RESULTS

OF THE

MAGNETICAL AND METEOROLOGICAL OBSERVATIONS

MADE AT

THE ROYAL OBSERVATORY, GREENWICH,

IN THE YEAR

1905:

UNDER THE DIRECTION OF

SIR W. H. M. CHRISTIE, K.C.B., M.A., D.Sc., F.R.S.,
ASTRONOMER ROYAL.

PUBLISHED BY ORDER OF THE BOARD OF ADMIRALTY, IN OBEDIENCE TO HIS MAJESTY'S COMMAND.

EDINBURGH:
PRINTED FOR HIS MAJESTY'S STATIONERY OFFICE
BY NEILL & CO., LIMITED, BELLEVUE.

1906.

ERRATA.

MAGNETICAL AND METEOROLOGICAL OBSERVATIONS, 1899.

OBSERVATIONS OF LUMINOUS METEORS.

Page civ, No. 14, column 4, *for* 3, *read* 3 × 1 (indicating a brightness three times as great as that of a star of the first magnitude).

Similarly insert × 1 after the figure in column 4, for the following observations :—

Page civ, No. 30; page cvi, Nos. 7, 8, 9, 23, 26, 30; page cviii, Nos. 2, 5, 6, 9, 11, 24; page cx, Nos. 1, 5, 9, 20, 21, 24, 25, 27, 30, 32; page cxii, Nos. 3, 4, 7, 12, 23, 29, 32; page cxiv, Nos. 2, 4, 7, 16, 20. *Also*, on page cxiv, No. 19, column 4, *for* >, *read* >1.

MAGNETICAL AND METEOROLOGICAL OBSERVATIONS, 1904.

INDEX.

Page 7, line 6, *for* PLATES I.–IV., *read* PLATES I.–III.

Page 7, line 8, *for* PLATE V., *read* PLATE IV.

INTRODUCTION.

Page xlii, line 9, *for* 1903, *read* 1904.

RESULTS.

Page (ix), column 4, *Delete* decimal point throughout.

Page (lxi), last line, *for* 0^h–24^h, *read* 1^h–24^h.

INDEX.

INTRODUCTION.

INTRODUCTION—*continued.*

INTRODUCTION—*concluded.*

RESULTS OF MAGNETICAL AND METEOROLOGICAL OBSERVATIONS—*continued.* PAGE

RESULTS OF MAGNETICAL AND METEOROLOGICAL OBSERVATIONS—*continued.* PAGE

RESULTS OF MAGNETICAL AND METEOROLOGICAL OBSERVATIONS—*concluded.* PAGE

ROYAL OBSERVATORY, GREENWICH.

RESULTS

OF

MAGNETICAL AND METEOROLOGICAL OBSERVATIONS.

1905.

GREENWICH MAGNETICAL AND METEOROLOGICAL OBSERVATIONS, 1905.

INTRODUCTION.

§ 1. *Personal Establishment and Arrangements.*

During the year 1905 the personal establishment in the Magnetical and Meteorological Department of the Royal Observatory consisted of Walter William Bryant, Superintendent, aided by one Established Computer, David J. R. Edney, and four Computers. The Computers employed during the year were : — Albert Edward Showell, Wilfred C. Parkinson, Henry George Scott Barrett, and Arnold F. Dauncey.

Mr. Bryant 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°Cabe No. 649, for general use.

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 $5\frac{1}{3}$ 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.

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. A wooden stand on which the nephoscope can be mounted for occasional observations was placed there in May 1904.

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 are 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 con-

taining 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* 1905.

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, special cloud observations in connection with the International Balloon ascents, 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 during 1899 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 to be $-10'{\cdot}8$. The upper declination magnet, formerly employed until the end of the year 1898 for the determination of absolute declination, was finally dismounted 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 $1''{\cdot}15$. By opening the North door of the Magnetic Pavilion observations 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 $100^{\text{r}}{\cdot}280$.

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 thirteen determinations during the first three months of the year to be $+0'.53''{\cdot}0$, from thirteen determinations during the next three months to be $-0'.1''{\cdot}7$, and from twenty-four determinations during the remainder of the year to be $+0'.6''{\cdot}3$.

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 fifty determinations to be $\frac{1}{725}$.

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 11 a.m. 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 until June 1904, when amidol development was substituted. 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. A vertical slit, about $0^{in.}3$ long and $0^{in.}01$ 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 11 a.m., 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 $7^{ft.}\ 6^{in.}$. The distance between the branches of the skein, where they pass over the upper pulleys, is $1^{in.}{\cdot}14$; at the lower pulleys the distance between the branches is $0^{in.}{\cdot}80$. 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 tranverse 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 now in use was mounted on 1900 July 9.

On 1904 December 30 the following observations were made for determination of the angle of torsion:—

1904. 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.
	° ′	div.	div.	s	° ′	div.	div.	s
Dec. 30	146 0	47·97		21·15	230 30	47·86		20·35
			7·73				8·31	
	147 0	55·70		20·95	231 30	56·17		20·78
			8·36				8·08	
	148 0	64·06		20·81	232 30	64·25		20·99

From these observations it appeared that the times of vibration and scale-readings were sensibly the same when the torsion-circle read 147°.30′, marked end west, and 231°.58′, marked end east, the difference being 84°.28′. Half this difference, or 42°.14′, is therefore the angle of torsion when the magnet is transverse to the meridian.

The value adopted in the reduction of the observations throughout the year was 42°.15′ derived from the determinations made on 1904 December 30 and 1905 December 29.

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 $30^{div}\cdot85$ 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 × value of one division in terms of radius. The change of horizontal force corresponding to change of one division of scale-reading was thus found to be 0·002357; and this value has 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 $-0°·3$ 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 × tan angle of torsion × 0·01. Taking for angle of torsion 42°.15′, the movement of the spot of light on the cylinder for a change of 0·01 of horizontal force is found to be 2·485 inches; and with this unit the cardboard scale for measure of the ordinates was 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°·2 to 61°·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°·0 to 60°·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 $(t-32)\times\cdot0000936+(t-32)^2\times\cdot000002074$, 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 $52\frac{3}{4}°$ 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.

A copper "damper," to reduce vibratory disturbances from electric railways or other sources, was applied to the magnet. After some preliminary trials this was made in the form of a flattened ring of round bar copper, half an inch in diameter, closely encircling the magnet and carried over its axis of vibration, and it was mounted on 1902 April 16. It was found that its effect was to reduce the amplitude of oscillation after every complete or double vibration (taking 36 seconds) in the ratio of 10 to 4·3, which is nearly the same as that of the damper for the declination magnet. It was dismounted on 1902 August 13, and since then it has not been found to be required.

The time of vibration of the magnet in the vertical plane is observed usually about once in each week. From 25 observations made before June 26 this was found to be $17^{s}\cdot089$, from 3 observations made between June 26 and July 1 (on each of which days the magnet was disturbed and adjusted), $15^{s}\cdot553$, and from 34 observations after July 1, $16^{s}\cdot311$.

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 1905 December 29 gave for the time of vibration of the magnet in the horizontal plane $16^{s}\cdot435$. This value has been used throughout for the year 1905.

The length of the normal to the fixed vertical scale that meets the face of the plane mirror is 186·07 inches, and $30^{div}\cdot85$ of the scale correspond to 12 inches. Consequently the angle which one division of the scale subtends, as seen from the mirror, is $7'.11''\cdot2$, or the angular movement of the normal to the mirror, corresponding to a change of one division of scale-reading, is $3'.35''\cdot6$.

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 $52\frac{3}{4}°$. Therefore, dividing the result just obtained, $3'.35''{\cdot}6$, by sin $52\frac{3}{4}°$, the angular motion of the magnet corresponding to a change of one division of scale-reading is found to be $4'.30''{\cdot}9$.

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 dip $\times \left(\frac{T'}{T}\right)^2 \times$ 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 $T' = 16^s{\cdot}435$, T = successively $17^s{\cdot}089$, $15^s{\cdot}553$ and $16^s{\cdot}311$, and dip = $66°.55'.55''$, the changes of vertical force corresponding to change of one division of scale-reading were found to be respectively 0·0005173, 0·0006246 and 0·0005679, and these values have been used successively during the year 1905 for the periods specified on page *xx* 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 $-0°{\cdot}3$ 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 = 200·4 × tan dip × $\left(\frac{T}{T'}\right)^2$ × 0·01. Using the values of T, T', and of dip before given (page *xxi*), the movements of the spot of light on the cylinder for a change of 0·01 of vertical force are thus found to be respectively 5·887 inches, 4·214 inches and 4·635 inches, and with these units the scales for measure of the ordinates were constructed for use during corresponding periods of the year (see page *xx*). 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 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 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 1905 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 = μ = 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 $1^{ft}\cdot0$ east to $1^{ft}\cdot0$ west of the engraved scale, at temperature 62°, is too long by 0·0034 inch, and the distance from $1^{ft}\cdot3$ east to $1^{ft}\cdot3$ 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° = 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,

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

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

$P = \dfrac{A_1 - A_2}{\dfrac{A_1}{r_1^2} - \dfrac{A_2}{r_2^2}}$ [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 :—

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

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

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

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

$$\frac{\text{Log. } A_1 - \text{Log. } A_2}{\text{modulus}} \times \frac{r_1^2 \times r_2^2}{r_2^2 - r_1^2} = (\text{Log. } A_1 - \text{Log. } A_2) \times 5{\cdot}64.$$

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,

$\dfrac{H}{F}$ = 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 $\dfrac{H}{F} = \dfrac{\theta}{90° - \theta}$, 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 $\dfrac{m}{X}$ 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 $0{\cdot}46108 = \frac{1}{2{\cdot}1689}$. 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 was 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. Recently, however, the former circuit shows less disturbance, owing probably to alterations in the working of the Electric Railway. 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 1905 which are classed as days of great disturbance. Days of lesser disturbance are January 5–6; February 3–4; March 7; April 1, 2; July 5–6; August 2; September 18–19; November 12–13, 15, 16. 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 were 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 June 1–5 and September 16–20, in Tables III. to VI. for horizontal force September 16–20, and December 29–31, and in Tables VII. to X. for vertical force, December 29–31.

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 $(t-32) \times \cdot0000936 + (t-32)^2 \times \cdot000002074$ (page *xix*), where t is the temperature in degrees Fahrenheit; and to those of vertical force, Tables VII. and IX., the correction $-(t-32) \times \cdot000212$ (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, c in Table III. on July 1, which should be taken as 1025 for comparison with the following 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

$$\text{H.F. in metrical measure} \times \sin 1' = 1{\cdot}8523 \times \sin 1' = 0{\cdot}0005388.$$

For variation of horizontal force, the factor is

$$\text{H.F. in metrical measure} = 1{\cdot}8523,$$

and for variation of vertical force

$$\begin{aligned}\text{V.F. in metrical measure} &= \text{H.F. in metrical measure} \times \tan \text{dip},\\ &= 1{\cdot}8523 \times \tan 66^\circ.55'.55'' = 4{\cdot}3494.\end{aligned}$$

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.

$$m = \frac{1}{24}(0+1+2 \ldots\ldots 22+23).$$

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

$$12\,b_1 = 6-18+\{(5+7)-(17+19)\}\sin 75^\circ+\{(4+8)-(16+20)\}\sin 60^\circ + \{(3+9)-(15+21)\}\sin 45^\circ+\{(2+10)-(14+22)\}\sin 30^\circ + \{(1+11)-(13+23)\}\sin 15^\circ.$$

$$12\,a_2 = (0+12)-(6+18)+\{(1+11+13+23)-(5+7+17+19)\}\cos 30^\circ + \{(2+10+14+22)-(4+8+16+20)\}\cos 60^\circ.$$

$$12\,b_2 = (3+15)-(9+21)+\{(2+4+14+16)-(8+10+20+22)\}\sin 60^\circ + \{(1+5+13+17)-(7+11+19+23)\}\sin 30^\circ.$$

$$12\,a_3 = (0+8+16)-(4+12+20)+\{(1+7+9+15+17+23)-(3+5+11+13+19+21)\}\cos 45^\circ.$$

$$12\,b_3 = (2+10+18)-(6+14+22)+\{(1+3+9+11+17+19)-(5+7+13+15+21+23)\}\sin 45^\circ.$$

$$12\,a_4 = (0+6+12+18)-(3+9+15+21) + \{(1+5+7+11+13+17+19+23)-(2+4+8+10+14+16+20+22)\}\cos 60^\circ.$$

$$12\,b_4 = \{(1+2+7+8+13+14+19+20)-(4+5+10+11+16+17+22+23)\}\sin 60^\circ.$$

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 :—

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

Similarly for c_2, β, &c.

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

$$\alpha' = \alpha + h$$
$$\beta' = \beta + 2h$$
$$\text{\&c.} = \text{\&c.},$$

a mean value of h for the month being employed.

The values of a_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 :—

1905.	a_5.	b_5.
Declination	$-0'.04$	$+0'.00$
Horizontal Force	$+0.9$	-0.2
Vertical Force	$+0.7$	-0.4

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 1905.	Declination.	Horizontal Force.	Vertical Force.
Sums of Squares of Observed Values (Table XII.)	328′·79	375283·8	19562·7
Sums of Squares of Residuals after the introduction of m	130·07	67334·4	2998·9
,, ,, a_1 and b_1	52·02	16412·3	1972·2
,, ,, a_2 and b_2	9·34	2775·2	324·8
,, ,, a_3 and b_3	1·04	355·0	47·1
,, ,, a_4 and b_4	0·07	17·2	10·3
,, ,, a_5 and b_5	0·05	6·4	3·1

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 a_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 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 Val Joyeux (formerly 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 1905, 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 (xxxii).

An additional plate (V.) 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 0·01 of Horizontal Force.		Of 0·01 of Vertical Force.			
					Jan. 1^{d} to June 23^{d} 9^{h}.		July 1^{d} 12^{h} to End of Year.	
	in.	mm.	in.	mm.	in.	mm.	in.	mm.
On the Photographs -	4·691	119·15	2·485	63·12	5·087	129·22	4·635	117·72
On the Plates -	2·580	65·53	1·367	34·72	2·798	71·07	2·549	64·75

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 ·00001 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 = 66°.55′.55″]
= Horizontal Force × 2·3481 ;

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.			
					Jan. 1d to June 23d 9h.		July 1d 12h to End of Year.	
	in.	mm.	in.	mm.	in.	mm.	in.	mm.
On the Photographs -	2·68	68·1	2·49	63·1	2·17	55·0	1·97	50·1
On the Plates -	1·47	37·4	1·37	34·7	1·19	30·3	1·09	27·6

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 1905	=	4·0173
Millimètre-milligramme-second,	or Metric unit,	,, ,, ,,	=	1·8523
Centimètre-gramme-second,	or C.G.S. unit,	,, ,, ,,	=	0·18523

Dividing, therefore, the scale values last given by 4·0173, 1·8523, and 0·18523 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.							
									Jan. 1d to June 23d 9h.				July 1d 12h to End of Year.			
	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	9·3	0·62	15·7	0·34	8·6	0·54	13·7	0·30	7·5	0·49	12·5	0·27	6·9
Metric -	1·45	36·8	0·80	20·2	1·34	34·1	0·74	18·7	1·17	29·7	0·64	16·3	1·07	27·1	0·59	14·9
C.G.S. -	14·5	368	8·0	202	13·4	341	7·4	187	11·7	297	6·4	163	10·7	27·1	5·9	14·9

The subjoined table gives the values of Magnetic Elements determined at the Royal Observatory, Greenwich :—

Year.	Declination West.	Horizontal Force, C.G.S. Unit.	Dip.	Year.	Declination West.	Horizontal Force, C.G.S. Unit.	Dip.
	° ′		° ′		° ′		° ′
1841	23.16·2	...	...	1873	19.33·4	0·1791	67.45·6
1842	23.14·6	...	...	1874	19.28·9	0·1795	67.43·6
1843	23.11·7	...	69. 0·6	1875	19.21·2	0·1795	67.42·3
1844	23.15·3	...	69. 0·3	1876	19. 8·3	0·1797	67.40·9
1845	22.56·7	...	68.57·5	1877	18.57·2	0·1799	67.39·6
1846	22.49·6	0·1731	68.58·1	1878	18.49·3	0·1801	67.38·1
1847	22.51·3	0·1736	68.59·0	1879	18.40·5	0·1803	67.36·9
1848	22.51·8	0·1731	68.54·7	1880	18.32·6	0·1804	67.35·6
1849	22.37·8	0·1733	68.51·3	1881	18.27·1	0·1805	67.34·6
1850	22.23·5	0·1738	68.46·9	1882	18.22·3	0·1804	67.34·1
1851	22.18·3	0·1744	68.40·4	1883	18.15·0	0·1810	67.31·6
1852	22.17·9	0·1745	68.42·7	1884	18. 7·6	0·1812	67.29·6
1853	22.10·1	0·1748	68.44·6	1885	18. 1·7	0·1816	67.27·8
1854	22. 0·8	0·1749	68.47·7	1886	17.54·5	0·1816	67.27·0
1855	21.48·4	0·1756	68.44·6	1887	17.49·1	0·1818	67.26·4
1856	21.43·5	0·1759	68.43·5	1888	17.40·4	0·1820	67.25·4
1857	21.35·4	0·1769	68.31·1	1889	17.34·9	0·1821	67.24·1
1858	21.30·3	0·1762	68.28·3	1890	17.28·6	0·1823	67.22·9
1859	21.23·5	0·1761	68.26·9	1891	17.23·4	0·1825	67.21·4
1860	21.14·3	...	68.30·1	1892	17.17·4	0·1827	67.19·9
1861	21. 5·5	0·1773	68.24·6	1893	17.11·4	0·1829	67.17·8
		0·1757	68.15·8	1894	17. 4·6	0·1829	67.17·3
1862	20.52·6	0·1761	68. 9·6	1895	16.57·4	0·1832	67.16·0*
1863	20.45·9	0·1763	68. 7·0	1896	16.51·7*	0·1833*	67.15·0*
1864	...	0·1765	68. 4·1	1897	16.45·8*	0·1836	67.13·4*
1865	20.33·9	0·1765	68. 2·7	1898	16.39·2*	0·1838	67.11·8
1866	20.28·0	0·1771	68. 1·3	1899	16.34·2	0·1842	67.10·2
1867	20.20·5	0·1776	67.57·2	1900	16.29·0	0·1844	67. 8·5
1868	20.13·1	0·1777	67.56·5	1901	16.26·0	0·1848	67. 6·1
1869	20. 4·1	0·1780	67.54·6	1902	16.22·8	0·1850	67. 3·4
1870	19.53·0	0·1782	67.52·4	1903	16.19·1	0·1850	67. 0·9
1871	19.41·9	0·1785	67.50·2	1904	16.15·0	0·1852	66.57·2
1872	19.36·8	0·1787	67.47·9	1905	16. 9·9	0·1852	66.55·9

* Corrected for the effect of the iron in the new buildings (see p. *vi*).

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

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 $0^{in}\cdot565$ in diameter, and the depression of the mercury due to capillary action is $0^{in}\cdot002$, but no correction is applied on this account. The cistern is of glass, and the graduated scale and attached rod are of brass; at its lower end the rod terminates in a point of ivory, which in observation is made just to meet the reflected image of the point as seen in the mercury. The scale is divided to $0^{in}\cdot05$, sub-divided by vernier to $0^{in}\cdot002$.

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 $-0^{in}\cdot006$, 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 Mr. Whipple, showed that the difference between the two barometers (after applying to the Greenwich barometer-readings the correction $-0^{in}\cdot006$) did not exceed $0^{in}\cdot001$. (*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 $5^{ft}\cdot\ 2^{in}\cdot$ 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 aluminium, 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 = $4^{in}\cdot16$ 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 *lii*) 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 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 and wet bulb thermometers used throughout the year were Negretti and Zambra, Nos. 45354 and 45356 respectively. The corrections $-0°{\cdot}4$ and $-0°{\cdot}3$ have been respectively 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. The readings of Negretti and Zambra, No. 83760, for maximum temperature of the air, required no correction; to those of Negretti and Zambra, No. 38338, for minimum temperature of the air, a correction of $+0°{\cdot}1$ has been applied; to those of Negretti and Zambra, No. 102104, for maximum temperature of evaporation, a correction of $+0°{\cdot}1$ has been applied; and to those of Negretti and Zambra, No. 98508, for minimum temperature of evaporation, a correction of $+0°{\cdot}1$ has been applied.

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 $-0°{\cdot}1$ has been applied. The wet-bulb is Hicks No. 268525, and the maximum thermometer is Negretti and Zambra, No. 85059, neither of which required correction. To the readings of the minimum thermometer, Negretti and Zambra, No. 68873, a correction of $+0°{\cdot}1$ 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 in the year 1905 was Hicks, No. 268524, to the readings of which a correction of $-0^{\circ}\cdot1$ has been applied. Negretti and Zambra, No. 37467, is a self-registering maximum thermometer, to the readings of which a correction of $-0^{\circ}\cdot4$ has been applied. No. 342663, by Hicks, is a self-registering minimum thermometer, to the readings of which corrections have been applied as follow: below 45° + $0^{\circ}\cdot1$, 45° to 55° + $0^{\circ}\cdot2$, and above 55° + $0^{\circ}\cdot3$. 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 was required; but this thermometer was accidentally broken on June 2, and Negretti and Zambra, No. 94859, was mounted in its place: to the readings of this thermometer a correction of $-0^{\circ}\cdot4$ has been applied, and to those of the minimum thermometer, Negretti and Zambra, No. 85080, a correction of + $0^{\circ}\cdot1$ 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. 99989. 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 $1\frac{1}{3}$ 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 $1\frac{1}{3}$ 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 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 Hersham. 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 1905 eight rain gauges were employed, placed at different elevations above the ground, complete information in regard to which will be found at page (cxi) 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 with the receiving surface 5 inches above 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, similarly placed in 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 Lord Kelvin'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.

Lord Kelvin'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 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 comparable 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 roof of the Photographic Thermometer shed, at a height of about 10 feet from the ground. The box in which the papers were formerly 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. Since 1901 the papers have been exposed in the Stevenson's screen in the Magnetic Pavilion Enclosure, in order to be at a greater distance from the main buildings, the use of the old Ozonometer box being temporarily discontinued, as a comparison had shown that more ozone was indicated in the new position. 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 (lxiii) and (lxiv)) have been calculated from the corresponding mean hourly values of air and evaporation temperatures (pages (lxii) and (lxiii)).

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 (lxi) and (cxi), is formed from the records of this gauge. In this numeration only those days are counted on which the fall amounted to or exceeded $0^{in}.005$.

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 (xxxv) to (lvii), and in the abstract table, page (lxi), 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.

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

The following is the notation employed for Electricity:—

N denotes *negative*		w denotes *weak*	
P ...	*positive*	s ...	*strong*
m ...	*moderate*	v ...	*variable*

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 parhelia, paraselenæ, and 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 (lxii) and (lxiii), do not in some cases agree with the monthly means given in the daily results

pages (xxxiv) to (lvi), and in the table on page (lxi), 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 (xcvii), 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 (cv), 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 (cix) and (cx) 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 regular observers of meteors in the year 1905 were Mr. Showell, Mr. Parkinson and Mr. Barrett. Their observations are distinguished by the initials S, P, and H.B, respectively. A few observations taken by Mr Bryant are distinguished by the initial B.

W. H. M. CHRISTIE.

ROYAL OBSERVATORY, GREENWICH.
1906, *October* 23.

ROYAL OBSERVATORY, GREENWICH.

RESULTS

OF

MAGNETICAL OBSERVATIONS

(EXCLUDING DAYS OF GREAT MAGNETIC DISTURBANCE),

1905.

TABLE I.—MEAN MAGNETIC DECLINATION WEST FOR EACH CIVIL DAY.

(Each result is the mean of 24 hourly ordinates from the photographic register.)

1905.

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

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

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

1905.

Hour, Greenwich Civil Time.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.
Midn.	0·6	1·0	1·5	2·6	4·0	3·3	3·8	3·4	1·8	2·0	0·5	0·3
1h	1·3	1·4	1·8	2·5	3·9	3·3	3·5	3·2	2·0	1·9	0·6	0·7
2	1·9	1·5	2·1	2·6	3·8	3·4	3·2	3·2	1·8	1·7	0·8	1·0
3	2·3	1·6	2·1	2·6	3·5	2·9	3·2	3·2	1·6	1·8	1·2	1·4
4	2·4	1·6	2·1	3·0	2·9	2·2	2·6	2·7	1·4	1·9	1·3	1·5
5	2·2	1·6	2·1	2·9	2·1	1·2	1·2	1·7	1·0	1·7	1·1	1·4
6	2·2	1·3	1·9	2·2	1·0	0·4	0·4	0·6	0·5	1·5	1·0	1·2
7	2·0	1·2	1·3	1·0	0·2	0·0	0·0	0·0	0·0	1·0	0·7	1·2
8	1·9	0·7	0·2	0·0	0·0	0·2	0·1	0·3	0·5	0·1	0·2	1·2
9	1·7	0·4	0·0	0·2	1·0	1·2	0·9	1·8	2·0	0·0	0·1	1·2
10	2·3	1·2	1·8	2·1	3·5	3·4	2·8	4·2	4·7	1·7	1·3	1·8
11	3·7	3·1	4·8	5·2	6·7	6·5	5·7	7·4	7·4	4·9	3·6	2·9
Noon.	5·0	5·3	7·8	8·2	9·2	8·9	8·5	9·6	8·8	7·2	5·1	3·8
13h	5·9	6·8	9·4	10·0	10·3	9·8	10·3	10·5	9·3	8·1	6·0	4·4
14	5·9	7·3	9·4	9·7	10·1	10·0	10·8	9·9	8·4	7·7	5·7	4·1
15	5·0	6·5	7·8	7·9	8·6	9·3	9·8	8·1	6·5	6·3	4·8	3·7
16	4·1	5·0	5·7	6·3	7·1	7·8	8·1	6·0	4·8	4·6	4·1	3·3
17	3·1	3·6	4·3	5·2	5·8	6·2	6·4	4·4	3·5	3·6	3·5	2·9
18	2·7	2·5	3·6	4·2	4·7	5·0	5·2	3·5	2·6	3·1	2·9	2·6
19	2·3	2·0	3·1	3·9	4·4	4·6	4·6	3·3	2·2	2·8	2·0	2·1
20	1·3	1·4	2·8	3·5	4·2	4·6	4·3	3·3	2·1	2·2	0·8	1·4
21	0·5	0·5	2·2	3·2	4·1	4·3	4·2	3·4	2·0	1·8	0·1	0·5
22	0·0	0·0	1·5	2·6	4·3	3·9	4·2	3·4	1·7	1·7	0·0	0·0
23	0·1	0·2	1·4	2·3	4·2	3·6	4·1	3·2	1·6	1·8	0·2	0·0
Means	2·52	2·40	3·36	3·91	4·58	4·42	4·50	4·18	3·26	2·96	1·98	1·86

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.)*

1905.

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	196	729	011	603	852	434	984	595	115	678	185	796	395	025	225	882	208	812	181	751	101	719	060	620
2	097	630	942	529	794	336	845	463	058	664	195	811	320	960	155	807	248	868	208	785	087	739	110	687
3	182	728	784	376	690	253	916	536	062	642	210	826	337	984	177	832	259	901	225	802	121	734	085	679
4	156	752	837	419	786	346	960	573	110	685	225	826	275	950	259	926	222	894	218	814	145	696	997	605
5	085	669	916	529	843	444	990	572	138	710	226	808	326	976	257	934	207	879	206	790	091	647	014	582
6	135	703	958	562	981	541	961	503	030	629	230	786	278	918	250	900	249	937	057	625	125	681	034	611
7	203	804	027	592	844	431	886	456	999	622	178	731	261	879	247	897	254	911	105	682	135	707	066	674
8	158	783	003	599	843	408	885	462	035	655	220	783	276	911	253	913	290	910	174	734	060	618	086	702
9	198	811	030	631	945	529	892	484	067	630	212	787	242	902	271	931	318	938	174	773	026	613	120	692
10	214	744	020	626	970	521	920	528	088	648	170	730	247	912	310	962	298	904	154	791	061	619	092	645
11	086	666	029	609	983	575	015	619	062	649	194	764	312	989	280	920	266	867	160	778	070	674	004	596
12	034	638	951	499	989	581	067	695	086	680	228	824	289	977	329	961	284	866	192	796	960	520	031	618
13	038	610	874	446	979	592	029	666	034	638	243	849	285	973	310	955	296	902	185	779	935	472	902	462
14	090	625	931	537	048	652	135	748	028	620	253	861	250	948	201	861	313	914	117	682	020	595	954	541
15	045	564	930	543	110	699	113	717	071	663	255	866	266	969	202	867	260	852	085	705	870	454	992	564
16	136	578	976	592	005	635	101	700	116	710	237	882	290	978	219	891	...	...	152	712	632	190	039	602
17	189	643	992	576	106	695	061	660	137	733	235	885	296	956	189	851	...	...	029	652	855	392	994	578
18	146	653	044	600	142	736	099	655	104	717	268	879	293	945	232	892	...	...	061	657	904	452	991	595
19	149	634	030	586	112	718	125	678	139	752	286	878	265	912	238	893	...	...	065	671	931	494	014	615
20	102	630	953	518	022	640	110	666	144	743	340	929	247	887	264	919	...	...	140	703	005	528	000	575
21	094	581	973	531	040	658	010	606	118	690	401	990	258	920	245	912	221	801	090	674	956	463	060	620
22	991	496	961	519	161	731	938	539	092	655	370	971	271	946	220	885	277	871	115	671	987	487	045	649
23	973	526	832	388	133	753	947	539	143	708	261	867	335	028	187	829	235	855	074	656	957	529	036	637
24	998	570	858	450	160	749	981	561	066	662	253	842	247	930	218	838	253	861	090	653	991	551	097	650
25	081	620	833	417	141	711	009	596	045	670	272	861	255	945	250	885	263	886	072	628	044	588	079	639
26	035	581	778	403	148	718	119	682	105	699	272	873	268	982	310	960	230	848	044	595	995	613	081	641
27	969	527	811	391	055	683	084	671	055	649	315	926	267	002	340	975	166	786	053	635	962	554	078	636
28	959	529	869	434	069	665	043	647	044	640	278	889	241	952	302	930	263	857	033	615	974	556	046	642
29	938	527			117	728	068	664	988	630	304	915	269	962	286	902	298	897	995	606	009	593	...	...
30	012	565			065	681	150	713	063	698	337	955	228	916	238	849	253	852	049	674	005	589	...	...
31	060	611			044	650			165	773			189	866	214	818			108	709			...	...

At the end of the year experiments were made for the determination of the angle of torsion, thus breaking the continuity of the values.

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

1905.

Day of Month.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.
d												
1	64·9	67·4	67·0	68·2	66·2	68·2	69·0	70·1	67·9	66·5	68·5	66·1
2	64·9	67·2	65·3	68·5	68·0	68·4	69·4	69·9	68·6	66·8	69·9	66·8
3	65·5	67·4	66·2	68·6	66·9	68·4	69·7	70·0	69·5	66·8	68·3	67·5
4	67·6	67·0	66·1	68·3	66·7	67·8	70·8	70·5	70·7	67·6	65·7	68·1
5	67·1	68·3	67·8	67·0	66·6	67·0	69·8	70·9	70·7	67·1	65·9	66·4
6	66·4	67·9	66·1	65·3	67·7	65·9	69·4	69·8	71·3	66·4	65·9	66·8
7	67·8	66·3	67·2	66·5	68·7	65·8	68·5	69·8	70·1	66·8	66·6	68·1
8	68·8	67·6	66·3	66·8	68·6	66·2	69·2	70·2	68·6	66·1	66·0	68·4
9	68·3	67·8	67·1	67·4	66·2	66·7	70·2	70·2	68·6	67·7	67·2	66·6
10	64·8	68·0	65·7	68·1	66·1	66·1	70·4	69·9	68·0	69·3	66·0	65·8
11	66·9	66·9	67·4	67·9	67·2	66·5	70·9	69·4	67·8	68·5	67·9	67·4
12	67·9	65·6	67·4	68·9	67·5	67·6	71·3	69·1	67·0	67·9	66·1	67·2
13	66·6	66·6	68·3	69·3	67·9	68·0	71·3	69·6	68·0	67·5	65·1	66·1
14	65·0	68·0	67·9	68·3	67·4	68·1	71·7	70·2	67·8	66·3	66·7	67·2
15	64·3	68·3	67·3	67·9	67·4	68·2	71·9	70·4	67·4	68·6	67·1	66·6
16	60·8	68·4	69·0	67·7	67·5	69·6	71·3	70·7	...	66·1	66·0	66·2
17	61·4	67·1	67·3	67·7	67·6	69·8	70·2	70·3	...	68·7	65·1	67·1
18	63·8	65·9	67·5	65·9	68·3	68·2	69·9	70·2	...	67·6	65·6	67·9
19	62·8	65·9	68·0	65·8	68·3	67·4	69·7	70·0	...	68·0	66·2	67·8
20	64·7	66·3	68·5	65·9	67·7	67·3	69·4	70·0	...	66·2	64·5	66·7
21	62·9	66·0	68·5	67·6	66·6	67·3	70·3	70·5	66·9	67·1	63·8	66·1
22	63·7	66·0	66·5	67·8	66·2	67·8	70·8	70·4	67·5	65·9	63·5	67·9
23	65·8	65·9	68·6	67·4	66·3	68·0	71·5	69·5	68·6	67·0	66·6	67·8
24	66·6	67·4	67·3	66·9	67·6	67·3	71·1	68·6	68·1	66·2	66·1	65·8
25	65·2	67·1	66·5	67·2	68·8	67·3	71·4	69·2	68·7	65·9	65·4	66·1
26	65·5	68·8	66·5	66·2	67·5	67·8	72·3	69·8	68·5	65·7	68·5	66·1
27	66·0	66·9	68·9	67·2	67·5	68·2	73·1	69·2	68·6	67·0	67·4	66·0
28	66·5	66·3	67·6	67·9	67·6	68·2	72·2	68·9	67·5	67·0	67·0	67·6
29	67·3		68·2	67·6	69·5	68·2	71·5	68·4	67·7	68·2	67·1	...
30	65·8		68·4	66·2	69·2	68·5	71·3	68·2	67·7	68·8	67·1	...
31	65·7		68·0		68·1		70·9	67·9		67·8		...
Means	65·53	67·08	67·37	67·40	67·53	67·66	70·66	69·74	68·47	67·20	66·43	66·94

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.*)

1905.

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.	43	73	101	125	144	171	169	190	156	180	168	185	174	190	213	230	191	208	150	169	116	131	38	59
1h	50	76	100	120	147	171	161	180	143	164	160	175	166	182	206	221	187	202	152	169	112	124	44	63
2	57	78	108	125	151	170	151	167	132	151	161	173	160	174	202	214	183	195	153	168	118	128	55	69
3	65	83	117	132	153	170	160	174	127	143	162	172	154	165	192	202	177	189	152	164	126	134	61	73
4	71	85	125	135	162	174	168	177	123	137	159	169	157	166	184	191	183	193	160	170	135	140	75	82
5	87	99	138	146	171	181	168	175	125	134	148	155	148	157	175	180	175	183	169	174	147	150	88	92
6	99	108	150	155	176	181	157	161	109	116	113	118	119	125	146	151	153	158	163	166	153	156	96	98
7	99	106	154	157	160	163	133	135	81	85	72	75	81	85	98	100	108	111	141	144	140	140	84	86
8	90	95	126	129	125	128	91	93	45	47	34	34	46	50	37	39	54	57	94	94	100	100	66	66
9	66	66	70	70	71	71	43	45	16	16	12	12	17	18	5	5	13	13	42	42	44	44	36	36
10	26	26	23	23	22	22	6	8	0	0	0	0	1	0	0	0	0	0	3	3	5	5	13	13
11	2	2	7	7	0	0	0	0	14	16	10	10	0	1	26	26	31	34	0	0	0	0	0	0
Noon.	0	0	0	0	14	14	29	29	45	49	46	46	33	34	56	56	67	70	18	18	11	11	7	9
13h	26	26	14	17	58	61	64	66	74	81	84	87	74	78	103	105	110	115	64	67	39	39	24	31
14	44	49	35	40	94	101	97	104	105	117	145	150	124	130	146	151	135	140	93	98	60	65	31	43
15	53	62	64	74	116	128	124	133	142	156	173	180	173	182	173	180	147	155	107	114	71	79	31	47
16	48	64	64	76	136	151	142	156	170	189	193	203	192	203	183	193	158	168	107	117	80	90	31	52
17	32	55	69	84	145	164	161	177	185	206	212	224	206	220	193	205	167	179	115	127	87	102	38	62
18	30	60	75	92	148	170	177	196	191	215	235	250	218	234	212	224	183	198	126	143	91	108	41	65
19	20	55	86	108	158	182	178	199	193	219	230	245	223	239	227	239	203	218	138	157	105	122	39	63
20	18	56	87	109	169	198	179	200	188	214	229	246	219	238	231	246	200	217	146	165	106	123	40	64
21	21	59	99	123	166	195	172	193	181	209	214	231	204	223	220	235	192	209	156	175	102	117	33	57
22	19	54	106	130	156	185	166	187	170	198	197	214	190	212	219	234	199	216	152	171	108	123	25	49
23	28	63	100	124	150	179	172	193	161	189	180	197	178	197	219	234	196	211	147	166	116	131	26	50
Means corrected for Temperature.	62·5		95·9		138·7		139·1		134·6		148·0		146·0		160·9		151·6		124·2		98·4		55·4	

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

1905.

Hour, Greenwich Civil Time.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	For the Year.
Midnight.	66°·1	67°·6	67°·9	67°·8	67°·9	68°·0	70°·9	70°·1	68°·8	67°·6	66°·7	67°·3	68°·06
1h	65·9	67·4	67·8	67·7	67·8	67·9	70·9	70·0	68·7	67·5	66·6	67·2	67·95
2	65·7	67·3	67·6	67·6	67·7	67·8	70·8	69·9	68·6	67·4	66·5	67·0	67·83
3	65·6	67·2	67·5	67·5	67·6	67·7	70·7	69·8	68·6	67·3	66·4	66·9	67·73
4	65·4	67·0	67·3	67·3	67·5	67·7	70·6	69·7	68·5	67·2	66·3	66·7	67·60
5	65·3	66·9	67·2	67·2	67·3	67·6	70·6	69·6	68·4	67·0	66·2	66·6	67·49
6	65·2	66·8	67·0	67·1	67·2	67·5	70·5	69·6	68·3	66·9	66·2	66·5	67·40
7	65·1	66·7	66·9	67·0	67·1	67·4	70·4	69·5	68·2	66·9	66·1	66·5	67·32
8	65·0	66·7	66·9	67·0	67·0	67·3	70·4	69·5	68·2	66·8	66·1	66·4	67·27
9	64·8	66·6	66·8	67·0	66·9	67·3	70·3	69·4	68·1	66·8	66·1	66·4	67·21
10	64·8	66·6	66·8	67·0	66·9	67·3	70·2	69·4	68·1	66·8	66·1	66·4	67·20
11	64·8	66·6	66·8	66·9	67·0	67·3	70·3	69·4	68·2	66·8	66·1	66·4	67·22
Noon.	64·8	66·6	66·8	66·9	67·1	67·3	70·3	69·4	68·2	66·8	66·1	66·5	67·23
13h	64·8	66·7	66·9	67·0	67·2	67·4	70·4	69·5	68·3	66·9	66·1	66·7	67·33
14	65·0	66·8	67·1	67·2	67·4	67·5	70·5	69·6	68·3	67·0	66·3	66·9	67·47
15	65·2	67·0	67·3	67·3	67·5	67·6	70·6	69·7	68·4	67·1	66·4	67·1	67·60
16	65·5	67·1	67·4	67·5	67·7	67·7	70·7	69·8	68·5	67·2	66·5	67·3	67·74
17	65·8	67·2	67·6	67·6	67·8	67·8	70·8	69·9	68·6	67·3	66·7	67·4	67·87
18	66·1	67·3	67·7	67·7	67·9	67·9	70·9	69·9	68·7	67·5	66·8	67·4	67·98
19	66·3	67·5	67·8	67·8	68·0	67·9	70·9	69·9	68·7	67·6	66·8	67·4	68·05
20	66·4	67·5	68·0	67·8	68·0	68·0	71·0	70·0	68·8	67·6	66·8	67·4	68·11
21	66·4	67·6	68·0	67·8	68·1	68·0	71·0	70·0	68·8	67·6	66·7	67·4	68·12
22	66·3	67·6	68·0	67·8	68·1	68·0	71·1	70·0	68·8	67·6	66·7	67·4	68·12
23	66·3	67·6	68·0	67·8	68·1	68·0	71·0	70·0	68·7	67·6	66·7	67·4	68·10

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.)*

1905.

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	484	767	475	710	450	695	450	689	390	669	426	678	889	130	896	127	825	089	789	057	670	890	597	857
2	479	775	485	724	471	750	455	694	431	660	420	674	884	117	895	126	829	079	786	046	706	907	596	867
3	473	760	497	730	458	720	465	694	432	688	438	679	897	128	896	127	872	096	767	029	689	907	600	835
4	525	779	512	751	436	700	467	708	404	668	453	719	902	120	898	116	910	126	776	017	650	923	636	854
5	545	801	537	763	468	701	446	719	384	661	458	743	899	132	918	130	912	130	760	012	653	915	595	851
6	540	804	524	767	435	699	410	714	407	642	434	723	900	139	895	130	930	135	747	013	644	904	592	844
7	556	793	494	762	452	695	409	680	433	647	432	721	882	136	885	120	929	158	742	006	640	887	620	846
8	582	798	507	736	472	736	435	697	441	674	430	707	895	126	895	115	873	133	717	000	637	895	640	860
9	575	812	519	758	465	719	427	670	384	673	440	713	898	110	904	128	860	120	735	987	662	897	613	877
10	495	782	522	765	428	713	446	683	368	662	445	720	919	131	894	127	862	130	765	985	636	892	587	853
11	534	777	490	763	448	691	433	683	384	655	441	714	928	131	880	123	857	136	759	000	656	885	609	831
12	560	789	446	750	457	707	444	677	406	666	466	722	930	128	856	101	830	107	742	985	691	953	591	834
13	527	781	453	732	487	720	443	669	421	656	477	720	948	142	868	103	833	080	741	995	663	940	581	854
14	474	768	491	738	485	728	444	696	416	659	483	722	945	126	896	116	819	081	702	958	667	910	592	856
15	429	738	515	744	473	712	433	693	412	653	494	727	962	145	903	119	809	071	728	940	705	952	585	851
16	350	724	513	733	513	746	435	693	404	645	508	713	947	148	914	126	806	068	698	971	723	996	572	845
17	340	712	507	742	472	740	445	692	420	655	529	736	913	129	895	113	802	054	712	930	656	943	585	841
18	394	714	479	737	469	714	404	687	421	664	500	760	898	124	895	115	808	049	688	938	650	918	603	848
19	388	735	472	740	478	696	390	663	397	649	480	755	888	117	882	113	813	063	685	916	644	906	591	817
20	400	709	466	741	494	723	393	672	408	664	470	749	885	118	865	091	795	061	636	904	615	917	573	837
21	395	725	449	732	478	709	416	655	387	670	471	748	906	115	886	100	763	044	640	881	584	882	548	814
22	418	733	435	724	435	699	421	658	366	649	503	771	921	122	882	098	773	037	608	885	560	860	580	821
23	469	729	439	718	465	694	399	644	345	628	502	764	924	110	865	108	793	040	624	867	609	861	583	814
24	477	720	458	691	454	708	382	640	365	621	476	751	926	124	837	095	779	037	622	880	608	872	540	817
25	459	751	476	723	445	718	369	619	388	627	476	751	924	118	843	088	776	023	610	878	584	863	541	814
26	455	747	493	711	432	705	362	643	380	632	478	744	935	110	850	083	775	027	602	877	631	845	536	796
27	458	720	475	737	488	714	389	624	397	638	473	729	960	122	838	085	770	017	620	867	637	884	530	798
28	467	708	440	702	446	702	416	632	399	667	472	728	949	135	856	106	767	025	648	898	611	865	550	791
29	487	709			432	677	425	666	418	642	468	726	950	146	841	103	776	028	667	887	616	853	...	...
30	459	746			450	687	400	689	416	657	475	735	938	141	838	113	798	054	681	903	611	844	...	...
31	443	714			444	689			412	676			921	137	847	111			658	910			...	...

At the end of June, and again 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.

1905.

Day of Month.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.
d												
1	65·8	68·1	67·6	67·9	66·0	67·3	67·8	68·3	66·7	66·5	68·8	66·9
2	65·2	67·9	66·0	67·9	68·4	67·2	68·2	68·3	67·4	66·9	69·7	66·4
3	65·6	68·2	66·8	68·4	67·1	67·8	68·3	68·3	68·6	66·8	68·9	68·1
4	67·2	67·9	66·7	67·8	66·7	66·6	68·9	68·9	69·0	67·8	66·3	68·9
5	67·1	68·5	68·2	66·3	66·1	65·7	68·2	69·2	68·9	67·3	66·8	67·1
6	66·7	67·7	66·7	64·8	68·1	65·5	67·9	68·1	69·5	66·6	66·9	67·3
7	68·0	66·5	67·7	66·4	69·1	65·5	67·2	68·1	68·4	66·7	67·5	68·5
8	69·0	68·4	66·7	66·8	68·2	66·1	68·3	68·8	66·9	65·8	67·0	68·8
9	68·0	67·9	67·2	67·7	65·5	66·3	69·2	68·6	66·9	67·3	68·1	66·7
10	65·6	67·7	65·7	68·0	65·3	66·2	69·2	68·2	66·5	68·8	67·1	66·6
11	67·7	66·3	67·7	67·4	66·4	66·3	69·6	67·7	66·0	67·8	68·4	68·7
12	68·4	64·8	67·4	68·2	66·9	67·1	69·8	67·6	66·1	67·7	66·8	67·7
13	67·2	66·0	68·2	68·5	68·1	67·7	70·0	68·1	67·5	67·2	66·1	66·3
14	65·3	67·5	67·7	67·3	67·7	67·9	70·6	68·8	66·8	67·1	67·7	66·7
15	64·6	68·4	67·9	66·9	67·8	68·2	70·5	69·0	66·8	69·2	67·5	66·6
16	61·5	68·8	68·2	67·0	67·8	69·5	69·7	69·2	66·8	66·3	66·3	66·3
17	61·6	68·1	66·5	67·5	68·1	69·4	69·0	68·9	67·3	68·9	65·6	67·1
18	64·1	67·0	67·6	65·8	67·7	66·9	68·5	68·8	67·8	67·4	66·5	67·6
19	62·8	66·5	68·9	66·3	67·3	66·2	68·4	68·3	67·4	68·3	66·8	68·5
20	64·6	66·2	68·4	66·0	67·1	66·0	68·2	68·5	66·6	66·5	64·9	66·7
21	63·6	65·8	68·3	67·9	65·8	66·1	69·3	69·1	65·9	67·8	65·1	66·6
22	64·3	65·5	66·7	68·0	65·8	66·5	69·7	69·0	66·7	66·1	65·0	67·8
23	66·9	66·0	68·4	67·6	65·8	66·8	70·4	67·7	67·5	67·7	67·3	68·3
24	67·7	68·2	67·2	67·0	67·1	66·2	69·8	67·0	67·0	67·0	66·7	66·1
25	65·4	67·5	66·3	67·4	67·9	66·2	70·0	67·6	67·5	66·5	66·0	66·3
26	65·4	68·9	66·3	65·9	67·3	66·6	70·9	68·2	67·3	66·2	69·1	66·9
27	66·8	66·8	68·5	68·1	67·8	67·1	71·5	67·5	67·5	67·5	67·5	66·5
28	67·8	66·8	67·1	69·0	66·5	67·1	70·4	67·4	67·0	67·4	67·2	67·8
29	68·7		67·6	67·8	68·6	67·0	69·9	66·8	67·3	68·8	68·0	...
30	65·6		68·0	65·5	67·8	66·9	69·6	66·2	67·1	68·7	68·2	...
31	66·4		67·6		66·7		69·0	66·7		67·3		...
Means	65·95	67·28	67·41	67·24	67·18	66·86	69·29	68·16	67·29	67·35	67·13	67·28

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.)*

1905.

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.	34	11	39	18	47	26	54	35	59	44	45	35	52	39	45	32	34	23	37	22	22	12	28	11
1h	27	8	34	15	41	22	49	32	54	42	41	33	48	37	40	30	29	20	33	20	15	7	22	10
2	24	7	31	16	36	21	46	34	54	44	40	34	42	33	39	31	29	23	27	16	13	5	19	9
3	20	7	28	16	34	21	44	34	54	46	39	35	41	34	40	34	28	24	28	20	12	6	15	9
4	18	7	25	17	32	24	43	37	57	53	43	41	45	41	40	36	29	25	27	21	12	8	12	8
5	18	11	24	18	31	25	40	36	58	56	45	45	49	47	42	40	30	28	24	20	11	9	9	9
6	17	12	21	17	29	27	41	39	58	58	42	44	49	49	45	45	31	33	23	21	11	11	6	8
7	13	11	19	17	31	31	42	42	56	58	42	46	50	52	44	46	31	33	25	23	12	12	5	7
8	12	12	21	21	30	30	38	40	49	53	38	42	47	51	41	43	27	31	30	30	14	14	5	7
9	6	8	16	16	25	25	28	30	32	38	26	33	35	41	31	35	16	20	23	23	12	12	3	5
10	0	2	10	12	15	17	16	18	13	17	14	21	20	24	17	19	5	9	12	14	4	4	0	0
11	0	0	2	2	3	3	4	6	3	7	3	7	8	10	6	8	0	2	2	4	0	0	3	1
Noon.	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	3	6	0
13h	5	0	6	4	10	8	10	8	12	8	11	11	10	8	12	10	13	11	5	3	12	10	13	3
14	18	9	21	17	28	22	31	25	28	20	29	27	27	20	29	25	28	26	15	11	24	18	21	4
15	27	14	35	29	44	34	50	40	42	32	42	40	43	36	50	44	42	38	31	25	33	25	26	7
16	33	18	46	36	57	44	58	43	57	45	54	48	58	49	64	56	53	47	39	28	40	28	30	11
17	42	19	46	34	60	45	65	48	69	54	65	59	70	59	72	64	54	48	40	29	50	33	34	13
18	48	20	51	34	58	41	68	51	74	57	71	63	75	62	70	60	52	43	44	29	51	34	32	11
19	52	22	54	35	61	40	68	49	74	57	68	60	75	62	63	53	52	41	45	28	48	31	33	14
20	52	20	53	32	62	39	68	49	73	56	64	54	72	57	60	50	51	40	42	27	43	28	32	13
21	50	18	48	27	60	37	65	46	70	51	60	50	67	49	56	43	46	35	39	24	39	27	32	13
22	44	14	40	19	57	34	61	42	67	48	56	46	63	48	50	37	42	31	35	20	33	21	30	13
23	40	12	39	18	53	32	57	38	64	45	52	42	60	45	48	38	39	30	35	20	27	17	30	13
Means corrected for Temperature.	11·0		19·6		27·0		34·2		41·2		38·2		39·7		36·6		27·5		19·9		15·6		8·3	

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

1905.

Hour, Greenwich Civil Time.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	For the Year.
Midnight.	66°·4	67°·8	67°·9	67°·7	67°·5	67°·2	69°·6	68°·5	67°·6	67°·7	67°·3	67°·6	67°·73
1h	66·2	67·7	67·8	67·6	67·4	67·1	69·5	68·4	67·5	67·6	67·2	67·4	67·62
2	66·1	67·5	67·6	67·4	67·3	67·0	69·4	68·3	67·4	67·5	67·2	67·3	67·50
3	65·9	67·4	67·5	67·3	67·2	66·9	69·3	68·2	67·3	67·4	67·1	67·1	67·38
4	65·8	67·2	67·3	67·1	67·0	66·8	69·2	68·1	67·3	67·3	67·0	67·0	67·26
5	65·6	67·1	67·2	67·0	66·9	66·7	69·1	68·0	67·2	67·2	66·9	66·8	67·14
6	65·5	67·0	67·0	66·9	66·8	66·6	69·0	67·9	67·0	67·1	66·8	66·7	67·02
7	65·4	66·9	66·9	66·8	66·7	66·5	68·9	67·8	67·0	67·1	66·8	66·7	66·96
8	65·3	66·8	66·9	66·7	66·6	66·5	68·8	67·8	66·9	67·0	66·8	66·7	66·90
9	65·2	66·8	66·9	66·7	66·5	66·4	68·7	67·7	66·9	67·0	66·8	66·7	66·86
10	65·2	66·7	66·8	66·7	66·6	66·4	68·8	67·8	66·9	66·9	66·8	66·8	66·87
11	65·3	66·8	66·9	66·7	66·6	66·5	68·9	67·8	67·0	66·9	66·8	66·9	66·93
Noon.	65·3	66·8	66·9	66·8	66·8	66·7	69·0	67·9	67·1	67·0	66·8	67·1	67·02
13h	65·5	66·9	67·0	66·9	67·0	66·7	69·1	68·0	67·2	67·1	66·9	67·3	67·13
14	65·7	67·0	67·2	67·1	67·2	66·8	69·3	68·1	67·2	67·2	67·1	67·6	67·29
15	65·9	67·1	67·4	67·3	67·3	66·8	69·3	68·2	67·3	67·3	67·2	67·7	67·40
16	66·0	67·3	67·5	67·5	67·4	67·0	69·4	68·3	67·4	67·5	67·4	67·7	67·53
17	66·4	67·4	67·6	67·6	67·5	67·0	69·5	68·3	67·4	67·5	67·6	67·8	67·63
18	66·6	67·6	67·7	67·6	67·6	67·1	69·6	68·4	67·5	67·7	67·6	67·8	67·73
19	66·7	67·7	67·9	67·7	67·6	67·1	69·6	68·4	67·6	67·8	67·6	67·7	67·78
20	66·8	67·8	68·0	67·7	67·6	67·2	69·7	68·4	67·6	67·7	67·5	67·7	67·81
21	66·8	67·8	68·0	67·7	67·7	67·2	69·8	68·5	67·6	67·7	67·4	67·7	67·82
22	66·7	67·8	68·0	67·7	67·7	67·2	69·7	68·5	67·6	67·7	67·4	67·6	67·80
23	66·6	67·8	67·9	67·7	67·7	67·2	69·7	68·4	67·5	67·7	67·3	67·6	67·76

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, 1905.	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° 12'·6	636	752	679	1178	3271
February	16. 10·1	518	737	544	959	3206
March	16. 11·2	597	710	603	1106	3088
April	16. 11·0	606	675	593	1122	2936
May	16. 11·5	676	655	620	1252	2849
June	16. 9·6	853	728	517	1580	3166
July	16. 9·9	948	1128	533	1756	4906
August	16. 9·7	896	1111	523	1660	4832
September	16. 8·7	875	1077	469	1621	4684
October	16. 8·6	703	949	463	1302	4128
November	16. 8·0	569	899	431	1054	3910
December	16. 7·5	620	837	404	1148	3640
Means	16. 9·9	.....	.....	532	.....	.....
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 1·8523 and 0·18523 respectively for the year, and of whole Vertical Force (applicable to column 6) are 4·3494 and 0·43494 respectively for the year.

HORIZONTAL FORCE.—At the end of the year experiments were made for determination of the angle of torsion, thus breaking the continuity of the values.
VERTICAL FORCE.—At the end of June, and again 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 1905.

(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′·62	151·3	25·4	87·3	280·3	110·5
1h	1·73	145·9	22·7	93·2	270·3	98·7
2	1·80	143·0	22·4	97·0	264·9	97·4
3	1·83	142·1	23·5	98·6	263·2	102·2
4	1·68	143·6	26·2	90·5	266·0	114·0
5	1·23	144·2	28·4	66·3	267·1	123·5
6	0·73	133·1	30·0	39·3	246·5	130·5
7	0·27	107·6	31·2	14·5	199·3	135·7
8	0·00	69·7	30·9	0·0	129·1	134·4
9	0·42	28·5	23·5	22·6	52·8	102·2
10	2·12	0·3	12·8	114·2	0·6	55·7
11	4·71	0·0	3·9	253·8	0·0	17·0
Noon.	6·83	20·0	0·0	368·0	37·0	0·0
13h	7·95	56·4	6·7	428·4	104·5	29·1
14	7·80	91·0	18·4	420·3	168·6	80·0
15	6·58	116·2	30·0	354·5	215·2	130·5
16	5·12	130·5	37·4	275·9	241·7	162·7
17	3·93	142·4	41·8	211·8	263·8	181·8
18	3·10	154·9	41·8	167·0	286·9	181·8
19	2·66	162·5	40·7	143·3	301·0	177·0
20	2·21	165·0	38·4	119·1	305·6	167·0
21	1·81	160·8	34·7	97·5	297·8	150·9
22	1·49	156·4	30·8	80·3	289·7	134·0
23	1·44	153·2	28·9	77·6	283·8	125·7
Means . . .	2·88	113·3	26·3	155·0	209·8	114·3
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 whole Horizontal Force (applicable to columns 4 and 5) are 1·8523 and 0·18523 respectively, and of whole Vertical Force (applicable to column 6) are 4·3494 and 0·43494 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.*)

1905.

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	4·7	226	15·0	219	7·7	180	21·3	409	12·4	271	...	190	12·0	274	11·0	307	10·8	277	10·2	314	8·5	240	2·8	127
2	3·5	73	12·7	254	13·5	321	17·6	426	9·7	257	...	255	13·2	327	13·4	610	11·6	344	11·0	290	8·6	278	5·4	137
3	4·7	216	23·9	867	7·5	316	12·9	362	13·5	340	...	239	9·8	213	10·7	477	17·0	425	9·4	277	8·0	286	6·5	164
4	10·9	285	10·4	176	12·6	233	11·2	328	14·5	313	...	287	12·9	275	10·4	330	11·3	378	9·6	225	13·8	230	11·0	295
5	11·3	511	9·4	233	11·2	430	12·4	320	10·6	246	...	317	12·5	373	10·3	348	12·1	360	8·6	178	13·0	238	4·0	144
6	12·4	316	7·0	188	10·0	290	10·6	353	13·9	321	11·8	269	17·0	615	11·7	410	10·4	263	18·4	330	11·0	220	5·0	110
7	3·6	136	9·1	162	13·7	491	12·6	355	13·0	320	10·7	222	10·9	428	7·3	460	12·2	328	9·3	148	7·1	196	3·9	141
8	5·2	127	9·2	165	10·1	384	11·9	282	11·1	276	9·0	376	10·4	417	9·8	382	11·0	229	9·6	82	7·6	207	3·9	91
9	3·6	67	8·2	165	12·6	180	11·9	212	10·4	224	14·9	305	10·2	345	9·3	177	10·5	215	6·0	129	8·2	206	4·3	32
10	6·4	93	11·1	346	8·7	158	12·0	265	7·9	279	12·6	422	8·5	292	9·5	248	13·3	239	7·3	153	8·7	303	4·7	221
11	8·6	246	7·0	219	12·2	167	11·2	269	9·3	306	13·3	384	8·8	170	9·8	218	11·6	242	9·5	185	8·3	233	4·2	126
12	5·1	156	9·1	248	11·1	144	10·9	249	10·7	234	7·8	192	12·0	178	12·1	144	9·6	244	8·9	202	23·9	570	13·3	299
13	4·2	49	9·7	257	11·2	329	12·2	279	10·7	230	8·2	225	11·8	299	15·8	185	10·6	294	8·1	246	11·1	348	12·3	299
14	10·3	264	12·1	203	14·0	222	11·4	295	7·3	209	8·5	209	10·0	253	10·2	355	10·6	300	8·1	294	7·8	226	7·1	92
15	11·5	182	8·7	142	16·5	202	8·5	285	9·1	214	9·2	217	11·7	283	15·6	317	10·7	257	7·9	243	20·5	732	3·5	102
16	4·7	119	10·5	102	13·6	288	10·2	166	8·2	209	8·4	292	9·8	221	16·8	208	...	...	9·5	215	13·1	463	3·2	61
17	8·9	242	7·1	147	8·3	230	7·2	212	10·6	227	11·0	333	13·4	285	13·6	320	...	...	12·2	290	5·8	202	3·9	149
18	5·3	170	5·9	158	9·7	297	8·8	177	12·5	344	10·7	249	12·0	388	12·7	340	...	...	11·0	220	5·2	139	3·6	107
19	7·2	106	5·0	141	10·1	222	10·3	214	13·8	294	11·4	272	13·3	300	14·5	322	...	...	10·1	242	5·9	186	4·0	111
20	8·6	170	7·2	192	12·2	125	9·7	319	11·0	263	8·1	220	13·2	319	12·7	352	...	...	10·9	280	2·8	166	8·1	277
21	6·8	193	9·6	178	11·0	290	13·7	351	11·7	229	13·9	332	14·6	285	9·8	260	9·1	284	8·7	217	8·3	267	4·3	112
22	12·8	284	8·9	235	12·4	297	9·7	284	12·0	287	12·5	402	9·9	285	9·0	203	8·8	196	6·8	234	4·0	155	2·5	122
23	3·4	128	11·6	193	10·8	265	7·9	219	12·3	204	13·9	665	13·2	411	8·8	225	7·9	173	7·4	285	6·6	199	3·2	86
24	9·5	171	6·3	165	12·1	287	9·7	214	6·9	214	8·9	351	13·3	363	9·5	207	8·2	162	6·8	192	5·5	126	3·5	105
25	8·8	197	7·8	265	11·6	303	8·5	301	8·3	178	12·4	296	11·4	286	8·9	222	6·8	173	8·0	229	4·6	105	4·8	97
26	6·4	265	5·9	166	9·9	251	7·6	269	9·4	158	13·8	342	10·2	252	10·3	202	12·9	283	8·0	245	6·0	172	4·2	101
27	9·2	186	8·7	182	12·5	235	8·9	174	14·0	306	10·0	251	10·3	235	9·6	247	13·5	340	7·2	233	7·4	179	3·3	112
28	6·9	82	6·2	150	9·2	236	8·3	212	10·0	281	12·8	267	14·7	283	13·0	227	7·9	292	12·4	347	4·2	105	9·1	232
29	8·0	265			12·0	190	10·8	247	12·2	360	14·0	332	8·3	238	12·6	379	6·7	244	6·9	224	4·1	91	10·2	...
30	6·2	247			12·7	163	13·9	229	12·2	309	13·0	337	9·7	221	9·7	380	11·0	241	8·8	229	4·8	139	6·0	...
31	10·0	200			11·5	173			10·4	273			11·7	238	11·0	362			7·3	260			4·7	...
Means	7·4	193	9·4	218	11·4	255	11·1	276	11·0	264	11·2	302	11·6	302	11·3	304	10·6	271	9·2	233	8·5	240	5·5	145

The mean of twelve monthly values is, for Declination 9′·85, and for Horizontal Force 250·2.

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, 1905.	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	5·9	108	22	30·4	492	121
February	7·3	157	36	41·7	951	186
March	9·4	198	45	52·1	1168	220
April	10·0	200	51	50·7	1278	244
May	10·3	219	58	51·9	1369	335
June	10·0	250	63	57·0	1603	292
July	10·8	239	62	57·9	1585	311
August	10·5	246	64	53·5	1629	285
September	9·3	218	48	55·0	1343	239
October	8·1	175	30	43·9	1131	142
November	6·0	156	34	39·8	912	213
December	4·4	98	14	26·4	449	83
Means	8′·50	188·7	43·9	46′·69	1159·2	222·6

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, 1905.	m	a_1	b_1	a_2	b_2	a_3	b_3	a_4	b_4
	DECLINATION WEST.								
January	2′·52	− 1′·82	− 0′·40	+ 0′·18	+ 1′·24	− 0′·39	− 0′·18	+ 0′·12	+ 0′·33
February	2·40	− 1·95	− 1·16	+ 0·49	+ 1·76	− 0·27	− 0·56	+ 0·14	+ 0·43
March	3·36	− 2·22	− 1·76	+ 0·96	+ 1·87	− 0·86	− 0·92	+ 0·33	+ 0·46
April	3·91	− 1·89	− 1·98	+ 1·05	+ 1·90	− 1·00	− 0·92	+ 0·41	+ 0·26
May	4·58	− 1·64	− 2·43	+ 1·85	+ 1·69	− 0·89	− 0·55	+ 0·19	+ 0·02
June	4·42	− 1·92	− 2·81	+ 1·62	+ 1·62	− 0·70	− 0·41	− 0·02	+ 0·08
July	4·50	− 1·78	− 2·96	+ 1·63	+ 1·91	− 0·55	− 0·66	− 0·03	+ 0·12
August	4·18	− 2·18	− 1·88	+ 2·17	+ 1·52	− 1·01	− 0·46	+ 0·08	+ 0·05
September	3·26	− 2·70	− 1·38	+ 1·93	+ 1·07	− 0·90	− 0·22	+ 0·20	+ 0·01
October	2·96	− 1·80	− 1·47	+ 1·10	+ 1·46	− 0·77	− 0·70	+ 0·50	+ 0·26
November	1·98	− 1·87	− 1·11	+ 0·42	+ 1·37	− 0·44	− 0·25	+ 0·42	+ 0·12
December	1·86	− 1·43	− 0·62	+ 0·03	+ 0·81	− 0·33	+ 0·01	+ 0·15	+ 0·17
For the Year	2·88	− 1·93	− 1·66	+ 1·12	+ 1·52	− 0·67	− 0·49	+ 0·21	+ 0·19
	HORIZONTAL FORCE.								
January	62·5	+ 19·1	+ 17·4	− 22·5	+ 6·2	+ 13·7	− 8·5	− 3·5	+ 6·7
February	95·9	+ 50·4	+ 19·0	− 32·0	− 1·2	+ 12·8	− 14·2	− 2·4	+ 5·8
March	138·7	+ 67·5	− 12·9	− 41·2	+ 9·4	+ 10·5	− 17·5	− 3·5	+ 8·5
April	139·1	+ 73·4	− 27·3	− 36·0	+ 17·1	+ 6·0	− 13·8	+ 4·0	+ 5·1
May	134·6	+ 65·0	− 61·6	− 27·5	+ 19·1	+ 2·2	− 10·7	+ 4·7	+ 0·6
June	148·0	+ 72·9	− 71·5	− 32·8	+ 28·3	− 5·4	− 10·0	− 0·5	+ 0·9
July	146·0	+ 75·0	− 64·9	− 34·7	+ 26·1	+ 1·7	− 10·6	− 1·0	+ 1·4
August	160·9	+ 87·9	− 55·7	− 20·3	+ 33·1	− 5·1	− 16·2	+ 5·0	+ 3·8
September	151·6	+ 76·0	− 39·6	− 19·3	+ 29·4	− 8·5	− 18·9	+ 8·5	+ 5·1
October	124·2	+ 68·6	− 7·0	− 29·0	+ 16·7	+ 3·7	− 20·7	+ 0·8	+ 9·7
November	98·4	+ 51·7	+ 6·9	− 31·5	+ 10·4	+ 7·3	− 16·2	+ 4·1	+ 7·2
December	55·4	+ 19·3	+ 8·8	− 23·1	+ 8·2	+ 3·5	− 7·5	+ 1·9	+ 6·1
For the Year	113·3	+ 60·6	− 24·0	− 29·2	+ 16·9	+ 3·5	− 13·8	+ 1·5	+ 5·1
	VERTICAL FORCE.								
January	11·0	+ 3·3	− 5·2	− 5·8	− 1·2	+ 1·9	− 0·6	− 0·5	+ 0·4
February	19·6	+ 3·7	− 8·2	− 9·2	+ 0·3	+ 3·8	+ 1·0	− 2·7	+ 0·1
March	27·0	+ 6·0	− 8·1	− 10·8	− 1·5	+ 6·3	− 1·0	− 3·0	− 0·8
April	34·2	+ 10·4	− 5·7	− 13·2	− 1·4	+ 5·7	− 0·9	− 3·3	+ 0·8
May	41·2	+ 15·5	+ 0·4	− 18·0	− 2·1	+ 5·3	− 1·0	− 1·0	+ 0·9
June	38·2	+ 10·7	− 7·5	− 16·8	− 1·9	+ 5·1	− 0·3	− 1·7	− 0·1
July	39·7	+ 11·3	− 5·0	− 17·7	− 5·1	+ 7·0	+ 0·5	− 1·0	− 0·2
August	36·6	+ 7·4	− 7·5	− 17·6	− 0·1	+ 7·8	+ 0·4	− 1·9	− 0·7
September	27·5	+ 5·5	− 8·5	− 12·9	+ 1·4	+ 5·8	− 2·4	− 2·3	+ 0·4
October	19·9	+ 4·6	− 2·5	− 8·0	− 1·4	+ 5·1	+ 1·1	− 2·5	+ 0·1
November	15·6	+ 1·6	− 11·5	− 7·4	− 1·3	+ 2·6	− 1·2	− 1·1	+ 0·4
December	8·3	+ 4·5	− 2·6	− 2·4	− 0·2	+ 1·0	− 0·4	− 0·1	− 0·1
For the Year	26·3	+ 7·0	− 6·0	− 11·7	− 1·2	+ 4·8	− 0·4	− 1·7	+ 0·1

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, 1905.	m	c_1	a	a'	c_2	β	β'	c_3	γ	γ'	c_4	δ	δ'
	DECLINATION WEST.												
January	2·52	1·86	257° 40′	260° 0′	1·26	8° 3′	12° 44′	0·43	245° 49′	252° 50′	0·35	19° 23′	28° 44′
February	2·40	2·27	239. 15	242. 44	1·83	15. 25	22. 24	0·62	205. 40	216. 8	0·46	18. 6	32. 4
March	3·36	2·83	231. 33	233. 44	2·10	27. 9	31. 32	1·26	223. 6	229. 40	0·57	35. 50	44. 35
April	3·91	2·74	223. 44	223. 48	2·17	28. 51	28. 58	1·36	227. 16	227. 27	0·48	57. 31	57. 46
May	4·58	2·93	213. 56	213. 4	2·51	47. 30	45. 46	1·04	238. 16	235. 41	0·19	83. 25	79. 58
June	4·42	3·40	214. 17	214. 21	2·29	45. 5	45. 13	0·82	239. 29	239. 41	0·08	345. 15	345. 31
July	4·50	3·45	210. 58	212. 19	2·51	40. 25	43. 8	0·86	219. 37	223. 41	0·13	346. 36	352. 2
August	4·18	2·87	229. 15	230. 13	2·65	54. 58	56. 55	1·11	245. 24	248. 19	0·09	57. 18	61. 11
September	3·26	3·03	242. 51	241. 38	2·21	61. 4	58. 39	0·93	255. 57	252. 19	0·20	85. 57	81. 6
October	2·96	2·32	230. 53	227. 25	1·83	36. 56	29. 59	1·04	227. 30	217. 5	0·56	62. 32	48. 38
November	1·98	2·17	239. 20	235. 25	1·44	17. 9	9. 19	0·51	240. 10	228. 25	0·44	73. 46	58. 7
December	1·86	1·56	246. 37	245. 33	0·81	2. 21	0. 12	0·34	271. 25	268. 12	0·22	41. 20	37. 2
For the Year	2·88	2·55	229. 16	229. 16	1·89	36. 23	36. 23	0·83	234. 15	234. 15	0·28	46. 48	46. 48
	HORIZONTAL FORCE.												
January	62′·5	25′·8	47° 32′	49° 52′	23′·3	285° 21′	290° 2′	16′·1	121° 50′	128° 51′	7′·6	332° 44′	342° 5′
February	95·9	53·9	69. 24	72. 53	32·0	267. 50	274. 49	19·1	137. 49	148. 17	6·3	337. 18	351. 16
March	138·7	68·7	100. 48	102. 59	42·2	282. 54	287. 17	20·4	149. 10	155. 44	9·2	337. 40	346. 25
April	139·1	78·3	110. 23	110. 27	39·8	295. 23	295. 30	15·1	156. 21	156. 32	6·5	37. 41	37. 56
May	134·6	89·5	133. 26	132. 34	33·5	304. 42	302. 58	10·9	168. 37	166. 2	4·7	82. 8	78. 41
June	148·0	102·0	134. 27	134. 31	43·3	310. 49	310. 57	11·4	208. 25	208. 37	1·1	330. 6	330. 22
July	146·0	99·1	130. 52	132. 13	43·4	306. 59	309. 42	10·8	171. 11	175. 15	1·8	325. 15	330. 41
August	160·9	104·1	122. 23	123. 21	38·8	328. 29	330. 26	17·0	197. 21	200. 16	6·2	53. 8	57. 1
September	151·6	85·6	117. 31	116. 18	35·2	326. 43	324. 18	20·7	204. 8	200. 30	9·9	58. 47	53. 56
October	124·2	68·9	95. 50	92. 22	33·5	299. 52	292. 55	21·1	169. 49	159. 24	9·7	4. 56	351. 2
November	98·4	52·1	82. 22	78. 27	33·2	288. 20	280. 30	17·8	155. 42	143. 57	8·3	29. 30	13. 51
December	55·4	21·2	65. 30	64. 26	24·6	289. 30	287. 21	8·3	155. 1	151. 48	6·4	17. 0	12. 42
For the Year	113·3	65·1	111. 37	111. 37	33·7	300. 6	300. 6	14·2	165. 32	165. 32	5·3	16. 28	16. 28
	VERTICAL FORCE.												
January	11′·0	6′·2	147° 56′	150° 16′	5′·9	258° 10′	262° 51′	2′·0	107° 54′	114° 55′	0′·7	310° 55′	320° 16′
February	19·6	9·0	155. 39	159. 8	9·2	271. 40	278. 39	3·9	74. 31	84. 59	2·7	271. 35	285. 33
March	27·0	10·1	143. 28	145. 39	10·9	262. 10	266. 33	6·4	98. 50	105. 24	3·1	255. 1	263. 46
April	34·2	11·9	118. 45	118. 49	13·3	264. 11	264. 18	5·8	99. 1	99. 12	3·4	283. 31	283. 46
May	41·2	15·5	88. 39	87. 47	18·2	263. 26	261. 42	5·4	100. 47	98. 12	1·4	312. 7	308. 40
June	38·2	13·1	125. 6	125. 10	16·9	263. 33	263. 41	5·2	93. 37	93. 49	1·8	265. 22	265. 38
July	39·7	12·4	114. 6	115. 27	18·4	253. 59	256. 42	7·0	85. 45	89. 49	1·0	257. 16	262. 42
August	36·6	10·5	135. 15	136. 13	17·6	269. 37	271. 34	7·8	86. 53	89. 48	2·0	249. 17	253. 10
September	27·5	10·1	146. 54	145. 41	13·0	275. 57	273. 32	6·3	112. 36	108. 58	2·3	278. 53	274. 2
October	19·9	5·2	118. 18	114. 50	8·1	260. 17	253. 20	5·2	77. 37	67. 12	2·5	273. 15	259. 21
November	15·6	11·6	172. 12	168. 17	7·5	260. 12	252. 22	2·9	115. 18	103. 33	1·2	287. 40	272. 1
December	8·3	5·2	119. 36	118. 32	2·4	264. 10	262. 1	1·1	112. 17	109. 4	0·1	239. 2	234. 44
For the Year	26·3	9·2	130. 24	130. 24	11·7	264. 2	264. 2	4·8	94. 52	94. 52	1·7	272. 50	272. 50

TABLE XVII.—RESULTS of OBSERVATIONS of MAGNETIC DIP made in the MAGNETIC PAVILION in the YEAR 1905.

Greenwich Civil Time, 1905.	3-inch Needle.	Magnetic Dip.	Observer.	Greenwich Civil Time, 1905.	3-inch Needle.	Magnetic Dip.	Observer.	Greenwich Civil Time, 1905.	3-inch Needle.	Magnetic Dip.	Observer.
d h				d h				d h			
Jan. 3. 12	D_1	66° 56′ 27″	E	May 2. 12	D_1	66° 56′ 48″	E	Sept. 1. 12	D_2	66° 56′ 42″	E
5. 12	D_2	66. 55. 51	E	4. 12	D_2	66. 56. 32	E	4. 14	D_1	66. 54. 59	E
6. 12	D_1	66. 57. 11	E	8. 12	D_1	66. 53. 35	E	6. 12	D_2	66. 55. 50	E
10. 12	D_2	66. 56. 11	E	10. 12	D_2	66. 55. 5	E	8. 12	D_1	66. 57. 50	E
12. 12	D_1	66. 56. 5	E	12. 12	D_1	66. 55. 44	E	12. 12	D_2	66. 55. 8	E
13. 12	D_2	66. 57. 15	E	15. 12	D_2	66. 54. 53	E	14. 12	D_1	66. 56. 48	E
16. 15	D_1	66. 53. 55	B	16. 14	D_1	66. 53. 47	B	18. 13	D_2	66. 56. 0	B
17. 16	D_2	66. 55. 31	B	18. 15	D_2	66. 56. 49	B	20. 13	D_1	66. 55. 48	B
18. 12	D_1	66. 57. 27	B	23. 13	D_1	66. 55. 4	B	22. 12	D_2	66. 56. 2	B
23. 15	D_2	66. 55. 58	B	25. 16	D_2	66. 54. 1	B	25. 12	D_1	66. 53. 22	B
26. 12	D_1	66. 56. 19	B	27. 13	D_1	66. 53. 57	B	27. 13	D_2	67. 0. 18	B
30. 15	D_2	66. 56. 19	B	29. 11	D_2	66. 55. 30	B	29. 12	D_1	66. 56. 28	B
Feb. 1. 15	D_1	66. 56. 45	B	June 1. 16	D_1	66. 54. 35	B	Oct. 2. 11	D_2	67. 0. 49	B
4. 13	D_2	66. 56. 0	B	3. 12	D_2	66. 57. 36	B	4. 15	D_1	66. 55. 33	B
8. 12	D_1	66. 55. 42	B	5. 13	D_1	66. 58. 56	B	6. 12	D_2	66. 58. 21	B
9. 15	D_2	66. 56. 7	B	7. 12	D_2	66. 57. 51	B	9. 11	D_1	66. 56. 17	B
11. 12	D_1	66. 57. 41	B	9. 11	D_1	66. 51. 49	B	11. 13	D_2	66. 56. 39	B
13. 12	D_2	66. 59. 50	B	15. 12	D_2	66. 55. 48	B	13. 13	D_1	66. 55. 14	B
15. 12	D_1	66. 56. 16	E	16. 12	D_2	66. 57. 6	E	16. 12	D_2	66. 55. 36	E
17. 12	D_2	66. 58. 34	E	19. 12	D_1	66. 55. 9	E	19. 12	D_1	66. 55. 32	E
20. 12	D_1	66. 56. 37	E	21. 12	D_2	66. 57. 41	E	23. 12	D_2	66. 58. 41	E
22. 12	D_2	66. 55. 24	E	23. 13	D_1	66. 57. 12	E	25. 12	D_1	66. 53. 19	E
24. 12	D_1	66. 56. 42	E	26. 12	D_2	66. 55. 22	E	27. 12	D_2	66. 55. 33	E
27. 12	D_2	66. 54. 19	E	28. 12	D_1	66. 56. 32	E	30. 12	D_1	66. 56. 9	E
Mar. 2. 12	D_1	66. 56. 36	E	July 4. 12	D_1	66. 56. 24	E	Nov. 2. 12	D_2	66. 54. 30	E
3. 12	D_2	66. 58. 18	E	6. 12	D_2	66. 55. 41	E	6. 12	D_1	66. 52. 33	E
7. 12	D_1	66. 57. 38	E	7. 12	D_1	66. 53. 58	E	7. 12	D_2	66. 55. 4	E
8. 12	D_2	66. 54. 55	E	10. 12	D_2	66. 54. 12	E	9. 12	D_1	66. 54. 1	E
13. 12	D_1	66. 56. 27	E	12. 12	D_1	66. 52. 43	E	13. 12	D_2	66. 57. 15	E
14. 12	D_2	66. 54. 57	E	14. 12	D_2	66. 55. 31	E	14. 12	D_1	66. 55. 6	E
18. 11	D_1	66. 55. 42	B	17. 12	D_2	66. 53. 46	B	17. 12	D_2	66. 58. 49	B
20. 15	D_2	66. 55. 23	B	19. 15	D_1	66. 53. 15	B	20. 12	D_1	66. 55. 56	B
23. 12	D_1	66. 54. 35	B	21. 14	D_2	66. 55. 4	B	22. 12	D_2	66. 58. 26	B
25. 11	D_2	66. 56. 5	B	24. 13	D_1	66. 53. 19	B	24. 12	D_1	66. 55. 59	B
27. 13	D_1	66. 54. 48	B	26. 13	D_2	66. 55. 39	B	27. 11	D_2	66. 57. 5	B
29. 11	D_2	66. 58. 5	B	28. 12	D_1	66. 54. 36	B	29. 12	D_1	66. 55. 19	B
Apr. 1. 12	D_1	66. 55. 36	B	Aug. 1. 15	D_2	66. 55. 31	B	Dec. 1. 12	D_2	67. 1. 47	B
3. 10	D_2	66. 58. 10	B	3. 15	D_1	66. 54. 14	B	5. 10	D_1	66. 55. 27	B
6. 13	D_1	66. 55. 31	B	5. 12	D_2	66. 56. 11	B	7. 12	D_2	66. 59. 21	B
8. 11	D_2	66. 54. 57	B	9. 16	D_1	66. 56. 45	B	11. 12	D_1	66. 53. 43	B
10. 12	D_1	66. 55. 39	B	11. 12	D_2	66. 54. 53	B	13. 12	D_2	66. 58. 29	B
12. 12	D_2	66. 56. 25	B	14. 16	D_1	66. 54. 6	B	15. 13	D_1	66. 52. 11	B
17. 12	D_1	66. 54. 24	E	18. 12	D_2	66. 55. 35	E	18. 12	D_2	66. 55. 26	E
19. 12	D_2	66. 57. 11	E	21. 12	D_1	66. 56. 41	E	20. 13	D_1	66. 55. 40	E
20. 12	D_1	66. 54. 15	E	24. 12	D_1	66. 55. 5	E	21. 12	D_2	66. 56. 11	E
25. 14	D_2	66. 55. 41	E	25. 15	D_2	66. 56. 9	E	27. 12	D_1	66. 55. 37	E
27. 12	D_1	66. 54. 47	E	28. 15	D_2	66. 57. 10	E	27. 13	D_2	66. 54. 49	E
28. 12	D_2	66. 57. 10	E	29. 12	D_1	66. 55. 39	E	28. 12	D_1	66. 53. 9	E

The initials B and E are those of Mr Bryant and Mr Edney.

TABLE XVIII.—MONTHLY and YEARLY MEANS of MAGNETIC DIP in the YEAR 1905.

Monthly Means of Magnetic Dip.

Month, 1905.	D_1, 3-inch Needle.	Number of Observations.	D_2, 3-inch Needle.	Number of Observations.
January	66° 56′ 14″	6	66° 56′ 11″	6
February	66. 56. 37	6	66. 56. 42	6
March	66. 55. 58	6	66. 56. 17	6
April	66. 55. 2	6	66. 56. 36	6
May	66. 54. 49	6	66. 55. 28	6
June	66. 55. 42	6	66. 56. 54	6
July	66. 54. 3	6	66. 54. 59	6
August	66. 55. 25	6	66. 55. 55	6
September	66. 55. 52	6	66. 56. 40	6
October	66. 55. 21	6	66. 57. 37	6
November	66. 54. 49	6	66. 56. 51	6
December	66. 54. 18	6	66. 57. 40	6
Means	66. 55. 21	Sum 72	66. 56. 29	Sum 72
Mean Annual Dip	66° 55′ 55′			

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 1905.

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, 1905.	Distances of Centres of Magnets.	Temperature Fahrenheit.	Observed Deflexion.	Mean of the Times of Vibration of Deflecting Magnet.	Number of Vibrations.	Temperature Fahrenheit.	Observer.
d h	ft.	°	° ′ ″	s		°	
January 10. 15	1·0	45·1	9. 39. 39	5·795	100	45·7	E
	1·3		4. 23. 20	5·795	100	46 8	
January 20. 15	1·0	39·3	9. 40. 19	5·791	100	39·3	B
	1·3		4. 23. 36	5·790	100	39·7	
February 8. 15	1·0	50·8	9. 39. 45	5·798	100	50·7	B
	1·3		4. 23. 6	5·800	100	51·0	
February 20. 15	1·0	43·4	9. 39. 41	5·794	100	43·5	E
	1·3		4. 23. 22	5·793	100	44·5	
March 8. 15	1·0	47·4	9. 40. 12	5·801	100	47·7	E
	1·3		4. 23. 26	5·800	100	49·2	
March 23. 15	1·0	59·7	9. 37. 42	5·798	100	60·0	B
	1·3		4. 22. 27	5·800	100	61·1	
April 6. 15	1·0	48·1	9. 39. 25	5·796	100	48·0	B
	1·3		4. 23. 13	5·794	100	48·6	
April 22. 13	1·0	44·7	9. 40. 2	5·795	100	45·0	E
	1·3		4. 23. 29	5·796	100	46·4	
May 8. 15	1·0	61·3	9. 37. 9	5·798	100	62·7	E
	1·3		4. 22. 2	5·798	100	63·1	
May 23. 15	1·0	53·4	9. 38. 17	5·795	100	54·0	B
	1·3		4. 22. 29	5·796	100	55·8	
June 8. 16	1·0	63·1	9. 36. 15	5·798	100	64·1	B
	1·3		4. 21. 40	5·798	100	65·7	
June 22. 15	1·0	74·1	9. 36. 10	5·805	100	75·3	E
	1·3		4. 21. 42	5·810	100	77·4	
July 7. 15	1·0	70·0	9. 36. 19	5·800	100	70·6	E
	1·3		4. 21. 36	5·809	100	75·7	
July 24. 15	1·0	71·5	9. 36. 30	5·808	100	71·3	B
	1·3		4. 21. 55	5·808	100	73·7	
August 8. 15	1·0	70·6	9. 36. 5	5·805	100	72·3	B
	1·3		4. 21. 29	5·807	100	73·1	
August 23. 15	1·0	63·0	9. 37. 21	5·800	100	63·1	E
	1·3		4. 22. 11	5·802	100	64·3	
September 8. 15	1·0	64·4	9. 37. 15	5·806	100	64·4	E
	1·3		4. 22. 12	5·808	100	66·9	
September 22. 15	1·0	59·6	9. 37. 45	5·802	100	60·0	B
	1·3		4. 22. 18	...	...	...	
October 9. 16	1·0	53·7	9. 38. 42	5·802	100	53·8	B
	1·3		4. 22. 33	5·803	100	55·0	
October 23. 15	1·0	49·2	9. 39. 1	5·799	100	50·2	E
	1·3		4. 23. 5	5·799	100	51·0	
November 7. 15	1·0	51·1	9. 38. 31	5·802	100	51·8	E
	1·3		4. 22. 38	5·802	100	53·3	
November 22. 15	1·0	46·9	9. 39. 10	5·802	100	46·9	B
	1·3		4. 23. 0	5·802	100	48·7	
December 7. 15	1·0	59·0	9. 37. 40	5·806	100	59·2	B
	1·3		4. 22. 20	5·806	100	59·8	
December 21. 15	1·0	52·7	9. 38. 19	5·802	100	52·5	E
	1·3		4. 22. 44	5·804	100	53·6	

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 initials B and E are those of Mr Bryant and Mr Edney.

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, 1905.	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. 10. 15	0·08404	0·08419	− 0·00440		8·92601	5·8002	0·13394	0·3388	4·0176	1·8524	1·8501
Jan. 20. 15	0·08405	0·08419	− 0·00406		8·92607	5·7995	0·13400	0·3389	4·0176	1·8524	1·8519
Feb. 8. 15	0·08413	0·08419	− 0·00175		8·92627	5·8022	0·13366	0·3388	4·0151	1·8513	1·8509
Feb. 20. 15	0·08402	0·08417	− 0·00451		8·92592	5·8006	0·13386	0·3388	4·0176	1·8525	1·8521
Mar. 8. 15	0·08415	0·08425	− 0·00299		8·92646	5·8060	0·13308	0·3387	4·0115	1·8497	1·8538
Mar. 23. 15	0·08397	0·08411	− 0·00434		8·92563	5·7991	0·13419	0·3388	4·0205	1·8538	1·8504
Apr. 6. 15	0·08405	0·08419	− 0·00429		8·92605	5·8016	0·13375	0·3388	4·0165	1·8520	1·8549
Apr. 22. 13	0·08409	0·08423	− 0·00406		8·92624	5·8036	0·13342	0·3387	4·0141	1·8508	1·8542
May 8. 15	0·08391	0·08400	− 0·00276		8·92520	5·7986	0·13427	0·3386	4·0229	1·8549	1·8535
May 23. 15	0·08396	0·08403	− 0·00214		8·92541	5·8004	0·13396	0·3386	4·0205	1·8538	1·8533
June 8. 16	0·08381	0·08392	− 0·00316		8·92472	5·7978	0·13440	0·3385	4·0257	1·8562	1·8544
June 22. 15	0·08396	0·08409	− 0·00378	−0·00333	8·92554	5·8010	0·13398	0·3387	4·0199	1·8535	1·8524
July 7. 15	0·08392	0·08399	− 0·00220		8·92520	5·8003	0·13407	0·3386	4·0219	1·8544	1·8528
July 24. 15	0·08397	0·08412	− 0·00434		8·92565	5·8043	0·13348	0·3385	4·0171	1·8522	1·8519
Aug. 8. 15	0·08390	0·08397	− 0·00209		8·92507	5·8018	0·13384	0·3384	4·0215	1·8542	1·8520
Aug. 23. 15	0·08397	0·08408	− 0·00333		8·92554	5·8011	0·13391	0·3386	4·0196	1·8534	1·8546
Sept. 8. 15	0·08397	0·08410	− 0·00384		8·92562	5·8048	0·13335	0·3384	4·0167	1·8520	1·8521
Sept. 22. 15	0·08397	0·08406	− 0·00265		8·92552	5·8027	0·13365	0·3385	4·0185	1·8529	1·8521
Oct. 9. 16	0·08403	0·08406	− 0·00096		8·92564	5·8045	0·13334	0·3385	4·0165	1·8520	1·8505
Oct. 23. 15	0·08401	0·08416	− 0·00462		8·92587	5·8036	0·13344	0·3386	4·0159	1·8517	1·8532
Nov. 7. 15	0·08396	0·08405	− 0·00259		8·92545	5·8052	0·13322	0·3383	4·0168	1·8521	1·8501
Nov. 22. 15	0·08399	0·08411	− 0·00333		8·92569	5·8074	0·13287	0·3383	4·0141	1·8508	1·8527
Dec. 7. 15	0·08395	0·08407	− 0·00338		8·92548	5·8050	0·13329	0·3384	4·0170	1·8522	1·8510
Dec. 22. 15	0·08395	0·08410	− 0·00440		8·92558	5·8053	0·13322	0·3384	4·0162	1·8518	1·8511
Means	...	...	...		...	...	...	...	4·0180	1·8526	1·8523

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 2, 9, 13, 23, 30, February 11, 18, 19, 26, 28, March 11, 13, 18, 22, 28, April 9, 11, 17, 18, 24, May 6, 11, 16, 20, 21, June 13, 16, 18, 19, 25, July 2, 4, 16, 21, 31, August 9, 10, 15, 17, 18, September 6, 13, 14, 15, 24, October 2, 3, 15, 29, 31, November 2, 3, 11, 25, 29, December 8, 10, 11, 22, 23.

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 Millimètre-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 Centimètre-Gramme-Second (C.G.S.) Unit. The values of the whole Horizontal and Vertical Forces expressed in terms of the Metric Unit are 1·8523 and 4·3494 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.*)

1905.

Hour, Greenwich Civil Time.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	For the Year.
	′	′	′	′	′	′	′	′	′	′	′	′	′
Midnight.	1·0	1·0	3·0	4·4	4·5	4·6	4·3	4·0	2·7	2·3	2·1	0·6	2·64
1h	1·2	1·2	3·2	4·0	4·2	4·6	4·2	3·9	2·6	2·6	2·2	0·7	2·65
2	1·4	1·6	3·4	3·9	4·3	4·1	4·1	3·9	2·2	2·4	2·3	0·8	2·64
3	1·5	1·7	3·3	4·2	4·0	3·5	4·2	3·7	2·0	2·3	2·6	0·7	2·58
4	1·7	1·9	3·2	3·9	3·7	3·3	3·6	3·0	1·9	2·4	2·5	0·7	2·42
5	1·9	1·6	3·0	3·7	2·7	2·1	2·2	2·2	1·6	2·2	2·2	0·5	1·93
6	1·2	1·4	2·5	3·2	1·7	0·9	1·1	0·8	0·9	1·8	1·7	0·4	1·24
7	0·9	1·3	1·7	2·0	0·6	0·0	0·3	0·1	0·0	1·0	1·3	0·3	0·56
8	0·6	0·5	0·3	0·4	0·0	0·6	0·0	0·0	0·0	0·0	0·3	0·0	0·00
9	0·5	0·0	0·0	0·0	1·0	1·9	0·9	1·8	1·6	0·0	0·0	0·1	0·42
10	1·3	0·8	1·8	1·6	4·1	4·3	3·2	5·2	4·3	2·1	1·2	1·0	2·34
11	2·7	2·5	5·7	4·5	7·6	7·3	6·6	8·7	7·2	5·2	3·7	2·1	5·09
Noon.	3·1	4·1	8·9	7·9	9·8	9·3	9·7	11·4	8·8	7·7	5·6	3·2	7·23
13h	3·8	5·1	10·1	9·8	10·7	9·7	11·7	12·0	9·6	8·2	6·5	3·5	8·16
14	3·5	5·9	9·8	9·4	10·1	9·6	12·1	10·3	9·1	7·5	6·0	3·1	7·80
15	2·7	5·4	8·3	7·6	8·2	8·2	10·5	8·3	7·0	5·6	4·9	2·6	6·38
16	2·0	3·8	6·1	6·3	6·5	6·6	9·0	6·2	4·9	4·1	4·0	2·2	4·91
17	1·2	3·2	4·9	5·4	5·1	5·3	7·0	4·7	3·6	3·6	3·5	1·4	3·85
18	0·9	2·6	4·7	5·0	4·3	4·8	5·6	3·7	3·4	3·2	3·3	1·1	3·32
19	1·2	2·3	4·3	4·9	4·2	5·0	4·8	3·8	3·7	2·7	2·7	1·0	3·15
20	0·8	2·1	3·8	4·5	4·3	5·2	4·7	4·2	3·3	2·6	2·3	0·7	2·98
21	0·6	2·0	3·5	4·3	4·4	5·0	4·7	4·2	3·0	2·4	1·9	0·5	2·81
22	0·4	2·1	2·4	3·9	4·1	5·0	4·5	4·3	2·8	2·2	1·9	0·5	2·61
23	0·0	1·7	1·6	3·5	4·2	4·9	4·3	4·2	2·8	2·2	1·9	0·5	2·42
24	0·0	2·1	2·1	4·0	4·3	5·0	4·4	4·1	2·9	2·3	1·9	0·6	2·58
Means 0h–23h	1·50	2·32	4·15	4·51	4·76	4·83	5·14	4·77	3·71	3·18	2·78	1·17	3·34
Means 1h–24h	1·46	2·37	4·11	4·50	4·75	4·84	5·14	4·78	3·72	3·18	2·77	1·17	3·34

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.)

1905.

Hour, Greenwich 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.	28	52	133	246	148	274	162	300	200	370	194	359	226	419	218	404	222	411	210	389	157	291	108	200	158·9	294·1
1h	29	54	124	230	143	265	163	302	190	352	179	332	212	393	199	369	213	395	209	387	159	295	99	183	151·6	280·9
2	34	63	116	215	142	263	145	269	189	350	165	306	196	363	192	356	207	383	207	383	163	302	104	193	146·7	271·7
3	35	65	111	206	140	259	144	267	183	339	163	302	196	363	190	352	193	357	211	391	169	313	98	182	144·4	267·5
4	43	80	114	211	151	280	146	270	176	326	162	300	190	352	192	356	194	359	211	391	170	315	105	194	146·2	270·7
5	54	100	126	233	149	276	147	272	170	315	144	267	177	328	185	343	178	330	215	398	170	315	106	196	143·5	265·6
6	63	117	125	232	148	274	141	261	145	269	113	209	149	276	154	285	145	269	202	374	164	304	112	207	130·1	240·9
7	57	106	141	261	140	259	129	239	110	204	67	124	101	187	108	200	107	198	170	315	146	270	108	200	107·0	198·1
8	52	96	126	233	98	182	101	187	64	119	18	33	67	124	44	82	55	102	106	196	104	193	100	185	69·6	128·8
9	25	46	76	141	44	82	46	85	14	26	0	0	41	76	0	0	12	22	34	63	52	96	64	119	25·7	47·5
10	0	0	44	82	0	0	0	0	0	0	8	15	6	11	10	19	0	0	0	0	8	15	24	44	0·0	0·0
11	0	0	14	26	4	7	4	7	30	56	31	57	0	0	38	70	25	46	24	44	0	0	0	0	5·9	10·6
Noon.	7	13	0	0	28	52	43	80	73	135	79	146	54	100	98	182	65	120	80	148	6	11	2	4	36·3	67·1
13h	32	59	27	50	72	133	84	156	125	232	117	217	98	182	161	298	111	206	137	254	36	67	35	65	77·9	144·4
14	60	111	58	107	119	220	106	196	161	298	168	311	163	302	187	346	138	256	177	328	69	128	62	115	114·0	211·0
15	62	115	53	98	152	282	137	254	192	356	206	382	207	383	206	382	150	278	202	374	103	191	59	109	135·8	251·5
16	65	120	48	89	174	322	152	282	205	380	220	408	228	422	208	385	180	333	206	382	130	241	66	122	148·5	275·0
17	86	159	60	111	191	354	164	304	237	439	222	411	224	415	211	391	186	345	219	406	148	274	86	159	161·2	298·5
18	107	198	73	135	191	354	178	330	245	454	235	435	228	422	227	420	209	387	240	445	154	285	92	170	173·3	320·7
19	101	187	95	176	216	400	179	332	248	459	244	452	224	415	247	458	229	424	253	469	170	315	90	167	183·0	339·0
20	105	194	106	196	222	411	173	320	231	428	246	456	223	413	267	495	219	406	250	463	175	324	86	159	183·6	339·9
21	99	183	110	204	229	424	181	335	221	409	226	419	221	409	259	480	203	376	248	459	175	324	76	141	179·0	331·4
22	86	159	105	194	215	398	179	332	217	402	206	382	221	409	249	461	211	391	246	456	183	339	76	141	174·5	323·2
23	97	180	105	194	191	354	179	332	196	363	200	370	210	389	237	439	215	398	246	456	180	333	76	141	169·4	313·6
24	86	159	107	198	173	320	185	343	190	352	198	367	198	367	235	435	207	383	248	459	170	315	76	141	164·5	304·4
Means 0h–23h	55·3	102·4	87·1	161·2	137·8	255·2	128·5	238·0	159·2	295·0	150·5	278·9	160·9	298·0	170·3	315·5	152·8	283·0	179·3	332·1	124·6	230·9	76·4	141·5	123·6	228·8
1h–24h	57·7	106·8	86·0	159·2	138·8	257·1	129·4	239·8	158·8	294·3	150·7	279·2	159·7	295·9	171·0	316·8	152·2	281·8	180·9	335·0	125·2	231·9	75·1	139·0	123·8	229·2

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.)

1905.

Hour, Greenwich 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.	16	70	25	109	35	152	45	196	49	213	41	178	42	183	37	161	27	117	26	113	14	61	8	35	30·0	130·5
1h	13	57	21	91	33	144	45	196	52	226	39	170	40	174	39	170	23	100	30	130	8	35	6	26	28·7	124·8
2	17	74	24	104	29	126	46	200	52	226	42	183	40	174	41	178	23	100	28	122	10	43	4	17	29·3	127·1
3	15	65	24	104	33	144	46	200	56	244	42	183	44	191	45	196	23	100	26	113	10	43	6	26	30·4	132·3
4	17	74	30	130	34	148	52	226	60	261	50	217	48	209	49	213	27	117	28	122	14	61	4	17	34·0	147·8
5	21	91	28	122	36	157	52	226	62	270	52	226	52	226	56	244	28	122	28	122	14	61	6	26	35·8	155·9
6	22	96	30	130	36	157	54	235	66	287	52	226	52	226	60	261	34	148	31	135	12	52	7	30	37·6	163·5
7	20	87	30	130	40	174	54	235	64	278	54	235	54	235	62	270	36	157	33	144	16	70	5	22	38·6	167·9
8	20	87	35	152	40	174	52	226	59	257	48	209	50	217	62	270	32	139	37	161	20	87	9	39	38·3	166·4
9	20	87	31	135	34	148	40	174	37	161	32	139	36	157	48	209	20	87	29	126	18	78	7	30	28·9	125·8
10	12	52	27	117	24	104	24	104	13	57	20	87	18	78	28	122	8	35	19	83	16	70	2	9	17·2	74·7
11	2	9	5	22	8	35	12	52	11	48	8	35	8	35	8	35	2	9	7	30	2	9	4	17	6·0	26·2
Noon.	4	17	1	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0·0	0·0
13h	0	0	0	0	6	26	8	35	10	43	16	70	4	17	9	39	8	35	6	26	4	17	4	17	5·9	25·3
14	12	52	4	17	24	104	22	96	26	113	34	148	16	70	21	91	21	91	16	70	12	52	8	35	17·6	76·4
15	16	70	12	52	36	157	34	148	42	183	46	200	30	130	35	152	35	152	30	130	17	74	7	30	27·9	121·4
16	14	61	22	96	35	152	36	157	56	244	56	244	46	200	49	213	39	170	28	122	17	74	7	30	33·3	145·1
17	9	39	22	96	31	135	44	191	63	274	60	261	58	252	53	231	35	152	26	113	23	100	9	39	35·7	155·1
18	15	65	17	74	25	109	46	200	59	257	56	244	60	261	47	204	29	126	24	104	19	83	7	30	33·3	144·6
19	11	48	19	83	29	126	46	200	57	248	51	222	53	231	47	204	27	117	21	91	17	74	9	39	31·9	138·5
20	5	22	17	74	33	144	46	200	55	239	51	222	45	196	45	196	27	117	22	96	20	87	10	43	30·9	134·5
21	3	13	17	74	31	135	43	187	53	231	45	196	41	178	41	178	25	109	22	96	16	70	14	61	28·8	125·5
22	1	4	13	57	29	126	41	178	49	213	43	187	43	187	37	161	23	100	24	104	14	61	10	43	26·9	116·6
23	0	0	15	65	31	135	42	183	51	222	43	187	43	187	41	178	25	109	24	104	16	70	10	43	28·0	121·8
24	0	0	13	57	27	117	42	183	51	222	43	187	42	183	37	161	21	91	22	96	14	61	16	70	26·9	117·2
Means 0h–23h	11·9	51·7	19·5	84·9	28·8	125·5	38·8	168·5	45·9	199·8	40·9	177·9	38·5	167·2	40·0	174·0	24·0	104·5	23·5	102·4	13·7	59·7	6·8	29·3	27·3	118·7
1h–24h	11·2	48·7	19·0	82·8	28·5	124·0	38·6	168·0	46·0	200·2	41·0	178·2	38·5	167·2	40·0	174·0	23·8	103·5	23·4	101·7	13·7	59·7	7·1	30·8	27·2	118·1

ROYAL OBSERVATORY, GREENWICH.

MAGNETIC DISTURBANCES

AND

EARTH CURRENTS.

1905.

MAGNETIC DISTURBANCES in DECLINATION, HORIZONTAL FORCE, and VERTICAL FORCE, recorded at the ROYAL OBSERVATORY, GREENWICH, in the Year 1905.

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 ± 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).

1905.

January

$2^d\ 22\frac{1}{2}^h$ to $23\frac{1}{2}^h$ Wave in Dec. (− 3′).

$4^d\ 3^h$ to 4^h Wave in H.F. (− ·0010), followed by small fluctuations till 9^h. 13^h to $14\frac{1}{2}^h$ Wave in H.F. (− ·0016). $15\frac{3}{4}^h$ to $17\frac{1}{4}^h$ Wave in H.F. (− ·0016): in Dec. small, followed by fluctuations in H.F. (± ·0006). 19^h to $19\frac{3}{4}^h$ Wave in Dec. (− 4′), followed by fluctuations. $21\frac{1}{2}^h$ to $22\frac{1}{2}^h$ Wave in Dec. (− 5′): two successive waves in H.F. (− ·0010) and (− ·0010).

$5^d\ 12^h$ to $6^d\ 12^h$. See Plate I.

$6^d\ 16\frac{1}{2}^h$ to $17\frac{1}{2}^h$ Wave in Dec. (− 6′): in H.F. (− ·0014). 20^h to $20\frac{1}{2}^h$ Wave in Dec. (− 3′): in H.F. (+ ·0010). 23^h to 24^h Wave in H.F. (+ ·0014), very sharp at commencement: small double wave in Dec.

$7^d\ 16\frac{1}{2}^h$ to $17\frac{3}{4}^h$ Wave in Dec. (− 5′): in H.F. (− ·0014).

$10^d\ 21\frac{1}{4}^h$ to $22\frac{1}{2}^h$ Irregular wave in Dec. (− 4′): small double wave in H.F. (− ·0010 to + ·0010).

$11^d\ 18^h$ to 20^h Slow wave in Dec. (+ 4′).

$12^d\ 2^h$ to 3^h Wave in Dec. (+ 4′). $17\frac{3}{4}^h$ to $19\frac{1}{4}^h$ Wave in Dec. (− 4′). $21\frac{1}{2}^h$ to $22\frac{1}{2}^h$ Double wave in Dec. (+ 3′ to − 5′).

$13^d\ 4^h$ to 6^h Wave in Dec. (+ 4′).

$14^d\ 18\frac{1}{2}^h$ to 20^h Wave in Dec. (+ 3′). 20^h to 21^h Wave in Dec. (− 9′): in H.F. (+ ·0012). $21\frac{1}{2}^h$ to $22\frac{1}{4}^h$ Wave in Dec. (− 3′): in H.F. small. $14^d\ 23^h$ to $15^d\ 0\frac{1}{2}^h$ Wave in Dec. (− 5′).

$15^d\ 2^h$ to 4^h Wave in Dec. (+ 4′).

$17^d\ 0^h$ to 1^h Wave in Dec. (− 6′), followed till $2\frac{1}{2}^h$ by a double wave (− 3′ to + 3′): double-crested wave in H.F. (+ ·0010) and (+ ·0010). 16^h to 18^h Irregular wave in Dec. (− 5′): double wave in H.F. (− ·0020 to + ·0010). $20\frac{3}{4}^h$ to $22\frac{1}{4}^h$ Two successive waves in Dec. (− 3′) and (− 3′): wave in H.F. (+ ·0010).

$19^d\ 20^h$ to $21\frac{1}{4}^h$ Irregular wave in H.F. (− ·0014): small double wave in Dec.

$20^d\ 2\frac{1}{2}^h$ to 4^h Shallow wave in Dec. (+ 3′). $20\frac{1}{2}^h$ to 22^h Wave in Dec. (− 13′): double wave in H.F. (− ·0016 to + ·0010).

$21^d\ 23\frac{1}{2}^h$ to $22^d\ 1\frac{1}{2}^h$ Prolonged wave in Dec. (− 6′): in H.F. (+ ·0010).

$22^d\ 2^h$ to 7^h Small fluctuations in Dec. and H.F. 8^h to $9\frac{1}{2}^h$ Wave in H.F. (− ·0010): increase of Dec. (+ 4′). $14\frac{1}{2}^h$ to 16^h Wave in Dec. (+ 4′). $16\frac{1}{2}^h$ to 18^h Irregular wave in Dec. (− 4′): serrated wave in H.F. (− ·0014). $20\frac{1}{2}^h$ to 22^h Wave in Dec. (− 8′): in H.F. (+ ·0016).

1905.

January

24^d $20\frac{1}{4}^h$ to 24^h Prolonged double-crested wave in Dec. (− 9′). $21\frac{1}{2}^h$ to $22\frac{1}{2}^h$ Two small waves in H.F. 23^h to 24^h Wave in H.F. (− ·0012).

25^d $15\frac{3}{4}^h$ to 17^h Wave in Dec. (− 4′): in H.F. (− ·0012). 22^h to $23\frac{3}{4}^h$ Two successive waves in Dec. (− 5′) and (− 3′): wave in H.F. (+ ·0020).

26^d 0^h to $0\frac{1}{4}^h$ Increase of Dec. (+ 5′): followed till $0\frac{3}{4}^h$ by a wave in Dec. (+ 4′): in H.F. (+ ·0010): in V.F. (+ ·0003). $11\frac{1}{2}^h$ to $13\frac{1}{4}^h$ Wave in H.F. (− ·0010).

27^d 18^h to 20^h Wave in H.F. (− ·0010). 22^h to 24^h Flat-crested wave in Dec. (− 5′).

28^d $18\frac{1}{2}^h$ to 19^h Decrease of H.F. (− ·0010). $19\frac{1}{4}^h$ to $20\frac{1}{2}^h$ Double-crested wave in Dec. (− 3′): in H.F. (− ·0012).

29^d $2\frac{1}{4}^h$ to 4^h Double-crested wave in Dec. (+ 5′): irregular wave in H.F. with superposed fluctuations (+ ·0010).

$7\frac{1}{2}^h$ to 9^h Wave in Dec. (+ 5′). 11^h to $11\frac{3}{4}^h$ Wave in Dec. (+ 3′). $17\frac{1}{2}^h$ to 20^h Double wave in Dec. (− 5′ to + 3′): wave in H.F. with superposed fluctuations (− ·0024).

31^d $9\frac{1}{4}^h$ Increase of H.F. (+ ·0008). $10\frac{1}{2}^h$ to $11\frac{1}{4}^h$ Double wave in H.F. (+ ·0010 to − ·0010): small wave in Dec. 12^h to 13^h Double wave in H.F. (+ ·0010 to − ·0010): wave in Dec. (+ 3′). $13\frac{1}{2}^h$ to $14\frac{1}{2}^h$ Wave in Dec. (− 5′): in H.F. (− ·0012), both with superposed fluctuations. 14^h to 19^h Sharp fluctuations in Dec. (± 1′): in H.F. (± ·0010). 19^h to 20^h Wave in Dec. (− 3′): in H.F. (− ·0010). 21^h to 23^h Irregular wave in Dec. with superposed fluctuations (− 6′).

February

1^d 21^h to 2^d $0\frac{1}{2}^h$ Prolonged wave in Dec. (− 12′), steep at commencement and with superposed fluctuations. 22^h to $23\frac{1}{2}^h$ Irregular wave in H.F. (+ ·0014).

2^d 0^h to 2^h Fluctuations in H.F. $2\frac{1}{2}^h$ to 5^h Double-crested wave in Dec. (− 6′): wave in H.F. (+ ·0034): shallow wave in V.F. (− ·0003). $20\frac{1}{2}^h$ to 22^h Serrated wave in Dec. (− 3′): small wave in H.F.

3^d 1^h to 4^d 1^h See Plate I.

4^d 3^h to $3\frac{1}{2}^h$ Increase of H.F. (+ ·0018), followed by small fluctuations till 6^h. 3^h to $4\frac{1}{2}^h$ Wave in Dec. with superposed fluctuations (+ 6′). 13^h to 17^h Fluctuations in H.F. $17\frac{1}{2}^h$ Increase of H.F. (+ ·0012). $18\frac{1}{4}^h$ to 20^h Wave in Dec. (− 24′), very steep at commencement: steep double wave in H.F. (− ·0028 to + ·0028), followed immediately afterwards by another wave (− ·0016).

5^d $6\frac{1}{2}^h$ to 9^h Irregular wave in Dec. (+ 5′), with superposed fluctuations: $7\frac{1}{2}^h$ to 8^h Wave in H.F. (− ·0010). 8^h to 10^h Irregular wave in H.F. (− ·0016), with superposed fluctuations (± ·0008). $12\frac{1}{2}^h$ to 15^h Sharp fluctuations in Dec. (± 2′). $12\frac{3}{4}^h$ Decrease of H.F. (− ·0020), followed till 16^h by sharp fluctuations (± ·0010), including a very sharp wave at 14^h (+ ·0024). 15^h to 16^h Decrease of Dec. (− 10′). $16\frac{3}{4}^h$ to $17\frac{1}{2}^h$ Wave in Dec. (+ 4′): in H.F. (+ ·0010). 18^h to $18\frac{1}{2}^h$ Wave in H.F. (− ·0020). 18^h to 19^h Two successive waves in Dec. (− 10′) and (− 4′). 19^h to 20^h Two successive waves in H.F. (− ·0010) and (− ·0012). $19\frac{3}{4}^h$ to 20^h Decrease of Dec. (− 7′). 23^h to $23\frac{1}{2}^h$ Wave in H.F. (+ ·0010).

6^d 0^h to $0\frac{3}{4}^h$ Wave in Dec. (+ 5′): in H.F. (− ·0015). 2^h to 7^h Small movements in Dec. (± 2′). 12^h to 17^h Small fluctuations in Dec. and H.F.

7^d $18\frac{1}{2}^h$ to $19\frac{3}{4}^h$ Wave in Dec. (− 4′): in H.F. (− ·0012). 21^h to 22^h Irregular wave in H.F. (+ ·0010): in Dec. small. 23^h to 24^h Wave in Dec. (+ 3′).

8^d 0^h to $1\frac{1}{4}^h$ Wave in H.F. (− ·0015): two successive small waves in Dec. (− 3′) and (− 3′). 4^h to 5^h Wave in Dec. (+ 4′). $19\frac{1}{2}^h$ to 21^h Two successive waves in Dec. (− 3′) and (− 3′), the first very sharp: wave in H.F. (+ ·0012).

9^d $13\frac{1}{4}^h$ to 14^h Wave in H.F. (− ·0010). $19\frac{1}{2}^h$ to $21\frac{1}{4}^h$ Wave in Dec. (− 5′): in H.F. small.

10^d 21^h Decrease of Dec. (− 4′): sharp increase of H.F. (+ ·0015). 22^h to 23^h Wave in Dec. (− 4′). $22\frac{1}{4}^h$ to $22\frac{3}{4}^h$ Decrease of H.F. (− ·0016).

12^d 17^h to $18\frac{1}{2}^h$ Wave in Dec. (− 4′).

13^d 0^h to 4^h Small movements in Dec. (± 2′): in H.F. (± ·0006). $21\frac{1}{2}^h$ Sudden decrease of Dec. (− 5′). $21\frac{1}{2}^h$ to $22\frac{1}{2}^h$ Wave in H.F. (+ ·0015).

14^d $7\frac{3}{4}^h$ to $8\frac{3}{4}^h$ Wave in Dec. (− 3′). $10\frac{1}{2}^h$ to 11^h Wave in Dec. (+ 4′): in H.F. (+ ·0010). $11\frac{3}{4}^h$ to 13^h Wave in Dec. (+ 6′): in H.F. small. $13\frac{1}{2}^h$ to $14\frac{3}{4}^h$ Irregular wave in Dec. (+ 4′): in H.F. (+ ·0014). $15\frac{3}{4}^h$ to $17\frac{1}{4}^h$ Wave in Dec. (− 4′): in H.F. (− ·0022). $17\frac{1}{2}^h$ to $18\frac{1}{4}^h$ Wave in H.F. (+ ·0010). $18\frac{3}{4}^h$ to $19\frac{3}{4}^h$ Wave in Dec. (− 6′): serrated wave in H.F. (− ·0014). $20\frac{1}{2}^h$ to 21^h Wave in Dec. (− 3′). $21\frac{3}{4}^h$ to $23\frac{1}{4}^h$ Prolonged wave in Dec. (− 13′): double wave in H.F. (+ ·0034 to − ·0010).

15^d 2^h to 3^h Wave in Dec. (+ 3′): in H.F. (+ ·0010). $13\frac{1}{2}^h$ to 14^h Wave in Dec. (+ 3′). 14^h to $14\frac{3}{4}^h$ Serrated wave in H.F. (− ·0010). $17\frac{1}{2}^h$ to $19\frac{1}{2}^h$ Prolonged wave in Dec. (− 4′). $21\frac{1}{2}^h$ to $23\frac{1}{2}^h$ Double wave in Dec. (+ 6′ to − 10′): in H.F. (+ ·0022 to − ·0006): in V.F. (+ ·0004 to − ·0003).

1905.

February

16d 4h to 6½h Serrated wave in Dec. (+ 5′): two successive waves in H.F. (− ·0014) and (− ·0012). 11½h to 12h Wave in Dec. (+ 4′): in H.F. (+ ·0010). 13h to 13½h Wave in Dec. (−3′). 16½h to 18½h Wave in Dec. (− 10′): in H.F. small. 20¼h to 23h Triple crested wave in Dec. (− 10′). 21h to 23h Double wave in H.F. (− ·0015 to + ·0015).

17d 2¼h to 3¼h Serrated wave in Dec. (− 4′). 4h to 5½h Wave in Dec. (+ 4′): in H.F. small. 11¾h to 12¼h Wave in H.F. (− ·0012): in Dec. small, each followed by fluctuations till 15h. 18½h to 19¼h Wave in H.F. (+ ·0010). 19h to 21h Irregular wave in Dec. (− 3′). 21h to 22h Wave in H.F. (+ ·0010). 22h to 24h Wave in Dec. (− 7′): in H.F. (+ ·0010).

20d 22½h to 21d 1h Prolonged wave in Dec. (− 8′): small double wave in H.F.

22d 19¾h to 21¼h Wave in Dec. (− 8′): irregular wave in H.F. (− ·0014). 21½h to 22h Wave in Dec. (− 3′): in H.F. (− ·0010). 23½h to 23¾h Wave in H.F. (+ ·0012): decrease of Dec. (− 5′).

23d 0¼h to 2¾h Prolonged double wave in Dec. (+ 7′ to − 8′): wave in V.F. (− ·0004): fluctuations in H.F. 3h to 5h Small fluctuations in Dec. and H.F. 8h to 9h Wave in Dec. (+ 3′). 11h to 12¼h Wave in Dec. (+ 5′). 13h to 17h Small fluctuations in Dec. and H.F. 19½h to 20½h Wave in Dec. (− 4′).

24d 2h to 4h Prolonged wave in Dec. (+ 7′): double wave in H.F. (− ·0012 to + ·0015).

24d 8½h to 10h Wave in H.F. (− ·0010).

25d 12¾h to 14h Wave in Dec. (− 3′): double-crested wave in H.F. (− ·0012). 17½h to 18½h Wave in Dec. (− 3′). 21h to 22¼h Wave in Dec. (− 5′): in H.F. (+ ·0012).

26d 15h to 19h Prolonged irregular wave in H.F. (− ·0016).

27d 1½h to 3h Wave in Dec. (+ 4′): in H.F. small. 16½h to 18½h Wave in Dec. (− 4′).

March

1d 18h to 19½h Wave in H.F. (− ·0012). 19½h to 20h Wave in Dec. (+ 3′).

2d 0¼h to 1h Wave in H.F. (+ ·0010).

2d 1h to 3d 1h See Plate II.

3d 1½h to 6h Sharp fluctuations in Dec. (± 2′): in H.F. (± ·0008). 20½h to 21½h Wave in Dec. (− 5′): double wave in H.F. (− ·0012 to + ·0008). 21¾h to 22¼h Wave in Dec. (+ 3′). 3d 23¾h to 4d 0¼h Sharp wave in Dec. (+ 6′).

4d 2h to 4¼h Two successive waves in Dec. (− 3′) and (− 3′). 2½h to 3½h Wave in H.F. (− ·0010) 14h to 15½h Flat-crested wave in H.F. (− ·0010).

5d 4¼h Increase of H.F. (+ ·0007). 9h to 13h Prolonged irregular wave in H.F. (− ·0030): in Dec. small. 14¾h to 16h Decrease of Dec. (− 5′), followed by a wave (− 5′): double wave in H.F. (− ·0010 to + ·0010): wave in V.F. (+ ·0007). 5d 23h to 6d 0½h Wave in Dec. (+ 5′): in H.F. (+ ·0016): decrease of V.F. (− ·0006).

6d 3½h to 5h Wave in Dec. (+ 5′). 6h to 10h Small fluctuations in Dec. and H.F. 15h to 23h Sharp fluctuations in H.F. (± ·0008).

7d 0h to 8d 0h See Plate II.

8d 6h to 7½h Double-crested wave in Dec. (+ 3′). 12¾h to 14h Wave in Dec. (+ 4′), : in H.F. (+ ·0010). 16h to 18h Double wave in H.F. (+ ·0012 to − 0012): small wave in Dec. 18¼h to 20h Double-crested wave in H.F. (+ ·0014). 18½h to 19½h Flat-crested wave in Dec. (− 3′). 8d 23h to 9h 0½h Irregular wave in Dec. (− 3′): serrated wave in H.F. (+ ·0012).

9d 17¼h to 18½h Wave in H.F. (− ·0010). 19½h to 21½h Irregular wave in H.F. (+ ·0010). 19h to 23h Occasional small waves in Dec.

11d 21½h to 22½h Wave in Dec. (− 3′).

12d 6¼h to 7½h Wave in Dec. (+ 3′). 21h to 23½h Irregular wave in Dec. (− 5′).

14d 20h to 20¾h Decrease of Dec. (− 4′): of H.F. (− ·0020). 20¾h to 22h Two successive waves in Dec. (− 4′) and (− 10′): double wave in H.F. (+ ·0020 to − ·0020): wave in V.F. (− ·0003). 14d 23h to 15d 0½h Flat-crested wave in Dec. (− 4′).

15d 0h to 2¼h Prolonged double wave in Dec. (− 6′ to + 8′): in H.F. (− ·0010 to + ·0010): in V.F. (+ ·0003 to − ·0003). 2¾h to 3¼h Increase of Dec. (+ 4′). 16½h to 17½h Wave in H.F. (− ·0012): in Dec. small. 19½h to 22h Double wave in H.F. with superposed fluctuations (− ·0016 to + ·0034): wave in V.F. (+ ·0005). 20½h to 21½h Sharp wave in Dec. (− 13′) 22h to 23¼h Double wave in Dec. (+ 4′ to − 3′): wave in H.F. (+ ·0010). 23h to 24h Wave in Dec. (− 3′).

16d 2h to 11h Sharp fluctuations in Dec. (± 2′): in H.F. (± ·0008). 14¾h to 15h Increase of H.F. (+ ·0010). 19h to 19½h Wave in Dec. (− 3′): in H.F. small.

17d 18¾h to 20h Wave in Dec. (− 3′).

19d 10½h to 11¼h Wave in H.F. (+ ·0010).

1905.

March

$21^d\ 0^h$ to $1\frac{1}{2}^h$ Wave in Dec. (+ 3′): in H.F. small. 10^h to 11^h Wave in H.F. (− ·0010).

$25^d\ 0\frac{1}{2}^h$ to $1\frac{1}{2}^h$ Wave in Dec. (+ 3′).

$26^d\ 23\frac{1}{2}^h$ to $27^d\ 0\frac{1}{4}^h$ Wave in Dec. (− 3′): in H.F. (+ ·0010).

$27^d\ 6\frac{1}{2}^h$ to 8^h Wave in Dec. (+ 3′). 13^h to 17^h Fluctuations in H.F. 21^h to $22\frac{1}{4}^h$ Sharp wave in Dec. (− 8′): in H.F. small.

$29^d\ 2^h$ Increase of H.F. (+ ·0006). 13^h to 22^h Small fluctuations in H.F.

$30^d\ 20\frac{3}{4}^h$ to $21\frac{3}{4}^h$ Wave in Dec. (− 4′).

$31^d\ 0\frac{1}{2}^h$ to $1\frac{1}{2}^h$ Wave in Dec. (+ 4′). 1^h to 2^h Wave in H.F. (+ ·0016). 14^h to 15^h Wave in H.F. (− ·0010).

April

$1^d\ 0^h$ to $2^d\ 0^h$ See Plate II.

$2^d\ 0^h$ to $3^d\ 0^h$ See Plate III.

$3^d\ 0^h$ to 1^h Irregular wave in H.F. (+ ·0011). $2\frac{1}{4}^h$ to 4^h Double wave in Dec. (− 3′ to +3′): in H.F. (− ·0007 to + ·0010). 5^h to $6\frac{1}{2}^h$ Irregular wave in Dec. (+ 6′): in H.F. small. $14\frac{1}{2}^h$ to $15\frac{1}{2}^h$ Wave in H.F. (− ·0010). 18^h to 19^h Wave in Dec. (− 3′): in H.F. (+ ·0012). $21\frac{1}{4}^h$ to $22\frac{1}{4}^h$ Wave in Dec. (+ 4′). $21\frac{3}{4}^h$ to $22\frac{1}{4}^h$ Wave in H.F. (− ·0010). $3^d\ 23\frac{1}{2}^h$ to $4^d\ 0\frac{1}{2}^h$ Wave in Dec. (+ 3′): in H.F. (+ ·0010).

$4^d\ 3\frac{3}{4}^h$ to 5^h Wave in Dec. (+ 4′): in H.F. small, each followed by small fluctuations till 9^h. 17^h to 18^h Wave in H.F. (+ ·0012): in Dec. small. $20\frac{1}{4}^h$ to 22^h Double-crested wave in Dec. (− 6′): irregular wave in H.F. (+ ·0018), very sharp at commencement.

$5^d\ 2\frac{1}{2}^h$ to 4^h Wave in Dec. (+ 5′). 10^h to $11\frac{1}{4}^h$ Wave in H.F. (− ·0012). 13^h to $15\frac{1}{4}^h$ Irregular double wave in H.F. (+ ·0010 to − ·0014). 16^h to 24^h Sharp fluctuations in Dec. (± 3′): in H.F. (± ·0010).

$6^d\ 0\frac{1}{2}^h$ to 4^h Irregular prolonged double wave in Dec. (+ 4′ to − 3′): in H.F. (− ·0008 to + ·0015): wave in V.F. (− ·0004). 14^h to $15\frac{1}{4}^h$ Wave in H.F. (− ·0010). $19\frac{1}{4}^h$ to $20\frac{1}{4}^h$ Irregular wave in Dec. (− 6′): in H.F. (+ ·0022), each with superposed fluctuations. $20\frac{1}{4}^h$ to $21\frac{1}{2}^h$ Double wave in Dec. (+ 4′ to − 3′). $21\frac{1}{4}^h$ to 23^h Prolonged wave in H.F. (+ ·0028).

$7^d\ 21\frac{1}{4}^h$ Decrease of Dec. (− 2′). 22^h to $22\frac{3}{4}^h$ Wave in H.F. (+ ·0010): in Dec. small.

$12^d\ 14^h$ to 16^h Sharp fluctuations in Dec. (± 3′). 22^h to 24^h Wave in H.F. (+ ·0025), with superposed fluctuations: decrease of V.F. (− ·0005). $12^d\ 22\frac{1}{4}^h$ to $13^d\ 1\frac{1}{4}^h$ Prolonged irregular wave in Dec. (− 7′).

$14^d\ 1^h$ to $2\frac{1}{4}^h$ Wave in H.F. (+ ·0010): in Dec. small. $17\frac{3}{4}^h$ to $18\frac{1}{2}^h$ Wave in H.F. (− ·0010). $19\frac{1}{4}^h$ to 20^h Double wave in H.F. (+ ·0010 to − ·0010). $21\frac{3}{4}^h$ to $23\frac{1}{2}^h$ Wave in Dec. (− 6′): double wave in H.F. (+ ·0008 to − ·0010).

$15^d\ 2\frac{1}{2}^h$ to $4\frac{1}{2}^h$ Double wave in Dec. (+ 5′ to − 5′): in H.F. (+ ·0010 to − ·0010): wave in V.F. (− ·0005).

$19^d\ 19^h$ to 20^h Decrease of H.F. (− ·0010).

$20^d\ 4^h$ to 5^h Wave in H.F. (+ ·0010). 7^h to 8^h Wave in Dec. (+ 3′).

$21^d\ 3\frac{1}{2}^h$ to 6^h Irregular wave in Dec. (+ 7′): in H.F. (+ ·0012). $13\frac{1}{2}^h$ to $14\frac{1}{2}^h$ Wave in H.F. (− ·0014), with superposed fluctuations. $16\frac{1}{2}^h$ to $18\frac{1}{2}^h$ Wave in Dec. (− 7′): double wave in H.F. (− ·0010 to + ·0010).

$22^d\ 23^h$ to $23\frac{1}{2}^h$ Wave in Dec. (+ 3′). $22^d\ 23\frac{1}{4}^h$ to $23^d\ 1^h$ Serrated wave in H.F. (+ 0010).

$26^d\ 3\frac{1}{2}^h$ to 5^h Wave in Dec. (+ 5′), with superposed fluctuations. $4\frac{1}{2}^h$ to $4\frac{3}{4}^h$ Sharp wave in H.F. (− ·0014). 5^h to $6\frac{1}{2}^h$ Wave in H.F. (+ ·0012), followed by fluctuations till 10^h. 5^h to 10^h Fluctuations in Dec. (± 2′).

$27^d\ 18\frac{1}{2}^h$ to $19\frac{1}{4}^h$ Wave in H.F. (+ ·0012).

$28^d\ 15\frac{1}{2}^h$ to 16^h Wave in H.F. (− ·0010).

$29^d\ 0^h$ to $1\frac{1}{2}^h$ Flat-crested wave in Dec. (− 6′): wave in H.F. (+ ·0030), with superposed fluctuations. $3\frac{1}{2}^h$ to 5^h Wave in Dec. (+ 3′): in H.F. small. 12^h to 20^h Fluctuations in H.F. (± ·0010). $18\frac{3}{4}^h$ to 20^h Wave in Dec. (− 6′). $29^d\ 23^h$ to $30^d\ 2^h$ Prolonged double-crested wave in Dec. (− 6′).

$30^d\ 12^h$ to 20^h Fluctuations in H.F. (± ·0008). 21^h to $22\frac{1}{4}^h$ Wave in Dec. (− 7′): in H.F. (− ·0016). $30^d\ 23\frac{1}{2}^h$ to May $1^d\ 1^h$ Wave in Dec. (+ 7′): in H.F. (+ ·0036): in V.F. (− ·0007).

May

$1^d\ 5\frac{1}{2}^h$ to 8^h Two successive waves in Dec. (− 3′) and (− 4′). $6\frac{1}{2}^h$ to $8\frac{1}{4}^h$ Wave in H.F. (− ·0010). 13^h to 20^h Small fluctuations in H.F. (± ·0005). $20\frac{1}{2}^h$ to 22^h Irregular wave in H.F. (+ ·0010): in Dec. small. $1^d\ 23\frac{1}{2}^h$ to $2^h\ 0\frac{3}{4}^h$ Wave in H.F. (+ ·0016): in Dec. small.

1905.

May

$2^d\ 2\frac{1}{2}^h$ to $4\frac{1}{2}^h$ Wave in Dec. (− 6′): in H.F. small. 12^h to 18^h Small fluctuations in H.F. $2^d\ 23\frac{1}{2}^h$ to $3^h\ 0\frac{1}{2}^h$ Wave in Dec. (− 3′): in H.F. small.

$3^d\ 23\frac{1}{2}^h$ to $4^d\ 0\frac{1}{2}^h$ Wave in H.F. (+ ·0016): in Dec. small.

$4^d\ 22\frac{1}{2}^h$ to 23^h Wave in Dec. (+ 3′): in H.F. (+ ·0010).

$5^d\ 21^h$ to 22^h Wave in H.F. (+ ·0010): in Dec. small.

$8^d\ 20\frac{3}{4}^h$ to $22\frac{1}{2}^h$ Small double wave in Dec. (+ 2′ to − 3′): in H.F. (− ·0008 to + ·0008).

$9^d\ 23^h$ to 24^h Wave in H.F. (+ ·0010): in Dec. small.

$12^d\ 14\frac{1}{2}^h$ to $15\frac{3}{4}^h$ Wave in H.F. (− ·0020), with superposed fluctuations. 16^h to 19^h Prolonged wave in Dec. (− 4′): double wave in H.F. (+ ·0020 to − ·0010).

$13^d\ 12^h$ to $12\frac{3}{4}^h$ Wave in H.F. (− ·0010). $13\frac{3}{4}^h$ to $14\frac{1}{2}^h$ Wave in H.F. (− ·0010).

$17^d\ 16\frac{1}{2}^h$ to 18^h Double wave in H.F. (+ ·0010 to − 0020). $22\frac{1}{2}^h$ to 23^h Wave in H.F. (− ·0010). $17^d\ 23\frac{1}{4}^h$ to $18^d\ 0\frac{1}{2}^h$ Wave in Dec. (+ 3′): in H.F. (+ ·0016).

$18^d\ 4^h$ to 8^h Small fluctuations in Dec. (± 1′). 18^h to 23^h Fluctuations in Dec. (± 2′): in H.F. (± ·0008).

$19^d\ 0\frac{1}{2}^h$ to 2^h Double wave in Dec. (− 3′ to + 8′): in H.F. (− ·0010 to + ·0022): in V.F. (+ ·0003 to − ·0004).

$20^d\ 21\frac{1}{2}^h$ to 22^h Wave in Dec. (− 4′): in H.F. small.

$22^d\ 21^h$ Increase of H.F. (+ ·0008), followed till $21\frac{3}{4}^h$ by a wave (+ ·0010); small wave in Dec.

$23^d\ 20\frac{1}{2}^h$ to $21\frac{1}{2}^h$ Flat-crested wave in H.F. (− ·0010). $23^d\ 23\frac{1}{4}^h$ to $24^d\ 1^h$ Wave in H.F. (+ ·0020), with superposed fluctuations: small double wave in Dec.

$24^d\ 21\frac{3}{4}^h$ to $22\frac{1}{2}^h$ Wave in Dec. (− 3′).

$26^d\ 15^h$ to $16\frac{1}{2}^h$ Wave in H.F. (+ ·0010). 17^h to 18^h Wave in H.F. (− ·0010). $20\frac{1}{2}^h$ to 22^h Irregular wave in H.F. (− ·0010). $22\frac{1}{2}^h$ to $23\frac{3}{4}^h$ Wave in Dec. (− 4′): in H.F. (+ ·0012).

$27^d\ 4^h$ to 9^h Small fluctuations in Dec. (± 1′). $12\frac{1}{2}^h$ to $12\frac{3}{4}^h$ Wave in H.F. (− ·0010). 13^h to $16\frac{1}{2}^h$ Three successive double waves in H.F. (+ ·0018 to − ·0012), (+ 0012 to − 0008), and (+ 0010 to − ·0010): small movements in Dec. (± 2′). 17^h to 18^h Irregular wave in H.F. (− ·0018). $18\frac{1}{4}^h$ to $18\frac{3}{4}^h$ Wave in H.F. (+ ·0010). $18\frac{1}{2}^h$ to $20\frac{1}{2}^h$ Double-crested wave in Dec. (− 10′). $18\frac{3}{4}^h$ to 20^h Double wave in H.F. (− ·0010 to + ·0016). 21^h to $21\frac{1}{2}^h$ Wave in H.F. (+ ·0010): in Dec. small. $22\frac{1}{2}^h$ to $23\frac{1}{2}^h$ Wave in H.F. (− ·0010).

$28^d\ 0\frac{1}{2}^h$ to 2^h Wave in Dec. (+ 5′): in H.F. small. 19^h to 20^h Wave in Dec. (− 5′): in H.F. (+ ·0012). $21\frac{1}{2}^h$ to $22\frac{3}{4}^h$ Double wave in Dec. (+ 4′ to − 4′): double-crested wave in H.F. (+ ·0010): decrease of V.F. (− ·0004).

$29^d\ 0^h$ to $1\frac{1}{2}^h$ Wave in Dec. (+ 5′). $9\frac{1}{2}^h$ to $10\frac{1}{2}^h$ Wave in H.F. (− ·0010). $11\frac{1}{2}^h$ to $12\frac{1}{2}^h$ Wave in H.F. (+ ·0010). 13^h to 16^h Two successive waves in H.F. (− ·0018) and (− ·0015). 14^h to $15\frac{1}{2}^h$ Wave in Dec. (+ 4′). 18^h to $19\frac{1}{2}^h$ Wave in Dec. (− 4′): in H.F. (− ·0010).

$30^d\ 0\frac{1}{2}^h$ to 2^h Irregular wave in Dec. (+ 4′): in H.F. small. $3\frac{1}{2}^h$ to 5^h Wave in Dec. (+ 3′): in H.F small. 20^h to 21^h Wave in H.F. (+ ·0012). 22^h to $23\frac{1}{2}^h$ Wave in H.F. (+ ·0010).

$31^d\ 2\frac{1}{2}^h$ to $3\frac{1}{2}^h$ Wave in H.F. (− ·0010): in Dec. small. 3^h to 9^h Small fluctuations in Dec. and H.F. $14\frac{1}{2}^h$ to $15\frac{1}{2}^h$ Wave in H.F. (− ·0010). $15\frac{1}{2}^h$ to 17^h Wave in H.F. (− ·0010).

June

$1^d\ 9\frac{1}{2}^h$ to 16^h Loss of Dec., H.F. and V.F. registers.

$1^d\ 16^h$ to $5^d\ 9^h$ Loss of Dec. register.

$3^d\ 12\frac{1}{2}^h$ to $13\frac{1}{4}^h$ Wave in H.F. (+ ·0010). 14^h to $15\frac{1}{2}^h$ Irregular wave in H.F. (− ·0020).

$4^d\ 15^h$ to 16^h Serrated wave in H.F. (+ ·0010). $17\frac{3}{4}^h$ to $19\frac{1}{2}^h$ Two successive double waves in H.F. (+ ·0010 to − ·0010) and (+ ·0006 to − 0006).

$5^d\ 2^h$ to 4^h Irregular wave in H.F. (+ ·0025), with superposed fluctuations: wave in V.F. (− ·0003). $12\frac{1}{2}^h$ to $13\frac{1}{4}$ Wave in Dec. (− 3′): in H.F. (− ·0015). $13\frac{1}{2}^h$ to $14\frac{1}{2}^h$ Wave in H.F. (+ ·0010): in Dec. small. $15\frac{1}{4}^h$ to 16^h Small double wave in H.F. (+ ·0008 to − ·0008).

$6^d\ 14^h$ to $15\frac{1}{4}^h$ Two successive double waves in H.F. (− ·0010 to + ·0020) and (− ·0018 to + ·0008): small movements in Dec. $16\frac{1}{2}^h$ to 18^h Double wave in Dec. (+ 3′ to − 3′): two successive waves in H.F. (+ ·0020) and (+ ·0012). 20^h to 22^h Double-crested wave in H.F. (+ 0012).

$8^d\ 14\frac{1}{2}^h$ to $16\frac{1}{4}^h$ Irregular wave in H.F. (+ ·0016), with superposed fluctuations. $8^d\ 22^h$ to $9^d\ 0\frac{1}{2}^h$ Prolonged double wave in Dec. (+ 3′ to − 4′): double-crested wave in H.F. (+ ·0020): decrease of V.F. (− ·0003).

$9^d\ 13\frac{1}{2}^h$ to 15^h Double wave in H.F. (+ ·0020 to − ·0008). 15^h to 16^h Sharp double wave in H.F. (+ ·0030 to − ·0035). $15\frac{1}{4}^h$ to $15\frac{3}{4}^h$ Double wave in Dec. (+ $3\frac{1}{2}$′ to − $3\frac{1}{2}$′): wave in V.F. (− ·0005). 16^h to $17\frac{1}{2}^h$ Serrated wave in Dec. (− 4′): sharp wave in H.F. (− ·0065), with superposed fluctuations: wave in V.F. (− ·0004). 20^h to 21^h Two successive waves in H.F. (+ ·0010) and (+ ·0010).

1905.

June

$10^d\ 4\frac{1}{2}^h$ to $5\frac{1}{2}^h$ Irregular wave in Dec. (− 4′): in H.F. (− ·0010). $9\frac{1}{4}^h$ to $10\frac{1}{4}^h$ Wave in H.F. (− ·0015). 10^h to $10\frac{1}{2}^h$ Increase of Dec. (+ 5′). $10\frac{1}{2}^h$ to 12^h Two successive waves in H.F. (− ·0020) and (− ·0016). $12\frac{1}{4}^h$ to $13\frac{1}{4}^h$ Double-crested wave in H.F. (− ·0010): small wave in Dec. $14\frac{1}{2}^h$ to $15\frac{1}{4}^h$ Wave in H.F. (+ ·0010). 20^h to $21\frac{1}{4}^h$ Wave in H.F. (+ ·0010), with superposed fluctuations. $21\frac{1}{2}^h$ to $22\frac{1}{2}^h$ Double-crested wave in Dec. (− 5′): in H.F. (+ ·0014).

$11^d\ 0^h$ to 10^h Sharp fluctuations in Dec. (± 2′): in H.F. (± ·0008). 11^h to $11\frac{1}{2}^h$ Sharp wave in H.F. (− ·0020). $12\frac{3}{4}^h$ to $13\frac{1}{2}^h$ Sharp wave in H.F. (− ·0024), followed by sharp fluctuations till 20^h (± ·0008): irregular wave in Dec. (− 3′), followed by small fluctuations till 18^h.

$14^d\ 17\frac{1}{2}^h$ to $18\frac{1}{2}^h$ Serrated wave in H.F. (+ ·0010).

$15^d\ 12\frac{1}{2}^h$ to $15\frac{1}{2}^h$ Irregular double wave in H.F. (+ ·0020 to − ·0010). $14\frac{1}{2}^h$ to $15\frac{1}{2}^h$ Wave in Dec. (− 4′), with superposed fluctuations. $16\frac{1}{4}^h$ to $17\frac{1}{2}^h$ Wave in H.F. (+ ·0018).

$17^d\ 1\frac{3}{4}^h$ to 3^h Wave in Dec. (+ 4′): in H.F. (+ ·0010).

$21^d\ 18\frac{1}{2}^h$ to 20^h Wave in Dec. (− 3′): in H.F. (− ·0015): in V.F. (− ·0003). $21^d\ 23\frac{1}{2}^h$ to $22^d\ 0\frac{1}{2}^h$ Wave in Dec. (− 4′).

$22^d\ 7\frac{1}{2}^h$ to $9\frac{1}{2}^h$ Wave in Dec. (+ 4′): in H.F. (− ·0018). $11\frac{3}{4}^h$ to $12\frac{1}{2}^h$ Wave in H.F. (+ ·0010). $13\frac{1}{2}^h$ to $16\frac{1}{4}^h$ Irregular double wave in H.F. (+ ·0015 to − ·0018): wave in V.F. (− ·0003). $16\frac{1}{2}^h$ to $17\frac{1}{2}^h$ Double wave in H.F. (+ ·0010 to − ·0010). 20^h to 21^h Wave in H.F. (+ ·0010): in Dec. small. $22^d\ 23^h$ to $23^d\ 1^h$ Irregular wave in Dec. (+ 7′): in H.F. (+ ·0020): in V.F. (− ·0005).

$23^d\ 5^h$ to 7^h Increase of Dec. (+ 10′). 6^h to $8\frac{1}{2}^h$ Double wave in H.F. (+ ·0010 to − ·0012). $8\frac{3}{4}^h$ to $10\frac{1}{2}^h$ Flat-crested wave in Dec. (− 4′): double-crested wave in H.F. (− ·0015). 12^h to 13^h Wave in Dec. (+ 3′): serrated wave in H.F. (− ·0020). $13\frac{1}{2}^h$ to $14\frac{1}{2}^h$ Two successive waves in H.F. (− ·0010) and (− ·0010). $15\frac{3}{4}^h$ to $16\frac{3}{4}^h$ Wave in H.F. (+ ·0016). 17^h to $19\frac{1}{2}^h$ Irregular wave in Dec. (− 6′): double wave in H.F. (+ ·0030 to − ·0010). $21\frac{1}{2}^h$ to 23^h Wave in Dec. (+ 6′): double wave in H.F. (+ ·0015 to − ·0010).

$24^d\ 8\frac{1}{2}^h$ to 11^h Two successive waves in H.F. (− ·0010) and (− ·0010). $18\frac{1}{2}^h$ to $19\frac{1}{2}^h$ Wave in H.F. (+ ·0010): in Dec. small.

$27^d\ 0^h$ to 2^h Wave in Dec. (− 3′).

$30^d\ 14\frac{1}{2}^h$ to $16\frac{1}{2}^h$ Wave in H.F. (− ·0014). $22\frac{1}{2}^h$ to $23\frac{1}{2}^h$ Wave in Dec. (− 3′).

July

$1^d\ 1\frac{3}{4}^h$ to 3^h Wave in Dec. (+ 8′): in H.F. (+ ·0013): in V.F. (− ·0003).

$3^d\ 2\frac{1}{4}^h$ to $3\frac{1}{2}^h$ Wave in Dec. (+ 3′).

$5^d\ 21^h$ to $6^d\ 21^h$ See Plate III.

$6^d\ 21^h$ to 23^h Sharp fluctuations in Dec. (± 2′): in H.F. (± ·0008). $23\frac{1}{2}^h$ to 24^h Wave in H.F. (+ ·0015): in Dec. small.

$7^d\ 1^h$ to 2^h Wave in Dec. (− 5′): in H.F. (+ ·0010). 3^h to 11^h Fluctuations in Dec. and H.F. 13^h to $14\frac{3}{4}^h$ Two successive waves in H.F. (− ·0020) and (− ·0010), each with superposed fluctuations. 15^h to 16^h Wave in Dec. (− 4′): in H.F. (− ·0015). $16\frac{1}{2}^h$ to $18\frac{1}{2}^h$ Two successive waves in H.F. (− ·0014) and (− ·0014). $17\frac{1}{2}^h$ to 19^h Wave in Dec. (− 3′). 20^h to 22^h Irregular wave in Dec. (− 4′): in H.F. (+ ·0026).

$8^d\ 9^h$ to 10^h Wave in H.F. (− ·0010). $13\frac{1}{2}^h$ to $14\frac{1}{4}^h$ Wave in H.F. (− ·0014): in Dec. small. $15\frac{1}{4}^h$ to $16\frac{1}{4}^h$ Wave in Dec. (− 4′): in H.F. (+ ·0020). 17^h to 18^h Wave in H.F. (+ ·0010). $22\frac{3}{4}^h$ to $23\frac{3}{4}^h$ Wave in Dec. (+ 3′): in H.F. (+ ·0012).

$9^d\ 1^h$ to 4^h Prolonged irregular wave in Dec. (+ 5′). $2\frac{1}{2}^h$ to 4^h Wave in H.F. (− ·0010). 6^h to 18^h Fluctuations in Dec. (± 1′): in H.F. (± ·0005).

$10^d\ 2\frac{1}{2}^h$ to 4^h Wave in Dec. (+ 4′): in H.F. small. 16^h to 22^h Fluctuations in H.F.

$13^d\ 0^h$ to 8^h Fluctuations in Dec. and H.F. $12\frac{3}{4}^h$ to 14^h Wave in H.F. (− ·0010). $16\frac{1}{4}^h$ to $17\frac{1}{2}^h$ Wave in H.F. (− ·0010).

$22^d\ 15\frac{1}{2}^h$ to 16^h Wave in H.F. (+ ·0018), with superposed fluctuations.

$23^d\ 8^h$ to 11^h Fluctuations in Dec. (± 2′): in H.F. (± ·0008). 16^h to $16\frac{1}{2}^h$ Wave in H.F. (+ ·0012). 17^h to $17\frac{1}{2}^h$ Wave in H.F. (+ ·0014). $18\frac{1}{4}^h$ to $19\frac{1}{4}^h$ Wave in Dec. (− 4′): in H.F. (− ·0024). $19\frac{3}{4}^h$ to $20\frac{1}{2}^h$ Sharp double wave in H.F. (+ ·0030 to − ·0012), followed by sharp fluctuations till 23^h (+ ·0008): wave in V.F. (+ ·0003): fluctuations in Dec. (± 2′).

1905.

July

$24^d\ 0^h$ to $1\frac{1}{4}^h$ Irregular double wave in H.F. (+ ·0036 to − ·0016): wave in Dec. (+ 5′): small wave in V.F. 3^h to $3\frac{1}{2}^h$ Wave in Dec. (+ 6′): in H.F. and V.F. small. 6^h to 9^h Prolonged wave in Dec. (+ 8′), with superposed fluctuations. 6^h to $7\frac{1}{2}^h$ Two successive waves in H.F. (− ·0014) and (− ·0020), followed by sharp fluctuations till 13^h. 14^h to 15^h Wave in H.F. (− ·0020). $16\frac{1}{2}^h$ to $17\frac{1}{4}^h$ Wave in H.F. (+ ·0010). 21^h to 24^h Fluctuations in Dec. and H.F.

$28^d\ 0^h$ to $1\frac{1}{2}^h$ Wave in H.F. (+ ·0010). $0\frac{1}{2}^h$ to 4^h Prolonged irregular wave in Dec. (− 5′). 3^h to 6^h Prolonged wave in H.F. (+ ·0020).

August

$2^d\ 0^h$ to $3^d\ 0^h$ See Plate III.

$3^d\ 2\frac{3}{4}^h$ to $3\frac{1}{2}^h$ Wave in Dec. (− 3′): in H.F. (− ·0010). $5\frac{1}{2}^h$ to 7^h Wave in H.F. (− ·0010). 7^h to 10^h Fluctuations in Dec. and H.F. $14\frac{3}{4}^h$ to $15\frac{1}{2}^h$ Wave in Dec. (− 4′): in H.F. (− ·0020). 16^h to $16\frac{1}{2}^h$ Wave in H.F. (− ·0015). $16\frac{3}{4}^h$ to $17\frac{3}{4}^h$ Double wave in Dec. (− 3′ to + 3′): sharp wave in H.F. (+ ·0040): wave in V.F. (+ ·0003). $20\frac{1}{2}^h$ to 22^h Irregular double wave in Dec. (− 3′ to + 6′): sharp fluctuations in H.F. (± ·0008). $3^d\ 23\frac{1}{2}^h$ to $4^d\ 0\frac{1}{2}^h$ Wave in Dec. (+ 7′).

$4^d\ 2^h$ to $3\frac{1}{4}^h$ Wave in Dec. (+ 4′): in H.F. (− ·0012). 4^h to 10^h Fluctuations in Dec. and H.F. 10^h to 14^h Loss of Dec., H.F. and V.F. registers. $14\frac{1}{2}^h$ to 16^h Irregular double wave in H.F. (− ·0010 to + ·0010).

$6^d\ 1^h$ to 2^h Wave in Dec. (+ 3′): in H.F. small. $16\frac{1}{4}^h$ to $17\frac{1}{4}^h$ Small double wave in H.F. (+ ·0012 to − ·0010). 18^h to $19\frac{1}{2}^h$ Double wave in H.F. (+ ·0008 to − ·0016). $6^d\ 23\frac{1}{2}^h$ to $7^d\ 0\frac{1}{2}^h$ Wave in Dec. (− 3′): in H.F. (+ ·0014).

$7^d\ 0\frac{1}{2}^h$ to $1\frac{3}{4}^h$ Wave in Dec. (− 4′). $3\frac{3}{4}^h$ to 5^h Wave in H.F. (− ·0016). $4\frac{1}{4}^h$ to $6\frac{3}{4}^h$ Irregular wave in Dec. (+ 10′), with superposed fluctuations. $6\frac{1}{2}^h$ to $7\frac{1}{2}^h$ Wave in H.F. (− ·0012), with superposed fluctuations. 7^h to 8^h Wave in Dec. (+ 5′). 23^h to 24^h Wave in H.F. (+ ·0016): in Dec. small.

$9^d\ 17^h$ to $17\frac{1}{2}^h$ Wave in H.F. (− ·0010).

$11^d\ 15\frac{3}{4}^h$ to 17^h Wave in H.F. (− ·0014).

$12^d\ 0\frac{1}{2}^h$ to $1\frac{1}{2}^h$ Wave in H.F. (− ·0014): small double wave in Dec.

$13^d\ 13\frac{1}{2}^h$ to 15^h Two successive waves in H.F. (+ ·0020) and (+ ·0014): small wave in Dec. $15\frac{1}{4}^h$ to $18\frac{1}{4}^h$ Very irregular triple-crested wave in H.F. (− ·0030).

$14^d\ 4\frac{3}{4}^h$ to $6\frac{1}{4}^h$ Wave in Dec. (− 3′). $7\frac{1}{2}^h$ to $9\frac{1}{4}^h$ Wave in H.F. (− ·0012). $14\frac{3}{4}^h$ to $15\frac{1}{4}^h$ Wave in H.F. (− ·0010).

$16^d\ 6^h$ Decrease of Dec. (− 2′). $6\frac{1}{2}^h$ to 7^h Wave in Dec. (+ 3′)

$17^d\ 18\frac{1}{4}^h$ to $19\frac{1}{4}^h$ Wave in H.F. (+ ·0010).

$19^d\ 21\frac{1}{2}^h$ to $22\frac{1}{4}^h$ Wave in Dec. (− 4′).

$20^d\ 2\frac{1}{4}^h$ to $3\frac{3}{4}^h$ Wave in Dec. (+ 7′): in H.F. (+ ·0020). 22^h to 23^h Wave in Dec. (+ 3′).

$23^d\ 5^h$ to 9^h Sharp fluctuations in Dec. (± 1′): in H.F. small. 13^h to 19^h Fluctuations in H.F.

$25^d\ 11\frac{1}{2}^h$ to $12\frac{1}{2}^h$ Wave in H.F. (− ·0012).

$26^d\ 1^h$ to 2^h Wave in Dec. (+ 3′). $2\frac{1}{2}^h$ to $3\frac{1}{2}^h$ Wave in Dec. (+ 3′).

$27^d\ 3^h$ to 5^h Wave in Dec. (+ 7′): in H.F. (− ·0012).

$28^d\ 13^h$ to 19^h Fluctuations in H.F. $19\frac{3}{4}^h$ to 21^h Wave in Dec. (− 11′): double wave in H.F. (− ·0010 to + ·0012). $22\frac{3}{4}^h$ to $23\frac{1}{2}^h$ Wave in H.F. (+ ·0010): in Dec. small. $28^d\ 23\frac{3}{4}^h$ to $29^d\ 1^h$ Wave in H.F. (+ ·0024): in Dec. small.

$29^d\ 3^h$ to 5^h Double-crested wave in Dec. (+ 4′): in H.F. (+ ·0010). 7^h to 9^h Wave in Dec. (+ 5′): in H.F. (− ·0025). $13\frac{1}{2}^h$ to $14\frac{1}{2}^h$ Wave in H.F. (− ·0012). 14^h to $15\frac{1}{2}^h$ Small double wave in Dec. (+ 3′ to − 2′). 15^h to $15\frac{1}{2}^h$ Wave in H.F. (− ·0010). 16^h to $16\frac{1}{2}^h$ Wave in H.F. (+ ·0014). 22^h to $23\frac{1}{2}^h$ Irregular wave in Dec. (− 12′): in H.F. (+ ·0040).

$30^d\ 3^h$ to 5^h Serrated wave in Dec. (+ 6′): in H.F. (+ ·0012). 8^h to 9^h Wave in H.F. (− ·0010). 13^h to $14\frac{1}{2}^h$ Wave in H.F. (− ·0010 to + ·0010), with superposed fluctuations. 16^h to 17^h Wave in H.F. (+ ·0012). 20^h to 22^h Double-crested wave in Dec. (− 5′). 22^h to $23\frac{1}{2}^h$ Wave in H.F. (+ ·0016).

$31^d\ 1^h$ to 9^h Small fluctuations in Dec. and H.F. 11^h to $12\frac{1}{2}^h$ Wave in H.F. (− ·0018). $15\frac{1}{2}^h$ to $16\frac{3}{4}^h$ Wave in Dec. (− 5′): in H.F. (+ ·0024), each with superposed fluctuations. $19\frac{1}{2}^h$ to $20\frac{1}{2}^h$ Wave in H.F. (+ ·0020): in Dec. small. $31^d\ 23\frac{1}{2}^h$ to September $1^d\ 1^h$ Irregular wave in Dec. (− 5′): in H.F. (+ ·0010).

1905.

September

$2^d\ 2^h$ to 5^h Prolonged double wave in Dec. (− 3′ to + 3′): small wave in H.F.

$3^d\ 8^h$ to $9\frac{1}{4}^h$ Two successive waves in H.F. (+ ·0010) and (+ ·0010). $9\frac{1}{2}^h$ to $10\frac{1}{2}^h$ Small double wave in Dec. (− 2½′ to + 3′): wave in H.F. (− ·0010). 11^h to 12^h Wave in Dec. (+ 4′). $11\frac{1}{2}^h$ to $12\frac{1}{4}^h$ Wave in H.F. (− ·0015). $12\frac{1}{2}^h$ to $13\frac{1}{4}^h$ Double wave in H.F. (− ·0010 to + ·0010). $13\frac{1}{2}^h$ Decrease of H.F. (− ·0018). $13\frac{1}{2}^h$ to $14\frac{3}{4}^h$ Wave in Dec. (− 5′). $14\frac{1}{2}^h$ to 17^h Two successive double waves in H.F. (+ ·0014 to − ·0010) and (+ ·0014 to − ·0024). 15^h to 16^h Wave in Dec. (− 4′). 18^h to 23^h Sharp fluctuations in H.F. (± ·0010). $20\frac{1}{2}^h$ to $22\frac{1}{2}^h$ Irregular wave in Dec. (− 6′).

$4^d\ 13^h$ Decrease of Dec. (− 3′): of H.F. (− ·0010). 14^h to $14\frac{3}{4}^h$ Wave in Dec. (+ 4′): in H.F. (+ ·0030). $16\frac{1}{4}^h$ to 17^h Wave in H.F. (+ ·0010). 18^h to 20^h Wave in Dec. (− 9′): fluctuations in H.F. $20\frac{3}{4}^h$ to $21\frac{3}{4}^h$ Wave in Dec. (− 5′): in H.F. (+ ·0012). 23^h to 24^h Wave in Dec. (+ 3′): in H.F. small.

$5^d\ 1\frac{1}{2}^h$ to 3^h Wave in Dec. (+ 9′): wave in V.F. (− ·0004). 6^h to $8\frac{1}{4}^h$ Wave in H.F. (− ·0020). $8\frac{1}{4}^h$ to $10\frac{1}{4}^h$ Wave in H.F. (− ·0014). $14\frac{3}{4}^h$ to $15\frac{1}{4}^h$ Wave in H.F. (− ·0014). $16\frac{1}{2}^h$ to 18^h Wave in H.F. (− ·0020). 18^h to 22^h Fluctuations in H.F. (± ·0005). 22^h to 23^h Double wave in Dec. (+ 4′ to − 4′): in H.F. (− 0010 to + ·0008).

$7^d\ 21\frac{3}{4}^h$ to $22\frac{3}{4}^h$ Wave in H.F. (+ ·0010).

$8^d\ 0^h$ to 1^h Wave in Dec. (+ 3′): in H.F. small. 9^h to 16^h Fluctuations in H.F. (± ·0005).

$9^d\ 0\frac{1}{2}^h$ to 1^h Wave in Dec. (+ 3′).

$10^d\ 0^h$ to 2^h Double wave in Dec. (+ 4′ to − 5′): wave in H.F. (+ ·0020). 13^h to $13\frac{3}{4}^h$ Wave in Dec. (+ 3′): in H.F. (− ·0012). 17^h to 18^h Wave in Dec. (− 6′): in H.F. (− ·0014). $21\frac{1}{4}^h$ to $22\frac{3}{4}^h$. Double wave in Dec. (+ 4′ to − 4′).

$11^d\ 12\frac{1}{2}^h$ to $13\frac{1}{2}^h$ Wave in Dec. (+ 3′): in H.F. (+ ·0010).

$12^d\ 7\frac{1}{2}^h$ to $9\frac{1}{2}^h$ Wave in H.F. (− ·0010)

$16^d\ 15^h$ to $20^d\ 11^h$ Loss of Dec. and H.F. registers.

$18^d\ 2^h$ to $19^d\ 2^h$ See Plate III.

$20^d\ 21\frac{1}{4}^h$ to $22\frac{1}{2}^h$ Wave in H.F. (+ ·0012), followed till 24^h by a double wave (+ ·0010 to − 0010): wave in V.F. (− ·0006). $20^d\ 21\frac{1}{2}^h$ to $21^d\ 3\frac{1}{2}^h$ Two successive double waves in Dec. (− 6′ to + 8′) and (− 7′ to + 4′).

$21^d\ 2^h$ to 3^h Wave in H.F. (− ·0010). $21^d\ 23\frac{1}{4}^h$ to $22^d\ 1^h$ Wave in Dec. (− 3′): in H.F. small.

$22^d\ 14^h$ to 18^h Sharp fluctuations in H.F. (± ·0008): in Dec. small. $21\frac{1}{2}^h$ to $22\frac{1}{2}^h$ Flat-crested wave in Dec. (− 5′): wave in H.F. (+ ·0012). 23^h to $23\frac{1}{2}^h$ Wave in Dec. (+ 3′).

$25^d\ 14\frac{1}{2}^h$ to 19^h Sharp fluctuations in H.F. (± ·0006). $18\frac{1}{2}^h$ to 20^h Wave in Dec. (− 8′): in H.F. small.

$26^d\ 4\frac{1}{2}^h$ to $8\frac{1}{2}^h$ Prolonged double wave in H.F. (+ ·0026 to − ·0012). 5^h to 6^h Wave in Dec. (+ 4′). 8^h to 10^h Wave in Dec. (+ 6′). $17\frac{3}{4}^h$ to $18\frac{1}{2}^h$ Wave in Dec. (− 4′): in H.F. small. 19^h to $19\frac{3}{4}^h$ Wave in Dec. (− 4′): in H.F. small. $21\frac{1}{2}^h$ to $23\frac{3}{4}^h$ Double wave in Dec. (− 5′ to + 3′): two successive waves in H.F. (− ·0012) and (− ·0014).

$27^d\ 0\frac{1}{4}^h$ to 2^h Prolonged wave in Dec. (+ 8′): serrated wave in H.F. (− ·0010). $3\frac{1}{4}^h$ to $4\frac{1}{4}^h$ Wave in Dec. (− 5′): in H.F. small. $4\frac{1}{2}^h$ to 10^h Fluctuations in Dec. (± 2′). 7^h to $8\frac{1}{2}^h$ Wave in H.F. (− ·0020). 9^h to 18^h Fluctuations in Dec. and H.F. 18^h to $20\frac{1}{2}^h$ Double wave in Dec. (+ 3′ to − 5′). $21\frac{1}{2}^h$ to $23\frac{1}{2}^h$ Double wave in Dec. (+ 5′ to − 3′): in H.F. (+ ·0020 to − ·0010).

$28^d\ 1^h$ to $2\frac{1}{4}^h$ Wave in Dec. (+ 5′): in H.F. small. $17\frac{1}{4}^h$ to $18\frac{1}{4}^h$ Wave in Dec. (− 3′): in H.F. (− ·0014). 22^h to $23\frac{1}{2}^h$ Wave in H.F. (+ ·0014): in Dec. small.

$29^d\ 17\frac{1}{2}^h$ to $18\frac{1}{2}^h$ Wave in Dec. (− 3′): in H.F. (− ·0010).

$30^d\ 15\frac{1}{4}^h$ to $17\frac{1}{4}^h$ Two successive waves in H.F. (− ·0016) and (− ·0010). 17^h to $18\frac{1}{4}^h$ Serrated wave in Dec. (− 5′). $17\frac{1}{2}^h$ to 19^h Two successive waves in H.F. (− ·0010) and (− ·0010). $19\frac{1}{4}^h$ to $21\frac{1}{4}^h$ Irregular wave in Dec. (− 15′): two successive waves in H.F. (+ ·0044) and (+ ·0010): wave in V.F. (− ·0003). $21\frac{1}{4}^h$ to 22^h Increase of H.F. (+ ·0010).

October

$1^d\ 18^h$ to $19\frac{1}{2}$ Serrated wave in Dec. (− 4′).

$5^d\ 0^h$ to 1^h Wave in H.F. (+ ·0010): in Dec. small. 15^h to $15\frac{1}{4}^h$ Wave in H.F. (+ ·0010): in Dec. small. 16^h to 17^d Wave in H.F. (− ·0010).

$6^d\ 12^h$ to $12\frac{1}{2}^h$ Double wave in Dec. (− 4′ to + 3′): in H.F. (− ·0014 to + ·0012).

$7^d\ 14\frac{1}{2}^h$ to $16\frac{1}{2}^h$ Serrated wave in H.F. (− ·0014): in Dec. small. $19\frac{3}{4}^h$ Decrease of Dec. (− 3′): of H.F. (+ ·0008). $20\frac{1}{2}^h$ to 22^h Double wave in Dec. (+ 6′ to − 4′): wave in H.F. (+ ·0024): in V.F. (− ·0003). $7^d\ 23\frac{1}{2}^h$ to $8^d\ 1^h$ Sharp wave in Dec. (+ 11′): wave in V.F. (− ·0005).

$8^d\ 13^h$ to 19^h Small fluctuations in Dec. and H.F. $19\frac{3}{4}^h$ to 21^h Wave in Dec. (− 4′): double wave in H.F. (− ·0008 to + ·0012).

1905.

October

$9^d\ 0^h$ to 5^h Small fluctuations in Dec. and H.F. $17\frac{1}{2}^h$ to $18\frac{1}{2}^h$ Wave in H.F. (− ·0010): in Dec. small.

$10^d\ 0\frac{1}{4}^h$ to 2^h Wave in Dec. (+ 6′).

$11^d\ 0\frac{1}{2}^h$ to 2^h Wave in Dec. (+ 4′): in H.F. small. 18^h to 19^h Wave in H.F. (+ ·0012): decrease of Dec. (− 5′).

$12^d\ 20\frac{1}{2}^h$ to $21\frac{1}{2}^h$ Wave in H.F. (+ ·0020), steep at commencement: small wave in Dec.

$13^d\ 1\frac{1}{2}^h$ to $2\frac{1}{2}^h$ Wave in Dec. (− 3′). $13\frac{1}{2}^h$ to $14\frac{1}{2}^h$ Decrease of H.F. (− ·0020). 17^h to 18^h Wave in Dec. (− 3′): in H.F. (+ ·0010). $21\frac{1}{4}^h$ to 23^h Small double wave in Dec. (− 3′ to + 2′): wave in H.F. (+ ·0026).

$14^h\ 3^h$ to 5^h Double-crested wave in Dec. (+ 4′): in H.F. (+ ·0010). 13^h to 16^h Fluctuations in H.F.

$17^d\ 0^h$ to 1^h Wave in Dec. (+ 3′): in H.F. small. 4^h to 9^h Small fluctuations in Dec. and H.F. 16^h to $17\frac{1}{2}^h$ Wave in H.F. (− ·0010): in Dec. small. 19^h to $19\frac{1}{2}^h$ Decrease of Dec. (− 4′). $19\frac{3}{4}^h$ to 21^h Double-crested wave in H.F. (+ ·0012): wave in Dec. (− 3′). $17^d\ 23^h$ to $18^d\ 1^h$ Double wave in Dec. (− 4′ to + 4′): in H.F. (− ·0008 to + ·0018): wave in V.F. (− ·0003).

$18^d\ 4^h$ to $5\frac{1}{2}^h$ Sharp fluctuations in Dec. (± 2′): in H.F. (± ·0005).

$20^d\ 20^h$ to 22^h Wave in Dec. (− 3′).

$25^d\ 21\frac{1}{2}^h$ Decrease of Dec. (− ′3). $23\frac{1}{2}^h$ to 24^h Decrease of H.F. (− ·0010). $25^d\ 23\frac{1}{2}^h$ to $26^d\ 1^h$ Double wave in Dec. (+ 3′ to − 3′).

$26^d\ 3\frac{1}{2}^h$ to $4\frac{1}{2}^h$ Wave in Dec. (+ 7′): in H.F. (+ ·0014). $16\frac{1}{4}^h$ to 18^h Wave in Dec. (− 8′): in H.F. small. $19\frac{3}{4}^h$ to $20\frac{1}{4}^h$ Decrease of Dec. (− 4′). $21\frac{1}{2}^h$ to $22\frac{1}{4}^h$ Wave in Dec. (+ 3′): in H.F. small.

$27^d\ 1^h$ to $2\frac{1}{4}^h$ Wave in Dec. (+ 4′).

$28^d\ 0\frac{1}{2}^h$ Increase of Dec. (+ 2′): of H.F. (+ ·0010). 14^h to $14\frac{1}{2}^h$ Wave in Dec. (+ 4′). 14^h to 16^h Two successive waves in H.F. (− ·0010) and (− ·0010), with superposed fluctuations. $15\frac{1}{2}^h$ to 18^h Prolonged shallow wave in V.F. (− ·0003). 17^h to 19^h Wave in Dec. (+ 8′): double wave in H.F. (+ ·0010 to − ·0020).

November

$4^d\ 14\frac{3}{4}^h$ to $17\frac{1}{2}^h$ Two successive waves in Dec. (+ 3′) and (+ 6′): irregular double wave in H.F. (+ ·0008 to − ·0014). 19^h to $20\frac{1}{2}^h$ Two successive waves in Dec. (+4′) and (+4′): in H.F. (− ·0012) and (− ·0015). $21\frac{1}{4}^h$ to $22\frac{1}{4}^h$ Decrease of Dec. (− 3′), followed till $22\frac{1}{4}^h$ by a wave (− 5′): wave in H.F. (+ ·0020): in V.F. (− ·0003).

$5^d\ 17\frac{1}{2}^h$ to $18\frac{1}{2}^h$ Wave in Dec. (+ 3′): in H.F. small.

$6^d\ 0\frac{1}{2}^h$ to 2^h Double-crested wave in Dec. (− 4′): wave in H.F. (− ·0010). $6^d\ 23\frac{3}{4}^h$ to $7^d\ 1^h$ Serrated wave in H.F. (+ ·0015).

$7^d\ 2^h$ to 5^h Fluctuations in Dec. (± 2′). 19^h to $20\frac{1}{4}^h$ Wave in Dec. (− 6′), steep at commencement. $21\frac{1}{2}^h$ to $23\frac{1}{2}^h$ Double wave in Dec. (+ 2′ to − 4′): flat-crested wave in H.F. (+ ·0014).

$8^d\ 0^h$ to 1^h Wave in Dec. (+ 4′). 21^h to 23^h Sharp wave in Dec. (− 9′): in H.F. (+ ·0026).

$9^d\ 20\frac{1}{2}^h$ to $21\frac{1}{2}^h$ Wave in Dec. (− 3′).

$12^d\ 7^h$ to $13^d\ 7^h$ See Plate IV.

$13^d\ 10^h$ to 11^h Wave in Dec. (+ 3′). $12\frac{1}{2}^h$ to $13\frac{1}{4}^h$ Double-crested wave in Dec. (+ 3′). $13\frac{3}{4}^h$ to $15\frac{1}{4}^h$ Double-crested wave in Dec. (− 5′): in H.F. (− ·0020). $17\frac{1}{4}^h$ to $18\frac{1}{2}^h$ Flat-crested wave in Dec. (− 6′): wave in H.F. (− ·0018). $20\frac{3}{4}^h$ Increase of H.F. (+ ·0010).

$14^d\ 3^h$ to 10^h Fluctuations in Dec. (± 1′): in H.F. (± ·0005). 18^h to 23^h Small sharp fluctuations in H.F. (± ·0005). 23^h to $23\frac{3}{4}^h$ Wave in H.F. (− ·0019). $23\frac{1}{2}^h$ to $23\frac{3}{4}^h$ Decrease of Dec. (− 4′).

$15^d\ 0^h$ to $16^d\ 0^h$ See Plate IV.

$16^d\ 0^h$ to $17^d\ 0^h$ See Plate IV.

$17^d\ 1^h$ to 3^h Serrated wave in Dec. (− 4′). 7^h to 15^h Sharp fluctuations in Dec. (± 2′): in H.F. (± ·0006). $14\frac{3}{4}^h$ Decrease of Dec. (− 3′). $15\frac{1}{2}^h$ to 17^h Two successive waves in Dec. (− 4′) and (− 3′): in H.F. small. $18\frac{1}{4}^h$ to $19\frac{1}{2}^h$ Double wave in Dec. (+ 3′ to − 3′): in H.F. (+ ·0010 to − ·0010). $22\frac{1}{4}^h$ to 23^h Wave in H.F. (+ ·0015): in Dec. small.

$18^d\ 7^h$ to 8^h Wave in H.F. (− ·0010).

$19^d\ 1^h$ to 2^h Wave in Dec. (+ 4′): in H.F. (+ ·0010).

$20^d\ 10\frac{1}{4}^h$ to 15^h Loss of Dec., H.F. and V.F. registers.

$21^d\ 3\frac{1}{2}^h$ to $4\frac{1}{2}^h$ Wave in Dec. (+ 5′). 8^h to 9^h Decrease of H.F. (− ·0020). $22\frac{3}{4}^h$ to $23\frac{3}{4}^h$ Wave in H.F. (+ ·0010).

1905.

November $23^d\ 11\frac{3}{4}^h$ to 13^h Wave in H.F. (− ·0010). $18\frac{1}{2}^h$ Decrease of Dec. (− 3′). 22^h to 23^h Wave in H.F. (+ ·0010). 23^h to 24^h Wave in Dec. (− 3′).

$24^d\ 16^h$ to $17\frac{1}{2}^h$ Wave in Dec. (− 4′): in H.F. (− ·0010).

$26^d\ 18^h$ to 24^h Fluctuations in Dec. and H.F.

$27^d\ 16\frac{1}{2}^h$ to 18^h Irregular wave in Dec. (+ 3′): in H.F. (− ·0010).

$30^d\ 0^h$ to $0\frac{3}{4}^h$ Wave in Dec. (+ 4′): in H.F. small. 19^h to 20^h Wave in Dec. (− 3′): in H.F. (− ·0010).

December $2^d\ 20\frac{3}{4}^h$ Decrease of Dec. (− 3′): followed till 22^h by a wave (− 4′).

$3^d\ 12\frac{3}{4}^h$ to $13\frac{1}{2}^h$ Wave in Dec. (+ 3′).

$4^d\ 0\frac{1}{4}^h$ to 2^h Serrated wave in Dec. (− 4′): wave in H.F. (+ ·0014). $2\frac{1}{4}^h$ to $2\frac{3}{4}^h$ Wave in H.F. (+ ·0010): small double wave in Dec. $9\frac{1}{2}^h$ to $10\frac{1}{4}^h$ Double wave in Dec. (− 3′ to + 3′), with superposed fluctuations: wave in H.F. (+ ·0012). $11\frac{3}{4}^h$ to $12\frac{1}{4}^h$ Wave in Dec. (− 3′): in H.F. small. $12\frac{3}{4}^h$ to $13\frac{1}{4}^h$ Decrease of H.F. (− ·0014). $13\frac{1}{4}^h$ to 14^h Irregular double wave in Dec. (+ 3′ to − 3′): wave in H.F. (− ·0012). 15^h to $16\frac{1}{4}^h$ Wave in Dec. (− 3′): in H.F. (− ·0010). $16\frac{1}{2}^h$ to 17^h Wave in Dec. (+ 3′): in H.F. (− ·0010). $17\frac{1}{4}^h$ to $18\frac{3}{4}^h$ Two successive waves in Dec. (+ 4′) and (+ 4′): irregular wave in H.F. (− ·0020). 18^h to 23^h Sharp fluctuations in Dec. (± 3′): in H.F. (± ·0008).

$6^d\ 21^h$ to 22^h Wave in Dec. (− 4′).

$12^d\ 3^h$ to 4^h Irregular wave in Dec. (+ 5′): in H.F. (+ ·0016), both very steep at commencement. $12\frac{3}{4}^h$ to 13^h Wave in Dec. (+ 3′): in H.F. small. 16^h to $21\frac{1}{2}$ Fluctuations in H.F. $12^d\ 21\frac{1}{4}^h$ to $13^d\ 1^h$ Prolonged flat-crested wave in Dec. (− 8′), with superposed fluctuations. 22^h to $23\frac{1}{4}^h$ Wave in H.F. (− ·0010).

$13^d\ 0^h$ to 3^h Fluctuations in H.F. $2\frac{3}{4}^h$ Increase of Dec. (+ 3′). $3\frac{1}{2}^h$ to 6^h Three successive waves in Dec. (− 5′), (− 4′) and (− 5′): prolonged serrated wave in H.F. (+ ·0020). $7\frac{1}{4}^h$ to $8\frac{1}{4}^h$ Wave in Dec. (− 5′): in H.F. (+ ·0010). $11\frac{1}{2}^h$ to $12\frac{1}{4}^h$ Irregular wave in Dec. (+ 3′). $19\frac{3}{4}^h$ to $20\frac{1}{2}^h$ Wave in H.F. (+ ·0010). $20\frac{1}{2}^h$ to $23\frac{1}{2}^h$ Prolonged wave in Dec. (− 8′), with superposed fluctuations: sharp fluctuations in H.F. (± ·0008).

$14^d\ 16^h$ to 17^h Wave in Dec. (− 3′): in H.F. (− ·0010). 21^h to $22\frac{1}{4}^h$ Wave in Dec. (− 4′).

$15^d\ 14\frac{3}{4}^h$ to $16\frac{1}{4}^h$ Wave in H.F. (− ·0010): in Dec. small.

$16^d\ 0\frac{1}{4}^h$ to $1\frac{1}{4}^h$ Wave in Dec. (− 3′): in H.F. (+ ·0010).

$19^d\ 1^h$ to 2^h Wave in Dec. (+ 3′): in H.F. small. 19^h to 20^h Wave in Dec. (− 4′): in H.F. (− ·0010).

$20^d\ 13\frac{1}{4}^h$ to 14^h Decrease of H.F. (− ·0016). 16^h to 17^h Wave in Dec. (+ 4′): in H.F. (− ·0010). $17\frac{1}{4}^h$ to $18\frac{3}{4}^h$ Irregular wave in Dec. (+ 4′). 19^h to $20\frac{1}{4}^h$ Irregular wave in Dec. (− 5′): in H.F. (− ·0010). $21\frac{1}{2}^h$ to 23^h Wave in Dec. (− 7′).

$21^d\ 0^h$ to $1\frac{1}{2}^h$ Double wave in Dec. (+ 4′ to − 3′): wave in H.F. (+ ·0016): decrease of V.F. (− ·0005).

$25^d\ 21\frac{1}{2}^h$ to $22\frac{1}{4}^h$ Wave in Dec. (− 3′).

$28^d\ 21^h$ to $22\frac{1}{2}^h$ Wave in Dec. (− 3′): in H.F. small.

$29^d\ 1^h$ to 2^h Wave in Dec. (+ 3′). $9\frac{1}{2}^h$ to 15^h Loss of Dec. and H.F. registers. 10^h to 17^h Loss of V.F. register. $21\frac{1}{2}^h$ to $22\frac{1}{2}^h$ Wave in Dec. (− 3′).

EXPLANATION OF THE PLATES.

The magnetic motions figured on the Plates are :—

(1.) Those for days of great disturbance—None in 1905.

(2.) Those for days of lesser disturbance—January 5–6, February $3^d\ 1^h$ to $4^d\ 1^h$, March $2^d\ 1^h$ to $3^d\ 1^h$, 7, April 1, 2, July $5^d\ 21^h$ to $6^d\ 21^h$, August 2, September $18^d\ 2^h$ to $19^d\ 2^h$, November $12^d\ 7^h$ to $13^d\ 7^h$, 15, 16.

(3.) Those for four quiet days—February 19, May 6, August 18, November 11—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 ·00001 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 $0^{in.}80 = 20{\cdot}2^{mm.}$ in the declination curve, by $0^{in.}74 = 18{\cdot}7^{mm.}$ in the horizontal force curve, and in the vertical force curve by $0^{in.}64 = 16{\cdot}3^{mm.}$, and $0^{in.}59 = 14{\cdot}9^{mm.}$ for the periods January–June and June–December respectively.

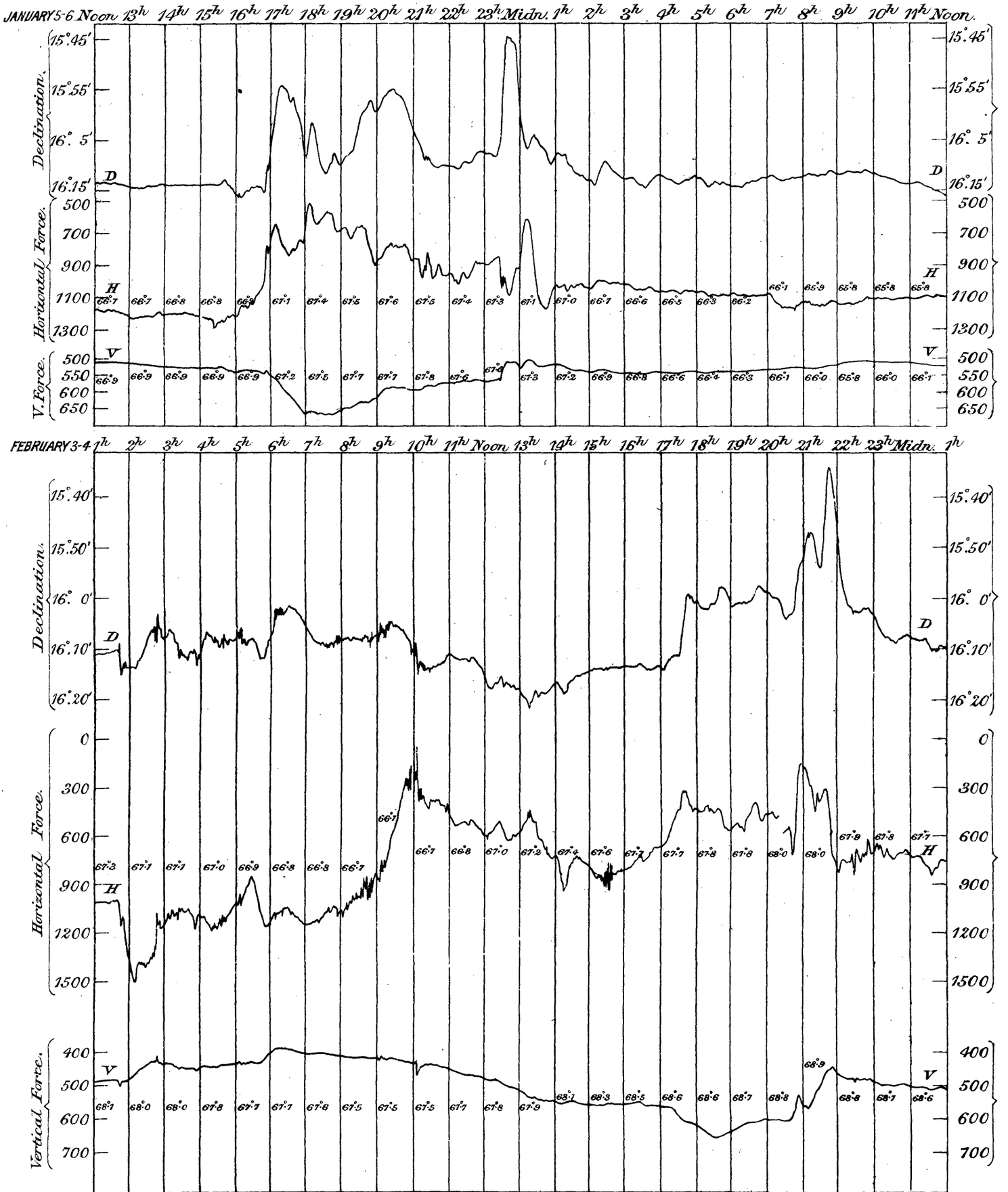
Downward motion indicates increase of declination and of horizontal and vertical force.

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.

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

Plate I.

Magnetic Disturbances recorded at the Royal Observatory, Greenwich, 1905.



400. 7. 06

Weller & Graham, Ltd Litho. London.

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

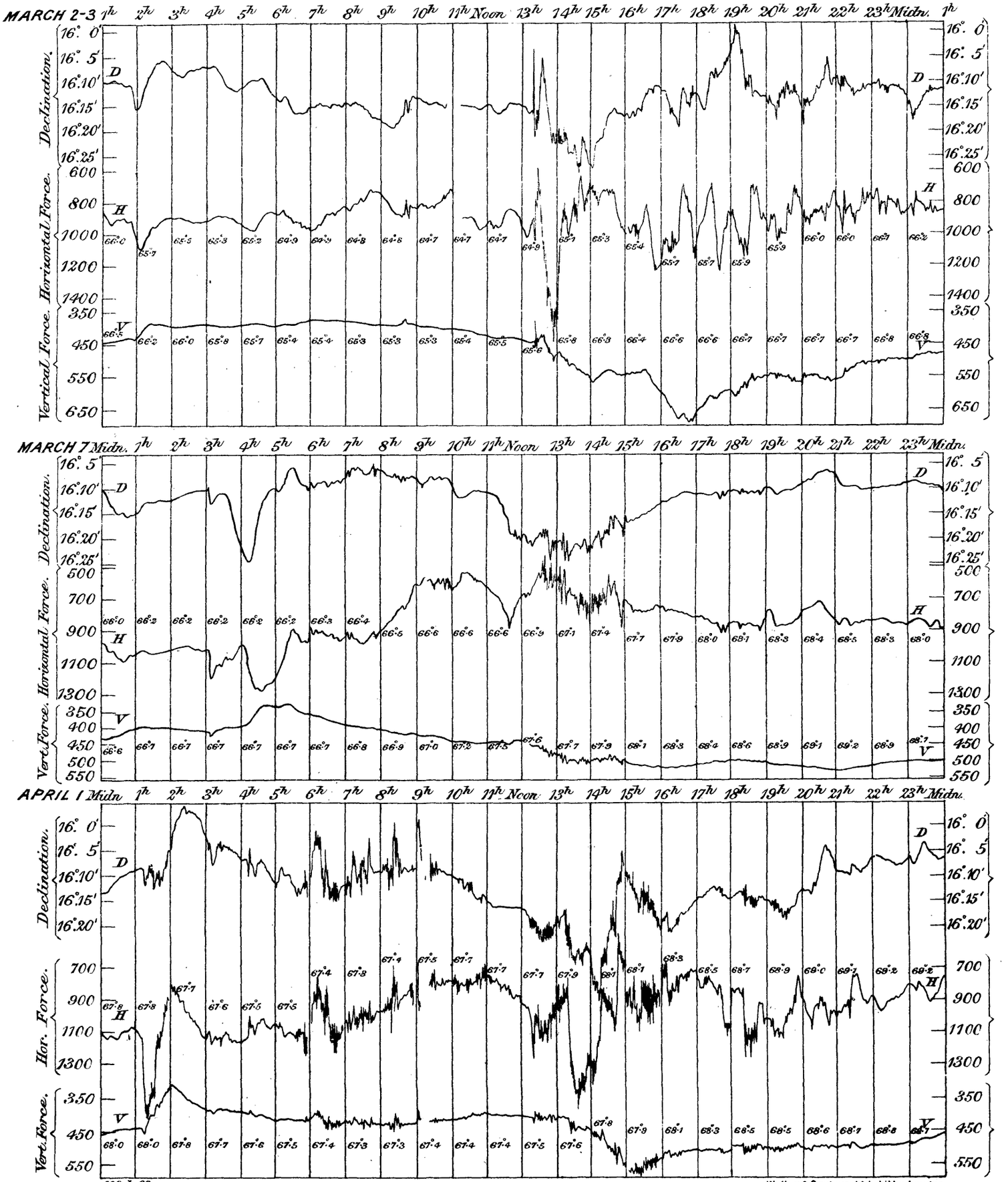
·000 ·001 ·002 *Declination.*

·000 ·001 ·002 *Horizontal Force.*

·000 ·001 ·002 *Vertical Force.*

Plate II.

Magnetic Disturbances recorded at the Royal Observatory, Greenwich, 1905.



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

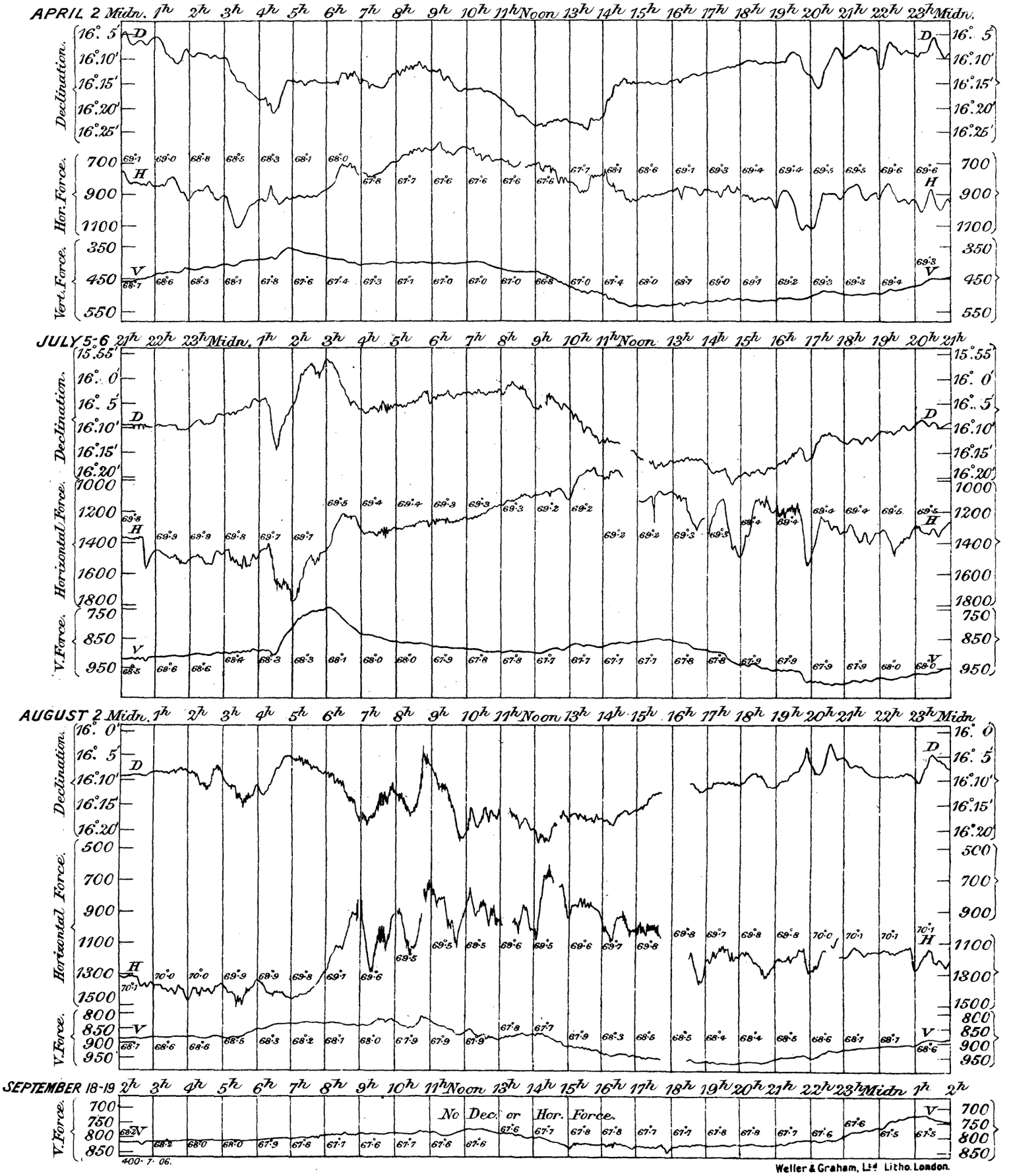
·000 ·001 ·002 — *Declination.*

·000 ·001 ·002 — *Horizontal Force.*

·000 ·001 ·002 — *Vertical Force.*

Plate III.

Magnetic Disturbances recorded at the Royal Observatory, Greenwich, 1905.



400- 7- 06.

Weller & Graham, Ltd Litho. London.

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

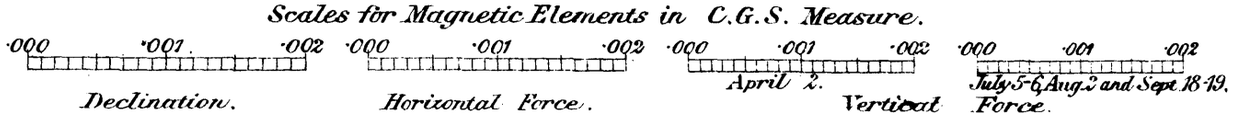
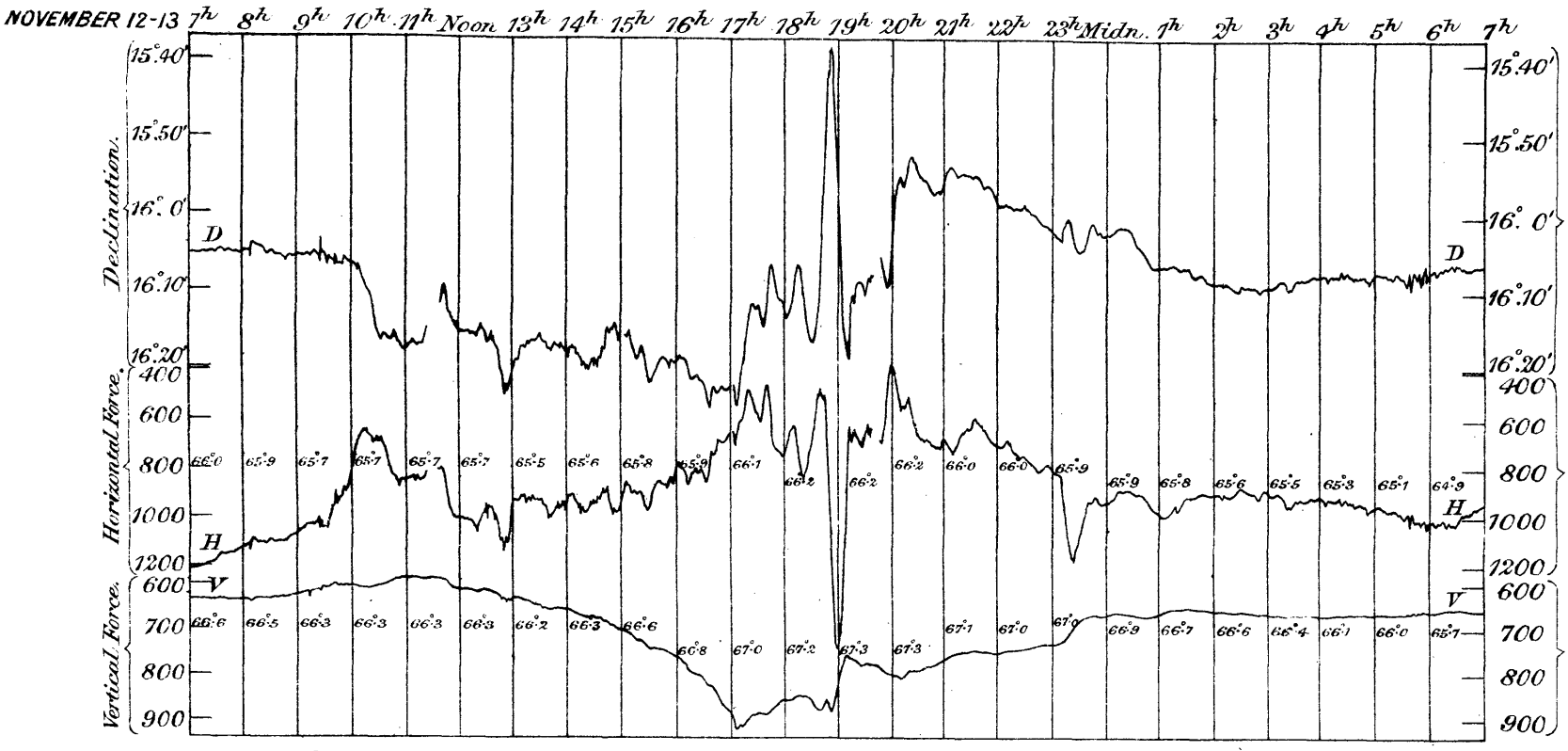
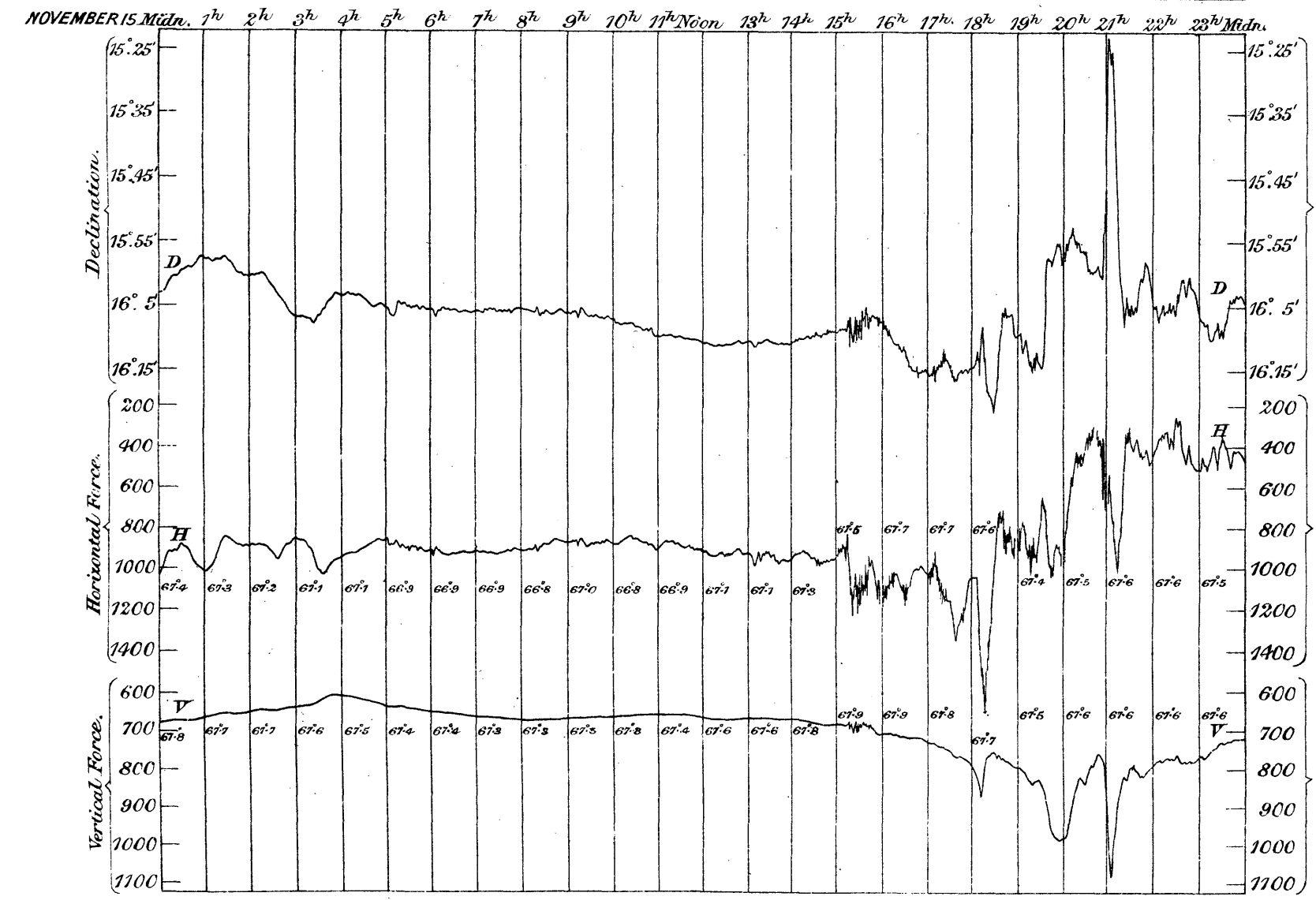
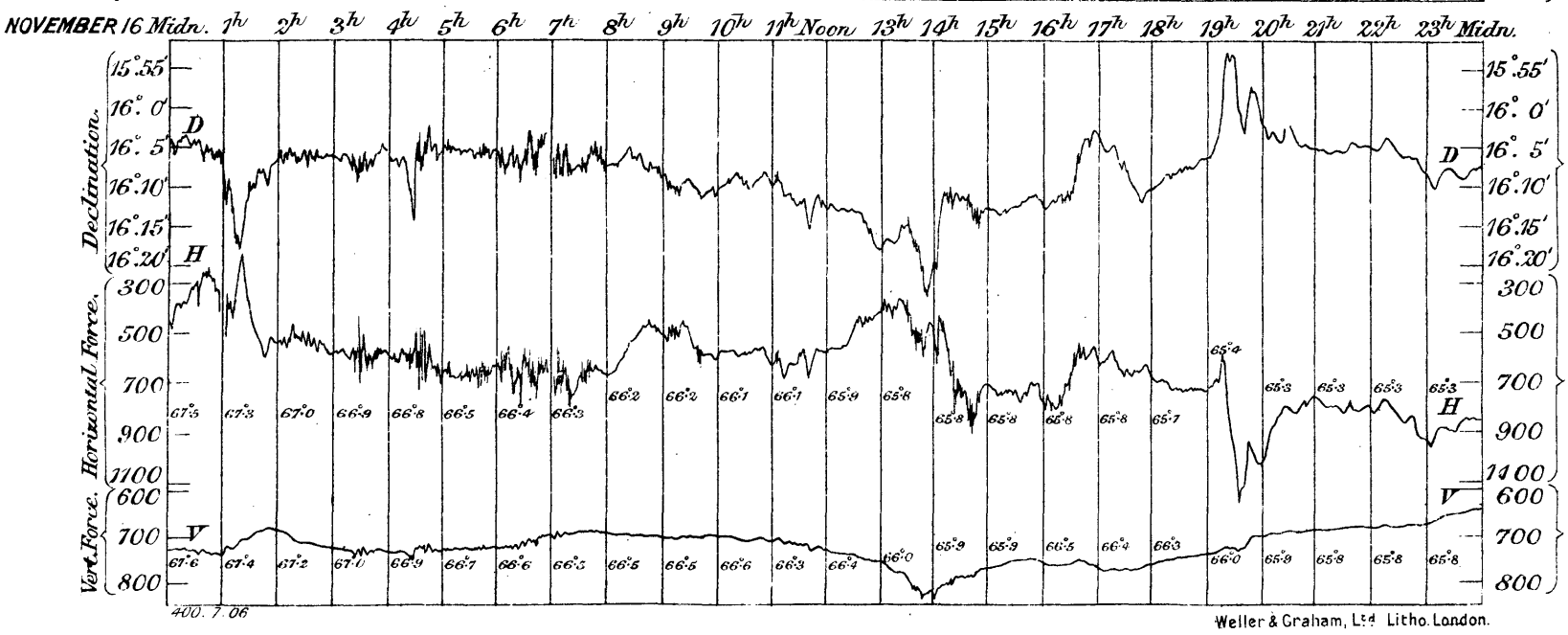


Plate IV.

Magnetic Disturbances recorded at the Royal Observatory, Greenwich, 1905.







400. 7. 06

Weller & Graham, Ltd Litho. London.

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

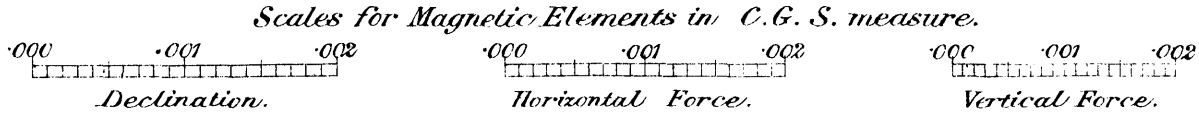
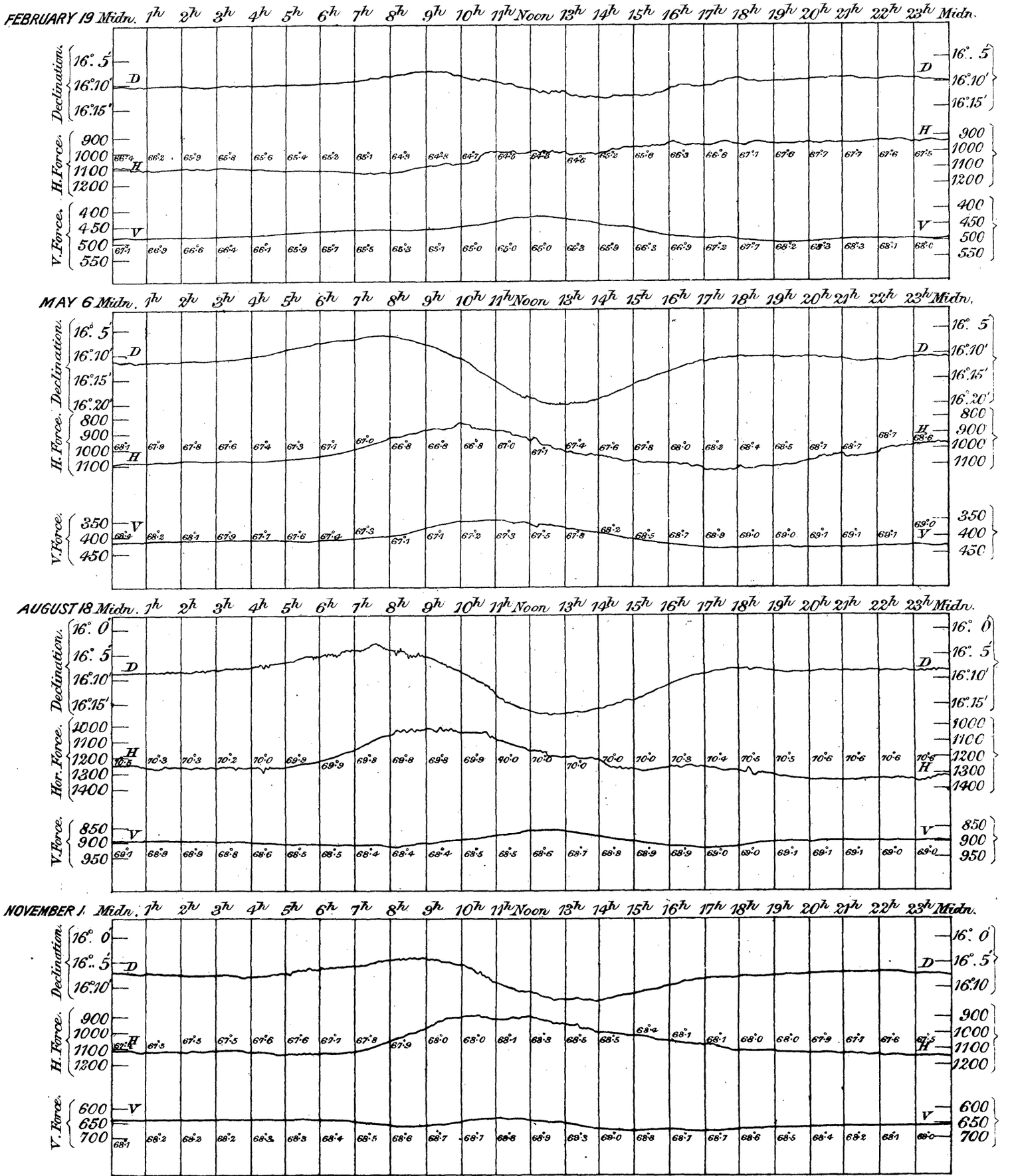


Plate V.

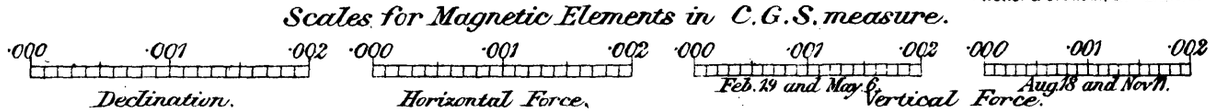
Types of Magnetic Diurnal Variations at four Seasons of the Year, Recorded at the Royal Observatory, Greenwich, 1905.



400. 7. 06.

Waller & Graham, Ltd Litho. London.

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



ROYAL OBSERVATORY, GREENWICH.

RESULTS

OF

METEOROLOGICAL OBSERVATIONS.

1905.

MONTH and DAY, 1905.	Phases of the Moon.	Barometer. Mean of 24 Hourly Values (corrected and reduced to 32° Fahrenheit).	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.	Of the Dew Point. Deduced Mean Daily Value.	Difference between the Air Temperature and Dew Point Temperature. Mean.	Greatest.	Least.	Degree of Humidity (Saturation = 100).	Temperature. Of Radiation. Highest in Sun's Rays.	Lowest on the Grass.	Rain collected in Gauge No. 6, whose receiving surface is 5 inches above the Ground.	Daily Amount of Ozone.	Electricity.
		in.	°	°	°	°	°	°	°	•	°	°		°	°	in.		
Jan. 1	...	30·509	34·8	19·5	15·3	28·3	− 10·2	27·2	22·9	5·4	14·4	0·7	80	43·0	9·8	0·001	4·0	mP, mN : mP : sP
2	...	30·480	35·0	19·7	15·3	29·7	− 8·8	28·5	24·6	5·1	19·1	0·3	81	35·8	10·0	0·073	0·0	mP : sP : vN, vP
3	...	30·208	47·0	35·0	12·0	42·5	+ 4·0	41·4	40·1	2·4	4·4	0·0	91	48·1	33·8	0·010	0·0	mP : mP : wP
4	...	30·002	48·0	45·0	3·0	46·5	+ 8·1	43·8	40·7	5·8	6·9	3·7	82	51·4	41·6	0·000	0·0	wP
5	Greatest Declination S.: New	29·650	47·5	39·0	8·5	44·9	+ 6·6	42·9	40·6	4·3	8·0	1·9	86	50·7	32·5	0·179	0·5	wP, vN : mP
6	...	29·518	53·7	38·5	15·2	47·7	+ 9·5	44·9	41·9	5·8	9·8	1·1	81	58·8	32·0	0·162	1·5	wP
7	...	29·958	54·0	43·4	10·6	49·8	+11·7	46·2	42·4	7·4	13·6	2·9	76	57·0	32·7	0·000	1·0	wP : mP : mP
8	...	30·061	50·8	43·5	7·3	48·5	+10·5	46·0	43·3	5·2	9·0	1·3	82	66·2	42·1	0·000	7·0	wP
9	...	29·837	50·8	36·3	14·5	44·6	+ 6·7	42·7	40·5	4·1	7·8	0·9	86	53·0	31·3	0·082	6·0	wwP : wwP, wwN : wwP
10	...	30·275	40·3	34·7	5·6	37·4	− 0·5	34·8	31·2	6·2	9·2	4·0	79	48·3	27·4	0·000	0·5	wP : vP : vP
11	...	30·009	48·0	40·0	8·0	43·9	+ 6·0	41·3	38·3	5·6	8·6	3·8	80	69·0	35·0	0·000	1·5	wP : mP : wP
12	Apogee : In Equator	29·972	47·0	34·8	12·2	41·6	+ 3·7	38·0	33·5	8·1	12·5	5·3	74	64·0	28·5	0·000	0·0	mP : sP : sP
13	First Quarter	30·263	40·8	25·1	15·7	34·0	− 4·0	32·4	29·6	4·4	6·7	1·6	83	49·4	17·6	0·000	0·0	sP : ssP
14	...	30·195	40·3	24·5	15·8	34·5	− 3·7	32·8	30·0	4·5	13·8	0·4	83	58·9	17·3	0·000	0·0	sP
15	...	29·919	39·1	26·3	12·8	33·0	− 5·3	27·1	15·2	17·8	19·4	12·3	46	58·3	22·7	0·000	0·0	wP : mP : mP
16	...	29·362	43·5	20·6	22·9	26·1	−12·4	24·5	16·5	9·6	20·7	0·0	65	46·0	18·6	0·082	0·0	...
17	...	29·150	43·6	32·8	10·8	39·3	+ 0·8	38·1	36·5	2·8	5·1	0·4	90	47·3	26·0	0·376	0·0	wN, wP : ssP : ssP
18	...	29·727	40·7	30·2	10·5	35·2	− 3·3	33·4	30·5	4·7	9·7	2·3	83	46·3	24·2	0·000	0·0	mP : sP : sP
19	Greatest Declination N.	30·161	37·5	25·1	12·4	31·2	− 7·3	30·1	27·3	3·9	10·1	0·4	84	37·5	20·6	0·000	0·2	sP
20	...	30·116	36·3	32·2	4·1	34·6	− 3·8	33·2	30·9	3·7	6·2	0·6	86	39·2	24·8	0·007	0·8	mP
21	Full	30·029	37·7	27·4	10·3	33·6	− 4·7	32·0	29·1	4·5	7·7	1·4	84	59·2	20·6	0·000	0·0	mP : sP : sP
22	...	30·136	36·0	33·4	2·6	34·4	− 3·9	33·1	30·9	3·5	6·4	3·2	86	37·0	32·4	0·000	0·0	mP : sP : ...
23	Perigee	30·132	40·8	32·5	8·3	35·1	− 3·3	34·4	33·3	1·8	4·6	0·8	93	45·1	32·0	0·003	0·0	...
24	...	30·085	43·7	34·1	9·6	38·8	+ 0·3	37·8	36·5	2·3	5·7	1·4	93	48·7	31·4	0·000	0·0	... : ... : mP
25	In Equator	30·182	45·0	36·6	8·4	42·2	+ 3·4	40·3	38·0	4·2	9·9	0·9	86	56·0	29·6	0·003	0·0	wP : mP : mP
26	...	30·538	41·0	30·0	11·0	35·2	− 3·8	33·0	29·5	5·7	9·7	2·7	79	61·6	24·0	0·000	0·0	sP
27	...	30·711	41·2	24·7	16·5	34·0	− 5·3	32·0	28·5	5·5	9·2	1·1	79	52·0	20·0	0·000	0·0	sP : ssP
28	Last Quarter	30·723	48·1	33·1	15·0	41·3	+ 1·8	39·2	36·6	4·7	8·2	1·3	84	52·0	28·0	0·000	0·0	sP : sP : mP
29	...	30·734	44·0	33·1	10·9	38·9	− 0·8	37·1	34·7	4·2	6·6	0·5	86	55·0	27·0	0·000	0·0	mP
30	...	30·364	47·3	34·1	13·2	42·0	+ 2·2	40·5	38·7	3·3	5·7	0·3	89	67·0	30·6	0·021	0·0	wP : mP : wP
31	...	30·137	46·6	39·5	7·1	43·0	+ 3·2	39·4	35·1	7·9	13·7	4·1	74	60·3	33·6	0·000	0·0	wP : mP : mP
Means	...	30·101	43·6	32·4	11·1	38·4	− 0·1	36·4	33·1	5·3	9·8	2·0	81·6	52·3	27·0	Sum 0·999	0·7	
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 30^{in}·101, being 0^{in}·323 *higher* than the average for the 50 years, 1841–1890.

TEMPERATURE OF THE AIR.

The highest in the month was 54°·0 on January 7; the lowest in the month was 19°·5 on January 1; and the range was 34°·5.
The mean of all the highest daily readings in the month was 43°·6, 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 32°·4, being 1°·2 *lower* than the average for the 50 years, 1841–1890.
The mean of the daily ranges was 11°·1, being 1°·6 *greater* than the average for the 50 years, 1841–1890.
The mean for the month was 38°·4, being 0°·1 *lower* than the average for the 50 years, 1841–1890.

MONTH and DAY, 1905.	Daily Duration of Sunshine.	Sun above Horizon.	Wind as deduced from Self-Registering Anemometers. Osler's. General Direction. A.M.	General Direction. P.M.	Pressure on the Square Foot. Greatest.	Pressure on the Square Foot. Mean of 24 Hourly Measures.	Robinson's. Horizontal Movement of the Air.	Clouds and Weather. A.M.	Clouds and Weather. P.M.
	hours.	hours.			lbs.	lbs.	miles		
Jan. 1	0·2	7·9	ESE : E : SSE	SSE : SSW	2·1	0·04	157	p.-cl,slt.-sn,sl : li.-cl : 9, cu, n, slt.-sn	9, slt.-sn : p.-cl, ho.-fr : 0, ho.-fr
2	0·0	7·9	S : SW	SW : WSW	1·0	0·05	233	9 : 10 : 10, slt.-sn	10, slt.-sn : 10, slt.-sn, sl, r : 10, oc.-slt.-r
3	0·0	7·9	WSW	W	1·5	0·19	335	10, oc.-slt.-r : 10	10 : 10
4	0·0	7·9	W	W : WSW	4·2	0·55	453	10 : 10	10 : 10 : 9
5	1·0	7·9	WSW : W : NW	WNW : W	3·3	0·75	487	10, r : 10, glm, oc.-r : 9, oc.-slt.-r	5, cu, ci.-s,li.-cl : 1, th.-cl : 0
6	0·0	8·0	W : WSW	W : WNW : NW	9·4	1·03	558	p.-cl, oc.-slt.-r : 10, fq.-th.-r	10, sc, w : 10, sc, w
7	0·2	8·0	NNW : NW	NNW : SW	15·0	0·82	409	10, st.-w : 10, sh.-r : 10	p.-cl : p.-cl : 10
8	0·4	8·0	SSW : SW	WSW : SW	5·6	0·72	458	9 : 9 : 8, cu.-s, li.-cl, w	10, w : 10, w
9	0·0	8·1	WSW : SW	W : WNW	7·8	1·29	590	10, w : p.-cl : 10, sc, r, w	10, sc, fq.-r : p.-cl, w : 0
10	0·8	8·1	NW : WNW	W : WSW : SW	4·0	0·50	411	0, ho.-fr : p.-cl : 6, ci, ci.-s, ci.-cu	1, ci.-s : 1 : p.-cl, ho.-fr
11	4·4	8·1	WSW : SW	WSW : SW	9·5	1·18	577	9 : p.-cl : 4, ci.-s, li.-cl	p.-cl, w : p.-cl, w : 9,oc.-th.-r, w
12	5·9	8·2	W	W : WNW	7·2	1·03	529	0, ho.-fr : 0 : 0, w	1,cu, li.-cl : 1,li.-cl,lu.-ha : 0
13	2·2	8·2	W : WSW	WSW : SSE	0·1	0·00	157	0, ho.-fr : 0, ho.-fr : 0	2, th.-cl, f : 0, slt.-f : 0,ho.-fr,prs,f
14	6·5	8·2	SE : SSE	SE : SSE	3·7	0·40	276	0, ho.-fr : 0, ho.-fr : 1, ci.-s	1, ci.-s : 0, lu.-co : 1, lu.-ha
15	3·8	8·2	SE	SE : ESE	11·0	1·07	423	0, fr : p.-cl : 7, ci, w	5, ci, ci.-s : 4, ci.-s : 1, th.-cl
16	0·6	8·3	ESE : SE	SE : ESE : SSW	5·0	0·73	401	1, fr : 1, fr : 9	10 : 10, fr.-r, slt.-sn, r : 10, slt.-r
17	0·0	8·3	S : W : WSW	W : WSW : SW	1·0	0·02	224	10, fq.-shs : p.-cl : 7, th.-cl, so.-ha	9,th.-cl,so.-ha : 5,th.-cl,lu.-ha,ho.-fr,h : 1,lu.-ha, ho.-fr
18	2·4	8·4	WSW : W	NW : WNW : W	1·4	0·12	300	1, ho.-fr : p.-cl,ho.-fr : 4, th.-cl, h	1, th.-cl, h : 0, h, ho.-fr : 0, h, ho.-fr
19	0·1	8·4	WSW	NE	0·0	0·00	137	0, h, ho.-fr, slt.-f : 0, slt.-f	1, th.-cl, f : 0 : 9
20	0·0	8·5	NE : ENE : ESE	E : ESE : SE	1·4	0·04	199	10 : 10	10 : 10
21	4·9	8·5	ESE : E	ESE : ENE : NE	0·7	0·02	185	p.-cl, h : 0, h,ho.-fr : 0	0 : p.-cl : 10
22	0·0	8·6	NE	NNE : NE	0·8	0·01	148	10 : 10	10 : 10, oc.-m.-r : 10, oc.-m.-r
23	0·0	8·6	ENE : E : SE	SW : W : S	0·0	0·00	94	10 : 10, glm : 10, oc.-m.-r	10, m : 10, m
24	0·0	8·7	S : SSE	S : SSW : SW	0·3	0·00	169	10, m : 10	9 : p.-cl : 10
25	2·0	8·7	WSW : NNW	NW : NNW : N	1·9	0·20	293	10 : 10, glm, slt.-r : 10, slt.-f, glm	p.-cl : th.-cl : 0
26	2·4	8·8	N : NNE	NE	0·7	0·04	171	0 : 0, ho.-fr : 6, ci.-cu, ci.-s, th.-cl	6,ci.-s, th.-cl : 2, ci.-s : 0, h
27	5·1	8·8	W : WSW	W : WSW	1·1	0·06	234	0, h, ho.-fr : 0, h	1, ci : 0 : 0, ho.-fr
28	0·7	8·9	WSW : W	WNW : W	1·3	0·13	327	0,h,ho.-fr : 0, ho.-fr : 2, th.-cl	1, th.-cl : 1, th.-cl : 0
29	3·6	8·9	WSW	W : WSW	0·8	0·04	255	0, ho.-fr : 1, th.-cl : 4, th.-cl	4, ci.-s : 0 : p.-cl, ho.-fr
30	1·0	9·0	SW : WSW : W	W : WSW	7·0	0·65	427	10 : 10 : 5, th.-cl, oc.-th.-r	10, oc.-th.-r : 10 : 10, w
31	0·9	9·0	W : NW	NW : W : WSW	5·1	0·67	427	p.-cl, w : 9 : 6, th.-cl	8, ci.-cu, ci.-s, th.-cl : 9 : p.-cl
Means	1·6	8·4	...	...	...	0·40	324		
Number of Column for Reference.	19	20	21	22	23	24	25	26	27

The mean *Temperature of Evaporation* for the month was 36°·4, being 0°·8 *lower* than
The mean *Temperature of the Dew Point* for the month was 33°·1, being 2°·3 *lower* than
The mean *Degree of Humidity* for the month was 81·6, being 7·2 *less* than
The mean *Elastic Force of Vapour* for the month was 0in·189, being 0in·018 *less* than
The mean *Weight of Vapour in a Cubic Foot of Air* for the month was 2grs·2, being 0gr·2 *less* than
The mean *Weight of a Cubic Foot of Air* for the month was 560 grains, being 6 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 6·0.

The mean proportion of *Sunshine* for the month (constant sunshine being represented by 1) was 0·190. The maximum daily amount of *Sunshine* was 6·5 hours on January 14.

The highest reading of the *Solar Radiation Thermometer* was 69°·0 on January 11; and the lowest reading of the *Terrestrial Radiation Thermometer* was 9°·8 on January 1.

The mean daily distribution of *Ozone* for the 12 hours ending 9h was 0·5; for the 6 hours ending 15h was 0·1; and for the 6 hours ending 21h was 0·1.

The *Proportions of Wind* referred to the cardinal points were N. 3, E. 5, S. 7, and W. 15. One day was calm.

The *Greatest Pressure of the Wind* in the month was 15·0 lbs. on the square foot on January 7. The mean daily *Horizontal Movement of the Air* for the month was 324 miles; the greatest daily value was 590 miles on January 9; and the least daily value was 94 miles on January 23.

Rain fell on 8 days in the month, amounting to 0in·999, as measured by gauge No. 6 partly sunk below the ground; being 0in·990 *less* than the average fall for the 50 years, 1841–1890.

MONTH and DAY, 1905.	Phases of the Moon.	BAROMETER. Mean of 24 Hourly Values (corrected and reduced to 32° Fahrenheit).	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.	Of the Dew Point. Deduced Mean Daily Value.	Difference between the Air Temperature and Dew Point Temperature. Mean.	Greatest.	Least.	Degree of Humidity (Saturation = 100).	TEMPERATURE. Of Radiation. Highest in Sun's Rays.	Lowest on the Grass.	Rain collected in Gauge No. 6, whose receiving surface is 5 inches above the Ground.	Daily Amount of Ozone.	Electricity.
		in.	°	°	°	°	°	°	°	°	°	°		°	°	in.		
Feb. 1	Greatest Declination S.	29·896	53·1	40·5	12·6	45·8	+ 6·1	42·9	39·6	6·2	10·6	2·9	80	75·3	36·7	0·000	0·5	wP : mP : wP
2	...	29·805	45·9	38·5	7·4	43·1	+ 3·4	38·4	32·8	10·3	14·7	4·8	67	70·8	33·1	0·000	3·5	wP : mP : wP
3	...	30·141	47·0	36·0	11·0	41·5	+ 1·8	38·7	35·3	6·2	11·3	3·5	79	64·3	30·2	0·000	0·0	wP : mP : wP
4	New	30·200	51·0	43·7	7·3	47·0	+ 7·2	45·2	43·2	3·8	7·2	0·8	87	63·3	39·5	0·012	0·0	wP
5	...	30·276	50·6	46·9	3·7	50·3	+10·5	48·1	45·8	4·5	8·4	1·7	85	75·0	42·0	0·000	0·0	... : wP
6	...	30·227	50·0	44·4	5·6	47·1	+ 7·4	44·6	41·8	5·3	10·5	3·4	83	60·7	38·2	0·000	0·0	wP
7	...	30·199	49·3	40·2	9·1	45·8	+ 6·4	44·7	43·5	2·3	5·9	1·0	92	59·0	37·5	0·121	0·0	wP
8	In Equator : Apogee	30·310	46·9	37·7	9·2	41·3	+ 2·2	40·8	40·2	1·1	5·0	0·2	96	73·2	32·4	0·000	1·0	wP
9	...	30·245	49·6	39·5	10·1	45·0	+ 6·3	43·2	41·1	3·9	8·4	0·2	86	60·5	34·5	0·000	0·0	wP
10	...	30·175	51·0	41·6	9·4	46·1	+ 7·7	43·2	39·9	6·2	9·6	3·7	80	70·6	35·0	0·000	2·0	wP : mP : mP
11	...	30·212	43·5	34·1	9·4	39·5	+ 1·2	36·3	32·1	7·4	16·3	2·9	76	73·5	28·7	0·000	0·0	mP : sP : sP
12	First Quarter	30·335	36·9	32·4	4·5	35·1	− 3·4	31·4	25·5	9·6	15·5	5·5	68	64·9	26·2	0·000	0·0	mP : sP
13	...	30·278	48·0	36·4	11·6	42·6	+ 3·8	40·9	38·9	3·7	8·0	1·5	87	52·8	33·3	0·041	0·0	mP : mP : sN, wP
14	...	30·330	51·5	45·2	6·3	48·0	+ 8·8	46·4	44·6	3·4	6·8	2·5	89	66·0	40·4	0·000	0·0	wP
15	Greatest Declination N.	30·326	48·8	42·5	6·3	46·3	+ 6·7	43·7	40·7	5·6	8·8	0·8	82	64·0	36·5	0·038	0·0	mP : mP : wP
16	...	30·095	53·5	45·1	8·4	47·9	+ 8·1	46·1	44·1	3·8	7·2	0·8	87	63·6	35·3	0·000	0·5	wP
17	...	29·971	50·4	38·5	11·9	47·1	+ 7·3	42·6	37·6	9·5	16·4	2·1	71	77·0	30·3	0·042	2·5	wP, wN : mP : sP
18	...	29·951	51·2	35·6	15·6	45·0	+ 5·3	42·9	40·5	4·5	10·7	1·4	84	76·6	28·3	0·003	1·0	wP
19	Full	29·696	48·0	35·1	12·9	41·8	+ 2·2	37·8	32·9	8·9	14·5	3·5	72	82·3	29·5	0·040	0·0	wP : vP, ssN : mP, ssN
20	Perigee	29·858	39·6	31·2	8·4	35·1	− 4·4	32·8	29·2	5·9	10·6	0·8	78	69·1	26·6	0·134	0·0	mP : sP, sN : vP, ssN
21	...	30·180	44·9	35·0	9·9	38·2	− 1·3	35·3	31·4	6·8	12·5	2·3	76	71·7	30·5	0·015	6·0	wP : mP, ssN : mP
22	In Equator	30·193	42·4	34·7	7·7	37·1	− 2·5	33·9	29·4	7·7	12·2	4·4	74	83·3	29·9	0·000	1·0	wP : mP : mP
23	...	29·943	36·2	34·3	1·9	35·1	− 4·7	33·8	31·8	3·3	8·0	0·8	87	37·0	32·4	0·048	0·0	wP
24	...	29·786	37·0	34·4	2·6	35·8	− 4·1	35·5	35·0	0·8	1·9	0·7	97	37·8	33·8	0·005	0·0	wP : wP : mP
25	...	29·794	46·4	35·7	10·7	39·6	− 0·4	37·7	35·2	4·4	9·7	1·4	85	85·0	30·3	0·009	1·5	wP : mP
26	Last Quarter	29·204	44·6	34·9	9·7	40·7	+ 0·6	38·5	35·7	5·0	6·4	2·6	83	55·4	30·4	0·157	11·0	wP, wN : vN, wP
27	...	29·075	47·4	33·1	14·3	40·0	− 0·1	37·5	34·2	5·8	9·9	3·1	80	79·4	29·6	0·059	5·5	wP, wwN : wP, vN : mP
28	Greatest Declination S.	29·154	45·7	33·0	12·7	37·9	− 2·3	34·8	30·6	7·3	12·8	3·7	76	79·6	26·5	0·000	0·0	wP : mP : mP
Means	...	29·995	46·8	37·9	8·9	42·4	+ 2·9	39·9	36·9	5·5	10·0	2·2	81·7	67·6	32·8	Sum. 0·724	1·3	...
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^{in}·995, being 0^{in}·196 *higher* than the average for the 50 years, 1841–1890.

TEMPERATURE OF THE AIR.

The highest in the month was 53°·5 on February 16; the lowest in the month was 31°·2 on February 20; and the range was 22°·3.
The mean of all the highest daily readings in the month was 46°·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 37°·9, being 3°·6 *higher* than the average for the 50 years, 1841–1890.
The mean of the daily ranges was 8°·9, being 2°·1 *less* than the average for the 50 years, 1841–1890.
The mean for the month was 42°·4, being 2°·9 *higher* than the average for the 50 years, 1841–1890.

MONTH and DAY, 1905.	Daily Duration of Sunshine.	Sun above Horizon.	Wind as deduced from Self-Registering Anemometers. Osler's. General Direction. A.M.	P.M.	Pressure on the Square Foot. Greatest.	Mean of 24 Hourly Measures.	Robinson's. Horizontal Movement of the Air.	Clouds and Weather. A.M.	P.M.
	hours.	hours.			lbs.	lbs.	miles.		
Feb. 1	3·6	9·1	WSW : W	W	12·8	1·27	608	9 : 9 : p.-cl, sc, so.-ha	6, cu, li.-cl, w: p.-cl, w : 10, w
2	3·8	9·2	W : WNW	WNW : W	7·8	1·37	599	9, w : p.-cl : 2, th.-cl, w	8, cu, n, w : 3, w : 0
3	3·4	9·2	W : WNW	NW : WSW	2·9	0·31	375	p.-cl, ho.-fr: 0 : 3, ci.-cu, th.-cl	4, th.-cl : 10
4	0·8	9·3	WSW : W	W : WSW	4·2	0·80	479	9 : 10	9, sc, w : 10, slt.-r : 10, oc.-th.-r
5	2·6	9·3	WSW : W	W : WSW	2·6	0·41	392	9 : li.-cl : 4, ci.-cu, th -cl	p.-cl : 10 : 10
6	0·0	9·4	WSW : SW	WSW : SW	3·8	0·49	406	10 : 10, sc	10, sc : p.-cl : p.-cl
7	0·0	9·4	WSW	WSW : NE : E	1·7	0·17	306	10 : 10 : 10, c.-r, li.-sc	10, fq.-th.-r : 10, fq.-r : 10
8	2·7	9·5	E : ESE	ESE : SE	0·6	0·00	131	10 : 10 : p.-cl	p.-cl : 10 : p.-cl, slt.-f
9	0·0	9·5	SE : SSE	SW : WSW	0·5	0·00	154	10 : 10	10, sc : 10
10	0·6	9·6	SW : WSW	WSW : W : NW	1·8	0·25	321	9 : 1, li.-cl : 5, ci, ci.-s, cu.-s	p.-cl : 10 : p.-cl
11	5·1	9·7	WNW : NW : NNW	N : NW	4·3	0·58	369	0 : 0, ho.-fr : 1, th.-cl	5 : p.-cl : 0
12	5·5	9·7	WNW : N : NNE	N : NNW : WNW	1·7	0·27	295	p.-cl : 9 : 2, th.-cl, h	1, th.-cl : 8, lu.-ha : 9
13	0·0	9·8	W	W : WSW : NW	1·2	0·10	256	9 : 9, slt.-f : 10, glm	10, glm : 10, slt.-r : 10
14	0·0	9·9	NNW : N	N : NNE	1·0	0·06	186	10 : 10	10, n : 10 : 10, slt.-f
15	0·3	9·9	NNW : WSW : W	W : WSW	2·4	0·27	311	10 : 9	10 : 10 : 10, r
16	1·0	10·0	W : WSW	WSW : SW	1·9	0·17	315	10 : 9	10 : 9 : p.-cl, slt.-r
17	5·1	10·0	WSW : NW	NW : WNW	3·1	0·64	424	10 : 10, li.-shs : 5, ci.-cu, ci.-s, li.-sc	4, cu, li.-cl : th.-cl, lu.-ha, lu.-co
18	0·8	10·1	WSW	SW : WSW : WNW	5·5	0·83	478	2 : 2, li.-cl, ho.-fr : 8, cu, n, w	10, oc.-th. r, w: 10, li.-shs, w : p.-cl, w
19	5·5	10·2	W	WNW : NW	17·0	1·22	581	0 : 1, li.-cl : 2, li.-cl, w	v, shs.-r, sq, w : p.-cl, sh.-r, w
20	3·1	10·2	N	N	8·6	1·57	512	p.-cl, ho.-fr: 0, w : p.-cl, oc.-sn, w	v, shs.-r, sl, sn, w : 9, w : p.-cl, oc.-slt.-r, w
21	6·6	10·3	N : NNE : NE	NE	13·0	1·33	539	9, oc.-shs, w: p.-cl : 5, cu, th.-cl, st.-w	5, cu, n, th.-cl, w, sn : p.-cl : 9
22	5·7	10·4	NE	NE	17·0	1·73	640	9, slt.-sn, sl: 8 : 4, cu, li.-cl, w	5, cu, cu.-s, st.-w: 8, st.-w : 10
23	0·0	10·4	NE : ENE	NE : ENE	9·8	1·13	530	10, w : 10, oc.-slt.-r, slt.-sn : 10, sc, slt.-r, sn, w	10, fq.-th.-r, w: 10, fq.-th.-r : 10
24	0·0	10·5	NE : NNE	SE : SSW	0·7	0·02	118	10, slt.-r : 10, glm : 10, glm	10, gt.-glm : 10, glm : 10, slt.-f
25	2·4	10·6	SW : WSW	SW	2·0	0·10	232	10, slt.-f : 10, slt.-r : 7, cu, th.-cl	5, cu, th.-cl : th.-cl : p.-cl
26	0·0	10·6	SSW : SW	SW	18·5	1·58	547	9, slt.-r, w : 10, sc, fq.-r, st.-w	10, sc, fq.-r, w: 9, sc, fq.-r : p.-cl
27	3·1	10·7	SW : WSW	WSW : W	11·0	1·18	531	p.-cl : 8, oc.-slt.-r: 5, sh.-r, sl, w	7, cu, w : v, sh.-r : 10, sh.-r
28	5·7	10·8	WSW : W	W : WSW	3·2	0·67	439	p.-cl : p.-cl, ho.-fr: 3, cu, ci, cu.-s	7, cu, cu.-s, n : 0, hy.-d
Means	2·4	9·9	...	...	...	0·66	396		
Number of Column for Reference.	19	20	21	22	23	24	25	26	27

The mean *Temperature of Evaporation* for the month was 39°·9, being 2°·1 *higher* than
The mean *Temperature of the Dew Point* for the month was 36°·9, being 1°·3 *higher* than
The mean *Degree of Humidity* for the month was 81·7, being 4·3 *less* than
The mean *Elastic Force of Vapour* for the month was 0in·219, being 0in·011 *greater* than
The mean *Weight of Vapour in a Cubic Foot of Air* for the month was 2grs·5, being 0gr·1 *greater* than
The mean *Weight of a Cubic Foot of Air* for the month was 554 grains, being 1 grain *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 7·0.

The mean proportion of *Sunshine* for the month (constant sunshine being represented by 1) was 0·243. The maximum daily amount of *Sunshine* was 6·6 hours on February 21.

The highest reading of the *Solar Radiation Thermometer* was 85°·0 on February 25; and the lowest reading of the *Terrestrial Radiation Thermometer* was 26°·2 on February 12.

The mean daily distribution of *Ozone* for the 12 hours ending 9h was 0·4; for the 6 hours ending 15h was 0·8; and for the 6 hours ending 21h was 0·1.

The *Proportions of Wind* referred to the cardinal points were N. 6, E. 3, S. 4, and W. 15.

The *Greatest Pressure of the Wind* in the month was 18·5 lbs. on the square foot on February 26. The mean daily *Horizontal Movement of the Air* for the month was 396 miles; the greatest daily value was 640 miles on February 22; and the least daily value was 118 miles on February 24.

Rain fell on 13 days in the month, amounting to 0in·724, as measured by gauge No. 6 partly sunk below the ground; being 0in·760 *less* than the average fall for the 50 years, 1841–1890.

MONTH and DAY, 1905.	Phases of the Moon.	BAROMETER. Mean of 24 Hourly Values (corrected and reduced to 32° Fahrenheit).	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.	Of the Dew Point. Deduced Mean Daily Value.	Difference between the Air Temperature and Dew Point Temperature. Mean.	Greatest.	Least.	Degree of Humidity (Saturation = 100).	TEMPERATURE. Of Radiation. Highest in Sun's Rays.	Lowest on the Grass.	Rain collected in Gauge No. 6, whose receiving surface is 5 inches above the Ground.	Daily Amount of Ozone.	Electricity.
		in.	°	°	°	°	°	°	°	°	°	°		°	°	in.		
Mar. 1	...	29·199	42·0	30·1	11·9	37·0	− 3·2	35·4	33·2	3·8	6·4	1·7	86	52·0	23·8	0·025	0·0	mP : sP : vP, ssN
2	...	29·720	44·1	34·6	9·5	39·0	− 1·4	37·0	34·4	4·6	7·7	1·9	84	79·0	28·6	0·045	4·0	wP, ssN : mP, ssN : mP
3	...	30·067	44·6	32·8	11·8	37·7	− 2·8	35·7	33·0	4·7	9·7	1·3	84	75·8	22·2	0·000	2·0	mP : mP : sP
4	...	30·090	44·5	27·1	17·4	37·7	− 3·0	36·2	34·2	3·5	11·2	0·0	87	73·0	18·0	0·009	2·0	mP : mP, wwN : wP
5	...	29·809	49·6	42·2	7·4	44·7	+ 3·8	43·2	41·5	3·2	8·2	0·4	89	73·2	38·0	0·136	6·0	wP : wwP : wwP, vN
6	New	29·812	50·0	41·0	9·0	43·9	+ 2·8	41·8	39·4	4·5	12·6	0·7	84	86·6	38·1	0·046	0·0	wP : mP : wP, wN
7	In Equator	29·734	50·6	42·8	7·8	46·0	+ 5·0	43·5	40·7	5·3	8·2	2·1	83	71·1	36·4	0·106	4·0	wP : wP : vP, vN
8	Apogee	29·846	50·7	36·4	14·3	42·5	+ 1·6	39·3	35·4	7·1	13·0	1·7	77	89·6	31·0	0·046	0·2	wP : mP : wP, wwN
9	...	29·447	52·9	38·6	14·3	45·9	+ 5·1	43·3	40·3	5·6	13·2	1·3	82	76·0	32·8	0·228	3·8	wwP, wwN : wP, mN : mP
10	...	29·374	49·5	35·5	14·0	42·1	+ 1·4	38·9	35·0	7·1	13·7	1·1	77	93·7	31·3	0·197	14·0	wP : mP : vN, wwP
11	...	29·050	51·2	38·5	12·7	48·3	+ 7·7	45·7	42·9	5·4	12·8	2·1	82	62·0	35·2	0·299	16·5	wwP, wwN : wN, wP : vP, ssN
12	...	28·965	49·0	40·0	9·0	44·5	+ 3·8	41·9	38·8	5·7	9·2	3·1	80	88·0	35·8	0·330	15·7	wwP, wN : ...
13	...	29·198	55·4	40·4	15·0	46·8	+ 5·9	44·1	41·0	5·8	12·0	1·3	81	101·0	35·3	0·096	4·8	... : ... : wP, vN
14	First Quarter	29·092	52·8	43·0	9·8	47·7	+ 6·5	44·8	41·7	6·0	10·9	1·5	80	99·3	38·0	0·275	2·5	wwP, wwN : vP, ssN : vP, ssN
15	Greatest Declination N.	28·937	50·6	38·5	12·1	44·1	+ 2·7	41·9	39·3	4·8	8·6	2·5	83	94·3	33·8	0·933	5·0	wwP, wwN : vP, ssN : vP, ssN
16	...	29·115	54·2	39·2	15·0	46·5	+ 5·0	43·6	40·3	6·2	11·4	0·9	80	100·0	34·5	0·040	8·0	wwP : wP, wN : wP, sN
17	...	29·402	55·7	43·1	12·6	46·8	+ 5·2	44·6	42·1	4·7	10·6	1·5	85	105·0	37·9	0·403	3·0	wP : vP, ssN : mN, mP
18	...	29·543	55·0	42·2	12·8	48·5	+ 6·9	46·1	43·5	5·0	13·2	0·8	83	81·0	34·5	0·185	4·5	wwP, mN : mP : mP
19	...	29·853	54·8	36·0	18·8	44·5	+ 3·0	41·4	37·8	6·7	17·8	1·2	77	89·0	26·5	0·000	0·0	mP
20	...	29·790	56·2	33·1	23·1	45·3	+ 3·9	41·5	37·1	8·2	18·8	2·2	74	107·6	25·3	0·000	7·0	mP : wP : mP
21	Full : Perigee : In Equator.	29·656	55·4	40·4	15·0	46·2	+ 4·8	43·2	39·8	6·4	11·4	2·2	79	94·3	33·0	0·000	0·0	wP : mP : mP
22	...	29·701	61·4	31·9	29·5	47·4	+ 5·9	44·9	42·2	5·2	13·7	0·2	83	107·0	25·7	0·000	2·0	mP : wP : mP
23	...	29·585	61·1	39·1	22·0	48·5	+ 6·7	46·1	43·5	5·0	13·7	0·7	83	115·4	30·0	0·003	4·0	mP : wP : mP, sN
24	...	29·598	58·1	40·8	17·3	49·2	+ 7·1	46·1	42·8	6·4	11·5	1·1	78	106·7	32·0	0·040	0·0	vN, mP : wP : mP
25	...	29·690	51·0	35·3	15·7	44·2	+ 1·8	42·7	40·9	3·3	11·8	0·4	88	74·4	25·9	0·048	2·0	mP : mP : mP, vN
26	...	29·722	56·8	39·2	17·6	47·3	+ 4·4	43·3	38·8	8·5	18·4	1·1	73	103·0	33·9	0·000	0·0	mP : wP : mP
27	Greatest Declination S. Last Quarter	29·567	46·3	40·8	5·5	44·7	+ 1·4	42·7	40·4	4·3	6·7	2·4	85	62·6	36·7	0·029	0·0	wP : vP, sN : sP, sN
28	...	29·742	56·4	38·6	17·8	47·1	+ 3·4	43·9	40·3	6·8	13·0	0·9	78	102·5	34·7	0·000	9·2	mP
29	...	29·734	57·4	44·0	13·4	49·4	+ 5·3	46·5	43·4	6·0	12·2	3·0	80	97·2	38·8	0·024	4·3	wP : mP, ssN : mP
30	...	29·710	57·9	42·8	15·1	49·1	+ 4·5	45·3	41·2	7·9	16·7	1·1	74	99·6	35·5	0·013	1·5	wP : mP : sP
31	...	29·915	56·1	37·3	18·8	45·2	+ 0·2	41·2	36·6	8·6	18·8	0·7	72	110·0	31·9	0·000	0·0	mP : sP : ssP
Means	...	29·570	52·6	38·2	14·4	45·1	+ 3·4	42·4	39·4	5·7	12·2	1·4	81·0	89·4	32·1	Sum 3·556	4·1	...
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 $29^{in}\cdot570$, being $0^{in}\cdot183$ *lower* than the average for the 50 years, 1841–1890.

TEMPERATURE OF THE AIR.

The highest in the month was 61°·4 on March 22; the lowest in the month was 27°·1 on March 4; and the range was 34°·3.
The mean of all the highest daily readings in the month was 52°·6, being 2°·9 *higher* than the average for the 50 years, 1841–1890.
The mean of all the lowest daily readings in the month was 38°·2, being 3°·2 *higher* than the average for the 50 years, 1841–1890.
The mean of the daily ranges was 14°·4, being 0°·3 *less* than the average for the 50 years, 1841–1890.
The mean for the month was 45°·1, being 3°·4 *higher* than the average for the 50 years, 1841–1890.

MONTH and DAY, 1905.	Daily Duration of Sunshine.	Sun above Horizon.	Wind as deduced from Self-Registering Anemometers. Osler's. General Direction. A.M.	General Direction. P.M.	Pressure on the Square Foot. Greatest.	Pressure on the Square Foot. Mean of 24 Hourly Measures.	Robinson's. Horizontal Movement of the Air.	Clouds and Weather. A.M.	Clouds and Weather. P.M.
	hours.	hours.			lbs.	lbs.	miles.		
Mar. 1	0·0	10·8	SW : W	N : NNE	1·8	0·07	191	0, ho.-fr : 9, slt.-r, glm	10, glm : 9, r : 10
2	2·9	10·9	NE	NE : NNE	4·2	0·59	390	10 : 10, sh.-r : v, li.-shs	v,slt.-sn,fr.-r: th.-cl : 5, th.-cl
3	1·4	10·9	NNE	NNE	1·7	0·14	226	p.-cl : 9 : 7, cu. n, th.-cl	9 : p.-cl : 1, ho.-fr
4	2·2	11·0	SW : SSW	WSW : SW : SSW	1·0	0·03	200	p.-cl : p.-cl, ho.-fr, h: 5, th.-cl	10, oc.-th.-r : 10, oc.-th.-r : 10
5	0·0	11·1	SSW : SW	SSW	3·1	0·29	276	10 : 10 : 10, sc	10 : 10, slt.-r : 10, slt.-r
6	0·9	11·1	NNW : NW : WNW	W : SW : WSW	2·0	0·22	322	10, slt.-r : 10 : p.-cl, so.-ha	9, ci.-cu, ci.-s, h: v, oc.-shs : 10
7	0·0	11·2	W : WSW	SW : W : NW	15·2	0·60	424	10 : 10	10, sc, n, oc.-slt.-r : 10, sh.-r, hl, w: p.-cl, sh.-r, w
8	1·4	11·3	NW : WNW : W	WSW : SW	5·2	0·84	476	p.-cl : 0, h : 10, th.-cl	10, th.-cl, so.-ha: 10, slt.-r : 10, th.-r, w
9	0·1	11·3	SW	W : WSW : SW	13·5	1·20	556	10, th.-r : 10, th.-r : 10, w	10, so.-ha, sh.-r, w: p.-cl : 0, h
10	4·6	11·4	WSW : W	WSW : SW : SSW	12·0	1·20	576	p.-cl : 0, h : 7, cu, cu.-s, th.-cl, w	5, sc, cu, so.-ha, prh : 9, fq.-r, w : 10, sc, r, st.-w
11	0·3	11·5	SW	SW : WSW : SSW	22·0	2·12	718	10, r, w : 10, r, st.-w : 10, sc, fq.-r, st.-w	10, sc, oc.-r, st.-w : p.-cl, so.-ha : p.-cl, slt.-r, l, w
12	5·4	11·6	SW : SSW	SW	23·5	2·02	705	9, w : p.-cl, w : v, shs.-r, st.-w	v, shs.-r, st.-w : v, shs.-r, w : p.-cl, oc.-r, sl, w
13	7·9	11·6	WSW : SW	SW : S	7·0	0·82	455	9 : p.-cl : 3, cu, li. cl	7, cu, ci.-cu, th.-cl : 10, sc, r, w
14	4·2	11·7	SSW : WSW : SW	SW : SSW	18·0	1·05	529	10, slt.-r : 10 : 9, cu, ci.-s, n, slt.-r, sq	v, cu, cl.-s, hy.-shs, hl, w : v, hy.-shs, lu.-ha: 9, st.-w
15	2·8	11·7	SSW : S	SW : WSW	19·8	1·55	613	10, slt.-r, hy.-sq: 10, st.-w : 7, cl, cl.-s, oc.-r, w	10, sc, oc.-shs: v, cu, n, shs.-r: 9, t.-sm, hl
16	5·5	11·8	SSW	SW : SSW : S	7·0	0·77	445	p.-cl : 9 : 9, cu, cu.-s, n, oc.-shs	8, cu, cu.-s, ci. s. w: v, sc, sh.-r, sq : p.-cl, lu.-ha, w
17	6·4	11·9	SW	WSW : SW : SSW	4·4	0·45	354	p.-cl, w : 0 : 6, cu, n, slt.-sh	v, n, hy.-sh, hl: p.-cl, hy.-shs: p.-cl, r
18	1·8	12·0	SSE : Variable	NNW : WNW : WSW	2·1	0·06	211	10, r : 10 : 10, glm	5, ci.-cu, ci : 1 : 1, h
19	8·7	12·0	SW : WSW : W	WNW : W : WSW	1·0	0·05	218	1, th.-cl, d: p.-cl, h : 1, li.-cl, h	1, th.-cl, h : 1, so.-ha, h : 1, h, ho.-fr
20	8·7	12·1	SSW : SSE : SE	SE : ESE	2·3	0·23	250	1, ho.-fr : p.-cl : 5, cu.-s, ci.-cu, ci.-s, so.-ha	3, ci, ci.-s, so.-ha : 6, th.-cl, lu.-ha: 9, th.-cl, lu.-ha
21	6·3	12·1	ESE : E : ENE	ENE : ESE	1·3	0·11	223	9 : p.-cl, so.-ha: 6, ci, h, so.-ha	2, ci : 1, ci : 1, th.-cl, d
22	6·5	12·2	NE : ESE	SE : SSE	1·2	0·03	143	p.-cl, f, ho.-fr: p.-cl, f : 1, f	2, cu, th.-cl : 2, cu, th.-cl : 1, li.-cl, d
23	5·7	12·3	SE : SSE	SSW : SW : SE	1·5	0·10	194	1, h : 9 : 8, cu.-s, ci.-cu, ci.-s	5, cu, cu.-s, th.-cl: li.-cl : p.-cl, sh.-r
24	6·0	12·3	Variable : WSW : NE	Variable : SW : SSW	0·9	0·03	185	9, r : 10 : 8, cu, n, th.-cl	5, cu.-s, th.-cl: 0 : p.-cl
25	0·0	12·4	SSW : SSE : WSW	SW : S	1·3	0·07	178	p.-cl : 10 : 10	10 : 10, oc.-slt.-r : 10, slt.-r
26	10·9	12·5	W	W : WSW : SW	4·3	0·58	433	p.-cl : 0 : 4, cu, th.-cl	1, th.-cl : 0, h : 9
27	0·0	12·5	SW : SSW : S	N : NW : WSW	1·1	0·08	217	10 : 10, slt.-r : 10, sc, oc.-slt.-r	10, oc.-slt.-r : p.-cl : th.-cl, hy.-d
28	5·8	12·6	WSW	WSW : SW	6·3	0·87	510	0, hy.-d : 0 : p.-cl	p.-cl, sc, so.-ha, w : v, w : 9, w
29	3·5	12·7	SW : WSW	WSW : SW	5·5	0·53	395	9, w : 9, w : 8, sc, cu.-s, w	9, fq.-th.-r : 9 : 9
30	3·7	12·7	SW : SSW : WSW	W	2·1	0·16	280	10 : 10, oc.-slt.-r: 9, n, cu, ci, slt.-r	8, cu.-s, cl, ci.-s, so.-ha : th.-cl : 0
31	8·1	12·8	W : WSW	WNW : W	3·7	0·34	361	0 : 0, h : 6, cu, th.-cl	7, cu, ci.-s : p.-cl
Means	3·9	11·8	...	...	...	0·55	363		
Number of Column for Reference.	19	20	21	22	23	24	25	26	27

The mean *Temperature of Evaporation* for the month was 42°·4, being 3°·1 *higher* than
The mean *Temperature of the Dew Point* for the month was 39°·4, being 3°·1 *higher* than
The mean *Degree of Humidity* for the month was 81·0, being 0·1 *less* than
The mean *Elastic Force of Vapour* for the month was 0in·241, being 0in·027 *greater* than
The mean *Weight of Vapour in a Cubic Foot of Air* for the month was 2grs·8, being 0gr·3 *greater* than
The mean *Weight of a Cubic Foot of Air* for the month was 543 grains, being 7 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 6·6.

The mean proportion of *Sunshine* for the month (constant sunshine being represented by 1) was 0·333. The maximum daily amount of *Sunshine* was 10·9 hours on March 26.

The highest reading of the *Solar Radiation Thermometer* was 115°·4 on March 23; and the lowest reading of the *Terrestrial Radiation Thermometer* was 18°·0 on March 4.

The mean daily distribution of *Ozone* for the 12 hours ending 9h was 1·8; for the 6 hours ending 15h was 1·8; and for the 6 hours ending 21h was 0·5.

The *Proportions of Wind* referred to the cardinal points were N. 3, E. 3, S. 11, and W. 14.

The *Greatest Pressure of the Wind* in the month was 23·5 lbs. on the square foot on March 12. The mean daily *Horizontal Movement of the Air* for the month was 363 miles; the greatest daily value was 718 miles on March 11; and the least daily value was 143 miles on March 22.

Rain fell on 22 days in the month, amounting to 3in·556, as measured by gauge No. 6 partly sunk below the ground; being 2in·095 *greater* than the average fall for the 50 years, 1841–1890.

MONTH and DAY, 1905.	Phases of the Moon.	BAROMETER. Mean of 24 Hourly Values (corrected and reduced to 32° Fahrenheit).	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.	Of the Dew Point. Deduced Mean Daily Value.	Difference between the Air Temperature and Dew Point Temperature. Mean.	Greatest.	Least.	Degree of Humidity (Saturation=100).	TEMPERATURE. Of Radiation. Highest in Sun's Rays.	Lowest on the Grass.	Rain collected in Gauge No. 6, whose receiving surface is 5 inches above the Ground.	Daily Amount of Ozone.	Electricity.
		in.	°	°	°	°	°	°	°	°	°	°		°	°	in.		
Apr. 1	...	30·072	60·0	38·9	21·1	48·5	+ 3·1	44·8	40·8	7·7	13·7	3·9	75	105·5	30·4	0·004	6·0	mP, sN : mP : mP
2	...	29·825	55·2	38·4	16·8	47·9	+ 2·2	44·9	41·7	6·2	9·2	1·1	80	81·4	30·2	0·000	3·0	wP : mP
3	...	29·938	52·1	33·3	18·8	44·1	− 1·9	41·6	38·7	5·4	13·8	0·2	81	103·6	25·0	0·000	2·0	vP : wP : mP
4	In Equator : Apogee : New	29·781	56·0	36·7	19·3	47·8	+ 1·6	45·7	43·4	4·4	8·8	1·6	86	86·6	36·7	0·007	0·0	wP : wP : mP
5	...	29·634	55·0	40·4	14·6	48·6	+ 2·4	44·8	40·7	7·9	15·4	1·9	74	94·1	36·1	0·035	0·0	sN, wP : sP : sP, ssN
6	...	29·882	46·0	35·6	10·4	39·9	− 6·3	34·0	26·4	13·5	20·9	4·8	58	88·7	26·6	0·000	2·0	mP : sP : ssP
7	..	29·662	52·9	32·6	20·3	40·0	− 6·1	38·0	35·4	4·6	10·3	0·5	84	77·0	25·4	0·228	0·0	vP, ssN : vP, ssN : mP
8	...	29·827	45·0	32·8	12·2	37·6	− 8·3	33·8	28·6	9·0	16·7	2·7	70	99·1	21·2	0·000	1·2	mP : sP : mP
9	...	29·569	50·3	31·1	19·2	42·5	− 3·1	40·1	37·2	5·3	9·5	1·5	82	75·0	21·8	0·232	3·8	wP : vN, wP : wP, ssN
10	...	29·223	52·1	40·7	11·4	45·4	− 0·1	44·8	44·1	1·3	5·0	0·4	96	77·8	40·0	0·555	2·0	vN, wP
11	Greatest Declination N.	29·202	57·4	44·7	12·7	50·5	+ 5·0	48·3	46·0	4·5	9·2	1·5	85	90·0	42·2	0·007	0·0	mP : wP
12	First Quarter	29·620	61·1	43·5	17·6	50·7	+ 5·0	47·7	44·6	6·1	15·2	1·7	80	93·8	34·7	0·000	0·0	wP : wP : mP
13	...	29·676	64·0	41·8	22·2	54·1	+ 8·1	50·1	46·2	7·9	17·3	1·3	74	114·0	33·4	0·000	0·0	wP
14	...	29·564	64·9	47·1	17·8	53·6	+ 7·2	50·8	48·1	5·5	14·2	1·0	81	118·0	40·8	0·036	6·0	wP : wP : wN, mP
15	...	29·557	61·1	45·1	16·0	50·7	+ 3·8	45·8	40·7	10·0	21·1	0·8	69	121·2	36·6	0·000	0·5	wP
16	...	29·536	59·9	41·4	18·5	49·7	+ 2·4	47·2	44·5	5·2	15·6	0·2	83	119·2	35·4	0·139	2·2	wP : vP, ssN : wN, wP
17	...	29·748	51·9	40·9	11·0	44·8	− 2·9	40·8	36·2	8·6	16·4	4·0	72	105·2	35·0	0·000	2·3	wP : mP : mP
18	In Equator : Perigee	29·790	47·2	35·4	11·8	40·9	− 7·2	38·0	34·3	6·6	13·9	2·7	78	105·0	29·8	0·007	0·0	mP : sP : sP
19	Full	29·751	45·5	35·7	9·8	39·5	− 8·8	37·7	35·4	4·1	7·0	1·4	86	75·5	30·0	0·082	0·0	mP : ssP, ssN : sP
20	...	29·747	49·5	38·0	11·5	41·8	− 6·7	38·3	34·0	7·8	13·9	1·6	75	93·1	30·4	0·009	3·0	mP : sP : sP, sN
21	...	29·773	51·1	38·9	12·2	43·0	− 5·5	39·5	35·3	7·7	14·3	2·1	74	91·8	35·0	0·013	0·0	mP, vN : mP, wN : mP
22	...	29·951	49·0	37·3	11·7	42·3	− 6·2	37·7	32·1	10·2	14·9	3·8	68	84·6	33·1	0·002	0·0	mP : sP : vP
23	...	29·809	52·6	36·5	16·1	44·1	− 4·3	39·5	34·1	10·0	19·0	3·9	67	96·7	29·9	0·013	0·0	mP : mP : vP, ssN
24	Greatest Declination S.	29·771	52·1	36·3	15·8	44·1	− 4·3	39·1	33·2	10·9	18·5	2·6	65	96·4	30·4	0·000	0·0	mP : sP
25	...	29·835	54·0	36·8	17·2	45·6	− 2·8	43·0	40·0	5·6	15·0	0·2	81	103·1	30·7	0·055	0·0	mP : wP, vN : mP
26	Last Quarter	29·837	57·9	47·3	10·6	50·6	+ 2·2	47·8	44·9	5·7	13·3	1·7	81	91·0	41·4	0·018	0·0	wP : mP : mP
27	...	29·759	58·9	48·1	10·8	51·6	+ 3·1	48·7	45·8	5·8	10·1	2·1	81	87·0	42·0	0·000	0·0	wP
28	...	29·476	58·1	47·5	10·6	51·4	+ 2·8	48·0	44·5	6·9	11·3	3·8	78	107·1	40·7	0·002	0·0	wwP : wP : mP
29	...	29·365	59·3	47·3	12·0	51·5	+ 2·7	48·3	45·1	6·4	13·3	3·6	79	110·0	41·6	0·060	1·8	wP, vN
30	...	29·303	61·1	45·0	16·1	50·3	+ 1·3	47·7	45·0	5·3	9·9	1·9	82	93·0	40·2	0·196	12·4	wP, vN
Means	...	29·683	54·7	39·8	14·9	46·4	− 0·7	43·2	39·6	6·9	13·6	2·0	77·5	96·1	35·6	Sum 1·700	1·6	...
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 $29^{in}\cdot683$, being $0^{in}\cdot058$ *lower* than the average for the 50 years, 1841–1890.

TEMPERATURE OF THE AIR.

The highest in the month was 64°·9 on April 14; the lowest in the month was 31°·1 on April 9; and the range was 33°·8.
The mean of all the highest daily readings in the month was 54°·7, being 2°·5 *lower* than the average for the 50 years, 1841–1890.
The mean of all the lowest daily readings in the month was 39°·8, being 0°·9 *higher* than the average for the 50 years, 1841–1890.
The mean of the daily ranges was 14°·9, being 3°·4 *less* than the average for the 50 years, 1841–1890.
The mean for the month was 46°·4, being 0°·7 *lower* than the average for the 50 years, 1841–1890.

MONTH and DAY, 1905.	Daily Duration of Sunshine.	Sun above Horizon.	Wind as deduced from Self-Registering Anemometers. Osler's. General Direction. A.M.	General Direction. P.M.	Pressure on the Square Foot. Greatest.	Pressure on the Square Foot. Mean of 24 Hourly Measures.	Robinson's. Horizontal Movement of the Air.	Clouds and Weather. A.M.	Clouds and Weather. P.M.
	hours.	hours.			lbs.	lbs.	miles.		
Apr. 1	4·3	12·9	WSW : SW	W : SW	2·0	0·18	298	9 : 9,oc.-slt.-r: 9, cu, cu.-s, oc.-slt.-r	6,cu,cu.-s,n: 10 : 10
2	0·0	12·9	WSW : W	W : NNE : SSE	2·8	0·48	377	10 : 9 : 9	10, slt.-sh : p.-cl, glm : 0, h, d
3	3·7	13·0	Variable:ENE:ESE	ESE : SSW : S	1·3	0·04	144	0,m,hy.-d: 0, m : 4, ci, ci.-s, ci.-cu, so.-ha	6,ci, s, th.-cl: 10 : 10
4	0·0	13·1	SSW : WSW	WSW : W	4·6	0·34	330	9 : 10	10, sc, s, sh.-r, so.-ha : 10 : 10
5	1·3	13·1	W : WNW : NW	WNW : NW : NNW	16·0	1·04	551	9, shs.-r : 10 : 9, cu, n, oc.-slt.-r, w	p.-cl,sc,w,so.-ha: 10,sc,oc.-shs,w: p.-cl, w
6	10·4	13·2	NNW : N	N : NNW : NW	4·4	0·57	358	9 : 1,li.-cl, h: 5, cu, th.-cl	4, cu, th.-cl : 0, h
7	0·5	13·2	SW : SSW : WSW	WSW : N : NNE	5·0	0·49	359	p.-cl : 10,th.-r,sn: 10, sc, oc.-slt.-r, w	10,sc,fq.-r,w: 10 : 9
8	9·0	13·3	NNE	N : NNE : SSW	1·3	0·05	181	10 : p.-cl, h : 6, cu, cu.-s	5, cu, li.-cl : 1,li.-cl,slt.-f : p.-cl, ho.-fr
9	0·0	13·4	SW : SSW : WSW	WSW : N	2·3	0·14	234	9 : 10 : 10, slt.-r	10, slt.-r : 10, r
10	0·0	13·4	Variable : E : ESE	ESE : E : NNE	1·2	0·05	172	10, th.-r : 10, c.-r	10, c.-r : 10, r
11	0·2	13·5	N : Calm : SE	S : SW	0·3	0·00	128	10 : 10,oc.-slt.-r: 9, cu.-s, so.-ha	10, oc.-slt.-r : 10 : 10
12	5·1	13·6	N : Variable	NE : SW : S	1·3	0·05	176	10 : 10, th.-cl, s, so.-ha	8, cu, th.-cl: 3, cu, th.-cl: 0
13	5·2	13·6	SSE : SE : S	S	2·6	0·27	277	0 : th.-cl : 8, ci, ci.-s, cu, cu.-s, so.-ha	p.-cl : p.-cl, d
14	1·3	13·7	S : SSE : SE	SSW : SW	1·5	0·09	216	9 : 10, slt.-sh : 9, s, oc.-slt.-r	p.-cl,oc.-slt.-r,so.-ha: 4, ci.-s, s : p.-cl, hy.-d
15	10·8	13·8	SW : WSW	SW : SSW : SE	1·2	0·05	205	9 : 2, cu, th.-cl	2, cu : 1, ci.-s : p.-cl, lu.-co
16	4·9	13·8	ESE : E : NE	ESE : E : ENE	4·2	0·36	284	0, m : 0, m : 3, cu, ci, ci.-s, so.-ha	9, oc.-r, l, t : 10
17	3·3	13·9	NE : ENE	ENE : NE : NNE	7·5	0·88	469	9 : 10 : 7,cu.-s,th.-cl,w	8, cu, cu.-s : 9 : 9
18	3·4	14·0	NNE : NE	NE : NNE	4·7	0·62	417	9 : p.-cl : 6, cu, th.-cl	10, oc.-shs, sn, sl, hl, so.-ha: p.-cl, sc
19	0·0	14·0	NNE : NE	E : NE	3·4	0·26	307	9 : 10, li.-shs : 10, n, oc.-slt.-r	10, fq.-r : p.-cl, oc.-slt.-r
20	1·0	14·1	NNE : NE	NE : NNE	4·0	0·62	418	10,oc.-slt.-r: 10, slt.-sh : 10, sc	10 : 8,cu.-s,ci.-s,li.-cl: 9, sh.-r
21	2·2	14·1	N : NNE	N : NNE	5·9	0·69	404	10, fq.-r : 10, li.-shs : v, shs.-r	v, w : 9
22	1·6	14·2	N	NNW : WNW : SW	1·8	0·20	254	10 : 10	9 : 10, oc.-slt.-r : p.-cl
23	5·7	14·3	W : WSW : NW	NW : W : WNW	9·3	0·45	385	p.-cl : 1 : 7, cu.-s, n, li.-cl	8, cu.-s, n : 10, sc, n, oc.-slt.-r, w : 9, li.-shs
24	6·0	14·3	W : WNW : NW	WNW : NW : NNW	3·8	0·35	348	1 : 0 : 8, cu, cu.-s, n, th.-cl	9 : 9
25	2·6	14·4	WSW : SW	SW : WSW	2·3	0·31	328	10 : p.-cl : 6, ci, ci.-s, cu.-s, oc.-th.-r	10, th.-r : 10, fq.-th.-r
26	0·2	14·4	WSW : W	WNW : W : WSW	2·3	0·15	283	10, oc.-slt.-r : 10	10,li.-sc,oc.-slt.-r: 9,oc.-slt.-r,so.-ha: p.-cl
27	0·4	14·5	SW	SW	4·0	0·41	354	10 : 10	9, sc : 7, cu.-s, li.-cl: 10
28	2·0	14·6	SW : SSW	SW	9·0	0·89	481	10 : 9 : 10, w	10, sc, w : p.-cl, d
29	7·9	14·6	SW	SW : WSW	5·7	0·67	423	9 : p.-cl : 9, cu, cu.-s, n, oc.-r, w	6, cu, oc.-slt.-r, so.-ha, prh : p.-cl : 10, oc.-th.-r
30	3·7	14·7	SW : SSW : S	SSW : SW	16·8	1·27	524	p.-cl, sh.-r: p.-cl : 10, fq.-r, w	v, shs.-r, st.-w : v, shs.-r, st.-w
Means	3·2	13·8	...	...	...	0·40	323		
Number of Column for Reference.	19	20	21	22	23	24	25	26	27

The mean *Temperature of Evaporation* for the month was 43°·2, being 0°·7 *lower* than
The mean *Temperature of the Dew Point* for the month was 39°·6, being 0°·6 *lower* than
The mean *Degree of Humidity* for the month was 77·5, being 0·9 *greater* than
The mean *Elastic Force of Vapour* for the month was 0in·243, being 0in·006 *less* than
The mean *Weight of Vapour in a Cubic Foot of Air* for the month was 2grs·8, being 0gr·1 *less* than
The mean *Weight of a Cubic Foot of Air* for the month was 543 grains, being the *same* as
} 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 7·9.

The mean proportion of *Sunshine* for the month (constant sunshine being represented by 1) was 0·234. The maximum daily amount of *Sunshine* was 10·8 hours on April 15.

The highest reading of the *Solar Radiation Thermometer* was 121°·2 on April 15; and the lowest reading of the *Terrestrial Radiation Thermometer* was 21°·2 on April 8.

The mean daily distribution of *Ozone* for the 12 hours ending 9h was 0·7; for the 6 hours ending 15h was 0·8; and for the 6 hours ending 21h was 0·1.

The *Proportions of Wind* referred to the cardinal points were N. 7, E. 4, S. 8, and W. 10. One day was calm.

The *Greatest Pressure of the Wind* in the month was 16·8 lbs. on the square foot on April 30. The mean daily *Horizontal Movement of the Air* for the month was 323 miles; the greatest daily value was 551 miles on April 5; and the least daily value was 128 miles on April 11.

Rain fell on 17 days in the month, amounting to 1in·700, as measured by gauge No. 6 partly sunk below the ground; being 0in·039 *greater* than the average fall for the 50 years, 1841–1890.

MONTH and DAY, 1905.	Phases of the Moon.	Barometer. Mean of 24 Hourly Values (corrected and reduced to 32° Fahrenheit).	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.	Of the Dew Point. Deduced Mean Daily Value.	Difference between the Air Temperature and Dew Point Temperature. Mean.	Greatest.	Least.	Degree of Humidity (Saturation = 100).	Temperature. Of Radiation. Highest in Sun's Rays.	Lowest on the Grass.	Rain collected in Gauge No. 6, whose receiving surface is 5 inches above the Ground.	Daily Amount of Ozone.	Electricity.
		in.	°	°	°	°	°	°	°	°	°	°		°	°	in.		
May 1	In Equator: Apogee	29·325	59·6	46·0	13·6	51·7	+ 2·5	47·4	43·0	8·7	17·3	4·4	73	115·1	41·5	0·000	14·0	wP, sN : wP, vN : mP
2	...	29·364	58·2	42·4	15·8	48·8	− 0·6	46·0	43·0	5·8	12·8	1·5	80	105·0	34·5	0·206	11·8	wP, sN: mP, sN
3	...	29·807	59·7	41·7	18·0	48·1	− 1·6	43·1	37·6	10·5	21·3	2·0	67	117·3	36·7	0·436	0·0	mP : mP : ssP, ssN
4	New	30·089	57·4	38·2	19·2	47·0	− 3·0	42·7	37·9	9·1	14·8	3·0	71	118·9	28·9	0·000	0·0	mP : ... : mP
5	...	30·208	60·2	41·6	18·6	49·3	− 1·0	44·8	40·0	9·3	16·5	4·6	70	114·0	35·7	0·000	0·0	wP : mP : mP
6	...	30·096	64·6	38·3	26·3	49·6	− 1·0	43·4	36·8	12·8	24·1	1·8	62	122·3	33·2	0·000	0·0	mP : mP : vP
7	...	29·934	68·0	40·8	27·2	55·6	+ 4·8	49·7	44·1	11·5	17·3	6·2	66	113·3	26·6	0·000	0·0	wP
8	Greatest Declination N.	29·973	59·8	42·2	17·6	52·8	+ 1·8	45·7	38·6	14·2	20·3	6·6	59	119·1	28·2	0·000	0·0	wP : mP : mP
9	...	30·221	62·6	44·8	17·8	49·9	− 1·3	43·6	37·0	12·9	22·6	2·8	61	118·5	23·7	0·000	0·0	mP : sP : mP
10	...	30·177	70·0	42·2	27·8	55·4	+ 3·9	47·5	40·0	15·4	25·2	5·3	56	120·3	30·4	0·000	0·0	wP : vP : sP
11	...	30·054	69·0	43·3	25·7	56·5	+ 4·8	50·5	45·0	11·5	20·5	5·2	66	127·0	32·4	0·000	0·0	mP
12	First Quarter	30·110	61·4	45·6	15·8	52·6	+ 0·6	46·1	39·6	13·0	20·1	5·0	62	123·1	38·2	0·000	0·0	mP : sP : mP
13	...	30·185	57·4	41·1	16·3	50·9	− 1·4	45·3	39·5	11·4	17·3	4·2	65	102·0	30·0	0·000	0·0	mP : vP : mP
14	...	30·154	56·2	45·3	10·9	49·9	− 2·7	46·5	42·9	7·0	12·0	2·9	77	95·6	43·4	0·006	0·0	wP
15	In Equator	30·148	64·0	41·2	22·8	51·2	− 1·6	46·0	40·6	10·6	22·0	1·1	67	129·2	30·6	0·000	0·0	wP : wP : vP
16	...	30·106	60·0	39·5	20·5	49·9	− 3·2	45·3	40·4	9·5	16·3	2·3	70	116·0	33·2	0·059	0·0	wP : vP, ssN : wP
17	Perigee	30·016	70·2	45·5	24·7	57·5	+ 4·2	48·9	41·1	16·4	28·1	4·4	55	137·5	40·3	0·000	0·0	wP
18	Full	29·971	69·6	44·4	25·2	57·0	+ 3·4	49·3	42·2	14·8	26·1	4·3	58	131·5	39·0	0·000	0·0	wP : mP : mP
19	...	29·884	67·0	46·3	20·7	53·8	− 0·1	49·8	45·9	7·9	17·6	1·7	75	120·0	45·4	0·059	0·0	wP, vN : mP : mP
20	...	29·802	61·1	45·1	16·0	50·0	− 4·2	47·1	44·0	6·0	13·5	2·5	81	110·8	45·0	0·095	0·0	wP : vN, mP : wP
21	Greatest Declination S.	29·841	53·1	41·6	11·5	46·2	− 8·4	41·8	36·8	9·4	14·9	4·4	71	96·2	38·1	0·000	0·0	wP : wP : mP
22	...	29·843	55·3	38·2	17·1	44·9	−10·1	39·4	33·0	11·9	21·4	6·0	63	119·5	32·0	0·000	0·0	mP
23	...	29·830	57·7	34·3	23·4	44·6	−10·7	39·3	33·1	11·5	21·2	3·1	64	129·0	25·1	0·000	0·0	sP : sP : mP
24	...	29·742	63·1	37·5	25·6	50·7	− 4·9	44·6	38·2	12·5	20·9	6·2	62	106·0	27·0	0·000	0·0	wP : vP : ssP
25	...	29·818	66·8	45·3	21·5	56·2	+ 0·5	49·7	43·6	12·6	20·7	4·0	63	125·8	37·0	0·000	0·0	wP : wP : mP
26	Last Quarter	29·902	69·8	47·6	22·2	57·2	+ 1·3	49·8	43·1	14·1	23·6	6·3	59	135·5	36·0	0·000	0·0	mP
27	...	30·001	73·5	42·2	31·3	59·4	+ 3·4	51·0	43·6	15·8	27·4	5·0	55	136·0	30·6	0·000	0·0	wP
28	In Equator	30·068	76·7	46·4	30·3	62·7	+ 6·7	54·0	46·5	16·2	26·2	2·3	55	137·7	34·3	0·000	0·0	wP
29	Apogee	29·946	82·3	49·8	32·5	67·9	+11·7	56·6	47·7	20·2	30·3	6·8	48	141·1	37·6	0·000	0·0	wP : wP : mP
30	...	29·924	74·7	52·3	22·4	62·4	+ 5·9	56·7	51·8	10·6	18·7	3·4	69	123·0	44·8	0·408	0·0	mP : vP, ssN : ssN, vP
31	...	29·851	69·7	53·8	15·9	60·7	+ 3·9	56·4	52·7	8·0	18·4	2·0	75	126·3	48·9	0·056	0·0	mP
Means	...	29·948	64·5	43·4	21·1	53·2	+ 0·1	47·4	41·6	11·6	20·3	3·9	65·3	120·4	35·1	Sum 1·325	0·8	...
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 $29^{in}\cdot948$, being $0^{in}\cdot162$ *higher* than the average for the 50 years, 1841–1890.

TEMPERATURE OF THE AIR.

The highest in the month was 82°·3 on May 29; the lowest in the month was 34°·3 on May 23; and the range was 48°·0.
The mean of all the highest daily readings in the month was 64°·5, being 0°·4 *higher* than the average for the 50 years, 1841–1890.
The mean of all the lowest daily readings in the month was 43°·4, being 0°·3 *lower* than the average for the 50 years, 1841–1890.
The mean of the daily ranges was 21°·1, being 0°·7 *greater* than the average for the 50 years, 1841–1890.
The mean for the month was 53°·2, being 0°·1 *higher* than the average for the 50 years, 1841–1890.

MONTH and DAY, 1905.	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.			A.M.	P.M.
			A.M.	P.M.	Greatest.	Mean of 24 Hourly Measures.	Horizontal Movement of the Air.		
	hours.	hours.			lbs.	lbs.	miles.		
May 1	8·6	14·8	SSW : SW	SW : S	17·0	1·73	627	9, st.-w : li.-cl, w : 7, cu, cu.-s, n, st.-w	8, sc, cu, cu.-s, s, w, so.-ha: 9
2	3·1	14·8	SW : SSW : WSW	WSW : W : WNW	5·2	0·48	381	10, oc.-slt.-r: 10, th.-r : 9, n, cu.-s, cl.-s, oc.-shs	v, oc.-shs, so.-ha: 10, fq.-r, w : 10, oc.-slt.-r
3	9·1	14·9	WSW : W	W : WSW : Variable	1·8	0·15	263	9, slt.-r : p.-cl : 6, cu, li.-cl	5, cu, th.-cl : 8, cu, n, sh.-r, so.-ha: p.-cl, hy.-sh
4	8·1	14·9	N : NNE : NE	NNE	4·8	0·50	349	1 : 1 : 5, cu, th.-cl	6, cu, cu.-s : p.-cl : 10, oc.-th.-r
5	9·9	15·0	NNE : NE	NNE : NE : N	3·2	0·55	404	10 : 10 : 4, cu, cu.-s	1, th.-cl : 1, th.-cl
6	12·2	15·0	N	NNE : N	2·6	0·35	304	5, th.-cl : p.-cl : 1	0 : 0
7	7·8	15·1	N	NNW : N : NE	1·1	0·03	164	1 : 0 : 0, h	p.-cl : 10 : 10
8	4·9	15·1	NNE : N	N : NE	2·8	0·36	306	9 : 8, cu, cu.-s, ci.-s, so.-ha	5, cu, cu.-s, ci.-cu: p.-cl, s : 1, d
9	11·5	15·2	NNE : N : NE	NNE : SSW : SW	1·0	0·04	162	1, th.-cl : 0 : 1, th.-cl	3, cu, th.-cl, h: 1, th.-cl : 1, th.-cl
10	12·5	15·2	WSW : W	WSW : W : NW	1·4	0·09	248	1, h : 0	1, ci, so.-ha : 2, th.-cl : 1, th.-cl
11	7·5	15·3	WSW	W : NW : N	1·7	0·12	271	0 : 1, th.-cl : 4, cl, ci.-cu, ci.-s, so.-ha	8, cu, ci.-cu: 10 : 10
12	10·3	15·4	N	NNE : NE	2·5	0·24	256	10 : p.-cl : 3, cu, li.-cl	5, cu.-s, ci.-s, th.-cl, so.-ha : 7, cu.-s, li.-cl: p.-cl, lu.-ha
13	1·0	15·4	NNE : NE	NNE : NE : Variable	2·7	0·24	241	9 : 9 : 10	9, n, cu, ci.-s: 9, th.-cl : 9
14	0·1	15·5	NE : NNE	NE : E	0·5	0·03	182	10 : 10, slt.-r : 10	10 : 10, li.-sh : 9
15	10·6	15·5	E : NE	NE : ENE	1·7	0·15	256	9 : p.-cl : 1, cu	3, cu.-s, th.-cl: 3, cu.-s, ci.-cu: 0
16	5·5	15·6	NNE : NE	ESE : NE : NNE	2·2	0·24	306	p.-cl : p.-cl : 5, cu, n, s	10, sc, r : 10 : 9
17	14·2	15·6	NNE : NE : E	E : NE	8·1	0·68	422	p.-cl : 1, li.-cl, h: 1, ci, ci.-s, w	1, cu, w : 0, w : 1, ci, ci.-s, lu.-co
18	12·8	15·7	NE : NNE : ENE	ENE : NE : NNE	2·5	0·30	343	p.-cl : 3, ci, ci.-s, li.-cl	1, cu : 2, cu, ci.-s : p.-cl
19	5·1	15·7	NNE : NE	NE : NNE	2·4	0·39	352	9, li.-shs : 9 : 8, ci, ci.-cu, ci.-s	5, cu, ci.-cu, ci.-s : 7, cu, cu.-s, ci.-s, sh.-r : 9
20	3·7	15·7	NNE	NNE : NE	3·0	0·62	410	10 : 10, shs.-r : 10	p.-cl, so.-ha : 10, oc.-slt.-r
21	0·2	15·8	NNE : NE	NE	3·1	0·47	389	10 : 10	9 : 9
22	10·6	15·8	NNE	NNE : NE	3·5	0·54	382	9 : p.-cl : 8, cu, n, oc.-th.-r	5, cu, n, th.-cl: 1, cu : 0
23	8·1	15·9	NNE	NNE : SW	0·7	0·01	165	0 : p.-cl : 7, cu, cu.-s, n	8, cu, cu.-s, n: p.-cl : 9
24	0·1	15·9	WSW : W	Variable	0·4	0·01	163	p.-cl : 9 : 9, s, ci.-cu, ci.-s	10 : 10
25	4·5	16·0	WSW	W : WSW : SW	0·8	0·02	186	9 : 5, cu, th.-cl	10 : 9, so.-ha : 9
26	3·4	16·0	WSW : SW	SW : WSW	1·0	0·02	167	9 : 9, s, cu	9 : p.-cl : 1, th.-cl
27	12·5	16·1	SW	SW : WSW	2·4	0·13	255	1, th.-cl : 2, ci, ci.-s : 3, cu, ci, ci.-s	4, li.-cl, so.-ha : 3, ci : 1
28	13·3	16·1	SW : WSW	SW : S	1·4	0·07	202	0 : 0	1, cu : 3, ci.-s, ci.-cu: 1, th.-cl
29	13·4	16·1	Variable : SSW : SW	SW : WSW	1·8	0·11	220	0 : 0 : 1, ci, ci.-s, cu	2, cu, th.-cl: 1, li.-cl : p.-cl
30	5·9	16·2	WSW : N : NNE	Variable	0·6	0·02	132	p.-cl : 6, ci, ci.-s, li.-cl	10, li.-sc, r, t : 10, hy.-sh, l, t: 10, l, sh.-r
31	4·2	16·2	NE : NNE	N : NE : Variable	1·6	0·01	161	9 : 9 : 9, cu, th.-cl	6, cu, th.-cl: p.-cl : 10, sh.-r
Means	7·6	15·5	...	...	...	0·28	280		
Number of Column for Reference.	19	20	21	22	23	24	25	26	27

The mean *Temperature of Evaporation* for the month was 47°·4, being 1°·8 *lower* than
The mean *Temperature of the Dew Point* for the month was 41°·6, being 3°·7 *lower* than
The mean *Degree of Humidity* for the month was 65·3, being 9·7 *less* than
The mean *Elastic Force of Vapour* for the month was 0in·263, being 0in·040 *less* than
The mean *Weight of Vapour in a Cubic Foot of Air* for the month was 3grs·0, being 0gr·4 *less* than
The mean *Weight of a Cubic Foot of Air* for the month was 541 grains, being 3 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 5·5.

The mean proportion of *Sunshine* for the month (constant sunshine being represented by 1) was 0·487. The maximum daily amount of *Sunshine* was 14·2 hours on May 17.

The highest reading of the *Solar Radiation Thermometer* was 141°·1 on May 29; and the lowest reading of the *Terrestrial Radiation Thermometer* was 23°·7 on May 9.

The mean daily distribution of *Ozone* for the 12 hours ending 9h was 0·4; for the 6 hours ending 15h was 0·4; and for the 6 hours ending 21h was 0·0.

The *Proportions of Wind* referred to the cardinal points were N. 14, E. 6, S. 4, and W. 7.

The *Greatest Pressure of the Wind* in the month was 17·0 lbs. on the square foot on May 1. The mean daily *Horizontal Movement of the Air* for the month was 280 miles; the greatest daily value was 627 miles on May 1; and the least daily value was 132 miles on May 30.

Rain fell on 8 days in the month, amounting to 1in·325, as measured by gauge No. 6 partly sunk below the ground; being 0in·678 *less* than the average fall for the 50 years, 1841–1890.

MONTH and DAY, 1905.	Phases of the Moon.	BAROMETER. Mean of 24 Hourly Values (corrected and reduced to 32° Fahrenheit).	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.	Of the Dew Point. Deduced Mean Daily Value.	Difference between the Air Temperature and Dew Point Temperature. Mean.	Greatest.	Least.	Degree of Humidity (Saturation = 100).	TEMPERATURE. Of Radiation. Highest in Sun's Rays.	Lowest on the Grass.	Rain collected in Gauge No. 6, whose receiving surface is 5 inches above the Ground.	Daily Amount of Ozone.	Electricity.
		in.	°	°	°	°	°	°	°	°	°	°		°	°	in.		
June 1	...	29·870	67·8	51·1	16·7	58·8	+ 1·6	53·2	48·2	10·6	15·7	4·4	68	128·2	48·0	0·000	0·0	wP : wP : mP
2	...	29·894	74·5	51·3	23·2	60·2	+ 2·5	55·6	51·6	8·6	18·2	2·6	73	122·0	48·4	0·033	1·2	wP
3	New	29·881	77·0	55·2	21·8	63·8	+ 5·8	57·4	52·1	11·7	23·2	2·1	66	150·0	50·3	0·000	5·8	wP
4	...	29·832	69·7	54·9	14·8	62·0	+ 3·8	56·3	51·4	10·6	16·6	7·0	69	118·9	44·4	0·000	5·0	wP
5	Greatest Declination N.	29·746	57·8	48·5	9·3	53·4	− 4·9	51·8	50·2	3·2	8·1	1·0	89	65·0	47·9	1·080	0·0	wP, wwN : wP, wN
6	...	29·637	51·1	46·8	4·3	49·3	− 9·0	48·9	48·5	0·8	3·7	0·6	97	59·4	46·8	0·539	0·5	wP : mP : mP
7	...	29·649	53·2	46·1	7·1	50·4	− 7·8	49·7	49·0	1·4	3·0	0·4	95	57·3	46·0	0·376	4·5	wP : wwP : wwP, wwN
8	...	29·758	67·0	50·6	16·4	56·7	− 1·5	51·5	46·7	10·0	22·7	0·2	69	124·3	49·6	0·293	6·0	wwP, wwN : wP : mP
9	...	29·770	53·2	50·1	3·1	52·0	− 6·2	50·9	49·8	2·2	4·7	1·4	92	60·0	49·0	0·250	0·0	wwP : vP, wN : wP
10	First Quarter	29·740	62·1	49·3	12·8	54·1	− 4·1	52·1	50·1	4·0	9·2	1·0	86	114·8	48·3	0·319	0·2	wP : vP, ssN : wP
11	In Equator	29·675	60·7	49·5	11·2	54·7	− 3·7	53·2	51·7	3·0	6·2	1·2	89	81·0	48·9	0·207	1·3	vP, wN : wwP : wwP
12	...	29·657	66·0	52·3	13·7	56·7	− 1·9	55·2	53·8	2·9	7·0	0·4	90	105·7	50·0	0·054	9·5	wwP : wwP : sN, vP
13	...	29·694	70·1	49·9	20·2	60·2	+ 1·4	56·5	53·3	6·9	14·0	0·4	78	135·0	41·0	0·000	16·0	wP
14	Perigee	29·659	68·5	51·2	17·3	59·4	+ 0·5	53·1	47·6	11·8	18·8	2·6	65	131·8	42·9	0·000	6·0	wP
15	...	29·596	74·0	48·3	25·7	60·5	+ 1·5	55·8	51·7	8·8	17·7	1·2	73	134·5	40·0	0·146	3·7	wP : wP : wP, sN
16	...	29·618	77·2	53·9	23·3	64·7	+ 5·7	59·4	55·0	9·7	18·7	0·6	71	146·0	47·6	0·000	8·3	sN, wP : wP : wP
17	Full	29·566	66·4	57·0	9·4	61·0	+ 1·9	59·3	57·8	3·2	7·5	1·3	90	75·3	47·0	0·545	2·2	vP, vN : wP : wP
18	Greatest Declination S.	29·605	67·6	52·0	15·6	59·3	+ 0·1	54·7	50·6	8·7	16·6	1·7	73	134·4	45·0	0·009	15·8	wP
19	...	29·741	70·4	48·8	21·6	59·5	0·0	55·5	52·0	7·5	13·8	1·6	77	140·0	41·2	0·005	19·2	wP
20	...	29·949	67·5	53·2	14·3	60·0	+ 0·1	56·3	53·1	6·9	12·1	1·8	78	104·4	48·2	0·008	20·3	wP
21	...	30·042	74·5	55·2	19·3	64·1	+ 3·8	58·9	54·5	9·6	15·5	1·8	71	132·2	49·4	0·000	12·5	wP
22	...	30·181	78·0	51·4	26·6	64·2	+ 3·5	58·2	53·2	11·0	19·6	1·8	67	127·4	40·8	0·000	0·0	wP
23	...	30·194	74·1	50·1	24·0	60·5	− 0·5	55·6	51·3	9·2	20·5	2·2	72	135·1	38·2	0·000	10·0	wP
24	Last Quarter	30·111	72·2	47·4	24·8	60·2	− 1·0	56·1	52·5	7·7	15·8	1·5	76	126·7	42·7	0·000	0·0	wP
25	In Equator: Apogee	29·942	74·1	54·1	20·0	63·5	+ 2·2	58·2	53·8	9·7	17·1	3·3	71	121·2	51·7	0·008	0·2	wP : wP : mN, wP
26	...	29·776	70·9	56·0	14·9	61·9	+ 0·5	57·7	54·1	7·8	13·2	2·6	76	124·9	48·2	0·013	0·8	wP
27	...	29·701	80·1	52·1	28·0	66·5	+ 5·1	60·3	55·3	11·2	21·8	1·2	67	121·4	42·2	0·000	3·0	wP
28	...	29·631	77·0	54·8	22·2	62·9	+ 1·6	58·2	54·2	8·7	18·6	3·5	73	136·2	46·0	0·000	9·0	wP
29	...	29·560	71·9	51·1	20·8	60·8	− 0·4	58·5	56·5	4·3	12·4	1·3	86	117·0	40·0	0·121	1·0	wP : wwN, wwP
30	...	29·579	68·1	59·7	8·4	63·1	+ 1·9	61·8	60·7	2·4	4·7	1·1	92	90·0	56·2	0·317	0·0	wP, wwN : wP : wwP
Means	...	29·775	68·8	51·7	17·0	59·5	+ 0·1	55·7	52·3	7·1	13·9	1·8	78·0	114·0	46·2	Sum 4·323	5·4	...
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^{in}·775, being 0^{in}·036 *lower* than the average for the 50 years, 1841–1890.

TEMPERATURE OF THE AIR.

The highest in the month was 80°·1 on June 27; the lowest in the month was 46°·1 on June 7; and the range was 34°·0.
The mean of all the highest daily readings in the month was 68°·8, being 2°·1 *lower* than the average for the 50 years, 1841–1890.
The mean of all the lowest daily readings in the month was 51°·7, being 1°·8 *higher* than the average for the 50 years, 1841–1890.
The mean of the daily ranges was 17°·0, being 4°·0 *less* than the average for the 50 years, 1841–1890.
The mean for the month was 59°·5, being 0°·1 *higher* than the average for the 50 years, 1841–1890.

MONTH and DAY, 1905.	Daily Duration of Sunshine.	Sun above Horizon.	Wind as deduced from Self-Registering Anemometers. Osler's. General Direction. A.M.	General Direction. P.M.	Pressure on the Square Foot. Greatest.	Pressure on the Square Foot. Mean of 24 Hourly Measures.	Robinson's. Horizontal Movement of the Air.	Clouds and Weather. A.M.	Clouds and Weather. P.M.
	hours.	hours.			lbs.	lbs.	miles.		
June 1	7·1	16·2	WSW : SW	SW : WSW : W	3·5	0·32	347	10 : p.-cl : 6, cu, n, th.-cl	7,cu,n,th.-cl: p.-cl,ci.-s,so.-ha: 10, th.-cl
2	3·7	16·3	WSW : SW	SW : WSW	4·3	0·51	385	10, slt.-r : p.-cl : 7, li.-sc, s, li.-cl, so.-ha	9, cu, cu.-s, so.-ha : 9, sc
3	3·7	16·3	WSW	W : WSW : SW	1·3	0·02	197	9 : 9 : 9, cu, ci.-cu, li.-cl, so.-ha	9, ci.-cu, ci.-s, th.-cl: 9
4	3·9	16·3	Variable : N	N : NE : SE	0·7	0·00	145	p.-cl : 7	9 : 10
5	0·0	16·4	E : NE	NE : NNE	5·8	0·36	350	10 : 10, r : 10, c.-r	10, sc, c.-r, sq : 10 sc, c.-r
6	0·0	16·4	NNE : NE	NE : NNE	3·4	0·37	379	10, th.-r : 10, th.-r : 10, c.-r	10, c.-r : 10, sc, fq.-th.-r: 10, sc, c.-r
7	0·0	16·4	NNE : NE	NE : NNE : N	1·5	0·15	285	10, slt.-r : 10	10, oc.-in.-r : 10 : 10, slt.-r
8	3·9	16·4	N : NNE : NE	NE : NNE	11·0	0·69	435	10, c.-r : 10, oc.-slt.-r : 9, cu, n, th.-cl, oc.-slt.-r	7, ci, ci.-s, cu, w : p.-cl
9	0·0	16·4	NNE : NE	NE : NNE	4·1	0·74	471	10 : 10, slt.-r : 10, c.-r	10,sc,fq.-th.-r: 10, oc.-r : 10, sc
10	0·0	16·5	NNE	Variable : NE : NNE	2·1	0·22	302	10 : 10, oc.-slt.-r : 10	10, n, t, l, hy.-r : 10, sc
11	0·0	16·5	NNE : N	NE : ENE	1·5	0·08	244	10, fq.-r : 10, slt.-r	10 : 10
12	0·5	16·5	NE : ENE	ENE : E : ESE	1·1	0·05	189	10 : 10, oc.-slt.-r : 10	9 : p.-cl, oc.-r : 9
13	9·7	16·5	ESE : SE	ESE : E : ENE	1·2	0·07	183	10, m : p.-cl : 4, ci, cu, th.-cl	5, ci, ci.-s, so.-ha: 3, ci : 1, s, lu.-co
14	13·1	16·5	ENE : NE : E	E : NE	3·1	0·20	274	1 : 1, cu, th.-cl	1, cu, th.-cl : 0, d
15	9·8	16·5	NE : NNE	ENE : E	0·5	0·01	162	p.-cl, h, d : p.-cl : 1, th.-cl	2, ci.-cu, cu, s: 7, ci, th.-cl : p.-cl, sh.-r, l
16	12·2	16·5	E : ESE : Variable	S : SSE : E	1·1	0·02	134	p.-cl, m : p.-cl : 6, cu, ci.-cu, ci	5, cu, ci, so.-ha: 3, ci, ci.-s : p.-cl
17	0·3	16·5	Variable : NE	Calm : Variable : NNE	1·0	0·00	97	p.-cl, slt.-r: 10, shs.-r : 10, r, glm	10, slt.-r, glm: p.-cl, ci : 9, ci, ci.-s
18	11·1	16·6	WSW : SW : SSW	SW : SSW	3·5	0·30	334	9, slt.-sh : p.-cl : 8, cu, cu.-s, n	9, cu, cu.-s, n: 4, cu, ci.-s, ci: p.-cl
19	9·3	16·6	S : SSW	SW	2·6	0·27	315	5 : p.-cl : 9, cu, n, oc.-slt.-r	8, cu, n : 9 : p.-cl
20	1·4	16·6	SSW : SW	SW : SSW	6·0	0·50	397	p.-cl : 9 : 9, cu, cu.-s, w	10, sc, oc.-slt.-r, w : p.-cl : li.-cl
21	3·5	16·6	SSW : SW	SW : WSW : W	6·5	0·51	423	p.-cl : 9 : 8, sc, ci, ci.-cu, ci.-s, cu, cu.-s, w	9, sc, cu.-s, n, w: p.-cl : 0
22	12·3	16·6	W : WSW : N	NNE : NE : E	1·0	0·02	155	0, d, h : 0	2, cu, th.-cl : 2, th.-cl
23	14·2	16·6	E : NE : ENE	E : ESE	1·3	0·07	198	1, th.-cl, d : 0	3, th.-cl : 2, ci : 1
24	6·5	16·6	NE : NNE	NNE : NE	2·7	0·17	282	9 : 10	7, cu.-s, th.-cl: 4, ci, ci.-s, ci.-cu: 1
25	1·9	16·6	N	NNE : N : NNW	2·0	0·16	279	9 : 10 : 9, cu, ci.-cu, th.-cl	9, cu, n : 9, slt.-sh
26	2·2	16·6	NNW	N : NNE	2·3	0·16	243	9 : 10 : 9, oc.-slt.-r	7, cu, cu.-s, n, oc.-r : 6, cu, n, ci.-cu: li.-cl
27	12·4	16·6	W : WSW	W	2·8	0·22	272	p.-cl, h : 3, cu, ci.-s, th.-cl	3, cu, ci.-s : 1, li.-cl : 1, s
28	9·9	16·5	WSW	WSW : SW	1·8	0·11	283	p.-cl : 0 : 6, cu, th.-cl	6, cu : 4, cu, cu.-s, so.-ha : 1, ci, ci.-s
29	0·6	16·5	SW : SE	E	0·9	0·02	162	p.-cl : 10 : 10	10, oc.-r : 10
30	0·0	16·5	ENE : NE	NE : N	0·4	0·01	186	10 : 10, fq.-r	10, th.-r : 9, n : 10, slt.-sh
Means	5·1	16·5	...	...	...	0·21	270		
Number of Column for Reference.	19	20	21	22	23	24	25	26	27

The mean *Temperature of Evaporation* for the month was 55°·7, being 0°·7 *higher* than
The mean *Temperature of the Dew Point* for the month was 52°·3, being 1°·2 *higher* than
The mean *Degree of Humidity* for the month was 78·0, being 4·0 *greater* than
The mean *Elastic Force of Vapour* for the month was 0in·393, being 0in·018 *greater* than
The mean *Weight of Vapour in a Cubic Foot of Air* for the month was 4grs·4, being 0gr·2 *greater* than
The mean *Weight of a Cubic Foot of Air* for the month was 530 grains, being 1 grain *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 7·2.

The mean proportion of *Sunshine* for the month (constant sunshine being represented by 1) was 0·310. The maximum daily amount of *Sunshine* was 14·2 hours on June 23.

The highest reading of the *Solar Radiation Thermometer* was 150°·0 on June 3; and the lowest reading of the *Terrestrial Radiation Thermometer* was 38°·2 on June 23.

The mean daily distribution of *Ozone* for the 12 hours ending 9h was 1·9; for the 6 hours ending 15h was 2·5; and for the 6 hours ending 21h was 1·0.

The *Proportions of Wind* referred to the cardinal points were N. 9, E. 9, S. 5, and W. 6. One day was calm.

The *Greatest Pressure of the Wind* in the month was 11·0 lbs. on the square foot on June 8. The mean daily *Horizontal Movement of the Air* for the month was 270 miles; the greatest daily value was 471 miles on June 9; and the least daily value was 97 miles on June 17.

Rain fell on 18 days in the month, amounting to 4in·323, as measured by gauge No. 6 partly sunk below the ground; being 2in·301 *greater* than the average fall for the 50 years, 1841–1890.

MONTH and DAY, 1905.	Phases of the Moon.	BAROMETER. Mean of 24 Hourly Values (corrected and reduced to 32° Fahrenheit).	TEMPERATURE. Of the Air. Highest.	Lowest.	Daily Range.	Mean of 24 Hourly Values.	Excess above Average of 50 Years.	TEMPERATURE. Of Evaporation. Mean of 24 Hourly Values.	Of the Dew Point. Deduced Mean Daily Value.	Difference between the Air Temperature and Dew Point Temperature. Mean.	Greatest.	Least.	Degree of Humidity (Saturation = 100).	TEMPERATURE. Of Radiation. Highest in Sun's Rays.	Lowest on the Grass.	Rain collected in Gauge No. 6, whose receiving surface is 5 inches above the Ground.	Daily Amount of Ozone.	Electricity.
		in.	°	°	°	°	°	°	°	°	°	°		°	°	in.		
July 1	...	29·690	76·0	57·5	18·5	65·0	+ 3·7	60·6	57·0	8·0	19·9	1·1	76	138·4	47·0	0·085	5·5	wwP : wN, wwP : wP
2	Greatest Declination N: New	29·861	76·0	53·1	22·9	65·0	+ 3·6	59·7	55·4	9·6	19·8	3·4	72	131·8	41·2	0·013	14·7	wwN, wP : wwP, wwN : wwP
3	...	30·026	78·0	58·8	19·2	65·5	+ 3·8	60·0	55·9	9·6	17·7	3·4	70	134·7	52·8	0·000	6·8	wwP : wwP : wP
4	...	30·021	68·9	56·6	12·3	62·3	+ 0·4	59·3	56·7	5·6	9·7	3·4	82	97·5	47·6	0·000	0·0	wP
5	...	29·828	72·2	56·4	15·8	63·6	+ 1·5	58·6	54·4	9·2	18·4	2·5	73	103·0	50·4	0·000	1·0	wP : wP : mP
6	...	29·869	70·0	54·5	15·5	61·5	− 0·7	55·5	50·3	11·2	19·6	2·7	67	120·5	45·1	0·018	2·0	wP : mP : mP
7	...	29·983	76·1	48·2	27·9	62·6	+ 0·5	55·5	49·4	13·2	22·8	4·8	62	120·1	36·8	0·000	0·0	wP : vP : mP
8	...	29·970	81·9	51·8	30·1	67·9	+ 5·9	60·0	53·8	14·1	29·4	2·7	60	143·9	40·8	0·000	1·2	wP
9	In Equator : First Quarter	29·871	83·2	57·3	25·9	67·6	+ 5·6	63·9	61·0	6·6	23·3	1·5	80	137·6	48·1	0·246	5·8	wP : wP, wN : vP, ssN
10	Perigee	29·887	76·0	58·8	17·2	65·1	+ 3·0	61·1	57·8	7·3	15·6	1·9	78	123·5	53·0	0·005	0·0	wP
11	...	29·905	79·3	61·5	17·8	68·2	+ 5·9	63·4	59·6	8·6	18·9	2·1	74	136·0	57·6	0·000	2·0	wP
12	...	29·924	81·0	61·2	19·8	69·4	+ 6·8	63·4	58·7	10·7	19·2	1·5	68	141·6	53·2	0·000	0·0	wP
13	...	29·996	80·1	59·2	20·9	69·2	+ 6·3	62·8	57·8	11·4	20·4	3·2	66	137·6	53·2	0·000	0·0	wP
14	...	30·018	84·3	59·5	24·8	71·5	+ 8·4	64·7	59·5	12·0	21·6	2·3	66	142·3	48·3	0·000	0·0	wP
15	Greatest Declination S.	29·888	79·8	62·2	17·6	68·6	+ 5·4	64·1	60·5	8·1	15·5	2·7	75	140·7	56·5	0·000	2·0	wwP
16	Full	29·783	74·0	57·8	16·2	63·9	+ 0·7	58·1	53·3	10·6	18·5	2·4	69	134·7	46·1	0·003	6·0	wP : vP, wN : wP
17	...	29·863	74·2	50·3	23·9	63·3	+ 0·2	56·7	51·2	12·1	19·4	2·2	65	137·4	38·0	0·000	0·0	wP
18	...	29·860	75·2	54·9	20·3	63·3	+ 0·3	58·1	53·7	9·6	19·3	2·8	71	123·9	45·6	0·023	0·0	wP : wP : mP
19	...	30·079	75·5	48·8	26·7	62·4	− 0·6	55·3	49·2	13·2	22·1	5·2	62	131·4	37·0	0·000	4·0	mP : mP : wP
20	...	30·016	80·0	54·2	25·8	66·6	+ 3·6	58·7	52·3	14·3	24·0	6·0	61	136·8	45·0	0·000	0·0	wP : wP : mP
21	...	29·931	81·1	55·5	25·6	69·1	+ 6·1	63·0	58·2	10·9	19·6	2·7	68	123·5	46·4	0·000	0·0	wP
22	In Equator	29·840	84·0	56·3	27·7	70·9	+ 8·0	63·1	57·2	13·7	24·8	4·2	62	146·3	46·6	0·000	0·0	wP
23	Apogee	29·695	72·4	60·5	11·9	65·5	+ 2·7	62·5	60·1	5·4	10·4	1·6	83	105·0	56·0	0·338	0·0	... : wP, wwN : wP
24	Last Quarter	29·812	76·2	57·1	19·1	64·8	+ 2·2	59·5	55·1	9·7	17·3	3·4	71	125·1	51·6	0·000	0·0	wP
25	...	29·850	81·3	56·1	25·2	68·5	+ 6·1	63·7	59·9	8·6	15·5	2·8	74	141·6	51·7	0·000	0·0	wP
26	...	29·851	87·2	61·4	25·8	71·7	+ 9·4	66·0	61·7	10·0	21·6	1·9	70	143·0	55·4	0·000	5·0	wP : wwP
27	...	29·799	82·1	62·1	20·0	68·5	+ 6·2	63·9	60·2	8·3	20·1	2·0	75	155·7	58·0	0·190	0·0	wwP : wwP : sN, vP
28	...	29·832	69·3	54·8	14·5	62·5	+ 0·2	59·6	57·1	5·4	11·0	2·0	83	102·0	45·2	0·000	0·0	wP
29	Greatest Declination N.	29·771	76·7	52·2	24·5	64·5	+ 2·2	60·3	56·8	7·7	20·9	0·8	76	138·2	42·0	0·000	0·0	wwP
30	...	29·732	75·6	57·1	18·5	66·1	+ 3·8	57·6	50·7	15·4	21·3	5·5	58	132·6	54·5	0·000	0·0	wwP
31	...	29·839	73·4	53·9	19·5	61·8	− 0·5	54·0	47·3	14·5	20·5	6·2	59	143·0	50·1	0·000	1·0	wP : wP : mP
Means	...	29·880	77·5	56·4	21·0	66·0	+ 3·6	60·4	55·9	10·1	19·3	2·9	70·2	131·3	48·4	Sum 0·921	1·8	...
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^{in}·880, being 0^{in}·087 *higher* than the average for the 50 years, 1841–1890.

TEMPERATURE OF THE AIR.

The highest in the month was 87°·2 on July 26; the lowest in the month was 48°·2 on July 7; and the range was 39°·0.
The mean of all the highest daily readings in the month was 77°·5, being 3°·5 *higher* than the average for the 50 years, 1841–1890.
The mean of all the lowest daily readings in the month was 56°·4, being 3°·3 *higher* than the average for the 50 years, 1841–1890.
The mean of the daily ranges was 21°·0, being 0°·1 *greater* than the average for the 50 years, 1841–1890.
The mean for the month was 66°·0, being 3°·6 *higher* than the average for the 50 years, 1841–1890.

MONTH and DAY, 1905.	Daily Duration of Sunshine.	Sun above Horizon.	Wind as deduced from Self-Registering Anemometers. Osler's. General Direction. A.M.	General Direction. P.M.	Pressure on the Square Foot. Greatest.	Pressure on the Square Foot. Mean of 24 Hourly Measures.	Robinson's. Horizontal Movement of the Air.	Clouds and Weather. A.M.	Clouds and Weather. P.M.
	hours.	hours.			lbs.	lbs.	miles.		
July 1	9·8	16·5	NNE : SW	SW	0·8	0·05	174	10, slt.-r : 10, slt.-r : 6,cu.-s,ci.-cu,ci	3, ci,ci.-cu,ci.-s : 2, ci, cu : p.-cl
2	11·0	16·5	SW	SW : WSW	3·6	0·29	313	9 : p.-cl : 4,cu.-s,cu,ci.-cu	2, cu,ci.-s,ci : 9, oc.-shs : 8, sc
3	5·7	16·5	WSW : SW	WSW : NNE : NE	1·1	0·03	200	9 : 9 : 7, ci, ci.-cu, th.-cl	10 : 10, n : 9
4	0·1	16·4	NNE : NE : ENE	E : ESE : NE	0·7	0·00	184	10 : 10	10 : 8, cu.-s, li.-cl
5	1·2	16·4	NE : NNE : N	N : NNW	1·2	0·03	186	10 : 9 : 9, s	9,ci.-cu,cu,n: 9 : p.-cl
6	7·3	16·4	NW : N	N	1·2	0·06	222	10, li.-shs : 10 : 8, cu, cu.-s	7, cu, cu.-s : p.-cl : 1, th.-cl
7	13·1	16·4	N	WSW : WNW : SW	0·1	0·00	135	1, th.-cl : 0, h	0, h : 0 : 0, h
8	14·3	16·4	WSW : NE	SE : ESE : E	1·0	0·05	180	0 : 0 : 0	0 : 0 : p.-cl
9	8·0	16·3	E : SE	Variable : SW : SSW	2·7	0·04	178	p.-cl, h : 0 : 5	p.-cl, t : v, hy.-sh, l, t : p.-cl
10	5·8	16·3	SW : WSW	WSW : SW	2·0	0·13	307	p.-cl : th.-cl : 7, ci,ci.-s,so.-ha	10, sc, th.-cl : 10, oc.-slt.-r : 10
11	6·4	16·3	WSW · W	W : WSW	1·3	0·10	300	10 : 10 : 7, cu,cu.-s,n,th.-cl	7, cu, cu.-s, th.-cl : 8, ci.-s, s, th.-cl
12	8·0	16·2	WSW : W	WSW : WNW : W	1·2	0·06	246	9 : 9 : 8, ci, ci.-s, s	6,s,cu,ci.-cu: 2, cu, li.-cl : p.-cl
13	7·2	16·2	WSW : WNW : NNW	NNW : Variable	1·2	0·02	211	p.-cl : 9 : 9, cu, cu.-s	6, cu.-s, n : 1, ci, s
14	13·8	16·2	W : WSW	W : WNW : WSW	0·6	0·04	216	1, h : 0, h	3, cu, cu.-s : 0
15	6·2	16·1	W : WSW	WSW	1·1	0·06	268	p.-cl : 10 : 8,cu.-s, th.-cl	7, cu, cu.-s, th.-cl : p.-cl
16	4·8	16·1	W : WSW : WNW	W : NW	1·6	0·04	244	5 : 9 : 10, li.-sc, oc.-slt.-r	6, cu,cu.-s,li.-cl : 2, cu, ci.-s : 0
17	9·4	16·1	WSW : W : NW	W : WSW	1·5	0·08	266	0 : 0, h : 4, ci, th.-cl	8, cu : 4, ci, so.-ha : p.-cl
18	4·7	16·0	WSW : NNW	NNW : NE	2·5	0·20	323	9, slt.-sh : 10 : 9, cu, cu.-s, n, oc.-shs	6,cu,cu.-s,th.-cl : 5, cu : p.-cl
19	10·1	16·0	Calm : NE : N	NNE : Variable : SSW	0·7	0·00	142	p.-cl : 0 : 3, cu, li.-cl	4,cu,cu.-s,th.-cl : p.-cl : 0
20	9·6	16·0	SW : WSW	WNW : NNW	0·5	0·01	199	0 : 0 : 1, ci	3, ci, ci.-cu : p.-cl : 8, ci.-cu, ci.-s, th.-cl
21	2·3	15·9	WSW : SW : Variable	Variable : SSE : SW	0·0	0·00	110	9 : 9, h	8, s : 3, ci.-s : 0, h, d
22	13·1	15·9	SW : WSW	WSW : W : WNW	1·3	0·13	288	0 : p.-cl, h : 4,cu,ci.-s,ci	5, ci.-cu : 6, cu : 9
23	1·9	15·8	WSW	WNW : NNW	3·4	0·16	302	9 : 10, oc.-slt.-r : 10, sc, c.-r	v, shs.-r : v, shs.-r : 9
24	8·7	15·8	NNW : N	WSW : SW : S	1·2	0·02	206	p.-cl : 9	8, cu, th.-cl : 3 : 1, s
25	7·0	15·7	SW	SW : WSW	2·7	0·19	336	1 : p.-cl : 9, cu, cu.-s	8, cu,cu.-s,n: 4, cu,cu.-s,n: 1
26	7·5	15·7	SW	SW : SSW : S	1·2	0·05	240	p.-cl : 9 : 3, cu, cu.-s	3, ci.-s,ci.-cu,cu : 4,cu,ci.-cu,cu.-s : p.-cl, l
27	6·2	15·6	SW : NE : E	Variable : NE	3·8	0·05	170	p.-cl : 8 : 8, cu.-s,ci.-s,ci.-cu	7, cu, ci,ci.-s: 10, oc.-slt.-r, hy.-sh, t, w : 10
28	1·5	15·6	NNE : N	NNE : NE : ESE	0·3	0·00	145	10 : 10 : 9	10 : p.-cl, n : 1, m
29	6·7	15·5	ESE : SE : SSW	SSW : SW	3·4	0·35	320	0 : p.-cl : 7, cu, cu.-s, so.-ha	6, cu.-s,ci.-cu,li.-cl : 9 : 9, sc
30	10·4	15·5	SW : WSW : W	W : WSW	4·2	0·42	406	p.-cl : 6, cu, li.-cl, w	4, cu, ci.-s : 2,cu,ci.-cu,ci.-s : 1
31	4·7	15·4	SW : WSW	WSW : WNW	0·5	0·00	188	9 : 9 : 7, cu, cu.-s, ci.-cu	8,cu,cu.-s,n,s,so.-ha : p.-cl
Means	7·3	16·1	...	...	...	0·09	232		
Number of Column for Reference.	19	20	21	22	23	24	25	26	27

The mean *Temperature of Evaporation* for the month was 60°·4, being 2°·6 *higher* than
The mean *Temperature of the Dew Point* for the month was 55°·9, being 2°·0 *higher* than
The mean *Degree of Humidity* for the month was 70·2, being 3·6 *less* than
The mean *Elastic Force of Vapour* for the month was 0in·447, being 0in·031 *greater* than
The mean *Weight of Vapour in a Cubic Foot of Air* for the month was 4grs·9, being 0gr·3 *greater* than
The mean *Weight of a Cubic Foot of Air* for the month was 525 grains, being 2 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 5·8.

The mean proportion of *Sunshine* for the month (constant sunshine being represented by 1) was 0·455. The maximum daily amount of *Sunshine* was 14·3 hours on July 8.

The highest reading of the *Solar Radiation Thermometer* was 155°·7 on July 27; and the lowest reading of the *Terrestrial Radiation Thermometer* was 36°·8 on July 7.

The mean daily distribution of *Ozone* for the 12 hours ending 9h was 0·6; for the 6 hours ending 15h was 0·9; and for the 6 hours ending 21h was 0·3.

The *Proportions of Wind* referred to the cardinal points were N. 6, E. 4, S. 6, and W. 15.

The *Greatest Pressure of the Wind* in the month was 4·2 lbs. on the square foot on July 30. The mean daily *Horizontal Movement of the Air* for the month was 232 miles; the greatest daily value was 406 miles on July 30; and the least daily value was 110 miles on July 21.

Rain fell on 8 days in the month, amounting to 0in·921, as measured by gauge No. 6 partly sunk below the ground; being 1in·549 *less* than the average fall for the 50 years, 1841–1890.

MONTH and DAY, 1905.	Phases of the Moon.	BAROMETER. Mean of 24 Hourly Values (corrected and reduced to 32° Fahrenheit).	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.	Of the Dew Point. Deduced Mean Daily Value.	Difference between the Air Temperature and Dew Point Temperature. Mean.	Greatest.	Least.	Degree of Humidity (Saturation=100).	TEMPERATURE. Of Radiation. Highest in Sun's Rays.	Lowest on the Grass.	Rain collected in Gauge No. 6, whose receiving surface is 5 inches above the Ground.	Daily Amount of Ozone.	Electricity.
		in.	°	°	°	°	°	°	°	°	°	°		°	°	in.		
Aug. 1	New	29·761	74·0	51·1	22·9	61·1	− 1·1	53·7	47·3	13·8	21·6	3·7	60	140·0	42·0	0·000	0·0	wP
2	...	29·711	76·4	48·9	27·5	60·9	− 1·2	54·4	48·7	12·2	23·8	1·2	64	145·8	33·5	0·000	3·0	wP
3	...	29·416	67·3	55·3	12·0	60·4	− 1·7	58·6	57·0	3·4	8·4	1·7	89	80·6	50·0	0·342	26·0	wwP, wwN : wwP, vN : wwP
4	Perigee	29·375	71·4	60·0	11·4	64·8	+ 2·6	59·7	55·5	9·3	14·4	5·5	72	126·6	54·7	0·004	14·0	wwP
5	In Equator	29·559	74·0	53·8	20·2	61·3	− 1·0	58·1	55·3	6·0	17·3	1·9	81	137·6	52·0	0·313	11·0	wwP : wP, vN : wP, mN
6	...	29·876	72·3	48·0	24·3	58·5	− 3·9	53·8	49·6	8·9	19·4	1·3	73	137·0	38·0	0·000	2·2	wP
7	First Quarter	29·778	70·0	52·8	17·2	61·0	− 1·5	58·0	55·4	5·6	11·2	2·3	82	123·3	44·0	0·030	6·8	wwP, wwN : wwP : wwP
8	...	29·796	76·9	56·0	20·9	64·5	+ 2·0	60·0	56·3	8·2	17·3	2·8	74	135·7	54·7	0·000	0·0	wwP : ...
9	...	29·789	70·7	54·2	16·5	60·1	− 2·4	57·5	55·2	4·9	12·2	2·3	85	111·0	47·7	0·024	10·0	wP
10	...	29·762	73·3	54·0	19·3	60·2	− 2·3	56·0	52·3	7·9	21·2	1·9	75	142·6	49·9	0·112	9·0	wwP : wP, sN : wP
11	Greatest Declination S.	29·874	68·9	51·3	17·6	58·9	− 3·6	53·7	49·1	9·8	20·7	2·0	70	129·0	46·1	0·000	4·0	wP : ...
12	...	30·095	71·8	48·8	23·0	59·9	− 2·6	55·4	51·4	8·5	16·9	1·0	74	128·0	41·0	0·000	0·0	... : wP : wP
13	...	30·093	74·5	52·2	22·3	62·3	− 0·1	56·0	50·6	11·7	21·8	3·0	66	130·9	42·0	0·000	2·0	wP
14	...	30·007	75·8	50·3	25·5	63·7	+ 1·4	57·9	53·1	10·6	19·4	3·6	69	133·8	40·0	0·000	6·0	wP
15	Full	29·893	73·8	51·9	21·9	63·6	+ 1·5	58·1	53·5	10·1	20·1	2·6	70	137·5	42·2	0·000	9·0	wP
16	...	29·880	70·7	54·3	16·4	62·8	+ 0·8	57·7	53·4	9·4	17·6	3·2	71	126·3	46·8	0·000	6·0	wP
17	...	29·947	73·7	52·1	21·6	60·5	− 1·3	55·4	51·0	9·5	21·0	3·2	71	145·7	42·8	0·000	7·0	wP
18	In Equator	29·701	73·4	52·0	21·4	62·6	+ 1·0	58·8	55·6	7·0	16·7	1·7	78	121·2	41·7	0·034	12·0	wwP : wwP, wwN : wwP
19	...	29·763	71·6	53·2	18·4	61·1	− 0·3	53·7	47·3	13·8	23·0	3·8	60	135·2	47·3	0·000	7·5	wwP : wP, wwN : mP
20	Apogee	29·741	71·7	54·1	17·6	62·8	+ 1·5	58·8	55·4	7·4	14·6	1·2	77	130·1	52·1	0·162	4·5	wwP : wP
21	...	29·844	73·0	52·2	20·8	62·5	+ 1·4	57·5	53·2	9·3	16·6	0·6	72	133·3	40·7	0·000	6·0	wwP : wwP : wP
22	...	29·689	74·0	50·9	23·1	61·5	+ 0·5	55·5	50·4	11·1	22·7	2·7	67	137·3	44·5	0·273	11·2	wwP : wP : vP, ssN
23	Last Quarter	29·664	66·0	49·3	16·7	56·3	− 4·6	51·2	46·4	9·9	16·7	1·0	70	110·0	42·9	0·000	6·8	wP : mP
24	...	29·771	70·7	44·6	26·1	55·9	− 4·9	50·7	45·9	10·0	20·0	1·9	69	135·0	34·0	0·000	4·5	mP : wP : mP
25	...	29·599	73·6	51·0	22·6	62·3	+ 1·5	57·5	53·4	8·9	22·1	2·1	73	136·1	39·7	0·037	5·5	wwP
26	Greatest Declination N.	29·452	71·8	55·1	16·7	60·8	0·0	56·8	53·4	7·4	18·7	0·6	77	124·2	46·0	0·007	7·5	wwP
27	...	29·516	65·5	51·2	14·3	57·1	− 3·6	54·8	52·7	4·4	12·5	1·4	85	127·0	48·1	0·082	9·7	... : vP, vN : wwP
28	...	29·238	67·6	52·0	15·6	57·9	− 2·7	55·6	53·5	4·4	12·1	0·4	85	127·0	45·1	0·614	7·8	wwP, wwN : ssN, vP : ssN, wP
29	...	29·193	66·0	52·6	13·4	57·0	− 3·3	54·7	52·6	4·4	11·9	0·6	85	107·8	52·6	0·502	0·7	vN, wwP : vP : wP, mN
30	New	29·580	58·2	52·3	5·9	55·7	− 4·4	52·5	49·5	6·2	8·2	4·4	80	69·9	49·6	0·000	2·3	wwP
31	...	30·052	63·5	47·4	16·1	54·1	− 5·8	50·5	47·0	7·1	16·5	4·2	77	122·2	34·7	0·000	0·0	... : wP : mP
Means	...	29·723	71·0	52·0	19·0	60·4	− 1·2	55·9	52·0	8·4	17·3	2·3	74·2	126·7	44·7	Sum 2·536	6·5	...
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^{in}·723, being 0^{in}·059 *lower* than the average for the 50 years, 1841–1890.

TEMPERATURE OF THE AIR.

The highest in the month was 76°·9 on August 8; the lowest in the month was 44°·6 on August 24; and the range was 32°·3.
The mean of all the highest daily readings in the month was 71°·0, 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 52°·0, being 1°·0 *lower* than the average for the 50 years, 1841–1890.
The mean of the daily ranges was 19°·0, being 0°·8 *less* than the average for the 50 years, 1841–1890.
The mean for the month was 60°·4, being 1°·2 *lower* than the average for the 50 years, 1841–1890.

MONTH and DAY, 1905.	Daily Duration of Sunshine.	Sun above Horizon.	WIND AS DEDUCED FROM SELF-REGISTERING ANEMOMETERS. OSLER'S. General Direction. A.M.	P.M.	Pressure on the Square Foot. Greatest.	Mean of 24 Hourly Measures.	ROBINSON'S. Horizontal Movement of the Air.	CLOUDS AND WEATHER. A.M.	P.M.
	hours.	hours.			lbs.	lbs.	miles.		
Aug. 1	3·9	15·4	SW	SW : WSW	1·4	0·04	189	p.-cl : 10 : 7,ci.-cu,th.-cl,h	6, s, cu.-s, ci.-s, so.-ha : 4, ci.-s : 1
2	10·5	15·3	SW : WSW	WSW : SSW : SSE	1·7	0·02	216	1, h : 1, h : 4, cu, th.-cl	7,cu,ci,th.-cl: 7,cu,ci.-cu,ci,so.-ha: 10
3	0·8	15·3	SSE : SE	SSE : S : SSW	2·9	0·15	257	9, r : 10, c.-r : 10, sc, c.-r	10, sc, fq.-r : 6, cu, ci.-cu,ci.-s: p.-cl
4	8·6	15·2	SSW : SW	SSW	12·3	1·45	507	p.-cl, w : 9,sc,cu,n,w,so.-ha	8, cu, n, oc.-shs : 3 : 0
5	8·7	15·2	SSW : SW	SW : WSW : NW	3·6	0·45	366	p.-cl : p.-cl : 7, cu, li.-cl	7, cu, n, hy.-shs, t : v, cu, shs.-r: 1, ci.-cu, hy.-d
6	11·0	15·1	SW : WSW	SW : SSW : S	1·0	0·01	217	0, hy.-d : 0 : 2,cu,n,th.-cl	9, cu, n : 4, th.-cl : 9
7	3·2	15·1	SE : SSE	S : SSW : SW	3·3	0·14	236	10, oc.-shs : 9,oc.-th.-r: 10, slt.-sh	9, cu, n : 9, cu, n : 9, l
8	5·3	15·0	SW : WSW	SW : WSW : SSW	0·9	0·00	217	10 : 10 : 9, cu	7, cu,so.-ha : 5, cu, ci : p.-cl, lu.-ha
9	0·5	15·0	SSW	SSW : WSW : SW	1·4	0·02	204	p.-cl : 10 : 10, li.-shs	10, oc.-shs : p.-cl : 9
10	9·3	14·9	SW : WSW	WSW : W : SW	3·4	0·25	328	10 : p.-cl : 6, cu, th.-cl	v, oc.-shs : 5, n, cu.-s : 1
11	10·1	14·8	WSW : W : WNW	NW : WNW : WSW	3·7	0·36	345	0, hy.-d : 1, th.-cl : 8, cu, li.-cl	9, cu : 5 : 1
12	5·3	14·8	WSW : W	W : WSW	1·2	0·03	226	0 : p.-cl, h : 8, cu, n	7,cu,ci.-cu : 5, cu : p.-cl
13	7·2	14·7	WSW : NW	WNW: Variable: NE	0·2	0·00	132	p.-cl, h : p.-cl : 8, cu, cu.-s, li.-cl,h	5, cu, cu.-s : 4,ci.-s, ci.-cu, li.-cl : p.-cl, h
14	10·8	14·7	NE : NNE : E	ESE : E	0·9	0·01	136	p.-cl, h : p.-cl : 2, cu, th.-cl,h	3, cu, th.-cl : 2 : 1, hy.-d
15	9·8	14·6	ENE : E	E : ENE	2·0	0·18	258	1, th.-cl, h: th.-cl, h : 3, ci, ci.-s, so.-ha	2,ci.-s,th.-cl,h: 3, ci, th.-cl : p.-cl
16	6·3	14·5	NE : ENE : E	E : ENE	8·0	0·33	314	9 : 9 : 8,cu,cu.-s,n,sq	7, cu, li.-cl : 4, ci, ci.-s, li.-cl: 1, th.-cl
17	10·9	14·5	NE : E	ESE : SE	0·9	0·02	168	th.-cl : 1, ci, ci.-s : 5, cu, th.-cl	4, ci, ci.-s, so.-ha: 2, ci, ci.-s : p.-cl, lu.-ha
18	1·2	14·4	SSE : SSW	SW : WSW	7·8	0·65	378	9 : 10 : 10, sc, oc.-slt.-r	8,cu,cu.-s,w: 10, sc, w : 9, fq.-th.-r
19	11·6	14·4	WSW : SW	W : WSW : SW	9·5	0·85	496	0 : 1, w : 7,cu,cu.-s,w	5,cu,cu.-s,w: 10 : 10
20	3·9	14·3	SW : SSW : WSW	WSW	7·3	0·35	325	10, r : 9 : 9,sc,n,li.-shs,w	8, cu, cu.-s, w : 9
21	8·9	14·3	WSW : SW	SW	1·8	0·15	279	p.-cl : 1, ci, cu : 4, cu, cu.-s, ci.-cu	8, cu, cu.-s,n: 9, cu, cu.-s,n: 10
22	6·6	14·2	SSW : W	WSW : SW : S	3·2	0·15	270	10 : 10, sc, oc.-th.-r : 6, n, cu, th.-cl	5,cu,ci, so.-ha: 8, ci, s, so.-ha, prh : 10, l, t, hy.-sh
23	8·0	14·1	SSW : SW : WSW	W : WSW	10·8	0·82	500	p.-cl : li.-cl : 8,cu,cu.-s,st.-w	9, n, cu, cu.-s, st.-w: 5,cu,cu.-s,w: 0
24	8·3	14·1	WSW : SW	SW : WSW : SE	0·6	0·00	177	0 : 1, li.-cl : 4,ci,ci.-s,cu	9, cu, n : 5, cu, ci.-cu, ci.-s, s: p.-cl, hy.-d
25	4·8	14·0	ENE : ESE : SSE	SE : E : ESE	2·0	0·11	191	8 : 9 : 7,cu,cu.-s,n	10, oc.-slt.-r : 10 : 10, sh.-r
26	6·8	13·9	SE : SSW	WSW : SW : SSW	2·3	0·17	259	10 : 4, li.-cl : 9,cu,n,sh.-r	5,cu.-s,ci,so.-ha: 6, cu.-s, ci : 9, oc.-slt.-r
27	2·4	13·9	SW : SSW : WSW	WSW : SW	2·9	0·25	315	9, hy.-sh : 10 : 9, cu, n, oc.-slt.-r	9, sc, cu, n, oc.-r, t.-sm : 9 : 10
28	2·3	13·8	SE : S : SW	WSW	4·5	0·30	318	p.-cl,oc.-r: 10, fq.-r : v, shs.-r, t, so.-ha	v, fq.-shs, t.-sm, so.-ha: 10, fq.-r : 10, sc, r, w
29	1·5	13·8	WSW : NW	NW : NNW	3·8	0·33	341	10, c.-r : 10,c.-r,gt.-glm: 10, fq.-th.-r	8, ci, ci.-s, cu, t.-sm: 10,oc.-slt.-r : 10, oc.-slt.-r
30	0·0	13·7	NNW	NNW : N	2·7	0·49	369	10 : 10 : 10, sc, slt.-sh	10, sc : 10, oc.-th.-r : 10 sc
31	3·8	13·6	N	N : SW	2·2	0·21	263	10 : 10 : 9,sc,cu,n,th.-cl	6, cu, th.-cl : 5,cu,th.-cl,d: p.-cl
Means	6·2	14·5	...	...	...	0·27	284		
Number of Column for Reference.	19	20	21	22	23	24	25	26	27

The mean *Temperature of Evaporation* for the month was 55°·9, being 1°·7 *lower* than
The mean *Temperature of the Dew Point* for the month was 52°·0, being 2°·2 *lower* than
The mean *Degree of Humidity* for the month was 74·2, being 2·6 *less* than
The mean *Elastic Force of Vapour* for the month was 0in·388, being 0in·033 *less* than
The mean *Weight of Vapour in a Cubic Foot of Air* for the month was 4grs·3, being 0gr·4 *less* than
The mean *Weight of a Cubic Foot of Air* for the month was 528 grains, being the same as
} 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 7·0.

The mean proportion of *Sunshine* for the month (constant sunshine being represented by 1) was 0·427. The maximum daily amount of *Sunshine* was 11·6 hours on August 19.

The highest reading of the *Solar Radiation Thermometer* was 145°·8 on August 2; and the lowest reading of the *Terrestrial Radiation Thermometer* was 33°·5 on August 2.

The mean daily distribution of *Ozone* for the 12 hours ending 9h was 3·4; for the 6 hours ending 15h was 2·6; and for the 6 hours ending 21h was 0·5.

The *Proportions of Wind* referred to the cardinal points were N. 4, E. 4, S. 11, and W. 12.

The *Greatest Pressure of the Wind* in the month was 12·3 lbs. on the square foot on August 4. The mean daily *Horizontal Movement of the Air* for the month was 284 miles; the greatest daily value was 507 miles on August 4; and the least daily value was 132 miles on August 13.

Rain fell on 13 days in the month, amounting to 2in·536, as measured by gauge No. 6 partly sunk below the ground; being 0in·186 *greater* than the average fall for the 50 years, 1841–1890.

MONTH and DAY, 1905.	Phases of the Moon.	BAROMETER. Mean of 24 Hourly Values (corrected and reduced to 32° Fahrenheit).	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.	Of the Dew Point. Deduced Mean Daily Value.	Difference between the Air Temperature and Dew Point Temperature. Mean.	Greatest.	Least.	Degree of Humidity (Saturation = 100).	TEMPERATURE. Of Radiation. Highest in Sun's Rays.	Lowest on the Grass.	Rain collected in Gauge No. 6, whose receiving surface is 5 inches above the Ground.	Daily Amount of Ozone.	Electricity.
		in.	°	°	°	°	°	°	°	°	°	°		°	°	in.		
Sept. 1	Perigee: In Equator	30·026	62·1	47·2	14·9	56·0	− 3·7	52·1	48·4	7·6	11·6	2·9	76	100·9	34·5	0·004	0·0	wwP
2	...	29·748	69·4	55·2	14·2	61·4	+ 1·7	57·6	54·3	7·1	12·6	1·5	78	101·2	53·4	0·022	0·8	... : wwP : wwP
3	...	29·698	75·1	57·2	17·9	64·7	+ 5·1	60·9	57·8	6·9	15·8	2·7	78	121·1	53·4	0·002	2·2	... : wwP
4	...	29·904	73·2	57·4	15·8	63·5	+ 4·1	60·3	57·6	5·9	10·4	2·1	81	121·2	53·9	0·000	2·0	... : wwP : wwP
5	...	29·801	71·7	56·0	15·7	62·3	+ 3·0	59·6	57·3	5·0	10·4	1·9	84	114·6	50·0	0·000	0·0	wwP
6	First Quarter	29·561	73·1	57·3	15·8	64·4	+ 5·3	62·0	60·0	4·4	9·5	2·1	86	111·0	50·5	0·132	9·0	wwP
7	Greatest Declination S.	29·453	66·0	53·8	12·2	59·0	+ 0·1	55·9	53·1	5·9	8·9	2·5	81	102·3	48·6	0·248	17·0	wwP : wwP, ssN : wP
8	...	29·643	67·1	52·3	14·8	58·2	− 0·5	53·0	48·3	9·9	17·5	3·8	70	121·0	47·2	0·000	7·8	wwP : wwP : wP
9	...	29·630	65·0	55·1	9·9	57·5	− 1·0	55·7	54·1	3·4	9·5	1·1	88	99·2	49·8	0·301	15·0	wP, wN : wP, wN : sN, wP
10	...	29·545	66·2	54·1	12·1	58·7	+ 0·4	53·5	48·9	9·8	17·5	2·1	70	119·0	51·0	0·038	5·2	wwP : wwP : wP
11	..	29·798	59·6	47·0	12·6	54·0	− 4·1	51·8	49·6	4·4	7·6	0·6	85	71·8	36·9	0·154	0·0	wwP : wP : wwP, wN
12	...	30·060	66·0	44·7	21·3	53·3	− 4·7	49·1	44·9	8·4	18·7	1·7	73	116·2	33·8	0·000	2·0	wwP : wP : wP
13	Full	30·103	68·6	43·1	25·5	55·7	− 2·2	51·5	47·5	8·2	14·0	2·1	75	123·6	32·0	0·130	4·0	wP : wP : wP, wN
14	...	30·085	62·6	45·6	17·0	54·2	− 3·6	49·5	44·9	9·3	16·5	2·5	70	111·2	35·4	0·000	0·0	wwP : mP : mP
15	In Equator	30·105	62·8	41·4	21·4	51·4	− 6·3	47·5	43·5	7·9	18·2	1·5	75	119·7	31·0	0·000	0·0	wP : mP : sP
16	...	30·081	64·0	43·7	20·3	53·8	− 3·7	50·0	46·3	7·5	15·4	1·6	75	104·0	33·3	0·000	0·0	wP : mP : mP
17	Apogee	30·158	65·3	45·1	20·2	55·7	− 1·6	51·4	47·3	8·4	16·9	1·7	74	124·8	32·5	0·000	1·0	wP
18	...	29·953	63·0	49·0	13·2	55·9	− 1·0	51·2	46·8	9·1	16·5	2·8	72	116·4	41·6	0·000	3·0	wP
19	...	29·775	64·0	48·2	15·8	55·3	− 1·2	51·4	47·7	7·6	14·8	3·4	76	93·6	40·2	0·000	0·0	wwP : mP : mP
20	...	29·972	62·1	43·6	18·5	54·2	− 1·9	50·7	47·3	6·9	13·1	1·9	77	97·2	33·2	0·000	0·0	wP : wP : mP
21	Last Quarter	30·037	64·0	43·1	20·9	53·2	− 2·5	49·8	46·4	6·8	12·7	2·3	78	117·0	34·4	0·000	2·5	wP
22	Greatest Declination N.	29·873	63·3	47·1	16·2	55·5	+ 0·1	52·5	49·7	5·8	14·0	1·8	81	115·0	35·1	0·013	4·5	wwP
23	...	29·666	56·7	49·8	6·9	54·2	− 1·0	50·5	46·9	7·3	11·7	2·2	76	77·2	44·7	0·000	0·0	wwP
24	...	29·521	58·3	47·3	11·0	53·0	− 2·1	48·2	43·4	9·6	13·9	4·6	70	99·0	41·0	0·026	0·0	wwP : wP : wP, wwN
25	..	29·519	56·0	49·7	6·3	53·0	− 2·0	51·8	50·6	2·4	5·4	1·6	92	65·7	49·0	0·419	0·0	wwP : wP : vP, vN
26	...	29·611	55·0	49·7	5·3	52·0	− 2·9	51·0	50·0	2·0	4·0	0·8	93	63·1	47·6	0·365	0·0	sN, wwP : wP, mN : wP, wN
27	...	29·545	57·9	49·7	8·2	52·8	− 2·1	51·7	50·6	2·2	6·6	1·0	93	76·8	42·1	0·188	2·0	... : wP, sN : wwP
28	New	29·564	63·0	47·9	15·1	54·8	0·0	52·2	49·7	5·1	13·3	1·0	83	116·9	40·4	0·000	6·0	wwP : wP
29	In Equator: Perigee	29·645	64·6	50·0	14·6	56·5	+ 1·9	53·8	51·3	5·2	12·6	2·0	83	109 6	44·6	0·269	0·0	wwP, vN : ... : ...
30	...	29·795	55·5	44·7	10·8	51·2	− 3·2	47·2	43·0	8·2	16·6	3·6	74	98·9	39 0	0·000	4·0	wwP : wP
Means	...	29·796	64·0	49·2	14·8	56·2	− 1·0	52·8	49·6	6·6	12·9	2·1	78·9	104·3	42·0	Sum 2·311	2·9	...
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·796, being 0in·010 *lower* than the average for the 50 years, 1841–1890.

TEMPERATURE OF THE AIR.

The highest in the month was 75°·1 on September 3; the lowest in the month was 41°·4 on September 15; and the range was 33°·7.
The mean of all the highest daily readings in the month was 64°·0, being 3°·3 *lower* than the average for the 50 years, 1841–1890.
The mean of all the lowest daily readings in the month was 49°·2, being 0°·1 *higher* than the average for the 50 years, 1841–1890.
The mean of the daily ranges was 14°·8, being 3°·4 *less* than the average for the 50 years, 1841–1890.
The mean for the month was 56°·2, being 1°·0 *lower* than the average for the 50 years, 1841–1890.

MONTH and DAY, 1905.	Daily Duration of Sunshine.	Sun above Horizon.	Wind as deduced from self-registering anemometers. Osler's. General Direction. A.M.	P.M.	Pressure on the Square Foot. Greatest.	Mean of 24 Hourly Measures.	Robinson's. Horizontal Movement of the Air.	Clouds and Weather. A.M.	P.M.
	hours.	hours.			lbs.	lbs.	miles.		
Sept. 1	0·5	13·6	WSW : W	WSW	1·4	0·13	297	9 : 10 : 7,cu,ci.-s.ci	10 : 8,cu.-s,th.-cl: p.-cl, li.-shs
2	1·7	13·5	SW : WNW	W : WSW	3·7	0·43	384	10, li.-shs : 10 : 10, sc, n	8, cu, ci : 8 : p.-cl
3	6·1	13·4	SW : WSW	W	11·0	0·76	489	10 : 10 : 6, s, n, cu	5,n,cu,ci,w : p.-cl, w
4	3·0	13·4	NW : W : WSW	SW	1·2	0·09	275	9 : p.-cl : 9,cu,cu.-s,n	9, cu.-s, n, th.-cl: 5, cu, cu.-s, ci.-s : p.-cl, hy.-d
5	4·6	13·3	SW : SSW	SW : SSW	2·6	0·15	259	10 : 10 : 9,fq.-th.-r	8, cu, cu.-s, th.-cl : p.-cl
6	2·1	13·2	SSW : Variable	SW	1·7	0·09	227	9 : 10, c.-r : 10, oc.-slt.-r	9, ci.-cu, cu, n, s: 8, ci, so.-ha : 8, ci.-cu
7	2·5	13·2	SW : SSW	SW	4·8	0·50	397	9,slt.-sh : p.-cl : 10, oc.-slt.-r	10,hy.-r,t.-sm: p.-cl : 0, hy.-d
8	10·9	13·1	SW : WSW	WSW : SW	9·4	0·90	504	0 : 1, cu : 6, cu, w	4, cu, cu.-s, w : p.-cl, lu.-ha
9	0·3	13·0	SW	SW : SSW : WSW	5·0	0·75	460	p.-cl : 10, sc, fq.-r, w	10, sc, fq.-r : 10, sc, fq.-r : 10
10	3·2	13·0	WSW : SW	W : WSW	10·2	0·76	451	10 : 10, r : 7,cu,n,oc.-slt.-r, w	7, cu, w : 10
11	0·0	12·9	SW : WSW	Variable : WSW	1·3	0·02	179	10 : 10	10, n, r : p.-cl, m
12	7·4	12·9	NW : WSW	W : NW : SW	1·0	0·02	181	9, m : 7, cu, cu.-s, th.-cl	5,cu,n,th.-cl: 3, cu, cu.-s : 0,hy.-d, m
13	7·9	12·8	SW	SW : WSW : Variable	1·1	0·04	207	0, d : 4, cu, ci.-s, ci	7, cu, cu.-s : 9, cu, cu.-s : 10, r
14	6·9	12·7	N	NNE : NE	0·6	0·01	166	9 : p.-cl : 3, cu, th.-cl	6,cu,ci.-s,so.-ha: 4, cu, ci, ci.-s: 1, h, d
15	8·1	12·7	NNE : N	N : WSW : SW	0·3	0·00	141	0, h, m, hy.-d: p.-cl : 4, cu, h	4, cu : 0, h : p.-cl, h, d
16	4·3	12·6	WSW : SW : N	N : NNE : Variable	0·2	0·00	146	10, slt.-sh : 10 : 5,cu,cu.-s,ci.-s	3, cu, th.-cl : 2, cu, th.-cl : p.-cl, hy.-d
17	10·0	12·5	Calm : NE : E	ESE : E	1·8	0·05	176	p.-cl, hy.-d : 0 : 1, cu	2, cu, th.-cl : 0, d : p.-cl, d
18	5·6	12·5	ENE	E : ENE : NE	4·1	0·37	333	p.-cl : 10 : 7, cu, ci.-s, so.-ha	5, cu, li.-cl, w : 6, cu, n : 9
19	1·4	12·4	NNE : N	N : NNE	1·3	0·04	185	9 : 10, h	8, cu, ci : p.-cl, so.-ha : 9, h
20	3·2	12·3	WSW : N	N : NNE	1·3	0·07	202	p.-cl, h, d: 2, li.-cl, d: 6, cu, th.-cl, so.-ha	9,cu,n,th.-cl: p.-cl : 1, s
21	6·2	12·3	N : NNE	NNE : NE	1·0	0·03	187	0, hy.-d : 0, h : 2, cu, th.-cl	3, cu, li.-cl : 9 : 2, d
22	0·9	12·2	NE : ENE : E	E : ENE	1·5	0·10	228	10, slt.-f : 10, oc.-slt.-r: 9, sc	9, n, cu.-s : 10 : 10
23	0·5	12·1	ENE : E	E : ENE	4·4	0·70	408	10 : 9 : 10, n	9, cu, n : p.-cl, s : 1, th.-cl
24	1·2	12·1	ENE : NE	NE : NNE	3·8	0·29	332	p.-cl : p.-cl : 7, cu, ci.-s, n	10, sc, n : 10, oc.-slt.-r : 10
25	0·0	12·0	N : NNE	N	2·4	0·28	296	10 : 10, h : 10, oc.-m.-r	10 : 10 : 10, fq.-r
26	0·0	12·0	N : NNE	NNE : Calm	2·6	0·08	181	10, oc.-r : 10 : 10, fq.-th.-r	10, sc, r : 10, m
27	0·0	11·9	Calm : E	E : ENE	0·1	0·00	116	10, m, oc.-shs : 10 : 10, sc	10, oc.-slt.-r : p.-cl, m : 4, th.-cl, m
28	3·6	11·8	E : NE : ENE	E : ENE : NE	1·5	0·08	226	p.-cl, 1m : 0, m : 5, cu, cu.-s, th.-cl	7, ci, ci.-s, ci.-cu, so.-ha. : p.-cl : 10, oc.-slt.-r
29	3·1	11·8	NNE : NE	NE : NNE	1·7	0·15	289	10 : 10, r : 10, fq.-th.-r	8, cu, ci.-s, th.-cl: p.-cl, d : 9
30	5·4	11·7	NNE : N	N : NNW	3·2	0·38	346	9 : p.-cl, h : 8, cu, n	7, n, cu, ci.-s, li.-cl: 5, cu, li.-cl : 2, th.-cl
Means	3·7	12·6	...	...	...	0·24	276		
Number of Column for Reference.	19	20	21	22	23	24	25	26	27

The mean *Temperature of Evaporation* for the month was 52°·8, being 1°·4 *lower* than
The mean *Temperature of the Dew Point* for the month was 49°·6, being 1°·8 *lower* than
The mean *Degree of Humidity* for the month was 78·9, being 1·9 *less* than
The mean *Elastic Force of Vapour* for the month was 0in·356, being 0in·023 *less* than
The mean *Weight of Vapour in a Cubic Foot of Air* for the month was 4grs·0, being 0gr·2 *less* than
The mean *Weight of a Cubic Foot of Air* for the month was 534 grains, being 1 grain *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 7·0.

The mean proportion of *Sunshine* for the month (constant sunshine being represented by 1) was 0·292. The maximum daily amount of *Sunshine* was 10·9 hours on September 8.

The highest reading of the *Solar Radiation Thermometer* was 124°·8 on September 17; and the lowest reading of the *Terrestrial Radiation Thermometer* was 31°·0 on September 15.

The mean daily distribution of *Ozone* for the 12 hours ending 9h was 1·3; for the 6 hours ending 15h was 1·1; and for the 6 hours ending 21h was 0·6.

The *Proportions of Wind* referred to the cardinal points were N. 10, E. 6, S. 5, and W. 8. One day was calm.

The *Greatest Pressure of the Wind* in the month was 11·0 lbs. on the square foot on September 3. The mean daily *Horizontal Movement of the Air* for the month was 276 miles; the greatest daily value was 504 miles on September 8; and the least daily value was 116 miles on September 27.

Rain fell on 13 days in the month, amounting to 2in·311, as measured by gauge No. 6 partly sunk below the ground; being 0in·060 *greater* than the average fall for the 50 years, 1841–1890.

MONTH and DAY, 1905.	Phases of the Moon.	BAROMETER. Mean of 24 Hourly Values (corrected and reduced to 32° Fahrenheit).	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.	Of the Dew Point. Deduced Mean Daily Value.	Difference between the Air Temperature and Dew Point Temperature. Mean.	Greatest.	Least.	Degree of Humidity (Saturation = 100).	TEMPERATURE. Of Radiation. Highest in Sun's Rays.	Lowest on the Grass.	Rain collected in Gauge No. 6, whose receiving surface is 5 inches above the Ground.	Daily Amount of Ozone.	Electricity.
		in.	°	°	°	°	°	°	°	°	°	°		°	°	in.		
Oct. 1	...	29·738	55·4	39·5	15·9	48·8	− 5·3	45·8	42·6	6·2	9·2	2·8	80	76·8	33·7	0·007	0·0	wwP
2	...	29·653	54·5	46·4	8·1	50·1	− 3·7	46·9	43·5	6·6	12·8	2·6	79	82·0	40·2	0·017	0·0	wwP : wP : wP
3	...	29·738	55·4	42·7	12·7	49·3	− 4·2	44·9	40·2	9·1	15·4	3·1	71	92·0	37·0	0·004	1·0	wP : mP : mP
4	...	29·315	57·2	49·5	7·7	53·7	+ 0·5	50·5	47·4	6·3	10·2	2·0	79	90·4	44·7	0·114	3·0	wwP : wwP, wwN : wP
5	Greatest Declination S. : First Quarter	29·441	55·3	44·0	11·3	50·6	− 2·4	45·8	40·8	9·8	15·8	6·3	70	84·3	38·7	0·000	0·0	wP : mP : mP
6	...	29·967	51·5	38·9	12·6	44·4	− 8·3	39·2	33·1	11·3	17·2	7·6	64	92·4	29·8	0·000	4·0	wP : sP : sP
7	...	30·096	54·8	39·1	15·7	47·8	− 4·7	44·9	41·8	6·0	11·2	1·5	81	85·0	29·8	0·016	0·0	vP : mP : mP
8	...	30·155	52·7	39·5	13·2	47·5	− 4·6	45·8	43·9	3·6	9·6	2·1	89	68·0	30·0	0·004	0·0	wP
9	...	30·217	59·6	39·6	20·0	52·7	+ 1·0	50·8	48·9	3·8	7·6	2·4	87	73·5	30·1	0·006	0·0	wP
10	...	30·244	55·7	49·3	6·4	53·2	+ 1·9	50·2	47·2	6·0	9·9	4·0	80	63·0	45·4	0·001	0·0	wwP : wP : wP
11	...	30·253	58·7	47·1	11·6	50·6	− 0·4	48·0	45·3	5·3	11·4	2·5	82	100·6	41·4	0·002	0·0	wP
12	In Equator	30·109	52·5	48·3	4·2	50·4	− 0·2	48·3	46·1	4·3	7·0	2·5	86	52·5	46·5	0·000	0·5	wP
13	Full	29·895	55·0	38·6	16·4	48·1	− 2·2	45·1	41·8	6·3	12·2	1·8	79	61·6	32·0	0·032	1·5	wwP : wP : mP
14	Apogee	29·916	50·0	36·3	13·7	43·3	− 6·8	38·2	32·1	11·2	16·2	6·1	64	77·0	29·0	0·000	1·0	mP : sP : mP
15	...	29·454	56·0	41·1	14·9	50·3	+ 0·4	46·9	43·3	7·0	9·6	2·5	78	62·0	37·7	0·115	3·0	wwP : wP : vP, wN
16	...	29·730	48·6	28·3	20·3	40·2	− 9·6	36·8	32·4	7·8	16·0	3·2	74	85·2	18·3	0·000	0·0	mP : sP : vP
17	...	29·910	47·0	26·1	20·9	38·3	−11·3	34·8	30·1	8·2	16·5	3·1	72	66·9	17·0	0·000	0·0	mP : sP : sP
18	...	29·903	52·2	33·8	18·4	41·7	− 7·8	38·3	34·1	7·6	15·8	1·4	76	84·3	23·8	0·000	0·0	mP : vP : vP
19	Greatest Declination N.	29·985	50·4	36·4	14·0	42·4	− 6·9	39·2	35·3	7·1	17·4	1·6	77	96·9	25·6	0·000	0·0	wP : mP : sP
20	...	30·082	49·0	30·3	18·7	38·9	−10·1	36·2	32·6	6·3	14·5	2·8	79	87·2	20·1	0·000	0·0	mP : sP : vP
21	Last Quarter	29·892	47·1	29·7	17·4	38·2	−10·6	36·0	33·0	5·2	10·5	2·6	82	59·0	21·8	0·008	2·0	mP : sP, ssN : mP
22	...	29·859	47·8	28·1	19·7	39·0	− 9·5	36·7	33·7	5·3	12·4	2·9	82	82·6	18·5	0·019	0·0	mP : mP, ssN : wP, wwN
23	...	29·987	49·7	35·2	14·5	41·4	− 6·8	39·6	37·3	4·1	12·2	1·2	86	79·3	27·3	0·012	0·0	wwP : mP : vP
24	...	30·016	44·9	35·3	9·6	40·7	− 7·2	39·5	38·0	2·7	8·1	0·7	90	52·0	28·1	0·003	0·0	mP : sP : sP
25	...	30·075	44·7	33·7	11·0	39·1	− 8·5	37·8	36·1	3·0	7·7	0·0	90	64·6	24·6	0·000	0·0	wP : mP : sP
26	In Equator	30·103	48·0	26·5	21·5	40·3	− 7·1	37·4	33·7	6·6	11·1	1·6	77	65·6	19·6	0·008	0·0	sP : mP
27	...	30·012	53·7	39·3	14·4	48·2	+ 0·9	44·5	40·5	7·7	16·2	3·4	75	76·7	28·6	0·006	0·0	wN, wP : sP : mP
28	Perigee: New	29·942	53·2	32·7	20·5	44·4	− 2·8	41·5	38·1	6·3	13·6	1·4	78	80·9	24·0	0·000	0·0	mP
29	...	29·447	56·4	44·8	11·6	50·4	+ 3·4	47·7	44·9	5·5	12·0	1·0	82	94·8	38·2	0·260	1·5	wwP, wwN : wP : wN, wP
30	...	29·148	53·7	42·9	10·8	48·3	+ 1·3	46·3	44·1	4·2	7·4	1·5	86	69·3	35·0	0·259	4·5	wwP, wwN : vP, vN : wP, vN
31	...	29·102	54·2	40·1	14·1	47·0	+ 0·2	44·1	40·8	6·2	11·6	2·0	80	82·6	32·2	0·013	0·5	wwP : ... : ...
Means	...	29·851	52·4	38·2	14·3	45·8	− 4·2	42·8	39·4	6·3	12·2	2·6	79·2	77·1	30·6	Sum 0·906	0·7	...
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^{in}·851, being 0^{in}·135 *higher* than the average for the 50 years, 1841–1890.

TEMPERATURE OF THE AIR.

The highest in the month was 59°·6 on October 9; the lowest in the month was 26°·1 on October 17; and the range was 33°·5.
The mean of all the highest daily readings in the month was 52°·4, being 5°·3 *lower* than the average for the 50 years, 1841–1890.
The mean of all the lowest daily readings in the month was 38°·2, being 5°·1 *lower* than the average for the 50 years, 1841–1890.
The mean of the daily ranges was 14°·3, being 0°·1 *less* than the average for the 50 years, 1841–1890.
The mean for the month was 45°·8, being 4°·2 *lower* than the average for the 50 years, 1841–1890.

MONTH and DAY, 1905.	Daily Duration of Sunshine.	Sun above Horizon.	Wind as deduced from Self-Registering Anemometers. Osler's. General Direction. A.M.	General Direction. P.M.	Pressure on the Square Foot. Greatest.	Pressure on the Square Foot. Mean of 24 Hourly Measures.	Robinson's. Horizontal Movement of the Air.	Clouds and Weather. A.M.	Clouds and Weather. P.M.
	hours.	hours.			lbs.	lbs.	miles.		
Oct. 1	0·2	11·6	WSW : W	W : WNW : NW	2·2	0·18	311	p.-cl : 9	10, oc.-slt.-r : 10 : 10
2	0·7	11·6	NNW : NW	NW	2·6	0·27	330	10 : 9 : 9, sc, cu, cu.-s, slt.-sh	9, n, cu.-s : 10, n, slt.-sh : 10
3	5·4	11·5	NNW : N	W : SW	1·1	0·07	241	p.-cl : p.-cl : 6, ci, ci.-cu, ci.-s	5, ci, ci.-s, th.-cl: 10 : 10, oc.-th.-r
4	2·4	11·4	SW : WSW	W : WSW	7·8	1·14	606	10 : 10, w : 10, sc, oc.-slt.-r, w	p.-cl, hy.-sh, w : 3, th.-cl, w : p.-cl, w
5	2·9	11·4	WSW : W : NW	NNW	6·2	0·84	500	p.-cl, w : 1, w : 5, cu, w	9 : 9 : 0
6	7·2	11·3	NNW	NNW : N : NW	2·9	0·43	370	0 : 0, h : 1, cu	3, cu, cu.-s : 2, cu, th.-cl: 0
7	0·6	11·2	WSW : W : NW	NW : WNW : WSW	1·7	0·09	256	p.-cl, oc.-slt.-r : 10 : 8, cu, cu.-s, lt.-cl, so.-ha	10 : 6, ci, ci.-cu, th.-cl: 9
8	0·0	11·1	WSW : NNW : NE	N	1·0	0·02	177	10 : 10, oc.-th.-r: 10	10 : 8, ci, ci.-s, lu.-co: p.-cl
9	0·0	11·1	SSW : WSW : W	NNW : N	0·9	0·04	233	10 : 10	10 : 10, oc.-slt.-r : 10
10	0·0	11·0	N : NNE	N : NNE	2·2	0·26	296	10 : 10	10, n : 10, oc.-th.-r : 9
11	1·1	11·0	N : NNE	N	1·3	0·13	245	10 : 10 : 9, cu, n, cu.-s, cl.-s	9 : 10, oc.-th.-r : 10
12	0·0	10·9	N : NNW	NW : WNW : W	1·2	0·06	221	10 : 10	10, glm : 10, oc.-m.-r : 10
13	0·0	10·8	WSW : WNW : N	N	2·7	0·42	368	10, oc.-slt.-r: 10, slt.-r : 10, glm	9, n : 3, ci : p.-cl, lu.-ha, lu.-co
14	5·5	10·8	NNW : NW	WNW : WSW	3·5	0·45	408	th. cl : 1, th.-cl, so.-ha: 3, ci, th.-cl, so.-ha	4, ci, ci.-cu, ci.-s: 8, ci, ci.-s, cu : 9
15	0·0	10·7	WSW	W : N : NNW	5·9	0·86	502	10 : 10 : 10, w	10, w : 10, fq.-r, : 9
16	8·6	10·6	N	N : SW	2·2	0·20	240	9 : 3 : 2, cu, th.-cl	1, th.-cl : 1 : 0, ho.-fr, f
17	3·8	10·6	SW : WSW : NW	WNW : NW : WSW	1·1	0·03	212	0, ho.-fr, f: 0, ho.-fr, slt.-f· 1, li.-cl, h	4, cu, th.-cl : 0, h : p.-cl
18	7·4	10·5	SW : WSW	WSW : ENE	0·2	0·00	197	9 : 4 : 5, li.-cl	3, th.-cl : 0, h : p.-cl, h, ho.-fr
19	8·1	10·5	NE	NE : NNE	3·5	0·30	326	9 : p.-cl : 2, cu, li.-cl	3, cu, th.-cl : 1, cu, th.-cl : 0, d
20	6·5	10·4	NNE : NE : N	NNE : N : WSW	1·1	0·04	172	p.-cl, ho.-fr : 1, h, ho.-fr: 2, cu	3, cu, th.-cl : 0, f, ho.-fr
21	0·2	10·3	WSW : WNW	NW : N	3·2	0·05	214	p.-cl, f, ho.-fr : 9	9, cu, n, oc.-shs : p.-cl, oc.-shs: 0
22	3·5	10·3	NNW : W : WSW	NNW : N	5·9	0·22	265	0, h, ho.-fr: 1, h : 1, th.-cl	p.-cl, oc.-r, sq: p.-cl, oc.-shs: p.-cl
23	5·2	10·2	N	N	1·8	0·05	199	0, ho.-fr : 0, h : 4, ci, cu, th.-cl	4, cu.-s, n, th.-cl: 9, oc.-shs : 9
24	0·0	10·1	N	N : NNE	0·9	0·00	151	10 : 10, glm : 10	10 : 10, slt.-sh : p.-cl, slt.-f
25	0·9	10·1	N	N : NNE	1·0	0·01	145	10, slt.-f : 10, slt.-f : 9	6, cu, th.-cl : 9 : 1, li.-cl, slt.-f
26	0·8	10·0	Variable : S : WSW	SW	2·4	0·14	227	0, f, ho.-fr: 0, f, ho.-fr: 7, cl, ci.-cu, th.-cl, so.-ha	9 : 10 : 10, oc.-slt.-r
27	3·7	10·0	WSW : WNW : NNW	NW : WSW	2·4	0·19	301	10, oc.-slt.-r : 10 : 6, cl, ci.-cu, li.-cl, so.-ha	2, ci, th.-cl : 0
28	4·3	9·9	WSW	SW : SSW : S	1·1	0·04	219	0, ho.-fr : 0, slt.-f : 4, th.-cl	9, cu, cu.-s, n: 9, cu, cu.-s, n: 9, slt.-sh
29	4·5	9·8	SSW : WSW	SW	12·0	0·30	339	9 : 10, hy.-r : 8, oc.-r, so.-ha	8 : 9, oc.-r, sq : 0
30	0·7	9·8	S : SSW : SW	SW : SSW	4·5	0·32	351	0 : 9, oc.-slt.-r: 9, hy.-shs	9, oc.-r, so.-ha: p.-cl : 10, oc.-slt.-r
31	5·9	9·7	SW : WSW	WSW : SW	4·2	0·49	410	p.-cl, oc.-slt.-r : 0 : 3, ci, cl.-s, cu, so.-ha	4, cu, ci, ci.-s, li.-sh: 5, cu, cu.-s, ci.-s, oc.-shs : 0, d
Means	2·9	10·7	...	...	...	0·25	291		
Number of Column for Reference.	19	20	21	22	23	24	25	26	27

The mean *Temperature of Evaporation* for the month was 42°·8, being 5°·2 *lower* than
The mean *Temperature of the Dew Point* for the month was 39°·4, being 6°·5 *lower* than
The mean *Degree of Humidity* for the month was 79·2, being 6·4 *less* than
The mean *Elastic Force of Vapour* for the month was 0in·241, being 0in·068 *less* than
The mean *Weight of Vapour in a Cubic Foot of Air* for the month was 2grs·8, being 0gr·7 *less* than
The mean *Weight of a Cubic Foot of Air* for the month was 547 grains, being 8 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 6·3.

The mean proportion of *Sunshine* for the month (constant sunshine being represented by 1) was 0·273. The maximum daily amount of *Sunshine* was 8·6 hours on October 16.

The highest reading of the *Solar Radiation Thermometer* was 100°·6 on October 11; and the lowest reading of the *Terrestrial Radiation Thermometer* was 17°·0 on October 17.

The mean daily distribution of *Ozone* for the 12 hours ending 9h was 0·5; for the 6 hours ending 15h was 0·2; and for the 6 hours ending 21h was 0·0.

The *Proportions of Wind* referred to the cardinal points were N. 14, E. 1, S. 4, and W. 12.

The *Greatest Pressure of the Wind* in the month was 12·0 lbs. on the square foot on October 29. The mean daily *Horizontal Movement of the Air* for the month was 291 miles; the greatest daily value was 606 miles on October 4; and the least daily value was 145 miles on October 25.

Rain fell on 15 days in the month, amounting to 0in·906, as measured by gauge No. 6 partly sunk below the ground; being 1in·905 *less* than the average fall for the 50 years, 1841–1890.

MONTH and DAY, 1905.	Phases of the Moon.	BAROMETER. Mean of 24 Hourly Values (corrected and reduced to 32° Fahrenheit).	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.	Of the Dew Point. Deduced Mean Daily Value.	Difference between the Air Temperature and Dew Point Temperature. Mean.	Greatest.	Least.	Degree of Humidity (Saturation = 100).	TEMPERATURE. Of Radiation. Highest in Sun's Rays.	Lowest on the Grass.	Rain collected in Gauge No. 6, whose receiving surface is 5 inches above the Ground.	Daily Amount of Ozone.	Electricity.
		in.	°	°	°	°	°	°	°	°	°	°		°	°	in.		
Nov. 1	Greatest Declination S.	29·018	52·0	39·7	12·3	47·9	+ 1·2	46·4	44·7	3·2	5·7	1·5	89	66·7	31·5	0·328	14·3	… : … : wN, wwP
2	…	29·108	53·7	41·5	12·2	47·4	+ 0·9	45·7	43·8	3·6	8·4	1·5	88	76·0	34·6	0·236	5·7	wwN, wwP : wP, wN
3	…	29·459	54·8	39·4	15·4	46·4	+ 0·1	44·5	42·4	4·0	8·6	0·7	87	87·1	29·1	0·243	2·5	wwP, wwN : wP, vN
4	First Quarter	29·566	51·8	39·2	12·6	46·3	+ 0·2	45·1	43·8	2·5	7·0	1·1	92	73·0	29·0	0·261	0·0	wP, wN : wP : wP, wwN
5	…	29·181	52·1	40·5	11·6	45·9	0·0	44·9	43·8	2·1	4·1	0·6	93	63·4	34·5	0·153	0·0	wwP : wwP, wwN : wP
6	…	29·295	52·3	37·1	15·2	43·3	− 2·2	41·3	38·9	4·4	9·7	1·1	84	83·0	26·6	0·000	3·0	wwP : wP : wP
7	…	29·542	51·0	30·4	20·6	40·1	− 5·0	38·6	36·7	3·4	10·1	0·2	88	82·0	23·1	0·000	0·0	wP
8	In Equator	29·780	46·2	28·2	18·0	39·8	− 4·8	38·9	37·7	2·1	6·5	0·7	93	66·8	19·1	0·016	0·0	wP
9	…	29·914	45·0	35·6	9·4	42·4	− 1·6	41·3	40·0	2·4	4·2	0·7	91	50·2	26·8	0·000	0·0	wP : mP
10	Apogee	29·859	51·7	35·3	16·4	44·0	+ 0·4	42·6	40·9	3·1	10·9	0·7	89	81·4	29·8	0·020	11·3	wP
11	…	29·265	53·0	45·6	7·4	48·7	+ 5·5	47·6	46·4	2·3	4·2	1·3	92	54·0	43·5	0·464	6·7	… : wwP
12	Full	29·120	50·5	42·3	8·2	46·2	+ 3·3	44·0	41·5	4·7	8·0	1·8	85	64·7	38·6	0·231	0·0	wwP, wwN : wP : wP, wwN
13	…	28·854	48·1	41·1	7·0	43·6	+ 0·8	42·4	41·0	2·6	4·2	1·3	90	59·0	39·0	0·210	0·0	wwP, wwN : wwP, wwN : wwP
14	…	29·251	43·6	39·1	4·5	42·1	− 0·5	40·4	38·3	3·8	5·4	2·2	87	50·2	35·3	0·084	0·0	wwP : wP, wwN : wP, vN
15	…	29·492	44·1	33·6	10·5	38·8	− 3·7	36·8	34·1	4·7	8·6	2·1	85	75·3	25·7	0·113	0·0	wwP, wN : wP, mN : mP
16	Greatest Declination N.	29·676	39·8	32·6	7·2	36·3	− 6·1	34·1	30·9	5·4	7·8	2·3	81	48·0	23·0	0·012	0·0	wP : mP : mP
17	…	29·917	36·8	30·2	6·6	34·4	− 7·9	33·1	30·9	3·5	6·0	1·3	86	41·7	25·0	0·000	0·0	mP
18	…	29·990	36·7	31·0	5·7	34·2	− 8·0	33·5	32·3	1·9	3·6	0·9	93	46·3	26·0	0·000	0·0	wP : mP : mP
19	…	29·600	40·0	34·8	5·2	36·9	− 5·3	34·1	30·1	6·8	9·2	4·0	77	53·8	31·4	0·000	0·0	wP : mP : mP
20	Last Quarter	29·771	41·8	26·9	14·9	35·5	− 6·6	33·4	30·1	5·4	9·7	3·4	81	60·8	17·8	0·000	3·0	mP : ssP : sP
21	…	29·999	35·9	23·2	12·7	29·2	−12·9	28·3	25·2	4·0	6·5	1·2	85	42·0	15·3	0·000	0·0	mP : sP : sP
22	In Equator	29·952	46·7	23·1	23·6	37·7	− 4·5	35·9	33·5	4·2	12·3	3·3	85	65·7	13·2	0·000	2·5	mP : mP : vP
23	…	29·534	51·6	40·4	11·2	47·4	+ 5·3	45·9	44·2	3·2	4·8	1·3	90	53·0	34·1	0·153	4·5	wwP : wwN, wP : wP
24	…	29·643	47·6	35·9	11·7	41·1	− 1·0	38·9	36·2	4·9	10·1	1·8	83	64·1	26·1	0·000	0·0	wP : mP : mP
25	Perigee	29·587	47·3	31·7	15·6	40·9	− 1·1	39·8	38·5	2·4	5·9	1·2	91	61·0	19·0	0·017	3·0	mP : wP
26	New	29·049	54·9	45·4	9·5	50·2	+ 8·3	48·1	45·9	4·3	8·2	0·8	86	60·0	40·7	0·305	13·0	wwP : wwP, wwN : wwN, wwP
27	…	29·406	47·6	39·4	8·2	43·0	+ 1·4	38·4	32·9	10·1	13·0	4·8	67	63·0	33·7	0·000	5·2	wwP : wP : mP
28	…	29·356	47·9	38·9	9·0	43·9	+ 2·6	42·0	39·7	4·2	7·5	1·3	85	51·9	32·3	0·061	5·8	wP, wN : wwP, wN : wP
29	Greatest Declination S.	29·672	46·0	29·3	16·7	42·6	+ 1·6	41·5	40·2	2·4	5·7	0·7	91	48·0	20·8	0·027	0·0	wwP, wwN : wP : mP
30	…	29·884	45·0	27·5	17·5	39·4	− 1·3	38·5	37·3	2·1	6·8	0·8	93	47·1	19·1	0·191	0·0	mP : wP
Means	…	29·525	47·2	35·3	11·9	41·9	− 1·4	40·2	38·1	3·8	7·4	1·6	86·9	61·3	28·1	Sum 3·125	2·7	…
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 $29^{in}\cdot525$, being $0^{in}\cdot219$ *lower* than the average for the 50 years, 1841–1890.

TEMPERATURE OF THE AIR.

The highest in the month was 54°·9 on November 26; the lowest in the month was 23°·1 on November 22; and the range was 31°·8.
The mean of all the highest daily readings in the month was 47°·2, being 1°·6 *lower* than the average for the 50 years, 1841–1890.
The mean of all the lowest daily readings in the month was 35°·3, being 2°·3 *lower* than the average for the 50 years, 1841–1890.
The mean of the daily ranges was 11°·9, being 0°·6 *greater* than the average for the 50 years, 1841–1890.
The mean for the month was 41°·9, being 1°·4 *lower* than the average for the 50 years, 1841–1890.

MONTH and DAY, 1905.	Daily Duration of Sunshine.	Sun above Horizon.	WIND AS DEDUCED FROM SELF-REGISTERING ANEMOMETERS. OSLER'S. General Direction. A.M.	General Direction. P.M.	Pressure on the Square Foot. Greatest.	Pressure on the Square Foot. Mean of 24 Hourly Measures.	ROBINSON'S. Horizontal Movement of the Air.	CLOUDS AND WEATHER. A.M.	CLOUDS AND WEATHER. P.M.
	hours.	hours.			lbs.	lbs.	miles.		
Nov. 1	0·0	9·6	S : SE	SE : S	4·7	0·43	336	p.-cl : 10, sh.-r : 10, sc, oc.-r	10, sc, oc.-r : 10, r, w : 10, shs.-r, w
2	0·2	9·6	SSW	S : SE	9·0	0·46	302	9, oc.-r, w : 9, oc.-slt.-r : 10, slt.-sh	10, n, slt.-r : p.-cl, oc.-slt.-r : 10, oc.-slt.-r
3	2·6	9·5	SE : SSE	S : SSW : SSE	0·7	0·01	189	9, sh.-r : p.-cl, n, oc.-r	p.-cl : 3, cu, th.-cl : p.-cl, shs.-r
4	1·6	9·4	SSE	ESE : E : ENE	1·5	0·02	184	vv, shs.-r : p.-cl : 7, ci, ci.-s, cu.-s, so.-ha	9, ci, ci.-s, so.-ha : 10, oc.-r : 10, slt.-r
5	0·2	9·4	ENE : SW	SSW : SW	1·1	0·02	172	10, oc.-slt.-r : 10 : 9	v, oc.-slt.-r : p.-cl, lu.-ha : 1, th.-cl, h
6	7·4	9·3	SW : WSW	SW : SSW	1·7	0·07	250	1, th.-cl, h : 1 : 1, ci, cu	3, cu, th.-cl : 0, m
7	4·5	9·3	SSW : Calm	WSW : SSW	0·0	0·00	122	0, slt.-f : 0, tk.-f : 1, ci, ci.-s, slt.-f	2, ci.-s : 0, slt.-f : 0, slt.-f, ho.-fr
8	1·6	9·2	WSW	SW : WSW	0·0	0·00	139	0, slt.-f, ho.-fr : 0, slt.-f : 3, ci.-cu, cu.-s, slt.-f	p.-cl, sh.-r, slt.-f : 10, f : 9, slt.-f, lu.-ha
9	0·0	9·2	WSW : NNW : N	Variable : S : SE	0·0	0·00	102	10, slt.-f : 10 slt.-f	10, f : p.-cl, f : 9, f
10	3·2	9·1	SE	S : SSE	1·7	0·08	191	10, f : 10 : 6, ci, cu	7, oc.-slt.-r, so.-ha : 10, oc.-slt.-r : 10, oc.-slt.-r
11	0·0	9·1	S	SSW : S : NW	6·7	0·49	329	10, oc.-slt.-r : 10, fq.-r, w	10, oc.-r : 10, c.-r
12	3·5	9·0	NW : WSW : W	W : SW : SE	1·7	0·13	290	10, r : p.-cl : 6, cu, li.-cl	9 : 9 : 10, r
13	0·0	9·0	SE : E : NE	NE : NNE	3·0	0·41	362	10, r : 10, oc.-slt.-r	10, fq.-r : 10, oc.-slt.-r
14	0·0	8·9	N : NNE	NNE : NE	1·8	0·22	322	10 : 10, oc.-slt.-r	10, sc, oc.-r : 10 : 10, sh.-r
15	4·3	8·9	NE : ENE	NE : NNE : N	4·0	0·53	426	10, r : p.-cl : 1, cu, cu.-s	p.-cl, oc.-slt.-r, sn : v : p.-cl, a, lu.-co
16	1·5	8·8	N	N : NNW	1·7	0·18	264	p.-cl, lu.-ha : 1, li.-cl, ho.-fr : 8, cu.-s, n, oc.-sn	9, n, cu.-s, cu : 9 : 10
17	0·0	8·8	NNW : N	N : SE	0·7	0·02	134	10 : 10	10, glm : 10 : p.-cl, f
18	0·0	8·7	E	E : ENE : NE	1·2	0·08	221	10, slt.-f : 10, slt.-f : 10	9, glm : 10 : 10
19	0·0	8·6	NE	NE : NNE : N	2·7	0·40	398	10 : 10	10 : p.-cl : 9
20	4·9	8·6	N	N : NNE	1·2	0·07	176	9 : p.-cl, slt.-f : 4, ci.-cu, th.-cl	1, ci.-cu : 0, slt.-f, ho.-fr : 0, slt.-f, fr
21	1·7	8·6	Variable	Variable : S : SW	0·0	0·00	111	0, slt.-f, fr : 0, f	0, tk.-f : 0, f, ho.-fr
22	4·9	8·5	SW : SSW	SSW	3·7	0·28	311	0, slt.-f, ho.-fr : p.-cl, ho.-fr : 1, ci	2, ci, ci.-cu, ci.-s : p.-cl : 10, w
23	0·0	8·5	SSW : SW	W	4·7	0·72	460	10, slt.-r, w : 10, sc, c.-r	10 : 10 : 0, h
24	6·4	8·4	WSW	WSW	1·7	0·12	331	0, ho.-fr : 0	1, cu : 0 : 0
25	0·0	8·4	SW : SSW : S	SSW : S	3·7	0·25	287	0 : 0, slt.-f, ho.-fr : 8, ci, ci.-s, slt.-f, so.-ha	10 : 10, th.-r, w
26	0·1	8·3	SSW : WSW : SW	SW : SSW	12·8	1·42	645	10, slt.-r : 10, sc, w : 10, sc, oc.-th.-r, w	p.-cl, hy.-sh, w : 10, oc.-r, st.-w : 9, oc.-th.-r, g
27	5·2	8·3	WSW : W	WSW : SW	12·7	1·38	719	9, g : 0, w : 1, cu, w	4, cu, cu.-s, w : 5, cu, li.-cl : 9, th.-cl
28	0·3	8·2	SW : SSW	S : Variable	3·8	0·34	340	9 : p.-cl : 8, ci.-s, cu.-s, n, so.-ha	p.-cl, oc.-th.-r : 10, th.-r : 10, slt.-f
29	0·5	8·2	ENE : NNE : NE	ENE : E	1·7	0·10	259	10, th.-r : 10, oc.-slt.-r : 10, oc.-slt.-r	7, cu, ci : 3, li.-cl : 0, slt.-f, ho.-fr
30	0·0	8·1	SE : SSE : S	SSW : S	1·8	0·04	175	0, slt.-f, ho.-fr : 0 : 9, n	10 : 10, fq.-r : 10, m.-r
Means	1·8	8·8	...	...	...	0·28	285		
Number of Column for Reference.	19	20	21	22	23	24	25	26	27

The mean *Temperature of Evaporation* for the month was 40°·2, being 1°·4 *lower* than
The mean *Temperature of the Dew Point* for the month was 38°·1, being 1°·6 *lower* than
The mean *Degree of Humidity* for the month was 86·9, being 0·6 *less* than
The mean *Elastic Force of Vapour* for the month was 0in·230, being 0in·014 *less* than
The mean *Weight of Vapour in a Cubic Foot of Air* for the month was 2grs·7, being 0gr·1 *less* than
The mean *Weight of a Cubic Foot of Air* for the month was 545 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 6·9.

The mean proportion of *Sunshine* for the month (constant sunshine being represented by 1) was 0·206. The maximum daily amount of *Sunshine* was 7·4 hours on November 6.

The highest reading of the *Solar Radiation Thermometer* was 87°·1 on November 3; and the lowest reading of the *Terrestrial Radiation Thermometer* was 13°·2 on November 22.

The mean daily distribution of *Ozone* for the 12 hours ending 9h was 1·3; for the 6 hours ending 15h was 1·0; and for the 6 hours ending 21h was 0·4.

The *Proportions of Wind* referred to the cardinal points were N. 6, E. 5, S. 11, and W. 7. One day was calm.

The *Greatest Pressure of the Wind* in the month was 12·8 lbs. on the square foot on November 26. The mean daily *Horizontal Movement of the Air* for the month was 285 miles; the greatest daily value was 719 miles on November 27; and the least daily value was 102 miles on November 9.

Rain fell on 18 days in the month, amounting to 3in·125, as measured by gauge No. 6 partly sunk below the ground; being 0in·859 *greater* than the average fall for the 50 years, 1841–1890.

MONTH and DAY, 1905.	Phases of the Moon.	BAROMETER. Mean of 24 Hourly Values (corrected and reduced to 32° Fahrenheit).	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.	Of the Dew Point. Deduced Mean Daily Value.	Difference between the Air Temperature and Dew Point Temperature. Mean.	Greatest.	Least.	Degree of Humidity (Saturation = 100).	TEMPERATURE. Of Radiation. Highest in Sun's Rays.	Lowest on the Grass.	Rain collected in Gauge No. 6, whose receiving surface is 5 inches above the Ground.	Daily Amount of Ozone.	Electricity.
		in.	°	°	°	°	°	°	°	°	°	°		°	°	in.		
Dec. 1	...	30·070	44·8	39·6	5·2	42·8	+ 2·2	41·8	40·6	2·2	3·5	0·7	92	46·2	39·0	0·025	0·0	wP
2	...	30·245	47·0	30·9	16·1	40·7	+ 0·1	40·1	39·4	1·3	4·4	0·2	95	63·0	23·4	0·007	0·0	wP
3	First Quarter	30·241	40·3	30·1	10·2	37·4	− 3·4	36·9	36·2	1·2	3·7	0·3	96	47·7	23·0	0·000	0·0	wwP : wP : wP
4	...	30·103	38·6	35·9	2·7	37·1	− 4·0	36·6	35·9	1·2	2·6	0·7	96	38·6	35·8	0·000	2·0	wwP : wP : mP
5	...	29·818	47·5	38·6	8·9	41·7	+ 0·4	40·7	39·5	2·2	5·1	1·5	93	47·5	38·1	0·088	3·0	wP : wP : wwP
6	In Equator	29·674	51·0	40·6	10·4	45·9	+ 4·6	43·8	41·4	4·5	7·8	0·8	85	60·6	35·9	0·041	3·0	wP
7	Apogee	29·768	57·3	50·4	6·9	53·2	+12·2	51·1	49·0	4·2	6·3	2·0	85	71·0	47·0	0·000	7·0	wwP
8	...	29·927	53·9	40·0	13·9	50·1	+ 9·5	48·9	47·6	2·5	4·0	1·1	92	57·2	33·8	0·165	0·0	wwP
9	...	30·131	48·5	38·0	10·5	42·3	+ 2·0	40·5	38·3	4·0	7·7	0·7	86	62·1	29·5	0·006	0·0	wP : wP : mP
10	...	30·483	38·7	26·6	12·1	33·3	− 6·6	32·7	31·6	1·7	4·4	0·0	93	38·7	21·1	0·000	0·0	mP
11	Full	30·605	37·6	25·4	12·2	30·5	− 9·3	30·0	28·6	1·9	3·9	0·0	93	53·2	21·3	0·000	0·0	sP : mP : sP
12	...	30·680	44·0	28·8	15·2	33·8	− 6·1	33·7	33·5	0·3	2·3	0·0	99	44·0	28·8	0·000	0·0	vP : wP : wwP
13	Greatest Declination N.	30·567	42·6	30·8	11·8	37·0	− 3·1	36·8	36·5	0·5	2·4	0·0	98	42·6	27·3	0·000	0·0	wwP : wP : wwP
14	...	30·393	44·6	38·5	6·1	42·3	+ 2·1	40·4	38·1	4·2	7·0	0·7	86	44·6	38·5	0·020	0·0	wwP : wP : wP
15	...	30·265	43·7	39·5	4·2	41·5	+ 1·2	38·9	35·7	5·8	7·7	3·5	81	43·7	37·7	0·000	0·0	wP : mP : mP
16	...	30·180	40·0	37·3	2·7	38·9	− 1·3	37·4	35·4	3·5	5·3	1·4	88	45·2	36·7	0·000	0·0	wP : mP
17	...	30·184	42·2	38·2	4·0	40·2	+ 0·2	38·6	36·5	3·7	5·3	1·6	87	42·2	37·2	0·004	0·2	wP
18	...	30·058	43·9	37·5	6·4	40·9	+ 1·2	39·1	36·8	4·1	6·6	1·1	86	47·0	34·3	0·000	0·8	wwP : wP : vP
19	Last Quarter	29·880	50·0	34·2	15·8	43·3	+ 4·0	40·9	38·1	5·2	9·0	1·7	81	73·4	27·2	0·000	0·0	wP : mP, sN : mP
20	In Equator	30·100	47·6	33·1	14·5	43·0	+ 4·0	40·9	38·4	4·6	6·7	2·0	83	51·4	25·7	0·002	0·2	mP : mP : wP
21	...	30·187	50·2	47·5	2·7	48·6	+ 9·8	45·0	41·1	7·5	8·0	5·3	75	56·0	43·8	0·000	0·8	wP
22	...	30·239	47·5	41·0	6·5	45·0	+ 6·4	42·1	38·7	6·3	6·9	5·1	79	47·9	39·8	0·000	1·0	wP
23	Perigee	30·161	42·0	39·3	2·7	40·7	+ 2·3	39·0	36·9	3·8	6·2	3·0	86	48·0	38·2	0·000	3·0	wP : mP : mP
24	...	30·163	42·0	35·2	6·8	40·0	+ 1·7	38·5	36·5	3·5	5·6	1·8	88	47·0	34·8	0·000	0·0	wP : mP
25	...	30·111	44·5	35·0	9·5	39·6	+ 1·3	38·4	36·8	2·8	4·8	0·9	90	56·0	28·0	0·000	0·0	wP : mP
26	New; Greatest Declination S.	29·959	44·1	28·3	15·8	38·6	+ 0·2	38·2	37·7	0·9	4·6	0·5	97	58·2	21·0	0·004	0·0	vP : wP : wP
27	...	29·602	39·6	29·5	10·1	35·9	− 2·5	35·5	34·9	1·0	2·0	0·5	96	44·7	16·2	0·000	0·0	wP : mP : mP
28	...	29·296	46·6	33·0	13·6	40·7	+ 2·2	40·6	40·5	0·2	1·5	0·0	99	52·2	30·8	0·125	0·0	vP, wN : wP : mP
29	...	29·185	45·9	42·0	3·9	43·6	+ 5·0	42·8	41·8	1·8	2·6	0·7	94	54·6	35·9	0·101	0·0	wP, wwN : wP, wN : wwN, wwP
30	...	29·856	42·0	32·9	9·1	38·2	− 0·4	36·3	33·7	4·5	7·6	2·3	84	56·0	27·1	0·010	2·0	wP : mP : wN, mP
31	...	30·072	32·9	27·6	5·3	30·3	− 8·3	27·6	19·5	10·8	14·6	6·4	62	43·0	24·0	0·000	6·0	wP : sP : mP
Means	...	30·071	44·6	35·7	8·9	40·6	+ 0·9	39·2	37·3	3·3	5·5	1·5	88·5	51·1	31·6	Sum 0·598	0·9	...
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 $30^{in}\cdot071$, being $0^{in}\cdot280$ *higher* than the average for the 50 years, 1841–1890.

TEMPERATURE OF THE AIR.

The highest in the month was 57°·3 on December 7; the lowest in the month was 25°·4 on December 11; and the range was 31°·9.
The mean of all the highest daily readings in the month was 44°·6, being 0°·6 *higher* than the average for the 50 years, 1841–1890.
The mean of all the lowest daily readings in the month was 35°·7, being 0°·9 *higher* than the average for the 50 years, 1841–1890.
The mean of the daily ranges was 8°·9, being 0°·3 *less* than the average for the 50 years, 1841–1890.
The mean for the month was 40°·6, being 0°·9 *higher* than the average for the 50 years, 1841–1890.

MONTH and DAY, 1905.	Daily Duration of Sunshine.	Sun above Horizon.	Wind as deduced from Self-Registering Anemometers. Osler's. General Direction. A.M.	General Direction. P.M.	Pressure on the Square Foot. Greatest.	Pressure on the Square Foot. Mean of 24 Hourly Measures.	Robinson's. Horizontal Movement of the Air.	Clouds and Weather. A.M.	Clouds and Weather. P.M.
	hours.	hours.			lbs.	lbs.	miles.		
Dec. 1	0·0	8·1	N	N : Variable : WSW	0·1	0·00	119	10, m.-r : 10 : 10, slt.-f	10, slt.-f : 10 : 10
2	0·7	8·1	SSE : SW : SSW	S	0·0	0·00	118	10 : 10 : 8, cu.-s, s, h	5, cu, cu.-s : 4, li.-cl, slt.-f : 0, slt.-f, ho.-fr
3	0·0	8·1	Variable : Calm	E	0·0	0·00	77	p.-cl, tk.-f: 10 : 10, slt.-f	10 : 10
4	0·0	8·0	Variable : SW : WSW	WSW : SW	0·2	0·00	136	10 : 10, slt.-f, gt.-glm : 10, gt.-glm	10 : 10
5	0·0	8·0	SW : SSW	SSW	3·5	0·37	373	10 : 10, oc.-m.-r: 10	10 : 10, oc.-slt.-r
6	4·6	8·0	W : WSW	SW : SSW	1·9	0·18	362	p.-cl : 0 : 7, cu.-s, ci.-cu, ci.-s	7, ci.-cu, ci.-s, li.-cl : 10, oc.-slt.-r
7	1·2	8·0	SW : WSW	WSW : SW	3·0	0·51	470	10 : 10, sc	9, ci.-s, cu.-s : 9, cu, cu.-s, n : 10, sc, oc.-slt.-r
8	0·0	7·9	SW : NW	W : WSW	3·2	0·27	348	10 : 10, m.-r : 10, slt.-f, glm	10, sc : 5, th.-cl : 1, ci.-s, lu.-ha
9	3·7	7·9	WSW	W : NW : NNW	1·7	0·13	299	0, hy.-d, ho.-fr : 0 : 1, ci.-s, ci.-cu	3, cu, ci.-cu, th.-cl : p.-cl : 0, hy.-d
10	0·0	7·9	WSW	SW : S	0·0	0·00	128	0, ho.-fr : 0, slt.-f	0, f : 0, f, ho.-fr
11	4·0	7·9	Calm : NNE : Variable	SE : NE	0·0	0·00	69	0, tk.-f, ho.-fr : 2, ci, th.-cl, f	tk.-f : f, ho.-fr
12	0·0	7·8	SW	SW : NNE : NE	0·4	0·00	106	f, ho.-fr : f, ho.-fr : p.-cl, f	7, th.-cl, f : 9, slt.-f : 10
13	0·0	7·8	NNW : N : Variable	Variable	0·1	0·00	134	10, slt.-f : p.-cl, ho.-fr: p.-cl, tk.-f	tk.-f : tk.-f
14	0·0	7·8	SW : WNW : NNW	SW : Variable : N	0·0	0·00	104	tk.-f, slt.-r : 10, f, glm	10, f, glm : 10 : 10
15	0·0	7·8	WSW : W	W : WNW : NNW	0·5	0·02	197	10 : 10	10 : 10
16	0·0	7·8	W : WSW : SW	SW : WSW	0·1	0·00	197	10 : 10	10 : 10, oc.-m.-r
17	0·0	7·8	SW : SE	SSE : SE	1·0	0·01	116	10 : 10	10 : 10, slt.-r : 10
18	0·0	7·8	SE : SSE	SSE	0·7	0·01	161	10 : 10	9, cu.-s : 10 : 10
19	4·7	7·8	SSW : SW	WSW	3·0	0·29	360	10 : 10 : 1, ci	6, cu, n : 0 : 0, hy.-d
20	0·0	7·8	SW : WSW	WSW : SW	2·9	0·15	348	0, ho.-fr : p.-cl, lu.-ha, lu.-co : 9	10 : 10 : 9
21	0·0	7·8	WSW	WSW	3·6	0·63	496	10 : 10 : 9, cu, n	9 : 10
22	0·0	7·8	WSW	WSW : SW : SSW	1·9	0·12	310	9 : 9 : 10	10 : 10
23	0·0	7·8	SSW : S : SSE	SSE : S	1·0	0·04	212	10 : 10	10 : 10
24	0·0	7·8	SSW	SW : SSW	0·3	0·00	161	10 : 10	10 : 10
25	0·7	7·8	SW	SW	0·5	0·01	191	10 : 10 : 9, ci.-cu	p.-cl : 1, ci.-cu : 0, hy.-d
26	0·2	7·8	SW : Calm : S	SSE : ESE : SE	1·0	0·01	144	p.-cl, slt.-f : 10	5, cu, cu.-s, n : 10
27	1·3	7·8	SE : E : ESE	E : ESE	0·3	0·00	161	p.-cl, ho.-fr : 0, m, ho.-fr: p.-cl	10, slt.-f : 10 : 10, slt.-f
28	0·0	7·8	ENE : ESE	ESE : SSE : SSW	0·2	0·00	126	10, slt.-f : 10, slt.-r, f : 10, slt.-r	10, oc.-slt.-r : p.-cl : 10, oc.-slt.-r
29	0·0	7·8	ENE : NE : N	NNW : NW : WNW	1·5	0·11	283	10, oc.-slt.-r : 10, oc.-th.-r	10, oc.-th.-r : 10, oc.-slt.-r
30	2·1	7·8	N : NNE : NE	E : ESE : SE	2·0	0·13	269	10 : 9 : 8, cu, cu.-s, li.-cl	6, cu, cu.-s : p.-cl, slt.-sh, lu.-co : p.-cl, ho.-fr
31	0·1	7·8	ESE : SE	ESE	3·0	0·35	325	0, ho.-fr : 6, ci.-s, ci.-cu	4, cl, ci.-s, so.-ha : 3, th.-cl, h : th.-cl
Means	0·8	7·9	...	...	...	0·11	223		
Number of Column for Reference.	19	20	21	22	23	24	25	26	27

The mean *Temperature of Evaporation* for the month was 39°·2, being 0°·9 *higher* than
The mean *Temperature of the Dew Point* for the month was 37°·3, being 0°·8 *higher* than
The mean *Degree of Humidity* for the month was 88·5, being the same as
The mean *Elastic Force of Vapour* for the month was 0in·223, being 0in·007 *greater* than
The mean *Weight of Vapour in a Cubic Foot of Air* for the month was 2grs·6, being 0gr·1 *greater* than
The mean *Weight of a Cubic Foot of Air* for the month was 557 grains, being 4 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 8·3.

The mean proportion of *Sunshine* for the month (constant sunshine being represented by 1) was 0·096. The maximum daily amount of *Sunshine* was 4·7 hours on December 19.

The highest reading of the *Solar Radiation Thermometer* was 73°·4 on December 19; and the lowest reading of the *Terrestrial Radiation Thermometer* was 16°·2 on December 27

The mean daily distribution of *Ozone* for the 12 hours ending 9h was 0·7; for the 6 hours ending 15h was 0·2; and for the 6 hours ending 21h was 0·0.

The *Proportions of Wind* referred to the cardinal points were N. 3, E. 4, S. 10, and W. 11. Three days were calm.

The *Greatest Pressure of the Wind* in the month was 3·6 lbs. on the square foot on December 21. The mean daily *Horizontal Movement of the Air* for the month was 223 miles; the greatest daily value was 496 miles on December 21; and the least daily value was 69 miles on December 11.

Rain fell on 8 days in the month, amounting to 0in·598, as measured by gauge No. 6 partly sunk below the ground; being 1in·172 *less* 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.

MAXIMA.			MINIMA.			MAXIMA.			MINIMA.		
	Greenwich Civil Time, 1905.	Reading.		Greenwich Civil Time, 1905.	Reading.		Greenwich Civil Time, 1905.	Reading.		Greenwich Civil Time, 1905.	Reading.
	d h m	in.		d h m	in.		d h m	in.		d h m	in.
January	1. 19. 40	30·620	January	6. 14. 15	29·408	April	6. 20. 40	29·961	April	7. 13. 45	29·461
	7. 22. 15	30·189		9. 11. 5	29·732		8. 13. 10	29·890		10. 21. 40	29·077
	10. 10. 55	30·359		11. 21. 50	29·776		12. 22. 40	29·719		16. 11. 40	29·486
	13. 10. 20	30·296		17. 2. 45	28·892		17. 21. 10	29·824		21. 4. 30	29·716
	19. 22. 10	30·270		21. 5. 40	29·983		22. 11. 40	29·994		24. 3. 10	29·725
	22. 23. 25	30·189		24. 15. 0	30·065		25. 8. 55	29·867		25. 19. 5	29·791
	29. 0. 40	30·783		31. 1. 15	30·020		26. 21. 5	29·889		30. 15. 20	29·215
	31. 12. 30	30·219				May	1. 16. 30	29·394	May	2. 9. 0	29·221
February	3. 20. 25	30·253	February	2. 2. 10	29·709		5. 7. 30	30·235		7. 16. 40	29·870
	5. 20. 45	30·319		4. 14. 40	30·175		9. 10. 25	30·263		11. 18. 5	30·011
	8. 10. 50	30·345		6. 20. 45	30·157		13. 10. 15	30·210		20. 16. 10	29·775
	12. 12. 0	30·381		10. 17. 55	30·131		22. 23. 0	29·893		24. 16. 20	29·723
	14. 23. 35	30·402		13. 21. 0	30·248		28. 7. 45	30·113		31. 16. 40	29·820
	17. 23. 55	30·114		17. 5. 5	29·874	June	3. 19. 15	29·925	June	7. 5. 40	29·613
	21. 21. 25	30·267		19. 15. 20	29·628		8. 21. 10	29·818		12. 4. 15	29·632
March	4. 5. 55	30·152	March	5. 16. 15	29·737		13. 21. 30	29·715		15. 16. 15	29·564
	6. 10. 55	29·856		7. 16. 40	29·617		15. 23. 20	29·651		17. 5. 30	29·551
	8. 11. 0	29·967		9. 12. 0	29·349		23. 9. 0	30·229		29. 17. 0	29·526
	9. 21. 20	29·462		11. 12. 30	28·948	July	3. 21. 15	30·084	July	5. 18. 10	29·767
	11. 19. 0	29·055		12. 15. 5	28·888		7. 8. 0	30·004		9. 15. 45	29·803
	13. 11. 5	29·291		14. 4. 5	28·900		14. 7. 55	30·061		16. 17. 45	29·760
	14. 18. 35	29·245		15. 12. 25	28·772		17. 9. 0	29·885		18. 10. 15	29·800
	19. 22. 5	29·925		21. 6. 45	29·606		19. 11. 40	30·114		23. 16. 20	29·654
	21. 23. 40	29·720		24. 3. 35	29·457		26. 9. 30	29·888		27. 16. 5	29·759
	25. 0. 40	29·743		25. 22. 55	29·621		28. 22. 15	29·853		30. 2. 35	29·677
	26. 20. 5	29·780		27. 13. 55	29·468		31. 10. 20	29·868			
	28. 9. 35	29·792		30. 16. 0	29·670				August	3. 18. 10	29·320
April	1. 9. 45	30·142	April	2. 12. 55	29·771	August	6. 11. 35	29·906		7. 15. 55	29·744
	3. 22. 25	29·975		5. 4. 40	29·603		8. 21. 20	29·841		10. 14. 40	29·740

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, 1905.	Reading.	Greenwich Civil Time, 1905.	Reading.	Greenwich Civil Time, 1905.	Reading.	Greenwich Civil Time, 1905.	Reading.
d h m	in.	d h m	in.	d h m	in.	d h m	in.
August 12. 10. 15	30·127	August 16. 3. 40	29·813	October 11. 9. 5	30·302	October 13. 10. 20	29·811
17. 7. 45	29·976	18. 21. 0	29·599	14. 9. 55	29·996	15. 16. 55	29·335
19. 20. 45	29·848	20. 9. 45	29·619	20. 11. 0	30·124	21. 15. 0	29·826
21. 7. 45	29·896	23. 4. 25	29·558	26. 8. 5	30·164	27. 4. 10	29·977
23. 22. 25	29·810	26. 5. 20	29·416	28. 23. 40	30·057	31. 1. 50	29·000
27. 20. 45	29·581	29. 5. 50	29·114	31. 21. 30	29·201		
31. 22. 40	30·151					November 1. 18. 0	28·864
		September 3. 17. 55	29·650	November 4. 8. 55	29·638	5. 14. 5	29·128
September 4. 11. 5	29·945	7. 16. 10	29·404	9. 22. 40	29·955	11. 22. 20	29·000
8. 23. 40	29·742	9. 19. 35	29·423	12. 10. 25	29·254	13. 5. 40	28·702
10. 1. 20	29·521	10. 7. 30	29·419	17. 23. 50	30·068	19. 15. 30	29·525
13. 9. 35	30·129	14. 15. 0	30·054	21. 9. 50	30·031	23. 11. 35	29·431
15. 9. 50	30·146	16. 4. 55	30·022	24. 23. 15	29·720	26. 23. 10	28·789
17. 10. 0	30·197	19. 15. 5	29·739	27. 23. 0	29·607	28. 17. 0	29·207
20. 22. 30	30·099	25. 4. 10	29·460				
26. 11. 10	29·639	27. 15. 20	29·521	December 2. 10. 30	30·279	December 6. 0. 5	29·572
30. 22. 25	29·869			6. 16. 45	29·723	7. 3. 20	29·643
		October 2. 4. 25	29·629	12. 11. 20	30·710	19. 6. 15	29·791
October 3. 10. 35	29·795	4. 15. 40	29·178	22. 10. 15	30·273	29. 5. 35	29·065
9. 0. 25	30·262	9. 15. 0	30·178	30. 23. 25	30·151		

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 1905.
[Extracted from the preceding Table.]

MONTH, 1905.	Readings of the Barometer.		Range.
	Highest.	Lowest.	
	in.	in.	in.
January	30·783	28·892	1·891
February	30·402	29·009	1·393
March	30·152	28·772	1·380
April	30·142	29·077	1·065
May	30·263	29·221	1·042
June	30·229	29·526	0·703
July	30·114	29·654	0·460
August	30·151	29·114	1·037
September	30·197	29·404	0·793
October	30·302	29·000	1·302
November	30·068	28·702	1·366
December	30·710	29·065	1·645

The highest reading in the year was $30^{in.}783$ on January 29. The lowest reading in the year was $28^{in.}702$ on November 13.
The range of reading in the year was $2^{in.}081$.

MONTHLY RESULTS of METEOROLOGICAL ELEMENTS for the YEAR 1905.

MONTH, 1905.	Mean Reading of the Barometer.	TEMPERATURE OF THE AIR. 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.	Mean Temperature of Evaporation.	Mean Temperature of the Dew Point.	Mean Degree of Humidity. (Saturation = 100.)
	in.	°	°	°	°	°	°	°	°	°	°	
January.....	30·101	54·0	19·5	34·5	43·6	32·4	11·1	38·4	− 0·1	36·4	33·1	81·6
February....	29·995	53·5	31·2	22·3	46·8	37·9	8·9	42·4	+ 2·9	39·9	36·9	81·7
March.....	29·570	61·4	27·1	34·3	52·6	38·2	14·4	45·1	+ 3·4	42·4	39·4	81·0
April.....	29·683	64·9	31·1	33·8	54·7	39·8	14·9	46·4	− 0·7	43·2	39·6	77·5
May	29·948	82·3	34·3	48·0	64·5	43·4	21·1	53·2	+ 0·1	47·4	41·6	65·3
June.....	29·775	80·1	46·1	34·0	68·8	51·7	17·0	59·5	+ 0·1	55·7	52·3	78·0
July	29·880	87·2	48·2	39·0	77·5	56·4	21·0	66·0	+ 3·6	60·4	55·9	70·2
August.....	29·723	76·9	44·6	32·3	71·0	52·0	19·0	60·4	− 1·2	55·9	52·0	74·2
September...	29·796	75·1	41·4	33·7	64·0	49·2	14·8	56·2	− 1·0	52·8	49·6	78·9
October.....	29·851	59·6	26·1	33·5	52·4	38·2	14·3	45·8	− 4·2	42·8	39·4	79·2
November...	29·525	54·9	23·1	31·8	47·2	35·3	11·9	41·9	− 1·4	40·2	38·1	86·9
December...	30·071	57·3	25·4	31·9	44·6	35·7	8·9	40·6	+ 0·9	39·2	37·3	88·5
		Highest.	Lowest.	Annual Range.								
Means.....	29·826	87·2	19·5	67·7	57·3	42·5	14·8	49·7	+ 0·2	46·4	42·9	78·6

MONTH, 1905.	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. Number of Rainy Days.	Amount collected in Gauge No. 6, whose receiving Surface is 5 inches above the Ground.	WIND. From Osler's Anemometer. 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.	Number of Calm or nearly Calm Hours.	Mean Daily Pressure on the Square Foot.	From Robinson's Anemometer. Mean Daily Horizontal Movement of the Air.
	in.	grs.	grs.				in.	h	h	h	h	h	h	h	h	h	lbs.	miles.
January	0·189	2·2	560	0·7	6·0	8	0·999	28	57	43	89	39	154	248	74	12	0·40	324
February....	0·219	2·5	554	1·3	7·0	13	0·724	70	76	18	25	14	156	242	64	7	0·66	396
March.....	0·241	2·8	543	4·1	6·6	22	3·556	36	44	27	55	96	288	162	30	6	0·55	363
April.....	0·243	2·8	543	1·6	7·9	17	1·700	94	104	46	30	68	212	106	54	12	0·40	323
May	0·263	3·0	541	0·8	5·5	8	1·325	194	228	29	9	22	148	86	22	6	0·28	280
June.....	0·393	4·4	530	5·4	7·2	18	4·323	127	197	98	36	25	144	66	8	19	0·21	270
July	0·447	4·9	525	1·8	5·8	8	0·921	97	60	41	22	21	231	207	54	11	0·09	232
August.....	0·388	4·3	528	6·5	7·0	13	2·536	45	44	57	47	85	300	125	33	8	0·27	284
September...	0·356	4·0	534	2·9	7·0	13	2·311	150	140	76	12	16	192	100	17	17	0·24	276
October.....	0·241	2·8	547	0·7	6·3	15	0·906	246	57	2	0	30	159	137	111	2	0·25	291
November...	0·230	2·7	545	2·7	6·9	18	3·125	91	89	36	87	129	166	71	16	35	0·28	285
December...	0·223	2·6	557	0·9	8·3	8	0·598	47	30	49	84	85	244	113	31	61	0·11	223
Sums.....	...	...	...	...	...	161	23·024	1225	1126	522	496	630	2394	1657	514	196	...	...
Means.....	0·286	3·2	542	2·4	6·8	...	...	...	...	...	...	...	...	...	...	...	0·31	296

The greatest recorded pressure of the wind on the square foot in the year was 23·5 lbs. on March 12.
The greatest recorded daily horizontal movement of the air in the year was 719 miles on November 27.
The least recorded daily horizontal movement of the air in the year was 69 miles on December 11.

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

Hour, Greenwich Civil Time.	1905. January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Yearly Means.
	in.	in.	in.	in.	in.	in.	in.	in.	in.	in.	in.	in.	in.
Midnight	30·102	30·017	29·561	29·708	29·951	29·789	29·883	29·731	29·813	29·868	29·509	30·074	29·834
1h	30·102	30·011	29·561	29·704	29·947	29·785	29·882	29·728	29·810	29·866	29·508	30·069	29·831
2	30·102	30·006	29·554	29·699	29·946	29·780	29·879	29·724	29·806	29·860	29·509	30·067	29·828
3	30·102	29·999	29·547	29·695	29·943	29·777	29·877	29·718	29·800	29·854	29·509	30·066	29·824
4	30·099	29·995	29·545	29·691	29·941	29·776	29·875	29·713	29·793	29·851	29·510	30·061	29·821
5	30·098	29·995	29·550	29·691	29·945	29·777	29·879	29·713	29·791	29·849	29·514	30·057	29·822
6	30·098	29·995	29·555	29·695	29·949	29·779	29·884	29·716	29·794	29·849	29·517	30·062	29·824
7	30·100	29·998	29·562	29·697	29·954	29·782	29·888	29·718	29·798	29·855	29·523	30·063	29·828
8	30·108	30·006	29·568	29·695	29·956	29·783	29·891	29·720	29·801	29·863	29·533	30·069	29·833
9	30·115	30·009	29·573	29·694	29·956	29·783	29·892	29·721	29·805	29·863	29·539	30·079	29·836
10	30·122	30·010	29·576	29·693	29·953	29·783	29·891	29·720	29·803	29·863	29·540	30·086	29·837
11	30·121	30·010	29·575	29·688	29·949	29·780	29·887	29·720	29·798	29·860	29·537	30·082	29·834
Noon	30·114	30·002	29·572	29·680	29·946	29·775	29·884	29·718	29·796	29·852	29·533	30·073	29·829
13h	30·100	29·990	29·570	29·675	29·942	29·770	29·878	29·718	29·793	29·843	29·528	30·066	29·823
14	30·094	29·982	29·564	29·669	29·939	29·767	29·876	29·718	29·787	29·838	29·525	30·061	29·818
15	30·091	29·978	29·565	29·662	29·935	29·764	29·872	29·716	29·782	29·832	29·524	30·062	29·815
16	30·093	29·977	29·568	29·657	29·932	29·759	29·867	29·716	29·779	29·831	29·527	30·066	29·814
17	30·094	29·978	29·573	29·657	29·932	29·757	29·865	29·717	29·778	29·835	29·529	30·071	29·816
18	30·097	29·984	29·582	29·659	29·935	29·759	29·866	29·719	29·781	29·844	29·532	30·074	29·819
19	30·099	29·985	29·590	29·664	29·941	29·763	29·868	29·725	29·787	29·849	29·528	30·077	29·823
20	30·095	29·987	29·591	29·674	29·954	29·769	29·876	29·737	29·796	29·850	29·528	30·078	29·828
21	30·095	29·988	29·591	29·679	29·966	29·781	29·886	29·742	29·801	29·851	29·530	30·079	29·832
22	30·093	29·988	29·590	29·679	29·970	29·783	29·889	29·743	29·803	29·851	29·531	30·080	29·833
23	30·097	29·986	29·591	29·680	29·971	29·783	29·891	29·743	29·805	29·849	29·529	30·080	29·834
24	30·095	29·984	29·592	29·681	29·970	29·782	29·890	29·741	29·804	29·847	29·532	30·074	29·833
Means 0h.–23h.	30·101	29·995	29·570	29·683	29·948	29·775	29·880	29·723	29·796	29·851	29·525	30·071	29·826
Means 1h.–24h.	30·101	29·994	29·571	29·682	29·949	29·775	29·880	29·724	29·795	29·850	29·525	30·071	29·826
Number of Days employed.	31	28	31	30	31	30	31	31	30	31	30	31	...

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

Hour, Greenwich Civil Time.	1905. January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Yearly Means.
	°	°	°	°	°	°	°	°	°	°	°	°	°
Midnight	37·4	40·9	42·7	43·6	47·8	55·3	61·1	56·3	53·0	43·0	40·0	40·2	46·8
1h	37·2	40·6	42·6	42·9	47·1	54·6	60·2	55·7	52·8	42·9	40·0	40·0	46·4
2	37·1	40·7	42·2	42·4	46·3	54·0	59·6	55·4	52·9	42·9	39·9	39·7	46·1
3	37·0	40·5	42·0	42·3	45·4	53·7	58·9	54·9	52·7	42·9	39·9	39·5	45·8
4	36·8	40·5	41·7	42·2	45·0	53·4	58·6	54·7	52·6	42·8	39·7	39·4	45·6
5	36·7	40·7	41·2	42·2	45·0	53·9	58·7	54·6	52·5	42·8	39·8	39·5	45·6
6	36·7	40·6	41·2	42·4	46·5	54·9	59·8	55·4	52·5	42·5	39·6	39·4	46·0
7	36·8	40·5	41·8	43·7	48·8	56·5	61·6	57·3	53·3	42·9	39·9	39·6	46·9
8	37·0	40·7	42·9	45·5	52·0	58·7	64·5	60·0	55·1	43·8	40·2	39·6	48·3
9	37·4	41·5	44·7	47·3	55·4	60·5	67·0	62·4	57·2	45·5	41·2	40·1	50·0
10	38·5	42·6	46·4	48·7	57·6	61·9	69·2	64·0	58·9	47·3	42·7	40·7	51·5
11	39·7	43·9	48·4	50·0	59·2	63·6	71·1	65·2	60·2	48·8	44·4	41·3	53·0
Noon	40·6	45·0	49·4	51·0	60·2	64·8	72·0	66·6	60·9	50·0	45·3	42·1	54·0
13h	41·4	45·6	49·7	51·4	61·2	65·5	73·2	67·4	61·2	50·8	45·9	42·5	54·7
14	41·6	45·9	50·0	51·9	61·4	65·8	73·6	67·0	61·2	50·8	45·8	42·4	54·8
15	41·6	45·5	50·0	51·3	61·3	65·5	74·3	66·6	61·2	50·7	45·2	42·1	54·6
16	41·0	44·7	49·0	51·0	60·4	65·3	73·8	65·4	60·4	49·6	44·1	41·5	53·9
17	40·0	44·1	48·1	50·0	59·3	64·2	72·0	64·5	59·3	48·4	43·3	41·1	52·9
18	39·5	43·4	46·9	48·4	57·7	63·3	70·3	63·2	57·8	47·4	42·5	41·0	51·8
19	39·0	42·9	45·2	47·0	55·6	61·5	68·5	61·2	56·5	46·4	41·9	40·8	50·5
20	38·7	42·1	44·3	45·9	53·5	59·7	66·4	59·5	55·4	45·3	41·4	40·4	49·4
21	38·5	41·6	44·0	44·9	51·6	58·3	64·4	58·1	54·4	44·3	40·8	40·3	48·4
22	38·4	41·3	43·8	44·4	50·1	57·2	63·0	57·3	53·7	43·8	40·7	40·2	47·8
23	38·3	40·9	43·4	44·1	48·8	56·2	61·9	56·6	53·2	43·3	40·5	39·8	47·3
24	37·9	40·7	42·9	43·8	47·9	55·5	60·9	56·0	52·8	42·9	40·0	39·7	46·8
Means 0h.–23h.	38·6	42·4	45·1	46·4	53·2	59·5	66·0	60·4	56·2	45·8	41·9	40·6	49·7
Means 1h.–24h.	38·6	42·4	45·1	46·4	53·2	59·5	66·0	60·4	56·2	45·8	41·9	40·5	49·7
Number of Days employed.	30	28	31	30	31	30	31	31	30	31	30	31	...

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

Hour, Greenwich Civil Time.	1905. January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Yearly Means.
	°	°	°	°	°	°	°	°	°	°	°	°	°
Midnight	36·0	38·9	41·2	41·6	44·7	53·2	58·2	53·9	51·2	41·2	38·8	39·0	44·8
1h	35·7	38·8	41·2	41·1	44·1	52·9	57·8	53·6	51·0	41·2	38·8	38·9	44·6
2	35·6	38·9	40·8	40·9	43·6	52·4	57·3	53·3	51·0	41·2	38·6	38·6	44·4
3	35·4	38·9	40·5	40·7	43·0	52·1	56·9	53·1	50·9	41·2	38·7	38·4	44·1
4	35·4	38·8	40·5	40·6	42·7	52·0	56·6	53·1	50·8	41·2	38·6	38·3	44·1
5	35·4	38·9	40·0	40·6	42·7	52·3	56·6	53·1	50·8	41·1	38·6	38·3	44·0
6	35·4	38·8	40·1	40·9	43·7	53·1	57·4	53·8	50·8	40·9	38·5	38·3	44·3
7	35·6	38·7	40·5	41·7	45·1	54·1	58·4	54·9	51·5	41·0	38·7	38·4	44·9
8	35·6	38·9	41·4	42·7	47·0	55·4	59·8	56·3	52·6	41·8	39·0	38·4	45·7
9	35·9	39·4	42·5	43·7	48·6	56·2	61·1	57·4	53·8	42·9	39·8	38·8	46·7
10	36·6	40·1	43·5	44·5	49·7	56·9	62·1	57·8	54·6	44·0	41·0	39·3	47·5
11	37·6	40·8	44·6	45·1	50·4	57·8	63·0	58·2	55·2	44·6	42·2	39·7	48·3
Noon	38·1	41·3	44·7	45·5	50·9	58·6	63·2	58·5	55·3	45·1	42·9	40·3	48·7
13h	38·5	41·6	44·9	45·7	51·3	58·9	63·8	58·7	55·2	45·4	43·0	40·6	49·0
14	38·5	41·9	45·0	46·2	51·5	59·2	63·7	58·8	55·1	45·4	42·8	40·4	49·0
15	38·5	41·8	45·0	46·0	51·5	59·2	63·8	58·5	55·1	45·3	42·4	40·3	48·9
16	38·2	41·5	44·3	45·9	50·9	58·9	63·5	58·1	54·5	44·7	41·8	40·0	48·5
17	37·7	41·2	43·9	45·1	50·4	58·3	62·6	57·6	54·0	44·1	41·4	39·7	48·0
18	37·4	40·8	43·2	44·6	49·7	57·7	62·3	56·9	53·4	43·6	40·7	39·7	47·5
19	37·0	40·4	42·5	43·7	48·9	56·9	61·5	56·3	52·8	43·1	40·3	39·3	46·9
20	36·8	39·8	42·1	43·1	48·0	55·9	60·9	55·5	52·3	42·5	40·0	39·1	46·3
21	36·6	39·5	42·0	42·5	47·0	55·2	60·1	55·0	52·0	42·0	39·6	39·0	45·9
22	36·6	39·2	41·8	42·1	46·1	54·6	59·2	54·5	51·6	41·7	39·4	38·8	45·5
23	36·5	38·8	41·8	42·0	45·5	53·9	58·6	54·2	51·2	41·4	39·1	38·6	45·1
24	36·3	38·7	41·4	41·9	44·9	53·5	57·9	53·7	51·0	41·2	38·9	38·4	44·8
Means 0h.–23h.	36·7	39·9	42·4	43·2	47·4	55·7	60·4	55·9	52·8	42·8	40·2	39·2	46·4
Means 1h.–24h.	36·7	39·9	42·4	43·2	47·4	55·7	60·4	55·9	52·8	42·8	40·2	39·2	46·4
Number of Days employed.	30	28	31	30	31	30	31	31	30	31	30	31	...

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

Hour, Greenwich Civil Time.	1905. January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Yearly Means.
	°	°	°	°	°	°	°	°	°	°	°	°	°
Midnight	34·1	36·4	39·4	39·3	41·3	51·2	55·7	51·6	49·4	39·0	37·2	37·5	42·7
1h	33·6	36·5	39·5	38·9	40·7	51·3	55·7	51·6	49·2	39·2	37·2	37·5	42·6
2	33·5	36·6	39·1	39·1	40·5	50·8	55·3	51·3	49·1	39·2	36·9	37·2	42·4
3	33·2	36·9	38·7	38·7	40·3	50·5	55·1	51·3	49·1	39·2	37·1	37·0	42·3
4	33·5	36·6	39·0	38·7	40·0	50·6	54·8	51·5	49·0	39·3	37·2	36·9	42·3
5	33·6	36·6	38·5	38·7	40·0	50·7	54·7	51·6	49·1	39·1	37·0	36·7	42·2
6	33·6	36·5	38·7	39·1	40·5	51·3	55·3	52·3	49·1	39·0	37·1	36·9	42·4
7	34·0	36·4	38·9	39·4	41·1	51·8	55·7	52·8	49·7	38·7	37·1	36·8	42·7
8	33·6	36·6	39·6	39·5	41·9	52·4	55·9	53·1	50·2	39·5	37·5	36·8	43·1
9	33·8	36·8	39·9	39·7	42·1	52·5	56·4	53·1	50·7	39·9	38·0	37·1	43·3
10	34·0	37·1	40·2	39·9	42·6	52·6	56·5	52·6	50·7	40·3	39·0	37·5	43·6
11	34·9	37·2	40·5	39·9	42·6	53·0	56·8	52·5	50·8	40·1	39·6	37·7	43·8
Noon	34·9	37·0	39·7	39·8	42·7	53·4	56·6	52·0	50·4	39·9	40·2	38·1	43·7
13h	34·9	37·0	39·8	39·8	42·7	53·5	56·8	51·8	50·0	39·8	39·7	38·3	43·7
14	34·7	37·3	39·7	40·4	42·9	53·8	56·4	52·2	49·8	39·8	39·4	38·0	43·7
15	34·7	37·5	39·7	40·5	43·0	54·1	56·2	52·0	49·8	39·7	39·2	38·1	43·7
16	34·7	37·8	39·2	40·6	42·6	53·7	56·0	52·2	49·3	39·5	39·1	38·1	43·6
17	34·7	37·8	39·3	39·9	42·5	53·4	55·5	51·9	49·3	39·4	39·1	37·9	43·4
18	34·7	37·7	39·0	40·5	42·5	53·0	56·1	51·6	49·4	39·4	38·6	38·0	43·4
19	34·4	37·4	39·4	40·0	42·5	52·9	56·1	52·1	49·4	39·4	38·3	37·4	43·3
20	34·2	37·0	39·5	39·9	42·5	52·6	56·5	51·9	49·3	39·3	38·2	37·4	43·2
21	34·0	36·9	39·6	39·7	42·3	52·4	56·6	52·2	49·6	39·3	38·1	37·3	43·2
22	34·2	36·6	39·5	39·4	41·9	52·2	56·0	52·0	49·6	39·3	37·8	37·0	43·0
23	34·1	36·2	39·9	39·5	42·0	51·7	55·8	52·0	49·2	39·2	37·3	37·0	42·8
24	34·2	36·2	39·6	39·7	41·7	51·6	55·3	51·5	49·2	39·2	37·5	36·7	42·7
Means 0h.–23h.	34·1	36·9	39·4	39·6	41·8	52·3	55·9	52·0	49·6	39·4	38·2	37·4	43·1
Means 1h.–24h.	34·2	36·9	39·4	39·6	41·8	52·3	55·9	52·0	49·6	39·4	38·2	37·4	43·1

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.

Hour, Greenwich Civil Time.	1905. January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Yearly Means.
Midnight	88	85	88	85	79	87	83	85	87	86	90	90	86
1h	87	86	89	86	79	89	86	87	88	86	90	91	87
2	87	86	89	89	81	89	86	87	88	86	90	91	87
3	86	88	89	88	83	89	87	87	88	86	90	91	88
4	88	87	91	88	83	90	87	89	88	87	91	91	88
5	89	86	91	88	83	89	86	89	89	86	90	90	88
6	89	86	91	88	81	87	86	90	89	88	91	91	88
7	90	86	90	85	75	85	81	85	88	85	90	90	86
8	88	86	88	80	69	80	74	78	84	85	90	90	83
9	87	84	84	76	61	75	69	72	79	81	89	90	79
10	85	82	80	72	57	72	64	66	74	77	86	89	75
11	83	77	74	69	54	69	61	63	71	72	83	88	72
Noon	81	74	69	66	53	67	58	60	68	69	82	86	69
13h	79	73	69	65	51	66	57	57	67	66	80	86	68
14	78	73	68	65	51	66	55	59	67	66	79	85	68
15	78	74	68	66	51	67	53	60	67	66	80	86	68
16	78	76	69	67	52	66	54	62	67	68	82	88	69
17	82	78	72	69	53	68	56	63	69	71	85	89	71
18	83	80	75	74	57	69	61	66	73	75	86	90	74
19	84	81	80	77	62	74	64	72	77	77	88	88	77
20	85	83	83	80	66	78	71	76	81	80	89	90	80
21	85	84	84	83	71	81	75	80	84	82	90	90	82
22	85	84	85	82	74	84	78	82	86	84	90	89	84
23	85	84	88	83	78	85	81	85	86	85	89	90	85
24	86	85	88	86	80	87	83	85	88	86	91	90	86
Means 0h.–23h.	85	82	81	78	67	78	71	75	79	79	87	89	79
Means 1h.–24h.	84	82	81	78	67	78	71	75	79	79	87	89	79

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 1905.

Month, 1905.	Registered Duration of Sunshine in the Hour ending 5h.	6h.	7h.	8h.	9h.	10h.	11h.	Noon.	13h.	14h.	15h.	16h.	17h.	18h.	19h.	20h.	Total registered Duration of Sunshine in each Month.	Corresponding aggregate Period during which the Sun was above the Horizon.	Proportion of Sunshine.	Mean Altitude of the Sun at Noon.
	h	h	h	h	h	h	h	h	h	h	h	h	h	h	h	h	h	h		o
January	...	...	...	...	1·5	7·9	8·9	8·7	8·1	8·7	4·8	0·5	...	...	...	...	49·1	259·0	0·190	18
February	...	...	...	1·3	7·1	8·3	11·8	11·1	9·9	9·3	5·9	2·4	0·3	...	...	...	67·4	277·3	0·243	26
March	...	...	2·7	7·1	11·3	11·3	13·5	13·2	13·7	13·2	14·2	10·3	9·6	1·6	...	...	121·7	366·0	0·333	37
April	...	1·6	5·1	6·9	10·2	10·1	10·3	9·6	8·7	7·6	6·6	8·1	7·5	4·0	0·4	...	96·7	413·6	0·234	48
May	1·1	12·0	17·7	19·4	20·2	21·4	20·9	19·5	19·1	17·7	18·1	15·4	13·3	11·3	7·1	0·5	234·7	481·5	0·487	57
June	0·8	4·7	8·0	10·8	11·3	10·6	11·4	12·9	13·1	12·6	12·5	12·6	10·6	9·5	8·7	3·1	153·2	494·6	0·310	62
July	1·3	9·4	11·1	14·7	16·7	17·2	20·4	17·9	18·3	18·2	18·8	19·4	15·4	13·8	11·5	2·4	226·5	497·7	0·455	60
August	0·4	8·3	12·8	16·7	15·8	14·4	15·2	17·3	18·3	17·7	16·9	13·5	11·9	8·8	4·1	0·2	192·3	450·6	0·427	52
September	...	0·1	2·8	6·3	10·0	9·3	9·5	11·7	11·5	11·4	11·7	10·9	12·0	3·4	...	...	110·6	378·9	0·292	41
October	...	...	...	4·4	8·7	11·4	11·4	10·4	12·6	11·8	10·9	7·1	1·4	...	...	...	90·1	330·2	0·273	30
November	...	...	...	0·1	3·8	8·1	10·2	8·3	8·7	8·2	5·1	2·1	...	...	...	...	54·6	265·5	0·206	20
December	...	...	...	...	0·3	3·5	3·8	4·5	4·1	4·5	2·4	0·1	...	...	...	...	23·3	243·9	0·096	16
For the Year	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1420·2	4458·8	0·319	...

The hours are reckoned from *apparent* midnight.

READINGS of DRY-BULB THERMOMETERS placed in a STEVENSON'S SCREEN in the OBSERVATORY GROUNDS, and of those mounted in a louvre-boarded shed on the ROOF of the MAGNET HOUSE at an elevation of 20 feet above the GROUND; and EXCESS of the READINGS above those of the corresponding THERMOMETERS on the ORDINARY STAND in the MAGNETIC PAVILION ENCLOSURE, in the YEAR 1905.

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

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

JANUARY.

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.					
	Maximum.	Minimum.	9h	Noon.	15h	21h	Maximum.	Minimum.	9h	Noon.	15h	21h		Maximum.	Minimum.	9h	Noon.	15h	21h	Maximum.	Minimum.	9h	Noon.	15h	21h
d	°	°	°	°	°	°	°	°	°	°	°	°	d	°	°	°	°	°	°	°	°	°	°	°	°
1	38·9	24·2	...	...	...	...	+1·0	−0·1	...	...	...	...	1	39·4	23·4	...	...	...	...	+1·5	−0·9	...	...	...	...
2	34·0	21·2	29·8	30·9	32·2	33·9	0·0	+1·7	−0·2	+0·3	−0·1	+0·1	2	34·1	19·3	29·9	30·9	31·9	33·9	+0·1	−0·2	−0·1	+0·3	−0·4	+0·1
3	47·0	33·1	40·7	44·4	46·7	46·9	0·0	−0·7	+0·2	−0·3	−0·2	−0·1	3	47·4	32·7	40·8	44·3	46·8	46·9	+0·4	−1·1	+0·3	−0·4	−0·1	−0·1
4	48·0	44·4	45·0	46·9	47·6	46·9	0·0	−0·6	−0·3	0·0	−0·3	0·0	4	49·2	44·4	45·0	47·2	47·2	46·8	+1·2	−0·6	−0·3	+0·3	−0·7	−0·1
5	47·2	41·4	46·0	46·5	46·0	41·8	−0·3	−0·1	−0·5	+0·3	+0·4	−0·1	5	47·3	41·0	46·1	46·7	46·3	41·9	−0·2	−0·5	−0·4	+0·5	+0·7	0·0
6	54·0	39·1	44·5	49·8	53·5	53·1	+0·3	+0·6	−0·1	−0·4	−0·1	+0·1	6	54·5	38·4	44·3	49·1	53·6	52·9	+0·8	−0·1	−0·3	−1·1	0·0	−0·1
7	53·7	45·9	51·5	51·0	50·9	46·9	−0·3	+2·5	+0·8	+0·5	+0·4	+0·8	7	55·3	45·9	51·2	51·3	50·5	46·9	+1·3	+2·5	+0·5	+0·8	0·0	+0·8
8	50·8	45·7	...	...	...	...	0·0	+2·2	...	...	...	...	8	51·4	45·5	...	...	...	...	+0·6	+2·0	...	...	...	...
9	50·6	37·3	49·9	44·9	42·5	38·0	−0·2	0·0	−0·4	+0·3	−0·1	−0·3	9	50·6	36·7	49·9	44·6	42·5	37·9	−0·2	−0·6	−0·4	0·0	−0·1	−0·4
10	41·4	35·1	37·2	39·9	40·6	37·2	+1·1	+0·4	+0·4	+0·3	+0·3	+0·3	10	41·2	34·7	37·1	39·7	40·8	36·6	+0·9	0·0	+0·3	+0·1	+0·5	−0·3
11	47·2	36·3	41·7	45·3	45·7	47·2	−0·8	−0·1	−0·1	−0·3	+0·1	−0·2	11	47·0	35·1	41·6	45·5	45·5	47·0	−1·0	−1·3	−0·2	−0·1	−0·1	−0·4
12	47·7	39·1	39·9	44·2	45·1	39·6	−0·2	+0·7	−0·3	0·0	+0·5	+0·4	12	48·8	37·9	39·6	44·0	45·3	39·9	+0·9	−0·5	−0·6	−0·2	+0·7	+0·7
13	41·3	31·1	32·3	39·6	40·8	34·2	+0·5	+2·2	+1·8	−0·7	+0·6	+4·9	13	41·0	30·2	32·2	40·7	41·0	33·1	+0·2	+1·3	+1·7	+0·4	+0·8	+3·8
14	40·0	26·8	35·1	39·4	39·0	35·9	−0·3	+2·3	+0·5	−0·3	+0·1	+0·9	14	40·9	26·5	34·9	39·8	38·8	35·1	+0·6	+2·0	+0·3	+0·1	−0·1	+0·1
15	38·3	28·1	...	...	...	...	−0·8	0·0	...	...	...	...	15	39·6	28·1	...	...	...	...	+0·5	0·0	...	...	...	...
16	35·3	20·9	21·5	22·9	23·6	35·3	+0·3	+0·3	−0·1	−0·4	0·0	+0·3	16	35·5	20·1	21·8	23·3	23·4	35·5	+0·5	−0·5	+0·2	0·0	−0·2	+0·5
17	43·6	34·9	37·2	40·8	41·0	35·5	0·0	+1·3	−0·6	−0·8	−0·7	+1·9	17	44·5	34·4	37·1	40·9	40·9	35·2	+0·9	+0·8	−0·7	−0·7	−0·8	+1·6
18	41·1	32·2	34·9	39·1	40·2	33·9	+0·4	+0·1	−0·6	+0·4	+1·3	+1·2	18	41·6	31·7	34·9	39·5	40·3	33·9	+0·9	−0·4	−0·6	+0·8	+1·4	+1·2
19	37·9	27·1	28·9	30·9	36·9	34·7	+0·4	+2·0	+2·3	+1·7	−0·6	+0·3	19	37·5	26·1	28·6	30·9	37·4	34·3	0·0	+1·0	+2·0	+1·7	−0·1	−0·1
20	36·6	33·1	35·7	35·1	34·7	33·1	+0·3	−0·2	+0·1	−0·5	+0·1	−0·2	20	36·4	32·4	35·5	35·0	34·6	32·9	+0·1	−0·9	−0·1	−0·6	0·0	−0·4
21	38·2	28·2	30·0	35·9	36·8	35·1	+0·5	+0·8	+0·3	−1·2	+0·1	−0·2	21	38·6	27·7	29·9	36·1	36·7	34·9	+0·9	+0·3	+0·2	−1·0	0·0	−0·4
22	35·8	33·0	...	...	...	...	−0·2	−0·4	...	...	...	...	22	36·0	32·9	...	...	...	...	0·0	−0·5	...	...	...	...
23	40·3	32·3	33·5	35·1	39·9	35·2	−0·5	−0·2	+0·1	−0·5	−0·6	+1·0	23	41·1	32·2	33·2	35·7	40·1	35·9	+0·3	−0·3	−0·2	+0·1	−0·4	+1·7
24	43·9	34·4	36·9	41·2	43·1	41·2	+0·2	+0·3	−0·3	−0·1	+0·6	+1·3	24	44·8	35·1	37·6	42·0	43·2	41·1	+1·1	+1·0	+0·4	+0·7	+0·7	+1·2
25	45·9	39·1	42·8	44·7	45·0	39·8	+0·9	+0·1	+0·2	+0·2	+0·4	+0·6	25	45·5	38·1	42·8	44·7	44·9	39·1	+0·5	−0·9	+0·2	+0·2	+0·3	−0·1
26	40·0	32·1	32·9	37·5	39·0	34·9	−1·0	+0·2	+0·5	−0·3	−0·7	+1·2	26	40·3	31·1	32·9	37·5	39·1	34·9	−0·7	−0·8	+0·5	−0·3	−0·6	+1·2
27	41·3	25·3	27·9	37·0	41·3	36·9	+0·1	+0·6	−0·4	+0·2	+0·1	0·0	27	41·6	25·0	27·9	36·7	41·2	36·9	+0·4	+0·3	−0·4	−0·1	0·0	0·0
28	48·2	33·9	38·3	43·3	47·0	41·2	+0·1	+0·8	−1·3	−1·2	−1·1	−0·5	28	49·8	33·5	38·3	44·3	48·2	41·8	+1·7	+0·4	−1·3	−0·2	+0·1	+0·1
29	44·7	33·7	...	...	...	...	+0·7	+0·6	...	...	...	...	29	44·5	32·9	...	...	...	...	+0·5	−0·2	...	...	...	...
30	47·1	34·1	39·8	46·0	46·6	45·6	−0·2	0·0	−0·1	−0·2	0·0	0·0	30	46·7	34·4	39·8	46·3	46·7	45·3	−0·6	+0·3	−0·1	+0·1	+0·1	−0·3
31	46·6	39·5	42·5	44·9	45·9	40·2	0·0	−0·5	+1·0	+0·2	+0·5	0·0	31	46·9	39·4	42·2	45·1	46·1	39·8	+0·3	−0·6	+0·7	+0·4	+0·7	−0·4
Means	43·4	33·6	37·6	40·7	42·0	39·4	+0·1	+0·5	+0·1	−0·1	0·0	+0·5	Means	43·8	33·1	37·5	40·8	42·0	39·2	+0·5	0·0	+0·1	+0·1	+0·1	+0·4

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.					
	Maximum.	Minimum.	9h	Noon.	15h	21h	Maximum.	Minimum.	9h	Noon.	15h	21h		Maximum.	Minimum.	9h	Noon.	15h	21h	Maximum.	Minimum.	9h	Noon.	15h	21h
d	°	°	°	°	°	°	°	°	°	°	°	°	d	°	°	°	°	°	°	°	°	°	°	°	°
1	52·9	39·2	44·3	50·5	51·1	44·9	−0·2	−0·3	−0·1	−0·3	+0·4	+0·2	1	52·7	39·1	44·1	50·2	50·7	44·9	−0·4	−0·4	−0·3	−0·6	0·0	+0·2
2	45·6	38·6	41·0	44·8	45·2	39·2	−0·3	−0·1	−0·9	+0·2	+0·1	−0·2	2	46·2	38·1	40·7	44·6	45·4	39·1	+0·3	−0·6	−1·2	0·0	+0·3	−0·3
3	47·9	35·5	37·0	45·0	46·2	44·8	+0·9	−0·5	−0·8	+0·4	+0·3	+0·1	3	47·4	35·1	37·2	45·5	46·4	44·7	+0·4	−0·9	−0·6	+0·9	+0·5	0·0
4	51·0	42·9	45·4	48·7	50·0	48·4	0·0	−0·8	+0·2	+0·1	+0·1	−0·2	4	51·6	42·4	45·4	48·9	49·9	48·4	+0·6	−1·3	+0·2	+0·3	0·0	−0·2
5	54·0	47·1	...	...	...	...	+0·4	−0·2	...	...	...	...	5	53·6	46·8	...	...	...	...	0·0	−0·5	...	...	...	...
6	49·7	45·2	46·4	48·8	48·1	46·6	−0·3	−0·2	−0·1	−0·4	+0·2	0·0	6	51·2	45·3	46·4	48·9	47·9	46·1	+1·2	−0·1	−0·1	−0·3	0·0	−0·5
7	49·0	40·4	45·9	48·1	48·2	41·0	−0·3	−0·3	−0·2	−0·5	−0·3	+0·1	7	50·4	40·3	45·9	48·3	48·3	40·9	+1·1	−0·4	−0·2	−0·3	−0·2	0·0
8	46·3	39·4	40·7	45·0	43·5	41·1	−0·6	−0·3	0·0	0·0	+0·7	+1·2	8	47·9	39·2	40·7	45·5	43·3	40·7	+1·0	−0·5	0·0	+0·5	+0·5	+0·8
9	49·0	38·2	43·4	48·0	48·1	46·2	−0·6	+0·5	−0·2	−0·2	−0·1	−0·2	9	49·7	38·0	43·6	48·7	48·0	46·0	+0·1	+0·3	0·0	+0·5	−0·2	−0·4
10	50·6	41·3	43·4	48·5	49·1	45·8	−0·4	−0·3	−0·4	−0·2	−0·2	+0·9	10	51·3	40·3	43·7	48·9	49·3	45·5	+0·3	−1·3	−0·1	+0·2	0·0	+0·6
11	46·0	35·8	38·5	43·1	42·0	37·0	+0·9	−0·3	0·0	+0·8	−0·1	+0·4	11	45·5	35·1	38·5	42·3	42·3	36·9	+0·4	−1·0	0·0	0·0	+0·2	+0·3
12	37·6	32·3	...	...	...	...	+0·6	−0·1	...	...	...	...	12	37·3	31·9	...	...	...	...	+0·3	−0·5	...	...	...	...
13	47·3	34·8	40·3	43·6	47·2	46·6	−0·5	+0·1	−0·3	−0·8	−0·3	−0·3	13	47·5	34·7	40·3	43·4	47·3	46·6	−0·3	0·0	−0·3	−1·0	−0·2	−0·3
14	51·0	46·1	47·9	49·9	49·9	47·6	−0·5	+0·9	+0·1	0·0	+0·2	+0·7	14	51·6	46·2	48·1	50·3	49·6	47·9	+0·1	+1·0	+0·3	+0·4	−0·1	+1·0
15	48·6	42·2	44·9	47·4	48·5	46·2	−0·2	−0·3	−0·3	−0·2	+0·1	+0·2	15	48·7	41·4	44·9	47·6	48·5	46·0	−0·1	−1·1	−0·3	0·0	+0·1	0·0
16	52·4	44·8	47·5	51·9	52·0	46·1	−1·1	−0·3	0·0	0·0	+0·1	+0·5	16	53·1	44·1	47·7	52·1	52·1	45·9	−0·4	−1·0	+0·2	+0·2	+0·2	+0·3
17	50·3	43·7	46·6	49·8	49·5	44·2	−0·1	+0·2	−0·8	+0·7	+0·6	+0·3	17	50·2	43·2	46·6	49·7	49·3	44·2	−0·2	−0·3	−0·8	+0·6	+0·4	+0·3
18	50·9	36·1	43·4	50·1	49·5	50·3	−0·3	+0·5	−0·2	+0·1	+0·2	−0·3	18	51·1	35·1	43·5	50·2	49·6	50·1	−0·1	−0·5	−0·1	+0·2	+0·3	−0·5
19	50·3	38·1	...	...	...	...	−0·3	0·0	...	...	...	...	19	51·6	37·4	...	...	...	...	+1·0	−0·7	...	...	...	...
20	39·0	32·1	32·9	36·3	36·3	36·2	−0·6	+0·9	−0·3	+0·1	−0·2	+0·1	20	40·3	30·1	32·9	36·2	35·2	35·0	+0·7	−1·1	−0·3	0·0	−1·3	−1·1
21	44·0	34·9	38·7	41·8	42·6	36·6	−0·9	−0·1	+0·1	−0·1	−0·4	+0·3	21	44·6	33·0	38·6	41·8	41·9	36·3	−0·3	−2·0	0·0	−0·1	−1·1	0·0
22	41·7	34·5	36·4	40·4	39·5	36·4	−0·7	−0·2	0·0	−0·2	−0·3	−0·4	22	44·2	34·0	36·3	40·2	39·5	36·4	+1·8	−0·7	−0·1	−0·4	−0·3	−0·4
23	37·0	34·2	35·6	35·8	35·3	35·0	+0·1	−0·1	−0·1	+0·3	+0·2	0·0	23	36·4	33·8	35·4	35·7	35·0	34·6	−0·5	−0·5	−0·3	+0·2	−0·1	−0·4
24	37·2	34·1	35·9	36·0	37·0	37·1	+0·2	−0·2	+0·2	+0·1	+0·2	+0·9	24	37·0	33·9	35·4	35·6	36·5	36·9	0·0	−0·4	−0·3	−0·3	−0·3	+0·7
25	45·7	36·4	37·3	42·9	44·4	38·5	−0·7	+0·7	+0·1	−0·1	−0·2	+0·9	25	46·2	36·2	37·5	43·2	44·5	38·3	−0·2	+0·5	+0·3	+0·2	−0·1	+0·7
26	44·0	36·1	...	...	...	...	−0·6	+0·4	...	...	...	...	26	46·2	35·6	...	...	...	...	+1·6	−0·1	...	...	...	...
27	47·0	33·1	41·1	42·6	46·5	40·0	−0·4	0·0	−0·5	+0·5	−0·4	0·0	27	47·4	32·3	41·5	42·9	46·8	40·0	0·0	−0·8	−0·1	+0·8	−0·1	0·0
28	44·7	32·6	35·6	43·9	43·9	36·3	−1·0	−0·4	−0·5	+0·3	−0·7	+0·9	28	45·8	32·0	35·9	43·1	44·1	35·8	+0·1	−1·0	−0·2	−0·5	−0·5	+0·4
Means	46·8	38·2	41·3	45·1	45·6	42·2	−0·3	0·0	−0·2	0·0	0·0	+0·3	Means	47·4	37·7	41·3	45·2	45·5	42·0	+0·3	−0·6	−0·2	+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.*

MARCH.

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.					
	Maximum.	Minimum.	9h	Noon.	15h	21h	Maximum.	Minimum.	9h	Noon.	15h	21h		Maximum.	Minimum.	9h	Noon.	15h	21h	Maximum.	Minimum.	9h	Noon.	15h	21h
d	°	°	°	°	°	°	°	°	°	°	°	°	d	°	°	°	°	°	°	°	°	°	°	°	°
1	41·9	31·4	35·7	39·9	41·9	37·4	−0·1	+1·3	+0·1	−0·1	+0·1	−0·2	1	42·6	30·3	35·9	39·9	41·9	37·3	+0·6	+0·2	+0·3	−0·1	+0·1	−0·3
2	43·0	35·4	37·9	40·9	41·2	37·0	−1·1	−0·3	−0·8	−0·3	−0·1	+0·1	2	43·2	35·1	37·9	41·0	41·0	36·8	−0·9	−0·6	−0·8	−0·2	−0·3	−0·1
3	43·0	33·9	35·9	40·7	42·5	37·4	−1·6	0·0	−0·2	0·0	0·0	+0·8	3	43·6	33·3	35·8	40·6	42·3	36·9	−1·0	−0·6	−0·3	−0·1	−0·2	+0·3
4	43·8	28·0	33·5	42·9	43·1	42·4	−0·7	+0·9	−0·7	+0·1	−0·5	+0·7	4	44·6	27·5	36·3	43·5	42·9	42·4	+0·1	+0·4	+2·1	+0·7	−0·7	+0·7
5	48·6	41·5	...	...	...	...	−1·0	+0·3	...	...	...	...	5	48·9	41·1	...	...	...	...	−0·7	−0·1	...	...	...	...
6	49·7	40·8	42·5	46·1	46·2	45·0	−0·3	−0·2	−0·2	+0·4	+0·1	0·0	6	49·1	40·3	42·5	45·5	46·3	44·9	−0·9	−0·7	−0·2	−0·2	+0·2	−0·1
7	50·7	42·4	45·0	49·3	48·3	44·3	+0·1	−0·6	−0·1	+0·2	+0·1	−0·3	7	50·9	42·2	45·0	49·8	48·2	44·4	+0·3	−0·8	−0·1	+0·7	0·0	−0·2
8	49·8	36·1	39·8	43·3	46·9	44·8	−0·9	−0·3	−0·1	+0·1	−0·7	+0·1	8	50·3	35·2	39·8	43·3	47·2	44·9	−0·4	−1·2	−0·1	+0·1	−0·4	+0·2
9	51·6	39·3	49·1	51·6	47·8	39·9	−1·3	−0·2	−0·4	+0·1	+0·2	+0·2	9	51·9	38·3	49·2	51·9	47·6	39·3	−1·0	−1·2	−0·3	+0·4	0·0	−0·4
10	48·4	35·2	38·9	46·1	47·2	44·0	−0·6	−0·3	−0·1	+0·7	−0·4	+0·1	10	48·6	34·3	39·0	45·1	47·4	44·0	−0·4	−1·2	0·0	−0·3	−0·2	+0·1
11	50·7	42·8	49·2	49·4	48·9	43·5	−0·5	+0·1	−0·4	−0·6	−0·4	−0·1	11	51·3	42·0	49·5	49·5	49·1	43·4	+0·1	−0·7	−0·1	−0·5	−0·2	−0·2
12	48·2	38·5	...	...	...	...	−0·8	0·0	...	...	...	...	12	50·4	37·9	...	...	...	...	+1·4	−0·6	...	...	...	...
13	53·9	40·2	45·7	51·2	52·4	47·0	−1·5	−0·2	−1·1	−0·1	−0·4	+0·1	13	54·4	39·4	46·1	51·2	52·6	46·9	−1·0	−1·0	−0·7	−0·1	−0·2	0·0
14	52·4	42·9	46·9	47·2	48·4	46·0	−0·4	−0·1	−0·3	−0·4	−0·2	−0·1	14	52·6	42·1	47·0	47·1	48·3	46·2	−0·2	−0·9	−0·2	−0·5	−0·3	+0·1
15	48·8	38·9	44·9	45·6	44·8	41·9	−1·8	−0·2	−1·7	−0·5	+1·1	+0·2	15	50·2	38·1	45·2	45·5	44·6	41·6	−0·4	−1·0	−1·4	−0·6	+0·9	−0·1
16	53·0	38·0	46·4	49·5	52·0	44·1	−1·2	−0·5	−0·3	−0·2	−0·6	+0·2	16	53·6	37·1	46·9	49·9	52·5	44·0	−0·6	−1·4	+0·2	+0·2	−0·1	+0·1
17	54·3	43·0	48·4	49·2	52·1	46·0	−1·4	−0·1	−1·2	+0·2	+0·4	+0·5	17	54·9	41·2	49·1	49·1	52·3	45·7	−0·8	−1·9	−0·5	+0·1	+0·6	+0·2
18	55·1	44·9	47·9	51·3	55·1	46·8	+0·1	+1·0	−0·3	−0·3	+0·3	+0·7	18	55·6	43·1	49·0	51·5	55·6	46·5	+0·6	−0·8	+0·8	−0·1	+0·8	+0·4
19	55·0	39·2	...	...	...	...	+0·2	+0·7	...	...	...	...	19	54·7	38·1	...	...	...	...	−0·1	−0·4	...	...	...	...
20	54·5	35·1	44·4	52·9	54·2	45·8	−1·7	+2·0	0·0	+0·7	−0·4	+0·4	20	55·6	35·1	45·1	52·8	54·6	44·9	−0·6	+2·0	+0·7	+0·6	0·0	−0·5
21	54·5	41·3	44·6	51·0	54·5	43·8	−0·9	+0·2	−0·1	−0·8	−0·2	+0·6	21	56·9	40·3	45·2	52·7	54·8	42·7	+1·5	−0·8	+0·5	+0·9	+0·1	−0·5
22	60·0	32·8	41·1	59·0	59·3	48·9	−1·4	+0·9	−0·3	−1·8	−0·3	+1·9	22	61·1	32·1	41·8	59·1	59·7	47·9	−0·3	+0·2	+0·4	−1·7	+0·1	+0·9
23	59·9	41·7	50·0	59·9	56·2	46·3	−1·2	+2·6	−0·4	+1·3	+1·4	+0·6	23	61·4	40·4	50·9	60·5	56·7	45·8	+0·3	+1·3	+0·5	+1·9	+1·9	+0·1
24	58·0	41·4	46·8	54·9	56·8	46·1	−0·1	−0·1	−0·3	+0·1	−0·4	−0·3	24	59·6	40·7	47·2	55·4	57·2	45·8	+1·5	−0·8	+0·1	+0·6	0·0	−0·6
25	50·2	38·0	45·8	49·2	48·8	43·0	−0·8	+2·7	+0·2	−0·2	−0·5	+0·4	25	51·5	36·9	46·3	49·7	49·2	42·8	+0·5	+1·6	+0·7	+0·3	−0·1	+0·2
26	57·0	39·1	...	...	...	...	+0·2	−0·1	...	...	...	...	26	56·8	38·6	...	...	...	...	0·0	−0·6	...	...	...	...
27	47·2	42·1	43·2	44·6	45·6	43·4	+0·4	+0·7	−0·3	0·0	0·0	+0·5	27	48·2	41·1	43·3	44·9	45·8	42·9	+1·4	−0·3	−0·2	+0·3	+0·2	0·0
28	56·0	38·5	47·4	55·5	53·0	48·8	−0·4	−0·1	−0·8	+0·6	+0·9	−0·2	28	56·4	37·5	47·8	54·9	53·1	48·8	0·0	−1·1	−0·4	0·0	+1·0	−0·2
29	56·2	44·6	50·5	53·9	52·0	49·3	−1·2	+0·6	−0·3	+0·3	0·0	0·0	29	57·0	44·0	50·8	54·1	51·9	49·1	−0·4	0·0	0·0	+0·5	−0·1	−0·2
30	57·6	45·2	48·8	52·1	56·6	47·1	−0·3	+0·4	+0·1	+0·2	+1·4	−0·5	30	58·2	44·5	48·7	52·5	55·9	47·1	+0·3	−0·3	0·0	+0·6	+0·7	−0·5
31	55·9	37·4	44·5	53·0	55·8	47·2	−0·2	+0·1	−1·1	+1·2	+0·9	+1·5	31	55·9	36·4	44·6	53·5	55·9	46·7	−0·2	−0·9	−1·0	+1·7	+1·0	+1·0
Means	51·9	39·0	44·3	49·3	50·1	44·3	−0·7	+0·4	−0·4	0·0	+0·1	+0·3	Means	52·6	38·2	44·7	49·4	50·2	44·1	0·0	−0·5	0·0	+0·2	+0·2	0·0

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.					
	Maximum.	Minimum.	9h	Noon.	15h	21h	Maximum.	Minimum.	9h	Noon.	15h	21h		Maximum.	Minimum.	9h	Noon.	15h	21h	Maximum.	Minimum.	9h	Noon.	15h	21h
d	°	°	°	°	°	°	°	°	°	°	°	°	d	°	°	°	°	°	°	°	°	°	°	°	°
1	59·1	38·9	45·6	53·9	57·7	48·6	−0·9	0·0	−1·3	+0·9	−1·9	0·0	1	60·1	38·1	46·7	54·5	58·0	48·1	+0·1	−0·8	−0·2	+1·5	−1·6	−0·5
2	55·0	44·1	...	...	...	...	−0·2	+0·8	...	...	...	...	2	55·6	42·8	...	...	...	...	+0·4	−0·5	...	...	...	...
3	51·8	35·6	42·9	49·8	51·7	44·9	−0·3	+2·3	0·0	−0·1	−0·1	+0·3	3	53·6	35·1	43·9	50·2	53·2	44·9	+1·5	+1·8	+1·0	+0·3	+1·4	+0·3
4	54·4	38·2	47·2	54·2	53·2	50·3	−1·6	+1·5	+0·2	+0·6	−0·4	−0·1	4	55·0	37·1	47·6	55·0	53·5	50·4	−1·0	+0·4	+0·6	+1·4	−0·1	0·0
5	54·6	42·5	50·0	53·7	52·7	43·2	−0·4	+0·2	−0·1	0·0	+0·2	+0·4	5	54·8	41·0	50·2	53·7	52·8	41·9	−0·2	−1·3	+0·1	0·0	+0·3	−0·9
6	46·6	35·8	39·7	43·7	44·9	39·9	+0·6	+0·2	+0·5	+2·2	+0·4	+1·3	6	46·9	35·2	38·6	42·7	45·4	39·5	+0·9	−0·4	−0·6	+1·2	+0·9	+0·9
7	51·7	33·1	40·2	49·2	44·5	38·4	−1·2	+0·5	−0·7	0·0	−0·1	0·0	7	53·1	32·4	40·3	49·6	44·3	37·4	+0·2	−0·2	−0·6	+0·4	−0·3	−1·0
8	45·3	32·8	39·1	42·3	44·9	36·2	+0·3	0·0	+1·3	+0·7	+1·2	+1·3	8	45·3	32·0	37·0	42·1	45·1	35·9	+0·3	−0·8	−0·8	+0·5	+1·4	+1·0
9	49·2	33·1	...	...	...	...	−1·1	+2·0	...	...	...	...	9	49·9	31·8	...	...	...	...	−0·4	+0·7	...	...	...	...
10	50·4	40·7	44·9	49·8	48·2	46·1	−1·7	0·0	−0·4	−0·7	−0·1	−0·1	10	52·9	40·1	45·2	49·5	48·6	45·7	+0·8	−0·6	−0·1	−1·0	+0·3	−0·5
11	56·3	44·3	48·8	52·8	56·2	51·0	−1·1	−0·4	−0·4	−0·1	−0·4	+0·1	11	57·9	44·1	50·9	53·2	57·3	50·9	+0·5	−0·6	+1·7	+0·3	+0·7	0·0
12	60·4	44·9	50·2	51·9	60·1	47·9	−0·7	+0·5	+0·1	+0·5	−0·4	+1·0	12	61·8	44·4	51·0	52·5	60·6	47·9	+0·7	0·0	+0·9	+1·1	+0·1	+1·0
13	63·8	42·7	56·5	61·1	60·9	54·9	−0·2	+0·9	−0·1	−1·6	+0·4	+0·7	13	65·4	41·9	57·3	61·6	61·3	54·7	+1·4	+0·1	+0·7	−1·1	+0·8	+0·5
14	63·0	49·4	52·9	61·4	59·7	49·9	−1·9	+0·5	−0·2	−1·2	+0·1	+0·7	14	65·0	48·5	53·1	62·8	59·5	49·3	+0·1	−0·4	0·0	+0·2	−0·1	+0·1
15	60·5	45·3	53·0	58·9	58·8	47·9	−0·6	−0·5	−0·3	+1·5	+0·6	+1·4	15	61·8	45·2	54·1	59·5	59·2	46·9	+0·7	−0·6	+0·8	+2·1	+1·0	+0·4
16	58·7	41·4	...	...	...	...	−1·2	0·0	...	...	...	...	16	61·0	41·0	...	...	...	...	+1·1	−0·4	...	...	...	...
17	50·9	40·7	44·9	48·5	47·6	42·0	−1·0	−0·2	+0·2	−0·2	0·0	+0·2	17	52·6	40·1	44·9	50·0	48·3	41·7	+0·7	−0·8	+0·2	+1·3	+0·7	−0·1
18	46·0	36·8	45·1	41·9	40·8	37·3	−1·2	+0·2	−0·5	0·0	−0·5	+0·4	18	49·0	36·0	46·0	42·5	40·9	36·8	+1·8	−0·6	+0·4	+0·6	−0·4	−0·1
19	43·9	35·6	41·2	42·5	41·0	38·8	−1·6	+0·2	−0·4	−0·3	−0·2	+0·3	19	45·6	34·9	41·6	43·6	40·9	38·2	+0·1	−0·5	0·0	+0·8	−0·3	−0·3
20	47·6	37·4	41·2	44·2	45·1	41·0	−1·9	+0·3	−0·3	−0·2	−0·6	+0·1	20	48·6	36·0	41·7	44·4	45·3	40·9	−0·9	−1·1	+0·2	0·0	−0·4	0·0
21	50·0	39·0	...	...	...	...	−1·1	+0·1	...	...	...	...	21	50·6	37·8	...	...	...	...	−0·5	−1·1	...	...	...	...
22	47·9	37·5	41·8	42·8	45·3	44·1	−1·1	+0·2	−0·2	0·0	+0·3	+0·2	22	48·9	36·4	42·0	42·9	45·1	44·1	−0·1	−0·9	0·0	+0·1	+0·1	+0·2
23	52·0	36·2	...	...	...	...	−0·6	−0·3	...	...	...	...	23	52·5	35·1	...	...	...	...	−0·1	−1·4	...	...	...	...
24	51·4	36·0	...	...	...	...	−0·7	−0·3	...	...	...	...	24	51·5	35·2	...	...	...	...	−0·6	−1·1	...	...	...	...
25	53·3	37·8	50·0	50·0	47·7	48·6	−0·7	+1·0	+0·4	+0·7	−0·1	0·0	25	54·1	36·3	49·6	50·6	47·8	48·7	+0·1	−0·5	0·0	+1·3	0·0	+0·1
26	57·0	47·3	50·6	55·2	55·1	47·9	−0·9	−0·5	0·0	+0·6	−0·1	+0·1	26	57·8	47·2	50·9	55·4	55·5	47·9	−0·1	−0·6	+0·3	+0·8	+0·3	+0·1
27	57·1	47·1	52·3	56·9	54·3	49·1	−1·8	−0·2	−0·5	−0·1	0·0	0·0	27	58·3	46·2	52·9	57·4	54·4	49·0	−0·6	−1·1	+0·1	+0·4	+0·1	−0·1
28	57·0	48·0	53·8	54·9	52·8	48·6	−1·1	+0·5	+0·3	−0·7	−0·3	+0·9	28	57·2	47·1	54·2	55·3	53·2	48·1	−0·9	−0·4	+0·7	−0·3	+0·1	+0·4
29	59·0	47·2	53·4	55·8	57·8	49·6	−0·3	−0·1	+0·2	+0·2	+0·6	+0·1	29	59·6	46·3	53·6	56·2	58·5	49·2	+0·3	−1·0	+0·4	+0·6	+1·3	−0·3
30	57·9	45·1	...	...	...	...	−3·2	+0·1	...	...	...	...	30	58·5	44·1	...	...	...	...	−2·6	−0·9	...	...	...	...
Means	53·7	40·5	47·2	51·1	51·3	45·5	−1·0	+0·3	−0·1	+0·1	−0·1	+0·4	Means	54·8	39·6	47·5	51·5	51·7	45·1	+0·1	−0·5	+0·3	+0·5	+0·3	+0·1

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

MAY.

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.					
	Maximum.	Minimum.	9h	Noon.	15h	21h	Maximum.	Minimum.	9h	Noon.	15h	21h		Maximum.	Minimum.	9h	Noon.	15h	21h	Maximum.	Minimum.	9h	Noon.	15h	21h
d	°	°	°	°	°	°	°	°	°	°	°	°	d	°	°	°	°	°	°	°	°	°	°	°	°
1	59·4	45·6	53·6	57·6	56·8	50·3	−0·2	−0·4	+0·7	+0·9	+0·4	+0·7	1	59·4	45·3	54·0	57·7	57·2	49·9	−0·2	−0·7	+1·1	+1·0	+0·8	+0·3
2	57·2	43·1	50·0	51·6	54·3	46·1	−1·0	+0·7	−0·3	+0·3	+0·6	−0·3	2	57·6	41·4	50·9	51·8	54·8	45·9	−0·6	−1·0	+0·6	+0·5	+1·1	−0·5
3	58·8	41·3	50·1	53·2	56·6	43·8	−0·9	−0·4	−0·5	+1·0	−0·1	−0·3	3	60·2	40·2	50·8	53·5	57·1	43·8	+0·5	−1·5	+0·2	+1·3	+0·4	−0·3
4	56·0	38·1	50·2	55·2	52·9	46·7	−1·4	−0·1	+0·6	+0·6	−0·1	+1·1	4	56·8	37·9	48·8	55·3	53·3	45·4	−0·6	−0·3	−0·8	+0·7	+0·3	−0·2
5	59·0	42·6	47·9	56·2	58·5	48·0	−1·2	+0·1	0·0	+0·7	−0·3	+0·8	5	59·9	42·1	47·9	54·7	58·9	47·6	−0·3	−0·4	0·0	−0·8	+0·1	+0·4
6	64·0	39·0	49·0	59·0	64·0	53·4	−0·6	+0·7	+1·2	+1·5	+0·4	+2·8	6	64·4	38·1	47·4	56·6	64·4	53·2	−0·2	−0·2	−0·4	−0·9	+0·8	+2·6
7	67·2	43·7	...	...	...	...	−0·8	+2·9	...	...	...	...	7	68·0	42·4	...	...	...	...	0·0	+1·6	...	...	...	...
8	59·5	47·2	53·4	57·3	59·3	49·7	−0·3	+0·2	−1·0	+0·9	−0·3	+1·3	8	58·9	47·2	52·9	56·2	58·5	48·8	−0·9	+0·2	−1·5	−0·2	−1·1	+0·4
9	61·7	38·3	54·1	58·6	61·7	48·5	−0·9	+2·0	+2·1	+1·7	+0·4	+0·5	9	62·5	37·1	53·0	59·0	62·2	48·0	−0·1	+0·8	+1·0	+2·1	+0·9	0·0
10	69·1	42·5	57·8	65·8	68·6	58·3	−0·9	+0·3	−0·1	−0·1	+0·3	+2·0	10	71·2	41·7	57·8	65·3	68·4	57·5	+1·2	−0·5	−0·1	−0·6	+0·1	+1·2
11	67·7	43·4	59·0	64·9	63·9	58·8	−1·3	+0·1	−0·2	+0·9	+0·6	+0·2	11	69·8	43·3	59·3	65·4	64·5	58·3	+0·8	0·0	+0·1	+1·4	+1·2	−0·3
12	61·0	46·1	55·9	58·6	61·0	52·5	−0·4	+0·5	+2·0	+1·7	+1·4	+1·3	12	60·6	45·5	53·0	59·1	60·1	52·0	−0·8	−0·1	−0·9	+2·2	+0·5	+0·8
13	56·6	43·1	52·0	55·9	56·6	50·9	−0·8	+2·0	−0·3	+0·2	−0·1	+0·5	13	57·1	41·2	51·9	55·7	57·1	51·0	−0·3	+0·1	−0·4	0·0	+0·4	+0·6
14	55·6	45·4	...	...	...	...	−0·6	+0·1	...	...	...	...	14	56·2	45·2	...	...	...	...	0·0	−0·1	...	...	...	...
15	62·0	41·1	54·8	59·8	61·6	51·0	−2·0	−0·1	−0·4	+1·0	+0·9	+1·4	15	63·6	40·1	54·4	58·2	60·5	50·1	−0·4	−1·1	−0·8	−0·6	−0·2	+0·5
16	58·7	40·4	55·0	56·4	50·8	52·2	−1·3	+0·9	+1·0	−0·8	−0·2	+0·1	16	59·4	39·3	53·4	57·6	50·8	52·0	−0·6	−0·2	−0·6	+0·4	−0·2	−0·1
17	68·9	45·8	62·8	68·9	65·0	56·3	−1·3	+0·3	+0·2	0·0	−0·4	+0·7	17	70·7	45·2	62·8	70·0	66·8	55·8	+0·5	−0·3	+0·2	+1·1	+1·4	+0·2
18	68·0	45·2	59·8	67·2	67·9	54·8	−1·6	+0·8	+0·2	−0·8	−0·8	+0·8	18	69·8	44·2	59·0	67·9	67·8	53·9	+0·2	−0·2	−0·6	−0·1	−0·9	−0·1
19	65·8	46·1	54·4	60·4	65·0	50·5	−1·2	−0·2	+0·1	−0·4	+0·5	+0·5	19	65·7	45·2	53·4	60·8	65·7	49·9	−1·3	−1·1	−0·9	0·0	+1·2	−0·1
20	60·0	45·4	48·4	51·9	57·8	48·7	−1·1	+0·3	−0·3	−0·2	+0·1	+0·5	20	59·7	44·2	46·9	50·5	56·9	48·2	−1·4	−0·9	−1·8	−1·6	−0·8	0·0
21	51·0	43·3	...	...	...	...	−2·1	+0·1	...	...	...	...	21	51·7	42·6	...	...	...	...	−1·4	−0·6	...	...	...	...
22	53·8	38·4	48·5	48·9	51·2	44·2	−1·5	+0·2	+1·0	+0·1	−0·6	+0·9	22	53·9	38·0	47·0	49·2	50·9	43·5	−1·4	−0·2	−0·5	+0·4	−0·9	+0·2
23	55·1	35·1	45·9	50·9	52·9	45·8	−2·6	+0·8	+0·2	+0·7	−0·2	+2·8	23	57·5	33·6	45·4	51·3	53·2	45·4	−0·2	−0·7	−0·3	+1·1	+0·1	+2·4
24	61·1	38·9	50·2	58·0	58·7	53·9	−2·0	+1·4	−0·9	−0·2	+0·1	+1·6	24	63·5	37·9	51·9	58·5	59·9	53·9	+0·4	+0·4	+0·8	+0·3	+1·3	+1·6
25	64·0	47·1	61·2	62·2	61·5	54·9	−2·8	+1·8	+0·1	−0·4	+0·2	+0·5	25	66·1	47·2	62·1	62·5	61·7	54·4	−0·7	+1·9	+1·0	−0·1	+0·4	0·0
26	67·1	49·0	59·0	66·9	64·1	54·9	−2·7	+0·8	−0·4	+1·0	−1·6	+1·1	26	68·6	48·8	62·2	67·8	64·5	54·3	−1·2	+0·6	+2·8	+1·9	−1·2	+0·5
27	72·0	45·1	63·4	69·9	70·9	57·8	−1·5	+2·9	−0·8	−0·2	−0·1	+0·2	27	73·7	44·9	64·1	70·3	71·3	57·0	+0·2	+2·7	−0·1	+0·2	+0·3	−0·6
28	76·1	47·6	...	...	...	...	−0·6	+1·2	...	...	...	...	28	77·6	46·4	...	...	...	...	+0·9	0·0	...	...	...	...
29	81·7	53·3	73·7	80·3	78·9	62·7	−0·6	+3·5	−0·1	−0·4	−0·2	−0·1	29	82·2	52·2	73·9	80·6	79·4	62·0	−0·1	+2·4	+0·1	−0·1	+0·3	−0·8
30	73·1	56·7	68·8	71·5	66·5	57·9	−1·6	+4·4	−0·2	+0·9	−1·1	+0·3	30	75·2	56·2	67·7	72·2	66·7	57·7	+0·5	+3·9	−1·3	+1·6	−0·9	+0·1
31	68·0	54·3	61·0	65·6	67·4	59·4	−1·7	+0·5	−0·4	−0·1	−2·0	+0·4	31	69·6	53·2	60·9	66·0	67·7	58·9	−0·1	−0·6	−0·5	+0·3	−1·7	−0·1
Means	63·2	44·3	55·6	60·5	61·3	52·3	−1·3	+0·9	+0·1	+0·4	−0·1	+0·8	Means	64·2	43·5	55·3	60·5	61·5	51·8	−0·2	+0·1	−0·1	+0·4	+0·1	+0·3

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.					
	Maximum.	Minimum.	9h	Noon.	15h	21h	Maximum.	Minimum.	9h	Noon.	15h	21h		Maximum.	Minimum.	9h	Noon.	15h	21h	Maximum.	Minimum.	9h	Noon.	15h	21h
d	°	°	°	°	°	°	°	°	°	°	°	°	d	°	°	°	°	°	°	°	°	°	°	°	°
1	66·2	51·2	60·8	64·6	63·9	56·7	−1·6	+0·1	+0·5	+1·0	−1·8	−0·2	1	67·5	51·0	61·9	64·8	64·4	56·5	−0·3	−0·1	+1·6	+1·2	−1·3	−0·4
2	72·2	51·1	62·3	68·5	68·3	60·1	−2·3	−0·2	+0·3	−0·1	+0·2	+0·2	2	73·8	51·0	62·9	69·0	68·7	59·9	−0·7	−0·3	+0·9	+0·4	+0·6	0·0
3	75·2	55·3	62·9	72·0	73·4	62·9	−1·8	+0·1	+0·1	+0·4	+0·7	+0·1	3	77·6	55·5	65·0	73·9	74·0	62·8	+0·6	+0·3	+2·2	+2·3	+1·3	0·0
4	69·4	57·3	...	...	...	...	−0·3	+2·4	...	...	...	...	4	69·3	56·7	...	...	...	...	−0·4	+1·8	...	...	...	...
5	63·0	49·2	53·9	54·5	51·9	49·9	+0·3	0·0	+0·3	−0·2	−0·3	+0·1	5	62·6	48·2	53·8	54·3	52·2	49·0	−0·1	−1·0	+0·2	−0·4	0·0	−0·8
6	51·1	47·2	50·7	51·0	50·5	47·8	0·0	+0·1	−0·3	+0·4	+0·6	+0·2	6	51·6	46·2	49·9	51·3	49·9	46·9	+0·5	−0·9	−1·1	+0·7	0·0	−0·7
7	53·0	46·3	49·9	52·1	52·9	51·7	−0·2	+0·2	−0·2	−0·6	−0·3	+0·4	7	53·1	45·6	49·6	52·5	53·1	51·1	−0·1	−0·5	−0·5	−0·2	−0·1	−0·2
8	65·2	50·6	55·6	64·0	64·8	54·7	−1·8	+0·1	−1·1	+0·3	−0·5	−0·2	8	65·6	50·0	56·6	64·3	64·9	53·9	−1·4	−0·5	−0·1	+0·6	−0·4	−1·0
9	54·7	50·2	52·9	53·0	52·9	52·0	−0·3	+0·1	+0·1	−0·2	+0·3	0·0	9	53·9	48·8	51·5	52·9	52·1	51·9	−1·1	−1·3	−1·3	−0·3	−0·5	−0·1
10	61·7	49·1	52·9	59·7	58·1	54·2	−0·4	−0·2	−0·3	+0·3	−0·1	0·0	10	61·8	48·6	53·1	60·1	58·3	53·9	−0·3	−0·7	−0·1	+0·7	+0·1	−0·3
11	59·7	49·7	...	...	...	...	−1·0	+0·2	...	...	...	...	11	61·0	49·1	...	...	...	...	+0·3	−0·4	...	...	...	...
12	63·1	53·1	...	...	...	...	−2·9	+0·8	...	...	...	...	12	66·1	52·4	...	...	...	...	+0·1	+0·1	...	...	...	...
13	68·7	51·0	62·5	68·7	67·6	58·2	−1·4	+1·1	−0·1	−0·3	+0·8	+0·4	13	70·5	50·1	63·8	69·1	67·9	57·6	+0·4	+0·2	+1·2	+0·1	+1·1	−0·2
14	67·7	51·3	65·2	67·7	66·2	56·2	−0·8	+0·1	−0·4	−0·8	+0·9	+1·2	14	69·0	50·8	65·7	68·2	67·1	55·1	+0·5	−0·4	+0·1	−0·3	+1·8	+0·1
15	72·4	49·5	61·9	70·4	72·0	60·2	−1·6	+1·2	+1·5	+1·8	−1·9	+0·3	15	75·9	48·2	60·7	70·0	72·4	59·7	+1·9	−0·1	+0·3	+1·4	−1·5	−0·2
16	76·0	55·1	68·2	73·5	76·0	64·0	−1·2	+1·2	+0·7	+0·9	+1·4	+1·4	16	78·6	54·2	70·0	75·2	76·6	63·0	+1·4	+0·3	+2·5	+2·6	+2·0	+0·4
17	65·1	57·4	60·3	62·8	63·7	60·2	−1·3	+0·4	−0·3	+0·1	−0·1	+1·0	17	66·0	56·7	60·4	63·6	64·3	60·0	−0·4	−0·3	−0·2	+0·9	+0·5	+0·8
18	66·3	53·7	...	...	...	...	−1·3	−0·1	...	...	...	...	18	68·2	53·2	...	...	...	...	+0·6	−0·6	...	...	...	...
19	69·0	50·8	61·6	65·9	64·4	57·6	−1·4	+2·0	+0·8	+0·3	−0·7	+0·2	19	70·3	49·8	62·7	66·4	64·7	57·0	−0·1	+1·0	+1·9	+0·8	−0·4	−0·4
20	66·5	53·3	61·9	63·9	62·7	58·5	−1·0	+0·1	−0·9	0·0	−0·6	0·0	20	67·8	52·2	62·9	64·6	63·2	58·0	+0·3	−1·0	+0·1	+0·7	−0·1	−0·5
21	72·8	55·3	67·3	70·5	69·9	63·6	−1·7	+0·1	+0·3	−0·1	−0·7	−0·1	21	73·9	54·4	68·4	70·8	71·2	63·9	−0·6	−0·8	+1·4	+0·2	+0·6	+0·2
22	77·2	52·1	68·9	75·8	75·9	60·0	−0·8	+0·7	−0·2	+2·6	+1·5	+0·2	22	77·0	51·2	68·1	76·5	76·1	59·9	−1·0	−0·2	−1·0	+3·3	+1·7	+0·1
23	73·0	50·4	65·7	70·3	72·9	56·8	−1·1	+0·3	+1·1	+0·7	+1·6	+1·2	23	74·7	50·7	63·9	70·9	73·5	55·9	+0·6	+0·6	−0·7	+1·3	+2·2	+0·3
24	71·0	47·7	55·9	65·8	69·6	64·3	−1·2	+0·3	+0·2	−0·3	−1·0	+0·2	24	71·8	47·2	55·9	66·2	69·7	63·8	−0·4	−0·2	+0·2	+0·1	−0·9	−0·3
25	72·0	54·9	...	...	...	...	−2·1	+0·8	...	...	...	..	25	73·6	53·5	...	...	...	...	−0·5	−0·6	...	...	...	...
26	68·7	56·1	61·3	67·7	65·9	62·9	−2·2	+0·1	+0·3	+0·7	−0·2	+0·7	26	68·7	55·8	61·5	67·8	66·3	62·4	−2·2	−0·2	+0·5	+0·8	+0·2	+0·2
27	78·5	54·1	67·8	72·5	77·3	65·6	−1·6	+2·0	−0·4	−0·1	+0·1	−0·1	27	80·6	53·8	69·3	74·6	78·0	64·9	+0·5	+1·7	+1·1	+2·0	+0·8	−0·8
28	74·9	55·0	60·8	71·5	69·9	61·2	−2·1	+0·2	+0·1	+0·6	+0·1	−0·1	28	77·3	54·3	62·4	72·8	70·9	60·7	+0·3	−0·5	+1·7	+1·9	+1·1	−0·6
29	69·6	53·1	65·3	66·4	62·9	60·8	−2·3	+2·0	−0·4	−0·1	−0·1	0·0	29	72·0	52·6	67·1	67·4	63·7	60·7	+0·1	+1·5	+1·4	+0·9	+0·7	−0·1
30	66·8	59·3	61·5	64·7	64·9	63·9	−1·3	−0·4	0·0	−0·9	+0·1	+0·6	30	68·7	59·3	60·9	65·6	65·4	63·4	+0·6	−0·4	−0·6	0·0	+0·6	+0·1
Means	67·7	52·3	60·7	65·5	65·5	58·6	−1·3	+0·5	+0·1	+0·3	0·0	+0·3	Means	69·0	51·7	61·1	66·1	65·9	58·1	0·0	−0·1	+0·5	+0·9	+0·4	−0·2

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

JULY.

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.					
	Maximum.	Minimum.	9h	Noon.	15h	21h	Maximum.	Minimum.	9h	Noon.	15h	21h		Maximum.	Minimum.	9h	Noon.	15h	21h	Maximum.	Minimum.	9h	Noon.	15h	21h
d	°	°	°	°	°	°	°	°	°	°	°	°	d	°	°	°	°	°	°	°	°	°	°	°	°
1	75·2	59·7	62·9	73·4	73·3	62·9	−0·8	−0·1	+0·2	+0·8	+1·1	+1·3	1	76·6	59·7	63·2	73·6	73·7	62·5	+0·6	−0·1	+0·5	+1·0	+1·5	+0·9
2	73·4	54·7	...	...	...	...	−2·6	+1·6	...	...	...	...	2	75·2	53·6	...	...	...	...	−0·8	+0·5	...	...	...	...
3	76·0	58·8	...	...	...	...	−2·0	0·0	...	...	...	...	3	79·8	58·3	...	...	...	...	+1·8	−0·5	...	...	...	...
4	67·0	57·1	62·8	65·8	66·1	62·9	−1·9	+0·5	+0·6	+0·1	+0·2	+0·3	4	69·2	56·3	62·9	66·3	67·1	62·5	+0·3	−0·3	+0·7	+0·6	+1·2	−0·1
5	71·1	57·3	66·0	69·7	70·9	64·1	−1·1	+0·9	+1·5	+0·2	+0·8	+2·4	5	72·1	56·9	65·1	69·9	71·9	64·4	−0·1	+0·5	+0·6	+0·4	+1·8	+2·7
6	69·5	57·1	64·9	66·7	66·4	60·4	−0·5	−0·1	+1·7	+0·6	+0·6	+0·6	6	69·9	56·3	64·7	67·9	67·1	60·0	−0·1	−0·9	+1·5	+1·8	+1·3	+0·2
7	75·0	50·6	65·5	70·9	74·9	63·9	−1·1	+2·4	+1·9	+0·4	+1·1	+2·3	7	76·6	49·3	63·9	71·6	76·0	63·3	+0·5	+1·1	+0·3	+1·1	+2·2	+1·7
8	80·9	54·1	74·1	80·1	79·5	63·2	−1·0	+2·3	+1·1	+1·5	−1·1	+0·5	8	83·0	53·2	73·1	80·2	79·8	62·3	+1·1	+1·4	+0·1	+1·6	−0·8	−0·4
9	81·9	57·4	...	...	...	...	−1·3	+0·1	...	...	...	...	9	85·2	57·5	...	...	...	...	+2·0	+0·2	...	...	...	...
10	73·5	59·2	68·6	70·4	71·2	63·2	−2·5	+0·4	+0·2	−0·5	−0·9	+0·2	10	75·3	58·4	69·4	71·7	71·9	63·0	−0·7	−0·4	+1·0	+0·8	−0·2	0·0
11	77·2	61·5	70·1	70·0	75·7	67·9	−2·1	0·0	−0·5	+0·4	−1·0	+0·3	11	79·3	61·6	71·7	71·7	77·1	67·3	0·0	+0·1	+1·1	+2·1	+0·4	−0·3
12	78·9	61·3	68·3	75·0	76·8	67·7	−2·1	+0·1	−0·3	+0·9	−1·2	+0·7	12	81·0	60·3	70·9	77·1	78·8	67·9	0·0	−0·9	+2·3	+3·0	+0·8	+0·9
13	79·3	59·8	67·8	75·5	75·0	71·3	−0·8	+0·6	−1·8	+1·4	+0·2	+0·8	13	81·4	59·1	68·8	75·8	75·8	70·7	+1·3	−0·1	−0·8	+1·7	+1·0	+0·2
14	84·0	60·2	73·6	80·7	80·9	70·9	−0·3	+0·7	−1·0	+1·3	0·0	+0·7	14	84·7	59·3	73·6	80·6	81·4	69·9	+0·4	−0·2	−1·0	+1·2	+0·5	−0·3
15	77·1	62·6	65·4	73·0	75·9	69·4	−2·7	+0·4	−0·2	−0·7	+0·6	+0·4	15	79·1	62·2	66·3	75·1	76·2	69·0	−0·7	0·0	+0·7	+1·4	+0·9	0·0
16	71·5	60·2	...	...	...	...	−2·5	0·0	...	...	...	...	16	74·2	59·7	...	...	...	...	+0·2	−0·5	...	...	...	...
17	72·9	52·3	66·3	70·8	68·1	62·6	−1·3	+2·0	−0·3	−1·0	−0·6	+0·5	17	74·7	51·2	66·4	71·1	68·5	61·8	+0·5	+0·9	−0·2	−0·7	−0·2	−0·3
18	73·8	58·6	60·9	68·3	71·8	62·3	−1·4	+1·4	−0·4	0·0	−0·3	+0·9	18	74·3	56·5	60·9	68·9	71·8	61·8	−0·9	−0·7	−0·4	+0·6	−0·3	+0·4
19	73·8	52·8	66·9	70·9	73·8	60·4	−1·7	+4·0	+2·7	+1·0	+0·6	+0·8	19	74·6	51·9	63·6	71·5	73·3	60·1	−0·9	+3·1	−0·6	+1·6	+0·1	+0·5
20	78·6	54·1	69·6	76·0	77·6	68·8	−1·4	−0·1	+0·6	−1·2	+0·2	+2·0	20	80·0	53·2	70·0	76·5	77·9	68·9	0·0	−1·0	+1·0	−0·7	+0·5	+2·1
21	80·4	58·2	71·6	75·9	79·0	68·8	−0·7	+2·7	+0·3	−0·7	0·0	+2·1	21	82·9	57·5	71·7	76·4	79·7	68·8	+1·8	+2·0	+0·4	−0·2	+0·7	+2·1
22	81·7	58·5	72·9	78·5	81·6	70·5	−2·3	+2·2	−0·3	−0·8	0·0	+0·5	22	83·2	57·4	73·9	79·4	82·2	69·9	−0·8	+1·1	+0·7	+0·1	+0·6	−0·1
23	70·6	60·3	...	...	...	...	−1·8	−0·3	...	...	...	...	23	71·6	60·3	...	...	...	...	−0·8	−0·3	...	...	...	...
24	73·3	57·4	61·7	69·0	73·3	64·0	−2·9	+0·3	+0·4	+0·5	−1·9	+0·4	24	76·2	57·3	62·0	68·7	75·0	63·7	0·0	+0·2	+0·7	+0·2	−0·2	+0·1
25	78·6	56·3	68·5	75·8	75·9	69·9	−2·7	+0·2	−0·1	−1·4	−0·5	+0·3	25	80·3	55·5	70·0	77·3	76·9	69·2	−1·0	−0·6	+1·4	+0·1	+0·5	−0·4
26	85·0	61·3	70·6	79·3	84·9	69·9	−2·2	−0·1	−0·7	+1·5	−0·7	+0·5	26	87·0	60·3	71·5	78·1	85·7	69·4	−0·2	−1·1	+0·2	+0·3	+0·1	0·0
27	81·5	63·1	72·9	76·6	81·5	63·5	−0·6	+0·5	+0·8	+0·4	+0·7	+0·7	27	83·6	62·2	71·9	78·6	83·0	63·0	+1·5	−0·4	−0·2	+2·4	+2·2	+0·2
28	68·6	57·1	64·4	66·3	67·5	60·8	−0·7	+0·4	+0·5	−0·1	+0·8	+2·2	28	70·0	56·9	63·6	66·7	68·1	60·0	+0·7	+0·2	−0·3	+0·3	+1·4	+1·4
29	75·8	54·9	68·1	72·8	73·0	64·2	−0·9	+2·7	+1·2	0·0	+0·6	+0·3	29	76·1	53·6	69·1	73·0	73·7	63·8	−0·6	+1·4	+2·2	+0·2	+1·3	−0·1
30	73·6	60·1	...	...	...	...	−2·0	0·0	...	...	...	...	30	74·8	59·9	...	...	...	...	−0·8	−0·2	...	...	...	...
31	70·0	54·1	64·1	67·2	68·5	61·3	−3·4	+0·2	+0·1	−0·5	+0·1	0·0	31	72·0	53·5	65·5	67·8	69·9	60·8	−1·4	−0·4	+1·5	+0·1	+1·5	−0·5
Means	75·8	57·8	67·5	72·7	74·5	65·4	−1·7	+0·8	+0·3	+0·2	0·0	+0·9	Means	77·5	57·1	67·7	73·4	75·3	65·0	+0·1	+0·1	+0·5	+0·8	+0·8	+0·4

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.					
	Maximum.	Minimum.	9h	Noon.	15h	21h	Maximum.	Minimum.	9h	Noon.	15h	21h		Maximum.	Minimum.	9h	Noon.	15h	21h	Maximum.	Minimum.	9h	Noon.	15h	21h
d	°	°	°	°	°	°	°	°	°	°	°	°	d	°	°	°	°	°	°	°	°	°	°	°	°
1	72·0	52·7	60·9	70·5	68·9	58·5	−2·0	+1·6	0·0	+0·6	0·0	+0·9	1	73·4	52·1	61·9	70·8	70·1	57·3	−0·6	+1·0	+1·0	+0·9	+1·2	−0·3
2	73·6	49·5	64·7	72·5	72·5	58·8	−2·8	+0·6	+0·2	+1·2	−0·2	+0·8	2	76·7	48·4	65·0	73·2	72·8	58·2	+0·3	−0·5	+0·5	+1·9	+0·1	+0·2
3	66·3	56·3	59·2	59·5	63·2	63·3	−1·0	+1·0	−0·2	−0·3	−0·4	+0·3	3	67·2	56·2	59·2	59·7	63·8	62·9	−0·1	+0·9	−0·2	−0·1	+0·2	−0·1
4	70·4	60·2	66·9	67·5	69·5	61·2	−1·0	0·0	−0·2	−0·6	+0·2	+0·3	4	71·2	59·9	66·9	68·0	69·9	60·9	−0·2	−0·3	−0·2	−0·1	+0·6	0·0
5	72·2	56·3	64·2	69·9	62·6	57·1	−1·8	0·0	+1·5	+0·3	−1·3	+0·5	5	73·4	55·3	65·2	69·5	62·5	56·0	−0·6	−1·0	+2·5	−0·1	−1·4	−0·6
6	70·2	48·9	...	...	...	...	−2·1	+0·9	...	...	...	...	6	71·5	47·5	...	...	...	...	−0·8	−0·5	...	...	...	...
7	68·0	53·9	...	...	...	...	−2·0	+1·8	...	...	...	...	7	69·4	53·1	...	...	...	...	−0·6	+1·0	...	...	...	...
8	75·3	58·5	65·1	69·9	71·3	60·6	−1·6	0·0	−0·6	−0·2	−1·0	+0·3	8	78·0	58·5	66·7	70·6	71·7	59·8	+1·1	0·0	+1·0	+0·5	−0·6	−0·5
9	68·0	54·5	60·8	67·1	65·3	58·8	−2·7	+0·3	−0·2	+0·5	−0·1	+0·2	9	70·6	54·2	61·9	67·5	65·9	57·9	−0·1	0·0	+0·9	+0·9	+0·5	−0·7
10	72·1	55·1	63·9	72·1	59·0	57·6	−1·2	0·0	−0·8	+0·6	+0·5	+0·1	10	72·7	54·2	64·5	72·7	58·7	56·9	−0·6	−0·9	−0·2	+1·2	+0·2	−0·6
11	67·1	51·8	60·5	64·0	64·2	58·7	−1·8	+0·5	+0·8	−0·3	−0·1	+1·1	11	68·4	50·6	61·5	64·4	64·6	57·9	−0·5	−0·7	+1·8	+0·1	+0·3	+0·3
12	70·5	49·3	62·9	67·1	70·5	58·8	−1·3	+0·5	0·0	−0·5	−0·1	+1·0	12	71·8	48·2	64·9	67·5	71·3	58·1	0·0	−0·6	+2·0	−0·1	+0·7	+0·3
13	72·6	52·6	...	...	...	...	−1·9	+0·4	...	...	...	...	13	75·1	51·3	...	...	...	...	+0·6	−0·9	...	...	...	...
14	74·1	53·5	67·8	71·7	73·6	60·3	−1·7	+3·2	+0·2	−0·2	−1·2	+0·9	14	76·4	52·9	67·7	71·3	74·5	59·6	+0·6	+2·6	+0·1	−0·6	−0·3	+0·2
15	72·8	53·7	67·8	71·9	71·6	61·6	−1·0	+1·8	−0·6	−0·5	0·0	+0·3	15	74·4	52·1	68·2	72·8	72·1	61·0	+0·6	+0·2	−0·2	+0·4	+0·5	−0·3
16	68·8	58·2	65·1	67·2	68·1	58·9	−1·9	+0·1	−0·3	−0·6	−0·6	+0·3	16	70·3	57·6	65·7	68·1	68·6	58·0	−0·4	−0·5	+0·3	+0·3	−0·1	−0·6
17	71·1	52·8	67·5	69·9	70·3	57·8	−2·6	+0·7	+3·0	−0·9	−0·2	+2·2	17	73·2	52·1	66·1	69·7	70·9	57·0	−0·5	0·0	+1·6	−1·1	+0·4	+1·4
18	72·0	53·8	63·1	66·7	71·3	61·8	−1·4	+1·8	−0·5	−0·8	−0·3	+0·1	18	72·8	52·9	63·2	67·6	71·7	61·6	−0·6	+0·9	−0·4	+0·1	+0·1	−0·1
19	70·0	53·2	61·0	64·6	67·3	60·7	−1·6	0·0	−1·0	0·0	−0·9	−0·1	19	70·8	52·3	62·2	64·8	67·6	60·4	−0·8	−0·9	+0·2	+0·2	−0·6	−0·4
20	70·3	53·9	...	...	...	...	−1·4	−0·2	...	...	...	...	20	71·5	53·6	...	...	...	...	−0·2	−0·5	...	...	...	...
21	71·4	53·6	65·8	69·7	66·7	59·0	−1·6	+1·4	−0·7	−0·8	−0·8	−0·1	21	72·2	52·4	65·7	69·8	67·5	58·9	−0·8	+0·2	−0·8	−0·7	0·0	−0·2
22	71·6	55·9	60·8	69·9	68·1	57·5	−2·4	−0·7	−1·3	+0·3	−0·4	+1·1	22	73·0	56·6	61·8	68·8	68·7	57·2	−1·0	0·0	−0·3	−0·8	+0·2	+0·8
23	64·6	49·0	58·6	60·8	63·1	54·3	−1·4	−0·6	−0·6	−0·4	+0·5	−0·1	23	65·2	48·2	59·1	61·3	63·6	53·6	−0·8	−1·4	−0·1	+0·1	+1·0	−0·8
24	69·3	46·1	61·4	69·3	63·3	55·5	−1·4	+1·5	+0·1	+1·8	−0·3	+3·7	24	70·9	44·4	62·1	69·7	64·1	54·9	+0·2	−0·2	+0·8	+2·2	+0·5	+3·1
25	71·1	52·2	68·5	71·1	65·7	62·1	−2·5	+1·9	−0·4	−0·8	+1·1	+0·3	25	72·8	51·2	68·9	71·8	65·1	61·9	−0·8	+0·9	0·0	−0·1	+0·5	+0·1
26	69·2	55·7	63·8	68·3	69·0	57·1	−2·6	+0·6	0·0	+0·6	+2·1	+0·6	26	71·8	56·1	65·0	69·3	69·5	56·6	0·0	+1·0	+1·2	+1·6	+2·6	+0·1
27	63·6	52·3	...	...	...	...	−1·9	+1·1	...	...	...	...	27	65·4	51·3	...	...	...	...	−0·1	+0·1	...	...	...	...
28	66·4	52·3	60·2	63·2	58·2	56·4	−1·2	+0·3	−1·1	−0·5	−0·5	−0·5	28	66·6	51·3	61·0	63·7	58·0	56·3	−1·0	−0·7	−0·3	0·0	−0·7	−0·6
29	65·6	52·1	55·8	60·0	63·8	55·9	−0·4	−0·5	−0·8	−0·5	+0·2	+0·3	29	65·7	52·2	55·8	60·5	64·2	55·0	−0·3	−0·4	−0·8	0·0	+0·6	−0·6
30	58·4	52·5	55·6	56·5	57·7	56·7	+0·2	+0·2	+0·2	+0·1	+0·3	+0·2	30	58·3	52·2	55·5	56·6	57·7	56·3	+0·1	−0·1	+0·1	+0·2	+0·3	−0·2
31	63·3	50·1	54·9	59·5	62·5	51·0	−0·2	+2·5	−0·3	+0·5	+1·5	+2·3	31	63·1	50·2	54·4	59·6	60·8	50·7	−0·4	+2·6	−0·8	+0·6	−0·2	+2·0
Means	69·4	53·2	62·6	66·9	66·4	58·5	−1·6	+0·7	−0·1	−0·1	−0·1	+0·7	Means	70·8	52·6	63·1	67·3	66·8	57·9	−0·3	0·0	+0·4	+0·3	+0·3	+0·1

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.					
	Maximum.	Minimum.	9h	Noon.	15h	21h	Maximum.	Minimum.	9h	Noon.	15h	21h		Maximum.	Minimum.	9h	Noon.	15h	21h	Maximum.	Minimum.	9h	Noon.	15h	21h
d	°	°	°	°	°	°	°	°	°	°	°	°	d	°	°	°	°	°	°	°	°	°	°	°	°
1	60·8	47·9	56·9	59·1	60·6	57·0	−1·3	+0·7	−0·5	−0·5	−0·3	0·0	1	61·7	46·5	57·3	59·5	61·1	56·6	−0·4	−0·7	−0·1	−0·1	+0·2	−0·4
2	67·9	55·1	61·5	62·1	67·3	62·1	−1·5	−0·1	−0·4	−0·6	−0·2	+0·1	2	68·8	54·5	61·6	62·8	68·3	61·8	−0·6	−0·7	−0·3	+0·1	+0·8	−0·2
3	73·8	57·0	...	...	...	...	−1·3	−0·2	...	...	...	...	3	75·0	56·9	...	...	...	...	−0·1	−0·3	...	...	...	...
4	70·4	57·1	64·0	69·0	67·5	60·2	−2·8	−0·3	−0·8	+0·5	−0·3	−0·4	4	71·8	56·8	65·0	70·7	67·9	59·7	−1·4	−0·6	+0·2	+2·2	+0·1	−0·9
5	69·7	56·1	61·9	65·7	68·7	63·6	−2·0	+0·1	−0·1	−0·5	+0·3	0·0	5	70·8	55·5	62·0	66·2	68·9	63·4	−0·9	−0·5	0·0	0·0	+0·5	−0·2
6	71·0	60·2	62·7	66·8	68·7	61·2	−2·1	+1·1	−0·9	−0·7	−0·6	−0·2	6	71·6	59·6	63·3	68·8	69·2	60·9	−1·5	+0·5	−0·3	+1·3	−0·1	−0·5
7	64·6	55·0	62·1	64·3	57·5	55·3	−1·4	−0·2	−0·5	−0·5	−0·6	+0·1	7	65·7	54·1	62·3	65·1	57·8	54·8	−0·3	−1·1	−0·3	+0·3	−0·3	−0·4
8	66·2	52·4	60·3	65·8	64·1	57·1	−0·9	+0·1	−0·8	+1·4	+0·3	−0·1	8	67·6	50·3	60·8	65·6	64·7	56·9	+0·5	−2·0	−0·3	+1·2	+0·9	−0·3
9	63·0	54·9	57·1	59·1	55·8	59·9	−2·0	−0·2	−1·5	+0·7	−0·1	−0·4	9	64·6	54·2	58·1	59·4	56·6	59·9	−0·4	−0·9	−0·5	+1·0	+0·7	−0·4
10	66·0	54·1	...	...	...	...	−0·2	0·0	...	...	...	...	10	66·6	54·2	...	...	...	...	+0·4	+0·1	...	...	...	...
11	58·8	49·6	56·7	58·6	56·1	50·1	−0·8	+1·5	−0·2	+0·1	+0·6	+0·8	11	59·6	49·1	57·5	59·3	56·3	49·9	0·0	+1·0	+0·6	+0·8	+0·8	+0·6
12	64·8	46·4	53·9	62·3	62·2	51·1	−1·2	+1·1	−0·7	−0·3	+1·2	+3·5	12	66·4	45·5	54·9	62·0	62·5	49·9	+0·4	+0·2	+0·3	−0·6	+1·5	+2·3
13	67·6	45·2	59·1	63·1	63·6	54·9	−1·0	+2·1	−1·6	+0·8	−0·8	+0·4	13	68·8	44·4	61·1	63·8	64·4	54·2	+0·2	+1·3	+0·4	+1·5	0·0	−0·3
14	61·9	47·1	55·2	61·6	60·0	51·3	−0·7	+0·6	−1·0	+0·7	+0·3	+1·6	14	62·1	45·2	55·0	62·1	59·9	50·1	−0·5	−1·3	−1·2	+1·2	+0·2	+0·4
15	63·4	43·4	52·8	61·5	62·1	48·3	+0·6	+0·3	−1·8	+0·9	+0·9	+3·3	15	63·2	42·9	53·1	61·8	62·7	48·5	+0·4	−0·2	−1·5	+1·2	+1·5	+3·5
16	63·4	44·3	55·8	60·3	63·4	52·8	−0·6	+2·9	−0·4	+0·6	+1·4	+2·1	16	61·9	42·5	56·4	58·9	61·9	51·9	−2·1	+1·1	+0·2	−0·8	−0·1	+1·2
17	64·3	47·2	...	...	...	...	−1·0	+2·1	...	...	...	...	17	65·1	46·1	...	...	...	...	−0·2	+1·0	...	...	...	...
18	61·1	50·3	56·9	60·1	59·3	53·2	−1·9	+0·9	−1·0	−1·1	−0·3	+0·3	18	62·6	49·2	57·1	59·9	59·9	52·9	−0·4	−0·2	−0·8	−1·3	+0·3	0·0
19	63·0	48·9	53·2	59·8	61·9	54·9	−1·0	+0·7	−0·4	−0·1	+0·2	+0·2	19	63·7	48·4	53·2	59·9	62·3	54·9	−0·3	+0·2	−0·4	0·0	+0·6	+0·2
20	62·0	46·1	56·5	59·8	59·9	53·0	−0·1	+2·5	−0·3	−0·5	+0·3	+1·3	20	62·2	44·6	56·4	60·0	60·5	52·3	+0·1	+1·0	−0·4	−0·3	+0·9	+0·6
21	62·5	43·5	53·0	60·0	61·8	54·0	−1·5	+0·4	−0·6	+0·4	−0·1	+0·4	21	62·1	42·1	53·4	58·7	61·1	53·4	−1·9	−1·0	−0·2	−0·9	−0·8	−0·2
22	61·7	49·1	55·1	59·9	60·0	55·6	−1·6	+2·0	−0·4	−0·7	+0·3	+0·6	22	63·5	48·2	55·2	60·5	60·2	54·9	+0·2	+1·1	−0·3	−0·1	+0·5	−0·1
23	55·9	51·8	54·6	54·6	55·2	52·3	−0·8	+0·2	−0·7	+0·1	−0·3	+0·7	23	57·0	51·0	54·9	55·0	55·4	51·6	+0·3	−0·6	−0·4	+0·5	−0·1	0·0
24	57·3	48·1	...	...	...	...	−1·0	+0·8	...	...	...	...	24	58·0	47·2	...	...	...	...	−0·3	−0·1	...	...	...	...
25	55·7	49·6	52·5	54·0	55·6	53·1	−0·3	−0·1	−0·3	0·0	0·0	+0·2	25	56·1	49·2	51·8	54·3	55·9	52·6	+0·1	−0·5	−1·0	+0·3	+0·3	−0·3
26	54·2	49·6	51·4	53·0	54·0	52·2	−0·8	−0·1	+0·1	−0·6	−0·3	+0·8	26	54·5	49·2	50·7	53·3	54·2	51·8	−0·5	−0·5	−0·6	−0·3	−0·1	+0·4
27	56·7	50·4	52·0	55·9	55·9	51·9	−1·2	+0·7	−0·6	−0·8	+0·2	+0·7	27	57·6	50·0	52·4	57·0	56·3	50·9	−0·3	+0·3	−0·2	+0·3	+0·6	−0·3
28	61·0	47·7	52·9	60·7	59·8	54·9	−2·0	−0·2	−1·0	−0·6	−0·5	−0·2	28	62·6	47·3	53·4	60·8	60·2	54·7	−0·4	−0·6	−0·5	−0·5	−0·1	−0·4
29	63·7	50·6	54·4	58·1	63·7	55·9	−0·9	+0·6	−0·2	−0·7	−0·9	+0·3	29	64·1	50·2	54·0	58·0	64·1	55·8	−0·5	+0·2	−0·6	−0·8	−0·5	+0·2
30	56·0	46·8	50·9	52·9	54·9	47·5	+0·1	+0·2	−0·6	+0·2	+0·2	+0·3	30	56·6	46·2	50·5	53·4	55·1	47·0	+0·7	−0·4	−1·0	+0·7	+0·4	−0·2
Means	62·9	50·2	56·3	60·3	60·8	54·7	−1·1	+0·7	−0·7	−0·1	0·0	+0·6	Means	63·7	49·4	56·6	60·6	61·1	54·3	−0·3	−0·1	−0·4	+0·3	+0·3	+0·2

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.					
	Maximum.	Minimum.	9h	Noon.	15h	21h	Maximum.	Minimum.	9h	Noon.	15h	21h		Maximum.	Minimum.	9h	Noon.	15h	21h	Maximum.	Minimum.	9h	Noon.	15h	21h
d	°	°	°	°	°	°	°	°	°	°	°	°	d	°	°	°	°	°	°	°	°	°	°	°	°
1	55·3	39·6	...	...	...	...	−0·1	+0·1	...	...	...	...	1	55·3	38·4	...	...	...	...	−0·1	−1·1	...	...	...	...
2	53·7	46·2	49·1	52·0	52·8	49·9	−0·8	−0·2	−0·4	+0·3	+0·7	+1·0	2	54·1	45·3	49·0	52·1	52·9	49·3	−0·4	−1·1	−0·5	+0·4	+0·8	+0·4
3	55·3	42·8	46·9	55·3	54·5	50·0	−0·1	+0·1	+0·3	+1·3	−0·1	+0·3	3	55·4	42·2	46·4	52·4	54·7	50·0	0·0	−0·5	−0·2	−1·6	+0·1	+0·3
4	56·4	49·1	55·1	56·3	56·4	50·0	−0·8	0·0	−0·5	0·0	−0·2	+0·2	4	56·9	49·0	55·0	56·5	56·2	49·3	−0·3	−0·1	−0·6	+0·2	−0·4	−0·5
5	55·1	47·5	52·7	53·5	55·1	47·5	−0·2	+0·2	+0·1	+0·2	+0·5	+0·2	5	55·0	47·3	52·9	53·4	55·0	47·3	−0·3	0·0	+0·3	+0·1	+0·4	0·0
6	50·5	39·0	43·2	49·6	49·2	43·7	−1·0	+0·1	−1·1	+0·8	+0·6	+0·3	6	51·8	38·1	43·4	48·7	48·7	42·9	+0·3	−0·8	−0·9	−0·1	+0·1	−0·5
7	55·2	39·2	48·3	52·6	55·2	47·7	+0·4	+0·1	−0·6	+0·1	+0·7	+0·1	7	55·1	38·1	48·6	52·7	55·1	47·5	+0·3	−1·0	−0·3	+0·2	+0·6	−0·1
8	52·0	45·1	...	...	...	...	−0·7	0·0	...	...	...	...	8	54·6	44·5	...	...	...	...	+1·9	−0·6	...	...	...	...
9	59·2	41·5	51·1	56·1	59·2	55·5	−0·4	+2·0	−0·5	−0·5	+0·1	0·0	9	59·6	41·4	51·1	55·9	59·2	55·1	0·0	+1·9	−0·5	−0·7	+0·1	−0·4
10	55·8	50·9	53·8	54·7	54·9	51·6	+0·1	0·0	−0·3	−0·2	+0·3	+0·3	10	55·9	50·7	53·5	55·0	55·0	51·3	+0·2	−0·2	−0·6	+0·1	+0·4	0·0
11	56·8	47·1	49·5	54·6	54·0	50·0	−1·9	0·0	+0·1	+0·2	0·0	+0·2	11	56·6	47·1	49·0	54·3	54·1	49·9	−2·1	0·0	−0·4	−0·1	+0·1	+0·1
12	52·6	48·1	49·9	51·0	52·5	50·9	+0·1	−0·2	0·0	−0·2	0·0	+0·2	12	52·3	48·3	49·9	50·9	52·2	50·6	−0·2	0·0	0·0	−0·3	−0·3	−0·1
13	54·4	41·8	53·1	49·5	48·2	42·3	−0·6	0·0	−0·4	+0·1	+0·2	+0·3	13	54·9	41·2	53·0	49·1	48·4	41·8	−0·1	−0·6	−0·5	−0·3	+0·4	−0·2
14	49·8	36·2	40·1	45·9	49·0	46·4	−0·2	−0·1	−0·7	+0·5	−0·3	−0·1	14	52·6	35·6	39·9	45·5	49·1	46·0	+2·6	−0·7	−0·9	+0·1	−0·2	−0·5
15	55·9	44·5	...	...	...	...	−0·1	−0·4	...	...	...	...	15	56·0	42·5	...	...	...	...	0·0	−2·4	...	...	...	...
16	47·6	35·6	38·8	47·1	47·3	37·0	−1·0	+0·2	−0·8	−0·5	+0·7	+4·6	16	47·8	34·3	38·8	45·5	46·8	36·9	−0·8	−1·1	−0·8	−2·1	+0·2	+4·5
17	47·1	28·9	33·8	44·8	46·2	41·1	+0·1	+2·8	−1·8	+1·0	0·0	+0·2	17	47·0	27·6	34·7	43·9	46·3	40·3	0·0	+1·5	−0·9	+0·1	+0·1	−0·6
18	52·1	33·9	39·7	51·2	51·3	40·7	−0·1	+0·1	−1·2	+0·9	+0·5	+1·4	18	52·6	32·6	40·0	51·2	51·1	39·7	+0·4	−1·2	−0·9	+0·9	+0·3	+0·4
19	48·4	37·4	41·2	48·4	48·0	39·7	−2·0	+1·0	−1·3	+0·8	−0·6	+0·9	19	53·6	36·1	41·6	48·8	48·2	39·1	+3·2	−0·3	−0·9	+1·2	−0·4	+0·3
20	48·2	33·1	37·8	47·2	47·1	37·2	−0·8	+0·6	−0·5	+1·3	−0·5	+4·6	20	48·2	32·1	38·2	46·8	46·8	36·9	−0·8	−0·4	−0·1	+0·9	−0·8	+4·3
21	47·0	31·2	36·9	44·8	46·6	38·0	−0·1	+1·5	−0·9	0·0	−0·1	+1·7	21	46·8	30·0	37·0	44·9	46·8	37·9	−0·3	+0·3	−0·8	+0·1	+0·1	+1·6
22	47·4	28·7	...	...	...	...	−0·4	+0·6	...	...	...	...	22	47·3	27·4	...	...	...	...	−0·5	−0·7	...	...	...	...
23	49·2	35·2	38·7	47·8	47·7	42·8	−0·5	0·0	−0·6	+0·8	+0·3	+0·7	23	49·6	34·1	37·6	48·2	47·6	42·7	−0·1	−1·1	−1·7	+1·2	+0·2	+0·6
24	44·3	35·1	40·1	43·9	44·3	40·8	−0·6	−0·2	−1·2	−0·4	+0·4	+0·1	24	44·6	35·1	40·2	44·3	44·1	39·9	−0·3	−0·2	−1·1	0·0	+0·2	−0·8
25	44·4	33·9	36·0	40·9	44·2	40·7	−0·3	+0·2	−0·7	+0·8	+0·2	+1·7	25	44·8	33·4	35·8	41·5	43·9	39·7	+0·1	−0·3	−0·9	+1·4	−0·1	+0·7
26	46·2	28·3	33·9	45·0	46·0	45·9	−0·8	+1·8	−0·6	−0·9	−0·1	−0·1	26	46·4	28·1	33·9	46·1	46·1	45·9	−0·6	+1·6	−0·6	+0·2	0·0	−0·1
27	53·6	43·1	48·9	51·9	53·6	43·1	−0·1	0·0	+0·1	+1·3	+0·8	−0·6	27	53·9	42·8	48·7	52·5	53·3	42·9	+0·2	−0·3	−0·1	+1·9	+0·5	−0·8
28	52·7	35·2	41·2	51·0	50·9	45·0	−0·5	+2·5	−2·4	−0·4	+0·1	+1·1	28	52·8	35·1	42·6	51·8	51·2	45·4	−0·4	+2·4	−1·0	+0·4	+0·4	+1·5
29	56·8	44·1	...	...	...	...	+0·4	+1·2	...	...	...	...	29	56·8	44·4	...	...	...	...	+0·4	+1·5	...	...	...	...
30	53·1	44·1	52·9	51·4	48·9	45·8	−0·6	+1·2	−0·5	−0·4	+0·3	+0·2	30	54·0	43·2	53·4	51·9	49·2	45·7	+0·3	+0·3	0·0	+0·1	+0·6	+0·1
31	54·0	43·7	47·7	51·7	52·1	44·5	−0·2	+0·6	−0·9	0·0	+0·3	+1·2	31	54·0	43·1	48·4	51·7	52·6	44·0	−0·2	0·0	−0·2	0·0	+0·8	+0·7
Means	51·9	39·7	44·6	49·9	50·6	44·9	−0·4	+0·5	−0·7	+0·3	+0·2	+0·8	Means	52·5	39·0	44·7	49·8	50·6	44·5	+0·1	−0·2	−0·6	+0·2	+0·2	+0·4

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.					
	Maximum.	Minimum.	9h	Noon.	15h	21h	Maximum.	Minimum.	9h	Noon.	15h	21h		Maximum.	Minimum.	9h	Noon.	15h	21h	Maximum.	Minimum.	9h	Noon.	15h	21h
d	°	°	°	°	°	°	°	°	°	°	°	°	d	°	°	°	°	°	°	°	°	°	°	°	°
1	51·3	41·1	49·8	49·6	50·6	49·0	−0·7	+1·4	+0·2	0·0	+0·2	+0·2	1	51·9	40·1	49·9	49·8	50·7	49·0	−0·1	+0·4	+0·3	+0·2	+0·3	+0·2
2	53·3	43·5	48·1	51·2	49·9	44·9	−0·4	+1·2	+0·5	0·0	+0·5	+0·9	2	54·4	42·3	48·1	51·7	49·9	44·7	+0·7	0·0	+0·5	+0·5	+0·5	+0·7
3	53·5	42·6	48·0	48·7	51·0	43·5	−1·3	+1·2	−1·7	+0·1	−0·3	+1·5	3	54·6	41·3	48·9	48·9	51·3	43·1	−0·2	−0·1	−0·8	+0·3	0·0	+1·1
4	51·1	41·9	45·6	51·1	49·3	45·8	−0·7	+2·7	0·0	−0·3	−0·2	+0·2	4	52·1	41·0	46·0	51·7	49·1	45·4	+0·3	+1·8	+0·4	+0·3	−0·4	−0·2
5	52·0	41·1	...	...	...	...	−0·1	0·0	...	...	...	...	5	51·9	40·3	...	...	...	...	−0·2	−0·8	...	...	...	...
6	51·8	37·8	42·6	50·9	50·8	40·8	−0·5	+0·4	−1·2	+0·3	+0·2	+2·4	6	52·3	37·0	43·2	51·2	50·7	41·0	0·0	−0·4	−0·6	+0·6	+0·1	+2·6
7	52·1	31·3	34·0	48·3	49·7	38·7	+1·1	+0·9	−0·3	−0·3	+0·4	+3·0	7	52·1	30·9	34·1	48·9	49·4	39·7	+1·1	+0·5	−0·2	+0·3	+0·1	+4·0
8	46·7	29·4	33·9	44·4	46·0	46·2	+0·5	+1·2	+2·5	+0·2	+0·2	0·0	8	47·1	28·8	34·3	44·9	46·1	46·2	+0·9	+0·6	+2·9	+0·7	+0·3	0·0
9	46·2	36·2	42·9	43·9	45·0	36·8	0·0	+0·6	−0·4	+0·2	+0·6	+0·5	9	46·7	36·2	42·9	44·2	45·1	36·8	+0·5	+0·6	−0·4	+0·5	+0·7	+0·5
10	50·1	36·1	41·0	49·7	49·0	47·3	−1·6	+0·8	0·0	−1·1	0·0	+0·3	10	51·5	35·9	40·8	50·3	49·3	47·2	−0·2	+0·6	−0·2	−0·5	+0·3	+0·2
11	52·5	45·8	48·2	50·0	50·9	46·6	−0·5	0·0	−0·1	−0·4	−0·3	+0·7	11	53·0	45·7	48·3	50·3	50·9	46·3	0·0	−0·1	0·0	−0·1	−0·3	+0·4
12	50·6	42·1	...	...	...	...	+0·1	−0·4	...	...	...	...	12	50·5	41·1	...	...	...	...	0·0	−1·4	...	...	...	...
13	47·6	40·9	44·8	44·8	45·2	44·0	−0·5	−0·2	−0·1	+0·2	−0·1	+1·3	13	48·8	40·1	44·5	44·3	44·9	43·8	+0·7	−1·0	−0·4	−0·3	−0·4	+1·1
14	45·0	39·2	42·7	43·2	41·9	39·9	+1·4	−0·1	+0·2	−0·1	−0·1	+0·2	14	45·5	38·9	42·3	42·9	41·9	39·7	+1·9	−0·4	−0·2	−0·4	−0·1	0·0
15	42·6	35·5	38·4	41·4	39·5	36·1	−1·5	+0·2	−0·6	−0·2	+0·2	+0·5	15	44·3	35·1	38·3	41·1	39·6	35·9	+0·2	−0·2	−0·7	−0·5	+0·3	+0·3
16	40·0	32·6	34·7	36·3	39·8	38·2	+0·2	0·0	0·0	−0·2	+0·2	+0·1	16	39·7	32·2	34·7	36·4	39·7	37·9	−0·1	−0·4	0·0	−0·1	+0·1	−0·2
17	38·3	32·4	34·9	35·7	36·7	34·8	+0·2	−0·3	+0·3	+0·2	+0·1	+2·2	17	38·7	31·1	35·1	35·3	36·6	32·9	+0·6	−1·6	+0·5	−0·2	0·0	+0·3
18	36·6	31·9	33·4	35·8	35·7	34·1	−0·1	+1·7	−0·1	+0·1	+0·1	+0·1	18	37·1	31·0	33·6	36·4	36·0	33·7	+0·4	+0·8	+0·1	+0·7	+0·4	−0·3
19	39·6	33·6	...	...	...	...	−0·4	+0·6	...	...	...	...	19	40·6	32·3	...	...	...	...	+0·6	−0·7	...	...	...	...
20	42·2	31·5	35·3	40·0	40·7	32·1	+0·4	+2·4	−0·3	−0·3	+0·3	+2·3	20	41·9	30·9	35·1	39·9	39·9	33·9	+0·1	+1·8	−0·5	−0·4	−0·5	+4·1
21	38·0	25·1	27·3	35·9	35·1	29·2	+2·1	+1·9	+1·3	0·0	+1·5	+2·6	21	39·7	24·1	26·9	36·7	34·8	29·9	+3·8	+0·9	+0·9	+0·8	+1·2	+3·3
22	46·8	26·1	34·3	44·1	45·3	46·7	+0·1	+3·0	+1·0	−0·5	+0·7	+0·4	22	47·4	24·7	34·3	44·7	45·4	46·6	+0·7	+1·6	+1·0	+0·1	+0·8	+0·3
23	51·1	44·0	49·1	50·9	48·5	44·0	−0·5	+0·3	−0·2	−0·7	+0·1	−0·8	23	51·3	42·8	48·9	51·2	48·9	44·0	−0·3	−0·9	−0·4	−0·4	+0·5	−0·8
24	48·7	37·0	39·0	45·4	46·6	39·2	+1·1	−0·1	−0·6	−0·6	0·0	+0·9	24	49·0	36·2	39·0	45·9	46·1	39·4	+1·4	−0·9	−0·6	−0·1	−0·5	+1·1
25	47·2	34·1	39·2	47·2	45·9	44·9	−0·1	+2·4	+1·4	+1·5	−0·1	+0·8	25	48·3	33·8	39·9	47·5	46·3	44·9	+1·0	+2·1	+2·1	+1·8	+0·3	+0·8
26	55·0	44·1	...	...	...	...	+0·1	+0·2	...	...	...	...	26	55·8	44·4	...	...	...	...	+0·9	+0·5	...	...	...	...
27	50·8	39·1	39·9	44·2	44·0	41·6	−0·5	−0·3	−0·5	0·0	+0·2	0·0	27	51·8	38·3	39·8	44·0	43·7	40·9	+0·5	−1·1	−0·6	−0·2	−0·1	−0·7
28	46·9	39·2	44·9	46·0	44·7	45·7	−1·0	+0·3	+0·2	−0·1	+0·5	+0·1	28	47·4	38·3	44·9	46·1	44·8	45·8	−0·5	−0·6	+0·2	0·0	+0·6	+0·2
29	46·1	38·8	43·9	45·7	45·0	38·8	+0·1	+0·8	0·0	+0·1	−0·3	+0·8	29	46·3	36·3	43·6	45·7	45·3	37·6	+0·3	−1·7	−0·3	+0·1	0·0	−0·4
30	45·0	29·2	38·6	44·3	44·5	43·6	0·0	+1·7	+0·4	+0·1	+0·3	+0·4	30	45·3	28·3	38·3	44·5	43·8	43·9	+0·3	+0·8	+0·1	+0·3	−0·4	+0·7
Means	47·3	36·8	40·6	44·9	45·1	41·3	−0·1	+0·8	+0·1	−0·1	+0·2	+0·8	Means	47·9	36·0	40·6	45·2	45·0	41·2	+0·5	0·0	+0·1	+0·2	+0·1	+0·7

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.					
	Maximum.	Minimum.	9h	Noon.	15h	21h	Maximum.	Minimum.	9h	Noon.	15h	21h		Maximum.	Minimum.	9h	Noon.	15h	21h	Maximum.	Minimum.	9h	Noon.	15h	21h
d	°	°	°	°	°	°	°	°	°	°	°	°	d	°	°	°	°	°	°	°	°	°	°	°	°
1	44·9	41·1	42·7	43·1	43·1	42·4	+0·1	+0·7	+0·3	−0·1	0·0	+0·4	1	44·6	40·2	42·4	43·0	43·3	42·4	−0·2	−0·2	0·0	−0·2	+0·2	+0·4
2	45·9	38·0	40·7	45·7	44·2	38·5	−1·1	+1·2	+0·1	+0·1	−0·4	+1·3	2	47·0	37·2	40·9	46·2	44·4	38·1	0·0	+0·4	+0·3	+0·6	−0·2	+0·9
3	40·1	31·3	...	...	...	...	−0·2	+1·2	...	...	...	...	3	40·3	30·1	...	...	...	...	0·0	0·0	...	...	...	...
4	40·0	35·7	37·7	36·8	36·5	38·0	+0·8	−0·2	+0·7	+0·3	+0·1	+0·3	4	39·7	35·5	37·4	36·5	36·3	37·8	+0·5	−0·4	+0·4	0·0	−0·1	+0·1
5	45·2	37·2	41·5	41·2	41·3	45·1	+0·2	−0·3	0·0	−0·1	+0·3	+0·1	5	45·2	37·1	41·2	41·1	41·2	45·1	+0·2	−0·4	−0·3	−0·2	+0·2	+0·1
6	49·0	40·2	42·2	46·2	47·8	48·6	+0·4	−0·4	−0·4	−0·4	−0·1	+0·1	6	48·6	39·3	42·1	46·6	47·8	48·5	0·0	−1·3	−0·5	0·0	−0·1	0·0
7	57·0	48·1	53·0	54·9	55·6	51·9	−0·3	0·0	−0·6	−0·3	0·0	+0·3	7	57·1	47·9	52·9	54·9	55·7	51·9	−0·2	−0·2	−0·7	−0·3	+0·1	+0·3
8	54·1	43·2	52·7	50·4	50·9	44·0	+0·2	+0·1	+0·2	−0·2	0·0	+0·6	8	53·8	42·8	52·4	50·6	51·2	43·7	−0·1	−0·3	−0·1	0·0	+0·3	+0·3
9	48·0	38·1	39·9	46·3	45·9	42·5	−0·5	+0·1	−0·7	−0·4	+0·2	+1·1	9	48·0	37·1	39·4	46·6	45·5	42·1	−0·5	−0·9	−1·2	−0·1	−0·2	+0·7
10	42·8	30·7	...	...	...	...	+0·8	+2·4	...	...	...	...	10	43·0	29·7	...	...	...	...	+1·0	+1·4	...	...	...	...
11	38·7	25·1	27·5	35·4	32·9	28·9	+1·1	−0·3	+0·1	+1·4	+0·1	+0·3	11	37·6	25·2	27·5	35·4	33·1	28·9	0·0	−0·2	+0·1	+1·4	+0·3	+0·3
12	43·0	27·4	31·3	34·1	37·0	42·1	−1·0	+0·3	0·0	+1·5	+2·0	−0·4	12	43·8	27·1	31·0	34·0	37·0	42·0	−0·2	0·0	−0·3	+1·4	+2·0	−0·5
13	42·9	32·1	37·0	34·9	33·5	39·9	+0·3	+1·3	+0·2	+0·9	−0·1	+2·5	13	43·0	32·6	36·1	34·8	33·3	39·9	+0·4	+1·8	−0·7	+0·8	−0·3	+2·5
14	44·2	38·1	42·6	43·1	43·1	43·9	−0·1	+1·3	0·0	+0·4	+0·2	−0·3	14	44·9	38·3	42·5	43·6	43·8	44·5	+0·6	+1·5	−0·1	+0·9	+0·9	+0·3
15	44·0	40·1	41·8	41·8	42·0	40·5	−0·6	0·0	+0·7	+0·2	+0·4	+0·2	15	44·9	39·4	41·1	41·8	41·9	40·3	+0·3	−0·7	0·0	+0·2	+0·3	0·0
16	41·3	37·3	38·5	39·9	39·9	39·8	+0·8	0·0	0·0	+0·3	+0·6	+0·1	16	41·0	37·3	38·5	39·9	39·5	39·7	+0·5	0·0	0·0	+0·3	+0·2	0·0
17	42·6	37·6	...	...	...	...	+0·4	−0·4	...	...	...	...	17	42·8	37·3	...	...	...	...	+0·6	−0·7	...	...	...	...
18	43·2	37·6	41·9	42·9	41·2	38·3	−0·7	+0·1	+0·1	−0·1	+0·1	+0·1	18	44·2	37·6	41·9	43·2	41·4	38·5	+0·3	+0·1	+0·1	+0·2	+0·3	+0·3
19	50·0	37·1	44·5	48·8	48·5	39·4	0·0	−0·5	+0·2	−0·5	−0·1	−0·3	19	50·3	37·1	44·0	49·2	48·7	38·9	+0·3	−0·5	−0·3	−0·1	+0·1	−0·8
20	47·4	34·9	41·8	46·3	47·1	47·2	+0·1	+1·8	−0·1	−0·3	+0·1	−0·1	20	47·3	33·9	41·7	46·5	47·0	47·3	0·0	+0·8	−0·2	−0·1	0·0	0·0
21	50·0	46·2	48·0	49·9	49·4	48·3	−0·2	−0·3	−0·3	+0·1	−0·2	0·0	21	50·6	43·7	47·9	50·5	49·6	48·1	+0·4	−2·8	−0·4	+0·7	0·0	−0·2
22	49·8	41·2	45·8	45·9	45·2	41·9	+1·3	0·0	+0·2	−0·1	−0·3	+0·2	22	49·3	41·3	45·6	46·2	45·5	41·8	+0·8	+0·1	0·0	+0·2	0·0	+0·1
23	42·7	39·2	40·7	42·0	41·0	39·9	+0·7	−0·1	+0·1	0·0	+0·3	+0·2	23	42·5	38·9	40·6	42·5	41·0	40·1	+0·5	−0·4	0·0	+0·5	+0·3	+0·4
24	41·6	37·9	...	...	...	...	−0·4	0·0	...	...	...	...	24	42·4	37·9	...	...	...	...	+0·4	0·0	...	...	...	...
25	44·3	34·7	...	...	...	...	−0·2	−0·3	...	...	...	...	25	44·6	34·2	...	...	...	...	+0·1	−0·8	...	...	...	...
26	43·9	29·3	...	...	...	...	−0·2	+1·0	...	...	...	...	26	44·8	29·1	...	...	...	...	+0·7	+0·8	...	...	...	...
27	41·2	30·2	33·8	36·3	36·9	38·7	+0·2	+0·7	+1·0	+0·1	+0·2	0·0	27	41·6	29·1	32·8	36·8	36·9	37·4	+0·6	−0·4	0·0	+0·6	+0·2	−1·3
28	46·7	32·9	39·7	43·8	46·2	44·0	+0·1	−0·1	+0·5	−0·8	0·0	+0·6	28	47·0	33·0	39·4	44·2	46·3	43·8	+0·4	0·0	+0·2	−0·4	+0·1	+0·4
29	45·3	41·8	43·1	44·1	44·1	43·9	−0·6	−0·3	+0·1	−0·3	0·0	−0·3	29	45·6	41·6	42·8	44·1	44·0	43·9	−0·3	−0·5	−0·2	−0·3	−0·1	−0·3
30	44·0	34·3	38·4	39·6	38·9	35·1	−0·6	+0·5	+0·1	0·0	−0·1	+0·7	30	44·5	33·1	38·2	39·7	38·9	34·9	−0·1	−0·7	−0·1	+0·1	−0·1	+0·5
31	35·9	27·8	...	...	...	...	+1·2	−0·1	...	...	...	...	31	36·9	26·9	...	...	...	...	+2·2	−1·0	...	...	...	...
Means	44·8	36·3	41·1	43·1	43·0	41·8	+0·1	+0·3	+0·1	+0·1	+0·1	+0·3	Means	45·1	35·9	40·8	43·2	43·1	41·7	+0·3	−0·2	−0·2	+0·3	+0·2	+0·2

READINGS of the WET-BULB THERMOMETER placed in a STEVENSON'S SCREEN in the OBSERVATORY GROUNDS; and EXCESS of the READINGS above those of the corresponding THERMOMETER on the ORDINARY STAND in the MAGNETIC PAVILION ENCLOSURE, in the YEAR 1905.

[No observations have been made of this thermometer on Sundays, Good Friday, Christmas Day, and Public Holidays.]

Days of the Month.	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.			
	9h	Noon.	15h	21h	9h	Noon.	15h	21h
JANUARY.								
d	°	°	°	°	°	°	°	°
2	27·9	30·0	31·6	33·4	− 0·1	+ 0·2	− 0·1	− 0·2
3	40·0	43·1	44·3	44·4	− 0·1	− 0·6	− 0·5	− 0·5
4	41·8	43·2	44·1	44·1	− 0·5	− 0·5	− 0·9	− 0·1
5	45·0	42·8	42·0	39·0	− 0·8	− 0·1	0·0	− 0·4
6	43·6	48·0	49·3	48·0	0·0	− 0·8	− 0·7	− 0·1
7	46·8	47·0	46·1	44·5	+ 0·1	+ 0·2	− 0·8	− 0·1
9	47·0	43·9	40·0	35·0	− 0·6	− 0·1	− 0·5	− 0·6
10	34·5	35·6	36·1	34·9	− 0·2	− 0·1	− 0·2	0·0
11	39·8	42·1	42·1	44·0	− 0·2	− 0·6	− 0·2	− 0·7
12	37·0	39·3	39·2	36·2	− 0·3	− 0·3	+ 0·1	0·0
13	31·7	37·2	37·2	32·4	+ 2·0	− 0·5	+ 0·7	+ 3·4
14	34·5	36·0	35·4	31·0	+ 0·1	− 0·6	− 0·4	+ 0·2
16	19·2	20·9	22·0	32·8	− 0·1	− 0·5	0·0	− 0·5
17	36·7	39·1	38·9	33·9	− 0·4	− 0·7	− 0·5	+ 1·2
18	33·2	36·0	36·9	32·8	− 0·6	+ 0·1	+ 1·0	+ 1·1
19	28·1	30·0	33·7	33·1	+ 1·9	+ 1·2	+ 1·4	− 0·2
20	34·1	33·4	32·8	31·9	− 0·3	− 0·5	0·0	+ 0·2
21	29·5	34·3	34·6	33·2	+ 0·3	− 0·1	+ 0·5	− 0·5
23	33·0	34·8	38·0	34·4	− 0·3	− 0·3	− 1·1	+ 0·5
24	35·0	39·3	40·8	40·1	− 0·5	− 0·9	− 0·1	+ 0·5
25	42·0	39·9	40·2	37·0	− 0·2	− 0·7	− 0·6	+ 0·2
26	31·0	34·4	34·9	32·9	+ 0·4	− 0·3	− 0·2	+ 1·0
27	27·1	33·3	36·9	35·0	− 0·6	+ 0·2	0·0	− 0·3
28	36·9	40·9	43·3	39·1	− 1·0	− 0·7	− 1·0	− 0·6
30	38·4	43·1	44·2	43·1	− 0·3	− 0·6	− 0·5	− 0·5
31	38·0	39·6	39·7	37·4	+ 0·3	− 0·1	− 0·2	− 0·4
Means	35·8	38·0	38·6	37·1	− 0·1	− 0·3	− 0·2	+ 0·1
FEBRUARY.								
d	°	°	°	°	°	°	°	°
1	42·6	47·0	45·7	40·0	− 0·7	− 0·6	− 0·6	− 0·5
2	36·3	38·0	38·3	36·5	− 1·3	0·0	+ 0·2	− 0·2
3	35·0	40·0	41·0	41·9	− 0·9	− 0·7	+ 0·1	− 0·2
4	43·0	45·0	46·9	48·0	0·0	− 0·6	− 0·4	− 0·6
6	43·1	44·7	44·7	44·2	− 0·6	− 0·9	− 0·3	− 0·5
7	45·0	46·9	47·8	40·5	− 0·1	− 0·6	− 0·3	− 0·2
8	39·8	42·3	42·0	40·4	− 0·5	− 1·0	+ 0·2	+ 0·7
9	42·4	45·0	44·9	43·2	− 0·6	− 0·2	0·0	− 0·5
10	41·3	43·2	45·2	42·0	− 0·6	− 0·6	− 0·6	+ 0·3
11	36·1	36·0	35·3	33·9	− 0·3	− 0·3	− 0·4	+ 0·2
13	38·9	41·1	43·2	45·0	− 0·6	− 1·3	− 0·8	− 0·8
14	46·0	46·9	47·0	45·8	− 0·1	− 0·4	− 0·5	+ 0·4
15	41·2	43·0	44·6	45·6	− 0·9	− 0·1	+ 0·2	+ 0·1
16	46·1	48·2	49·3	44·0	+ 0·1	− 0·3	− 0·3	+ 0·7
17	44·6	41·3	41·5	39·3	− 0·1	+ 0·3	+ 0·2	+ 0·4
18	41·3	46·8	47·8	48·4	− 0·3	+ 0·2	0·0	− 0·2
20	29·7	33·2	35·1	34·7	0·0	− 0·3	− 0·4	+ 0·1
21	35·9	37·1	37·7	34·6	+ 0·2	− 0·2	− 0·1	+ 1·0
22	34·0	35·6	34·6	33·2	− 0·1	− 0·1	− 0·3	− 0·3
23	34·0	34·1	34·6	34·1	− 0·3	+ 0·1	0·0	− 0·4
24	35·2	35·3	36·1	36·4	− 0·1	− 0·3	− 0·4	+ 0·5
25	36·8	39·0	41·0	36·2	0·0	− 0·5	+ 0·3	+ 0·3
27	37·8	38·9	42·4	37·2	− 0·9	+ 0·2	− 0·6	− 0·2
28	33·1	38·1	37·8	34·6	− 0·5	− 0·2	− 0·9	+ 0·8
Means	39·1	41·1	41·9	40·0	− 0·4	− 0·4	− 0·2	0·0

Days of the Month.	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.			
	9h	Noon.	15h	21h	9h	Noon.	15h	21h
MARCH.								
d	°	°	°	°	°	°	°	°
1	34·6	37·1	38·7	36·5	− 0·1	− 0·2	− 0·3	− 0·2
2	35·9	38·1	38·2	35·2	− 0·2	− 0·5	− 0·4	− 0·1
3	34·7	37·8	38·0	34·9	− 0·4	− 0·1	− 0·3	+ 0·5
4	32·0	37·8	40·8	40·7	− 0·3	− 0·2	− 0·7	0·0
6	40·4	41·4	41·9	43·7	− 0·6	+ 0·1	− 0·1	− 0·3
7	42·3	45·1	46·8	40·4	− 0·4	0·0	− 0·2	− 0·5
8	36·2	37·7	41·7	43·7	− 0·2	+ 0·2	− 0·3	0·0
9	47·2	48·8	42·0	36·6	− 0·5	+ 0·6	− 0·4	+ 0·1
10	36·2	39·6	40·2	42·4	− 0·4	+ 0·3	− 0·7	− 0·3
11	47·7	47·9	43·5	40·2	− 0·5	− 0·5	− 0·9	− 0·5
13	43·0	45·9	46·0	45·3	− 1·3	+ 0·2	− 1·2	− 0·2
14	44·1	43·7	43·2	43·2	0·0	+ 0·1	− 0·6	− 0·5
15	42·1	44·0	41·2	38·6	− 1·8	− 0·8	+ 0·2	− 0·2
16	43·5	45·8	46·1	42·2	− 0·7	− 0·6	− 0·6	− 0·5
17	45·0	46·0	47·2	44·9	− 1·2	0·0	− 0·3	0·0
18	47·0	47·8	47·6	43·6	− 0·4	− 0·4	− 0·8	+ 0·1
20	40·0	46·0	45·6	43·0	− 0·9	+ 1·0	− 1·1	+ 0·1
21	41·3	45·9	48·5	42·1	− 1·0	− 0·8	− 0·4	+ 0·5
22	41·0	52·4	52·0	46·7	− 0·4	− 1·3	− 0·6	+ 1·0
23	47·3	52·3	49·5	44·7	− 1·1	+ 0·8	+ 0·7	+ 0·1
24	45·0	50·0	51·0	44·6	− 0·4	− 0·1	0·0	+ 0·1
25	44·1	45·1	45·1	42·3	− 0·7	− 0·5	0·0	− 0·1
27	41·1	42·7	42·9	41·3	− 0·8	− 0·4	+ 0·2	0·0
28	44·0	48·0	47·0	45·4	− 0·8	+ 0·2	+ 0·1	− 0·3
29	46·1	48·0	48·4	47·0	− 0·6	− 0·1	− 0·5	0·0
30	46·3	46·0	47·4	43·1	− 0·4	− 0·3	+ 0·1	0·0
31	41·9	43·2	45·8	40·3	− 1·1	− 0·2	+ 0·1	− 0·1
Means	41·9	44·6	44·7	41·9	− 0·6	− 0·1	− 0·3	0·0
APRIL.								
d	°	°	°	°	°	°	°	°
1	43·6	48·1	50·5	45·5	− 1·4	+ 0·1	− 1·2	− 0·4
3	41·0	43·4	45·0	42·1	− 0·2	− 1·2	− 0·3	− 0·1
4	45·0	49·6	49·2	47·8	− 0·2	− 0·1	− 0·6	− 0·1
5	46·6	46·3	44·4	38·8	0·0	− 0·7	− 0·6	0·0
6	32·8	34·4	35·2	33·6	− 0·5	+ 1·1	− 0·1	+ 0·5
7	39·5	46·9	42·1	36·5	− 0·6	− 0·4	− 0·8	− 0·2
8	35·0	35·6	37·0	32·0	+ 0·9	+ 0·6	+ 1·1	+ 0·1
10	44·3	48·0	47·3	45·7	− 0·5	− 0·6	− 0·4	− 0·1
11	46·9	48·9	51·8	49·9	− 0·3	− 0·5	− 0·6	+ 0·1
12	47·5	49·0	51·1	46·0	− 0·1	+ 0·4	− 1·3	+ 0·5
13	51·6	52·7	52·9	51·7	− 0·4	− 1·6	− 0·2	+ 0·7
14	50·3	54·0	53·1	48·3	− 0·9	− 0·8	− 0·9	+ 0·2
15	47·0	47·4	47·6	44·0	+ 0·8	− 0·3	− 0·2	+ 0·4
17	41·0	40·9	41·0	39·6	0·0	+ 0·1	+ 0·2	+ 0·3
18	38·4	38·0	38·0	35·9	− 0·9	+ 0·2	− 0·3	+ 0·6
19	38·3	40·0	39·0	37·3	− 0·6	+ 0·1	0·0	+ 0·1
20	38·8	39·0	39·1	37·3	− 0·2	− 0·3	− 0·4	0·0
22	36·7	36·4	38·4	38·3	− 0·1	− 0·6	0·0	+ 0·2
25	43·5	45·1	46·0	48·0	+ 0·5	+ 0·4	+ 0·3	+ 0·1
26	48·2	49·5	49·8	45·6	0·0	+ 0·6	− 0·5	+ 0·7
27	50·0	51·8	49·4	46·5	− 0·6	+ 0·1	+ 0·4	− 0·2
28	48·5	49·2	50·0	46·0	+ 0·5	− 0·8	− 0·5	+ 0·6
29	48·5	50·2	51·6	47·8	− 0·1	− 0·1	0·0	+ 0·2
Means	43·6	45·4	45·6	42·8	− 0·2	− 0·2	− 0·3	+ 0·2

READINGS of the WET-BULB THERMOMETER in a STEVENSON'S SCREEN in the OBSERVATORY GROUNDS—*continued.*

Days of the Month.	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.			
	9h	Noon.	15h	21h	9h	Noon.	15h	21h
MAY.								
d	°	°	°	°	°	°	°	°
1	48·0	49·4	49·8	48·1	+ 1·1	+ 0·8	+ 0·1	+ 0·3
2	47·2	47·9	48·1	44·8	+ 0·4	+ 0·4	+ 0·2	− 0·1
3	44·0	44·5	46·2	42·3	+ 0·4	+ 0·8	+ 0·1	− 0·4
4	46·0	46·3	46·0	42·5	+ 0·9	+ 0·3	− 0·2	− 0·3
5	43·5	49·0	49·7	44·6	− 0·5	− 0·2	− 0·6	+ 0·4
6	44·4	50·1	50·9	43·0	+ 0·5	+ 1·2	+ 0·8	+ 1·0
8	45·0	47·6	47·6	43·8	− 1·1	+ 0·5	− 0·6	+ 0·6
9	44·6	48·0	49·0	43·4	+ 0·6	+ 1·2	− 0·5	0·0
10	48·6	52·8	54·9	49·2	− 0·3	− 0·9	0·0	+ 0·7
11	49·1	54·6	56·9	54·2	− 0·4	− 0·3	+ 0·1	0·0
12	47·4	49·0	50·1	48·2	+ 0·9	+ 1·5	+ 1·2	+ 0·4
13	45·0	47·0	48·3	45·0	− 0·4	− 0·2	− 0·2	+ 0·1
15	48·0	49·3	50·6	46·0	− 0·7	0·0	+ 0·9	+ 0·9
16	47·8	49·0	48·1	45·4	+ 0·3	− 0·8	+ 0·6	+ 0·4
17	54·3	55·9	50·1	48·2	− 0·4	+ 0·7	− 0·8	+ 0·3
18	50·0	52·9	54·0	49·0	− 0·2	− 0·6	− 0·6	+ 1·3
19	50·0	54·1	56·0	48·1	− 0·5	− 0·4	+ 0·8	+ 0·6
20	47·0	48·8	52·1	45·9	− 0·4	− 0·4	+ 0·1	+ 0·8
22	41·7	41·3	41·9	39·7	+ 0·7	0·0	− 0·4	+ 0·4
23	40·0	42·2	43·1	40·5	+ 0·7	0·0	− 0·6	+ 1·1
24	45·1	47·1	48·2	48·3	− 0·9	− 1·0	− 0·5	+ 0·5
25	52·1	52·0	51·0	50·0	0·0	− 0·7	− 0·2	+ 0·1
26	50·3	53·0	52·5	48·8	− 0·7	+ 0·4	− 1·1	+ 0·2
27	52·0	56·0	55·9	52·1	− 1·0	+ 0·1	− 0·1	− 0·2
29	60·0	63·0	63·0	53·8	− 0·5	− 0·9	+ 0·3	+ 0·3
30	59·5	61·1	61·2	54·3	− 1·2	+ 0·4	− 1·0	+ 0·3
31	56·5	58·2	57·0	56·0	− 0·2	− 1·1	− 1·7	+ 0·2
Means	48·4	50·7	51·2	47·2	− 0·1	0·0	− 0·1	+ 0·4
JUNE.								
d	°	°	°	°	°	°	°	°
1	54·0	58·3	56·1	50·4	− 0·7	− 0·1	− 1·7	0·0
2	56·5	58·7	59·4	57·7	+ 0·2	− 0·4	− 0·3	− 0·1
3	56·1	59·3	60·9	57·2	− 0·3	− 0·5	− 0·2	− 0·5
5	52·0	53·0	50·8	49·2	− 0·4	− 0·4	− 0·5	− 0·1
6	49·9	50·2	49·9	47·0	− 0·3	− 0·4	0·0	− 0·1
7	48·9	51·0	51·2	50·8	− 0·3	− 0·3	− 0·8	− 0·2
8	52·0	55·6	52·0	50·9	− 0·5	+ 1·1	− 0·5	+ 0·7
9	51·0	52·0	52·0	50·9	− 0·4	− 0·3	− 0·3	0·0
10	51·0	55·1	55·9	52·0	− 0·7	− 0·5	− 0·8	+ 0·2
13	57·2	60·0	59·8	54·6	− 0·5	− 1·1	− 0·7	+ 0·1
14	56·0	56·6	56·7	52·4	− 1·0	− 1·1	+ 1·2	+ 1·3
15	56·6	61·2	62·0	57·4	+ 0·5	+ 0·6	− 0·9	+ 0·1
16	62·1	62·9	64·3	57·3	− 0·5	− 0·4	+ 0·6	+ 0·4
17	59·3	61·1	62·1	58·1	− 0·4	− 0·1	− 0·1	+ 0·5
19	56·7	57·7	57·9	55·1	− 0·3	+ 0·2	− 0·6	0·0
20	56·6	57·0	57·0	56·0	− 0·8	− 0·3	− 0·7	0·0
21	59·9	61·8	62·6	58·6	+ 0·4	0·0	− 0·6	+ 0·1
22	57·0	63·0	65·0	55·3	− 0·9	+ 0·3	+ 0·3	− 0·5
23	56·9	60·0	61·0	55·0	− 0·8	+ 0·1	+ 0·5	+ 0·3
24	53·2	59·5	61·9	58·0	− 0·4	− 1·1	− 1·4	− 0·1
26	56·6	60·1	60·0	59·0	0·0	+ 0·2	− 0·7	− 0·3
27	61·0	64·1	64·0	58·9	− 1·0	− 0·6	− 0·7	0·0
28	57·4	62·1	61·0	57·2	− 0·3	− 0·4	− 0·4	− 0·3
29	58·9	59·5	61·0	59·1	− 1·1	− 1·2	− 0·4	− 0·4
30	60·9	63·5	63·9	62·6	− 0·1	− 0·7	+ 0·1	− 0·1
Means	55·9	58·5	58·7	55·2	− 0·4	− 0·3	− 0·4	0·0

Days of the Month.	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.			
	9h	Noon.	15h	21h	9h	Noon.	15h	21h
JULY.								
d	°	°	°	°	°	°	°	°
1	61·9	64·1	63·0	58·5	− 0·1	− 0·2	+ 0·9	+ 0·3
4	59·2	61·2	61·4	59·7	− 0·6	− 0·4	− 0·2	0·0
5	61·0	61·0	60·9	58·9	+ 0·3	− 0·1	0·0	+ 1·1
6	57·3	56·3	55·8	53·7	+ 0·4	− 0·4	0·0	+ 0·1
7	56·1	59·2	60·6	59·0	+ 0·2	+ 0·1	+ 0·5	+ 0·4
8	63·3	64·8	64·0	60·1	− 0·4	+ 0·7	− 0·9	0·0
10	62·1	62·1	63·1	61·2	− 0·2	− 0·5	− 1·1	0·0
11	64·0	62·9	65·2	64·6	− 0·9	0·0	− 0·8	0·0
12	63·0	65·8	66·9	60·5	+ 0·1	+ 0·4	− 0·8	0·0
13	61·9	65·7	64·7	64·6	− 0·8	+ 0·7	− 0·1	0·0
14	64·4	67·0	68·6	65·5	− 1·0	+ 0·4	− 0·3	+ 0·1
15	61·6	65·2	66·7	65·2	− 0·3	− 1·3	− 0·4	− 0·1
17	57·8	59·6	59·0	54·8	+ 0·1	− 1·2	− 0·6	0·0
18	58·5	62·1	60·6	56·1	− 0·6	− 0·4	− 0·4	+ 0·3
19	56·0	59·0	59·9	55·2	+ 1·0	− 0·2	− 0·1	+ 0·4
20	60·3	62·9	62·3	61·1	+ 0·4	− 1·0	− 1·0	+ 0·8
21	64·1	65·9	66·2	64·7	− 0·3	− 0·7	− 1·2	+ 0·7
22	65·0	65·6	67·0	64·0	− 0·6	− 0·7	− 0·8	0·0
24	57·2	60·3	64·1	60·9	0·0	− 0·5	− 0·9	+ 0·1
25	63·4	67·9	68·0	65·0	− 0·3	− 1·5	− 0·5	− 0·1
26	65·0	69·0	71·7	65·3	− 1·5	+ 0·2	− 0·3	− 0·2
27	65·0	65·8	68·4	61·9	− 0·5	− 0·9	+ 0·4	+ 0·1
28	60·0	60·8	61·6	58·0	− 0·2	− 0·2	− 0·1	+ 0·6
29	62·9	64·0	60·5	62·2	+ 0·4	− 1·2	+ 0·4	− 0·3
31	56·5	56·0	57·0	54·4	− 0·2	− 0·4	+ 0·3	+ 0·9
Means	61·1	63·0	63·5	60·6	− 0·2	− 0·4	− 0·3	+ 0·2
AUGUST.								
d	°	°	°	°	°	°	°	°
1	55·7	58·0	56·0	55·5	+ 0·4	+ 0·5	− 0·2	+ 0·2
2	56·0	58·8	58·0	52·9	+ 0·3	0·0	− 0·7	+ 0·1
3	58·0	58·7	60·7	60·1	− 0·3	− 0·3	− 0·6	− 0·3
4	60·0	60·0	61·6	57·9	− 0·7	− 1·5	− 0·4	− 0·3
5	59·8	61·0	60·1	55·8	+ 0·1	− 0·4	− 0·6	+ 0·1
8	60·6	61·9	61·0	56·1	− 0·2	− 1·0	− 1·5	− 0·9
9	57·0	61·0	61·0	56·0	− 0·7	+ 0·4	− 0·6	− 0·4
10	56·1	59·2	55·8	54·9	− 0·3	− 0·5	0·0	+ 0·2
11	54·9	55·0	54·1	53·4	0·0	− 0·8	− 0·6	+ 0·3
12	57·2	57·9	59·2	55·7	− 0·7	− 0·9	− 0·5	+ 0·1
14	60·0	61·4	62·1	56·4	− 0·7	− 0·9	− 1·2	0·0
15	61·2	61·2	61·9	56·9	− 0·4	− 0·3	+ 0·1	− 0·2
16	58·9	58·6	58·6	54·0	− 0·2	− 1·1	− 1·2	− 0·2
17	59·0	59·2	59·4	55·0	+ 0·6	− 1·0	− 0·2	+ 1·0
18	60·8	61·2	61·2	60·3	− 0·2	− 0·7	− 0·4	− 0·1
19	54·1	53·8	55·1	53·6	− 0·3	+ 0·4	− 0·6	+ 0·2
21	58·2	60·4	59·6	54·1	− 0·9	− 1·1	− 0·4	− 0·1
22	58·8	57·4	56·7	53·6	− 0·9	+ 0·5	− 0·3	+ 0·3
23	52·0	53·0	53·9	50·2	− 0·8	0·0	+ 0·5	0·0
24	53·8	56·4	55·3	52·6	+ 0·2	+ 1·2	+ 0·4	+ 1·9
25	59·0	58·2	59·0	58·2	− 1·3	− 1·0	− 0·2	− 0·3
26	59·6	60·9	57·7	53·9	+ 0·3	+ 0·5	+ 1·1	− 0·1
28	58·2	59·0	56·0	54·0	− 0·3	− 0·3	− 0·3	− 0·3
29	54·9	56·7	56·3	54·1	− 0·6	− 0·3	− 0·3	− 0·3
30	51·2	52·5	53·8	52·8	− 0·5	− 0·4	− 0·3	− 0·3
31	50·8	52·0	53·0	48·0	− 1·1	− 0·3	+ 0·3	+ 0·8
Means	57·1	58·2	58·0	54·8	− 0·4	− 0·4	− 0·3	+ 0·1

READINGS of the WET-BULB THERMOMETER in a STEVENSON'S SCREEN in the OBSERVATORY GROUNDS—*concluded.*

Days of the Month.	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.			
	9h	Noon.	15h	21h	9h	Noon.	15h	21h
SEPTEMBER.								
d	°	°	°	°	°	°	°	°
1	52·0	53·2	55·0	54·3	− 0·7	− 0·5	− 0·3	− 0·1
2	56·1	57·0	60·0	58·8	− 0·6	− 0·6	+ 0·3	− 0·3
4	59·5	62·1	63·0	58·7	− 0·9	0·0	− 0·8	− 0·3
5	59·0	60·9	62·6	61·6	− 0·1	− 0·8	− 0·2	− 0·1
6	61·4	62·9	64·8	58·6	− 0·4	− 0·7	− 0·3	− 0·1
7	57·5	59·3	55·7	52·7	− 0·2	− 1·0	+ 0·3	0·0
8	53·7	56·9	55·2	53·0	− 0·5	+ 0·9	− 0·6	+ 0·1
9	55·9	56·3	55·3	59·0	+ 0·1	− 0·3	− 0·3	− 0·4
11	53·4	55·0	54·6	49·4	− 0·3	+ 0·4	− 0·1	+ 0·7
12	50·9	52·4	52·0	48·8	0·0	− 0·5	0·0	+ 2·0
13	54·0	55·0	55·8	53·7	+ 0·2	+ 0·3	− 0·9	+ 0·2
14	50·3	52·8	51·2	47·6	− 0·9	+ 0·8	0·0	+ 0·8
15	49·4	52·3	52·2	46·0	− 2·0	− 0·4	+ 0·4	+ 1·6
16	51·0	53·0	55·2	51·5	− 0·7	− 0·9	+ 1·1	+ 1·5
18	51·0	52·4	51·3	49·5	− 1·1	− 1·3	− 0·6	+ 0·1
19	51·0	54·7	54·2	50·4	− 0·7	− 0·7	− 0·4	0·0
20	52·5	55·1	54·0	48·3	− 0·5	− 1·2	0·0	+ 0·4
21	49·4	53·5	55·2	51·8	− 0·7	− 0·1	− 0·1	+ 0·1
22	53·7	53·1	54·1	52·1	− 0·2	− 0·7	− 0·4	+ 0·1
23	50·4	49·4	48·9	47·6	− 1·2	− 0·6	− 0·6	+ 0·1
25	51·4	53·0	53·7	51·7	− 0·3	− 0·3	− 0·5	0·0
26	50·0	51·2	52·1	51·4	− 0·3	− 0·6	− 0·4	+ 0·2
27	50·9	52·9	53·8	51·0	− 0·8	− 0·4	− 0·3	+ 0·1
28	51·9	54·9	53·0	52·8	− 0·8	− 1·2	− 1·1	− 0·3
29	53·5	55·2	56·1	54·0	− 0·3	− 0·6	− 0·7	− 0·2
30	47·7	47·0	46·1	42·6	− 0·5	− 0·4	− 0·3	0·0
Means	53·0	54·7	54·8	52·2	− 0·6	− 0·4	− 0·3	+ 0·2
OCTOBER.								
d	°	°	°	°	°	°	°	°
2	45·4	46·4	47·0	46·9	− 1·0	− 0·3	− 0·1	+ 0·6
3	42·6	46·6	46·1	46·6	0·0	+ 0·3	− 0·4	+ 0·2
4	51·6	53·4	51·4	46·6	− 0·4	− 0·1	− 0·3	0·0
5	47·0	46·9	47·0	42·4	− 0·3	− 0·3	− 0·6	+ 0·1
6	37·9	41·7	41·8	38·8	− 1·2	− 0·1	+ 0·1	+ 0·3
7	45·6	47·9	50·2	45·8	− 0·5	+ 0·1	+ 0·5	+ 0·1
9	49·6	53·0	54·8	52·9	− 0·7	− 0·7	− 0·5	− 0·5
10	49·5	49·7	50·1	48·9	− 1·1	− 0·6	− 0·1	− 0·1
11	47·1	49·1	49·1	48·0	− 0·3	− 0·2	− 0·4	− 0·3
12	47·8	48·3	49·0	48·9	+ 0·4	− 0·2	− 0·1	− 0·2
13	51·9	46·1	42·8	37·0	− 0·4	− 0·4	+ 0·2	0·0
14	34·5	38·0	42·0	41·9	− 0·7	− 0·3	− 0·6	− 0·1
16	36·0	41·3	39·3	34·3	− 0·8	− 1·0	+ 0·6	+ 3·0
17	32·1	37·3	38·9	37·4	− 1·0	+ 0·4	− 0·6	− 0·1
18	36·5	42·9	43·3	39·1	− 1·0	+ 0·2	− 0·1	+ 0·9
19	38·3	41·0	40·1	37·4	− 1·3	− 0·3	− 1·3	+ 0·4
20	36·4	41·2	40·0	35·2	− 0·5	+ 0·4	− 0·7	+ 3·4
21	35·0	40·1	42·0	36·0	− 0·7	− 0·4	− 0·1	+ 1·3
23	37·0	42·6	41·6	41·1	− 0·9	− 0·6	− 0·5	− 0·4
24	39·1	40·2	40·9	39·5	− 1·2	− 0·9	− 0·4	− 0·2
25	35·5	38·9	41·0	38·8	− 1·1	+ 0·6	− 0·1	+ 1·0
26	32·5	40·8	41·0	42·3	− 0·3	0·0	− 0·2	− 0·4
27	46·5	44·7	45·0	40·2	− 0·2	+ 0·4	− 0·1	− 0·5
28	40·0	44·4	44·6	42·6	− 1·7	− 0·1	− 0·3	+ 0·8
30	49·1	48·1	46·0	44·1	− 0·8	− 0·4	+ 0·4	− 0·3
31	44·2	46·4	46·9	43·0	− 0·5	− 0·4	+ 0·2	+ 0·7
Means	41·9	44·5	44·7	42·1	− 0·7	− 0·2	− 0·2	+ 0·4

Days of the Month.	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.			
	9h	Noon.	15h	21h	9h	Noon.	15h	21h
NOVEMBER.								
d	°	°	°	°	°	°	°	°
1	48·0	47·4	48·0	47·1	0·0	− 0·4	+ 0·1	− 0·1
2	44·9	47·9	47·1	44·0	+ 0·1	− 0·2	− 0·4	+ 0·4
3	47·0	47·3	46·1	42·5	− 0·8	− 0·4	+ 0·4	+ 1·0
4	44·7	47·8	46·7	45·0	− 0·3	− 0·8	− 0·3	0·0
6	41·1	46·2	45·7	39·7	− 0·8	− 0·2	− 0·2	+ 1·6
7	33·8	45·6	45·0	37·8	− 0·3	− 0·2	+ 0·3	+ 2·3
8	32·3	42·0	44·0	44·0	+ 0·9	− 0·3	0·0	− 0·1
9	41·9	42·7	42·8	36·1	− 0·2	+ 0·1	+ 0·1	0·0
10	40·4	46·0	44·0	46·2	− 0·5	− 0·7	− 0·7	− 0·2
11	46·9	49·1	49·3	46·0	− 0·4	− 0·7	− 0·4	+ 0·3
13	43·9	43·2	43·9	42·1	− 0·1	− 0·2	+ 0·1	+ 0·7
14	41·0	41·1	40·6	37·8	+ 0·2	− 0·4	− 0·3	+ 0·2
15	36·4	38·2	36·9	34·3	− 0·7	− 0·5	+ 0·2	+ 0·4
16	33·1	34·7	36·9	35·7	+ 0·3	− 0·1	+ 0·2	0·0
17	33·8	34·2	35·0	33·0	+ 0·2	− 0·2	+ 0·2	+ 1·1
18	33·0	34·9	34·8	33·3	− 0·2	+ 0·1	0·0	− 0·2
20	34·0	36·9	37·0	31·1	0·0	0·0	+ 0·5	+ 1·7
21	26·9	34·0	33·1	28·1	+ 0·9	0·0	+ 1·1	+ 2·1
22	32·0	38·3	42·0	46·1	+ 1·0	− 1·1	+ 0·3	+ 0·6
23	48·9	50·0	46·1	42·0	+ 0·2	− 0·8	− 0·3	− 0·8
24	37·6	42·0	42·2	38·0	− 0·2	− 0·3	+ 0·2	+ 0·6
25	37·7	45·0	43·0	43·4	+ 0·6	+ 1·1	− 0·5	+ 0·1
27	36·7	38·4	38·4	38·3	− 0·2	+ 0·1	+ 0·4	− 0·2
28	42·3	42·9	43·4	44·6	− 0·1	− 0·2	− 0·2	− 0·1
29	42·3	43·3	42·2	38·0	− 0·8	− 0·4	− 0·3	+ 0·5
30	38·0	41·2	41·5	43·0	0·0	− 0·3	− 0·2	+ 0·2
Means	39·2	42·3	42·1	39·9	0·0	− 0·3	0·0	+ 0·5
DECEMBER.								
d	°	°	°	°	°	°	°	°
1	41·1	41·8	41·8	41·0	− 0·3	− 0·1	+ 0·1	0·0
2	40·1	44·0	42·7	38·0	− 0·3	+ 0·1	− 0·6	+ 1·0
4	37·2	36·0	35·9	36·9	+ 0·2	− 0·1	0·0	− 0·2
5	40·0	39·0	40·0	44·1	− 0·5	− 0·7	− 0·3	− 0·3
6	40·3	42·9	43·8	47·8	− 0·2	− 0·2	− 0·3	− 0·1
7	50·9	51·9	51·9	50·4	− 0·3	− 0·2	− 0·3	− 0·4
8	51·7	49·2	48·4	43·0	− 0·4	− 0·5	− 0·4	+ 0·1
9	38·9	43·9	43·6	39·0	− 0·6	− 0·1	− 0·1	+ 0·2
11	27·5	34·7	32·8	28·6	+ 0·1	+ 2·3	0·0	+ 0·1
12	31·1	33·6	36·0	41·8	+ 0·1	+ 1·1	+ 1·3	− 0·5
13	36·0	34·6	33·3	39·0	+ 0·1	+ 0·7	− 0·2	+ 1·7
14	42·0	42·1	42·1	40·6	− 0·2	− 0·2	− 0·1	− 0·1
15	38·2	38·7	39·0	38·0	+ 0·3	0·0	+ 0·1	0·0
16	36·9	38·0	38·0	38·7	+ 0·1	+ 0·1	+ 0·3	− 0·1
18	40·2	41·0	38·3	36·0	0·0	− 0·1	0·0	+ 0·2
19	42·1	44·2	44·6	38·0	− 0·3	− 0·6	− 0·1	− 0·4
20	40·0	43·3	44·7	43·9	− 0·3	− 0·5	− 0·1	0·0
21	45·0	46·0	45·0	44·4	− 0·1	0·0	− 0·1	− 0·3
22	42·9	42·9	42·0	39·3	+ 0·1	+ 0·1	− 0·1	− 0·3
23	38·2	39·1	38·4	38·1	− 0·5	− 0·7	− 0·3	− 0·1
27	33·0	35·8	36·2	38·2	+ 0·9	− 0·1	− 0·3	+ 0·1
28	39·0	43·4	46·0	43·4	− 0·1	− 1·1	− 0·1	+ 0·1
29	42·5	43·1	42·7	42·8	− 0·1	− 0·3	− 0·1	− 0·1
30	37·0	37·0	36·5	32·8	+ 0·1	0·0	− 0·1	+ 0·5
Means	39·7	41·1	41·0	40·2	− 0·1	0·0	− 0·1	0·0

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 1905.

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

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

JANUARY.

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.			
	Maximum.	Minimum.	9h	Noon.	15h	21h	Maximum.	Minimum.	9h	Noon.	15h	21h	9h	Noon.	15h	21h	9h	Noon.	15h	21h
d	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°
1	37·9	24·4	...	...	...	...	0·0	+0·1	...	...	...	...	...	...	...	...	...	...	...	...
2	34·0	20·5	30·2	30·6	32·2	34·0	0·0	+1·0	+0·2	0·0	−0·1	+0·2	28·2	29·8	31·6	33·6	+ 0·2	0·0	− 0·1	0·0
3	47·3	34·0	40·6	44·9	47·0	47·0	+0·3	+0·2	+0·1	+0·2	+0·1	0·0	40·3	43·6	44·9	45·0	+ 0·2	− 0·1	+ 0·1	+ 0·1
4	47·8	45·1	45·1	46·9	47·8	47·2	−0·2	+0·1	−0·2	0·0	−0·1	+0·3	42·0	43·5	44·9	44·3	− 0·3	− 0·2	− 0·1	+ 0·1
5	47·3	42·0	46·3	46·2	45·9	42·0	−0·2	+0·5	−0·2	0·0	+0·3	+0·1	45·3	42·7	42·3	39·0	− 0·5	− 0·2	+ 0·3	− 0·4
6	53·9	39·0	44·6	50·0	53·9	53·2	+0·2	+0·5	0·0	−0·2	+0·3	+0·2	43·6	48·5	49·8	48·1	0·0	− 0·3	− 0·2	0·0
7	54·0	44·1	51·0	51·3	50·5	46·3	0·0	+0·7	+0·3	+0·8	0·0	+0·2	46·6	46·8	46·2	44·5	− 0·1	0·0	− 0·7	− 0·1
8	50·0	46·1	...	...	...	...	−0·8	+2·6	...	...	...	...	...	...	...	...	...	...	...	...
9	50·6	38·0	50·1	44·7	42·8	38·0	−0·2	+0·7	−0·2	+0·1	+0·2	−0·3	47·7	44·0	40·1	35·0	+ 0·1	0·0	− 0·4	− 0·6
10	40·8	35·3	37·0	39·7	40·7	37·3	+0·5	+0·6	+0·2	+0·1	+0·4	+0·4	34·5	35·7	36·4	35·0	− 0·2	0·0	+ 0·1	+ 0·1
11	48·0	35·4	42·7	45·7	45·8	47·2	0·0	−1·0	+0·9	+0·1	+0·2	−0·2	40·2	42·7	42·0	44·6	+ 0·2	0·0	− 0·3	− 0·1
12	48·0	39·0	40·0	44·2	45·0	39·6	+0·1	+0·6	−0·2	0·0	+0·4	+0·4	37·2	39·5	39·1	36·2	− 0·1	− 0·1	0·0	0·0
13	42·4	29·5	31·7	41·8	41·8	30·0	+1·6	+0·6	+1·2	+1·5	+1·6	+0·7	30·9	38·6	38·0	29·3	+ 1·2	+ 0·9	+ 1·5	+ 0·3
14	40·6	25·1	36·1	40·6	39·6	35·8	+0·3	+0·6	+1·5	+0·9	+0·7	+0·8	35·0	37·1	35·8	31·0	+ 0·6	+ 0·5	0·0	+ 0·2
15	39·0	28·1	...	...	...	...	−0·1	0·0	...	...	...	...	...	...	...	...	...	...	...	...
16	35·0	20·7	21·8	23·1	23·6	35·0	0·0	+0·1	+0·2	−0·2	0·0	0·0	19·4	21·5	21·9	33·0	+ 0·1	+ 0·1	− 0·1	− 0·3
17	43·8	34·8	38·1	41·8	42·0	35·7	+0·2	+1·2	+0·3	+0·2	+0·3	+2·1	37·3	40·0	39·1	33·9	+ 0·2	+ 0·2	− 0·3	+ 1·2
18	40·9	33·2	35·5	38·9	40·0	33·8	+0·2	+1·1	0·0	+0·2	+1·1	+1·1	33·9	36·0	36·4	32·3	+ 0·1	+ 0·1	+ 0·5	+ 0·6
19	36·9	25·8	27·0	30·0	36·3	34·6	−0·6	+0·7	+0·4	+0·8	−1·2	+0·2	26·5	29·3	33·1	33·4	+ 0·3	+ 0·5	+ 0·8	+ 0·1
20	36·3	33·1	35·9	35·6	34·8	33·1	0·0	−0·2	+0·3	0·0	+0·2	−0·2	34·3	33·9	32·9	31·7	− 0·1	0·0	+ 0·1	0·0
21	38·3	28·4	30·1	38·3	37·3	35·0	+0·6	+1·0	+0·4	+1·2	+0·6	−0·3	29·6	35·0	34·4	33·2	+ 0·4	+ 0·6	+ 0·3	− 0·5
22	35·8	33·5	...	...	...	...	−0·2	+0·1	...	...	...	...	...	...	...	...	...	...	...	...
23	40·6	32·7	33·6	35·7	40·6	34·6	−0·2	+0·2	+0·2	+0·1	+0·1	+0·4	33·5	35·1	39·0	34·1	+ 0·2	0·0	− 0·1	+ 0·2
24	43·8	34·4	37·7	41·3	42·7	40·3	+0·1	+0·3	+0·5	0·0	+0·2	+0·4	35·6	40·0	40·9	39·6	+ 0·1	− 0·2	0·0	0·0
25	45·0	39·2	42·8	44·6	44·9	39·2	0·0	+0·2	+0·2	+0·1	+0·3	0·0	42·0	40·0	40·4	36·9	− 0·2	− 0·6	− 0·4	+ 0·1
26	40·5	32·4	32·8	38·0	40·0	34·0	−0·5	+0·5	+0·4	+0·2	+0·3	+0·3	30·9	34·8	35·2	32·3	+ 0·3	+ 0·1	+ 0·1	+ 0·4
27	41·5	25·4	29·0	37·0	41·5	37·1	+0·3	+0·7	+0·7	+0·2	+0·3	+0·2	28·0	33·3	37·3	35·0	+ 0·3	+ 0·2	+ 0·4	− 0·3
28	48·2	33·6	39·6	44·7	48·2	42·0	+0·1	+0·5	0·0	+0·2	+0·1	+0·3	38·1	41·9	44·5	40·0	+ 0·2	+ 0·3	+ 0·2	+ 0·3
29	45·0	33·9	...	...	..	...	+1·0	+0·8	...	...	...	...	...	...	...	...	...	...	...	...
30	47·3	34·8	40·0	46·6	46·7	45·7	0·0	+0·7	+0·1	+0·4	+0·1	+0·1	38·9	44·1	45·0	43·9	+ 0·2	+ 0·4	+ 0·3	+ 0·3
31	46·6	40·3	41·8	44·8	45·4	40·3	0·0	+0·3	+0·3	+0·1	0·0	+0·1	38·2	39·6	40·0	38·0	+ 0·5	− 0·1	+ 0·1	+ 0·2
Means	43·5	33·6	37·7	41·0	42·2	39·2	+0·1	+0·5	+0·3	+0·3	+0·2	+0·3	36·1	38·3	38·9	37·0	+ 0·2	+ 0·1	+ 0·1	+ 0·1

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

FEBRUARY.

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.			
	Maximum.	Minimum.	9h	Noon.	15h	21h	Maximum.	Minimum.	9h	Noon.	15h	21h	9h	Noon.	15h	21h	9h	Noon.	15h	21h
d	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°
1	52·6	39·8	44·5	50·2	51·0	45·0	−0·5	+0·3	+0·1	−0·6	+0·3	+0·3	43·2	47·5	46·3	40·7	− 0·1	− 0·1	0·0	+ 0·2
2	45·5	39·1	42·1	44·5	45·1	39·7	−0·4	+0·4	+0·2	−0·1	0·0	+0·3	37·8	38·0	38·1	36·9	+ 0·2	0·0	0·0	+ 0·2
3	47·0	36·3	38·0	44·6	46·2	45·0	0·0	+0·3	+0·2	0·0	+0·3	+0·3	36·0	40·6	41·2	42·3	+ 0·1	− 0·1	+ 0·3	+ 0·2
4	51·0	43·5	45·4	48·6	49·9	48·5	0·0	−0·2	+0·2	0·0	0·0	−0·1	43·3	45·0	47·2	48·3	+ 0·3	− 0·6	− 0·1	− 0·3
5	53·2	47·9	...	...	...	...	−0·4	+0·6	...	...	...	...	...	...	...	...	...	...	...	...
6	49·2	45·7	46·2	49·0	48·0	46·5	−0·8	+0·3	−0·3	−0·2	+0·1	−0·1	43·8	45·6	45·0	44·2	+ 0·1	0·0	0·0	− 0·5
7	48·8	41·0	46·0	48·1	48·1	41·0	−0·5	+0·3	−0·1	−0·5	−0·4	+0·1	45·0	47·0	47·9	40·6	− 0·1	− 0·5	− 0·2	− 0·1
8	46·7	39·1	40·4	44·9	43·0	40·0	−0·2	−0·6	−0·3	−0·1	+0·2	+0·1	39·8	43·0	41·7	39·7	− 0·5	− 0·3	− 0·1	0·0
9	48·8	38·4	43·6	48·0	48·0	46·3	−0·8	+0·7	0·0	−0·2	−0·2	−0·1	42·9	45·0	44·8	43·6	− 0·1	− 0·2	− 0·1	− 0·1
10	50·1	42·1	44·0	48·6	49·2	45·0	−0·9	+0·5	+0·2	−0·1	−0·1	+0·1	42·0	43·6	45·7	41·7	+ 0·1	− 0·2	− 0·1	0·0
11	45·4	35·8	38·0	42·3	42·0	36·7	+0·3	−0·3	−0·5	0·0	−0·1	+0·1	35·8	36·0	35·6	33·7	− 0·6	− 0·3	− 0·1	0·0
12	36·7	32·5	...	..	...	...	−0·3	+0·1	...	...	...	...	...	...	...	...	...	...	...	...
13	47·4	35·1	40·6	44·3	47·4	46·8	−0·4	+0·4	0·0	−0·1	−0·1	−0·1	39·2	42·0	43·9	45·4	− 0·3	− 0·4	− 0·1	− 0·4
14	51·0	45·7	48·0	49·9	49·8	47·0	−0·5	+0·5	+0·2	0·0	+0·1	+0·1	46·0	47·0	47·0	45·0	− 0·1	− 0·3	− 0·5	− 0·4
15	48·4	43·0	45·0	47·3	48·4	46·0	−0·4	+0·5	−0·2	−0·3	0·0	0·0	41·8	43·0	44·3	45·4	− 0·3	− 0·1	− 0·1	− 0·1
16	52·4	45·4	47·3	51·7	51·9	46·0	−1·1	+0·3	−0·2	−0·2	0·0	+0·4	46·0	48·4	49·0	43·8	0·0	− 0·1	− 0·6	+ 0·5
17	50·0	44·2	47·2	49·0	48·9	44·2	−0·4	+0·7	−0·2	−0·1	0·0	+0·3	44·6	41·0	41·6	39·3	− 0·1	0·0	+ 0·3	+ 0·4
18	51·0	36·4	43·7	50·0	49·2	50·2	−0·2	+0·8	+0·1	0·0	−0·1	−0·4	41·6	46·3	47·5	48·2	0·0	− 0·3	− 0·3	− 0·4
19	50·3	38·3	...	...	...	...	−0·3	+0·2	...	...	...	...	...	...	...	...	...	...	...	...
20	39·0	31·5	33·2	36·0	36·1	36·3	−0·6	+0·3	0·0	−0·2	−0·4	+0·2	29·7	33·5	35·1	34·9	0·0	0·0	− 0·4	+ 0·3
21	44·2	35·1	39·0	41·8	43·0	36·6	−0·7	+0·1	+0·4	−0·1	0·0	+0·3	36·0	37·2	37·8	33·8	+ 0·3	− 0·1	0·0	+ 0·2
22	42·0	35·0	36·5	40·8	40·0	36·7	−0·4	+0·3	+0·1	+0·2	+0·2	−0·1	34·1	35·9	35·0	33·4	0·0	+ 0·2	+ 0·1	− 0·1
23	37·0	34·6	35·7	36·0	35·3	35·0	+0·1	+0·3	0·0	+0·5	+0·2	0·0	34·0	34·5	34·7	34·3	− 0·3	+ 0·5	+ 0·1	− 0·2
24	37·0	34·7	35·9	36·0	37·0	36·4	0·0	+0·4	+0·2	+0·1	+0·2	+0·2	35·3	35·5	36·3	36·0	0·0	− 0·1	− 0·2	+ 0·1
25	46·0	36·2	37·1	43·0	44·8	38·0	−0·4	+0·5	−0·1	0·0	+0·2	+0·4	36·7	39·3	41·2	36·2	− 0·1	− 0·2	+ 0·5	+ 0·3
26	44·2	36·1	...	...	...	...	−0·4	+0·4	...	...	...	...	...	...	...	...	...	...	...	...
27	46·9	33·5	42·2	43·0	46·7	40·1	−0·5	+0·4	+0·6	+0·9	−0·2	+0·1	38·6	39·5	42·6	37·4	− 0·1	+ 0·8	− 0·4	0·0
28	45·4	33·4	36·3	44·0	44·6	36·3	−0·3	+0·4	+0·2	+0·4	0·0	+0·9	33·8	38·6	38·6	34·4	+ 0·2	+ 0·3	− 0·1	+ 0·6
Means	46·7	38·5	41·5	45·1	45·6	42·1	−0·4	+0·3	0·0	0·0	0·0	+0·1	39·5	41·4	42·0	40·0	− 0·1	− 0·1	− 0·1	0·0

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

MARCH.

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.			
	Maximum.	Minimum.	9h	Noon.	15h	21h	Maximum.	Minimum.	9h	Noon.	15h	21h	9h	Noon.	15h	21h	9h	Noon.	15h	21h
d	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°
1	42·3	31·2	35·5	40·0	41·8	37·5	+0·3	+1·1	−0·1	0·0	0·0	−0·1	34·5	37·3	39·0	36·3	− 0·2	0·0	0·0	− 0·4
2	43·3	36·1	38·8	41·0	41·2	37·0	−0·8	+0·4	+0·1	−0·2	−0·1	+0·1	36·0	38·2	38·6	35·2	− 0·1	− 0·4	0·0	− 0·1
3	43·4	34·1	36·0	40·8	42·6	36·7	−1·2	+0·2	−0·1	+0·1	+0·1	+0·1	35·0	37·9	38·2	34·3	− 0·1	0·0	− 0·1	− 0·1
4	43·5	27·3	35·3	42·8	43·2	41·8	−1·0	+0·2	+1·1	0·0	−0·4	+0·1	32·9	38·0	40·8	40·7	+ 0·6	0·0	− 0·7	0·0
5	48·2	41·7	...	...	...	...	−1·4	+0·5	...	...	...	...	...	...	...	...	...	...	...	...
6	49·0	41·1	42·8	45·6	46·1	45·0	−1·0	+0·1	+0·1	−0·1	0·0	0·0	41·0	41·4	42·0	44·0	0·0	+ 0·1	0·0	0·0
7	50·6	43·6	45·0	49·0	48·1	44·5	0·0	+0·6	−0·1	−0·1	−0·1	−0·1	42·5	45·0	47·0	41·0	− 0·2	− 0·1	0·0	+ 0·1
8	49·6	37·1	39·9	43·1	47·0	45·0	−1·1	+0·7	0·0	−0·1	−0·6	+0·3	36·4	37·7	41·8	43·9	0·0	+ 0·2	− 0·2	+ 0·2
9	51·6	39·9	49·3	51·3	47·8	39·9	−1·3	+0·4	−0·2	−0·2	+0·2	+0·2	47·2	48·0	42·1	36·9	− 0·5	− 0·2	− 0·3	+ 0·4
10	47·7	36·1	38·9	45·2	47·0	44·0	−1·3	+0·6	−0·1	−0·2	−0·6	+0·1	36·4	39·1	40·3	42·4	− 0·2	− 0·2	− 0·6	− 0·3
11	50·7	43·4	49·2	49·6	49·1	43·4	−0·5	+0·7	−0·4	−0·4	−0·2	−0·2	48·0	48·0	44·3	40·4	− 0·2	− 0·4	− 0·1	− 0·3
12	48·9	39·1	...	...	...	...	−0·1	+0·6	...	...	...	...	...	...	...	...	...	...	...	...
13	54·4	40·9	47·6	51·2	52·2	46·8	−1·0	+0·5	+0·8	−0·1	−0·6	−0·1	44·4	45·7	46·6	45·6	+ 0·1	0·0	− 0·6	+ 0·1
14	52·0	43·1	47·1	47·4	48·2	45·8	−0·8	+0·1	−0·1	−0·2	−0·4	−0·3	44·1	43·8	43·3	43·7	0·0	+ 0·2	− 0·5	0·0
15	49·4	39·4	46·1	45·7	44·9	42·1	−1·2	+0·3	−0·5	−0·4	+1·2	+0·4	43·2	44·3	41·8	39·0	− 0·7	− 0·5	+ 0·8	+ 0·2
16	53·0	38·8	46·6	49·0	51·5	44·1	−1·2	+0·3	−0·1	−0·7	−1·1	+0·2	44·1	45·7	45·8	42·9	− 0·1	− 0·7	− 0·9	+ 0·2
17	53·1	43·5	49·5	48·9	51·7	45·6	−2·6	+0·4	−0·1	−0·1	0·0	+0·1	46·0	46·0	47·1	45·0	− 0·2	0·0	− 0·4	+ 0·1
18	54·8	44·7	47·5	51·3	54·8	46·9	−0·2	+0·8	−0·7	−0·3	0·0	+0·8	46·6	47·9	48·2	44·0	− 0·8	− 0·3	− 0·2	+ 0·5
19	54·3	39·5	...	...	...	...	−0·5	+1·0	...	...	...	...	...	...	...	...	...	...	...	...
20	55·1	34·4	45·6	53·2	55·1	45·7	−1·1	+1·3	+1·2	+1·0	+0·5	+0·3	41·2	46·0	47·1	43·5	+ 0·3	+ 1·0	+ 0·4	+ 0·6
21	55·1	41·3	44·9	52·0	55·1	43·9	−0·3	+0·2	+0·2	+0·2	+0·4	+0·7	42·0	46·7	49·0	42·0	− 0·3	0·0	+ 0·1	+ 0·4
22	61·0	32·2	41·1	61·0	60·1	47·2	−0·4	+0·3	−0·3	+0·2	+0·5	+0·2	41·0	54·1	52·6	45·6	− 0·4	+ 0·4	0·0	− 0·1
23	59·4	40·2	50·0	58·0	55·0	46·0	−1·7	+1·1	−0·4	−0·6	+0·2	+0·3	47·7	51·2	49·1	44·7	− 0·7	− 0·3	+ 0·3	+ 0·1
24	58·3	42·1	47·0	55·1	57·7	46·5	+0·2	+0·6	−0·1	+0·3	+0·5	+0·1	45·1	50·2	51·4	44·7	− 0·3	+ 0·1	+ 0·4	+ 0·2
25	51·0	36·1	45·6	49·2	48·9	42·6	0·0	+0·8	0·0	−0·2	−0·4	0·0	44·3	45·4	44·8	42·3	− 0·5	− 0·2	− 0·3	− 0·1
26	56·0	39·9	...	...	...	...	−0·8	+0·7	...	...	...	...	...	...	...	...	...	...	...	...
27	47·0	42·5	43·0	44·2	45·4	43·3	+0·2	+1·1	−0·5	−0·4	−0·2	+0·4	41·2	42·7	43·0	41·3	− 0·7	− 0·4	+ 0·3	0·0
28	56·0	39·2	48·4	55·3	52·2	48·9	−0·4	+0·6	+0·2	+0·4	+0·1	−0·1	44·6	48·3	47·0	45·5	− 0·2	+ 0·5	+ 0·1	− 0·2
29	55·9	44·9	50·8	53·4	52·0	49·3	−1·5	+0·9	0·0	−0·2	0·0	0·0	46·5	47·8	48·5	47·0	− 0·2	− 0·3	− 0·4	0·0
30	56·4	45·5	48·6	51·6	55·0	47·7	−1·5	+0·7	−0·1	−0·3	−0·2	+0·1	46·7	46·0	47·2	43·4	0·0	− 0·3	− 0·1	+ 0·3
31	55·0	38·1	45·8	52·1	55·0	46·8	−1·1	+0·8	+0·2	+0·3	+0·1	+1·1	42·8	43·4	46·0	41·1	− 0·2	0·0	+ 0·3	+ 0·7
Means	51·8	39·3	44·7	49·1	50·0	44·2	−0·8	+0·6	0·0	−0·1	0·0	+0·2	42·3	44·7	44·9	42·1	− 0·2	− 0·1	− 0·1	+ 0·1

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

APRIL.

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.			
	Maximum.	Minimum.	9h	Noon.	15h	21h	Maximum.	Minimum.	9h	Noon.	15h	21h	9h	Noon.	15h	21h	9h	Noon.	15h	21h
d	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°
1	59·6	39·4	46·3	53·0	59·6	48·3	−0·4	+0·5	−0·6	0·0	0·0	−0·3	44·3	48·0	51·7	46·0	− 0·7	0·0	0·0	+ 0·1
2	54·6	44·1	...	...	...	...	−0·6	+0·8	...	...	...	...	...	...	...	...	...	...	...	..
3	52·0	34·1	43·3	50·1	51·8	44·8	−0·1	+0·8	+0·4	+0·2	0·0	+0·2	41·3	44·0	46·0	42·2	+ 0·1	− 0·6	+ 0·7	0·0
4	54·0	37·9	46·8	53·9	53·0	50·4	−2·0	+1·2	−0·2	+0·3	−0·6	0·0	45·0	49·8	49·4	48·1	− 0·2	+ 0·1	− 0·4	+ 0·2
5	54·0	43·0	50·0	53·3	52·1	43·0	−1·0	+0·7	−0·1	−0·4	−0·4	+0·2	46·5	47·1	45·1	39·0	− 0·1	+ 0·1	+ 0·1	+ 0·2
6	45·0	35·9	39·2	41·3	44·3	39·4	−1·0	+0·3	0·0	−0·2	−0·2	+0·8	33·4	32·9	35·8	34·0	+ 0·1	− 0·4	+ 0·5	+ 0·9
7	51·4	33·4	40·7	49·0	44·3	38·2	−1·5	+0·8	−0·2	−0·2	−0·3	−0·2	40·0	47·1	42·8	36·5	− 0·1	− 0·2	− 0·1	− 0·2
8	44·1	32·1	37·9	41·7	43·5	35·5	−0·9	−0·7	+0·1	+0·1	−0·2	+0·6	34·0	35·0	36·1	32·3	− 0·1	0·0	+ 0·2	+ 0·4
9	49·0	32·1	...	...	...	...	−1·3	+1·0	...	...	...	...	...	...	...	...	...	...	...	...
10	50·8	41·1	44·9	50·2	48·0	46·1	−1·3	+0·4	−0·4	−0·3	−0·3	−0·1	44·4	48·0	47·4	45·8	− 0·4	− 0·6	− 0·3	0·0
11	56·0	45·0	48·7	52·8	56·0	51·0	−1·4	+0·3	−0·5	−0·1	−0·6	+0·1	46·5	49·4	51·9	49·9	− 0·7	0·0	− 0·5	+ 0·1
12	59·6	44·9	50·2	51·2	59·6	47·4	−1·5	+0·5	+0·1	−0·2	−0·9	+0·5	47·7	48·5	51·3	45·9	+ 0·1	− 0·1	− 1·1	+ 0·4
13	63·8	42·9	56·5	61·7	60·2	54·2	−0·2	+1·1	−0·1	−1·0	−0·3	0·0	51·9	53·2	52·8	51·0	− 0·1	− 1·1	− 0·3	0·0
14	62·6	49·4	52·7	61·6	58·6	49·8	−2·3	+0·5	−0·4	−1·0	−1·0	+0·6	50·4	54·5	53·1	48·4	− 0·8	− 0·3	− 0·9	+ 0·3
15	59·8	46·2	53·4	58·1	58·0	46·9	−1·3	+0·4	+0·1	+0·7	−0·2	+0·4	46·1	47·3	47·0	43·8	− 0·1	− 0·4	− 0·8	+ 0·2
16	58·7	41·8	...	...	...	...	−1·2	+0·4	...	...	...	...	..	...	...	...	...	...	...	...
17	50·4	41·1	44·8	49·1	47·6	42·0	−1·5	+0·2	+0·1	+0·4	0·0	+0·2	41·0	41·3	41·0	39·5	0·0	+ 0·5	+ 0·2	+ 0·2
18	47·9	37·0	46·0	42·0	41·1	37·1	+0·7	+0·4	+0·4	+0·1	−0·2	+0·2	39·8	38·0	38·1	35·6	+ 0·5	+ 0·2	− 0·2	+ 0·3
19	44·1	35·7	41·6	42·2	41·2	38·5	−1·4	+0·3	0·0	−0·6	0·0	0·0	39·0	39·7	39·0	37·2	+ 0·1	− 0·2	0·0	0·0
20	48·4	37·5	41·7	44·2	45·2	41·1	−1·1	+0·4	+0·2	−0·2	−0·5	+0·2	39·2	39·3	39·2	37·3	+ 0·2	0·0	− 0·3	0·0
21	50·2	39·1	...	...	...	...	−0·9	+0·2	...	...	...	...	...	...	...	...	...	...	...	...
22	49·2	37·7	42·0	43·0	44·9	44·1	+0·2	+0·4	0·0	+0·2	−0·1	+0·2	37·0	37·0	38·3	38·3	+ 0·2	0·0	− 0·1	+ 0·2
23	51·5	37·2	...	...	...	...	−1·1	+0·7	...	...	...	...	...	...	...	...	...	...	...	...
24	50·4	36·6	...	...	...	...	−1·7	+0·3	...	...	...	...	...	...	...	...	...	...	...	...
25	52·0	37·6	49·3	49·1	47·2	48·3	−2·0	+0·8	−0·3	−0·2	−0·6	−0·3	42·9	44·5	45·2	47·8	− 0·1	− 0·2	− 0·5	− 0·1
26	56·7	48·0	50·6	54·3	55·0	48·2	−1·2	+0·2	0·0	−0·3	−0·2	+0·4	48·2	49·0	50·1	45·2	0·0	+ 0·1	− 0·2	+ 0·3
27	56·4	48·0	52·1	56·0	54·0	49·3	−2·5	+0·7	−0·7	−1·0	−0·3	+0·2	50·0	50·9	49·0	46·5	− 0·6	− 0·8	0·0	− 0·2
28	56·1	48·4	53·1	54·8	52·6	48·4	−2·0	+0·9	−0·4	−0·8	−0·5	+0·7	48·0	49·5	50·0	45·9	0·0	− 0·5	− 0·5	+ 0·5
29	57·6	48·0	52·8	55·2	57·0	49·5	−1·7	+0·7	−0·4	−0·4	−0·2	0·0	48·3	50·0	51·4	47·6	− 0·3	− 0·3	− 0·2	0·0
30	57·7	45·2	...	...	...	...	−3·4	+0·2	...	...	...	...	...	...	...	...	...	...	...	...
Means	53·5	40·7	47·2	50·8	51·1	45·3	−1·3	+0·5	−0·1	−0·2	−0·3	+0·2	43·7	45·4	45·7	42·8	− 0·1	− 0·2	− 0·2	+ 0·2

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.			
	Maximum.	Minimum.	9h	Noon.	15h	21h	Maximum.	Minimum.	9h	Noon.	15h	21h	9h	Noon.	15h	21h	9h	Noon.	15h	21h
d	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°
1	58·3	46·1	53·0	57·0	55·8	49·9	−1·3	+0·1	+0·1	+0·3	−0·6	+0·3	47·0	48·5	49·2	47·8	+ 0·1	− 0·1	− 0·5	0·0
2	56·0	43·2	50·2	51·3	53·6	46·2	−2·2	+0·8	−0·1	0·0	−0·1	−0·2	46·7	47·2	48·0	44·8	− 0·1	− 0·3	+ 0·1	− 0·1
3	57·0	42·3	50·2	52·0	56·7	43·6	−2·7	+0·6	−0·4	−0·2	0·0	−0·5	44·0	44·1	46·1	41·8	+ 0·4	+ 0·4	0·0	− 0·9
4	56·0	38·9	49·2	53·6	52·7	45·2	−1·4	+0·7	−0·4	−1·0	−0·3	−0·4	45·0	45·5	46·3	42·7	− 0·1	− 0·5	+ 0·1	− 0·1
5	59·0	42·8	47·4	56·0	58·9	47·2	−1·2	+0·3	−0·5	+0·5	+0·1	0·0	43·4	49·5	50·2	44·3	− 0·6	+ 0·3	− 0·1	+ 0·1
6	63·5	38·7	47·8	57·0	63·5	51·6	−1·1	+0·4	0·0	−0·5	−0·1	+1·0	43·9	48·7	50·3	42·8	0·0	− 0·2	+ 0·2	+ 0·8
7	66·2	42·0	...	...	...	...	−1·8	+1·2	...	...	...	...	...	...	...	...	...	...	...	...
8	59·0	47·4	53·9	56·0	58·0	48·5	−0·8	+0·4	−0·5	−0·4	−1·6	+0·1	45·4	46·6	47·2	43·2	− 0·7	− 0·5	− 1·0	0·0
9	61·0	36·9	52·0	56·8	60·6	48·3	−1·6	+0·6	0·0	−0·1	−0·7	+0·3	44·0	46·8	48·9	43·4	0·0	0·0	− 0·6	0·0
10	68·4	43·2	57·9	64·9	67·8	56·9	−1·6	+1·0	0·0	−1·0	−0·5	+0·6	49·0	52·8	54·3	48·9	+ 0·1	− 0·9	− 0·6	+ 0·4
11	66·3	44·9	58·4	63·7	63·0	58·4	−2·7	+1·6	−0·8	−0·3	−0·3	−0·2	48·9	54·6	56·5	54·0	− 0·6	− 0·3	− 0·3	− 0·2
12	59·6	46·1	53·5	57·0	59·0	51·6	−1·8	+0·5	−0·4	+0·1	−0·6	+0·4	46·0	47·8	48·2	47·8	− 0·5	+ 0·3	− 0·7	0·0
13	56·1	41·7	52·0	55·3	56·1	50·3	−1·3	+0·6	−0·3	−0·4	−0·6	−0·1	45·0	47·0	48·0	45·0	− 0·4	− 0·2	− 0·5	+ 0·1
14	55·1	45·7	...	...	...	...	−1·1	+0·4	...	...	...	...	...	...	...	...	...	...	...	...
15	62·1	41·6	54·9	58·0	60·8	50·0	−1·9	+0·4	−0·3	−0·8	+0·1	+0·4	48·0	49·0	49·7	45·6	− 0·7	− 0·3	0·0	+ 0·5
16	59·0	40·1	54·0	56·9	50·6	52·2	−1·0	+0·6	0·0	−0·3	−0·4	+0·1	47·2	49·0	47·4	45·1	− 0·3	− 0·8	− 0·1	+ 0·1
17	69·0	45·8	62·7	68·9	65·5	55·7	−1·2	+0·3	+0·1	0·0	+0·1	+0·1	54·3	55·4	51·0	48·1	− 0·4	+ 0·2	+ 0·1	+ 0·2
18	68·5	45·0	59·3	67·4	67·9	54·8	−1·1	+0·6	−0·3	−0·6	−0·8	+0·8	50·0	52·6	53·7	48·0	− 0·2	− 0·9	− 0·9	+ 0·3
19	65·6	46·6	53·7	60·0	64·0	50·0	−1·4	+0·3	−0·6	−0·8	−0·5	0·0	49·7	53·9	55·0	47·5	− 0·8	− 0·6	− 0·2	0·0
20	60·1	45·1	48·2	51·9	57·2	48·1	−1·0	0·0	−0·5	−0·2	−0·5	−0·1	47·0	49·0	51·7	45·3	− 0·4	− 0·2	− 0·3	+ 0·2
21	51·0	43·7	...	...	...	...	−2·1	+0·5	...	...	...	...	...	...	...	...	...	...	...	...
22	53·8	38·4	47·0	49·0	51·6	43·4	−1·5	+0·2	−0·5	+0·2	−0·2	+0·1	40·5	41·5	42·1	39·4	− 0·5	+ 0·2	− 0·2	+ 0·1
23	55·4	33·9	44·9	49·7	52·9	43·8	−2·3	−0·4	−0·8	−0·5	−0·2	+0·8	38·9	41·8	43·5	39·8	− 0·4	− 0·4	− 0·2	+ 0·4
24	60·3	38·6	50·1	57·7	58·5	52·2	−2·8	+1·1	−1·0	−0·5	−0·1	−0·1	45·1	47·7	48·3	48·0	− 0·9	− 0·4	− 0·4	+ 0·2
25	63·0	46·1	60·5	61·4	61·0	54·9	−3·8	+0·8	−0·6	−1·2	−0·3	+0·5	51·4	51·7	51·0	50·0	− 0·7	− 1·0	− 0·2	+ 0·1
26	66·1	49·1	59·0	66·1	63·8	54·8	−3·7	+0·9	−0·4	+0·2	−1·9	+1·0	50·9	53·1	52·3	49·0	− 0·1	+ 0·5	− 1·3	+ 0·4
27	70·6	43·1	63·3	68·8	70·0	58·1	−2·9	+0·9	−0·9	−1·3	−1·0	+0·5	52·0	55·0	55·5	52·2	− 1·0	− 0·9	− 0·5	− 0·1
28	74·9	47·6	...	...	...	...	−1·8	+1·2	...	...	...	...	..	...	...	...	...	...	...	...
29	80·5	51·2	73·0	79·4	78·0	63·4	−1·8	+1·4	−0·8	−1·3	−1·1	+0·6	60·0	63·0	62·0	53·8	− 0·5	− 0·9	− 0·7	+ 0·3
30	73·0	53·1	68·7	70·5	67·8	57·6	−1·7	+0·8	−0·3	−0·1	+0·2	0·0	60·0	60·4	62·4	54·0	− 0·7	− 0·3	+ 0·2	0·0
31	67·7	54·3	61·3	64·9	67·6	58·5	−2·0	+0·5	−0·1	−0·8	−1·8	−0·5	56·8	58·5	58·2	55·9	+ 0·1	− 0·8	− 0·5	+ 0·1
Means	62·6	44·0	55·0	59·7	60·8	51·7	−1·8	+0·6	−0·4	−0·4	−0·5	+0·2	48·2	50·4	51·0	47·0	− 0·4	− 0·3	− 0·3	+ 0·1

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.			
	Maximum.	Minimum.	9h	Noon.	15h	21h	Maximum.	Minimum.	9h	Noon.	15h	21h	9h	Noon.	15h	21h	9h	Noon.	15h	21h
d	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°
1	65·9	51·3	60·0	62·9	64·4	57·1	−1·9	+0·2	−0·3	−0·7	−1·3	+0·2	54·1	57·1	56·4	50·3	− 0·6	− 1·3	− 1·4	− 0·1
2	72·2	51·4	61·2	67·3	67·5	60·0	−2·3	+0·1	−0·8	−1·3	−0·6	+0·1	55·1	58·0	59·0	57·3	− 1·2	− 1·1	− 0·7	− 0·5
3	73·8	55·6	61·9	70·6	71·9	63·0	−3·2	+0·4	−0·9	−1·0	−0·8	+0·2	55·3	59·0	60·1	57·7	− 1·1	− 0·8	− 1·0	0·0
4	68·4	55·7	...	...	...	...	−1·3	+0·8	...	...	...	...	...	...	...	...	...	...	...	...
5	62·6	49·4	53·8	54·5	51·9	49·8	−0·1	+0·2	+0·2	−0·2	−0·2	0·0	52·0	53·1	51·0	49·0	− 0·4	− 0·3	− 0·3	− 0·3
6	51·2	47·4	50·7	51·1	50·2	47·4	+0·1	+0·3	−0·3	+0·5	+0·3	−0·2	49·7	50·3	50·0	47·0	− 0·5	− 0·3	+ 0·1	− 0·1
7	53·2	46·2	50·0	52·4	52·9	51·4	0·0	+0·1	−0·1	−0·3	−0·3	+0·1	49·0	51·0	51·7	50·6	− 0·2	− 0·3	− 0·3	− 0·4
8	65·6	50·8	56·4	64·1	64·9	55·0	−1·4	+0·3	−0·3	+0·4	−0·4	+0·1	51·9	54·4	52·4	50·2	− 0·6	− 0·1	− 0·1	0·0
9	55·3	50·8	52·5	53·0	52·9	52·0	+0·3	+0·7	−0·3	−0·2	+0·3	0·0	51·0	51·0	52·0	50·9	− 0·4	− 1·3	− 0·3	0·0
10	61·6	49·4	52·9	59·1	58·0	54·4	−0·5	+0·1	−0·3	−0·3	−0·2	+0·2	51·3	55·0	56·0	52·0	− 0·4	− 0·6	− 0·7	+ 0·2
11	60·2	49·8	...	...	...	...	−0·5	+0·3	...	...	...	...	...	...	...	...	...	...	...	...
12	63·7	53·1	...	...	...	...	−2·3	+0·8	...	...	...	...	...	...	...	...	...	...	...	...
13	68·0	50·1	62·0	68·0	66·3	57·9	−2·1	+0·2	−0·6	−1·0	−0·5	+0·1	56·8	60·0	59·6	54·1	− 0·9	− 1·1	− 0·9	− 0·4
14	67·1	51·4	65·3	67·1	65·3	55·0	−1·4	+0·2	−0·3	−1·4	0·0	0·0	56·3	57·0	56·0	51·1	− 0·7	− 0·7	+ 0·5	0·0
15	72·8	49·0	60·3	69·2	72·8	60·1	−1·2	+0·7	−0·1	+0·6	−1·1	+0·2	56·0	60·1	62·7	57·2	− 0·1	− 0·5	− 0·2	− 0·1
16	74·8	54·5	67·3	72·2	74·0	63·0	−2·4	+0·6	−0·2	−0·4	−0·6	+0·4	62·2	62·0	63·2	57·2	− 0·4	− 1·3	− 0·5	+ 0·3
17	65·5	57·2	60·0	63·1	63·4	59·6	−0·9	+0·2	−0·6	+0·4	−0·4	+0·4	59·2	61·2	61·9	57·8	− 0·5	0·0	− 0·3	+ 0·2
18	65·4	54·1	...	...	...	...	−2·2	+0·3	...	...	...	...	...	...	...	...	...	...	...	...
19	67·3	49·7	60·1	64·7	64·6	57·4	−3·1	+0·9	−0·7	−0·9	−0·5	0·0	56·6	56·5	58·0	55·2	− 0·4	− 1·0	− 0·5	+ 0·1
20	65·6	53·8	62·1	63·7	62·6	58·5	−1·9	+0·6	−0·7	−0·2	−0·7	0·0	57·0	57·0	56·8	56·0	− 0·4	− 0·3	− 0·9	0·0
21	71·8	55·6	66·5	70·1	69·4	63·8	−2·7	+0·4	−0·5	−0·5	−1·2	+0·1	59·0	61·4	62·2	58·5	− 0·5	− 0·4	− 1·0	0·0
22	76·2	52·4	68·1	72·4	74·6	60·0	−1·8	+1·0	−1·0	−0·8	+0·2	+0·2	58·0	61·9	64·6	55·3	+ 0·1	− 0·8	− 0·1	− 0·5
23	72·8	51·1	65·0	69·1	71·7	56·0	−1·3	+1·0	+0·4	−0·5	+0·4	+0·4	56·8	59·0	60·2	54·8	− 0·9	− 0·9	− 0·3	+ 0·1
24	71·6	47·7	55·4	65·8	70·0	64·2	−0·6	+0·3	−0·3	−0·3	−0·6	+0·1	53·2	60·1	63·1	58·1	− 0·4	− 0·5	− 0·2	0·0
25	72·8	54·2	...	...	...	...	−1·3	+0·1	...	...	...	...	...	...	...	...	...	...	...	...
26	68·4	56·1	61·0	66·2	65·4	62·1	−2·5	+0·1	0·0	−0·8	−0·7	−0·1	57·0	59·6	60·1	59·1	+ 0·4	− 0·3	− 0·6	− 0·2
27	77·9	53·1	67·7	72·0	76·3	66·0	−2·2	+1·0	−0·5	−0·6	−0·9	+0·3	61·1	64·0	63·9	58·8	− 0·9	− 0·7	− 0·8	− 0·1
28	73·6	55·4	60·0	69·8	69·6	61·4	−3·4	+0·6	−0·7	−1·1	−0·2	+0·1	56·9	61·2	60·8	57·6	− 0·8	− 1·3	− 0·6	+ 0·1
29	69·6	51·3	64·4	66·0	62·9	60·8	−2·3	+0·2	−1·3	−0·5	−0·1	0·0	58·9	60·0	61·6	59·2	− 1·1	− 0·7	+ 0·2	− 0·3
30	67·5	59·9	61·4	65·0	64·8	63·3	−0·6	+0·2	−0·1	−0·6	0·0	0·0	60·9	63·9	63·8	62·3	− 0·1	− 0·3	0·0	− 0·4
Means	67·4	52·2	60·2	64·8	65·1	58·4	−1·6	+0·4	−0·4	−0·5	−0·4	+0·1	55·8	58·2	58·7	55·1	− 0·5	− 0·7	− 0·4	− 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.			
	Maximum.	Minimum.	9h	Noon.	15h	21h	Maximum.	Minimum.	9h	Noon.	15h	21h	9h	Noon.	15h	21h	9h	Noon.	15h	21h
d	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°
1	74·0	60·1	62·1	72·0	71·3	62·0	−2·0	+0·3	−0·6	−0·6	−0·9	+0·4	61·5	63·6	61·5	58·1	− 0·5	− 0·7	− 0·6	− 0·1
2	73·3	54·3	...	...	...	...	−2·7	+1·2	...	...	...	...	...	...	...	...	...	...	...	...
3	75·0	59·3	...	...	...	...	−3·0	+0·5	...	...	...	...	...	...	...	...	...	...	...	...
4	67·6	57·1	62·0	65·8	66·0	62·6	−1·3	+0·5	−0·2	+0·1	+0·1	0·0	59·4	61·5	61·1	59·9	− 0·4	− 0·1	− 0·5	+ 0·2
5	70·7	57·1	64·1	68·8	70·0	62·4	−1·5	+0·7	−0·4	−0·7	−0·1	+0·7	60·1	61·0	61·0	58·0	− 0·6	− 0·1	+ 0·1	+ 0·2
6	67·7	57·5	62·4	65·7	65·4	60·0	−2·3	+0·3	−0·8	−0·4	−0·4	+0·2	56·0	56·2	55·6	53·7	− 0·9	− 0·5	− 0·2	+ 0·1
7	74·8	49·1	63·4	70·5	74·0	62·9	−1·3	+0·9	−0·2	0·0	+0·2	+1·3	55·6	59·0	60·0	59·0	− 0·3	− 0·1	− 0·1	+ 0·4
8	80·2	52·8	72·6	78·9	80·0	63·0	−1·7	+1·0	−0·4	+0·3	−0·6	+0·3	62·9	64·0	64·8	60·2	− 0·8	− 0·1	− 0·1	+ 0·1
9	80·6	57·8	...	...	...	...	−2·6	+0·5	...	...	...	...	...	...	...	...	...	...	...	...
10	73·0	59·4	68·2	70·1	70·6	63·0	−3·0	+0·6	−0·2	−0·8	−1·5	0·0	61·7	62·3	63·0	61·2	− 0·6	− 0·3	− 1·2	0·0
11	76·6	61·8	70·2	69·1	75·7	67·9	−2·7	+0·3	−0·4	−0·5	−1·0	+0·3	64·8	62·8	65·1	64·8	− 0·1	− 0·1	− 0·9	+ 0·2
12	77·7	62·2	68·1	73·9	76·7	67·2	−3·3	+1·0	−0·5	−0·2	−1·3	+0·2	62·5	64·7	66·7	60·6	− 0·4	− 0·7	− 1·0	+ 0·1
13	77·4	60·1	68·7	73·4	74·4	70·9	−2·7	+0·9	−0·9	−0·7	−0·4	+0·4	62·2	64·2	64·9	65·1	− 0·5	− 0·8	+ 0·1	+ 0·5
14	81·8	59·5	73·4	78·9	79·3	71·2	−2·5	0·0	−1·2	−0·5	−1·6	+1·0	64·5	66·5	68·1	65·7	− 0·9	− 0·1	− 0·8	+ 0·3
15	76·7	62·6	65·0	73·0	74·4	69·0	−3·1	+0·4	−0·6	−0·7	−0·9	0·0	61·5	65·7	66·3	65·3	− 0·4	− 0·8	− 0·8	0·0
16	70·8	60·6	...	...	...	...	−3·2	+0·4	...	...	...	...	...	...	...	..	...	...	...	...
17	71·4	51·7	66·0	71·0	68·1	62·6	−2·8	+1·4	−0·6	−0·8	−0·6	+0·5	57·0	60·5	59·4	55·4	− 0·7	− 0·3	− 0·2	+ 0·6
18	73·2	57·3	61·2	67·6	71·0	61·4	−2·0	+0·1	−0·1	−0·7	−1·1	0·0	59·1	62·0	60·7	55·9	0·0	− 0·5	− 0·3	+ 0·1
19	73·3	50·2	64·4	69·3	73·3	60·0	−2·2	+1·4	+0·2	−0·6	+0·1	+0·4	55·5	58·6	60·1	55·0	+ 0·5	− 0·6	+ 0·1	+ 0·2
20	78·0	54·7	68·5	76·4	76·6	67·2	−2·0	+0·5	−0·5	−0·8	−0·8	+0·4	59·8	63·3	62·8	60·6	− 0·1	− 0·6	− 0·5	+ 0·3
21	80·3	56·2	71·0	76·0	78·9	67·2	−0·8	+0·7	−0·3	−0·6	−0·1	+0·5	64·0	65·9	67·4	64·3	− 0·4	− 0·7	0·0	+ 0·3
22	80·9	57·3	73·0	77·2	80·0	70·0	−3·1	+1·0	−0·2	−2·1	−1·6	0·0	65·6	65·0	66·7	64·1	0·0	− 1·3	− 1·1	+ 0·1
23	70·6	60·3	...	...	...	...	−1·8	−0·3	...	...	...	...	...	...	...	...	...	...	...	...
24	73·7	57·7	61·1	68·0	73·7	64·0	−2·5	+0·6	−0·2	−0·5	−1·5	+0·4	57·0	60·6	64·0	61·0	− 0·2	− 0·2	− 1·0	+ 0·2
25	78·3	56·2	68·0	75·9	75·9	69·8	−3·0	+0·1	−0·6	−1·3	−0·5	+0·2	63·2	68·5	68·3	65·2	− 0·5	− 0·9	− 0·2	+ 0·1
26	83·6	61·9	71·1	76·7	83·0	69·8	−3·6	+0·5	−0·2	−1·1	−2·6	+0·4	66·1	68·0	71·2	65·7	− 0·4	− 0·8	− 0·8	+ 0·2
27	80·6	63·0	71·7	75·7	80·4	63·0	−1·5	+0·4	−0·4	−0·5	−0·4	+0·2	65·0	66·0	68·0	62·0	− 0·5	− 0·7	0·0	+ 0·2
28	68·4	57·0	63·8	66·0	66·9	59·3	−0·9	+0·3	−0·1	−0·4	+0·2	+0·7	59·9	60·8	61·3	57·9	− 0·3	− 0·2	− 0·4	+ 0·5
29	74·3	53·2	66·0	72·0	71·9	63·8	−2·4	+1·0	−0·9	−0·8	−0·5	−0·1	61·6	64·2	60·0	62·4	− 0·9	− 1·0	− 0·1	− 0·1
30	73·4	60·5	...	...	...	...	−2·2	+0·4	...	...	...	...	...	...	...	...	...	...	...	...
31	71·0	54·3	63·6	66·8	68·0	61·7	−2·4	+0·4	−0·4	−0·9	−0·4	+0·4	56·9	56·0	56·7	54·2	+ 0·2	− 0·4	0·0	+ 0·7
Means	75·1	57·5	66·8	71·9	73·8	64·9	−2·3	+0·6	−0·4	−0·6	−0·7	+0·4	60·9	62·8	63·4	60·6	− 0·4	− 0·5	− 0·4	+ 0·2

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.			
	Maximum.	Minimum.	9h	Noon.	15h	21h	Maximum.	Minimum.	9h	Noon.	15h	21h	9h	Noon.	15h	21h	9h	Noon.	15h	21h
d	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°
1	71·3	52·1	61·0	69·0	68·3	58·0	−2·7	+1·0	+0·1	−0·9	−0·6	+0·4	55·3	57·0	55·7	55·6	0·0	− 0·5	− 0·5	+ 0·3
2	73·9	50·0	63·9	70·2	71·9	58·2	−2·5	+1·1	−0·6	−1·1	−0·8	+0·2	55·1	57·4	57·7	53·0	− 0·6	− 1·4	− 1·0	+ 0·2
3	66·7	55·9	59·1	59·4	63·3	63·4	−0·6	+0·6	−0·3	−0·4	−0·3	+0·4	57·9	58·6	61·0	60·4	− 0·4	− 0·4	− 0·3	0·0
4	70·2	61·1	66·0	67·5	68·8	61·1	−1·2	+0·9	−1·1	−0·6	−0·5	+0·2	60·0	61·0	61·5	58·2	− 0·7	− 0·5	− 0·5	0·0
5	71·4	57·0	63·0	68·6	63·4	57·0	−2·6	+0·7	+0·3	−1·0	−0·5	+0·4	59·7	60·8	60·2	55·9	0·0	− 0·6	− 0·5	+ 0·2
6	69·4	49·0	...	...	...	...	−2·9	+1·0	...	...	...	...	...	...	...	...	...	...	...	...
7	67·6	52·8	...	...	...	...	−2·4	+0·7	...	...	...	...	...	...	...	...	...	...	...	...
8	74·5	59·1	65·8	70·0	71·3	60·4	−2·4	+0·6	+0·1	−0·1	−1·0	+0·1	60·6	62·6	62·0	57·1	− 0·2	− 0·3	− 0·5	+ 0·1
9	67·4	54·9	60·7	65·7	64·7	59·0	−3·3	+0·7	−0·3	−0·9	−0·7	+0·4	57·6	59·7	60·9	56·3	− 0·1	− 0·9	− 0·7	− 0·1
10	70·7	55·7	64·4	70·0	58·0	57·7	−2·6	+0·6	−0·3	−1·5	−0·5	+0·2	56·5	58·2	55·8	54·8	+ 0·1	− 1·5	0·0	+ 0·1
11	66·2	51·8	59·8	63·4	63·8	58·0	−2·7	+0·5	+0·1	−0·9	−0·5	+0·4	54·6	55·0	54·0	53·3	− 0·3	− 0·8	− 0·7	+ 0·2
12	70·2	49·8	63·3	66·6	70·2	58·8	−1·6	+1·0	+0·4	−1·0	−0·4	+1·0	57·7	58·1	59·3	56·0	− 0·2	− 0·7	− 0·4	+ 0·4
13	72·2	53·2	...	...	...	...	−2·3	+1·0	...	...	...	...	...	...	...	...	...	...	...	...
14	74·4	51·4	67·7	71·2	74·1	59·8	−1·4	+1·1	+0·1	−0·7	−0·7	+0·4	60·7	62·1	63·1	56·7	0·0	− 0·2	− 0·2	+ 0·3
15	72·8	52·4	68·8	72·0	71·4	61·3	−1·0	+0·5	+0·4	−0·4	−0·2	0·0	61·9	61·0	61·7	57·3	+ 0·3	− 0·5	− 0·1	+ 0·2
16	69·2	58·3	65·3	67·3	68·7	58·3	−1·5	+0·2	−0·1	−0·5	0·0	−0·3	58·6	59·2	60·0	54·4	− 0·5	− 0·5	+ 0·2	+ 0·2
17	70·6	52·4	64·2	69·5	70·3	56·0	−3·1	+0·3	−0·3	−1·3	−0·2	+0·4	57·8	59·4	59·9	54·1	− 0·6	− 0·8	+ 0·3	+ 0·1
18	71·6	53·1	63·2	66·5	70·3	61·7	−1·8	+1·1	−0·4	−1·0	−1·3	0·0	60·8	61·0	61·1	60·7	− 0·2	− 0·9	− 0·5	+ 0·3
19	69·6	53·8	61·7	64·2	67·9	60·9	−2·0	+0·6	−0·3	−0·4	−0·3	+0·1	54·6	53·3	55·5	53·8	+ 0·2	− 0·1	− 0·2	+ 0·4
20	69·8	54·3	...	...	...	...	−1·9	+0·2	...	...	...	...	...	...	...	...	...	...	...	...
21	70·6	53·4	66·3	69·0	66·3	59·1	−2·4	+1·2	−0·2	−1·5	−1·2	0·0	58·9	60·7	59·6	54·5	− 0·2	− 0·8	− 0·4	+ 0·3
22	71·9	56·8	61·8	68·1	67·8	56·8	−2·1	+0·4	−0·3	−1·5	−0·7	+0·4	59·8	56·0	56·8	53·7	+ 0·1	− 0·9	− 0·2	+ 0·4
23	64·6	50·2	58·5	60·9	62·3	55·2	−1·4	+0·6	−0·7	−0·3	−0·3	+0·8	52·9	53·4	53·5	50·2	+ 0·1	+ 0·4	+ 0·1	0·0
24	68·2	45·6	61·7	67·4	63·2	52·2	−2·5	+1·0	+0·4	−0·1	−0·4	+0·4	53·4	55·3	54·8	51·1	− 0·2	+ 0·1	− 0·1	+ 0·4
25	71·8	51·1	68·2	71·8	64·6	62·0	−1·8	+0·8	−0·7	−0·1	0·0	+0·2	59·6	58·4	58·9	58·2	− 0·7	− 0·8	− 0·3	− 0·3
26	69·0	56·2	63·1	67·2	66·1	56·7	−2·8	+1·1	−0·7	−0·5	−0·8	+0·2	58·6	60·0	55·4	53·8	− 0·7	− 0·4	− 1·2	− 0·2
27	62·6	51·9	...	...	...	...	−2·9	+0·7	...	...	...	...	...	...	...	...	...	...	...	...
28	65·8	52·4	61·0	63·2	58·5	56·8	−1·8	+0·4	−0·3	−0·5	−0·2	−0·1	58·1	59·0	56·0	54·2	− 0·4	− 0·3	− 0·3	− 0·1
29	64·4	52·8	56·1	59·9	63·2	55·3	−1·6	+0·2	−0·5	−0·6	−0·4	−0·3	55·3	56·2	56·0	54·1	− 0·2	− 0·8	− 0·6	− 0·3
30	58·0	52·3	55·0	56·2	57·2	56·7	−0·2	0·0	−0·4	−0·2	−0·2	+0·2	51·0	52·4	53·8	52·9	− 0·7	− 0·5	− 0·3	− 0·2
31	62·1	48·2	54·9	58·7	61·0	49·1	−1·4	+0·6	−0·3	−0·3	0·0	+0·4	51·3	51·9	52·7	47·0	− 0·6	− 0·4	0·0	− 0·2
Means	69·0	53·2	62·5	66·3	66·0	58·1	−2·0	+0·7	−0·2	−0·7	−0·5	+0·3	57·2	58·0	58·0	54·9	− 0·3	− 0·6	− 0·3	+ 0·1

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.			
	Maximum.	Minimum.	9h	Noon.	15h	21h	Maximum.	Minimum.	9h	Noon.	15h	21h	9h	Noon.	15h	21h	9h	Noon.	15h	21h
d	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°
1	61·0	48·2	56·7	59·4	60·6	57·1	−1·1	+1·0	−0·7	−0·2	−0·3	+0·1	52·0	53·5	55·0	54·4	− 0·7	− 0·2	− 0·3	0·0
2	67·7	55·5	61·6	62·6	67·5	61·9	−1·7	+0·3	−0·3	−0·1	0·0	−0·1	56·4	57·6	59·4	59·0	− 0·3	0·0	− 0·3	− 0·1
3	73·5	57·5	...	...	...	...	−1·6	+0·3	...	...	...	...	...	...	...	...	...	...	...	...
4	70·6	57·9	64·8	68·1	67·4	60·7	−2·6	+0·5	0·0	−0·4	−0·4	+0·1	60·1	62·0	63·5	59·0	− 0·3	− 0·1	− 0·3	0·0
5	69·1	56·2	61·8	65·7	67·3	63·4	−2·6	+0·2	−0·2	−0·5	−1·1	−0·2	59·0	61·1	62·0	61·4	− 0·1	− 0·6	− 0·8	− 0·3
6	71·6	59·7	63·1	67·0	68·3	61·2	−1·5	+0·6	−0·5	−0·5	−1·0	−0·2	61·2	63·1	64·2	59·0	− 0·6	− 0·5	− 0·9	+ 0·3
7	64·5	55·5	62·4	64·0	57·7	55·6	−1·5	+0·3	−0·2	−0·8	−0·4	+0·4	57·2	59·5	55·0	52·8	− 0·5	− 0·8	− 0·4	+ 0·1
8	65·8	53·1	60·7	64·0	64·0	57·2	−1·3	+0·8	−0·4	−0·4	+0·2	0·0	54·0	55·6	56·0	53·0	− 0·2	− 0·4	+ 0·2	+ 0·1
9	63·0	55·4	58·3	58·0	56·0	60·1	−2·0	+0·3	−0·3	−0·4	+0·1	−0·2	56·0	56·1	55·5	59·0	+ 0·2	− 0·5	− 0·1	− 0·4
10	65·3	54·8	...	...	...	...	−0·9	+0·7	...	...	...	...	...	...	...	...	...	...	...	...
11	58·5	49·3	56·9	58·5	55·1	49·8	−1·1	+1·2	0·0	0·0	−0·4	+0·5	53·1	54·6	54·6	49·2	− 0·6	0·0	− 0·1	+ 0·5
12	64·6	46·0	54·7	61·9	61·0	48·3	−1·4	+0·7	+0·1	−0·7	0·0	+0·7	50·8	52·5	52·0	47·2	− 0·1	− 0·4	0·0	+ 0·4
13	66·6	43·6	61·0	63·0	63·2	54·2	−2·0	+0·5	+0·3	+0·7	−1·2	−0·3	54·2	54·8	55·4	53·2	+ 0·4	+ 0·1	− 1·3	− 0·3
14	61·6	47·5	55·1	60·0	59·8	50·0	−1·0	+1·0	−1·1	−0·9	+0·1	+0·3	51·0	51·5	51·2	47·0	− 0·2	− 0·5	0·0	+ 0·2
15	61·7	43·2	55·0	60·1	61·6	45·2	−1·1	+0·1	+0·4	−0·5	+0·4	+0·2	51·1	52·2	51·9	44·4	− 0·3	− 0·5	+ 0·1	0·0
16	62·6	43·0	55·9	59·4	61·7	51·3	−1·4	+1·6	−0·3	−0·3	−0·3	+0·6	51·2	53·3	54·0	50·3	− 0·5	− 0·6	− 0·1	+ 0·3
17	64·0	46·1	...	...	...	...	−1·3	+1·0	...	...	...	...	...	...	...	...	...	...	...	...
18	61·6	50·1	58·0	61·1	59·7	53·0	−1·4	+0·7	+0·1	−0·1	+0·1	+0·1	51·9	53·5	51·6	49·2	− 0·2	− 0·2	− 0·3	− 0·2
19	62·8	48·5	53·3	59·3	61·5	54·8	−1·2	+0·3	−0·3	−0·6	−0·2	+0·1	51·2	55·0	55·2	50·2	− 0·5	− 0·4	+ 0·6	− 0·2
20	61·5	44·6	56·6	59·8	59·4	51·9	−0·6	+1·0	−0·2	−0·5	−0·2	+0·2	52·8	55·9	53·8	48·0	− 0·2	− 0·4	− 0·2	+ 0·1
21	61·7	43·6	53·3	59·0	61·4	54·0	−2·3	+0·5	−0·3	−0·6	−0·5	+0·4	49·7	53·0	54·9	52·0	− 0·4	− 0·6	− 0·4	+ 0·3
22	62·6	48·1	55·0	60·2	60·0	55·0	−0·7	+1·0	−0·5	−0·4	+0·3	0·0	53·6	53·3	54·1	52·0	− 0·3	− 0·5	− 0·4	0·0
23	56·2	51·9	54·9	54·1	55·8	51·9	−0·5	+0·3	−0·4	−0·4	+0·3	+0·3	51·0	49·1	49·4	47·6	− 0·6	− 0·9	− 0·1	+ 0·1
24	57·6	47·6	...	...	...	...	−0·7	+0·3	...	....	...	...	...	...	...	...	...	...	...	...
25	55·4	50·1	52·5	53·9	55·4	53·0	−0·6	+0·4	−0·3	−0·1	−0·2	+0·1	51·6	53·0	54·0	51·8	− 0·1	− 0·3	− 0·2	+ 0·1
26	54·2	49·9	51·2	53·0	53·9	51·6	−0·8	+0·2	−0·1	−0·6	−0·4	+0·2	50·0	51·6	52·2	51·1	− 0·3	− 0·2	− 0·3	− 0·1
27	56·8	50·1	52·0	56·1	55·7	51·2	−1·1	+0·4	−0·6	−0·6	0·0	0·0	51·0	52·7	53·9	50·9	− 0·7	− 0·6	− 0·2	0·0
28	61·4	48·1	53·6	61·4	60·4	55·2	−1·6	+0·2	−0·3	+0·1	+0·1	+0·1	52·4	56·0	53·4	53·0	− 0·3	− 0·1	− 0·7	− 0·1
29	64·0	50·6	54·3	58·2	64·0	55·6	−0·6	+0·6	−0·3	−0·6	−0·6	0·0	53·7	55·6	56·6	54·0	− 0·1	− 0·2	− 0·2	− 0·2
30	55·7	47·0	51·2	52·7	54·1	47·0	−0·2	+0·4	−0·3	0·0	−0·6	−0·2	47·9	47·1	46·0	42·4	− 0·3	− 0·3	− 0·4	− 0·2
Means	62·8	50·1	56·7	60·0	60·5	54·2	−1·3	+0·6	−0·3	−0·4	−0·2	+0·1	53·2	54·7	54·8	52·0	− 0·3	− 0·4	− 0·3	0·0

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.			
	Maximum.	Minimum.	9h	Noon.	15h	21h	Maximum.	Minimum	9h	Noon.	15h	21h	9h	Noon.	15h	21h	9h	Noon.	15h	21h
d	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°
1	55·5	40·1	...	...	...	...	+0·1	+0·6	...	...	...	...	...	...	...	...	...	...	...	...
2	53·6	46·8	49·4	51·2	52·1	49·1	−0·9	+0·4	−0·1	−0·5	0·0	+0·2	45·9	46·0	47·1	46·1	− 0·5	− 0·7	0·0	− 0·2
3	54·4	43·1	46·3	52·9	54·1	49·7	−1·0	+0·4	−0·3	−1·1	−0·5	0·0	42·3	45·3	45·9	46·3	− 0·3	− 1·0	− 0·6	− 0·1
4	56·9	49·5	55·7	56·0	56·9	50·0	−0·3	+0·4	+0·1	−0·3	+0·3	+0·2	52·0	53·3	52·2	46·7	0·0	− 0·2	+ 0·5	+ 0·1
5	54·6	47·5	52·7	53·0	54·5	47·5	−0·7	+0·2	+0·1	−0·3	−0·1	+0·2	47·3	46·9	46·9	42·4	0·0	− 0·3	− 0·7	+ 0·1
6	49·8	39·3	43·8	48·3	48·7	44·1	−1·7	+0·4	−0·5	−0·5	+0·1	+0·7	38·1	41·1	41·1	38·7	− 1·0	− 0·7	− 0·6	+ 0·2
7	54·4	40·1	48·4	52·0	54·4	48·2	−0·4	+1·0	−0·5	−0·5	−0·1	+0·6	45·6	47·7	49·7	46·0	− 0·5	− 0·1	0·0	+ 0·3
8	51·8	45·1	...	...	...	...	−0·9	+0·8	...	...	...	...	...	...	...	...	...	...	...	...
9	59·0	40·2	51·2	56·2	59·0	55·1	−0·6	+0·7	−0·4	−0·4	−0·1	−0·4	50·0	53·3	55·0	53·0	− 0·3	− 0·4	− 0·3	− 0·4
10	55·7	51·3	53·9	54·7	54·5	51·3	0·0	+0·4	−0·2	−0·2	−0·1	0·0	50·2	50·0	50·0	49·0	− 0·4	− 0·3	− 0·2	0·0
11	57·5	47·2	49·2	54·3	53·9	50·0	−1·2	+0·1	−0·2	−0·1	−0·1	+0·2	47·2	49·1	49·4	48·0	− 0·2	− 0·2	− 0·1	− 0·3
12	52·4	48·7	49·9	51·2	52·1	50·7	−0·1	+0·4	0·0	0·0	−0·4	0·0	47·5	48·4	48·9	49·0	+ 0·1	− 0·1	− 0·2	− 0·1
13	54·7	42·1	53·2	49·2	47·8	42·1	−0·3	+0·3	−0·3	−0·2	−0·2	+0·1	52·0	46·2	42·2	37·0	− 0·3	− 0·3	− 0·4	0·0
14	49·8	36·6	40·4	45·1	49·1	46·5	−0·2	+0·3	−0·4	−0·3	−0·2	0·0	34·7	38·0	42·3	42·0	− 0·5	− 0·3	− 0·3	0·0
15	55·8	44·9	...	...	...	...	−0·2	0·0	...	...	...	...	...	...	...	...	...	...	...	...
16	47·6	32·6	39·4	46·0	46·9	33·1	−1·0	+0·2	−0·2	−1·6	+0·3	+0·7	36·8	41·1	39·1	32·0	0·0	− 1·2	+ 0·4	+ 0·7
17	46·7	27·7	36·1	44·0	46·3	41·3	−0·3	+1·6	+0·5	+0·2	+0·1	+0·4	34·0	36·8	39·1	37·5	+ 0·9	− 0·1	− 0·4	0·0
18	52·5	34·5	41·2	51·1	51·9	40·0	+0·3	+0·7	+0·3	+0·8	+1·1	+0·7	37·4	43·2	43·5	38·6	− 0·1	+ 0·5	+ 0·1	+ 0·4
19	50·0	37·1	42·2	47·7	48·9	38·9	−0·4	+0·7	−0·3	+0·1	+0·3	+0·1	39·1	40·9	41·4	37·0	− 0·5	− 0·4	0·0	0·0
20	48·2	32·4	38·9	46·3	47·3	33·0	−0·8	+0·3	+0·6	+0·4	−0·3	+0·4	37·1	41·0	40·1	32·2	+ 0·2	+ 0·2	− 0·6	+ 0·4
21	46·6	30·3	37 8	44·9	46·4	37·4	−0·5	+0·6	0·0	+0·1	−0·3	+1·1	35·6	40·1	41·5	35·7	− 0·1	− 0·4	− 0·6	+ 1·0
22	47·7	29·1	...	...	...	...	−0·1	+1·0	...	...	...	...	...	...	...	...	...	...	...	...
23	48·6	35·8	39·2	46·7	47·5	42·2	−1·1	+0·6	−0·1	−0·3	+0·1	+0·1	37·9	42·4	41·7	41·4	0·0	− 0·8	− 0·4	− 0·1
24	44·6	35·5	41·1	44·1	44·0	41·0	−0·3	+0·2	−0·2	−0·2	+0·1	+0·3	40·0	40·9	41·0	39·8	− 0·3	− 0·2	− 0·3	+ 0·1
25	44·7	34·1	36·3	40·0	44·4	40·1	0·0	+0·4	−0·4	−0·1	+0·4	+1·1	36·0	38·2	41·6	38·8	− 0·6	− 0·1	+ 0·5	+ 1·0
26	46·4	27·1	35·1	45·6	46·0	46·2	−0·6	+0·6	+0·6	−0·3	−0·1	+0·2	32·8	41·0	41·0	43·0	0·0	+ 0·2	− 0·2	+ 0·3
27	53·6	44·0	48·7	50·8	53·0	44·0	−0·1	+0·9	−0·1	+0·2	+0·2	+0·3	46·7	44·3	45·0	41·0	0·0	0·0	− 0·1	+ 0·3
28	53·1	33·7	44·2	51·1	51·0	44·1	−0·1	+1·0	+0·6	−0·3	+0·2	+0·2	42·1	44·0	45·0	42·0	+ 0·4	− 0·5	+ 0·1	+ 0·2
29	56·9	43·8	...	...	...	...	+0·5	+0·9	...	...	...	...	...	...	...	...	..	...	...	...
30	53·8	43·9	53·3	51·8	48·3	45·5	+0·1	+1·0	−0·1	0·0	−0·3	−0·1	50·0	48·3	45·3	44·5	+ 0·1	− 0·2	− 0·3	+ 0·1
31	53·9	44·0	49·1	52·0	52·0	44·0	−0·3	+0·9	+0·5	+0·3	+0·2	+0·7	45·0	47·0	47·1	43·0	+ 0·3	+ 0·2	+ 0·4	+ 0·7
Means	52·0	39·6	45·3	49·5	50·4	44·4	−0·4	+0·6	0·0	−0·2	0·0	+0·3	42·4	44·4	44·7	41·9	− 0·1	− 0·3	− 0·2	+ 0·2

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.			
	Maximum.	Minimum.	9h	Noon.	15h	21h	Maximum.	Minimum.	9h	Noon.	15h	21h	9h	Noon.	15h	21h	9h	Noon.	15h	21h
d	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°
1	51·6	40·1	50·1	49·1	50·1	49·0	−0·4	+0·4	+0·5	−0·5	−0·3	+0·2	48·5	47·7	48·0	47·0	+ 0·5	− 0·1	+ 0·1	− 0·2
2	53·0	43·2	47·8	51·0	49·4	44·3	−0·7	+0·9	+0·2	−0·2	0·0	+0·3	45·0	48·0	47·3	44·0	+ 0·2	− 0·1	− 0·2	+ 0·4
3	53·8	41·9	50·0	48·0	52·0	42·2	−1·0	+1·3	+0·3	−0·6	+0·7	+0·2	47·7	47·2	46·7	41·6	− 0·1	− 0·5	+ 1·0	+ 0·1
4	51·6	40·5	45·9	51·5	49·6	45·5	−0·2	+1·3	+0·3	+0·1	+0·1	−0·1	45·0	48·0	47·0	45·0	0·0	− 0·6	0·0	0·0
5	51·6	42·0	...	...	...	...	−0·5	+0·9	...	...	...	...	...	...	...	...	...	...	...	...
6	52·8	38·2	45·1	51·9	51·1	40·0	+0·5	+0·8	+1·3	+1·3	+0·5	+1·6	42·9	46·9	45·9	39·2	+ 1·0	+ 0·5	0·0	+ 1·1
7	52·2	30·8	33·9	49·7	50·3	36·8	+1·2	+0·4	−0·4	+1·1	+1·0	+1·1	33·8	46·6	45·4	36·3	− 0·3	+ 0·8	+ 0·7	+ 0·8
8	46·6	28·8	31·1	44·2	46·0	46·3	+0·4	+0·6	−0·3	0·0	+0·2	+0·1	31·0	42·1	44·1	44·2	− 0·4	− 0·2	+ 0·1	+ 0·1
9	46·6	36·2	43·0	43·8	44·3	36·3	+0·4	+0·6	−0·3	+0·1	−0·1	0·0	41·9	42·5	42·9	36·1	− 0·2	− 0·1	+ 0·2	0·0
10	52·0	36·1	41·1	52·0	48·9	47·1	+0·3	+0·8	+0·1	+1·2	−0·1	+0·1	41·0	47·6	44·8	46·3	+ 0·1	+ 0·9	+ 0·1	− 0·1
11	52·6	46·1	48·0	50·1	51·0	46·2	−0·4	+0·3	−0·3	−0·3	−0·2	+0·3	47·1	49·7	49·4	46·0	− 0·2	− 0·1	− 0·3	+ 0·3
12	50·2	42·7	...	...	...	...	−0·3	+0·4	...	...	...	...	...	...	...	...	...	...	...	...
13	47·6	41·4	44·8	44·7	45·0	44·0	−0·5	+0·3	−0·1	+0·1	−0·3	+1·3	43·8	43·5	44·0	42·1	− 0·2	+ 0·1	+ 0·2	+ 0·7
14	44·2	39·5	42·2	43·1	42·1	39·8	+0·2	+0·2	−0·3	−0·2	+0·1	+0·1	41·0	41·4	41·0	37·9	+ 0·2	− 0·1	+ 0·1	+ 0·3
15	43·2	35·4	39·3	41·8	39·4	35·4	−0·9	+0·1	+0·3	+0·2	+0·1	−0·2	37·4	39·0	37·0	33·9	+ 0·3	+ 0·3	+ 0·3	0·0
16	39·6	32·9	34·7	36·2	39·6	38·1	−0·2	+0·3	0·0	−0·3	0·0	0·0	33·0	35·0	36·9	35·6	+ 0·2	+ 0·2	+ 0·2	− 0·1
17	38·9	32·9	34·9	35·3	36·7	33·0	+0·8	+0·8	+0·3	−0·2	+0·1	+0·4	33·9	34·1	35·0	32·2	+ 0·3	− 0·3	+ 0·2	+ 0·3
18	36·0	31·0	33·4	36·0	35·9	34·0	−0·7	+0·8	−0·1	+0·3	+0·3	0·0	33·1	35·0	34·7	33·1	− 0·1	+ 0·2	− 0·1	− 0·4
19	39·6	34·0	...	...	...	...	−0·4	+1·0	...	...	...	...	...	...	...	...	...	...	...	...
20	41·6	29·9	35·3	40·2	40·1	30·3	−0·2	+0·8	−0·3	−0·1	−0·3	+0·5	34·0	37·0	36·6	29·8	0·0	+ 0·1	+ 0·1	+ 0·4
21	37·4	24·1	26·9	36·4	33·2	27·2	+1·5	+0·9	+0·9	+0·5	−0·4	+0·6	26·5	34·0	31·8	26·8	+ 0·5	0·0	− 0·2	+ 0·8
22	47·3	23·8	34·3	46·1	45·4	46·4	+0·6	+0·7	+1·0	+1·5	+0·8	+0·1	31·8	40·5	42·0	45·7	+ 0·8	+ 1·1	+ 0·3	+ 0·2
23	51·4	44·1	49·3	51·2	48·7	45·0	−0·2	+0·4	0·0	−0·4	+0·3	+0·2	48·9	50·0	46·3	42·7	+ 0·2	− 0·8	− 0·1	− 0·1
24	47·9	37·6	40·0	46·0	47·0	39·1	+0·3	+0·5	+0·4	0·0	+0·4	+0·8	38·1	42·3	42·4	38·0	+ 0·3	0·0	+ 0·4	+ 0·6
25	46·8	32·7	38·1	45·6	46·2	44·3	−0·5	+1·0	+0·3	−0·1	+0·2	+0·2	37·4	43·7	43·2	43·1	+ 0·3	− 0·2	− 0·3	− 0·2
26	54·9	44·1	...	...	...	...	0·0	+0·2	...	...	...	...	...	...	...	...	...	...	...	...
27	51·0	39·9	40·9	44·6	44·0	41·4	−0·3	+0·5	+0·5	+0·4	+0·2	−0·2	37·2	38·6	38·3	38·3	+ 0·3	+ 0·3	+ 0·3	− 0·2
28	48·4	39·5	44·8	45·9	44·1	45·7	+0·5	+0·6	+0·1	−0·2	−0·1	+0·1	42·3	42·9	43·4	44·8	− 0·1	− 0·2	− 0·2	+ 0·1
29	46·0	38·5	43·8	45·7	45·6	38·5	0·0	+0·5	−0·1	+0·1	+0·3	+0·5	43·0	43·7	42·7	38·0	− 0·1	0·0	+ 0·2	+ 0·5
30	44·6	28·1	38·3	44·2	44·2	43·2	−0·4	+0·6	+0·1	0·0	0·0	0·0	38·0	41·2	41·5	43·0	0·0	− 0·3	− 0·2	+ 0·2
Means	47·4	36·5	40·7	45·2	45·0	40·7	0·0	+0·6	+0·2	+0·1	+0·1	+0·3	39·4	42·6	42·2	39·6	+ 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.			
	Maximum.	Minimum.	9h	Noon.	15h	21h	Maximum.	Minimum.	9h	Noon.	15h.	21h	9h	Noon.	15h	21h	9h	Noon.	15h	21h
d	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°
1	44·6	41·1	42·4	43·0	43·0	42·1	−0·2	+0·7	0·0	−0·2	−0·1	+0·1	41·2	41·9	42·0	41·1	− 0·2	0·0	+ 0·3	+ 0·1
2	46·9	36·5	40·4	46·9	44·8	37·4	−0·1	−0·3	−0·2	+1·3	+0·2	+0·2	40·2	44·9	43·1	37·1	− 0·2	+ 1·0	− 0·2	+ 0·1
3	39·3	30·2	...	...	...	...	−1·0	+0·1	...	...	...	...	...	...	...	...	...	...	...	...
4	39·2	36·1	37·2	36·6	36·4	37·9	0·0	+0·2	+0·2	+0·1	0·0	+0·2	37·0	36·1	35·9	37·1	0·0	0·0	0·0	0·0
5	45·0	37·9	41·6	41·3	41·0	45·0	0·0	+0·4	+0·1	0·0	0·0	0·0	40·4	39·4	40·0	44·1	− 0·1	− 0·3	− 0·3	− 0·3
6	49·3	41·1	42·4	46·7	48·3	48·6	+0·7	+0·5	−0·2	+0·1	+0·4	+0·1	40·3	43·0	44·1	48·0	− 0·2	− 0·1	0·0	+ 0·1
7	57·6	48·4	53·5	55·0	55·6	51·7	+0·3	+0·3	−0·1	−0·2	0·0	+0·1	51·1	52·0	52·0	50·6	− 0·1	− 0·1	− 0·2	− 0·2
8	53·9	44·0	52·2	50·2	51·0	44·0	0·0	+0·9	−0·3	−0·4	+0·1	+0·6	52·0	49·3	48·8	43·3	− 0·1	− 0·4	0·0	+ 0·4
9	48·0	38·6	41·1	47·2	46·0	42·0	−0·5	+0·6	+0·5	+0·5	+0·3	+0·6	40·0	44·2	44·0	39·0	+ 0·5	+ 0·2	+ 0·3	+ 0·2
10	42·8	28·7	...	...	...	...	+0·8	+0·4	...	...	...	...	...	...	...	...	...	...	...	...
11	37·8	25·1	26·9	34·6	33·0	28·0	+0·2	−0·3	−0·5	+0·6	+0·2	−0·6	26·9	32·8	32·8	27·8	− 0·5	+ 0·4	0·0	− 0·7
12	43·4	26·6	31·3	32·9	35·1	42·5	−0·6	−0·5	0·0	+0·3	+0·1	0·0	31·0	32·6	34·9	42·2	0·0	+ 0·1	+ 0·2	− 0·1
13	42·9	31·1	36·9	34·1	33·2	37·2	+0·3	+0·3	+0·1	+0·1	−0·4	−0·2	36·0	34·0	33·1	37·1	+ 0·1	+ 0·1	− 0·4	− 0·2
14	44·5	37·2	42·3	43·0	43·0	44·4	+0·2	+0·4	−0·3	+0·3	+0·1	+0·2	42·0	42·1	42·2	41·0	− 0·2	− 0·2	0·0	+ 0·3
15	44·6	40·1	41·0	41·5	41·9	40·2	0·0	0·0	−0·1	−0·1	+0·3	−0·1	38·0	38·8	39·1	38·0	+ 0·1	+ 0·1	+ 0·2	0·0
16	40·5	37·8	38·2	39·6	39·5	39·8	0·0	+0·5	−0·3	0·0	+0·2	+0·1	36·9	38·0	37·8	39·0	+ 0·1	+ 0·1	+ 0·1	+ 0·2
17	42·2	38·1	...	...	...	...	0·0	+0·1	...	...	...	...	...	...	...	...	...	...	...	...
18	43·5	37·7	41·7	43·0	41·1	38·1	−0·4	+0·2	−0·1	0·0	0·0	−0·1	40·3	41·1	38·2	35·8	+ 0·1	0·0	− 0·1	0·0
19	50·6	38·0	44·4	50·0	48·9	40·0	+0·6	+0·4	+0·1	+0·7	+0·3	+0·3	42·4	45·1	45·0	38·5	0·0	+ 0·3	+ 0·3	+ 0·1
20	47·6	34·3	41·9	46·3	47·0	47·4	+0·3	+1·2	0·0	−0·3	0·0	+0·1	40·2	43·9	44·8	44·0	− 0·1	+ 0·1	0·0	+ 0·1
21	49·9	46·9	48·3	49·9	49·6	48·2	−0·3	+0·4	0·0	+0·1	0·0	−0·1	45·2	46·1	45·4	44·9	+ 0·1	+ 0·1	+ 0·3	+ 0·2
22	48·6	41·5	45·7	46·0	45·2	41·7	+0·1	+0·3	+0·1	0·0	−0·3	0·0	43·0	43·0	42·1	39·7	+ 0·2	+ 0·2	0·0	+ 0·1
23	42·0	40·0	40·6	42·0	41·0	40·0	0·0	+0·7	0·0	0·0	+0·3	+0·3	38·7	39·6	38·5	38·1	0·0	− 0·2	− 0·2	− 0·1
24	41·6	38·2	...	...	...	...	−0·4	+0·3	...	...	...	...	...	...	...	...	...	...	...	...
25	44·6	35·1	...	...	...	...	+0·1	+0·1	...	...	...	...	...	...	...	...	...	...	...	...
26	45·0	28·6	...	...	...	...	+0·9	+0·3	...	...	...	...	...	...	...	...	...	...	...	...
27	41·2	30·2	33·0	36·3	36·7	38·6	+0·2	+0·7	+0·2	+0·1	0·0	−0·1	32·5	35·9	36·3	38·1	+ 0·4	0·0	− 0·2	0·0
28	46·5	33·1	39·1	44·4	46·2	43·8	−0·1	+0·1	−0·1	−0·2	0·0	+0·4	39·0	44·0	46·0	43·2	− 0·1	− 0·5	− 0·1	− 0·1
29	45·1	42·3	43·0	44·0	44·0	44·0	−0·8	+0·2	0·0	−0·4	−0·1	−0·2	42·5	43·1	43·0	43·0	− 0·1	− 0·3	+ 0·2	+ 0·1
30	45·4	34·3	38·2	39·8	39·2	34·5	+0·8	+0·5	−0·1	+0·2	+0·2	+0·1	37·0	37·2	36·8	32·5	+ 0·1	+ 0·2	+ 0·2	+ 0·2
31	35·3	28·3	...	...	...	...	+0·6	+0·4	...	...	...	...	...	...	...	...	...	...	...	...
Means	44·8	36·4	41·0	43·1	42·9	41·5	+0·1	+0·3	0·0	+0·1	+0·1	+0·1	39·7	41·2	41·1	40·1	0·0	0·0	0·0	0·0

(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.

1905.

Days of the Month.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.
d	°	°	°	°	°	°	°	°	°	°	°	°
1	52·77	52·02	51·15	50·28	49·75	49·56	49·77	50·51	51·57	52·59	53·17	53·13
2	52·73	51·98	51·12	50·30	49·73	49·56	49·81	50·52	51·60	52·61	53·19	53·13
3	52·75	51·96	51·06	50·27	49·73	49·54	49·82	50·53	51·69	52·63	53·20	53·09
4	52·75	51·93	51·05	50·25	49·71	49·56	49·81	50·56	51·73	52·67	53·21	53·06
5	52·72	51·90	51·03	50·23	49·70	49·51	49·85	50·62	51·76	52·70	53·18	53·07
6	52·70	51·89	51·03	50·18	49·69	49·52	49·85	50·67	51·80	52·70	53·21	53·06
7	52·68	51·86	51·00	50·17	49·69	49·51	49·83	50·66	51·84	52·75	53·21	53·07
8	52·67	51·82	50·96	50·14	49·67	49·53	49·88	50·70	51·87	52·77	53·20	53·05
9	52·64	51·80	50·94	50·12	49·67	49·52	49·94	50·74	51·90	52·78	53·22	53·03
10	52·60	51·77	50·91	50·09	49·66	49·53	49·94	50·76	51·92	52·80	53·22	52·98
11	52·57	51·73	50·88	50·08	49·64	49·56	49·97	50·83	51·95	52·83	53·24	52·97
12	52·56	51·69	50·85	50·04	49·62	49·57	49·99	50·84	52·00	52·85	53·23	52·95
13	52·52	51·65	50·82	50·02	49·62	49·58	50·02	50·91	52·05	52·86	53·23	52·94
14	52·49	51·63	50·77	50·04	49·63	49·59	50·04	50·95	52·08	52·86	53·22	52·94
15	52·45	51·63	50·76	50·03	49·62	49·60	50·06	50·98	52·10	52·88	53·22	52·92
16	52·37	51·60	50·72	50·00	49·61	49·61	50·07	51·02	52·12	52·92	53·20	52·89
17	52·37	51·55	50·71	49·96	49·61	49·61	50·07	51·06	52·17	52·92	53·20	52·87
18	52·36	51·50	50·69	49·94	49·61	49·61	50·08	51·08	52·21	52·97	53·20	52·85
19	52·33	51·49	50·66	49·90	49·57	49·57	50·09	51·12	52·24	52·99	53·21	52·83
20	52·31	51·44	50·64	49·90	49·58	49·60	50·21	51·16	52·27	53·00	53·20	52·81
21	52·27	51·42	50·61	49·87	49·55	49·61	50·20	51·20	52·30	53·05	53·20	52·80
22	52·27	51·38	50·59	49·86	49·53	49·63	50·21	51·24	52·32	53·03	53·19	52·77
23	52·25	51·35	50·57	49·86	49·52	49·65	50·22	51·26	52·36	53·03	53·17	52·76
24	52·23	51·31	50·54	49·84	49·53	49·65	50·28	51·31	52·39	53·06	53·17	52·74
25	52·22	51·30	50·50	49·80	49·53	49·68	50·31	51·36	52·41	53·06	53·17	52·71
26	52·17	51·26	50·47	49·77	49·54	49·71	50·35	51·39	52·44	53·07	53·17	52·70
27	52·14	51·23	50·45	49·77	49·57	49·73	50·37	51·42	52·46	53·10	53·17	52·65
28	52·13	51·22	50·45	49·75	49·58	49·73	50·38	51·44	52·52	53·10	53·17	52·64
29	52·08		50·40	49·76	49·58	49·75	50·42	51·46	52·56	53·15	53·16	52·63
30	52·06		50·35	49·73	49·57	49·75	50·46	51·52	52·57	53·16	53·14	52·59
31	52·02		50·33		49·56		50·45	51·53		53·17		52·55
Means	52·43	51·62	50·74	50·00	49·62	49·60	50·09	51·01	52·11	52·91	53·20	52·88

The mean of the twelve monthly values is 51°·35.

(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.

1905.

Days of the Month.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.
d	°	°	°	°	°	°	°	°	°	°	°	°
1	50·60	48·52	47·23	46·80	47·53	49·09	51·68	54·91	56·80	56·82	55·00	52·26
2	50·48	48·37	47·16	46·82	47·54	49·16	51·77	55·03	56·82	56·78	54·90	52·19
3	50·43	48·31	47·13	46·83	47·57	49·21	51·88	55·10	56·91	56·74	54·80	52·02
4	50·39	48·21	47·12	46·86	47·60	49·31	51·91	55·21	56·94	56·73	54·70	51·92
5	50·22	48·16	47·10	46·88	47·62	49·33	52·09	55·31	56·94	56·68	54·52	51·82
6	50·22	48·11	47·13	46·89	47·65	49·34	52·18	55·42	56·97	56·62	54·47	51·74
7	50·13	48·02	47·11	46·90	47·69	49·44	52·27	55·50	56·97	56·61	54·32	51·72
8	50·14	47·96	47·07	46·93	47·70	49·52	52·41	55·61	56·98	56·59	54·23	51·61
9	50·06	47·89	47·06	46·90	47·71	49·61	52·53	55·72	56·97	56·52	54·13	51·53
10	49·96	47·83	47·01	46·93	47·81	49·72	52·59	55·79	56·98	56·52	54·10	51·44

(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.*

1905.

Days of the Month.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.
d	°	°	°	°	°	°	°	°	°	°	°	°
11	49·90	47·76	46·99	47·02	47·83	49·89	52·71	55·82	56·98	56·47	54·02	51·34
12	49·84	47·70	46·94	47·02	47·82	49·91	52·82	55·90	57·01	56·40	53·96	51·28
13	49·76	47·62	46·90	47·00	47·84	50·11	52·93	56·00	57·04	56·33	53·84	51·21
14	49·69	47·55	46·86	47·11	47·95	50·20	53·07	56·08	57·00	56·22	53·76	51·17
15	49·53	47·50	46·82	47·11	48·00	50·30	53·13	56·14	57·00	56·20	53·67	51·09
16	49·51	47·51	46·81	47·15	48·04	50·38	53·21	56·18	57·02	56·17	53·56	51·01
17	49·51	47·52	46·79	47·13	48·11	50·44	53·32	56·24	57·07	56·08	53·48	50·95
18	49·43	47·43	46·74	47·15	48·16	50·51	53·41	56·28	57·04	56·08	53·39	50·82
19	49·33	47·47	46·73	47·13	48·14	50·51	53·52	56·32	57·03	56·01	53·33	50·81
20	49·32	47·43	46·72	47·20	48·24	50·62	53·66	56·36	57·04	55·92	53·22	50·71
21	49·23	47·42	46·72	47·18	48·23	50·70	53·81	56·43	57·01	55·87	53·08	50·61
22	49·26	47·40	46·72	47·26	48·32	50·78	53·91	56·48	57·01	55·83	53·03	50·53
23	49·19	47·37	46·73	47·30	48·40	50·84	53·91	56·47	56·97	55·72	53·03	50·50
24	49·14	47·35	46·70	47·33	48·46	50·91	54·09	56·56	56·98	55·65	52·91	50·48
25	49·08	47·34	46·73	47·28	48·52	51·03	54·24	56·62	56·91	55·58	52·82	50·42
26	48·97	47·28	46·68	47·34	48·61	51·18	54·36	56·64	56·91	55·50	52·73	50·38
27	48·89	47·31	46·70	47·36	48·71	51·28	54·48	56·65	56·91	55·45	52·66	50·27
28	48·83	47·27	46·68	47·38	48·85	51·37	54·52	56·70	56·91	55·39	52·59	50·22
29	48·72		46·72	47·41	48·93	51·46	54·76	56·71	56·91	55·31	52·49	50·17
30	48·67		46·72	47·47	48·98	51·53	54·76	56·72	56·81	55·22	52·37	50·09
31	48·50		46·72		49·03		54·81	56·76		55·10		50·02
Means	49·58	47·70	46·88	47·10	48·12	50·26	53·25	56·05	56·96	56·10	53·64	51·04

The mean of the twelve monthly values is 51°·39.

(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.

1905.

Days of the Month.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.
d	°	°	°	°	°	°	°	°	°	°	°	°
1	47·60	44·91	45·31	46·63	48·24	52·18	56·88	61·18	60·73	58·31	52·91	49·29
2	47·54	44·90	45·22	46·74	48·33	52·33	57·03	61·30	60·70	58·19	52·80	49·22
3	47·52	44·86	45·14	46·80	48·44	52·62	57·14	61·32	60·63	58·08	52·74	49·07
4	47·50	44·81	45·11	46·90	48·56	52·88	57·22	61·35	60·54	57·99	52·64	49·02
5	47·31	44·78	45·08	47·00	48·66	53·02	57·45	61·38	60·44	57·84	52·52	49·00
6	47·23	44·89	45·07	47·04	48·74	53·22	57·60	61·32	60·41	57·69	52·41	48·91
7	47·21	44·94	45·02	47·15	48·77	53·51	57·71	61·31	60·38	57·59	52·30	48·81
8	47·25	45·02	45·00	47·21	48·93	53·81	57·92	61·32	60·38	57·44	52·21	48·72
9	47·26	45·13	45·04	47·17	49·02	53·81	58·09	61·22	60·38	57·29	52·15	48·71
10	47·29	45·23	45·08	47·18	49·21	53·91	58·14	61·29	60·38	57·11	52·04	48·80
11	47·36	45·32	45·14	47·12	49·30	53·98	58·30	61·21	60·30	56·92	51·92	48·82
12	47·38	45·40	45·18	47·08	49·44	54·03	58·48	61·20	60·23	56·71	51·85	48·82
13	47·34	45·32	45·14	47·12	49·60	54·03	58·64	61·19	60·23	56·62	51·66	48·77
14	47·34	45·42	45·18	47·23	49·84	54·00	58·86	61·19	60·09	56·48	51·54	48·66
15	47·36	45·51	45·20	47·30	50·04	54·03	58·99	61·14	60·02	56·40	51·48	48·51

(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.*

1905.

Days of the Month.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.
d	°	°	°	°	°	°	°	°	°	°	°	°
16	47·06	45·48	45·21	47·49	50·19	54·12	59·13	61·09	59·92	56·29	51·38	48·40
17	46·91	45·51	45·28	47·60	50·39	54·18	59·40	61·09	59·82	56·09	51·33	48·30
18	46·73	45·61	45·41	47·73	50·53	54·40	59·50	61·07	59·69	55·99	51·19	48·14
19	46·58	45·64	45·53	47·84	50·60	54·52	59·72	61·07	59·54	55·78	51·07	48·12
20	46·40	45·73	45·64	47·98	50·72	54·77	59·90	61·06	59·44	55·54	50·83	48·02
21	46·20	45·78	45·75	47·99	50·81	55·02	60·02	61·11	59·32	55·27	50·60	47·96
22	46·10	45·80	45·82	48·07	50·95	55·20	60·19	61·10	59·23	55·02	50·48	47·90
23	45·92	45·78	45·80	48·06	51·06	55·37	60·11	61·12	59·11	54·73	50·30	47·92
24	45·76	45·72	45·90	48·05	51·22	55·51	60·27	61·10	59·04	54·43	50·03	47·92
25	45·61	45·66	46·03	48·02	51·26	55·72	60·47	61·13	58·92	54·19	49·80	47·90
26	45·47	45·61	46·11	47·95	51·32	55·96	60·59	61·08	58·82	53·91	49·62	47·90
27	45·37	45·49	46·20	47·90	51·40	56·18	60·70	61·00	58·72	53·73	49·58	47·92
28	45·30	45·38	46·30	47·95	51·53	56·34	60·70	60·98	58·61	53·52	49·49	47·86
29	45·20		46·39	48·05	51·67	56·49	60·88	60·90	58·52	53·36	49·40	47·81
30	45·03		46·46	48·10	51·78	56·65	61·02	60·84	58·38	53·19	49·35	47·72
31	45·00		46·53		51·94		61·12	60·82		53·03		47·66
Means	46·62	45·34	45·52	47·48	50·08	54·39	59·10	61·14	59·76	55·96	51·25	48·41

The mean of the twelve monthly values is 52°·09.

(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.

1905.

Days of the Month.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.
d	°	°	°	°	°	°	°	°	°	°	°	°
1	44·02	40·52	41·68	45·39	47·77	54·66	60·07	64·40	60·81	56·91	49·27	45·22
2	43·59	40·70	41·51	45·59	47·92	54·89	60·14	64·30	60·64	56·59	49·19	45·21
3	43·16	41·05	41·32	45·74	48·13	55·12	60·32	64·00	60·63	56·32	49·29	45·22
4	42·82	41·13	41·36	45·86	48·16	55·59	60·50	63·82	60·73	56·09	49·28	45·00
5	42·96	41·15	41·37	45·98	48·18	55·91	60·80	63·66	60·91	55·90	49·08	44·90
6	43·24	41·83	41·49	46·12	48·30	56·10	60·90	63·41	61·12	55·62	49·10	44·71
7	43·50	42·29	41·82	46·03	48·53	55·76	61·00	63·13	61·21	55·24	48·80	44·80
8	43·98	42·60	42·10	45·70	48·81	55·33	61·10	63·04	61·22	54·72	48·47	45·20
9	44·31	42·78	42·30	45·23	49·20	54·82	61·23	63·00	60·94	54·56	48·10	45·72
10	44·54	42·90	42·54	45·05	49·51	54·74	61·48	63·10	60·74	54·40	48·00	45·89
11	44·39	43·04	42·61	45·04	49·80	54·63	61·79	62·91	60·52	54·50	47·80	45·49
12	44·14	43·01	42·86	45·30	50·06	54·50	62·14	62·70	60·32	54·40	48·09	44·89
13	44·00	42·51	42·82	45·77	50·50	54·68	62·49	62·54	60·02	54·38	48·13	44·38
14	43·69	42·36	42·89	46·27	50·89	54·89	62·89	62·58	59·58	54·22	48·08	44·12
15	43·04	42·63	43·23	46·76	51·02	55·33	63·17	62·59	59·40	53·90	47·93	44·04
16	42·42	42·91	43·50	47·15	51·07	55·84	63·40	62·59	59·12	53·44	47·61	44·05
17	41·86	43·12	43·44	47·39	51·19	56·38	63·76	62·71	58·92	52·99	47·11	44·10
18	41·56	43·42	43·63	47·40	51·30	56·94	63·61	62·68	58·71	52·34	46·63	44·06
19	41·22	43·48	43·91	47·17	51·41	57·12	63·60	62·63	58·59	51·74	46·25	44·04
20	41·04	43·45	43·99	46·98	51·71	57·41	63·50	62·58	58·52	51·24	45·76	44·06

(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.*

1905.

Days of the Month.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.
d	°	°	°	°	°	°	°	°	°	°	°	°
21	40·61	43·16	43·92	46·56	51·80	57·72	63·49	62·54	58·38	50·80	45·39	44·00
22	40·59	42·72	44·04	46·39	51·72	58·00	63·75	62·53	58·14	50·34	45·00	44·20
23	40·43	42·43	44·14	46·31	51·52	58·30	63·70	62·43	58·01	49·76	44·57	44·57
24	40·38	42·18	44·28	46·19	51·31	58·55	64·01	62·38	58·00	49·40	44·52	44·69
25	40·46	41·97	44·63	46·04	51·20	58·92	64·08	62·11	57·76	49·12	44·67	44·52
26	40·63	41·79	44·61	46·22	51·50	59·12	64·11	62·00	57·56	49·00	44·69	44·60
27	40·64	41·90	44·70	46·51	51·92	59·40	64·38	61·95	57·36	48·71	45·03	44·46
28	40·44	41·73	44·82	46·76	52·43	59·54	64·49	61·87	57·23	48·78	45·29	44·14
29	40·25		44·80	47·17	53·02	59·78	64·72	61·60	57·10	48·83	45·29	43·99
30	40·12		45·10	47·45	53·63	59·95	64·62	61·38	57·00	48·99	45·41	44·03
31	40·16		45·22		54·26		64·52	61·06		49·11		44·02
Means	42·20	42·31	43·25	46·25	50·57	56·66	62·70	62·72	59·31	52·66	47·06	44·59

The mean of the twelve monthly values is 50°·86.

(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.

1905.

Days of the Month.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.
d	°	°	°	°	°	°	°	°	°	°	°	°
1	37·3	41·1	48·0	46·7	50·3	58·9	64·0	63·8	58·1	52·0	47·4	43·0
2	36·0	41·0	39·2	47·9	49·7	59·6	64·4	64·0	60·0	52·4	47·6	43·0
3	40·0	39·2	39·0	45·7	48·7	62·1	64·6	60·4	61·4	51·2	47·3	42·0
4	43·0	43·0	37·7	47·0	48·0	62·7	64·0	64·0	62·2	54·0	46·4	41·0
5	44·0	50·0	40·4	48·1	45·2	59·1	64·4	64·0	62·0	52·2	48·2	42·3
6	44·0	44·7	42·9	44·0	49·4	55·0	64·0	61·9	62·9	48·9	45·0	43·0
7	45·6	44·8	43·0	43·3	52·1	54·0	63·7	61·2	61·4	49·8	43·0	48·2
8	44·6	43·1	41·3	42·0	53·0	55·0	65·1	64·0	59·1	51·0	42·0	48·2
9	46·4	43·2	44·9	43·2	51·2	54·3	67·3	63·0	59·7	52·0	45·0	44·0
10	41·8	43·2	41·2	45·0	52·0	54·7	65·9	63·0	60·0	54·0	44·4	40·1
11	42·8	41·1	45·4	47·0	54·1	54·2	66·9	61·0	58·6	53·2	47·6	37·4
12	41·6	38·4	43·2	49·0	54·1	56·0	67·4	62·6	57·7	52·0	46·3	38·0
13	39·6	40·0	43·7	50·2	53·9	57·6	67·4	62·5	56·6	52·0	45·9	39·4
14	38·4	44·0	45·0	51·3	53·0	58·9	69·0	63·8	57·0	47·0	44·8	41·1
15	36·0	43·7	44·4	50·0	53·0	59·3	68·4	63·8	55·0	50·3	42·4	41·3
16	32·0	45·0	44·1	50·0	52·3	61·8	66·9	64·0	55·9	46·4	40·0	40·8
17	37·0	45·0	45·2	47·3	54·7	62·3	66·0	63·0	57·0	42·3	40·0	41·0
18	36·0	43·0	45·5	46·0	55·0	59·6	65·0	63·1	56·8	44·2	38·9	43·3
19	30·0	42·5	45·0	44·4	55·2	61·0	65·0	62·8	56·1	44·7	39·5	43·0
20	35·9	38·7	43·2	43·9	52·3	61·0	66·1	62·4	56·1	43·2	39·6	41·0
21	34·4	39·2	44·3	44·7	51·0	63·0	67·2	62·8	54·8	42·7	37·0	45·0
22	35·9	38·8	44·1	44·0	50·0	63·0	69·0	63·3	56·1	42·0	37·2	45·0
23	35·9	38·1	46·3	45·0	49·6	63·0	67·2	60·0	56·1	43·0	44·6	44·0
24	38·4	38·7	47·6	44·7	51·2	60·8	65·2	66·0	56·0	43·0	42·0	42·8
25	39·9	39·4	45·3	47·0	55·0	63·3	67·3	62·0	55·0	42·6	41·0	43·6

(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.*

1905.

Days of the Month.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.
d	°	°	°	°	°	°	°	°	°	°	°	°
26	36·3	41·0	45·0	48·0	56·7	63·1	69·1	62·4	54·2	42·0	40·8	41·0
27	34·9	39·6	45·0	50·0	57·0	63·8	70·0	61·0	55·2	46·2	43·0	39·8
28	41·8	39·0	45·0	50·1	58·7	63·8	66·4	61·0	55·0	44·1	43·3	41·3
29	41·3		47·0	50·0	62·1	63·8	66·4	59·2	55·2	47·8	43·9	43·0
30	39·0		48·0	49·9	62·9	63·0	66·3	57·6	54·1	48·1	45·7	42·2
31	40·7		45·6		60·6		65·0	58·0		47·0		35·0
Means	39·0	41·7	44·0	46·8	53·3	59·9	66·3	62·3	57·5	47·8	43·3	42·1

The mean of the twelve monthly values is 50°·33.

(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.

1905.

Days of the Month.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.
d	°	°	°	°	°	°	°	°	°	°	°	°
1	30·3	48·5	39·8	52·8	55·8	65·3	70·5	66·2	60·7	52·6	49·8	43·0
2	31·7	43·4	42·0	52·8	51·9	68·3	72·8	70·6	63·0	52·1	49·8	43·8
3	43·3	42·6	39·8	49·2	53·9	71·0	71·2	61·7	67·9	51·5	49·1	40·0
4	45·2	48·2	39·9	53·7	53·4	70·2	66·1	69·2	68·1	56·2	48·9	38·9
5	45·9	51·6	43·0	53·0	55·9	55·8	68·5	68·8	65·8	53·2	48·9	42·0
6	48·3	47·9	44·6	43·8	57·1	52·2	67·5	66·7	65·9	48·4	48·2	44·8
7	50·4	47·9	48·3	47·3	65·4	52·9	69·1	62·9	63·4	52·2	47·4	52·8
8	48·2	44·1	42·4	43·6	58·8	61·2	77·7	70·0	63·9	52·3	42·6	51·0
9	47·3	46·3	50·1	45·7	59·0	54·5	78·1	66·7	61·9	54·7	45·0	44·7
10	38·4	46·4	45·1	50·0	64·8	58·1	71·3	70·0	63·2	54·0	47·8	35·7
11	44·3	40·7	49·4	52·8	66·1	54·9	72·7	64·0	60·4	53·8	50·0	32·8
12	42·5	34·7	46·1	53·0	57·2	60·4	73·7	67·4	60·0	51·8	47·3	33·2
13	36·1	42·2	50·0	60·0	55·1	66·5	73·7	67·0	63·6	51·6	45·4	36·8
14	38·1	49·0	48·8	58·5	55·9	66·3	79·8	71·3	59·6	44·7	42·9	42·2
15	36·8	46·7	46·8	57·0	59·1	69·0	73·9	71·1	60·2	53·0	40·0	41·1
16	24·0	50·0	49·2	57·1	57·6	72·2	61·3	67·3	58·0	44·7	37·1	39·9
17	39·8	47·6	50·4	48·2	67·6	65·0	73·2	68·6	62·5	43·1	36·3	40·0
18	36·2	48·2	50·0	44·3	66·4	62·4	66·8	66·4	60·4	47·1	36·1	43·7
19	29·8	44·2	48·7	42·6	60·4	66·7	72·4	64·6	58·4	46·5	38·0	46·0
20	36·3	36·9	50·3	44·0	52·3	66·0	75·5	64·9	60·3	44·2	38·3	43·9
21	34·0	41·3	50·1	46·0	49·1	71·0	75·0	69·1	58·1	42·1	36·7	48·6
22	35·1	39·7	53·8	43·4	50·0	72·6	79·6	67·9	58·5	41·6	44·6	46·6
23	35·3	36·3	56·6	48·9	51·4	70·0	67·1	60·9	55·3	44·1	50·3	40·3
24	40·3	36·4	53·2	49·1	56·9	65·0	68·7	67·1	56·0	42·7	42·7	41·2
25	43·1	41·6	48·4	52·2	64·9	70·0	75·4	70·3	54·0	41·7	44·1	43·0
26	34·1	43·0	51·2	53·2	67·0	68·2	76·3	68·2	53·8	42·7	51·0	41·0
27	32·9	41·8	45·8	56·0	70·0	72·7	78·8	61·8	55·5	50·0	42·2	36·3
28	40·9	41·4	52·6	55·2	73·6	69·1	67·2	64·8	58·9	47·2	45·3	43·1
29	38·0		53·0	55·1	79·4	68·0	72·3	59·4	60·2	51·7	45·4	43·8
30	43·8		51·7	51·0	73·2	65·9	71·7	56·9	53·6	51·4	43·9	39·4
31	43·1		52·7		65·3		68·2	59·1		50·1		30·4
Means	39·1	43·9	48·2	50·6	60·5	65·0	72·1	66·2	60·4	48·8	44·5	41·6

The mean of the twelve monthly values is 53°·41.

ABSTRACT of the CHANGES of the DIRECTION of the WIND, as derived from the Records of OSLER'S ANEMOMETER in the Year 1905.

(It is to be understood that the direction of the wind was nearly constant in the intervals between the times given in the second column and those next following in the first column.)

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

Greenwich Civil Time.		Change of Direction.		Amount of Motion.	
From	To	From	To	Direct.	Retrograde.
				°	°
January.					
d h	d h				
1. 0¼	1. 0¾	N.E.	E.S.E.	67½	
1. 5	1. 5¼	E.S.E.	E.		22½
1. 6½	1. 6¾	E.	E.N.E.		22½
1. 8¼	1. 8½	E.N.E.	E.	22½	
1. 9¼	1. 9½	E.	S.S.E.	67½	
1. 17¼	1. 19	S.S.E.	S.S.W.	45	
1. 23	1. 23½	S.S.W.	S.		22½
2. 5½	2. 5¾	S.	S.S.W.	22½	
2. 9	2. 9½	S.S.W.	S.W.	22½	
2. 14	2. 15¼	S.W.	W.S.W.	22½	
3. 10¼	3. 11½	W.S.W.	W.	22½	
4. 17½	4. 21½	W.	W.S.W.		22½
5. 7½	5. 7¾	W.S.W.	N.N.W.	90	
5. 8	5. 8½	N.N.W.	W.		67½
5. 9½	5. 9¾	W.	W.N.W.	22½	
5. 21¼	5. 21¾	W.N.W.	W.		22½
6. 1¾	6. 3	W.	W.S.W.		22½
6. 7	6. 8	W.S.W.	W.	22½	
6. 17½	6. 18¼	W.	W.N.W.	22½	
6. 22½	6. 23	W.N.W.	N.W.	22½	
7. 0¼	7. 0½	N.W.	N.N.W.	22½	
7. 17½	7. 17¾	N.N.W.	S.W.		112½
7. 23½	7. 23¾	S.W.	S.S.W.		22½
8. 3	8. 3½	S.S.W.	S.W.	22½	
8. 15	8. 15½	S.W.	W.S.W.	22½	
9. 0	9. 2	W.S.W.	S.W.		22½
9. 10¼	9. 11	S.W.	W.N.W.	67½	
9. 12½	9. 12¾	W.N.W.	N.W.	22½	
9. 13¼	9. 14½	N.W.	W.		45
9. 21	9. 21½	W.	W.N.W.	22½	
9. 23¾	10. 0½	W.N.W.	N.W.	22½	
10. 4¼	10. 4¾	N.W.	W.N.W.		22½
10. 12¼	10. 12½	W.N.W.	W.		22½
10. 15¾	10. 16½	W.	W.S.W.		22½
10. 21	10. 21¼	W.S.W.	S.W.		22½
11. 1	11. 2½	S.W.	W.S.W.	22½	
11. 22½	11. 23½	W.S.W.	W.	22½	
12. 13¾	12. 15¼	W.	W.N.W.	22½	
12. 21½	12. 23½	W.N.W.	W.S.W.		45
13. 17½	13. 17¾	W.S.W.	S.S.E.		90
13. 23¼	13. 23½	S.S.E.	S.E.		22½
14. 7	14. 8	S.E.	S.S.E.	22½	
14. 11¾	14. 12	S.S.E.	S.E.		22½
16. 1¼	16. 1¾	S.E.	E.S.E.		22½
16. 20	16. 23½	E.S.E.	S.S.W.	90	
17. 0½	17. 0¾	S.S.W.	S.		22½
17. 2¼	17. 2½	S.	S.E.		45
17. 3¼	17. 3½	S.E.	W.	135	
17. 7¼	17. 7½	W.	W.S.W.		22½
17. 13¼	17. 14¼	W.S.W.	W.	22½	
Jan.—*cont.*					
17. 16½	17. 17¾	W.	W.S.W.		22½
18. 6¼	18. 8¼	W.S.W.	W.	22½	
18. 10½	18. 12¼	W.	N.W.	45	
18. 15¾	18. 16¼	N.W.	W.N.W.		22½
18. 18	18. 18½	W.N.W.	W.		22½
18. 19¾	18. 21	W.	W.S.W.		22½
19. 13	19. 13¼	W.S.W.	E.S.E.	225	
19. 14½	19. 14¾	E.S.E.	N.E.		67½
20. 2	20. 2¼	N.E.	E.N.E.	22½	
20. 7	20. 9½	E.N.E.	E.S.E.	45	
20. 11¼	20. 12¾	E.S.E.	E.		22½
20. 14¼	20. 19	E.	S.E.	45	
20. 21¾	20. 22¼	S.E.	E.S.E.		22½
21. 2½	21. 2¾	E.S.E.	E.		22½
21. 6¼	21. 7¼	E.	E.S.E.	22½	
21. 13¾	21. 14	E.S.E.	E.		22½
21. 15¾	21. 17	E.	E.N.E.		22½
21. 21	21. 22	E.N.E.	N.E.		22½
22. 12½	22. 12¾	N.E.	N.N.E.		22½
22. 15¾	22. 16¼	N.N.E.	N.E.	22½	
22. 18	22. 19¼	N.E.	E.N.E.	22½	
22. 22	22. 22¼	E.N.E.	N.N.E.		45
23. 0¼	23. 0½	N.N.E.	E.N.E.	45	
23. 2¾	23. 3	E.N.E.	S.E.	67½	
23. 4	23. 4¼	S.E.	E.		45
23. 7¼	23. 7½	E.	E.N.E.	22½	
23. 10	23. 10¼	E.N.E.	S.E.	67½	
23. 11	23. 12½	S.E.	S.W.	90	
23. 14¾	23. 15	S.W.	W.	45	
23. 17½	23. 17¾	W.	S.W.		45
23. 19	23. 19¼	S.W.	S.S.W.		22½
23. 23¼	24. 0¼	S.S.W.	S.S.E.		45
24. 13¼	24. 14½	S.S.E.	S.W.	67½	
24. 22¾	24. 23	S.W.	W.S.W.	22½	
25. 5¾	25. 9½	W.S.W.	N.N.W.	90	
25. 12	25. 12½	N.N.W.	N.W.		22½
25. 14¾	25. 15¼	N.W.	N.N.W.	22½	
25. 18½	25. 20¾	N.N.W.	N.	22½	
26. 1¼	26. 3½	N.	N.N.E.	22½	
26. 11¼	26. 13½	N.N.E.	N.E.	22½	
26. 23½	26. 23¾	N.E.	S.	135	
27. 0½	27. 0¾	S.	W.	90	
27. 3	27. 4	W.	W.S.W.		22½
27. 10½	27. 13¼	W.S.W.	W.	22½	
27. 21½	27. 22½	W.	W.S.W.		22½
28. 2	28. 3	W.S.W.	W.	22½	
28. 12	28. 14	W.	W.N.W.	22½	
28. 23¾	29. 2½	W.N.W.	W.S.W.		45
29. 10¾	29. 11½	W.S.W.	W.	22½	
29. 16	29. 16¼	W.	W.S.W.		22½
Jan.—*cont.*					
29. 18	29. 19	W.S.W.	W.	22½	
30. 0	30. 2	W.	W.S.W.		22½
30. 7	30. 8	W.S.W.	W.	22½	
30. 16½	30. 17¼	W.	W.S.W.		22½
30. 22½	30. 23	W.S.W.	W.	22½	
31. 1¼	31. 2	W.	N.W.	45	
31. 14¼	31. 14½	N.W.	W.N.W.		22½
31. 16¼	31. 16½	W.N.W.	W.		22½
31. 22¼	31. 23¼	W.	W.S.W.		22½
			Sums	2497½	1575
February.					
1. 1½	1. 4	W.S.W.	W.	22½	
2. 9	2. 11¼	W.	W.N.W.	22½	
2. 17	2. 17½	W.N.W.	W.		22½
3. 3½	3. 4¾	W.	W.N.W.	22½	
3. 7¼	3. 7¾	W.N.W.	W.		22½
3. 11	3. 12	W.	N.W.	45	
3. 15¾	3. 18¼	N.W.	W.S.W.		67½
4. 9¼	4. 10¼	W.S.W.	W.	22½	
4. 19	4. 20¾	W.	W.S.W.		22½
5. 2	5. 3½	W.S.W.	W.	22½	
5. 23	5. 23½	W.	W.S.W.		22½
6. 16¾	6. 17½	W.S.W.	S.W.		22½
6. 20¼	7. 1¾	S.W.	W.S.W.	22½	
7. 17¼	7. 17½	W.S.W.	N.E.	157½	
7. 18½	7. 19¼	N.E.	E.	45	
8. 4	8. 4¾	E.	E.S.E.	22½	
8. 9½	8. 9¾	E.S.E.	S.E.	22½	
8. 11	8. 11½	S.E.	E.S.E.		22½
8. 14½	8. 14¾	E.S.E.	S.E.	22½	
9. 0½	9. 2½	S.E.	S.S.E.	22½	
9. 10	9. 12	S.S.E.	S.W.	67½	
9. 14	9. 16	S.W.	W.S.W.	22½	
10. 0¾	10. 1	W.S.W.	S.W.		22½
10. 3¼	10. 3¾	S.W.	W.S.W.	22½	
10. 16½	10. 19¼	W.S.W.	N.W.	67½	
11. 0½	11. 0¾	N.W.	W.N.W.		22½
11. 2½	11. 2¾	W.N.W.	W.		22½
11. 5	11. 5¼	W.	N.W.	45	
11. 7½	11. 8	N.W.	N.N.W.	22½	
11. 9¾	11. 10½	N.N.W.	N.	22½	
11. 15¼	11. 15¾	N.	N.W.		45
11. 18	11. 20	N.W.	N.	45	
11. 21¼	12. 0¼	N.	W.N.W.		67½

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

Greenwich Civil Time.		Change of Direction.		Amount of Motion.	
From	To	From	To	Direct.	Retrograde.
				°	°
Feb.—*cont.*					
d h	d h				
12. 2¾	12. 3¾	W.N.W.	N.	67½	
12. 15¼	12. 15½	N.	N.N.W.		22½
12. 18	12. 18¾	N.N.W.	W.N.W.		45
12. 21¼	12. 22½	W.N.W.	W.		22½
13. 9¼	13. 9½	W.	W.N.W.	22½	
13. 12	13. 14	W.N.W.	W.S.W.	315	
13. 18	13. 22½	W.S.W.	N.W.	67½	
14. 0	14. 1	N.W.	N.N.W.	22½	
14. 6	14. 6¼	N.N.W.	N.	22½	
14. 15	14. 16	N.	N.N.E.	22½	
14. 17	14. 18	N.N.E.	N.		22½
14. 21½	14. 22¼	N.	N.N.W.		22½
15. 1½	15. 2¾	N.N.W.	W.S.W.		90
15. 7¾	15. 9¼	W.S.W.	W.	22½	
15. 16	15. 19	W.	W.S.W.		22½
16. 19	16. 20	W.S.W.	S.W.		22½
17. 0½	17. 2	S.W.	W.S.W.	22½	
17. 7	17. 10½	W.S.W.	N.W.	67½	
17. 17¼	17. 18¼	N.W.	W.N.W.		22½
17. 22½	18. 0½	W.N.W.	W.S.W.		45
18. 9¾	18. 11½	W.S.W.	S.W.		22½
18. 16	18. 18	S.W.	W.S.W.	22½	
18. 21¼	18. 21¾	W.S.W.	W.N.W.	45	
18. 23	18. 23½	W.N.W.	W.		22½
19. 11¾	19. 12	W.	W.N.W.	22½	
19. 15	19. 15½	W.N.W.	N.W.	22½	
20. 0	20. 1¾	N.W.	N.	45	
20. 13¾	20. 15¾	N.	N.N.E.	22½	
21. 8	21. 10½	N.N.E.	N.E.	22½	
23. 17¼	23. 17¾	N.E.	E.N.E.	22½	
23. 20	23. 20½	E.N.E.	N.E.		22½
23. 23	23. 23½	N.E.	N.N.E.		22½
24. 9½	24. 10¼	N.N.E.	S.	157½	
24. 11¾	24. 14	S.	S.E.		45
24. 19	24. 19¼	S.E.	S.S.E.	22½	
24. 21¼	24. 21½	S.S.E.	S.S.W.	45	
25. 0	25. 1	S.S.W.	S.W.	22½	
25. 2¼	22. 2¾	S.W.	W.S.W.	22½	
25. 7¾	25. 8¼	W.S.W.	S.W.		22½
25. 22¼	25. 23¾	S.W.	S.S.W.		22½
26. 11¾	26. 12	S.S.W.	S.W.	22½	
27. 5½	27. 8	S.W.	W.S.W.	22½	
27. 15¾	27. 16	W.S.W.	W.	22½	
27. 23¼	28. 0	W.	W.S.W.		22½
28. 7¼	28. 8¼	W.S.W.	W.	22½	
28. 17¼	28. 17¾	W.	W.S.W.		22½
			Sums	2025	945

Greenwich Civil Time.		Change of Direction.		Amount of Motion.	
From	To	From	To	Direct.	Retrograde.
				°	°
March.					
d h	d h				
1. 1¾	1. 3¼	W.S.W.	S.W.		22½
1. 7½	1. 9¼	S.W.	W.	45	
1. 11	1. 11¼	W.	N.	90	
1. 16	1. 16¼	N.	N.N.E.	22½	
1. 18	1. 18½	N.N.E.	N.		22½
1. 21	2. 0	N.	N.E.	45	
2. 21½	2. 22	N.E.	N.N.E.		22½
4. 2½	4. 2¾	N.N.E.	S.W.		157½
4. 6¼	4. 6½	S.W.	S.S.W.		22½
4. 9½	4. 10¼	S.S.W.	W.S.W.	45	
4. 16	4. 19½	W.S.W.	S.S.W.		45
5. 5¼	5. 6	S.S.W.	S.W.	22½	
5. 11½	5. 12½	S.W.	S.S.W.		22½
5. 22¾	6. 0	S.S.W.	N.N.W.	135	
6. 5½	6. 6	N.N.W.	N.W.		22½
6. 7¾	6. 9¼	N.W.	W.N.W.		22½
6. 11¼	6. 12	W.N.W.	W.		22½
6. 14¾	6. 16	W.	W.S.W.		22½
6. 22	7. 0	W.S.W.	W.	22½	
7. 6¼	7. 7	W.	W.S.W.		22½
7. 16¼	7. 17	W.S.W.	W.	22½	
7. 20¼	7. 22¾	W.	N.W.	45	
8. 1	8. 1½	N.W.	W.N.W.		22½
8. 3½	8. 4½	W.N.W.	N.W.	22½	
8. 5½	8. 6	N.W.	W.	45	
8. 11¾	8. 12	W.	W.S.W.		22½
8. 15¼	8. 15½	W.S.W.	S.W.		22½
9. 10¼	9. 12	S.W.	W.	45	
9. 19¼	9. 20¼	W.	W.S.W.		22½
10. 8½	10. 10¼	W.S.W.	W.	22½	
10. 12¼	10. 12½	W.	W.S.W.		22½
10. 16	10. 18½	W.S.W.	S.S.W.		45
10. 21	10. 22¾	S.S.W.	S.W.	22½	
12. 3½	12. 4	S.W.	S.S.W.		22½
12. 11¾	12. 12	S.S.W.	S.W.	22½	
12. 22¾	12. 23¼	S.W.	W.S.W.	22½	
13. 11	13. 11½	W.S.W.	S.W.		22½
13. 16½	13. 17¾	S.W.	S.		45
13. 22	14. 0½	S.	S.S.W.	22½	
14. 4½	14. 5	S.S.W.	W.S.W.	45	
14. 9	14. 10¾	W.S.W.	S.W.		22½
14. 19¼	14. 20¾	S.W.	S.S.W.		22½
15. 5¼	15. 6	S.S.W.	S.		22½
15. 8	15. 10¼	S.	S.S.W.	22½	
15. 12¼	15. 12½	S.S.W.	S.W.	22½	
15. 14¾	15. 15	S.W.	W.S.W.	22½	
15. 18¼	15. 19	W.S.W.	S.W.		22½
16. 0	16. 0½	S.W.	S.S.W.		22½
16. 22½	16. 23½	S.S.W.	S.W.	22½	
17. 18½	17. 20	S.W.	S.S.W.		22½
17. 23	18. 1½	S.S.W.	S.S.E.		45
18. 5	18. 5½	S.S.E.	S.E.		22½
18. 7	18. 7¼	S.E.	S.S.E.	22½	
18. 9¾	18. 11¼	S.S.E.	N.N.W.	180	
18. 16	18. 16½	N.N.W.	W.N.W.		45
18. 17¾	18. 18	W.N.W.	W.		22½
18. 22	19. 0½	W.	W.S.W.		22½
19. 6¼	19. 6½	W.S.W.	W.	22½	
19. 19	19. 19½	W.	S.W.		45

Greenwich Civil Time.		Change of Direction.		Amount of Motion.	
From	To	From	To	Direct.	Retrograde.
				°	°
March—*cont.*					
d h	d h				
20. 0	20. 0¼	S.W.	S.S.W.		22½
20. 1½	20. 2¾	S.S.W.	S.S.E.		45
20. 5¼	20. 6	S.S.E.	S.E.		22½
20. 10½	20. 11	S.E.	S.S.E.	22½	
20. 16	20. 17¾	S.S.E.	E.S.E.		45
21. 3¼	21. 3¾	E.S.E.	E.		22½
21. 10½	21. 10¾	E.	E.N.E.		22½
21. 12½	21. 13½	E.N.E.	E.	22½	
21. 15	21. 16½	E.	E.S.E.	22½	
21. 23	21. 23¼	E.S.E.	N.E.		67½
22. 3¾	22. 4	N.E.	E.S.E.	67½	
22. 10¾	22. 11¼	E.S.E.	S.E.	22½	
22. 13½	22. 14¼	S.E.	S.S.E.	22½	
22. 19	22. 21½	S.S.E.	S.E.		22½
23. 5¾	23. 6	S.E.	E.		45
23. 7¼	23. 11½	E.	S.S.W.	112½	
23. 19¼	23. 21½	S.S.W.	S.E.		67½
24. 0¾	24. 1¼	S.E.	W.	135	
24. 2½	24. 2¾	W.	N.W.	45	
24. 3½	24. 4¼	N.W.	W.S.W.		67½
24. 6½	24. 7	W.S.W.	W.	22½	
24. 8½	24. 10	W.	N.E.	135	
24. 12½	24. 12¾	N.E.	E.N.E.	22½	
24. 14¼	24. 14½	E.N.E.	S.E.	67½	
24. 18¼	24. 18½	S.E.	S.W.	90	
24. 20½	24. 20¾	S.W.	S.S.W.		22½
25. 1	25. 1¼	S.S.W.	S.S.E.		45
25. 5½	25. 6¼	S.S.E.	S.S.W.	45	
25. 8¾	25. 10	S.S.W.	S.W.	22½	
25. 19	25. 20½	S.W.	S.		45
25. 23	26. 1	S.	W.	90	
26. 14½	26. 15½	W.	W.S.W.		22½
26. 18	26. 20	W.S.W.	S.W.		22½
27. 7¼	27. 9¾	S.W.	S.S.E.		67½
27. 11¾	27. 12½	S.S.E.	N.N.E.		135
27. 13½	27. 14	N.N.E.	N.		22½
27. 15¼	27. 17¾	N.	W.S.W.		112½
27. 21¾	27. 23¼	W.S.W.	W.	22½	
28. 0½	28. 1	W.	W.S.W.		22½
29. 0½	29. 0¾	W.S.W.	S.W.		22½
29. 7½	29. 9	S.W.	W.S.W.	22½	
29. 17¼	29. 18	W.S.W.	S.W.		22½
30. 5¼	30. 6	S.W.	S.S.W.		22½
30. 8	30. 11¾	S.S.W.	W.	67½	
30. 23½	31. 3½	W.	W.S.W.		22½
31. 8½	31. 9¾	W.S.W.	W.N.W.	45	
31. 15¾	31. 16¼	W.N.W.	W.		22½
31. 19	31. 19¾	W.	W.N.W.	22½	
31. 21¼	31. 23¾	W.N.W.	W.S.W.		45
			Sums	2227½	2227½

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

Greenwich Civil Time. From	Greenwich Civil Time. To	Change of Direction. From	Change of Direction. To	Amount of Motion. Direct.	Amount of Motion. Retrograde.
				°	°
April.					
d h	d h				
1. 3¼	1. 3½	W.S.W.	S.W.		22½
1. 8	1. 8½	S.W.	W.S.W.	22½	
1. 12¼	1. 12¾	W.S.W.	W.	22½	
1. 13¾	1. 14½	W.	S.W.		45
2. 1½	2. 2	S.W.	W.S.W.	22½	
2. 6	2. 7½	W.S.W.	W.	22½	
2. 15¼	2. 15¾	W.	N.N.E.	112½	
2. 17¾	2. 18	N.N.E.	N.E.	22½	
2. 19	2. 19¼	N.E.	S.S.E.	112½	
2. 23	3. 0½	S.S.E.	W.N.W.	135	
3. 2¼	3. 2½	W.N.W.	E.N.E.	135	
3. 8½	3. 8¾	E.N.E.	E.S.E.	45	
3. 15	3. 16	E.S.E.	S.S.W.		270
3. 18½	3. 19	S.S.W.	S.		22½
3. 22	3. 22¼	S.	S.S.W.	22½	
4. 6¼	4. 7	S.S.W.	W.S.W.	45	
4. 18¾	4. 19¾	W.S.W.	W.	22½	
5. 6½	5. 9¾	W.	N.W.	45	
5. 12½	5. 13	N.W.	W.N.W.		22½
5. 19½	5. 20¼	W.N.W.	N.N.W.	45	
6. 4¼	6. 4½	N.N.W.	N.	22½	
6. 13¼	6. 13½	N.	N.N.W.		22½
6. 18¼	6. 18¾	N.N.W.	N.W.		22½
6. 23¾	7. 0	N.W.	S.W.		90
7. 7	7. 9½	S.W.	W.S.W.	22½	
7. 13¼	7. 14	W.S.W.	N.	112½	
7. 19½	7. 21¼	N.	N.E.	45	
7. 22½	7. 23½	N.E.	N.N.E.		22½
8. 17½	8. 20	N.N.E.	S.S.W.	180	
8. 22	8. 23	S.S.W.	S.W.	22½	
9. 3¼	9. 3½	S.W.	S.S.W.		22½
9. 7	9. 8½	S.S.W.	W.S.W.	45	
9. 18¼	9. 20½	W.S.W.	N.N.E.	135	
9. 22¾	9. 23	N.N.E.	E.N.E.	45	
10. 1¼	10. 2	E.N.E.	N.E.		22½
10. 3¾	10. 4	N.E.	E.S.E.		67½
10. 5¼	10. 5½	E.S.E.	E.		22½
10. 7¼	10. 7½	E.	E.S.E.	22½	
10. 14½	10. 15¼	E.S.E.	E.		22½
10. 17½	10. 20¼	E.	N.N.E.		67½
10. 22¼	10. 23½	N.N.E.	N.		22½
11. 5½	11. 5¾	N.	E.S.E.	112½	
11. 6¾	11. 7	E.S.E.	S.S.E.	45	
11. 9	11. 9¼	S.S.E.	S.E.		22½
11. 12½	11. 12¾	S.E.	S.	45	
11. 14½	11. 17	S.	S.W.	45	
11. 21	11. 22	S.W.	W.S.W.	22½	
11. 23¾	12. 0	W.S.W.	N.	112½	
12. 7	12. 8	N.	W.S.W.	247½	
12. 10¼	12. 10¾	W.S.W.	N.E.	157½	
12. 13½	12. 14¼	N.E.	S.W.	180	
12. 18	12. 20	S.W.	S.		45
12. 22¾	12. 23¼	S.	S.S.E.		22½
13. 4½	13. 5½	S.S.E.	S.E.		22½
13. 7½	13. 7¾	S.E.	S.	45	
14. 5¼	14. 7½	S.	S.E.		45
14. 11	14. 11¾	S.E.	S.S.W.	67½	
14. 14½	14. 14¾	S.S.W.	S.W.	22½	
14. 22¾	15. 3½	S.W.	W.S.W.	22½	
				°	°
April—*cont.*					
d h	d h				
15. 10¼	15. 10½	W.S.W.	S.W.		22½
15. 13½	15. 13¾	S.W.	S.S.W.		22½
15. 17¼	15. 22¾	S.S.W.	E.S.E.		90
16. 4	16. 4¼	E.S.E.	E.		22½
16. 7	16. 8	E.	E.N.E.		22½
16. 10	16. 10¼	E.N.E.	E.	22½	
16. 11¾	16. 13¼	E.	E.S.E.	22½	
16. 15	16. 16	E.S.E.	E.		22½
16. 20¾	16. 21½	E.	E.N.E.		22½
17. 1½	17. 2	E.N.E.	N.E.		22½
17. 7	17. 8½	N.E.	E.N.E.	22½	
17. 16¼	17. 20¼	E.N.E.	N.N.E.		45
18. 5	18. 5½	N.N.E.	N.E.	22½	
18. 10	18. 10¼	N.E.	E.N.E.	22½	
18. 11¾	18. 12	E.N.E.	N.E.		22½
18. 20	18. 20½	N.E.	N.N.E.		22½
19. 4	19. 5	N.N.E.	N.E.	22½	
19. 12	19. 12½	N.E.	E.	45	
19. 14	19. 14¾	E.	N.E.		45
19. 17¼	19. 17½	N.E.	E.	45	
19. 18½	19. 18¾	E.	N.E.		45
20. 16¼	20. 16½	N.E.	N.N.E.		22½
20. 22¼	20. 23¾	N.N.E.	N.		22½
21. 12½	21. 14	N.	N.N.E.	22½	
21. 21¼	21. 21¾	N.N.E.	N.		22½
22. 10¼	22. 11	N.	N.N.W.		22½
22. 15	22. 15¼	N.N.W.	W.N.W.		45
22. 18¼	22. 18½	W.N.W.	S.W.		67½
22. 20½	22. 21¾	S.W.	W.S.W.	22½	
22. 22¾	22. 23¼	W.S.W.	W.	22½	
23. 2¼	23. 4	W.	W.S.W.		22½
23. 5¾	23. 7¼	W.S.W.	W.N.W.	45	
23. 9	23. 9¼	W.N.W.	N.W.	22½	
23. 20	23. 20½	N.W.	W.		45
24. 5¾	24. 6¼	W.	W.N.W.	22½	
24. 9½	24. 10¼	W.N.W.	N.W.	22½	
24. 15½	24. 15¾	N.W.	N.N.W.	22½	
24. 22	24. 22½	N.N.W.	W.S.W.		90
25. 1½	25. 2	W.S.W.	S.W.		22½
25. 4¾	25. 5½	S.W.	W.S.W.	22½	
25. 12	25. 12¼	W.S.W.	S.W.		22½
25. 20¾	25. 22	S.W.	W.S.W.	22½	
26. 5	26. 6¾	W.S.W.	W.	22½	
26. 19¾	26. 20½	W.	W.S.W.		22½
26. 23½	27. 0	W.S.W.	S.W.		22½
28. 9	28. 9¼	S.W.	S.S.W.		22½
28. 11½	28. 12¼	S.S.W.	S.W.	22½	
29. 19½	29. 20	S.W.	W.S.W.	22½	
30. 0¼	30. 0½	W.S.W.	S.W.		22½
30. 5	30. 8	S.W.	S.		45
30. 11¼	30. 14¼	S.	S.W.	45	
			Sums	3262½	1845
				°	°
May.					
d h	d h				
1. 12½	1. 12¾	S.W.	S.S.W.		22½
1. 15¼	1. 15½	S.S.W.	S.W.	22½	
1. 19¾	1. 20¾	S.W.	S.		45
1. 23½	2. 1½	S.	S.W.	45	
2. 4½	2. 5½	S.W.	S.S.W.		22½
2. 8½	2. 10	S.S.W.	W.S.W.	45	
2. 19¼	2. 19½	W.S.W.	W.	22½	
2. 20¾	2. 21	W.	W.N.W.	22½	
2. 23	2. 23½	W.N.W.	W.S.W.		45
3. 7	3. 8	W.S.W.	W.	22½	
3. 17	3. 18½	W.	S.W.		45
3. 20¼	3. 20½	S.W.	S.S.W.	337½	
3. 23¼	4. 0	S.S.W.	N.	157½	
4. 5¾	4. 6¼	N.	N.N.E.	22½	
5. 22¼	5. 22½	N.N.E.	N.		22½
6. 12½	6. 12¾	N.	N.N.E.	22½	
6. 14½	6. 14¾	N.N.E.	N.		22½
7. 12	7. 13½	N.	N.N.W.		22½
7. 18	7. 18½	N.N.W.	N.	22½	
7. 22¼	7. 22½	N.	N.E.	45	
7. 23¾	8. 1¾	N.E.	N.		45
8. 17¼	8. 18¼	N.	N.E.	45	
8. 23	9. 0	N.E.	N.N.E.		22½
9. 3	9. 3¼	N.N.E.	N.		22½
9. 7¾	9. 8¼	N.	N.E.	45	
9. 13	9. 13¼	N.E.	N.		45
9. 15	9. 15½	N.	W.	270	
9. 18	9. 18¼	W.	S.S.W.	292½	
9. 20¾	9. 21¼	S.S.W.	S.W.	22½	
10. 1	10. 2	S.W.	W.S.W.	22½	
10. 9	10. 9½	W.S.W.	W.	22½	
10. 17½	10. 17¾	W.	N.W.	45	
10. 21	10. 23¾	N.W.	W.S.W.		67½
11. 10½	11. 11	W.S.W.	W.	22½	
11. 14¼	11. 14½	W.	N.W.	45	
11. 20½	11. 21¾	N.W.	N.	45	
12. 14½	12. 15¾	N.	N.N.E.	22½	
12. 18½	12. 18¾	N.N.E.	N.E.	22½	
12. 20	12. 20¾	N.E.	S.S.E.	112½	
12. 22¼	12. 22½	S.S.E.	S.E.		22½
12. 23	12. 23¼	S.E.	N.E.		90
13. 4½	13. 4¾	N.E.	N.		45
13. 9	13. 9¾	N.	N.N.E.	22½	
13. 16¾	13. 17	N.N.E.	N.E.	22½	
13. 19¼	13. 19½	N.E.	N.N.E.		22½
14. 3	14. 4½	N.N.E.	N.E.	22½	
14. 20¼	14. 21¾	N.E.	E.	45	
15. 2	15. 2¾	E.	N.E.		45
16. 0	16. 0½	N.E.	N.N.E.		22½
16. 7	16. 7¼	N.N.E.	N.E.	22½	
16. 10½	16. 12¾	N.E.	S.E.	90	
16. 13½	16. 13¾	S.E.	E.S.E.		22½
16. 15	16. 16	E.S.E.	N.E.		67½
16. 19½	16. 21½	N.E.	N.N.E.		22½
17. 5	17. 6	N.N.E.	N.E.	22½	
17. 8½	17. 10½	N.E.	E.	45	
17. 19¼	17. 22	E.	N.E.		45
18. 2	18. 3	N.E.	N.N.E.		22½
18. 8	18. 10	N.N.E.	E.N.E.	45	

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

Greenwich Civil Time. From	Greenwich Civil Time. To	Change of Direction. From	Change of Direction. To	Amount of Motion. Direct.	Amount of Motion. Retrograde.
				°	°
May—*cont.*					
d h	d h				
18. 15½	18. 16½	E.N.E.	N.E.		22½
18. 20¾	18. 21	N.E.	N.N.E.		22½
21. 7	21. 7½	N.N.E.	N.E.	22½	
21. 22½	21. 22¾	N.E.	N.N.E.		22½
22. 14¼	22. 14¾	N.N.E.	N.E.	22½	
22. 22¾	23. 0	N.E.	N.N.E.		22½
23. 17½	23. 19¾	N.N.E.	S.S.W.	180	
23. 22	24. 1½	S.S.W.	W.S.W.	45	
24. 9	24. 10	W.S.W.	W.	22½	
24. 15¾	24. 16	W.	N.N.W.	67½	
24. 18	24. 18¾	N.N.W.	N.	22½	
24. 20¾	24. 21¼	N.	S.W.	225	
24. 23½	24. 23¾	S.W.	W.S.W.	22½	
25. 19¼	25. 19½	W.S.W.	S.W.		22½
25. 22	25. 23	S.W.	W.S.W.	22½	
26. 9	26. 9¼	W.S.W.	S.W.		22½
26. 14¼	26. 14½	S.W.	W.S.W.	22½	
26. 19	26. 20¼	W.S.W.	S.W.		22½
27. 13¾	27. 14¼	S.W.	W.S.W.	22½	
27. 16¼	27. 16½	W.S.W.	S.W.		22½
28. 21¼	28. 22	S.W.	S.		45
29. 0¼	29. 1¾	S.	E.N.E.		112½
29. 3¼	29. 5	E.N.E.	S.S.W.	135	
29. 8	29. 8½	S.S.W.	S.W.	22½	
29. 13¼	29. 13½	S.W.	W.S.W.	22½	
29. 15½	29. 16½	W.S.W.	S.W.		22½
29. 19	29. 21	S.W.	W.S.W.	22½	
30. 1½	30. 2½	W.S.W.	N.N.W.	90	
30. 5¼	30. 6	N.N.W.	N.	22½	
30. 8¾	30. 9	N.	N.N.E.	22½	
30. 12¼	30. 12½	N.N.E.	S.E.	112½	
30. 13¾	30. 14¼	S.E.	N.E.		90
30. 17½	30. 20	N.E.	E.S.E.	67½	
30. 22¼	30. 23	E.S.E.	N.E.		67½
31. 9	31. 10½	N.E.	N.N.E.		22½
31. 13	31. 13½	N.N.E.	N.N.W.		45
31. 16	31. 17¼	N.N.W.	N.E.	67½	
31. 21¼	31. 23	N.E.	W.S.W.	202½	
			Sums	3645	1462½
June.					
1. 9½	1. 11	W.S.W.	S.W.		22½
1. 13½	1. 14½	S.W.	W.S.W.	22½	
1. 17¼	1. 17½	W.S.W.	W.	22½	
1. 22¾	1. 23	W.	W.S.W.		22½
2. 2	2. 3¼	W.S.W.	S.W.		22½
2. 19½	2. 20¼	S.W.	W.S.W.	22½	
3. 14½	3. 15½	W.S.W.	S.W.		22½
3. 22	3. 22¼	S.W.	W.S.W.	22½	
3. 23¾	4. 0	W.S.W.	N.	112½	
4. 1	4. 1¼	N.	S.E.	135	
4. 1¾	4. 2½	S.E.	N.N.E.	247½	
4. 17¼	4. 18½	N.N.E.	N.E.	22½	
June—*cont.*					
4. 21¼	4. 22	N.E.	S.E.	90	
5. 0	5. 1½	S.E.	E.N.E.		67½
5. 4	5. 4¼	E.N.E.	N.E.		22½
5. 19	5. 20¼	N.E.	N.N.E.		22½
6. 7½	6. 9	N.N.E.	N.E.	22½	
6. 13	6. 14½	N.E.	N.N.E.		22½
7. 7¼	7. 8¼	N.N.E.	N.E.	22½	
7. 13½	7. 14	N.E.	N.N.E.		22½
7. 19½	7. 20¼	N.N.E.	N.		22½
8. 1¾	8. 2	N.	N.N.E.	22½	
8. 6¼	8. 6¾	N.N.E.	N.E.	22½	
8. 20¾	8. 21	N.E.	N.N.E.		22½
9. 8	9. 11	N.N.E.	N.E.	22½	
9. 19½	9. 20½	N.E.	N.N.E.		22½
10. 11¾	10. 12	N.N.E.	N.		22½
10. 13¼	10. 13½	N.	N.E.	45	
10. 14½	10. 14¾	N.E.	S.E.	90	
10. 15½	10. 16½	S.E.	N.E.		90
10. 19	10. 19½	N.E.	N.N.E.		22½
11. 12¼	11. 14¼	N.N.E.	E.	67½	
11. 15½	11. 15¾	E.	E.N.E.		22½
11. 22½	11. 23	E.N.E.	N.E.		22½
12. 5½	12. 6¾	N.E.	E.N.E.	22½	
12. 15¼	12. 16	E.N.E.	E.	22½	
12. 20¼	12. 20½	E.	E.S.E.	22½	
13. 8	13. 9¼	E.S.E.	S.E.	22½	
13. 12½	13. 13	S.E.	E.S.E.		22½
13. 17¾	13. 18	E.S.E.	E.		22½
13. 20¼	13. 20½	E.	E.N.E.		22½
14. 4¼	14. 4¾	E.N.E.	N.E.		22½
14. 6¾	14. 7¼	N.E.	E.N.E.	22½	
14. 8	14. 8½	E.N.E.	E.	22½	
14. 21½	14. 22½	E.	N.E.		45
15. 2	15. 2¼	N.E.	N.N.E.		22½
15. 9¼	15. 9½	N.N.E.	N.E.	22½	
15. 13½	15. 15¾	N.E.	E.	45	
16. 4	16. 5½	E.	E.S.E.	22½	
16. 9	16. 10	E.S.E.	S.E.	22½	
16. 10¾	16. 11	S.E.	S.	45	
16. 15¾	16. 16¼	S.	S.S.E.		22½
16. 20¼	16. 20½	S.S.E.	E.		67½
16. 22½	16. 23	E.	S.E.	45	
17. 0½	17. 1¼	S.E.	E.N.E.		67½
17. 2	17. 2¼	E.N.E.	S.W.	157½	
17. 3½	17. 5	S.W.	N.E.	180	
17. 14½	17. 14¾	N.E.	N.N.W.		67½
17. 16	17. 16¼	N.N.W.	W.		67½
17. 17¼	17. 17½	W.	N.	90	
17. 19¾	17. 19¾	N.	N.N.E.	22½	
17. 23¼	17. 23¾	N.N.E.	S.	157½	
18. 0¾	18. 1	S.	W.S.W.	67½	
18. 3	18. 4½	W.S.W.	S.W.		22½
18. 19	18. 20	S.W.	S.S.W.		22½
18. 23¼	19. 0	S.S.W.	S.		22½
19. 5¾	19. 6	S.	S.S.W.	22½	
19. 11	19. 11½	S.S.W.	S.W.	22½	
21. 12	21. 13	S.W.	W.S.W.	22½	
21. 19½	21. 20	W.S.W.	W.	22½	
22. 2½	22. 3	W.	W.S.W.		22½
June—*cont.*					
22. 7	22. 8½	W.S.W.	N.	112½	
22. 13½	22. 16	N.	N.E.	45	
22. 18	22. 18¼	N.E.	E.	45	
23. 5¾	23. 6	E.	N.E.		45
23. 10	23. 10¼	N.E.	E.N.E.	22½	
23. 12	23. 12¼	E.N.E.	E.	22½	
23. 14½	23. 15¾	E.	E.S.E.	22½	
23. 22	24. 1½	E.S.E.	N.E.		67½
24. 6½	24. 7½	N.E.	N.N.E.		22½
24. 18	24. 18¼	N.N.E.	N.E.	22½	
24. 21	24. 21½	N.E.	N.N.E.		22½
25. 0¼	25. 0¾	N.N.E.	N.N.W.		45
25. 2	25. 3¼	N.N.W.	N.	22½	
25. 11	25. 11½	N.	N.E.	45	
25. 14½	25. 15	N.E.	N.		45
25. 17½	25. 17¾	N.	N.N.E.	22½	
25. 19¼	25. 19½	N.N.E.	N.		22½
25. 22	25. 22¾	N.	N.N.W.		22½
26. 11	26. 13	N.N.W.	N.N.E.	45	
26. 19¼	26. 19½	N.N.E.	N.E.	22½	
26. 23	26. 23½	N.E.	W.	225	
27. 3¼	27. 3½	W.	W.S.W.		22½
27. 13½	27. 13¾	W.S.W.	W.	22½	
27. 22	28. 0	W.	W.S.W.		22½
28. 12	28. 12¾	W.S.W.	S.W.		22½
29. 6¾	29. 8½	S.W.	S.E.		90
29. 12½	29. 13	S.E.	E.		45
29. 22½	29. 23	E.	E.N.E.		22½
30. 8	30. 8½	E.N.E.	N.E.		22½
30. 18	30. 18¼	N.E.	N.		45
30. 23	30. 23¼	N.	N.N.E.	22½	
			Sums	2835	1620
July.					
1. 7¼	1. 7½	N.N.E.	S.W.		157½
2. 18½	2. 19½	S.W.	W.S.W.	22½	
3. 17¾	3. 18¾	W.S.W.	N.N.E.	135	
4. 3	4. 4	N.N.E.	N.E.	22½	
4. 7¾	4. 8¼	N.E.	E.N.E.	22½	
4. 9¼	4. 9½	E.N.E.	N.E.		22½
4. 13½	4. 14	N.E.	E.	45	
4. 15¾	4. 16¼	E.	E.S.E.	22½	
4. 18¼	4. 18½	E.S.E.	E.		22½
4. 20	4. 20¼	E.	N.E.		45
4. 23¼	4. 23¾	N.E.	S.E.	90	
5. 1¼	5. 2	S.E.	N.E.		90
5. 6¾	5. 7	N.E.	N.N.E.		22½
5. 14¼	5. 14½	N.N.E.	N.N.W.		45
5. 19¼	5. 19½	N.N.W.	N.	22½	
5. 21¾	5. 22	N.	W.S.W.		112½
5. 22½	5. 22¾	W.S.W.	N.N.W.	90	
6. 0¼	6. 0½	N.N.W.	N.W.		22½
6. 6¾	6. 7½	N.W.	N.	45	

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

Greenwich Civil Time. From	Greenwich Civil Time. To	Change of Direction. From	Change of Direction. To	Amount of Motion. Direct.	Amount of Motion. Retrograde.
				°	°
July—*cont.*					
d h	d h				
7. 8¼	7. 8½	N.	N.N.E.	22½	
7. 10¼	7. 11½	N.N.E.	W.S.W.		135
7. 13	7. 13¾	W.S.W.	W.N.W.	45	
7. 15¼	7. 15½	W.N.W.	W.S.W.		45
7. 19¼	7. 19½	W.S.W.	S.W.		22½
7. 22	7. 23½	S.W.	W.S.W.	22½	
8. 6½	8. 6¾	W.S.W.	N.E.	202½	
8. 11	8. 12½	N.E.	S.E.	90	
8. 17¼	8. 17½	S.E.	E.S.E.		22½
8. 20½	8. 22	E.S.E.	E.		22½
9. 6¼	9. 6½	E.	E.N.E.		22½
9. 8	9. 9½	E.N.E.	E.S.E.	45	
9. 13	9. 13½	E.S.E.	N.N.W.	225	
9. 14¼	9. 14½	N.N.W.	S.W.		112½
9. 15¾	9. 16	S.W.	N.	135	
9. 17¾	9. 19	N.	S.S.W.	202½	
9. 22	10. 0	S.S.W.	S.W.	22½	
10. 2½	10. 4	S.W.	W.S.W.	22½	
10. 14¾	10. 15	W.S.W.	S.W.		22½
10. 23½	11. 0	S.W.	W.S.W.	22½	
11. 3½	11. 4½	W.S.W.	W.	22½	
11. 18	11. 18½	W.	W.S.W.		22½
12. 4	12. 4¼	W.S.W.	W.	22½	
12. 6	12. 6¼	W.	W.S.W.		22½
12. 17½	12. 18¼	W.S.W.	W.N.W.	45	
12. 21	12. 22	W.N.W.	W.		22½
13. 0	13. 2	W.	W.S.W.		22½
13. 5½	13. 6	W.S.W.	W.	22½	
13. 8¼	13. 10	W.	N.N.W.	67½	
13. 17¾	13. 18¼	N.N.W.	N.W.		22½
13. 21½	13. 22¾	N.W.	W.S.W.		67½
14. 7¾	14. 8	W.S.W.	W.	22½	
14. 15½	14. 16	W.	W.N.W.	22½	
14. 18	14. 18½	W.N.W.	W.S.W.		45
14. 23	15. 0	W.S.W.	W.	22½	
15. 7¼	15. 8½	W.	W.S.W.		22½
16. 0¾	16. 1	W.S.W.	W.	22½	
16. 2½	16. 3½	W.	W.S.W.		22½
16. 5¼	16. 7½	W.S.W.	W.N.W.	45	
16. 10¼	16. 12	W.N.W.	W.S.W.		45
16. 14½	16. 14¾	W.S.W.	W.	22½	
16. 16½	16. 17½	W.	N.W.	45	
16. 21½	16. 22½	N.W.	W.		45
17. 0¼	17. 0¾	W.	W.S.W.		22½
17. 2½	17. 2¾	W.S.W.	S.W.		22½
17. 5¾	17. 6	S.W.	W.S.W.	22½	
17. 8¼	17. 9¼	W.S.W.	W.N.W.	45	
17. 12½	17. 13	W.N.W.	W.		22½
17. 20	17. 21½	W.	W.S.W.		22½
18. 11¼	18. 11¾	W.S.W.	N.N.W.	90	
18. 18½	18. 18¾	N.N.W.	N.E.	67½	
19. 6½	19. 6¾	N.E.	N.N.E.		22½
19. 13½	19. 14	N.N.E.	N.		22½
19. 15½	19. 15¾	N.	E.S.E.		247½
19. 16	19. 16¼	E.S.E.	S.W.		247½
20. 2	20. 4	S.W.	W.S.W.	22½	
20. 11¼	20. 11½	W.S.W.	W.	22½	
20. 14	20. 14¼	W.	W.N.W.	22½	
20. 15¼	20. 16	W.N.W.	N.N.W.	45	
July—*cont.*					
20. 22¼	20. 22¾	N.N.W.	W.S.W.		90
21. 4½	21. 4¾	W.S.W.	S.W.		22½
21. 8½	21. 8¾	S.W.	N.	135	
21. 10	21. 10¼	N.	N.E.	45	
21. 11¼	21. 11½	N.E.	W.S.W.		157½
21. 14	21. 14¼	W.S.W.	S.S.E.		90
21. 16¼	21. 16½	S.S.E.	N.E.		112½
21. 17¾	21. 18½	N.E.	S.S.E.	112½	
21. 21	21. 22½	S.S.E.	S.W.	67½	
22. 1½	22. 2¼	S.W.	W.S.W.	22½	
22. 16	22. 16¼	W.S.W.	W.	22½	
22. 19	22. 19¼	W.	W.N.W.	22½	
22. 21¾	22. 22	W.N.W.	W.		22½
22. 23½	23. 0½	W.	W.S.W.		22½
23. 12½	23. 13¾	W.S.W.	W.N.W.	45	
23. 16¾	23. 18	W.N.W.	N.N.W.	45	
24. 3	24. 4	N.N.W.	N.	22½	
24. 10	24. 10¼	N.	N.W.		45
24. 13¼	24. 13½	N.W.	W.S.W.		67½
24. 18½	24. 20¼	W.S.W.	S.		67½
24. 22¾	24. 23½	S.	S.W.	45	
25. 21	25. 21½	S.W.	W.S.W.	22½	
26. 0½	26. 1	W.S.W.	S.W.		22½
26. 14	26. 14½	S.W.	S.S.W.		22½
27. 0	27. 0½	S.S.W.	S.W.	22½	
27. 3	27. 5	S.W.	N.E.	180	
27. 8¼	27. 9	N.E.	E.	45	
27. 11½	27. 11¾	E.	E.S.E.	22½	
27. 12½	27. 12¾	E.S.E.	S.S.E.		315
27. 12¾	27. 13	S.S.E.	N.N.E.		135
27. 21½	27. 21¾	N.N.E.	N.E.	22½	
28. 0½	28. 3	N.E.	N.		45
28. 8	28. 8½	N.	N.N.E.	22½	
28. 14¾	28. 15¾	N.N.E.	N.E.	22½	
28. 17	28. 18¼	N.E.	E.S.E.	67½	
29. 3	29. 3½	E.S.E.	S.E.	22½	
29. 8	29. 8¼	S.E.	S.S.W.	67½	
29. 14	29. 15	S.S.W.	S.W.	22½	
30. 6	30. 6½	S.W.	W.S.W.	22½	
30. 8¾	30. 9	W.S.W.	W.	22½	
30. 20	30. 20½	W.	W.S.W.		22½
31. 0	31. 1	W.S.W.	S.W.		22½
31. 5	31. 6	S.W.	W.S.W.	22½	
31. 13¼	31. 14	W.S.W.	S.W.		22½
31. 16	31. 16¼	S.W.	W.N.W.	67½	
31. 18½	31. 19¾	W.N.W.	W.S.W.		45
			Sums	3352½	3487½
August.					
1. 9	1. 9½	W.S.W.	S.W.		22½
1. 13	1. 13¼	S.W.	W.S.W.	22½	
1. 18¼	1. 18½	W.S.W.	W.N.W.		315
1. 18¾	1. 19	W.N.W.	S.W.		67½
Aug.—*cont.*					
1. 21½	1. 22½	S.W.	W.S.W.	22½	
2. 1¾	2. 2	W.S.W.	S.W.		22½
2. 6	2. 7	S.W.	W.S.W.	22½	
2. 10	2. 10½	W.S.W.	S.W.		22½
2. 12	2. 12½	S.W.	W.S.W.	22½	
2. 14½	2. 14½	W.S.W.	S.W.		22½
2. 20½	2. 20¾	S.W.	S.S.W.		22½
2. 22½	2. 23	S.S.W.	S.S.E.		45
3. 1¼	3. 1½	S.S.E.	S.E.		22½
3. 7½	3. 7¾	S.E.	S.S.E.	22½	
3. 14½	3. 17	S.S.E.	S.S.W.	45	
5. 3	5. 3½	S.S.W.	S.W.	22½	
5. 13	5. 13½	S.W.	W.S.W.	22½	
5. 16½	5. 17½	W.S.W.	N.W.	67½	
5. 18½	5. 20	N.W.	W.S.W.		67½
6. 2½	6. 3	W.S.W.	S.W.		22½
6. 5½	6. 6½	S.W.	W.S.W.	22½	
6. 13¼	6. 14½	W.S.W.	S.W.		22½
6. 19½	6. 21	S.W.	S.		45
7. 0¾	7. 1½	S.	S.E.		45
7. 7	7. 7½	S.E.	S.S.E.	22½	
7. 8¾	7. 9	S.S.E.	S.	22½	
7. 14	7. 14½	S.	S.S.W.	22½	
7. 21½	7. 23	S.S.W.	S.W.	22½	
8. 6	8. 7	S.W.	W.S.W.	22½	
8. 14¾	8. 15	W.S.W.	S.W.		22½
8. 19½	8. 20	S.W.	S.S.W.		22½
9. 4	9. 5	S.S.W.	S.W.	22½	
9. 15	9. 15¾	S.W.	W.S.W.	22½	
9. 17¼	9. 17½	W.S.W.	S.W.		22½
10. 6	10. 6½	S.W.	W.S.W.	22½	
10. 11½	10. 11¾	W.S.W.	S.W.		22½
10. 14½	10. 15	S.W.	W.N.W.	67½	
10. 15¾	10. 17	W.N.W.	S.W.		67½
10. 20	10. 21½	S.W.	W.S.W.	22½	
11. 7	11. 7¾	W.S.W.	W.N.W.	45	
11. 15	11. 15½	W.N.W.	N.W.	22½	
11. 19¾	11. 21½	N.W.	W.S.W.		67½
12. 9½	12. 10	W.S.W.	W.	22½	
12. 17	12. 18¼	W.	W.S.W.		22½
13. 9¼	13. 9½	W.S.W.	N.W.	67½	
13. 12	13. 12¼	N.W.	W.N.W.		22½
13. 14	13. 15¼	W.N.W.	N.	67½	
13. 16½	13. 16¾	N.	N.E.	45	
13. 21¼	13. 22½	N.E.	E.	45	
14. 1¼	14. 1½	E.	N.E.		45
14. 10	14. 10½	N.E.	E.	45	
14. 12½	14. 13	E.	E.S.E.	22½	
14. 20¾	14. 22¾	E.S.E.	E.N.E.		45
15. 10½	15. 11	E.N.E.	E.	22½	
15. 15	15. 15¼	E.	E.N.E.		22½
15. 17¾	15. 18¼	E.N.E.	E.	22½	
15. 21¼	16. 0	E.	N.E.		45
16. 8¾	16. 9¼	N.E.	E.N.E.	22½	
16. 10¾	16. 11½	E.N.E.	E.	22½	
16. 14	16. 14¼	E.	E.N.E.		22½
16. 18	16. 18½	E.N.E.	E.	22½	
16. 21	17. 0	E.	N.E.		45
17. 9	17. 10	N.E.	E.	45	

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

Greenwich Civil Time. From	Greenwich Civil Time. To	Change of Direction. From	Change of Direction. To	Amount of Motion. Direct.	Amount of Motion. Retrograde.
Aug.—*cont.*				°	°
d h	d h				
17. 11½	17. 11¾	E.	E.S.E.	22½	
17. 19	17. 20	E.S.E.	S.E.	22½	
17. 22	17. 23¾	S.E.	S.S.E.	22½	
18. 2½	18. 4½	S.S.E.	S.S.W.	45	
18. 10	18. 10¼	S.S.W.	S.W.	22½	
18. 21½	18. 21¾	S.W.	W.S.W.	22½	
19. 0	19. 0½	W.S.W.	S.W.		22½
19. 7½	19. 8	S.W.	W.S.W.	22½	
19. 21¾	19. 22½	W.S.W.	S.W.		22½
20. 5¼	20. 5½	S.W.	S.S.W.		22½
20. 8½	20. 9½	S.S.W.	W.S.W.	45	
21. 1¼	21. 1½	W.S.W.	S.W.		22½
21. 23½	22. 0	S.W.	S.S.W.		22½
22. 9½	22. 9¾	S.S.W.	W.	67½	
22. 11¼	22. 11¾	W.	W.S.W.		22½
22. 14¼	22. 14½	W.S.W.	S.W.		22½
22. 18½	22. 20	S.W.	S.		45
22. 23	22. 23¼	S.	S.S.W.	22½	
23. 2	23. 2¼	S.S.W.	S.W.	22½	
23. 4½	23. 7½	S.W.	W.S.W.	22½	
23. 13½	23. 14⅓	W.S.W.	W.	22½	
23. 16½	23. 16¾	W.	W.S.W.		22½
24. 3½	24. 4½	W.S.W.	S.W.		22½
24. 13¾	24. 15	S.W.	W.S.W.	22½	
24. 19	24. 20¼	W.S.W.	S.E.		112½
24. 23	24. 23¼	S.E.	E.N.E.		67½
25. 4½	25. 4¾	E.N.E.	S.E.	67½	
25. 6¾	25. 7	S.E.	S.S.E.	22½	
25. 9	25. 9¼	S.S.E.	S.E.		22½
25. 15½	25. 16	S.E.	E.		45
25. 18½	25. 18¾	E.	E.S.E.	22½	
26. 0½	26. 1	E.S.E.	S.E.	22½	
26. 2¾	26. 3	S.E.	S.S.E.	22½	
26. 4¾	26. 5¼	S.S.E.	S.S.W.	45	
26. 12	26. 13	S.S.W.	W.S.W.	45	
26. 15¼	26. 15½	W.S.W.	S.W.		22½
26. 17½	26. 20	S.W.	S.S.W.		22½
27. 7	27. 10	S.S.W.	W.	67½	
27. 13	27. 13½	W.	W.S.W.		22½
27. 21½	27. 22½	W.S.W.	S.W.		22½
28. 0½	28. 1¼	S.W.	S.S.W.		22½
28. 2¾	28. 3¾	S.S.W.	S.E.		67½
28. 4¾	28. 5¼	S.E.	S.	45	
28. 7¾	28. 8¼	S.	S.W.	45	
28. 11	28. 11½	S.W.	W.S.W.	22½	
28. 13	28. 13½	W.S.W.	S.W.		22½
28. 14½	28. 14¾	S.W.	W.S.W.	22½	
29. 6	29. 6½	W.S.W.	N.W.	67½	
29. 14¾	29. 15	N.W.	N.N.W.	22½	
30. 14½	30. 16	N.N.W.	N.	22½	
30. 19¾	30. 20	N.	S.S.W.	202½	
30. 21¼	30. 23¼	S.S.W.	W.S.W.	45	
			Sums	2317½	1957½
September.				°	°
d h	d h				
1. 10	1. 10¼	W.S.W.	W.	22½	
1. 13¾	1. 14	W.	W.S.W.		22½
2. 1	2. 1½	W.S.W.	S.W.		22½
2. 7¼	2. 7¾	S.W.	W.N.W.	67½	
2. 11¾	2. 12	W.N.W.	W.		22½
2. 21½	2. 21¾	W.	W.S.W.		22½
2. 23¼	2. 23½	W.S.W.	S.W.		22½
3. 6½	3. 7½	S.W.	W.S.W.	22½	
3. 14	3. 15½	W.S.W.	W.	22½	
3. 23½	4. 0½	W.	N.W.	45	
4. 1¾	4. 4	N.W.	W.S.W.		67½
4. 12½	4. 12¾	W.S.W.	S.W.		22½
5. 18	5. 18½	S.W.	S.S.W.		22½
5. 22	5. 22¼	S.S.W.	S.		22½
6. 0	6. 1	S.	S.S.W.	22½	
6. 5½	6. 6	S.S.W.	S.W.	22½	
6. 7¼	6. 7½	S.W.	N.E.		180
6. 8¼	6. 8½	N.E.	E.S.E.	67½	
6. 9¼	6. 9¾	E.S.E.	E.N.E.	45	
6. 11	6. 11¼	E.N.E.	E.S.E.	45	
6. 12¼	6. 14½	E.S.E.	S.W.	112½	
8. 6¾	8. 7¼	S.W.	W.S.W.	22½	
8. 13	8. 13½	W.S.W.	S.W.		22½
9. 15½	9. 16	S.W.	S.S.W.		22½
9. 18½	9. 20½	S.S.W.	W.S.W.	45	
10. 2½	10. 3½	W.S.W.	S.W.		22½
10. 8	10. 8¾	S.W.	W.S.W.	22½	
10. 10½	10. 10¾	W.S.W.	W.	22½	
10. 16	10. 19	W.	W.S.W.		22½
11. 0½	11. 1	W.S.W.	S.W.		22½
11. 7	11. 7¾	S.W.	W.S.W.	22½	
11. 12¼	11. 13¼	W.S.W.	S.E.	247½	
11. 16¾	11. 17¼	S.E.	S.W.	90	
11. 19¾	11. 20¼	S.W.	W.S.W.	22½	
12. 0¾	12. 1	W.S.W.	N.W.	67½	
12. 3	12. 3¼	N.W.	W.S.W.		67½
12. 11	12. 11½	W.S.W.	W.	22½	
12. 14	12. 14¼	W.	N.W.	45	
12. 16¼	12. 16½	N.W.	W.S.W.		67½
12. 18	12. 20	W.S.W.	S.W.		22½
13. 16	13. 17½	S.W.	W.S.W.	22½	
13. 19½	13. 19¾	W.S.W.	N.N.W.	90	
13. 20¾	13. 21	N.N.W.	N.E.	67½	
13. 22½	13. 23½	N.E.	N.		45
14. 11½	14. 12	N.	N.N.E.	22½	
14. 19¾	14. 20¼	N.N.E.	N.E.	22½	
14. 23½	14. 23¾	N.E.	N.N.E.		22½
15. 1½	15. 1¾	N.N.E.	N.		22½
15. 9	15. 9¼	N.	N.N.E.	22½	
15. 13½	15. 14½	N.N.E.	N.		22½
15. 18½	15. 18¾	N.	W.S.W.		112½
15. 21	15. 21¼	W.S.W.	S.W.		22½
15. 23	15. 23¼	S.W.	W.S.W.	22½	
16. 8¼	16. 8½	W.S.W.	N.	112½	
16. 14	16. 15	N.	N.N.E.	22½	
16. 18½	16. 20	N.N.E.	E.	67½	
16. 21¼	16. 21½	E.	S.S.E.	67½	
16. 23¾	17. 0	S.S.E.	S.E.		22½
17. 1½	17. 1¾	S.E.	S.	45	
Sept.—*cont.*				°	°
d h	d h				
17. 3¼	17. 3½	S.	N.E.		135
17. 9	17. 9¼	N.E.	E.N.E.	22½	
17. 10¼	17. 10½	E.N.E.	E.S.E.	45	
17. 18	17. 18½	E.S.E.	E.		22½
17. 22	17. 23	E.	E.N.E.		22½
18. 18	18. 19	E.N.E.	N.E.		22½
19. 0¾	19. 1	N.E.	N.N.E.		22½
19. 3¾	19. 4	N.N.E.	N.		22½
19. 15	19. 15½	N.	N.N.W.		22½
20. 0½	20. 0¾	N.N.W.	W.S.W.		90
20. 8	20. 8½	W.S.W.	N.	112½	
20. 15	20. 16½	N.	N.N.E.	22½	
20. 23½	20. 23¾	N.N.E.	N.		22½
21. 8¾	21. 9	N.	N.N.E.	22½	
21. 15½	21. 16	N.N.E.	N.E.	22½	
22. 0½	22. 0¾	N.E.	N.		45
22. 2½	22. 3	N.	N.E.	45	
22. 7¼	22. 7½	N.E.	E.N.E.	22½	
22. 9½	22. 10	E.N.E.	E.	22½	
22. 16¼	22. 16¾	E.	E.N.E.		22½
24. 1½	24. 2¼	E.N.E.	N.E.		22½
24. 17	24. 18	N.E.	N.N.E.		22½
25. 0	25. 1	N.N.E.	N.		22½
25. 7¼	25. 7½	N.	N.N.E.	22½	
25. 10½	25. 10¾	N.N.E.	N.		22½
26. 3	26. 3½	N.	N.N.E.	22½	
26. 20¾	26. 21	N.N.E.	S.E.	112½	
26. 22½	27. 5	S.E.	E.S.E.	337½	
27. 9½	27. 10	E.S.E.	E.		22½
27. 12½	27. 13	E.	E.S.E.	22½	
27. 14	27. 16	E.S.E.	E.N.E.		45
27. 21	27. 23	E.N.E.	E.	22½	
28. 2	28. 2½	E.	N.E.		45
28. 10	28. 10¼	N.E.	E.N.E.	22½	
28. 11¾	28. 12	E.N.E.	E.	22½	
28. 18	28. 20¾	E.	N.E.		45
29. 17½	29. 18½	N.E.	N.N.E.		22½
30. 3¾	30. 4	N.N.E.	N.		22½
30. 17¼	30. 17¾	N.	N.N.W.		22½
30. 22½	30. 23	N.N.W.	N.W.		22½
			Sums	2587½	1800
October.					
1. 0¾	1. 2½	N.W.	W.S.W.		67½
1. 7¼	1. 8	W.S.W.	W.	22½	
1. 16	1. 17¼	W.	N.W.	45	
2. 0¼	2. 1	N.W.	N.N.W.	22½	
2. 10	2. 10¾	N.N.W.	N.W.		22½
2. 23¾	3. 0½	N.W.	N.N.W.	22½	
3. 5	3. 5½	N.N.W.	N.	22½	
3. 13¼	3. 14¼	N.	W.		90
3. 17½	3. 18½	W.	S.W.		45
4. 3	4. 3½	S.W.	W.S.W.	22½	

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

Greenwich Civil Time. From	Greenwich Civil Time. To	Change of Direction. From	Change of Direction. To	Amount of Motion. Direct.	Amount of Motion. Retrograde.
Oct.—*cont.*				°	°
d h	d h				
4. 10½	4. 11½	W.S.W.	S.W.		22½
4. 12¾	4. 13¾	S.W.	W.S.W.	22½	
5. 3	5. 3¾	W.S.W.	W.	22½	
5. 6	5. 9½	W.	N.N.W.	67½	
6. 15½	6. 16½	N.N.W.	N.	22½	
6. 19½	6. 23½	N.	W.S.W.		112½
7. 4	7. 4½	W.S.W.	W.	22½	
7. 7½	7. 8	W.	N.W.	45	
7. 16½	7. 16¾	N.W.	W.N.W.		22½
7. 18	7. 20½	W.N.W.	W.S.W.		45
8. 6	8. 7½	W.S.W.	N.N.W.	90	
8. 8¾	8. 9¾	N.N.W.	N.E.	67½	
8. 12¾	8. 13	N.E.	N.		45
8. 22¾	8. 23¾	N.	S.S.W.		157½
9. 2	9. 2½	S.S.W.	W.S.W.	45	
9. 6	9. 7½	W.S.W.	W.	22½	
9. 10	9. 12¾	W.	N.N.W.	67½	
9. 17½	9. 18½	N.N.W.	N.	22½	
10. 6½	10. 6¾	N.	N.N.E.	22½	
11. 13	11. 13¼	N.N.E.	N.		22½
12. 10½	12. 11½	N.	W.		90
12. 12¾	12. 13½	W.	N.W.	45	
12. 17½	12. 17¾	N.W.	W.N.W.		22½
12. 20¾	12. 21	W.N.W.	W.		22½
13. 0¼	13. 1¾	W.	W.S.W.		22½
13. 7¾	13. 8¾	W.S.W.	W.N.W.	45	
13. 10¼	13. 10½	W.N.W.	N.	67½	
13. 22½	13. 23	N.	N.N.W.		22½
14. 5½	14. 5¾	N.N.W.	N.W.		22½
14. 7	14. 7½	N.W.	N.N.W.	22½	
14. 9½	14. 9¾	N.N.W.	N.W.		22½
14. 12	14. 12¼	N.W.	W.N.W.		22½
14. 15½	14. 16½	W.N.W.	W.S.W.	45	
15. 10½	15. 11	W.S.W.	W.	22½	
15. 16¾	15. 17	W.	N.	90	
15. 18	15. 18¾	N.	N.N.W.		22½
15. 19¾	15. 20¼	N.N.W.	N.W.		22½
15. 21½	15. 22¾	N.W.	N.	45	
16. 20½	16. 20¾	N.	S.W.	225	
17. 5	17. 5½	S.W.	W.S.W.	22½	
17. 10¼	17. 10½	W.S.W.	N.W.	67½	
17. 12½	17. 12¾	N.W.	W.N.W.		22½
17. 14¼	17. 14½	W.N.W.	N.N.W.	45	
17. 16½	17. 18¼	N.N.W.	W.N.W.		45
17. 20¾	17. 22½	W.N.W	S.W.		67½
18. 6	18. 7½	S.W.	W.S.W.	22½	
18. 9½	18. 10	W.S.W.	W.	22½	
18. 11¼	18. 11½	W.	W.S.W.		22½
18. 17	18. 17¼	W.S.W.	S.W.		22½
18. 19	18. 20	S.W.	E.N.E.		157½
18. 23½	18. 23¾	E.N.E.	N.E.		22½
19. 17	19. 18	N.E.	N.N.E.		22½
20. 7½	20. 7¾	N.N.E.	N.		22½
20. 9¾	20. 10	N.	N.N.E.	22½	
20. 17	20. 17¼	N.N.E.	N.		22½
20. 21	20. 21¼	N.	W.S.W.		112½
21. 9	21. 10¼	W.S.W.	W.N.W.	45	
21. 11¼	21. 11½	W.N.W.	N.W.	22½	
21. 14¾	21. 16¾	N.W.	N.	45	
Oct.—*cont.*					
d h	d h				
21. 23	21. 23¼	N.	N.N.W.		22½
22. 3	22. 3¼	N.N.W.	W.N.W.		45
22. 6	22. 6¼	W.N.W.	W.S.W.		45
22. 9	22. 9¾	W.S.W.	N.N.W.	90	
22. 15	22. 15¼	N.N.W.	N.	22½	
24. 18	24. 20	N.	N.E.	45	
24. 21¼	24. 23	N.E.	N.		45
25. 14	25. 14¼	N.	N.N.E.	22½	
26. 1	26. 2½	N.N.E.	S.W.		157½
26. 4	26. 4½	S.W.	S.		45
26. 8	26. 10	S.	W.S.W.	67½	
26. 11¾	26. 12	W.S.W.	S.W.		22½
26. 23	27. 0	S.W.	W.S.W.	22½	
27. 4½	27. 6	W.S.W.	W.N.W.	45	
27. 7¾	27. 8	W.N.W.	N.W.	22½	
27. 9½	27. 9¾	N.W.	N.N.W.	22½	
27. 12¼	27. 12¾	N.N.W.	N.W.		22½
27. 16¼	27. 16½	N.W.	W.N.W.		22½
27. 17½	27. 18½	W.N.W.	W.S.W.		45
28. 13¼	28. 13½	W.S.W.	S.W.		22½
28. 16½	28. 17½	S.W.	S.S.W.		22½
28. 18¾	28. 19½	S.S.W.	S.		22½
28. 21½	28. 22½	S.	S.S.W.	22½	
29. 0½	29. 1	S.S.W.	S.W.	22½	
29. 3½	29. 4	S.W.	S.S.W.		22½
29. 8	29. 9¼	S.S.W.	W.S.W.	45	
29. 11¾	29. 12	W.S.W.	S.W.		22½
29. 21	30. 0	S.W.	S.		45
30. 4½	30. 5	S.	S.S.W.	22½	
30. 9¾	30. 10	S.S.W.	S.W.	22½	
30. 15¼	30. 15½	S.W.	S.S.W.		22½
31. 0½	31. 2	S.S.W.	S.W.	22½	
31. 3½	31. 4	S.W.	W.S.W.	22½	
31. 13¼	31. 13½	W.S.W.	S.W.		22½
31. 22	1. 0½	S.W.	S.		45
			Sums	2115	2250
November.					
1. 3½	1. 5½	S.	S.E.		45
1. 15½	1. 16	S.E.	S.S.E.	22½	
1. 18	1. 18½	S.S.E.	S.	22½	
2. 1¼	2. 2	S.	S.S.W.	22½	
2. 12¾	2. 16¾	S.S.W.	S.E.		67½
3. 7½	3. 8½	S.E.	S.S.E.	22½	
3. 12¾	3. 14¾	S.S.E.	S.W.	67½	
3. 16	3. 16½	S.W.	S.S.W.		22½
3. 18½	3. 21	S.S.W.	S.S.E.		45
4. 9½	4. 10	S.S.E.	S.E.		22½
4. 12	4. 12½	S.E.	E.S.E.		22½
4. 16	4. 16½	E.S.E.	E.		22½
4. 20	4. 20¾	E.	E.N.E.		22½
5. 4¾	5. 5¼	E.N.E.	N.W.		112½
5. 6¼	5. 6½	N.W.	S.W.		90
Nov.—*cont.*					
d h	d h				
5. 11¾	5. 12	S.W.	S.S.W.		22½
5. 15	5. 15½	S.S.W.	S.W.	22½	
6. 17	6. 18½	S.W.	S.S.W.		22½
7. 3¾	7. 4	S.S.W.	N.E.		157½
7. 5	7. 6	N.E.	N.N.W.		67½
7. 10½	7. 11½	N.N.W.	W.S.W.		90
7. 17	7. 17¼	W.S.W.	S.S.W.		45
7. 23	7. 23¼	S.S.W.	W.S.W.	45	
8. 11¾	8. 12	W.S.W.	S.W.		22½
8. 14	8. 14½	S.W.	W.S.W.	22½	
8. 19	8. 19¼	W.S.W.	N.W.	67½	
8. 20¼	8. 21¼	N.W.	W.S.W.		67½
9. 3¾	9. 4	W.S.W.	N.	112½	
9. 10½	9. 11¼	N.	S.S.W.	202½	
9. 12	9. 13½	S.S.W.	N.N.E.		180
9. 14¾	9. 15¼	N.N.E.	S.	157½	
9. 22	9. 22¼	S.	S.E.		45
9. 23¼	9. 23½	S.E.	S.	45	
10. 1	10. 1¼	S.	S.E.		45
10. 10½	10. 10¾	S.E.	S.S.E.	22½	
11. 0½	11. 1	S.S.E.	S.	22½	
11. 11	11. 11¼	S.	S.S.W.	22½	
11. 17½	11. 18½	S.S.W.	S.		22½
11. 22¼	11. 22½	S.	N.W.	135	
12. 2	12. 2¾	N.W.	W.N.W.		22½
12. 4¼	12. 5½	W.N.W.	W.S.W.		45
12. 8½	12. 10½	W.S.W.	W.	22½	
12. 13	12. 15	W.	S.W.		45
12. 17	12. 19½	S.W.	S.E.		90
13. 1½	13. 2¾	S.E.	E.		45
13. 4½	13. 6½	E.	N.E.		45
13. 13¾	13. 16¼	N.E.	N.N.E.		22½
14. 1½	14. 2¾	N.N.E.	N.		22½
14. 6¾	14. 8	N.	N.N.E.	22½	
14. 12	14. 14	N.N.E.	N.E.	22½	
15. 16½	15. 16¾	N.E.	N.N.E.		22½
15. 19	15. 22	N.N.E.	N.		22½
16. 19¼	16. 19½	N.	N.N.W.		22½
17. 3	17. 3¼	N.N.W.	N.	22½	
17. 13¾	17. 14	N.	N.W.		45
17. 15½	17. 15¾	N.W.	N.	45	
17. 17½	17. 19½	N.	S.E.	135	
18. 1¾	18. 2¼	S.E.	E.N.E.		67½
18. 4¾	18. 5	E.N.E.	E.	22½	
18. 14¾	18. 15	E.	E.N.E.		22½
18. 18	18. 18¼	E.N.E.	N.E.		22½
19. 16½	19. 17	N.E.	N.N.E.		22½
19. 20¾	19. 21	N.N.E.	N.		22½
20. 17½	20. 18	N.	N.N.E.	22½	
20. 22¼	20. 22½	N.N.E.	S.W.	202½	
21. 12½	21. 17¼	S.W.	S.	315	
21. 20¾	21. 20¾	S.	S.W.	45	
22. 7½	22. 8	S.W.	S.S.W.		22½
23. 5	23. 6	S.S.W.	S.W.	22½	
23. 10½	23. 12	S.W.	W.N.W.	67½	
23. 14½	23. 15	W.N.W.	W.		22½
23. 21½	23. 22½	W.	W.S.W.		22½
24. 13	24. 13¼	W.S.W.	W.	22½	
24. 14½	24. 15½	W.	S.W.		45

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

Greenwich Civil Time. From	Greenwich Civil Time. To	Change of Direction. From	Change of Direction. To	Amount of Motion. Direct.	Amount of Motion. Retrograde.
Nov.—*cont.*				°	°
d h	d h				
24. 17½	24. 17¾	S.W.	W.S.W.	22½	
25. 0½	25. 1	W.S.W.	S.W.		22½
25. 7	25. 7¼	S.W.	S.S.W.		22½
25. 9	25. 9¼	S.S.W.	S.		22½
25. 11½	25. 11¾	S.	S.S.W.	22½	
25. 13½	25. 14	S.S.W.	S.		22½
25. 22	25. 23½	S.	S.S.W.	22½	
26. 1½	26. 3	S.S.W.	W.S.W.	45	
26. 4¾	26. 5¼	W.S.W.	S.W.		22½
26. 6½	26. 7	S.W.	S.S.W.		22½
26. 11	26. 13	S.S.W.	S.W.	22½	
26. 15½	26. 17¼	S.W.	S.S.W.		22½
26. 19½	26. 20½	S.S.W.	S.W.	22½	
26. 22¾	27. 1	S.W.	W.	45	
27. 7	27. 7½	W.	W.S.W.		22½
27. 9	27. 10½	W.S.W.	W.	22½	
27. 14	27. 14¾	W.	W.S.W.		22½
27. 23	28. 0	W.S.W.	S.W.		22½
28. 2½	28. 3¼	S.W.	S.S.W.		22½
28. 12¾	28. 13	S.S.W.	S.		22½
28. 19½	28. 19¾	S.	N.N.W.	157½	
28. 22¼	28. 23	N.N.W.	E.N.E.	90	
29. 2½	29. 3½	E.N.E.	N.N.E.		45
29. 8½	29. 9½	N.N.E.	N.E.	22½	
29. 13	29. 14½	N.E.	E.	45	
29. 17	29. 17¾	E.	E.N.E.		22½
30. 1½	30. 5½	E.N.E.	S.S.E.	90	
30. 9½	30. 10	S.S.E.	S.	22½	
30. 11	30. 12	S.	S.S.W.	22½	
30. 16¼	30. 16½	S.S.W.	S.		22½
30. 23½	30. 23¾	S.	S.E.		45
			Sums	2700	2385
December.					
1. 0¾	1. 3	S.E.	N.	225	
1. 16¼	1. 16½	N.	S.E.	135	
1. 18	1. 20½	S.E.	S.W.	90	
2. 0¼	2. 0¾	S.W.	S.S.E.		67½
2. 1¾	2. 2½	S.S.E.	S.W.	67½	
2. 13¼	2. 13½	S.W.	S.E.		90
2. 14½	2. 14¾	S.E.	S.	45	
2. 20	2. 20¼	S.	S.S.E.		22½
2. 23¼	2. 23½	S.S.E.	N.N.E.		135
3. 2½	3. 3	N.N.E	N.E.	22½	
3. 13½	3. 13¾	N.E.	E.	45	
4. 0	4. 0¼	E.	E.N.E.		22½
4. 3¼	4. 3¾	E.N.E.	S.	112½	
Dec.—*cont.*					
d h	d h				
4. 5	4. 6	S.	S.W.	45	
4. 8½	4. 9¼	S.W.	W.S.W.	22½	
4. 19½	4. 20	W.S.W.	S.W.		22½
5. 5¾	5. 6¼	S.W.	S.S.W.		22½
5. 22	6. 0½	S.S.W.	W.S W.	45	
6. 13	6. 14½	W.S.W.	S.W.		22½
6. 16	6. 16¼	S.W.	S.S.W.		22½
6. 21½	6. 22	S.S.W.	S.W.	22½	
7. 5	7. 5½	S.W.	W.S.W.	22½	
7. 15	7. 16½	W.S.W.	S.W.		22½
8. 5½	8. 6	S.W.	W.S.W.	22½	
8. 9	8. 9¾	W.S.W.	N.W.	67½	
8. 10¾	8. 11¾	N.W.	W.	45	
8. 19	8. 19½	W.	W.S.W.		22½
9. 12½	9. 12¾	W.S.W.	W.	22½	
9. 15	9. 17½	W.	N.N.W.	67½	
9. 22	10. 0¾	N.N.W.	W.S.W.	90	
10. 11½	10. 12½	W.S.W.	S.W.		22½
10. 18	10. 19	S.W.	S.	45	
10. 21	10. 21¼	S.	S.W.	45	
10. 22½	10. 22¾	S.W.	E.N.E.	157½	
11. 0	11. 0¼	E.N.E.	N.	67½	
11. 1¾	11. 2	N.	N.N.E.	22½	
11. 5½	11. 7	N.N.E.	N.E.	22½	
11. 8½	11. 8¾	N.E.	S.E.	90	
11. 14½	11. 15	S.E.	N.E.	90	
11. 18¾	11. 19	N.E.	S.E.	90	
11. 20	11. 20¼	S.E.	N.E.	90	
11. 22¼	11. 22¾	N.E.	S.S.W.	157½	
12. 0	12. 1½	S.S.W.	S.W.	22½	
12. 15½	12. 15¾	S.W.	N.E.	180	
12. 16¾	12. 17¼	N.E.	N.N.E.	22½	
12. 20¾	12. 21	N.N.E.	N.E.	22½	
12. 23½	12. 23¾	N.E.	N.N.W.	67½	
13. 2½	13. 3	N.N.W.	N.	22½	
13. 5½	13. 6¾	N.	W.	90	
13. 8	13. 8¼	W.	N.N.W.	67½	
13. 10½	13. 10¾	N.N.W.	S.W.	112½	
13. 14½	13. 15½	S.W.	W.S.W.	22½	
13. 17½	13. 18½	W.S.W.	N.N.W.	90	
13. 21½	13. 21¾	N.N.W.	S.W.	112½	
14. 2	14. 3¼	S.W.	W.N.W.	67½	
14. 4½	14. 4¾	W.N.W.	N.N.W.	45	
14. 6½	14. 6¾	N.N.W.	S.W.	112½	
14. 15¾	14. 16	S.W.	S.E.	90	
14. 17¾	14. 18	S.E.	N.N.W.	157½	
14. 20	14. 20¼	N.N.W.	N.	22½	
14. 22	14. 22¼	N.	N.N.W.	22½	
15. 1½	15. 2¼	N.N.W.	W.S.W.	90	
15. 4	15. 4¼	W.S.W.	N.W.	67½	
15. 5¼	15. 5½	N.W.	W.S.W.	67½	
15. 7¼	15. 7½	W.S.W.	W.	22½	
15. 13¾	15. 14	W.	W.N.W.	22½	
Dec.—*cont.*					
d h	d h				
15. 17½	15. 18	W.N.W.	N.N.W.	45	
15. 20¼	15. 20½	N.N.W.	W.		67½
16. 2	16. 2¼	W.	W.S.W.		22½
16. 4	16. 4¼	W.S.W.	S.W.		22½
16. 13½	16. 14	S.W.	W.S.W.	22½	
16. 21	16. 21¼	W.S.W.	S.W.		22½
17. 6½	17. 6¾	S.W.	S.E.		90
17. 12	17. 12¼	S.E.	S.S.E.	22½	
17. 17	17. 17½	S.S.E.	S.E.		22½
18. 4	18. 5½	S.E.	S.S.E.	22½	
19. 0	19. 0½	S.S.E.	S.S.W.	45	
19. 7½	19. 8	S.S.W.	S.W.	22½	
19. 12	19. 14	S.W.	W.S.W.	22½	
19. 22	19. 23	W.S.W.	S.W.		22½
20. 7¼	20. 7½	S.W.	W.S.W.	22½	
22. 16	22. 16½	W.S.W.	S.W.		22½
22. 21¾	22. 22¾	S.W.	S.S.W.		22½
23. 4½	23. 7½	S.S.W.	S.S.E.		45
23. 16	23. 16¼	S.S.E.	S.	22½	
23. 22	23. 23	S.	S.S.W.	22½	
24. 9	24. 9¼	S.S.W.	S.W.	22½	
24. 17½	24. 18	S.W.	S.S.W.		22½
24. 23½	25. 0½	S.S.W.	S.W.	22½	
26. 5	26. 7½	S.W.	S.		45
26. 10½	26. 11	S.	S.S.E.		22½
26. 13½	26. 14½	S.S.E.	E.S.E.		45
26. 16¾	26. 17	E.S.E.	S.E.	22½	
27. 2¼	27. 3½	S.E.	E.		45
27. 6½	27. 6¾	E.	E.S.E.	22½	
27. 20	27. 20½	E.S.E.	E.		22½
28. 0	28. 0½	E.	E.N.E.		22½
28. 9	28. 10¼	E.N.E.	E.S.E.	45	
28. 14¼	28. 17	E.S.E.	S.S.W.	90	
28. 18½	28. 19¾	S.S.W.	S.E.		67½
28. 21½	28. 23¼	S.E.	E.N.E.		67½
29. 2¾	29. 3	E.N.E.	N.E.		22½
29. 6	29. 6½	N.E.	N.N.E.		22½
29. 8¼	29. 8½	N.N.E.	N.		22½
29. 11¼	29. 11½	N.	N.N.W.		22½
29. 15	29. 17	N.N.W.	W.N.W.		45
29. 21¼	29. 23¼	W.N.W.	N.	67½	
30. 5	30. 5½	N.	N.N.E.	22½	
30. 10	30. 10¼	N.N.E.	N.E.	22½	
30. 12½	30. 14	N.E.	E.	45	
30. 16	30. 16¼	E.	E.S.E.	22½	
30. 18¾	30. 19	E.S.E.	S.E.	22½	
31. 0	31. 0½	S.E.	E.S.E.		22½
			Sums	2880	2902½

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

Excess of Motion in each Month.

1905.	Direct.	Retrograde.	1905.	Direct.	Retrograde.
January	922½°	°	July	°	135°
February	1080		August	360	
March	...		September	787½	
April	1417½		October		135
May	2182½		November	315	
June	1215		December		22½

The whole excess of direct motion for the year was 7987½°.

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	1905.												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	13·2	14·6	14·1	11·0	10·5	8·7	8·5	9·6	9·4	11·4	11·8	8·1	10·9
2	12·6	15·0	13·7	10·9	10·0	8·4	8·3	9·0	9·1	11·4	12·5	8·9	10·8
3	12·3	14·2	13·8	10·8	10·1	8·9	7·9	9·3	9·3	11·3	11·9	8·9	10·7
4	12·6	15·1	13·8	10·9	9·8	8·8	8·0	9·0	9·7	11·3	11·4	9·5	10·8
5	12·8	15·0	13·1	10·6	9·6	9·0	7·6	9·0	9·8	11·6	12·0	9·2	10·8
6	12·7	15·5	13·4	11·2	9·9	8·8	7·5	8·9	10·0	11·6	11·4	8·6	10·8
7	12·8	14·7	13·5	11·5	10·0	9·7	8·1	9·5	9·7	11·7	11·7	8·8	11·0
8	12·2	14·5	13·6	12·7	10·9	10·6	8·5	10·4	10·3	11·5	11·8	9·0	11·3
9	12·5	15·8	14·4	14·7	11·6	11·1	9·4	11·5	11·4	11·7	11·8	9·0	12·1
10	12·9	17·5	15·0	15·3	12·5	11·8	9·8	13·0	12·3	12·4	12·6	8·9	12·8
11	13·5	18·2	16·5	15·1	13·6	12·1	10·2	14·0	12·8	12·3	12·5	9·6	13·4
Noon.	13·9	19·0	17·2	16·2	13·4	12·8	10·7	15·9	14·0	13·1	12·9	10·0	14·1
13h	14·9	20·5	18·1	17·2	13·3	14·3	11·3	15·2	13·8	13·9	13·4	10·7	14·7
14	15·2	19·7	17·9	16·4	14·5	13·9	11·4	15·2	13·9	13·7	12·9	10·7	14·6
15	14·8	19·3	18·5	16·0	14·1	14·2	11·1	15·1	13·8	13·6	12·5	10·6	14·5
16	14·5	19·3	17·4	15·5	13·6	14·6	11·4	14·5	13·6	13·4	11·4	9·6	14·1
17	13·0	17·3	16·0	15·6	14·2	14·0	11·6	14·5	14·2	13·0	10·9	8·8	13·6
18	13·6	16·6	14·9	15·2	13·5	13·3	11·4	14·1	12·4	12·0	10·8	8·8	13·1
19	14·1	15·8	15·4	14·1	12·7	13·3	10·6	12·4	12·3	11·7	11·1	9·7	12·8
20	13·8	16·2	14·1	13·5	11·0	12·0	10·4	11·3	11·8	11·6	12·1	9·5	12·3
21	14·2	15·8	14·5	12·8	10·5	11·0	10·5	10·6	11·3	11·5	11·6	9·1	11·9
22	14·1	15·1	14·2	12·1	10·8	10·2	9·5	10·4	10·8	12·0	10·8	9·2	11·6
23	14·1	16·3	14·7	12·0	9·9	9·7	9·5	10·8	10·2	12·0	11·4	8·9	11·6
Midnight.	13·5	14·6	15·0	11·5	9·6	9·2	9·4	10·4	9·6	11·7	11·6	8·5	11·2
Means	13·5	16·5	15·1	13·5	11·7	11·3	9·7	11·8	11·8	12·1	11·9	9·3	12·3
Greatest Hourly Measures	34	37	41	35	41	32	23	33	36	33	44	24	...
Least Hourly Measures	1	1	1	1	2	1	1	0	0	1	0	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.)

1905.

Days of the Month.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.
d												
1	+ 890	+ 586	+ 926	+ 950	+ 359	+ 595	+ 212	+ 600	+ 288	+ 284	...	+ 479
2	+ 655	+ 681	+ 660	+ 593	+ 337	+ 528	+ 196	+ 522	...	+ 304	+ 131	+ 495
3	+ 940	+ 662	+ 961	+ 725	+ 763	+ 502	+ 264	+ 148	...	+ 579	+ 193	+ 389
4	+ 355	+ 320	+ 755	+ 603	+ 835	+ 508	+ 336	+ 177	...	+ 243	+ 190	+ 540
5	+ 490	...	+ 121	+ 868	+ 665	+ 207	+ 464	+ 202	+ 186	+ 678	+ 141	+ 380
6	+ 489	+ 486	+ 385	+1334	+ 983	+ 548	+ 701	+ 332	+ 145	...	+ 360	+ 503
7	+ 704	+ 385	+ 434	+ 762	+ 616	+ 245	+ 752	+ 124	+ 265	+ 957	+ 537	+ 160
8	+ 431	+ 495	+ 583	+1202	+ 863	+ 502	+ 424	...	+ 335	+ 472	+ 550	...
9	+ 170	+ 535	+ 276	+ 185	+1092	+ 391	+ 307	+ 306	+ 175	+ 370	+ 535	+ 483
10	+ 406	+ 587	+ 370	− 332	+ 955	+ 522	+ 306	+ 333	+ 258	+ 340	+ 442	+ 793
11	+ 464	+1131	+ 194	+ 662	+ 935	+ 122	+ 347	...	+ 162	+ 465	...	+1089
12	+1087	+1096	...	+ 673	+ 917	+ 255	+ 333	...	+ 426	+ 482	...	+ 799
13	+1438	+ 835	...	+ 531	+ 980	+ 328	+ 463	+ 397	+ 394	+ 576	...	+ 274
14	+1224	+ 455	+ 333	+ 502	+ 622	+ 432	+ 373	+ 388	+ 575	+1198	...	...
15	+ 830	+ 749	+ 295	+ 585	+ 671	+ 431	+ 243	+ 369	+ 760	+ 374	+ 498	+ 728
16	...	+ 503	+ 279	+ 452	+ 435	+ 363	+ 358	+ 375	+ 756	+1118	+ 830	+ 655
17	+ 975	+ 818	+ 404	+ 857	+ 449	+ 371	+ 582	+ 458	+ 384	+1323	+ 944	+ 590
18	+1267	+ 578	+ 489	+ 969	+ 657	+ 282	+ 520	+ 204	+ 438	+1062	+ 753	+ 503
19	+1308	+ 520	+ 747	+1003	+ 623	+ 323	+ 700	+ 387	+ 548	+ 909	+ 773	+ 669
20	+ 835	+ 835	+ 601	+1023	+ 742	+ 296	+ 592	+ 307	+ 551	+1187	+1415	+ 802
21	+1017	+ 667	+ 635	+ 819	+ 720	+ 304	+ 387	+ 337	+ 460	+ 930	+1117	+ 490
22	...	+ 733	+ 524	+1109	+1060	+ 478	+ 335	+ 359	+ 129	+ 653	+ 934	+ 524
23	...	+ 520	+ 624	+ 919	+1267	+ 451	...	+ 602	...	+ 712	+ 457	+ 682
24	...	+ 525	+ 650	+1178	+1128	+ 555	+ 493	+ 672	+ 241	+1043	+ 793	+ 724
25	+ 918	+ 601	+ 550	+ 705	+ 755	+ 372	+ 327	+ 297	+ 315	+ 973	+ 642	+ 789
26	+1423	+ 181	+ 826	+ 822	+ 720	+ 551	+ 321	+ 225	+ 101	+1075	+ 89	+ 607
27	+1519	+ 498	+ 619	+ 592	+ 578	+ 391	+ 270	...	...	+ 829	+ 568	+ 716
28	+1245	+ 777	+ 838	...	+ 576	+ 354	+ 329	+ 81	+ 204	+ 822	+ 239	+ 643
29	+ 804		+ 561	+ 494	+ 474	+ 330	+ 296	+ 114	...	+ 333	+ 464	+ 333
30	+ 708		+ 892	+ 288	+ 728	+ 268	+ 320	+ 200	+ 217	+ 272	+ 566	+ 662
31	+ 827		+1295		+ 793		+ 690	+ 380		...		+ 891
Means.....	+ 867	+ 621	+ 580	+ 727	+ 752	+ 394	+ 408	+ 329	+ 346	+ 709	+ 566	+ 600

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.	1905. January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Yearly Means.
Midnight.	+ 840	+ 630	+ 473	+ 910	+ 695	+ 434	+ 393	+ 329	+ 295	+ 642	+ 536	+ 624	+ 567
1h	+ 733	+ 533	+ 504	+ 759	+ 649	+ 407	+ 356	+ 304	+ 287	+ 556	+ 494	+ 568	+ 512
2	+ 714	+ 489	+ 531	+ 640	+ 634	+ 390	+ 318	+ 269	+ 270	+ 507	+ 468	+ 539	+ 481
3	+ 643	+ 459	+ 467	+ 568	+ 625	+ 376	+ 297	+ 246	+ 236	+ 465	+ 439	+ 511	+ 444
4	+ 604	+ 436	+ 410	+ 554	+ 618	+ 329	+ 288	+ 226	+ 215	+ 446	+ 449	+ 485	+ 422
5	+ 614	+ 434	+ 449	+ 585	+ 627	+ 287	+ 281	+ 238	+ 205	+ 449	+ 440	+ 426	+ 420
6	+ 641	+ 460	+ 480	+ 674	+ 668	+ 283	+ 289	+ 251	+ 189	+ 453	+ 418	+ 408	+ 435
7	+ 674	+ 527	+ 557	+ 654	+ 782	+ 301	+ 315	+ 249	+ 195	+ 448	+ 403	+ 403	+ 459
8	+ 717	+ 571	+ 553	+ 636	+ 855	+ 314	+ 334	+ 237	+ 225	+ 486	+ 442	+ 398	+ 481
9	+ 754	+ 643	+ 628	+ 672	+ 901	+ 381	+ 437	+ 261	+ 321	+ 660	+ 548	+ 503	+ 559
10	+ 961	+ 769	+ 743	+ 795	+ 954	+ 489	+ 557	+ 302	+ 425	+ 853	+ 632	+ 652	+ 678
11	+1055	+ 740	+ 688	+ 756	+ 895	+ 495	+ 537	+ 334	+ 456	+ 959	+ 662	+ 727	+ 692
Noon.	+1045	+ 667	+ 541	+ 748	+ 790	+ 440	+ 438	+ 340	+ 403	+ 884	+ 618	+ 710	+ 635
13h	+1070	+ 630	+ 550	+ 660	+ 697	+ 366	+ 391	+ 287	+ 368	+ 870	+ 616	+ 705	+ 601
14	+1059	+ 676	+ 541	+ 642	+ 619	+ 345	+ 355	+ 284	+ 360	+ 860	+ 608	+ 680	+ 586
15	+1056	+ 686	+ 608	+ 668	+ 632	+ 354	+ 397	+ 339	+ 407	+ 873	+ 620	+ 650	+ 607
16	+1123	+ 671	+ 633	+ 687	+ 730	+ 386	+ 440	+ 386	+ 472	+ 935	+ 656	+ 683	+ 650
17	+1021	+ 685	+ 670	+ 776	+ 804	+ 409	+ 463	+ 380	+ 496	+ 964	+ 695	+ 717	+ 673
18	+ 948	+ 731	+ 775	+ 808	+ 818	+ 413	+ 493	+ 425	+ 476	+ 861	+ 707	+ 693	+ 679
19	+ 948	+ 751	+ 679	+ 823	+ 803	+ 421	+ 475	+ 445	+ 487	+ 827	+ 672	+ 689	+ 668
20	+ 933	+ 706	+ 631	+ 799	+ 848	+ 438	+ 455	+ 448	+ 447	+ 788	+ 668	+ 690	+ 654
21	+ 852	+ 650	+ 688	+ 836	+ 873	+ 472	+ 497	+ 476	+ 398	+ 788	+ 624	+ 655	+ 651
22	+ 897	+ 673	+ 618	+ 904	+ 798	+ 465	+ 512	+ 456	+ 355	+ 747	+ 600	+ 642	+ 639
23	+ 917	+ 681	+ 509	+ 887	+ 726	+ 450	+ 474	+ 393	+ 325	+ 698	+ 578	+ 636	+ 606
24	+ 850	+ 640	+ 496	+ 855	+ 705	+ 418	+ 413	+ 322	+ 278	+ 612	+ 550	+ 612	+ 563
Means 0h.–23h.	+ 867	+ 621	+ 580	+ 727	+ 752	+ 394	+ 408	+ 329	+ 346	+ 709	+ 566	+ 600	+ 575
Means 1h.–24h.	+ 868	+ 621	+ 581	+ 724	+ 752	+ 393	+ 409	+ 329	+ 346	+ 708	+ 567	+ 599	+ 575
Number of Days employed.	27	27	29	29	31	30	30	27	24	29	25	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 0^{in}·020. The scale employed is arbitrary: the sign + indicates positive potential.)

Hour, Greenwich Civil Time.	1905. January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Yearly Means.
Midnight.	+ 457	+ 688	+ 252	+ 909	+ 637	+ 398	+ 385	+ 283	+ 177	+ 464	+ 355	+ 634	+ 470
1^h	+ 402	+ 508	+ 328	+ 682	+ 426	+ 355	+ 352	+ 205	+ 209	+ 330	+ 291	+ 538	+ 385
2	+ 388	+ 513	+ 354	+ 504	+ 484	+ 344	+ 300	+ 148	+ 216	+ 244	+ 254	+ 510	+ 355
3	+ 340	+ 513	+ 318	+ 496	+ 564	+ 348	+ 283	+ 109	+ 191	+ 196	+ 222	+ 476	+ 338
4	+ 270	+ 492	+ 268	+ 475	+ 579	+ 298	+ 275	+ 99	+ 189	+ 148	+ 235	+ 426	+ 313
5	+ 260	+ 487	+ 317	+ 515	+ 521	+ 211	+ 222	+ 129	+ 189	+ 112	+ 236	+ 356	+ 296
6	+ 270	+ 473	+ 326	+ 666	+ 474	+ 192	+ 193	+ 140	+ 164	+ 100	+ 230	+ 360	+ 299
7	+ 325	+ 514	+ 411	+ 577	+ 619	+ 219	+ 187	+ 130	+ 162	+ 82	+ 204	+ 354	+ 315
8	+ 285	+ 532	+ 401	+ 312	+ 717	+ 229	+ 128	+ 109	+ 180	+ 72	+ 225	+ 310	+ 292
9	+ 332	+ 590	+ 491	+ 236	+ 770	+ 324	+ 122	+ 125	+ 267	+ 120	+ 295	+ 404	+ 340
10	+ 743	+ 748	+ 647	+ 429	+ 899	+ 502	+ 258	+ 147	+ 362	+ 190	+ 335	+ 536	+ 483
11	+ 953	+ 667	+ 610	+ 396	+ 877	+ 520	+ 242	+ 279	+ 353	+ 380	+ 357	+ 586	+ 518
Noon.	+ 910	+ 583	+ 418	+ 469	+ 877	+ 457	+ 272	+ 292	+ 288	+ 436	+ 323	+ 574	+ 492
13^h	+ 895	+ 536	+ 427	+ 274	+ 759	+ 343	+ 223	+ 238	+ 178	+ 450	+ 305	+ 576	+ 434
14	+ 883	+ 627	+ 478	+ 162	+ 501	+ 337	+ 260	+ 231	+ 167	+ 476	+ 285	+ 568	+ 415
15	+ 908	+ 618	+ 561	+ 220	+ 376	+ 395	+ 358	+ 264	+ 202	+ 474	+ 276	+ 484	+ 428
16	+ 945	+ 687	+ 580	+ 346	+ 653	+ 462	+ 467	+ 338	+ 231	+ 552	+ 319	+ 450	+ 503
17	+ 610	+ 596	+ 618	+ 510	+ 883	+ 476	+ 340	+ 294	+ 254	+ 544	+ 363	+ 438	+ 494
18	+ 375	+ 624	+ 739	+ 523	+ 821	+ 418	+ 598	+ 353	+ 219	+ 424	+ 430	+ 474	+ 500
19	+ 628	+ 674	+ 534	+ 624	+ 587	+ 392	+ 537	+ 345	+ 309	+ 468	+ 413	+ 494	+ 500
20	+ 655	+ 702	+ 435	+ 517	+ 557	+ 388	+ 403	+ 319	+ 300	+ 550	+ 421	+ 500	+ 479
21	+ 452	+ 579	+ 534	+ 550	+ 607	+ 412	+ 420	+ 311	+ 258	+ 584	+ 363	+ 438	+ 459
22	+ 727	+ 643	+ 428	+ 704	+ 516	+ 372	+ 497	+ 297	+ 224	+ 612	+ 341	+ 384	+ 479
23	+ 935	+ 648	+ 368	+ 733	+ 457	+ 321	+ 523	+ 214	+ 191	+ 624	+ 362	+ 356	+ 478
24	+ 688	+ 446	+ 398	+ 680	+ 599	+ 310	+ 392	+ 151	+ 137	+ 568	+ 365	+ 360	+ 424
Means $0^h.-23^h.$	+ 581	+ 593	+ 452	+ 493	+ 632	+ 363	+ 327	+ 225	+ 228	+ 360	+ 310	+ 468	+ 419
Means $1^h.-24^h.$	+ 591	+ 583	+ 458	+ 483	+ 630	+ 359	+ 327	+ 219	+ 227	+ 364	+ 310	+ 456	+ 417
Number of Days employed.	6	9	18	10	7	13	4	11	9	5	11	5	...

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.	1905. January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Yearly Means.
Midnight.	+ 919	+ 601	+ 805	+ 778	+ 697	+ 466	+ 405	+ 397	+ 364	+ 806	+ 667	+ 629	+ 628
1h	+ 793	+ 538	+ 780	+ 705	+ 703	+ 484	+ 370	+ 409	+ 332	+ 732	+ 647	+ 581	+ 590
2	+ 806	+ 483	+ 800	+ 687	+ 670	+ 458	+ 327	+ 384	+ 302	+ 672	+ 634	+ 553	+ 565
3	+ 761	+ 436	+ 709	+ 564	+ 638	+ 428	+ 302	+ 371	+ 265	+ 656	+ 603	+ 523	+ 521
4	+ 707	+ 407	+ 632	+ 571	+ 628	+ 388	+ 295	+ 341	+ 235	+ 669	+ 608	+ 495	+ 498
5	+ 729	+ 413	+ 661	+ 598	+ 660	+ 389	+ 295	+ 343	+ 220	+ 692	+ 591	+ 437	+ 502
6	+ 765	+ 460	+ 750	+ 658	+ 730	+ 396	+ 314	+ 364	+ 217	+ 680	+ 550	+ 409	+ 524
7	+ 794	+ 545	+ 861	+ 736	+ 841	+ 411	+ 349	+ 369	+ 228	+ 673	+ 544	+ 402	+ 563
8	+ 836	+ 607	+ 854	+ 789	+ 909	+ 433	+ 380	+ 362	+ 269	+ 739	+ 595	+ 411	+ 599
9	+ 872	+ 696	+ 894	+ 891	+ 954	+ 479	+ 505	+ 391	+ 378	+ 970	+ 737	+ 522	+ 691
10	+1040	+ 826	+ 944	+ 994	+ 986	+ 522	+ 628	+ 439	+ 492	+1211	+ 866	+ 672	+ 802
11	+1106	+ 840	+ 857	+ 948	+ 913	+ 502	+ 600	+ 395	+ 552	+1302	+ 922	+ 739	+ 806
Noon.	+1098	+ 778	+ 744	+ 872	+ 777	+ 453	+ 479	+ 399	+ 504	+1179	+ 868	+ 725	+ 740
13h	+1125	+ 747	+ 758	+ 830	+ 687	+ 400	+ 420	+ 336	+ 522	+1124	+ 882	+ 725	+ 713
14	+1119	+ 746	+ 671	+ 845	+ 657	+ 364	+ 371	+ 333	+ 520	+1106	+ 882	+ 695	+ 692
15	+1116	+ 782	+ 711	+ 848	+ 713	+ 329	+ 407	+ 406	+ 583	+1152	+ 908	+ 679	+ 720
16	+1208	+ 744	+ 727	+ 846	+ 767	+ 322	+ 441	+ 437	+ 664	+1256	+ 935	+ 748	+ 758
17	+1168	+ 803	+ 784	+ 899	+ 802	+ 359	+ 486	+ 456	+ 692	+1342	+ 974	+ 803	+ 797
18	+1117	+ 848	+ 829	+ 987	+ 837	+ 412	+ 478	+ 489	+ 688	+1334	+ 952	+ 757	+ 811
19	+1039	+ 839	+ 914	+ 934	+ 883	+ 442	+ 452	+ 535	+ 658	+1205	+ 906	+ 737	+ 795
20	+1009	+ 765	+ 956	+ 943	+ 950	+ 467	+ 452	+ 561	+ 601	+1099	+ 887	+ 725	+ 785
21	+ 947	+ 737	+ 956	+ 980	+ 963	+ 510	+ 495	+ 629	+ 543	+1022	+ 835	+ 688	+ 775
22	+ 934	+ 736	+ 935	+ 970	+ 883	+ 539	+ 503	+ 611	+ 490	+ 918	+ 813	+ 695	+ 752
23	+ 906	+ 735	+ 749	+ 974	+ 803	+ 573	+ 466	+ 563	+ 461	+ 866	+ 752	+ 707	+ 713
24	+ 890	+ 735	+ 774	+ 925	+ 733	+ 539	+ 413	+ 488	+ 414	+ 786	+ 698	+ 683	+ 673
Means 0h.–23h.	+ 955	+ 671	+ 803	+ 827	+ 794	+ 439	+ 426	+ 430	+ 449	+ 975	+ 773	+ 627	+ 681
Means 1h.–24h.	+ 954	+ 677	+ 802	+ 833	+ 795	+ 442	+ 426	+ 434	+ 451	+ 974	+ 775	+ 630	+ 683
Number of Days employed.	18	13	8	10	23	12	22	14	13	10	12	22	...

AMOUNT of RAIN COLLECTED in each MONTH of the YEAR 1905.

MONTH, 1905.	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.
		in.	in.	in.	in	in.	in.	in.	in.
January	8	0·577	0·621	0·857	0·902	1·076	0·999	1·099	1·111
February	13	0·128	0·201	0·514	0·523	0·669	0·724	0·679	0·704
March	22	1·989	1·695	2·666	2·854	3·558	3·556	3·579	3·579
April	17	0·863	0·928	1·305	1·452	1·680	1·700	1·681	1·772
May	8	0·749	0·889	1·049	1·252	1·354	1·325	1·368	1·408
June	18	2·195	2·580	3·477	4·093	4·222	4·323	4·150	4·228
July	8	0·546	0·591	0·865	0·927	0·959	0·921	0·969	1·035
August	13	1·838	1·737	2·288	2·541	2·624	2·536	2·629	2·667
September	13	1·271	1·374	1·917	2·163	2·258	2·311	2·260	2·324
October	15	0·485	0·384	0·675	0·751	0·863	0·906	0·878	0·923
November	18	1·870	1·951	2·321	2·680	2·996	3·125	2·910	3·026
December	8	0·262	0·297	0·487	0·483	0·607	0·598	0·614	0·624
Sums	161	12·773	13·248	18·421	20·621	22·866	23·024	22·816	23·401
Height of receiving Surface above the ground	...	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
Height of receiving Surface above mean sea level	...	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

PARHELIA AND PARASELENÆ

AND OF

AURORA BOREALIS.

1905.

OBSERVATIONS OF PARHELIA AND PARASELENÆ, MADE AT THE ROYAL OBSERVATORY, GREENWICH, IN THE YEAR 1905.

THE PARASELENÆ OF 1905 JANUARY 13.

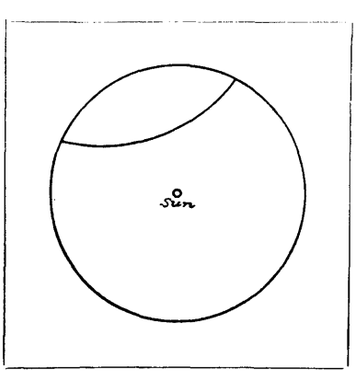
h	m	
22	35.	Two mock moons were noticed on either side of the moon at a distance of about 22°. They were first seen at $22^h\ 5^m$, but were then mistaken for fragments of light cloud.
22	38.	Both mock moons are elongated in form and about $2\frac{1}{2}°$ in length.
22	50.	The mock moons are becoming faint and are circular in form.
22	58.	The southern mock moon is rather faint, and the northern mock moon is elongated and about 2° in length.
23	0.	The southern mock moon has practically disappeared, and the northern mock moon is becoming diffused.
23	5.	No change since the last note, but fog prevents further observation.

HENRY G. S. BARRETT.

THE PARHELION OF 1905 MARCH 10.

h	m	
14	15.	A bright partial solar halo first seen.
15	40.	A mock sun appeared to the east of the sun.
15	55.	The mock sun disappears.
16	15.	The halo now disappears.

ALBERT E. SHOWELL.



THE SOLAR HALO OF 1905 APRIL 12.

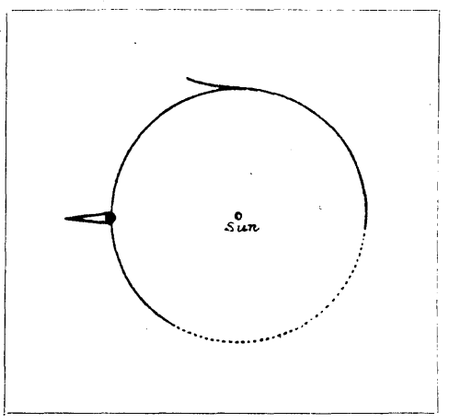
At $8^h\ 35^m$ a complete solar halo was seen with an arc in the position shown in the diagram. The arc when first seen was of about the same intensity as the halo, and remained visible till $8^h\ 50^m$. The halo disappeared shortly before 9^h.

HENRY G. S. BARRETT.

THE PARHELION OF 1905 APRIL 29.

h	m	
15	30.	A partial solar halo was seen with its upper portion intensely bright and prismatically coloured.
15	50.	A mock sun was seen to the south of the sun.

THE PARHELION OF 1905 APRIL 29—*continued.*



h m

15 52. The halo is becoming more complete, and the mock sun is elongated to a length of 2° horizontally.

15 54. The mock sun is round in shape, and the halo becoming fainter, with the exception of the upper portion, which still remains brilliant and prismatically coloured.

15 58. A spur is now visible, and is about 3° in length, and the mock sun is prismatically coloured.

16 5. The spur is about 7° or 8° in length.

16 7. The spur is faint.

16 12. The mock sun is bright.

16 13. The spur is not seen, owing to cloud.

16 14. The halo disappears, with the exception of the upper portion.

16 22. The top portion of the halo is perfectly straight for a length of 5°.

16 23. The mock sun is invisible.

h m

16 25. A contact arch appears in the position shown in diagram.

16 30. The mock sun is again visible.

16 32. The contact arch has disappeared, and the mock sun is invisible, owing to cloud.

16 36. All the phenomena have now disappeared.

WILFRED C. PARKINSON.
HENRY G. S. BARRETT.

THE PARHELIA OF 1905 AUGUST 22.

A solar halo formed at $16^h\ 20^m$, and at $16^h\ 30^m$ two mock suns were seen north and south of the sun on the halo, but they only remained visible for a few minutes. The solar halo remained till $18^h\ 15^m$.

ALBERT E. SHOWELL.
HENRY G. S. BARRETT.

THE AURORA BOREALIS OF 1905 NOVEMBER 15.

h m

19 55. A dull red glow in the N.W. was first seen about this time, but its true nature was not realised.

20 45. An arc of livid red light, about 5° in breadth, was seen extending across the entire northern sky from the approximate azimuths of N. 40° E. to N. 85° W.

20 45 to 20 58. The arc varies in intensity, and towards the latter portion of this period it is broken up into two portions, one on the N.E. horizon and the other at a position just to the W. of Polaris.

21 0. The western portion has become a vertically banded patch, extending towards the horizon and enveloping γ and β Draconis.

21 3. The N.E. portion has now become diffused, and includes almost the entire space between the azimuths of N. 15° E. and N.E., and extends up to about 50° altitude. It is somewhat brighter towards the upper part.

21 5. The N.E. portion is gradually fading and working round towards the north.

21 6. The N.N.W. portion is a diffused mass at an altitude of about 45°.

21 8. The N.N.E. portion assumes the appearance of a streamer from an altitude of 10° to about 50°.

21 9. The streamer is now very brilliant.

21 10. The streamer now disappears.

THE AURORA BOREALIS OF 1905 NOVEMBER 15—*continued.*

h	m	
21	11.	A vertical streamer is now seen passing between γ and β Ursæ Minoris, and commencing as low down as can be seen; at $21^h\ 12^m$ two other small streamers appear to the west of it; the centre one of the three involves γ Ursæ Minoris; the western streamer shows a sharp golden concentration to the east of it. There is also a patch involving β Ursæ Majoris.
21	13.	The western streamers are very diffused, and the eastern patch has disappeared.
21	14.	Just below β and γ Ursæ Majoris there is a uniform mass of light 7° in length and 3° in breadth.
21	15.	Dull red patches are seen in the N.W., especially near α Lyræ.
21	16.	Diffused light is becoming general between N. and N.W. up to an altitude of 45°.
21	19.	The light is becoming banded in the N.W.
21	20.	The light is fading, except low down on the N.W. horizon, where it still appears banded.
21	21.	The light is only now visible in the W.N.W.
21	23.	An area of generally diffused light extends from W.N.W. to N. (thin clouds passing over at times).
21	25.	A broad band of red light is visible almost up to α Cygni.
21	27.	A bright red light appears low down on the W.N.W. horizon.
21	28.	The patches mentioned in the last two notes have almost disappeared.
21	29.	A dull diffused patch is seen just to the West of γ Ursæ Minoris, disappearing in about a minute.
21	31.	A dull diffused patch noted in the area included by α, β, γ and δ, Ursæ Majoris.
21	37.	Nothing is now visible.
21	40.	A dull diffused red light is visible from Polaris, and extending almost up to the zenith.
21	41.	α Lyræ is involved in a faint luminous patch.
21	43.	A diffused glow is now visible low down in the N.N.W. Nothing further was seen after $21^h\ 45^m$.

ALBERT E. SHOWELL.
HENRY G. S. BARRETT.

ROYAL OBSERVATORY, GREENWICH.

OBSERVATIONS

OF

LUMINOUS METEORS.

1905.

Month and Day, 1905.	Greenwich Civil Time.	Observer.	Brightness 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 Reference.
	h m s				s		°	
April 22	23. 54. 16	H.B.	3	...	0·4	None	5	1
April 23	0. 7. 11	H.B.	2	Bluish-white	1·5	Short	15	2
,,	0. 24. 4	H.B.	3	...	0·6	None	8	3
,,	0. 25. 36	S.	2	Bluish-white	1·0	Bright	30	4
,,	0. 54. 56	S.&H.B.	2	White	0·5	None	12	5
,,	1. 8. 29	S.&H.B.	1	Bluish-white	0·5	None	4	6
,,	1. 19. 12	H.B.	4	...	0·4	None	5	7
,,	1. 45. 14	S.&H.B.	3	...	0·8	None	8	8
,,	2. 11. 6	S.&H.B.	2	Bluish-white	1·0	Slight	15	9
July 26	21. 28.	B.	2	White	0·5	None	10	10
August 10	21. 20. 27	S.	2	Bluish-white	0·5	None	10	11
,,	21. 39. 35	S.&H.B.	2	White	1·0	Slight: 2 secs.	8	12
,,	21. 51. 55	P.	2	...	0·5	None	7	13
,,	21. 55. 30	S.,P.&H.B.	1	Bluish-white	0·8	Streak	8	14
,,	21. 58. 5	H.B.	2	White	0·6	Streak	5	15
,,	22. 5. 33	S.&H.B.	1	Bluish-white	1·2	Streak: 2 secs.	18	16
,,	22. 7. 6	S.	1	Reddish	1·5	Bright: 2 secs.	20	17
,,	22. 12. 35	S.&H.B.	1	White	1·0	Streak: 1 sec.	12	18
,,	22. 15. 20	P.	1	White	0·8	Slight	10	19
,,	22. 20. 38	P.	>1	White	0·5	Slight	7	20
,,	22. 21. 33	H.B.	3	...	0·5	None	5	21
,,	22. 23. 26	S.,P.&H.B.	2	Bluish-white	0·6	Slight	12	22
,,	22. 27. 50	S.,P.&H.B.	2	White	1·2	...	8	23
,,	22. 28. 18	S.&P.	3	...	0·6	...	5	24
,,	22. 28. 33	S.	3	White	0·6	...	8	25
,,	22. 28. 48	S.,P.&H.B.	1	White	0·8	...	12	26
,,	22. 31. 31	S.,P.&H.B.	1	White	0·8	...	15	27
,,	22. 38. 50	S.&H.B.	2	Bluish-white	0·5	...	12	28
,,	22. 41. 20	S.	2	Bluish-white	1·5	...	20	29
,,	22. 43. 49	S.	1	White	1·2	...	15	30
,,	22. 50. 31	H.B.	2	White	0·5	...	10	31
,,	23. 1. 48	H.B.	>1	Bluish-white	1·5	...	18	32
,,	23. 6. 26	S.,P.&H.B.	2	Reddish	0·6	...	8	33
,,	23. 12. 56	H.B.	2	White	0·8	...	10	34
,,	23. 17. 51	S.&H.B.	3	...	0·4	...	5	35
,,	23. 19. 18	H.B.	3	...	0·5	...	15	36
,,	23. 19. 50	S.&P.	2	White	1·0	...	10	37
,,	23. 21. 18	H.B.	3	...	0·6	...	8	38
,,	23. 21. 27	H.B.	1	White	1·5	...	20	39
,,	23. 28. 49	P.	2	White	1·0	...	10	40
,,	23. 38. 24	S.	2	Bluish-white	1·0	...	8	41
,,	23. 44. 7	S.&P.	1	White	1·0	...	12	42
,,	23. 44. 36	P.	2	White	0·7	...	5	43
,,	23. 48. 29	P.&H.B.	1	Bluish-white	1·0	...	15	44
,,	23. 52. 1	S.&P.	2	White	0·8	...	10	45
,,	23. 52. 19	S.	3	Bluish-white	0·6	None	12	46
,,	23. 55. 24	P.	2	White	1·0	Bright	15	47
August 11	0. 1. 4	S.&P.	3	...	0·5	...	8	48
,,	0. 20. 16	P.	2	Bluish-white	0·5	None	8	49
,,	0. 21. 41	S.	1	White	1·0	Slight	10	50
,,	0. 21. 46	S.	1	White	1·0	Bright	10	51
,,	0. 27. 55	S.	2	White	0·8	Faint	15	52

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

No. for Reference.	Path of Meteor in the Sky.
1	From a point $\frac{1}{3}$ of the distance from ι Herculis towards γ Draconis towards a point midway between B^1 and 16 Draconis.
2	From a point midway between 33 and 23 Cygni towards Piazzi XXI. 285.
3	Directed from 15 Draconis towards β Ursæ Minoris.
4	From β Lyræ passed between δ and α Cygni.
5	From a point midway between α Herculis and Piazzi XVII. 50 towards 30 Ophiuchi.
6	From ϵ Lyræ towards a point midway between ι Herculis and β Draconis.
7	From B^2 Lyræ to 45 Draconis.
8	From B^2 Lyræ to 36 Draconis.
9	From 16 Lyræ towards o Cygni.
10	From a point midway between δ and ϵ Coronæ fell vertically downwards.
11	From 72 Cassiopeiæ towards Piazzi IX. 37.
12	From a point 5° West of Piazzi III. 54 moved towards the West parallel to the horizon.
13	Directed from η Cephei towards β Lacertæ.
14	Directed from η Persei to a point midway between γ and β Andromedæ.
15	Directed from γ Persei disappeared at κ Persei.
16	Directed from a point midway between ϵ and δ Cassiopeiæ, and commencing when opposite to κ Cassiopeiæ to a point midway between ζ and ν Cephei.
17	From δ Cassiopeiæ passed over α Cassiopeiæ and 10° beyond it.
18	From a point midway between γ and τ Andromedæ towards σ Piscium.
19	From κ Delphini towards η Aquilæ.
20	Fell vertically towards 26 Lyncis.
21	From α Trianguli towards 107 Piscium.
22	From a point midway between α Andromedæ and 78 Pegasi to α Pegasi.
23	From β Piscium passed just below γ Pegasi.
24	From β Andromedæ towards γ Pegasi.
25	From η Pegasi towards ι Pegasi.
26	From a point midway between α and β Andromedæ to a point midway between α Andromedæ and γ Pegasi.
27	From 12 Pegasi towards a point midway between α and γ Cygni.
28	From 56 Andromedæ towards η Piscium.
29	From θ Cassiopeiæ towards β Lacertæ.
30	Passed across 50 Andromedæ and below β Andromedæ.
31	From κ Piscium passed to a point midway between λ and δ Aquarii.
32	From a point midway between ϵ and ν Persei passed just over and beyond θ Aurigæ.
33	Directed from 32 Andromedæ towards a point midway between ψ and χ Pegasi.
34	From ψ Piscium to δ Piscium.
35	From 60 Andromedæ to 56 Andromedæ.
36	From a point midway between α Andromedæ and 78 Pegasi towards ξ Pegasi.
37	From a point 5° above β Andromedæ towards α Andromedæ.
38	From a point midway between α and γ Pegasi passed in a slightly curved path just east of 77 Pegasi and ι Piscium.
39	Directed from a point midway between ϵ and ζ Cygni towards β Aquilæ.
40	From δ Cassiopeiæ fell vertically downwards.
41	From Capella towards β Aurigæ.
42	From γ Persei to τ Andromedæ.
43	From γ Persei towards δ Cassiopeiæ.
44	From β Persei towards α Arietis.
45	From 50 Andromedæ towards σ Piscium.
46	From α Arietis towards o Piscium.
47	From β Camelopardi to 18 Lyncis.
48	From λ Persei towards ϵ Aurigæ.
49	From a point 2° West of α Persei to μ Persei.
50	From ϵ Andromedæ to α Andromedæ.
51	From ζ Pegasi towards δ Aquarii.
52	From δ Cassiopeiæ towards β Persei.

Month and Day, 1905.	Greenwich Civil Time.	Observer.	Brightness 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 Reference.
	h m s				s		°	
August 11	0. 28. 43	S.&P.	1	...	...	...	...	1
,,	0. 30. 5	H.B.	1	White	1·4	Slight	20	2
,,	0. 30. 12	H.B.	3	...	0·5	None	3	3
,,	0. 31. 32	H.B.	3	...	0·4	None	5	4
,,	0. 39. 49	H.B.	3	...	0·4	None	4	5
,,	0. 45. 12	S.,P.&H.B.	1	Bluish-white	0·8	Streak	8	6
,,	0. 48. 28	H.B.	3	...	0·6	None	5	7
,,	0. 51. 54	H.B.	3	...	0·5	None	6	8
,,	0. 54. 39	S.,P.&H.B.	2	White	1·2	Streak	20	9
,,	0. 54. 41	H.B.	3	...	0·4	None	5	10
,,	1. 4. 35	H.B.	>1	Yellowish	0·8	Streak: 2 secs.	10	11
,,	1. 8. 44	H.B.	3	...	0·5	Slight	5	12
,,	1. 9. 24	H.B.	3	...	0·4	Slight	7	13
,,	1. 13. 0	H.B.	3	...	0·4	Slight	5	14
,,	1. 14. 11	H.B.	3	...	0·4	None	4	15
,,	1. 17. 44	H.B.	3	...	0·5	...	10	16
,,	1. 20. 36	H.B.	3	...	0·4	...	5	17
,,	1. 34. 29	H.B.	1	Bluish-white	0·5	Slight	12	18
,,	1. 36. 35	S.&H.B.	3	...	0·3	Slight	6	19
,,	1. 45. 55	P.&H.B.	3	...	0·4	...	12	20
,,	1. 48. 38	H.B.	3	...	0·2	...	4	21
,,	1. 52. 24	P.&H.B.	2	White	0·4	Streak: 2 secs.	3	22
,,	1. 54. 10	P.&H.B.	2	White	0·8	Streak: 1 sec.	6	23
,,	1. 54. 26	S.&H.B.	2	White	0·5	Streak	5	24
,,	1. 58. 51	H.B.	2	White	0·5	Faint streak	8	25
,,	1. 59. 49	S.&P.	2	White	0·5	...	7	26
,,	2. 2. 7	H.B.	1	White	1·0	Faint	12	27
,,	2. 3. 20	H.B.	3	...	0·4	...	6	28
,,	2. 3. 22	H.B.	1	White	1·2	Faint: 1 sec.	15	29
,,	2. 22. 19	P.&H.B.	>1	White	0·6	Streak: 2 secs.	8	30
,,	2. 23. 7	P.	1	White	1·2	Bright	15	31
,,	2. 24. 40	S.&P.	2	Bluish-white	0·5	...	10	32
,,	2. 26. 24	H.B.	2	Yellowish	0·6	Faint streak	5	33
,,	2. 29. 12	H.B.	2	White	0·8	Streak	12	34
,,	2. 30. 44	P.	2	White	0·5	Slight	7	35
,,	2. 36. 5	S.&H.B.	1	Yellowish	1·5	Streak: 3 secs.	20	36
,,	2. 36. 19	H.B.	2	White	0·6	Faint	12	37
,,	2. 46. 36	H.B.	2	White	0·6	None	12	38
,,	2. 52. 24	P.	1	Bluish-white	1·4	Bright	10	39
,,	2. 54. 52	P.	1	White	1·5	Bright: 2 secs.	13	40
,,	2. 56. 55	H.B.	3	...	0·3	None	7	41
,	3. 6. 19	S.&P.	2	White	1·2	Faint	13	42
,,	3. 9. 35	P.&H.B.	>1	Yellowish	0·6	Streak	20	43
,,	3. 9. 55	P.	2	White	0·5	Faint	10	44
,,	3. 13. 23	H.B.	1	White	0·4	None	7	45
,,	21. 20. 26	S.	1	White	2·0	3 secs.	25	46
,,	21. 22. 8	S.&H.B.	2	...	1·0	Slight	20	47
,,	21. 23. 13	S.	1	Bluish-white	1·2	1 sec.	15	48
,,	21. 24. 35	H.B.	1	Yellowish	0·8	Slight: 1 sec.	15	49
,,	21. 33. 55	S.&H.B.	1	Yellowish	0·6	2 secs.	8	50
,,	21. 36. 27	H.B.	>1	Yellowish	1·2	Streak: 2 secs.	25	51
,,	21. 45. 47	S.	1	Bluish-white	1·5	Bright	15	52
,,	21. 46. 30	H.B.	2	White	0·6	Slight: 1 sec.	8	53
,,	21. 46. 39	P.	1	White	1·0	Bright	15	54
,,	21. 47. 59	S.	= 2	Yellowish	1·5	4 secs.	40	55
,,	21. 56. 35	S.,P.&H.B.	1	Yellowish	0·5	Bright: 2 secs.	8	56
,,	22. 2. 12	H.B.	3	White	0·5	Slight	5	57
,,	22. 4. 3	H.B.	3	White	0·3	None	4	58
,,	22. 5. 19	S.	2	Bluish-white	0·7	Slight	10	59
,,	22. 8. 33	H.B.	2	Yellowish	0·8	Slight	12	60
,,	22. 11. 7	H.B.	3	White	0·4	Slight	15	61
,,	22. 16. 27	B.&H.B.	2	White	0·4	Slight	5	62
,,	22. 18. 11	S.	1	White	1·5	Bright	20	63
,,	22. 24. 36	B.	1	White	2·0	None	15	64
,,	22. 24. 42	B.	1–2	...	2·0	Slight	12	65

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

No. for Reference.	Path of Meteor in the Sky.
1	From β Persei towards the Pleiades.
2	From a point just below γ Cephei towards γ Draconis.
3	From θ Andromedæ towards ι Andromedæ.
4	From a point midway between ϵ and ζ Cygni towards δ Sagittæ.
5	From σ Ursæ Majoris towards 38 Ursæ Majoris.
6	From a point midway between ϵ and ν Persei to Capella.
7	From 30 Piscium towards a point midway between ι and β Ceti.
8	From a point near ζ Andromedæ towards ω Piscium.
9	From γ Andromedæ towards η Piscium.
10	Passed over points midway between ρ and η Arietis and γ and η Arietis.
11	Directed from a point midway between θ and 62 Persei passed close to and 2° beyond 35 Arietis.
12	From ι Persei towards ρ Persei.
13	From a point midway between β and 32 Persei towards ξ Persei.
14	From ψ Persei towards δ Piscium.
15	From 39 Arietis towards 40 Arietis.
16	Passed over 55 Camelopardi towards τ Ursæ Majoris.
17	From η Persei passed close to δ Arietis.
18	From 35 Arietis passed over ν Ceti.
19	From η Persei towards ϵ Arietis.
20	Passed midway between ϵ and δ Piscium, moving towards ι Ceti.
21	Passed over γ Ceti moving from ξ^1 Ceti.
22	Fell vertically downwards $\frac{1}{2}$° north of ϵ Aurigæ, the centre of path being opposite to ϵ Aurigæ.
23	Directed from δ Arietis to a point within 3° and in a direct line with κ^1 Ceti.
24	From χ Aurigæ fell nearly vertically downwards.
25	From λ Arietis towards ξ Piscium.
26	From δ Andromedæ towards β Pegasi.
27	From γ Pegasi towards κ Piscium.
28	From λ Andromedæ towards 32 Andromedæ.
29	From a point 3° below γ Pegasi towards a point just below λ Piscium.
30	From 32 Persei to a point 3° south of the Pleiades.
31	From a point midway between β and η Pegasi moved towards the west (cloudy).
32	From a point near δ Andromedæ towards η Andromedæ.
33	From a point between α and β Arietis a little nearer the latter to a point $\frac{1}{3}$ of distance from o to η Piscium.
34	From η Piscium to a point midway between θ and η Ceti.
35	Moved parallel to and 3° above a line joining θ and η Ceti.
36	Commencing opposite to 31 Pegasi passed very close to θ Pegasi, β Aquarii, and θ Capricorni.
37	From 70 Pegasi passed over β Piscium.
38	From Piazzi IX. 37 towards 74 Ursæ Majoris.
39	From ϵ Pegasi towards β Aquarii.
40	From ι Pegasi passed across ϵ Pegasi towards β Aquarii.
41	From a point $\frac{1}{3}$ of the distance from η to γ Arietis towards μ Piscium.
42	From γ Piscium towards δ Aquarii.
43	From a point midway between γ Pegasi and 68 Piscium towards 98 Aquarii.
44	From γ Pegasi fell vertically downwards.
45	Passed a little to the east of ι Ceti moving towards 7 Ceti.
46	From θ Cassiopeiæ towards δ Cygni.
47	From α Lacertæ towards a point midway between α and λ Cygni.
48	From α Lacertæ towards η Cygni.
49	From 56 Pegasi towards 25 Aquarii.
50	From a point midway between ϵ and δ Cassiopeiæ passed over κ Cassiopeiæ.
51	From 52 Cygni towards a point a little south of α Aquilæ.
52	From ι Cassiopeiæ towards β Lacertæ.
53	Directed from Piazzi II. 237 passed beyond a point midway between Polaris and Cephei 51 (Hev.).
54	From a point near Polaris towards α Ursæ Majoris.
55	From α Andromedæ towards π Aquarii.
56	Commencing exactly at ϵ Cassiopeiæ towards a point between ι and 30 Cephei.
57	From 5 Lacertæ towards a point $\frac{1}{3}$ of the distance from α to 51 Cygni.
58	From a point midway between ϵ Cassiopeiæ and η Persei towards Piazzi III. 7.
59	From γ Cephei towards ϕ Draconis.
60	From 56 Pegasi towards 31 Pegasi.
61	From a point midway between τ and γ Andromedæ towards a point $\frac{1}{3}$ of the distance from 91 Andromedæ to α Trianguli.
62	Passed over 50 Andromedæ moving towards 82 Piscium.
63	From 2 Ursæ Minoris towards ζ Draconis.
64	From a point midway between β Boötis and α Coronæ passed slowly over and beyond γ Herculis.
65	From η Draconis to a point just below ζ Herculis.

Month and Day, 1905.	Greenwich Civil Time.	Observer.	Brightness 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 Reference.
	h m s				s		°	
August 11	22. 29. 24	H.B.	4	...	0·4	None	6	1
,,	22. 34. 24	B.	...	...	...	...	...	2
,,	22. 34. 24	S.	3	...	0·5	None	10	3
,,	22. 34. 48	S.	2	Bluish-white	1·0	Faint	15	4
,,	22. 35. 23	H.B.	3	...	0·5	None	5	5
,,	22. 35. 42	B.	...	...	0·5	Faint	5	6
,,	22. 35. 58	B	1	...	1·0	Faint: 7 secs.	7	7
,,	22. 37. 43	S.&H.B.	3	...	0·7	Faint	5	8
,,	22. 42. 2	B.,S.&H.B.	3	...	0·4	Faint	5	9
,,	22. 43. 23	B.	2	...	...	Faint	...	10
,,	22. 45. 48	S.	>1	Yellowish	1·5	Bright: 2 secs.	15	11
,,	22. 47. 31	B.	2	...	1·0	Faint	7	12
,,	22. 54. 26	H.B.	2	White	0·6	Slight	12	13
,,	22. 56. 25	S.,P.&H.B.	>4	White	2·0	Bright: 20 secs.	15	14
,,	22. 57. 9	H.B.	3	...	0·4	...	4	15
,,	22. 57. 21	S.	2	White	1·0	Slight	15	16
,,	23. 0. 48	P.	2	White	0·5	Faint	7	17
,,	23. 5. 53	H.B.	1	Yellowish	0·8	1 sec.	7	18
,,	23. 9. 47	S.&H.B.	2	...	0·6	Streak	12	19
,,	23. 15. 21	S.	3	Bluish-white	0·5	None	7	20
,,	23. 23. 46	H.B.	3	...	0·8	None	7	21
,,	23. 29. 31	H.B.	2	White	0·5	Slight: 1 sec.	6	22
,,	23. 30. 32	B.	1	White	1·2	Faint	7	23
,,	23. 30. 40	B.&S.	>1	Bluish	1·5	Bright: 1 sec.	15	24
,,	23. 41. 19	H.B.	1	Bluish	1·5	Bright	20	25
,,	23. 43. 24	S.&H.B.	2	White	0·6	None	10	26
,,	23. 49. 45	S.,P.&H.B.	1	Bluish white	0·8	Slight	12	27
,,	23. 51. 52	S.&P.	2	White	0·5	Bright	12	28
August 12	0. 0. 33	H.B.	2	White	0·5	Slight	6	29
,,	0. 8. 24	S.&H.B.	2	White	0·8	None	10	30
,,	0. 12. 26	P.&H.B.	3	...	0·4	None	10	31
,,	0. 16. 24	S.,P.&H.B.	2	Bluish-white	0·8	Bright	13	32
,,	0. 23. 30	S.&H.B.	2	White	1·2	Slight	15	33
,,	0. 32. 11	P.	2	White	0·8	Slight	10	34
,,	0. 37. 11	S.&P.	3	...	0·6	None	15	35
,,	0. 43. 49	S.	1	Yellowish	0·8	Bright: 8 secs.	15	36
,,	0. 57. 15	H.B.	2	Bluish	1·0	Slight	8	37
,,	0. 57. 19	S.	2	Bluish-white	1·0	Slight	10	38
,,	1. 0. 7	H.B.	>1	Yellowish	0·6	Streak: 2 secs.	8	39
,,	1. 6. 21	H.B.	2	White	0·8	Bright	15	40
,,	1. 10. 36	H.B.	2	Yellowish	0·5	None	8	41
,,	1. 14. 3	H.B.	2	White	0·4	Slight	8	42
,,	1. 15. 31	S.&H.B.	1	Bluish-white	1·2	Streak: 1 sec.	15	43
,,	1. 23. 54	P.&H.B.	2	Bluish-white	0·8	Slight	15	44
,,	1. 26. 26	S.	3	...	0·5	None	6	45
,,	1. 27. 38	H.B.	2	Bluish-white	0·8	Slight	15	46
,,	1. 33. 34	S.&P.	2	White	0·6	Slight	10	47
,,	1. 50. 15	S.&H.B.	>1	Bluish-white	0·8	Bright	20	48
,,	1. 58. 18	H.B.	2	White	1·0	Bright	20	49
,,	2. 6. 16	P.&H.B.	3	...	0·3	None	5	50
,,	2. 14. 44	S.&P.	3	...	0·5	None	8	51
,,	2. 26. 24	S.,P.&H.B.	3	...	0·6	None	10	52
,,	2. 34. 36	P.	2	Yellowish	1·5	Bright	15	53
,,	2. 42. 31	S.,P.&H.B.	2	White	0·6	Bright	12	54
,,	2. 53. 42	S.,P.&H.B.	3	...	0·5	None	10	55
,,	3. 2. 34	S.	2	Yellowish	0·8	Faint	15	56
,,	3. 10. 51	P.	2	White	0·6	Bright	15	57
,,	3. 20. 8	S.&P.	2	White	0·8	None	12	58
,,	3. 46. 43	S.,P.&H.B.	4	White	2·0	Bright: 3 secs.	30	59
,,	21. 30. 7	H.B.	2	White	0·8	None	10	60
,,	21. 41. 50	S.&P.	2	Bluish-white	0·5	None	10	61
,,	21. 48. 21	S.,P.&H.B.	3	...	0·8	None	12	62

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

No. for Reference.	Path of Meteor in the Sky.
1	Directed from ϵ Cassiopeiæ passed just beyond τ Persei.
2	From Piazzi XIV. 260 to a point between ι and κ Boötis.
3	From γ Cassiopeiæ to ι Cephei.
4	From τ Cassiopeiæ towards π Cygni.
5	From a point just above γ Pegasi towards ι Piscium.
6	From a point 1° north of α Cephei towards the Zenith.
7	From a point 5° south of β Cassiopeiæ moved in an opposite direction to γ Cassiopeiæ.
8	From a point 6° south of β Cassiopeiæ in the direction of α Andromedæ.
9	From a point midway between β and 51 Andromedæ towards β Andromedæ.
10	From a point midway between Polaris and α Ursæ Majoris fell vertically downwards.
11	From a point 3° west of β Andromedæ directed towards α Andromedæ.
12	From α Camelopardi towards a point making an equilateral triangle with α and β Camelopardi.
13	From 54 Andromedæ passed over η Persei and 8° beyond it.
14	From a point midway between γ and τ Andromedæ towards ν Piscium.
15	From 60 Andromedæ towards a point midway between 56 and 58 Andromedæ.
16	From ζ Andromedæ to a point 5° beyond χ Pegasi.
17	From ζ Andromedæ towards δ Piscium.
18	From a point midway between ϵ Aurigæ and 58 Persei towards χ Aurigæ.
19	From a point 3° north of 72 Andromedæ to a point $\frac{1}{3}$ of distance from η to β Pegasi.
20	From κ Cassiopeiæ towards o Cephei.
21	Directed from ζ Andromedæ towards a point midway between γ Pegasi and ω Piscium.
22	Directed from θ Cassiopeiæ to 56 Andromedæ.
23	From a point midway between α Persei and γ Andromedæ in the direction of γ Trianguli.
24	From a point $\frac{1}{3}$ of distance from α Trianguli to γ Andromedæ moved towards δ Piscium.
25	From ϵ Cassiopeiæ towards β Cephei.
26	From α Cygni towards η Cygni.
27	From a point midway between μ and β Andromedæ towards ψ Pegasi.
28	From γ Persei to ϕ Cassiopeiæ.
29	From a point just above 38 Ursæ Majoris passed a little below α Ursæ Majoris.
30	From γ Cephei towards κ Cephei.
31	From δ Ursæ Minoris towards θ Ursæ Minoris.
32	From α Persei passed 3° beyond ϵ Persei.
33	From κ Andromedæ towards ι Lacertæ.
34	From δ Cygni towards δ Lyræ.
35	From θ Persei towards β Trianguli.
36	From 32 Persei towards the Pleiades.
37	From γ Andromedæ to a point beyond 16 Persei.
38	From μ Andromedæ to a point a little east of α Andromedæ.
39	From a point just below the Pleiades towards λ Tauri.
40	Directed from γ Andromedæ to a point 3° west of α Pegasi.
41	From η Persei towards ϵ Cassiopeiæ.
42	From a point midway between Capella and ϵ Aurigæ towards θ Aurigæ.
43	From Piazzi IX. 37 towards κ Draconis.
44	From Polaris towards β Ursæ Majoris.
45	From a point 2° south of θ Aurigæ passed beyond κ Aurigæ.
46	From a point $\frac{1}{3}$ of distance from α to β Arietis towards δ Ceti.
47	From Capella towards θ Aurigæ.
48	From γ Cassiopeiæ towards ν Cephei.
49	From β Pegasi towards ϵ Pegasi.
50	From δ Cassiopeiæ passed a little beyond γ Cassiopeiæ.
51	From κ Andromedæ passed a little beyond o Andromedæ.
52	From the Pleiades to λ Tauri.
53	From θ Andromedæ towards β Pegasi.
54	From α Ursæ Minoris towards β Ursæ Minoris.
55	From a point midway between α and γ Cygni to a point a little beyond η Cygni.
56	From γ Cassiopeiæ towards ζ Cephei.
57	From δ Persei towards ζ Arietis.
58	From a point midway between ι and θ Piscium passed a little beyond ϕ Aquarii.
59	From γ Persei towards β Cephei.
60	From a point midway between ζ and ϵ Cygni towards η Aquilæ.
61	From α Andromedæ towards τ Pegasi.
62	From ζ Cassiopeiæ towards δ Cephei.

Month and Day, 1905.		Greenwich Civil Time.	Observer.	Brightness 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 Reference.
		h m s				s		°	
August	12	21. 56. 12	S.&H.B.	2	Bluish-white	1·5	Slight	20	1
	,,	22. 2. 32	P.&H.B.	2	White	1·2	Bright	15	2
	,,	22. 17. 50	S.,P.&H.B.	3	...	0·8	...	12	3
	,,	22. 31. 28	S.,P.&H.B.	2	White	0·6	Slight	10	4
	,,	22. 37. 9	H.B.	2	White	0·5	...	8	5
	,,	22. 48. 8	S.&H.B.	2	Yellowish	1·2	Bright	20	6
	,,	22. 58. 12	P.	2	White	1·5	Slight	20	7
	,,	23. 11. 52	H.B.	2	White	0·6	...	10	8
	,,	23. 18. 20	S.,P.&H.B.	3	...	0·6	...	12	9
	,,	23. 33. 2	S.,P.&H.B.	2	White	0·8	Bright	15	10
	,,	23. 47. 2	S.,P.&H.B.	1	Bluish-white	1·0	Bright	12	11
August	13	22. 20. 56	S.&H.B.	>1	Bluish-white	1·5	Bright	25	12
	,,	22. 26. 16	H.B.	2	...	0·5	None	8	13
	,,	22. 51. 41	H.B.	3	...	0·6	None	5	14
	,,	22. 53. 59	P.	2	White	0·8	None	15	15
	,,	22. 59. 7	S.	2	Bluish-white	1·0	Slight	12	16
	,,	22. 59. 44	H.B.	3	...	0·5	None	10	17
	,,	23. 1. 14	S.	1	White	1·0	None	15	18
	,,	23. 1. 47	S.	2	Bluish-white	1·2	Bright	15	19
	,,	23. 7. 16	P.	2	White	0·8	Slight	10	20
	,,	23. 19. 17	H.B.	2	Bluish-white	0·8	Slight	10	21
	,,	23. 47. 8	S.	1	Yellowish	3·0	Bright	25	22
	,,	23. 57. 34	P.	2	White	1·3	None	12	23
August	14	0. 2. 49	P.	2	Yellowish	1·0	Slight	10	24
	,,	0. 14. 31	S.	2	White	1·5	Faint	15	25
	,,	0. 21. 52	S.&P.	3	White	1·0	Slight	10	26
	,,	0. 27. 49	S.&H.B.	2	...	0·3	Streak	4	27
	,,	0. 46. 27	S.&H.B.	2	White	0·5	None	6	28
	,,	0. 50. 9	P.&H.B.	2	White	1·0	Slight	12	29
	,,	0. 56. 48	S.&P.	2	White	1·4	Bright	15	30
	,,	1. 8. 53	S.,P.&H.B.	1	Bluish-white	0·5	Slight	10	31
	,,	1. 17. 25	S.,P.&H.B.	2	Bluish-white	0·5	Slight	8	32
	,,	1. 29. 18	S.&H.B.	3	...	0·4	None	5	33
	,,	1. 34. 7	S.&P.	2	White	0·8	Slight	12	34
	,,	1. 42. 40	P.&H.B.	3	...	0·5	None	10	35
	,,	1. 53. 27	S.,P.&H.B.	2	White	0·8	Slight	12	36
October	29	19. 16	H.B.	1	Yellowish	2·0	Dull red: 6 secs.	17	37
November	15	23. 59. 4	H.B.	>1	Yellowish	...	Bright: 3 secs.	25±	38
November	16	0. 12. 49	S.	1	White	2·5	Bright	35	39
	,,	0. 24. 35	S.&H.B.	1	White	2·0	Bright	15	40
	,,	0. 48. 52	H.B.	1	Yellowish	1·2	Slight	18	41
	,,	3. 32. 36	S.	2	Bluish-white	1·0	Bright	15	42
	,,	3. 47. 55	P.	1	White	0·6	Bright	12	43
	,,	3. 49. 50	P.	2	White	0·6	Bright	15	44
	,,	3. 50. 37	S.	2	White	0·5	None	10	45
	,,	3. 56. 52	S.	1	Bluish-white	1·0	Slight	12	46
	,,	4. 1. 11	P.	2	...	0·8	Bright	12	47
	,,	4. 3. 40	S.	2	...	0·4	None	8	48
	,,	4. 13. 52	P.	1	Bluish-white	1·0	Bright	15	49

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 β Persei towards ξ Arietis.
2	From δ Persei towards ι Aurigæ.
3	From η Persei towards ϵ Cassiopeiæ.
4	From γ Andromedæ to β Andromedæ.
5	From 58 Persei to a point 2° beyond 16 Aurigæ.
6	From ϵ Persei towards τ Tauri.
7	From β Cassiopeiæ to a point a little beyond ϵ Cephei.
8	From γ Trianguli towards λ Arietis.
9	From Polaris towards β Ursæ Minoris.
10	From Capella to a point a little beyond θ Aurigæ.
11	From ϵ Aurigæ towards υ Aurigæ.
12	From Polaris towards α Ursæ Majoris.
13	From θ Aquilæ to ρ Aquilæ.
14	From 34 Persei towards Piazzi III. 7.
15	From α Andromedæ towards α Pegasi.
16	From a point midway between γ and α Cassiopeiæ towards ι Cassiopeiæ, passing across β Cassiopeiæ.
17	From γ Cygni to η Cygni.
18	From γ Andromedæ towards β Andromedæ.
19	From Polaris towards β Ursæ Minoris.
20	From β Cassiopeiæ towards δ Cephei.
21	From τ Persei to β Persei.
22	From γ Persei towards γ Cephei.
23	From Capella passed across β Aurigæ.
24	From γ Cassiopeiæ towards ι Cephei.
25	From β Persei towards ζ Arietis.
26	From β Andromedæ towards ϵ Andromedæ.
27	From a point $\frac{1}{3}$ of the distance from ϵ to β Persei towards ζ Persei.
28	From a point midway between Piazzi III. 54 and Piazzi IV. 7 towards Piazzi IV. 269.
29	From ψ Pegasi towards 70 Pegasi.
30	From Polaris to β Ursæ Minoris.
31	From ι Cephei towards η Cephei.
32	From a point midway between γ and α Persei moved across α Persei towards 52 Persei.
33	From β Andromedæ to ϵ Andromedæ.
34	From o Andromedæ to ι Lacertæ.
35	From μ Andromedæ to ρ Andromedæ.
36	From η Cephei to κ Cygni.
37	From ν Boötis passed over a point midway between ζ and 51 Herculis, and disappeared shortly before reaching a line joining δ and α Herculis.
38	Passed midway between η and ϵ Piscium and ϵ and δ Piscium, commencing near γ Arietis.
39	From λ Draconis to a point midway between γ and κ Cephei.
40	From a point midway between α and β Lacertæ towards ϵ Cygni.
41	Directed from δ Cephei to a point 3° from 72 Andromedæ.
42	From a point midway between δ and γ Leonis towards α Canum Venaticûm.
43	From Regulus towards γ Cancri.
44	From γ Ursæ Majoris to a point a little beyond α Draconis.
45	From π Leonis towards Castor.
46	From λ Draconis towards δ Ursæ Minoris.
47	From γ Leonis to a point 3° beyond ν Ursæ Majoris.
48	From ϵ Leonis to α Lyncis.
49	From θ Ursæ Majoris to a point about 5° beyond π Ursæ Majoris.

Month and Day, 1905.	Greenwich Civil Time.	Observer.	Brightness 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 Reference.
	h m s				s		°	
November 16	4. 21. 3	P.	3	...	0·5	None	8	1
,,	4. 23. 18	P.	1	White	1·3	Bright	15	2
,,	4. 30. 11	S.	1	White	1·4	Bright	20	3
,,	4. 35. 25	P.	1	White	1·0	Slight	15	4
,,	4. 41. 1	S.	1	White	1·5	Bright	25	5
,,	4. 43. 44	P.	>1	White	2·5	Brilliant: 3 secs.	20	6
,,	4. 45. 6	S.	>1	Yellowish	0·5	Brilliant	15	7
,,	5. 3. 37	P.	1	Bluish-white	0·8	Bright	12	8
,,	5. 15. 1	S.&P.	1	White	1·0	Bright	15	9
,,	5. 29. 53	S.	>1	White	1·4	Bright	20	10
,,	5. 40. 41	S.	1	Bluish-white	0·5	Bright	10	11
,,	5. 46. 40	S.&P.	2	...	0·3	None	8	12
,,	5. 49. 33	S.	>1	White	1·5	Bright	20	13
,,	5. 59. 44	P.	1	Bluish-white	1·0	Bright	20	14
,,	6. 3. 49	S.&P.	>1	Blue	2·0	Bright	35	15
,,	6. 20. 46	P.	1	Bluish-white	1·0	Slight	15	16
November 19	20. 54. 6	S.&P.	2	...	1·5	Faint	15	17
,,	21. 1. 20	S.	1	Bluish-white	1·0	Faint	12	18
,,	21. 10. 49	S.	2	Bluish-white	0·8	Bright	10	19
,,	21. 21. 21	S.&P.	1	Bluish-white	1·3	Bright	15	20
,,	21. 35. 38	S.&P.	1	Bluish-white	2·0	Bright	20	21
,,	23. 11. 5	S.&P.	2	Bluish-white	1·5	Faint	15	22
November 20	20. 12. 17	P.	2	White	1·0	Faint: long	20	23
,,	20. 21. 59	S.	1	Bluish-white	1·5	Bright	20	24
,,	21. 34. 56	H.B.	4	...	0·5	None	7	25
,,	21. 40. 46	H.B.	2	Yellowish	0·4	Slight	4	26
,,	21. 46. 16	P.&H.B.	1	White	0·2	None	25	27
,,	22. 36. 24	S.&P.	3	White	0·6	None	12	28
,,	22. 54. 33	S.&P.	2	Bluish-white	0·8	None	10	29
,,	23. 22. 49	H.B.	3	Bluish-white	0·5	None	7	30
,,	23. 38. 56	S.	1	Bluish-white	1·5	Bright	20	31
,,	23. 44. 16	P.	2	Bluish-white	1·0	None	15	32
,,	23. 56. 11	S.,P.&H.B.	1	White	1·5	None	20	33

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

No. for Reference.	Path of Meteor in the Sky.
1	From μ to γ Ursæ Majoris.
2	From η Leonis passed across ϵ Leonis and about 10° beyond it.
3	From γ Leonis towards χ Ursæ Majoris.
4	From ϵ Leonis in a direction parallel to the line joining γ Leonis and Regulus.
5	From ζ Leonis towards θ Ursæ Majoris.
6	From ξ Leonis towards α Hydræ.
7	From a point near θ Leonis towards γ Virginis.
8	From ξ Leonis to β Cancri.
9	From Regulus to a point a little beyond α Hydræ.
10	From ι Cancri passed midway between Castor and Pollux.
11	From μ towards β Ursæ Majoris.
12	From ζ Leonis to β Leonis Minoris.
13	From a point about 3° west of α Ursæ Majoris towards Polaris.
14	From ζ Ursæ Majoris to a point a little beyond η Draconis.
15	From a point midway between η and γ Leonis towards Polaris.
16	From γ Leonis to a point 3° east of ψ Ursæ Majoris.
17	From a point midway between α and β Arietis towards α Piscium.
18	From γ Pegasi to a point a little beyond γ Piscium.
19	From γ Andromedæ to a point a little beyond ϕ Andromedæ.
20	From a point midway between γ Andromedæ and β Trianguli towards η Piscium.
21	From μ Andromedæ towards μ Pegasi.
22	From γ Cassiopeiæ towards κ Cephei.
23	From β Trianguli passed 1° to the east of α Arietis.
24	From γ Andromedæ to γ Cassiopeiæ.
25	Directed from 16 Persei towards a point between θ Persei and 62 Andromedæ ($43° + 40°$ to $38° + 45\frac{1}{2}°$).
26	$35° + 25°$ to $37° + 21°$.
27	Directed from a point midway between μ and ν Tauri to a point within 2° in a direct line from ν Orionis.
28	From 23 Andromedæ towards α Lacertæ.
29	From α Trianguli passed over α Arietis.
30	From a point $\frac{1}{3}$ of the distance from τ to υ Piscium to a point 2° north of ψ Piscium.
31	From a point near ϕ Cassiopeiæ towards γ Cephei.
32	From γ Persei towards β Camelopardi.
33	From α Lacertæ passed just over and beyond α Cygni.