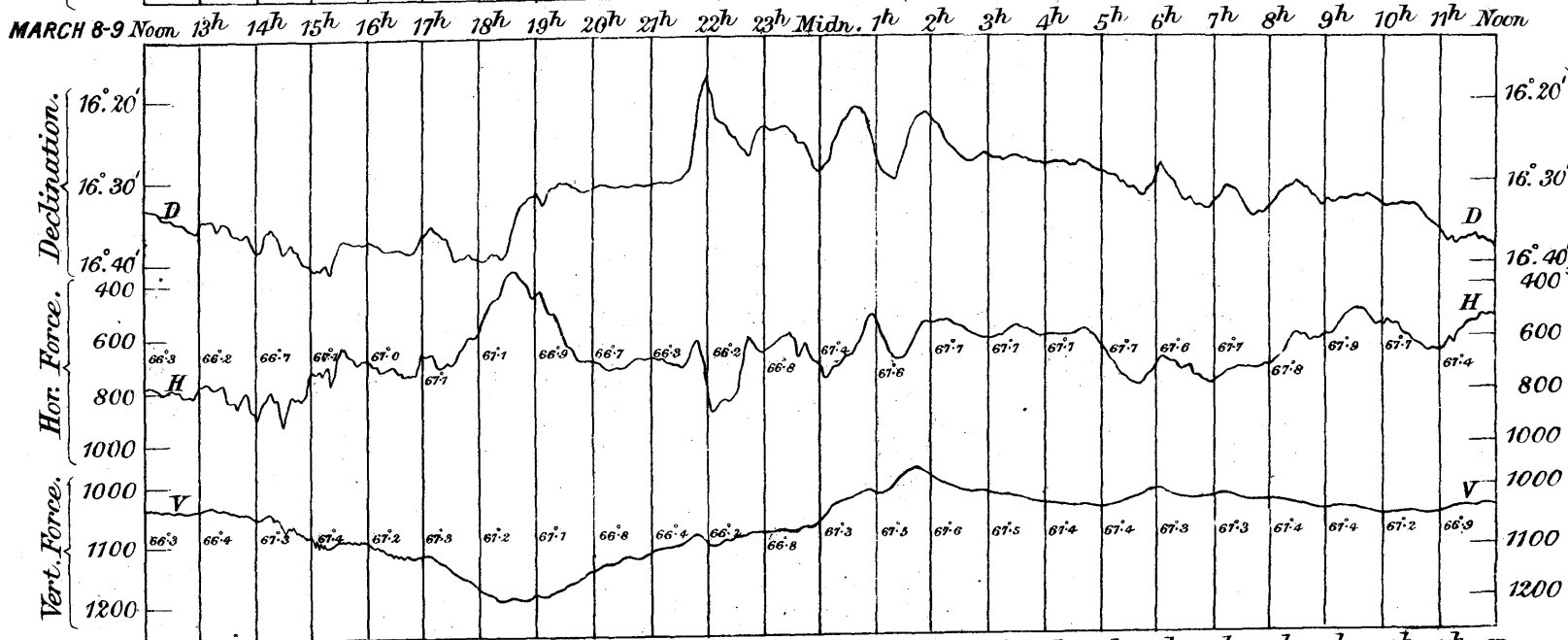
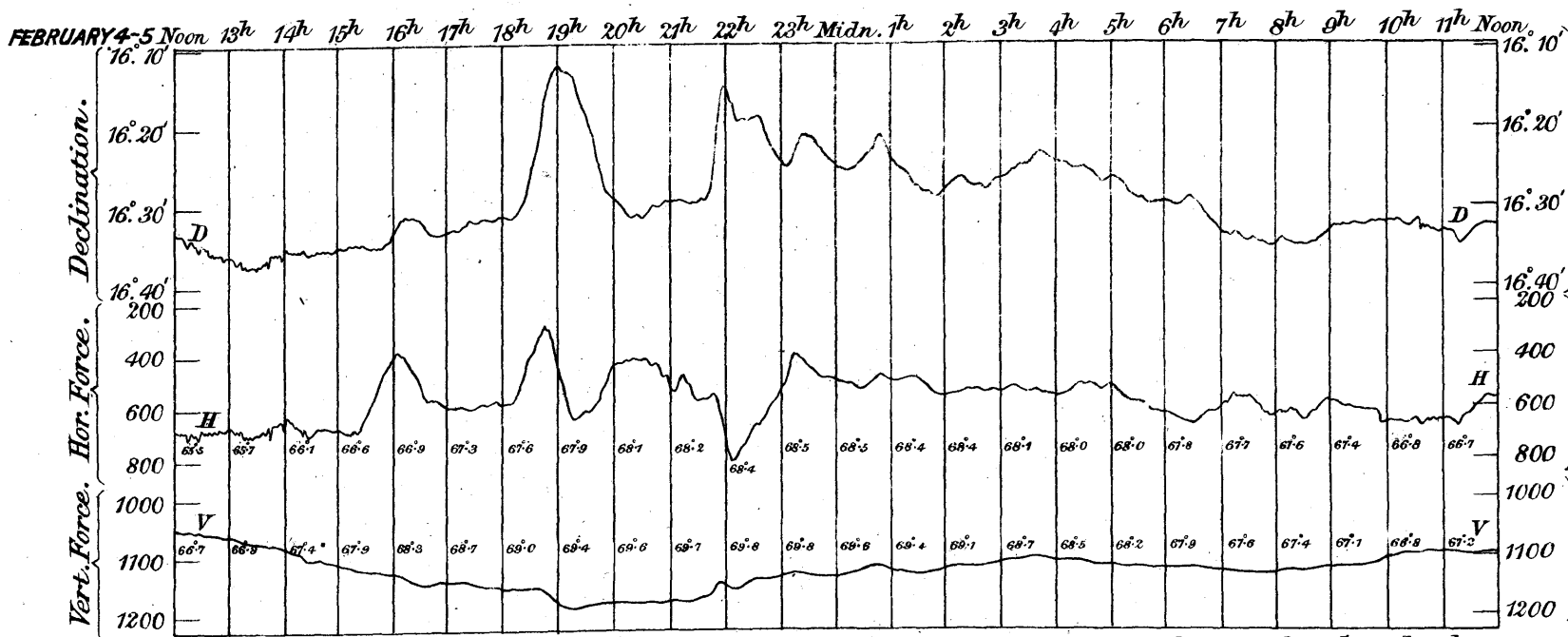
1873.1.1902.

Scales for Magnetic Elements in C.G.S. measure.



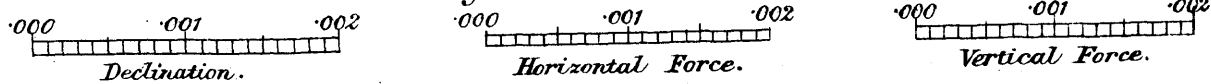


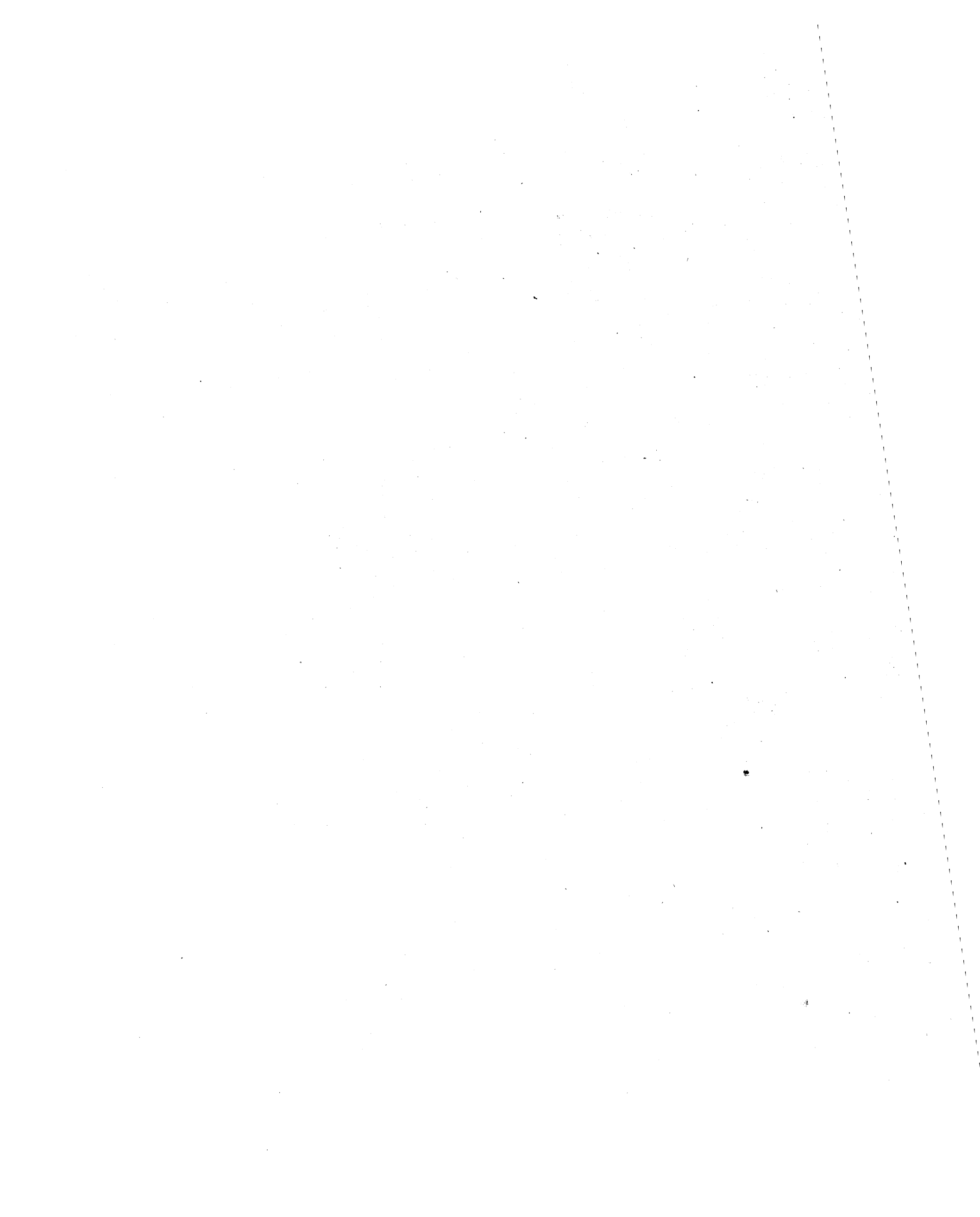
Magnetic Disturbances recorded at the Royal Observatory, Greenwich, 1900.



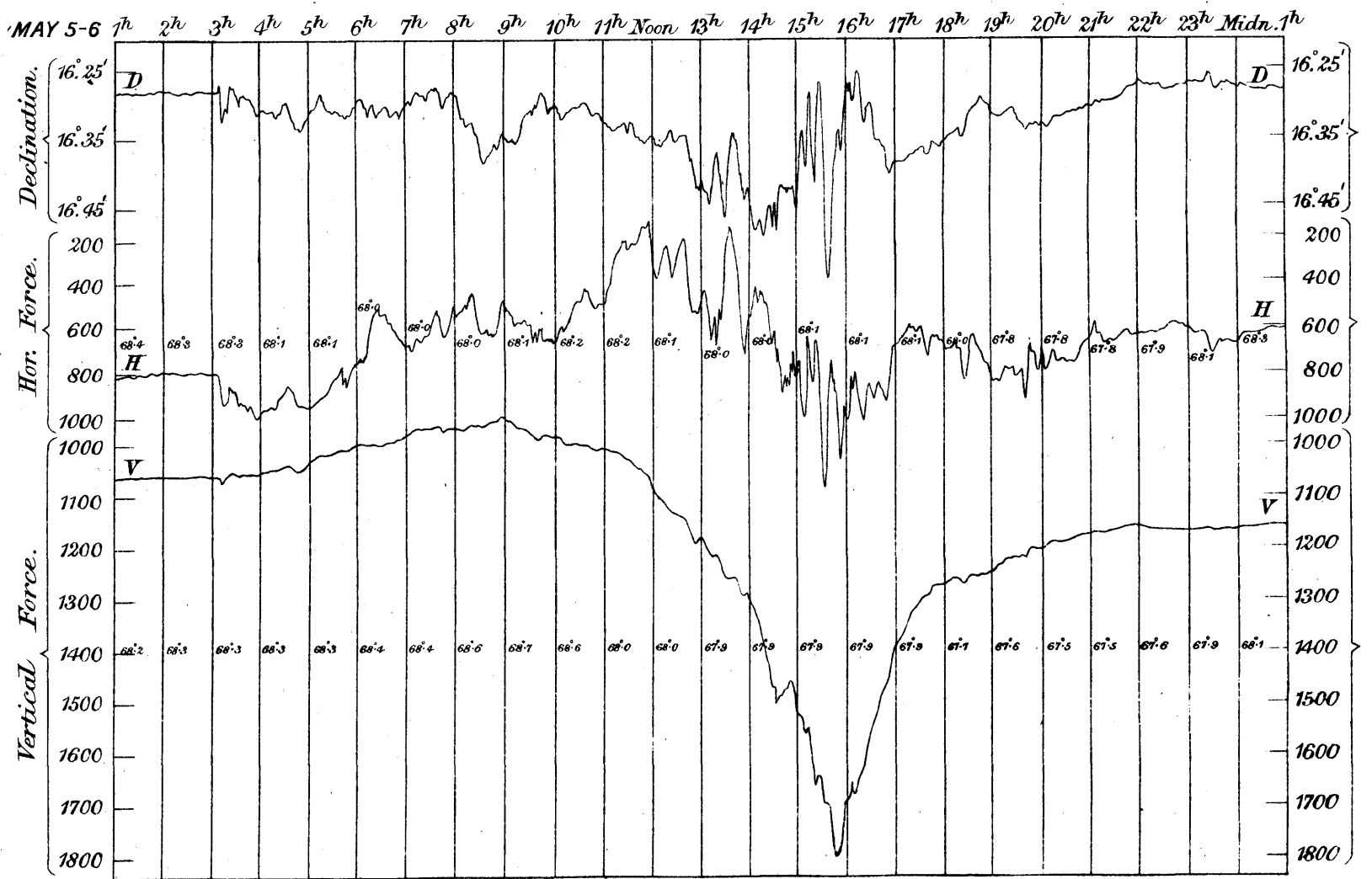
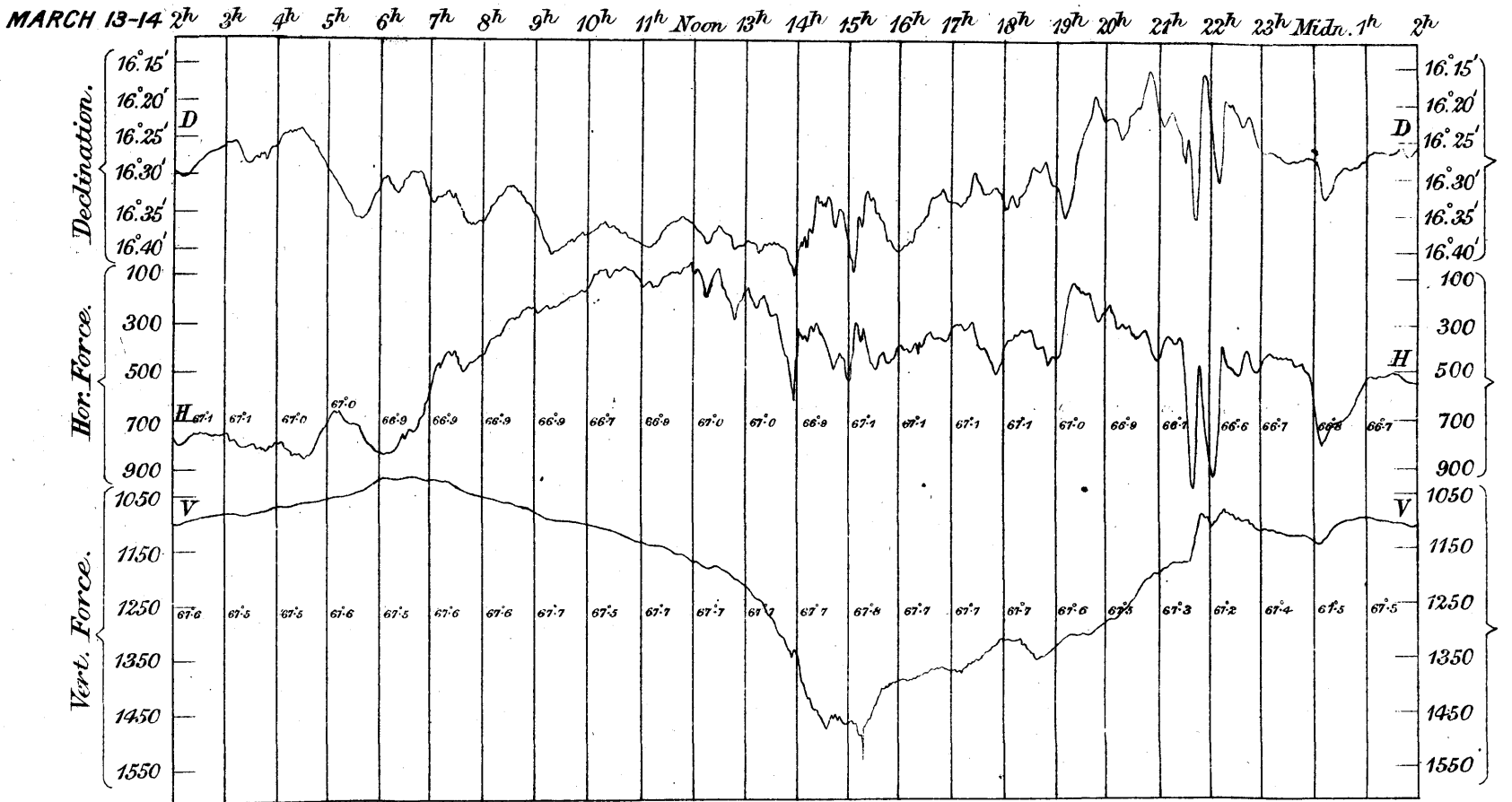
E. Weller & Grahams, Ltd Litho. London.

Scales for Magnetic Elements in C.G.S. measure.





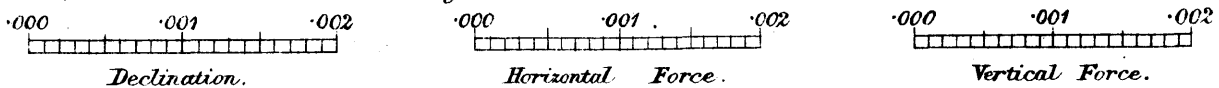
Magnetic Disturbances recorded at the Royal Observatory, Greenwich, 1900.

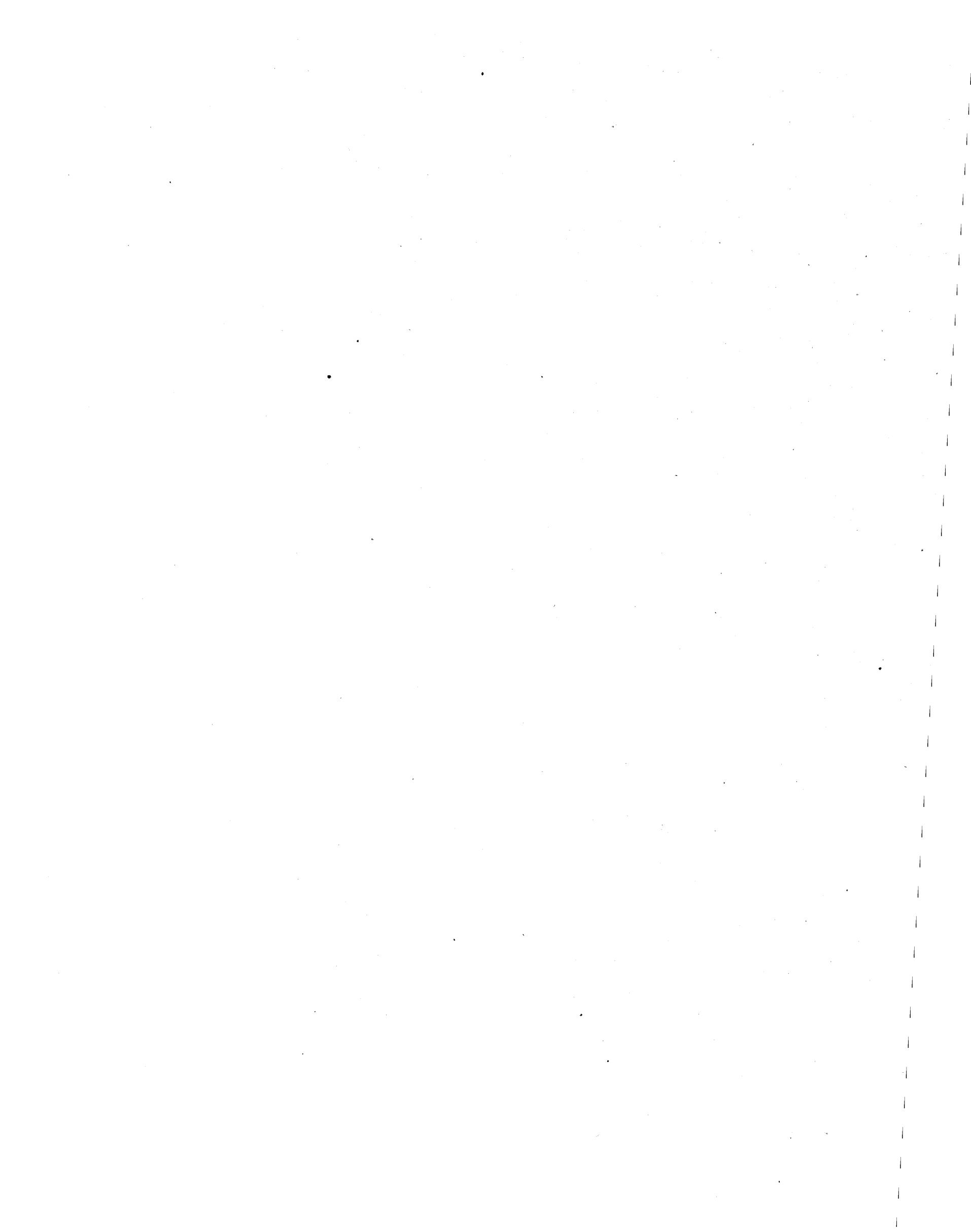


1873.1.1902

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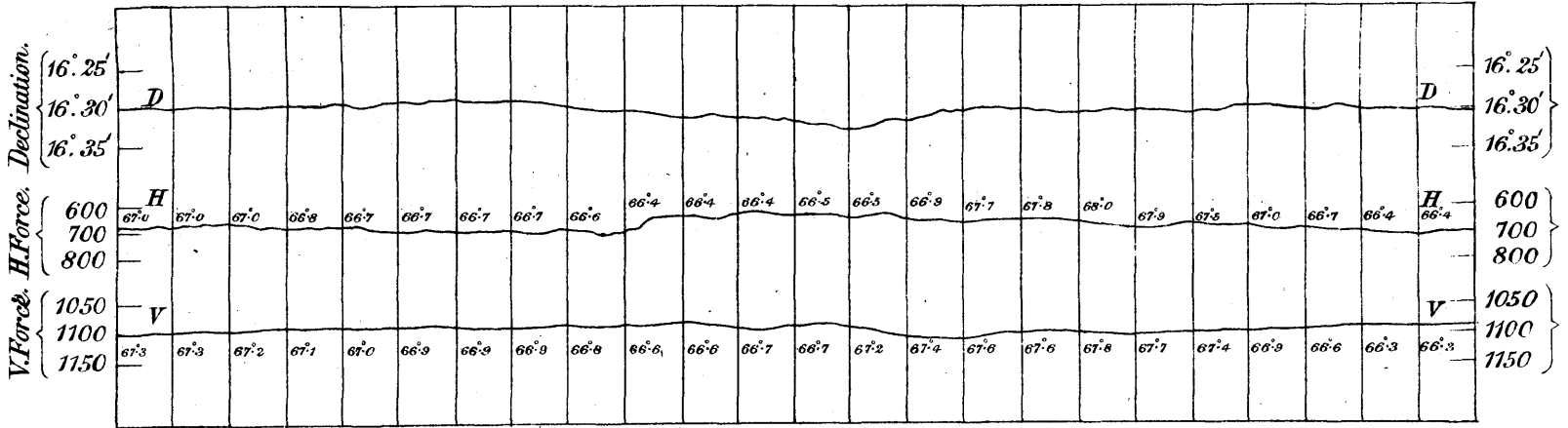
Scales for Magnetic Elements in C.G.S. measure.



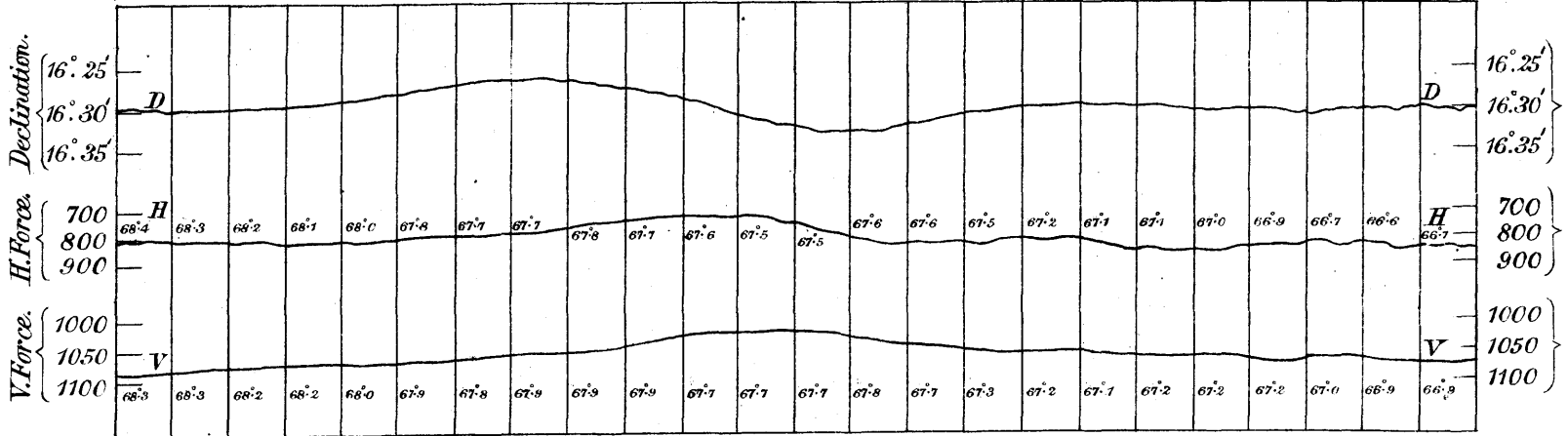


Types of Magnetic Diurnal Variations at four seasons of the Year recorded at the Royal Observatory, Greenwich, 1900.

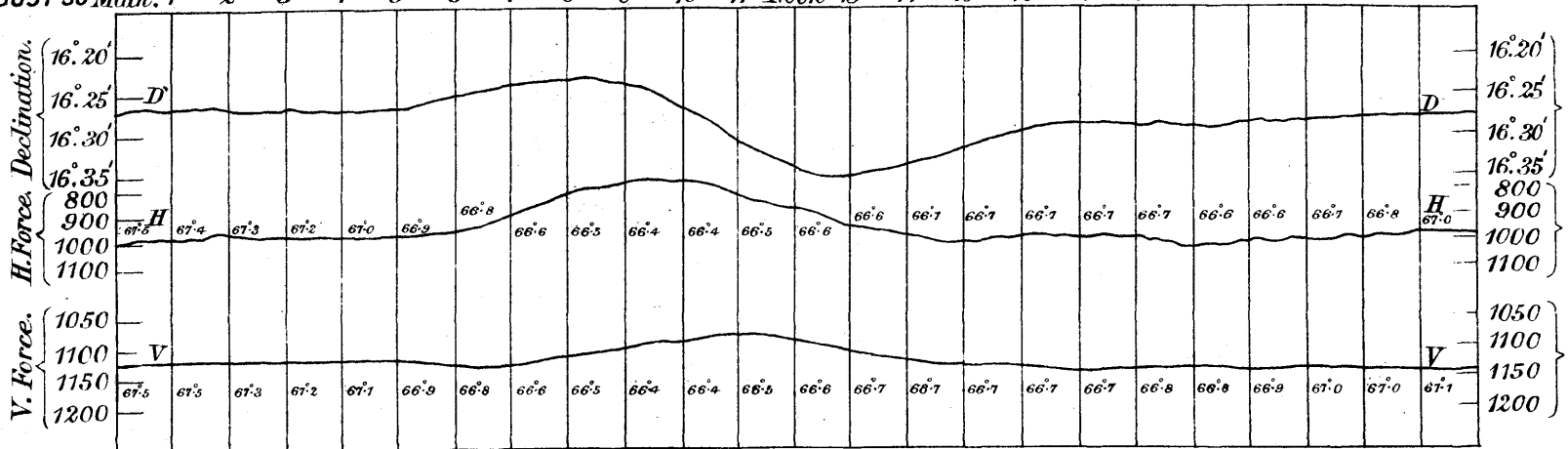
FEBRUARY 6 Midn. 1h 2h 3h 4h 5h 6h 7h 8h 9h 10h 11h Noon 13h 14h 15h 16h 17h 18h 19h 20h 21h 22h 23h Midn.



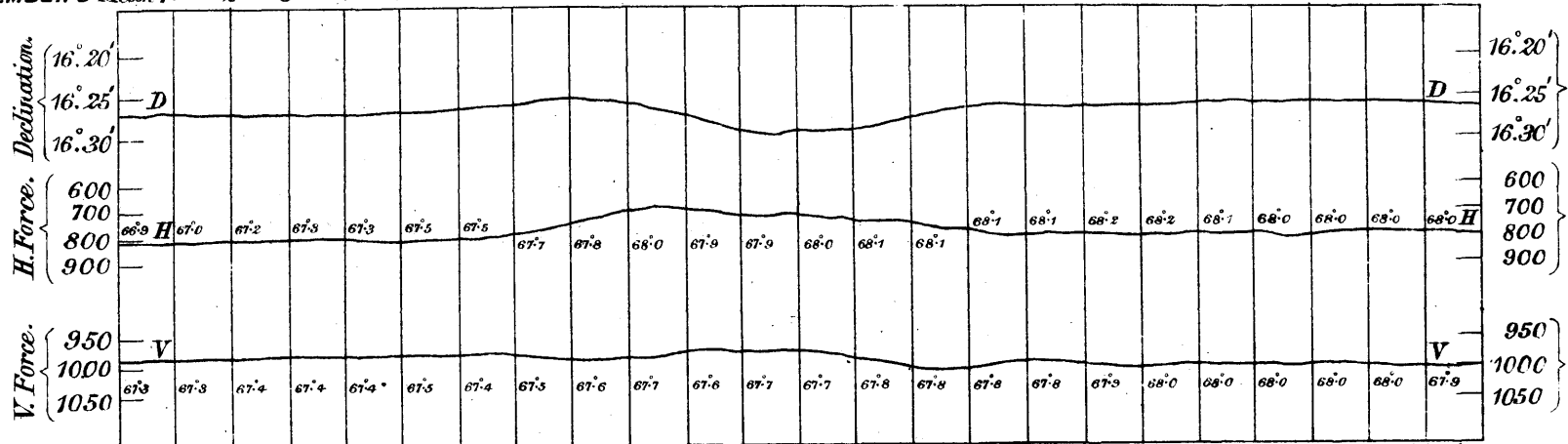
APRIL 25 Midn. 1h 2h 3h 4h 5h 6h 7h 8h 9h 10h 11h Noon 13h 14h 15h 16h 17h 18h 19h 20h 21h 22h 23h Midn.



AUGUST 30 Midn. 1h 2h 3h 4h 5h 6h 7h 8h 9h 10h 11h Noon 13h 14h 15h 16h 17h 18h 19h 20h 21h 22h 23h Midn.



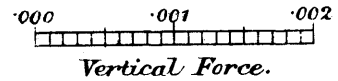
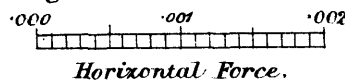
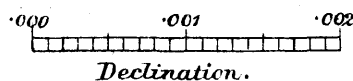
NOVEMBER 5 Midn. 1h 2h 3h 4h 5h 6h 7h 8h 9h 10h 11h Noon 13h 14h 15h 16h 17h 18h 19h 20h 21h 22h 23h Midn.



1873 - 1. 1902.

E. Weller & Grahams, Litho. London.

Scales for Magnetic Elements in C.G.S. measure.



ROYAL OBSERVATORY, GREENWICH.

RESULTS

OF

METEOROLOGICAL OBSERVATIONS.

1900.

DAILY RESULTS OF THE METEOROLOGICAL OBSERVATIONS,

Table with columns: MONTH and DAY, 1900; Phases of the Moon; BAROMETER; TEMPERATURE (Of the Air, Of Evaporation, Of the Dew Point); Difference between the Air Temperature and Dew Point Temperature; TEMPERATURE (Of Radiation); Rain collected in Gauge No. 6; Daily Amount of Ozone; Electricity. Rows include dates from Jan 1 to Jan 31, with various moon phases like New, Perigee, First Quarter, Apogee, Last Quarter, Full, and Greatest Declination N/S.

The results apply to the civil day.

The mean reading of the Barometer (Column 2) and the mean temperatures of the Air and Evaporation (Columns 6 and 8) are deduced from the photographic records. The average temperature (Column 7) is deduced from the 50 years' observations, 1841-1890. The temperature of the Dew Point (Column 9) and the Degree of Humidity (Column 13) are deduced from the corresponding temperatures of the Air and Evaporation by means of Glaisher's Hygrometrical Tables. The mean difference between the Air and Dew Point Temperatures (Column 10) is the difference between the numbers in Columns 6 and 9, and the Greatest and Least Differences (Columns 11 and 12) are deduced from the 24 hourly photographic measures of the Dry-bulb and Wet-bulb Thermometers.

The values given in Columns 3, 4, 5, 14, and 15 are derived from eye-readings of self-registering thermometers.

The mean reading of the Barometer for the month was 29.754, being 0.024 lower than the average for the 50 years, 1841-1890.

TEMPERATURE OF THE AIR.

The highest in the month was 53.0 on January 24; the lowest in the month was 25.9 on January 21; and the range was 27.1. The mean of all the highest daily readings in the month was 45.0, being 1.9 higher than the average for the 50 years, 1841-1890. The mean of all the lowest daily readings in the month was 35.1, being 1.5 higher than the average for the 50 years, 1841-1890. The mean of the daily ranges was 9.9, being 0.4 greater than the average for the 50 years, 1841-1890. The mean for the month was 40.4, being 1.9 higher than the average for the 50 years, 1841-1890.

MONTH and DAY, 1900.	Daily Duration of Sunshine.	Sun above Horizon.	WIND AS DEDUCED FROM SELF-REGISTERING ANEMOMETERS.							CLOUDS AND WEATHER.						
			OSLER'S.						ROBIN- SON'S.							
			General Direction.		Pressure on the Square Foot.		Horizontal Movement of the Air.	A.M.						P.M.		
			A.M.	P.M.	Greatest.	Least.		Mean of 24 Hourly Measures.								
Jan. 1	0.0	7.9	SE : NE : ENE	ENE : E	1.9	0.0	0.02	146	o, f, ho.-fr:	tk.-f	: 10, f	10, f	: 10, f	: 10, hy.-r		
2	0.0	7.9	ESE : S : SSW	SSW : S	1.6	0.0	0.11	248	10, hy.-r	: 10, slt.-r	: 10, oc.-slt.-r	8	: 8			
3	0.5	7.9	S : SSE	S : SW	3.1	0.0	0.37	329	p.-cl	: li.-cl	: 9, fq.-r	v, fq.-shs, t	: 10, fq.-r	: 10		
4	0.0	7.9	W : NNW	N	2.2	0.0	0.36	326	10	: 10	: 10, glm	10	: 10, th.-r	: 10		
5	1.3	8.0	N : NNE	N	2.6	0.0	0.17	252	10, oc.-slt.-r	: 10	: 9, cu	9	: 10			
6	1.7	8.0	SW : SSW : S	SSW : S	4.7	0.0	0.27	255	10	: 10, f	: 4, ci.-s, tk.-f	7, cu	: 10	10, w		
7	0.0	8.0	S : SSE : NNW	NNW : NW : W	6.9	0.0	0.62	366	10	: 10, r	: 10, r, glm, w	10	: 5, ci.-s, cu.-s	: 0		
8	1.7	8.0	WSW : SW	WSW : SW	2.7	0.0	0.16	300	o, ho.-fr	: 9, shs.-r		5, ci.-s, th.-cl	: p.-cl, sh.-r	: 8		
9	1.6	8.1	WSW : NNW	NW : WNW : W	2.8	0.0	0.37	371	9	: 9, r	: 8, h, glm, sh.-r	7, cu, li.-cl	: 2, li.-cl, h	: 0		
10	2.8	8.1	W : WSW : NW	NNW	5.4	0.0	0.61	433	o, ho.-fr	: 10, oc.-shs	: p.-cl	2, ci.-s, cu.-s	: p.-cl	: p.-cl		
11	0.0	8.1	NNW	N : SE	1.4	0.0	0.06	156	p.-cl, ho.-fr	: p.-cl	: 10, th.-cl, h, so.-ha	7, th.-cl, so.-ha, h	: 10	: 10, th.-cl, f, lu.-co		
12	5.4	8.2	Calm : SE	SE : SSE	0.2	0.0	0.00	98	p.-cl, ho.-fr, slt.-f	: li.-cl, slt.-f, fr	: 3	3, ci.-s, ci.-cu	: 10, lu.-ha	: 5, li.-cl, lu.-ha, ho.-fr		
13	2.6	8.2	SSE	S : SSE : SE	1.6	0.0	0.03	184	r, lu.-ha, ho.-fr	: o	: p.-cl	8	: 4, th.-cl, lu.-ha, lu.-co	: 2, th.-cl, lu.-ha, ho.-fr		
14	6.1	8.2	SE : ESE	S : SSE	1.2	0.0	0.06	201	p.-cl, ho.-fr	: o, ho.-fr	: o, ho.-fr	p.-cl	: p.-cl	: o, lu.-ha		
15	0.0	8.3	S : SSW	SSW : SW : WSW	8.1	0.0	0.52	392	8, slt.-sn	: 10, slt.-r	: 10, sc, w, oc.-shs	9, r, glm	: 7	: 8, th.-cl, lu.-ha		
16	0.2	8.3	SW : SSW	Variable : NW : SW	1.4	0.0	0.07	228	9	: 10, r	: 9, c.-r, slt.-f	10, f, glm	: 10, slt.-f	: p.-cl, lu.-co		
17	2.6	8.4	SSW : SE : WSW	WSW : W	4.5	0.0	0.35	357	p.-cl, lu.-co	: 10, r	: 8, cu, cu.-s	10, oc.-r	: 3, th.-cl	: 0		
18	3.5	8.4	W : WNW	WNW : NW	6.8	0.0	0.98	534	o ho.-fr	: o, w	: r, ci.-s, li.-cl, w	5, cu, w	: p.-cl, sh.-r	: 0		
19	0.0	8.5	SW : SSW	SSW	7.7	0.0	0.66	440	p.-cl, ho.-fr	: 1	: 8, ci.-s, ci.-cu, so.-ha	9, th.-r, w	: 10, slt.-r, w	: 10, fq.-shs, w		
20	0.0	8.5	WSW : SW	Variable : Calm	4.7	0.0	0.08	158	10, c.-r	: 10	: 10	10	: p.-cl, slt.-f	: o, tk.-f, ho.-fr		
21	0.0	8.6	Variable : Calm : SE	SSE : SSW : SW	5.9	0.0	0.33	260	10, f, fr	: 10, slt.-f		10	: 10, r, w	: 10, c.-r		
22	0.0	8.6	WSW : W : SW	WSW : W	8.1	0.0	0.92	521	10	: 10	: 10, sc, w	10, sc, w	: 10, st.-w	: 8		
23	0.0	8.6	WSW : W	WSW : SW	4.8	0.0	0.50	414	9	: p.-cl	: 9, li.-sc	9, cu	: 10	: 10		
24	0.0	8.7	SW : SSW	SW : WSW : WNW	12.4	0.0	0.72	472	10	: 10	: 10, sc, shs.-r	10, sc, th.-r, w	: v, th.-r, w	: o, w		
25	4.1	8.7	W : WNW	W : WSW : SW	5.4	0.0	0.70	466	v, w	: 1	: 3, ci.-cu, th.-cl	3, ci.-s, li.-cl	: p.-cl	: v		
26	0.0	8.8	SW	SW : W : WSW	7.3	0.0	0.80	482	p.-cl	: p.-cl, w	: 10, w	10, w	: 10, shs.-r	: v		
27	0.9	8.8	WSW : SW	WSW : W : NW	4.0	0.0	0.37	371	p.-cl, ho.-fr	: o, ho.-fr	: 9, s, ci.-s, li.-cl, so.-ha	10, r	: 6, sh.-r	: 1, sh.-r		
28	2.7	8.9	WSW : SW : NE	N : NNE	7.1	0.0	0.56	355	4	: 10, sn	: 10	8	: 10, fq.-r	: 10, r, sn, sl, w		
29	0.4	8.9	NNE : N	N : NNE	8.5	0.0	1.02	533	9, w	: 9	: 8, cu, w	10, oc.-th.-r, w	: 10, fq.-th.-r, w	: 10, oc.-slt.-r		
30	0.0	9.0	N	N : NNE	3.3	0.0	0.45	397	10	: 8, th.-cl	: 10	10	: 10, oc.-slt.-r	: 10		
31	0.0	9.1	N : NNE	NNE : NE	2.1	0.0	0.30	355	9	: 10, slt.-sh	: 10, th.-r	10	: 10, oc.-th.-r	: 10		
Means	1.2	8.4	...	...	...	...	0.40	336						
Number of Columns for Reference.	19	20	21	22	23	24	25	26	27				28			

The mean *Temperature of Evaporation* for the month was 38°·6, being 1°·4 higher than
 The mean *Temperature of the Dew Point* for the month was 36°·1, being 0°·7 higher than
 The mean *Degree of Humidity* for the month was 85°·0, being 3·8 less than
 The mean *Elastic Force of Vapour* for the month was 0ⁱⁿ·213, being 0ⁱⁿ·006 greater than
 The mean *Weight of Vapour in a Cubic Foot of Air* for the month was 28^{rs}·5, being 08^r·1 greater than
 The mean *Weight of a Cubic Foot of Air* for the month was 551 grains, being 3 grains less than
 The mean amount of *Cloud* for the month (a clear sky being represented by 0, and an overcast sky by 10) was 7·7.
 The mean proportion of *Sunshine* for the month (constant sunshine being represented by 1) was 0·147. The maximum daily amount of *Sunshine* was 6·1 hours on January 14.
 The highest reading of the *Solar Radiation Thermometer* was 81°·0 on January 17; and the lowest reading of the *Terrestrial Radiation Thermometer* was 20°·5 on January 14.
 The mean daily distribution of *Ozone* for the 12 hours ending 9^h was 0·5; for the 6 hours ending 15^h was 0·0; and for the 6 hours ending 21^h was 0·0.
 The *Proportions of Wind* referred to the cardinal points were N. 7, E. 3, S. 9, and W. 11. One day was calm.
 The *Greatest Pressure of the Wind* in the month was 12·4 lbs. on the square foot on January 24. The mean daily *Horizontal Movement of the Air* for the month was 336 miles; the greatest daily value was 534 miles on January 18; and the least daily value was 98 miles on January 12.
Rain fell on 22 days in the month, amounting to 2ⁱⁿ·277, as measured by gauge No. 6 partly sunk below the ground; being 0ⁱⁿ·288 greater than the average fall for the 50 years, 1841-1890.

the average for the 50 years, 1841-1890.

DAILY RESULTS OF THE METEOROLOGICAL OBSERVATIONS,

Table with columns: MONTH and DAY, Phases of the Moon, BAROMETER, TEMPERATURE (Of the Air, Of Evaporation, Of the Dew Point, Of Radiation), Difference between Air Temperature and Dew Point Temperature, Degree of Humidity, Rain collected in Gauge No. 6, Daily Amount of Ozone, and Electricity. Rows include dates from Feb. 1 to Feb. 28, with various phase labels like Perigee, First Quarter, Full, Last Quarter, and a summary Means row.

The results apply to the civil day.

The mean reading of the Barometer (Column 2) and the mean temperatures of the Air and Evaporation (Columns 6 and 8) are deduced from the photographic records. The average temperature (Column 7) is deduced from the 50 years' observations, 1841-1890. The temperature of the Dew Point (Column 9) and the Degree of Humidity (Column 13) are deduced from the corresponding temperatures of the Air and Evaporation by means of Glaisher's Hygrometrical Tables. The mean difference between the Air and Dew Point Temperatures (Column 10) is the difference between the numbers in Columns 6 and 9, and the Greatest and Least Differences (Columns 11 and 12) are deduced from the 24 hourly photographic measures of the Dry-bulb and Wet-bulb Thermometers.

The values given in Columns 3, 4, 5, 14, and 15 are derived from eye-readings of self-registering thermometers.

The mean reading of the Barometer for the month was 29.398, being 0.0401 lower than the average for the 50 years, 1841-1890.

TEMPERATURE OF THE AIR.

The highest in the month was 58.9 on February 24; the lowest in the month was 18.0 on February 9; and the range was 40.9. The mean of all the highest daily readings in the month was 43.5, being 1.8 lower than the average for the 50 years, 1841-1890. The mean of all the lowest daily readings in the month was 33.2, being 1.1 lower than the average for the 50 years, 1841-1890. The mean of the daily ranges was 10.3, being 0.7 less than the average for the 50 years, 1841-1890. The mean for the month was 38.5, being 1.0 lower than the average for the 50 years, 1841-1890.

MONTH and DAY, 1900.	Daily Duration of Sunshine. Sun above Horizon.		WIND AS DEDUCED FROM SELF-REGISTERING ANEMOMETERS.							CLOUDS AND WEATHER.									
			OSLER'S.				ROBIN-SON'S.												
			General Direction.		Pressure on the Square Foot.			Horizontal Movement of the Air.	A.M.		P.M.								
			A.M.	P.M.	Greatest.	Least.	Mean of 24 Hourly Measures.												
hours.	hours.			lbs.	lbs.	lbs.	miles.												
Feb. 1	0.0	9.1	NE : NNE : E	E : ENE	3.3	0.0	0.26	310	10	:	10, slt.-sn	:	10, slt.-sn	10	:	10	:	10, slt.-sn	
2	0.0	9.2	ENE	ENE : NNE	8.0	0.0	0.85	517	10	:	10	:	10, w	10, sn, w	:	10, sn	:	10, sn	
3	0.0	9.2	NNE : N	N : WSW	1.2	0.0	0.07	201	10, sn	:	10	:	10, fq.-m.-r	10, fq.-m.-r	:	10, m.-r, f	:	10, m.-r, slt.-f	
4	0.0	9.3	SW : N	Variable : N	0.1	0.0	0.00	70	10	:	10	:	10, gt.-glm	10, gt.-glm	:	p.-cl	:	p.-cl	
5	0.0	9.3	N : NNE : NE	NNE : NE	0.8	0.0	0.05	215	10	:	10	:	10	10	:	10	:	10, th.-r	
6	4.7	9.4	NE : NNE	N	3.5	0.0	0.45	405	10	:	8	:	4, ci.-cu, li.-cl	5, cu, li.-cl	:	p.-cl, ho.-fr	:	p.-cl	
7	4.4	9.4	N : NNW	N : Variable	1.1	0.0	0.03	156	v	:	1, ho.-fr	:	1, th.-cl	4, th.-cl	:	8, th.-cl	:	10, th.-cl, ho.-fr, r	
8	6.3	9.5	NNE : NE	NNE : NE	0.7	0.0	0.01	159	7, ho.-fr	:	0, fr	:	2, th.-cl	1, th.-cl	:	1, th.-cl	:	0, ho.-fr	
9	3.9	9.6	NE : Calm : SE	E : SE : SSE	0.2	0.0	0.01	110	p.-cl, f, ho.-fr	:	0, fr, f	:	5, f	7, s, th.-cl, so.-ha	:	4, th.-cl, h, lu.-ha, lu.-co	:	p.-cl, ho.-fr	
10	0.0	9.6	S : SSE : SE	SSE	9.7	0.0	0.32	328	0, ho.-fr	:	0	:	9, so.-ha	10	:	10, sn, w	:	10, sn, sl	
11	3.6	9.7	SSW : WNW	WNW : WSW	15.5	0.0	0.75	445	10, sn, sl	:	10	:	10, glm, w	3, st.-w	:	0, st.-w	:	0, fr	
12	1.0	9.8	SW : SE : ESE	ESE : NE : ENE	0.3	0.0	0.00	127	0, ho.-fr	:	0	:	9, th.-cl, so.-ha, prh	9, th.-cl, so.-ha	:	10	:	p.-cl, slt.-f	
13	0.0	9.8	Variable : NE	ENE : E	14.3	0.0	0.60	311	p.-cl, tk.-f	:	p.-cl, tk.-f	:	9, f	10	:	10, sn, st.-w	:	10, w, sn, sl, r	
14	1.0	9.9	NE : N	N : NNW : SSE	12.5	0.0	1.06	441	10, r, sn	:	10, sn, st.-w	:	10, slt.-sn, w	9, cu	:	0, slt.-f, ho.-fr	:	0, ho.-fr, lu.-co	
15	0.0	9.9	SSE	SSE : S : SSW	19.6	0.0	1.35	506	0	:	10	:	10, r, sn, sl, w	10, c.-r, w	:	10, c.-r, g	:	10, c.-r, st.-w	
16	6.6	10.0	SSW : W : WSW	WSW : SW	10.7	0.0	1.60	595	10, th.-r, w	:	10	:	8, cu.-s, ci.-s, w	2, li.-cl, sh.-r, w	:	1, li.-cl, w	:	p.-cl, lu.-ha, lu.-co	
17	1.3	10.1	SSW	SSW : SE : W	12.5	0.0	0.98	419	10, shs.-r	:	3, li.-cl	:	8	10, r	:	10, hy.-sh	:	10, hy.-sh, lu.-ha	
18	5.4	10.1	WSW	WSW : SSW	5.0	0.0	0.60	396	p.-cl, ho.-fr	:	p.-cl	:	6, cu, cu.-s, th.-cl	8, cu	:	9, cu	:	9, sh.-r	
19	0.0	10.2	SSW : S	SSW : SW	17.7	0.0	2.86	666	10, fq.-shs, w	:	9, sc, fq.-shs, w	:	10, sc, th.-r, st.-w	10, sc, c.-r, st.-w	:	10, c.-r, st.-w	:	v, hy.-shs, st.-w	
20	2.4	10.2	WSW : SW	SW : WNW : NNW	7.4	0.0	1.32	501	p.-cl	:	p.-cl	:	9, fq.-shs, w	v, fq.-shs, w	:	9	:	p.-cl	
21	6.2	10.3	NW : WNW	WNW : SW : S	4.7	0.0	0.59	374	p.-cl, ho.-fr	:	2, th.-cl	:	5, cu, th.-cl	5, cu, cu.-s	:	6, cu, li.-cl	:	7, th.-cl	
22	2.8	10.4	S : SW	WSW : SW	5.5	0.0	0.74	396	9, w, hy.-sh	:	9	:	10, slt.-r	6, cu, li.-cl, slt.-r	:	3, cu, ci.-cu, cu.-s	:	0	
23	1.0	10.5	S : SSE : SW	SW : SSW	3.9	0.0	0.41	351	9, fq.-shs	:	9, fq.-shs	:	10	8, sc	:	9, fq.-r	:	10, shs.-r	
24	0.5	10.5	SSW : S	S : SSW	1.3	0.0	0.11	227	9, fq.-shs	:	p.-cl	:	10, th.-r	10, oc.-slt.-r	:	10	:	10, li.-shs	
25	1.3	10.6	SE : E : SW	SW : ENE : E	2.3	0.0	0.07	189	10, oc.-shs	:	10	:	10	9, li.-cl	:	li.-cl	:	10	
26	1.3	10.6	ENE : E : ESE	SSE : SE : ESE	3.5	0.0	0.22	217	9, f	:	10, f	:	10, th.-r, slt.-f	8, cu, li.-cl	:	8, cu, cu.-s, sh.-r	:	9	
27	0.0	10.7	ESE : ENE : SW	SW : SSE	1.0	0.0	0.04	195	10, r	:	10, r	:	10, th.-r, gt.-glm	10, th.-r	:	10, th.-r	:	10	
28	0.0	10.8	E : ENE : NE	NE : NNE	2.6	0.0	0.26	324	10	:	10	:	10, r	10	:	10	:	10	
Means	1.9	9.9	0.56	327											
Number of Column for Reference.	19	20	21	22	23	24	25	26					27						28

The mean Temperature of Evaporation for the month was 36°·8, being 1°·0 lower than
 The mean Temperature of the Dew Point for the month was 33°·9, being 1°·7 lower than
 The mean Degree of Humidity for the month was 83·8, being 2·2 less than
 The mean Elastic Force of Vapour for the month was 0ⁱⁿ·195, being 0ⁱⁿ·013 less than
 The mean Weight of Vapour in a Cubic Foot of Air for the month was 2^{grs}·3 being 0^{gr}·1 less than
 The mean Weight of a Cubic Foot of Air for the month was 547 grains, being 6 grains 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 0·193. The maximum daily amount of Sunshine was 6·6 hours on February 16.
 The highest reading of the Solar Radiation Thermometer was 95°·7 on February 24; and the lowest reading of the Terrestrial Radiation Thermometer was 14°·0 on February 9.
 The mean daily distribution of Ozone for the 12 hours ending 9^h was 0·7; for the 6 hours ending 15^h was 0·0; and for the 6 hours ending 21^h was 0·0.
 The Proportions of Wind referred to the cardinal points were N. 7, E. 6, S. 9, and W. 5. One day was calm.
 The Greatest Pressure of the Wind in the month was 19·6 lbs. on the square foot on February 15. The mean daily Horizontal Movement of the Air for the month was 327 miles; the greatest daily value was 666 miles on February 19; and the least daily value was 70 miles on February 4.
 Rain fell on 19 days in the month, amounting to 3ⁱⁿ·583, as measured by gauge No. 6 partly sunk below the ground; being 2ⁱⁿ·099 greater than the average fall for the 50 years, 1841-1890.

the average for the 50 years, 1841-1890.

MONTH and DAY, 1900.	Phases of the Moon.	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 5 inches above the ground.	Daily Amount of Ozone.	Electricity.
			Of the Air.					Of Evaporation. Mean of 24 Hourly Values.	Of the Dew Point. Deducted Mean Daily Value.	Mean.	Greatest.	Least.	Of Radiation.						
			Highest.	Lowest.	Daily Range.	Mean of 24 Hourly Values.	Excess above Average of 50 Years.						Highest in Sun's Rays.		Lowest on the Grass.				
Mar. 1	New: Perigee: In Equator.	30.030	42.3	33.8	8.5	37.5	- 2.7	34.2	29.6	7.9	13.1	3.0	74	90.9	28.1	0.013	0.2	wwP, wwN : mP : mP	
2	...	30.092	41.0	33.3	7.7	37.2	- 3.2	35.5	33.1	4.1	7.0	1.8	86	58.4	27.2	0.017	0.8	wP, wwN : wP : wP	
3	...	30.023	43.2	36.3	6.9	39.5	- 1.0	37.3	34.4	5.1	7.5	3.1	82	57.8	34.0	0.001	0.0	wP	
4	...	29.976	40.2	35.0	5.2	36.7	- 4.0	34.4	31.1	5.6	11.5	2.0	81	71.8	32.9	0.014	0.0	wwP, wwN : wP : wP	
5	...	30.038	40.0	35.3	4.7	37.6	- 3.3	35.6	32.9	4.7	6.4	2.5	84	57.6	32.0	0.007	0.0	wP : wP : mP	
6	...	30.126	39.0	36.2	2.8	37.8	- 3.3	35.5	32.4	5.4	7.0	3.1	81	48.0	34.5	0.000	0.0	wP : mP : mP	
7	...	30.110	42.7	35.1	7.6	38.8	- 2.2	35.6	31.4	7.4	9.5	5.3	75	61.1	32.0	0.000	0.0	wP : mP : mP	
8	First Quarter: Greatest Dec. N.	30.081	41.9	36.6	5.3	39.2	- 1.7	36.6	33.2	6.0	8.7	2.9	80	52.1	33.6	0.010	0.2	wP : mP : mP, sN	
9	...	30.058	47.1	36.4	10.7	39.9	- 0.9	37.1	33.5	6.4	10.7	3.4	78	93.3	30.0	0.000	0.8	wP	
10	...	30.105	55.0	35.9	19.1	43.5	+ 2.8	41.1	38.3	5.2	11.6	0.2	81	101.2	30.1	0.000	0.0	wP	
11	...	30.079	50.9	35.6	15.3	43.7	+ 3.1	42.1	40.2	3.5	7.3	0.7	87	82.0	29.8	0.000	0.0	wP	
12	...	30.252	55.3	31.8	23.5	44.3	+ 3.6	40.9	36.9	7.4	15.8	1.3	75	93.2	26.5	0.000	0.0	wP : mP	
13	...	30.341	46.3	37.0	9.3	41.8	+ 0.9	38.3	34.0	7.8	11.3	3.4	75	68.0	31.3	0.000	0.5	wP : wP : mP	
14	...	30.378	51.0	35.4	15.6	43.7	+ 2.5	40.1	35.9	7.8	11.1	5.1	74	88.0	28.3	0.000	1.5	mP	
15	Apogee: In Equator	29.943	48.9	40.9	8.0	44.5	+ 3.1	41.1	37.2	7.3	11.8	4.0	75	70.8	39.5	0.000	0.0	wP	
16	Full	29.411	42.9	33.7	9.2	39.0	- 2.5	35.9	31.8	7.2	13.9	2.8	76	64.7	28.4	0.072	0.0	wP, vN : sP : vP, ssN	
17	...	29.344	37.8	25.5	12.3	32.0	- 9.6	29.9	25.1	6.9	11.5	1.4	74	68.9	21.8	0.014	0.2	mP : ssP : vP, ssN	
18	...	29.302	42.1	21.6	20.5	33.2	- 8.4	31.2	27.3	5.9	12.0	0.3	78	94.8	20.6	0.193	0.8	mP : mP : vP, ssN	
19	...	29.145	44.8	32.3	12.5	38.2	- 3.3	36.8	34.9	3.3	7.7	0.6	88	110.3	31.8	0.295	1.0	vP, vN : mP, mN : wP	
20	...	29.479	52.8	35.1	17.7	42.4	+ 1.0	38.7	34.2	8.2	17.2	0.7	74	107.1	26.4	0.005	3.0	wP : wP : mP	
21	...	29.584	48.4	30.2	18.2	39.0	- 2.4	37.3	35.1	3.9	11.6	0.0	86	103.0	25.0	0.081	0.0	mP : mP : mP, vN	
22	...	29.359	45.2	39.3	5.9	42.7	+ 1.2	41.4	39.8	2.9	4.4	0.9	90	52.0	37.1	0.040	0.0	wP, wN : wP : wP	
23	Greatest Declination S.	29.634	45.1	35.4	9.7	40.2	- 1.6	38.3	35.8	4.4	7.2	2.5	85	47.1	34.1	0.000	0.0	wP	
24	Last Quarter	29.757	41.7	34.8	6.9	37.1	- 5.0	34.3	30.3	6.8	11.7	2.2	77	66.9	33.2	0.000	1.2	wP : mP : mP	
25	...	29.711	41.2	34.5	6.7	37.2	- 5.2	33.4	28.0	9.2	15.4	6.7	70	79.1	33.0	0.000	3.8	wP : mP : mP	
26	...	29.534	41.2	32.3	8.9	35.8	- 7.1	33.1	29.0	6.8	15.2	2.2	75	78.0	26.5	0.015	0.0	mP : sP : ssP	
27	...	29.521	42.4	32.2	10.2	35.4	- 7.9	32.4	27.7	7.7	12.6	2.8	73	75.2	26.3	0.000	0.0	mP : vP : mP	
28	...	29.460	41.0	32.4	8.6	36.7	- 7.0	35.3	33.3	3.4	6.7	1.2	88	61.8	28.5	0.141	0.0	wP, sN : mP : mP	
29	In Equator: Perigee.	29.739	45.0	30.0	15.0	36.7	- 7.4	34.0	30.1	6.6	13.9	0.0	77	95.9	23.8	0.000	0.0	mP : sP : mP	
30	New	29.932	48.1	27.6	20.5	37.5	- 7.1	34.5	30.3	7.2	14.9	0.0	76	101.9	21.6	0.000	0.0	mP	
31	...	30.190	50.5	28.5	22.0	39.4	- 5.6	36.0	31.5	7.9	14.5	2.5	74	108.9	23.3	0.000	0.0	mP : mP : wP	
Means	...	29.830	45.0	33.5	11.5	39.0	- 2.7	36.4	32.8	6.1	10.9	2.2	79.0	77.7	29.4	Sum 0.918	0.5	...	
Number of Column for Reference.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	

The results apply to the civil day.

The mean reading of the Barometer (Column 2) and the mean temperatures of the Air and Evaporation (Columns 6 and 8) are deduced from the photographic records. The average temperature (Column 7) is deduced from the 50 years' observations, 1841-1890. The temperature of the Dew Point (Column 9) and the Degree of Humidity (Column 13) are deduced from the corresponding temperatures of the Air and Evaporation by means of Glaisher's Hygrometrical Tables. The mean difference between the Air and Dew Point Temperatures (Column 10) is the difference between the numbers in Columns 6 and 9, and the Greatest and Least Differences (Columns 11 and 12) are deduced from the 24 hourly photographic measures of the Dry-bulb and Wet-bulb Thermometers.

The values given in Columns 3, 4, 5, 14, and 15 are derived from eye-readings of self-registering thermometers.

The mean reading of the Barometer for the month was 29.830, being 0.0077 higher than the average for the 50 years, 1841-1890.

TEMPERATURE OF THE AIR.

The highest in the month was 55.3 on March 12; the lowest in the month was 21.6 on March 18; and the range was 33.7. The mean of all the highest daily readings in the month was 45.0, being 4.7 lower than the average for the 50 years, 1841-1890. The mean of all the lowest daily readings in the month was 33.5, being 1.5 lower than the average for the 50 years, 1841-1890. The mean of the daily ranges was 11.5, being 3.2 less than the average for the 50 years, 1841-1890. The mean for the month was 39.0, being 2.7 lower than the average for the 50 years, 1841-1890.

MONTH and DAY, 1900.	Daily Duration of Sunshine.		Sun above Horizon.		WIND AS DEDUCED FROM SELF-REGISTERING ANEMOMETERS.							CLOUDS AND WEATHER.	
					OSLER'S.				ROBINSON'S.				
					General Direction.		Pressure on the Square Foot.			Horizontal Movement of the Air.		A.M.	P.M.
					A.M.	P.M.	Greatest.	Least.	Mean of 24 Hourly Measures.	miles.			
Mar. 1	2.7	10.8	NNE : ENE	NE : E : N	3.6	0.0	0.34	322	10	10, shs.-r : 9, cu	9, sn : 4, li.-cl : v		
2	0.0	10.9	NNW : N	N	4.3	0.0	0.37	305	p.-cl : 10, oc.-slt.-r : 10, slt.-r	9, slt.-r : 9 : v			
3	0.0	11.0	NNW : N	N	1.2	0.0	0.10	229	p.-cl, shs.-r : 10 : 10	10 : 10			
4	2.0	11.0	N : NE	NE : ENE : N	2.3	0.0	0.20	272	9, slt.-r : 10 : 9	10 : 10, oc.-slt.-sn : 10			
5	1.5	11.1	N : NNE	NNE : N	1.2	0.0	0.06	208	9, oc.-th.-r : p.-cl : 8, cu, li.-cl	10 : 10			
6	0.0	11.2	NNE : N	N	1.4	0.0	0.08	214	10 : 10	10 : 10			
7	0.0	11.2	N : NNW	N : NNE	1.1	0.0	0.03	157	10 : 10	10 : 10 : 10			
8	0.2	11.3	NE : ENE	ENE : E : ESE	0.3	0.0	0.00	158	10 : 10	10 : 10 : 10, slt.-r			
9	4.5	11.4	ENE : E	E : ESE	1.5	0.0	0.09	240	p.-cl : p.-cl : 6, cu, ci.-cu, li.-cl	5, ci.-cu, cu.-s, li.-cl : p.-cl, lu.-co : p.-cl, d			
10	7.3	11.4	E	E	2.4	0.0	0.20	264	o, hy.-d : 0 : 0	5, th.-cl : 3, th.-cl : 2, th.-cl			
11	1.8	11.5	ENE : NE	ENE : NNE : ESE	0.1	0.0	0.00	146	o, d : p.-cl : 4, th.-cl, h, so.-ha	9, th.-cl, so.-ha : 10, th.-cl : 2, f			
12	7.6	11.6	NNE : N : NNW	N : NNW : NW	2.0	0.0	0.07	188	o, d, ho.-fr, slt.-f : 0, slt.-f : 1, ci.-s, th.-cl	2, th.-cl : 4, th.-cl, lu.-ha : 0, lu.-co			
13	0.7	11.6	WSW : NW : N	NNE : N	6.8	0.0	0.54	392	0 : 1 : 10, slt.-r	10 : 5, cu, cu.-s, w : 1, li.-cl			
14	1.0	11.7	NNW : WNW : N	N : NNW : WNW	4.8	0.0	0.20	275	0 : p.-cl : 9, cu	10 : 10			
15	0.0	11.8	WSW : W	W : WSW	4.4	0.0	0.55	421	9 : 10 : 10	10 : 10			
16	1.7	11.8	WSW : NW : WNW	WNW : NNW	5.2	0.0	0.30	305	9, hy.-sh : 10, shs.-r, sq : 10	8, cu, ci.-s, li.-cl : 5, s, li.-cl : 2, li.-cl, m			
17	0.6	11.9	NNW : WSW : NW	N : SE : SW	1.5	0.0	0.01	145	o, ho.-fr : 0 : 8	9 : 10, gt.-glm, sn : 0, fr, slt.-f			
18	4.9	12.0	SW : S	SSE : S	4.7	0.0	0.35	264	o, ho.-fr : 0 : 3, cu, cu.-s, sn	9, so.-ha, sn : 10, r, sn, sl : 10, r, sl			
19	5.2	12.0	Variable	SSE : SE : ESE	1.8	0.0	0.12	200	10, r, sn : 10, sn : 8, cu, cu.-s	4, cu, li.-cl, shs.-r : 9, cu : 0			
20	8.5	12.1	SSE : SSW	SSW : SSE : ESE	1.3	0.0	0.02	195	o, d : 2, li.-cl : 6, cu, cu.-s	6, cu : 1 : 0, slt.-f, d			
21	3.4	12.2	ENE : NE	ENE : NE	4.4	0.0	0.41	333	o, ho.-fr, slt.-f : 7, slt.-f : 9, cu, cu.-s, n	6, cu, ci.-s, th.-cl : 10, oc.-slt.-r, w : 10, r			
22	0.0	12.2	NE : ENE	ENE	4.3	0.0	0.58	443	10, slt.-r : 10, sc	10 : 10			
23	0.0	12.3	ENE : NE	NE : NNE	5.5	0.0	0.97	537	10 : 10	10, w : 10			
24	1.1	12.4	NNE : NE	NE : NNE	4.2	0.0	0.66	446	10 : 10	9 : 10			
25	1.5	12.4	NNE	N : NNW	2.8	0.0	0.31	303	9 : p.-cl : 9, cu, li.-cl	10, slt.-sn : 10			
26	1.1	12.5	NNW : N	N : NNW : WSW	1.4	0.0	0.08	211	10, r : 9 : 10, oc.-sn	8 : 10 : th.-cl			
27	1.1	12.6	N	W : NW : SW	1.0	0.0	0.04	188	p.-cl : 10 : 10, glm	10, slt.-sn : 8, slt.-f : 10			
28	0.0	12.6	SW : WSW : N	N : NNE	3.0	0.0	0.23	277	10, slt.-sn : 10, c.-r : 10, r, glm	10 : 10 : 0			
29	5.5	12.7	N	NNE : SE	1.0	0.0	0.04	172	o, ho.-fr : 0 : 4, cu, li.-cl	6, cu, cu.-s : 0 : 0, ho.-fr			
30	8.4	12.7	NE : ENE	ENE : ESE	0.6	0.0	0.02	134	o, ho.-fr : 5 : 2, li.-cl	4, cu, li.-cl : 0 : 0, ho.-fr			
31	8.7	12.8	ENE : E	E : ENE : ESE	0.4	0.0	0.03	116	o, ho.-fr : 6 : 1, li.-cl	1, cu.-s : 6, cu, li.-cl : p.-cl			
Means	2.6	11.8	...	...	...	...	0.23	260		
Number of Column for Reference.	19	20	21	22	23	24	25	26	27	28			

The mean *Temperature of Evaporation* for the month was 36°.4, being 2°.9 lower than
 The mean *Temperature of the Dew Point* for the month was 32°.8, being 3°.5 lower than
 The mean *Degree of Humidity* for the month was 79.0, being 2.1 less than
 The mean *Elastic Force of Vapour* for the month was 0.186, being 0.028 less than
 The mean *Weight of Vapour in a Cubic Foot of Air* for the month was 28.2, being 0.3 less than
 The mean *Weight of a Cubic Foot of Air* for the month was 554 grains, being 4 grains 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 0.221. The maximum daily amount of *Sunshine* was 8.7 hours on March 31.
 The highest reading of the *Solar Radiation Thermometer* was 110°.3 on March 19; and the lowest reading of the *Terrestrial Radiation Thermometer* was 20°.6 on March 18.
 The mean daily distribution of *Ozone* for the 12 hours ending 9^h was 0.5; for the 6 hours ending 15^h was 0.0; and for the 6 hours ending 21^h was 0.0.
 The *Proportions of Wind* referred to the cardinal points were N. 16, E. 9, S. 2, and W. 4.
 The *Greatest Pressure of the Wind* in the month was 6.8 lbs. on the square foot on March 13. The mean daily *Horizontal Movement of the Air* for the month was 260 miles; the greatest daily value was 537 miles on March 23; and the least daily value was 116 miles on March 31.
Rain fell on 13 days in the month, amounting to 0.18, as measured by gauge No. 6 partly sunk below the ground; being 0.543 less than the average fall for the 50 years, 1841-1890.

the average for the 50 years, 1841-1890.

DAILY RESULTS OF THE METEOROLOGICAL OBSERVATIONS,

Table with columns: MONTH and DAY, 1900; Phases of the Moon; BARO-METER; TEMPERATURE (Of the Air, Of Evaporation, Of the Dew Point, Difference between the Air Temperature and Dew Point Temperature, TEMPERATURE Of Radiation); Degree of Humidity; Rain collected in Gauge No. 6; Daily Amount of Ozone; Electricity.

The results apply to the civil day.

The mean reading of the Barometer (Column 2) and the mean temperatures of the Air and Evaporation (Columns 6 and 8) are deduced from the photographic records. The average temperature (Column 7) is deduced from the 50 years' observations, 1841-1890. The temperature of the Dew Point (Column 9) and the Degree of Humidity (Column 13) are deduced from the corresponding temperatures of the Air and Evaporation by means of Glaisher's Hygrometrical Tables. The mean difference between the Air and Dew Point Temperatures (Column 10) is the difference between the numbers in Columns 6 and 9, and the Greatest and Least Differences (Columns 11 and 12) are deduced from the 24 hourly photographic measures of the Dry-bulb and Wet-bulb Thermometers.

The values given in Columns 3, 4, 5, 14, and 15 are derived from eye-readings of self-registering thermometers.

The mean reading of the Barometer for the month was 29.814, being 0.073 higher than the average for the 50 years, 1841-1890.

TEMPERATURE OF THE AIR.

The highest in the month was 76.1 on April 21; the lowest in the month was 25.7 on April 2; and the range was 50.4. The mean of all the highest daily readings in the month was 56.8, being 0.4 lower than the average for the 50 years, 1841-1890. The mean of all the lowest daily readings in the month was 38.8, being 0.1 lower than the average for the 50 years, 1841-1890. The mean of the daily ranges was 18.0, being 0.3 less than the average for the 50 years, 1841-1890. The mean for the month was 47.8, being 0.6 higher than the average for the 50 years, 1841-1890.

MONTH and DAY, 1900.	Daily Duration of Sunshine.		WIND AS DEDUCED FROM SELF-REGISTERING ANEMOMETERS.						ROBINSON'S.		CLOUDS AND WEATHER.	
	hours.	Sun above Horizon.	OSLER'S.				Pressure on the Square Foot.		Horizontal Movement of the Air.	A.M.	P.M.	
			General Direction.		Greatest.	Least.	Mean of 24 Hourly Measures.					
			A.M.	P.M.								
Apr. 1	9.5	12.9	ESE : SE : NE	ENE : ESE : SE	0.8	0.0	0.03	137	0, ho.-fr : 0, slt.-f : 3, cu, cu.-s, ci.-s	3, ci, ci.-s : 3, s, ci.-s : 0, ho.-fr		
2	2.3	12.9	Variable : SW : WSW	W : NW : WSW	1.0	0.0	0.05	180	0, ho.-fr, m : p.-cl, m : 10, f, h	10 : 10, slt.-f : 10, li.-shs		
3	0.8	13.0	WSW : SW	SW : SSW : S	4.7	0.0	0.32	299	10, slt.-r : 10, li.-shs : 9, slt.-r	9 : 10, l, c.-r : 10, c.-r		
4	6.0	13.1	WSW	WSW : W : SSW	3.7	0.0	0.45	391	10, slt.-r : 10 : 8	7, cu, li.-cl : 4, cu, th.-cl : 3, th.-cl		
5	0.9	13.1	Variable : N	N : NNW	2.5	0.0	0.08	186	9, sh.-r : 9 : 10, slt.-r	10 : 10, fq.-r, hl : 10, c.-r		
6	6.4	13.2	NW : WSW : W	SW : SSW : SSE	2.6	0.0	0.14	245	p.-cl : p.-cl : 8, cu, li.-cl, h	5, cu, li.-cl, so.-ha : 6, cu, ci.-cu, cu.-s, li.-ha : 6, li.-cl		
7	1.1	13.3	ESE : E	ESE : E : NNE	2.4	0.0	0.20	255	p.-cl, sh.-r : 9, sh.-r : 10, oc.-slt.-r	9, cu, ci.-cu, ci.-s : 7 : p.-cl		
8	0.3	13.3	N	N : NNW : NNE	2.0	0.0	0.17	227	9 : p.-cl : 10, slt.-r	10 : 10, slt.-r : 10		
9	4.9	13.4	Calm : NE	WSW : SW	1.0	0.0	0.05	163	p.-cl, m, ho.-fr : 9, f : 10, th.-cl, slt.-f	9 : 10 : 8, shs.-r		
10	6.5	13.5	NW : W : SW	WNW : WSW : SW	3.5	0.0	0.38	356	p.-cl : 3, li.-cl : 5, cu, th.-cl	7, cu : 8 : 10, th.-cl, li.-ha, li.-co		
11	2.2	13.5	SSW : SW : WSW	SW : SSW	17.3	0.0	1.40	616	9, shs.-r : v, li.-shs, w : 9, w	10, st.-w : 9, st.-w, fq.-hy.-shs : 8, sc, li.-ha, w		
12	5.4	13.6	WSW : W : WNW	WSW : SW	11.0	0.0	1.31	604	9, shs.-r, w : 4, li.-cl : 8, cu, th.-cl, w	9, w : 10, sc, w : 10, sc, w		
13	8.1	13.7	WSW : W	WNW : WSW	23.0	0.0	3.15	776	p.-cl, st.-w : p.-cl, slt.-sh, w : 7, cu, st.-w	6, cu, st.-w : 3, th.-cl, w, li.-co : 1		
14	4.5	13.7	SW : WSW	WSW : SW	5.6	0.0	0.59	417	0 : 10 : 10	7, cu, li.-cl, w : 4, th.-cl : 10		
15	1.4	13.8	SW	SW : WSW	7.5	0.0	1.05	538	9 : 10 : 9, cu, li.-cl, w	10 : 5, s, ci.-s, li.-cl : 0		
16	8.1	13.8	WSW : SW	W : WNW : NW	19.2	0.0	1.35	613	0 : 0 : v, shs.-r, st.-w	v, hy.-sh, hl, t : v, shs.-r, w : 0		
17	0.0	13.9	WNW : WSW : SW	SW : WSW : NW	3.3	0.0	0.18	305	0 : 10 : 10, r	10, slt.-r : 10 : 0, m		
18	10.0	13.9	NW : N	N : NNE : SE	1.1	0.0	0.02	167	0, d : 0 : 3, cu, li.-cl	5, cu, li.-cl : 6, cu, th.-cl : p.-cl		
19	9.6	14.0	Calm : SSW	SW : SSE : NE	0.1	0.0	0.00	83	p.-cl : 0 : 2, th.-cl, h	1, th.-cl : 0 : 0		
20	12.1	14.1	NE : SE	ESE	2.1	0.0	0.12	170	0, m, d : 0 : 0	0 : 0		
21	9.6	14.2	E	SW : WSW	0.7	0.0	0.01	129	0, m, d : 0, f : 4, h, f	0, f : 0		
22	6.4	14.2	WSW : NW	NW : NNW : N	0.7	0.0	0.02	171	0, d : 0 : 6, m	6, ci.-s, li.-cl, so.-ha : 8 : 9		
23	6.8	14.3	N : NNE : NE	NE : ESE	1.4	0.0	0.10	224	9 : 10 : 5, cu, li.-cl	4, cu.-s, li.-cl : 3, li.-cl, so.-ha : 3		
24	7.0	14.4	ESE : NE	NE : N : E	0.7	0.0	0.03	148	1 : 0 : 5, cu, li.-cl	9 : 5 : p.-cl		
25	0.3	14.4	NNE : NE	NE : ENE : E	3.4	0.0	0.23	253	p.-cl : 10 : 10, c.-r	10, slt.-r : p.-cl : 0		
26	10.4	14.5	NE	Variable : SW	0.3	0.0	0.01	135	0, ho.-fr : 0 : 3, cu, li.-cl	1, cu, li.-cl : 10, th.-cl : 0		
27	0.7	14.5	SW : WSW : N	NNE : NE	2.3	0.0	0.19	257	5 : 10 : 10	10 : 10		
28	8.3	14.6	NE	NE : SSE : SSW	1.2	0.0	0.06	183	9 : p.-cl : 4, cu, cu.-s, li.-cl	0 : 0		
29	3.0	14.6	SW : WSW	WSW	4.0	0.0	0.35	342	0, ho.-fr : 10 : 9	9 : 10, fq.-slt.-r : 10, li.-shs		
30	0.0	14.7	SW	SW	3.2	0.0	0.20	286	10, li.-shs : 10, li.-shs : 10, c.-r	10, oc.-slt.-r : 10, oc.-th.-r : 9		
Means	5.1	13.8	...	...	...	...	0.41	295		
Number of Columns for Reference.	19	20	21	22	23	24	25	26	27	28		

The mean *Temperature of Evaporation* for the month was 43°.6, being 0°.3 lower than
 The mean *Temperature of the Dew Point* for the month was 39°.2, being 1°.0 lower than
 The mean *Degree of Humidity* for the month was 72.9, being 3.7 less than
 The mean *Elastic Force of Vapour* for the month was 0.239, being 0.010 less than
 The mean *Weight of Vapour in a Cubic Foot of Air* for the month was 28.7, being 0.2 less than
 The mean *Weight of a Cubic Foot of Air* for the month was 544 grains, being 1 grain greater than
 The mean amount of *Cloud* for the month (a clear sky being represented by 0, and an overcast sky by 10) was 6.4.
 The mean proportion of *Sunshine* for the month (constant sunshine being represented by 1) was 0.369. The maximum daily amount of *Sunshine* was 12.1 hours on April 20.
 The highest reading of the *Solar Radiation Thermometer* was 126°.4 on April 26 and the lowest reading of the *Terrestrial Radiation Thermometer* was 21°.1 on April 26.
 The mean daily distribution of *Ozone* for the 12 hours ending 9^h was 0.3; for the 6 hours ending 15^h was 0.0; and for the 6 hours ending 21^h was 0.0.
 The *Proportions of Wind* referred to the cardinal points were N. 6, E. 5, S. 7, and W. 11. One day was calm.
 The *Greatest Pressure of the Wind* in the month was 23.0 lbs. on the square foot on April 13. The mean daily *Horizontal Movement of the Air* for the month was 295 miles; the greatest daily value was 776 miles on April 13; and the least daily value was 83 miles on April 19.
Rain fell on 11 days in the month, amounting to 0.924, as measured by gauge No. 6 partly sunk below the ground; being 0.737 less than the average fall for the 50 years, 1841-1890.

MONTH and DAY, 1900.	Phases of the Moon.	BARO- METER. Mean of 24 Hourly Values (Corrected and reduced to 32° Fahrenheit).	TEMPERATURE.							Difference between the Air Temperature and Dew Point Temperature.			TEMPERATURE.			Rain collected in Gauge No. 6, whose receiving surface is 5 inches above the ground.	Daily Amount of Ozone.	Electricity.
			Of the Air.					Of Evapo- ration.	Of the Dew Point.	Mean.	Greatest.	Least.	Degree of Humidity (Saturation = 100).	Of Radiation.				
			Highest.	Lowest.	Daily Range.	Mean of 24 Hourly Values.	Excess above Average of 50 Years.	Mean of 24 Hourly Values.	De- duced Mean Daily Value.					Highest in Sun's Rays.	Lowest on the Grass.			
May 1	...	29.830	59.4	44.5	14.9	51.6	+ 2.4	46.5	41.3	10.3	17.7	1.0	68	89.0	37.4	0.000	0.0	vP, wN : ssP : vP mP : wP : mP
2	Greatest Declination N.	29.789	65.6	43.0	22.6	54.3	+ 4.9	48.1	42.1	12.2	20.0	2.9	63	129.0	35.8	0.000	0.0	wP, wN : vP, ssN
3	...	29.473	60.2	43.7	16.5	49.9	+ 0.2	46.6	43.1	6.8	17.3	1.9	78	121.6	36.9	0.139	0.0	wP
4	...	29.803	61.8	43.2	18.6	52.9	+ 2.9	48.0	43.1	9.8	16.7	0.7	70	125.3	37.6	0.000	0.0	wP
5	...	29.726	70.4	48.4	22.0	59.5	+ 9.2	53.1	47.5	12.0	21.4	5.0	65	138.2	42.0	0.001	0.0	wP
6	First Quarter	29.470	71.2	47.6	23.6	58.6	+ 8.0	54.8	51.4	7.2	16.0	1.0	77	105.9	39.4	0.279	0.0	mP, wN : vP, ssN
7	...	29.427	65.0	45.6	19.4	56.1	+ 5.3	51.4	47.0	9.1	18.8	1.3	72	135.4	36.5	0.000	0.0	wP : wP : mP
8	...	29.472	61.0	42.3	18.7	53.2	+ 2.2	49.4	45.6	7.6	12.9	1.3	75	100.2	34.5	0.000	0.0	mP
9	Apogee : In Equator	29.451	56.1	49.3	6.8	51.1	- 0.1	49.2	47.2	3.9	8.0	0.8	87	75.4	43.6	0.114	0.0	vP, vN : mP
10	...	29.776	53.7	39.8	13.9	48.3	- 3.2	46.2	43.9	4.4	10.7	0.6	85	92.9	30.7	0.006	0.0	wP
11	...	29.880	58.6	34.7	23.9	47.9	- 3.8	43.5	38.6	9.3	18.6	0.5	72	118.0	25.3	0.000	0.0	mP : mP : wP
12	...	29.874	51.2	43.3	7.9	46.7	- 5.3	43.5	39.9	6.8	9.7	3.5	78	105.8	36.0	0.000	0.0	wP : mP
13	...	29.865	50.4	39.4	11.0	44.5	- 7.8	40.4	35.6	8.9	13.9	3.0	71	103.5	35.4	0.000	0.0	wP : wP : mP
14	Full	29.831	53.9	37.0	16.9	44.3	- 8.3	39.2	33.2	11.1	19.8	1.4	65	120.0	32.1	0.000	0.2	mP : vP : sP
15	...	29.910	56.7	38.1	18.6	46.7	- 6.1	41.4	35.4	11.3	20.1	3.0	66	121.1	32.5	0.000	0.8	mP : sP : sP
16	Greatest Declination S.	29.959	56.6	37.8	18.8	46.1	- 7.0	42.0	37.3	8.8	16.3	1.6	72	128.3	30.5	0.000	0.0	sP
17	...	29.928	63.9	42.2	21.7	51.1	- 2.2	45.8	40.3	10.8	18.9	5.2	67	123.9	40.8	0.000	0.0	mP : sP : mP
18	...	29.839	54.4	43.3	11.1	48.4	- 5.2	45.6	42.6	5.8	12.0	0.9	81	82.7	40.2	0.013	0.0	wP : wP : mP
19	...	29.923	57.9	41.6	16.3	48.2	- 5.7	42.9	37.1	11.1	18.0	4.6	66	117.1	38.9	0.000	0.0	mP : sP : wP
20	...	29.936	65.2	36.8	28.4	52.3	- 1.9	46.7	41.0	11.3	19.1	0.0	66	127.2	26.1	0.000	0.7	mP : wP
21	Last Quarter	29.778	65.7	44.4	21.3	56.3	+ 1.7	51.1	46.2	10.1	15.7	4.2	69	127.8	36.1	0.000	3.8	mP : wP, wN : wP
22	...	29.525	58.6	50.0	8.6	53.9	- 1.1	52.3	50.7	3.2	4.6	1.2	89	87.2	45.6	0.232	4.5	wP, mN : wP, wN
23	In Equator	29.507	62.0	47.3	14.7	52.4	- 2.9	50.2	48.0	4.4	12.0	1.0	85	125.7	40.8	0.160	1.0	wP : vP, vN
24	Perigee	29.563	60.2	47.2	13.0	51.6	- 4.0	49.4	47.2	4.4	8.6	1.4	85	122.8	43.7	0.412	3.0	wP : vP, ssN
25	...	29.823	61.7	45.0	16.7	52.7	- 3.0	48.3	43.9	8.8	15.2	3.1	72	112.9	39.6	0.007	0.0	wP : mP : mP
26	...	30.058	62.1	45.2	16.9	51.7	- 4.2	48.9	46.1	5.6	12.9	0.6	81	128.2	36.9	0.000	0.0	mP : wP
27	...	30.092	70.0	41.1	28.9	56.7	+ 0.7	51.5	46.7	10.0	21.2	0.0	69	133.9	32.8	0.000	0.2	wP
28	New	30.083	68.8	53.0	15.8	58.9	+ 2.9	53.7	49.1	9.8	18.5	1.0	70	127.3	42.7	0.000	0.8	wP : wP : mP
29	Greatest Declination N.	30.139	65.4	45.5	19.9	56.4	+ 0.2	50.5	45.0	11.4	19.0	2.3	66	125.7	36.3	0.000	0.0	mP : vP : mP
30	...	30.148	57.1	48.2	8.9	51.3	- 5.2	48.0	44.6	6.7	11.6	3.1	78	105.2	42.3	0.000	0.0	mP
31	...	30.103	57.9	47.0	10.9	51.1	- 5.7	48.5	45.8	5.3	9.1	0.8	82	118.5	44.2	0.004	0.0	wP : mP : mP
Means	...	29.806	60.7	43.7	17.0	51.8	- 1.4	47.6	43.4	8.3	15.3	1.9	73.9	115.3	37.2	Sum 1.367	0.5	...
Number of Column for Reference.	I	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18

The results apply to the civil day.

The mean reading of the Barometer (Column 2) and the mean temperatures of the Air and Evaporation (Columns 6 and 8) are deduced from the photographic records. The average temperature (Column 7) is deduced from the 50 years' observations, 1841-1890. The temperature of the Dew Point (Column 9) and the Degree of Humidity (Column 13) are deduced from the corresponding temperatures of the Air and Evaporation by means of Glaisher's Hygrometrical Tables. The mean difference between the Air and Dew Point Temperatures (Column 10) is the difference between the numbers in Columns 6 and 9, and the Greatest and Least Differences (Columns 11 and 12) are deduced from the 24 hourly photographic measures of the Dry-bulb and Wet-bulb Thermometers.

The values given in Columns 3, 4, 5, 14, and 15 are derived from eye-readings of self-registering thermometers.

The mean reading of the Barometer for the month was 29.806, being 0.020 higher than the average for the 50 years, 1841-1890.

TEMPERATURE OF THE AIR.

The highest in the month was 71.2 on May 6; the lowest in the month was 34.7 on May 11; and the range was 36.5. The mean of all the highest daily readings in the month was 60.7, being 3.4 lower than the average for the 50 years, 1841-1890. The mean of all the lowest daily readings in the month was 43.7, being the same as the average for the 50 years, 1841-1890. The mean of the daily ranges was 17.0, being 3.4 less than the average for the 50 years, 1841-1890. The mean for the month was 51.8, being 1.4 lower than the average for the 50 years, 1841-1890.

MONTH and DAY, 1900.	Daily Duration of Sunshine.		WIND AS DEDUCED FROM SELF-REGISTERING ANEMOMETERS.						CLOUDS AND WEATHER.	
	hours.	Sun above Horizon.	OSLER'S.		ROBINSON'S.			A.M.	P.M.	
			General Direction.		Pressure on the Square Foot.					
			A.M.	P.M.	Greatest.	Least.	Mean of 24 Hourly Measures.			Horizontal Movement of the Air.
May 1	4.8	14.8	WSW : NW : NNW	N : NE : S	1.0	0.0	0.03	180	9 : 9 : 8, cu, li-cl	4, cu, th-cl : 8 : 0
2	9.6	14.8	S : SSW : WSW	SSW : S : SSE	2.4	0.0	0.17	251	o, d : p-cl : 7, cu, th-cl	2, ci-s, li-cl : 4, s, ci-s : 0
3	5.0	14.9	SSE : S : SSW	SW : WSW	15.0	0.0	1.04	464	p-cl : 10, w : 8, cu, shs-r, st-w	5, cu, w : v, shs-r : 0
4	10.7	14.9	SSW	SSW : SSE	5.0	0.0	0.61	400	o, d : 5, cu, li-cl	6, cu, li-cl : 9, th-cl : 10
5	8.3	15.0	SSE : S : SSW	SSW : SW : SSE	4.0	0.0	0.24	259	9 : 8 : 4, ci-cu, li-cl	7, ci-cu, li-cl : 8, so-ha, slt-r : 8, cu-s
6	1.9	15.1	SW : ENE : NE	Variable	2.3	0.0	0.09	175	p-cl : 9 : 10, slt-r	9, shs-r : 10, r, l, t : 9, hy-r, lu-ha
7	8.0	15.1	SSW : SW : WSW	SW	1.8	0.0	0.13	243	9 : p-cl : 8, cu, li-cl	6, cu, ci-cu, li-cl : 3, li-cl : 0
8	0.2	15.1	WSW : N : NE	N : NE : NNW	1.8	0.0	0.06	208	o : p-cl : 10	10 : 10, th-cl
9	0.0	15.2	W : WSW	W : NW : NNW	3.3	0.0	0.24	301	p-cl, th-r : 10 : 10, r, glm	10, c-r, glm : 10
10	1.1	15.3	NNW : WSW : NE	ENE : E	2.3	0.0	0.13	219	10 : 10 : 10, th-r	10, th-r : 5 : 0, d
11	11.6	15.3	NE	NE : ENE : E	1.0	0.0	0.02	153	o, ho-fr : o : 1, li-cl	o : o : p-cl
12	0.3	15.4	ENE : NE : NNE	NE : NNE : ENE	0.7	0.0	0.01	166	9 : 10 : 10	10 : 10
13	1.4	15.4	NNE	NE : NNE	4.7	0.0	0.54	399	10 : p-cl : 10	10 : 10 : 1, li-cl
14	9.3	15.5	NNE : NE	NE : NNE	13.0	0.0	1.45	582	p-cl : p-cl, w : 9, cu, w	6, cu, st-w : 5, cu, st-w : 0, w
15	10.9	15.5	NNE : NE	NE : NNE	5.6	0.0	0.90	479	o, w : p-cl, w : 8, cu, w	6, cu, ci-cu, w : p-cl, w : 0
16	5.9	15.6	N : NNE	NNE : NE	4.6	0.0	0.58	400	o : 4 : 8, cu	9 : 10 : 10
17	8.0	15.6	NE : NNE	NE : ESE	0.9	0.0	0.04	167	9 : 10 : 5, cu, li-cl	1, li-cl : 5, cu, ci-cu, li-cl : 10
18	0.0	15.7	ESE : E : ENE	E : NE	1.4	0.0	0.04	188	10 : 10	10 : 10, slt-r : 10
19	3.6	15.7	N : NNW	N : NE : SE	0.6	0.0	0.02	155	9 : 10 : 6, cu	5, cu : 8 : p-cl
20	6.3	15.7	SE : SW : WSW	SW : SSW	1.7	0.0	0.11	233	p-cl, m, d : p-cl : 7, li-cl, h	7 : 6, s, cu-s, li-cl : 0
21	5.2	15.8	SSW	SSW : SW	6.8	0.0	0.67	395	p-cl, d : p-cl : 5, cu, ci-s, li-cl	9, w : 9, cu-s, ci-s, se, w : 10, w
22	0.0	15.8	SW : SSW	SSW : SW	7.2	0.0	1.25	533	10, w : 10, shs-r, w : 10, r, w	10, hy-r : 10, r : 5
23	5.6	15.9	SW	SW	5.5	0.0	0.65	401	p-cl : v, shs-r, w : 6, cu, w	8, cu, shs-r : 10, shs-r : 10
24	2.4	15.9	SSW	Variable : N : NNW	1.9	0.0	0.03	177	10 : 9 : 9, slt-r	7, cu, n, by-r, hi, glm, t : p-cl : 10
25	7.1	16.0	NNW : NW	NNW : N : NNE	2.3	0.0	0.23	267	10 : p-cl : 9, cu	9, oc-shs : 10, oc-slt-r : p-cl
26	6.5	16.0	NNE : NE	ESE : SE : SSE	1.3	0.0	0.03	156	p-cl : 10 : 8, cu, cu-s	4, li-cl : 3 : 10
27	11.4	16.1	SE : SSW	SW : SSW	1.6	0.0	0.12	215	p-cl : o : 1, cu, li-cl	4, cu, cu-s, li-cl : 6, s, ci-s, li-cl : p-cl
28	6.1	16.1	SW : WSW	W : WNW : NNW	2.8	0.0	0.27	311	p-cl : 10 : 10, slt-r	9, cu : p-cl : 0
29	10.5	16.1	NNW : WSW	NNW : N : NNE	3.0	0.0	0.20	265	o : o : 4, cu, cu-s, li-cl	7 : 6, th-cl : 2
30	0.9	16.2	N	N : NNE	2.4	0.0	0.24	313	p-cl : 10 : 10	10 : 10, th-cl : 10
31	0.6	16.2	NNE : N	N	2.8	0.0	0.29	317	9 : 10 : 10	9 : 10 : 10, sc, fq, slt-r
Means	5.3	15.5	...	...	...	...	0.34	289		
Number of Column for Reference.	19	20	21	22	23	24	25	26	27	28

The mean *Temperature of Evaporation* for the month was 47°·6, being 1°·6 lower than
 The mean *Temperature of the Dew Point* for the month was 43°·4, being 1°·9 lower than
 The mean *Degree of Humidity* for the month was 73·9, being 1·1 less than
 The mean *Elastic Force of Vapour* for the month was 0ⁱⁿ·281, being 0ⁱⁿ·022 less than
 The mean *Weight of Vapour in a Cubic Foot of Air* for the month was 3^{gr}·2, being 0^{gr}·2 less than
 The mean *Weight of a Cubic Foot of Air* for the month was 540 grains, being 2 grains greater than
 The mean amount of *Cloud* for the month (a clear sky being represented by 0, and an overcast sky by 10) was 7·2.
 The mean proportion of *Sunshine* for the month (constant sunshine being represented by 1) was 0·339. The maximum daily amount of *Sunshine* was 11·6 hours on May 11.
 The highest reading of the *Solar Radiation Thermometer* was 138°·2 on May 5; and the lowest reading of the *Terrestrial Radiation Thermometer* was 25°·3 on May 11.
 The mean daily distribution of *Ozone* for the 12 hours ending 9^h was 0·5; for the 6 hours ending 15^h was 0·0; and for the 6 hours ending 21^h was 0·0.
 The *Proportions of Wind* referred to the cardinal points were N. 10, E. 6, S. 9, and W. 6.
 The *Greatest Pressure of the Wind* in the month was 15·0 lbs. on the square foot on May 3. The mean daily *Horizontal Movement of the Air* for the month was 289 miles; the greatest daily value was 582 miles on May 14; and the least daily value was 153 miles on May 11.
Rain fell on 9 days in the month, amounting to 1ⁱⁿ·367, as measured by gauge No. 6 partly sunk below the ground; being 0ⁱⁿ·636 less than the average fall for the 50 years, 1841-1890.

the average for the 50 years, 1841-1890.

MONTH and DAY, 1900.	Phases of the Moon.	BARO- METER. Mean of 24 Hourly Values (corrected and reduced to 32° Fahrenheit)	TEMPERATURE.								Difference between the Air Temperature and Dew Point Temperature.			TEMPERATURE.		Rain collected in Gauge No. 6, whose receiving surface is 5 inches above the Ground.	Daily Amount of Ozone.	Electricity.
			Of the Air.					Of Evapo- ration.	Of the Dew Point.	Mean.	Greatest.	Least.	Of Radiation.					
			Highest.	Lowest.	Daily Range.	Mean of 24 Hourly Values.	Excess above Average of 50 Years.	Mean of 24 Hourly Values.	De- duced Mean Daily Value.				Degree of Humidity (Saturation = 100).	Highest in Sun's Rays.	Lowest on the Grass.			
June 1	...	29.992	53.1	47.5	5.6	49.5	- 7.7	48.3	47.0	2.5	4.8	0.0	92	65.2	46.4	0.233	0.0	mP, vN : wP
2	...	29.878	64.7	47.5	17.2	54.6	- 3.1	53.3	52.0	2.6	6.7	0.0	91	103.0	45.6	0.012	1.0	wP
3	...	29.793	71.0	49.7	21.3	59.3	+ 1.3	56.1	53.3	6.0	12.4	0.0	81	120.7	40.7	0.000	0.0	wwP : wwP : wP
4	...	29.763	75.5	49.0	26.5	61.8	+ 3.6	54.5	48.2	13.6	24.7	2.2	61	137.9	39.6	0.000	0.2	wP : wP, wwN
5	First Quarter : In Equator : Apogee	29.795	62.3	45.3	17.0	53.8	- 4.5	50.5	47.3	6.5	10.8	2.1	78	135.6	37.9	0.002	0.8	wP : mP : mP
6	...	29.772	72.8	48.2	24.6	59.2	+ 0.9	54.1	49.5	9.7	23.6	1.9	71	115.9	45.1	0.020	0.0	mP : mP : wP, mN
7	...	29.692	67.9	51.3	16.6	57.5	- 0.7	53.9	50.6	6.9	18.5	1.8	78	134.6	47.0	0.094	0.0	wP, wN : vP, ssN : wP
8	...	29.692	67.8	50.4	17.4	56.7	- 1.5	53.0	49.6	7.1	18.0	0.6	77	131.7	46.5	0.083	0.0	wP, vN : wP
9	...	29.802	68.7	50.9	17.8	59.0	+ 0.8	54.6	50.6	8.4	14.9	2.2	74	130.8	38.2	0.000	0.5	wP
10	...	29.725	81.2	49.2	32.0	68.1	+ 9.9	57.7	49.5	18.6	32.8	3.4	51	138.0	35.8	0.000	1.5	wP : wwP, wwN : wwP
11	...	29.678	89.4	59.6	29.8	73.8	+ 15.4	64.6	57.9	15.9	30.6	6.3	58	155.3	49.0	0.000	0.0	wP
12	Greatest Declination S.	29.695	82.6	57.6	25.0	69.8	+ 11.2	64.0	59.5	10.3	20.1	2.3	70	136.0	48.6	0.094	0.0	wP : vP, ssN : vP, sN
13	Full	29.757	65.8	53.3	12.5	59.6	+ 0.8	56.5	53.8	5.8	12.6	2.0	82	114.8	44.3	0.145	0.0	wP : wP, sN : wP
14	...	29.937	67.7	49.3	18.4	57.7	- 1.2	54.4	51.4	6.3	14.8	0.0	80	125.0	38.8	0.124	0.2	wP : vP, vN : wP
15	...	29.830	71.2	54.0	17.2	60.8	+ 1.8	58.9	57.3	3.5	8.8	0.0	89	130.0	53.6	0.075	0.8	wwP, wwN : wwP : wwP
16	...	29.904	69.9	54.2	15.7	61.6	+ 2.6	57.6	54.2	7.4	13.0	1.4	77	128.0	50.1	0.000	0.0	wP
17	...	29.902	72.6	55.5	17.1	63.7	+ 4.6	57.8	52.9	10.8	20.9	1.7	68	130.4	46.5	0.002	0.0	wP
18	...	29.931	74.1	50.0	24.1	62.1	+ 2.9	55.0	48.9	13.2	23.9	3.2	62	134.0	40.0	0.000	0.0	mP : wP : wP
19	Perigee	29.772	73.9	54.7	19.2	63.7	+ 4.2	56.1	49.8	13.9	23.8	3.6	61	142.9	51.0	0.000	0.2	wP
20	In Equator : Last Quarter	29.623	69.8	53.0	16.8	58.3	- 1.6	55.6	53.2	5.1	15.5	0.0	83	139.1	48.6	0.243	0.8	vP, sN : vP, ssN : wP
21	...	29.591	61.6	51.5	10.1	55.6	- 4.7	54.6	53.7	1.9	8.2	0.6	94	101.2	46.9	0.433	3.0	wP : wP, wN
22	...	29.683	68.5	53.0	15.5	58.7	- 2.0	54.5	50.7	8.0	18.4	0.0	75	122.1	51.0	0.007	0.0	wwP : wwP : wP
23	...	29.723	66.2	47.4	18.8	56.8	- 4.2	51.6	46.8	10.0	17.8	0.8	69	126.9	46.4	0.090	0.0	vP, sN : mP
24	...	29.745	66.1	50.3	15.8	57.1	- 4.1	53.8	50.7	6.4	15.5	1.0	79	127.1	45.4	0.019	1.2	wP
25	...	29.432	64.1	52.3	11.8	55.7	- 5.6	53.4	51.2	4.5	13.3	1.6	86	115.4	49.2	0.675	3.8	wP, vN : vP, sN
26	Greatest Declination N.	29.720	62.1	51.5	10.6	55.6	- 5.8	52.2	49.0	6.6	10.1	2.8	79	106.3	49.5	0.000	0.0	wP
27	New	29.855	66.0	47.4	18.6	56.6	- 4.8	52.6	48.9	7.7	14.2	1.3	76	113.9	42.1	0.000	0.0	wP : wP : mP
28	...	29.851	69.0	50.0	19.0	57.4	- 3.9	55.5	53.8	3.6	15.1	0.0	88	111.9	44.1	0.260	0.0	wP : wP, sN
29	...	29.775	72.8	53.6	19.2	61.1	- 0.1	56.4	52.3	8.8	18.9	0.0	73	132.5	46.4	0.000	1.0	wP
30	...	29.600	66.9	53.2	13.7	58.1	- 3.1	55.4	53.0	5.1	14.6	1.0	83	116.7	52.0	0.204	3.5	wP
Means	...	29.764	69.5	51.3	18.2	59.4	0.0	55.2	51.6	7.9	16.6	1.4	76.2	124.1	45.5	Sum 2.815	0.6	...
Number of Column for Reference.	I	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18

The results apply to the civil day.

The mean reading of the Barometer (Column 2) and the mean temperatures of the Air and Evaporation (Columns 6 and 8) are deduced from the photographic records. The average temperature (Column 7) is deduced from the 50 years' observations, 1841-1890. The temperature of the Dew Point (Column 9) and the Degree of Humidity (Column 13) are deduced from the corresponding temperatures of the Air and Evaporation by means of Glaisher's Hygrometrical Tables. The mean difference between the Air and Dew Point Temperatures (Column 10) is the difference between the numbers in Columns 6 and 9, and the Greatest and Least Differences (Columns 11 and 12) are deduced from the 24 hourly photographic measures of the Dry-bulb and Wet-bulb Thermometers.

The values given in Columns 3, 4, 5, 14, and 15 are derived from eye-readings of self-registering thermometers.

The mean reading of the Barometer for the month was 29.764, being 0.047 lower than the average for the 50 years, 1841-1890.

TEMPERATURE OF THE AIR.

The highest in the month was 89.4 on June 11; the lowest in the month was 45.3 on June 5; and the range was 44.1. The mean of all the highest daily readings in the month was 69.5, being 1.4 lower than the average for the 50 years, 1841-1890. The mean of all the lowest daily readings in the month was 51.3, being 1.4 higher than the average for the 50 years, 1841-1890. The mean of the daily ranges was 18.2, being 2.8 less than the average for the 50 years, 1841-1890. The mean for the month was 59.4, being the same as the average for the 50 years, 1841-1890.

MONTH and DAY, 1900.	Daily Duration of Sunshine. Sun above Horizon.		WIND AS DEDUCED FROM SELF-REGISTERING ANEMOMETERS.						CLOUDS AND WEATHER.			
			OSLER'S.				ROBINSON'S.					
			General Direction.		Pressure on the Square Foot.		Greatest.	Least.	Mean of 24 Hourly Measures.	Horizontal Movement of the Air.	A.M.	P.M.
			A.M.	P.M.								
June 1	0.0	16.2	N	N : NNE	7.5	0.0	1.06	507	10, li.-shs, w : 10, c.-r, w : 10, sc, r, w	10, oc.-slt.-r, w : 10, fq.-r, w : 10, fq.-shs		
2	1.5	16.3	NNE	NNE	2.0	0.0	0.12	261	10, fq.-r : 10 : 10	9 : 8 : 5		
3	5.7	16.3	NNE : N : NNW	NNE : N	3.4	0.0	0.27	314	p.-cl, f, m : 10 : p.-cl	8 : 3, li.-cl : 0		
4	13.1	16.3	N : NNE : NE	NE : NNE	3.2	0.0	0.39	367	0 : p.-cl : 3, ci.-s, li.-cl	1, ci.-s, li.-cl : 1, ci.-s, li.-cl : 1		
5	8.3	16.4	NNE : N	N	2.2	0.0	0.24	307	0 : p.-cl : 6, cu, li.-cl	6, cu, li.-cl, slt.-r : 7, cu, ci.-cu, li.-cl : 9		
6	8.5	16.4	N	NE : W : WSW	1.2	0.0	0.04	171	p.-cl, l : th.-cl, h : 5, th.-cl, h	3, ci.-s, li.-cl : 8, hy.-sh : 9, th.-cl		
7	5.7	16.4	WSW	WSW : SW	3.7	0.0	0.38	344	p.-cl, hy.-sh : 9, hy.-shs : 5, cu	9, cu, oc.-hy.-shs : 6, cu, cu.-s : 3		
8	5.6	16.4	SW : WSW	W : WSW	5.9	0.0	0.71	443	9, hy.-shs, hl : p.-cl, shs.-r : 8, sc, fq.-r	7, cu, li.-cl, sh.-r : 10, w : 8, th.-cl		
9	7.1	16.4	SW	SSW : SSE	2.3	0.0	0.19	289	p.-cl : 9 : 9, cu	8, ci.-s, cu.-s : 3 : 0		
10	15.2	16.5	SSE : SE	SSE : SE	4.8	0.0	0.32	258	0, m : 0 : 1, li.-cl	0 : 1, ci, li.-cl : p.-cl		
11	13.8	16.5	S : SW : SE	SE : E : SW	2.6	0.0	0.11	178	p.-cl : 1, ci.-cu, li.-cl : 2, cu, cu.-s, ci.-cu	1, li.-cl : 2 : 1, ci.-cu, li.-cl, lu.-ha		
12	10.6	16.5	Variable	NE : ESE	1.7	0.0	0.06	157	0 : 1, li.-cl : 9, hy.-r, l, t	6, cu, ci.-cu, li.-cl : 3, cu, ci.-cu, slt.-sh : 8, t.-sm, fq.-r		
13	4.0	16.5	SW	SW	1.8	0.0	0.18	254	9, l : 9 : 10, slt.-r	10, fq.-hy.-shs : 9, th.-cl : 8, s, th.-cl		
14	7.5	16.5	SW	SW : S : ESE	3.0	0.0	0.18	242	p.-cl : 3, li.-cl : 8, cu, hy.-r, t	8, cu, cu.-s, so.-ha : 10, slt.-r : 10, r		
15	2.5	16.5	ESE : SW	SW : WSW	3.4	0.0	0.34	304	10, r : 10 : 9	10, oc.-slt.-r : 10, oc.-slt.-r : 3		
16	6.4	16.5	WSW : SW	SW	1.8	0.0	0.21	300	1, th.-cl : p.-cl : 9	10 : 10 : 9, slt.-r		
17	7.6	16.6	SW : WSW : W	WSW : W	2.0	0.0	0.24	297	10, th.-r : 10 : 10, glm	9 : 3, li.-cl : 1, li.-cl		
18	10.1	16.6	WSW : W	WSW : W : WNW	1.0	0.0	0.02	152	0 : 0 : 3, cu, li.-cl	7, cu, ci.-cu, so.-ha : 5, cu, ci.-cu, th.-cl, so.-ha : 10, th.-cl		
19	8.9	16.6	SW : S	SW : SSW	2.7	0.0	0.22	257	9 : p.-cl : 4, cu, cu.-s	3, ci.-cu, ci.-s, li.-cl, so.-ha : 8, so.-ha : 9, slt.-sh		
20	7.4	16.6	SSW : SW	SW : WSW	4.4	0.0	0.31	321	v, hy.-sh : 9 : 9, cu, ci.-cu, n, oc.-hy.-shs	6, slt.-r : 10, oc.-shs : p.-cl		
21	0.4	16.6	SW : SSW	Variable	1.2	0.0	0.05	212	10 : 10 : 10, r	10, c.-r : 10, c.-r : 10, shs.-r		
22	8.0	16.6	WSW : W	WSW : SW : SSW	5.0	0.0	0.54	399	10 : p.-cl : 7, cu, cu.-s, n	7 : 9, slt.-r : 10, n, t, sh.-r		
23	10.5	16.6	SSW : WSW : W	W : WNW : WSW	6.0	0.0	0.38	354	v, shs.-r : p.-cl : 5, cu, cu.-s	5 : 8, th.-cl : 9		
24	3.1	16.6	SW	SW : SSW	4.3	0.0	0.45	329	9 : p.-cl : 9	10, oc.-slt.-r : 10, fq.-slt.-r		
25	2.2	16.6	SW : SSW	NW : NNW	4.0	0.0	0.45	329	10 : 9, hy.-sh : 9, hy.-r	9, hy.-r, l, t : 9, cu, r, t : 10, sc		
26	1.0	16.5	WNW : W	WNW : NW : W	5.2	0.0	0.57	382	9 : 10 : 10, glm	9 : 9 : 10		
27	5.5	16.5	WSW : W : WNW	W : NW : SW	1.0	0.0	0.05	180	p.-cl, m : 8, th.-cl, h : 9, th.-cl	7, cu, th.-cl : 8, cu, th.-cl, so.-ha : 10, th.-cl		
28	2.6	16.5	Variable : NNE	N : ESE	1.0	0.0	0.02	88	9, m : 10, m : 8, m, h	8, cu, th.-cl, h : 10, glm, hy.-r, t, m : 10, th.-cl, m		
29	7.9	16.5	Calm : SW	SW	2.6	0.0	0.15	203	9, m : p.-cl, f, h : 4, cu, th.-cl, h, so.-ha	4, cu, ci.-cu, ci.-s : 10 : 10, r		
30	1.2	16.5	SSW : WSW	SW	5.7	0.0	0.48	337	9 : 10 : 10, sh.-r	9, slt.-r : 9, oc.-slt.-r : 9		
Means	6.4	16.5	...	...	...	...	0.29	285		
Number of Column for Reference.	19	20	21	22	23	24	25	26	27	28		

The mean *Temperature of Evaporation* for the month was 55°.2, being 0°.2 higher than
 The mean *Temperature of the Dew Point* for the month was 51°.6, being 0°.5 higher than
 The mean *Degree of Humidity* for the month was 76.2, being 2.2 greater than
 The mean *Elastic Force of Vapour* for the month was 0.12382, being 0.007 greater than
 The mean *Weight of Vapour in a Cubic Foot of Air* for the month was 4.873, being 0.1 greater than
 The mean *Weight of a Cubic Foot of Air* for the month was 530 grains, being 1 grain less than
 The mean amount of *Cloud* for the month (a clear sky being represented by 0, and an overcast sky by 10) was 7.0.
 The mean proportion of *Sunshine* for the month (constant sunshine being represented by 1) was 0.388. The maximum daily amount of *Sunshine* was 15.2 hours on June 10.
 The highest reading of the *Solar Radiation Thermometer* was 155°.3 on June 11; and the lowest reading of the *Terrestrial Radiation Thermometer* was 35°.8 on June 10.
 The mean daily distribution of *Ozone* for the 12 hours ending 9^h was 0.5; for the 6 hours ending 15^h was 0.0; and for the 6 hours ending 21^h was 0.1.
 The *Proportions of Wind* referred to the cardinal points were N. 6, E. 3, S. 9, and W. 12.
 The *Greatest Pressure of the Wind* in the month was 7.5 lbs. on the square foot on June 1. The mean daily *Horizontal Movement of the Air* for the month was 285 miles; the greatest daily value was 507 miles on June 1; and the least daily value was 88 miles on June 28.
Rain fell on 17 days in the month amounting to 2.12815, as measured by gauge No. 6 partly sunk below the ground; being 0.1793 greater than the average fall for the 50 years, 1841-1890.

DAILY RESULTS OF THE METEOROLOGICAL OBSERVATIONS,

Table with columns: MONTH and DAY, 1900; Phases of the Moon; BAROMETER; TEMPERATURE (Of the Air, Of Evaporation, Of the Dew Point); Difference between the Air Temperature and Dew Point Temperature; TEMPERATURE (Of Radiation); Rain collected in Gauge No. 6; Daily Amount of Ozone; Electricity. Rows include dates from July 1 to July 31, and a Means row.

The results apply to the civil day.

The mean reading of the Barometer (Column 2) and the mean temperatures of the Air and Evaporation (Columns 6 and 8) are deduced from the photographic records. The average temperature (Column 7) is deduced from the 50 years' observations, 1841-1890. The temperature of the Dew Point (Column 9) and the Degree of Humidity (Column 13) are deduced from the corresponding temperatures of the Air and Evaporation by means of Glaisher's Hygrometrical Tables. The mean difference between the Air and Dew Point Temperatures (Column 10) is the difference between the numbers in Columns 6 and 9, and the Greatest and Least Differences (Columns 11 and 12) are deduced from the 24 hourly photographic measures of the Dry-bulb and Wet-bulb Thermometers.

The values given in Columns 3, 4, 5, 14, and 15 are derived from eye-readings of self-registering thermometers.

The mean reading of the Barometer for the month was 29.836, being 0.043 higher than the average for the 50 years, 1841-1890.

TEMPERATURE OF THE AIR.

The highest in the month was 94.0 on July 16; the lowest in the month was 46.3 on July 8; and the range was 47.7. The mean of all the highest daily readings in the month was 78.3, being 4.3 higher than the average for the 50 years, 1841-1890. The mean of all the lowest daily readings in the month was 56.7, being 3.6 higher than the average for the 50 years, 1841-1890. The mean of the daily ranges was 21.6, being 0.7 greater than the average for the 50 years, 1841-1890. The mean for the month was 66.6, being 4.2 higher than the average for the 50 years, 1841-1890.

MONTH and DAY, 1900.	Daily Duration of Sunshine. Sun above Horizon.		WIND AS DEDUCED FROM SELF-REGISTERING ANEMOMETERS.							CLOUDS AND WEATHER.					
			OSLER'S.				ROBIN- SON'S.								
			General Direction.		Pressure on the Square Foot.			Horizontal Movement of the Air.				A.M.		P.M.	
			A.M.	P.M.	Greatest.	Least.	Mean of Hourly Measure.	Horizontal Movement of the Air.	A.M.	P.M.	A.M.	P.M.			
July	hours.	hours.	SSW : WSW	SW	lbs.	lbs.	lbs.	miles.	9	: li-cl	: 9, cu	10	: 10	: 10, slt.-sh	
1	5.8	16.5	SW	SE : NNW	6.0	0.0	0.81	398	10, r	: 10, r	: 10, oc.-slt.-r	10, c.-r	: 10, hy.-r, gt.-gln	: 10	
2	0.1	16.5	W : WSW	WSW : NNW	4.4	0.0	0.17	244	10	: 8, li-cl	: 5, cu, li-cl	6, hy.-sh, l, t	: 4, cu.-s, cu, t	: 1, l	
3	7.9	16.5	N	N : SE : SW	1.4	0.0	0.07	190	p.-cl, m	: p.-cl	: 5, cu	9, t	: 9, cu, cl.-cu, li.-cl	: 10	
4	9.0	16.4	SW	WSW : NW	2.2	0.0	0.14	263	10	: 10		8, cu, li.-cl	: 9, cu, slt.-sh	: 9, slt.-sh	
5	4.6	16.4	WSW : NW	NW : WNW : NNW	8.3	0.0	1.27	478	p.-cl	: 5	: 9, cu, hy.-sh, w	9, cu, cl.-cu, li.-cl	: 8, cu, ci.-cu, w	: 0, w	
6	8.7	16.4	NNW	N : NE	4.7	0.0	0.73	350	v	: 7, th.-cl	: 7, cu	8, cu	: 4, cu, cu.-s	: 1, cu.-s, li.-cl	
7	11.4	16.4	NNW	NNW	2.2	0.0	0.11	209	0	: 4	: 7, cu, cu.-s	8, cu	: v, oc.-slt.-r, so.-ha	: 10	
8	8.8	16.4	NNW : W : WSW	WNW : WSW	2.1	0.0	0.14	273	10	: 9	: 10	10	: 10		
9	0.7	16.3	WSW	SW : S	1.0	0.0	0.07	224	0	: 1, li.-cl	: 1, li.-cl, h	0	: 0		
10	15.3	16.3	SE : S	SE : E	1.9	0.0	0.09	216	0	: 0	: 1, li.-cl	1, cu.-s, cl.-cu, cl.-s	: 1, li.-cl	: p.-cl, m	
11	15.1	16.3	E	E : ESE	2.7	0.0	0.05	173	p.-cl, m	: th.-cl, slt.-f	: 1, ci, li.-cl	1, ci.-s	: 2, li.-cl	: 8, th.-cl, h	
12	13.4	16.2	SW : N	SSW	2.0	0.0	0.09	186	1, th.-cl, h, m	: h, m	: 7, cu, li.-cl	6, cu, cu.-s, li.-cl	: 3, cu, cu.-s, li.-cl	: 7, ci.-s, cu.-s	
13	12.4	16.2	SSW	SSW	4.1	0.0	0.31	301	9	: 9	: 9, cu, sh.-r	6, cu, li.-cl	: 4, cu, li.-cl	: 0	
14	10.5	16.2	SSW : SW	SSW : S : E	1.1	0.0	0.01	115	0, hy.-d	: 10	: 7, cu, li.-cl	6, cu, li.-cl	: 3, li.-cl	: 0	
15	13.0	16.1	NE : Variable	SSW : WNW : NNW	3.7	0.0	0.14	187	0, m, d	: 1, li.-cl	: 3, li.-cl	2, cu	: p.-cl, slt.-r	: 6, s, cu.-s, l	
16	11.4	16.1	NNW : N	Variable	0.8	0.0	0.02	153	0, m	: 0	: 1, li.-cl	2, li.-cl, h	: 2, cu, cl.-cu, li.-cl	: 0, m	
17	13.3	16.1	SSW : S	SSW : S : SSE	1.0	0.0	0.04	151	0, m	: 0		0	: 0		
18	13.7	16.0	Variable : NE	S : ESE	1.0	0.0	0.03	124	0, m	: 0		1, ci.-s	: 1, th.-cl	: 2, th.-cl	
19	13.5	16.0	ESE : E : ENE	E : WSW	3.0	0.0	0.16	242	p.-cl, l, t	: p.-cl	: 1, li.-cl	2, cu, th.-cl	: 2, cu, li.-cl	: 1, cu, li.-cl, l	
20	11.2	15.9	WSW : SW	WSW : SW	3.1	0.0	0.22	262	0, l, t	: 9	: 9, cu, slt.-r	8, cu, cl.-cu, li.-cl	: 8, slt.-sh	: 10	
21	7.1	15.9	WSW : W : WNW	NW : NNW	1.2	0.0	0.06	204	9	: p.-cl	: 9	9, cu	: 10	: 10	
22	5.3	15.8	NNW	NNW : SSW	0.4	0.0	0.01	128	p.-cl	: 10	: 9, slt.-r	7, cu	: p.-cl	: 0	
23	3.6	15.8	SW	SSW : S	1.7	0.0	0.08	191	0	: 0	: 3, cu, li.-cl, h	3, li.-cl	: 1, li.-cl	: 0	
24	14.4	15.7	Calm : SSW	SW : WSW	5.0	0.0	0.27	243	0, m	: 0		1, li.-cl	: 0	: 0	
25	14.6	15.7	W : NNW	N : E	2.2	0.0	0.13	217	p.-cl	: p.-cl	: 4, cu, li.-cl	4, cu, li.-cl	: 2, li.-cl	: 0	
26	8.6	15.7	ESE : E	E : ESE	6.2	0.0	0.57	299	0, m	: p.-cl	: 4, li.-cl	9, t.-sm, hy.-r	: 10, t.-sm, hy.-r	: 9, t.-sm, hy.-r, w	
27	7.1	15.6	ESE : SSE : SW	SW	4.4	0.0	0.22	261	9	: 10, shs.-r	: 10	8	: 5, ci.-s, li.-cl	: 1, li.-cl	
28	5.2	15.6	SW : WSW	WSW	4.0	0.0	0.27	268	p.-cl	: 10	: 4, cu	p.-cl, shs.-r	: 10, l, t	: 9	
29	6.4	15.5	WSW : W	W : WNW : WSW	7.5	0.0	0.67	399	10	: p.-cl	: 5, cu	7, cu, li.-cl	: 3, cu, li.-cl	: li.-cl	
30	13.0	15.5	WSW	SW : SSW	2.8	0.0	0.17	257	0, m	: p.-cl	: 6, cu, cu.-s	8, cu, cl.-cu, li.-cl	: p.-cl	: 0	
31	9.7	15.4	...	...	...	...	0.23	236						
Means	9.5	16.0	...	...	...	...	0.23	236						
Number of Column for Reference.	19	20	21	22	23	24	25	26	27			28			

The mean *Temperature of Evaporation* for the month was 60°·1, being 2°·3 higher than the average for the 50 years, 1841-1890.

The mean *Temperature of the Dew Point* for the month was 54°·8, being 0°·9 higher than the average for the 50 years, 1841-1890.

The mean *Degree of Humidity* for the month was 66·6, being 7·2 less than the average for the 50 years, 1841-1890.

The mean *Elastic Force of Vapour* for the month was 0ⁱⁿ·430, being 0ⁱⁿ·014 greater than the average for the 50 years, 1841-1890.

The mean *Weight of Vapour in a Cubic Foot of Air* for the month was 48^{grs}·8, being 0^{grs}·2 greater than the average for the 50 years, 1841-1890.

The mean *Weight of a Cubic Foot of Air* for the month was 524 grains, being 3 grains less than the average for the 50 years, 1841-1890.

The mean amount of *Cloud* for the month (a clear sky being represented by 0, and an overcast sky by 10) was 5·1.

The mean proportion of *Sunshine* for the month (constant sunshine being represented by 1) was 0·593. The maximum daily amount of *Sunshine* was 15·3 hours on July 10.

The highest reading of the *Solar Radiation Thermometer* was 156°·1 on July 16; and the lowest reading of the *Terrestrial Radiation Thermometer* was 33°·9 on July 8.

The mean daily distribution of *Ozone* for the 12 hours ending 9^h was 0·0; for the 6 hours ending 15^h was 0·0; and for the 6 hours ending 21^h was 0·0.

The *Proportions of Wind* referred to the cardinal points were N. 6, E. 5, S. 8, and W. 11. One day was calm.

The *Greatest Pressure of the Wind* in the month was 8·3 lbs. on the square foot on July 6. The mean daily *Horizontal Movement of the Air* for the month was 236 miles; the greatest daily value was 478 miles on July 6; and the least daily value was 115 miles on July 15.

Rain fell on 5 days in the month, amounting to 1ⁱⁿ·408, as measured by gauge No. 6 partly sunk below the ground; being 1ⁱⁿ·062 less than the average fall for the 50 years, 1841-1890.

MONTH and DAY, 1900.	Phases of the Moon.	BARO- METER. Mean of 24 Hourly Values (corrected and reduced to 32° Fahr.=height).	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 Amount of Ozone.	Electricity.
			Of the Air.					Of Evapo- ration.	Of the Dew Point.	Mean.	Greatest.	Least.		Of Radiation.				
			Highest.	Lowest.	Daily Range.	Mean of 24 Hourly Values.	Excess above Average of 50 Years.	Mean of 24 Hourly Values.	De- duced Mean Daily Value.					Highest in Sun's Rays.	Lowest on the Grass.			
Aug. 1	...	29.699	66.6	56.7	9.9	61.0	- 1.2	58.3	56.0	5.0	9.5	2.1	84	118.2	52.2	0.281	0.0	wP : vP, ssN : wP, wwN
2	...	29.625	73.7	54.7	19.0	62.3	+ 0.2	55.9	50.4	11.9	23.4	4.0	65	134.5	49.5	0.002	0.0	wP : wP, wN : wP
3	First Quarter	29.317	68.9	51.3	17.6	59.4	- 2.7	55.8	52.6	6.8	14.4	1.4	79	125.8	50.8	0.289	0.0	wwP : vP, vN
4	...	29.520	64.6	50.8	13.8	56.7	- 5.5	50.6	45.0	11.7	19.2	3.4	65	122.0	44.5	0.004	0.0	wP : mP : mP
5	...	29.564	62.7	48.2	14.5	55.3	- 7.0	52.4	49.6	5.7	11.2	0.6	82	94.7	42.5	0.120	0.0	wP : vP, sN
6	Greatest Declination S.	29.318	64.6	51.4	13.2	56.2	- 6.2	53.9	51.7	4.5	9.9	1.0	85	88.8	47.0	0.198	0.0	wP : wP, wN : wP
7	...	29.407	68.0	52.7	15.3	57.2	- 5.3	52.8	48.8	8.4	15.5	2.6	73	123.0	47.6	0.085	0.0	wP : vP, vN
8	...	29.720	64.9	50.8	14.1	56.2	- 6.3	53.5	51.0	5.2	11.2	1.6	83	127.0	43.0	0.025	0.0	wP
9	...	29.638	61.8	50.4	11.4	55.8	- 6.7	54.0	52.3	3.5	10.1	0.8	88	87.0	42.3	0.257	0.0	wP : wwP, wN
10	Full	29.814	63.3	51.7	11.6	56.0	- 6.5	53.1	50.4	5.6	10.5	1.6	82	112.0	47.0	0.052	0.0	wP
11	...	30.176	72.1	50.4	21.7	59.5	- 3.0	55.2	51.4	8.1	19.4	0.4	75	112.3	41.4	0.000	0.0	wP
12	Perigee : In Equator	30.172	77.9	53.9	24.0	65.6	+ 3.1	57.9	51.7	13.9	27.2	3.2	60	130.2	45.2	0.000	0.0	wP : wP : mP
13	...	30.208	82.1	52.0	30.1	67.7	+ 5.3	61.0	55.7	12.0	25.7	2.6	65	125.2	47.4	0.000	0.0	wP
14	...	30.190	81.4	52.4	29.0	66.7	+ 4.4	61.0	56.4	10.3	26.9	1.3	70	133.0	44.0	0.000	0.0	wP
15	...	30.127	69.8	55.5	14.3	62.6	+ 0.5	57.9	53.9	8.7	19.8	1.3	73	131.4	47.4	0.000	0.0	wP
16	...	29.945	76.9	55.5	21.4	65.8	+ 3.8	60.3	55.8	10.0	22.3	0.6	70	136.6	49.7	0.000	0.0	wP
17	Last Quarter	29.815	81.9	60.1	21.8	67.4	+ 5.6	63.5	60.4	7.0	19.4	1.7	78	143.8	55.4	0.050	0.0	wP : wP : vP, vN
18	...	29.810	81.7	57.3	24.4	69.7	+ 8.1	65.0	61.3	8.4	19.0	0.9	75	131.2	52.9	0.000	0.0	wP
19	Greatest Declination N.	29.780	79.8	56.3	23.5	66.8	+ 5.4	60.7	55.9	10.9	20.6	3.2	68	140.3	48.4	0.000	0.0	wP
20	...	29.651	75.6	55.6	20.0	63.8	+ 2.5	59.9	56.7	7.1	16.8	1.1	78	119.1	46.2	0.000	0.0	wP : mP : mP
21	...	29.504	73.2	55.0	18.2	62.9	+ 1.8	58.9	55.5	7.4	18.9	1.1	77	144.0	47.9	0.000	1.0	wP
22	...	29.359	68.6	52.9	15.7	61.1	+ 0.1	56.7	52.9	8.2	15.5	1.9	75	129.3	45.7	0.122	3.0	wP : vP, ssN : wP
23	...	29.476	65.6	49.7	15.9	56.3	- 4.6	53.3	50.5	5.8	14.8	2.4	81	126.2	43.2	0.441	0.0	wP : vP, vN : wP
24	...	29.565	71.2	51.8	19.4	60.5	- 0.3	56.8	53.6	6.9	15.1	1.2	78	133.2	43.7	0.000	0.0	wP
25	...	29.765	68.2	48.2	20.0	58.1	- 2.7	55.6	53.3	4.8	11.9	2.0	84	92.5	41.9	0.000	0.0	wP : wP, wN : wP
26	New In Equator	29.901	65.3	51.6	13.7	57.2	- 3.6	51.9	47.0	10.2	19.0	2.6	69	118.9	44.6	0.000	0.0	wP
27	Apogee	29.833	60.7	52.5	8.2	56.7	- 4.0	52.9	49.4	7.3	12.7	1.2	77	70.2	46.8	0.102	0.0	wP : mP : wP
28	...	29.993	60.9	55.8	5.1	57.8	- 2.8	54.4	51.4	6.4	10.8	4.2	79	71.6	53.2	0.001	0.2	wP
29	...	30.160	70.4	55.3	15.1	61.1	+ 0.8	57.1	53.6	7.5	17.1	2.7	77	126.7	49.0	0.000	0.8	wP
30	...	30.213	68.0	50.7	17.3	59.5	- 0.6	55.8	52.5	7.0	14.8	1.8	78	125.7	45.5	0.000	0.0	wP : wP : mP
31	...	30.117	75.1	45.9	29.2	61.0	+ 1.1	56.3	52.2	8.8	19.2	0.4	73	132.7	40.1	0.000	0.0	wP : wP : mP
Means	...	29.787	70.5	52.8	17.7	60.8	- 0.8	56.5	52.9	7.9	16.8	1.8	75.7	119.6	46.6	Sum 2.029	0.2	...
Number of Column for Reference.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18

The results apply to the civil day.

The mean reading of the Barometer (Column 2) and the mean temperatures of the Air and Evaporation (Columns 6 and 8) are deduced from the photographic records. The average temperature (Column 7) is deduced from the 50 years' observations, 1841-1890. The temperature of the Dew Point (Column 9) and the Degree of Humidity (Column 13) are deduced from the corresponding temperatures of the Air and Evaporation by means of Glaisher's Hygrometrical Tables. The mean difference between the Air and Dew Point Temperatures (Column 10) is the difference between the numbers in Columns 6 and 9, and the Greatest and Least Differences (Columns 11 and 12) are deduced from the 24 hourly photographic measures of the Dry-bulb and Wet-bulb Thermometers.

The values given in Columns 3, 4, 5, 14, and 15 are derived from eye-readings of self-registering thermometers.

The mean reading of the Barometer for the month was 29ⁱⁿ.787, being 0ⁱⁿ.005 higher than the average for the 50 years, 1841-1890.

TEMPERATURE OF THE AIR.

The highest in the month was 82°1 on August 13; the lowest in the month was 45°9 on August 31; and the range was 36°2. The mean of all the highest daily readings in the month was 70°5, being 2°3 lower than the average for the 50 years, 1841-1890. The mean of all the lowest daily readings in the month was 52°8, being 0°2 lower than the average for the 50 years, 1841-1890. The mean of the daily ranges was 17°7, being 2°1 less than the average for the 50 years, 1841-1890. The mean for the month was 60°8, being 0°8 lower than the average for the 50 years, 1841-1890.

MONTH and DAY, 1900.	Daily Duration of Sunshine. Sun above Horizon.		WIND AS DEDUCED FROM SELF-REGISTERING ANEMOMETERS.							CLOUDS AND WEATHER.				
			OSLER'S.				ROBIN-SON'S.							
			General Direction.		Pressure on the Square Foot.			Horizontal Movement of the Air.						
			A.M.	P.M.	Greatest.	Least.	Mean of 24 Hourly Measures.							
Aug. 1	1.8	15.4	SSW	SW : WSW	5.4	0.0	0.35	312	9	: 10	: 10, hy-r	9, so-ha	: 9, oc-hy-shs	: 7, cu
2	10.9	15.3	WSW	WSW : W	7.2	0.0	1.03	479	p-cl	: 0, w	: 4, cu, li-cl, w, sht-sh	6, cu, li-cl, w	: 9, w	: 10
3	3.1	15.3	SW : SSW	SSW : WSW : WNW	27.0	0.0	2.03	658	10	: 10, oc-slt-r	: 9, sc, st-w, fq-shs	v, li-shs, st-w	: 10, fq-r, st-w	: 10, hy-r, g
4	5.5	15.2	WNW	WNW : NW : NNW	15.0	0.0	1.72	553	10, st-w, sht-r	: 10, st-w	: 6, cu, w	8, cu, w	: 7, cu	: p-cl
5	0.1	15.1	WSW	SSW : WSW	10.2	0.0	0.30	275	p-cl	: 10	: 10, oc-slt-r	10, sc, fq-shs	: 10, sc	: 8, hy-sh, l, t, w
6	1.3	15.1	WSW : SW : SSW	S : SW : WSW	24.3	0.0	1.35	486	0, l	: p-cl	: 10, oc-th-r	10, c-r	: 9, sc, w	: 8, g
7	8.6	15.1	WSW : SW	SW	13.0	0.0	1.23	484	0, st-w	: 2, li-cl, w	: 9, cu, w	9, w, sh-r	: 6, sh-r, l, t	: 0
8	2.1	15.0	SW : N	N : NE : SE	1.3	0.0	0.07	189	p-cl	: 10, fq-th-r	: 10	10	: 6, th-cl	: 5, cl-s, th-cl, lu-ha, d
9	0.3	15.0	SSE : SSW	SSE : SW : W	4.8	0.0	0.28	275	p-cl, d	: 10	: 10, sht-r	10, c-r	: 10, c-r	: 10
10	1.5	14.9	WNW : W	NNW : N : SW	4.6	0.0	0.47	313	10, oc-slt-r	: 10, oc-slt-r	: 10, sht-r	9, hy-r	: 5	: 3, th-cl, d, m
11	4.1	14.8	SW : WSW : N	W : WSW : SW	0.3	0.0	0.02	135	9, f	: 8, h, sht-m	: 2, cu, h	5, cu, li-cl	: 6, so-ha	: 6, th-cl, lu-ha
12	12.7	14.8	SW : WSW : W	W : WNW : NNW	3.5	0.0	0.11	203	10	: 3	: 0	0	: 0	
13	12.6	14.7	SW	Variable	0.3	0.0	0.00	129	th-cl, h, d	: 0, h, d	: 0, h	1, th-cl, h	: 1, th-cl	: 0, d
14	12.4	14.6	Calm : NE	N : NNE : E	1.7	0.0	0.09	135	0, h, m, hy-d	: 0	: 1, th-cl, h	0	: 0	
15	12.2	14.6	ENE : NE	ENE : E	3.5	0.0	0.26	251	p-cl, m, d	: p-cl, m, d	: 2, cu	0	: 3, li-cl	
16	11.8	14.5	NE : ENE	ENE : NE	4.4	0.0	0.32	291	9, d	: p-cl	: 3, cu, li-cl	2, cu, li-cl	: 5, cu, th-cl	: 4
17	4.3	14.5	NNE : N	NE : NNE : E	2.0	0.0	0.04	168	p-cl	: 10	: 5, cu-s, ci-s	5, cu, th-cl	: 7, l, t, hy-r	: 0, sht-m
18	6.7	14.4	Calm : NNW	NE : SSW	0.5	0.0	0.01	105	0, m	: 0, m	: 0, h	5, cu	: 6, cu	: 0, l
19	12.2	14.3	SSW : S : SW	SSW : SW	2.1	0.0	0.11	220	0, m, d	: 0	: 3, cl-cu, cl-s, li-cl	4, ci-s, li-cl	: 3, ci-s, li-cl	: li-cl, l
20	2.6	14.3	SW : WSW : NNW	W : N : Variable	0.5	0.0	0.02	118	p-cl, m, d	: 10	: 10	6, cu, h	: 10	: 10, l, t, th-r
21	6.4	14.2	WSW : SSW : SW	SW : SSW	2.5	0.0	0.15	215	p-cl, d	: p-cl	: 7, cu	8, cu, so-ha, l, t	: 9, oc-th-r	: 9
22	10.9	14.2	SSE : SW	SW : SSW	10.6	0.0	0.80	386	9, r	: p-cl	: 6, cu, hy-shs, hl	6, cu, hy-sh, hl	: p-cl	: 0, d
23	3.2	14.1	SSW : S : SW	SSW : SE	3.3	0.0	0.13	213	0	: 9, hy-shs	: 10, n, hy-r, l, t	9, hy-r, l	: 9	: li-cl
24	8.5	14.0	SW : SSE : S	SSW : SW	1.3	0.0	0.07	182	0, d	: 0	: 8, cu	8, cu, li-cl	: 3, cu, th-cl	: 0, d
25	2.0	14.0	SW : WSW	E : ENE : NE	3.6	0.0	0.11	178	0, d	: tk-f	: 7, f, li-shs, glm	9, t	: 5, th-cl	: 9, l
26	7.7	13.9	NE	NE : ENE	3.7	0.0	0.47	349	9	: 0	: 8, cu	8, cu	: 9, cu	: 1, li-cl
27	0.0	13.9	NE	NE : NNE	8.5	0.0	1.05	467	li-cl	: 10, w	: 10, sht-r, w	10, sht-r, w	: 10, sht-r, w	: 10, r
28	0.0	13.8	NNE	NE : NNE	5.2	0.0	0.63	388	10	: 10		10	: 10, sht-r, w	: 10
29	4.6	13.7	NNE : NE : ENE	ENE : E : ESE	1.9	0.0	0.13	249	10, sht-r	: 10	: 8, cu	9	: 9	: p-cl
30	0.7	13.7	E : NE : NNE	NE : SE	1.1	0.0	0.01	141	p-cl, m, d	: 10, sht-m	: 10	10, th-cl	: 5, th-cl	: 3, d
31	8.8	13.6	Calm : SW	SW	1.2	0.0	0.07	174	0, h, d	: 0	: 1, li-cl	3, cu, th-cl	: 9	: th-cl
Means	5.8	14.5	...	...	...	...	0.43	281						
Number of Columns for Reference.	19	20	21	22	23	24	25	26	27			28		

The mean *Temperature of Evaporation* for the month was 56°.5, being 1°.1 lower than
 The mean *Temperature of the Dew Point* for the month was 52°.9, being 1°.3 lower than
 The mean *Degree of Humidity* for the month was 75.7, being 1.1 less than
 The mean *Elastic Force of Vapour* for the month was 0.12401, being 0.0020 less than
 The mean *Weight of Vapour in a Cubic Foot of Air* for the month was 4.875.5, being 0.872 less than
 The mean *Weight of a Cubic Foot of Air* for the month was 529 grains, being 1 grain greater than
 The mean amount of *Cloud* for the month (a clear sky being represented by 0, and an overcast sky by 10) was 6.2.
 The mean proportion of *Sunshine* for the month (constant sunshine being represented by 1) was 0.399. The maximum daily amount of *Sunshine* was 12.7 hours on August 12.
 The highest reading of the *Solar Radiation Thermometer* was 144°.0 on August 21; and the lowest reading of the *Terrestrial Radiation Thermometer* was 40°.1 on August 31.
 The mean daily distribution of *Ozone* for the 12 hours ending 9^h was 0.2; for the 6 hours ending 15^h was 0.0; and for the 6 hours ending 21^h was 0.0.
 The *Proportions of Wind* referred to the cardinal points were N. 7, E. 5, S. 8, and W. 9. Two days were calm.
 The *Greatest Pressure of the Wind* in the month was 27.0 lbs. on the square foot on August 3. The mean daily *Horizontal Movement of the Air* for the month was 281 miles; the greatest daily value was 658 miles on August 3; and the least daily value was 105 miles on August 18.
Rain fell on 12 days in the month, amounting to 2.129, as measured by gauge No. 6 partly sunk below the ground; being 0.1221 less than the average fall for the 50 years, 1841-1890.

the average for the 50 years, 1841-1890.

MONTH and DAY, 1900.	Phases of the Moon.	BARO-METER. Mean of 24 Hourly Values (corrected and reduced to 32° Fahrenheit).	TEMPERATURE.							Difference between the Air Temperature and Dew Point Temperature.			TEMPERATURE.		Degree of Humidity (Saturation = 100).	Rain collected in Gauge No. 6, whose receiving surface is 5 inches above the Ground.	Daily Amount of Ozone.	Electricity.
			Of the Air.				Of Evaporation.	Of the Dew Point.	Of Radiation.									
			Highest.	Lowest.	Daily Range.	Mean of 24 Hourly Values.	Excess above Average of 50 Years.	Mean of 24 Hourly Values.	Deducted Mean Daily Value.	Mean.	Greatest.	Least.	Highest in Sun's Rays.	Lowest on the Grass.				
Sept. 1	...	29.892	67.3	57.9	9.4	61.4	+ 1.7	59.6	58.1	3.3	5.9	1.9	89	88.0	51.2	0.516	0.0	wP, wwN : wP
2	First Quarter	29.936	61.0	50.6	10.4	56.0	- 3.7	52.2	48.6	7.4	12.4	2.0	76	80.7	45.6	0.004	0.0	wP : wP : mP
3	Greatest Declination S.	30.232	62.1	44.9	17.2	54.1	- 5.5	49.7	45.4	8.7	16.7	1.9	72	129.0	38.9	0.000	0.0	wP : mP : mP
4	...	30.236	63.8	40.4	23.4	52.5	- 6.9	49.1	45.7	6.8	14.6	0.9	78	92.1	34.1	0.000	0.0	wP : mP : mP
5	...	30.104	68.8	43.1	25.7	55.8	- 3.5	51.4	47.2	8.6	19.4	0.4	73	107.9	35.0	0.000	0.0	wP : mP : mP
6	...	30.015	72.1	41.7	30.4	57.0	- 2.1	51.6	46.6	10.4	25.4	0.8	68	127.7	31.5	0.000	0.0	wP : mP : mP
7	...	29.873	74.1	46.3	27.8	59.8	+ 0.9	54.2	49.2	10.6	23.9	2.3	68	128.2	37.2	0.000	0.0	wP : wP : mP
8	...	29.815	68.9	50.9	18.0	59.3	+ 0.6	55.8	52.7	6.6	15.5	0.6	79	112.7	43.0	0.002	0.0	wP, sN : wP : wP
9	Full : In Equator : Perigee	29.875	69.9	49.5	20.4	59.4	+ 0.9	55.9	52.8	6.6	14.9	0.2	79	116.2	41.3	0.000	0.0	wP
10	...	29.978	70.1	49.2	20.9	59.8	+ 1.5	54.4	49.6	10.2	20.0	2.4	69	116.8	40.2	0.000	0.0	wP : mP : mP
11	...	30.233	66.5	49.0	17.5	56.7	- 1.4	51.9	47.4	9.3	19.3	1.9	71	129.9	38.5	0.000	0.0	wP : wP : mP
12	...	30.328	69.7	45.1	24.6	56.4	- 1.6	51.9	47.7	8.7	22.0	1.0	72	124.5	35.0	0.000	0.0	wP
13	...	30.298	70.9	43.2	27.7	56.8	- 1.1	53.3	50.1	6.7	17.8	1.2	78	124.0	35.5	0.000	0.0	wP
14	...	30.207	65.2	52.0	13.2	58.5	+ 0.7	54.3	50.5	8.0	14.2	1.8	75	126.3	43.0	0.000	0.0	wP
15	Greatest Dec. N. : Last Quarter	30.019	69.9	54.3	15.6	60.4	+ 2.7	57.2	54.4	6.0	13.5	0.8	81	131.5	45.7	0.000	0.0	wwP
16	...	29.950	82.6	56.6	26.0	64.9	+ 7.4	61.3	58.3	6.6	25.0	0.0	79	133.1	50.3	0.058	0.0	wwP : wwP : wwP, wN
17	...	29.939	74.7	55.7	19.0	63.3	+ 6.0	60.1	57.4	5.9	15.5	0.0	81	132.4	46.5	0.000	0.0	wwP : wwP : wP
18	...	29.833	69.9	54.4	15.5	60.5	+ 3.6	57.6	55.1	5.4	10.1	0.4	83	114.6	43.6	0.003	0.0	wP
19	...	30.019	68.0	45.5	22.5	55.9	- 0.6	51.3	47.0	8.9	20.5	2.1	72	101.2	35.5	0.000	0.0	wP
20	...	30.186	70.6	41.2	29.4	55.9	- 0.2	50.4	45.3	10.6	23.9	0.0	68	123.3	32.3	0.000	0.0	wP : wP : mP
21	...	30.173	74.1	44.3	29.8	60.1	+ 4.4	54.2	49.0	11.1	21.3	4.8	67	127.9	33.8	0.000	0.0	mP : wP
22	In Equator	30.102	73.0	57.0	16.0	62.3	+ 6.9	59.6	57.3	5.0	11.7	1.3	84	130.2	50.7	0.013	0.0	wP
23	New	29.964	73.9	51.3	22.6	61.6	+ 6.4	57.6	54.2	7.4	21.4	0.2	77	117.1	40.8	0.000	0.0	wP : wwP : wP
24	Apogee	29.637	71.0	51.5	19.5	59.9	+ 4.8	56.2	53.0	6.9	14.0	1.7	79	112.0	41.0	0.064	0.0	wP : wwP, wwN : wP
25	...	29.822	63.5	43.1	20.4	52.9	- 2.1	47.6	42.3	10.6	22.2	2.9	67	117.9	34.9	0.000	0.0	wP : mP : mP
26	...	29.857	66.9	46.2	20.7	55.6	+ 0.7	50.8	46.3	9.3	17.1	3.4	71	120.3	37.2	0.001	0.5	mP : wP
27	...	29.499	60.0	55.1	4.9	57.2	+ 2.3	55.3	53.6	3.6	8.7	1.6	88	74.6	52.0	0.294	1.5	wP : wP, wwN : wP
28	...	29.516	65.2	50.4	14.8	56.6	+ 1.8	53.5	50.6	6.0	13.9	2.2	80	123.2	43.4	0.000	0.0	wwP : wP
29	...	29.705	67.7	45.0	22.7	55.1	+ 0.5	51.7	48.4	6.7	17.1	0.6	79	124.5	36.8	0.000	0.0	wP
30	Greatest Declination S.	29.565	63.4	47.7	15.7	55.0	+ 0.6	52.7	50.5	4.5	12.9	0.9	85	114.3	38.3	0.188	0.0	wwP
Means	...	29.960	68.8	48.8	20.1	58.0	+ 0.9	54.1	50.5	7.5	17.0	1.4	76.3	116.7	40.4	Sum 1.143	0.1	...
Number of Column for Reference.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18

The results apply to the civil day.

The mean reading of the Barometer (Column 2) and the mean temperatures of the Air and Evaporation (Columns 6 and 8) are deduced from the photographic records. The average temperature (Column 7) is deduced from the 50 years' observations, 1841-1890. The temperature of the Dew Point (Column 9) and the Degree of Humidity (Column 13) are deduced from the corresponding temperatures of the Air and Evaporation by means of Glaisher's Hygrometrical Tables. The mean difference between the Air and Dew Point Temperatures (Column 10) is the difference between the numbers in Columns 6 and 9, and the Greatest and Least Differences (Columns 11 and 12) are deduced from the 24 hourly photographic measures of the Dry-bulb and Wet-bulb Thermometers.

The values given in Columns 3, 4, 5, 14, and 15 are derived from eye-readings of self-registering thermometers.

The mean reading of the Barometer for the month was 29.960, being 0.1154 higher than the average for the 50 years, 1841-1890.

TEMPERATURE OF THE AIR.

The highest in the month was 82.6 on September 16; the lowest in the month was 40.4 on September 4; and the range was 42.2. The mean of all the highest daily readings in the month was 68.8, being 1.5 higher than the average for the 50 years, 1841-1890. The mean of all the lowest daily readings in the month was 48.8, being 0.3 lower than the average for the 50 years, 1841-1890. The mean of the daily ranges was 20.1, being 1.9 greater than the average for the 50 years, 1841-1890. The mean for the month was 58.0, being 0.9 higher than the average for the 50 years, 1841-1890.

MONTH and DAY, 1900.	Daily Duration of Sunshine.		WIND AS DEDUCED FROM SELF-REGISTERING ANEMOMETERS.						CLOUDS AND WEATHER.					
	hours.	Sun above Horizon.	OSLER'S.				ROBINSON'S.							
			General Direction.		Pressure on the Square Foot.		Greatest.	Least.	Mean of 24 Hourly Measurements.	Horizontal Movement of the Air.	A.M.		P.M.	
			A.M.	P.M.	lbs.	lbs.					lbs.	miles.		
Sept. 1	0.0	13.5	SW : WSW	WSW : WNW : NNW	1.3	0.0	0.07	238	5	: 10, r	: 10, sc, fq.-th.-r	10, oc.-th.-r	: 10	: 9
2	0.1	13.5	NW : WSW	NNW : N : NNE	2.2	0.0	0.11	222	p.-cl	: 10	: 10, slt.-sh	10	: 6	: 0
3	7.5	13.4	N : NE	NNE : Calm	2.7	0.0	0.20	231	o, m, d	: 1, li.-cl	: 9, cu	9, cu	: 5, cu, li.-cl	: o, m, d
4	3.8	13.4	Variable	NW : NNW	0.3	0.0	0.00	121	o, m, f, d	: o	: 6, th.-cl, glm, h	9	: p.-cl	: o, f, d
5	7.7	13.3	SW	NW : NNW : SW	1.0	0.0	0.02	164	o, f, d	: 1	: 2, li.-cl	2, th.-cl, h, so.-ha	: 2, th.-cl	: o, m
6	10.6	13.2	SW : WSW	WSW : SW	1.2	0.0	0.04	190	o, d	: o	: 1, th.-cl, h	1, ci.-s, li.-cl	: o	: o
7	5.5	13.2	SW	WSW : Variable	0.7	0.0	0.01	125	o, d	: o	: 1, li.-cl	3, ci.-s, ci.-cu, li.-cl	: 7, cu, ci.-cu	: 10, slt.-r
8	5.6	13.1	WSW : N	N : S	1.1	0.0	0.05	168	9, li.-shs, m	: 9	: 9	5, cu, li.-cl	: 4, cu, li.-cl	: 8, th.-cl
9	2.8	13.0	SW	SW : W : WNW	0.6	0.0	0.03	152	9, m	: 10	: 5, ci, ci.-s	10	: 8, cu.-s	: p.-cl, d
10	4.9	13.0	NW : SW	NW : N	2.9	0.0	0.12	199	p.-cl, m, d	: o, m	: 4, li.-cl	7	: 9	: 9
11	8.8	12.9	N : NNE	NNE : NE	3.1	0.0	0.17	209	o, d, m	: o	: 3, cu, li.-cl	7, cu, li.-cl	: 2	: o, m
12	7.8	12.9	NE : Calm	NE : SE : E	0.6	0.0	0.01	116	o, f, hy.-d	: o, f	: 3, li.-cl, f	o	: o	: o, m, d
13	9.4	12.8	Calm : ENE	ENE : E : ESE	1.5	0.0	0.07	154	o, f, d	: o	: o	o	: o	: 1, l, d
14	4.8	12.7	ENE : ESE : E	E	3.0	0.0	0.32	262	p.-cl	: 10	: 8, cu, li.-cl	4, ci.-cu, li.-cl	: 10	: 10
15	5.6	12.6	E	ESE	1.5	0.0	0.11	217	10, f	: 10	: 8	1, ci.-s	: 10	
16	4.3	12.6	ESE : E : NE	SE : SW : SSW	1.3	0.0	0.02	139	10, f	: 10, f	: 7, ci.-cu, ci.-s	6, li.-cl	: 10	: 1, li.-cl, l
17	8.2	12.5	SW : S	SW	1.2	0.0	0.02	141	1, li.-cl	: 1, li.-cl	: 7, cu, cu.-s, ci.-cu	4, cu, li.-cl	: o, f, d	
18	1.9	12.5	SW : WSW	SW : NW	1.0	0.0	0.03	147	10, f	: 10	: 10	8, ci.-cu, ci.-s, li.-cl	: 10	: 10, r
19	6.3	12.4	NW : SW	NNW : WNW : SW	0.6	0.0	0.01	122	o, d	: o	: 5, cu, h	5, cu, cu.-s	: 2, li.-cl	: 2, d
20	8.8	12.3	SW : WSW	WSW : SW	1.5	0.0	0.05	180	o, m, d	: o	: 1, li.-cl, so.-ha	1, li.-cl	: 1, th.-cl	: o, d
21	10.5	12.2	SW : SSW	WSW : SW	1.5	0.0	0.11	251	o, hy.-d	: o	: 1, ci.-cu, ci.-s	1, ci.-s, li.-cl	: 1, li.-cl	: p.-cl
22	1.9	12.2	SW : WSW	WSW : SW	1.3	0.0	0.07	227	o	: 10, r	: 8	8, th.-cl	: 9, th.-cl	: p.-cl
23	6.0	12.1	SW	WSW : SW : SSW	1.6	0.0	0.08	225	10	: 10	: 6, li.-cl	o	: o	
24	2.1	12.1	SSW : SW	SW : NNW	7.1	0.0	0.44	305	o	: 10	: 10, th.-r, w	10, c.-r, w	: 10	: 9
25	7.2	12.0	NNW : SW : WNW	WNW : W : WSW	2.1	0.0	0.08	231	p.-cl, d	: p.-cl	: 6, cu, th.-cl	6, cu, ci.-cu, li.-cl	: 3, li.-cl	: o
26	5.1	11.9	WSW : SW	WSW : SW	6.7	0.0	0.65	409	o, d	: o	: 7, cu, th.-cl	10, cu, w	: 10, w	: 10, li.-shs, w
27	0.0	11.9	SW : SSW	SSW : SW	10.3	0.0	1.19	503	10, st.-w, li.-shs	: 10, w	: 10, sc, r, w	10, th.-r, w	: 10, th.-r	: 10
28	4.5	11.8	SSW : SW	WSW : SW	2.7	0.0	0.13	257	p.-cl	: v	: 7, cu	10, oc.-slt.-r	: 7, cu	: o, d
29	7.6	11.7	SW	SW : WSW : SSW	1.0	0.0	0.04	203	o, hy.-d	: o, m	: 1, cu, li.-cl, m	5, cu	: 2, li.-cl	: o
30	2.0	11.7	SSW : S	SSW : NNW	5.6	0.0	0.50	341	o	: p.-cl	: 8, w	10, c.-r	: 10	
Means	5.4	12.6	...	...	...	...	0.16	215						
Number of Column for Reference.	19	20	21	22	23	24	25	26		27				28

The mean *Temperature of Evaporation* for the month was 54°.1, being 0°.1 lower than the average for the 50 years, 1841-1890.

The mean *Temperature of the Dew Point* for the month was 50°.5, being 0°.9 lower than the average for the 50 years, 1841-1890.

The mean *Degree of Humidity* for the month was 76.3, being 4.5 less than the average for the 50 years, 1841-1890.

The mean *Elastic Force of Vapour* for the month was 0.12367, being 0.0012 less than the average for the 50 years, 1841-1890.

The mean *Weight of Vapour in a Cubic Foot of Air* for the month was 4.878.1, being 0.871 less than the average for the 50 years, 1841-1890.

The mean *Weight of a Cubic Foot of Air* for the month was 535 grains, being 2 grains greater than the average for the 50 years, 1841-1890.

The mean amount of *Cloud* for the month (a clear sky being represented by 0, and an overcast sky by 10) was 5.4.

The mean proportion of *Sunshine* for the month (constant sunshine being represented by 1) was 0.426. The maximum daily amount of *Sunshine* was 10.6 hours on September 6.

The highest reading of the *Solar Radiation Thermometer* was 133°.1 on September 16; and the lowest reading of the *Terrestrial Radiation Thermometer* was 31°.5 on September 6.

The mean daily distribution of *Ozone* for the 12 hours ending 9^h was 0.1; for the 6 hours ending 15^h was 0.0; and for the 6 hours ending 21^h was 0.0.

The *Proportions of Wind* referred to the cardinal points were N. 5, E. 4, S. 9, and W. 11. One day was calm.

The *Greatest Pressure of the Wind* in the month was 10.3 lbs. on the square foot on September 27. The mean daily *Horizontal Movement of the Air* for the month was 215 miles; the greatest daily value was 503 miles on September 27; and the least daily value was 116 miles on September 12.

Rain fell on 6 days in the month, amounting to 1.143, as measured by gauge No. 6 partly sunk below the ground; being 1.108 less than the average fall for the 50 years, 1841-1890.

DAILY RESULTS OF THE METEOROLOGICAL OBSERVATIONS,

Table with columns: MONTH and DAY, 1900.; Phases of the Moon.; BA. O-METER.; TEMPERATURE. (Of the Air, Of Evaporation, Of the Dew Point); Difference between the Air Temperature and Dew Point Temperature.; TEMPERATURE. (Of Radiation); Rain collected in Gauge No. 6; Daily Amount of Ozone.; Electricity.

The results apply to the civil day.

The mean reading of the Barometer (Column 2) and the mean temperatures of the Air and Evaporation (Columns 6 and 8) are deduced from the photographic records. The average temperature (Column 7) is deduced from the 50 years' observations, 1841-1890. The temperature of the Dew Point (Column 9) and the Degree of Humidity (Column 13) are deduced from the corresponding temperatures of the Air and Evaporation by means of Glaisher's Hygrometrical Tables. The mean difference between the Air and Dew Point Temperatures (Column 10) is the difference between the numbers in Columns 6 and 9, and the Greatest and Least Differences (Columns 11 and 12) are deduced from the 24 hourly photographic measures of the Dry-bulb and Wet-bulb Thermometers.

The values given in Columns 3, 4, 5, 14, and 15 are derived from eye-readings of self-registering thermometers.

The mean reading of the Barometer for the month was 29.806, being 0.090 higher than the average for the 50 years, 1841-1890.

TEMPERATURE OF THE AIR.

The highest in the month was 74.2 on October 9; the lowest in the month was 35.6 on October 16; and the range was 38.6. The mean of all the highest daily readings in the month was 58.2, being 0.5 higher than the average for the 50 years, 1841-1890. The mean of all the lowest daily readings in the month was 44.0, being 0.7 higher than the average for the 50 years, 1841-1890. The mean of the daily ranges was 14.1, being 0.3 less than the average for the 50 years, 1841-1890. The mean for the month was 51.3, being 1.3 higher than the average for the 50 years, 1841-1890.

MONTH and DAY, 1900.	Daily Duration of Sunshine.		WIND AS DEDUCED FROM SELF-REGISTERING ANEMOMETERS.							CLOUDS AND WEATHER.				
	hours.	Sun above Horizon.	OSLER'S.				ROBINSON'S.			CLOUDS AND WEATHER.				
			General Direction.		Pressure on the Square Foot.			Horizontal Movement of the Air.	A.M.		P.M.			
			A.M.	P.M.	Greatest.	Least.	Mean of 24 Hourly Measurements.							
hours.	hours.				lbs.	lbs.	lbs.	miles.						
Oct. 1	6.5	11.6	NW : SW : WSW	SW : SSW	1.5	0.0	0.05	231	p.-cl, d : 0	2, ci.-cu, ci.-s, th.-cl	6, cu, ci.-cu, li.-cl	9, lu.-ha	th.-cl	
2	4.5	11.5	SSW : SW	SW : SSW	3.1	0.0	0.17	279	p.-cl : p.-cl	p.-cl, slt.-r	7, cu, n	5, cu	p.-cl, d	
3	6.2	11.5	SW : NW	WNW : S	2.4	0.0	0.12	233	p.-cl : 10	6, cu	6, cu, ci.-cu, li.-cl	2, li.-cl	2, li.-cl, lu.-ha, d	
4	1.5	11.4	SE : SSE	SSE : SW	8.4	0.0	0.75	382	p.-cl, d : 7, slt.-sh	9, slt.-sh, w	10, c.-r, w	0, w	1, w	
5	4.5	11.3	SW	SW : SSW	11.8	0.0	0.96	476	p.-cl, sh.-r : 3, li.-cl	5, li.-cl, li.-shs, w	10, sc, c.-r, w	v, shs.-r, w	p.-cl	
6	5.3	11.3	SW	SW	9.9	0.0	1.18	520	p.-cl : p.-cl	6, cu, li.-cl, w	5, st.-w	p.-cl, w	3, li.-cl	
7	8.3	11.2	SW	SW : SSW	4.5	0.0	0.45	332	p.-cl : p.-cl	2, cu, li.-cl, w	2, li.-cl	2, li.-cl	1	
8	9.5	11.1	SSE : S : SSW	SW : SSW	4.0	0.0	0.23	261	o, f, d : 1, th.-cl	0	0	0	o, hy.-d	
9	9.2	11.1	S : SW	SW	3.7	0.0	0.27	277	o, m, d : 0	0	0	p.-cl	10	
10	0.9	11.0	SW : NNW : WNW	WNW : NW	3.8	0.0	0.52	360	9	10, slt.-r	10, so.-ha	9	2, li.-cl, m, l : p.-cl, m	
11	5.0	10.9	NW : SW	WSW : SW	0.1	0.0	0.00	124	p.-cl, f : 10, f	5, li.-cl	3, cu, th.-cl	5, li.-cl	p.-cl, f, d	
12	1.4	10.9	WSW	Calm : SW	0.1	0.0	0.00	111	p.-cl, lu.-ha	4, th.-cl, m	9, glm, f	p.-cl	p.-cl	
13	0.5	10.8	SW : SSW	WSW : W	5.3	0.0	0.63	399	9	p.-cl	10, w	10, oc.-slt.-r, w	10, r, w : p.-cl	
14	5.6	10.7	WSW : W : WNW	NW : W : WSW	8.0	0.0	0.98	474	p.-cl, d : 1	p.-cl, slt.-sh, sq : 9, w	9, shs.-r, hl	2, li.-cl	1, li.-cl	
15	5.8	10.7	WSW : WNW	WNW : W : WSW	6.2	0.0	0.56	398	o, ho.-fr : 1	2, cu, li.-cl	6, cu	3	10	
16	1.9	10.6	WSW	SW : S	0.9	0.0	0.01	156	p.-cl, d, ho.-fr : 0	7	10	10		
17	4.4	10.6	SSE : SSW	W : WSW	3.1	0.0	0.17	272	9, li.-shs : 9, li.-shs	6, cu, th.-cl, fq.-th.-r	2, ci.-cu, li.-cl	7, th.-cl	th.-cl	
18	1.3	10.5	W : NNW	NNW : N	2.7	0.0	0.23	306	p.-cl, d : 9, th.-cl	7, cu, ci.-cu, li.-cl	10, shs.-r, glm	10, fq.-m.-r, glm	10	
19	1.8	10.5	N : NNE	NNE : N	1.8	0.0	0.21	271	10	10	9	10	10	
20	0.5	10.4	N	N : NNW	2.3	0.0	0.18	244	10	10	9, cu.-s, th.-cl	10, sh.-r	10	p.-cl
21	7.0	10.3	NNW : N	NNE : N	6.1	0.0	0.55	344	o, ho.-fr : 0	6, slt.-r, w	9, oc.-slt.-r, hl, w	0, w	0	
22	2.1	10.2	N	N : SW : WSW	2.7	0.0	0.17	220	o, ho.-fr : 0	6, ci.-cu, li.-cl	5, ci.-cu, li.-cl	1, th.-cl, f	0, f	
23	0.0	10.2	WSW	WSW : WNW	0.3	0.0	0.00	167	9, m : 10, f, th.-r	10, f, slt.-r	9, f	10, f	p.-cl, f	
24	0.0	10.1	W : WSW	W : WSW : SW	1.5	0.0	0.03	191	9, m : 10, m	10	10	10	10, m.-r	
25	0.0	10.0	SW	SW : WSW	5.6	0.0	0.37	325	10	10, slt.-r	10, sc, w	10, sc, slt.-r, w	10, fq.-th.-r : 9, th.-cl	
26	1.2	10.0	SW : SSW	WSW	7.9	0.0	0.50	353	9	10, r, w	10, hy.-r, hl, w	8, cu, hy.-r	p.-cl, l, slt.-r : 0	
27	3.7	9.9	WSW : W	W : WSW	12.0	0.0	1.34	565	o	1, th.-cl, w	9, cu, st.-w	5, ci.-cu, li.-cl, shs.-r, w	p.-cl : 0, d	
28	3.7	9.9	SW	SW : S : SSW	6.7	0.0	0.40	353	o	1, ci.-s	6, ci.-s, th.-cl	v, so.-ha, r	10, c.-r : 10, shs.-r	
29	2.4	9.8	WSW	WSW	7.5	0.0	1.12	512	p.-cl, w, sh.-r : 4	6, ci.-cu, ci.-s, w	6, ci.-s, cu.-s, oc.-slt.-r, w	10	10, slt.-r	
30	0.0	9.8	NW : S : SW	SW : SSE	1.0	0.0	0.01	156	10, c.-r	10, r	10, oc.-slt.-r	10, m.-r	10, fq.-m.-r	
31	5.4	9.7	SW : S	S : SSE : SE	2.8	0.0	0.08	212	9	p.-cl	4, ci.-cu, ci.-s, li.-cl	4, ci.-cu, li.-cl	10 : 10	
Means	3.6	10.6	...	...	...	...	0.39	307					
Number of Column for Reference.	19	20	21	22	23	24	25	26	27				28	

The mean *Temperature of Evaporation* for the month was 48° 4, being 0° 4 higher than the mean *Temperature of the Dew Point* for the month was 45° 5, being 0° 4 lower than the mean *Degree of Humidity* for the month was 81.0, being 4.6 less than the mean *Elastic Force of Vapour* for the month was 0.305, being 0.004 less than the mean *Weight of Vapour in a Cubic Foot of Air* for the month was 3.874, being 0.871 less than the mean *Weight of a Cubic Foot of Air* for the month was 540 grains, being 1 grain 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 0.334. The maximum daily amount of *Sunshine* was 9.5 hours on October 8. The highest reading of the *Solar Radiation Thermometer* was 126° 3 on October 2; and the lowest reading of the *Terrestrial Radiation Thermometer* was 25° 4 on October 16. The mean daily distribution of *Ozone* for the 12 hours ending 9^h was 0.3; for the 6 hours ending 15^h was 0.0; and for the 6 hours ending 21^h was 0.0. The *Proportions of Wind* referred to the cardinal points were N. 5, E. 0, S. 11, and W. 15. The *Greatest Pressure of the Wind* in the month was 12.0 lbs. on the square foot on October 27. The mean daily *Horizontal Movement of the Air* for the month was 307 miles; the greatest daily value was 565 miles on October 27; and the least daily value was 111 miles on October 12. *Rain* fell on 14 days in the month amounting to 1.550, as measured by gauge No. 6 partly sunk below the ground; being 1.261 less than the average fall for the 50 years, 1841-1890.

} the average for the 50 years, 1841-1890.

DAILY RESULTS OF THE METEOROLOGICAL OBSERVATIONS,

Table with columns: MONTH and DAY, 1900.; Phases of the Moon.; BAROMETER (Mean of 24 Hourly Values); TEMPERATURE (Of the Air: Highest, Lowest, Daily Range, Mean of 24 Hourly Values, Excess above Average of 50 Years; Of Evaporation: Mean of 24 Hourly Values, Deduced Mean Daily Value; Difference between the Air Temperature and Dew Point Temperature: Mean, Greatest, Least; TEMPERATURE (Of Radiation: Highest in Sun's Rays, Lowest on the Grass; Rain collected in Gauge No. 6; Daily Amount of Ozone; Electricity.

The results apply to the civil day.

The mean reading of the Barometer (Column 2) and the mean temperatures of the Air and Evaporation (Columns 6 and 8) are deduced from the photographic records. The average temperature (Column 7) is deduced from the 50 years' observations, 1841-1890. The temperature of the Dew Point (Column 9) and the Degree of Humidity (Column 13) are deduced from the corresponding temperatures of the Air and Evaporation by means of Glaisher's Hygrometrical Tables. The mean difference between the Air and Dew Point Temperatures (Column 10) is the difference between the numbers in Columns 6 and 9, and the Greatest and Least Differences (Columns 11 and 12) are deduced from the 24 hourly photographic measures of the Dry-bulb and Wet-bulb Thermometers.

The values given in Columns 3, 4, 5, 14, and 15 are derived from eye-readings of self-registering thermometers.

The mean reading of the Barometer for the month was 29.572, being 0.172 lower than the average for the 50 years, 1841-1890.

TEMPERATURE OF THE AIR.

The highest in the month was 62.3 on November 1; the lowest in the month was 26.8 on November 11; and the range was 35.5. The mean of all the highest daily readings in the month was 50.8, being 2.0 higher than the average for the 50 years, 1841-1890. The mean of all the lowest daily readings in the month was 41.6, being 4.0 higher than the average for the 50 years, 1841-1890. The mean of the daily ranges was 9.2, being 2.1 less than the average for the 50 years, 1841-1890. The mean for the month was 46.4, being 3.2 higher than the average for the 50 years, 1841-1890.

MONTH and DAY, 1900.	Daily Duration of Sunshine. Sun above Horizon.		WIND AS DEDUCED FROM SELF-REGISTERING ANEMOMETERS.								CLOUDS AND WEATHER.							
			OSLER'S.				ROBINSON'S.											
			General Direction.		Pressure on the Square Foot.		Greatest.	Least.	Mean of 24 Hourly Measurements.	Horizontal Movement of the Air.	A.M.		P.M.					
			A.M.	P.M.														
Nov. 1	1.7	9.6	S : SW	SW : WSW	3.2	0.0	0.20	277	p-cl, li-shs :	p-cl :	10, fq-r	9, cu, li-cl, sc, fq-shs :	10, sc, shs-r :	10, m-r				
2	0.0	9.6	NNW : N	N : NNE	1.5	0.0	0.05	183	p-cl :	10	:	10, gt-glm	:	10				
3	0.0	9.5	NNE : N	NE : ESE	0.2	0.0	0.00	119	10, th-r :	10	:	10, m	:	10, oc-slt-r :	10			
4	0.0	9.4	ESE : SE : SSE	SSE : SE	0.8	0.0	0.04	172	10, th-r :	10	:	10	:	10, fq-r	:	10, oc-slt-r		
5	0.0	9.4	WSW : SW	SSW : S : SSE	0.4	0.0	0.00	176	10, oc-th-r :	10, fq-th-r :	10, fq-th-r	10, oc-th-r :	:	9	:			
6	0.2	9.3	SSE : SE	SSE	4.6	0.0	0.43	307	10, sh-r :	10	:	10, oc-slt-r	:	10, sc	:	9, slt-r, w, l :	v, slt-r	
7	0.0	9.3	SSE : SSW : SW	SW	4.5	0.0	0.55	380	9, oc-shs :	v, sh-r :	10, sc	10, sc :	10, r	:	10, c-r	:		
8	7.2	9.2	SW	SSW	10.0	0.0	0.96	495	p-cl :	0	:	3, s, cl-s, ci, so-ha,	6, ci-cu, li-cl, st-w :	10, sc, fq-r, w :	v, lu-ha, w	:		
9	3.8	9.2	SW : WSW	WSW : SW	5.6	0.0	0.52	402	9	:	p-cl	:	6, ci-cu, ci-s, slt-r	6, ci-s, cu :	4, s, cu-s :	3, li-cl	:	
10	7.6	9.1	SW : WSW	SW : SSW	1.6	0.0	0.08	240	0, ho-fr :	0	:	1, cu, th-cl	1, cu :	1, th-cl, l :	v, f, ho-fr	:		
11	3.6	9.1	Calm : SW	WSW : W : SW	0.6	0.0	0.01	173	0, f, ho-fr :	0, f	:	1, li-cl, h, f	p-cl :	0, ho-fr, slt-f :	p-cl, f	:		
12	0.0	9.0	SSW : SSE : S	S : SSW	5.1	0.0	0.42	339	9	:	p-cl	:	10, slt-r	10, sc, r :	10, fq-r	:	10	
13	0.0	9.0	SSW : SW	SW : SSW	3.8	0.0	0.21	322	10	:	10	:	10, fq-th-r	10, slt-r :	p-cl	:	0, l, m	
14	1.0	8.9	SW : SSW : S	NNW : NW : W	1.0	0.0	0.05	232	p-cl, lu-ha, d :	0	:	10, glm, sh-r	10, glm, r :	10, slt-r	:	9	:	
15	1.4	8.8	SW : SSW : S	SW : SSW	6.9	0.0	0.46	357	p-cl	:	10, r, w	:	10, fq-r, w	10, cu, li-shs :	0	:	0	
16	0.0	8.8	SSE : ESE : E	E : NE : NNE	1.5	0.0	0.12	286	0	:	p-cl, slt-r :	10, oc-slt-r	10, hy-r :	10, r	:	p-cl	:	
17	0.0	8.7	NNE : N	N : NNE	7.8	0.0	1.07	463	9	:	10	:	10, sc, w, fq-r	10, sc, w :	10, fq-r, w :	p-cl	:	
18	0.2	8.7	NNE : N	N : NNE	8.9	0.0	2.02	591	v, w	:	p-cl, w	:	10, st-w	10, st-w :	5, st-w	:	0	
19	1.5	8.6	N : NNE	NNE : NE	5.5	0.0	0.90	455	p-cl	:	8	:	9	10, w :	10, fq-r	:	10	
20	0.0	8.6	NNE : NE	NE : NNE	2.9	0.0	0.20	295	10	:	10	:	10, slt-r	10, glm, fq-r :	10, li-shs	:	10	
21	0.0	8.6	NE : NNE	N : NNW	2.3	0.0	0.18	273	10	:	10	:	10	10	:	10, th-r	:	10
22	0.0	8.5	NW : WNW : WSW	WSW : SW	1.1	0.0	0.06	258	10	:	10	:	v, so-ha	9, th-cl, h, so-ha :	10	:	10	
23	4.6	8.5	SW : SSW	S : SE : ESE	1.1	0.0	0.02	212	0, ho-fr :	1, li-cl	:	2, ci-cu, li-cl, f	6	:	0, ho-fr	:		
24	0.1	8.4	ESE	ESE : SE	1.6	0.0	0.02	178	0, ho-fr, f :	5, th-cl, m :	10	10, th-r	:	10	:			
25	1.3	8.4	SSE : W	WSW	2.2	0.0	0.15	281	10, hy-r	:	9, sc	8	:	0, m	:			
26	1.9	8.3	W : WSW	SW : S	2.0	0.0	0.05	219	0, m	:	p-cl, m :	9, cu, ci-cu	8, ci-cu, cu-s :	10	:	10, shs-r		
27	4.1	8.3	SSW : WSW	SW : S : SE	3.6	0.0	0.21	247	v	:	2, li-cl	:	2, ci-s, li-cl, so-ha	5, cu, cu-s, th-cl :	p-cl	:	0, d	
28	0.0	8.2	ESE	SE : ESE	2.0	0.0	0.17	246	9, f	:	10, r	:	10, r	10, fq-r	:	10	:	10, slt-r
29	0.0	8.2	ENE : E : ESE	ESE	6.4	0.0	0.62	309	10, r	:	10, w	:	10, sc, oc-th-r	10	:	10	:	6
30	0.6	8.2	E : NE : N	N	1.3	0.0	0.05	182	9, f	:	10	:	6, ci-cu, th-cl, h	10	:	10, oc-slt-r :	10	
Means	1.4	8.8	0.33	289										
Number of Column for Reference.	19	20	21	22	23	24	25	26			27							28

The mean *Temperature of Evaporation* for the month was 44°·7, being 3°·1 higher than
 The mean *Temperature of the Dew Point* for the month was 42°·8, being 3°·1 higher than
 The mean *Degree of Humidity* for the month was 87·7, being 0·2 greater than
 The mean *Elastic Force of Vapour* for the month was 0ⁱⁿ·275, being 0ⁱⁿ·031 greater than
 The mean *Weight of Vapour in a Cubic Foot of Air* for the month was 3^{grs}·2, being 0^{grs}·4 greater than
 The mean *Weight of a Cubic Foot of Air* for the month was 541 grains, being 7 grains less than
 The mean amount of *Cloud* for the month (a clear sky being represented by 0, and an overcast sky by 10) was 8·1.
 The mean proportion of *Sunshine* for the month (constant sunshine being represented by 1) was 0·154. The maximum daily amount of *Sunshine* was 7·6 hours on November 10.
 The highest reading of the *Solar Radiation Thermometer* was 101°·0 on November 1; and the lowest reading of the *Terrestrial Radiation Thermometer* was 20°·0 on November 11.
 The mean daily distribution of *Ozone* for the 12 hours ending 9^h was 0·3; for the 6 hours ending 15^h was 0·0; and for the 6 hours ending 21^h was 0·0.
 The *Proportions of Wind* referred to the cardinal points were N. 7, E. 5, S. 11, and W. 7.
 The *Greatest Pressure of the Wind* in the month was 10·0 lbs, on the square foot on November 8. The mean daily *Horizontal Movement of the Air* for the month was 289 miles; the greatest daily value was 591 miles on November 18; and the least daily value was 119 miles on November 3.
Rain fell on 19 days in the month, amounting to 2ⁱⁿ·019, as measured by gauge No. 6 partly sunk below the ground; being 0ⁱⁿ·247 less than the average fall for the 50 years, 1841-1890.

the average for the 50 years, 1841-1890.

DAILY RESULTS OF THE METEOROLOGICAL OBSERVATIONS,

Table with columns: MONTH and DAY, 1900; Phases of the Moon; BAROMETER; TEMPERATURE (Of the Air, Of Evaporation, Of the Dew Point); Difference between the Air Temperature and Dew Point Temperature; TEMPERATURE (Of Radiation); Rain collected in Gauge No. 6; Daily Amount of Ozone; Electricity.

The results apply to the civil day.

The mean reading of the Barometer (Column 2) and the mean temperatures of the Air and Evaporation (Columns 6 and 8) are deduced from the photographic records. The average temperature (Column 7) is deduced from the 50 years' observations, 1841-1890. The temperature of the Dew Point (Column 9) and the Degree of Humidity (Column 13) are deduced from the corresponding temperatures of the Air and Evaporation by means of Glaisher's Hygrometrical Tables. The mean difference between the Air and Dew Point Temperatures (Column 10) is the difference between the numbers in Columns 6 and 9, and the Greatest and Least Differences (Columns 11 and 12) are deduced from the 24 hourly photographic measures of the Dry-Bulb and Wet-bulb Thermometers.

The values given in Columns 3, 4, 5, 14, and 15 are derived from eye-readings of self-registering thermometers.

* Rainfall (Column 16). Amounts entered on December 23 and 24 are derived from fog.

The mean reading of the Barometer for the month was 29.755, being 0.036 lower than the average for the 50 years, 1841-1890.

TEMPERATURE OF THE AIR.

The highest in the month was 56.3 on December 5; the lowest in the month was 30.7 on December 23; and the range was 25.6. The mean of all the highest daily readings in the month was 49.9, being 5.9 higher than the average for the 50 years, 1841-1890. The mean of all the lowest daily readings in the month was 40.3, being 5.5 higher than the average for the 50 years, 1841-1890. The mean of the daily ranges was 9.6, being 0.4 greater than the average for the 50 years, 1841-1890. The mean for the month was 45.7, being 6.0 higher than the average for the 50 years, 1841-1890.

MONTH and DAY, 1900.	Daily Duration of Sunshine.		WIND AS DEDUCED FROM SELF-REGISTERING ANEMOMETERS.						CLOUDS AND WEATHER.			
	hours.	Sun above Horizon.	OSLER'S.		ROBIN-SON'S.			CLOUDS AND WEATHER.				
			General Direction.		Pressure on the Square Foot.			A.M.		P.M.		
			A.M.	P.M.	Greatest.	Least.	Mean of 24 Hourly Measures.	Horizontal Movement of the Air.	A.M.	P.M.		
hours.	hours.			lbs.	lbs.	lbs.	miles.					
Dec. 1	0.0	8.1	N : NNE : E	E : ESE	1.0	0.0	0.02	132	10	: 10	: 10, th-r	10, fq.-th-r : 10, oc.-th-r : 10
2	0.0	8.1	E : ENE	E : ESE	0.2	0.0	0.00	131	10	: 10	: 10, m, th-r	10, glm, th-r : 10 : 10
3	0.2	8.1	SE : SSE	SSW : S	10.5	0.0	0.72	315	10	: 10		10 : 10, fq.-th-r, w : 10, sc, st.-w, r
4	2.2	8.0	SW : WSW	WSW : SW	12.3	0.0	1.78	563	10, w	: 10, st.-w	: 9, cu, ci.-s, s	10 : 10, hy.-shs : 10
5	0.0	8.0	WSW : SW	S : SE : WSW	23.5	0.0	1.07	423	10, shs.-r	: 10, slt.-r	: 10, c.-r	10, c.-r : 10, c.-r, st.-w : v, sc, lu.-ha, st.-w
6	0.0	8.0	WNW : W : WSW	SW : WNW	16.5	0.0	1.20	452	p.-cl, st.-w	: p.-cl	: 10	10, r : 10, c.-r : 6, lu.-ha
7	0.7	8.0	W : WSW	W : SW : SSW	3.1	0.0	0.29	325	p.-cl	: p.-cl	: 5, cu.-s, ci.-s	9, cu, ci.-cu, fq.-r : 5 : o, f, lu.-co, hy.-d
8	0.0	7.9	SSW : S	SSW	4.8	0.0	0.85	429	o, hy.-d	: p.-cl	: 10, sc, oc.-th.-r	10, sc, w, fq.-th.-r : 10, sc, slt.-r : 10
9	0.0	7.9	SSW : SW	WSW : SW	7.1	0.0	0.75	381	9, w	: 10, w	: 10, th.-r, glm	10 : 10 : 9, lu.-ha
10	2.5	7.9	WSW	WSW : SW : SSW	0.4	0.0	0.00	184	z	: o	: 1, li.-cl, m	4, ci.-cu, cu.-s, ci.-s : 5, cu, th.-cl, m : p.-cl, f, lu.-ha
11	0.0	7.9	SSW	SSW : SW	6.1	0.0	1.00	455	p.-cl	: 10	: 10, sc, oc.-th.-r, w	10, sc, w : 10, sc, w : 10, w
12	0.0	7.8	SW	SW : SSW	8.0	0.0	1.09	481	10, w	: 10	: 10, sc	10, sc : 10, oc.-th.-r : 10, shs.-r
13	0.0	7.8	SSW	WSW : SW	3.7	0.0	0.30	339	10, shs.-r	: 10	: 10, c.-r	10, sc, c.-r : o, d : o, d
14	2.0	7.8	SW	SW	5.1	0.0	0.76	435	o, d	: o	: 6, ci.-cu, ci.-s, th.-cl	10 : p.-cl : 10
15	2.7	7.8	SW	SW : WSW	8.1	0.0	1.30	523	10	: p.-cl	: 7, cu, cu.-s, w	6, cu, cu.-s, sc, w, slt.-r : p.-cl, slt.-r : o
16	4.7	7.8	WSW : SW	SW : WSW	1.8	0.0	0.20	316	o	: o	: 3, ci.-cu, cu.-s	o : 9 : 10
17	5.8	7.8	SW : SSW	SSW : S : SW	3.0	0.0	0.26	303	9	: 9	: 5, cu, li.-cl	o : 2, th.-cl, hy.-d : p.-cl, ho.-fr
18	0.9	7.8	SW : SSW	SSW	6.1	0.0	0.91	456	10	: 10	: p.-cl	8, cu : 9 : 10
19	5.7	7.8	NW : SW	SW : SSW	4.8	0.0	0.37	351	10, r	: p.-cl	: 1, ci.-s, li.-cl, so.-ha	1, ci.-s, cu.-s, th.-cl : o : o
20	0.0	7.8	SSW : SW	SSW : SW	16.0	0.0	3.10	720	o, w	: p.-cl, st.-w	: 10, sc, st.-w, oc.-slt.-r	10, sc, fq.-slt.-r, w : 10, sc, slt.-r, w : p.-cl, w
21	6.3	7.8	SW : WSW	SW	13.0	0.0	2.19	578	v, w	: o, st.-w	: 1, li.-cl, w	2, cu, ci.-cu, li.-cl : 8 : 10, r
22	0.0	7.8	SW	SW : NE	0.7	0.0	0.00	152	o, ho.-fr	: o, ho.-fr	: 5, s, th.-cl, so.-ha	10, m, so.-ha : 10, f : p.-cl, f
23	0.0	7.8	Calm	Variable : Calm	0.1	0.0	0.00	72	9, f	: 10, f, fr	: 10, tk.-f	10, tk.-f : 10, tk.-f : 10, f
24	0.0	7.8	Calm : Variable	SW : SSW	1.5	0.0	0.05	159	10, f	: 10, f	: 10, tk.-f	10, f : 10 : p.-cl
25	0.0	7.8	SSW	SSW : S	6.3	0.0	1.03	461	p.-cl, m	: 9	: 10	10, w : 10, w : o
26	1.6	7.8	S : SSW : SW	SW : S : SSE	7.2	0.0	0.69	351	9, w	: 10, shs.-r, glm	: 7, ci.-cu, ci.-s, th.-cl, so.-ha	8, s, th.-cl : o
27	0.0	7.8	SE : S	SSW : SW : S	6.4	0.0	0.97	411	10, fq.-r, w	: 10, sc, shs.-r	: 10, sc, th.-r	10, sc, fq.-th.-r : 10, oc.-r, w : 10, w
28	0.0	7.8	SW	WSW : W	27.0	0.0	4.96	956	v, st.-w	: p.-cl, st.-w	: 10, sc, r, st.-w	10, sc, fq.-r, st.-w : 10, sc, st.-w : o, st.-w
29	3.0	7.8	WSW	WSW : SSW : S	7.9	0.0	0.75	345	o, w	: o, ho.-fr	: 1, th.-cl, h	8 : 8, th.-cl : p.-cl, ho.-fr, f
30	0.0	7.8	S : SSW	S : SSE : SE	20.0	0.0	0.43	338	9, r	: 10	: 10, slt.-r	10, hy.-r : 10, hy.-r : 10, r, w
31	0.1	7.8	S : N	N : NE	12.6	0.0	1.46	499	10, w	: 10, r, w	: 10, c.-r, w	10, oc.-r : 10 : 10, m.-r
Means	1.2	7.9	...	...	...	...	0.92	388				
Number of Column for Reference.	19	20	21	22	23	24	25	26	27			28

The mean *Temperature of Evaporation* for the month was 44°.2, being 5°.9 higher than the average for the 50 years, 1841-1890.

The mean *Temperature of the Dew Point* for the month was 42°.6, being 6°.1 higher than the average for the 50 years, 1841-1890.

The mean *Degree of Humidity* for the month was 89.2, being 0.7 greater than the average for the 50 years, 1841-1890.

The mean *Elastic Force of Vapour* for the month was 0.273, being 0.057 greater than the average for the 50 years, 1841-1890.

The mean *Weight of Vapour in a Cubic Foot of Air* for the month was 387.1, being 0.876 greater than the average for the 50 years, 1841-1890.

The mean *Weight of a Cubic Foot of Air* for the month was 545 grains, being 8 grains less than the average for the 50 years, 1841-1890.

The mean amount of *Cloud* for the month (a clear sky being represented by 0, and an overcast sky by 10) was 7.8.

The mean proportion of *Sunshine* for the month (constant sunshine being represented by 1) was 0.157. The maximum daily amount of *Sunshine* was 6.3 hours on December 21.

The highest reading of the *Solar Radiation Thermometer* was 82°.3 on December 14; and the lowest reading of the *Terrestrial Radiation Thermometer* was 24°.5 on December 23.

The mean daily distribution of *Ozone* for the 12 hours ending 9^h was 0.8; for the 6 hours ending 15^h was 0.0; and for the 6 hours ending 21^h was 0.0.

The *Proportions of Wind* referred to the cardinal points were N. 2, E. 1, S. 16, and W. 11. One day was calm.

The *Greatest Pressure of the Wind* in the month was 27.0 lbs. on the square foot on December 28. The mean daily *Horizontal Movement of the Air* for the month was 388 miles; the greatest daily value was 956 miles on December 28; and the least daily value was 72 miles on December 23.

Rain fell on 18 days in the month, amounting to 2.282, as measured by gauge No. 6 partly sunk below the ground; being 0.512 greater than the average fall for the 50 years, 1841-1890.

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

MAXIMA.		MINIMA.		MAXIMA.		MINIMA.						
Greenwich Civil Time, 1900.	Reading.	Greenwich Civil Time, 1900.	Reading.	Greenwich Civil Time, 1900.	Reading.	Greenwich Civil Time, 1900.	Reading.					
d h m	in.	d h m	in.	d h m	in.	d h m	in.					
July	9. 2. 0	30.106	July	6. 9. 0	29.795	October	22. 10. 30	30.403				
	15. 22. 45	29.970		12. 17. 50	29.550		28. 10. 10	29.722				
	17. 23. 0	30.110		16. 13. 30	29.851		31. 9. 25	29.833				
	21. 22. 30	30.000		19. 18. 15	29.805	November	2. 23. 10	30.088	November	1. 9. 20	29.677	
	26. 23. 10	29.927		25. 18. 30	29.712		8. 9. 45	29.812		7. 3. 15	29.050	
	27. 20. 10	29.777		27. 19. 15	29.713		11. 22. 0	29.778		10. 4. 45	29.510	
	29. 0. 40	29.667		28. 5. 5	29.586		14. 21. 45	29.612		13. 13. 20	29.400	
	31. 9. 30	29.908		29. 14. 20	29.598		18. 21. 20	30.192		16. 7. 15	29.006	
August	2. 21. 10	29.673	August	2. 3. 25	29.590		22. 19. 15	29.640		21. 21. 40	29.557	
	4. 21. 0	29.677		3. 19. 50	29.105		26. 10. 0	29.557		25. 6. 30	29.225	
	8. 22. 30	29.858		6. 19. 0	29.090		27. 10. 40	29.450		27. 3. 0	29.317	
	11. 23. 25	30.216		9. 18. 20	29.400	28. 22. 40	29.069	28. 13. 30	29.000			
	13. 10. 20	30.239		12. 17. 20	30.137	December	3. 2. 15	29.787	December	4. 3. 50	29.287	
	26. 7. 50	29.936		22. 4. 30	29.289		4. 16. 35	29.510		5. 20. 25	29.195	
	30. 9. 10	30.236		27. 6. 50	29.803		6. 8. 20	29.598		6. 18. 0	29.370	
	September	3. 23. 0		30.301	September		1. 18. 0	29.836		8. 0. 0	30.067	9. 5. 50	29.868
12. 9. 15		30.364	8. 3. 45	29.770			10. 10. 40	30.246		12. 4. 20	29.902	
20. 9. 25		30.220	18. 17. 0	29.773			12. 11. 10	30.013		13. 11. 20	29.820	
26. 9. 10		29.927	24. 15. 30	29.580			14. 10. 15	30.198		15. 13. 20	29.966	
29. 8. 35		29.749	28. 4. 10	29.426			16. 19. 5	30.362		19. 1. 45	29.778	
October		1. 21. 0	29.783	October		30. 16. 20	29.501	19. 19. 0	30.057	20. 20. 20	29.385	
		3. 20. 35	29.929			October	3. 1. 10	29.627	22. 9. 10	29.942	23. 0. 40	29.770
		5. 11. 20	29.683				4. 15. 40	29.462	24. 20. 25	29.977	26. 5. 35	29.652
	7. 20. 50	30.137	5. 15. 45		29.598		26. 11. 5	29.745	28. 10. 15	28.785		
	11. 8. 5	30.044	10. 4. 30		29.840		29. 20. 35	29.615	31. 1. 0	28.760		
	16. 11. 15	29.804	14. 6. 0		29.530							

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 expressed in civil reckoning, commencing at midnight and counting from 0^h to 24^h. The height of the barometer cistern above mean sea level is 159 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 1900.
 [Extracted from the preceding Table.]

MONTH, 1900.	Readings of the Barometer.		Range.
	Highest.	Lowest.	
	in.	in.	in.
January	30·296	29·078	1·218
February	29·934	28·356	1·578
March	30·472	29·041	1·431
April	30·410	29·070	1·340
May	30·170	29·304	0·866
June	29·973	29·271	0·702
July	30·110	29·448	0·662
August	30·239	29·090	1·149
September	30·364	29·426	0·938
October	30·403	29·111	1·292
November	30·192	28·959	1·233
December	30·362	28·760	1·602

The highest reading in the year was 30ⁱⁿ·472 on March 13.

The lowest reading in the year was 28ⁱⁿ·356 on February 19.

The range of reading in the year was 2ⁱⁿ·116.

MONTHLY RESULTS of METEOROLOGICAL ELEMENTS for the YEAR 1900.

MONTH, 1900.	Mean Reading of the Barometer.	TEMPERATURE OF THE AIR.								Mean Temperature of Evaporation.	Mean Tempera- ture 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 Average of 50 Years.			
January	in. 29.754	53.0	25.9	27.1	45.0	35.1	9.9	40.4	+ 1.9	38.6	36.1	85.0
February....	29.398	58.9	18.0	40.9	43.5	33.2	10.3	38.5	- 1.0	36.8	33.9	83.8
March	29.830	55.3	21.6	33.7	45.0	33.5	11.5	39.0	- 2.7	36.4	32.8	79.0
April	29.814	76.1	25.7	50.4	56.8	38.8	18.0	47.8	+ 0.6	43.6	39.2	72.9
May	29.806	71.2	34.7	36.5	60.7	43.7	17.0	51.8	- 1.4	47.6	43.4	73.9
June	29.764	89.4	45.3	44.1	69.5	51.3	18.2	59.4	0.0	55.2	51.6	76.2
July	29.836	94.0	46.3	47.7	78.3	56.7	21.6	66.6	+ 4.2	60.1	54.8	66.6
August	29.787	82.1	45.9	36.2	70.5	52.8	17.7	60.8	- 0.8	56.5	52.9	75.7
September..	29.960	82.6	40.4	42.2	68.8	48.8	20.1	58.0	+ 0.9	54.1	50.5	76.3
October	29.806	74.2	35.6	38.6	58.2	44.0	14.1	51.3	+ 1.3	48.4	45.5	81.0
November ..	29.572	62.3	26.8	35.5	50.8	41.6	9.2	46.4	+ 3.2	44.7	42.8	87.7
December ...	29.755	56.3	30.7	25.6	49.9	40.3	9.6	45.7	+ 6.0	44.2	42.6	89.2
Means	29.757	Highest. 94.0	Lowest. 18.0	Annual Range. 76.0	58.1	43.3	14.8	50.5	+ 1.0	47.2	43.8	78.9

MONTH, 1900.	Mean Elastic Force of Vapour.	Mean Weight of Vapour in a Cubic Foot of Air.	Mean Weight of a Cubic Foot of Air.	Mean Amount of Ozone.	Mean Amount of Cloud. (0-10.)	RAIN.		WIND.										From Robinson's Anemo- meter. Mean Daily Horizontal Movement of the Air.
						Number of Rainy Days.	Amount collected in Gauge No. 6 whose receiving Surface is 5 inches above the Ground.	From Osler's Anemometer.								Number of Calm or nearly Calm Hours.	Mean Daily Pressure on the Square Foot.	
								Number of Hours of Prevalence of each Wind referred to different Points of Azimuth.										
								N.	N.E.	E.	S.E.	S.	S.W.	W.	N.W.			
January	in. 0.213	grs. 2.5	grs. 55.1	0.5	7.7	22	in. 2.277	h 126	h 41	h 23	h 60	h 114	h 175	h 134	h 53	h 18	lbs. 0.40	miles. 336
February....	0.195	2.3	54.7	0.7	8.0	19	3.583	98	114	66	45	114	128	59	23	25	0.56	327
March	0.186	2.2	55.4	0.5	7.6	13	0.918	256	157	120	36	27	50	44	49	5	0.23	260
April	0.239	2.7	54.4	0.3	6.4	11	0.924	79	77	65	38	38	228	123	37	35	0.41	295
May	0.281	3.2	54.0	0.5	7.2	9	1.367	169	143	57	39	94	166	39	36	1	0.34	289
June	0.382	4.3	53.0	0.6	7.0	17	2.815	99	49	14	52	39	309	103	47	8	0.29	285
July	0.430	4.8	52.4	0.0	5.1	5	1.408	96	23	66	43	84	212	116	75	29	0.23	236
August	0.401	4.5	52.9	0.2	6.2	12	2.029	69	134	49	25	84	222	90	31	40	0.43	281
September..	0.367	4.1	53.5	0.1	5.4	6	1.143	70	43	64	17	60	292	89	49	36	0.16	215
October	0.305	3.4	54.0	0.3	6.3	14	1.550	95	6	0	22	96	303	168	49	5	0.39	307
November ..	0.275	3.2	54.1	0.3	8.1	19	2.019	117	76	58	85	122	174	72	13	3	0.33	289
December ...	0.273	3.1	54.5	0.8	7.8	18	2.282	27	14	33	27	180	337	102	10	14	0.92	388
Sums .....	...	...	...	...	...	165	22.315	1301	877	615	489	1052	2596	1139	472	219	...	...
Means	0.296	3.4	54.0	0.4	6.9	...	...	...	...	...	...	...	...	...	...	...	0.39	292

The greatest recorded pressure of the wind on the square foot in the year was 27.0 lbs. on August 3 and December 28.
 The greatest recorded daily horizontal movement of the air in the year was 956 miles on December 28.
 The least recorded daily horizontal movement of the air in the year was 70 miles on February 4.

MONTHLY MEAN READING of the BAROMETER at every HOUR of the DAY, as deduced from the PHOTOGRAPHIC RECORDS.

Table with columns for Hour, Greenwich Civil Time, 1900 (January-December), and Yearly Means. Rows include hourly barometer readings from Midnight to 24h, and monthly means for 0h-23h and 1h-24h intervals.

MONTHLY MEAN TEMPERATURE of the AIR at every HOUR of the DAY, as deduced from the PHOTOGRAPHIC RECORDS.

Table with columns for Hour, Greenwich Civil Time, 1900 (January-December), and Yearly Means. Rows include hourly air temperature readings from Midnight to 24h, and monthly means for 0h-23h and 1h-24h intervals.

MONTHLY MEAN TEMPERATURE of EVAPORATION at every HOUR of the DAY, as deduced from the PHOTOGRAPHIC RECORDS.

Hour, Greenwich Civil Time.	1900.												Yearly Means.	
	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.		
Midnight	37.8	36.3	35.2	41.6	45.5	53.2	57.7	54.8	51.6	47.3	44.4	43.7	45.8	
1 ^{h.}	37.4	36.1	35.1	41.1	45.2	52.9	57.2	54.5	51.3	47.0	44.3	43.5	45.5	
2	37.0	36.0	35.0	40.5	44.8	52.4	56.8	54.2	51.2	46.6	44.2	43.7	45.2	
3	37.0	35.7	34.7	40.2	44.5	52.0	56.6	54.1	51.0	46.5	44.1	43.5	45.0	
4	36.9	35.3	34.6	39.8	44.4	51.6	56.2	53.8	50.8	46.5	43.7	43.5	44.8	
5	36.8	35.2	34.6	39.7	44.5	51.8	56.4	53.5	50.6	46.4	43.6	43.6	44.7	
6	36.9	35.2	34.6	40.0	45.3	52.6	57.2	53.9	50.8	46.2	43.4	43.6	45.0	
7	36.9	35.3	34.7	41.2	46.3	53.4	58.4	55.0	51.6	46.6	43.4	43.7	45.5	
8	37.0	35.5	35.5	42.6	47.4	54.6	60.0	56.4	53.3	47.7	43.7	43.7	46.4	
9	37.7	36.1	36.4	44.0	48.2	56.0	61.0	57.5	55.0	48.9	44.3	43.8	47.4	
10	38.5	37.0	37.1	45.4	49.4	56.7	61.8	58.2	56.1	49.9	45.0	44.5	48.3	
11	39.5	37.9	37.8	46.1	50.0	57.1	62.6	58.7	57.2	50.6	45.8	45.1	49.0	
Noon	40.4	38.5	38.4	46.6	50.4	57.6	62.8	59.0	57.4	50.7	46.4	45.6	49.5	
13 ^{h.}	40.9	38.9	38.8	47.0	50.6	58.3	63.0	59.1	58.0	50.8	46.7	45.8	49.8	
14	41.0	39.1	38.9	47.5	50.8	58.4	63.5	59.3	58.2	50.7	46.5	45.6	50.0	
15	40.9	38.8	38.8	47.4	50.8	58.4	63.4	59.3	58.1	50.6	46.2	45.4	49.8	
16	40.6	38.3	38.5	47.2	50.6	58.2	63.2	59.1	57.4	50.1	45.7	45.0	49.5	
17	40.1	38.0	37.9	46.4	50.0	57.9	62.5	58.5	56.7	49.5	45.4	44.6	49.0	
18	39.7	37.4	37.3	45.7	49.4	57.3	61.9	57.9	55.6	49.0	45.0	44.5	48.4	
19	39.4	37.0	36.6	44.7	48.3	56.5	61.4	57.2	54.6	48.7	44.7	44.2	47.8	
20	38.9	36.8	36.1	44.1	47.5	55.7	60.6	56.4	54.1	48.4	44.5	44.1	47.3	
21	38.7	36.8	35.8	43.5	47.0	54.9	59.9	55.9	53.2	48.1	44.3	44.0	46.8	
22	38.4	36.5	35.5	43.0	46.5	54.2	58.9	55.5	52.4	47.8	44.3	43.7	46.4	
23	37.9	36.5	35.3	42.3	45.8	53.7	58.4	55.1	51.8	47.8	44.2	43.5	46.0	
24	37.6	36.4	35.2	42.0	45.5	53.4	57.8	54.7	51.4	47.5	43.9	43.5	45.7	
Means	0 ^{h.} -23 ^{h.}	38.6	36.8	36.4	43.6	47.6	55.2	60.1	56.5	54.1	48.4	44.7	44.2	47.2
	1 ^{h.} -24 ^{h.}	38.6	36.8	36.4	43.6	47.6	55.2	60.1	56.5	54.1	48.4	44.7	44.2	47.2
Number of Days employed.	31	28	31	30	31	28	31	31	30	31	30	31	...	

MONTHLY MEAN TEMPERATURE of the DEW POINT at every HOUR of the DAY, as deduced by GLAISHER'S TABLES from the corresponding AIR and EVAPORATION TEMPERATURES.

Hour, Greenwich Civil Time.	1900.												Yearly Means.	
	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.		
Midnight	36.0	34.9	32.5	38.9	43.0	51.3	54.8	53.1	49.8	45.3	43.0	42.1	43.7	
1 ^{h.}	35.5	34.7	32.8	38.5	43.0	51.3	54.7	53.0	49.7	45.0	43.0	41.6	43.6	
2	35.1	34.5	32.7	37.9	42.8	51.1	54.6	52.8	49.7	44.7	42.9	42.1	43.4	
3	35.1	34.2	32.5	37.8	42.8	50.8	54.6	52.7	49.7	44.6	43.3	41.7	43.3	
4	35.1	33.7	32.4	37.7	42.8	50.5	54.4	52.4	49.6	45.0	42.5	41.9	43.2	
5	34.9	33.7	32.5	37.8	42.8	50.6	54.6	52.0	49.2	44.8	42.1	42.2	43.1	
6	35.0	33.9	32.8	38.0	43.2	51.0	54.8	52.3	49.4	44.6	42.1	42.1	43.3	
7	35.0	33.9	32.8	38.8	43.6	51.1	55.2	53.1	50.0	45.0	42.0	42.5	43.6	
8	35.1	34.1	33.4	39.3	43.7	51.4	55.5	53.7	51.0	45.6	42.2	42.4	43.9	
9	35.9	34.5	33.4	39.7	43.8	52.0	55.2	53.6	51.8	46.0	42.6	42.4	44.2	
10	36.2	34.9	33.5	40.5	44.4	51.8	55.1	53.5	51.8	46.2	43.0	43.0	44.5	
11	37.2	35.2	33.3	40.0	44.6	51.9	55.3	53.4	51.9	46.2	43.0	43.3	44.6	
Noon	37.6	35.5	33.6	40.4	44.4	51.7	54.9	53.2	51.3	45.9	43.6	43.6	44.6	
13 ^{h.}	37.8	35.5	33.8	40.4	44.3	51.8	54.9	53.0	51.5	45.7	43.6	43.7	44.7	
14	37.5	35.4	33.7	40.3	44.5	51.9	55.1	52.6	51.3	45.9	43.4	43.4	44.6	
15	37.7	35.2	33.3	40.2	44.2	51.7	55.1	52.6	51.3	45.9	43.4	43.4	44.5	
16	37.6	34.7	33.2	40.2	44.2	51.6	55.1	52.7	51.2	45.9	43.0	43.1	44.4	
17	37.3	34.9	33.1	39.7	44.2	51.9	54.7	52.8	51.2	45.8	43.2	42.9	44.3	
18	37.1	34.8	33.0	39.7	43.8	51.8	54.5	52.8	51.0	45.8	42.9	43.0	44.2	
19	37.0	34.7	33.1	39.3	43.2	51.7	54.9	53.0	50.9	46.2	42.9	42.7	44.1	
20	36.5	34.9	33.0	39.6	43.3	51.8	55.3	53.0	51.3	46.3	42.7	42.6	44.2	
21	36.5	35.3	32.9	39.7	43.4	51.7	55.7	53.3	50.9	46.1	42.7	42.5	44.2	
22	36.3	35.0	32.6	39.7	43.4	51.5	55.2	53.3	50.4	45.7	42.8	41.9	44.0	
23	35.9	35.2	32.5	39.3	42.9	51.5	55.2	53.2	50.0	45.9	42.9	41.7	43.8	
24	35.7	34.9	32.7	39.3	42.9	51.5	54.9	53.0	49.6	45.5	42.5	41.9	43.7	
Means	0 ^{h.} -23 ^{h.}	36.3	34.7	33.0	39.3	43.6	51.5	55.0	53.0	50.7	45.6	42.9	42.6	44.0
	1 ^{h.} -24 ^{h.}	36.3	34.7	33.0	39.3	43.6	51.5	55.0	53.0	50.7	45.6	42.8	42.6	44.0

HUMIDITY, SUNSHINE, AND READINGS OF THERMOMETERS IN A STEVENSON'S SCREEN AND ON THE ROOF OF THE MAGNET HOUSE,

MONTHLY MEAN DEGREE of HUMIDITY (Saturation = 100) at every HOUR of the DAY, as deduced by GLAISHER'S TABLES from the corresponding AIR and EVAPORATION TEMPERATURES.

Table with 14 columns: Hour, Greenwich Civil Time.; 1900. (January-December); Yearly Means. Rows include hours from Midnight to 24, and means for 0h-23h and 1h-24h.

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 1900.

Table with 19 columns: Month, 1900.; Registered Duration of Sunshine in the Hour ending (5h-20h); Total registered Duration of Sunshine in each Month.; Corresponding aggregate Period during which the Sun was above Horizon.; Proportion of Sunshine.; Mean Altitude of the Sun at Noon. Rows include months from January to December and 'For the Year'.

The hours are reckoned from apparent midnight.

READINGS of DRY-BULB THERMOMETERS in a STEVENSON'S SCREEN and on the ROOF of the MAGNET HOUSE—continued.

FEBRUARY.

Days of the Month.	Readings of Thermometers in a Stevenson's Screen, 4 ft. above the ground.						Excess above readings of the Thermometers on the ordinary stand, 4 ft. above the ground.						Days of the Month.	Readings of Thermometers on the Roof of the Magnet House, 20 ft. above the ground.						Excess above readings of the Thermometers on the ordinary stand, 4 ft. above the ground.					
	Maxi-mum.	Mini-mum.	9 ^h	Noon.	15 ^h	21 ^h	Maxi-mum.	Mini-mum.	9 ^h	Noon.	15 ^h	21 ^h		Maxi-mum.	Mini-mum.	9 ^h	Noon.	15 ^h	21 ^h	Maxi-mum.	Mini-mum.	9 ^h	Noon.	15 ^h	21 ^h
d	o	o	o	o	o	o	c	o	o	o	o	o	d	o	o	o	o	o	o	o	o	o	o	o	
1	36.1	31.7	33.1	34.2	33.6	34.1	-1.6	-0.5	+0.1	-0.1	-0.1	+0.1	1	37.0	31.5	33.1	34.3	33.8	33.9	-0.7	-0.7	+0.1	0.0	+0.1	-0.1
2	37.5	32.0	34.5	36.1	33.9	32.4	+1.2	+0.1	0.0	-0.2	-0.3	+0.1	2	36.5	31.2	34.4	36.5	33.6	32.2	+0.2	-0.7	-0.1	+0.2	-0.6	-0.1
3	34.3	32.2	33.8	33.9	33.8	33.9	+0.4	0.0	+0.1	0.0	0.0	+0.1	3	33.8	31.7	33.3	33.6	33.5	33.8	-0.1	-0.5	-0.4	-0.3	-0.3	0.0
4	38.1	33.0	...	...	...	...	+2.5	+0.1	...	...	...	...	4	35.4	32.4	...	...	...	...	-0.2	-0.5	...	...	...	...
5	37.0	33.7	33.7	34.8	35.0	36.4	+0.1	+2.4	-0.2	-0.3	-0.3	-0.3	5	36.6	30.9	33.7	34.9	35.0	36.6	-0.3	-0.4	-0.2	-0.2	-0.3	-0.1
6	39.1	32.1	33.9	38.0	36.9	32.1	+0.4	-0.2	-0.3	+0.4	+0.1	-0.2	6	38.8	31.1	33.9	37.3	36.8	31.9	+0.1	-1.2	-0.3	-0.3	0.0	-0.4
7	34.5	25.1	27.8	33.7	32.3	25.1	+0.6	+0.2	+0.1	+1.7	-0.4	+0.1	7	33.5	23.9	26.9	32.2	32.3	25.4	-0.4	-1.0	-0.8	+0.2	-0.4	+0.4
8	35.3	22.8	23.4	33.2	34.5	29.2	+0.4	+0.6	-0.5	+0.5	-0.2	+0.5	8	35.8	21.4	23.3	32.4	34.1	28.1	+0.9	-0.8	-0.6	-0.3	-0.6	-0.6
9	36.0	19.4	21.0	35.0	35.4	27.3	-0.8	+1.4	+1.4	-0.3	0.0	+1.6	9	37.4	18.1	20.7	34.9	36.0	26.8	+0.6	+0.1	+1.1	-0.4	+0.6	+1.1
10	35.7	22.4	29.6	34.9	35.1	32.0	-0.3	+2.6	-0.2	+0.1	+0.1	+0.1	10	36.3	20.7	30.1	35.8	35.0	32.0	+0.3	+0.9	+0.3	+1.0	0.0	+0.1
11	36.9	30.4	...	...	...	...	+0.2	-0.2	...	...	...	...	11	36.7	28.9	...	...	...	...	0.0	-1.7	...	...	...	...
12	38.0	23.6	28.0	36.0	36.1	33.3	-0.9	+2.2	+0.3	-0.4	-0.4	-0.4	12	39.5	23.1	29.0	36.9	36.8	33.1	+0.6	+1.7	+1.3	+0.5	+0.3	-0.6
13	36.1	22.5	26.2	31.0	35.4	32.9	+0.1	-0.4	-0.2	-1.4	-0.4	+0.1	13	35.7	22.1	26.6	31.1	35.7	32.5	-0.3	-0.8	+0.2	-1.3	-0.1	-0.3
14	38.8	31.4	33.6	36.0	36.8	31.5	+1.5	+3.0	+1.2	+0.2	0.0	+2.9	14	36.5	30.1	32.3	34.6	36.5	31.5	-0.8	+1.7	-0.1	-1.2	-0.3	+2.9
15	41.3	29.4	34.8	34.2	36.3	41.3	+0.7	+1.7	-0.1	-0.3	+0.5	+0.7	15	41.6	27.9	34.8	34.3	36.4	41.5	+1.0	+0.2	-0.1	-0.2	+0.6	+0.9
16	48.0	38.7	39.7	44.9	46.9	43.1	+1.1	-0.5	-0.3	-0.2	+0.3	-0.1	16	47.1	37.3	39.9	45.3	46.6	43.0	+0.2	-1.9	-0.1	+0.2	0.0	-0.2
17	48.0	38.9	44.4	47.2	45.9	40.7	+0.1	+0.2	-0.3	+0.3	+0.1	-0.3	17	48.0	38.5	44.8	47.5	46.4	40.6	+0.1	-0.2	+0.1	+0.6	+0.6	-0.4
18	49.1	35.2	...	...	...	...	0.0	+1.3	...	...	...	...	18	49.2	33.9	...	...	...	...	+0.1	0.0	...	...	...	...
19	52.0	44.3	50.9	51.0	50.1	45.2	+0.1	+0.3	0.0	-0.2	-0.4	0.0	19	51.8	44.0	50.9	51.0	50.0	45.1	-0.1	0.0	0.0	-0.2	-0.5	-0.1
20	47.6	37.6	42.8	44.9	45.2	38.0	-0.3	+0.3	-0.2	0.0	+0.2	+0.3	20	47.5	36.1	43.1	45.0	45.2	38.0	-0.4	-1.2	+0.1	+0.1	+0.2	+0.3
21	44.2	32.7	34.8	39.8	43.5	37.2	+0.3	-0.3	-0.4	+0.6	-0.2	+0.6	21	44.2	31.3	34.7	39.2	43.0	37.2	+0.3	-1.7	-0.5	0.0	-0.7	+0.6
22	53.9	36.8	45.8	50.6	52.6	45.9	+0.3	+0.9	-0.1	-0.1	-0.1	+0.3	22	53.5	36.1	46.0	51.0	52.7	45.6	-0.1	+0.2	+0.1	+0.3	0.0	0.0
23	55.2	43.1	50.5	51.7	55.0	51.1	-0.5	+1.1	-0.5	-0.1	+0.2	+0.3	23	55.5	42.5	50.7	51.7	55.0	51.0	-0.2	+0.5	-0.3	-0.1	+0.2	+0.2
24	58.0	50.9	51.5	55.6	56.5	50.9	-0.9	+0.1	+0.1	0.0	-0.1	+0.1	24	59.1	50.3	51.4	56.2	56.7	50.3	+0.2	-0.5	0.0	+0.6	+0.1	-0.5
25	55.9	48.3	...	...	...	...	0.0	+0.1	...	...	...	...	25	57.0	48.2	...	...	...	...	+1.1	0.0	...	...	...	...
26	57.0	42.8	44.8	51.0	55.2	49.2	-0.5	-0.7	+0.2	-0.4	-0.3	+0.2	26	57.2	43.4	44.6	51.4	56.3	48.6	-0.3	-0.1	0.0	0.0	+0.8	-0.4
27	49.2	46.3	47.5	48.0	48.6	47.7	+0.1	0.0	0.0	+0.1	-0.1	+0.2	27	49.4	45.7	47.0	48.0	48.9	47.2	+0.3	-0.6	-0.5	+0.1	+0.2	-0.3
28	49.1	38.3	42.2	41.1	41.1	39.2	+1.6	0.0	+0.8	-0.1	-0.3	-0.1	28	47.5	37.2	42.0	40.4	40.4	39.0	0.0	-1.1	+0.6	-0.8	-1.0	-0.3
Means	43.6	34.1	37.0	40.7	41.5	37.9	+0.2	+0.6	0.0	0.0	-0.1	+0.3	Means	43.5	33.2	37.0	40.6	41.5	37.7	+0.1	-0.4	0.0	-0.1	0.0	+0.1

READINGS OF DRY-BULB THERMOMETERS IN A STEVENSON'S SCREEN AND ON THE ROOF OF THE MAGNET HOUSE—continued.

APRIL.

Days of the Month.	Readings of Thermometers in a Stevenson's Screen, 4 ft. above the ground.						Excess above readings of the Thermometers on the ordinary stand, 4 ft. above the ground.						Days of the Month.	Readings of Thermometers on the Roof of the Magnet House, 20 ft. above the ground.						Excess above readings of the Thermometers on the ordinary stand, 4 ft. above the ground.					
	Maxi-mum.	Mini-mum.	9 ^h	Noon.	15 ^h	21 ^h	Maxi-mum.	Mini-mum.	9 ^h	Noon.	15 ^h	21 ^h		Maxi-mum.	Mini-mum.	9 ^h	Noon.	15 ^h	21 ^h	Maxi-mum.	Mini-mum.	9 ^h	Noon.	15 ^h	21 ^h
d	o	o	o	o	o	o	o	o	o	o	o	o	d	o	o	o	o	o	o	o	o	o	o	o	
1	44.9	31.4	...	...	...	...	-1.0	+1.1	...	...	...	...	1	46.6	29.9	...	...	...	...	+0.7	-0.4	...	...	...	...
2	48.0	27.4	34.9	45.3	47.8	41.6	-0.4	+1.7	-0.3	+0.6	-0.5	-0.4	2	47.9	25.1	34.9	45.3	47.9	41.3	-0.5	-0.6	-0.3	+0.6	-0.4	-0.7
3	52.0	33.5	40.8	49.1	49.9	41.1	-0.9	+0.1	+0.5	+1.4	-0.3	-0.3	3	52.7	32.4	41.0	50.0	50.0	41.1	-0.2	-0.1	+0.7	+2.3	-0.2	-0.3
4	55.7	40.5	47.1	50.8	54.9	43.6	-0.4	-0.2	+0.1	-0.7	+0.9	+0.2	4	56.1	40.3	47.3	51.0	54.7	43.1	0.0	-0.4	+0.3	-0.5	+0.7	-0.3
5	50.1	39.0	42.6	44.2	49.4	42.1	+0.2	+1.0	+0.4	-0.1	+0.5	0.0	5	50.8	38.3	42.5	44.3	49.2	41.9	+0.9	+0.3	+0.3	0.0	+0.3	-0.2
6	54.1	34.4	42.4	50.8	50.7	39.9	0.0	0.0	+0.1	+1.1	+0.2	+1.6	6	54.6	33.0	42.0	51.0	51.2	39.3	+0.5	-1.4	-0.3	+1.3	+0.7	+1.0
7	49.2	38.5	43.5	47.2	48.2	41.1	-0.9	+1.0	-1.2	-0.4	-0.3	+0.3	7	50.5	37.2	44.2	48.9	49.0	40.7	+0.4	-0.3	-0.5	+1.3	+0.5	-0.1
8	48.0	37.4	...	...	...	...	+0.2	0.0	...	...	...	...	8	46.4	37.0	...	...	...	...	-1.4	-0.4	...	...	...	...
9	54.9	33.8	43.4	46.4	54.9	47.1	+0.1	+1.3	+0.7	+0.1	+0.2	+0.2	9	55.3	32.5	43.4	46.3	55.2	47.0	+0.5	0.0	+0.7	0.0	+0.5	+0.1
10	54.9	39.1	47.2	52.0	53.6	47.1	+0.3	-0.3	+0.5	+1.3	0.0	+0.3	10	54.6	37.9	46.9	52.0	53.7	47.1	0.0	-1.5	+0.2	+1.3	+0.1	+0.3
11	58.2	42.2	52.7	57.9	52.8	49.4	+0.1	-0.1	0.0	+0.1	-0.2	-0.1	11	59.0	41.4	53.0	58.5	52.9	49.0	+0.9	-0.9	+0.3	+0.7	-0.1	-0.5
12	57.0	44.5	50.1	55.8	56.3	52.1	0.0	+0.2	+0.5	+0.5	+0.1	0.0	12	57.5	44.1	50.0	56.0	56.7	52.0	+0.5	-0.2	+0.4	+0.7	+0.5	-0.1
13	58.8	45.3	...	...	...	...	+0.1	-0.7	...	...	...	...	13	58.2	44.8	...	...	...	...	-0.5	-1.2	...	...	...	...
14	64.4	42.5	49.1	57.4	63.1	53.6	+0.3	-0.1	-0.1	+0.4	+0.4	0.0	14	64.5	41.3	49.3	58.4	63.3	53.3	+0.4	-1.3	+0.1	+1.4	+0.6	-0.3
15	57.1	48.0	...	...	...	...	+0.4	+0.2	...	...	...	...	15	57.2	47.6	...	...	...	...	+0.5	-0.2	...	...	...	...
16	55.3	40.6	...	...	...	...	0.0	-0.1	...	...	...	...	16	54.7	39.2	...	...	...	...	-0.6	-1.5	...	...	...	...
17	51.2	38.5	47.0	46.2	47.5	51.0	+0.2	-0.6	+0.3	-0.2	-0.2	+0.5	17	51.0	37.2	47.2	46.2	47.6	50.8	0.0	-1.9	+0.5	-0.2	-0.1	+0.3
18	61.3	42.8	51.6	58.7	60.3	53.1	+0.2	+1.0	+1.6	0.0	-0.7	+0.4	18	61.5	42.0	50.1	58.6	60.9	53.1	+0.4	+0.2	+0.1	-0.1	-0.1	+0.4
19	67.2	46.6	56.2	62.7	67.2	54.2	+0.2	+1.6	-0.4	+1.7	+1.2	+1.0	19	69.6	46.1	56.7	62.8	68.9	53.3	+2.6	+1.1	+0.1	+1.8	+2.9	+0.1
20	66.8	42.3	60.2	66.7	65.5	50.5	-0.4	+2.2	+0.9	+0.3	-1.4	+0.5	20	69.4	40.3	60.8	67.0	67.0	50.0	+2.2	+0.2	+1.5	+0.6	+0.1	0.0
21	76.6	42.6	62.6	68.5	76.6	61.5	+0.5	+3.0	+1.3	+0.5	+1.0	+0.4	21	78.7	41.1	60.5	69.2	78.0	61.4	+2.6	+1.5	-0.8	+1.2	+2.4	+0.3
22	71.7	44.0	...	...	...	...	-0.7	-0.6	...	...	...	...	22	73.5	43.3	...	...	...	...	+1.1	-1.3	...	...	...	...
23	66.6	45.4	47.2	57.9	62.3	45.5	+1.6	+0.9	0.0	+1.6	+0.3	+0.8	23	65.7	44.0	47.3	58.5	63.5	44.8	+0.7	-0.5	+0.1	+2.2	+1.5	+0.1
24	60.8	40.1	52.1	59.8	59.9	46.9	-0.4	+1.7	+1.7	+1.1	+1.0	+1.7	24	62.5	37.4	51.2	58.0	59.0	45.8	+1.3	-1.0	+0.8	-0.7	+0.1	+0.6
25	48.1	40.1	44.7	43.9	43.7	40.5	+1.0	+1.0	+0.7	+0.2	0.0	+0.9	25	47.0	37.9	44.0	43.9	43.9	40.0	-0.1	-1.2	0.0	+0.2	+0.2	+0.4
26	53.7	33.0	45.9	51.1	52.4	44.2	-0.4	+1.8	+1.2	+0.4	+1.4	+0.3	26	55.3	29.9	46.1	52.2	53.1	43.6	+1.2	-1.3	+1.4	+1.5	+2.1	-0.3
27	51.3	36.4	46.4	49.4	50.0	45.2	-0.9	+0.1	+0.2	+1.4	+0.2	+0.2	27	50.5	35.2	46.9	48.8	50.0	45.0	-1.7	-1.1	+0.7	+0.8	+0.2	0.0
28	54.0	39.3	46.8	50.9	53.8	43.8	-0.1	+0.1	+1.8	+1.3	+0.5	+1.1	28	55.5	38.1	47.2	50.9	54.5	43.2	+1.4	-1.1	+2.2	+1.3	+1.2	+0.5
29	58.0	37.1	...	...	...	...	-0.1	+0.9	...	...	...	...	29	58.5	35.9	...	...	...	...	+0.4	-0.3	...	...	...	...
30	55.3	49.4	51.8	55.0	53.8	50.1	-0.9	+0.1	+0.1	0.0	+0.3	+0.2	30	55.9	49.2	51.9	55.8	53.7	49.8	-0.3	-0.1	+0.2	+0.8	+0.2	-0.1
Means	56.8	39.9	48.1	53.4	55.4	47.2	-0.1	+0.6	+0.5	+0.5	+0.2	+0.4	Means	57.4	38.7	48.0	53.6	55.8	46.8	+0.5	-0.6	+0.4	+0.8	+0.6	+0.1

READINGS OF DRY-BULB THERMOMETERS in a STEVENSON'S SCREEN and on the ROOF of the MAGNET HOUSE—continued.

JUNE.

Days of the Month.	Readings of Thermometers in a Stevenson's Screen, 4 ft. above the ground.						Excess above readings of the Thermometers on the ordinary stand, 4 ft. above the ground.						Days of the Month.	Readings of Thermometers on the Roof of the Magnet House, 20 ft. above the ground.						Excess above readings of the Thermometers on the ordinary stand, 4 ft. above the ground.					
	Maxi- mum.	Mini- mum.	9 ^h	Noon.	15 ^h	21 ^h	Maxi- mum.	Mini- mum.	9 ^h	Noon.	15 ^h	21 ^h		Maxi- mum.	Mini- mum.	9 ^h	Noon.	15 ^h	21 ^h	Maxi- mum.	Mini- mum.	9 ^h	Noon.	15 ^h	21 ^h
d	o	o	o	o	o	o	o	o	o	o	o	o	d	o	o	o	o	o	o	o	o	o	o	o	
1	53.3	47.8	49.0	51.1	53.3	48.1	+0.2	0.0	-0.2	-0.3	+0.4	+0.3	1	53.0	46.2	47.7	51.1	53.0	47.3	-0.1	-1.6	-1.5	-0.3	+0.1	-0.5
2	63.7	47.7	52.5	56.9	62.6	56.2	-1.0	+0.2	+0.1	-0.1	-0.2	+0.3	2	63.4	46.7	52.0	56.5	63.0	55.9	-1.3	-0.8	-0.4	-0.5	+0.2	0.0
3	69.9	50.3	...	...	...	...	-1.1	+0.6	...	...	...	...	3	70.6	49.7	...	...	...	...	-0.4	0.0	...	...	...	...
4	74.7	50.2	...	...	...	...	-0.8	+0.6	...	...	...	...	4	76.2	49.0	...	...	...	...	+0.7	-0.6	...	...	...	...
5	65.4	46.3	55.8	59.4	62.6	51.8	-0.6	+1.0	+1.1	+2.6	+1.6	+0.7	5	65.2	45.1	54.3	58.6	62.0	51.1	-0.8	-0.2	-0.4	+1.8	+1.0	0.0
6	72.0	48.4	57.4	64.9	70.9	62.6	-0.8	+0.2	+1.1	+0.9	-0.6	0.0	6	74.4	48.1	57.7	65.0	73.2	62.3	+1.6	-0.1	+1.4	+1.0	+1.7	-0.3
7	68.6	53.5	59.2	66.0	58.0	53.7	+0.7	+0.3	+0.3	+1.3	-0.6	+0.4	7	68.6	52.3	59.1	67.3	58.5	53.0	+0.7	-0.9	+0.2	+2.6	-0.1	-0.3
8	66.7	50.7	55.3	60.2	65.7	58.0	-1.1	+0.3	-0.1	+0.2	-0.2	+0.3	8	67.9	49.4	55.8	60.2	66.9	57.3	+0.1	-1.0	+0.4	+0.2	+1.0	-0.4
9	67.2	53.3	60.8	64.5	65.6	56.9	-1.5	+0.3	+0.9	-0.3	-0.5	+1.8	9	69.3	52.4	62.0	66.6	67.0	56.3	+0.6	-0.6	+2.1	+1.8	+0.9	+1.2
10	81.5	51.4	...	...	...	...	+0.3	+2.2	...	...	...	...	10	81.7	50.2	...	...	...	...	+0.5	+1.0	...	...	...	...
11	87.6	60.6	75.6	85.2	87.4	70.4	-1.8	+1.0	+0.6	-1.6	+0.5	+0.3	11	88.0	60.4	76.4	85.0	87.4	69.9	-1.4	+0.8	+1.4	-1.8	+0.5	-0.2
12	82.0	60.1	77.1	75.1	80.9	66.8	-0.6	+2.5	+0.4	0.0	-0.8	+0.4	12	84.4	59.9	77.5	75.7	83.0	66.2	+1.8	+2.3	+0.8	+0.6	+1.3	-0.2
13	66.9	56.2	58.6	60.5	59.7	57.1	+0.5	+0.2	+0.8	-0.3	+0.8	+0.3	13	66.5	56.2	59.0	61.1	61.5	56.2	+0.1	+0.2	+1.2	+0.3	+2.6	-0.6
14	67.0	50.1	61.2	60.7	65.6	55.6	-0.7	+0.8	-0.5	-1.0	+1.2	+0.9	14	68.6	48.4	62.9	63.0	66.6	55.0	+0.9	-0.9	+1.2	+1.3	+2.2	+0.3
15	69.9	53.8	63.6	63.9	65.9	61.2	-1.3	0.0	-0.2	+0.7	+0.2	-0.1	15	71.2	53.8	64.6	65.0	67.2	61.0	0.0	0.0	+0.8	+1.8	+1.5	-0.3
16	69.0	54.3	63.6	65.9	66.5	61.4	-0.9	+0.1	+0.9	-0.2	-0.3	+0.1	16	70.8	53.4	64.7	67.3	67.8	61.0	+0.9	-0.8	+2.0	+1.2	+1.0	-0.3
17	71.3	58.7	...	...	...	...	-1.3	-0.7	...	...	...	...	17	73.5	59.4	...	...	...	...	+0.9	0.0	...	...	...	...
18	73.0	51.3	63.9	68.3	71.1	62.6	-1.1	+1.3	+0.8	+1.4	-0.4	+0.4	18	74.5	49.2	64.3	68.3	73.2	62.2	+0.4	-0.8	+1.2	+1.4	+1.7	0.0
19	74.0	56.3	67.9	71.8	71.9	59.8	+0.1	+1.6	+1.4	+0.1	+0.3	+0.7	19	75.5	55.3	68.8	72.1	72.3	59.4	+1.6	+0.6	+2.3	+0.4	+0.7	+0.3
20	69.8	54.2	61.4	62.2	63.7	56.3	0.0	+0.2	+0.4	+2.7	+0.9	-0.1	20	71.1	53.4	62.2	62.7	64.1	55.6	+1.3	-0.6	+1.2	+3.2	+1.3	-0.8
21	60.2	52.4	59.6	57.0	56.1	55.9	-1.4	+0.9	+0.6	-0.8	-0.2	+0.2	21	61.6	51.3	60.6	58.0	56.9	55.4	0.0	-0.2	+1.6	+0.2	+0.6	-0.3
22	68.1	52.7	60.0	61.8	65.8	57.5	-0.4	-0.3	+0.3	-0.3	-0.2	-0.1	22	69.3	52.3	59.8	62.7	66.9	57.1	+0.8	-0.7	+0.1	+0.6	+0.9	-0.5
23	65.4	47.2	56.0	60.7	62.1	59.2	-0.8	-0.2	-1.1	-1.3	-0.2	-0.2	23	66.6	45.9	56.7	60.9	63.0	58.3	+0.4	-1.5	-0.4	-1.1	+0.7	-1.1
24	65.7	50.5	...	...	...	...	-0.4	+0.2	...	...	...	...	24	66.8	49.1	...	...	...	...	+0.7	-1.2	...	...	...	...
25	63.5	52.7	54.9	53.9	59.3	54.1	-0.6	+0.4	-0.5	-0.3	+0.7	+0.1	25	64.2	52.3	55.5	54.1	59.5	53.2	+0.1	0.0	+0.1	-0.1	+0.9	-0.8
26	60.4	51.5	56.2	57.5	59.9	57.9	-1.7	0.0	-0.2	0.0	+0.2	+0.2	26	61.5	51.2	56.1	57.6	60.8	57.4	-0.6	-0.3	-0.3	+0.1	+1.1	-0.3
27	64.9	47.4	58.9	61.6	63.5	59.0	-1.1	0.0	+0.7	-0.3	0.0	+0.3	27	67.4	45.9	59.4	62.8	66.4	58.2	+1.4	-1.5	+1.2	+0.9	+2.9	-0.5
28	68.3	52.2	55.1	64.1	67.9	55.9	-0.7	+2.2	0.0	-0.4	-0.1	+0.6	28	69.1	50.9	55.3	64.0	68.6	55.1	+0.1	+0.9	+0.2	-0.5	+0.6	-0.2
29	72.4	53.9	63.2	70.1	70.9	58.6	-0.4	+0.3	+0.6	+1.8	+0.2	-0.1	29	74.0	53.4	65.2	70.3	72.3	58.4	+1.2	-0.2	+2.6	+2.0	+1.6	-0.3
30	66.1	53.0	57.0	63.6	62.5	58.1	-0.8	-0.2	-0.7	-0.8	-0.4	-0.1	30	67.3	52.5	57.7	64.7	63.0	57.9	+0.4	-0.7	0.0	+0.3	+0.1	-0.3
Means	69.0	52.3	60.2	63.5	65.6	58.2	-0.7	+0.5	+0.3	+0.1	+0.1	+0.3	Means	70.1	51.4	60.6	64.0	66.6	57.6	+0.4	-0.3	+0.8	+0.7	+1.1	-0.3

READINGS OF DRY-BULB THERMOMETERS IN A STEVENSON'S SCREEN AND ON THE ROOF OF THE MAGNET HOUSE—continued.

AUGUST.

Days of the Month.	Readings of Thermometers in a Stevenson's Screen; 4 ft. above the ground.						Excess above readings of the Thermometers on the ordinary stand; 4 ft. above the ground.						Days of the Month.	Readings of Thermometers on the Roof of the Magnet House; 20 ft. above the ground.						Excess above readings of the Thermometers on the ordinary stand; 4 ft. above the ground.					
	Maxi- mum.	Mini- mum.	9 ^h	Noon.	15 ^h	21 ^h	Maxi- mum.	Mini- mum.	9 ^h	Noon.	15 ^h	21 ^h		Maxi- mum.	Mini- mum.	9 ^h	Noon.	15 ^h	21 ^h	Maxi- mum.	Mini- mum.	9 ^h	Noon.	15 ^h	21 ^h
d	°	°	°	°	°	°	°	°	°	°	°	°	d	°	°	°	°	°	°	°	°	°	°	°	°
1	66.2	56.8	63.3	57.8	64.9	59.0	-0.4	-0.4	+0.3	-0.4	+0.6	-0.3	1	67.8	57.0	63.5	58.0	65.7	58.2	+1.2	-0.2	+0.5	-0.2	+1.4	-1.1
2	71.7	54.4	62.7	68.0	71.2	62.1	-2.0	-0.3	-0.1	-0.1	-0.5	+0.2	2	72.8	53.4	63.0	68.0	72.1	61.6	-0.9	-1.3	+0.2	-0.1	+0.4	-0.3
3	68.5	52.1	61.7	65.4	64.9	52.1	-0.4	-0.2	-0.1	+0.5	0.0	-0.2	3	68.5	51.5	62.0	66.3	65.4	51.5	-0.4	-0.8	+0.2	+1.4	+0.5	-0.8
4	64.0	50.9	57.4	61.9	61.0	55.1	-0.6	-0.4	-0.3	+1.1	+0.7	-0.3	4	64.5	50.3	57.3	62.1	61.1	55.0	-0.1	-1.0	-0.4	+1.3	+0.8	-0.4
5	61.0	48.9	...	...	...	...	-1.7	+0.7	...	...	...	...	5	62.5	47.6	...	...	...	...	-0.2	-0.6	...	...	...	...
6	63.3	51.3	...	...	...	...	-1.3	-0.1	...	...	...	...	6	63.7	50.2	...	...	...	...	-0.9	-1.2	...	...	...	...
7	67.2	52.4	59.7	62.9	63.8	54.6	-0.8	-0.3	-0.1	+0.2	+0.3	-0.1	7	68.8	51.3	60.2	63.3	64.7	54.0	+0.8	-1.4	+0.4	+0.6	+1.2	-0.7
8	63.1	52.4	55.1	58.3	62.0	55.0	-1.8	0.0	0.0	+0.3	+0.3	+2.6	8	62.7	51.3	55.2	58.3	62.0	54.2	-2.2	-1.1	+0.1	+0.3	+0.3	+1.8
9	60.1	51.9	58.7	57.1	56.1	56.3	-1.7	+1.5	-0.9	-0.2	+0.1	-0.4	9	61.0	50.9	59.7	57.2	56.3	56.3	-0.8	+0.5	+0.1	-0.1	+0.3	-0.4
10	62.0	52.6	55.3	58.3	60.8	54.6	-1.3	-0.1	0.0	-0.3	-0.3	+1.9	10	63.2	52.3	55.1	59.0	61.1	54.2	-0.1	-0.4	-0.2	+0.4	0.0	+1.5
11	70.5	50.3	59.0	67.1	70.5	58.6	-1.6	-0.1	+0.3	+1.1	-0.2	+1.3	11	72.4	49.3	60.0	68.2	72.0	60.0	+0.3	-1.1	+1.3	+2.2	+1.3	+2.7
12	77.1	55.6	...	...	...	...	-0.8	+1.7	...	...	...	...	12	79.3	54.8	...	...	...	...	+1.4	+0.9	...	...	...	...
13	81.5	54.1	71.6	79.8	80.6	66.4	-0.6	+2.1	-0.1	+1.1	+0.3	+3.1	13	83.9	53.5	73.4	79.9	81.9	67.0	+1.8	+1.5	+1.7	+1.2	+1.6	+3.7
14	81.3	55.8	69.9	79.2	80.5	61.9	-0.1	+3.4	+2.1	+1.2	-0.2	+1.2	14	81.0	54.5	69.0	77.7	80.2	60.7	-0.4	+2.1	+1.2	-0.3	-0.5	0.0
15	70.2	56.6	66.2	69.5	68.2	58.7	+0.4	+1.1	-0.3	+1.8	+0.3	+0.7	15	70.7	55.4	65.5	68.7	69.2	57.7	+0.9	-0.1	-1.0	+1.0	+1.3	-0.3
16	76.2	56.4	67.9	74.0	75.1	66.0	-0.7	+0.9	+0.2	+1.8	-1.1	+0.1	16	76.5	55.7	68.0	73.0	75.7	65.7	-0.4	+0.2	+0.3	+0.8	-0.5	-0.2
17	81.4	60.5	63.1	76.9	80.9	65.7	-0.5	+0.4	+0.4	+0.2	0.0	+1.8	17	82.7	60.0	62.9	76.3	80.2	65.0	+0.8	-0.1	+0.2	-0.4	-0.7	+1.1
18	81.2	59.3	71.9	80.9	81.2	69.9	-0.5	+2.0	+1.6	+2.2	-0.1	-0.5	18	82.4	58.8	71.5	79.6	80.8	69.7	+0.7	+1.5	+1.2	+0.9	-0.5	-0.7
19	78.7	57.2	...	...	...	...	-1.1	+0.9	...	...	...	...	19	80.1	56.4	...	...	...	...	+0.3	+0.1	...	...	...	...
20	73.9	55.6	60.5	69.2	72.1	64.0	-1.7	0.0	+0.2	0.0	-0.5	+0.1	20	75.8	54.3	61.3	70.1	73.5	64.0	+0.2	-1.3	+1.0	+0.9	+0.9	+0.1
21	73.1	56.9	65.6	69.9	68.5	60.2	-0.1	+1.9	+1.3	+0.5	-0.7	+0.1	21	74.2	56.3	66.5	71.2	69.6	60.0	+1.0	+1.3	+2.2	+1.8	+0.4	-0.1
22	68.3	56.3	67.4	67.1	67.9	56.3	-0.3	-0.2	+0.6	+0.3	+0.7	-0.4	22	68.6	55.1	67.3	66.1	68.0	55.6	0.0	-1.4	+0.5	-0.7	+0.8	-1.1
23	64.6	51.5	53.9	54.9	62.1	58.6	-1.0	+1.8	-0.3	+0.3	-1.2	+0.2	23	65.4	50.2	54.0	54.5	62.9	58.3	-0.2	+0.5	-0.2	-0.1	-0.4	-0.1
24	69.0	52.8	63.5	66.9	66.2	57.9	-2.2	+1.0	-1.1	-0.8	-0.5	+2.2	24	71.0	52.6	65.0	68.4	68.0	57.5	-0.2	+0.8	+0.4	+0.7	+1.3	+1.8
25	67.3	49.7	60.4	63.7	62.1	57.9	-0.9	+1.5	-0.5	0.0	+0.1	+1.0	25	68.6	48.8	61.6	64.5	62.4	57.3	+0.4	+0.6	+0.7	+0.8	+0.4	+0.4
26	64.1	52.5	...	...	...	...	-1.2	+0.9	...	...	...	...	26	64.5	50.9	...	...	...	...	-0.8	-0.7	...	...	...	...
27	60.5	53.3	60.2	58.3	59.1	56.0	-0.2	+0.9	-0.4	-0.4	-0.1	0.0	27	60.6	51.5	60.6	58.3	59.0	55.1	-0.1	-0.9	0.0	-0.4	-0.2	-0.9
28	60.9	55.5	56.9	59.7	60.4	59.2	0.0	+0.2	0.0	0.0	-0.3	0.0	28	60.6	54.3	56.9	59.7	60.3	59.0	-0.3	-1.0	0.0	0.0	-0.4	-0.2
29	70.0	56.3	63.2	68.3	67.7	58.0	-0.4	-0.5	+0.3	+0.2	+0.1	+0.6	29	70.8	55.9	63.0	68.8	68.3	57.0	+0.4	-0.9	+0.1	+0.7	+0.7	-0.4
30	67.0	54.5	59.5	64.6	65.6	57.2	-1.0	+0.6	+0.3	+0.9	+0.1	+2.5	30	67.7	53.5	59.1	65.1	66.3	56.0	-0.3	-0.4	-0.1	+1.4	+0.8	+1.3
31	74.7	48.4	63.5	73.1	74.7	60.1	-0.4	+2.5	-0.1	+0.5	0.0	-0.4	31	76.5	47.3	64.7	73.5	75.6	59.4	+1.4	+1.4	+1.1	+0.9	+0.9	-1.1
Means	69.6	54.0	62.2	66.6	68.0	59.3	-0.9	+0.8	+0.1	+0.5	-0.1	+0.7	Means	70.6	53.1	62.5	66.8	68.6	58.8	+0.1	-0.1	+0.4	+0.6	+0.5	+0.2

READINGS of DRY-BULB THERMOMETERS in a STEVENSON'S SCREEN and on the ROOF of the MAGNET HOUSE—continued.

SEPTEMBER.

Days of the Month.	Readings of Thermometers in a Stevenson's Screen, 4 ft. above the ground.						Excess above readings of the Thermometers on the ordinary stand, 4 ft. above the ground.						Days of the Month.	Readings of Thermometers on the Roof of the Magnet House, 20 ft. above the ground.						Excess above readings of the Thermometers on the ordinary stand, 4 ft. above the ground.					
	Maxi- mum.	Mini- mum.	9 ^h	Noon.	15 ^h	21 ^h	Maxi- mum.	Mini- mum.	9 ^h	Noon.	15 ^h	21 ^h		Maxi- mum.	Mini- mum.	9 ^h	Noon.	15 ^h	21 ^h	Maxi- mum.	Mini- mum.	9 ^h	Noon.	15 ^h	21 ^h
d	°	°	°	°	°	°	°	°	°	°	°	°	d	°	°	°	°	°	°	°	°	°	°	°	°
1	66.1	58.0	61.1	63.5	65.7	63.0	-1.2	+0.1	+0.1	-0.2	-0.8	+0.2	1	67.0	57.3	61.1	64.0	66.0	62.6	-0.3	-0.6	+0.1	+0.3	-0.5	-0.2
2	63.2	52.5	...	...	...	...	+0.3	+0.3	...	...	...	...	2	62.6	51.3	...	...	...	...	-0.3	-0.9	...	...	...	...
3	62.1	49.5	59.1	58.8	59.9	51.8	0.0	+0.6	+2.1	+0.4	+0.6	+0.5	3	63.5	48.4	58.0	58.1	60.4	50.6	+1.4	-0.5	+1.0	-0.3	+1.1	-0.7
4	63.1	42.7	55.3	62.4	62.6	52.8	-0.7	+2.3	+0.6	+0.7	-0.1	+3.5	4	64.7	41.0	55.4	62.2	63.2	53.0	+0.9	+0.6	+0.7	+0.5	+0.5	+3.7
5	67.4	45.3	59.5	64.6	67.1	54.6	-1.4	+2.2	+1.7	-0.2	+0.2	+3.7	5	68.7	43.5	60.1	65.0	67.6	54.7	-0.1	+0.4	+2.3	+0.2	+0.7	+3.8
6	71.9	45.1	58.6	66.1	71.4	55.0	-0.2	+3.4	+0.4	+0.4	0.0	+3.0	6	73.0	43.3	59.1	66.0	72.8	55.0	+0.9	+1.6	+0.9	+0.3	+1.4	+3.0
7	73.3	49.4	58.4	70.7	72.6	60.5	-0.8	+3.1	-0.3	+1.9	-0.1	+1.2	7	74.9	48.2	58.9	70.0	74.6	61.7	+0.8	+1.9	+0.2	+1.2	+1.9	+2.4
8	69.0	52.7	60.9	59.7	69.0	57.4	+0.1	+1.7	+1.5	0.0	+0.8	+2.2	8	68.5	52.2	60.2	60.2	67.6	58.0	-0.4	+1.2	+0.8	+0.5	-0.6	+2.8
9	68.0	51.3	...	...	...	...	-1.9	+1.8	...	...	...	...	9	70.5	50.2	...	...	...	...	+0.6	+0.7	...	...	...	...
10	69.4	51.0	60.2	66.9	67.1	60.1	-0.7	+1.8	-0.3	+0.4	-0.7	-0.1	10	70.1	50.0	60.2	66.3	68.5	59.5	0.0	+0.8	-0.3	-0.2	+0.7	-0.7
11	66.1	49.4	60.7	64.0	64.0	54.9	-0.4	+0.4	+1.5	+2.0	-0.7	+1.2	11	65.7	48.2	59.0	62.7	63.7	54.1	-0.8	-0.8	-0.2	+0.7	-1.0	+0.4
12	69.8	46.5	50.7	68.0	69.8	54.7	+0.1	+1.4	-0.9	+2.5	+0.9	+2.8	12	69.4	45.7	51.3	65.0	68.6	53.0	-0.3	+0.6	-0.3	-0.5	-0.3	+1.1
13	70.2	46.0	59.9	69.5	69.2	55.2	-0.7	+2.8	+1.2	+0.4	+0.5	+0.9	13	71.5	45.0	58.1	69.0	70.0	54.2	+0.6	+1.8	-0.6	-0.1	+1.3	-0.1
14	64.8	52.5	60.5	63.9	63.6	56.5	-0.4	+1.3	-0.3	+1.0	+0.9	-0.2	14	66.4	51.2	61.5	64.6	63.8	56.2	+1.2	0.0	+0.7	+1.7	+1.1	-0.5
15	69.0	55.0	60.2	68.9	68.2	57.8	-0.9	+0.7	+0.1	+0.7	+0.2	+0.5	15	70.6	53.5	61.0	67.5	69.0	57.6	+0.7	-0.8	+0.9	-0.7	+1.0	+0.3
16	81.7	57.2	...	...	...	...	-0.9	+0.7	...	...	...	...	16	83.4	56.6	...	...	...	...	+0.8	+0.1	...	...	...	...
17	74.6	57.7	63.5	70.5	74.6	58.9	-0.1	+1.5	-0.2	+0.3	+0.8	+0.5	17	76.0	57.0	64.7	71.6	75.2	58.1	+1.3	+0.8	+1.0	+1.4	+1.4	-0.3
18	69.9	55.2	58.9	63.6	68.8	60.4	0.0	+0.8	+0.1	+0.5	-0.9	+0.1	18	71.5	54.5	60.1	65.2	70.0	60.0	+1.6	+0.1	+1.3	+2.1	+0.3	-0.3
19	67.2	47.5	55.0	62.0	66.4	53.7	-0.8	+1.0	0.0	-0.6	+0.6	+3.8	19	67.2	45.9	55.5	62.0	66.7	54.0	-0.8	-0.6	+0.5	-0.6	+0.9	+4.1
20	70.1	44.0	56.2	68.1	70.0	54.9	-0.5	+2.8	-2.1	+1.0	+1.1	+2.6	20	71.2	42.8	57.0	67.6	70.9	54.1	+0.6	+1.6	-1.3	+0.5	+2.0	+1.8
21	74.1	47.3	62.0	70.7	73.5	61.2	0.0	+3.0	-0.3	+1.3	0.0	-0.2	21	76.0	46.3	64.1	70.0	73.8	61.1	+1.9	+2.0	+1.8	+0.6	+0.3	-0.3
22	71.9	57.0	60.8	66.8	70.1	62.6	-1.1	0.0	-0.3	-0.2	-0.1	+0.6	22	73.5	56.0	61.2	67.1	72.0	62.5	+0.5	-1.0	+0.1	+0.1	+1.8	+0.5
23	74.5	57.3	...	...	...	...	+0.6	+0.1	...	...	...	...	23	74.7	57.3	...	...	...	...	+0.8	+0.1	...	...	...	...
24	69.7	54.0	62.1	67.5	62.7	58.0	-1.3	+2.7	+0.1	-0.7	0.0	-0.2	24	70.2	52.9	62.2	68.0	62.7	57.5	-0.8	+1.6	+0.2	-0.2	0.0	-0.3
25	62.7	44.4	53.3	58.1	61.9	50.8	-0.8	+1.3	-0.7	+0.4	0.0	+0.3	25	63.0	42.4	54.7	57.3	62.9	50.0	-0.5	-0.7	+0.7	-0.4	+1.0	-0.5
26	66.1	46.3	57.4	64.9	64.3	56.9	-0.8	+0.1	-1.2	+0.8	-0.4	-1.3	26	66.4	45.1	58.5	65.3	64.9	57.9	-0.5	-1.1	-0.1	+1.2	+0.2	-0.3
27	59.3	55.7	58.0	59.1	57.4	55.7	-0.7	0.0	-0.4	-0.6	-0.4	0.0	27	59.6	55.4	58.0	59.4	57.4	55.4	-0.4	-0.3	-0.4	-0.3	-0.4	-0.3
28	64.9	51.1	57.6	62.8	60.0	55.3	-0.3	+0.7	-0.1	+0.4	-0.1	-0.3	28	63.8	50.0	59.2	63.1	60.5	54.7	-1.4	-0.4	+1.5	+0.7	+0.4	-0.9
29	67.7	47.6	54.9	64.9	62.7	53.1	0.0	+2.6	-1.1	+1.7	-0.7	+0.9	29	67.9	46.1	56.7	65.0	63.8	52.5	+0.2	+1.1	+0.7	+1.8	+0.4	+0.3
30	62.6	48.9	...	...	...	...	-0.8	+1.2	...	...	...	...	30	63.1	48.0	...	...	...	...	-0.3	+0.3	...	...	...	...
Means	68.3	50.6	58.6	65.0	66.5	56.6	-0.5	+1.4	0.0	+0.6	+0.1	+1.1	Means	69.2	49.5	59.0	64.9	67.1	56.3	+0.3	+0.3	+0.5	+0.4	+0.6	+0.8

READINGS of DRY-BULB THERMOMETERS in a STEVENSON'S SCREEN and on the ROOF of the MAGNET HOUSE—continued.

OCTOBER.

Days of the Month.	Readings of Thermometers in a Stevenson's Screen, 4 ft. above the ground.						Excess above readings of the Thermometers on the ordinary stand, 4 ft. above the ground.						Days of the Month.	Readings of Thermometers on the Roof of the Magnet House, 20 ft. above the ground.						Excess above readings of the Thermometers on the ordinary stand, 4 ft. above the ground.					
	Maxi-mum.	Mini-mum.	9 ^h	Noon.	15 ^h	21 ^h	Maxi-mum.	Mini-mum.	9 ^h	Noon.	15 ^h	21 ^h		Maxi-mum.	Mini-mum.	9 ^h	Noon.	15 ^h	21 ^h	Maxi-mum.	Mini-mum.	9 ^h	Noon.	15 ^h	21 ^h
d	o	o	o	o	o	o	o	o	o	o	o	o	d	o	o	o	o	o	o	o	o	o	o	o	
1	63.2	44.4	52.1	61.2	59.6	52.2	+0.3	+2.0	-1.6	+1.4	0.0	-0.2	1	62.7	42.6	54.1	60.0	60.0	52.1	-0.2	+0.2	+0.4	+0.2	+0.4	-0.3
2	65.5	49.6	55.9	61.6	62.6	53.4	-1.2	+1.3	-0.5	0.0	-1.1	+0.3	2	65.6	49.0	56.3	61.8	63.0	52.8	-1.1	+0.7	-0.1	+0.2	-0.7	-0.3
3	58.2	43.3	49.0	54.8	56.9	43.3	-0.4	+2.2	+0.2	+0.8	-0.8	+2.1	3	58.8	43.3	48.3	54.2	57.2	44.1	+0.2	+2.2	-0.5	+0.2	-0.5	+2.9
4	61.4	40.4	55.2	60.9	56.6	55.1	-1.1	+2.3	-1.5	-0.7	-0.1	+0.1	4	62.4	38.3	57.0	61.3	56.7	54.7	-0.1	+0.2	+0.3	-0.3	0.0	-0.3
5	60.4	49.4	55.8	59.7	55.4	53.4	-0.6	-0.2	-0.6	+0.8	-0.6	-0.2	5	61.1	48.2	57.0	60.2	55.2	52.9	+0.1	-1.4	+0.6	+1.3	-0.8	-0.7
6	65.4	52.6	59.2	65.4	63.6	59.0	-0.5	0.0	-1.1	-0.3	-0.9	-0.1	6	65.6	51.5	60.0	65.2	63.7	58.3	-0.3	-1.1	-0.3	-0.5	-0.8	-0.8
7	68.1	56.8	...	...	...	...	+0.2	+0.6	...	...	...	...	7	68.5	56.3	...	...	...	...	+0.6	+0.1	...	...	...	...
8	73.3	48.9	63.3	72.5	73.3	59.2	-0.6	+2.4	-1.9	+0.7	+0.2	+0.2	8	74.3	48.0	65.4	72.0	73.5	58.7	+0.4	+1.5	+0.2	+0.2	+0.4	-0.3
9	74.3	57.3	65.1	74.2	72.6	57.5	+0.1	+2.0	-2.0	+1.2	+0.5	+0.2	9	74.5	56.6	67.7	73.5	72.8	57.0	+0.3	+1.3	+0.6	+0.5	+0.7	-0.3
10	60.8	48.4	55.5	57.1	55.2	50.2	+0.3	-0.9	+0.4	+0.4	-0.1	+0.2	10	60.4	48.9	55.4	57.5	55.1	49.3	-0.1	-0.4	+0.3	+0.8	-0.2	-0.7
11	57.2	42.2	45.4	54.9	57.2	48.0	+0.3	+1.4	-0.3	+1.3	+0.5	+1.2	11	57.9	40.1	46.0	54.8	57.8	48.0	+1.0	-0.7	+0.3	+1.2	+1.1	+1.2
12	56.9	41.7	46.7	54.9	54.8	48.0	+0.4	+1.7	-1.2	+0.7	+0.9	0.0	12	56.2	40.2	47.7	54.1	55.0	47.6	-0.3	+0.2	-0.2	-0.1	+1.1	-0.4
13	56.0	46.5	53.2	55.4	55.0	52.8	-0.3	+1.7	+0.2	+0.4	-0.5	-0.1	13	56.5	45.1	53.4	55.8	55.1	52.2	+0.2	+0.3	+0.4	+0.8	-0.4	-0.7
14	53.2	40.8	...	...	...	...	-0.3	0.0	...	...	...	...	14	52.5	39.0	...	...	...	...	-1.0	-1.8	...	...	...	...
15	52.2	38.3	44.2	50.6	50.1	44.3	+0.1	+0.1	-0.3	-0.3	-0.2	-0.1	15	51.5	36.9	44.4	50.0	50.2	43.9	-0.6	-1.3	-0.1	-0.9	-0.1	-0.5
16	51.0	37.2	45.4	50.2	49.6	50.7	-0.9	+1.6	-2.2	-0.1	-0.6	+1.0	16	52.5	35.4	48.0	51.4	50.0	51.0	+0.6	-0.2	+0.4	+1.1	-0.2	+1.3
17	63.1	49.2	54.6	59.9	61.2	50.9	+0.1	+1.7	+0.1	+0.1	+1.0	-0.1	17	63.0	49.2	54.9	59.7	61.1	50.4	0.0	+1.7	+0.4	-0.1	+0.9	-0.6
18	54.0	47.3	50.9	53.4	52.0	51.7	-0.9	+0.2	-0.2	-0.3	+0.2	0.0	18	54.0	46.3	50.9	53.3	52.0	51.5	-0.9	-0.8	-0.2	-0.4	+0.2	-0.2
19	55.0	45.9	48.6	55.0	52.5	48.7	-0.2	+0.4	-0.1	-0.2	-0.1	+0.1	19	54.8	45.4	48.5	54.5	52.1	48.4	-0.4	-0.1	-0.2	-0.7	-0.5	-0.2
20	50.0	44.3	46.4	49.0	49.1	45.9	+0.1	+0.2	+0.2	-0.4	+0.3	+0.2	20	49.5	43.2	46.3	49.0	49.0	45.3	-0.4	-0.9	+0.1	-0.4	+0.2	-0.4
21	49.7	39.0	...	...	...	...	-0.6	+0.3	...	...	...	...	21	49.2	37.5	...	...	...	...	-1.1	-1.2	...	...	...	...
22	48.0	37.6	41.4	47.6	47.5	41.9	+0.1	+0.2	-0.6	-0.1	+0.7	+1.2	22	47.9	36.2	41.8	47.4	46.8	41.7	0.0	-1.2	-0.2	-0.3	0.0	+1.0
23	56.1	41.3	47.5	52.8	55.8	52.4	0.0	+2.1	+0.1	-0.4	+0.1	-0.1	23	56.1	40.3	47.5	53.0	55.4	52.0	0.0	+1.1	+0.1	-0.2	-0.3	-0.5
24	57.2	48.3	52.0	56.9	57.0	55.8	-0.1	+0.2	-0.5	+0.1	-0.3	-0.7	24	57.2	47.2	52.2	57.1	57.0	55.7	-0.1	-0.9	-0.3	+0.3	-0.3	-0.8
25	57.2	48.6	54.9	55.3	56.5	48.6	-0.1	+0.3	-0.5	0.0	+0.2	-0.1	25	57.5	47.3	55.1	55.3	56.6	48.1	+0.2	-1.0	-0.3	0.0	+0.3	-0.6
26	49.6	39.2	48.0	42.7	46.9	39.2	+0.1	+0.2	+0.1	-0.1	+0.2	+0.2	26	49.7	38.7	48.0	42.4	47.2	38.7	+0.2	-0.3	+0.1	-0.4	+0.5	-0.3
27	52.7	37.9	46.9	51.1	49.7	43.9	+0.2	-0.3	-0.5	+0.1	0.0	-0.5	27	52.2	36.2	47.0	51.1	49.4	43.2	-0.3	-2.0	-0.4	+0.1	-0.3	-1.2
28	52.5	39.0	...	...	...	...	-0.4	0.0	...	...	...	...	28	52.5	37.7	...	...	...	...	-0.4	-1.3	...	...	...	...
29	55.5	48.4	52.1	53.7	49.0	50.6	-0.4	+0.1	-0.8	-0.1	+0.1	-0.2	29	55.3	47.6	52.6	54.0	49.0	50.3	-0.6	-0.7	-0.3	+0.2	+0.1	-0.5
30	52.0	45.5	47.8	50.2	51.9	51.9	-0.1	-0.2	-0.3	-0.5	-0.2	+0.2	30	52.2	45.2	47.8	50.7	52.1	52.0	+0.1	-0.5	-0.3	0.0	0.0	+0.3
31	65.0	51.4	58.0	64.3	61.3	56.2	0.0	-1.3	-1.3	+0.4	+0.3	+0.9	31	65.2	52.0	59.8	64.3	61.7	56.5	+0.2	-0.7	+0.5	+0.4	+0.7	+1.2
Means	57.9	45.2	51.7	56.5	56.0	50.5	-0.2	+0.7	-0.6	+0.2	0.0	+0.2	Means	58.0	44.2	52.3	56.4	56.1	50.2	-0.1	-0.3	0.0	+0.1	+0.1	-0.1

READINGS of DRY-BULB THERMOMETERS in a STEVENSON'S SCREEN and on the ROOF of the MAGNET HOUSE—*continued.*

NOVEMBER.

Days of the Month.	Readings of Thermometers in a Stevenson's Screen, 4 ft. above the ground.						Excess above readings of the Thermometers on the ordinary stand, 4 ft. above the ground.						Days of the Month.	Readings of Thermometers on the Roof of the Magnet House, 20 ft. above the ground.						Excess above readings of the Thermometers on the ordinary stand, 4 ft. above the ground.					
	Maxi-mum.	Mini-mum.	9 ^h	Noon.	15 ^h	21 ^h	Maxi-mum.	Mini-mum.	9 ^h	Noon.	15 ^h	21 ^h		Maxi-mum.	Mini-mum.	9 ^h	Noon.	15 ^h	21 ^h	Maxi-mum.	Mini-mum.	9 ^h	Noon.	15 ^h	21 ^h
d	°	°	°	°	°	°	°	°	°	°	°	°	d	°	°	°	°	°	°	°	°	°	°	°	°
1	61.8	54.4	56.6	59.7	57.0	55.1	-0.5	+1.0	-0.2	-0.1	0.0	0.0	1	62.2	53.8	56.8	60.0	57.0	55.0	-0.1	+0.4	0.0	+0.2	0.0	-0.1
2	55.9	51.5	53.2	54.2	54.5	53.3	+0.6	+0.2	-0.2	0.0	0.0	0.0	2	55.0	51.3	53.2	54.0	54.6	53.2	-0.3	0.0	-0.2	-0.2	+0.1	-0.1
3	56.2	50.5	52.9	55.7	54.1	50.5	-0.3	+0.1	0.0	-0.3	+0.1	+0.1	3	56.2	50.4	53.0	55.6	54.1	50.4	-0.3	0.0	+0.1	-0.4	+0.1	0.0
4	52.1	47.3	...	...	...	...	+0.2	+0.1	...	...	...	...	4	51.5	46.5	...	...	...	...	-0.4	-0.7	...	...	...	...
5	55.9	48.1	50.5	53.4	55.9	52.9	-0.3	-0.1	-0.2	-0.3	0.0	+0.4	5	56.4	47.6	50.2	53.9	56.4	53.0	+0.2	-0.6	-0.5	+0.2	+0.5	+0.5
6	56.6	50.7	51.9	53.9	55.4	54.9	+0.1	+0.5	+0.3	-0.1	+0.1	+0.1	6	56.9	50.2	51.9	54.1	55.5	54.9	+0.4	0.0	+0.3	+0.1	+0.2	+0.1
7	55.3	45.9	49.8	50.2	49.1	46.1	+0.1	-0.3	0.0	-0.2	-0.2	-0.2	7	54.9	45.4	49.7	50.1	49.0	46.0	-0.3	-0.8	-0.1	-0.3	-0.3	-0.3
8	54.2	40.3	44.0	51.6	52.5	50.1	+0.3	-0.2	-1.2	0.0	-0.2	-0.1	8	54.0	38.8	45.0	51.3	52.9	50.0	+0.1	-1.7	-0.2	-0.3	+0.2	-0.2
9	55.0	44.9	51.5	53.6	51.8	44.9	+0.1	+0.2	-0.7	+0.1	-0.4	+0.2	9	54.3	44.7	51.9	53.8	52.2	44.7	-0.6	0.0	-0.3	+0.3	0.0	0.0
10	49.0	36.4	39.1	47.5	47.2	38.3	-0.7	+0.5	-0.6	+1.7	-0.8	+2.3	10	48.5	35.0	39.4	46.9	47.9	38.5	-1.2	-0.9	-0.3	+1.1	-0.1	+2.5
11	44.7	28.0	...	...	...	...	+0.5	+1.2	...	...	...	...	11	44.4	26.8	...	...	...	...	+0.2	0.0	...	...	...	...
12	52.4	37.2	43.6	47.1	47.8	52.4	+0.1	+2.3	+0.4	-0.1	0.0	+0.1	12	52.2	35.9	44.3	47.6	48.0	52.2	-0.1	+1.0	+1.1	+0.4	+0.2	-0.1
13	57.8	47.7	56.1	55.5	51.9	48.6	+0.2	+1.4	0.0	-0.3	-0.1	+0.2	13	57.4	46.6	56.2	55.6	51.9	48.1	-0.2	+0.3	+0.1	-0.2	-0.1	-0.3
14	50.8	41.9	46.2	49.7	49.8	47.1	-1.0	+2.5	-0.5	0.0	+0.3	+0.2	14	51.6	41.2	47.3	49.8	50.4	47.0	-0.2	+1.8	+0.6	+0.1	+0.9	+0.1
15	53.2	39.5	46.3	49.9	48.2	43.0	+0.3	+0.2	+0.2	-0.1	-0.3	+1.2	15	52.8	38.2	46.5	50.0	48.2	42.6	-0.1	-1.1	+0.4	0.0	-0.3	+0.8
16	47.3	41.5	44.6	46.3	47.3	45.1	-1.8	+1.3	-0.1	-0.2	+0.1	0.0	16	47.3	41.3	44.7	46.1	47.2	45.1	-1.8	+1.1	0.0	-0.4	0.0	0.0
17	47.6	42.1	46.4	47.1	46.9	44.7	-0.4	-0.1	-0.2	+0.2	-0.2	0.0	17	47.4	41.2	46.4	45.3	46.9	43.3	-0.6	-1.0	-0.2	-1.6	-0.2	-1.4
18	46.7	41.4	...	...	...	...	-0.2	+0.1	...	...	...	...	18	46.3	41.0	...	...	...	...	-0.6	-0.3	...	...	...	...
19	45.5	38.6	40.9	43.9	42.2	39.7	+0.5	+0.1	-0.3	-0.1	-0.1	+0.1	19	44.4	37.9	40.8	44.1	42.1	39.5	-0.6	-0.6	-0.4	+0.1	-0.2	-0.1
20	44.2	37.3	41.6	43.9	43.6	42.9	0.0	-0.1	-0.1	0.0	-0.1	+0.2	20	44.1	36.6	41.5	43.8	43.5	42.9	-0.1	-0.8	-0.2	-0.1	-0.2	+0.2
21	45.4	41.6	42.9	44.6	45.1	44.8	+0.3	-0.2	-0.3	-0.1	0.0	+0.1	21	45.2	41.2	43.0	44.3	45.0	44.5	+0.1	-0.6	-0.2	-0.4	-0.1	-0.2
22	45.9	40.8	42.2	44.1	45.1	42.3	0.0	+0.2	+0.2	-0.5	-0.6	-0.1	22	45.9	39.8	42.0	44.1	45.2	42.3	0.0	-0.8	0.0	-0.5	-0.5	-0.1
23	49.0	36.3	39.3	47.5	46.1	41.1	-0.1	+2.5	+3.2	-1.4	+0.3	+0.4	23	49.3	34.9	39.2	48.0	46.3	40.2	+0.2	+1.1	+3.1	-0.9	+0.5	-0.5
24	45.1	35.2	40.7	44.4	43.0	44.9	+0.2	+1.8	+0.1	-0.2	0.0	+0.1	24	44.7	33.6	40.6	44.6	43.0	44.7	-0.2	+0.2	0.0	0.0	0.0	-0.1
25	53.1	44.4	...	...	...	...	+0.1	-0.1	...	...	...	...	25	53.0	44.1	...	...	...	...	0.0	-0.4	...	...	...	...
26	51.1	42.4	43.9	49.8	49.2	48.2	+0.2	-0.4	-0.1	+0.4	0.0	+0.4	26	50.6	42.1	43.9	50.0	49.0	48.1	-0.3	-0.7	-0.1	+0.6	-0.2	+0.3
27	51.3	41.4	41.8	48.0	48.6	41.6	+0.4	0.0	-0.4	-0.1	+1.0	+0.2	27	51.3	39.8	41.3	48.7	49.0	40.9	+0.4	-1.6	-0.9	+0.6	+1.4	-0.5
28	46.8	40.6	45.1	45.6	46.6	45.5	+0.2	+0.6	+0.1	-0.1	0.0	+0.1	28	46.5	39.1	45.0	45.7	46.5	45.1	-0.1	-0.9	0.0	0.0	-0.1	-0.3
29	47.4	43.0	44.8	46.3	47.4	45.3	+0.2	-0.1	0.0	+0.3	+0.4	+0.5	29	47.2	41.9	44.5	46.3	47.2	45.0	0.0	-1.2	-0.3	+0.3	+0.2	+0.2
30	45.6	41.5	41.8	44.9	43.7	42.5	+0.1	-0.1	0.0	+0.5	0.0	0.0	30	45.2	40.9	41.6	44.7	43.4	42.3	-0.3	-0.7	-0.2	+0.3	-0.3	-0.2
Means	50.8	42.4	46.1	49.2	48.8	46.4	0.0	+0.5	0.0	0.0	0.0	+0.3	Means	50.6	41.6	46.2	49.2	48.9	46.1	-0.2	-0.3	+0.1	0.0	+0.1	0.0

READINGS OF DRY-BULB THERMOMETERS IN A STEVENSON'S SCREEN AND ON THE ROOF OF THE MAGNET HOUSE—concluded.

DECEMBER.

Days of the Month.	Readings of Thermometers in a Stevenson's Screen, 4 ft. above the ground.						Excess above readings of the Thermometers on the ordinary stand, 4 ft. above the ground.						Days of the Month.	Readings of Thermometers on the Roof of the Magnet House, 20 ft. above the ground.						Excess above readings of the Thermometers on the ordinary stand, 4 ft. above the ground.					
	Maxim.	Minim.	9 ^h	Noon.	15 ^h	21 ^h	Maxim.	Minim.	9 ^h	Noon.	15 ^h	21 ^h		Maxim.	Minim.	9 ^h	Noon.	15 ^h	21 ^h	Maxim.	Minim.	9 ^h	Noon.	15 ^h	21 ^h
d	o	o	o	o	o	o	o	o	o	o	o	o	d	o	o	o	o	o	o	o	o	o	o	o	
1	43.3	39.6	42.3	42.9	43.1	39.8	-0.2	0.0	-0.5	-0.1	-0.1	+0.1	1	43.1	38.8	42.1	42.9	43.1	39.3	-0.4	-0.8	-0.7	-0.1	-0.1	-0.4
2	43.0	39.3	...	...	...	...	+0.1	+0.2	...	...	...	...	2	42.6	38.6	...	...	...	...	-0.3	-0.5	...	...	...	...
3	48.8	39.1	41.2	44.4	45.8	48.8	+0.1	+1.2	+0.1	-0.2	+0.4	+0.1	3	48.9	37.7	41.2	44.8	45.8	48.9	+0.2	-0.2	+0.1	+0.2	+0.4	+0.2
4	54.3	48.3	53.3	53.5	50.9	52.0	-0.1	0.0	+0.3	-0.2	+0.2	+0.2	4	54.4	48.4	53.2	53.6	50.6	52.0	0.0	+0.1	+0.2	-0.1	-0.1	+0.2
5	56.3	49.5	49.9	49.9	49.9	55.9	+0.1	+0.1	-0.1	-0.1	+0.1	-0.1	5	56.3	49.3	49.8	50.1	49.9	56.1	+0.1	-0.1	-0.2	+0.1	+0.1	+0.1
6	56.2	46.4	49.4	52.2	51.0	48.3	-0.1	+0.6	-0.2	-0.3	+0.3	+0.6	6	56.1	45.2	49.2	52.1	50.8	48.0	-0.2	-0.6	-0.4	-0.4	+0.1	+0.3
7	51.1	42.1	43.7	49.1	48.8	42.9	+0.4	+3.2	0.0	-0.2	+0.2	+3.4	7	50.7	41.2	43.5	49.0	48.7	42.3	0.0	+2.3	-0.2	-0.3	+0.1	+2.8
8	52.5	40.7	50.3	51.5	51.4	51.8	0.0	+3.2	-0.2	-0.2	+0.1	-0.1	8	52.4	40.0	50.2	51.6	51.3	51.6	-0.1	+2.5	-0.3	-0.1	0.0	-0.3
9	54.3	49.5	...	...	...	...	+0.1	0.0	...	...	...	...	9	54.4	49.0	...	...	...	...	+0.2	-0.5	...	...	...	...
10	50.6	39.7	40.3	45.8	45.6	41.4	+0.6	+1.0	-0.1	-0.1	+0.8	+1.4	10	50.0	38.3	40.0	45.8	45.2	41.3	0.0	-0.4	-0.4	-0.1	+0.4	+1.3
11	52.0	40.1	47.9	49.9	51.1	52.0	0.0	+2.1	+0.2	+0.2	+0.2	0.0	11	52.0	39.6	47.9	50.0	50.9	52.0	0.0	+1.6	+0.2	+0.3	0.0	0.0
12	55.7	50.7	52.6	55.5	54.6	50.9	-0.1	-0.1	-0.3	+0.2	+0.1	+0.1	12	55.8	50.4	52.6	55.7	54.4	50.9	0.0	-0.4	-0.3	+0.4	-0.1	+0.1
13	53.6	43.4	52.9	51.5	50.0	43.9	0.0	-0.4	0.0	-0.2	-0.3	+0.1	13	53.5	42.3	52.9	51.0	49.9	43.2	-0.1	-1.5	0.0	-0.7	-0.4	-0.6
14	51.0	41.1	44.2	49.2	50.7	49.8	+0.1	-0.9	-0.3	+0.1	+0.3	+0.3	14	50.7	40.7	44.0	49.2	50.6	49.6	-0.2	-1.3	-0.5	+0.1	+0.2	+0.1
15	52.3	45.4	49.6	50.8	51.7	45.9	-0.6	-0.4	-0.2	+0.4	0.0	0.0	15	52.1	44.8	49.4	50.6	51.5	45.3	-0.8	-1.0	-0.4	+0.2	-0.2	-0.6
16	49.7	39.9	...	...	...	...	+0.8	-0.1	...	...	...	...	16	49.3	39.0	...	...	...	...	+0.4	-1.0	...	...	...	...
17	47.2	37.7	44.6	45.9	43.9	39.1	+0.2	+1.3	-0.1	-0.8	+0.5	+1.0	17	47.0	36.2	44.3	46.5	43.8	39.0	0.0	-0.2	-0.4	-0.2	+0.4	+0.9
18	51.3	38.5	47.7	50.8	50.3	51.3	0.0	+0.9	-0.1	+0.1	+0.1	0.0	18	51.2	37.6	47.7	50.8	50.1	51.2	-0.1	0.0	-0.1	+0.1	-0.1	-0.1
19	51.5	36.8	37.4	45.0	46.2	44.3	+0.4	0.0	+0.6	-0.6	-0.1	+0.8	19	51.2	35.6	36.8	45.5	46.1	44.0	+0.1	-1.2	0.0	-0.1	-0.2	+0.5
20	54.0	43.6	49.9	51.0	50.9	53.6	+0.1	+0.5	0.0	+0.1	+0.2	-0.3	20	53.9	43.2	49.7	51.0	50.9	53.9	0.0	+0.1	-0.2	+0.1	+0.2	0.0
21	53.7	42.0	43.6	47.2	47.0	42.1	-0.2	-0.4	-0.1	-0.4	+0.2	-0.3	21	53.9	41.2	43.3	47.3	47.0	41.8	0.0	-1.2	-0.4	-0.3	+0.2	-0.6
22	43.5	34.5	35.8	40.6	41.0	39.3	-0.7	+2.2	-0.1	-0.9	+0.6	+0.1	22	42.5	33.6	35.5	41.0	41.0	39.0	-1.7	+1.3	-0.4	-0.5	+0.6	-0.2
23	39.3	30.7	...	...	...	...	+0.1	0.0	...	...	...	...	23	39.0	30.5	...	...	...	...	-0.2	-0.2	...	...	...	...
24	43.7	31.0	33.0	35.0	37.1	43.7	+0.2	-0.3	-0.1	0.0	+0.2	+0.2	24	43.8	30.5	33.0	35.1	37.0	43.8	+0.3	-0.8	-0.1	+0.1	+0.1	+0.3
25	51.7	42.9	...	...	...	...	+0.5	0.0	...	...	...	...	25	51.4	42.8	...	...	...	...	+0.2	-0.1	...	...	...	...
26	52.0	45.9	...	...	...	...	+0.5	+0.9	...	...	...	...	26	51.5	44.9	...	...	...	...	0.0	-0.1	...	...	...	...
27	50.9	44.1	47.6	49.3	50.2	47.7	+0.1	+1.0	-0.1	-0.2	-0.2	+0.2	27	50.7	43.3	47.8	49.4	50.2	47.8	-0.1	+0.2	+0.1	-0.1	-0.2	+0.3
28	53.3	42.9	46.7	43.3	46.0	42.9	+0.1	+0.2	+0.1	-0.8	-0.4	+0.2	28	52.5	42.9	46.7	43.2	46.1	42.9	-0.7	+0.2	+0.1	-0.9	-0.3	+0.2
29	43.2	36.3	36.9	42.4	43.2	36.8	-0.1	+1.8	-0.6	-0.3	-0.1	+2.0	29	43.5	35.2	36.6	42.4	43.4	37.7	+0.2	+0.7	-0.9	-0.3	+0.1	+2.9
30	50.0	36.3	...	...	...	...	+0.3	+2.8	...	...	...	...	30	50.1	36.1	...	...	...	...	+0.4	+2.6	...	...	...	...
31	51.8	36.9	43.1	41.0	38.9	37.2	+0.2	-0.4	+0.5	+0.6	-0.1	-0.1	31	51.7	36.3	41.8	40.0	38.1	37.1	+0.1	-1.0	-0.8	-0.4	-0.9	-0.2
Means	50.4	41.1	45.2	47.4	47.5	45.9	+0.1	+0.7	-0.1	-0.2	+0.1	+0.4	Means	50.2	40.4	45.0	47.4	47.4	45.8	-0.1	0.0	-0.3	-0.1	0.0	+0.3

READINGS of THERMOMETERS placed in a STEVENSON'S SCREEN near the ORDINARY STAND in the MAGNETIC PAVILION ENCLOSURE; and EXCESS of the READINGS above those of the corresponding THERMOMETERS on the ORDINARY STAND, in the YEAR 1900.

(The readings of the maximum and minimum thermometers apply to the twenty-four hours ending at 21^h.)

[Observations of the maximum and minimum thermometers only have been made on Sundays, Good Friday, Christmas Day, and Public Holidays.]

APRIL.

Table with columns: Days of the Month, Readings of Dry-Bulb Thermometers in a Stevenson's Screen, Excess above readings of Thermometers on the ordinary stand, Readings of the Wet-Bulb Thermometer in a Stevenson's Screen, Excess above readings of the Thermometer on the ordinary stand. Rows include days 1-30 and a Means row.

READINGS of THERMOMETERS in a STEVENSON'S SCREEN in the MAGNETIC PAVILION ENCLOSURE—*continued.*

MAY.

Days of the Month.	Readings of Dry-Bulb Thermometers in a Stevenson's Screen, 4 ft. above the ground.						Excess above readings of Thermometers on the ordinary stand, 4 ft. above the ground.						Readings of the Wet-Bulb Thermometer in a Stevenson's Screen, 4 ft. above the ground.				Excess above readings of the Thermometer on the ordinary stand, 4 ft. above the ground.				
	Maxi. min.	Mini. num.	9 ^h	Noon.	15 ^h	21 ^h	Maxi. num.	Mini. num.	9 ^h	Noon.	15 ^h	21 ^h	9 ^h	Noon.	15 ^h	21 ^h	9 ^h	Noon.	15 ^h	21 ^h	
d	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°
1	58.0	46.2	51.1	55.0	58.0	49.5	-1.4	0.0	-0.6	-1.4	-0.7	+0.5	45.0	46.9	48.8	46.2	-0.3	-0.7	+0.2	+0.4	
2	64.2	43.3	56.0	62.0	62.5	51.3	-1.4	+0.3	-1.0	0.0	-1.0	-0.1	50.6	53.7	52.0	45.8	-0.4	+0.4	-0.7	+0.4	
3	59.0	44.1	49.1	58.3	55.7	47.8	-1.2	+0.4	-0.6	0.0	-0.4	+0.2	48.0	52.0	49.2	44.8	-0.2	+0.3	-0.5	+0.6	
4	60.2	43.7	54.9	58.0	58.3	55.1	-1.6	+0.5	-0.2	-1.3	-0.6	+0.1	49.3	51.0	51.0	49.3	0.0	-0.7	-0.7	-0.1	
5	68.8	48.5	61.2	65.2	67.7	57.6	-1.6	+0.1	-1.3	-1.1	-1.7	+0.2	53.4	56.6	57.7	54.6	-0.2	-0.5	-1.4	+0.3	
6	69.3	48.0	...	...	...	...	-1.9	+0.4	...	...	...	...	...	...	...	...	...	...	...	...
7	66.0	51.6	53.8	59.7	61.7	51.7	0.0	+0.2	-0.2	-1.4	-1.4	+0.2	50.3	53.0	53.0	48.2	-0.5	-0.6	-0.5	+0.3	
8	59.8	42.4	56.8	58.9	58.8	52.0	-1.2	+0.1	+0.1	-0.5	-0.2	+0.2	52.2	53.0	51.0	48.3	-0.1	-0.6	-0.3	-0.3	
9	54.7	49.4	50.5	51.1	54.2	50.7	-1.4	0.0	-0.2	-0.5	-0.5	-0.1	49.1	50.0	51.0	48.8	-0.2	0.0	-0.6	-0.1	
10	52.9	43.5	49.0	47.0	51.9	43.9	-0.8	+0.1	+0.2	+0.3	-0.6	+0.2	48.3	46.0	47.7	41.1	-0.1	0.0	-0.3	+0.3	
11	57.3	34.8	50.0	55.0	57.3	45.2	-1.3	+0.1	-0.7	-0.7	+0.1	-0.2	44.1	46.1	47.9	43.0	-1.0	-0.9	+0.6	+0.3	
12	49.3	43.2	45.1	48.6	49.3	46.7	-1.9	-0.1	-0.3	-0.2	-0.3	0.0	41.1	44.1	45.3	43.0	-0.9	-0.4	-0.1	+0.1	
13	48.9	40.7	...	...	...	...	-1.5	0.0	...	...	...	...	...	...	...	...	...	...	...	...
14	53.0	36.9	45.6	49.9	52.8	43.0	-0.9	-0.1	-0.5	+0.1	-0.9	-0.1	41.0	42.2	43.0	39.2	-0.1	+0.5	-0.8	+0.5	
15	56.0	38.2	49.3	52.8	56.0	44.8	-0.7	+0.1	-0.7	+1.3	-0.7	+0.1	43.0	45.4	46.0	40.9	+0.1	+0.5	+0.3	+0.6	
16	55.4	37.8	48.0	53.1	50.3	45.0	-1.2	0.0	-0.7	-0.3	-0.5	0.0	43.6	46.2	44.4	40.8	-0.7	+0.2	-0.3	+0.4	
17	62.2	42.1	45.3	53.6	60.9	50.8	-1.7	-0.1	-0.6	-1.2	-0.3	+0.3	41.4	46.7	50.8	48.0	-0.7	-1.2	-0.3	-0.1	
18	53.0	43.5	51.1	52.2	49.4	44.5	-1.4	-0.2	-0.4	-0.6	-0.3	-0.2	46.5	47.8	45.0	43.5	-0.4	-0.6	-0.1	-0.1	
19	56.0	41.9	46.3	51.3	53.0	48.1	-1.9	0.0	-0.6	-0.7	-0.9	0.0	39.3	43.6	45.0	44.1	-0.4	-0.1	-0.2	0.0	
20	63.8	37.3	...	...	...	...	-1.4	+0.5	...	...	...	...	...	...	...	...	...	...	...	...
21	63.8	44.9	61.2	62.2	58.8	57.2	-1.9	+0.5	-0.9	-0.6	+0.4	-0.2	53.9	55.2	54.0	54.1	-0.7	-0.4	-0.4	-0.1	
22	57.5	50.2	55.1	56.1	55.3	51.6	-1.1	-0.2	-0.4	-0.9	-0.6	0.0	53.6	54.9	54.6	50.0	-0.1	-0.2	-0.3	+0.1	
23	60.1	47.6	54.1	60.0	57.0	50.0	-1.9	+0.3	-1.6	-1.3	-0.7	+0.2	52.2	54.1	51.2	48.9	-1.1	-0.6	-0.7	+0.2	
24	58.6	47.2	50.4	57.0	56.3	53.2	-1.6	0.0	-0.7	-1.6	-1.4	+0.2	48.2	52.6	52.0	49.8	-0.4	-1.2	-0.8	+0.4	
25	59.5	45.2	53.1	56.2	57.1	53.4	-2.2	+0.2	-0.8	-0.5	-0.6	+0.3	49.3	50.5	51.0	51.1	-0.4	+0.4	+0.4	+0.6	
26	60.6	45.5	...	...	...	...	-1.5	+0.3	...	...	...	...	...	...	...	...	...	...	...	...
27	68.9	41.1	...	...	...	...	-1.1	0.0	...	...	...	...	...	...	...	...	...	...	...	...
28	67.0	53.0	56.9	63.6	65.0	59.3	-1.8	0.0	-0.3	-0.9	-0.4	-0.2	53.9	56.8	55.1	53.0	-0.1	-0.3	-0.1	+0.2	
29	63.2	45.9	57.9	61.8	62.1	52.9	-2.2	+0.4	-0.8	-1.3	-0.9	0.0	51.4	52.7	53.1	49.4	-0.5	-0.6	-0.6	+0.4	
30	56.0	48.0	49.3	54.1	54.0	50.8	-1.1	-0.2	-0.4	-0.3	-0.3	+0.1	47.3	49.8	49.2	47.3	-0.2	+0.4	+0.2	0.0	
31	56.1	47.0	50.7	53.3	53.7	50.1	-1.8	0.0	-0.4	-0.5	-0.2	-0.1	48.0	49.4	50.6	48.0	+0.1	0.0	+0.6	-0.2	
Means	59.3	44.3	52.0	56.0	56.8	50.2	-1.4	+0.1	-0.6	-0.6	-0.6	+0.1	47.8	50.0	50.0	47.0	-0.4	-0.3	-0.3	+0.2	

READINGS OF THERMOMETERS in a STEVENSON'S SCREEN in the MAGNETIC PAVILION ENCLOSURE—continued.

JUNE.

Days of the Month.	Readings of Dry-Bulb Thermometers in a Stevenson's Screen, 4 ft. above the ground.						Excess above readings of Thermometers on the ordinary stand, 4 ft. above the ground.						Readings of the Wet-Bulb Thermometer in a Stevenson's Screen, 4 ft. above the ground.				Excess above readings of the Thermometer on the ordinary stand, 4 ft. above the ground.			
	Maxi- mum.	Mini- mum.	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	9 ^h	Noon.	15 ^h	21 ^h
d	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°
1	52.8	47.5	49.1	51.0	52.8	47.8	-0.3	-0.3	-0.1	-0.4	-0.1	0.0	48.0	48.8	50.1	47.3	+0.1	-0.2	+0.2	-0.1
2	63.2	47.5	52.2	56.7	62.1	55.8	-1.5	0.0	-0.2	-0.3	-0.7	-0.1	52.0	55.3	59.0	55.0	+0.2	-0.2	-0.6	0.0
3	69.8	49.9	...	...	...	...	-1.2	+0.2	...	...	...	...	...	...	...	...	...	...	...	...
4	74.2	49.6	...	...	...	...	-1.3	0.0	...	...	...	...	...	...	...	...	...	...	...	...
5	65.1	45.3	54.3	56.4	60.0	51.0	-0.9	0.0	-0.4	-0.4	-1.0	-0.1	51.3	53.0	55.0	50.0	-0.1	+0.5	-0.7	+0.4
6	71.4	48.2	56.0	63.6	70.3	62.7	-1.4	0.0	-0.3	-0.4	-1.2	+0.1	52.3	56.9	56.7	57.0	-0.2	-0.5	-0.4	-0.6
7	65.3	53.2	58.5	64.3	57.9	53.2	-2.6	0.0	-0.4	-0.4	-0.7	-0.1	54.1	55.0	53.7	50.8	-0.7	-0.3	-0.7	+0.4
8	65.9	50.3	55.1	59.1	65.3	57.7	-1.9	-0.1	-0.3	-0.9	-0.6	0.0	52.0	54.7	55.0	54.2	-0.1	-0.3	-0.5	+0.4
9	66.0	53.0	59.4	63.2	65.0	55.3	-2.7	0.0	-0.5	-1.6	-1.1	+0.2	55.0	56.4	57.8	53.2	0.0	-0.5	-0.2	+0.7
10	80.2	49.2	...	...	...	...	-1.0	0.0	...	...	...	...	...	...	...	...	...	...	...	...
11	86.3	60.1	75.2	85.0	85.6	70.8	-3.1	+0.5	+0.2	-1.8	-1.3	+0.7	65.0	71.3	68.0	64.3	+0.3	+0.4	+0.3	+0.5
12	81.8	58.0	75.7	74.0	81.2	66.5	-0.8	+0.4	-1.0	-1.1	-0.5	+0.1	68.3	67.2	69.5	62.8	+0.1	-0.5	-0.3	+0.1
13	66.7	55.9	57.6	60.3	59.0	57.2	+0.3	-0.1	-0.2	-0.5	+0.1	+0.4	55.9	55.3	58.0	54.7	+0.2	-0.5	+0.2	+1.0
14	65.3	50.2	61.8	60.5	63.9	55.0	-2.4	+0.9	+0.1	-1.2	-0.5	+0.3	55.2	57.6	56.7	53.6	+0.1	-0.2	+0.1	+0.1
15	68.9	53.8	63.6	62.6	65.0	61.1	-2.3	0.0	-0.2	-0.6	-0.7	-0.2	60.1	61.0	61.8	59.4	+0.1	0.0	-0.2	+0.3
16	67.4	54.5	62.7	65.1	66.0	61.3	-2.5	+0.3	0.0	-1.0	-0.8	0.0	58.7	59.4	60.3	58.6	+0.3	-0.3	-0.2	+0.4
17	70.7	58.8	...	...	...	...	-1.9	-0.6	...	...	...	...	...	...	...	...	...	...	...	...
18	71.7	50.5	62.7	66.2	70.7	62.5	-2.4	+0.5	-0.4	-0.7	-0.8	+0.3	56.1	57.0	58.7	58.4	+0.1	+0.6	-0.1	+1.0
19	71.5	55.0	65.8	69.8	69.7	59.0	-2.4	+0.3	-0.7	-1.9	-1.9	-0.1	57.3	59.0	59.0	54.0	+0.6	0.0	-0.1	0.0
20	67.7	54.3	60.3	59.3	62.7	56.3	-2.1	+0.3	-0.7	-0.2	-0.1	-0.1	57.0	56.4	57.3	53.5	-0.4	+0.1	+0.5	-0.2
21	59.2	52.0	58.8	56.7	55.5	55.6	-2.4	+0.5	-0.2	-1.1	-0.8	-0.1	54.6	55.4	54.3	55.2	-0.1	-1.1	-0.7	-0.1
22	66.8	53.0	58.9	61.5	65.2	57.4	-1.7	0.0	-0.8	-0.6	-0.8	-0.2	53.9	54.3	55.4	54.4	-0.8	-0.5	-0.6	-0.3
23	65.1	47.3	56.0	60.2	61.7	59.3	-1.1	-0.1	-1.1	-1.8	-0.6	-0.1	50.7	52.6	53.3	54.1	-0.3	-0.8	-0.9	-0.4
24	63.8	50.5	...	...	...	...	-2.3	+0.2	...	...	...	...	...	...	...	...	...	...	...	...
25	63.0	52.3	54.9	53.7	58.9	53.9	-1.1	0.0	-0.5	-0.5	+0.3	-0.1	53.6	52.7	55.1	53.2	-0.7	-0.4	+0.4	-0.2
26	60.9	51.6	56.2	57.2	59.1	57.8	-1.2	+0.1	-0.2	-0.3	-0.6	+0.1	52.6	53.7	54.4	53.7	-0.3	-0.3	-0.8	0.0
27	64.0	47.4	57.8	61.1	63.2	58.7	-2.0	0.0	-0.4	-0.8	-0.3	0.0	53.2	55.9	56.0	54.0	-1.0	-0.8	0.0	+0.2
28	67.9	50.4	55.0	62.9	67.2	55.3	-1.1	+0.4	-0.1	-1.6	-0.8	0.0	54.3	58.1	58.8	55.0	-0.4	-0.6	-0.3	-0.2
29	71.2	53.6	62.4	68.1	69.7	58.4	-1.6	0.0	-0.2	-0.2	-1.0	-0.3	58.1	59.8	59.5	52.0	+0.2	0.0	-1.1	+0.3
30	65.0	53.2	57.0	63.7	62.2	58.1	-1.9	0.0	-0.7	-0.7	-0.7	-0.1	55.5	57.3	56.8	55.2	-0.7	-0.4	-0.5	0.0
Means	68.0	51.9	59.5	62.5	64.8	57.9	-1.7	+0.1	-0.4	-0.8	-0.7	0.0	55.4	57.0	57.6	54.9	-0.1	-0.3	-0.3	+0.1

READINGS of THERMOMETERS in a STEVENSON'S SCREEN in the MAGNETIC PAVILION ENCLOSURE—*continued.*

JULY.

Days of the Month.	Readings of Dry-Bulb Thermometers in a Stevenson's Screen, 4 ft. above the ground.						Excess above readings of Thermometers on the ordinary stand, 4 ft. above the ground.						Readings of the Wet-Bulb Thermometer in a Stevenson's Screen, 4 ft. above the ground.				Excess above readings of the Thermometer on the ordinary stand, 4 ft. above the ground.			
	Maxi- mum.	Mini- mum.	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	9 ^h	Noon.	15 ^h	21 ^h
d	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°
1	64.5	56.5	...	...	...	...	-1.8	0.0	...	...	...	...	...	...	...	...	...	...	...	...
2	62.3	54.3	59.1	61.2	59.2	56.2	-3.0	+0.1	-0.6	-0.6	-0.1	-0.2	56.2	57.0	58.8	55.7	-0.3	-0.6	+0.1	0.0
3	66.0	54.5	60.8	64.0	60.8	58.2	-2.9	+0.1	-0.5	+0.1	-1.8	-0.1	54.8	56.8	57.0	53.9	0.0	+0.2	-1.0	+0.2
4	68.2	52.7	61.0	62.7	63.2	61.1	+0.1	+0.3	-0.2	-0.8	-0.5	0.0	55.2	55.4	56.3	57.0	-0.1	-0.1	-0.5	+0.2
5	73.3	54.3	59.3	62.2	71.1	67.1	-1.8	+0.4	-0.4	-0.6	-1.0	0.0	57.5	60.7	63.3	62.0	-0.2	+0.3	-0.8	-0.3
6	67.4	56.6	59.2	62.0	63.2	59.2	0.0	0.0	-0.4	-1.3	-0.7	+0.1	51.6	54.6	53.0	53.0	-0.3	-0.2	-0.4	+0.1
7	61.1	52.0	57.1	57.9	60.5	52.3	-1.1	+0.5	-1.8	-0.5	-0.9	-0.1	50.4	49.4	50.5	49.0	-0.4	-0.3	-0.5	+0.5
8	63.0	49.5	...	...	...	...	-2.5	+3.2	...	...	...	...	...	...	...	...	...	...	...	...
9	68.4	56.2	60.2	65.0	67.9	64.1	-1.5	+0.3	-0.3	-0.4	-0.6	-0.1	54.8	59.6	61.1	60.1	-0.2	-0.1	+0.6	+0.3
10	80.2	52.3	66.9	76.3	79.7	64.8	-2.5	+0.4	-1.2	-0.2	-1.6	+0.1	55.9	60.2	65.0	57.8	-0.4	+0.5	-0.3	+0.9
11	82.2	55.3	75.2	81.2	81.1	66.3	-2.5	+0.9	-1.2	-1.8	-0.9	-0.2	64.7	67.5	65.3	61.9	0.0	-1.2	+0.2	+0.2
12	75.6	59.1	72.6	74.3	73.8	64.1	-1.3	+0.9	-0.4	-0.9	-0.9	+0.7	64.8	60.5	59.8	58.8	-0.4	-1.2	-0.3	+0.2
13	81.2	55.8	69.4	78.0	78.1	62.0	-2.4	+0.4	-0.5	-0.8	-1.4	+0.4	63.0	66.5	66.7	54.2	-0.7	-0.6	-1.0	0.0
14	74.1	57.0	66.0	70.2	73.6	63.2	-1.8	+0.7	0.0	-0.9	-2.2	0.0	61.4	61.0	63.7	59.4	0.0	-0.7	-1.3	0.0
15	80.6	53.4	...	...	...	...	-3.5	+0.6	...	...	...	...	...	...	...	...	...	...	...	...
16	91.8	58.8	80.0	88.7	82.0	74.8	-2.2	+0.5	-1.0	-2.7	-1.0	+0.3	70.7	72.0	71.7	68.2	-0.7	-1.9	0.0	-0.2
17	81.0	62.8	70.7	75.2	80.2	69.3	-1.9	+0.8	-1.0	-1.5	-0.3	+0.6	61.8	63.1	64.7	63.0	+0.3	-0.6	+0.3	+0.3
18	82.3	56.6	75.2	79.5	81.5	66.6	-3.0	+0.2	-1.5	-0.1	-2.2	+0.8	64.2	65.8	67.2	60.6	-1.0	+1.1	-1.2	+0.7
19	89.9	53.4	75.9	86.4	88.4	71.5	-1.8	+0.8	+0.9	-0.3	-1.7	+0.4	68.1	69.1	70.3	65.3	+1.2	+0.7	-1.3	+0.3
20	89.3	62.4	77.0	86.7	88.0	73.1	-0.9	+0.3	-0.5	-1.9	-0.5	-0.1	68.1	74.1	74.1	65.0	0.0	-0.8	+0.3	+0.1
21	76.4	62.1	67.7	74.3	75.2	67.3	-1.7	+0.7	-0.5	-1.7	-1.4	-0.1	62.8	65.1	65.8	64.0	-0.1	-1.4	-0.4	+0.2
22	78.5	63.0	...	...	...	...	-2.4	+0.3	...	...	...	...	...	...	...	...	...	...	...	...
23	81.1	67.6	70.2	74.0	79.3	69.9	-1.8	0.0	-0.6	-0.9	-1.1	+0.2	64.3	65.2	67.6	65.0	-0.4	-0.7	+0.1	+0.3
24	85.7	62.8	78.7	82.8	85.1	70.7	-2.5	+0.5	-1.0	-0.8	-2.3	0.0	68.7	69.8	70.9	63.4	-0.2	-0.1	-0.8	+0.4
25	91.0	61.2	81.6	89.1	90.1	75.2	-2.0	+1.4	-0.8	-0.6	-1.5	+0.1	69.0	70.5	70.3	66.8	-1.1	-0.1	-0.7	+0.1
26	78.0	65.3	70.3	75.0	76.5	68.0	-2.7	+0.1	-1.1	-1.6	-0.2	+0.8	62.0	63.0	64.0	64.6	-0.4	-1.6	+0.1	+0.7
27	75.7	58.4	70.0	74.2	67.7	62.1	-0.8	+0.5	-0.7	-0.8	-0.1	-0.6	62.8	66.9	60.2	61.2	0.0	0.0	+0.4	+0.3
28	75.2	62.1	66.2	69.0	74.3	63.9	-2.1	-0.1	0.0	-0.6	-1.1	+0.1	64.1	64.9	68.0	62.1	+0.4	+0.3	+0.2	+0.8
29	73.0	57.7	...	...	...	...	-2.2	+0.5	...	...	...	...	...	...	...	...	...	...	...	...
30	73.3	57.4	64.0	70.2	71.9	65.2	-2.4	+0.2	-1.5	-0.6	-0.9	+0.7	57.2	57.6	60.2	57.0	-0.5	-1.0	+0.1	+0.2
31	75.9	56.4	67.4	71.6	74.8	64.8	-3.1	+0.2	-0.9	-0.6	0.0	+0.1	61.4	61.5	63.0	61.1	-0.3	-0.2	+0.3	+0.2
Means	76.3	57.7	68.5	73.5	74.9	65.4	-2.0	+0.5	-0.7	-0.9	-1.0	+0.1	61.4	63.0	63.8	60.4	-0.2	-0.4	-0.3	+0.3

READINGS of THERMOMETERS in a STEVENSON'S SCREEN in the MAGNETIC PAVILION ENCLOSURE—continued.

AUGUST.

Days of the Month.	Readings of Dry-Bulb Thermometers in a Stevenson's Screen, 4 ft. above the ground.						Excess above readings of Thermometers on the ordinary stand, 4 ft. above the ground.						Readings of the Wet-Bulb Thermometer in a Stevenson's Screen, 4 ft. above the ground.				Excess above readings of the Thermometer on the ordinary stand, 4 ft. above the ground.			
	Maxi- mum.	Mini- mum.	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	9 ^h	Noon.	15 ^h	21 ^h
d	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°
1	65.1	57.0	62.9	57.5	63.0	59.3	-1.5	-0.2	-0.1	-0.7	-1.3	0.0	60.1	57.2	59.5	57.6	+0.4	-0.5	-0.9	+0.6
2	71.8	55.2	63.1	67.5	71.0	62.1	-1.9	+0.5	+0.3	-0.6	-0.7	+0.2	57.2	60.1	57.9	54.9	+0.8	-0.1	-0.3	+0.2
3	67.2	52.3	61.4	63.8	64.8	52.3	-1.7	0.0	-0.4	-1.1	-0.1	0.0	58.8	61.2	56.5	51.2	-0.2	-1.3	-0.1	-0.2
4	63.2	51.9	56.9	60.4	60.0	55.3	-1.4	+0.6	-0.8	-0.4	-0.3	-0.1	50.4	52.2	51.5	50.2	-0.7	-0.1	+0.3	-0.2
5	61.0	48.7	...	...	...	...	-1.7	+0.5	...	...	...	...	...	...	...	...	...	...	...	...
6	63.8	51.8	...	...	...	...	-0.8	+0.4	...	...	...	...	...	...	...	...	...	...	...	...
7	66.2	53.1	59.5	62.7	62.8	55.0	-1.8	+0.4	-0.3	0.0	-0.7	+0.3	53.6	54.5	56.7	52.5	-0.2	0.0	-0.2	+0.2
8	61.9	52.5	55.0	57.7	61.1	52.5	-3.0	+0.1	-0.1	-0.3	-0.6	+0.1	53.2	54.7	56.0	52.0	-0.5	-0.2	-0.4	+0.3
9	60.0	51.0	59.0	56.8	55.6	56.4	-1.8	+0.6	-0.6	-0.5	-0.4	-0.3	55.5	53.7	54.2	56.0	-0.3	0.0	-0.2	+0.1
10	61.1	52.8	55.1	58.1	60.4	52.8	-2.2	+0.1	-0.2	-0.5	-0.7	+0.1	52.4	54.3	56.0	51.4	+0.1	-0.2	-0.5	+0.1
11	70.2	50.6	58.3	65.9	69.7	57.9	-1.9	+0.2	-0.4	-0.1	-1.0	+0.6	55.9	58.0	59.2	55.3	-0.1	+0.1	-0.8	+0.2
12	76.8	54.5	...	...	...	...	-1.1	+0.6	...	...	...	...	...	...	...	...	...	...	...	...
13	80.6	52.5	71.6	78.1	79.6	63.7	-1.5	+0.5	-0.1	-0.6	-0.7	+0.4	65.0	67.4	64.6	60.2	+0.3	+0.2	-0.2	+0.2
14	80.3	53.1	67.1	77.7	80.0	60.9	-1.1	+0.7	-0.7	-0.3	-0.7	+0.2	61.3	64.2	64.7	59.9	-0.6	+0.2	0.0	+0.2
15	68.8	56.3	65.3	67.2	67.7	58.3	-1.0	+0.8	-1.2	-0.5	-0.2	+0.3	59.8	58.1	57.1	56.4	-0.8	-0.5	0.0	0.0
16	75.5	55.3	67.0	72.3	75.1	65.7	-1.4	-0.2	-0.7	+0.1	-1.1	-0.2	60.9	62.1	63.7	61.2	-0.7	-0.1	-0.6	+0.2
17	80.3	60.3	62.7	76.0	79.8	63.9	-1.6	+0.2	0.0	-0.7	-1.1	0.0	60.9	68.0	69.2	62.7	+0.1	0.0	-0.1	0.0
18	80.6	57.7	69.2	78.1	80.6	70.6	-1.1	+0.4	-1.1	-0.6	-0.7	+0.2	65.0	69.0	70.5	66.3	-0.7	+0.3	-0.2	+0.1
19	77.2	56.9	...	...	...	...	-2.6	+0.6	...	...	...	...	...	...	...	...	...	...	...	...
20	73.3	54.3	60.0	68.0	72.0	64.0	-2.3	-1.3	-0.3	-1.2	-0.6	+0.1	58.9	63.0	63.0	61.1	0.0	-0.2	+0.2	+0.1
21	71.2	55.4	64.0	68.9	68.0	60.0	-2.0	+0.4	-0.3	-0.5	-1.2	-0.1	60.7	59.5	61.0	57.4	-0.2	-0.3	-0.2	+0.2
22	67.1	56.7	66.0	66.0	66.3	56.7	-1.5	+0.2	-0.8	-0.8	-0.9	0.0	59.0	58.0	57.0	53.9	-0.1	-0.5	-0.6	+0.7
23	64.4	50.4	53.8	54.3	62.3	58.2	-1.2	+0.7	-0.4	-0.3	-1.0	-0.2	52.7	53.7	55.3	55.3	+0.1	0.0	-0.3	+0.3
24	68.7	52.6	62.7	66.2	65.5	56.0	-2.5	+0.8	-1.9	-1.5	-1.2	+0.3	58.8	60.3	58.7	54.8	-0.9	-0.7	-0.5	+0.3
25	67.0	48.6	60.4	63.1	61.7	57.0	-1.2	+0.4	-0.5	-0.6	-0.3	+0.1	58.0	59.9	58.3	55.7	0.0	+0.2	+0.3	+0.4
26	64.0	52.0	...	...	...	...	-1.3	+0.4	...	...	...	...	...	...	...	...	...	...	...	...
27	60.3	52.9	60.3	58.2	58.9	55.6	-0.4	+0.5	-0.3	-0.5	-0.3	-0.4	55.0	53.0	53.1	54.0	+0.5	+0.4	+0.4	+0.3
28	60.6	55.4	56.6	59.3	60.5	59.0	-0.3	+0.1	-0.3	-0.4	-0.2	-0.2	54.5	55.0	56.0	56.5	+0.3	+0.3	+0.4	+0.3
29	69.6	56.4	63.0	67.9	67.3	57.8	-0.8	-0.4	+0.1	-0.2	-0.3	+0.4	59.1	60.5	59.0	56.4	+0.3	+0.8	+0.1	+0.3
30	66.2	54.2	58.6	63.1	65.0	55.0	-1.8	+0.3	-0.6	-0.6	-0.5	+0.3	56.6	58.0	58.6	54.1	-0.2	+0.6	+0.3	+0.4
31	73.9	46.3	63.6	71.1	73.4	60.4	-1.2	+0.4	0.0	-1.5	-1.3	-0.1	59.0	62.8	63.4	55.6	+0.5	-0.1	+0.1	-0.1
Means	69.0	53.5	61.7	65.6	67.4	58.7	-1.5	+0.3	-0.4	-0.6	-0.7	+0.1	57.8	59.2	59.3	56.3	-0.1	-0.1	-0.2	+0.2

READINGS of THERMOMETERS in a STEVENSON'S SCREEN in the MAGNETIC PAVILION ENCLOSURE—*continued.*

SEPTEMBER.

Days of the Month.	Readings of Dry-Bulb Thermometers in a Stevenson's Screen, 4 ft. above the ground.						Excess above readings of Thermometers on the ordinary stand, 4 ft. above the ground.						Readings of the Wet-Bulb Thermometer in a Stevenson's Screen, 4 ft. above the ground.				Excess above readings of the Thermometer on the ordinary stand, 4 ft. above the ground.			
	Maxi- mum.	Mini- mum.	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	9 ^h	Noon.	15 ^h	21 ^h
1	66.2	58.2	60.9	63.6	66.2	62.9	-1.1	+0.3	-0.1	-0.1	-0.3	+0.1	60.6	62.8	64.0	60.1	-0.2	-0.1	-0.3	0.0
2	63.0	52.3	...	...	...	...	+0.1	+0.1	...	...	...	...	...	...	...	...	...	...	...	...
3	60.8	49.0	57.4	57.6	59.0	50.6	-1.3	+0.1	+0.4	-0.8	-0.3	-0.7	50.3	51.2	52.0	48.2	+0.5	+0.2	+0.3	-0.1
4	62.9	41.1	54.5	61.2	62.2	50.0	-0.9	+0.7	-0.2	-0.5	-0.5	+0.7	50.4	54.6	54.5	48.7	-0.4	+0.7	+0.1	+0.3
5	67.8	43.8	57.9	63.3	66.2	51.3	-1.0	+0.7	+0.1	-1.5	-0.7	+0.4	53.2	56.0	57.2	50.3	+0.5	-1.0	+0.5	+0.6
6	71.7	42.5	57.9	65.3	71.3	52.7	-0.4	+0.8	-0.3	-0.4	-0.1	+0.7	53.8	57.1	58.1	50.7	+0.4	+0.2	-0.1	+1.0
7	72.6	47.3	58.1	68.7	71.9	59.7	-1.5	+1.0	-0.6	-0.1	-0.8	+0.4	54.3	58.3	59.0	55.2	-0.1	-0.3	0.0	+0.1
8	68.0	51.5	59.1	59.0	67.3	55.6	-0.9	+0.5	-0.3	-0.7	-0.9	+0.4	56.5	56.0	59.4	55.1	-0.1	-0.3	-0.3	+0.4
9	68.0	50.2	...	...	...	...	-1.9	+0.7	...	...	...	...	...	...	...	...	...	...	...	...
10	68.3	50.2	60.0	66.0	67.1	60.2	-1.8	+1.0	-0.5	-0.5	-0.7	0.0	52.7	55.9	58.1	54.4	0.0	+0.2	-0.2	0.0
11	65.1	49.5	58.4	62.0	63.7	53.6	-1.4	+0.5	-0.8	0.0	-1.0	-0.1	54.1	53.3	55.0	50.6	-0.6	0.0	-0.4	-0.1
12	68.8	44.9	51.1	65.6	68.2	52.4	-0.9	-0.2	-0.5	+0.1	-0.7	+0.5	49.9	55.2	56.7	50.5	+0.2	+0.1	-0.4	+0.1
13	70.0	43.4	58.2	68.9	69.9	54.3	-0.9	+0.2	-0.5	-0.2	+1.2	0.0	55.3	59.3	60.1	52.8	-0.6	-0.4	+0.6	+0.1
14	64.3	51.9	60.2	63.1	62.9	56.2	-0.9	+0.7	-0.6	+0.2	+0.2	-0.5	55.5	56.5	56.1	53.4	-0.4	-0.1	-0.5	-0.2
15	69.2	55.0	59.8	67.8	68.2	57.4	-0.7	+0.7	-0.3	-0.4	+0.2	+0.1	57.0	61.2	61.3	56.5	-0.3	-0.5	+0.1	-0.2
16	81.5	57.0	...	...	...	...	-1.1	+0.5	...	...	...	...	...	...	...	...	...	...	...	...
17	73.3	57.2	63.7	68.6	73.0	58.9	-1.4	+1.0	0.0	-1.6	-0.8	+0.5	60.9	61.9	63.9	58.0	+0.3	-0.9	-0.1	+0.4
18	69.1	54.8	57.9	63.0	68.6	60.1	-0.8	+0.4	-0.9	-0.1	-1.1	-0.2	57.0	59.9	62.5	57.2	-0.6	+0.1	-1.0	0.0
19	66.7	47.0	55.2	61.8	65.3	50.1	-1.3	+0.5	+0.2	-0.8	-0.5	+0.2	52.0	54.2	54.5	48.2	-0.3	-0.1	-0.3	+0.3
20	69.2	42.0	58.9	67.0	69.0	53.1	-1.4	+0.8	+0.6	-0.1	+0.1	+0.8	54.0	54.8	55.4	49.2	+0.8	+0.5	+0.5	+0.5
21	73.0	45.5	63.0	69.7	72.2	61.3	-1.1	+1.2	+0.7	+0.3	-1.3	-0.1	56.0	57.6	60.6	57.6	+1.1	+0.5	-0.3	+0.2
22	71.1	57.2	61.0	66.5	69.5	62.0	-1.9	+0.2	-0.1	-0.5	-0.7	0.0	59.0	62.0	64.0	60.7	+0.2	-0.3	-0.6	+0.1
23	73.8	57.2	...	...	...	...	-0.1	0.0	...	...	...	...	...	...	...	...	...	...	...	...
24	69.8	52.0	62.0	67.4	62.2	57.9	-1.2	+0.7	0.0	-0.8	-0.5	+0.1	60.3	61.5	62.0	54.0	+0.3	+0.1	-0.1	+0.2
25	61.8	43.9	54.6	57.4	61.3	51.0	-1.7	+0.8	+0.6	-0.3	-0.6	+0.5	50.3	50.3	49.9	47.4	+0.5	-0.4	0.0	+0.7
26	65.3	46.4	58.4	64.1	63.9	58.1	-1.6	+0.2	-0.2	0.0	-0.8	-0.1	53.7	55.7	55.9	54.2	+0.3	+0.7	0.0	+0.5
27	59.2	55.8	58.0	59.2	57.3	55.8	-0.8	+0.1	-0.4	-0.5	-0.5	+0.1	57.5	58.8	56.3	54.6	0.0	-0.1	-0.2	+0.1
28	63.7	51.2	57.9	62.3	59.8	55.8	-1.5	+0.8	+0.2	-0.1	-0.3	+0.2	54.6	55.7	56.3	53.8	+0.3	+0.9	+0.4	+0.8
29	66.0	46.0	56.8	63.8	63.0	52.8	-1.7	+1.0	+0.8	+0.6	-0.4	+0.6	53.8	55.7	56.1	51.5	+0.6	+0.9	+0.8	+0.8
30	62.8	48.4	...	...	...	...	-0.6	+0.7	...	...	...	...	...	...	...	...	...	...	...	...
Means	67.8	49.7	58.4	64.1	66.0	55.8	-1.1	+0.6	-0.1	-0.4	-0.5	+0.2	54.9	57.0	58.0	53.3	+0.1	0.0	-0.1	+0.3

READINGS of THERMOMETERS in a STEVENSON'S SCREEN in the MAGNETIC PAVILION ENCLOSURE—continued.

OCTOBER.

Days of the Month.	Readings of Dry-Bulb Thermometers in a Stevenson's Screen, 4 ft. above the ground.						Excess above readings of Thermometers on the ordinary stand, 4 ft. above the ground.						Readings of the Wet-Bulb Thermometer in a Stevenson's Screen, 4 ft. above the ground.				Excess above readings of the Thermometer on the ordinary stand, 4 ft. above the ground.			
	Maxi- mum.	Mini- mum.	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	9 ^h	Noon.	15 ^h	21 ^h
d	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°
1	61.7	43.3	54.8	59.8	59.3	52.3	-1.2	+0.9	+1.1	0.0	-0.3	-0.1	51.0	52.6	52.0	50.6	+ 1.2	+ 1.0	+ 0.4	+ 0.9
2	65.0	49.1	56.3	61.1	62.6	53.4	-1.7	+0.8	-0.1	-0.5	-1.1	+0.3	53.7	56.6	57.4	52.6	+ 0.5	+ 0.7	+ 0.6	+ 0.7
3	57.5	41.6	48.8	53.5	57.3	41.7	-1.1	+0.5	0.0	-0.5	-0.4	+0.5	47.0	45.6	47.3	40.3	+ 0.3	- 0.6	- 0.3	+ 0.4
4	61.8	38.4	56.4	61.0	56.3	55.0	-0.7	+0.3	-0.3	-0.6	-0.4	0.0	52.4	55.6	55.9	51.2	- 0.5	- 0.2	+ 0.2	+ 0.2
5	60.2	50.2	56.7	59.0	55.6	53.7	-0.8	+0.6	+0.3	+0.1	-0.4	+0.1	51.7	54.0	53.8	51.8	+ 0.7	+ 0.5	+ 0.1	+ 0.4
6	65.1	53.2	60.1	65.0	64.3	59.3	-0.8	+0.6	-0.2	-0.7	-0.2	+0.2	56.6	59.1	59.0	56.7	+ 0.3	- 1.1	- 0.3	+ 0.3
7	67.0	56.8	...	...	...	...	-0.9	+0.6	...	...	...	...	...	...	...	...	...	...	...	...
8	73.5	47.3	65.6	72.0	72.5	59.3	-0.4	+0.8	+0.4	+0.2	-0.6	+0.3	61.6	65.0	63.4	58.8	+ 0.4	+ 0.6	+ 0.1	+ 0.4
9	73.5	56.1	67.6	73.2	71.9	57.4	-0.7	+0.8	+0.5	+0.2	-0.2	+0.1	63.7	64.5	62.3	56.4	+ 0.3	- 0.1	+ 0.8	+ 0.5
10	60.4	50.0	55.0	56.5	55.1	50.0	-0.1	+0.7	-0.1	-0.2	-0.2	0.0	52.2	51.0	49.4	46.5	+ 0.2	+ 0.3	- 0.5	- 0.2
11	56.7	41.5	45.0	53.9	56.2	46.9	-0.2	+0.7	-0.7	+0.3	-0.5	+0.1	44.7	50.2	50.7	46.0	- 0.6	+ 0.2	- 0.6	+ 0.1
12	57.0	40.7	48.1	54.3	53.8	48.1	+0.5	+0.7	+0.2	+0.1	-0.1	+0.1	45.4	49.1	49.0	46.0	+ 0.4	- 0.4	+ 0.3	+ 0.4
13	55.3	45.4	52.8	55.0	55.2	52.9	-1.0	+0.6	-0.2	0.0	-0.3	0.0	48.0	49.6	50.7	49.9	+ 0.1	+ 0.2	- 0.1	+ 0.2
14	53.0	41.2	...	...	...	...	-0.5	+0.4	...	...	...	...	...	...	...	...	...	...	...	...
15	50.7	38.6	44.2	50.1	50.1	44.7	-1.4	+0.4	-0.3	-0.8	-0.2	+0.3	40.5	44.1	43.4	41.2	- 0.2	- 0.6	- 0.1	+ 0.5
16	50.5	36.3	47.9	50.0	49.5	49.8	-1.4	+0.7	+0.3	-0.3	-0.7	+0.1	43.3	44.5	45.5	48.1	+ 0.7	- 0.1	- 0.5	+ 0.1
17	62.2	48.3	54.3	59.8	60.1	51.1	-0.8	+0.8	-0.2	0.0	-0.1	+0.1	52.2	54.1	53.6	48.8	0.0	+ 0.3	+ 0.8	+ 0.4
18	54.0	47.2	50.7	53.2	51.6	51.5	-0.9	+0.1	-0.4	-0.5	-0.2	-0.2	48.3	49.8	50.3	50.8	- 0.1	+ 0.3	+ 0.2	+ 0.1
19	54.2	45.7	48.2	54.1	52.4	48.8	-1.0	+0.2	-0.5	-1.1	-0.2	+0.2	46.4	48.1	47.0	46.0	+ 0.1	- 0.5	+ 0.3	+ 0.2
20	49.0	44.2	46.0	48.9	48.8	45.7	-0.9	+0.1	-0.2	-0.5	0.0	0.0	43.8	45.1	44.9	43.5	+ 0.2	- 0.1	+ 0.5	+ 0.5
21	49.2	39.2	...	...	...	...	-1.1	+0.5	...	...	...	...	...	...	...	...	...	...	...	...
22	47.6	37.8	41.6	47.1	47.5	40.7	-0.3	+0.4	-0.4	-0.6	+0.7	0.0	39.7	43.1	43.7	39.9	0.0	+ 0.3	+ 0.8	+ 0.5
23	56.0	40.0	47.2	52.9	55.8	52.5	-0.1	+0.8	-0.2	-0.3	+0.1	0.0	47.2	51.8	52.3	51.8	0.0	+ 0.1	+ 0.1	0.0
24	57.1	48.6	52.2	56.3	57.1	55.8	-0.2	+0.5	-0.3	-0.5	-0.2	-0.7	51.4	54.0	54.7	54.6	0.0	- 0.6	0.0	- 0.3
25	56.9	48.7	55.1	55.0	56.1	48.7	-0.4	+0.4	-0.3	-0.3	-0.2	0.0	53.3	52.0	53.0	47.5	- 0.2	+ 0.3	+ 0.3	+ 0.6
26	49.3	39.3	47.9	42.7	46.9	39.3	-0.2	+0.3	0.0	-0.1	+0.2	+0.3	45.1	41.7	44.2	37.6	+ 0.3	+ 0.1	+ 0.3	+ 0.5
27	51.7	38.6	47.1	50.5	49.4	44.2	-0.8	+0.4	-0.3	-0.5	-0.3	-0.2	44.0	45.8	46.2	42.6	+ 0.3	+ 0.4	+ 0.2	+ 0.6
28	52.1	39.3	...	...	...	...	-0.8	+0.3	...	...	...	...	...	...	...	...	...	...	...	...
29	56.0	48.5	53.0	53.8	49.0	51.0	+0.1	+0.2	+0.1	0.0	+0.1	+0.2	48.4	50.0	47.2	49.3	+ 0.2	+ 0.3	+ 0.4	+ 0.5
30	52.0	45.8	47.7	50.2	51.9	51.8	-0.1	+0.1	-0.4	-0.5	-0.2	+0.1	47.6	49.8	51.0	51.5	- 0.1	+ 0.1	- 0.4	- 0.2
31	65.2	51.3	59.2	64.2	61.4	55.8	+0.2	-1.4	-0.1	+0.3	+0.4	+0.5	57.0	57.5	56.3	54.0	- 0.4	- 0.2	0.0	+ 0.3
Means	57.5	44.9	52.2	56.0	55.8	50.4	-0.6	+0.4	-0.1	-0.3	-0.2	+0.1	49.5	51.3	51.3	48.7	+ 0.2	0.0	+ 0.1	+ 0.3

READINGS of THERMOMETERS in a STEVENSON'S SCREEN in the MAGNETIC PAVILION ENCLOSURE—continued.

NOVEMBER.

Days of the Month.	Readings of Dry-Bulb Thermometers in a Stevenson's Screen, 4 ft. above the ground.						Excess above readings of Thermometers on the ordinary stand, 4 ft. above the ground.						Readings of the Wet-Bulb Thermometer in a Stevenson's Screen, 4 ft. above the ground.				Excess above readings of the Thermometer on the ordinary stand, 4 ft. above the ground.			
	Maxi-mum.	Mini-mum.	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	9 ^h	Noon.	15 ^h	21 ^h
1	61.7	54.2	56.7	59.9	56.8	55.2	-0.6	+0.8	-0.1	+0.1	-0.2	+0.1	56.2	55.9	55.4	53.7	-0.3	+0.4	+0.5	+0.1
2	55.3	51.6	53.2	54.2	54.2	53.2	0.0	+0.3	-0.2	0.0	-0.3	-0.1	52.8	53.0	53.2	52.3	0.0	-0.3	-0.2	-0.1
3	56.0	50.3	52.6	55.8	54.0	50.3	-0.5	-0.1	-0.3	-0.2	0.0	-0.1	51.7	52.9	51.9	49.5	0.0	+0.1	+0.2	-0.1
4	51.7	47.2	...	...	...	...	-0.2	0.0	...	...	...	...	...	...	...	...	...	...	...	...
5	55.7	48.3	50.5	53.1	55.6	52.5	-0.5	+0.1	-0.2	-0.6	-0.3	0.0	49.7	52.0	54.1	51.6	0.0	-0.6	-0.2	0.0
6	56.2	50.5	51.4	53.7	55.3	55.0	-0.3	+0.3	-0.2	-0.3	0.0	+0.2	50.3	52.0	52.5	52.0	-0.1	-0.2	0.0	+0.3
7	55.0	46.2	49.7	50.3	49.2	46.2	-0.2	0.0	-0.1	-0.1	-0.1	-0.1	48.2	47.3	46.9	45.6	0.0	-0.2	+0.2	+0.1
8	54.1	41.1	46.0	51.9	52.7	50.0	+0.2	+0.6	+0.8	+0.3	0.0	-0.2	42.0	45.5	47.5	49.0	+0.8	+0.3	+0.3	0.0
9	54.0	45.0	52.1	52.9	52.6	45.0	-0.9	+0.3	-0.1	-0.6	+0.4	+0.3	48.4	46.9	47.6	42.3	+0.4	+0.2	+0.4	+0.5
10	48.4	36.3	40.0	46.1	48.4	36.4	-1.3	+0.4	+0.3	+0.3	+0.4	+0.4	38.0	41.0	42.0	35.5	+0.3	+0.2	+0.5	+0.6
11	44.1	27.2	...	...	...	...	-0.1	+0.4	...	...	...	...	...	...	...	...	...	...	...	...
12	52.2	35.6	43.1	47.1	47.9	52.2	-0.1	+0.7	-0.1	-0.1	+0.1	-0.1	41.2	45.5	47.1	51.9	-0.3	-0.1	+0.1	+0.2
13	57.0	47.2	56.1	55.5	52.0	48.3	-0.6	+0.9	0.0	-0.3	0.0	-0.1	54.7	54.1	50.2	46.2	+0.1	-0.3	0.0	+0.5
14	50.9	40.9	46.8	49.6	49.6	47.0	-0.9	+1.5	+0.1	-0.1	+0.1	+0.1	45.5	48.0	46.9	45.0	+0.2	+0.3	+0.3	+0.4
15	53.0	39.8	46.1	50.0	48.4	42.1	+0.1	+0.5	0.0	0.0	-0.1	+0.3	45.2	49.4	46.9	41.5	+0.2	+0.2	+0.3	+0.6
16	47.2	40.8	44.3	46.1	47.2	45.0	-1.9	+0.6	-0.4	-0.4	0.0	-0.1	43.6	46.0	47.0	44.2	+0.3	+0.2	+0.3	+0.1
17	47.6	42.3	46.3	47.0	47.0	44.7	-0.4	+0.1	-0.3	+0.1	-0.1	0.0	45.2	45.8	45.3	43.3	0.0	+0.1	+0.3	+0.2
18	46.4	41.4	...	...	...	...	-0.5	+0.1	...	...	...	...	...	...	...	...	...	...	...	...
19	44.0	39.0	41.0	44.0	42.2	39.7	-1.0	+0.5	-0.2	0.0	-0.1	+0.1	38.3	39.0	37.6	37.5	+0.3	-0.4	-0.4	+0.5
20	44.0	37.8	41.6	44.0	43.4	42.8	-0.2	+0.4	-0.1	+0.1	-0.3	+0.1	41.1	42.9	42.7	42.0	+0.1	+0.1	0.0	+0.1
21	45.1	42.2	43.1	44.8	45.1	44.6	0.0	+0.4	-0.1	+0.1	0.0	-0.1	42.0	42.9	43.0	43.6	+0.1	+0.2	+0.2	+0.2
22	45.8	41.2	42.0	44.4	45.5	42.6	-0.1	+0.6	0.0	-0.2	-0.2	+0.2	41.3	42.1	42.0	39.8	0.0	-0.2	+0.3	+0.4
23	49.4	35.2	37.0	49.3	45.9	40.5	+0.3	+1.4	+0.9	+0.4	+0.1	-0.2	36.6	44.4	43.2	39.9	+0.9	0.0	+0.1	+0.2
24	44.7	34.6	40.5	44.2	43.0	44.6	-0.2	+1.2	-0.1	-0.4	0.0	-0.2	39.8	42.9	42.1	43.3	-0.1	-0.1	0.0	-0.1
25	52.6	44.5	...	...	...	...	-0.4	0.0	...	...	...	...	...	...	...	...	...	...	...	...
26	51.2	43.4	43.8	49.3	49.4	48.0	+0.3	+0.6	-0.2	-0.1	+0.2	+0.2	43.0	47.2	45.5	45.8	-0.1	-0.1	+0.3	+0.2
27	51.3	41.3	42.3	49.6	47.8	41.3	+0.4	-0.1	+0.1	+1.5	+0.2	-0.1	41.0	44.6	44.1	40.8	+0.1	+1.1	+0.1	+0.2
28	46.4	40.6	45.0	45.2	46.3	45.3	-0.2	+0.6	0.0	-0.5	-0.3	-0.1	44.3	44.9	46.0	45.1	-0.1	-0.1	+0.1	0.0
29	47.1	43.3	44.8	45.9	47.0	45.0	-0.1	+0.2	0.0	-0.1	0.0	+0.2	42.4	44.0	44.4	44.4	0.0	+0.1	+0.1	+0.3
30	45.1	41.8	41.9	44.2	43.6	42.3	-0.4	+0.2	+0.1	-0.2	-0.1	-0.2	40.3	41.6	42.0	41.2	+0.1	0.0	+0.1	+0.1
Means	50.4	42.4	46.1	49.2	48.8	46.1	-0.3	+0.5	0.0	0.0	0.0	0.0	44.7	46.6	46.4	44.9	+0.1	0.0	+0.1	+0.2

READINGS of THERMOMETERS in a STEVENSON'S SCREEN in the MAGNETIC PAVILION ENCLOSURE—concluded.

DECEMBER.

Days of the Month.	Readings of Dry-Bulb Thermometers in a Stevenson's Screen, 4 ft. above the ground.						Excess above readings of Thermometers on the ordinary stand, 4 ft. above the ground.						Readings of the Wet-Bulb Thermometer in a Stevenson's Screen, 4 ft. above the ground.				Excess above readings of the Thermometer on the ordinary stand, 4 ft. above the ground.			
	Maxi-mum.	Mini-mum.	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	9 ^h	Noon.	15 ^h	21 ^h
d	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°
1	43.0	39.8	41.9	43.0	43.0	39.8	-0.5	+0.2	-0.9	0.0	-0.2	+0.1	41.7	42.8	42.5	39.1	0.0	0.0	+0.1	+0.2
2	43.0	39.3	...	...	...	...	+0.1	+0.2	...	...	...	...	...	...	...	...	...	...	...	...
3	48.6	38.6	41.2	44.4	45.3	48.6	-0.1	+0.7	+0.1	-0.2	-0.1	-0.1	40.0	43.0	43.1	47.8	+0.2	+0.2	+0.1	+0.2
4	54.2	48.6	53.1	53.8	50.9	52.0	-0.2	+0.3	+0.1	+0.1	+0.2	+0.2	50.3	50.0	48.0	50.3	+0.3	+0.5	+0.4	+0.2
5	56.7	49.6	50.0	50.0	49.7	56.2	+0.5	+0.2	0.0	0.0	-0.1	+0.2	49.3	49.7	49.6	54.2	0.0	0.0	-0.1	-0.1
6	56.4	46.1	49.4	52.2	50.7	48.0	+0.1	+0.3	-0.2	-0.3	0.0	+0.3	47.5	49.6	49.7	46.1	+0.2	+0.2	+0.4	+0.2
7	50.2	39.6	43.7	49.1	48.5	40.0	-0.5	+0.7	0.0	-0.2	-0.1	+0.5	42.6	46.8	46.9	40.0	+0.2	+0.3	+0.3	+0.7
8	52.3	38.5	50.4	51.8	51.2	51.7	-0.2	+1.0	-0.1	+0.1	-0.1	-0.2	49.2	50.2	50.4	51.0	-0.1	0.0	+0.1	+0.3
9	54.2	50.3	...	...	...	...	0.0	+0.8	...	...	...	...	...	...	...	...	...	...	...	...
10	50.1	39.6	40.5	46.3	45.4	40.5	+0.1	+0.9	+0.1	+0.4	+0.6	+0.5	40.1	44.2	43.0	40.0	+0.2	+0.5	+0.6	+0.7
11	52.1	38.5	47.7	49.6	51.1	52.1	+0.1	+0.5	0.0	-0.1	+0.2	+0.1	46.8	48.6	49.4	50.5	+0.4	+0.3	+0.5	+0.6
12	55.3	50.6	53.0	55.1	54.3	50.6	-0.5	-0.2	+0.1	-0.2	-0.2	-0.2	51.8	53.0	53.2	50.3	+0.3	+0.3	+0.3	+0.1
13	53.3	44.2	52.9	51.5	50.2	44.2	-0.3	+0.4	0.0	-0.2	-0.1	+0.4	51.6	50.1	48.2	43.1	0.0	-0.4	+0.1	+0.6
14	50.9	42.3	44.3	48.9	50.2	49.5	0.0	+0.3	-0.2	-0.2	-0.2	0.0	43.1	46.3	47.2	47.8	+0.2	+0.3	-0.5	+0.9
15	52.6	46.2	50.0	50.2	51.9	46.2	-0.3	+0.4	+0.2	-0.2	+0.2	+0.3	48.0	49.3	50.5	44.6	+0.5	+0.3	+0.3	+0.8
16	49.6	40.4	...	...	...	...	+0.7	+0.4	...	...	...	...	...	...	...	...	...	...	...	...
17	47.2	37.4	44.8	47.0	43.7	38.7	+0.2	+1.0	+0.1	+0.3	+0.3	+0.6	43.6	45.0	42.4	38.7	+0.5	+0.5	+0.6	+1.0
18	51.3	38.4	47.7	50.3	50.2	51.3	0.0	+0.8	-0.1	-0.4	0.0	0.0	46.7	48.7	49.0	49.7	+0.3	+0.3	+0.5	+0.5
19	51.1	37.1	37.1	46.2	46.6	43.8	0.0	+0.3	+0.3	+0.6	+0.3	+0.3	36.9	43.2	44.5	43.0	+0.4	+0.7	+0.6	+0.7
20	53.9	43.6	49.9	50.7	50.6	53.7	0.0	+0.5	0.0	-0.2	-0.1	-0.2	49.0	49.0	50.5	52.3	+0.4	+0.5	+0.2	+0.3
21	54.0	42.3	44.0	48.0	47.0	42.3	+0.1	-0.1	+0.3	+0.4	+0.2	-0.1	41.8	43.6	43.0	42.2	+0.8	+0.2	+0.1	+0.5
22	42.4	33.1	36.0	41.9	40.6	39.2	-1.8	+0.8	+0.1	+0.4	+0.2	0.0	35.7	39.8	39.5	38.9	0.0	+0.4	+0.3	+0.4
23	39.5	30.5	...	...	...	...	+0.3	-0.2	...	...	...	...	...	...	...	...	...	...	...	...
24	43.8	31.5	33.0	35.0	37.0	43.8	+0.3	+0.2	-0.1	0.0	+0.1	+0.3	33.0	35.0	37.0	43.8	-0.1	0.0	+0.1	+0.3
25	51.6	43.3	...	...	...	...	+0.4	+0.4	...	...	...	...	...	...	...	...	...	...	...	...
26	51.8	45.5	...	...	...	...	+0.3	+0.5	...	...	...	...	...	...	...	...	...	...	...	...
27	50.7	44.0	47.4	49.2	50.3	47.4	-0.1	+0.9	-0.3	-0.3	-0.1	-0.1	47.0	48.9	49.2	46.2	+0.1	0.0	+0.2	+0.2
28	53.4	42.9	46.4	43.9	46.3	42.9	+0.2	+0.2	-0.2	-0.2	-0.1	+0.2	43.4	43.5	42.7	39.0	+0.6	-0.1	+0.2	+0.8
29	43.5	35.4	37.8	43.0	43.5	35.6	+0.2	+0.9	+0.3	+0.3	+0.2	+0.8	36.2	40.0	40.5	35.0	+0.4	+0.3	+0.3	+0.8
30	49.8	34.4	...	...	...	...	+0.1	+0.9	...	...	...	...	...	...	...	...	...	...	...	...
31	51.8	37.2	43.2	40.8	39.0	37.2	+0.2	-0.1	+0.6	+0.4	0.0	-0.1	42.7	40.4	37.9	36.2	+0.1	+0.2	+0.3	+0.3
Means	50.3	40.9	45.2	47.6	47.3	45.6	0.0	+0.5	0.0	0.0	0.0	+0.2	44.1	45.9	45.7	44.6	+0.2	+0.2	+0.2	+0.5

(I.)—Readings of a Thermometer whose bulb is sunk to the depth of 25·6 feet (24 French feet) below the surface of the soil, at Noon on every Day of the Year.

1900.												
Days of the Month.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.
d	°	°	°	°	°	°	°	°	°	°	°	°
1	53·35	52·46	51·46	50·36	49·61	49·25	49·48	50·24	51·40	52·47	53·18	53·33
2	53·37	52·43	51·42	50·33	49·60	49·26	49·51	50·27	51·43	52·50	53·19	53·32
3	53·33	52·40	51·38	50·30	49·56	49·26	49·52	50·29	51·48	52·52	53·21	53·32
4	53·30	52·34	51·32	50·28	49·56	49·26	49·53	50·33	51·51	52·57	53·22	53·35
5	53·27	52·33	51·31	50·25	49·53	49·25	49·54	50·35	51·56	52·59	53·22	53·33
6	53·25	52·30	51·27	50·23	49·51	49·26	49·57	50·38	51·60	52·63	53·24	53·33
7	53·22	52·24	51·23	50·21	49·50	49·26	49·58	50·42	51·64	52·66	53·23	53·33
8	53·21	52·19	51·20	50·17	49·48	49·26	49·62	50·44	51·66	52·70	53·25	53·36
9	53·18	52·15	51·16	50·14	49·45	49·27	49·62	50·47	51·73	52·74	53·27	53·33
10	53·14	52·13	51·14	50·11	49·43	49·28	49·67	50·51	51·76	52·72	53·25	53·29
11	53·12	52·12	51·10	50·09	49·42	49·27	49·68	50·56	51·81	52·74	53·24	53·30
12	53·08	52·08	51·06	50·08	49·40	49·28	49·71	50·62	51·83	52·75	53·27	53·31
13	53·04	52·02	51·03	50·04	49·39	49·30	49·74	50·67	51·89	52·79	53·32	53·30
14	53·02	52·00	50·99	50·02	49·37	49·30	49·76	50·68	51·91	52·81	53·30	53·27
15	53·02	51·95	50·95	50·00	49·36	49·32	49·77	50·71	51·97	52·82	53·31	53·28
16	52·99	51·94	50·90	49·95	49·34	49·33	49·82	50·77	52·01	52·84	53·30	53·25
17	52·97	51·92	50·85	49·93	49·34	49·33	49·83	50·81	52·06	52·89	53·32	53·25
18	52·93	51·85	50·80	49·92	49·32	49·34	49·86	50·86	52·07	52·91	53·32	53·25
19	52·92	51·83	50·77	49·89	49·31	49·35	49·89	50·87	52·10	52·93	53·31	53·22
20	52·88	51·79	50·77	49·88	49·32	49·36	49·92	50·93	52·14	52·94	53·32	53·22
21	52·82	51·74	50·72	49·85	49·31	49·36	49·94	50·96	52·19	52·96	53·32	53·26
22	52·82	51·73	50·69	49·82	49·28	49·38	49·96	51·00	52·20	52·97	53·33	53·23
23	52·80	51·68	50·66	49·79	49·28	49·37	49·98	51·02	52·25	53·00	53·33	53·20
24	52·77	51·67	50·62	49·77	49·27	49·37	50·03	51·08	52·27	53·04	53·32	53·13
25	52·72	51·65	50·59	49·74	49·26	49·40	50·07	51·11	52·28	53·06	53·34	53·16
26	52·71	51·60	50·55	49·72	49·25	49·42	50·08	51·15	52·30	53·04	53·34	53·15
27	52·65	51·55	50·52	49·69	49·27	49·43	50·13	51·17	52·35	53·07	53·33	53·13
28	52·57	51·50	50·50	49·66	49·27	49·45	50·14	51·22	52·39	53·08	53·34	53·09
29	52·57		50·46	49·65	49·27	49·46	50·17	51·28	52·40	53·12	53·33	53·07
30	52·54		50·44	49·63	49·26	49·48	50·18	51·32	52·44	53·16	53·33	53·06
31	52·51		50·40	49·62	49·26		50·22	51·37		53·18		53·05
Means	52·97	51·99	50·91	49·98	49·38	49·33	49·82	50·77	51·95	52·85	53·29	53·24

The mean of the twelve monthly values is 51°·37

(II.)—Readings of a Thermometer whose bulb is sunk to the depth of 12·8 feet (12 French feet) below the surface of the soil, at Noon on every Day of the Year.

1900.												
Days of the Month.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.
d	°	°	°	°	°	°	°	°	°	°	°	°
1	51·30	48·69	46·67	46·21	46·37	48·50	51·27	54·35	56·65	56·82	55·89	53·91
2	51·23	48·65	46·64	46·18	46·43	48·53	51·39	54·53	56·66	56·83	55·80	53·81
3	51·10	48·60	46·60	46·16	46·48	48·63	51·47	54·62	56·70	56·80	55·73	53·74
4	50·97	48·50	46·57	46·13	46·55	48·72	51·58	54·80	56·71	56·84	55·69	53·70
5	50·85	48·49	46·57	46·12	46·62	48·77	51·66	54·88	56·76	56·83	55·59	53·62
6	50·73	48·43	46·56	46·10	46·66	48·84	51·74	55·01	56·79	56·86	55·51	53·54
7	50·62	48·36	46·58	46·07	46·73	48·93	51·81	55·20	56·80	56·85	55·44	53·44
8	50·56	48·28	46·57	46·02	46·80	48·99	51·91	55·23	56·86	56·87	55·37	53·37
9	50·47	48·21	46·59	46·02	46·86	49·07	51·98	55·34	56·92	56·87	55·34	53·32
10	50·37	48·20	46·58	45·99	46·91	49·19	52·15	55·46	56·90	56·75	55·21	53·19

(II.)—Readings of a Thermometer whose bulb is sunk to the depth of 12·8 feet (12 French feet) below the surface of the soil, at Noon on every Day of the Year—concluded.

1900.												
Days of the Month.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.
d	°	°	°	°	°	°	°	°	°	°	°	°
11	50·26	48·12	46·57	45·96	47·00	49·31	52·23	55·60	56·91	56·70	55·14	53·14
12	50·17	48·07	46·56	45·95	47·07	49·32	52·31	55·73	56·92	56·67	55·13	53·10
13	50·07	47·98	46·56	45·91	47·12	49·40	52·40	55·85	56·92	56·68	55·11	53·02
14	50·00	47·94	46·55	45·91	47·20	49·49	52·45	55·89	56·92	56·63	55·06	52·94
15	49·97	47·72	46·54	45·91	47·29	49·59	52·53	55·98	56·91	56·59	55·00	52·90
16	49·90	47·56	46·51	45·88	47·38	49·66	52·68	56·02	56·95	56·56	54·93	52·80
17	49·80	47·47	46·49	45·87	47·46	49·79	52·70	56·07	56·94	56·59	54·88	52·76
18	49·73	47·38	46·45	45·90	47·53	49·88	52·80	56·11	56·91	56·53	54·81	52·71
19	49·66	47·32	46·42	45·92	47·60	49·98	52·91	56·13	56·90	56·50	54·75	52·62
20	49·58	47·26	46·46	45·94	47·72	50·04	53·01	56·16	56·90	56·45	54·69	52·51
21	49·52	47·16	46·45	45·97	47·78	50·17	53·05	56·17	56·93	56·39	54·63	52·39
22	49·40	47·08	46·41	46·00	47·82	50·30	53·17	56·19	56·90	56·34	54·57	52·33
23	49·35	47·02	46·40	46·01	47·89	50·40	53·27	56·19	56·90	56·33	54·50	52·25
24	49·27	46·97	46·40	46·04	47·95	50·47	53·42	56·28	56·89	56·31	54·43	52·33
25	49·13	46·92	46·38	46·07	48·01	50·60	53·59	56·30	56·91	56·26	54·39	52·36
26	49·10	46·87	46·36	46·10	48·07	50·71	53·65	56·32	56·90	56·14	54·30	52·30
27	49·01	46·80	46·32	46·13	48·16	50·83	53·80	56·36	56·87	56·10	54·20	52·24
28	48·91	46·72	46·30	46·19	48·24	50·93	53·91	56·41	56·85	56·04	54·14	52·17
29	48·86		46·29	46·26	48·31	51·07	54·02	56·51	56·85	56·04	54·08	52·11
30	48·80		46·24	46·29	48·36	51·20	54·13	56·56	56·85	55·97	53·98	52·10
31	48·75		46·25		48·42		54·29	56·65		55·97		51·99
Means	49·92	47·74	46·48	46·04	47·38	49·71	52·69	55·77	56·86	56·52	54·94	52·86

The mean of the twelve monthly values is 51°·41.

(III.)—Readings of a Thermometer whose bulb is sunk to the depth of 6·4 feet (6 French feet) below the surface of the soil, at Noon on every Day of the Year.

1900.												
Days of the Month.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.
d	°	°	°	°	°	°	°	°	°	°	°	°
1	47·21	46·00	44·43	44·23	47·69	51·39	55·94	61·42	60·63	59·13	55·25	51·90
2	47·19	45·92	44·66	44·20	47·79	51·52	56·01	61·48	60·52	59·08	55·12	51·79
3	47·09	45·84	44·83	44·16	47·88	51·70	56·10	61·55	60·52	58·93	55·07	51·70
4	47·02	45·70	44·89	44·10	48·02	51·77	56·19	61·60	60·47	58·90	55·01	51·64
5	47·01	45·59	44·95	44·10	48·19	51·82	56·27	61·53	60·43	58·77	55·00	51·53
6	47·02	45·40	44·95	44·11	48·33	51·94	56·35	61·50	60·35	58·69	55·00	51·38
7	47·01	45·20	44·92	44·21	48·49	52·10	56·43	61·43	60·24	58·56	54·96	51·29
8	46·99	45·01	44·90	44·29	48·70	52·24	56·57	61·28	60·08	58·46	54·94	51·32
9	46·93	44·90	44·86	44·37	48·89	52·43	56·67	61·12	60·03	58·38	54·90	51·33
10	46·86	44·81	44·83	44·45	49·13	52·65	56·82	60·98	59·93	58·18	54·84	51·30
11	46·82	44·63	44·80	44·53	49·34	52·88	56·91	60·91	59·82	58·09	54·76	51·31
12	46·79	44·50	44·77	44·64	49·51	52·99	56·99	60·82	59·78	58·03	54·69	51·32
13	46·72	44·32	44·78	44·71	49·60	53·20	57·12	60·78	59·76	58·03	54·59	51·29
14	46·61	44·18	44·80	44·88	49·69	53·48	57·23	60·61	59·67	57·91	54·37	51·23
15	46·57	43·93	44·82	45·04	49·76	53·79	57·49	60·47	59·61	57·79	54·19	51·26

(III.)—Readings of a Thermometer whose bulb is sunk to the depth of 6·4 feet (6 French feet) below the surface of the soil, at Noon on every Day of the Year—concluded.

1900.												
Days of the Month	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.
d	°	°	°	°	°	°	°	°	°	°	°	°
16	46·43	...	44·84	45·19	49·80	54·04	57·80	60·50	59·58	57·66	54·02	51·22
17	46·27	...	44·87	45·37	49·81	54·30	57·95	60·53	59·53	57·57	53·88	51·24
18	46·10	...	44·86	45·47	49·82	54·50	58·22	60·60	59·50	57·33	53·74	51·21
19	45·99	...	44·87	45·73	49·85	54·70	58·52	60·62	59·44	57·13	53·59	51·13
20	45·91	...	44·85	45·87	49·97	54·83	58·80	60·61	59·55	56·93	53·45	51·09
21	45·80	...	44·73	46·02	50·02	55·00	59·00	60·77	59·60	56·78	53·31	51·00
22	45·79	...	44·67	46·18	50·08	55·21	59·30	60·81	59·57	56·61	53·14	50·90
23	45·76	...	44·60	46·37	50·18	55·38	59·61	60·84	59·53	56·51	52·97	50·82
24	45·78	...	44·55	46·59	50·29	55·50	59·95	61·00	59·50	56·38	52·80	50·73
25	45·80	...	44·55	46·81	50·47	55·62	60·27	61·01	59·47	56·19	52·69	50·68
26	45·90	43·74	44·54	47·04	50·57	55·73	60·41	60·99	59·45	55·95	52·50	50·54
27	45·99	43·96	44·53	47·25	50·71	55·82	60·69	60·92	59·37	55·85	52·32	50·40
28	46·02	44·20	44·50	47·40	50·82	55·87	61·02	60·90	59·36	55·72	52·20	50·28
29	46·11		44·46	47·52	50·94	55·96	61·16	60·90	59·30	55·65	52·09	50·19
30	46·11		44·36	47·60	51·08	55·93	61·30	60·81	59·22	55·47	51·99	50·09
31	46·06		44·32		51·22		61·37	60·79		55·40		50·06
Means	46·44	...	44·72	45·41	49·57	53·81	58·21	60·97	59·79	57·42	53·91	51·07

At temperatures below 43°·60 the spirit of this thermometer passes beyond range of the scale and descends into the capillary tube. The readings were out of range from February 16 to 25 inclusive.

(IV.)—Readings of a Thermometer whose bulb is sunk to the depth of 3·2 feet (3 French feet) below the surface of the soil, at Noon on every Day of the Year.

1900.												
Days of the Month	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.
d	°	°	°	°	°	°	°	°	°	°	°	°
1	42·63	42·10	43·49	40·47	47·35	52·43	57·69	64·91	61·15	58·42	52·61	48·31
2	42·60	41·82	43·20	40·51	47·66	52·40	57·93	64·90	61·12	58·23	52·89	48·13
3	42·89	41·50	42·75	40·54	47·89	52·41	58·12	64·48	61·08	57·91	53·10	48·02
4	43·12	41·11	42·40	40·68	48·21	52·72	58·32	64·09	60·76	57·73	53·22	47·90
5	43·30	40·80	42·22	41·12	48·44	53·00	58·29	63·52	60·38	57·32	53·24	48·11
6	43·23	40·58	42·01	41·54	48·90	53·39	58·50	63·17	60·00	57·12	53·26	48·39
7	43·04	40·32	41·85	41·75	49·61	53·70	58·63	62·61	59·71	57·00	53·27	48·62
8	43·00	39·97	41·72	41·91	50·10	53·94	58·62	62·09	59·46	57·17	53·18	48·68
9	42·98	39·67	41·70	42·09	50·27	54·16	58·54	61·76	59·59	57·28	52·91	48·62
10	42·97	39·38	41·70	42·23	50·38	54·50	58·80	61·40	59·61	57·28	52·61	48·71
11	42·90	39·05	41·71	42·48	50·34	55·07	59·09	61·23	59·62	57·30	52·13	48·69
12	42·62	38·83	41·90	43·00	50·06	55·73	59·52	61·15	59·61	57·01	51·49	48·55
13	42·36	38·57	42·00	43·40	49·91	56·49	60·21	61·27	59·46	56·69	51·08	48·69
14	41·92	38·45	42·12	43·94	49·78	56·92	60·60	61·39	59·29	56·30	51·05	48·90
15	41·46	38·19	42·12	44·31	49·50	57·02	61·10	61·57	59·28	55·88	51·03	48·89
16	41·27	37·90	42·28	44·73	49·31	57·12	61·57	61·89	59·39	55·24	50·84	48·80
17	41·33	37·70	42·30	44·91	49·26	57·32	61·91	62·01	59·67	54·80	50·59	48·65
18	41·57	38·27	41·89	44·87	49·39	57·57	62·56	62·38	59·89	54·57	50·39	48·42
19	41·61	38·67	41·35	45·02	49·61	57·83	63·07	62·62	60·00	54·52	50·10	48·21
20	41·60	39·44	41·14	45·40	49·79	57·99	63·50	62·83	60·03	54·40	49·73	48·16

(xc)

EARTH TEMPERATURE,

(IV.)—Readings of a Thermometer whose bulb is sunk to the depth of 3·2 feet (3 French feet) below the surface of the soil, at Noon on every Day of the Year—concluded.

1900.												
Days of the Month.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.
d	°	°	°	°	°	°	°	°	°	°	°	°
21	41·78	39·90	41·03	45·83	49·89	58·07	63·89	63·00	59·80	54·24	49·40	48·07
22	41·90	39·92	41·09	46·31	50·24	58·14	64·31	63·00	59·97	53·87	49·19	47·97
23	42·22	40·10	41·29	46·87	50·71	58·04	64·61	62·83	59·49	53·41	49·07	47·63
24	42·63	40·63	41·47	47·32	50·91	57·89	65·09	62·69	59·62	53·15	48·79	47·14
25	43·02	41·45	41·40	47·42	51·10	57·81	65·42	62·35	59·50	53·18	48·53	46·77
26	43·21	42·28	41·30	47·52	51·14	57·80	65·60	62·10	59·47	53·24	48·42	46·70
27	43·30	42·87	41·10	47·21	51·30	57·61	65·93	61·81	59·04	53·20	48·43	46·94
28	43·17	43·29	40·92	47·00	51·65	57·43	66·13	61·53	59·00	52·81	48·39	47·08
29	42·84		40·77	47·02	52·01	57·45	65·89	61·33	58·90	52·50	48·40	47·16
30	42·47		40·59	47·01	52·34	57·52	65·58	61·18	58·67	52·40	48·35	46·94
31	42·24		40·51		52·43		65·32	61·27		52·44		46·61
Means	42·49	40·10	41·72	44·15	49·98	55·98	61·75	62·40	59·75	55·37	50·86	48·01

The mean of the twelve monthly values is 51°05.

(V.)—Readings of a Thermometer whose bulb is sunk to the depth of 1 inch below the surface of the soil, at Noon on every Day of the Year.

1900.												
Days of the Month.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.
d	°	°	°	°	°	°	°	°	°	°	°	°
1	39·0	37·0	40·0	38·9	50·1	52·1	60·0	64·0	62·0	55·1	54·1	44·8
2	44·4	36·7	39·3	37·1	52·2	52·0	60·0	63·9	59·1	56·0	53·3	43·8
3	43·0	36·0	40·0	40·0	51·1	56·7	60·0	63·8	59·0	58·7	53·2	43·1
4	41·8	36·2	38·3	43·4	51·1	59·0	60·0	60·0	56·9	54·2	51·2	48·5
5	40·7	36·2	38·9	42·2	55·1	56·8	60·1	59·7	57·8	54·7	52·3	49·0
6	37·7	36·2	39·1	41·5	55·2	56·8	60·5	59·4	57·2	56·2	52·5	49·2
7	40·7	33·5	39·0	42·9	55·2	58·6	59·0	59·9	58·0	58·0	51·2	46·7
8	40·0	32·6	39·7	42·0	54·3	57·9	58·1	58·9	59·0	59·0	48·7	47·9
9	40·1	32·2	40·1	42·0	52·3	58·5	61·1	59·1	59·9	60·1	50·9	50·0
10	40·2	32·6	41·6	43·9	50·7	61·5	62·2	58·1	59·7	57·0	46·1	45·2
11	38·7	33·2	40·8	47·0	50·0	65·7	66·1	59·3	58·8	53·2	41·3	46·6
12	37·3	33·2	40·6	46·7	50·1	65·1	66·2	62·0	57·5	51·7	45·1	49·6
13	35·2	32·9	42·0	47·3	49·0	61·1	66·1	65·0	58·1	53·3	51·2	50·9
14	33·3	34·0	41·3	48·1	47·8	60·6	65·9	65·0	59·0	49·1	48·2	46·5
15	37·5	34·1	42·9	49·7	48·6	61·1	66·0	63·3	59·9	48·3	46·9	48·7
16	39·8	37·2	41·0	46·9	49·7	61·1	70·6	64·3	61·9	47·7	47·2	44·8
17	40·9	39·9	36·9	45·3	50·0	62·0	69·2	65·0	62·9	52·7	47·1	46·0
18	38·8	38·2	35·8	47·1	52·1	62·8	69·6	67·2	61·9	56·4	46·1	46·6
19	39·1	44·3	37·3	49·1	49·6	63·6	70·4	66·3	58·0	56·2	44·1	44·1
20	41·9	41·5	40·0	51·0	51·8	62·0	72·4	64·2	57·2	50·1	44·7	47·1
21	42·0	36·6	38·9	51·3	55·4	60·0	69·9	65·3	58·1	48·0	45·0	45·7
22	42·5	41·2	41·1	53·2	55·0	59·7	69·7	64·0	59·9	46·7	45·1	42·1
23	44·3	44·3	41·1	51·9	54·1	58·0	71·1	60·0	60·6	49·1	43·4	39·6
24	45·4	46·3	39·2	50·7	53·1	65·0	72·6	62·1	61·3	51·2	43·6	40·0
25	47·5	47·1	38·5	48·4	52·9	57·0	73·6	61·0	56·1	53·4	46·3	45·7

(V.)—Readings of a Thermometer whose bulb is sunk to the depth of 1 inch below the surface of the soil, at Noon on every Day of the Year—concluded.

1900.												
Days of the Month.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.
d	°	°	°	°	°	°	°	°	°	°	°	°
26	44.0	46.3	38.0	46.1	51.6	57.1	71.8	60.1	56.9	49.5	45.9	47.0
27	41.0	46.3	37.5	46.7	54.8	57.6	70.9	59.1	58.6	48.0	45.1	47.3
28	37.1	44.2	38.3	47.0	55.2	58.0	67.2	59.0	58.1	46.7	45.1	45.7
29	38.2		37.2	48.0	55.7	60.3	66.1	61.5	56.6	51.2	45.4	42.2
30	38.8		37.3	50.6	54.0	59.8	65.0	61.1	56.7	50.0	44.9	44.5
31	38.8		38.4		53.7		66.1	61.4		53.3		44.0
Means	40.3	38.2	39.4	46.2	52.3	59.6	66.0	62.0	58.9	52.7	47.5	45.9

The mean of the twelve monthly values is 50°75.

(VI.)—Readings of a Thermometer within the case covering the deep-sunk Thermometers, whose bulb is placed on a level with their scales, at Noon on every Day of the Year.

1900.												
Days of the Month.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.
d	°	°	°	°	°	°	°	°	°	°	°	°
1	39.3	34.0	39.2	43.7	56.5	51.3	65.0	61.2	64.9	57.6	59.2	43.6
2	51.2	36.0	39.4	43.2	62.7	57.3	63.0	67.5	58.0	60.3	53.5	42.3
3	44.8	34.4	40.7	47.4	56.2	64.9	66.2	64.9	61.6	54.4	54.9	44.3
4	41.3	34.8	37.2	51.2	59.0	73.1	66.9	62.1	60.6	60.3	51.0	53.4
5	39.6	34.9	38.8	44.2	67.4	61.7	63.3	59.8	63.7	59.4	53.2	50.6
6	38.1	36.2	38.9	48.5	61.9	63.0	63.4	60.1	63.6	64.3	53.0	51.4
7	40.5	30.3	39.9	47.8	60.5	66.2	60.5	63.2	65.2	65.5	50.2	47.7
8	43.3	29.3	40.3	43.2	60.3	61.0	62.8	59.1	60.8	69.5	49.0	51.3
9	44.0	31.4	43.3	46.6	52.2	66.1	67.3	58.9	68.2	71.7	53.2	53.6
10	41.7	33.2	49.3	51.6	48.3	75.8	75.0	58.3	66.3	57.1	44.2	43.6
11	38.7	33.2	48.0	56.5	56.3	83.3	82.7	65.4	64.2	53.7	39.2	47.1
12	35.4	35.0	45.1	54.8	52.9	73.2	75.3	72.2	64.0	50.8	47.0	54.3
13	33.5	31.3	44.6	53.2	48.1	61.5	78.0	80.0	67.5	55.8	56.2	52.2
14	32.2	35.0	47.5	56.4	49.9	65.1	73.0	75.6	63.9	48.1	49.3	47.9
15	42.6	34.4	46.6	55.6	52.0	66.0	75.4	69.2	66.2	49.9	49.8	51.2
16	43.1	42.8	40.0	51.2	55.8	66.5	88.0	73.2	71.7	47.8	46.9	44.4
17	46.8	46.4	34.6	48.5	56.0	67.1	79.1	73.5	72.0	58.7	47.3	45.7
18	41.4	43.4	39.3	56.9	54.9	67.0	82.0	80.1	66.9	53.2	46.3	50.3
19	43.8	50.7	40.9	59.3	52.5	73.1	85.6	75.8	59.1	52.6	43.6	42.4
20	43.7	45.6	47.5	65.2	59.9	67.2	86.2	68.5	65.5	49.0	44.2	51.0
21	38.2	38.2	43.0	67.4	66.1	61.1	75.4	72.5	69.0	47.2	44.2	45.9
22	44.9	49.4	43.5	66.0	57.8	62.7	75.2	67.2	65.1	46.4	43.7	38.6
23	48.8	51.4	40.7	57.6	61.4	60.8	75.5	58.4	66.1	51.5	44.4	32.3
24	49.8	54.4	39.2	59.4	57.2	64.6	85.2	68.6	68.6	55.7	44.1	35.8
25	46.5	53.3	39.5	45.0	58.2	56.5	90.0	64.0	55.9	55.0	49.2	50.3
26	48.2	50.4	37.8	52.2	55.2	57.8	77.6	63.0	63.3	46.1	47.6	49.2
27	40.4	48.3	36.7	51.7	67.3	61.9	78.1	58.6	60.4	50.4	44.3	48.8
28	34.5	42.3	40.0	52.1	64.5	61.2	70.0	59.4	63.2	47.9	45.6	44.6
29	38.1		40.4	56.1	63.8	69.4	71.7	68.0	62.1	53.4	45.8	39.8
30	37.9		43.1	55.7	56.3	63.8	70.2	64.7	60.3	50.7	43.8	40.1
31	38.2		44.6		54.9		72.8	71.9		61.2		43.1
Means	41.6	40.0	41.6	52.9	57.6	65.0	74.2	66.6	64.3	55.0	48.1	46.3

The mean of the twelve monthly values is 54°43.

ABSTRACT of the CHANGES of the DIRECTION of the WIND—continued.

Table with 18 columns: Greenwich Civil Time (From/To), Change of Direction (From/To), Amount of Motion (Direct/Retrograde), and corresponding data for April, April-cont, and May. Includes a 'Sums' row at the end of the April section.

ABSTRACT of the CHANGES of the DIRECTION of the WIND—continued.

Table with columns for Greenwich Civil Time, Change of Direction, Amount of Motion, and sub-columns for From/To directions and Direct/Retrograde amounts. It is organized into sections for July and August, with a 'Sums' row at the bottom of the July section.

ABSTRACT of the CHANGES of the DIRECTION of the WIND—continued.

Table with 18 columns: Greenwich Civil Time (From/To), Change of Direction (From/To), Amount of Motion (Direct/Retrograde), and similar for a second set of data. Includes sub-sections for Aug.—cont. and Sept.—cont. with specific wind direction and motion data.

ABSTRACT of the CHANGES of the DIRECTION of the WIND—continued.

Table with columns for Greenwich Civil Time, Change of Direction, Amount of Motion, and wind direction (From/To). It is divided into three sections: July, July-cont., and August. Each section includes hourly data with wind direction changes and motion amounts.

ABSTRACT of the CHANGES of the DIRECTION of the WIND—continued.

Table with columns for Greenwich Civil Time, Change of Direction, Amount of Motion, and sub-columns for From/To directions and Direct/Retrograde amounts. It is divided into sections for August (cont.) and September (cont.), with a 'Sums' row at the end of the August section.

ABSTRACT of the CHANGES of the DIRECTION of the WIND—continued.

Table with columns for Greenwich Civil Time, Change of Direction, Amount of Motion, and sub-columns for From/To directions and Direct/Retrograde motion. It is divided into sections for Sept., Oct., and November, with a 'Sums' row at the end of each section.

ABSTRACT of the CHANGES of the DIRECTION of the WIND—continued.

Table with columns: Greenwich Civil Time (From/To), Change of Direction (From/To), Amount of Motion (Direct/Retrograde), and sub-sections for Nov., Dec., and Dec.—cont. with specific wind direction and motion data.

ABSTRACT of the CHANGES of the DIRECTION of the WIND—*concluded*.

Excess of Motion in each Month.

	Direct.	Retrograde.		Direct.	Retrograde.
	°	°		°	°
1900.			1900.		
January	1327½		July	720	
February		405	August	1822½	
March	112½		September.....	1912½	
April	1192½		October.....	202½	
May	1215		November.....		180
June.....		157½	December.....		337½

The whole excess of direct motion for the year was 7425°.

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

Hour ending	1900.												Mean for the Year.
	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	
h.	Miles.	Miles.	Miles.	Miles.	Miles.	Miles.	Miles.	Miles.	Miles.	Miles.	Miles.	Miles.	Miles.
1	13·0	12·6	10·0	10·8	10·1	9·7	8·6	10·6	7·7	11·1	10·3	17·2	11·0
2	12·7	13·0	10·0	10·1	9·4	8·9	8·0	9·8	7·9	10·7	10·7	16·4	10·6
3	12·6	13·0	10·0	10·4	9·3	9·1	7·6	9·8	7·0	10·7	11·1	16·1	10·6
4	12·7	13·0	9·8	9·6	9·0	9·6	7·3	9·7	7·2	10·7	10·9	16·3	10·5
5	12·9	12·4	9·5	9·1	9·4	9·3	7·5	9·6	7·1	11·0	11·2	16·1	10·4
6	12·8	12·5	9·1	9·6	9·9	9·6	7·6	10·5	7·9	10·6	11·3	16·8	10·7
7	12·7	12·7	9·5	10·0	11·1	11·0	8·5	10·5	7·5	11·0	11·5	16·3	11·0
8	12·5	12·9	9·3	10·8	12·2	11·0	8·6	10·4	7·7	12·1	11·5	16·2	11·3
9	12·1	12·9	10·1	11·3	13·0	11·7	9·8	10·7	8·1	12·8	11·7	15·8	11·7
10	13·4	14·4	10·8	12·1	14·2	12·9	10·2	12·0	9·2	14·2	12·2	16·1	12·6
11	13·6	13·7	11·6	12·6	14·0	12·7	10·5	11·9	9·9	15·1	12·7	16·3	12·9
Noon.	14·8	13·6	12·1	15·0	15·2	12·9	10·9	11·6	10·4	15·8	12·9	16·7	13·5
13 ^h .	16·2	15·6	13·0	14·6	15·1	14·0	11·5	13·3	11·3	16·4	13·1	16·5	14·2
14	15·5	16·4	12·6	15·4	14·7	15·3	12·5	13·9	11·5	15·7	13·9	16·3	14·5
15	15·5	16·0	12·0	15·5	14·6	15·2	12·2	14·8	11·2	15·1	14·1	15·3	14·3
16	15·2	15·0	12·3	15·5	14·3	14·9	12·3	14·8	11·2	14·6	13·1	14·4	14·0
17	14·9	14·0	12·1	16·1	14·4	15·3	12·5	14·0	10·5	13·7	13·0	14·9	13·8
18	15·5	13·6	12·1	13·9	13·5	14·1	11·8	14·1	9·7	12·4	12·4	15·7	13·2
19	15·6	13·4	11·7	13·3	13·1	13·4	11·0	13·4	9·2	12·9	12·7	15·8	13·0
20	15·5	12·9	11·2	12·7	11·4	12·3	11·0	11·8	8·8	12·4	12·3	16·5	12·4
21	14·7	13·1	11·2	12·2	10·6	11·3	10·1	11·6	9·3	12·4	12·8	16·5	12·1
22	14·0	13·5	10·4	12·0	10·4	10·6	9·4	10·7	8·9	11·9	12·0	16·3	11·7
23	13·9	13·5	10·3	12·0	10·6	10·2	8·8	11·2	8·3	11·6	11·3	17·0	11·6
Midnight.	13·4	13·0	9·3	10·6	10·1	9·5	8·2	10·6	7·5	11·6	10·5	17·0	10·9
Means.....	14·0	13·6	10·8	12·3	12·1	11·9	9·8	11·7	9·0	12·8	12·0	16·2	12·2
Greatest Hourly Measures.....	35	41	27	48	38	29	26	48	30	35	32	50	...
Least Hourly Measures.....	0	0	1	1	1	0	0	0	0	2	1	0	...

MEAN ELECTRICAL POTENTIAL of the ATMOSPHERE, from THOMSON'S ELECTROMETER, for each CIVIL DAY.

(Each result is the mean of Twenty-four Hourly Ordinates from the Photographic Register. The scale employed is arbitrary : the sign + indicates positive potential.)

1900.												
Days of the Month.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.
d												
1	+ 263	+ 508	+ 473	+ 722	+ 888	+ 390	+ 240	+ 221	+ 240	+ 402	...	+ 438
2	+ 159	+ 427	+ 358	+ 1058	+ 659	+ 289	+ 239	+ 250	+ 348	+ 323	...	+ 491
3	+ 147	+ 243	+ 375	+ 42	+ 486	+ 172	+ 368	+ 63	+ 477	+ 650	...	+ 400
4	+ 204	+ 292	+ 317	+ 516	+ 491	+ 245	+ 446	+ 601	+ 516	+ 294	...	+ 440
5	+ 406	+ 287	+ 451	+ 516	+ 434	+ 548	...	+ 320	+ 520	+ 253	...	+ 325
6	+ 405	+ 500	+ 511	+ 844	+ 294	+ 549	...	+ 186	+ 551	+ 222	...	+ 345
7	+ 105	+ 1125	+ 741	+ 367	+ 483	+ 278	...	+ 190	+ 557	+ 208	...	+ 467
8	+ 466	+ 1325	+ 547	+ 670	+ 904	+ 320	...	+ 328	+ 335	+ 200	...	+ 275
9	+ 239	+ 1041	+ 343	+ 774	+ 466	+ 373	...	+ 165	+ 288	+ 170	...	+ 285
10	+ 569	+ 681	+ 248	+ 986	+ 584	+ 234	...	+ 340	+ 513	+ 395	+ 1081	+ 648
11	+ 966	+ 528	+ 223	+ 295	+ 790	+ 291	+ 269	+ 324	+ 540	+ 326	+ 976	+ 290
12	+ 653	+ 871	+ 466	+ 487	+ 639	+ 472	+ 256	+ 322	+ 481	+ 343	+ 557	+ 270
13	+ 765	+ 753	+ 574	+ 475	+ 546	+ 308	+ 361	+ 376	+ 364	+ 347	+ 360	+ 359
14	+ 469	+ 458	+ 673	+ 506	+ 869	+ 231	+ 375	+ 385	+ 308	+ 626	...	+ 462
15	+ 295	- 98	+ 459	+ 358	+ 963	+ 168	+ 351	+ 368	+ 152	+ 871	...	+ 356
16	+ 445	+ 284	+ 748	+ 454	+ 1002	+ 275	+ 283	+ 338	+ 90	+ 837	+ 298	+ 590
17	+ 330	+ 97	+ 804	+ 563	+ 921	+ 257	+ 458	+ 285	+ 183	+ 393	+ 521	+ 510
18	+ 659	+ 277	+ 689	+ 745	+ 407	+ 465	+ 296	+ 227	+ 242	+ 485	+ 651	+ 397
19	+ 347	+ 19	+ 499	+ 394	+ 1003	+ 354	+ 303	+ 253	+ 348	+ 622	+ 953	+ 492
20	+ 412	+ 210	+ 510	+ 498	+ 544	+ 263	+ 268	+ 420	+ 373	+ 661	+ 545	+ 174
21	+ 582	+ 672	+ 553	+ 658	+ 510	+ 222	+ 327	+ 318	+ 493	+ 682	+ 591	+ 449
22	+ 243	+ 241	+ 315	+ 631	+ 286	+ 244	+ 305	+ 267	+ 320	+ 849	+ 646	+ 923
23	+ 253	+ 154	+ 407	+ 575	+ 302	+ 365	+ 435	+ 119	+ 232	+ 338	+ 728	...
24	+ 177	...	+ 570	+ 982	+ 348	+ 283	+ 264	+ 278	+ 216	+ 214	+ 590	...
25	+ 529	...	+ 672	+ 1068	+ 840	+ 169	+ 310	+ 339	+ 568	+ 199	+ 351	+ 261
26	+ 317	...	+ 1099	+ 1129	+ 454	+ 445	+ 568	+ 377	+ 417	+ 314	+ 618	+ 328
27	+ 580	...	+ 1078	+ 1133	+ 349	+ 626	+ 234	+ 426	+ 188	+ 469	+ 703	+ 125
28	+ 215	...	+ 526	+ 907	+ 550	+ 225	+ 265	+ 275	+ 233	+ 347	+ 259	+ 244
29	+ 221	...	+ 918	+ 658	+ 901	+ 288	+ 257	+ 254	+ 284	+ 276	+ 250	+ 809
30	+ 213	...	+ 728	+ 280	+ 832	+ 268	+ 291	+ 392	+ 191	- 27	+ 668	+ 142
31	+ 364	...	+ 720	...	+ 742	...	...	+ 355	...	+ 162	...	+ 308
Means	+ 387	+ 474	+ 568	+ 643	+ 629	+ 321	+ 324	+ 302	+ 352	+ 402	+ 597	+ 400

MONTHLY MEAN ELECTRICAL POTENTIAL of the ATMOSPHERE, from THOMSON'S ELECTROMETER, at every HOUR of the DAY.

(The results depend on the Photographic Register, using all days of complete record. The scale employed is arbitrary: the sign + indicates positive potential.)

Hour, Greenwich Civil Time.	1900.												Yearly Means.	
	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.		
Midnight.	+ 421	+ 483	+ 486	+ 670	+ 651	+ 388	+ 364	+ 332	+ 355	+ 429	+ 646	+ 427	+ 471	
1 ^h .	+ 437	+ 465	+ 454	+ 625	+ 619	+ 354	+ 353	+ 320	+ 332	+ 394	+ 538	+ 359	+ 437	
2	+ 385	+ 410	+ 416	+ 515	+ 580	+ 321	+ 326	+ 292	+ 311	+ 339	+ 514	+ 262	+ 389	
3	+ 329	+ 394	+ 407	+ 560	+ 518	+ 283	+ 299	+ 268	+ 289	+ 312	+ 439	+ 258	+ 363	
4	+ 321	+ 402	+ 437	+ 574	+ 481	+ 275	+ 311	+ 257	+ 278	+ 292	+ 436	+ 236	+ 358	
5	+ 300	+ 407	+ 435	+ 593	+ 473	+ 287	+ 325	+ 254	+ 265	+ 282	+ 479	+ 267	+ 364	
6	+ 253	+ 394	+ 415	+ 637	+ 520	+ 284	+ 344	+ 268	+ 254	+ 279	+ 504	+ 285	+ 370	
7	+ 255	+ 401	+ 423	+ 696	+ 646	+ 271	+ 355	+ 244	+ 261	+ 307	+ 559	+ 300	+ 393	
8	+ 264	+ 423	+ 534	+ 739	+ 678	+ 279	+ 342	+ 233	+ 265	+ 334	+ 572	+ 327	+ 416	
9	+ 317	+ 440	+ 589	+ 727	+ 653	+ 334	+ 354	+ 270	+ 305	+ 378	+ 553	+ 382	+ 442	
10	+ 432	+ 527	+ 715	+ 762	+ 681	+ 413	+ 412	+ 358	+ 389	+ 464	+ 546	+ 479	+ 515	
11	+ 462	+ 534	+ 729	+ 740	+ 665	+ 254	+ 371	+ 344	+ 391	+ 436	+ 628	+ 467	+ 502	
Noon.	+ 475	+ 506	+ 702	+ 584	+ 626	+ 308	+ 292	+ 265	+ 359	+ 382	+ 610	+ 437	+ 462	
1 ^h .	+ 448	+ 494	+ 655	+ 597	+ 559	+ 300	+ 227	+ 246	+ 325	+ 393	+ 587	+ 441	+ 439	
14	+ 465	+ 491	+ 648	+ 609	+ 519	+ 255	+ 202	+ 247	+ 311	+ 331	+ 567	+ 447	+ 424	
15	+ 471	+ 526	+ 672	+ 571	+ 606	+ 300	+ 232	+ 256	+ 338	+ 366	+ 639	+ 446	+ 452	
16	+ 478	+ 562	+ 685	+ 651	+ 680	+ 255	+ 271	+ 295	+ 398	+ 467	+ 635	+ 487	+ 489	
17	+ 415	+ 526	+ 552	+ 679	+ 720	+ 210	+ 184	+ 262	+ 436	+ 511	+ 649	+ 476	+ 468	
18	+ 366	+ 513	+ 594	+ 624	+ 726	+ 310	+ 315	+ 334	+ 449	+ 517	+ 639	+ 494	+ 490	
19	+ 388	+ 490	+ 629	+ 700	+ 744	+ 341	+ 353	+ 352	+ 442	+ 500	+ 720	+ 484	+ 512	
20	+ 388	+ 452	+ 625	+ 687	+ 648	+ 371	+ 355	+ 372	+ 448	+ 478	+ 750	+ 462	+ 503	
21	+ 420	+ 520	+ 616	+ 664	+ 675	+ 430	+ 446	+ 394	+ 443	+ 495	+ 734	+ 457	+ 525	
22	+ 397	+ 532	+ 640	+ 632	+ 719	+ 452	+ 373	+ 409	+ 417	+ 493	+ 715	+ 462	+ 520	
23	+ 403	+ 476	+ 564	+ 599	+ 698	+ 419	+ 364	+ 375	+ 395	+ 462	+ 675	+ 459	+ 491	
24	+ 422	+ 467	+ 511	+ 655	+ 661	+ 377	+ 363	+ 338	+ 351	+ 425	+ 632	+ 438	+ 470	
Means	0 ^h -23 ^h .	+ 387	+ 474	+ 568	+ 643	+ 629	+ 321	+ 324	+ 302	+ 352	+ 402	+ 597	+ 400	+ 450
	1 ^h -34 ^h .	+ 387	+ 473	+ 569	+ 642	+ 629	+ 320	+ 324	+ 302	+ 352	+ 402	+ 597	+ 401	+ 450
Number of Days employed.	31	23	31	30	31	30	24	31	30	31	19	29	...	

MONTHLY MEAN ELECTRICAL POTENTIAL of the ATMOSPHERE, from THOMSON'S ELECTROMETER, on RAINY DAYS,
at every HOUR of the DAY.

(The results depend on the Photographic Register, using all days on which the rainfall amounted to or exceeded 0ⁱⁿ.020.
The scale employed is arbitrary: the sign + indicates positive potential.)

Hour, Greenwich Civil Time.	1900.												Yearly Means.	
	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.		
Midnight.	+ 354	+ 377	+ 427	+ 620	+ 527	+ 417	+ 377	+ 362	+ 248	+ 436	+ 566	+ 344	+ 421	
1 ^h .	+ 389	+ 373	+ 368	+ 484	+ 512	+ 381	+ 360	+ 335	+ 220	+ 375	+ 497	+ 255	+ 379	
2	+ 338	+ 307	+ 283	+ 135	+ 493	+ 365	+ 327	+ 286	+ 212	+ 290	+ 428	+ 105	+ 297	
3	+ 287	+ 289	+ 293	+ 384	+ 390	+ 280	+ 247	+ 253	+ 188	+ 255	+ 341	+ 163	+ 281	
4	+ 265	+ 288	+ 485	+ 385	+ 275	+ 269	+ 273	+ 243	+ 180	+ 237	+ 312	+ 149	+ 280	
5	+ 258	+ 302	+ 490	+ 383	+ 145	+ 312	+ 277	+ 221	+ 166	+ 238	+ 354	+ 206	+ 279	
6	+ 225	+ 299	+ 248	+ 444	+ 73	+ 286	+ 297	+ 243	+ 148	+ 199	+ 393	+ 239	+ 258	
7	+ 219	+ 312	+ 125	+ 505	+ 305	+ 201	+ 313	+ 173	+ 170	+ 223	+ 421	+ 253	+ 268	
8	+ 207	+ 329	+ 598	+ 422	+ 320	+ 225	+ 327	+ 170	+ 140	+ 261	+ 394	+ 285	+ 306	
9	+ 247	+ 326	+ 685	+ 235	+ 220	+ 347	+ 317	+ 229	+ 130	+ 284	+ 364	+ 332	+ 310	
10	+ 349	+ 393	+ 893	+ 364	+ 147	+ 422	+ 390	+ 318	+ 160	+ 322	+ 224	+ 438	+ 368	
11	+ 384	+ 378	+ 883	+ 621	+ 323	+ 129	+ 340	+ 327	+ 178	+ 291	+ 380	+ 368	+ 384	
Noon.	+ 403	+ 294	+ 805	+ 305	+ 273	+ 309	+ 207	+ 145	+ 128	+ 250	+ 346	+ 347	+ 318	
13 ^h .	+ 388	+ 295	+ 733	+ 452	+ 268	+ 339	+ 37	+ 113	+ 90	+ 263	+ 301	+ 340	+ 302	
14	+ 418	+ 290	+ 697	+ 585	+ 122	+ 249	+ 90	+ 201	+ 120	+ 236	+ 276	+ 347	+ 303	
15	+ 392	+ 322	+ 582	+ 483	+ 330	+ 344	+ 157	+ 181	+ 154	+ 74	+ 431	+ 424	+ 323	
16	+ 358	+ 356	+ 718	+ 620	+ 407	+ 234	+ 377	+ 218	+ 226	+ 331	+ 398	+ 443	+ 390	
17	+ 299	+ 315	+ 667	+ 562	+ 457	+ 94	- 437	+ 117	+ 226	+ 355	+ 400	+ 392	+ 287	
18	+ 294	+ 291	+ 620	+ 281	+ 482	+ 245	+ 530	+ 257	+ 222	+ 371	+ 369	+ 404	+ 364	
19	+ 308	+ 224	+ 718	+ 540	+ 853	+ 296	+ 510	+ 253	+ 210	+ 414	+ 553	+ 399	+ 440	
20	+ 306	+ 173	+ 560	+ 601	+ 422	+ 327	+ 367	+ 260	+ 222	+ 414	+ 610	+ 398	+ 388	
21	+ 328	+ 279	+ 538	+ 518	+ 395	+ 381	+ 770	+ 268	+ 242	+ 442	+ 580	+ 374	+ 426	
22	+ 307	+ 276	+ 548	+ 357	+ 515	+ 421	+ 87	+ 329	+ 218	+ 416	+ 551	+ 388	+ 368	
23	+ 346	+ 238	+ 352	+ 470	+ 473	+ 379	+ 193	+ 316	+ 240	+ 386	+ 536	+ 433	+ 364	
24	+ 406	+ 299	+ 362	+ 641	+ 493	+ 364	+ 327	+ 278	+ 280	+ 349	+ 512	+ 425	+ 395	
Means {	0 ^h .-23 ^h .	+ 320	+ 305	+ 555	+ 448	+ 364	+ 302	+ 280	+ 242	+ 185	+ 307	+ 418	+ 326	+ 338
	1 ^h .-24 ^h .	+ 322	+ 302	+ 552	+ 449	+ 362	+ 300	+ 278	+ 239	+ 186	+ 303	+ 416	+ 329	+ 337
Number of Days employed.	19	14	6	8	6	14	3	12	5	8	9	13	...	

MONTHLY MEAN ELECTRICAL POTENTIAL of the ATMOSPHERE, from THOMSON'S ELECTROMETER, on NON-RAINY DAYS,
at every HOUR of the DAY.

(The results depend on the Photographic Register, using only those days on which no rainfall was recorded. The scale employed is arbitrary: the sign + indicates positive potential.)

Hour, Greenwich Civil Time.	1900.												Yearly Means.	
	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December		
Midnight.	+ 567	+ 649	+ 510	+ 740	+ 701	+ 371	+ 365	+ 326	+ 401	+ 420	+ 760	+ 577	+ 532	
1 ^h .	+ 581	+ 608	+ 471	+ 718	+ 668	+ 338	+ 355	+ 323	+ 367	+ 403	+ 557	+ 507	+ 491	
2	+ 526	+ 570	+ 454	+ 679	+ 636	+ 302	+ 330	+ 308	+ 332	+ 366	+ 633	+ 439	+ 465	
3	+ 489	+ 557	+ 451	+ 657	+ 576	+ 319	+ 317	+ 284	+ 303	+ 340	+ 582	+ 400	+ 440	
4	+ 480	+ 580	+ 445	+ 672	+ 551	+ 314	+ 316	+ 272	+ 289	+ 334	+ 610	+ 397	+ 438	
5	+ 406	+ 570	+ 454	+ 721	+ 565	+ 289	+ 333	+ 281	+ 282	+ 315	+ 662	+ 436	+ 443	
6	+ 320	+ 541	+ 478	+ 744	+ 656	+ 298	+ 363	+ 277	+ 271	+ 311	+ 742	+ 459	+ 455	
7	+ 322	+ 540	+ 512	+ 807	+ 765	+ 345	+ 374	+ 276	+ 277	+ 335	+ 832	+ 449	+ 486	
8	+ 366	+ 570	+ 538	+ 901	+ 805	+ 340	+ 353	+ 262	+ 290	+ 359	+ 847	+ 480	+ 509	
9	+ 439	+ 618	+ 575	+ 951	+ 792	+ 324	+ 367	+ 283	+ 348	+ 415	+ 822	+ 549	+ 540	
10	+ 580	+ 737	+ 681	+ 935	+ 844	+ 405	+ 423	+ 352	+ 445	+ 516	+ 908	+ 650	+ 623	
11	+ 613	+ 778	+ 696	+ 772	+ 767	+ 337	+ 380	+ 345	+ 447	+ 489	+ 922	+ 676	+ 602	
Noon.	+ 618	+ 836	+ 648	+ 669	+ 723	+ 279	+ 311	+ 329	+ 418	+ 399	+ 852	+ 639	+ 560	
13 ^h .	+ 559	+ 804	+ 603	+ 616	+ 652	+ 253	+ 259	+ 318	+ 379	+ 419	+ 818	+ 684	+ 530	
14	+ 531	+ 804	+ 608	+ 578	+ 647	+ 252	+ 229	+ 269	+ 360	+ 424	+ 787	+ 680	+ 514	
15	+ 568	+ 842	+ 653	+ 584	+ 700	+ 252	+ 229	+ 296	+ 392	+ 448	+ 763	+ 641	+ 531	
16	+ 629	+ 881	+ 650	+ 623	+ 760	+ 269	+ 252	+ 336	+ 460	+ 509	+ 798	+ 631	+ 566	
17	+ 591	+ 854	+ 654	+ 676	+ 803	+ 319	+ 281	+ 341	+ 508	+ 585	+ 870	+ 624	+ 592	
18	+ 549	+ 859	+ 649	+ 706	+ 810	+ 367	+ 309	+ 369	+ 523	+ 586	+ 887	+ 661	+ 606	
19	+ 500	+ 904	+ 634	+ 713	+ 729	+ 367	+ 351	+ 408	+ 508	+ 549	+ 848	+ 616	+ 594	
20	+ 516	+ 886	+ 629	+ 683	+ 720	+ 393	+ 375	+ 436	+ 518	+ 535	+ 865	+ 584	+ 595	
21	+ 577	+ 893	+ 639	+ 689	+ 770	+ 496	+ 411	+ 456	+ 514	+ 539	+ 890	+ 623	+ 625	
22	+ 553	+ 930	+ 661	+ 716	+ 778	+ 519	+ 419	+ 444	+ 489	+ 529	+ 873	+ 607	+ 627	
23	+ 514	+ 846	+ 604	+ 693	+ 739	+ 476	+ 390	+ 397	+ 457	+ 484	+ 792	+ 544	+ 578	
24	+ 429	+ 728	+ 527	+ 642	+ 669	+ 399	+ 369	+ 363	+ 389	+ 459	+ 708	+ 496	+ 515	
Means	0 ^h -23 ^h .	+ 516	+ 736	+ 579	+ 718	+ 715	+ 343	+ 337	+ 333	+ 399	+ 442	+ 788	+ 565	+ 539
	1 ^h -24 ^h .	+ 511	+ 739	+ 580	+ 714	+ 714	+ 344	+ 337	+ 334	+ 399	+ 443	+ 786	+ 561	+ 539
Number of Days employed	9	9	17	17	20	11	19	16	20	14	6	7	...	

AMOUNT OF RAIN COLLECTED IN EACH MONTH OF THE YEAR 1900.

AMOUNT OF RAIN COLLECTED in each MONTH of the YEAR 1900.									
MONTH, 1900.	Number of Rainy Days.	Monthly Amount of Rain collected in each Gauge.							
		Self- registering Gauge of Osler's Anemometer.	Second Gauge at Osler's Anemometer.	On the roof of the Octagon Room.	On the roof of the Magnetic Observatory.	On the roof of the Photographic Thermometer Shed.	Gauges partly sunk in the ground.		
							In Magnetic Pavilion Enclosure.	In Observatory Grounds.	
No. 1.	No. 2.	No. 3.	No. 4.	No. 5.	No. 6.	No. 7.	No. 8.		
January.....	22	in. 1' 214	in. 1' 232	in. 1' 665	in. 1' 822	in. 2' 161	in. 2' 277	in. 2' 198	in. 2' 241
February.....	19	1' 472	1' 707	2' 493	3' 012	3' 353	3' 583	3' 348	3' 370
March.....	13	0' 496	0' 563	0' 724	0' 815	0' 879	0' 918	0' 920	0' 913
April.....	11	0' 390	0' 376	0' 598	0' 792	0' 936	0' 924	0' 915	0' 966
May.....	9	0' 794	0' 823	1' 081	1' 211	1' 357	1' 367	1' 320	1' 384
June.....	17	1' 823	1' 859	2' 315	2' 607	2' 759	2' 815	2' 772	2' 782
July.....	5	0' 919	1' 145	1' 257	1' 322	1' 356	1' 408	1' 369	1' 358
August.....	12	1' 274	1' 188	1' 547	1' 898	2' 056	2' 029	2' 042	2' 051
September.....	6	0' 628	0' 507	0' 810	1' 030	1' 115	1' 143	1' 122	1' 138
October.....	14	0' 926	0' 930	1' 204	1' 377	1' 515	1' 550	1' 505	1' 574
November.....	19	1' 111	1' 290	1' 578	1' 712	1' 857	2' 019	1' 948	1' 947
December.....	18	1' 300	1' 301	1' 727	1' 975	2' 192	2' 282	2' 167	2' 290
Sums.....	165	12' 347	12' 921	16' 999	19' 573	21' 536	22' 315	21' 626	22' 014
Height of receiving Surface	{ above the ground } { above mean sea level }	ft. in. 50. 8	ft. in. 50. 8	ft. in. 38. 4	ft. in. 21. 6	ft. in. 10. 0	ft. in. 0. 5	ft. in. 0. 5	ft. in. 0. 5
		ft. in. 205. 6	ft. in. 205. 6	ft. in. 193. 2	ft. in. 176. 4	ft. in. 164. 10	ft. in. 155. 3	ft. in. 155. 3	ft. in. 155. 3

ROYAL OBSERVATORY, GREENWICH.

OBSERVATIONS

OF

LUMINOUS METEORS.

1900.

Month and Day, 1900.	Greenwich Civil Time.	Observer.	Apparent Size of Meteor in Star Magnitudes.	Colour of Meteor.	Duration of Meteor in Seconds of Time.	Appearance and Duration of Train.	Length of Meteor's Path in Degrees.	No. for Refer- ence.
March 28	^{h m s} 20. 31.	A.C.	Venus × 3	Bluish-white	^s ...	Brilliant	...	1
April 20	22. 47. 46	J.	1	Bluish-white	0.5	Slight	15	2
"	23. 15. 47	C.	1	Bluish-white	1.0	Bright : broken	10	3
"	23. 25. 56	C.	1	Bluish-white	1.0	Brilliant : long	10	4
"	23. 39. 38	J.	> 1	Blue	1.5	Bright	25	5
"	23. 47. 48	C.	2	Bluish-white	0.5	None	5	6
April 21	0. 4. 44	E.	2	Bluish-white	1.0	Bright	10	7
"	0. 19. 50	E.	3	Bluish-white	0.5	Slight	5	8
"	0. 30. 22	C.	1	White	0.5	Bright	10	9
"	0. 30. 41	J.	3	Bluish-white	1.0	Slight	20	10
"	0. 40. 4	J.	4	Bluish-white	0.5	None	15	11
"	1. 2. 4	J.	1	Bluish-white	1.5	Brilliant	45	12
July 24	1. 18.	A.C.	1	Bluish-white	...	Train of sparks	...	13
August 11	22. 58. 29	J.	2	Bluish-white	1.0	None	15	14
"	23. 2. 18	J.	> 1	Bluish-white	1.0	Slight	20	15
"	23. 13. 38	J.	> 1	Bluish-white	1.5	Bright	15	16
August 12	21. 31. 16	J.	> 1	Bluish-white	1.0	Brilliant	20	17
"	21. 36. 7	J.	2	Bluish-white	0.5	None	10	18
"	21. 46. 41	J.	2	Bluish-white	0.5	Slight	15	19
"	21. 57. 13	J.	1	Reddish	1.0	Slight	20	20
"	22. 0. 40	J.	> 1	Bluish-white	0.5	Slight	10	21
"	22. 22. 47	J.	2	Bluish-white	1.0	Slight	20	22
"	22. 32. 27	J.	1	Bluish-white	0.5	Slight	15	23
"	22. 33. 46	S.	> 1	Bluish-white	1.0	Brilliant	10	24
"	23. 5. 25	J.	> 1	Bluish-white	1.0	Brilliant	20	25
"	23. 9. 3	J.	> 1	Bluish-white	0.5	Brilliant	20	26
"	23. 11. 5	J.	> 1	Bluish-white	2.0	Bright	20	27
"	23. 16. 43	J.	1	Bluish	1.0	Bright : broken: lasting 1 ^s	5	28

The time is expressed in civil reckoning, commencing at midnight and counting from 0^h. to 24^h.

No. for Reference.	Path of Meteor through the Stars.
1	From direction of ϵ Ursæ Majoris burst 1° N. of β Leonis.
2	From α Cephei towards β Cassiopeiæ.
3	From a point midway between ζ and ϵ Herculis towards κ Herculis.
4	From 46 Aurigæ towards θ Aurigæ.
5	From 33 Cygni to a point near β Cassiopeiæ.
6	From γ Draconis towards ν Draconis.
7	From 69 Virginis towards δ Corvi.
8	From 74 Virginis towards \circ Virginis.
9	From η Cephei towards ι Cephei.
10	From ζ Cephei towards ζ Cassiopeiæ.
11	From ϕ Draconis towards Polaris.
12	From Polaris towards Capella.
13	From a point near β Pegasi to θ Aquilæ.
14	From α Andromedæ to α Pegasi.
15	From β Andromedæ towards γ Pegasi.
16	From a point a little below ϵ Cassiopeiæ towards β Andromedæ.
17	From η Ursæ Majoris towards η Boötis.
18	From δ Ursæ Majoris towards β Canum Venaticum.
19	From ϵ Cassiopeiæ towards Polaris.
20	From Piazzi XIII. 110 towards β Canum Venaticum.
21	From ϵ Herculis fell vertically downwards.
22	From a point midway between Polaris and γ Cephei disappeared near ν Draconis.
23	From ϵ Cygni moved in the direction of θ Andromedæ.
24	From α Persei to ζ Persei.
25	From 55 Camelopardali to a point a little below β Ursæ Majoris.
26	From Polaris towards η Draconis.
27	From β Draconis towards ϵ Ursæ Minoris.
28	From Piazzi IV. 7 to Piazzi III. 54.

OBSERVATIONS OF LUMINOUS METEORS,

Month and Day, 1900.	Greenwich Civil Time.	Observer.	Apparent Size of Meteor in Star Magnitudes.	Colour of Meteor.	Duration of Meteor in Seconds of Time.	Appearance and Duration of Train.	Length of Meteor's Path in Degrees.	No. for Refer- ence.
September 17	^{h m s} 21. 46. 10	G.B.	2	White	^s 1.0	Slight	...	1
October 21	19. 0.	C.	>1	Bluish	1.5	Broken	25	2
"	22. 20.	J.	>1	Bluish	2.0	Brilliant	...	3
October 24	0. 10. 43	W.	>1	Green	>2.0	Broken trail	20	4
November 13	23. 50. 9	S.	1	Bluish-white	1.0	Slight	10	5
November 14	1. 8. 39	R.	>1	Bluish-white	1.5	Long	20	6
"	1. 28. 27	J.	2	Bluish-white	0.5	None	5	7
"	1. 29. 18	J.	>1	Bluish-white	1.0	Bright	10	8
"	1. 42. 2	R.	2	Bluish-white	0.5	None	5	9
"	1. 46. 5	R.	1	Bluish-white	1.0	None	10	10
"	1. 54. 53	J.	>1	Bluish-white	1.0	Slight	10	11
"	2. 12. 17	J.	1	Bluish-white	0.5	Slight	5	12
"	2. 27. 2	R.&S.	>1	Bluish-white	1.5	Broken	20	13
"	2. 40. 9	S.	>1	Bluish-white	0.5	None	5	14
"	2. 43. 39	S.	>1	Bluish-white	1.0	None	5	15
"	3. 43. 48	R.&S.	1	Bluish-white	1.0	Slight	10	16
"	3. 47. 27	R.	>1	Bluish-white	2.0	Very brilliant	10	17
"	3. 48. 48	S.	>1	Bluish-white	1.0	Brilliant	10	18
"	3. 52. 22	R.	1	Bluish-white	0.8	None	10	19
"	3. 57. 35	J.	1	Bluish-white	1.0	Bright: broken	20	20
"	3. 58. 47	R.	2	Bluish-white	1.0	None	10	21
"	4. 1. 55	J.	2	Bluish-white	0.5	Slight	5	22
"	4. 4. 9	J.	1	Bluish-white	0.5	Slight	10	23
"	4. 6. 30	R.	2	Bluish-white	1.0	Slight	10	24
"	4. 7. 51	J.	1	Bluish-white	1.0	Bright	10	25
"	4. 9. 56	J.	1	Bluish-white	0.5	Slight	15	26
"	4. 13. 46	J.	>1	Bluish-white	1.5	Slight	5	27
"	4. 35. 5	S.	2	Bluish-white	0.5	None	5	28
"	5. 31. ±	N.	1	Bluish-white	0.5	Train	10	29

The time is expressed in civil reckoning, commencing at midnight and counting from 0^h to 24^h.

No. for Reference.	Path of Meteor through the Stars.
1	From Polaris moved in a curved path towards α Aquilæ.
2	Moved slowly from α Lyræ towards α Ophiuchi.
3	From θ Pegasi to α Capricorni.
4	Moving from west towards Capella, disappeared near that star.
5	From a point a little to the N. of Capella towards γ Persei.
6	From a point near Castor towards θ Ursæ Majoris.
7	From $\iota\alpha$ Monocerotis towards γ Monocerotis.
8	From γ Orionis to α Arietis.
9	From a point near γ Cephei towards γ Cassiopeiæ.
10	From Aldebaran moved in the direction of ζ Tauri.
11	From β Tauri towards ϵ Arietis.
12	From β Leonis Minoris fell vertically downwards.
13	From a point midway between α and β Ursæ Majoris moved across ϵ Ursæ Majoris.
14	From Polaris moved towards ζ Draconis,
15	From α Ursæ Majoris towards 21 Canum Venaticûm.
16	From ξ Orionis towards β Tauri.
17	From λ Andromedæ towards ζ Cephei.
18	From Procyon towards γ Orionis.
19	From δ Aurigæ towards ζ Persei.
20	From 23 Ursæ Majoris towards ψ Cassiopeiæ.
21	From δ Ursæ Majoris towards α Canum Venaticûm.
22	From a point midway between Aldebaran and the Pleiades fell vertically downwards.
23	From β Trianguli to 38 Arietis.
24	From a point near Capella towards β Camelopardali.
25	From ι Cephei to α Lacertæ.
26	From γ Draconis towards γ Cephei.
27	From ϵ Aurigæ to Piazzi IV. 7.
28	From ϵ Ursæ Majoris towards θ Boötis.
29	From a point near β Tauri moved towards the Pleiades. Path nearly parallel to line joining α and γ Orionis.

Month and Day, 1900.	Greenwich Civil Time.	Observer.	Apparent Size of Meteor in Star Magnitudes.	Colour of Meteor.	Duration of Meteor in Seconds of Time.	Appearance and Duration of Train.	Length of Meteor's Path in Degrees.	No. for Refer- ence.
November 14	^{h m s} 23. 56. 36	J.	2	Bluish-white	^s 0.5	Slight	^o 10	1
November 15	0. 0. 15	S.	>1	Bluish-white	1.5	Brilliant	20	2
"	0. 1. 48	S.	1	Bluish-white	1.0	Brilliant	10	3
"	0. 11. 28	J.	>1	Bluish-white	1.5	Brilliant : 1 ^s	25	4
"	0. 13. 13	S.	2	Bluish-white	0.5	Bright	10	5
"	0. 18. 55	S.	1	Bluish-white	1.0	Bright	10	6
"	0. 20. 18	J.	>1	Bluish-white	1.0	Brilliant:broken	15	7
"	0. 28. 18	J.	3	Bluish-white	0.5	Very slight	5	8
"	0. 30. 17	S.	3	Bluish-white	0.5	None	5	9
"	0. 41. 15	S.	1	Bluish-white	1.5	Brilliant	15	10
"	0. 46. 13	J.	1	Bluish-white	2.0	Bright	10	11
"	1. 36. 10	J.	>1	Bluish-white	1.5	Bright : broken	15	12
"	1. 41. 50	S.	1	Bluish-white	1.0	Slight	10	13
"	1. 46. 15	S.	>1	Bluish-white	2.0	Brilliant : 2 ^s	20	14
"	1. 48. 10	S.	1	Bluish-white	1.0	Bright	10	15
"	2. 17. 0	J.&S.	>1	Bluish-white	1.5	Brilliant	25	16
"	2. 25. 33	S.	1	Bluish-white	1.0	Brilliant	10	17
"	2. 26. 40	S.	>1	Bluish-white	1.0	Brilliant	10	18
"	2. 27. 10	J.	>1	Bluish-white	0.5	Bright	10	19
"	2. 29. 16	S.	1	Bluish-white	1.0	Bright	10	20
"	22. 56. 21	C.	2	Bluish-white	0.5	None	5	21
"	23. 3. 50	C.	2	Bluish-white	0.5	Very slight	5	22
"	23. 12. 18	R.	1	Bluish-white	0.5	None	5	23
"	23. 16. 52	R.&S.	1	Bluish-white	1.0	Slight	10	24
"	23. 21. 48	C.	1	Bluish-white	1.0	None	15	25
"	23. 29. 57	S.	1	Bluish-white	1.0	Slight	5	26
"	23. 31. 49	R.	>1	Bluish-white	1.5	Long : broken	15	27
"	23. 32. 44	S.	1	Bluish-white	1.5	Brilliant	20	28
"	23. 46. 37	R.	2	Bluish-white	0.5	None	5	29
"	23. 47. 13	C.	>1	Bluish-white	1.0	Broken	15	30
"	23. 49. 22	S.	1	Bluish-white	0.5	None	5	31

The time is expressed in civil reckoning, commencing at midnight and counting from 0^h to 24^h.

No. for Reference.	Path of Meteor through the Stars.
1	From ι Aurigæ to η Geminorum.
2	From Aldebaran to γ Arietis.
3	From Castor towards θ Ursæ Majoris.
4	From α Tauri to η Piscium.
5	From σ Persei to α Trianguli.
6	From a point midway between α and β Aurigæ to ϵ Tauri.
7	From γ Cancri towards ν Geminorum.
8	From θ Aurigæ towards γ Geminorum.
9	From a point midway between γ and ϵ Orionis towards B^2 Monocerotis.
10	From γ Ursæ Majoris towards ι Draconis.
11	From γ Draconis to ι Draconis.
12	From β Ursæ Majoris to ξ Draconis.
13	From γ Geminorum towards κ Geminorum.
14	From τ Persei towards κ Andromedæ.
15	From α Cassiopeiæ towards β Persei.
16	From θ Ursæ Majoris towards γ Cassiopeiæ.
17	From γ Geminorum to the Pleiades.
18	From a point midway between Castor and Pollux to a point a little to the N. of α Orionis.
19	From β Canis Majoris to a point a little below γ Orionis.
20	From δ Geminorum to ζ Orionis.
21	From α Persei towards γ Andromedæ.
22	From η Ursæ Majoris to θ Boötis.
23	From θ Aurigæ towards ι Aurigæ.
24	From μ Geminorum to ζ Geminorum.
25	From β Canis Minoris to ι Monocerotis.
26	From ϵ Tauri towards λ Tauri.
27	From a point a little above γ Pegasi towards α Pegasi.
28	From α Arietis to γ Pegasi.
29	From α Cygni towards ϵ Cygni.
30	From ι Ursæ Majoris towards χ Ursæ Majoris.
31	From ϵ Orionis to α Orionis.

OBSERVATIONS OF LUMINOUS METEORS,

Month and Day, 1900.	Greenwich Civil Time.	Observer.	Apparent Size of Meteor in Star Magnitudes.	Colour of Meteor.	Duration of Meteor in Seconds of Time.	Appearance and Duration of Train.	Length of Meteor's Path in Degrees.	No. for Refer- ence.
November 15	^{h m s} 23. 53. 28	S.	1	Bluish-white	^s 1.0	Slight	10	1
"	23. 57. 2	R.	2	Bluish-white	0.5	Slight	5	2
"	23. 59. 44	C.	1	Bluish-white	0.5	Slight	10	3
November 16	0. 2. 51	C.	2	Bluish-white	0.5	Broken	5	4
"	0. 3. 1	C.	1	Bluish-white	1.0	None	...	5
"	0. 13. 25	R.	1	Bluish-white	0.5	None	10	6
"	0. 16. 14	S.	1	Bluish-white	0.5	Slight	10	7
"	0. 16. 39	S.	1	Bluish-white	2.0	Brilliant	15	8
"	0. 21. 32	S.	> 1	Bluish	2.5	Very brilliant	20	9
"	0. 21. 46	R.	1	Bluish-white	1.5	None	15	10
"	0. 21. 56	S.	2	Bluish-white	1.0	Slight	5	11
"	0. 36. 39	S.	2	Bluish-white	0.5	None	5	12
"	0. 44. 41	R.	1	Bluish-white	0.5	None	10	13
"	0. 45. 35	C.	2	Bluish-white	1.0	Bright	15	14
"	0. 46. 40	R.	1	Bluish-white	1.0	Slight	15	15
"	0. 53. 5	C.&R.	2	Bluish-white	1.0	None	15	16
"	0. 54. 36	C.&R.	1	Bluish-white	1.0	Slight	10	17
"	0. 54. 53	S.	> 1	Bluish-white	1.5	Bright	15	18
"	1. 5. 5	S.	1	Bluish-white	1.0	Slight	10	19
"	1. 5. 15	S.	> 1	Bluish-white	1.0	Brilliant	15	20
"	1. 9. 53	C.	2	Bluish-white	0.5	None	10	21
"	1. 15. 33	C.	1	Bluish-white	1.0	Bright : 1 ^s	15	22
"	1. 16. 54	S.	2	Bluish-white	0.5	Slight	10	23
"	1. 25. 35	R.	2	White	0.5	None	5	24
"	1. 26. 50	C.	2	Bluish-white	0.5	Broken	10	25
"	1. 30. 25	C.	1	Bluish-white	1.0	None	20	26
"	1. 35. 14	R.	2	Bluish-white	0.5	None	10	27
"	1. 36. 10	C.	1	Bluish-white	1.0	Brilliant	15	28
"	1. 40. 59	S.	1	Bluish-white	1.0	Brilliant	10	29
"	1. 50. 21	S.	2	Bluish-white	1.0	None	5	30
"	1. 50. 36	S.	1	Bluish-white	0.5	Bright	10	31
"	2. 2. 31	C.	> 1	Bluish	1.5	Brilliant	20	32

The time is expressed in civil reckoning, commencing at midnight and counting from 0^h to 24^h.

No. for Reference.	Path of Meteor through the Stars.
1	From γ Geminorum towards Procyon.
2	From α Ursæ Majoris to σ Ursæ Majoris.
3	From θ Geminorum towards κ Ursæ Majoris.
4	From κ Leonis towards ξ Leonis.
5	From θ Leonis towards a point beyond β Leonis.
6	From γ Ursæ Minoris towards ζ Draconis.
7	From a point a little above Castor towards κ Ursæ Majoris.
8	From ι Cancri moved slowly towards μ Ursæ Majoris.
9	From a point near Capella moved towards γ Andromedæ.
10	From ν Geminorum towards Aldebaran.
11	From α Orionis to a point midway between ψ and γ Orionis.
12	From a point midway between α Persei and γ Andromedæ towards ζ Persei.
13	From a point midway between α and β Arietis towards ψ Piscium.
14	From γ Ursæ Majoris to α Draconis.
15	From γ Trianguli towards η Piscium.
16	From ζ Tauri towards γ Tauri.
17	From π Orionis towards γ Eridani.
18	From β Orionis moved to a point beyond ϵ Leporis.
19	From Polaris towards ϵ Cassiopeiæ.
20	From a point near γ Cassiopeiæ towards γ Cephei.
21	From δ Ceti to π Ceti.
22	From κ Geminorum to η Geminorum.
23	From a point near α Cassiopeiæ towards σ Andromedæ.
24	From a point a little below β Tauri towards ϵ Tauri.
25	From α Lyncis to κ Ursæ Majoris.
26	From Procyon to ι Monocerotis.
27	From α Cassiopeiæ moved in the direction of α Pegasi.
28	From κ Geminorum to μ Geminorum.
29	From a point near Polaris moved towards γ Cephei.
30	From χ Orionis towards β Aurigæ.
31	From ι Ursæ Majoris to a point midway between Castor and Pollux.
32	From π Orionis towards γ Eridani.

Month and Day, 1900.	Greenwich Civil Time.	Observer.	Apparent Size of Meteor in Star Magnitudes.	Colour of Meteor.	Duration of Meteor in Seconds of Time.	Appearance and Duration of Train.	Length of Meteor's Path in Degrees.	No. for Refer- ence.
November 16	^{h m s} 2. 15. 34	S.	> 1	Bluish-white	^s 1.5	Brilliant	^o 20	1
"	2. 26. 51	C.	2	Bluish-white	0.5	None	5	2
"	2. 36. 0	R.	2	Bluish	0.5	Slight	5	3
"	2. 42. 4	R.	> 1	Bluish-white	2.5	Broken	30	4
"	2. 43. 30	C.	> 1	Bluish-white	1.0	Slight	15	5
"	2. 48. 2	R.	2	White	0.5	None	5	6
"	2. 49. 0	R.	1	Bluish-white	1.0	Slight	10	7
"	2. 51. 21	S.	1	Bluish-white	0.5	Slight	5	8
"	2. 51. 39	S.	2	Bluish-white	0.5	None	5	9
"	3. 0. 35	R.	1	Bluish-white	0.5	Broken	5	10
"	3. 14. 45	R.	1	Bluish-white	1.0	None	10	11
"	3. 22. 46	S.	1	Bluish-white	1.0	None	10	12
November 23	21. 18. 46	S.	> 1	Bluish-white	2.0	Very brilliant	15	13
"	21. 35. 21	S.	1	Bluish-white	1.0	Brilliant	10	14
"	21. 41. 58	S.	> 1	Bluish-white	1.0	Brilliant	15	15
November 25	18. 53. 0	C.	1	Bluish-white	0.5	None	10	16
"	19. 23. 56	C.	2	Bluish-white	0.5	None	5	17
"	20. 8. 37	C.	> 1	Reddish	2.0	Long	25	18
"	20. 33. 38	S.	1	Bluish-white	1.5	Bright	15	19
"	20. 51. 21	S.	1	Bluish-white	1.5	Brilliant	15	20
December 10	21. 7. 26	R.	2	Bluish-white	0.5	None	5	21
"	21. 27. 46	R.	1	Bluish-white	1.0	Slight	15	22
"	21. 46. 55	S.	1	Bluish-white	0.5	None	5	23
"	21. 49. 19	S.&R.	1	Bluish-white	1.0	Broken	10	24
December 13	20. 44. 24	S.	1	Bluish-white	1.0	Brilliant	10	25
"	20. 56. 39	S.	1	Bluish-white	1.5	Slight	15	26

The time is expressed in civil reckoning, commencing at midnight and counting from 0^h to 24^h.

No. for Reference.	Path of Meteor through the Stars.
1	From γ Ursæ Majoris towards ϵ Ursæ Minoris.
2	From κ Geminorum to δ Geminorum.
3	From a point near Procyon moved in the direction of β Orionis.
4	From ζ Orionis towards Procyon.
5	From γ Geminorum towards ζ Orionis.
6	From a point near γ Monocerotis moved in the direction of ζ Leporis.
7	From γ Geminorum towards Aldebaran.
8	From Capella moved in the direction of Aldebaran.
9	From Capella towards θ Aurigæ.
10	From α Lyncis towards κ Ursæ Majoris.
11	From θ Ursæ Majoris towards ρ Leonis Minoris.
12	From a point near Polaris moved towards γ Cassiopeiæ.
13	From π Andromedæ toward β Persei.
14	From a point midway between α and δ Persei moved towards β Trianguli.
15	From β Andromedæ towards α Piscium.
16	From θ Persei to δ Persei.
17	From ν Persei to μ Persei.
18	From γ Hev. Camelopardali to α Ursæ Majoris.
19	From a point midway between μ and λ Pegasi to ϵ Pegasi.
20	From α Persei to Capella.
21	From a point near β Aurigæ moved in the direction of β Camelopardali.
22	From γ Geminorum towards ζ Orionis.
23	From ϵ Geminorum towards ζ Tauri.
24	From a point near α Ursæ Majoris moved across γ Ursæ Majoris.
25	From a point midway between α and β Ursæ Majoris towards ζ Ursæ Majoris.
26	From θ Aurigæ towards Aldebaran.

