RESULTS

OF THE

MAGNETICAL AND METEOROLOGICAL OBSERVATIONS

MADE AT

THE ROYAL OBSERVATORY, GREENWICH,

IN THE YEAR

1904:

UNDER THE DIRECTION OF

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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.

1905.

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ROYAL OBSERVATORY, GREENWICH.

RESULTS

OF

MAGNETICAL AND METEOROLOGICAL OBSERVATIONS.

1904.

GREENWICH MAGNETICAL AND METEOROLOGICAL OBSERVATIONS, 1904.

INTRODUCTION.

§ 1. *Personal Establishment and Arrangements.*

During the year 1904 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^{c}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.

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* 1904.

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 $-10'\cdot8$. 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 $1''\cdot15$. 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 $-6^{\text{div}}\cdot0$, which is equivalent to $-6''\cdot9$.

The value in arc of one revolution of the telescope-micrometer is $1'.34''\cdot2$.

The adopted reading for the line of collimation of the theodolite telescope throughout the year was $100^{\text{r}}\cdot280$.

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 nine determinations during the first seven months of the year to be $3'.\ 20''\cdot0$, and from sixteen determinations during the remainder of the year, to be $0'.42''\cdot9$, a change having taken place on August 7.

The effect of torsion of the silk suspending thread is eliminated by turning the torsion-circle until the brass torsion weight inserted in place of the magnet, rests in the plane of the magnetic meridian. The weight is inserted usually about once a week, and whenever the adjustment is found not to have been sufficiently close, the observed positions of the magnet are corrected for displacement of the magnet from the meridian by the torsion of the thread. Such correction is determined experimentally, with the magnet in position, by changing the reading of the torsion-circle by a definite amount, usually 90°, thus giving the suspension thread that amount of azimuthal twist, and observing, with the theodolite, the change in the position of the magnet thereby produced, from which is derived the ratio of the couple due to torsion of the thread to the couple due to the earth's horizontal magnetic force. This ratio was found from the mean of twenty-seven determinations to be $\frac{1}{1037}$. The thread was broken on December 20, and the ratio for the new one was found from the mean of four determinations to be $\frac{1}{1207}$.

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 January 1 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
Jan. 1	146 0	46·33		21·54	230	46·30		20·44
			7·90				9·70	
	147 0	54·23		21·06	231	56·00		20·94
			8·62				7·78	
	148 0	62·85		20·00	232	63·78		20·86

From these observations it appeared that the times of vibration and scale-readings were sensibly the same when the torsion-circle read 147°.8′, marked end west, and 230°.57′, marked end east, the difference being 83°.49′. Half this difference, or 41°.54′·5, 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°.10′ derived from the determinations made on 1902 December 31, 1904 January 1, and 1904 December 30.

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 0·002364; 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 $-0°{\cdot}3$ 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°.10′, the movement of the spot of light on the cylinder for a change of 0·01 of horizontal force is found to be 2·478 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 53 observations made during the course of the year this was found to be $16^{s}\cdot939$.

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 1902 December 30 gave for the time of vibration of the magnet in the horizontal plane $17^{s}\cdot109$. This value has been used throughout for the year 1904.

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″·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″·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 $T' = 17^s{\cdot}109$, $T = 16^s{\cdot}939$, and dip = 66°.57′.11″, the change of vertical force corresponding to change of one division of scale-reading was found to be 0·0005700, and this value has been used throughout the year 1904 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 $= 200{\cdot}4 \times \tan \text{dip} \times \left(\frac{T}{T'}\right)^2 \times 0{\cdot}01$. Using the values of T, T', and of dip before given (page *xxi*), the movement of the spot of light on the cylinder for a change of 0·01 of vertical force is thus found to be 4·617 inches, and with this unit the scale for measure of the ordinates was constructed for use throughout the year. Base line values were then determined and written on the sheets, and new base lines laid down, from which the hourly ordinates (see page *xxix*) were measured, exactly in the same way as was described for declination.

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

DIP INSTRUMENT.—The instrument with which the observations of magnetic dip are made is that which is known as Airy's instrument. It was constructed by Messrs. Troughton and Simms, and is mounted in the Magnetic Pavilion on a slate slab supported by a braced wooden stand built up from the ground independently

of the floor. The plan of the instrument was arranged by 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 1904 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,

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

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

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

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

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

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

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

In calculating the value of P as well as the values of the four factors within brackets, the distances r_1 and r_2 are taken as being equal to 1·0 ft. and 1·3 ft. respectively. The expression for P is not convenient for logarithmic computation, and, in practice, its value for each observation has, since the year 1877, been calculated from the expression $\dfrac{\text{Log. } A_1 - \text{Log. } A_2}{\text{modulus}} \times \frac{r_1^2 \times r_2^2}{r_2^2 - r_1^2} = (\text{Log. } A_1 - \text{Log. } A_2) \times 5{\cdot}64$.

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,

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

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

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

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

From the combination of the values of $\frac{m}{X}$ and mX, m and X are immediately found. The computation is made with reference to English measure, taking as units of length and weight the foot and grain, but it is desirable to express X also in metric measure. If the English foot be supposed equal to α times the millimètre, and the grain equal to

β times the milligramme, then, for reduction to metric measure, $\frac{m}{X}$ and mX must be multiplied by α^3 and $\alpha^2\beta$ respectively, or X must be multiplied by $\sqrt{\frac{\beta}{\alpha}}$. Taking the mètre as equal to 39·37079 inches, and the gramme as equal to 15·432349 grains, the factor by which X is to be multiplied in order to obtain X in metric (millimètre-milligramme-second) measure is $0{\cdot}46108 = \frac{1}{2{\cdot}1689}$. 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 is approximately the same both in the Blackheath—North Kent East Junction circuit, which is perpendicular to the course of the electric railway, and in the Angerstein Wharf—Lady Well circuit, which is parallel to the line of railway, with one earth plate (Angerstein Wharf) near the river. At night when the trains are not running, the interruptions entirely cease.

§ 5. *Magnetic Reductions.*

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

Before the photographic records of magnetic declination, horizontal force, and vertical force are discussed, they are divided into two groups—one including all days on which the traces show no particular disturbance, and which, therefore, are suitable for the determination of diurnal inequality; the other comprising days of unusual and violent disturbance, when the traces are so irregular that it appears impossible to treat them except by the exhibition of every motion of each magnet through the day. Following the principle of separation hitherto adopted, there are no days in the year 1904 which are classed as days of great disturbance. Days of lesser disturbance are January 28–29; April 1, 18–19; June 15–16; July 6–7; August 3–4; September 25; October 21–22. 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 III. to VI. for horizontal force January 1, December 30 and 31, and in Tables VII. to X. for vertical force, December 30 and 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 April 6, which should be taken as 1028 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

$$\text{H.F. in metrical measure} \times \sin 1' = 1{\cdot}8520 \times \sin 1' = 0{\cdot}0005387.$$

For variation of horizontal force, the factor is

$$\text{H.F. in metrical measure} = 1{\cdot}8520,$$

and for variation of vertical force

$$\begin{aligned}\text{V.F. in metrical measure} &= \text{H.F. in metrical measure} \times \tan \text{dip},\\ &= 1{\cdot}8520 \times \tan 66°.57'.11'' = 4{\cdot}3531.\end{aligned}$$

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 :—

1904.	a_5.	b_5.
Declination	$-0'.04$	$-0'.00$
Horizontal Force	$+0.6$	-0.4
Vertical Force	$+1.0$	-0.5

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 1904.	Declination.	Horizontal Force.	Vertical Force.
Sums of Squares of Observed Values (Table XII.)	278′·78	297742·7	18453·0
Sums of Squares of Residuals after the introduction of m	111·08	49330·3	2857·2
,, ,, a_1 and b_1	44·32	12013·3	1942·1
,, ,, a_2 and b_2	8·54	3075·1	361·2
,, ,, a_3 and b_3	0·89	461·2	49·2
,, ,, a_4 and b_4	0·05	18·4	17·4
,, ,, a_5 and b_5	0·02	12·0	3·2

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 1904, affording thereby, it is hoped, facilities for making comparison with solar phenomena.

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

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

The indications of horizontal and vertical force are given precisely as registered; they are therefore affected, slightly as compared with the amount of motion on disturbed days, by the small recorded changes of temperature of the magnets. The recorded hourly temperatures being inserted on the plates, reference to the temperature-correction of the magnets, given at page *xxx*, will show the effect produced. Briefly, an increase of about $4\frac{1}{2}^{\circ}$ of temperature throws the horizontal force curve upward by 0·001 of the whole horizontal force; an increase of about 5° of temperature throws the vertical force curve downward by 0·001 of the whole vertical force.

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

—	Length in Inches.					
	Of 1° of Declination.		Of 0·01 of Horizontal Force.		Of 0·01 of Vertical Force.	
	in.	mm.	in.	mm.	in.	mm.
On the Photographs -	4·691	119·15	2·478	62·94	4·617	117·28
On the Plates -	2·580	65·53	1·363	34·62	2·539	64·50

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°.57′.11″]
= Horizontal Force × 2·3505;

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.	
	in.	mm.	in.	mm.	in.	mm.
On the Photographs -	2·68	68·1	2·48	62·9	1·96	49·9
On the Plates -	1·47	37·4	1·36	34·6	1·08	27·4

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 1904	= 4·0166
Millimètre-milligramme-second,	or Metric unit,	„	„	„	= 1·8520
Centimètre-gramme-second,	or C.G.S. unit,	„	„	„	= 0·18520

Dividing, therefore, the scale values last given by 4·0166, 1·8520, and 0·18520 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.			
	On the Photographs.		On the Plates.		On the Photographs.		On the Plates.		On the Photographs.		On the Plates.	
	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	0·49	12·4	0·27	6·8
Metric -	1·45	36·8	0·80	20·2	1·34	34·0	0·74	18·7	1·06	26·9	0·58	14·8
C.G.S. -	14·5	368	8·0	202	13·4	340	7·4	187	10·6	269	5·8	148

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				

* 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 correction −0°·3 has been applied to the readings of both these thermometers.

The self-registering thermometers for temperature of air and evaporation are all by Negretti and Zambra. The maximum thermometers are on Negretti and Zambra's principle, the minimum thermometers are of Rutherford's construction. To the readings of Negretti and Zambra, No. 83760, for maximum temperature of the air, a correction of −0°·1 has been applied; to those of Negretti and Zambra, No. 38338, for minimum temperature of the air, a correction of +0°·2 has been applied; and to those of Negretti and Zambra, No. 102104, for maximum temperature of evaporation, a correction of +0°·1 has been applied. To the readings of Negretti and Zambra, No. 98508, for minimum temperature of evaporation, a correction of +0°·2 has been applied whenever they exceeded 59°.

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°·1 has been applied. The wet-bulb is Hicks No. 268525, to the readings of which a correction of +0°·1 has been applied. The maximum thermometer is Negretti and Zambra, No. 85059, which required no correction. To the readings of the minimum thermometer, Negretti and Zambra, No. 68873, a correction of +0°·3 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 1903 was Hicks, No. 268524, which required no correction. Negretti and Zambra, No. 37467, is a self-registering maximum thermometer, to the readings of which a correction of $-0^{\circ}\cdot5$ has been applied. No. 342663, by Hicks, is a self-registering minimum thermometer, to the readings of which corrections have been applied as follow: 20° to 33° $-$ $0^{\circ}\cdot1$, 33° to 40° $0^{\circ}\cdot0$, 40° to 46° $+$ $0^{\circ}\cdot1$, 46° to 53° $+$ $0^{\circ}\cdot2$, 53° to 58° $+$ $0^{\circ}\cdot3$, 58° to 62° $+$ $0^{\circ}\cdot4$, and above 62° $+$ $0^{\circ}\cdot5$. The bulbs of all these thermometers are 4 feet above the platform, and about 20 feet above the ground. The eye-observation of the thermometer for temperature of the air is omitted on Sundays and a few other days.

On 1900 March 31, an additional Stevenson screen, similar to the screen already mounted in the Magnet ground, was erected in the Magnetic Pavilion enclosure, 15 feet north-east of the open stand. The dry and wet-bulb thermometers mounted in this screen are Negretti and Zambra, Nos. 94713 and 94714, which required no correction to their readings. To the readings of the maximum thermometer, Negretti and Zambra, No. 85066, no correction is required, and to those of the minimum thermometer, Negretti and Zambra, No. 85080, a correction of $+$ $0^{\circ}\cdot2$ 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 1904 eight rain gauges were employed, placed at different elevations above the ground, complete information in regard to which will be found at page (cviii) of the Meteorological Section.

The gauge No. 1 forms part of the Osler Anemometer apparatus, and is self-registering, the record being made on the sheet on which the direction and pressure of the wind are recorded. The receiving surface is a rectangular opening 10×20 inches (200 square inches in area). The collected water passes into a vessel suspended by spiral springs, which lengthen as the water accumulates, until 0·25 inch is collected. The water then discharges itself by means of the following modification of the siphon. A vertical copper tube, open at both ends, is fixed in the receiver, with one end just projecting below the bottom. Over this tube a larger tube, closed at the top, is loosely placed. The accumulating water, having risen to the top of the inner tube, begins to flow off into a small tumbling bucket, fixed in a globe placed underneath, and carried by the receiver. When full, the bucket falls over, throwing the water into a small exit pipe at the lower part of the globe—the only outlet. This creates a partial vacuum in the globe sufficient to cause the longer leg of the siphon to act, and the whole remaining contents of the receiver then run off, through the globe, to a waste pipe. The spiral springs at the same time shorten, and raise the receiver. The gradual descent of the water vessel as the rain falls, and the immediate ascent on discharge of the water, act upon a pencil, and cause a corresponding trace to be made on the paper fixed to the moving board of the anemometer. The rain scale on the paper was determined experimentally by passing a known quantity of water through the receiver. The continuous record thus gives complete information on the rate of the fall of rain.

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

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

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

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

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

For a full description of the principle of the electrometer, reference may be made to 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 com-

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

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

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

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

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

§ 7. *Meteorological Reductions.*

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

All results in regard to atmospheric pressure, temperature of the air and of evaporation with deductions therefrom, and atmospheric electricity, are derived from the photographic records, excepting that the maximum and minimum values of air temperature are those given by eye observation of the ordinary maximum and minimum thermometers at 9^h and 21^h (civil reckoning), reference being made, however, to the photographic register when necessary to obtain the values corresponding to the civil day from midnight to midnight. The hourly readings of the photographic traces for the elements mentioned are entered into a form having double argument, the horizontal argument ranging through the 24 hours of the civil day (0^h to 23^h), and the vertical argument through the days of a calendar month. Then for all the photographic elements, the means of the numbers standing in the vertical columns of the monthly forms, into which the values are entered, give the mean monthly photographic values for each hour of the day, the means of the numbers in the horizontal columns giving the mean daily value. It should be mentioned that before measuring out the electrometer ordinates, a pencil line was first drawn through the trace to represent the general form of the curve, in the way described for the magnetic registers (page *xxix*), excepting that no day has been omitted on account of unusual electrical disturbance, as it has been found difficult to decide on any limit of disturbance beyond which it would seem proper, as regards determination of diurnal inequality, to reject the results. In measuring the electrometer ordinates a scale of inches is used, and the values given in the tables which follow are expressed in thousandths of an inch, positive and negative potential being denoted by positive and negative numbers respectively. The scale has not been determined in terms of any electrical unit.

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

as given by eye observation. A correction applicable to the photographic reading at each of these hours is thus obtained, and, by interpolation, corrections for the intermediate hours are found. The mean of the twenty-four hourly corrections in each month is adopted as the correction applicable to each mean daily value in the month. Thus mean hourly and mean daily values of the several elements are obtained for each month. The process of correction is equivalent to giving photographic indications in terms of corrected standard barometer, and in terms of the standard dry and wet bulb thermometers exposed on the free stand. The barometer results are *not* reduced to sea level, neither are they corrected for the effect of gravity, by reduction to the latitude of 45°.

The mean daily temperature of the dew-point and degree of humidity are deduced from the mean daily temperatures of the air and of evaporation by use of Glaisher's *Hygrometrical Tables*. The factors by which the dew-point given in these tables is calculated were found by Mr. Glaisher from the comparison of a great number of dew-point determinations obtained by use of Daniell's hygrometer, with simultaneous observations of dry and wet bulb thermometers, combining observations made at the Royal Observatory, Greenwich, with others made in India and at Toronto. The factors are given in the following table.

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

Reading of Dry-bulb Thermometer.	Factor.	Reading of Dry-bulb Thermometer.	Factor.	Reading of Dry-bulb Thermometer.	Factor.	Reading of Dry-bulb Thermometer.	Factor.
°		°		°		°	
10	8·78	33	3·01	56	1·94	79	1·69
11	8·78	34	2·77	57	1·92	80	1·68
12	8·78	35	2·60	58	1·90	81	1·68
13	8·77	36	2·50	59	1·89	82	1·67
14	8·76	37	2·42	60	1·88	83	1·67
15	8·75	38	2·36	61	1·87	84	1·66
16	8·70	39	2·32	62	1·86	85	1·65
17	8·62	40	2·29	63	1·85	86	1·65
18	8·50	41	2·26	64	1·83	87	1·64
19	8·34	42	2·23	65	1·82	88	1·64
20	8·14	43	2·20	66	1·81	89	1·63
21	7·88	44	2·18	67	1·80	90	1·63
22	7·60	45	2·16	68	1·79	91	1·62
23	7·28	46	2·14	69	1·78	92	1·62
24	6·92	47	2·12	70	1·77	93	1·61
25	6·53	48	2·10	71	1·76	94	1·60
26	6·08	49	2·08	72	1·75	95	1·60
27	5·61	50	2·06	73	1·74	96	1·59
28	5·12	51	2·04	74	1·73	97	1·59
29	4·63	52	2·02	75	1·72	98	1·58
30	4·15	53	2·00	76	1·71	99	1·58
31	3·70	54	1·98	77	1·70	100	1·57
32	3·32	55	1·96	78	1·69		

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

The excess of the mean temperature of the air on each day above the average of 50 years, given in the "Daily Results of the Meteorological Observations," is found by comparing the numbers contained in column 6 with a table of average daily temperatures found by smoothing the accidental irregularities of the daily means deduced from the observations for the fifty years 1841–1890. In this series the mean daily temperature from 1841 to 1847 depends usually on 12 observations daily, in 1848 on 6 observations daily, and from 1849 to 1890 on 24 hourly readings from the photographic record. The smoothed numbers are given in the following table.

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

Day of the Month.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.
	°	°	°	°	°	°	°	°	°	°	°	°
1	38·5	39·7	40·2	45·4	49·2	57·2	61·3	62·2	59·7	54·1	46·7	40·6
2	38·5	39·7	40·4	45·7	49·4	57·7	61·4	62·1	59·7	53·8	46·5	40·6
3	38·5	39·7	40·5	46·0	49·7	58·0	61·7	62·1	59·6	53·5	46·3	40·8
4	38·4	39·8	40·7	46·2	50·0	58·2	61·9	62·2	59·4	53·2	46·1	41·1
5	38·3	39·8	40·9	46·2	50·3	58·3	62·1	62·3	59·3	53·0	45·9	41·3
6	38·2	39·7	41·1	46·2	50·6	58·3	62·2	62·4	59·1	52·7	45·5	41·3
7	38·1	39·4	41·0	46·1	50·8	58·2	62·1	62·5	58·9	52·5	45·1	41·0
8	38·0	39·1	40·9	45·9	51·0	58·2	62·0	62·5	58·7	52·1	44·6	40·6
9	37·9	38·7	40·8	45·6	51·2	58·2	62·0	62·5	58·5	51·7	44·0	40·3
10	37·9	38·4	40·7	45·5	51·5	58·2	62·1	62·5	58·3	51·3	43·6	39·9
11	37·9	38·3	40·6	45·5	51·7	58·4	62·3	62·5	58·1	51·0	43·2	39·8
12	37·9	38·5	40·7	45·7	52·0	58·6	62·6	62·5	58·0	50·6	42·9	39·9
13	38·0	38·8	40·9	46·0	52·3	58·8	62·9	62·4	57·9	50·3	42·8	40·1
14	38·2	39·2	41·2	46·4	52·6	58·9	63·1	62·3	57·8	50·1	42·6	40·2
15	38·3	39·6	41·4	46·9	52·8	59·0	63·2	62·1	57·7	49·9	42·5	40·3
16	38·5	39·8	41·5	47·3	53·1	59·0	63·2	62·0	57·5	49·8	42·4	40·2
17	38·5	39·8	41·6	47·7	53·3	59·1	63·1	61·8	57·3	49·6	42·3	40·0
18	38·5	39·7	41·6	48·1	53·6	59·2	63·0	61·6	56·9	49·5	42·2	39·7
19	38·5	39·6	41·5	48·3	53·9	59·5	63·0	61·4	56·5	49·3	42·2	39·3
20	38·4	39·5	41·4	48·5	54·2	59·9	63·0	61·3	56·1	49·0	42·1	39·0
21	38·3	39·5	41·4	48·5	54·6	60·3	63·0	61·1	55·7	48·8	42·1	38·8
22	38·3	39·6	41·5	48·5	55·0	60·7	62·9	61·0	55·4	48·5	42·2	38·6
23	38·4	39·8	41·8	48·4	55·3	61·0	62·8	60·9	55·2	48·2	42·1	38·4
24	38·5	39·9	42·1	48·4	55·6	61·2	62·6	60·8	55·1	47·9	42·1	38·3
25	38·8	40·0	42·4	48·4	55·7	61·3	62·4	60·8	55·0	47·6	42·0	38·3
26	39·0	40·1	42·9	48·4	55·9	61·4	62·3	60·8	54·9	47·4	41·9	38·4
27	39·3	40·1	43·3	48·5	56·0	61·4	62·3	60·7	54·9	47·3	41·6	38·4
28	39·5	40·2	43·7	48·6	56·0	61·3	62·3	60·6	54·8	47·2	41·3	38·5
29	39·7		44·1	48·8	56·2	61·2	62·3	60·3	54·6	47·0	41·0	38·6
30	39·8		44·6	49·0	56·5	61·2	62·3	60·1	54·4	47·0	40·7	38·6
31	39·8		45·0		56·8		62·3	59·9		46·8		38·6
Means	38·5	39·5	41·7	47·2	53·1	59·4	62·4	61·6	57·2	50·0	43·2	39·7

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

The daily register of rain contained in column 16 is that recorded by the gauge No. 6, whose receiving surface is 5 inches above the ground. This gauge is usually read at 9^h, 15^h, and 21^h Greenwich civil time. The continuous record of Osler's self-registering gauge shows whether the amounts measured at 9^h are to be placed to the same, or to the preceding civil day; and in cases in which rain fell both before and after midnight, also gives the means of ascertaining the proper proportion of the 9^h amount which should be placed to each civil day. The number of days of rain given in the footnotes, and in the abstract tables, pages (lix) and (cviii), 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 (xxxiii) to (lv), and in the abstract table, page (lix), is the mean found from observations made usually at 9^h, 12^h (noon), 15^h, and 21^h of each civil day.

For understanding the divisions of time under the headings, "Clouds and Weather" and "Electricity," the following remarks are necessary:—In regard to Clouds and Weather, the day is divided by columns into two parts (from midnight to noon, and from noon to midnight), and each of these parts is subdivided into two or three parts by colons (:). Thus, when there is a single colon in the first column, it denotes that the indications before it apply (roughly) to the interval from midnight to 6^h, and those following it to the interval from 6^h to noon. When there are two colons in the first column, it is to be understood that the twelve hours are divided into three nearly equal parts of four hours each. And similarly for the second column. In regard to Electricity, the results are included in one column; in this case the colons divide the whole period of 24 hours (midnight to midnight).

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

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 (lx) and (lxi), do not in some cases agree with the monthly means given in the daily results

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

The table, "Abstract of the Changes of the Direction of the Wind," as derived from Osler's Anemometer, page (xcv), 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 (cii), 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 $0^{in.}020$, 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 (cvi) and (cvii) 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 1904 were Mr. Showell, Mr. Parkinson and Mr. Barrett. Their observations are distinguished by the initials S, P, and B, respectively. A few observations taken by Mr Dyson, Mr Crommelin, and Mr Edney are distinguished by the initials D, A C, and E, respectively.

W. H. M. CHRISTIE.

ROYAL OBSERVATORY, GREENWICH.
1905, *November* 3.

ROYAL OBSERVATORY, GREENWICH.

RESULTS

OF

MAGNETICAL OBSERVATIONS

(EXCLUDING DAYS OF GREAT MAGNETIC DISTURBANCE),

1904.

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

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

1904.

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	...	18·2	16·3	14·9	14·3	14·2	14·9	14·2	14·8	14·8	14·2	12·8
2	17·9	17·5	16·0	16·4	13·9	14·3	14·5	14·5	14·5	14·4	15·2	13·1
3	18·0	17·4	15·9	15·9	15·3	14·9	13·7	15·9	14·6	14·1	14·1	13·3
4	18·5	17·9	14·6	16·0	15·1	14·8	14·1	13·8	14·7	13·5	14·0	12·6
5	18·4	16·8	15·6	16·5	15·1	15·4	14·3	14·1	14·5	14·5	13·4	13·0
6	17·8	16·2	15·7	16·5	15·1	15·9	12·8	13·5	14·9	14·1	14·3	13·1
7	18·0	17·1	15·1	16·8	15·3	15·1	11·8	14·3	15·2	14·1	13·9	13·4
8	17·9	16·7	15·9	15·4	16·6	14·3	13·4	14·4	14·0	14·2	14·0	13·5
9	17·7	17·6	15·4	16·1	15·9	14·6	13·0	14·6	14·6	14·5	13·9	13·4
10	17·5	16·8	15·9	15·9	16·1	14·6	12·5	13·9	15·3	15·3	14·2	13·3
11	17·3	17·3	15·7	15·8	16·0	13·9	13·8	13·5	14·6	14·8	13·7	12·8
12	17·8	17·3	16·0	16·3	16·3	14·3	13·0	13·9	14·6	15·3	14·1	13·0
13	17·5	17·2	15·8	17·0	17·4	15·2	13·7	13·7	15·1	14·6	14·3	12·9
14	18·1	17·4	15·8	16·0	15·0	15·1	13·9	14·2	14·1	14·0	13·8	12·9
15	18·7	17·6	16·1	16·4	14·0	16·7	14·0	14·5	13·5	13·8	13·7	11·8
16	18·3	17·9	16·1	16·4	15·2	17·1	13·1	13·8	14·3	13·6	15·1	13·3
17	17·7	17·5	16·2	16·7	15·0	14·7	13·5	14·0	13·6	14·7	15·2	12·9
18	17·1	17·4	15·7	16·6	16·1	14·9	14·0	13·5	13·8	14·4	14·5	12·8
19	17·3	17·0	15·9	17·3	17·1	14·8	14·0	13·7	13·9	14·5	14·3	12·8
20	17·1	16·9	15·5	17·4	15·7	14·8	14·0	13·5	13·9	14·1	14·2	12·6
21	17·2	17·0	15·5	17·4	14·9	14·6	13·8	13·3	14·0	14·2	13·9	12·2
22	16·4	17·0	15·9	16·4	14·8	14·1	13·8	12·2	14·3	13·2	12·9	11·5
23	17·5	17·7	16·0	16·0	15·4	14·1	14·1	12·7	14·0	13·9	12·1	11·6
24	17·5	17·4	16·2	16·6	15·4	14·4	13·2	13·7	13·7	13·6	11·8	11·7
25	17·8	17·6	15·7	15·5	14·8	14·5	14·6	13·8	14·9	14·2	12·7	11·8
26	17·8	17·7	16·1	17·0	14·1	14·5	13·9	13·6	14·5	13·8	11·8	12·1
27	17·7	17·8	16·1	16·1	13·1	14·6	14·3	14·0	14·6	14·5	11·6	11·3
28	17·2	17·5	15·5	16·9	14·2	14·9	13·9	13·4	14·3	14·5	12·3	12·0
29	18·6	17·3	15·1	15·4	13·8	14·8	14·9	13·6	14·3	14·5	12·7	13·2
30	17·5		15·0	14·9	14·7	14·9	13·8	14·5	14·3	14·7	13·4	12·6
31	18·2		15·8		14·4		12·9	14·3		14·0		11·8

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

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

1904.

Hour, Greenwich Civil Time.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.
	′	′	′	′	′	′	′	′	′	′	′	′
Midn.	0·2	0·2	2·7	2·3	2·9	4·8	3·5	2·9	1·9	0·6	0·6	0·4
1h	0·6	0·5	2·7	2·5	2·8	4·5	3·3	2·7	1·9	0·6	1·2	0·8
2	0·8	0·7	2·5	2·4	2·7	4·3	3·1	2·7	1·8	0·9	1·2	1·1
3	0·9	0·9	2·3	2·4	2·6	3·8	2·9	2·5	1·7	1·3	1·4	1·3
4	1·0	1·1	2·2	2·5	2·2	3·0	2·2	2·2	1·4	1·5	1·5	1·5
5	1·1	1·1	2·2	2·3	1·4	1·5	1·1	1·3	1·2	1·4	1·5	1·4
6	1·4	0·9	2·1	1·9	0·7	0·3	0·4	0·4	0·9	1·0	1·3	1·1
7	1·5	0·6	1·4	0·8	0·0	0·0	0·0	0·0	0·2	0·6	1·2	1·1
8	1·4	0·6	0·2	0·0	0·0	0·4	0·1	0·3	0·0	0·0	1·1	1·0
9	1·8	0·7	0·0	0·8	1·2	1·9	1·1	1·8	1·0	0·1	1·3	1·1
10	2·5	1·4	1·3	3·1	3·4	4·7	3·3	4·5	3·0	1·8	2·2	2·0
11	3·1	3·0	4·2	6·4	6·6	7·7	6·1	7·3	5·9	4·3	3·5	3·2
Noon.	3·7	4·5	6·9	9·3	9·1	10·4	8·6	9·9	8·2	6·5	4·4	3·8
13h	4·2	5·0	8·4	10·7	10·1	11·1	9·5	10·8	8·8	7·1	4·7	4·0
14	3·8	4·5	8·0	10·4	9·6	10·8	9·5	10·2	8·1	6·8	4·4	3·8
15	2·8	3·6	6·5	8·7	8·0	9·8	8·6	8·5	6·2	5·5	3·5	3·2
16	2·1	2·4	4·5	6·6	6·3	8·3	7·2	6·5	4·6	4·0	2·8	2·6
17	2·0	1·7	3·3	5·2	5·1	6·9	5·7	4·8	3·7	3·0	2·2	2·1
18	1·8	1·2	3·2	4·4	4·0	5·7	4·7	3·9	3·2	2·4	1·6	1·6
19	1·2	1·1	3·1	3·9	3·4	5·2	4·4	3·7	2·6	1·9	1·3	1·0
20	0·7	0·8	2·7	3·4	3·4	5·2	4·4	3·5	2·1	1·4	0·8	0·6
21	0·2	0·4	2·5	3·1	3·3	5·2	4·1	3·5	1·9	0·6	0·3	0·1
22	0·0	0·1	2·5	2·5	3·3	5·0	3·8	3·4	1·7	0·5	0·0	0·0
23	0·0	0·0	2·6	2·3	3·0	5·0	3·6	3·1	1·8	0·5	0·1	0·0
Means	1·62	1·54	3·25	4·08	3·96	5·23	4·22	4·18	3·08	2·26	1·84	1·62

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

(Each result is the mean of 24 hourly readings 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.)*

1904.

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	...	...	650	218	454	996	258	833	519	123	839	414	795	399	826	481	788	389	758	357	642	222	694	227
2	523	003	656	202	519	056	278	867	518	102	796	354	793	382	822	479	816	403	790	353	700	270	631	225
3	503	047	675	243	565	084	305	911	536	111	798	385	719	325	805	482	822	423	800	351	726	289	615	207
4	519	058	692	255	534	039	317	921	496	088	725	326	731	337	706	404	796	376	829	373	562	168	590	201
5	565	100	639	247	494	022	377	981	480	108	672	307	766	372	683	384	782	393	856	412	543	171	629	221
6	660	125	648	216	454	022	408	028	495	118	760	366	855	468	724	404	761	391	870	412	586	194	676	229
7	675	160	568	155	519	049	313	924	563	145	734	311	750	366	690	350	838	427	793	328	625	226	671	217
8	613	190	571	175	527	126	403	004	609	155	676	256	825	445	670	337	826	398	652	198	602	172	696	212
9	578	155	641	213	540	115	469	058	569	134	711	271	772	417	713	365	844	421	593	149	668	262	629	173
10	510	111	644	219	474	054	344	936	548	147	796	378	761	408	713	363	824	382	790	295	653	257	570	171
11	516	076	612	204	431	023	352	936	551	140	815	399	736	381	697	329	810	368	691	283	669	268	577	142
12	571	158	606	202	408	968	496	059	540	163	774	356	721	361	726	332	765	357	672	266	655	244	570	171
13	587	200	646	230	415	987	543	159	437	062	758	364	763	413	749	357	785	391	598	156	619	203	603	168
14	562	144	632	204	426	008	588	175	477	102	813	436	790	445	788	413	787	391	519	103	604	220	601	169
15	565	102	617	175	469	044	569	180	495	087	848	437	765	430	829	452	856	455	510	106	689	245	517	111
16	410	945	575	128	452	003	602	167	568	157	579	183	660	332	846	454	839	443	593	165	695	207	501	117
17	437	979	528	088	394	959	593	163	593	216	575	198	713	380	845	451	793	401	650	275	737	226	556	186
18	505	058	581	132	390	989	529	104	512	089	600	206	688	355	834	418	774	373	787	393	718	207	590	201
19	587	150	609	146	516	091	369	958	547	105	593	206	718	370	792	367	751	350	809	410	689	235	589	159
20	638	154	645	213	526	142	400	996	548	111	638	268	752	409	810	378	704	276	831	418	630	200	565	128
21	665	175	673	279	544	140	459	046	622	187	630	241	703	368	778	358	702	270	743	335	616	174	452	044
22	607	078	657	234	505	085	421	003	660	228	679	278	737	389	750	342	688	260	744	321	593	132	454	041
23	543	057	601	185	403	011	468	062	656	243	706	319	754	419	752	332	663	247	794	359	542	112	494	081
24	515	057	580	128	374	980	538	142	617	221	753	345	729	401	744	321	682	266	808	385	520	095	511	091
25	563	102	571	129	443	015	556	128	656	264	757	344	752	427	765	337	584	171	824	382	455	027	535	127
26	563	135	533	089	461	043	524	080	724	359	737	338	830	500	763	347	627	209	735	291	420	978	492	086
27	663	259	532	083	428	027	507	075	831	466	687	307	830	485	815	419	652	241	654	234	482	026	517	099
28	658	230	545	103	450	044	498	106	802	386	726	320	862	517	775	393	647	248	676	258	536	075	493	104
29	679	239	478	029	443	042	589	171	750	366	732	333	854	506	764	401	672	280	639	223	601	122	564	192
30	571	208			387	981	603	199	743	371	721	332	859	526	764	419	689	278	596	207	730	223		
31	603	199			362	968			839	452			831	498	766	411			596	188				

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.

1904.

Day of Month.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.
d	°											
1	...	66·4	65·3	66·7	67·9	66·7	67·9	70·0	67·8	67·7	66·9	64·9
2	62·6	65·5	65·1	67·3	67·1	66·0	67·3	70·1	67·2	66·2	66·5	67·5
3	65·4	66·4	64·3	68·0	66·7	67·2	68·0	70·9	67·8	65·7	66·2	67·4
4	65·2	66·2	63·7	67·9	67·4	67·8	68·0	71·7	66·9	65·4	68·0	68·2
5	65·0	68·1	64·7	67·9	68·9	69·2	68·0	71·8	68·2	65·9	68·9	67·4
6	61·9	66·4	66·4	68·6	68·7	68·0	68·3	71·0	69·0	65·3	68·1	65·8
7	62·8	67·2	64·8	68·2	67·0	66·8	68·4	70·2	67·3	65·0	67·8	65·5
8	66·8	67·9	67·7	67·8	65·5	66·9	68·6	70·5	66·6	65·5	66·5	64·2
9	66·8	66·6	66·7	67·3	66·3	66·1	69·6	69·9	66·8	65·9	67·5	65·4
10	67·8	66·7	66·9	67·4	67·7	67·0	69·7	69·8	66·0	63·7	67·9	67·8
11	66·1	67·4	67·4	67·1	67·3	67·1	69·6	69·1	66·0	67·4	67·7	66·3
12	67·2	67·6	66·1	66·2	68·7	67·0	69·4	68·0	67·4	67·5	67·3	67·8
13	68·3	67·1	66·6	68·4	68·8	68·0	69·8	68·1	68·0	66·0	67·1	66·3
14	67·0	66·6	67·0	67·2	68·8	68·7	70·0	68·8	67·9	67·1	68·4	66·4
15	65·1	66·0	66·7	68·2	67·4	67·3	70·4	68·7	67·7	67·6	65·9	67·5
16	65·0	65·8	65·7	66·3	67·3	67·9	70·7	68·1	67·9	66·6	64·0	68·4
17	65·3	66·1	66·3	66·5	68·7	68·7	70·5	68·0	68·1	68·8	63·0	69·0
18	65·8	65·7	67·7	66·7	66·8	68·0	70·5	67·1	67·7	68·0	63·0	68·2
19	66·2	65·1	66·7	67·3	66·0	68·3	69·9	66·7	67·7	67·8	65·5	66·5
20	64·2	66·4	68·4	67·6	66·2	69·0	70·1	66·4	66·6	67·2	66·5	66·2
21	63·9	68·0	67·6	67·2	66·3	68·2	70·4	66·9	66·4	67·4	66·0	67·4
22	62·2	66·8	66·9	67·0	66·4	67·7	69·9	67·4	66·6	66·8	65·2	67·2
23	64·1	67·1	68·1	67·5	67·2	68·3	70·4	66·9	67·1	66·3	66·5	67·2
24	65·3	65·6	68·0	67·9	67·9	67·4	70·7	66·8	67·1	66·8	66·7	66·9
25	65·2	66·0	66·6	66·6	68·1	67·2	70·8	66·6	67·2	66·0	66·6	67·4
26	66·6	65·9	67·0	65·9	69·2	67·8	70·6	67·1	67·0	65·9	66·0	67·5
27	67·6	65·7	67·7	66·4	69·2	68·6	70·0	67·9	67·3	66·9	65·4	67·0
28	66·6	66·0	67·5	68·1	67·1	67·5	70·0	68·5	67·8	67·0	65·2	68·2
29	66·1	65·7	67·7	67·0	68·4	67·8	69·9	69·3	68·1	67·1	64·4	68·9
30	69·3		67·5	67·6	68·9	68·2	70·5	70·0	67·3	68·2	63·2	
31	67·6		68·0		68·3		70·5	69·6		67·4		
Means	65°·63	66°·48	66°·67	67°·33	67°·62	67°·68	69°·63	68°·77	67°·35	66°·65	66°·26	67°·05

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.*)

1904.

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.	21	47	61	89	103	130	176	200	144	163	193	214	163	178	162	178	166	185	118	135	56	82	14	38
1h	23	46	61	85	100	124	174	196	145	162	179	198	157	172	153	167	161	177	122	139	59	83	16	35
2	30	49	58	77	104	124	179	198	143	160	169	186	145	158	141	155	151	167	117	129	65	84	24	38
3	37	53	53	69	104	121	179	194	147	161	168	182	138	148	138	150	159	171	123	133	73	87	35	47
4	48	62	61	73	109	121	184	196	148	160	173	185	130	138	132	141	165	174	132	139	83	95	53	63
5	62	73	74	83	118	126	184	194	142	151	167	176	126	131	129	136	160	167	140	145	94	103	68	75
6	69	78	85	92	128	133	176	183	111	118	136	143	98	103	112	116	148	152	134	137	102	107	75	80
7	68	75	88	92	122	125	154	159	61	66	95	100	70	73	76	80	123	127	112	112	91	93	67	69
8	55	62	72	76	86	89	107	110	23	25	54	56	34	37	38	40	85	87	77	77	73	75	54	56
9	33	38	43	45	38	38	51	51	4	4	15	15	6	6	4	4	34	34	29	29	39	39	31	31
10	11	13	10	10	0	0	9	9	0	0	0	0	0	0	0	0	0	0	0	0	14	14	8	8
11	0	0	0	0	4	4	0	0	21	23	26	28	10	10	33	35	9	11	0	0	0	0	5	5
Noon.	15	11	9	9	28	28	31	34	42	44	74	74	49	52	82	84	42	44	18	18	6	6	0	0
13h	42	38	19	21	52	55	81	86	72	77	123	128	94	97	120	124	88	92	41	44	20	22	13	15
14	58	54	38	45	75	85	128	138	108	115	174	179	135	140	148	155	115	122	56	61	23	28	23	30
15	54	52	45	57	84	99	160	172	145	152	208	215	171	179	151	158	125	134	63	68	19	28	19	29
16	33	35	43	57	86	101	190	205	179	188	223	235	184	192	149	158	136	148	64	71	18	32	14	28
17	21	32	41	55	91	108	208	225	196	208	227	241	182	192	147	156	145	157	75	85	35	54	20	42
18	19	38	41	60	99	119	214	231	204	216	224	241	195	208	154	166	154	168	92	107	54	78	23	47
19	23	46	43	67	107	129	217	236	215	229	223	242	222	235	172	184	170	186	106	123	65	91	17	46
20	30	58	45	71	112	139	213	232	203	217	220	239	224	239	181	195	173	192	112	129	71	97	21	50
21	30	61	49	77	113	142	196	218	182	196	218	239	207	225	183	197	174	193	111	128	68	97	25	54
22	27	58	54	82	110	139	185	207	161	175	206	227	188	203	173	187	174	193	114	133	61	87	23	52
23	23	54	60	88	103	135	178	202	151	168	198	219	172	187	168	182	173	192	115	134	60	86	18	47
Means corrected for Temperature.	47·2		61·7		100·6		161·5		132·4		165·1		137·6		131·2		136·4		94·8		65·3		41·0	

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

1904.

Hour, Greenwich Civil Time.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	For the Year.
Midnight.	66°·2	67°·1	67°·2	67°·8	68°·0	68°·1	69°·9	69°·1	67°·7	67°·0	66°·8	67°·5	67°·70
1h	66·1	66·9	67·1	67·7	67·9	68·0	69·9	69·0	67·6	67·0	66·7	67·3	67·60
2	65·9	66·7	66·9	67·6	67·9	67·9	69·8	69·0	67·6	66·8	66·5	67·1	67·48
3	65·8	66·6	66·8	67·4	67·8	67·8	69·7	68·9	67·4	66·7	65·3	67·0	67·35
4	65·7	66·4	66·6	67·3	67·7	67·7	69·6	68·8	67·3	66·6	66·2	66·9	67·23
5	65·6	66·3	66·4	67·2	67·6	67·6	69·5	68·7	67·2	66·5	66·1	66·8	67·12
6	65·5	66·2	66·3	67·1	67·5	67·5	69·5	68·6	67·1	66·4	65·9	66·7	67·03
7	65·4	66·1	66·2	67·0	67·4	67·4	69·4	68·6	67·1	66·3	65·8	66·6	66·94
8	65·4	66·1	66·2	66·9	67·3	67·3	69·4	68·5	67·0	66·3	65·8	66·6	66·90
9	65·3	66·0	66·1	66·8	67·2	67·2	69·3	68·4	66·9	66·3	65·7	66·5	66·81
10	65·2	65·9	66·1	66·8	67·2	67·2	69·3	68·4	66·9	66·3	65·7	66·5	66·79
11	65·1	65·9	66·1	66·8	67·3	67·3	69·3	68·5	67·0	66·3	65·7	66·5	66·82
Noon.	64·9	65·9	66·1	66·9	67·3	67·2	69·4	68·5	67·0	66·3	65·7	66·5	66·81
13h	64·9	66·0	66·2	67·0	67·4	67·4	69·4	68·6	67·1	66·4	65·8	66·6	66·90
14	64·9	66·2	66·5	67·2	67·5	67·4	69·5	68·7	67·2	66·5	65·9	66·8	67·02
15	65·0	66·4	66·7	67·3	67·5	67·5	69·6	68·7	67·3	66·5	66·1	66·9	67·13
16	65·2	66·5	66·7	67·4	67·6	67·7	69·6	68·8	67·4	66·6	66·3	67·1	67·24
17	65·6	66·5	66·8	67·5	67·7	67·8	69·7	68·8	67·4	66·7	66·5	67·4	67·37
18	65·9	66·7	66·9	67·5	67·7	67·9	69·8	68·9	67·5	66·9	66·7	67·5	67·49
19	66·1	66·9	67·0	67·6	67·8	68·0	69·8	68·9	67·6	67·0	66·8	67·7	67·60
20	66·3	67·0	67·2	67·6	67·8	68·0	69·9	69·0	67·7	67·0	66·8	67·7	67·67
21	66·4	67·1	67·3	67·7	67·8	68·1	70·0	69·0	67·7	67·0	66·9	67·7	67·72
22	66·4	67·1	67·3	67·7	67·8	68·1	69·9	69·0	67·7	67·1	66·8	67·7	67·72
23	66·4	67·1	67·4	67·8	67·9	68·1	69·9	69·0	67·7	67·1	66·8	67·7	67·74

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.)*

1904.

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	772	115	815	096	700	989	731	002	775	006	822	099	844	106	940	156	871	139	769	010	706	966	519	796
2	766	111	786	073	701	997	707	967	753	015	791	074	833	089	929	138	855	126	755	032	696	967	581	818
3	823	108	801	059	678	991	739	982	730	001	832	098	852	083	977	169	862	124	745	028	673	950	592	827
4	852	139	803	082	666	994	742	987	748	000	865	115	842	085	986	157	838	104	733	018	717	948	610	828
5	839	143	845	076	675	967	749	988	772	998	902	120	856	103	004	181	855	090	745	022	728	940	620	857
6	773	133	817	079	731	995	760	997	761	996	876	126	844	087	981	179	877	110	732	026	711	940	580	857
7	777	120	826	078	704	002	781	022	728	994	847	118	866	122	951	165	855	130	722	029	716	959	573	852
8	852	131	847	092	745	988	760	991	687	981	827	095	869	110	940	145	828	109	710	008	673	950	541	850
9	881	145	805	065	746	008	762	022	694	967	811	092	905	127	916	136	822	099	712	004	667	919	532	809
10	885	124	796	056	759	017	737	995	726	965	808	064	912	134	905	131	812	101	670	009	688	925	584	802
11	888	169	816	061	752	010	746	004	722	963	836	094	914	145	906	147	818	101	734	986	685	926	570	845
12	867	121	805	067	760	035	711	984	762	984	841	097	914	143	871	133	823	081	753	005	681	931	562	797
13	862	099	803	076	721	992	735	976	803	036	854	091	926	150	859	117	819	062	725	998	662	909	540	817
14	848	108	773	060	733	995	748	004	796	031	863	087	940	156	859	096	833	089	721	960	684	927	527	787
15	796	098	770	062	717	983	784	023	794	046	868	143	941	153	862	107	824	078	734	969	624	899	559	798
16	797	099	770	066	696	973	753	024	788	042	877	116	946	158	861	117	831	078	685	962	599	934	593	817
17	804	081	777	058	720	986	744	012	817	054	910	139	948	155	860	118	835	072	713	937	582	914	608	839
18	813	098	767	035	732	979	760	020	791	059	888	148	956	165	835	114	828	082	717	975	582	914	601	830
19	809	086	751	028	704	968	790	040	768	053	868	120	921	143	826	115	819	073	719	960	619	896	581	824
20	758	080	760	012	737	966	788	031	767	027	876	119	916	130	811	105	794	065	731	981	645	909	563	817
21	724	069	809	040	744	994	777	033	774	034	868	109	920	129	819	090	770	043	760	007	622	901	574	811
22	710	082	803	069	718	984	753	013	766	024	852	104	911	140	830	092	770	034	754	014	589	883	566	818
23	746	044	780	034	737	970	756	003	776	015	850	087	910	119	825	093	768	026	748	002	593	849	553	800
24	789	078	760	035	755	002	772	011	797	034	845	105	933	129	833	108	772	022	756	001	597	836	535	793
25	770	059	748	023	708	983	752	014	817	041	825	098	935	136	817	096	780	036	740	004	592	846	531	755
26	775	029	740	017	708	966	702	977	822	031	839	084	924	136	818	086	783	039	727	002	582	848	543	778
27	805	059	721	004	728	973	716	984	851	071	866	105	927	143	836	086	775	027	734	986	544	831	525	779
28	809	092	709	990	724	978	755	992	810	081	847	101	921	145	861	094	784	023	727	987	532	815	540	775
29	818	086	711	992	727	983	755	019	853	086	847	099	922	142	877	093	794	029	714	957	507	811	552	785
30	883	099			726	978	752	989	877	110	860	107	932	137	891	094	778	030	724	948	475	805		
31	861	108			742	979			852	095			938	147	890	121			716	966				

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.

1904.

Day of Month.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.
d												
1	63°0	65°9	65°5	66°4	68°3	66°1	66°8	69°0	66°5	67°8	66°9	66°1
2	62·9	65·6	65·2	66·9	66·8	65·8	67·1	69·3	66·4	66·1	66·4	68·0
3	65·7	67·0	64·4	67·7	66·4	66·6	68·3	70·1	66·8	65·8	66·1	67·6
4	65·6	66·0	63·7	67·6	67·3	67·4	67·7	71·1	66·6	65·7	68·3	68·9
5	64·8	68·3	65·4	67·9	68·5	68·9	67·5	70·8	68·1	66·1	69·2	68·0
6	62·2	66·8	66·7	68·0	68·1	67·4	67·7	69·8	68·2	65·3	68·4	66·1
7	63·0	67·3	65·1	67·8	66·6	66·4	67·1	69·1	66·2	64·7	67·7	66·0
8	66·0	67·6	67·7	68·3	65·3	66·5	67·8	69·5	65·9	65·1	66·1	64·6
9	66·7	66·9	66·8	66·9	66·3	65·9	68·7	68·8	66·1	65·4	67·3	66·1
10	67·9	66·9	67·0	67·0	67·9	67·1	68·7	68·5	65·5	63·2	68·0	68·9
11	65·9	67·6	67·0	67·0	67·8	67·0	68·3	67·8	65·8	67·3	67·8	66·2
12	67·2	66·8	66·2	66·3	68·7	67·1	68·4	66·8	67·0	67·3	67·4	68·1
13	68·0	66·3	66·4	67·8	68·2	68·0	68·6	67·0	67·7	66·3	67·5	66·1
14	66·9	65·6	66·8	67·1	68·1	68·6	69·0	68·0	67·1	67·9	67·7	66·9
15	64·9	65·4	66·6	67·9	67·3	66·2	69·2	67·6	67·2	68·1	66·2	67·9
16	64·9	65·2	66·1	66·4	67·2	67·9	69·2	67·1	67·5	66·1	63·4	68·6
17	66·1	65·9	66·6	66·5	68·0	68·4	69·4	67·0	68·0	68·6	63·5	68·3
18	65·7	66·5	67·5	66·9	66·5	66·9	69·3	66·0	67·2	67·0	63·5	68·4
19	66·1	66·1	66·7	67·4	65·7	67·3	68·7	65·5	67·2	67·8	66·1	67·7
20	64·0	67·3	68·4	67·7	66·9	67·7	69·1	65·3	66·4	67·4	66·7	67·2
21	62·9	68·3	67·4	67·1	66·9	67·8	69·3	66·4	66·3	67·5	66·0	68·0
22	61·6	66·6	66·6	66·9	67·0	67·3	68·4	66·8	66·7	66·9	65·3	67·3
23	65·1	67·2	68·2	67·5	67·9	68·0	69·3	66·5	67·0	67·2	67·1	67·5
24	65·5	66·2	67·5	67·9	68·0	66·9	69·9	66·2	67·4	67·6	67·9	67·0
25	65·5	66·2	66·2	66·8	68·6	66·3	69·7	66·0	67·1	66·7	67·2	68·6
26	67·2	66·1	67·0	66·2	69·3	67·6	69·2	66·5	67·1	66·2	66·6	68·1
27	67·2	65·8	67·6	66·5	68·8	67·9	69·0	67·4	67·3	67·3	65·6	67·2
28	65·8	65·9	67·2	68·0	66·4	67·2	68·6	68·2	67·9	66·9	65·8	68·1
29	66·5	65·9	67·1	66·7	68·2	67·3	68·8	69·0	68·1	67·7	64·8	68·2
30	69·0		67·3	68·0	68·2	67·5	69·5	69·6	67·3	68·6	63·6	...
31	67·5		68·0		67·7		69·3	68·3		67·4		...
Means	65°53	66°52	66°64	67°24	67°51	67°23	68°63	67°90	66°99	66°74	66°47	67°44

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.)*

1904.

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.	18	1	28	7	58	39	62	47	66	50	52	37	44	33	50	36	41	29	35	21	29	6	21	2
1h	18	3	24	7	54	37	57	44	62	46	47	32	40	29	44	32	37	25	26	12	24	5	18	3
2	11	0	18	5	50	37	49	38	60	46	43	33	38	29	42	32	34	26	24	14	21	4	15	2
3	11	2	18	7	48	39	47	41	59	47	47	39	40	33	41	33	32	24	24	16	19	6	13	5
4	8	1	16	10	47	42	46	42	57	49	50	44	46	41	40	34	30	26	23	17	16	8	13	7
5	8	3	15	11	44	42	48	46	59	54	52	48	48	45	44	40	29	27	22	20	12	6	12	8
6	5	5	12	12	42	44	49	51	57	54	49	47	45	45	44	42	32	32	24	22	10	8	10	8
7	3	3	10	10	41	43	52	56	50	49	46	46	42	44	43	43	34	36	25	26	8	6	9	7
8	2	2	9	11	42	46	45	51	44	45	42	44	35	37	35	37	31	35	26	29	9	9	8	8
9	3	5	9	11	34	38	29	37	28	31	32	36	24	28	25	30	22	26	20	23	6	6	4	4
10	7	13	4	8	18	22	11	19	10	13	16	18	11	15	13	15	12	16	10	13	0	0	0	0
11	9	17	0	2	6	8	2	6	0	1	0	2	0	2	4	4	4	6	0	1	2	0	2	2
Noon.	0	10	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	2	0	8	4	3	3
13h	0	10	6	2	13	13	16	14	19	16	13	11	10	7	10	8	11	9	13	11	16	12	11	7
14	9	19	17	11	34	29	41	37	43	38	34	30	25	22	29	25	25	21	26	22	28	20	19	13
15	14	22	25	16	51	46	56	50	60	52	51	45	42	37	47	41	36	30	36	32	35	22	21	11
16	18	22	29	20	61	54	69	63	73	63	65	57	55	48	60	52	43	35	44	38	38	23	27	12
17	23	18	29	18	61	52	78	70	84	72	74	64	66	59	68	60	45	37	47	39	42	23	33	12
18	30	19	32	19	59	48	83	72	89	77	77	64	67	58	66	56	45	35	50	38	40	19	35	12
19	33	16	33	16	60	45	81	70	86	74	73	60	65	54	62	52	48	36	49	35	36	13	35	10
20	33	14	35	14	60	43	77	64	82	68	68	53	61	48	60	48	47	35	46	32	33	10	34	9
21	30	9	34	13	60	39	75	62	79	65	60	45	58	45	56	44	45	31	43	27	29	6	32	9
22	26	3	32	11	60	39	72	57	74	60	58	43	52	39	55	43	43	29	40	24	28	5	29	6
23	26	5	27	6	60	39	68	53	72	56	58	43	50	37	51	39	39	27	37	21	24	3	27	4
Means corrected for Temperature.	9·3		10·3		36·8		45·4		46·9		39·2		34·8		35·3		26·4		22·2		9·3		6·8	

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

1904.

Hour, Greenwich Civil Time.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	For the Year.
Midnight.	66°·1	67°·1	67°·2	67°·7	67°·9	67°·6	68°·9	68°·3	67°·3	67°·1	67°·0	67°·8	67°·50
1h	66·0	66·9	67·1	67·6	67·9	67·6	68·9	68·2	67·3	67·1	66·8	67·6	67·42
2	65·8	66·7	66·9	67·5	67·8	67·4	68·8	68·1	67·1	66·9	66·7	67·5	67·27
3	65·7	66·6	66·7	67·3	67·7	67·3	68·7	68·0	67·1	66·8	66·5	67·3	67·14
4	65·6	66·4	66·5	67·2	67·5	67·2	68·6	67·9	66·9	66·7	66·3	67·2	67·00
5	65·5	66·3	66·4	67·1	67·4	67·1	68·5	67·8	66·8	66·5	66·2	67·1	66·89
6	65·3	66·1	66·2	66·9	67·3	67·0	68·4	67·7	66·7	66·5	66·0	67·0	66·76
7	65·3	66·1	66·2	66·8	67·2	66·9	68·3	67·6	66·6	66·4	66·0	67·0	66·70
8	65·3	66·0	66·1	66·7	67·1	66·8	68·3	67·5	66·5	66·3	65·9	66·9	66·62
9	65·2	66·0	66·1	66·6	67·0	66·7	68·2	67·4	66·5	66·3	65·9	66·9	66·57
10	65·0	65·9	66·1	66·6	67·0	66·8	68·2	67·5	66·5	66·3	65·9	66·9	66·56
11	64·9	66·0	66·2	66·8	67·1	66·8	68·3	67·6	66·6	66·4	66·0	66·9	66·63
Noon	64·8	66·1	66·3	67·0	67·2	66·9	68·4	67·6	66·7	66·5	66·1	66·9	66·71
13h	64·8	66·3	66·3	67·1	67·3	67·0	68·5	67·7	66·8	66·5	66·1	67·1	66·79
14	64·8	66·4	66·5	67·2	67·4	67·1	68·5	67·8	66·9	66·6	66·3	67·2	66·89
15	64·9	66·5	66·5	67·3	67·5	67·2	68·6	67·9	67·0	66·6	66·5	67·4	66·99
16	65·1	66·5	66·6	67·3	67·6	67·3	68·7	68·0	67·1	66·7	66·6	67·6	67·09
17	65·5	66·6	66·7	67·4	67·7	67·4	68·7	68·0	67·1	66·8	66·8	67·9	67·22
18	65·8	66·7	66·8	67·5	67·7	67·5	68·8	68·1	67·2	67·0	66·9	68·0	67·33
19	66·1	66·9	67·0	67·5	67·7	67·5	68·9	68·1	67·3	67·1	67·0	68·1	67·43
20	66·2	67·1	67·1	67·6	67·8	67·6	69·0	68·2	67·3	67·1	67·0	68·1	67·51
21	66·3	67·1	67·3	67·6	67·8	67·6	69·0	68·2	67·4	67·2	67·0	68·0	67·54
22	66·4	67·1	67·3	67·7	67·8	67·6	69·0	68·2	67·4	67·2	67·0	68·0	67·56
23	66·3	67·1	67·3	67·7	67·9	67·6	69·0	68·2	67·3	67·2	66·9	68·0	67·54

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, 1904.	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° 17'·7	121	1100	95·4	224	4788
February	16. 17·3	177	1051	93·2	328	4575
March	16. 15·7	036	988	84·6	67	4301
April	16. 16·3	046	1003	87·8	85	4366
May	16. 15·2	193	1027	81·9	357	4471
June	16 14·8	319	1105	79·7	591	4810
July	16. 13·7	414	1131	73·8	767	4923
August	16. 13·9	389	1122	74·9	720	4884
September	16. 14·4	342	1074	77·6	633	4675
October	16. 14·3	290	993	77·0	537	4323
November	16. 13·6	181	901	73·3	335	3922
December	16. 12·6	155	813	67·9	287	3539
Means	16. 15·0	.....	.....	80·6	.....	.....
Number of Column	1	2	3	4	5	6

The units in columns 2 and 3 are ·00001 of the whole Horizontal and Vertical Forces respectively; in columns 4, 5, and 6 the unit is ·00001 of the Millimètre-Milligramme-Second Unit, or ·000001 of the Centimètre-Gramme-Second (C.G.S.) Unit, in terms of which units the values of the whole Horizontal Force (applicable to columns 4 and 5) are 1·8520 and 0·18520 respectively for the year, and of whole Vertical Force (applicable to column 6) are 4·3531 and 0·43531 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 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 1904.

(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.	1·49	132·1	24·3	80·3	244·6	105·8
1h	1·58	127·5	21·5	85·1	236·1	93·6
2	1·59	122·6	20·8	85·7	227·1	90·5
3	1·57	121·8	22·9	84·6	225·6	99·7
4	1·43	124·4	25·3	77·0	230·4	110·1
5	1·03	125·5	27·8	55·5	232·4	121·0
6	0·60	115·7	29·4	32·3	214·3	128·0
7	0·19	93·1	29·4	10·2	172·4	128·0
8	0·00	61·3	28·1	0·0	113·5	122·3
9	0·64	23·3	21·5	36·5	43·2	93·6
10	2·34	0·0	11·3	126·1	0·0	49·2
11	4·68	5·2	2·8	252·1	9·6	12·2
Noon.	6·68	29·2	0·0	359·9	54·1	0·0
13h	7·44	62·1	8·6	400·8	115·0	37·4
14	7·06	91·5	22·5	380·3	169·5	97·9
15	5·81	107·4	32·3	313·0	198·9	140·6
16	4·39	116·3	39·2	236·5	215·4	170·6
17	3·38	125·1	42·3	182·1	231·7	184·1
18	2·71	135·4	41·7	146·0	250·8	181·5
19	2·30	146·7	38·7	123·9	271·7	168·5
20	1·99	150·3	35·1	107·2	278·4	152·8
21	1·67	147·7	31·5	90·0	273·5	137·1
22	1·47	140·8	28·5	79·2	260·8	124·1
23	1·40	136·7	26·3	75·4	253·2	114·5
Means . . .	2·64	101·7	25·5	142·5	188·4	111·0
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 1·8520 and 0·18520 respectively, and of whole Vertical Force (applicable to column 6) are 4·3531 and 0·43531 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.)

1904.

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	...	...	7·7	189	5·8	160	18·7	665	11·3	262	11·5	276	12·4	285	13·2	300	11·2	322	11·6	188	5·9	190	6·4	177
2	5·9	77	8·3	245	10·4	184	13·9	327	10·3	308	9·0	353	12·4	236	11·0	332	9·2	305	10·9	147	8·8	197	3·7	88
3	5·4	165	3·8	99	7·4	152	12·0	243	11·5	259	10·3	192	10·1	195	16·1	203	8·6	180	9·5	188	3·4	179	10·1	192
4	3·7	80	5·3	130	6·8	222	10·7	369	9·4	234	11·7	248	9·3	272	14·8	451	8·8	199	5·6	221	12·9	360	8·5	82
5	3·7	174	9·3	194	6·3	216	10·7	257	9·6	306	11·5	296	8·2	310	8·9	230	9·2	180	8·5	189	8·5	212	7·8	161
6	3·8	85	9·9	228	6·5	146	11·9	245	6·7	193	13·3	316	14·5	418	9·3	263	9·5	233	10·3	226	5·9	133	6·0	108
7	2·9	30	6·6	112	6·6	174	16·0	212	8·9	179	7·9	244	11·7	415	10·5	72	10·3	245	15·8	442	5·7	152	3·4	100
8	2·9	88	9·4	148	6·2	129	15·1	325	13·6	190	9·4	277	10·2	321	10·8	170	12·3	255	11·3	254	5·5	212	4·6	103
9	9·3	85	8·8	177	6·6	67	10·3	183	12·6	251	11·2	227	8·1	245	10·5	213	10·1	175	8·9	318	5·2	63	6·5	163
10	9·0	206	6·3	68	6·5	107	14·3	332	13·2	193	13·5	314	10·8	270	10·5	155	10·7	226	11·2	183	4·2	155	5·0	95
11	5·2	152	5·7	65	8·9	131	10·6	411	8·9	166	12·4	256	8·1	210	10·1	227	12·8	214	10·1	295	5·0	130	4·6	117
12	5·7	55	5·3	107	5·1	281	11·8	357	12·7	400	11·5	225	11·8	205	14·0	322	11·0	300	9·7	275	3·5	170	3·3	122
13	5·3	84	5·6	142	8·2	58	11·9	202	15·5	547	13·6	236	8·9	298	10·7	317	9·4	215	19·0	246	3·8	45	4·3	147
14	3·3	66	5·1	132	8·2	198	9·1	302	9·6	302	15·5	312	12·0	193	13·3	309	9·1	259	14·3	173	3·9	185	5·4	122
15	7·8	183	6·4	218	10·6	161	11·9	265	12·6	331	20·4	363	8·1	220	12·0	218	9·0	155	7·8	397	8·7	146	10·2	157
16	14·1	434	8·4	183	9·9	126	13·0	317	11·7	344	16·7	760	9·4	315	11·9	217	10·6	264	7·2	190	10·4	224	7·1	168
17	4·8	59	9·1	181	9·6	148	14·7	344	15·2	400	11·4	422	10·5	206	12·1	234	7·7	187	5·6	233	7·3	169	3·0	111
18	4·2	206	6·2	104	12·9	260	18·7	457	13·0	217	9·9	311	10·9	300	10·8	316	8·4	203	7·2	210	7·7	264	3·1	101
19	3·6	176	5·4	120	10·6	204	22·2	365	8·9	302	9·6	244	11·5	268	8·7	162	7·5	109	8·0	157	4·6	63	2·8	88
20	5·3	133	6·9	214	11·9	135	8·8	336	8·7	274	10·4	287	9·5	350	9·5	197	7·1	237	8·2	231	3·8	127	4·7	32
21	9·5	190	7·1	114	9·2	207	11·6	227	8·1	277	10·2	265	11·7	270	13·8	226	8·4	234	15·2	391	5·4	124	7·2	185
22	8·7	118	6·1	137	9·1	137	11·0	272	8·1	171	11·2	247	10·8	260	9·4	280	7·6	154	8·6	100	5·4	105	5·1	125
23	5·4	74	6·3	122	9·3	187	9·7	334	8·6	145	12·9	257	12·9	240	9·7	240	8·3	219	4·2	129	3·5	95	3·5	100
24	6·2	137	4·3	160	9·6	195	8·1	245	7·1	193	10·0	246	10·7	193	9·7	225	12·3	254	4·6	105	5·6	100	3·8	99
25	3·9	184	5·7	93	10·6	228	9·2	180	8·6	276	11·4	157	9·1	298	11·5	112	20·2	395	7·9	138	9·7	325	3·3	55
26	5·2	152	3·9	129	12·3	247	8·8	240	8·8	244	11·9	347	12·8	307	13·0	256	9·9	383	6·5	177	6·9	237	7·4	84
27	4·2	123	5·0	106	9·2	147	7·4	155	10·8	301	17·4	385	11·1	295	10·6	204	9·5	246	9·9	245	4·4	158	7·4	115
28	13·8	332	4·7	54	8·3	104	10·6	318	18·5	449	10·5	230	10·4	220	12·1	296	10·6	227	8·9	254	2·7	117	6·9	86
29	8·5	278	6·6	110	11·3	205	12·0	310	13·7	242	11·7	244	12·2	343	13·9	367	9·6	277	6·2	111	5·4	156	4·9	112
30	9·6	159			12·8	378	12·2	210	13·2	371	11·3	227	11·2	307	14·4	315	11·1	280	8·2	179	5·2	153	4·7	...
31	4·4	160			12·1	311			13·2	278			11·3	380	9·9	233			8·9	172			3·1	...
Means	6·2	148	6·5	141	9·0	181	12·2	300	11·1	278	12·0	292	10·7	279	11·5	247	10·0	238	9·3	218	6·0	165	5·4	117

The mean of the twelve monthly values is, for Declination 9′·16, and for Horizontal Force 217·0.

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, 1904.	Difference between the Greatest and Least of the 24 Hourly Values.			Sums of the 24 Hourly Deviations from the Mean Value.		
	Declination.	Horizontal Force.	Vertical Force.	Declination.	Horizontal Force.	Vertical Force.
	′			′		
January	4·2	78	22	23·2	351	156
February	5·0	92	20	27·4	514	99
March	8·4	142	54	37·6	810	222
April	10·7	236	72	58·3	1406	354
May	10·1	229	77	54·5	1442	372
June	11·1	242	64	57·5	1554	309
July	9·5	239	59	53·0	1457	299
August	10·8	197	60	58·2	1134	280
September	8·8	193	37	48·4	1155	171
October	7·1	145	39	43·3	990	197
November	4·7	107	23	25·7	732	132
December	4·0	80	13	23·4	389	74
Means	7′·87	165·0	45·0	42′·54	994·5	222·1

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, 1904.	m	a_1	b_1	a_2	b_2	a_3	b_3	a_4	b_4
	DECLINATION WEST.								
January	1′·62	− 1′·53	− 0′·16	+ 0′·29	+ 0′·45	− 0′·26	− 0′·02	+ 0′·17	+ 0′·17
February	1′·54	− 1′·56	− 0′·50	+ 0′·58	+ 0′·85	− 0′·53	− 0′·35	+ 0′·16	+ 0′·22
March	3′·25	− 1′·33	− 1′·43	+ 1′·12	+ 1′·50	− 0′·73	− 0′·94	+ 0′·47	+ 0′·45
April	4′·08	− 2′·45	− 2′·14	+ 1′·39	+ 1′·83	− 1′·03	− 0′·80	+ 0′·37	+ 0′·23
May	3′·96	− 2′·13	− 2′·19	+ 1′·81	+ 1′·55	− 0′·89	− 0′·53	+ 0′·20	+ 0′·05
June	5′·23	− 1′·85	− 2′·95	+ 2′·16	+ 1′·60	− 0′·80	− 0′·27	+ 0′·05	+ 0′·04
July	4′·22	− 1′·74	− 2′·63	+ 1′·64	+ 1′·51	− 0′·71	− 0′·42	+ 0′·05	+ 0′·09
August	4′·18	− 2′·49	− 2′·22	+ 2′·07	+ 1′·42	− 0′·97	− 0′·50	+ 0′·08	+ 0′·06
September	3′·08	− 2′·22	− 1′·56	+ 1′·54	+ 1′·29	− 0′·86	− 0′·42	+ 0′·42	+ 0′·16
October	2′·26	− 2′·11	− 1′·16	+ 0′·84	+ 1′·39	− 0′·77	− 0′·53	+ 0′·35	+ 0′·17
November	1′·84	− 1′·52	− 0′·27	+ 0′·48	+ 0′·84	− 0′·37	− 0′·08	+ 0′·19	+ 0′·15
December	1′·62	− 1′·39	− 0′·22	+ 0′·35	+ 0′·79	− 0′·32	− 0′·03	+ 0′·14	+ 0′·04
For the Year	2′·64	− 1′·86	− 1′·45	+ 1′·19	+ 1′·25	− 0′·69	− 0′·41	+ 0′·22	+ 0′·15
	HORIZONTAL FORCE.								
January	47·2	+ 13·5	+ 6·8	− 13·0	+ 1·7	+ 2·6	− 15·6	− 3·6	+ 7·3
February	61·7	+ 29·5	+ 5·1	− 14·6	+ 1·2	+ 11·9	− 11·7	+ 0·2	+ 6·2
March	100·6	+ 48·3	− 10·2	− 24·3	+ 8·8	+ 5·7	− 18·8	+ 1·2	+ 9·8
April	161·5	+ 74·4	− 38·4	− 46·8	+ 25·3	+ 8·9	− 15·1	+ 1·2	+ 8·4
May	132·4	+ 65·3	− 59·2	− 32·6	+ 28·9	− 8·3	− 4·0	+ 4·2	− 1·6
June	165·1	+ 68·0	− 68·6	− 26·5	+ 37·3	+ 0·2	− 20·2	+ 2·8	+ 1·2
July	137·6	+ 66·2	− 69·8	− 23·0	+ 22·4	− 4·0	− 14·3	− 1·8	+ 7·1
August	131·2	+ 55·1	− 48·4	− 6·7	+ 26·7	− 8·3	− 22·1	+ 4·3	+ 7·6
September	136·4	+ 68·8	− 26·4	− 24·4	+ 19·7	+ 0·9	− 21·0	+ 2·5	+ 7·8
October	94·8	+ 58·9	+ 2·0	− 22·1	+ 9·9	− 0·6	− 15·1	+ 5·0	+ 7·7
November	65·3	+ 38·9	+ 8·3	− 22·5	− 4·5	− 1·7	− 8·3	+ 2·7	+ 7·4
December	41·0	+ 15·7	+ 7·9	− 19·7	− 1·3	+ 1·4	− 10·6	+ 0·7	+ 1·4
For the Year	101·7	+ 50·2	− 24·2	− 23·0	+ 14·7	+ 0·7	− 14·7	+ 1·6	+ 5·9
	VERTICAL FORCE.								
January	9·3	− 5·7	− 7·5	− 1·6	+ 1·3	− 0·1	+ 1·0	− 0·2	− 1·1
February	10·3	+ 0·4	− 3·6	− 5·6	+ 0·2	+ 2·2	0·0	− 1·5	− 0·7
March	36·8	+ 8·3	− 2·9	− 13·0	+ 1·9	+ 8·6	− 0·6	− 4·0	− 0·4
April	45·4	+ 13·3	− 11·2	− 18·2	− 1·9	+ 8·8	− 2·1	− 2·2	+ 1·3
May	46·9	+ 17·2	− 12·5	− 19·0	+ 1·3	+ 6·3	− 2·6	− 1·7	+ 1·0
June	39·2	+ 10·1	− 7·7	− 18·6	+ 0·9	+ 7·0	− 0·7	− 2·1	− 0·7
July	34·8	+ 10·3	− 6·5	− 17·9	− 0·1	+ 5·2	− 0·9	− 0·7	− 1·2
August	35·3	+ 10·1	− 8·0	− 15·6	+ 0·1	+ 7·4	− 0·8	− 1·5	− 0·7
September	26·4	+ 6·0	− 2·8	− 9·8	− 1·0	+ 6·0	− 0·8	− 2·1	+ 1·4
October	22·2	+ 2·0	− 7·7	− 10·5	− 0·7	+ 5·8	− 0·9	− 2·4	+ 0·6
November	9·3	− 2·7	− 6·0	− 4·3	+ 4·6	+ 2·6	− 0·9	− 0·7	+ 0·8
December	6·8	− 0·8	− 2·8	− 3·4	+ 1·3	+ 0·3	− 1·7	− 0·5	+ 0·6
For the Year	25·5	+ 5·7	− 6·6	− 11·5	+ 0·7	+ 5·0	− 0·9	− 1·6	+ 0·1

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

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

(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, 1904.	m	c_1	α	α'	c_2	β	β'	c_3	γ	γ'	c_4	δ	δ'
	DECLINATION WEST.												
January	1′·62	1′·54	264° 3′	266° 20′	0′·54	32° 35′	37° 8′	0′·26	265° 35′	272° 25′	0′·25	45° 16′	54° 22′
February	1·54	1·63	252. 11	255. 40	1·03	34. 15	41. 13	0·63	236. 29	246. 56	0·27	36. 10	50. 7
March	3·25	1·95	225. 55	228. 6	1·88	36. 47	41. 8	1·19	217. 57	224. 29	0·65	46. 12	54. 54
April	4·08	3·25	228. 58	229. 1	2·30	37. 6	37. 12	1·30	232. 1	232. 10	0·44	58. 23	58. 35
May	3·96	3·06	224. 9	223. 18	2·38	49. 31	47. 48	1·04	239. 1	236. 27	0·20	75. 27	72. 1
June	5·23	3·48	212. 4	212. 9	2·68	53. 29	53. 39	0·85	251. 23	251. 38	0·07	130. 55	131. 15
July	4·22	3·16	213. 30	214. 52	2·23	47. 28	50. 12	0·82	239. 32	243. 38	0·10	25. 57	31. 24
August	4·18	3·33	228. 19	229. 16	2·51	55. 36	57. 31	1·10	242. 49	245. 41	0·10	55. 24	59. 14
September	3·08	2·71	234. 59	233. 45	2·01	50. 12	47. 44	0·96	244. 6	240. 24	0·45	69. 28	64. 32
October	2·26	2·41	241. 15	237. 46	1·63	31. 7	24. 9	0·94	235. 24	224. 57	0·39	64. 55	50. 58
November	1·84	1·55	259. 56	256. 15	0·97	29. 46	22. 24	0·38	257. 36	246. 33	0·24	51. 2	36. 18
December	1·62	1·41	260. 52	259. 49	0·86	23. 48	21. 42	0·32	263 51	260. 42	0·15	73. 0	68. 48
For the Year	2·64	2·36	232. 4	232. 4	1·73	43. 35	43. 35	0·80	239. 20	239. 20	0·27	56. 29	56. 29
	HORIZONTAL FORCE.												
January	47·2	15·1	63° 12′	65° 29′	13·1	277° 37′	282° 10′	15·9	170° 30′	177° 20′	7·9	332° 36′	341° 42′
February	61·7	30·0	80. 13	83. 42	14·6	274. 31	281. 29	16·7	134. 29	144. 36	6·2	1. 32	15. 29
March	100·6	49·3	101. 57	104. 8	25·9	289. 50	294. 11	19·7	163. 3	169. 35	9·9	6. 47	15. 29
April	161·5	83·7	117. 19	117. 22	53·2	298. 26	298. 32	17·6	149. 21	149. 30	8·5	8. 9	8. 21
May	132·4	88·1	132. 14	131. 23	43·6	311. 37	309. 54	9·2	244. 5	241. 31	4·5	110. 54	107. 28
June	165·1	96·6	135. 14	135. 19	45·8	324. 34	324. 44	20·2	179. 30	179. 45	3·0	66. 18	66. 38
July	137·6	96·2	136. 32	137. 54	32·1	314. 10	316. 54	14·8	195. 43	199. 49	7·3	345. 28	350. 55
August	131·2	73·4	131. 20	132. 17	27·5	345. 57	347. 52	23·6	200. 39	203. 31	8·7	29. 32	33. 22
September	136·4	73·7	110. 59	109. 45	31·4	308. 55	306. 27	21·0	177. 34	173. 52	8·2	17. 47	12. 51
October	94·8	58·9	88. 0	84. 31	24·3	294. 5	287. 7	15·1	182. 16	171. 49	9·2	33. 8	19. 11
November	65·3	39·8	77. 58	74. 17	22·9	258. 36	251. 14	8·4	191. 59	180. 56	7·8	19. 55	5. 11
December	41·0	17·6	63. 13	62. 10	19·7	266. 20	264. 14	10·7	172. 30	169. 21	1·5	27. 15	23. 3
For the Year	101·7	55·8	115. 46	115. 46	27·3	302. 32	302. 32	14·8	177. 11	177. 11	6·1	15. 33	15. 33
	VERTICAL FORCE.												
January	9·3	9·4	217° 27′	219° 44′	2·0	308° 13′	312° 46′	1·0	356° 29′	363° 19′	1·1	190° 53′	199° 59′
February	10·3	3·6	174. 9	177. 38	5·6	272. 19	279. 17	2·2	89. 47	100. 14	1·7	244. 12	258. 9
March	36·8	8·8	109. 30	111. 41	13·1	278. 22	282. 43	8·6	93. 57	100. 29	4·0	264. 50	273. 32
April	45·4	17·4	129. 58	130. 1	18·3	264. 0	264. 6	0·9	103. 28	103. 37	2·9	296. 31	296. 43
May	46·9	21·3	126. 1	125. 10	19·0	273. 57	272. 14	6·8	112. 10	109. 36	2·0	299. 57	296. 31
June	39·2	12·6	127. 17	127. 22	18·7	272. 37	272. 47	7·0	95. 46	96. 1	2·2	250. 49	251. 9
July	34·8	12·2	122. 28	123. 50	17·9	269. 50	272. 34	5·3	100. 0	104. 6	1·3	209. 55	215. 22
August	35·3	12·9	128. 23	129. 20	15·6	270. 18	272. 13	7·4	96. 20	99. 12	1·7	244. 12	248. 2
September	26·4	6·7	114. 52	113. 38	9·8	263. 52	261. 24	6·0	97. 18	93. 36	2·5	304. 41	299. 45
October	22·2	7·9	165. 32	162. 3	10·5	266. 5	259. 7	5·9	98. 51	88. 24	2·5	283. 23	269. 26
November	9·3	6·6	204. 1	200. 20	6·3	316. 40	309. 18	2·8	109. 50	98. 47	1·1	318. 11	303. 27
December	6·8	2·9	196. 45	195. 42	3·6	291. 28	289. 22	1·7	171. 31	168. 22	0·8	318. 59	314. 47
For the Year	25·5	8·7	139. 11	139. 11	11·5	273. 16	273. 16	5·1	100. 20	100. 20	1·6	273. 3	273. 3

TABLE XVII.—RESULTS of OBSERVATIONS of MAGNETIC DIP made in the MAGNETIC PAVILION in the YEAR 1904.

Greenwich Civil Time, 1904.	3-inch Needle.	Magnetic Dip.	Observer.	Greenwich Civil Time, 1904.	3-inch Needle.	Magnetic Dip.	Observer.	Greenwich Civil Time, 1904.	3-inch Needle.	Magnetic Dip.	Observer.
d h		° ′ ″		d h		° ′ ″		d h		° ′ ″	
Jan. 5. 15	D_1	66. 59. 38	E	May 4. 12	D_1	66. 56. 39	E	Sept. 2. 12	D_1	66. 59. 57	E
7. 15	D_2	66. 57. 50	E	6. 12	D_2	66. 57. 18	E	5. 12	D_2	66. 57. 7	E
8. 12	D_1	66. 59. 40	E	10. 12	D_1	66. 57. 51	E	7. 12	D_1	67. 0. 33	E
13. 12	D_2	66. 59. 25	E	11. 12	D_2	66. 55. 43	E	9. 12	D_2	66. 56. 50	E
15. 12	D_1	66. 59. 9	E	12. 12	D_1	66. 54. 55	E	12. 12	D_1	66. 56. 38	E
22. 16	D_1	66. 57. 11	B	13. 12	D_2	66. 58. 1	E	14. 12	D_2	66. 57. 39	E
26. 15	D_2	66. 54. 57	B	17. 16	D_1	66. 55. 52	B	19. 12	D_1	66. 58. 33	E
26. 15	D_1	67. 3. 44	B	19. 13	D_2	66. 57. 48	B	20. 12	D_2	66. 55. 54	E
27. 15	D_2	66. 53. 28	B	21. 13	D_1	66. 54. 6	B	21. 13	D_1	66. 56. 41	B
27. 16	D_1	66. 54. 10	B	25. 13	D_2	66. 59. 11	B	26. 12	D_2	66. 58. 27	B
29. 15	D_2	66. 56. 39	B	27. 13	D_1	66. 53. 26	B	28. 12	D_1	66. 57. 44	B
30. 16	D_2	67. 2. 7	B	30. 13	D_2	66. 58. 9	B	30. 12	D_2	67. 0. 33	B
Feb. 2. 16	D_1	66. 59. 37	B	June 2. 12	D_1	66. 58. 11	B	Oct. 3. 12	D_1	66. 55. 29	B
3. 15	D_2	66. 56. 44	B	6. 13	D_2	66. 57. 12	B	4. 12	D_2	66. 57. 45	B
5. 15	D_1	66. 54. 10	B	8. 13	D_1	66. 56. 0	B	8. 12	D_1	66. 55. 37	B
11. 17	D_2	67. 0. 14	B	9. 13	D_2	66. 59. 37	B	10. 12	D_2	66. 57. 2	B
13. 14	D_1	66. 55. 4	B	13. 12	D_1	66. 58. 45	B	12. 12	D_1	66. 58. 45	B
13. 14	D_2	66. 55. 41	B	14. 13	D_2	66. 55. 18	B	14. 12	D_2	66. 57. 55	B
16. 12	D_1	67. 0. 33	E	17. 13	D_1	66. 58. 10	E	18. 12	D_1	66. 53. 2	E
18. 12	D_2	66. 57. 6	E	20. 12	D_2	66. 56. 54	E	21. 12	D_2	66. 56. 37	E
23. 12	D_1	66. 57. 15	E	20. 13	D_1	66. 58. 21	E	24. 12	D_2	66. 56. 46	E
25. 12	D_1	66. 56. 48	E	23. 12	D_2	66. 56. 55	E	25. 12	D_1	66. 53. 13	E
25. 13	D_2	66. 56. 4	E	28. 12	D_1	66. 57. 3	E	27. 12	D_1	67. 1. 11	E
26. 12	D_2	66. 55. 56	E	28. 13	D_2	66. 58. 13	E	28. 12	D_2	66. 58. 33	E
Mar. 4. 12	D_1	66. 58. 32	E	July 4. 12	D_1	66. 55. 1	E	Nov. 2. 12	D_1	66. 58. 48	E
4. 13	D_2	66. 56. 32	E	5. 15	D_2	66. 56. 22	E	4. 12	D_2	66. 55. 56	E
8. 12	D_1	66. 57. 25	E	7. 12	D_1	66. 56. 57	E	7. 12	D_1	66. 59. 42	E
9. 12	D_2	66. 56. 44	E	8. 12	D_2	66. 56. 44	E	9. 12	D_2	66. 55. 35	E
11. 12	D_1	66. 56. 38	E	11. 12	D_1	66. 55. 36	E	14. 12	D_1	67. 0. 12	E
14. 15	D_2	66. 58. 38	E	13. 12	D_2	66. 57. 56	E	15. 12	D_2	66. 56. 47	E
17. 14	D_1	66. 54. 47	B	19. 12	D_1	66. 54. 12	B	18. 11	D_1	66. 57. 50	B
22. 17	D_2	66. 57. 34	B	20. 15	D_2	66. 57. 35	B	21. 13	D_2	66. 56. 44	B
22. 18	D_1	66. 55. 16	B	23. 12	D_1	66. 53. 53	B	23. 14	D_1	66. 59. 34	B
28. 12	D_2	66. 56. 39	B	25. 12	D_2	66. 57. 54	B	25. 15	D_2	66. 59. 8	B
28. 12	D_1	66. 55. 43	B	26. 14	D_1	66. 54. 18	B	26. 12	D_1	66. 58. 18	B
30. 15	D_2	66. 55. 39	B	28. 12	D_2	66. 55. 41	B	28. 15	D_2	66. 57. 24	B
Apr. 5. 14	D_1	66. 57. 44	B	Aug. 3. 15	D_1	66. 59. 30	B	Dec. 2. 15	D_1	66. 56. 2	B
5. 15	D_2	66. 54. 50	B	4. 14	D_2	67. 0. 9	B	5. 13	D_2	66. 58. 15	B
6. 17	D_1	66. 56. 50	B	6. 17	D_1	66. 57. 33	B	6. 15	D_1	66. 57. 18	B
6. 18	D_2	66. 58. 27	B	9. 12	D_2	66. 56. 1	B	7. 14	D_2	66. 58. 7	B
9. 17	D_1	66. 55. 27	B	12. 12	D_1	66. 56. 58	B	12. 11	D_1	66. 57. 45	B
9. 17	D_2	66. 57. 24	B	15. 15	D_2	66. 55. 48	B	15. 10	D_2	66. 57. 35	B
15. 12	D_1	66. 55. 54	E	19. 13	D_1	66. 53. 55	B	19. 12	D_1	66. 55. 32	E
19. 12	D_2	66. 57. 38	E	20. 12	D_2	66. 56. 5	B	20. 12	D_2	66. 55. 48	E
20. 12	D_1	66. 57. 53	E	23. 12	D_1	66. 55. 23	E	22. 12	D_2	66. 58. 4	E
22. 12	D_2	66. 56. 3	E	24. 12	D_2	66. 57. 43	E	23. 14	D_1	66. 57. 55	E
26. 12	D_1	66. 56. 27	E	29. 12	D_1	66. 56. 1	E	28. 12	D_1	66. 58. 10	E
28. 12	D_2	66. 56. 32	E	29. 14	D_2	66. 57. 42	E	29. 12	D_2	66. 59. 17	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 1904.

Monthly Means of Magnetic Dip.

Month, 1904.	D_1, 3-inch Needle.	Number of Observations.	D_2, 3-inch Needle.	Number of Observations.
January	66° 58′ 55″	6	66° 57′ 24″	6
February	66. 57. 15	6	66. 56. 57	6
March	66. 56. 23	6	66. 56. 58	6
April	66. 56. 42	6	66. 56. 49	6
May	66. 55. 28	6	66. 57. 42	6
June	66. 57. 45	6	66. 57. 21	6
July	66. 55. 0	6	66. 57. 2	6
August	66. 56. 33	6	66. 57. 15	6
September	66. 58. 21	6	66. 57. 45	6
October	66. 56. 13	6	66. 57. 26	6
November	66. 59. 4	6	66. 56. 56	6
December	66. 57. 7	6	66. 57. 51	6
Means	66. 57. 4	Sum 72	66. 57. 17	Sum 72
Mean Annual Dip	66° 57′ 11″			

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 1904.

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, 1904.	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 12. 15	1·0	47·1	9. 41. 8	5·793	100	48·0	E
	1·3		4. 23. 50	5·797	100	48·3	
January 21. 16	1·0	41·7	9. 41. 24	5·800	100	41·4	B
	1·3		4. 23. 40	...	...	...	
February 9. 16	1·0	46·6	9. 41. 1	5·795	100	46·6	B
	1·3		4. 33. 39	...	...	...	
February 19. 15	1·0	41·2	9. 41. 19	5·790	100	41·4	E
	1·3		4. 23 49	5·792	100	43·0	
March 9. 15	1·0	55·1	9. 39. 44	5·799	100	55·6	E
	1·3		4. 23. 20	5·797	100	57·1	
March 23. 17	1·0	49·1	9. 40. 14	5·795	100	49·9	B
	1·3		4. 23 34	5·793	100	50·0	
April 7. 16	1·0	52·9	9. 39. 56	5·798	100	53·8	B
	1·3		4. 23. 23	5·796	100	53·9	
April 22. 15	1·0	49·9	9. 40. 6	5·795	100	50·2	E
	1·3		4. 23. 30	5·790	100	51·0	
May 10. 15	1·0	47·8	9. 40. 21	5·792	100	47·3	E
	1·3		4. 23. 36	5·792	100	48·9	
May 24. 16	1·0	58·0	9. 39. 31	5·799	100	57·1	B
	1·3		4. 23. 12	5·795	100	57·5	
June 7. 16	1·0	69·6	9. 37. 52	5·802	100	68·2	B
	1·3		4. 22. 26	5·803	100	70·6	
June 23. 15	1·0	69·8	9. 37. 17	5·804	100	70·3	E
	1·3		4. 22. 14	5·803	100	72·1	
July 8. 15	1·0	72·2	9. 37. 15	5·801	100	74·3	E
	1·3		4. 22. 8	5·804	100	78·7	
July 22. 16	1·0	73·0	9. 36. 55	5·799	100	74·1	B
	1·3		4. 21. 55	5·800	100	75·6	
August 8. 15	1·0	73·9	9. 36. 46	5·803	100	74·2	B
	1·3		4. 21. 56	5·803	100	74·9	
August 23. 15	1·0	61·5	9. 38. 41	5·799	100	62·1	E
	1·3		4. 22. 41	5·798	100	62·5	
September 7. 15	1·0	64·4	9. 38. 15	5·803	100	65·1	E
	1·3		4. 22. 41	5·802	100	66·7	
September 23. 16	1·0	58·3	9. 39. 2	5·797	100	58·0	B
	1·3		4. 22. 51	5·796	100	58·7	
October 7. 13	1·0	50·6	9. 41. 45	5·803	100	50·5	B
	1·3		4. 23. 55	5·803	100	50·7	
October 25. 15	1·0	55·5	9. 39. 2	5·797	100	55·6	E
	1·3		4. 22. 57	5·798	100	56·0	
November 8. 15	1·0	49·3	9. 40. 12	5·797	100	49·5	E
	1·3		4. 23. 32	5·796	100	50·6	
November 21. 15	1·0	44·7	9. 40. 10	5·794	100	44·6	B
	1·3		4. 23. 19	5·792	100	45·9	
December 7. 13	1·0	45·0	9. 40. 15	5·794	100	45·1	B
	1·3		4. 23. 35	5·792	100	45·1	
December 23. 13	1·0	41·0	9. 40. 18	5·791	100	40·7	E
	1·3		4. 23. 32	5·794	100	41·6	

The deflecting magnet is placed on the east side of the suspended magnet, with its marked end 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 magnet.

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, 1904.	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. $m X$.	Value of m.	Value of Horizontal Force X.	Value of Horizontal Force. As observed.	Value of Horizontal Force. Reduced to Mean of Month.
d h						s					
Jan. 12. 15	0·08428	0·08438	−0·00282		8·92703	5·7988	0·13415	0·3393	4·0138	1·8507	1·8505
Jan. 21. 16	0·08424	0·08425	−0·00017		8·92660	5·8070	0·13290	0·3386	4·0101	1·8490	1·8479
Feb. 9. 16	0·08426	0·08431	−0·00158		8·92680	5·7991	0·13411	0·3392	4·0147	1·8511	1·8497
Feb. 19. 15	0·08422	0·08429	−0·00186		8·92666	5·7972	0·13434	0·3392	4·0164	1·8519	1·8517
Mar. 9. 15	0·08419	0·08433	−0·00406		8·92669	5·7982	0·13430	0·3392	4·0161	1·8517	1·8498
Mar. 23. 17	0·08418	0·08432	−0·00406		8·92662	5·7974	0·13438	0·3392	4·0168	1·8521	1·8531
Apr. 7. 16	0·08419	0·08431	−0·00361		8·92664	5·8002	0·13399	0·3391	4·0149	1·8512	1·8529
Apr. 22. 15	0·08417	0·08431	−0·00400		8·92658	5·7975	0·13436	0·3392	4·0169	1·8521	1·8520
May 10. 15	0·08418	0·08428	−0·00395		8·92660	5·7974	0·13437	0·3392	4·0168	1·8521	1·8528
May 24. 16	0·08420	0·08433	−0·00372		8·92671	5·7991	0·13417	0·3392	4·0154	1·8514	1·8509
June 7. 16	0·08414	0·08426	−0·00338		8·92636	5·7991	0·13424	0·3391	4·0174	1·8523	1·8523
June 23. 15	0·08406	0·08419	−0·00400		8·92598	5·8000	0·13411	0·3389	4·0185	1·8528	1·8522
July 8. 15	0·08409	0·08420	−0·00327	−0·00306	8·92607	5·7970	0·13457	0·3391	4·0202	1·8537	1·8515
July 22. 16	0·08405	0·08414	−0·00259		8·92584	5·7954	0·13484	0·3391	4·0225	1·8547	1·8547
Aug. 8. 15	0·08404	0·08416	−0·00344		8·92587	5·7988	0·13431	0·3389	4·0199	1·8535	1·8545
Aug. 23. 15	0·08413	0·08422	−0·00237		8·92624	5·7992	0·13417	0·3390	4·0176	1·8525	1·8532
Sept. 7. 15	0·08411	0·08426	−0·00417		8·92630	5·8015	0·13385	0·3389	4·0158	1·8516	1·8508
Sept. 23. 16	0·08414	0·08422	−0·00248		8·92626	5·7991	0·13418	0·3390	4·0175	1·8524	1·8551
Oct. 7. 13	0·08442	0·08445	−0·00102		8·92759	5·8067	0·13299	0·3391	4·0059	1·8471	1·8499
Oct. 25. 15	0·08410	0·08421	−0·00338		8·92614	5·7994	0·13411	0·3389	4·0177	1·8525	1·8512
Nov. 8. 15	0·08418	0·08431	−0·00395		8·92660	5·8014	0·13378	0·3390	4·0141	1·8508	1·8522
Nov. 21. 15	0·08411	0·08417	−0·00197		8·92606	5·7992	0·13407	0·3389	4·0179	1·8526	1·8529
Dec. 7. 13	0·08412	0·08427	−0·00412		8·92635	5·7983	0·13421	0·3391	4·0173	1·8523	1·8521
Dec. 23. 13	0·08407	0·08420	−0·00355		8·92603	5·7992	0·13404	0·3389	4·0179	1·8526	1·8536
Means ...	...	...	...	...	...	...	...	...	4·0163	1·8519	1·8520

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 7, 13, 14, 19, 23, February 10, 12, 14, 19, 21, March 10, 15, 18, 19, 22, April 6, 14, 16, 23, 27, May 5, 10, 16, 20, 25, June 8, 9, 10, 20, 24, July 4, 11, 12, 19, 25, August 6, 11, 14, 24, 28, September 4, 14, 15, 18, 29, October 3, 12, 17, 20, 24, November 8, 9, 12, 20, 28, December 7, 10, 12, 23, 25.

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 1·8520 and 4·3531 respectively for the year.

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

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

1904.

Hour, Greenwich Civil Time.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	For the Year.
	′	′	′	′	′	′	′	′	′	′	′	′	′
Midnight.	0·0	0·5	3·1	3·8	4·2	5·7	3·6	3·8	2·7	2·1	0·6	0·1	2·34
1h	0·3	0·4	2·9	3·5	3·9	5·0	3·5	3·7	2·5	2·0	1·0	0·7	2·27
2	0·2	0·6	3·2	2·9	3·6	4·3	3·1	3·5	2·3	2·1	1·3	0·9	2·15
3	0·4	0·8	3·0	3·1	3·4	4·4	2·8	3·2	2·5	2·1	1·5	0·9	2·16
4	0·1	1·0	2·7	3·2	2·9	3·4	2·3	2·7	2·5	2·1	1·6	1·0	1·95
5	0·0	1·0	2·8	2·9	1·7	1·9	1·4	1·7	2·2	2·1	1·3	1·0	1·49
6	0·3	0·8	2·5	2·4	0·9	0·4	0·4	0·7	1·8	1·6	0·8	0·6	0·92
7	0·2	0·8	1·5	1·2	0·0	0·0	0·0	0·0	0·5	1·0	0·6	0·1	0·31
8	0·1	0·6	0·1	0·0	0·5	0·3	0·1	0·4	0·0	0·0	0·1	0·0	0·00
9	0·7	0·7	0·0	0·4	2·0	2·1	1·2	2·2	1·1	0·3	0·0	0·2	0·73
10	1·7	1·7	1·3	2·4	4·1	4·6	3·3	5·3	3·1	2·0	1·1	0·9	2·44
11	2·2	3·3	4·8	6·0	7·6	7·4	6·0	8·2	5·9	4·8	2·6	2·0	4·89
Noon.	3·0	4·8	8·1	8·7	9·6	9·8	8·5	10·1	8·1	6·8	3·7	2·6	6·80
13h	3·3	5·3	9·6	10·2	10·2	10·4	9·3	10·7	8·8	7·3	3·8	3·1	7·49
14	2·6	4·9	9·0	9·6	9·4	10·4	9·4	10·1	8·5	6·8	3·4	3·1	7·09
15	1·2	3·9	7·2	7·9	7·9	9·5	7·9	8·5	7·0	5·6	2·6	2·1	5·76
16	1·1	2·8	4·9	6·2	6·3	7·8	6·4	6·5	5·4	4·3	2·3	1·8	4·47
17	1·1	2·6	3·8	5·0	5·0	6·4	5·0	5·0	4·3	3·4	2·0	1·4	3·57
18	0·8	2·3	3·9	4·5	4·3	5·6	4·3	4·5	4·0	3·2	1·6	0·9	3·15
19	0·6	1·8	3·8	4·4	4·3	5·6	4·2	4·5	3·5	2·9	1·3	0·6	2·94
20	0·4	1·3	3·7	4·2	4·4	5·7	4·0	4·4	3·2	2·7	1·0	0·3	2·76
21	0·2	1·0	3·8	4·5	4·5	5·8	4·0	4·1	3·2	1·9	0·6	0·1	2·63
22	0·3	0·3	4·0	4·5	4·8	5·8	3·9	4·1	2·7	1·8	0·5	0·1	2·55
23	0·2	0·0	3·7	4·2	4·4	5·9	3·8	3·9	2·8	2·0	0·5	0·1	2·44
24	0·4	0·3	3·7	4·1	4·5	5·9	3·7	4·0	2·8	2·0	0·9	0·2	2·53
Means 0h–23h	0·88	1·80	3·89	4·40	4·58	5·34	4·10	4·66	3·69	2·95	1·49	1·03	3·05
Means 1h–24h	0·89	1·79	3·92	4·42	4·59	5·35	4·10	4·67	3·70	2·95	1·50	1·03	3·06

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.)

1904.

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.	43	80	76	141	133	246	168	311	136	252	180	333	148	274	190	352	159	294	157	291	86	159	37	69	120·2	222·6
1h	43	80	65	120	129	239	174	322	134	248	174	322	140	259	190	352	144	267	151	280	80	148	43	80	116·4	215·5
2	47	87	51	94	126	233	170	315	134	248	154	285	137	254	178	330	132	244	151	280	87	161	43	80	111·6	206·7
3	46	85	51	94	125	231	157	291	140	259	152	282	131	243	174	322	139	257	157	291	84	156	48	89	111·1	205·8
4	52	96	58	107	120	222	162	300	135	250	147	272	124	230	159	294	143	265	157	291	98	181	60	111	112·0	207·3
5	62	115	74	137	122	226	172	319	133	246	147	272	111	206	153	283	148	274	158	293	108	200	67	124	115·3	213·7
6	52	96	82	152	129	239	167	309	105	194	125	231	93	172	127	235	142	263	156	289	105	194	67	124	106·6	197·3
7	48	89	77	143	116	215	151	280	75	139	76	141	67	124	78	144	121	224	134	248	91	169	59	109	85·2	157·9
8	38	70	59	109	84	156	117	217	34	63	36	67	29	54	34	63	89	165	98	181	74	137	47	87	55·7	103·2
9	16	30	21	39	30	56	58	107	14	26	10	19	0	0	0	0	44	81	46	85	42	78	23	43	19·4	36·1
10	6	11	3	6	0	0	18	33	0	0	0	0	19	35	12	22	0	0	0	0	12	22	1	2	0·0	0·0
11	0	0	0	0	2	4	0	0	17	31	24	44	35	65	48	89	6	11	18	33	0	0	6	11	7·1	13·1
Noon	28	52	22	41	40	74	5	9	58	107	56	104	75	139	100	185	27	50	58	107	8	15	0	0	33·9	62·7
13h	66	122	33	61	78	144	57	106	104	193	120	222	106	196	167	309	63	117	96	178	45	83	39	72	75·3	139·3
14	87	161	56	104	99	183	133	246	159	294	168	311	134	248	219	406	106	196	128	237	57	106	61	113	111·3	206·2
15	81	150	61	113	142	263	159	294	185	343	185	343	172	319	231	428	124	230	136	252	58	107	64	119	127·3	235·8
16	75	139	54	100	143	265	185	343	214	396	209	387	180	333	229	424	149	276	114	211	77	143	57	106	134·6	249·4
17	70	130	54	100	135	250	202	374	232	430	232	430	188	348	209	387	164	304	131	243	95	176	64	119	142·1	263·3
18	73	135	71	131	140	259	214	396	236	437	244	452	199	369	220	407	180	333	157	291	110	204	72	133	153·8	284·7
19	72	133	88	163	146	270	224	415	242	448	252	467	212	393	230	426	188	348	177	328	112	207	83	154	162·9	301·8
20	61	113	89	165	154	285	224	415	238	441	240	444	229	424	236	437	203	376	185	343	113	209	81	150	165·2	305·9
21	53	98	88	163	147	272	221	409	240	444	248	459	215	398	244	452	197	365	173	320	107	198	69	128	160·9	297·9
22	63	117	95	176	151	280	219	406	233	432	246	456	205	380	228	422	207	383	171	317	96	178	60	111	158·6	293·9
23	55	102	117	217	150	278	214	396	227	420	236	437	193	357	208	385	199	369	179	332	88	163	54	100	154·1	285·4
24	59	109	113	209	149	276	214	396	221	409	226	419	189	350	192	356	182	337	173	320	94	174	47	87	149·0	275·9
Means 0h–23h	51·5	95·5	60·2	111·5	110·0	203·7	148·8	275·5	142·7	264·2	152·5	282·5	130·9	242·5	161·0	298·1	128·1	237·2	128·7	238·4	76·4	141·4	50·2	93·1	105·9	196·1
1h–24h	52·2	96·7	61·8	114·3	110·7	205·0	150·7	279·1	146·3	270·7	154 5	286·1	132·6	245·7	161·1	298·2	129·0	239·0	129·3	239·6	76·7	142·0	50·6	93·8	107·1	198·3

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.)

1904.

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.	7	30	11	48	49	213	54	235	46	200	52	226	55	239	36	157	23	100	30	131	15	65	14	61	31·7	137·8
1h	13	57	9	39	45	196	52	226	44	192	50	218	53	231	36	157	21	91	22	96	11	48	15	65	29·9	130·4
2	9	39	11	48	46	200	46	200	44	192	50	218	53	231	34	148	23	100	24	104	13	57	15	65	29·7	129·2
3	12	52	11	48	48	209	50	218	46	200	50	218	55	239	34	148	28	122	22	96	13	57	15	65	31·0	135·0
4	10	44	13	57	58	252	50	218	50	218	54	235	61	266	36	157	28	122	24	104	14	61	15	65	33·4	145·6
5	12	52	16	70	52	226	52	226	54	235	58	252	66	287	44	192	30	131	26	113	14	61	17	74	35·8	155·6
6	16	70	14	61	52	226	60	261	55	239	56	244	60	261	40	174	34	148	28	122	16	70	19	83	36·5	158·9
7	12	52	16	70	56	244	64	279	51	222	56	244	58	252	42	183	38	165	30	131	14	61	17	74	36·8	160·5
8	8	35	14	61	54	235	56	244	47	205	54	235	54	235	36	157	30	131	32	139	16	70	19	83	34·0	148·2
9	8	35	18	78	44	192	39	170	31	135	42	183	48	209	26	113	18	78	30	131	14	61	11	48	26·4	115·1
10	8	35	10	44	28	122	20	87	11	48	22	96	30	131	14	61	14	61	16	70	8	35	5	22	14·5	63·4
11	14	61	8	35	12	52	10	44	5	22	8	35	10	44	2	9	8	35	4	17	0	0	9	39	6·5	28·4
Noon.	8	35	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	17	0	0	0·0	0·0
13h	10	44	6	26	16	70	12	52	14	61	16	70	8	35	14	61	4	17	10	44	8	35	0	0	8·8	38·6
14	19	83	7	30	34	148	28	122	24	104	32	139	20	87	24	104	16	70	24	104	19	83	4	17	19·9	86·6
15	11	48	15	65	54	235	38	165	30	131	40	174	36	157	38	165	22	96	34	148	19	83	2	9	27·2	118·7
16	11	48	25	109	63	274	42	183	36	157	48	209	47	205	46	200	30	131	42	183	15	65	10	44	33·6	146·4
17	5	22	17	74	56	244	50	218	46	200	58	252	55	239	50	218	29	126	44	192	19	83	13	57	35·8	156·1
18	7	30	15	65	50	218	54	235	50	218	58	252	49	213	44	192	29	126	42	183	11	48	15	65	34·3	149·5
19	4	17	12	52	50	218	56	244	44	192	54	235	53	231	34	148	27	118	42	183	9	39	11	48	32·0	139·4
20	6	26	18	78	46	200	56	244	47	205	50	218	49	213	36	157	27	118	42	183	5	22	9	39	31·6	137·6
21	2	9	12	52	44	192	55	239	43	187	48	209	47	205	34	148	23	100	40	174	3	13	8	35	28·9	126·0
22	0	0	14	61	42	183	53	231	41	178	48	209	45	196	34	148	23	100	36	157	9	39	6	26	28·3	123·0
23	0	0	12	52	40	174	53	231	43	187	48	209	43	187	32	139	19	83	36	157	9	39	4	17	27·2	118·6
24	2	9	12	52	40	174	53	231	41	178	44	192	47	205	32	139	17	74	36	157	3	13	8	35	26·9	117·3
Means 0h–23h	8·8	38·5	12·7	55·1	43·3	188·5	43·7	190·5	37·6	163·7	43·8	190·8	44·0	191·4	31·9	139·0	22·7	98·7	28·3	123·4	11·6	50·5	10·5	45·9	27·2	118·7
1h–24h	8·6	37·6	12·7	55·3	42·9	186·8	43·7	190·3	37·4	162·8	43·5	189·4	43·6	190·0	31·7	138·2	22·4	97·6	28·6	124·5	11·1	48·3	10·3	44·8	27·0	117·8

ROYAL OBSERVATORY, GREENWICH.

MAGNETIC DISTURBANCES

AND

EARTH CURRENTS.

1904.

MAGNETIC DISTURBANCES in DECLINATION, HORIZONTAL FORCE, and VERTICAL FORCE, recorded at the ROYAL OBSERVATORY, GREENWICH, in the Year 1904.

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).

1904.

January

$1^d\ 16^h$ to $17\frac{1}{2}^h$ Double wave in H.F. (+ ·0014 to − ·0008). $19\frac{1}{2}^h$ Decrease of H.F. (− ·0014). $1^d\ 23\frac{1}{2}^h$ to $2^d\ 0\frac{1}{2}^h$ Wave in Dec. (+ 3′). [$1^d\ 10^h$ to 22^h Loss of Dec. register.]

$2^d\ 3\frac{1}{2}^h$ to 5^h Wave in Dec. (+ 3′). 16^h to 18^h Irregular wave in Dec. (− 8′). $16\frac{1}{4}^h$ to $17\frac{1}{4}^h$ Double-crested wave in H.F. (+ ·0010). $18\frac{1}{4}^h$ to $20\frac{1}{2}^h$ Prolonged irregular wave in Dec. with superposed fluctuations (− 10′). 19^h to 20^h Serrated wave in H.F. (+ ·0018). 23^h to 24^h Double wave in Dec. (− 3′ to + 3′): wave in H.F. (+ ·0012).

$3^d\ 9\frac{1}{2}^h$ to 11^h Wave in H.F. (− ·0016): in Dec. small. 15^h to $16\frac{1}{4}^h$ Wave in H.F. (− ·0012). $15\frac{1}{4}^h$ to 17^h Wave in Dec. (− 5′). 20^h to $21\frac{1}{2}^h$ Double wave in Dec. (− 5′ to + 3′), followed till $22\frac{1}{4}^h$ by a smaller wave. $20\frac{1}{2}^h$ to $22\frac{1}{2}^h$ Prolonged double-crested wave in H.F. (+ ·0020).

$4^d\ 0\frac{1}{2}^h$ Increase in Dec. (+ 3′): followed by small fluctuations till 5^h. $6\frac{1}{2}^h$ to $7\frac{1}{2}^h$ Wave in Dec. (+ 3′). $15\frac{1}{2}^h$ to $16\frac{1}{2}^h$ Wave in H.F. (− ·0010). 16^h to 17^h Wave in Dec. (+ 3′). $4^d\ 23\frac{1}{2}^h$ to $5^d\ 1^h$ Wave in H.F. (+ ·0020): in Dec. small.

$5^d\ 4^h$ to 6^h Shallow wave in Dec. and H.F. 13^h to 17^h Wave in H.F. (− ·0020), with superposed fluctuations, also in Dec. 15^h to 16^h Wave in Dec. (− 3′). $5^d\ 22\frac{3}{4}^h$ to $6^d\ 0\frac{1}{4}^h$ Irregular wave in H.F., steep at commencement (+ ·0030). $22\frac{3}{4}^h$ to $23\frac{1}{4}^h$ Small sharp wave in Dec. (+ 3′). $5^d\ 23\frac{1}{2}^h$ to $6^d\ 2\frac{1}{2}^h$ Two successive waves in Dec. (− 3′) and (− 3′).

$6^d\ 16^h$ to 18^h Small fluctuations in Dec. and H.F.

$9^d\ 17\frac{1}{4}^h$ to 19^h Irregular wave in Dec. (− 5′). $17\frac{1}{4}^h$ to $19\frac{3}{4}^h$ Prolonged irregular wave in H.F. (− ·0016). 22^h to 23^h Wave in Dec. (− 12′). 22^h to $23\frac{1}{2}^h$ Two successive waves in H.F. (+ ·0014) and (+ ·0012): wave in V.F. (+ ·0004). $9^d\ 23^h$ to $10^d\ 2^h$ Irregular wave in Dec. (− 5′), followed by fluctuations.

$10^d\ 1^h$ to 5^h Fluctuations in H.F. 2^h to $4\frac{1}{2}^h$ Fluctuations in Dec. 5^h to 8^h Prolonged irregular wave in Dec. (+ 8′): three successive waves in H.F. (− ·0010), (− ·0010), and (− ·0010). $16\frac{1}{2}^h$ to $21\frac{1}{2}^h$ Sharp fluctuations in Dec. (± 1′): in H.F. (± ·0010). 22^h to 23^h Small double wave in Dec. and H.F.

$11^d\ 3\frac{3}{4}^h$ to 6^h Double wave in Dec. (+ 3′ to − 3′): prolonged wave in H.F. (+ ·0014). $16\frac{1}{4}^h$ to 18^h Prolonged wave in Dec. (− 4′): in H.F. (− ·0016): each being followed by sharp fluctuations till 22^h. 22^h to 24^h Wave in Dec. (+ 5′). 22^h to 23^h Wave in H.F. (− ·0010). [$11\frac{1}{2}^h$ to 15^h Loss of Dec., H.F. and V.F. registers].

$12^d\ 19^h$ to $20\frac{1}{2}^h$ Wave in Dec. (− 4′): in H.F. small.

$15^d\ 16^h$ to 18^h Fluctuations in H.F.

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January $16^d\ 1\frac{1}{2}^h$ to $3\frac{1}{2}^h$ Double wave in Dec. (+ 5′ to − 5′): wave in H.F. (+ ·0020). $1\frac{3}{4}^h$ to $2\frac{1}{4}^h$ Decrease in V.F. (− ·0004). $12\frac{1}{2}^h$ to 14^h Wave in Dec. (+ 3′). 15^h to $16\frac{1}{2}^h$ Sharp double wave in Dec. (− 14′ to + 5′), followed till $16\frac{3}{4}^h$ by another sharp wave (− 5′): two successive double waves in H.F. (+ ·0014 to − ·0016) and (+ ·0012 to − ·0022). $17\frac{1}{2}^h$ to $18\frac{1}{2}^h$ Wave in Dec. (− 8′): in H.F. (− ·0014). $19\frac{1}{2}^h$ to 22^h Prolonged double-crested wave in Dec. (− 10′). 20^h to 21^h Wave in H.F. (− ·0012).

$21^d\ 22^h$ to $23\frac{1}{2}^h$ Irregular wave in Dec. (− 7′). $22\frac{1}{2}^h$ to 23^h Wave in H.F. (− ·0012).

$22^d\ 0^h$ to 1^h Wave in Dec. (− 3′): in H.F. (− ·0014). 6^h to $7\frac{1}{2}^h$ Wave in H.F. (+ ·0010): fluctuations in Dec. 17^h to 18^h Wave in Dec. (− 5′): in H.F. (− ·0014). [11^h to 15^h Loss of Dec., H.F. and V.F. registers.]

$24^d\ 16^h$ to $17\frac{1}{2}^h$ Sharp wave in Dec. (− 9′): in H.F. (− ·0020).

$25^d\ 19\frac{1}{2}^h$ to 20^h Wave in H.F. (+ ·0010).

$26^d\ 0^h$ to 1^h Wave in H.F. (+ ·0010): in Dec. small.

$27^d\ 21^h$ to 22^h Wave in Dec. (− 5′): in H.F. small. $23\frac{1}{2}^h$ to 24^h Wave in H.F. (+ ·0010): in Dec. small. [$11\frac{1}{2}^h$ to 15^h Loss of Dec., H.F. and V.F. registers.]

[$28^d\ 9\frac{1}{2}^h$ to 15^h Loss of Dec., H.F. and V.F. registers.]

$28^d\ 16^h$ to $29^d\ 12^h$ See Plate I.

$29^d\ 23^h$ to $30^d\ 1^h$ Double-crested wave in Dec. (− 7′): double wave in H.F. (− ·0010 to + ·0014): decrease of V.F. (− ·0003).

$30^d\ 5\frac{1}{2}^h$ to 7^h Wave in Dec. (+ 4′): in H.F. (+ ·0010). 13^h to 14^h Wave in Dec. (+ 3′). $15\frac{1}{2}^h$ to $17\frac{1}{2}^h$ Double-crested wave in Dec. (− 8′): in H.F. (− ·0020): shallow wave in V.F. (+ ·0003). 21^h to 23^h Irregular double wave in Dec. (− 12′ to + 4′): in H.F. (+ ·0026 to − ·0010). 22^h to 23^h Wave in V.F. (+ ·0003).

$31^d\ 11\frac{1}{2}^h$ to $13\frac{1}{4}^h$ Wave in H.F. (− ·0014). 16^h to 18^h Serrated wave in H.F. (− ·0012). $16\frac{3}{4}^h$ to $17\frac{1}{2}^h$ Wave in Dec. (− 4′).

February $1^d\ 2^h$ to 4^h Small double wave in Dec. and H.F.: followed by fluctuations till 11^h. $11\frac{1}{2}^h$ to $13\frac{3}{4}^h$ Prolonged wave in H.F. (− ·0020). 12^h to $12\frac{1}{2}^h$ Irregular wave in Dec. (− 3′). 19^h to 20^h Sharp wave in Dec. (− 7′): in H.F. small. $21\frac{1}{2}^h$ to $23\frac{1}{4}^h$ Two successive waves in H.F. (+ ·0014) and (+ ·0010): in Dec. small.

$2^d\ 13^h$ Decrease of Dec. (− 4′). $15\frac{1}{2}^h$ to 17^h Wave in Dec. (− 5′): in H.F. small. $17\frac{1}{2}^h$ to 19^h Wave in Dec. (− 3′): in H.F. (+ ·0010).

$3^d\ 0\frac{3}{4}^h$ to 2^h Wave in H.F. (+ ·0010): in Dec. small. $17\frac{1}{2}^h$ to $18\frac{1}{2}^h$ Wave in Dec. (− 3′): in H.F. small.

$4^d\ 18\frac{1}{2}^h$ to $19\frac{1}{2}^h$ Wave in Dec. (− 3′). $19\frac{1}{4}^h$ to $20\frac{1}{2}^h$ Wave in H.F. (− ·0010). 21^h to 22^h Sharp double-crested wave in H.F. (− ·0015). 22^h to $22\frac{1}{2}^h$ Sharp wave in H.F. (− ·0014). $4^d\ 23^h$ to $5^d\ 1\frac{1}{2}^h$ Wave in V.F. (+ ·0005).

$5^d\ 0^h$ to $1\frac{1}{2}^h$ Two successive waves in Dec. (+ 5′) and (+ 3′): in H.F. (+ ·0020) and (+ ·0010). $3\frac{1}{2}^h$ to $4\frac{1}{2}^h$ Wave in H.F. (+ ·0010). $3\frac{1}{2}^h$ to $5\frac{1}{2}^h$ Wave in Dec. (− 5′). 6^h to 10^h Small fluctuations in Dec. and H.F. 17^h to 19^h Double-crested wave in Dec. (− 10′) with superposed fluctuations: double wave in H.F. (− ·0014 to + ·0018): small wave in V.F. 22^h to 24^h Two successive waves in Dec. (− 4′) and (− 4′): prolonged wave in H.F. (+ ·0034). 23^h to 24^h Wave in V.F. (− ·0003).

$6^d\ 0\frac{1}{2}^h$ to $2\frac{1}{2}^h$ Wave in Dec. (− 12′): irregular wave in H.F. (+ ·0032), with superposed fluctuations. $13\frac{3}{4}^h$ to 15^h Wave in Dec. (− 3′): in H.F. (− ·0020). $19\frac{1}{4}^h$ Decrease of Dec. (− 5′), followed till 20^h by a wave (− 6′). $19\frac{1}{4}^h$ to 21^h Double wave in H.F. (− ·0008 to + ·0022). 21^h to $21\frac{3}{4}^h$ Wave in Dec. (− 3′).

$7^d\ 2\frac{1}{2}^h$ to $3\frac{1}{2}^h$ Wave in Dec. (+ 4′): in H.F. small, followed by small fluctuations till 9^h. $14\frac{1}{2}^h$ to $16\frac{1}{4}^h$ Wave in H.F. (− ·0014). $16\frac{1}{2}^h$ to $18\frac{1}{2}^h$ Prolonged irregular wave in Dec. (− 10′). $16\frac{3}{4}^h$ to $17\frac{1}{2}^h$ Wave in H.F. (− ·0014). $21\frac{1}{2}^h$ to $23\frac{1}{2}^h$ Prolonged irregular wave in H.F. (+ ·0020): double-crested wave in Dec. (− 3′): in V.F. (− ·0003).

$8^d\ 15\frac{1}{2}^h$ to $17\frac{1}{4}^h$ Two successive waves in Dec. (− 3′) and (− 3′): in H.F. (− ·0010) and (− ·0014). 21^h to 24^h Two successive waves in Dec. (− 8′) and (− 4′). 22^h to 24^h Double wave in H.F. (− ·0010 to + ·0010).

$9^d\ 13^h$ to $14\frac{1}{2}^h$ Wave in Dec. (+ 5′). 14^h to 15^h Wave in H.F. (− ·0016). $18\frac{1}{2}^h$ to 21^h Three successive waves in Dec. (− 3′), (− 3′) and (− 4′): fluctuations in H.F.

$10^d\ 21\frac{3}{4}^h$ to $22\frac{1}{4}^h$ Wave in Dec. (− 3′): in H.F. (+ ·0010).

$11^d\ 21\frac{1}{2}^h$ to 23^h Wave in H.F. (+ ·0020): in Dec. small.

$12^d\ 1\frac{1}{4}^h$ to $2\frac{1}{2}^h$ Wave in Dec. (− 3′). 20^h to $20\frac{3}{4}^h$ Wave in Dec. (− 3′). $12^d\ 23^h$ to $13^d\ 0\frac{1}{2}^h$ Wave in H.F. (+ ·0014): in Dec. small.

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February $13^d\ 15\frac{1}{4}^h$ to $16\frac{1}{2}^h$ Wave in H.F. (− ·0012). 18^h to 19^h Wave in Dec. (− 6′): in H.F. (+ ·0014).

$14^d\ 0^h$ to 1^h Wave in H.F. (+ ·0010): in Dec. small.

$15^d\ 0^h$ to 10^h Sharp fluctuations in Dec. and H.F.

$16^d\ 6^h$ to 7^h Decrease of Dec. (− 5′). 15^h to $15\frac{3}{4}^h$ Double-crested wave in H.F. (+ ·0010). $16\frac{1}{4}^h$ to $17\frac{1}{2}^h$ Wave in H.F. (− ·0024): in Dec. mall. 19^h to 20^h Wave in Dec. (− 3′), followed till 21^h by a double wave (+ 5′ to − 7′). $19\frac{1}{2}^h$ to $20\frac{1}{2}^h$ Sharp irregular wave in H.F. (+ ·0025). $16^d\ 23\frac{1}{2}^h$ to $17^d\ 1^h$ Wave in Dec. (− 5′), followed by fluctuations till $17^d\ 7^h$. [$16^d\ 18^h$ to $17^d\ 9\frac{1}{2}^h$ Loss of V.F. register.]

$17^d\ 16\frac{1}{2}^h$ to 18^h Wave in H.F. (− ·0014). 17^h to 19^h Double-crested wave in Dec. (− 7′).

[$28^d\ 13\frac{1}{2}^h$ to $29^d\ 2^h$ Loss of H.F. register.]

March $1^d\ 18\frac{1}{2}^h$ to $19\frac{1}{4}^h$ Wave in Dec. (− 4′): in H.F. (+ ·0010).

$2^d\ 16\frac{1}{4}^h$ to $17\frac{1}{4}^h$ Wave in H.F. (− ·0010): in Dec. small. 20^h to $21\frac{1}{4}^h$ Irregular wave in Dec. (− 5′): small double wave in H.F. (− ·0006 to + ·0010).

$3^d\ 18^h$ to 23^h Sharp fluctuations in Dec. (± 2′): in H.F. (± ·0006). 23^h to 24^h Wave in Dec. (− 3′): in H.F. (− ·0012).

$4^d\ 1\frac{1}{2}^h$ to $1\frac{3}{4}^h$ Wave in Dec. (− 3′): in H.F. small. 2^h to $3\frac{3}{4}^h$ Double wave in Dec. (− 3′ to + 4′): wave in H.F. (− ·0016). 4^h to 9^h Sharp fluctuations in Dec. (± 2′): in H.F. (± ·0006). $14\frac{3}{4}^h$ to $16\frac{1}{2}^h$ Sharp wave in Dec. (− 11′) with superposed fluctuations: irregular wave in H.F. (− ·0026), in V.F. (+ ·0003). 22^h to 23^h Two successive waves in H.F. (+ ·0016) and (+ ·0010).

$5^d\ 0^h$ to $0\frac{3}{4}^h$ Wave in Dec. (+ 3′): in H.F. (+ ·0018). $0\frac{3}{4}^h$ to 3^h Double wave in Dec. (+ 3′ to − 4′): in H.F. (+ ·0012 to − ·0012). $4\frac{1}{2}^h$ to $5\frac{1}{2}^h$ Wave in H.F. (− ·0010). 7^h to 8^h Wave in H.F. (− ·0014). $9\frac{1}{2}^h$ to $10\frac{1}{2}^h$ Wave in Dec. (− 3′): in H.F. (− ·0010). $17\frac{1}{2}^h$ to $18\frac{1}{2}^h$ Wave in Dec. (− 3′).

$7^d\ 18\frac{3}{4}^h$ to 20^h Wave in Dec. (− 5′).

$9^d\ 19\frac{1}{2}^h$ to 21^h Serrated wave in Dec. (− 5′): in H.F. small.

$11^d\ 1\frac{3}{4}^h$ to 3^h Wave in H.F. (+ ·0012): in Dec. small. 12^h to 18^h Small fluctuations in Dec. and H.F. $20\frac{1}{2}^h$ to 22^h Wave in Dec. (− 4′): in H.F. small.

$12^d\ 4\frac{1}{2}^h$ to $5\frac{1}{2}^h$ Wave in H.F. (− ·0010): in Dec. small. $8\frac{1}{2}^h$ to 11^h Wave in H.F. (− ·0020). 12^h to $13\frac{1}{2}^h$ Wave in H.F. (− ·0010). 17^h to 23^h Fluctuations in Dec. and H.F.

[$16^d\ 18^h$ to $17^d\ 11^h$ Loss of V.F. register.]

$20^d\ 12^h$ to 16^h Fluctuations in Dec. and H.F.

$24^d\ 21^h$ to 23^h Flat-crested wave in Dec. (− 3′).

$26^d\ 4\frac{1}{2}^h$ to 6^h Sharp wave in Dec. (+ 8′), followed by fluctuations till 10^h: double wave in H.F. (− ·0010 to + ·0010): slight decrease of V.F. 14^h to 15^h Wave in H.F. (− ·0014): in Dec. small.

$27^d\ 2\frac{1}{2}^h$ to $3\frac{1}{2}^h$ Wave in H.F. (+ 3′): followed by small fluctuations till 9^h.

$29^d\ 15^h$ to $16\frac{1}{2}^h$ Wave in H.F. (+ ·0012). $19\frac{1}{4}^h$ to 21^h Irregular wave in Dec. (− 5′): in H.F. (+ ·0016).

$30^d\ 20\frac{1}{2}^h$ to $22\frac{1}{2}^h$ Two successive waves in Dec. (− 6′) and (− 3′): prolonged wave in H.F. (+ ·0030), with superposed fluctuations: small wave in V.F.

$31^d\ 3^h$ to 4^h Wave in Dec. (+ 4′).

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

$2^d\ 0^h$ to 1^h Increase of Dec. (+ 7′). 2^h to $3\frac{1}{2}^h$ Two successive waves in Dec. (− 3′) and (− 3′). $2\frac{1}{2}^h$ to 5^h Double wave in H.F. (− ·0010 to + ·0010). 12^h to 13^h Sharp wave in H.F. (− ·0026). $13\frac{1}{2}^h$ to $14\frac{1}{4}^h$ Wave in H.F. (+ ·0010). 15^h to 16^h Wave in Dec. (− 4′): in H.F. (− ·0018). 19^h to 20^h Wave in Dec. (− 3′): in H.F. (+ ·0010). 21^h to 22^h Wave in Dec. (− 3′): in H.F. (− ·0010). 22^h to $22\frac{3}{4}^h$ Wave in H.F. (− ·0010). 23^h to 24^h Wave in H.F. (+ ·0016). $2^d\ 23^h$ to $3^d\ 1\frac{1}{4}^h$ Double wave in Dec. (+ 4′ to − 4′).

$3^d\ 17^h$ to 21^h Fluctuations in Dec. and H.F. 21^h to 23^h Prolonged irregular wave in Dec. (− 7′). $22\frac{1}{2}^h$ to $23\frac{1}{2}^h$ Wave in H.F. (+ ·0010).

$4^d\ 0^h$ to 1^h Wave in Dec. (+ 4′): in H.F. (+ ·0012). 1^h to 4^h Two successive waves in H.F. (− ·0010) and (− ·0018). $2\frac{1}{2}^h$ to $4\frac{1}{2}^h$ Shallow wave in Dec. (+ 4′). $15\frac{1}{4}^h$ to 16^h Wave in H.F. (+ ·0010). $18\frac{1}{2}^h$ to $19\frac{1}{2}^h$ Wave in Dec. (− 3′): in H.F. (+ ·0010). $22\frac{1}{2}^h$ to $23\frac{1}{2}^h$ Wave in H.F. (+ ·0014): in Dec. small.

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$7^d\ 13^h$ to 20^h Small fluctuations in Dec. and H.F. 22^h to 23^h Wave in Dec. (− 4′): in H.F. (−·0010).

$8^d\ 1^h$ to $2\frac{1}{4}^h$ Wave in Dec. (− 3′): in H.F. (− ·0010). $14\frac{1}{2}^h$ to 15^h Increase of H.F. (− ·0012).

$9^d\ 2\frac{1}{2}^h$ to $3\frac{1}{2}^h$ Wave in Dec. (+ 3′). $15\frac{1}{4}^h$ to $15\frac{3}{4}^h$ Wave in H.F. (+ ·0010): in Dec. small. $21\frac{1}{2}^h$ to 23^h Sharp fluctuations in H.F. (± ·0006). $9^d\ 22\frac{1}{2}^h$ to $10^d\ 0\frac{1}{2}^h$ Wave in V.F. (+ ·0005). $9^d\ 23\frac{1}{2}^h$ to $10^d\ 2^h$ Sharp double wave in Dec. (+ 6′ to −8′): wave in H.F. (− 0012).

$10^d\ 21\frac{1}{4}^h$ to 22^h Wave in Dec. (− 3′): in H.F. (− 0016). $22\frac{1}{4}^h$ to $23\frac{1}{4}^h$ Irregular wave in H.F. (− ·0014), with superposed fluctuations.

$11^d\ 0^h$ to 1^h Wave in Dec. (− 5′): in H.F. (− ·0016). $1\frac{1}{2}^h$ to $2\frac{3}{4}^h$ Wave in Dec. (+ 4′): in H.F. (+ ·0010). 14^h to 23^h Sharp fluctuations in H.F. (± ·0010): in Dec. small. $20\frac{3}{4}^h$ to $22\frac{1}{4}^h$ Wave in Dec. (− 3′).

$13^d\ 1\frac{1}{2}^h$ to $2\frac{1}{2}^h$ Wave in Dec. (+ 5′): in H.F. (+ ·0010).

$17^d\ 16\frac{1}{2}^h$ to 17^h Wave in H.F. (+ ·0015), steep at commencement: in Dec. small. $19\frac{1}{2}^h$ to $21\frac{3}{4}^h$ Prolonged irregular wave in Dec. (− 7′): in H.F. (− ·0016).

$18^d\ 4\frac{1}{4}^h$ to $6\frac{1}{4}^h$ Wave in Dec. (+ 6′): in H.F. (− ·0014). 8^h to $8\frac{1}{2}^h$ Sharp wave in Dec. (+ 5′): decrease of H.F. (− ·0010).

$18^d\ 16^h$ to $19^d\ 16^h$ See Plate II.

$19^d\ 18\frac{1}{4}^h$ to 19^h Wave in Dec. (+ 3′): in H.F. small.

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

$25^d\ 22^h$ to 23^h Wave in Dec. (− 3′): in H.F. small.

$26^d\ 2\frac{1}{2}^h$ to 4^h Wave in Dec. (+ 3′): in H.F. (+ ·0010). $6\frac{1}{2}^h$ to $7\frac{1}{2}^h$ Wave in Dec. (− 3′): in H.F. − ·0010).

[$28^d\ 13\frac{3}{4}^h$ to $15\frac{1}{2}^h$ Loss of Dec., H.F. and V.F. registers.]

$27^d\ 13^h$ to 20^h Sharp fluctuations in H.F. (± ·0010): in Dec. small. 21^h to 23^h Irregular double wave in H.F. (− ·0006 to + ·0018): fluctuations in Dec.

$30^d\ 1\frac{1}{2}^h$ to 3^h Wave in H.F. (+ ·0020). $1\frac{3}{4}^h$ to $2\frac{1}{4}^h$ Wave in Dec. (+ 3′).

May

$1^d\ 5^h$ to 9^h Fluctuations in Dec. and H.F. 17^h to 18^h Wave in H.F. (− ·0010): in Dec. small. $1^d\ 23^h$ to $2^d\ 0\frac{1}{2}^h$ Wave in Dec. (− 4′); in H.F. small.

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

$7^d\ 22^h$ to 23^h Wave in H.F. (+ ·0010).

$8^d\ 10\frac{1}{4}^h$ Increase of H.F. (+ ·0007). 12^h to 20^h Fluctuations in H.F.

$12^d\ 5^h$ to 11^h Sharp fluctuations in Dec. (± 2′). 6^h to $7\frac{1}{2}^h$ Small double wave in H.F. $8\frac{1}{4}^h$ to $9\frac{1}{2}^h$ Wave in H.F. (+ ·0012). $11\frac{1}{2}^h$ to $12\frac{1}{4}^h$ Wave in H.F. (+ ·0012). 15^h to 17^h Double wave in H.F. (+ ·0014 to − ·0012). 18^h to 23^h Sharp fluctuations in H.F. (± ·0010). $21\frac{3}{4}^h$ to 23^h Double wave in Dec., steep at commencement (+ 3′ to − 5′).

$13^d\ 0^h$ to 1^h Two successive waves in H.F. (+ ·0010) and (+ ·0014). $0\frac{1}{2}^h$ to 1^h Wave in Dec. (− 4′). $1\frac{1}{2}^h$ to 2^h Small sharp wave in Dec. (− 3′): in H.F. (− ·0010). $1\frac{1}{2}^h$ to $3\frac{1}{2}^h$ Prolonged wave in V.F. (+ ·0005). 2^h to $4\frac{1}{2}^h$ Triple wave in Dec. (− 3′), (+ 4′), (− 4′). 3^h to $9\frac{1}{2}^h$ Prolonged double wave in H.F., with superposed fluctuations (+ ·0024 to − ·0024). 5^h to 11^h Small sharp fluctuations in Dec. $11\frac{3}{4}^h$ to 14^h Two successive waves in H.F. (− ·0020) and (− ·0024): irregular wave in Dec. (+ 5′). 13^h to 20^h Prolonged wave in V.F. (+ ·0012). 15^h to 24^h Sharp fluctuations in Dec. (± 3′): in H.F. (± ·0010). $13^d\ 21^h$ to $14^d\ 2^h$ Prolonged serrated wave in V.F. (− ·0008).

$14^d\ 3^h$ to 4^h Wave in Dec. (+ 3′): in H.F. small. 6^h to 7^h Irregular wave in Dec. (+ 5′): in H.F. small. $15\frac{1}{2}^h$ to 16^h Wave in H.F. (+ ·0010). 17^h to 18^h Double wave in H.F. (− ·0008 to + ·0016), followed by fluctuations till 22^h. $22\frac{1}{4}^h$ to 23^h Wave in Dec. (− 3′): in H.F. (+ ·0010).

$15^d\ 0^h$ to 4^h Fluctuations in Dec. and H.F.

$16^d\ 19\frac{3}{4}^h$ to $20\frac{1}{2}^h$ Wave in H.F. (+ ·0012).

$17^d\ 1^h$ to 4^h Fluctuations in Dec. and H F. $6\frac{1}{2}^h$ to $7\frac{1}{2}^h$ Small double waves in Dec. and H.F. $9\frac{3}{4}^h$ Increase of H.F. (+ ·0006). $20\frac{1}{2}^h$ to $21\frac{1}{2}^h$ Wave in Dec. (− 3′): in H.F. (+ ·0012). $22\frac{3}{4}^h$ to $23\frac{1}{4}^h$ Small double wave in H.F. (− ·0006 to + ·0008).

$18^d\ 6\frac{1}{2}^h$ to $7\frac{1}{4}^h$ Small double wave in Dec. (− 2′ to + 1′).

$19^d\ 5^h$ to 6^h Wave in H.F. (− ·0010). $12\frac{1}{2}^h$ to $13\frac{1}{4}^h$ Wave in H.F. (+ ·0012), followed by fluctuations till 19^h.

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

$23^d\ 16\frac{1}{2}^h$ to $17\frac{1}{4}^h$ Wave in H.F. (+ ·0010).

$24^d\ 3\frac{1}{2}^h$ to 5^h Double wave in Dec. (− 2′ to + 3′), followed by small fluctuations till 9^h.

1904.

May

27d 17h to 18h Double-crested wave in H.F. (− ·0020). 19h to 20½h Serrated wave in H.F. (+ ·0018). 27d 23h to 28d 1h Wave in H.F. (− ·0020): in Dec. small.

28d 1¼h to 3½h Double wave in Dec. (+ 7′ to − 3′): in H.F. (+ ·0008 to + ·0008): in V.F. (− ·0003). 6h to 7h Sharp decrease of H.F. (− ·0020). 6½h to 8h Irregular wave in Dec., with superposed fluctuations (− 7′). 7h to 8½h Double wave in H.F. (− ·0018 to − ·0008). 9h to 13h Fluctuations in H.F. 9¾h Increase of Dec. (+ 3′), followed by sharp fluctuations till 17h. 13h to 15h Triple wave in H.F. (− ·0016), (+ ·0016) and (− ·0016), followed by sharp fluctuations till 17h. 15h to 19h Shallow wave in V.F.(+ ·0003). 17¾h to 19h Double wave in H.F.(− ·0014 to + ·0012). 18h to 20h Two successive waves in Dec. (− 4′) and (− 3′).

29d 0h to 1h Double-crested wave in H.F. (+ ·0020): in Dec. (+ 3′). 12½h to 13½h Wave in H.F. (− ·0010). 15½h to 16½h Wave in H.F. (− ·0010). 29d 23½h to 30d 1h Wave in H.F. (+ ·0018): in Dec. small.

30d 16h to 21h Fluctuations in Dec. and H.F.

31d 0h to 1h Wave in Dec. (− 3′). 2h to 3h Wave in Dec. (− 3′). 22½h to 23½h Wave in H.F. (+ ·0010): decrease of Dec. (− 3′).

June

1d 1¼h to 3h Wave in Dec. (+ 3′): in H.F. (+ ·0010).

2d 3½h to 4½h Wave in Dec. (+ 3′). [10h to 16½h Loss of Dec., H.F. and V.F. registers.]

4d 22½h to 23h Sharp wave in H.F. (+ ·0016): in Dec. small.

5d 1h to 4h Small fluctuations in Dec. and H.F. 16½h to 18h Shallow wave in H.F. (+ ·0010).

6d 12h to 20h Sharp fluctuations in Dec. (± 2′): in H.F. (± ·0016): in V.F. small.

11d 1½h to 2½h Small wave in Dec. (+ 2′), followed by decrease of Dec. (− 5′): wave in H.F. (+ ·0012): in V.F. small. 12h to 12½h Wave in H.F. (− ·0012).

15d 12h to 16d 12h See Plate II.

16d 12h to 18h Sharp fluctuations in H.F. (± ·0010). 12½h to 14h Double wave in Dec. (+ 3′ to − 3′), followed by small fluctuations till 17h. 20¾h to 22h Two successive waves in Dec. (− 3′) and (− 4′): in H.F. (+ ·0018) and (+ ·0008). 22½h to 23h Wave in Dec. (+ 3′).

17d 2h to 3h Wave in Dec. (+ 3′). 13h to 13½h Wave in H.F. (+ ·0010). 15¾h to 16½h Wave in H.F. (+ ·0010). 23h to 24h Wave in Dec. (− 3′): in H.F. (+ ·0010).

18d 14¾h to 15¼h Wave in H.F. (+ ·0010).

21d 4h to 5½h Wave in Dec. (+ 3′). 16½h to 18h Wave in H.F. (− ·0010).

26d 15¾h to 16¼h Irregular wave in H.F. (+ ·0010). 17h to 18h Small double wave in H.F. (+ ·0010 to − ·0007), followed by fluctuations till 21h. 22h to 23½h Wave in Dec. (− 4′).

27d 1h to 2½h Wave in Dec. (+ 3′). 3h to 4½h Wave in H.F. (+ ·0010). 5h to 9h Fluctuations in Dec. (± 1′). 14h to 15h Wave in H.F. (+ ·0016), followed by fluctuations till 19h. 19¾h to 21h Wave in Dec. (+ 4′): in H.F. (+ ·0014).

July

1d 13h to 14h Wave in H.F. (+ ·0010). 16h to 19h Two successive double waves in H.F. (+ ·0010 to − ·0010) and (+ ·0010 to − ·0010).

2d 15¼h to 16½h Wave in H.F. (+ ·0012).

3d 14¾h Slight increase of H.F.

5d 2½h to 4h Shallow wave in Dec. (+ 3′).

6d 12h to 7d 12h See Plate II.

7d 17½h to 19h Wave in Dec. (− 3′): double wave in H.F. (− ·0008 to + ·0014).

9d 17h to 22h Fluctuations in Dec. (± 1′): in H.F. (± ·0008).

10d 0¼h to 2h Wave in Dec. (− 4′): with superposed fluctuations: sharp wave in H.F. (+ ·0034): wave in V.F. (− ·0003).

13d 15½h to 16h Sharp wave in H.F. (+ ·0024): in Dec. and V.F. small. 18½h to 19½h Wave in H.F. (− ·0012).

14d 7h to 9½h Sharp fluctuations in Dec. (± 2′): in H.F. and V.F. small. 15h to 20h Sharp fluctuations in H.F. (± ·0012): in Dec. and V.F. small. 21h to 22h Wave in Dec. (+ 3′).

14d 23½h to 15d 0½h Wave in Dec. (+ 5′): in H.F. (+ ·0022): in V.F. small.

15d 21h to 22h Wave in Dec. (+ 4′): in H.F. small.

16d 0¼h to 1½h Wave in Dec. (+ 4′): in H.F. (+ ·0014). [12h to 15h Loss of Dec. and H.F. registers.]

17d 7h to 9h Wave in Dec. (− 3′): in H.F. small.

18d 21½h to 22½h Wave in H.F. (+ ·0010).

1904.

July

$20^d\ 5^h$ to 9^h Fluctuations in Dec. ($\pm$ 1′).

[$22^d\ 10^h$ to 15^h Loss of Dec., H.F. and V.F. registers.]

$23^d\ 14\frac{1}{2}^h$ to $16\frac{1}{2}^h$ Wave in H.F. (+ ·0016). $21\frac{1}{2}^h$ to $23\frac{1}{2}^h$ Wave in Dec. (− 3′).

$26^d\ 17^h$ to 22^h Small fluctuations in H.F. $19\frac{1}{2}^h$ to 21^h Wave in Dec. (− 4′). $26^d\ 23^h$ to $27^d\ 1\frac{1}{2}^h$ Wave in Dec. (− 4′): double wave in H.F. (+ ·0012 to − ·0014), with superposed fluctuations.

$28^d\ 3^h$ to $4\frac{1}{2}^h$ Wave in Dec. (+ 3′). 14^h to $15\frac{1}{2}^h$ Double wave in H.F. (− ·0010 to + ·0008). $15\frac{3}{4}^h$ to $16\frac{1}{2}^h$ Wave in H.F. (− ·0010).

$29^d\ 1^h$ to $2\frac{1}{2}^h$ Wave in Dec. (+ 5′).

$30^d\ 5^h$ to 8^h Small fluctuations in Dec. and H.F. 19^h to 23^h Fluctuations in H.F. $30^d\ 23^h$ to $31^d\ 0\frac{1}{2}^h$ Wave in Dec. (+ 3′): in H.F. (+ ·0014).

$31^d\ 1^h$ to 2^h Wave in H.F. (+ ·0012): in Dec. small.

August

$2^d\ 2^h$ to $2\frac{1}{2}^h$ Wave in Dec. (− 3′): decrease of H.F. (− ·0010). 3^h to 4^h Sharp wave in Dec. (+ 9′). $3\frac{1}{2}^h$ to $5\frac{1}{2}^h$ Irregular wave in H.F. (+ ·0020). $3\frac{1}{2}^h$ Decrease of V.F. (− ·0005). 5^h to 9^h Sharp fluctuations in Dec. and H.F.

$3^d\ 12^h$ to $4^d\ 12^h$ See Plate III.

$4^d\ 12^h$ to 16^h Fluctuations in Dec. and H.F. $16\frac{1}{4}^h$ to $16\frac{3}{4}^h$ Wave in H.F. (+ ·0010): in Dec. small. $18\frac{1}{2}^h$ to $20\frac{1}{2}^h$ Wave in Dec. (− 6′). $19\frac{1}{2}^h$ to 20^h Wave in H.F. (+ ·0010). 22^h to $23\frac{1}{2}^h$ Double wave in Dec. (+ 4′ to − 3′): wave in H.F. (+ ·0016): in V.F (− ·0003).

$5^d\ 2^h$ to 3^h Wave in Dec. (+ 4′): in H.F. small.

$9^d\ 20^h$ to 22^h Fluctuations in H.F.

$10^d\ 1^h$ to 2^h Wave in Dec. (+ 3′): in H.F. small. 16^h to 21^h Sharp fluctuations in H.F. ($\pm$ ·0008). $21\frac{1}{2}^h$ to 22^h Decrease of Dec. (− 3′).

$17^d\ 23^h$ to $23\frac{1}{2}^h$ Wave in Dec. (+ 3′). $17^d\ 23^h$ to $18^d\ 0\frac{1}{2}^h$ Wave in H.F. (+ ·0020), very steep at commencement.

$19^d\ 0^h$ to 1^h Wave in Dec. (+ 5′): in H.F small.

$20^d\ 13^h$ to 22^h Small fluctuations in H.F.

$21^d\ 5^h$ to 7^h Fluctuations in Dec. ($\pm$ 1′). 12^h to 13^h Flat-crested wave in Dec. (− 3′): in H.F. (− ·0010). $17\frac{3}{4}^h$ to $19\frac{1}{4}^h$ Wave in Dec. (− 5′): in H.F. small. 21^h to 23^h Two successive waves in Dec. (− 3′) and (− 6′): in H.F. (− ·0010) and (− ·0010): slight decrease of V.F.

$22^d\ 2\frac{1}{2}^h$ to 4^h Prolonged wave in Dec. (+ 9′): in H.F. (− ·0012): decrease of V.F. (− ·0004). 20^h to $21\frac{1}{2}^h$ Double-crested wave in Dec. (− 7′). $20\frac{1}{2}^h$ to 21^h Wave in H.F. (+ ·0018). 23^h to $23\frac{3}{4}^h$ Wave in H.F. (+ ·0012).

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

$29^d\ 14\frac{1}{2}^h$ to 17^h Two successive double waves in H.F. (+ ·0008 to − ·0008) and (+ ·0010 to − ·0014). $20\frac{1}{4}^h$ Increase of H.F. (+ ·0010), followed by fluctuations till 22^h ($\pm$ ·0008). $29^d\ 23^h$ to $30^d\ 0\frac{1}{2}^h$ Prolonged wave in Dec. (− 6′): in H.F. (+ ·0018).

$30^d\ 3^h$ to 9^h Small sharp fluctuations in Dec. and H.F. 15^h to 16^h Wave in H.F. (+ ·0012), with superposed fluctuations. $17\frac{1}{2}^h$ to 19^h Wave in H.F. (− ·0014), steep at commencement. 19^h to 20 Wave in Dec. (− 3′).

$31^d\ 0^h$ to 1^h Wave in Dec. (+ 3′). $1\frac{3}{4}^h$ to 3^h Wave in Dec. (+ 6′).

September

$5^d\ 10^h$ to 12^h Sharp fluctuations in Dec. ($\pm$ 2′): in H.F. ($\pm$ ·0010). 14^h to 19^h Fluctuations in H.F. 20^h to $21\frac{1}{2}^h$. Wave in Dec. (− 4′). 22^h to $23\frac{1}{2}^h$ Flat-crested wave in H.F. (+ ·0012): in Dec. small.

$6^d\ 19\frac{1}{4}^h$ to $20\frac{1}{2}^h$ Wave in H.F. (− ·0016).

$7^d\ 1\frac{1}{2}^h$ to $2\frac{1}{2}^h$ Wave in Dec. (+ 3′): in H.F. small.

$8^d\ 1^h$ to 2^h Wave in Dec. (− 4′): in H.F. (− ·0012). 3^h to 4^h Decrease of Dec. (− 6′). $14\frac{3}{4}^h$ to $15\frac{1}{4}^h$ Wave in H.F. (+ ·0012): in Dec. small. 16^h to 20^h Sharp fluctuations in H.F. ($\pm$ ·0010).

$9^d\ 20^h$ to 21^h Wave in Dec. (− 3′): in H.F. small.

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

$11^d\ 14\frac{1}{2}^h$ to 16^h Wave in Dec. (− 3′): in H.F. (− ·0014). 17^h to 18^h Wave in H.F. (− ·0016). 19^h to $19\frac{1}{2}^h$ Wave in H.F. (+ ·0010). 21^h to $21\frac{1}{2}^h$ Wave in Dec. (− 3′). $21\frac{1}{2}^h$ to $22\frac{1}{2}^h$ Wave in H.F. (+ ·0012).

1904.

September

$12^d\ 0\frac{1}{2}^h$ to 2^h Double wave in Dec. (+ 4′ to − 2′): wave in H.F. (+ ·0016): in V.F. (− ·0003). 13^h to 14^h Wave in H.F. (− ·0014): in Dec. small.

$13^d\ 1\frac{1}{2}^h$ to $2\frac{1}{2}^h$ Wave in Dec. (+ 3′). 21^h to 22^h Wave in H.F. (− ·0010): in Dec. small.

$15^d\ 23^h$ to 24^h Wave in Dec. (+ 3′): in H.F. small.

$16^h\ 7^h$ to 9^h Sharp fluctuations in Dec. (± 3′): in H.F. (± ·0008). $16\frac{1}{2}^h$ to 17^h Wave in H.F. (− ·0010). $17\frac{3}{4}^h$ to $18\frac{3}{4}^h$ Wave in H.F. (− ·0010). 20^h to 22^h Irregular double-crested wave in Dec. (− 7′): in H.F. (+ ·0014).

$22^d\ 13\frac{1}{2}^h$ to $22^d\ 14^h$ Wave in H.F. (+ ·0010): in Dec. small.

$24^d\ 20\frac{3}{4}^h$ Decrease of H.F. (− ·0008). 21^h to $22\frac{1}{4}^h$ Wave in Dec. (− 5′): irregular wave in H.F., with superposed fluctuations (− ·0020), followed by sharp fluctuations till 24^h. 23^h to $23\frac{1}{2}^h$ Sharp decrease of Dec. (− 5′).

$25^d\ 0^h$ to $26^d\ 0^h$ See Plate III.

$26^d\ 3^h$ to 5^h Serrated wave in Dec. (+ 5′). $15\frac{1}{2}^h$ to $16\frac{1}{2}^h$ Wave in Dec. (− 3′): in H.F. (− ·0010).

$29^d\ 15^h$ to 24^h Small fluctuations in H.F.

October

$2^d\ 12\frac{1}{2}^h$ to $13\frac{1}{2}^h$ Irregular wave in Dec. (+ 3′): in H.F. (+ ·0012), each with superposed fluctuations. 20^h to $20\frac{1}{2}^h$ Wave in Dec. (− 3′): in H.F. (− ·0010).

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

$7^d\ 1^h$ to 2^h Fluctuations in Dec. and H.F. 3^h to $3\frac{1}{2}^h$ Wave in Dec. (+ 3′), followed till $5\frac{1}{2}^h$ by a double wave (+ 4′ to − 6′). 3^h to $5\frac{1}{2}^h$ Two successive waves in H.F. (+ ·0010) and (+ ·0030): decrease of V.F. (− ·0005). 8^h to 9^h Wave in H.F. (− ·0016): sharp fluctuations in Dec. (± 2′). 21^h to $22\frac{3}{4}^h$ Sharp wave in Dec. (− 8′): double wave in H.F. (+ ·0044 to − ·0010). $7^d\ 23^h$ to $8^d\ 1^h$ Double wave in Dec. (− 3′ to + 5′): in H.F. (− ·0016 to + ·0010).

$8^d\ 0^h$ to 2^h Wave in V.F. (− ·0005). $1\frac{1}{4}^h$ to $2\frac{1}{4}^h$ Wave in Dec. (− 5′): Small double wave in H.F. (+ ·0010 to − ·0008). $2\frac{3}{4}^h$ to 4^h Serrated wave in Dec. (+ 4′). 5^h to 9^h Small fluctuations in Dec. and H.F. $9\frac{1}{2}^h$ to $10\frac{1}{2}^h$ Wave in H.F. (− ·0014). 12^h to 16^h Small fluctuations in Dec. and H.F. $15\frac{3}{4}^h$ to $16\frac{3}{4}^h$ Wave in H.F. (− ·0010). $16\frac{3}{4}^h$ to $18\frac{1}{2}^h$ Two successive waves in Dec. (− 3′) and (− 12′): in H.F. (− ·0010) and (− ·0040). 23^h to 24^h Wave in Dec. (− 3′): in H.F. (+ ·0016).

$9^d\ 20^h$ to 21^h Wave in Dec. (+ 4′): in H.F. (+ ·0012). [14^h to 20^h Loss of V.F. register.]

$10^d\ 19^h$ to 20^h Wave in Dec. (− 3′).

$11^d\ 23^h$ to 24^h Wave in H.F. (+ ·0010): in Dec. small.

$13^d\ 20^h$ to $21\frac{1}{2}^h$ Sharp wave in Dec. (− 9′). $20\frac{1}{2}^h$ to 22^h Double wave in H.F (− ·0014 to + ·0010).

$14^d\ 0^h$ to 5^h Fluctuations in Dec. (± 2′): in H.F. (± ·0004). $12\frac{1}{2}^h$ to 14^h Wave in Dec. (− 3′): in H.F. (− ·0010). $14\frac{1}{2}^h$ to 16^h Wave in H.F. (− ·0014). 19^h to 21^h Serrated wave in H.F. (− ·0012). $14^d\ 23\frac{1}{2}^h$ to $15^d\ 0\frac{1}{2}^h$ Wave in H.F. (+ ·0010).

$16^d\ 1^h$ to 4^h Wave in Dec. (− 5′). 1^h to $2\frac{1}{2}^h$ In H.F. (+ ·0010). $10\frac{1}{4}^h$ Increase of Dec. (+ 3′): small positive wave in H.F. 11^h to 13^h Fluctuations in Dec. and H.F.

$21^d\ 0^h$ to 1^h Wave in H.F. (+ ·0010): in Dec. small.

$21^d\ 12^h$ to $22^d\ 12^h$ See Plate III.

$22^d\ 16\frac{1}{4}^h$ to $17\frac{1}{4}^h$ Wave in Dec. (− 7′): in H.F. (− ·0016). 18^h to 21^h Sharp fluctuations in Dec. (± 2′): in H.F. (± ·0008).

$23^d\ 2^h$ to $3\frac{1}{2}^h$ Small double wave in Dec. (+ 3′ to − 2′).

$25^d\ 18^h$ to 22^h Small fluctuations in H.F. $20\frac{1}{2}^h$ to $22\frac{3}{4}^h$ Shallow wave in Dec. (− 4′).

$27^d\ 14\frac{1}{2}^h$ to $15\frac{1}{2}^h$ Wave in H.F. (− ·0010). $16\frac{1}{2}^h$ to $17\frac{1}{2}^h$ Wave in Dec. (− 3′). $22\frac{1}{2}^h$ to $23\frac{1}{2}^h$ Wave in H.F. (− ·0010). $27^d\ 23\frac{1}{2}^h$ to $28^d\ 0\frac{1}{2}^h$ Wave in Dec. (− 3′).

$28^d\ 12^h$ to 14^h Fluctuations in Dec. and H.F. 15^h to 16^h Wave in Dec. (− 5′): in H.F. (− ·0016). $20\frac{1}{2}^h$ to $21\frac{1}{2}^h$ Wave in Dec. (− 5′), steep at commencement: in H.F. (+ ·0014).

$29^d\ 20^h$ to 21^h Wave in H.F. (− ·0010): in Dec. small.

$30^d\ 0\frac{1}{2}^h$ to $1\frac{1}{4}^h$ Wave in Dec. (+ 3′): in H.F. (+ ·0014). $22\frac{3}{4}^h$ Decrease of Dec. (− 3′).

$31^d\ 0\frac{1}{2}^h$ to $1\frac{1}{2}^h$ Wave in Dec. (+ 3′). 4^h to 5^h Wave in Dec. (+ 3′). $13\frac{1}{2}^h$ to 14^h Wave in Dec. (+ 3′): in H.F. small.

November

$2^d\ 11\frac{3}{4}^h$ to $12\frac{1}{2}^h$ Wave in H.F. (+ ·0018): increase of Dec. (+ 3′). 13^h to $14\frac{1}{2}^h$ Wave in Dec. (+ 5′): in H.F. (− ·0016). $16\frac{1}{2}^h$ to 18^h Wave in Dec. (− 8′): in H.F. (− ·0020). 19^h to 22^h Sharp fluctuations in H.F.

$3^d\ 0^h$ to 2^h Two successive waves in Dec. (+ 4′) and (+ 3′): in H.F. (+ ·0010) and (+ ·0010).

1904.

November $4^d\ 14^h$ to 18^h Sharp fluctuations in Dec. ($\pm 3'$): in H.F. ($\pm \cdot0010$). 20^h to 21^h Sharp wave in Dec. ($-10'$): double wave in H.F. ($-\cdot0008$ to $+\cdot0024$). 22^h to $23\frac{1}{4}^h$ Wave in Dec. ($-4'$), followed till $5^d\ 1^h$ by a double wave ($+7'$ to $-5'$).

$4^d\ 22^h$ to $5^d\ 0\frac{1}{2}^h$ Two successive waves in H.F. ($-\cdot0012$) and ($-\cdot0010$): wave in V.F. ($-\cdot0005$).

$5^d\ 3^h$ to $4\frac{1}{2}^h$ Double wave in Dec. ($+3'$ to $-3'$): in H.F. ($-\cdot0006$ to $+\cdot0008$). $10\frac{1}{2}^h$ to $11\frac{1}{4}^h$ Wave in Dec. ($+5'$): in H.F. ($+\cdot0010$). $13\frac{1}{2}^h$ to 15^h Irregular wave in Dec. ($-7'$). 14^h to $15\frac{1}{2}^h$ Double wave in H.F. ($+\cdot0010$ to $-\cdot0010$). 16^h to $17\frac{1}{4}^h$ Wave in Dec. ($-10'$): double wave in H.F. ($-\cdot0010$ to $+\cdot0012$).

$6^d\ 2\frac{1}{4}^h$ to $3\frac{1}{2}^h$ Serrated wave in Dec. ($-3'$).

$11^d\ 20\frac{1}{4}^h$ to $21\frac{1}{2}^h$ Wave in Dec. ($-3'$).

$15^d\ 21\frac{3}{4}^h$ Decrease of Dec. ($-5'$). 22^h to 23^h Wave in H.F. ($-\cdot0012$): in Dec. small. $23\frac{1}{4}^h$ to 24^h Wave in Dec. ($-3'$): in H.F. ($-\cdot0010$).

$16^d\ 0^h$ to 1^h Wave in Dec. ($+4'$). $2\frac{3}{4}^h$ to 4^h Double wave in Dec. ($-4'$ to $+3'$). $4\frac{3}{4}^h$ to $6\frac{1}{2}^h$ Double wave in Dec. ($+4'$ to $-2'$). $14\frac{3}{4}^h$ to $16\frac{1}{2}^h$ Wave in Dec. ($-8'$): in H.F. ($-\cdot0025$). $18\frac{1}{2}^h$ to 20^h Wave in Dec. ($-3'$): in H.F. small. 23^h to $23\frac{3}{4}^h$ Wave in Dec. ($+6'$): in H.F. ($+\cdot0018$): decrease of V.F. ($-\cdot0004$). [0^h to 11^h Loss of H.F. and V.F. registers.]

$17^d\ 3^h$ to 4^h Small double wave in Dec. $5\frac{1}{2}^h$ Decrease of Dec. ($-3'$). 7^h to $8\frac{1}{2}^h$ Wave in H.F. ($-\cdot0014$). 7^h to $9\frac{1}{2}^h$ Wave in Dec. ($+5'$). 13^h to 14^h Wave in H.F. ($-\cdot0010$): small double wave in Dec. 15^h to $16\frac{3}{4}^h$ Prolonged wave in Dec. ($-9'$), with superposed fluctuations; two successive waves in H.F. ($-\cdot0020$) and ($-\cdot0008$). $16\frac{3}{4}^h$ to 17^h Decrease of H.F. ($-\cdot0010$). 21^h to 22^h Wave in Dec. ($-3'$): in H.F. ($+\cdot0010$). [$17^d\ 1^h$ to 7^h and $17^d\ 23^h$ to $18^d\ 5\frac{1}{2}^h$ Loss of H.F. register.]

$18^d\ 2^h$ to 4^h Double wave in Dec. ($+3'$ to $-3'$). 6^h to 7^h Wave in H.F. ($+\cdot0010$). 18^h to 19^h Wave in Dec. ($-4'$): in H.F. ($+\cdot0012$).

$23^d\ 0\frac{1}{2}^h$ to $1\frac{1}{2}^h$ Wave in Dec. ($+3'$).

$25^d\ 12^h$ to 13^h Irregular wave in Dec. ($-4'$): in H.F. ($-\cdot0014$), followed till 20^h by sharp fluctuations in Dec. ($\pm 2'$) and H.F. ($\pm \cdot0006$).

$26^d\ 15^h$ to $15\frac{1}{2}^h$ Decrease of H.F. ($-\cdot0020$). $16\frac{1}{2}^h$ to $17\frac{1}{4}^h$ Wave in Dec. ($-3'$). 22^h to $23\frac{1}{4}^h$ Double wave in Dec. ($-3'$ to $+4'$): wave in H.F. ($+\cdot0020$). $23\frac{1}{4}^h$ to 24^h Wave in Dec. ($-3'$): in H.F. ($-\cdot0010$).

$27^d\ 18^h$ to 19^h Wave in Dec. ($-3'$): in H.F. small.

$29^d\ 22^h$ to $23\frac{1}{2}^h$ Wave in Dec. ($-7'$): in H.F. ($+\cdot0024$).

[$30^d\ 0^h$ to 5^h Loss of V.F. register.]

December $1^d\ 2^h$ to 3^h Wave in Dec. ($-4'$), with superposed fluctuations: in H.F. small.

$2^d\ 19^h$ to 20^h Small double wave in H.F.

$3^d\ 14\frac{1}{4}^h$ to $15\frac{3}{4}^h$ Double wave in H.F. ($+\cdot0010$ to $-\cdot0012$): small fluctuations in Dec. 16^h to $16\frac{1}{2}^h$ Wave in H.F. ($+\cdot0010$): in Dec. small. $17\frac{1}{2}^h$ to $18\frac{1}{2}^h$ Wave in H.F. ($-\cdot0012$). 19^h to $21\frac{1}{2}^h$ Sharp wave in Dec. ($-19'$), with superposed fluctuations: double wave in H.F. ($-\cdot0012$ to $+\cdot0016$).

$4^d\ 16^h$ to $16\frac{1}{2}^h$ Wave in Dec. ($-3'$). $17\frac{1}{2}^h$ to 18^h Wave in Dec. ($-3'$): in H.F. small. 21^h to 23^h Two successive waves in Dec. ($-3'$) and ($-4'$).

$5^d\ 0^h$ to 2^h Shallow wave in Dec. ($-3'$): in H.F. ($-\cdot0010$). 16^h to $17\frac{1}{4}$ Irregular wave in Dec. ($-5'$): in H.F. ($-\cdot0010$). $21\frac{1}{2}^h$ to $22\frac{1}{2}^h$ Double wave in Dec. ($+3'$ to $-3'$): wave in H.F. ($+\cdot0012$).

$9^d\ 12^h$ to 20^h Small fluctuations in Dec. and H.F.

$11^d\ 22\frac{1}{4}^h$ to $23\frac{1}{4}^h$ Wave in H.F. ($+\cdot0014$).

$14^d\ 18^h$ to $19\frac{1}{4}^h$ Double wave in Dec. ($-5'$) to $+3'$): wave in H.F. ($-\cdot0018$). $14^d\ 23\frac{1}{2}^h$ to $15^d\ 2^h$ Prolonged irregular wave in Dec. ($-11'$): double-crested wave in H.F. ($-\cdot0016$).

$15^d\ 6^h$ to 7^h Wave in Dec. ($+3'$): in H.F. small. $12\frac{1}{4}^h$ to 13^h Wave in Dec. ($+3'$). $20\frac{1}{2}^h$ to $22\frac{1}{4}^h$ Irregular double-crested wave in Dec. ($-11'$): irregular wave in H.F. ($+\cdot0040$), each with superposed fluctuations.

$16^d\ 9^h$ to 11^h Fluctuations in Dec. ($\pm 1'$). 9^h to 18^h Fluctuations in H.F. ($\pm \cdot0006$). 19^h to 20^h Sharp wave in Dec. ($-10'$): double wave in H.F. ($-\cdot0014$ to $+\cdot0014$).

$18^d\ 21\frac{1}{2}^h$ to $22\frac{1}{4}^h$ Wave in H.F. ($+\cdot0010$).

$26^d\ 20\frac{1}{2}^h$ to $21\frac{1}{4}^h$ Wave in Dec. ($-5'$): in H.F. ($-\cdot0010$). 23^h to 24^h Irregular wave in Dec. ($-5'$): sharp wave in H.F. ($+\cdot0024$).

$27^d\ 21^h$ to 24^h Small fluctuations in Dec. and H.F.

$29^h\ 15\frac{1}{2}^h$ to 17^h Wave in Dec. ($-7'$): in H.F. small. $29^d\ 23^h$ to $30^d\ 0\frac{1}{2}^h$ Wave in H.F. ($+\cdot0010$): in Dec. small.

[$30^d\ 11^h$ to 18^h Loss of Dec., H.F. and V.F. registers.]

EXPLANATION OF THE PLATES.

The magnetic motions figured on the Plates are :—

(1.) Those for days of great disturbance—None in 1904.

(2.) Those for days of lesser disturbance—January 28–29, April 1, 18^{d}–16^{h} to 19^{d}–16^{h}, June 15–16, July 6–7, August 3–4, September 25, October 21–22.

(3.) Those for four quiet days—February 20, May 10, August 11, November 20—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 $0^{in.}80 = 20{\cdot}3^{mm.}$ in the declination curve, by $0^{in.}74 = 18{\cdot}7^{mm.}$ in the horizontal force curve, and by $0^{in.}58 = 14{\cdot}8^{mm.}$ in the vertical force curve.

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

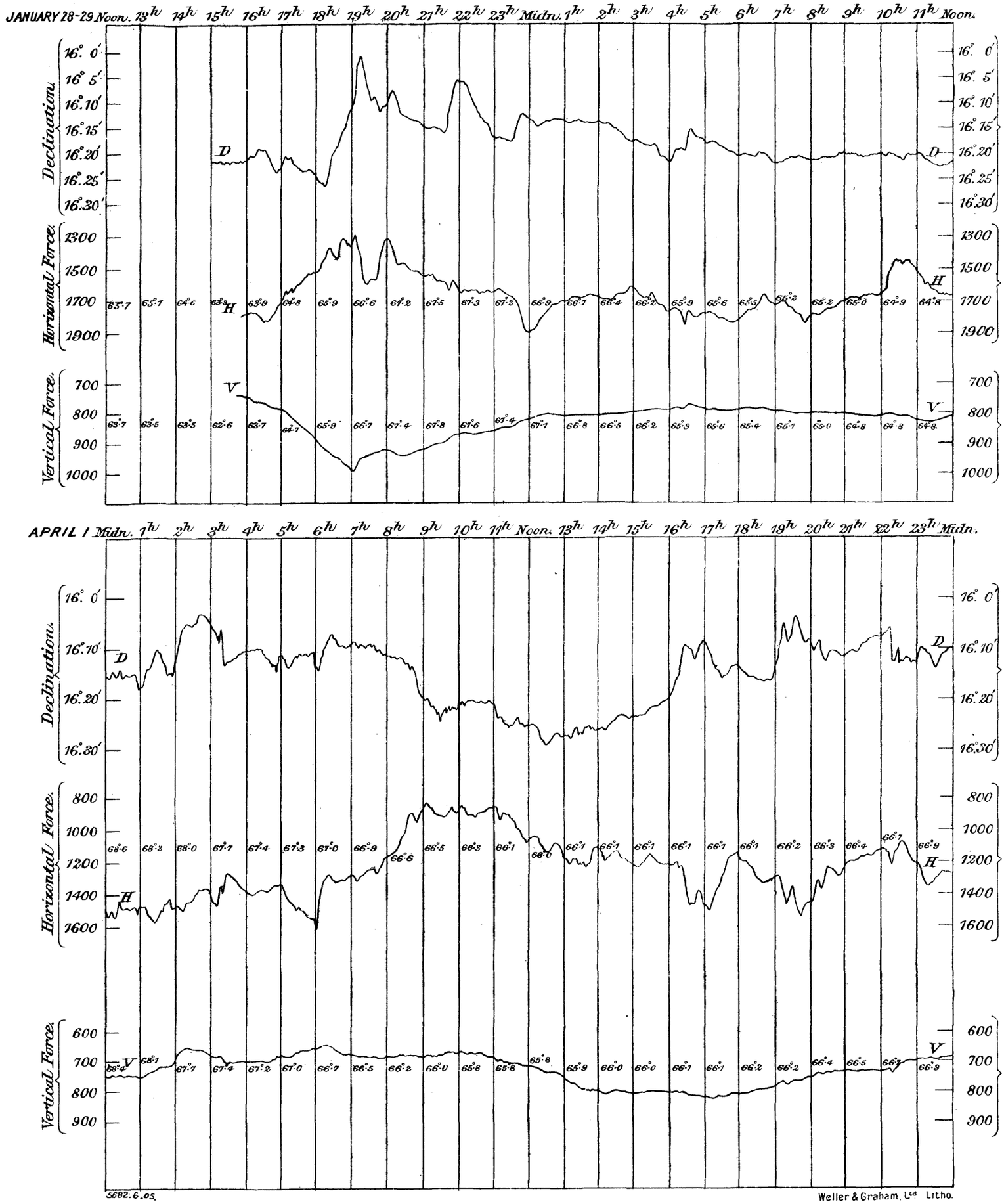
The earth current registers are not given on the plates in consequence of interference with the records caused by the running of trains on the City and South London Electric Railway.

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

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

Plate I.

Magnetic Disturbances recorded at the Royal Observatory, Greenwich, 1904.



5682.6.05.

Weller & Graham, Ltd Litho.

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

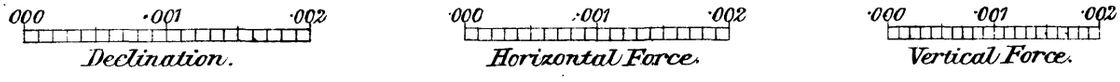
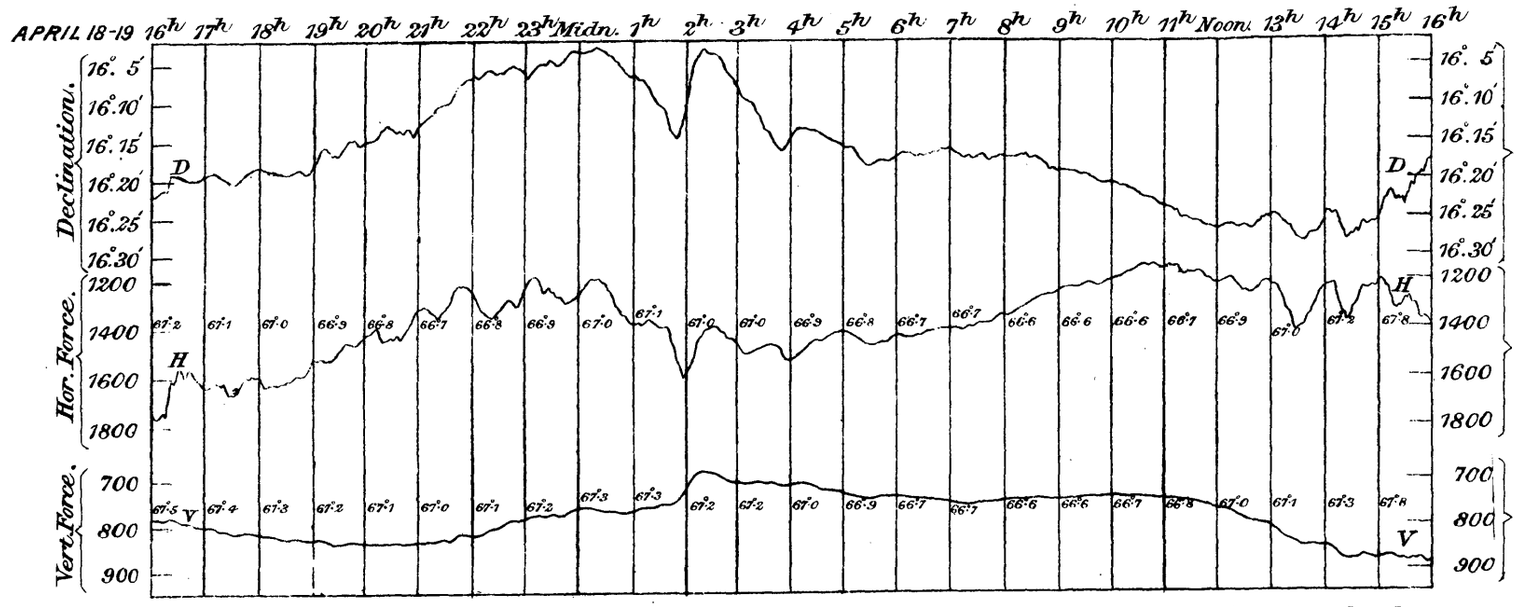
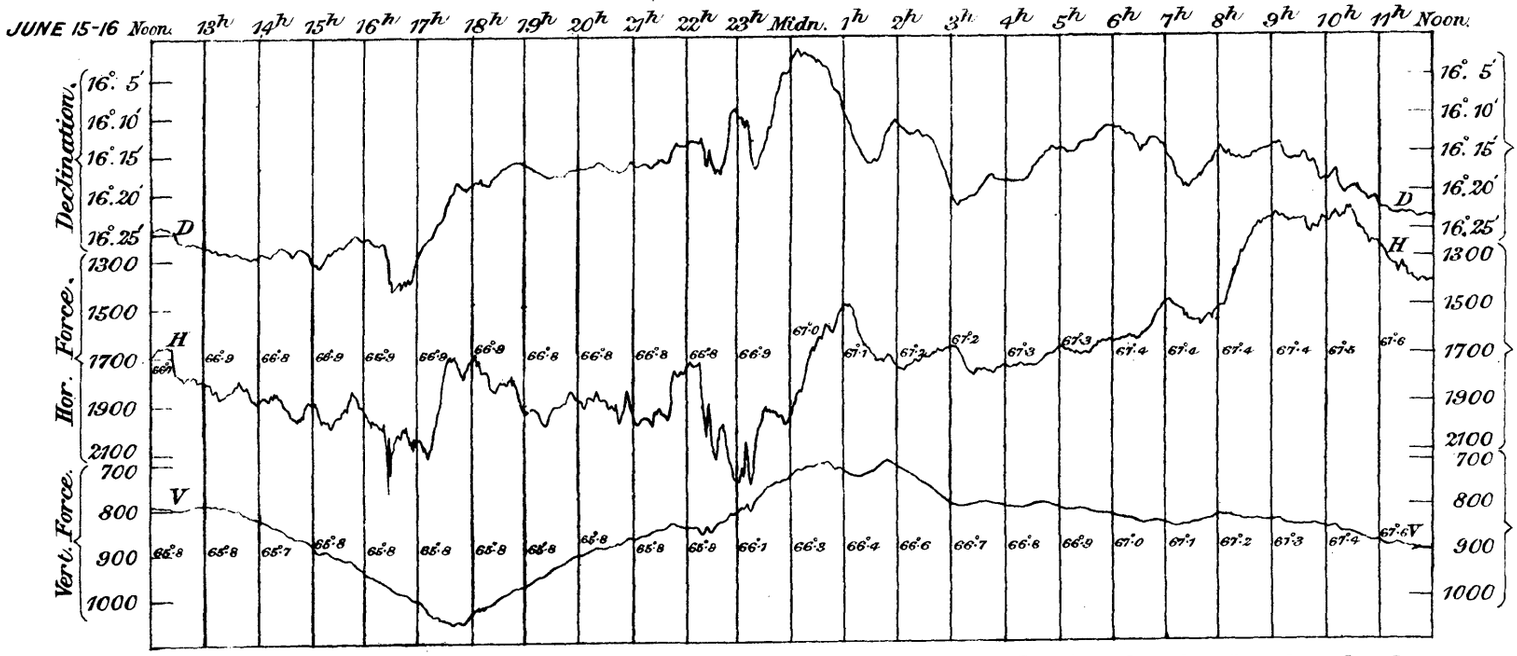
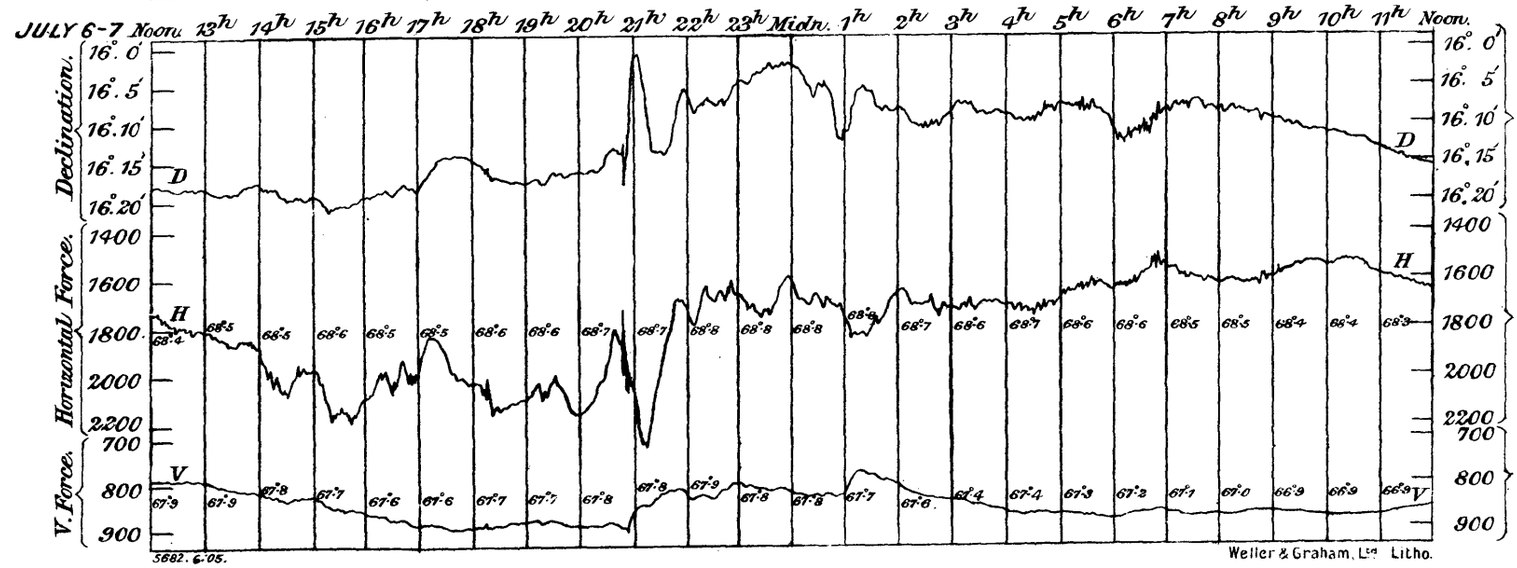


Plate II.

Magnetic Disturbances recorded at the Royal Observatory, Greenwich, 1904.







5682. 6-05.

Weller & Graham, Ltd. Litho.

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

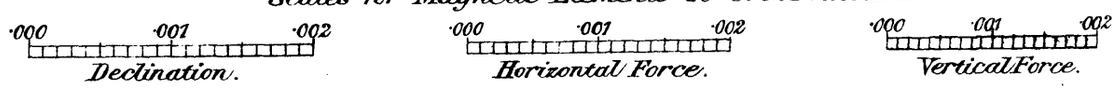
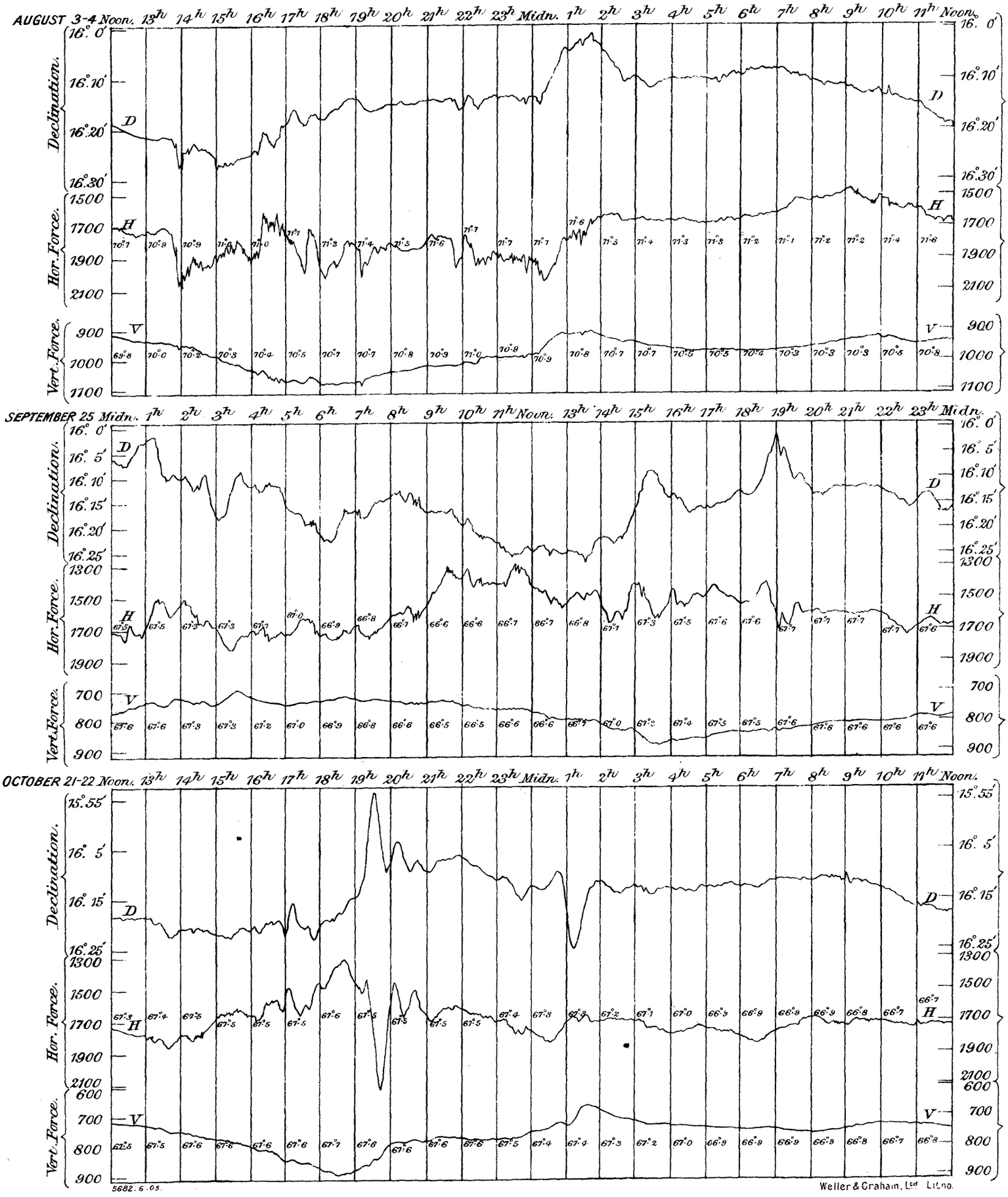
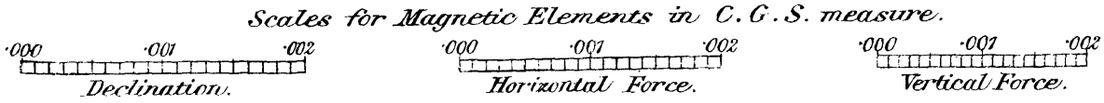


Plate III.

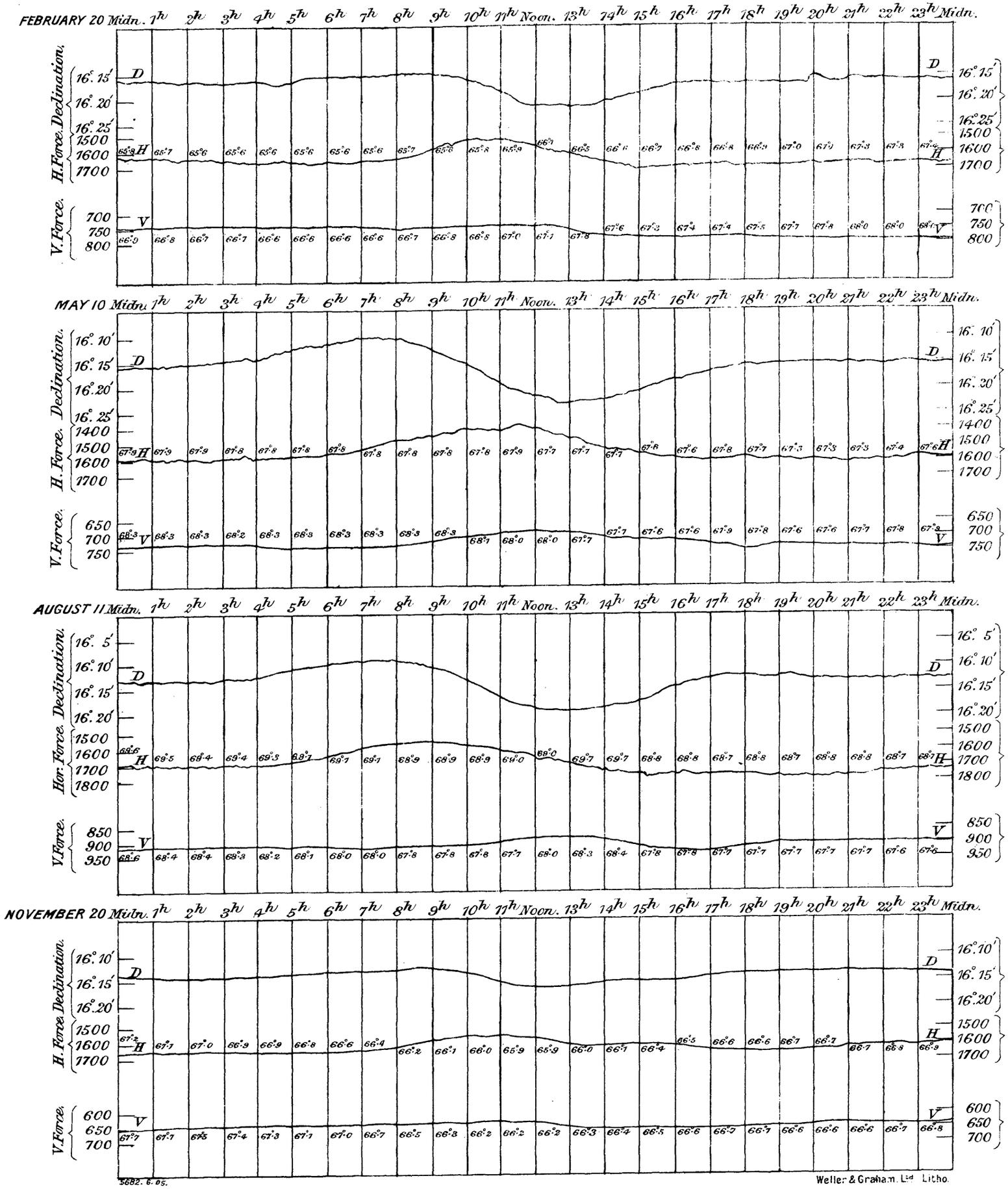
Magnetic Disturbances recorded at the Royal Observatory, Greenwich, 1904.



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



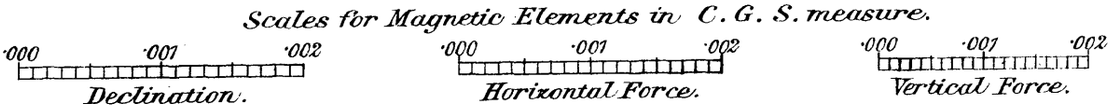
Types of Magnetic Diurnal Variations at four seasons of the Year recorded at the Royal Observatory, Greenwich, 1904.



5682. 6. 05.

Weller & Graham. Ltd Litho.

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



ROYAL OBSERVATORY, GREENWICH.

RESULTS

OF

METEOROLOGICAL OBSERVATIONS.

1904.

MONTH and DAY, 1904.	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	...	29·780	34·9	23·8	11·1	31·3	− 7·2	29·9	26·4	4·9	6·2	2·7	81	49·2	14·6	0·000	0·0	... : sP : mP
2	Greatest Declination N.	29·777	43·5	29·5	14·0	34·9	− 3·6	33·7	31·8	3·1	6·4	1·2	88	52·0	16·2	0·040	2·0	mP, ssN : sP : vP
3	Full	29·579	46·0	42·0	4·0	43·6	+ 5·1	42·5	41·2	2·4	5·1	0·4	91	55·0	36·7	0·098	8·0	sN, wP : wP : vN, wP
4	Perigee	29·441	44·8	32·2	12·6	41·1	+ 2·7	40·0	38·6	2·5	5·1	0·0	91	64·1	27·0	0·090	0·5	vP : vP : wP, ssN
5	...	29·756	44·8	33·5	11·3	40·2	+ 1·9	39·2	37·9	2·3	5·3	0·0	92	65·4	23·6	0·000	1·5	wP : mP : sP
6	...	30·119	36·3	29·3	7·0	34·7	− 3·5	33·9	32·6	2·1	4·0	0·0	92	41·2	21·4	0·006*	0·0	mP
7	...	29·875	47·7	30·0	17·7	41·3	+ 3·2	39·9	38·1	3·2	5·1	1·0	89	49·0	22·5	0·054	1·0	wP
8	In Equator	29·609	47·0	39·0	8·0	42·7	+ 4·7	42·0	41·2	1·5	2·9	0·9	94	47·0	33·0	0·037	0·0	wP : vP : mP
9	Last Quarter	29·738	41·0	34·4	6·6	37·9	0·0	36·6	34·9	3·0	6·0	0·7	89	47·2	29·7	0·000	0·2	mP : sP
10	...	29·730	47·3	35·0	12·3	41·5	+ 3·6	39·5	37·0	4·5	8·0	1·8	85	54·4	29·8	0·179	0·8	wwP : wwP, wwN : vP
11	...	29·649	44·9	33·0	11·9	40·8	+ 2·9	39·6	38·1	2·7	5·5	1·3	90	57·0	27·2	0·000	0·0	wP : wP : wwP
12	...	29·462	49·5	38·4	11·1	44·7	+ 6·8	43·9	43·0	1·7	3·9	0·4	94	53·0	33·3	0·247	1·0	...
13	...	29·106	54·8	42·7	12·1	50·1	+12·1	47·9	45·6	4·5	9·4	1·5	85	74·8	38·0	0·160	3·0	... : ... : wP, vN
14	...	28·959	46·8	38·4	8·4	43·0	+ 4·8	40·1	36·6	6·4	10·1	3·7	79	60·0	33·0	0·102	0·0	wP, ssN : wP, ssN : wP
15	Greatest Declination S.	29·476	42·5	35·7	6·8	38·6	+ 0·3	35·3	30·9	7·7	10·6	3·5	74	59·4	30·0	0·000	3·0	wP : mP : mP
16	...	29·717	39·0	33·1	5·9	35·6	− 2·9	33·3	29·8	5·8	11·3	3·1	79	50·0	26·0	0·000	0·0	mP : sP : vP
17	New	30·116	39·0	29·6	9·4	34·9	− 3·6	33·1	30·2	4·7	8·5	3·0	82	44·5	21·5	0·000	0·0	mP : sP : mP
18	...	30·099	48·9	34·8	14·1	43·2	+ 4·7	42·4	41·4	1·8	3·4	0·5	94	48·9	28·5	0·086	0·0	wP
19	Apogee	30·249	48·1	29·2	18·9	41·3	+ 2·8	40·7	39·9	1·4	4·8	0·3	95	48·1	19·8	0·044	0·0	wwP : wwP, wwN : mP
20	...	30·395	35·9	28·7	7·2	33·1	− 5·3	31·4	28·1	5·0	6·5	1·0	81	45·0	20·0	0·000	0·0	wP : mP : mP
21	...	30·343	43·1	28·2	14·9	36·3	− 2·0	35·0	33·1	3·2	6·2	0·6	89	55·0	22·5	0·051	0·0	vP, ssN : wP : wP
22	...	30·508	40·8	26·2	14·6	34·3	− 4·0	33·3	31·6	2·7	5·3	0·0	89	54·4	21·9	0·000	0·0	wP : mP : wP
23	In Equator	30·405	32·5	27·0	5·5	30·7	− 7·7	30·2	28·8	1·9	2·5	0·0	92	37·0	24·0	0·000	1·2	wP : wwP : ...
24	...	30·123	31·9	28·8	3·1	30·4	− 8·1	29·0	25·0	5·4	7·4	1·6	79	35·0	28·6	0·000	7·5	... : wP
25	First Quarter	29·986	36·1	30·5	5·6	32·9	− 5·9	31·5	28·7	4·2	5·9	2·6	84	45·0	30·0	0·000	2·3	wwP
26	...	29·845	48·1	34·8	13·3	42·8	+ 3·8	41·0	38·8	4·0	6·3	2·3	86	67·1	25·9	0·006*	0·5	wP
27	...	29·633	50·6	46·3	4·3	48·3	+ 9·0	47·0	45·6	2·7	4·6	1·7	91	52·0	42·6	0·113	12·0	wwP, wwN : wwP
28	...	29·553	50·9	41·7	9·2	46·9	+ 7·4	45·4	43·8	3·1	5·1	1·9	90	51·0	37·6	0·394	1·5	wwP, wwN : ... : wP
29	Greatest Declination N.	29·760	47·5	34·6	12·9	42·6	+ 2·9	40·2	37·3	5·3	10·9	2·3	82	77·0	30·0	0·000	0·0	wP : mP : mP
30	...	29·386	44·9	42·9	2·0	44·3	+ 4·5	42·7	40·8	3·5	6·6	2·4	88	49·2	39·7	0·424	0·0	wP, vN : ssN : vN, wP
31	...	29·127	44·7	36·0	8·7	40·2	+ 0·4	39·2	37·9	2·3	4·8	1·6	92	69·1	29·3	0·384	0·0	wP : ssN, ssP : vP
Means	...	29·784	43·7	33·8	9·8	39·5	+ 1·0	38·0	36·0	3·5	6·2	1 4	87·3	53·5	27·9	Sum 2·515	1·5	...
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-bub and Wet-bulb Thermometers.

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

* Rainfall (Column 16). Amounts entered on January 6 and 26 are derived from fog and dew respectively.

The mean reading of the *Barometer* for the month was $29^{in}\cdot784$, being $0^{in}\cdot006$ *higher* than the average for the 50 years, 1841–1890.

TEMPERATURE OF THE AIR.

The highest in the month was 54°·8 on January 13; the lowest in the month was 23°·8 on January 1; and the range was 31°·0.
The mean of all the highest daily readings in the month was 43°·7, 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 33°·8, being 0°·2 *higher* than the average for the 50 years, 1841–1890.
The mean of the daily ranges was 9°·8, being 0°·3 *greater* than the average for the 50 years, 1841–1890.
The mean for the month was 39°·5, being 1°·0 *higher* than the average for the 50 years, 1841–1890.

MONTH and DAY, 1904.	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.		
Jan. 1	0·0	7·8	ENE	ENE : E	0·9	0·04	186	0, ho.-fr : 10 : 9	9, th.-cl : 10 : 9
2	1·0	7·9	ESE : E	ESE : SE : SSE	1·1	0·05	191	10 : 10, slt.-sn, sl, slt.-r. : 8	p.-cl : p.-cl : 10, oc.-th.-r, lu.-ha
3	0·0	7·9	S : SSE : SE	SSE : SE	2·2	0·17	256	10, slt.-r : 10 : 10	10 : 10, fq.-r : 10, fq.-th.-r
4	2·2	7·9	SW : SSW : SSE	SSE : SE	3·1	0·17	242	10, th.-r : 0, tk.-f, ho.-fr: 1, ci, ci.-s	7 : 10, slt.-r : 10, fq.-r
5	0·7	7·9	SE : ESE : E	E : ENE : NE	0·9	0·03	173	9 : 8, cu.-s, ci.-s	4, ci, ci.-s : 0, ho.-fr : 10, f
6	0·0	8·0	NE : Calm : Variable	SE : SSW : SSE	0·2	0·00	93	10, f : 10	10 : 10 : p.-cl
7	0·0	8·0	S : SSW	S : SSW	7·0	0·54	375	10 : 10	10 : 10, fq.-r, w : 10
8	0·0	8·0	SSW	SSW : SW	0·9	0·02	196	10 : 10, slt.-f	10, fq.-r, gt.-glm: 10, oc.-slt.-r : 9
9	0·0	8·0	SW	WNW : SW : S	1·9	0·12	280	9 : 10	6, th.-cl, : 0, ho.-fr : 5, li.-cl, ho.-fr
10	0·0	8·1	SSW : S	SSW : SW	15·5	1·08	503	9, sl : 9, w : 10, st.-w	10, r, st.-w : p.-cl : 0
11	0·0	8·1	SSW	SSW : S	4·0	0·38	388	0 : 9, so.-ha	10, oc.-slt.-r : 10 : 10, oc.-slt.-r
12	0·0	8·1	S : SW	SW : SSW : S	2·9	0·16	268	10 : 10, fq.-m.-r, f	10 : 10, c.-r : 10, c.-r
13	1·7	8·2	SSW	SSW : SW	20·0	2·33	752	10, slt.-r, st.-w: 10, sc, st.-w: 10, sc, oc.-shs, st.-w	8, ci.-s, th.-cl, st.-w: v, oc.-shs, hl : p.-cl, slt.-sh, l, w
14	1·6	8·2	SSW : SW	SSW : WSW : SW	15·0	2·06	741	v, r, l, w : 9, l, slt.-sh, st.-w: 8, ci .s, th.-cl, shs.-r, w	9, oc.-shs, st.-w: 5, li.-cl, st.-w: 0, st.-w
15	4·4	8·2	SW	SW	10·5	1·26	599	0, w : 0, ho.-fr : 1, ci, ci.-s, w	4, cu.-s, th.-cl, w: 0 : 0, ho.-fr
16	1·5	8·3	WSW : W : WNW	NW : WNW	4·8	0·46	405	0, ho.-fr : p-cl, ho.-fr: 6, cu.-s, li.-cl, w	6, w : 0, slt.-f : 0, h, ho.-fr
17	0·3	8·3	NW : WSW	NW : WSW : SW	1·0	0·03	224	0, h, ho.-fr: 0, slt.-f : 3, ci, ci.-s, slt.-f	0, slt.-f : 0, slt.-f, ho.-fr: p.-cl, ho.-fr
18	0·0	8·3	SW	W : NW	0·6	0·02	228	10 : 10, m.-r, slt.-f: 10, oc.-th.-r, glm	10, oc.-r, slt.-f : 10, m.-r, slt.-f
19	0·0	8·4	NW : NNW : N	ESE : ENE : E	3·1	0·15	234	10, m.-r : 10, m.-r : 10, fq.-th.-r, glm	9, oc.-th.-r : 0, ho.-fr : 1, ho.-fr
20	0·0	8·5	E : ENE	E : ESE : S	0·2	0·00	126	10 : 10	10 : p.-cl, ho.-fr : 9
21	0·7	8·5	S : SW : N	N	3·0	0·14	252	10 : 10, slt.-r, f : 10, oc.-m.-r, slt.-f	5, cu, th.-cl : th.-cl : 0, ho.-fr
22	3·3	8·5	NNW	NNE	0·6	0·00	126	0. m, ho.-fr : 0, f	1, th.-cl : 0, ho.-fr, slt.-f: 0, ho.-fr, f
23	0·0	8·6	Calm : SE	SE : E : NE	0·1	0·00	69	tk.-f : tk.-f	tk.-f : 10, f, fr
24	0·0	8·6	E : SE	SE : SW	0·6	0·01	109	10, fr : 10	10 : 10, fr
25	0·0	8·7	SW : S	SE	0·7	0·01	124	10 : 10	9 : 9, l
26	2·5	8·7	SSE : S : SSW	SSW : S	6·5	0·46	395	2, ho.-fr : 0 : 3, ci, th.-cl	8 : li.-cl, oc.-slt.-r, lu.-ha : 9, sc, slt.-sh, w
27	0·0	8·8	S : SSW	SSW : S	14·0	2·07	690	9, li.-shs, w: 10, oc.-th.-r, w: 10, sc, fq.-th.-r, w	10, sc, fq.-r, w : 10, sc, th.-r, st.-w
28	0·0	8·8	SSW : S	SSW : SW	10·2	0·60	432	10, sc, oc.-slt.-r, w : 10, sc, fq.-r, w	10, fq.-r : 10, oc.-r : p.-cl
29	6·2	8·9	SW : SSW	SSW : S	7·5	0·38	360	p.-cl, ho.-fr : 0	1, th.-cl : th.-cl : 9, lu.-ha, w
30	0·0	8·9	S	S : SSW	11·7	1·66	576	9, st.-w : 10, r, w : 10, sc, fq.-r, w	10, fq.-r, w : p.-cl, lu.-ha, lu.-co
31	0·3	9·0	S : SE : E	Variable	4·2	0·13	219	10, slt.-r : 10 : 10, c.-r	v, hy.-r, hl : 10 : 10, oc.-slt.-r
Means	0·9	8·3	...	...	...	0·47	317		
Number of Column for Reference.	19	20	21	22	23	24	25	26	27

The mean *Temperature of Evaporation* for the month was 38°·0, being 0°·8 *higher* than
The mean *Temperature of the Dew Point* for the month was 36°·0, being 0°·6 *higher* than
The mean *Degree of Humidity* for the month was 87·3, being 1·5 *less* than
The mean *Elastic Force of Vapour* for the month was 0in·212, being 0in·005 *greater* than
The mean *Weight of Vapour in a Cubic Foot of Air* for the month was 2grs·4, being the same as
The mean *Weight of a Cubic Foot of Air* for the month was 553 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 7·6.

The mean proportion of *Sunshine* for the month (constant sunshine being represented by 1) was 0·102. The maximum daily amount of *Sunshine* was 6·2 hours on January 29.

The highest reading of the *Solar Radiation Thermometer* was 77°·0 on January 29; and the lowest reading of the *Terrestrial Radiation Thermometer* was 14°·6 on January 1.

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

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

The *Greatest Pressure of the Wind* in the month was 20·0 lbs. on the square foot on January 13. The mean daily *Horizontal Movement of the Air* for the month was 317 miles; the greatest daily value was 752 miles on January 13; and the least daily value was 69 miles on January 23.

Rain fell on 16 days in the month, amounting to 2in·515, as measured by gauge No. 6 partly sunk below the ground; being 0in·526 *greater* than the average fall for the 50 years, 1841–1890.

MONTH and DAY, 1904.	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	Full	29·205	43·0	31·7	11·3	37·8	− 1·9	36·3	34·3	3·5	7·1	1·4	87	72·6	28 4	0·034	0·0	vN, wP : vP : vP, ssN
2	Perigee	29·122	44·0	35·6	8·4	39·8	+ 0·1	38·7	37·3	2·5	4·8	0·7	91	57·9	27·4	0·349	0·0	wP, ssN
3	...	29·060	47·3	36·7	10·6	42·4	+ 2·7	41·3	40·0	2·4	4·6	0·7	91	53·0	30·0	0·256	0·0	wP, wN : vN, wwP : wP
4	In Equator	29·225	47·0	37·4	9·6	41·8	+ 2·0	39·2	36·0	5·8	10·5	1·6	81	74·6	32·6	0·016	0·0	wP : mP : mP, ssN
5	...	29·349	49·5	35·6	13·9	42·3	+ 2·5	40·7	38·8	3·5	11·8	0·5	88	91·9	27·7	0·054	0·0	wP, vN : mP : mP
6	...	29·297	44·6	36·4	8·2	41·2	+ 1·5	39·1	36·5	4·7	10·1	1·6	84	50·8	30·9	0·064	0·0	wP : mP, ssN : mP
7	...	29·429	46·8	33·7	13·1	40 0	+ 0·6	37·2	33·6	6·4	11·3	2·2	78	70·4	28·4	0·082	0·0	mP
8	Last Quarter	28·911	49·8	39·3	10·5	44·5	+ 5·4	42·0	39·1	5·4	10·7	0·9	81	66·0	32·3	0·160	0·0	vN, wP : wP
9	...	28·744	45·0	39·0	6·0	41·9	+ 3·2	39·6	36·7	5·2	7·1	2·5	83	61·6	34·0	0·394	0·0	wP : ssN, vP : mP, vN
10	...	28·752	47·7	36·8	10·9	42·3	+ 3·9	39·7	36·5	5·8	10·9	0·9	81	72·5	32·0	0·250	0·0	mP : mP : ssN, vP
11	Greatest Declination S.	29·033	44·9	35·3	9·6	40·8	+ 2·5	38·6	35·8	5·0	7·9	1·1	83	44·9	28·1	0·000	0·0	wP : sP : sP
12	...	29·535	49·5	32·4	17·1	42·2	+ 3·7	40·6	38·7	3·5	5·1	1·3	88	52·0	27·1	0·235	0·0	mP : vN, wwP
13	...	29·110	49·9	39·2	10·7	45·7	+ 6·9	41·7	37·1	8·6	12·6	4·6	73	81·4	35·0	0·148	0·0	vP, ssN : mP : sP, ssN
14	...	28·941	47·6	36·4	11·2	41·9	+ 2·7	38·4	34·1	7·8	12·2	3·3	75	79·2	31·7	0·053	0·0	mP : mP : vP, ssN
15	...	29·180	40·9	31·2	9·7	36·6	− 3·0	34·0	30·2	6·4	8·9	4·6	78	57·7	24·8	0·000	0·0	sP : ssP : ssP
16	Apogee : New	29·209	45·7	33·2	12·5	36·8	− 3·0	34·7	31·7	5·1	14·3	0·8	83	79·6	28·2	0·073	0·0	sP : sP : sP, ssN
17	...	28·831	37·2	29·8	7·4	35·5	− 4·3	34·5	32·9	2·6	5·5	0·7	90	43·0	23·4	0·198	0·0	wN, vP : sP : ssP
18	...	29·355	40·7	29·8	10·9	35·9	− 3·8	34·1	31·4	4·5	8·7	1·3	84	68·2	23·4	0·000	0·0	ssP
19	In Equator	29·828	41·8	31·5	10·3	37·0	− 2·6	34·4	30·7	6·3	11·9	1·8	78	67·0	25·0	0·122	0·2	sP : ssP : sP, vN
20	...	29·650	53·7	41·8	11·9	49·4	+ 9·9	47·3	45·0	4·4	6·2	1·1	86	70·0	39·0	0·006	0·8	wP
21	...	29·633	54·2	46·8	7·4	50·3	+10·8	47·0	43·5	6·8	10·2	1·5	78	75·3	42·2	0·029	2·5	wP
22	...	29·753	47·2	38·4	8·8	44·4	+ 4·8	40·9	36·8	7·6	12·4	4·1	74	68·4	34·1	0·000	1·5	vP : sP
23	...	30·011	42·9	34·5	8·4	37·6	− 2·2	34·2	29·5	8·1	10·8	5·4	73	83·8	26·0	0·000	4·0	mP
24	First Quarter	30·031	43·9	32·8	11·1	36·5	− 3·4	33·6	29·4	7·1	11·7	3·1	76	94·0	24·1	0·000	0·0	mP : mP : sP
25	...	30·066	38·3	32·9	5·4	34·4	− 5·6	32·2	28·5	5·9	9·2	4·2	78	59·2	29·8	0·004	0·0	mP : mP : sP
26	Greatest Declination N.	29·898	36·1	29·2	6·9	33·3	− 6·8	31·7	28·7	4·6	8·7	3·6	83	51·3	23·8	0·000	9·0	mP
27	....	30·044	38·2	29·2	9·0	33·5	− 6·6	30·3	24·3	9·2	12·2	6·1	68	72·0	21·1	0·000	0·0	vP : ssP : sP
28	...	30·069	35·9	27·7	8·2	31·0	− 9·2	28·7	22·5	8·5	12·3	2·9	69	84·5	19·0	0·003	0·0	sP
29	...	29·794	34·1	27·2	6·9	29·7	−10·5	28·3	23·8	5·9	10·2	4·4	78	79·4	24·9	0·016	3·0	mP : sP : sP
Means	...	29·416	44·4	34·5	9·9	39·5	0·0	37·2	33·9	5·6	9·7	2·4	80·7	68·4	28·8	Sum 2·546	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 $29^{in}\cdot416$, being $0^{in}\cdot383$ *lower* than the average for the 50 years, 1841–1890.

TEMPERATURE OF THE AIR.

The highest in the month was 54°·2 on February 21; the lowest in the month was 27°·2 on February 29; and the range was 27°·0.
The mean of all the highest daily readings in the month was 44°·4, being 0°·9 *lower* than the average for the 50 years, 1841–1890.
The mean of all the lowest daily readings in the month was 34°·5, being 0°·2 *higher* than the average for the 50 years, 1841–1890.
The mean of the daily ranges was 9°·9, being 1°·1 *less* than the average for the 50 years, 1841–1890.
The mean for the month was 39°·5, being *the same as* the average for the 50 years, 1841–1890.

MONTH and DAY, 1904.	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.		
Feb. 1	4·0	9·0	WSW : SW : SSW	SSW : SE	6·8	0·14	259	0, slt.-r : 0, slt.-f, ho.-fr: 1, li.-cl	p.-cl, hy.-sh, so.-ha : 8, sc, th.-cl, oc.-slt.-r, lu.-ha : 9, sc
2	0·0	9·1	ESE : SE	SSE	3·4	0·05	179	10, hy.-sh : p.-cl, so.-ha, oc.-r	10, fq.-r : 10, oc.-r : p.-cl, lu.-ha
3	0·0	9·2	E : ESE	SE : SW	5·8	0·49	363	9, li.-shs : 10, slt.-r : 10, sc, c.-r	10, fq.-r : 10, sc, w : 10
4	5·8	9·2	SSW : S : SW	SW : SSW : SE	3·8	0·30	344	p.-cl : 1, li.-cl	5, cu.-s, li.-cl : v, oc.-shs : 9, slt.-sh
5	4·9	9·3	SSW	SSW : SE	1·4	0·04	218	9, shs.-r : 9, oc.-shs : 6, cu, cu.-s, th.-cl	3, cu, li.-cl : 0, ho.-fr : p.-cl
6	0·0	9·3	SSE : SSW	SW	12·5	0·76	440	10 : 9, sh.-r : 9, sc, fq.-r	10, st.-w : p.-cl, w : 0, d
7	4·1	9·4	SW	SW : SSW : SE	2·3	0·13	284	0, ho.-fr : 0 : 2, th.-cl	5, li.-cl : 9, oc.-r : 10, oc.-r
8	0·8	9·4	ESE : SE : SSW	SSW : SW	14·0	1·35	560	10 : p.-cl, oc.-r, w: 8, oc.-shs, hl, w	8, sc, slt.-sh, w: p.-cl, w : 2, li.-cl, w
9	0·5	9·5	SW : SSW : SE	S : WSW	14·8	1·37	563	9, st.-w : 9, slt.-sh : 10, c.-r, st.-w	v, shs.-r, st.-w: v, oc.-shs, w: 10, oc.-slt.-r, w
10	3·0	9·6	SW : SSW	SSW : S	12·8	0·70	408	10, w : p.-cl, sh.-r : 6, th.-cl, w	10 : 10, c.-r : 10, oc.-shs
11	0·0	9·6	SSW : SW	Variable : NW : SW	9·8	0·60	313	9, w : 10, w : 10, glm	10, gt.-glm : p.-cl, ho.-fr : 8, th.-cl, slt.-f
12	0·0	9·7	SW : S	S : SSW	18·2	1·51	537	0, ho.-fr : 0 : p.-cl, so.-ha	10, sc, fq.-r, w : 10, sc, fq.-r, st.-w
13	5·8	9·8	SSW : SW	SW : SSW	20·3	2·64	796	9, oc.-r : 9, shs.-r, st.-w : 7, cu.-s, li.-cl, st.-w	5, cu, li.-cl, sh.-r, st.-w : v, sh.-r, st.-w: 0, l, st.-w
14	4·1	9·8	SSW	SSW : W	13·0	1·25	602	p.-cl : 0 : 5, ci.-s, cu.-s, th.-cl, w	9, so.-ha : 9, oc.-r, w : p.-cl, sh.-r
15	0·1	9·9	W : SW	SSW : S	3·7	0·16	300	p.-cl, ho.-fr: 0 : 8, ci.-s, li.-cl, so.-ha	10 : p.-cl, l : 0, ho.-fr
16	3·3	9·9	SW : SSW	S : SE : ENE	3·3	0·25	325	p.-cl, ho.-fr: 0, ho.-fr : 5, cl, th.-cl, so.-ha	8, ci.-s, oc.-r : 10, r, sn : 10, r, sl, sn
17	0·0	10·0	ENE : Variable : W	NW : WSW : SW	4·7	0·41	352	10, r, sl : 10 : 10, slt.-r, sn	9, sn, sl : p.-cl : 0, ho.-fr
18	1·0	10·1	Variable : N : NNW	N : NW	2·9	0·24	272	p.-cl, ho.-fr : 9, ci.-s, cu.-s, n	7, ci.-s, cu.-s : 0, ho.-fr
19	1·7	10·1	NW : W	WSW : SSW : SW	4·7	0·24	316	0, ho.-fr : 0, ho.-fr, slt.-f : 6, th.-cl, slt.-f	4, th.-cl, so.-ha: 9 : 10, slt.-r
20	0·1	10·2	SW : WSW	SW	11·0	1·51	600	10, slt.-r, w : 10, sc, w	10, w : 10, sc, w
21	0·3	10·2	SW	SW	24·0	1·56	627	10, oc.-slt.-r : 10, sc, oc.-th.-r	10, sc, oc.-m.-r, st.-w : 10, sc, st.-w
22	0·7	10·3	WSW : W : NW	NNW : N : NNE	15·0	1·55	562	10, st.-w : 10, st.-w	10 : 10 : p.-cl
23	2·3	10·4	NE : E	ESE : E	0·6	0·00	123	10 : 9	9 : p.-cl
24	2·4	10·4	E : ENE	ENE : NE : NNE	1·9	0·08	209	10 : 6, cu, cu.-s, li.-cl	8, cu.-s : 10, slt.-sn : 10
25	0·0	10·5	NE : ENE	E : ENE : ESE	0·5	0·01	135	10 : 10, slt.-sn	10, slt.-sn : 10
26	0·0	10·6	SE	SE : E : ENE	2·3	0·07	191	10, th.-cl : 10 : 9, oc.-sn, so.-ha	10, oc.-sn : 10
27	1·0	10·6	ENE : NNE : NNW	NNE : ENE : E	0·7	0·03	160	10 : 10 : 8, th.-cl	9, so.-ha : 10 : 10
28	3·8	10·7	NNE : NE	NNE : ENE	3·2	0·16	276	p.-cl, ho.-fr: p.-cl : 5, cu, cu.-s, li.-cl, slt.-sn	p.-cl, oc.-sn : 9 : 10, slt.-sn
29	1·2	10·8	NNE : ENE : NE	E : NE	1·9	0·05	211	10, slt.-sn : 10, sn : 10, oc.-sn	9, sn : 10, sn
Means	1·8	9·9	...	...	...	0·61	363		
Number of Column for Reference.	19	20	21	22	23	24	25	26	27

The mean *Temperature of Evaporation* for the month was 37°·2, being 0°·6 *lower* than
The mean *Temperature of the Dew Point* for the month was 33°·9, being 1°·7 *lower* than
The mean *Degree of Humidity* for the month was 80·7, being 5·3 *less* than
The mean *Elastic Force of Vapour* for the month was 0in·195, being 0in·013 *less* than
The mean *Weight of Vapour in a Cubic Foot of Air* for the month was 2grs·3, being 0gr·1 *less* than
The mean *Weight of a Cubic Foot of Air* for the month was 546 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 7·3.

The mean proportion of *Sunshine* for the month (constant sunshine being represented by 1) was 0·178 The maximum daily amount of *Sunshine* was 5·8 hours on February 4 and 13.

The highest reading of the *Solar Radiation Thermometer* was 94°·0 on February 24; and the lowest reading of the *Terrestrial Radiation Thermometer* was 19°·0 on February 28.

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

The *Proportions of Wind* referred to the cardinal points were N. 3, E. 7, S. 12, and W. 7.

The *Greatest Pressure of the Wind* in the month was 24·0 lbs. on the square foot on February 21. The mean daily *Horizontal Movement of the Air* for the month was 363 miles; the greatest daily value was 796 miles on February 13; and the least daily value was 123 miles on February 23.

Rain fell on 19 days in the month, amounting to 2in·546, as measured by gauge No. 6 partly sunk below the ground; being 1in·062 *greater* than the average fall for the 50 years, 1841–1890.

MONTH and DAY, 1904.	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	Perigee	29·772	36·9	28·3	8·6	31·6	− 8·6	29·0	22·7	8·9	11·2	4·4	68	79·0	21·2	0·004	0·0	sP : ssP : ssP
2	Full	29·816	37·5	28·5	9·0	34·4	− 6·0	33·6	32·3	2·1	4·4	0·5	92	46·2	21·5	0·380	0·0	vP : vN, mP
3	In Equator	29·834	36·8	29·2	7·6	33·9	− 6·6	32·9	31·1	2·8	4·2	0·0	89	43·0	19·1	0·117	0·0	vP : vP : vP, ssN
4	...	29·787	38·4	32·7	5·7	36·1	− 4·6	35·3	34·1	2·0	3·8	0·0	93	45·4	31·8	0·000	2·0	mP
5	...	29·765	41·2	34·9	6·3	38·3	− 2·6	36·8	34·7	3·6	7·1	2·6	88	65·0	34·4	0·000	4·0	mP
6	...	29·626	38·2	34·1	4·1	36·8	− 4·3	36·0	34·9	1·9	3·8	1·1	93	43·1	32·8	0·117	0·0	wP, vN : wP : mP
7	...	29·464	44·5	36·2	8·3	39·8	− 1·2	39·3	38·6	1·2	1·8	0·2	96	47·0	33·4	0·120	0·0	mP : mP : ssN, vP
8	...	29·488	57·7	39·3	18·4	47·9	+ 7·0	45·0	41·8	6·1	14·6	0·7	81	99·8	32·5	0 002	0·0	wP, mN : wP : mP
9	Last Quarter	29·752	59·1	34·4	24·7	46·7	+ 5·9	44·0	40·9	5·8	11·0	0·0	81	93·0	26·8	0·000	0·2	mP : mP : vP, ssN
10	Greatest Declination S.	30·035	46·2	35·2	11·0	40·6	− 0·1	37·5	33·6	7·0	12·8	3·0	76	89·8	27·4	0·000	0·8	wP : mP : vP
11	...	30·167	47·4	32·0	15·4	39·1	− 1·5	36·2	32·4	6·7	13·9	1·7	78	88·0	22·5	0·000	0·0	wP : sP : vP
12	...	30·039	43·1	27·2	15·9	35·3	− 5·4	33·5	30·7	4·6	9·7	0·0	83	81·2	19·0	0·000	0·0	wP : mP : wP
13	...	29·717	47·9	30·9	17·9	38·7	− 2·2	35·9	32·2	6·5	12·3	1·6	78	91·0	20·5	0·000	0·0	wP : mP ...
14	Apogee	29·540	48·8	34·2	14·6	41·1	− 0·1	38·6	35·5	5·6	10·9	0·2	81	81·2	29·5	0·000	1·0	... : mP : sP
15	...	29·788	46·8	32·4	14·4	38·9	− 2·5	36·0	32·1	6·8	13·3	2·2	78	102·6	22·5	0·018	0·0	... : sP : mP
16	...	29·892	50·0	26·9	23·1	38·4	− 3·1	35·2	30·9	7·5	18·1	0·9	74	98·1	19·9	0·000	0·0	wP : vP : mP
17	New; In Equator	29·727	48·6	29·3	19·3	37·4	− 4·2	34·9	31·5	5·9	13·8	0·8	80	103·2	15·6	0·000	0·0	wP : mP : wP
18	...	29·846	52·9	26·4	26·5	41·3	− 0·3	38·0	33·9	7·4	14·2	0·0	75	90·0	21·2	0·000	0·0	vP : sP
19	...	29·964	55·5	41·4	14·1	48·6	+ 7·1	46·6	44·5	4·1	8·0	0·2	86	89·0	34·2	0·043	0·2	wP : mP : wP
20	...	29·899	53·5	46·3	7·2	49·2	+ 7·8	48·5	47·8	1·4	4·4	0·6	95	68·0	44·1	0·022	5·3	wwP, wwN : wP : wP
21	...	29·830	52·2	39·1	13·1	46·5	+ 5·1	44·4	42·0	4·5	10·7	1·9	85	71·0	31·4	0·045	9·5	wP : wP, wN : sP
22	...	30·047	54·0	31·8	22·2	44·1	+ 2·6	40·7	36·7	7·4	17·2	2·9	75	94·7	24·8	0·000	3·0	mP : sP : mP
23	...	30·111	46·3	39·0	7·3	43·4	+ 1·6	39·3	34·4	9·0	11·3	5·7	71	66·4	33·3	0·000	3·0	mP : sP : sP
24	Greatest Declination N. First Quarter	30·080	50·0	36·9	13·1	42·5	+ 0·4	38·2	33·0	9·5	14·3	3·7	70	106·8	29·4	0·000	1·0	wP : sP : sP
25	...	29·830	39·9	34·8	5·1	37·3	− 5·1	36·1	34·4	2·9	6·9	1·0	90	44·3	29·0	0·035	0·5	wP
26	...	29·910	48·9	35·3	13·6	42·1	− 0·8	39·7	36·7	5·4	10·3	0·5	82	89·3	29·8	0·003	1·5	... : mP : mP
27	...	30·092	43·9	31·7	12·2	39·0	− 4·3	37·8	36·2	2·8	6·8	1·1	90	88·0	23·0	0·000	0·0	wP
28	...	29·981	51·6	31·4	20·2	41·3	− 2·4	39·0	36 1	5·2	12·4	0·5	82	99·6	22·8	0·002	3·0	wP : mP : mP
29	Perigee	29·358	53·8	36·7	17·1	45·0	+ 0·9	42·7	40·0	5·0	14·0	1·5	83	94·7	32·4	0·197	0·0	vN, wP : mP, ssN : sP, ssN
30	In Equator	29·182	47·0	33·2	13·8	38·4	− 6·2	36·8	34·6	3·8	11·6	1·0	87	100·1	29·6	0·243	0·0	sP : ssP, ssN : ssP, ssN
31	Full	29·427	48·8	35·3	13·5	41·1	− 3·9	38·8	35·9	5·2	12·2	0·5	82	85·7	30·6	0·014	0·0	ssP : mP
Means	...	29·799	47·3	33·7	13·7	40·5	− 1·2	38·3	35·4	5·1	10·4	1·3	82·6	80·1	27·3	Sum 1·362	1·1	...
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 $29^{in}\cdot799$, being $0^{in}\cdot046$ *higher* than the average for the 50 years, 1841–1890.

TEMPERATURE OF THE AIR.

The highest in the month was 59°·1 on March 9; the lowest in the month was 26°·4 on March 18; and the range was 32°·7.
The mean of all the highest daily readings in the month was 47°·3, being 2°·4 *lower* than the average for the 50 years, 1841–1890.
The mean of all the lowest daily readings in the month was 33°·7, being 1°·3 *lower* than the average for the 50 years, 1841–1890.
The mean of the daily ranges was 13°·7, being 1°·0 *less* than the average for the 50 years, 1841–1890.
The mean for the month was 40°·5, being 1°·2 *lower* than the average for the 50 years, 1841–1890.

MONTH and DAY, 1904.	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.		
Mar. 1	1·4	10·8	NNE	NNE : N : NNW	2·0	0·10	258	10, slt.-sn, fr: p.-cl : 8, cu, cu.-s, li.-cl, slt.-sn	8, cu, cu.-s, n: th.-cl : 0, ho.-fr
2	0·0	10·9	NNW : N : NNE	NE : E	7·0	0·77	448	10, sn : 10, oc.-sn : 10, fq.-r, sl, sn, w	10, sc, slt.-r, w: 10, fq.-r, w : p.-cl
3	0·0	10·9	E : ENE : NE	NNE : NE	3·8	0·10	249	p.-cl, ho.-fr: p.-cl : 9, oc.-slt.-r	10, sc, oc.-slt.-r: 10, slt.-r, sl, sn: 10, sn, slt.-r, sl
4	0·0	11·0	NNE : NE	ENE : NE	3·6	0·26	319	10 : 10 : 10, oc.-slt.-r	10, sh.-r : 10 : 10
5	0·0	11·1	NE : ENE	ENE : NE	5·3	0·72	466	10 : 10	10, w : 10
6	0·0	11·1	NE : ENE	NE : ENE	2·9	0·15	279	10 : 10, oc.-slt.-r, sl, sn	10 : 10
7	0·0	11·2	NE : ENE : E	E : SSE	3·2	0·20	270	10 : 10	10, li.-shs : 10, fq.-r : p.-cl, oc.-r
8	6·8	11·3	SSE : S : SSW	S : SE	1·3	0·07	226	0 : p.-cl : 7, cu, slt.-sh	6, cu, th.-cl: p.-cl : p.-cl, d
9	5·5	11·4	Calm : NE	NE : E : NNE	5·8	0·25	229	p.-cl, f : 1, th.-cl, f	5, cu, th.-cl: 10 : 10, w
10	5·1	11·4	NNE : N	N	8·8	1·13	513	9, w : 10, w : 7, cu, cu.-s, th.-cl, w	5, cu, cu.-s, w : 0, d
11	6·6	11·5	N : NNE	N : E	1·1	0·07	187	p.-cl, ho.-fr : 8, cu, th.-cl	4, cu, li.-cl : 0 : 0, h, ho.-fr
12	2·3	11·6	Calm : NE : E	E : SE	0·7	0·03	131	0, tk.-f : p.-cl, f : 9	5 : 1, ci.-s : 0, ho.-fr
13	2·1	11·6	SSW	SW : SSW	1·5	0·05	206	10 : 8, th.-cl : 7, cu, th.-cl, so.-ha	p.-cl, cu, th.-cl: 2, ci, ci.-s : 0
14	0·9	11·7	S : SSW : SW	SW : SSW : NNW	1·1	0·02	211	0, h : 10, th.-cl : 10	9, ci.-s, th.-cl : 9
15	4·8	11·8	N : NNE : NE	ENE : ESE	1·4	0·09	214	10, sl : li.-cl : 7, cu, th.-cl	4, cu.-s, ci.-s: p.-cl : p.-cl, ho.-fr
16	7·8	11·8	SSW : S	SE : ESE	0·5	0·03	154	p.-cl, ho.-fr : 5, ci, ci.-s, ci.-cu	6, li.-cl : 6, ci.-cu : p.-cl
17	8·3	11·9	E : NE : ENE	ESE : SE : SSE	0·7	0·02	154	0, ho.-fr : 0 : 1, li.-cl	1, li.-cl : 0 : 0, h, ho.-fr
18	3·8	12·0	Variable : WSW	WSW : W : SW	0·7	0·03	159	0, h, ho.-fr: 0, h : 2, th.-cl, slt.-f	7, cu.-s, li.-cl : 10
19	0·5	12·0	WSW : W	W : SW	1·5	0·11	257	10 : 8, ci.-cu, ci.-s, th.-cl	10 : 10, fq.-r : 10, sh.-r
20	0·0	12·1	WSW	SW : WSW	2·2	0·12	264	10, sh.-r : 10, li.-shs : 10	10 : 10
21	0·0	12·2	SW : WSW	WNW : NNE	3·7	0·24	304	10 : 10	10, fq.-th.-r, glm : p.-cl : 0
22	7·5	12·2	N : W	WNW : W	6·5	0·52	401	0, ho.-fr : 0 : 3, th.-cl, w	7, cu, th.-cl, w: p.-cl, li.-shs : p.-cl, l
23	0·5	12·3	N : NNE	NNE : NE	7·0	1·13	491	0 : 10, sc, w	10, sc, w : 9, sc, w : 9, w
24	5·1	12·4	NE : ENE	E : ENE : NE	5·4	0·90	498	10, w : 10 : 9, cu.-s, w	8, cu, cu.-s, w: ci.-s, th.-cl, lu.-ha : 9
25	0·0	12·4	NE : ENE	ENE : NE	2·2	0·20	296	10, slt.-r : 10, sc, fq.-th.-r	10, sc, oc.-th.-r : 10
26	0·6	12·5	NE	ENE : NNE	0·2	0·00	103	10 : 10	10 : 10
27	2·3	12·6	ENE	ESE : SE : SSE	0·1	0·00	122	10 : 10	8 : p.-cl : 0, h
28	4·3	12·6	SSE : SW	SW : SSW	5·2	0·20	255	p.-cl : 10 : 7	2, ci, ci.-s, th.-cl : 10, fq.-r, l, w
29	2·9	12·7	SW : WSW	WSW	8·8	1·03	501	10, fq.-r, w: 10, sq, hy.-sh, hl: 8, cu.-s, th.-cl, w	v, fq.-r, hl, t.-sm, w: p.-cl : p.-cl, sh.-r, lu.-ha, w
30	4·3	12·8	W	Variable	6·3	0·36	330	10 : p.-cl : 8, sn, r, so.-ha	9, oc.-sn : 9, hy.-shs, hl, sn: 9, oc.-r
31	1·6	12·8	WNW : NNE : NE	SW : SSW	4·2	0·25	286	10 : 10 : 9, gt.-glm	10 : 10 : 9, fq.-th.-r, lu.-ha
Means	2·7	11·8	...	...	...	0·30	284		
Number of Column for Reference.	19	20	21	22	23	24	25	26	27

The mean *Temperature of Evaporation* for the month was 38°·3, being 1°·0 *lower* than
The mean *Temperature of the Dew Point* for the month was 35°·4, being 0°·9 *lower* than
The mean *Degree of Humidity* for the month was 82·6, being 1·5 *greater* than
The mean *Elastic Force of Vapour* for the month was 0in·207, being 0in·007 *less* than
The mean *Weight of Vapour in a Cubic Foot of Air* for the month was 2grs·4, being 0gr·1 *less* than
The mean *Weight of a Cubic Foot of Air* for the month was 552 grains, being 2 grains *greater* than
} the average for the 50 years, 1841–1890.

The mean amount of *Cloud* for the month (a clear sky being represented by 0, and an overcast sky by 10) was 7·5.

The mean proportion of *Sunshine* for the month (constant sunshine being represented by 1) was 0·232. The maximum daily amount of *Sunshine* was 8·3 hours on March 17.

The highest reading of the *Solar Radiation Thermometer* was 106°·8 on March 24; and the lowest reading of the *Terrestrial Radiation Thermometer* was 15°·6 on March 17.

The mean daily distribution of *Ozone* for the 12 hours ending 9h was 0·3; for the 6 hours ending 15h was 0·7; and for the 6 hours ending 21h was 0·1.

The *Proportions of Wind* referred to the cardinal points were N. 9, E. 9, S. 5, and W. 7. One day was calm.

The *Greatest Pressure of the Wind* in the month was 8·8 lbs. on the square foot on March 10 and 29. The mean daily *Horizontal Movement of the Air* for the month was 284 miles; the greatest daily value was 513 miles on March 10; and the least daily value was 103 miles on March 26.

Rain fell on 12 days in the month, amounting to 1in·362, as measured by gauge No. 6 partly sunk below the ground; being 0in·099 *less* than the average fall for the 50 years, 1841–1890.

MONTH and DAY, 1904.	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	...	29·623	52·5	39·3	13·2	45·4	0·0	39·8	33·4	12·0	19·7	2·4	63	110·8	34·4	0·010	0·0	mP, ssN : mP : sP
2	...	29·963	55·7	39·2	16·5	46·2	+ 0·5	41·7	36·6	9·6	18·6	2·1	70	107·2	34·0	0·003	0·0	mP
3	...	29·755	55·6	43·5	12·1	48·8	+ 2·8	44·0	38·8	10·0	23·2	1·9	68	107·2	38·0	0·076	0·0	wP, wN : wP : mP, vN
4	...	29·857	51·3	38·5	12·8	45·3	− 0·9	41·2	36·5	8·8	15·1	2·5	72	92·4	33·4	0·093	0·0	vP, ssN : sP, ssN : sP
5	...	29·882	54·0	42·8	11·2	48·6	+ 2·4	46·1	43·4	5·2	7·8	2·4	83	75·8	38·4	0·103	0·0	vP, vN : wP : mP
6	Greatest Declination S.	29·700	57·1	40·8	16·3	51·4	+ 5·2	46·7	41·8	9·6	18·6	2·1	70	103·4	34·5	0·080	0·0	wP, wN : mP : sP
7	Last Quarter	29·710	53·5	37·3	16·2	46·1	0·0	41·3	35·8	10·3	18·4	2·5	68	88·3	31·4	0·004	0·0	mP : vP, sN : ssP
8	...	29·802	64·0	43·2	20·8	51·7	+ 5·8	48·7	45·7	6·0	12·3	1·1	80	100·0	40·8	0·009	0·0	mP
9	...	29·779	55·3	40·5	14·8	49·5	+ 3·9	44·3	38·7	10·8	21·2	4·2	66	108·0	34·6	0·009	0·5	wP : vP : sP
10	Apogee	29·850	52·0	37·8	14·2	44·2	− 1·3	39·2	33·3	10·9	18·5	5·1	65	99·0	32·0	0·000	1·5	mP
11	...	29·877	56·6	36·5	20·1	45·8	+ 0·3	41·1	35·7	10·1	17·7	1·9	69	100·8	30·4	0·000	0·0	mP : sP : mP
12	...	29·622	61·1	37·2	23·9	51·7	+ 6·0	45·7	39·6	12·1	20·9	5·7	64	113·7	28·1	0·000	0·0	... : mP
13	In Equator	29·315	57·9	49·0	8·9	53·3	+ 7·3	48·9	44·5	8·8	18·2	1·8	72	112·3	40·5	0·168	0·0	vP, ssN : mP : sP
14	...	29·398	66·9	42·8	24·1	55·3	+ 8·9	51·5	47·9	7·4	15·1	2·9	77	128·6	34·6	0·000	0·0	mP : wP : mP
15	New	29·309	58·6	42·0	16·6	52·2	+ 5·3	50·5	48·8	3·4	6·3	1·5	88	73·3	32·4	0·155	0·0	mP : mP, sN : sP
16	...	29·582	60·3	39·0	21·3	49·0	+ 1·7	45·5	41·7	7·3	16·9	0·4	76	101·6	28·0	0·000	0·0	sP
17	...	29·745	63·6	37·5	26·1	51·0	+ 3·3	45·6	40·0	11·0	19·2	0·5	66	125·3	29·0	0·000	0·0	mP : wP : vP
18	...	29·935	63·1	34·5	28·6	51·0	+ 2·9	45·2	39·2	11·8	20·5	1·8	64	122·0	26·8	0·000	0·0	mP : vP : mP
19	...	29·938	63·9	40·9	23·0	52·2	+ 3·9	46·1	39·9	12·3	21·6	2·9	64	115·0	31·9	0·000	0·0	mP : sP : sP
20	Greatest Declination N.	29·780	64·0	41·1	22·9	51·4	+ 2·9	46·5	41·4	10·0	19·4	1·5	69	124·2	36·0	0·000	0·0	mP : sP : sP
21	...	29·910	51·9	36·1	15·8	45·7	− 2·8	42·1	38·0	7·7	13·0	4·0	75	104·0	29·0	0·000	2·0	mP : sP : sP
22	...	29·744	54·7	33·2	21·5	45·2	− 3·3	42·5	39·4	5·8	13·6	0·8	80	93·1	25·5	0·160	1·0	mP : vP : ssN, sP
23	First Quarter	29·684	56·9	44·4	12·5	49·6	+ 1·2	46·9	44·0	5·6	12·0	1·5	82	118 6	41·5	0·084	7·0	ssP, ssN : mP : sP
24	...	29·922	60·9	46·2	14·7	52·4	+ 4·0	48·6	44·7	7·7	12·9	2·1	76	101·5	35·0	0·000	4·7	mP
25	...	29·953	54·4	41·3	13·1	47·8	− 0·6	41·4	34·3	13·5	19·4	2·1	59	109·0	32·5	0·000	5·3	mP : sP : ssP
26	Perigee	29·996	51·8	33·8	18·0	45·1	− 3·3	39·5	33·0	12·1	17·2	4·0	63	81·0	25·0	0·000	0·0	ssP
27	In Equator	29 924	56·9	39·2	17·7	47·9	− 0·6	43·1	37·8	10·1	18·7	1·8	69	106·0	30·2	0·002	0·0	sP, ssN : ssP : ssP
28	...	29·913	58·9	45·1	13·8	50·9	+ 2·3	47·9	44·8	6·1	11·8	2·1	80	108·7	34·2	0·000	2·0	mP
29	Full	29·808	56·3	48·5	7·8	51·8	+ 3·0	50·0	48·2	3·6	6·4	1·6	87	76·9	45·0	0·015	10·8	wP : wP : mP
30	...	29·775	60·6	49·3	11·3	53·7	+ 4·7	50·6	47·6	6·1	12·2	1·8	79	100·0	42·7	0·034	7·2	wP : wP : sP
Means	...	29·768	57·7	40·7	17·0	49·3	+ 2·2	45·1	40·5	8·9	16·2	2·3	72·1	103·6	33·7	Sum 1·005	1·4	...
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}·768, being 0^{in}·027 *higher* than the average for the 50 years, 1841–1890.

TEMPERATURE OF THE AIR.

The highest in the month was 66°·9 on April 14; the lowest in the month was 33°·2 on April 22; and the range was 33°·7.
The mean of all the highest daily readings in the month was 57°·7, 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 40°·7, being 1°·8 *higher* than the average for the 50 years, 1841–1890.
The mean of the daily ranges was 17°·0, being 1°·3 *less* than the average for the 50 years, 1841–1890.
The mean for the month was 49°·3, being 2°·2 *higher* than the average for the 50 years, 1841–1890.

MONTH and DAY, 1904.	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	10·4	12·9	WSW	WNW : W	12·0	1·39	592	p.-cl,slt.-r,sq: p.-cl : 8, cu, cu.-s,li.-cl,w	7,cu,cu.-s,st.-w : ci, ci.-s, st.-w : 0, w
2	3·7	13·0	W : WSW	WSW : SW	8·0	0·75	458	p.-cl : 10 : 6,cu.-s,ci.-s,so.-ha	8, cu.-s, ci.-s, w : 10, oc.-slt.-r, w
3	7·4	13·0	SW : WNW	W	14·4	1·90	648	10, oc.-r, st.-w : 10, r, st.-w : 5, cu, th.-cl, w	th.-cl, w : p.-cl, oc.-shs, w
4	6·9	13·1	W : WNW	WNW : W : WSW	11·7	0·83	480	9,hy.-sh,w: p.-cl, sq : 6, cu, th.-cl	p.-cl, slt.-r, w : th.-cl : p.-cl
5	0·1	13·1	WSW	W : WSW	8·0	0·87	517	9 : 10, oc.-r, w: 10, sc, w	10, sc, w : 9
6	8·8	13·2	WSW : WNW	NW : WNW : SW	10·3	1·37	572	10 : 10, oc.-r, st.-w : 4, cu th.-cl, w	1, th.-cl : 1, th.-cl : 0
7	3·4	13·3	WSW : W	NW : WNW : W	7·0	1·11	498	p.-cl : 10 : 8, cu.-s, li.-cl, w	v, li.-shs, w : 8, ci.-s, cu.-s, w : 10
8	1·4	13·3	W : WSW	W	6·2	0·40	359	10 : 10, oc.-r : 10	7 : p.-cl
9	5·5	13·4	WSW : WNW	WNW : W	11·0	1·18	563	9 : 10, th.-r, glm,w : 9, slt.-sh	7, cu, ci.-s, th.-cl,w : 6, cu, ci.-s, w: 2, w
10	6·1	13·5	W : WNW	WNW : NW	8·0	1·28	564	0 : 0 : 8, cu.-s, li.-cl, w	9,cu.-s,li.-cl,w: 9, w : p.-cl
11	11·3	13·5	W : NW : NNW	NW : W : SW	1·4	0·06	242	0 : 0 : 3, th.-cl	1, th.-cl : 1, th.-cl, h
12	6·9	13·6	SSE	SSE : S	4·7	0·30	278	10 : 8 : 7, ci.-cu, ci.-s, th.-cl, so.-ha	5, ci.-cu, ci.-s, th.-cl : th.-cl
13	4·9	13·6	S : SW	WSW : SW	14·0	0·89	451	5, r, l, t : 10, fq.-r : 9, sc, fq.-r, w	5, cu, ci, ci.-s: 4, th.-cl, so.-ha: 9
14	3·7	13·7	SSW : S	Variable : S	3·6	0·13	224	0 : p.-cl : 6, cu, ci.-s, th.-cl	p.-cl : 10 : 10
15	0·1	13·8	Variable : Calm : NE	NW : WSW : SW	2·9	0·09	162	10, slt.-r : 10 : 10	10, fq.-r, glm : 6, ci.-s, th.-cl: 1, th.-cl
16	3·9	13·8	WSW : SW : W	NNE : Variable	0·4	0·01	147	5, d : 10 : 8, cu, th.-cl	5, cu, ci.-s, th.-cl: 2, cu, th.-cl : th.-cl, d
17	8·3	13·9	WSW : SE	W : WSW : SW	1·0	0·03	154	th.-cl : p.-cl : 6, cu, th.-cl	3, th.-cl : 1, th.-cl
18	6·0	14·0	WSW : E	ESE : NE	3·7	0·08	197	0, ho.-fr : 8, cu, ci.-cu, th.-cl	p.-cl : 0 : 0
19	9·5	14·0	NE : NNE : ENE	ENE : NNE	4·7	0·30	328	0 : p.-cl : 5, th.-cl, so.-ha	4, cu, th.-cl : 1, li.-cl : 0, lu.-co
20	10·2	14·1	NNE	NNE	4·1	0·29	293	9 : 10 : 3, ci.-s, th.-cl	1,ci,ci.-s,so.-ha,prh: 1, th.-cl : p.-cl
21	1·5	14·2	N : NNE	NNE : NE	5·9	0·99	386	9 : 10, w : 9, sc, w	10, sc, w : p.-cl : 0, d
22	0·0	14·2	WSW : SW	WSW : SW : NW	5·1	0·42	350	p.-cl : 10 : 9	10, sc, fq.-r, w : 10, sc, oc.-slt.-r
23	3·4	14·3	Variable	E : ESE : N	2·5	0·13	239	10 : 10, fq.-r : 9, cu.-s, th.-cl	8,cu.-s,ci.-s,li.-cl: 9 : 10
24	2·3	14·3	WNW : NNW	NW : W : WSW	1·8	0·08	231	10 : 10	p.-cl : 7, cu.-s, ci, ci.-s : p.-cl,lu.-ha,lu.-co
25	10·6	14·4	N : NNW	N	4·6	0·52	361	p.-cl : 0 : 4, cu.-s, ci.-s, w	6, cu, cu.-s, li.-cl: p.-cl : 0
26	2·1	14·5	NNW : SW : WNW	WNW : W : WSW	2·1	0·10	250	p.-cl, ho.-fr: 1, li.-cl : p.-cl, so.-ha	9, cu.-s, n : 10 : p.-cl
27	5·0	14·5	WSW : NNW	NW : WSW	2·4	0·15	286	0 : 9, li.-shs : 8, cu, n, th.-cl	7, cu, n, th.-cl, so.-ha: 1
28	1·8	14·6	WSW	WSW : W : SW	2·7	0·23	338	p.-cl : 9 : 9, so.-ha	p.-cl : 10 : 9
29	0·0	14·6	WSW : SW	WSW : SW	3·3	0·43	407	10 : 10	10, oc.-slt.-r : 10
30	0·1	14·7	SW : WSW	WSW : W	3·1	0·22	306	10 : 9, slt.-r : 10	10, li.-sh : 9 : 9
Means	4·8	13·8	...	...	...	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 45°·1, being 1°·2 *higher* than
The mean *Temperature of the Dew Point* for the month was 40°·5, being 0°·3 *higher* than
The mean *Degree of Humidity* for the month was 72·1, being 4·5 *less* than
The mean *Elastic Force of Vapour* for the month was 0in·252, being 0in·003 *greater* than
The mean *Weight of Vapour in a Cubic Foot of Air* for the month was 2grs·9, being the *same* as
The mean *Weight of a Cubic Foot of Air* for the month was 542 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 6·7.

The mean proportion of *Sunshine* for the month (constant sunshine being represented by 1) was 0·351. The maximum daily amount of *Sunshine* was 11·3 hours on April 11.

The highest reading of the *Solar Radiation Thermometer* was 128°·6 on April 14; and the lowest reading of the *Terrestrial Radiation Thermometer* was 25°·0 on April 26.

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

The *Proportions of Wind* referred to the cardinal points were N. 5, E. 2, S. 5, and W. 17. One day was calm.

The *Greatest Pressure of the Wind* in the month was 14·4 lbs. on the square foot on April 3. The mean daily *Horizontal Movement of the Air* for the month was 363 miles; the greatest daily value was 648 miles on April 3; and the least daily value was 147 miles on April 16.

Rain fell on 13 days in the month, amounting to 1in·005, as measured by gauge No. 6 partly sunk below the ground; being 0in·656 *less* than the average fall for the 50 years, 1841–1890.

MONTH and DAY, 1904.	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	...	29·812	63·0	45·6	17·4	51·8	+ 2·6	45·3	38·7	13·1	20·8	4·8	61	101·0	41·1	0·000	4·0	mP : wP : mP
2	...	29·573	54·6	44·3	10·3	48·9	− 0·5	46·4	43·7	5·2	8·4	1·4	82	78·0	38·0	0·391	6·0	wP, vN : wP, vN : sP
3	Greatest Declination S.	29·834	57·6	39·2	18·4	48·4	− 1·3	43·5	38·1	10·3	17·3	1·8	68	122·8	32·0	0·000	4·0	sP
4	...	29·947	60·1	40·8	19·3	50·2	+ 0·2	45·1	39·7	10·5	17·9	2·4	68	127·1	32·6	0·000	4·0	sP : ssP : vP
5	...	29·838	63·9	42·8	21·1	53·2	+ 2·9	48·3	43·4	9·8	20·3	2·7	70	139·0	33·1	0·000	2·0	wP : wP : mP
6	...	29·513	58·5	43·5	15·0	47·8	− 2·8	44·4	40·7	7·1	17·7	0·0	77	121·0	40·0	0·109	1·5	mN, mP : ssP, ssN : mP, vN
7	Last Quarter	29·362	49·2	40·4	8·8	44·8	− 6·0	42·1	38·9	5·9	9·0	2·9	80	81·0	33·0	0·045	4·5	wP : vN, mP : mP
8	Apogee	29·365	47·5	37·2	10·3	41·9	− 9·1	39·4	36·3	5·6	10·7	1·1	82	81·2	30·4	0·032	0·0	wP, wN : wP : wP
9	...	29·579	54·5	34·2	20·3	44·6	− 6·6	41·3	37·5	7·1	14·2	0·5	75	95·9	28·6	0·004	0·0	wP
10	...	29·682	50·2	40·6	9·6	45·0	− 6·5	43·5	41·8	3·2	8·4	1·7	88	77·0	34·0	0·237	0·0	wP, vN : mP
11	In Equator	29·952	56·9	36·2	20·7	47·4	− 4·3	45·3	43·0	4·4	11·6	0·5	86	105·0	28·9	0·000	2·8	wP
12	...	30·005	64·1	43·5	20·6	54·3	+ 2·3	51·6	49·0	5·3	11·4	1·1	82	116·3	39·4	0·019	5·7	wP
13	...	30·025	68·5	49·5	19·0	58·4	+ 6·1	55·1	52·1	6·3	13·1	0·4	80	122·0	45·3	0·000	9·0	wP
14	...	29·847	69·9	49·6	20·3	60·8	+ 8·2	55·0	50·0	10·8	20·5	3·0	67	123·8	42·6	0·000	6·3	wP : wP : mP
15	New	29·898	68·9	44·4	24·5	55·8	+ 3·0	50·2	45·0	10·8	23·8	0·6	67	124·8	37·0	0·000	7·4	mP : wP
16	...	29·824	72·6	42·5	30·1	60·8	+ 7·7	53·9	47·9	12·9	25·6	1·7	62	131·7	32·7	0·000	5·0	mP : wP, ssN : mP
17	...	29·655	68·6	49·7	18·9	60·3	+ 7·0	53·9	48·3	12·0	23·6	4·2	64	120·0	44·5	0·000	4·5	wP : mP : mP
18	Greatest Declination N.	29·796	62·9	46·0	16·9	52·6	− 1·0	46·7	40·8	11·8	21·5	4·2	65	126·6	39·4	0·000	5·8	mP : wP, wN : mP
19	...	29·967	61·0	42·2	18·8	51·9	− 2·0	45·5	39·0	12·9	21·1	2·6	62	122·6	35·4	0·000	7·5	mP : sP : sP
20	...	30·000	62·2	39·2	23·0	50·7	− 3·5	45·7	40·5	10·2	19·4	1·5	69	125·2	28·0	0·012	8·8	vP : wP, wwN : wP
21	...	29·759	49·8	46·1	3·7	48·2	− 6·4	46·7	45·1	3·1	4·8	1·9	89	69·2	43·0	0·343	7·2	wwP, wN : wwP : wwP
22	First Quarter : Perigee	29·826	59·9	47·1	12·8	51·8	− 3·2	50·0	48·2	3·6	7·6	0·6	87	99·0	46·6	0·000	0·0	wP
23	...	29·810	67·9	49·8	18·1	56·8	+ 1·5	51·9	47·4	9·4	18·9	0·6	71	131·0	46·0	0·004	2·0	wwP : wP
24	In Equator	29·791	55·9	50·4	5·5	52·9	− 2·7	51·7	50·5	2·4	4·8	0·4	92	73·9	48·8	0·112	13·0	wP : wP : mP
25	...	29·718	68·9	49·8	19·1	57·9	+ 2·2	55·5	53·3	4·6	12·6	0·4	85	120·0	42·4	0·045	0·0	wP
26	...	29·654	75·1	46·5	28·6	62·6	+ 6·7	59·8	57·4	5·2	14·1	0·2	84	125·6	38·7	0·000	3·0	wP
27	...	29·709	70·8	55·7	15·1	62·0	+ 6·0	60·5	59·2	2·8	10·4	0·6	91	122·7	53·0	0·063	7·0	wP
28	...	29·882	62·9	54·2	8·7	58·1	+ 2·1	56·4	54·9	3·2	7·4	0·0	89	83·2	50·3	0·078	5·0	wP
29	Full	29·969	68·8	54·2	14·6	61·1	+ 4·9	57·2	53·8	7·3	14·4	1·9	78	112·2	46·6	0·000	6·5	wP
30	...	29·851	66·7	52·2	14·5	59·0	+ 2·5	56·9	55·0	4·0	9·2	1·0	87	128·3	50·3	0·022	12·2	wwP : wP
31	Greatest Declination S.	29·735	60·9	49·0	11·9	56·6	− 0·2	55·6	54·7	1·9	3·2	0·8	94	71·6	37·7	0·407	14·3	wP : wN, wP : wP
Means	...	29·780	62·0	45·4	16·6	53·4	+ 0·3	49·8	46·3	7·2	14·3	1·5	77·5	109·0	39·3	Sum 1·923	5·1	...
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 $29^{in}\cdot780$, being $0^{in}\cdot006$ *lower* than the average for the 50 years, 1841–1890.

TEMPERATURE OF THE AIR.

The highest in the month was 75°·1 on May 26; the lowest in the month was 34°·2 on May 9; and the range was 40°·9.
The mean of all the highest daily readings in the month was 62°·0, 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 45°·4, being 1°·7 *higher* than the average for the 50 years, 1841–1890.
The mean of the daily ranges was 16°·6, being 3°·8 *less* than the average for the 50 years, 1841–1890.
The mean for the month was 53°·4, being 0°·3 *higher* than the average for the 50 years, 1841–1890.

MONTH and DAY, 1904.	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.		
May 1	7·1	14·8	W : WSW	WSW : SW	2·5	0·25	269	10 : 9 : 6, ci, ci.-s, ci.-cu, so.-ha	4, cu, ci, ci.-s : p.-cl
2	0·1	14·8	SW : W : WSW	Variable : W	15·0	0·90	494	10, slt.-r, w : 10, slt.-r	10, slt.-r, glm, w : p.-cl : p.-cl, ci.-s
3	7·5	14·9	WSW : W	W	3·0	0·33	335	0 : 0 : 7, ci, ci.-cu, ci.-s, so.-ha	9, ci.-s : p.-cl, cu.-s, ci.-s, li.-cl : p.-cl
4	9·3	14·9	WNW : N	NNE : SE : SSE	1·2	0·07	192	p.-cl, sh.-r : 1, d : 6, cu, cu.-s, li.-cl	6, cu, li.-cl : 6, th.-cl : p.-cl
5	7·1	15·0	SSW : SW	SW : WSW	3·0	0·26	309	10 : p.-cl : 6, ci, ci.-s, ci.-cu, so.-ha	7, ci.-s, th.-cl, so.-ha : 9
6	5·9	15·1	W : WNW	WSW	4·5	0·35	344	10, oc.-r : 10 : 8, cu, ci.-s, li.-sh, so.-ha	8, cu, n, hy.-sh, hl, t : 9, fq.-r : 9, oc.-slt.-r, l
7	0·0	15·1	WSW : W	NNW : N	1·9	0·18	272	10 : 10 : 10, fq.-r	10, oc.-slt.-r : 10 : p.-cl
8	0·0	15·1	N : NNE : ENE	Variable	0·5	0·01	136	9 : 10, oc.-slt.-r	10 : 10, oc.-slt.-r : 10
9	0·8	15·2	WSW	W : WSW : SW	1·9	0·12	256	10 : 10	9, oc.-slt.-r : p.-cl, slt.-sh : p.-cl
10	0·3	15·3	SSW : Variable	N : Variable	1·2	0·04	142	9 : 10, th.-r : 10, th.-r	10 : 10 : p.-cl
11	1·5	15·3	NNE : NE	Variable : SE : S	0·5	0·00	106	0, slt.-f, hy.-d : p.-cl : 9, th.-cl	9, cu, cu.-s, th.-cl : th.-cl : p.-cl
12	0·9	15·4	SSE : WSW	WSW : SW	0·5	0·02	145	10, slt.-sh : 10, oc.-slt.-r : 9	9 : p.-cl : p.-cl, d
13	2·7	15·4	SW	SW : SSW : S	1·8	0·15	247	10 : 10 : 9, th.-cl, so.-ha	9, th.-cl, so.-ha : li.-cl : 10
14	7·8	15·5	SSW : SW : WSW	W	4·8	0·46	360	10 : 10 : 9, ci.-s, so.-ha	4, ci, th.-cl : 2, cu : 0
15	11·0	15·5	WSW	WSW : SW	1·4	0·07	229	0 : 0 : 1, cu, th.-cl	2, ci, so.-ha : 3, ci, ci.-s : 1, th.-cl
16	8·6	15·6	WSW : SE : S	S : SSE : SE	2·6	0·13	200	0 : 0 : 5, ci.-cu, th.-cl, so.-ha	8, ci, ci.-s, ci.-cu, so.-ha : 5, th.-cl : p.-cl
17	8·3	15·6	SW : W	W	4·1	0·62	421	p.-cl : 10 : 8, cu, th.-cl	5, cu, ci.-s, th.-cl : 8
18	11·7	15·7	W : WSW	W : WNW	7·0	0·76	475	p.-cl : 5, cu, th.-cl	7, cu, li.-cl, w : 7, cu, cu.-s, li.-cl, li.-shs, w : 0
19	11·8	15·7	WSW : NNW	NNW : N	2·5	0·19	268	0 : 4, cu, th.-cl	4, cu, ci.-s, li.-cl : 0
20	7·1	15·7	NE : SE : ESE	ESE : E	3·7	0·44	297	p.-cl : 3, ci.-s, th.-cl, so.-ha	5, ci.-s, so.-ha : p.-cl, slt.-sh : p.-cl, slt.-r, lu.-ha, lu.-co
21	0·0	15·8	E	E : NE : NNE	4·4	0·31	290	10, shs.-r : 10, c.-r : 10, sc, fq.-r	10, oc.-slt.-r : 10
22	0·1	15·8	Variable : Calm	NE : ENE	0·0	0·00	69	10 : 10	10, gt.-glm, slt.-r : 10 : 10, m
23	7·4	15·9	Calm : SW	WSW : SW	2·7	0·25	215	10, m : 10 : 6, cu, th.-cl	7, cu, s, so.-ha : p.-cl, so.-ha : 9, oc.-slt.-r
24	0·0	15·9	SW	SW	4·1	0·53	344	10, oc.-slt.-r : 10, sc, oc.-slt.-r	10, sc, oc.-slt.-r : 10, sc, oc.-slt.-r
25	3·8	16·0	Variable : ENE : ESE	ESE : SE	0·4	0·00	136	10, slt.-r : 10, oc.-slt.-r : 9, so.-ha	10, th.-cl : 2, th.-cl : 0
26	1·1	16·0	SE	SE : ESE	0·6	0·00	91	p.-cl, m : 9 : 10	9 : 9
27	2·6	16·1	Variable : WSW	WSW : SW : SSW	2·6	0·17	218	9 : 10 : 10, shs.-r, t, glm	8, cu, cu.-s, ci.-s : 10, oc.-slt.-r
28	0·0	16·1	SW : WSW	WSW : W : WNW	1·4	0·09	270	10, oc.-slt.-r : 10 : 10	10 : 10
29	7·1	16·1	W : N : NNE	NNE : NE : E	1·1	0·07	194	10 : p.-cl : 3, th.-cl	th.-cl : 10 : 10
30	4·1	16·2	E	E	3·1	0·30	287	10, oc.-th.-r : 10, th.-r : 8, cu, th.-cl	6, cu, th.-cl : 5, li.-cl : p.-cl, l
31	0·1	16·2	E : ESE : SW	SW : S	1·0	0·03	154	p.-cl, m : 10, slt.-r : 10, c.-r	10, slt.-r : p.-cl : 2, th.-cl
Means	4·4	15·5	...	...	...	0·23	250		
Number of Column for Reference.	19	20	21	22	23	24	25	26	27

The mean *Temperature of Evaporation* for the month was 49°·8, being 0°·6 *higher* than
The mean *Temperature of the Dew Point* for the month was 46°·3, being 1°·0 *higher* than
The mean *Degree of Humidity* for the month was 77·5, being 2·5 *greater* than
The mean *Elastic Force of Vapour* for the month was 0in·315, being 0in·012 *greater* than
The mean *Weight of Vapour in a Cubic Foot of Air* for the month was 3grs·5, being 0gr·1 *greater* than
The mean *Weight of a Cubic Foot of Air* for the month was 537 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 7·3.

The mean proportion of *Sunshine* for the month (constant sunshine being represented by 1) was 0·282. The maximum daily amount of *Sunshine* was 11·8 hours on May 19.

The highest reading of the *Solar Radiation Thermometer* was 139°·0 on May 5; and the lowest reading of the *Terrestrial Radiation Thermometer* was 28°·0 on May 20.

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

The *Proportions of Wind* referred to the cardinal points were N. 4, E. 5, S. 7, and W. 13. Two days were calm.

The *Greatest Pressure of the Wind* in the month was 15·0 lbs. on the square foot on May 2. The mean daily *Horizontal Movement of the Air* for the month was 250 miles; the greatest daily value was 494 miles on May 2; and the least daily value was 69 miles on May 22.

Rain fell on 14 days in the month, amounting to 1in·923, as measured by gauge No. 6 partly sunk below the ground; being 0in·080 *less* than the average fall for the 50 years, 1841–1890.

MONTH and DAY, 1904.	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	...	29·728	61·9	48·7	13·2	53·5	− 3·7	51·8	50·2	3·3	7·4	0·8	89	90·3	37·0	0·278	8·0	wP, wN : wP, sN : wP
2	...	29·918	58·1	49·2	8·9	53·9	− 3·8	51·7	49·6	4·3	10·2	1·6	86	92·4	45·1	0·000	1·0	wP
3	...	30·058	63·9	47·0	16·9	53·7	− 4·3	50·6	47·6	6·1	13·7	1·3	79	124·5	38·0	0·000	5·0	wP
4	...	30·097	68·1	43·9	24·2	55·3	− 2·9	51·1	47·1	8·2	17·5	0·6	74	128·8	34·6	0·000	1·0	mP : wP
5	Apogee	30·072	70·5	46·7	23·8	59·0	+ 0·7	52·5	46·7	12·3	21·6	2·7	63	135·4	45·8	0·000	9·0	wP
6	Last Quarter	29·997	71·2	46·8	24·4	57·9	− 0·4	52·7	48·0	9·9	20·5	1·9	70	134·0	43·8	0·000	7·0	wP : mP : wP
7	In Equator	29·959	66·0	48·4	17·6	55·5	− 2·7	51·0	46·8	8·7	16·2	1·5	73	129·1	46·1	0·000	4·0	wP
8	...	29·847	63·8	47·4	16·4	53·0	− 5·2	48·8	44·6	8·4	17·1	5·9	73	123·3	45·0	0·000	0·5	wP : mP : mP
9	...	29·659	59·9	47·0	12·9	52·9	− 5·3	48·1	43·3	9·6	15·4	4·2	70	119·7	44·4	0·005	1·5	mP
10	...	29·645	64·9	50·4	14·5	57·3	− 0·9	54·6	52·2	5·1	9·5	0·2	83	119·6	44·4	0·106	0·0	wP, wwN : wP : mP
11	...	29·805	61·9	50·2	11·7	55·3	− 3·1	53·2	51·2	4·1	7·0	2·4	87	98·8	44·0	0·000	0·5	wP
12	...	29·982	67·3	50·0	17·3	57·2	− 1·4	53·5	50·1	7·1	13·7	2·2	77	130·3	43·0	0·000	4·3	wP
13	New	29·925	74·0	47·6	26·4	59·8	+ 1·0	54·8	50·4	9·4	20·0	0·8	71	136·7	39·7	0·004	10·9	wP
14	Greatest Declination N.	29·750	73·3	53·4	19·9	61·3	+ 2·4	57·7	54·6	6·7	17·1	0·4	79	135·2	48·0	0·249	16·5	wP : wP : vP, wN
15	...	29·655	66·5	53·5	13·0	58·6	− 0·4	54·4	50·6	8·0	14·1	1·0	75	121·6	50·2	0·000	18·0	wP
16	...	29·792	70·6	54·5	16·1	60·6	+ 1·6	54·7	49·5	11·1	20·3	1·3	67	136·8	48·8	0·000	12·8	wP
17	Perigee	29·869	73·7	52·2	21·5	59·8	+ 0·7	54·2	49·2	10·6	20·0	1·2	68	143·0	47·8	0·018	2·5	wP : wP : mP, sN
18	...	29·891	70·3	48·3	22·0	58·5	− 0·7	52·8	47·7	10·8	20·7	1·3	68	131·2	43·3	0·000	11·5	mP
19	...	29·952	68·1	47·5	20·6	57·1	− 2·4	53·1	49·4	7·7	16·8	1·7	75	132·0	40·5	0·000	6·0	wP : wP : mP
20	First Quarter : In Equator	29·896	72·0	53·2	18·8	61·5	+ 1·6	55·9	51·1	10·4	17·5	3·6	70	138·1	47·6	0·000	3·0	mP : wP : mP
21	...	30·032	63·9	48·6	15·3	56·7	− 3·6	50·9	45·5	11·2	17·9	1·5	67	109·8	42·7	0·003	0·0	mP : sP : sP
22	...	30·186	72·3	44·3	28·0	60·6	− 0·1	53·6	47·5	13·1	20·7	2·7	62	127·2	34·8	0·000	0·0	mP
23	...	30·086	71·1	47·0	24·1	59·9	− 1·1	54·5	49·7	10·2	18·4	4·0	69	124·5	33·6	0·000	4·0	mP
24	...	29·710	76·1	47·8	28·3	61·7	+ 0·5	54·7	48·7	13·0	23·5	3·0	63	134·9	37·4	0·011	6·8	wP : wP : mP
25	...	29·424	65·8	48·7	17·1	55·8	− 5·5	52·1	48·6	7·2	13·5	0·4	78	112·2	38·1	0·155	8·2	sN, wP : vP, ssN : mP
26	...	29·671	67·9	47·2	20·7	55·5	− 5·9	52·7	50·1	5·4	16·0	0·2	83	133·0	35·0	0·042	2·0	wP : ssN, mP
27	Greatest Declination S. Full	29·911	69·9	49·3	20·6	58·0	− 3·4	52·3	47·2	10·8	21·4	2·2	67	132·6	39·4	0·000	2·0	wP : mP : vP
28	...	30·032	71·9	44·5	27·4	59·4	− 1·9	53·5	48·3	11·1	23·2	1·4	67	129·0	31·6	0·000	0·0	mP : wP
29	...	29·934	73·3	45·2	28·1	60·8	− 0·4	54·3	48·6	12·2	21·7	0·4	64	134·2	34·0	0·000	0·0	wP : wP : mP
30	...	29·757	73·9	48·4	25·5	62·4	+ 1·2	56·2	50·9	11·5	19·7	0·4	66	136·8	36·0	0·000	8·8	wP
Means	...	29·875	68·4	48·6	19·8	57·7	− 1·6	53·1	48·8	8·9	17·1	1·8	72·8	125·8	41·3	Sum 0·871	5·2	...
Number of Column for Reference.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18

The results apply to the civil day.

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

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

The mean reading of the *Barometer* for the month was 29^{in}·875, being 0^{in}·064 *higher* than the average for the 50 years, 1841–1890.

TEMPERATURE OF THE AIR.

The highest in the month was 76°·1 on June 24; the lowest in the month was 43°·9 on June 4; and the range was 32°·2.
The mean of all the highest daily readings in the month was 68°·4, 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 48°·6, being 1°·3 *lower* than the average for the 50 years, 1841–1890.
The mean of the daily ranges was 19°·8, being 1°·2 *less* than the average for the 50 years, 1841–1890.
The mean for the month was 57°·7, being 1°·6 *lower* than the average for the 50 years, 1841–1890.

MONTH and DAY, 1904.	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	0·4	16·2	SE : ESE : Variable	WNW : N : NW	4·7	0·24	226	9, slt.-r : 10, slt.-r : 10, c.-r	9, cu, n, fq.-r: 10, sc, fq.-th.-r: 10
2	0·9	16·3	WNW : NW : NNW	N : NNE	2·0	0·33	329	p.-cl : p.-cl : 10, sc, n	10, sc : 10, sc
3	6·2	16·3	NNE : NE	ENE : SE : ESE	1·5	0·16	244	10 : 10 : 9, cu, n	7, cu, ci.-cu: 3, th.-cl : 0
4	9·9	16·3	NE : NNE	NE : E	2·3	0·20	264	p.-cl : 2, ci, th.-cl	3, cu, ci, so.-ha : 5 : 10
5	13·9	16·4	NE : NNE	E : ENE : NE	2·3	0·24	316	10 : p.-cl : 1, cu, li.-cl	1, cu : 0
6	8·3	16·4	NE : NNE	NE	3·6	0·40	376	0 : th.-cl : 1, ci.-s	4, cu, th.-cl: 7, cu, ci.-cu, ci.-s: p.-cl
7	10·3	16·4	ENE	ENE	2·8	0·54	411	10 : p.-cl : 2, cu, th.-cl	5, cu, ci.-s : 4, cu, ci, ci.-s: p.-cl
8	4·6	16·4	ENE : NE	ENE : SE : NE	3·0	0·33	368	10 : 10	8, cu, th.-cl : 8, cu, cu.-s, th.-cl: 10
9	1·2	16·4	ENE : NE	E : NE : NNE	2·0	0·15	261	10 : 10	9, cu, th.-cl : 10 : 9, slt.-r
10	0·9	16·5	NNE : NE : E	ESE : NE	1·3	0·03	187	10, r : 10, sc	9 : 8 : p.-cl
11	0·1	16·5	NE : NNE	NNE : NE	1·1	0·04	200	9 : 10, oc.-m.-r	10 : 10
12	1·0	16·5	NNE : N	NE : S	0·5	0·02	163	10 : 9, th.-cl	10 : p.-cl : 9
13	7·1	16·5	S : SSW : SW	SW : SSW	1·3	0·09	202	10 : p.-cl : 8, ci.-s, th.-cl	7, ci, ci.-s : 7, th.-cl : 10, oc.-slt.-r
14	3·5	16·5	S : SSW : SW	SW : SSW	2·6	0·22	251	10, slt.-r : 9 : 9, cu.-s, ci.-cu, ci.-s	9, cu.-s, ci.-cu: 10, oc.-r : 10, c.-r
15	1·5	16·5	SSW : SW : WSW	WSW : SW	7·0	1·34	498	9 : 9 : 10, w	10, w : 9, cu.-s, li.-cl, slt.-r: 9, oc.-slt.-r, w
16	13·1	16·5	SW : WSW	WSW	7·8	1·21	487	10, oc.-slt.-r : p.-cl, w : 5, cu, th.-cl	2, cu, ci.-s, w: 2, ci, ci.-s, w : p.-cl
17	6·0	16·5	SW : WSW	WSW : SW	1·7	0·08	249	10 : p.-cl : 6, cu, ci.-cu, ci.-s	9, cu, ci.-cu, ci.-s: 9 : 9, shs.-r
18	12·7	16·6	WSW : WNW	WNW : W : WSW	2·4	0·38	345	0 : p.-cl : 5, cu, th.-cl	6, cu, cu.-s, th.-cl : 3, cu : 1, th.-cl
19	4·3	16·6	WSW	WSW : W : WNW	2·3	0·17	289	p.-cl : 10, oc.-th.-r	9, cu, li.-cl : 9
20	9·3	16·6	W : WSW	WSW : W	2·9	0·21	279	10 : 9 : 8, th.-cl	5, ci.-cu, ci.-s, th.-cl: 4, cu, th.-cl : 1
21	3·3	16·6	W : WSW : N	N : NNW	1·8	0·15	243	1 : 9, cu, n	10, t : 9, cu.-s : 2
22	10·4	16·6	NNW : SW : W	W : N	2·1	0·12	222	p.-cl : 5, ci, th.-cl, so.-ha	3, ci, th.-cl : 3, th.-cl, so.-ha : p.-cl
23	8·8	16·6	N	NNE : S	0·3	0·00	111	p.-cl : 7, cu, li.-cl	4, th.-cl, h, so.-ha: 6, li.-cl : p.-cl
24	6·6	16·6	SSW : SW	SW : WSW	2·1	0·13	228	th.-cl : 2, th.-cl : 5, ci.-s, so.-ha	8 : 10 : 10, slt.-r
25	4·1	16·6	WSW : W : WNW	WNW : NNW : N	12·5	0·75	420	10, r : 10, sh.-r, w : 6, cu, hy.-sh, w	v, shs.-r, w : 7, w : 8
26	5·4	16·5	WSW : SW : W	Variable	2·6	0·05	165	10, m : p.-cl : 5, cu, th.-cl	v, hy.-shs : v, hy.-shs : p.-cl, l
27	10·1	16·5	N: NNE	N : NNE : Variable	0·7	0·00	150	9 : p.-cl : 5, cu, th.-cl	6, cu, th.-cl : p.-cl : p.-cl, lu.-co
28	9·6	16·5	Calm : Variable : ENE	SE : SSE : S	0·7	0·01	119	0, m, d : 0, m : 1, th.-cl	4, th.-cl : 2, th.-cl : 1, ci.-s, lu.-co, d
29	13·3	16·5	SE	ESE : E	2·8	0·17	207	1, th.-cl, d: 0 : 1, th.-cl	1, ci, ci.-s : 1, ci, so.-ha, prh: 1, ci, ci.-s, lu.-ha
30	11·4	16·5	E : ESE	ESE : SW	1·5	0·12	217	p.-cl, hy.-d : p.-cl : 2, ci, ci.-cu, ci.-s	1, li.-cl : 1 : p.-cl
Means	6·6	16·5	...	...	...	0·26	268		
Number of Column for Reference.	19	20	21	22	23	24	25	26	27

The mean *Temperature of Evaporation* for the month was 53°·1, being 1°·9 *lower* than
The mean *Temperature of the Dew Point* for the month was 48°·8, being 2°·3 *lower* than
The mean *Degree of Humidity* for the month was 72·8, being 1·2 *less* than
The mean *Elastic Force of Vapour* for the month was 0in·345, being 0in·030 *less* than
The mean *Weight of Vapour in a Cubic Foot of Air* for the month was 3grs·9, being 0gr·3 *less* than
The mean *Weight of a Cubic Foot of Air* for the month was 534 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 6·3.

The mean proportion of *Sunshine* for the month (constant sunshine being represented by 1) was 0·401. The maximum daily amount of *Sunshine* was 13·9 hours on June 5.

The highest reading of the *Solar Radiation Thermometer* was 143°·0 on June 17; and the lowest reading of the *Terrestrial Radiation Thermometer* was 31°·6 on June 28.

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

The *Proportions of Wind* referred to the cardinal points were N. 9, E. 7, S. 4, and W. 9. One day was calm.

The *Greatest Pressure of the Wind* in the month was 12·5 lbs. on the square foot on June 25. The mean daily *Horizontal Movement of the Air* for the month was 268 miles; the greatest daily value was 498 miles on June 15; and the least daily value was 111 miles on June 23.

Rain fell on 8 days in the month, amounting to 0in·871, as measured by gauge No. 6 partly sunk below the ground; being 1in·151 *less* than the average fall for the 50 years, 1841–1890.

MONTH and DAY, 1904.	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.		
July 1	...	29·727	72·9	53·0	19·9	60·5	− 0·8	54·7	49·6	10·9	23·8	2·2	68	139·3	42·3	0·031	8·0	wP : wP, wwN : vN, mP
2	...	29·803	69·5	50·8	18·7	58·0	− 3·4	54·1	50·6	7·4	19·3	1·8	76	142·7	42·6	0·084	15·4	wP : vP, ssN : ssN, mP
3	Apogee	29·818	69·9	52·8	17·1	61·1	− 0·6	55·0	49·7	11·4	22·0	1·9	67	131·8	48·0	0·212	6·8	wP : wP, ssN : mP
4	...	29·894	73·9	49·2	24·7	60·7	− 1·2	54·3	48·7	12·0	22·7	3·2	65	138·9	44·0	0·000	1·5	mP : wP : mP
5	In Equator : Last Quarter	29·853	66·0	54·6	11·4	60·3	− 1·8	56·6	53·4	6·9	9·1	3·4	78	88·6	50·5	0·013	4·5	wP : wP : mP
6	...	29·907	79·1	52·3	26·8	64·4	+ 2·2	59·0	54·5	9·9	18·4	1·4	70	140·2	46·4	0·000	0·0	mP : wP : mP
7	...	29·993	67·1	54·9	12·2	61·5	− 0·6	59·0	56·9	4·6	7·7	2·1	85	86·0	47·0	0·000	0·0	mP : wP
8	...	30·034	82·2	53·5	28·7	66 8	+ 4·8	58·9	52·6	14·2	25·7	1·1	61	135·2	44·7	0·000	0·0	wP : wP : sP
9	...	30·052	82·0	54·5	27·5	68·8	+ 6·8	59·8	52·8	16·0	27·2	6·1	56	141·2	44·3	0·000	0·0	wP
10	...	30·027	80·1	54·8	25·3	66·8	+ 4·7	60·4	55·3	11·5	24·5	2·8	67	141·6	44·0	0·000	0·0	wP : wP : wwN, wP
11	Greatest Declination N.	29·950	75·2	54·5	20·7	64·6	+ 2·3	58·3	53·1	11·5	24·1	1·5	66	142·8	46·8	0·000	3·0	wP
12	...	29·853	74·0	56·7	17·3	64·7	+ 2·1	60·0	56·1	8·6	19·9	1·7	74	139·6	50·8	0·005	5·0	wP : wN, wP : wP, ssN
13	New	29·950	80·8	56·9	23·9	67·6	+ 4·7	61·1	56·0	11 6	21·1	1·3	65	147·0	48·0	0·000	8·0	wP
14	...	29·925	83·0	53·8	29·2	69·0	+ 5·9	60·9	54·6	14·4	23·5	3·6	60	150·6	44·1	0·000	4·0	mP : wP : mP
15	Perigee	29·774	85·2	59·2	26·0	71·6	+ 8·4	62·9	56·3	15·3	28·6	5·5	59	148·2	53·7	0·000	0·7	wP : wP, wwN : wP
16	...	29·906	80·7	58·2	22·5	69·7	+ 6·5	62·6	57·1	12·6	22·3	3·4	64	141·6	52·1	0·000	5·3	wP
17	...	30·020	85·0	54·2	30·8	71·0	+ 7·9	62·2	55·5	15·5	26·4	1·7	58	134·0	44·0	0·000	0·0	wP
18	In Equator	30·087	75·5	55·8	19·7	64·7	+ 1·7	58·0	52·4	12·3	25·0	3·6	64	140·0	51·9	0·000	0·0	wP
19	First Quarter	29·926	74·3	54·2	20·1	63·3	+ 0·3	57·3	52·3	11·0	24·5	3·3	67	138·6	49·0	0·000	6·5	wP
20	...	29·779	79·6	57·4	22·2	67·9	+ 4·9	60·9	55·4	12·5	20·2	2·3	64	124·0	52·3	0·033	4·5	ssP, ssN : wP : mP
21	...	29·816	82·5	54·8	27·7	66·7	+ 3·7	59·0	52·8	13·9	26·5	5·1	61	148·2	47·0	0·000	2·5	mP : wP
22	...	29·882	79·6	54·8	24·8	64·6	+ 1·7	58·7	53·8	10·8	21·6	2·1	68	136·0	48·0	0·000	1·5	mP : ... : mP
23	...	29·847	81·9	58·2	23·7	68·4	+ 5·6	61·6	56·3	12·1	22·4	3·2	65	143·3	51·8	0·009	6·0	wP : wP : mP
24	Greatest Declination S.	29·699	82·2	56·3	25·9	70·3	+ 7·7	63·1	57·6	12·7	24·0	3·2	64	138·8	48·3	0·009	3·5	mP : wP : vP
25	...	29·516	73·1	53·2	19·9	64·0	+ 1·6	61·2	58·9	5·1	12·6	0·6	83	135·9	44·4	1·546	19·7	mP : ssN, wP : ssP, ssN
26	...	29·477	77·0	56·9	20·1	64·9	+ 2·6	60·5	56·9	8·0	18·0	0·9	75	134·0	54·3	0·000	6·8	wP, wwN : wP : mP
27	Full	29·613	67·9	57·9	10·0	61·8	− 0·5	59·5	57·6	4·2	9·2	1·5	86	96·7	53·3	0·049	0·0	wP, wN : mP
28	...	29·851	76·9	57·7	19·2	65·2	+ 2·9	60·2	56·1	9·1	20·5	1·3	73	137·2	50·0	0·010	1·0	wwP : wP : mP
29	...	29·931	77·1	52·2	24·9	65·1	+ 2·8	60·3	56·4	8·7	18·0	0·6	74	128·8	44·0	0·090	5·0	wP
30	Apogee	29·852	83·9	60·4	23·5	68·9	+ 6·6	63·9	59·9	9·0	24·3	1·1	73	126·2	55·4	0·122	8·0	wP, ssN : wP : vP, ssN
31	...	29·877	78·3	57·0	21·3	67·2	+ 4·9	61·3	56·6	10·6	22·6	0·9	68	138·2	55·0	0·018	4·0	vP, vN : wP : wP
Means	...	29·859	77·3	55·2	22·1	65·5	+ 3·0	59·5	54·7	10·8	21·2	2·4	68·5	134·0	48·3	Sum 2·231	4·2	...
Number of Column for Reference.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18

The results apply to the civil day.

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

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

The mean reading of the *Barometer* for the month was 29^{in}·859, being 0^{in}·066 *higher* than the average for the 50 years, 1841–1890.

TEMPERATURE OF THE AIR.

The highest in the month was 85°·2 on July 15; the lowest in the month was 49°·2 on July 4; and the range was 36°·0.
The mean of all the highest daily readings in the month was 77°·3, being 3°·3 *higher* than the average for the 50 years, 1841–1890.
The mean of all the lowest daily readings in the month was 55°·2, being 2°·1 *higher* than the average for the 50 years, 1841–1890.
The mean of the daily ranges was 22°·1, being 1°·2 *greater* than the average for the 50 years, 1841–1890.
The mean for the month was 65°·5, being 3°·0 *higher* than the average for the 50 years, 1841–1890.

MONTH and DAY, 1904.	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	10·0	16·5	SW : WSW : W	WSW : SW	5·0	0·35	327	p.-cl : p.-cl : 3, cu, th.-cl	3, cu, th.-cl : 8,cu,n,shs.-r: p.-cl
2	9·1	16·5	SW : WSW	WSW : SW	4·8	0·24	304	p.-cl : 7, cu, n, th.-cl	v, shs.-r : v, shs.-r : p.-cl
3	6·6	16·5	SW : WSW	WSW : WNW : W	10·0	0·40	352	9 : 9, shs.-r : 8, n, cu.-s, th.-cl	v, w : p.-cl, slt.-sh
4	5·8	16·4	WSW : W	W : WSW	3·2	0·13	261	p.-cl : 6, cu, ci.-s, th.-cl	6, cu, n, ci.-s : 8
5	0·1	16·4	SW : WSW	WSW : W	2·1	0·21	301	9 : 10, hy.-sh : 10, sc, oc.-slt.-r	10 : p.-cl : 1, ci.-s
6	14·6	16·4	WSW	SW	1·3	0·07	232	0, d : 1, cu : 2, cu, th.-cl	4, cu.-s, th.-cl : 0
7	0·0	16·4	WSW : Variable	NE : E : SE	0·9	0·01	125	p.-cl : 10 : 10	10 : 10
8	10·1	16·4	Calm : SW : WSW	WSW : WNW : N	0·8	0·01	130	p.-cl, h : h : 2, li.-cl, h	1, th.-cl : 0 : 10
9	13·7	16·3	N : NE : ENE	ENE : ESE : SE	0·4	0·02	149	0 : 0	0 : 0
10	14·3	16·3	ESE	ESE : E	1·9	0·11	196	0 : 0	0 : 0
11	14·4	16·3	E : ENE	E : ENE	4·0	0·35	310	0, h : 0 : 1, th.-cl	0 : 0
12	11·0	16·2	ENE : E	ESE	8·0	0·55	325	p.-cl : p.-cl, w : 4, ci, so.-ha, w	5, ci, ci.-s, th.-cl: 8 : 9, slt.-sh, l
13	13·2	16·2	SW : WSW	WSW : SW	1·4	0·10	253	p.-cl, hy.-d: p.-cl : 3, cu, th.-cl	5, cu : 2, ci, ci.-s : 1, th.-cl
14	10·6	16·2	WSW : SW	SSW : SW	2·7	0·13	217	1, th.-cl, h: p.-cl : 7, cu, ci.-cu, ci.-s	6, cu, ci.-s, ci: 6, ci, ci.-s, so.-ha : 8
15	11·2	16·1	SSW : Variable : SW	SSW : SW : WSW	4·0	0·38	269	9 : p.-cl : 6, ci.-cu, ci.-s	2, th.-cl : 1, th.-cl : 0
16	10·0	16·1	WSW : SW	WSW : SW	2·5	0·18	292	p.-cl : 9 : 8, cu, th.-cl	2, th.-cl : 1, li.-cl : 0
17	13·9	16·1	WSW : N : NE	NNE : E	2·3	0·04	133	0, hy.-d : 0, h	0, h : 1, li.-cl : 1
18	14·3	16·0	ENE : E	ESE : E	3·4	0·40	326	0 : 0 : 1, th.-cl	0 : 1, th.-cl : 1
19	11·6	16·0	E : ESE	ESE : E	3·1	0·36	320	p.-cl : p.-cl : 2, th.-cl	1, th.-cl : 2, ci.-s : p.-cl
20	9·4	15·9	ESE : SE	WSW : W : NW	2·0	0·15	265	9, sh.-r : 9, sh.-r : 5, ci, ci.-s	7, cu, th.-cl : 2, ci : 1, ci, cu
21	11·1	15·9	WSW : W	WSW	1·8	0·07	211	1 : 9, cu, ci.-cu, ci.-s	8, cu : 7, ci, ci.-cu, cu, so.-ha: 1, ci.-s, lu.-co
22	8·4	15·8	WSW : W	WSW : SW	1·2	0·08	229	1, ci.-s : 8 : 6, cu, ci	p.-cl, so.-ha : 7, ci, ci.-cu, so.-ha : 8, lu.-co
23	6·2	15·8	SW	SW : WSW	1·2	0·04	172	p.-cl, shs.-r: p.-cl : 5, cu, ci.-cu, ci.-s	9 : p.-cl, slt.-r : p.-cl
24	9·3	15·7	SSW : SE	SSW : SW	1·5	0·06	178	p.-cl : 9, slt.-sh : 8, cu, th.-cl	6, cu, ci.-cu, ci: 5, cu, ci.-cu, ci: p.-cl, lu.-ha prs
25	1·7	15·7	Variable : NE : E	ESE : SSW	2·6	0·06	159	1 : 9 : 10, r	p.-cl, oc.-r : 10, t.-sm, hy.-r : 10, hy.-r
26	7·7	15·7	SW	WSW : SW : Variable	1·1	0·04	179	10 : 9 : 8, cu, n, th.-cl	7, cu, n : 9, n
27	0·1	15·6	NE : NNE	NW : W	0·9	0·05	192	9 : 10, slt.-r : 10, oc.-shs	10, oc.-shs : 10, oc.-shs : 10, slt.-r
28	8·0	15·6	W : WSW	W : WSW	1·1	0·07	216	10, h, sh.-r : 10, h : 9, cu, h	7, cu, th.-cl : 3, cu : 1, th.-cl
29	2·8	15·5	WSW : SSW	SW : S	1·6	0·09	215	9 : 3, li.-cl : 9, shs.-r	9 : 10, oc.-shs : 10, oc.-slt.-r
30	5·0	15·5	SSE : WSW	SW	2·0	0·07	155	10 : 9, hy.-sh: 7, cu, ci.-cu, th.-cl	8, ci.-cu, th.-cl: 9, r : p.-cl, shs.-r, l
31	9·4	15·4	WSW : W	W : WSW : SW	1·8	0·13	236	9, oc.-shs: 9 : 3, cu, th.-cl	4, cu, th.-cl, so.-ha, prh: 3, ci, ci.-cu, so.-ha: 1, th.-cl
Means	8·8	16·0	...	...	...	0·16	233		
Number of Column for Reference.	19	20	21	22	23	24	25	26	27

The mean *Temperature of Evaporation* for the month was 59°·5, being 1°·7 *higher* than
The mean *Temperature of the Dew Point* for the month was 54°·7, being 0°·8 *higher* than
The mean *Degree of Humidity* for the month was 68·5, being 5·3 *less* than
The mean *Elastic Force of Vapour* for the month was 0in·428, being 0in·012 *greater* than
The mean *Weight of Vapour in a Cubic Foot of Air* for the month was 4grs·7, being 0gr·1 *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 5·0.

The mean proportion of *Sunshine* for the month (constant sunshine being represented by 1) was 0·550. The maximum daily amount of *Sunshine* was 14·6 hours on July 6.

The highest reading of the *Solar Radiation Thermometer* was 150°·6 on July 14; and the lowest reading of the *Terrestrial Radiation Thermometer* was 42°·3 on July 1.

The mean daily distribution of *Ozone* for the 12 hours ending 9h was 1·7; for the 6 hours ending 15h was 1·2; and for the 6 hours ending 21h was 1·3.

The *Proportions of Wind* referred to the cardinal points were N. 2, E. 7, S. 7, and W. 14. One day was calm.

The *Greatest Pressure of the Wind* in the month was 10·0 lbs. on the square foot on July 3. The mean daily *Horizontal Movement of the Air* for the month was 233 miles; the greatest daily value was 352 miles on July 3; and the least daily value was 125 miles on July 7.

Rain fell on 14 days in the month, amounting to 2in·231, as measured by gauge No. 6 partly sunk below the ground; being 0in·239 *less* than the average fall for the 50 years, 1841–1890.

MONTH and DAY, 1904.	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	In Equator	29·977	79·0	56·2	22·8	64·8	+ 2·6	59·1	54·4	10·4	21·1	1·3	69	148·3	49·9	0·000	6·0	wP : wwP, wwN : mP
2	...	30·003	83·0	53·0	30·0	67·6	+ 5·5	60 9	55·6	12·0	24·0	1·1	65	150 2	44·9	0·000	0·0	mP : wP : wP
3	...	30 023	87·4	54·0	33·4	73·0	+10·9	63·7	56·8	16·2	28·6	2·3	57	152·2	46·0	0 000	0·0	wP
4	Last Quarter	29·860	91·0	57·3	33·7	73·1	+10·9	64·7	58·5	14·6	29·9	3·0	61	146·8	45·6	0·058	8·5	wP : wP, wN : vP, ssN
5	...	29·818	78·6	59·7	18·9	67·9	+ 5·6	62·1	57·5	10·4	19·9	2·3	69	144·1	53·5	0·000	1·5	wP
6	...	29·831	71·9	57·1	14·8	63·0	+ 0·6	59·5	56·5	6·5	12·8	4·0	80	112·0	51·8	0·000	7·2	wP
7	...	29·945	74·7	54·4	20·3	63·0	+ 0·5	56·3	50·6	12·4	21·8	3·3	64	137·0	48·8	0·000	11·3	wP
8	Greatest Declination N.	30·006	74·6	54·9	19·7	63·8	+ 1·3	56·0	49·5	14·3	23·4	5·1	60	131·1	42·9	0·000	1·5	wP : mP : mP
9	...	29·953	74·0	50·2	23·8	61·9	− 0·6	55·5	50·0	11·9	24·8	4·2	66	130·0	41·0	0·000	0·0	wP : mP : mP
10	...	29·827	72·3	52·5	19·8	61·8	− 0·7	55·7	50·5	11·3	21·1	3·8	67	127·2	41·3	0·000	0·0	wP : mP : mP
11	New	29·697	62·9	50·5	12·4	57·7	− 4·8	54·1	50·8	6·9	13·7	2·8	78	102·0	41·5	0·062	0·0	wP : wP, vN : sP
12	Perigee	29·885	71·2	49·8	21·4	59·2	− 3·3	53·6	48·6	10·6	22·9	1·5	68	137·2	44·8	0·000	3·0	wP : mP : mP
13	...	29·960	75·0	45·4	29·6	60·9	− 1·5	55·2	50·3	10·6	22·8	2·3	67	138·6	33·6	0·000	1·8	wP
14	In Equator	29·693	75·0	55·5	19·5	64·0	+ 1·7	59·6	55·9	8·1	17·9	3·4	75	138·0	45·4	0·027	16·4	wP : wwP, wN : wP
15	...	29·654	72·2	55·5	16·7	62·0	− 0·1	56·4	51·6	10·4	22·7	3·8	69	129·4	52·6	0·000	10·8	wP
16	...	29·906	71·2	50·3	20·9	60·4	− 1·6	55·4	51·0	9·4	17·6	0·8	71	120·0	42·0	0·000	1·0	wP
17	...	29·647	65·8	53·6	12·2	58·6	− 3·2	57·0	55·6	3·0	4·0	0·2	89	102·0	51·8	0·354	4·0	wP : vN, wP : wP
18	First Quarter	29·672	66·9	51·5	15·4	58·3	− 3·3	53·7	49·6	8·7	15·8	1·0	73	118·0	48·4	0·000	6·5	wP : mP : mP
19	...	29·796	68·2	49·5	18·7	57·9	− 3·5	52·9	48·4	9·5	18·1	1·2	71	131·0	43·3	0·000	8·5	wP : mP : mP
20	...	29·892	67·6	45·5	22·1	56·2	− 5·1	52·6	49·2	7·0	17·5	1·5	78	114·5	36·8	0·000	0·0	wP : mP : wP
21	Greatest Declination S.	29·889	68·9	43·5	25·4	57·0	− 4·1	53·0	49·3	7·7	17·1	1·4	75	128·0	34·8	0·086	0·0	wP : wP : wP, wN
22	...	29·613	69·2	47·8	21·4	56·0	− 5·0	54·2	52·5	3·5	14·2	0·8	88	118·3	40·4	0·120	4·0	wP : vP, vN
23	...	29·846	64·9	52·6	12·3	56·3	− 4·6	52·9	49·8	6·5	15·7	1·6	79	110·7	47·8	0·007	0·5	wP : mP : mP
24	...	29·911	64·3	47·5	16·8	54·6	− 6·2	50·3	46·2	8·4	17·9	1·4	73	123·3	40·1	0·003	4·5	mP : sP : mP
25	...	29·971	68·7	45·8	22·9	56·9	− 3·9	51·3	46·1	10·8	18·7	1·2	67	113·4	36·3	0·000	2·0	mP : vP : wP
26	Full	29·845	72·0	52·0	20·0	61·6	+ 0·8	57·1	53·2	8·4	15·5	2·0	75	130·0	50·3	0·000	8·0	wP : wP : mP
27	Apogee	29·943	72·7	52·8	19·9	60·8	+ 0·1	56·6	53·0	7·8	19·8	0·0	76	128·9	43·0	0·000	3·0	wP : mP : mP
28	In Equator	30·023	78·5	49·5	29·0	64·9	+ 4·3	58·1	52·5	12·4	25·0	1·0	64	140·6	40·2	0·000	2·0	mP : wP : wP
29	...	29·918	79·9	51·6	28·3	65·2	+ 4·9	58·9	53·8	11·4	25·0	0·9	67	137·3	39·8	0·000	0·0	wP
30	...	29·691	81·9	52·6	29·3	66·7	+ 6·6	61·7	57·7	9·0	20·2	0·4	74	140·2	41·1	0·003	1·2	wP
31	...	29·625	60·9	53·2	7·7	57·2	− 2·7	56·0	54·9	2·3	4·2	0·2	92	84·5	46·0	0·515	1·3	wP : mP : vN, wP
Means	...	29·849	73·0	51·8	21·3	61·7	+ 0·1	56·6	52·3	9·4	19·2	1·9	71·8	127·9	44·1	Sum 1·235	3·7	...
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 $29^{in}\cdot849$, being $0^{in}\cdot067$ *higher* than the average for the 50 years, 1841–1890.

TEMPERATURE OF THE AIR.

The highest in the month was 91°·0 on August 4; the lowest in the month was 43°·5 on August 21; and the range was 47°·5.
The mean of all the highest daily readings in the month was 73°·0, being 0°·2 *higher* than the average for the 50 years, 1841–1890.
The mean of all the lowest daily readings in the month was 51°·8, being 1°·2 *lower* than the average for the 50 years, 1841–1890.
The mean of the daily ranges was 21°·3, being 1°·5 *greater* than the average for the 50 years, 1841–1890.
The mean for the month was 61°·7, being 0°·1 *higher* than the average for the 50 years, 1841–1890.

MONTH and DAY, 1904.	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. Movement of the Air. Horizontal Movement of the Air.	Clouds and Weather. A.M.	Clouds and Weather. P.M.
	hours.	hours.			lbs.	lbs.	miles.		
Aug. 1	9·1	15·4	SW : WSW : W	SW	0·5	0·01	163	9 : p.-cl, d : 6, cu, th.-cl	7, cu, ci.-cu, n : 4, ci.-s, th.-cl, so.-ha : 1
2	13·1	15·3	SW : Variable	S	1·1	0·01	128	p.-cl, d : 1, th.-cl : 4, ci, cu, h	6, cu, th.-cl : p.-cl : 0, d
3	14·2	15·3	S	S : SE	1·5	0·05	148	0, d : 0 : 1, cu, th.-cl	1, cu, th.-cl, so.-ha : 1; th.-cl : 0, l
4	10·0	15·2	SE : S : SSW	SW : W : S	4·0	0·38	239	0 : 0 : 1, ci.-s	5, cu, ci, th.-cl : p.-cl, fq.-r, l, t : 2
5	10·6	15·1	SW : WSW : W	WSW : SW	2·2	0·22	277	9 : 9 : 3, cu, th.-cl	4, cu, th.-cl : 6, ci.-cu, so.-ha : 9
6	1·4	15·1	SW	WSW : W	6·5	0·88	417	9, slt.-r : 10, oc.-slt.-r	8, th.-cl, so.-ha, w : 2, th.-cl : 0
7	7·3	15·1	W : WSW : WNW	WNW : WSW	3·3	0·14	267	p.-cl : p.-cl : 8, cu, cu.-s, th.-cl	8, cu, cu.-s, ci.-s, so.-ha : p.-cl
8	11·2	15·0	W : NNE : N	N : WNW : NNW	0·3	0·00	124	9 : p.-cl, h : 4, th.-cl, h	4, cu, th.-cl : 2, cu, th.-cl : 0
9	9·3	14·9	N : NNE : NNW	NNW : N : WNW	1·2	0·02	146	0 : 0, h	3, cu, ci.-s : 5, cu : p.-cl
10	7·3	14·9	N : NNE : NNW	NNW : WSW : NW	0·5	0·01	151	p.-cl : p.-cl, h : 5, cu, ci.-s, so.-ha	6, cu, th.-cl, h : 5, th.-cl : 2, th.-cl, h
11	1·7	14·8	SSW : SW : WSW	W : WNW	1·3	0·08	230	2, th.-cl, h : p.-cl : 10, oc.-slt.-r	10, fq.-r : p.-cl : 0
12	12·5	14·8	W : WNW	WNW : W : WSW	3·0	0·33	321	0, hy.-d : 0 : 5, cu, ci.-cu, ci	4, cu, li.-cl : 2, cu, li.-cl : 0, hy.-d
13	12·9	14·7	WSW : SW	SW : SSW	1·7	0·08	227	0, hy.-d : 0 : 2, ci.-s, so.-ha	1, ci.-s, so.-ha : 1, ci, ci.-s : p.-cl, d
14	4 5	14·7	SSW : SW : WSW	SW : WSW	8·5	0·89	477	10 : 10 : 9, st.-w	10, hy.-sh, w : p.-cl, oc.-m.-r, w : p.-cl
15	9·7	14·6	WSW : W	W : WSW	21·2	1·85	639	9, w : 9, sc, st.-w	9, cu, ci.-cu, th.-cl, st.-w : 5, cu, ci.-s, w : 0
16	3·4	14·5	WSW : W	W : WSW : SW	0·7	0·03	158	0, h : p.-cl : 7, th.-cl, h	8, cu, cu.-s, n : 9 : 9
17	1·5	14·5	SW : S : SSE	S : SW : WSW	3·5	0·22	268	10, li.-shs : 10, oc.-r : 10, fq.-r	p.-cl, oc.-r : 4, ci.-s, th.-cl, li.-shs : 1, th.-cl
18	6·9	14·4	W : NW : NNW	NW : WNW : W	4·3	0·48	403	p.-cl : 9 : 7, cu, th.-cl, w	3, cu, th.-cl, h : p.-cl : 2, th.-cl
19	7·2	14·4	W : WSW : WNW	W : WNW : NNW	3·5	0·25	314	0 : 1 : 6, cu, cu.-s, th.-cl	7, cu, cu.-s, n : 8, cu.-s, n : p.-cl
20	5·5	14·3	Variable : N	N : Variable	0·2	0·00	100	p.-cl : 1, li.-cl, h : 5, cu, li.-cl, h, so.-ha	6, cu, th.-cl : 5, cu, ci.-s, th.-cl : li.-cl, h
21	4·5	14·2	Variable : Calm	NE : E : NNE	0·7	0·00	95	h : p.-cl : 6, ci, ci.-s, so.-ha	10 : 10, oc.-r : 10
22	0·9	14·2	SE : S : SSE	SW : NE : NNE	1·8	0·05	179	h, hy.-d : 10, slt.-r : 10, r, t	9, oc.-r, l, t, so.-ha : 9, slt.-r : 10, oc.-slt.-r
23	0·6	14·1	NNE : NE	NE : NNE	2·5	0·19	266	10 : 10 : 9, cu, n, oc.-slt.-r	9 : 10, oc.-slt.-r : 9, l
24	10·8	14·0	NNE	NNE : N	2·8	0·24	276	p.-cl, hy.-d : li.-cl : 4, cu, ci, th.-cl	7, cu, n : p.-cl, sh.-r : 2, li.-cl, lu.-ha, d
25	6·6	14·0	N : NNE	Variable : SW	1·2	0·03	174	1, th.-cl, hy.-d : 1, th.-cl : 2, cu, th.-cl, h, so.-ha	7, th.-cl : 10 : 10
26	6·3	13·9	SW : WSW	W	3·5	0·39	397	10, slt.-r : 10, oc.-m.-r : 9, so.-ha	9, cu, n : p.-cl : 2, th.-cl, lu.-co, lu.-ha, d
27	10·9	13·9	WSW : W : WNW	WNW : NNW : S	1·0	0·02	194	p.-cl, hy.-d : li.-cl : 2, li.-cl, h	1, li.-cl : 1, ci, ci.-s : p.-cl, prs
28	12·4	13·8	SW : Calm : SE	SSE : SE	0·4	0·00	124	th.-cl, hy.-d : 0 : 1, ci.-s	3, ci : 0, d
29	12·3	13·7	SE : ENE : ESE	SE : ESE : E	1·6	0·05	181	0, hy.-d : 0	0 : 0, d
30	8·3	13·7	E : ESE : SE	S : SW : WSW	1·1	0·06	185	0, hy.-d : 1, ci.-s : 7, ci, ci.-cu, th.-cl	8, cu.-s, ci.-cu, ci.-s, so.-ha : p.-cl, slt.-sh : p.-cl, l
31	0·0	13·6	SW : WSW	W : NNW : NW	1·2	0·04	179	p.-cl, lu.-ha : 10 : 10, c.-r	10, oc.-r : 10, c.-r : 10, c.-r
Means	7·5	14·5	...	...	...	0·23	240		
Number of Column for Reference.	19	20	21	22	23	24	25	26	27

The mean *Temperature of Evaporation* for the month was 56°·6, being 1°·0 *lower* than
The mean *Temperature of the Dew Point* for the month was 52°·3, being 1°·9 *lower* than
The mean *Degree of Humidity* for the month was 71·8, being 5·0 *less* than
The mean *Elastic Force of Vapour* for the month was 0in·393, being 0in·028 *less* than
The mean *Weight of Vapour in a Cubic Foot of Air* for the month was 4grs·4, being 0gr·3 *less* than
The mean *Weight of a Cubic Foot of Air* for the month was 529 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 5·3.

The mean proportion of *Sunshine* for the month (constant sunshine being represented by 1) was 0·517. The maximum daily amount of *Sunshine* was 14·2 hours on August 3.

The highest reading of the *Solar Radiation Thermometer* was 152°·2 on August 3; and the lowest reading of the *Terrestrial Radiation Thermometer* was 33°·6 on August 13.

The mean daily distribution of *Ozone* for the 12 hours ending 9h was 1·8; for the 6 hours ending 15h was 1·3; and for the 6 hours ending 21h was 0·6.

The *Proportions of Wind* referred to the cardinal points were N. 5, E. 3, S. 7, and W. 14. Two days were calm.

The *Greatest Pressure of the Wind* in the month was 21·2 lbs. on the square foot on August 15. The mean daily *Horizontal Movement of the Air* for the month was 240 miles; the greatest daily value was 639 miles on August 15; and the least daily value was 95 miles on August 21.

Rain fell on 8 days in the month, amounting to 1in·235, as measured by gauge No. 6 partly sunk below the ground; being 1in·115 *less* than the average fall for the 50 years, 1841–1890.

MONTH and DAY, 1904.	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	...	29·819	62·8	53·0	9·8	56·9	− 2·8	54·2	51·7	5·2	10·1	1·0	83	87·0	47·3	0·365	1·5	vN, wP : mP
2	...	29·970	69·5	51·4	18·1	58·7	− 1·0	54·7	51·1	7·6	15·3	2·8	76	117·0	43·6	0·000	1·8	wP
3	Last Quarter	29·830	64·8	51·0	13·8	58·2	− 1·4	54·5	51·2	7·0	15·8	2·5	78	101·7	42·1	0·132	13·2	wP : mP
4	Greatest Declination N.	29·957	71·6	42·2	29·4	56·3	− 3·1	51·2	46·4	9·9	20·0	1·9	69	123·3	33·0	0·000	2·0	wP
5	...	29·811	74·6	52·2	22·4	64·0	+ 4·7	57·8	52·6	11·4	18·7	3·4	66	131·9	44·1	0·000	6·5	wP
6	...	29·768	64·3	53·2	11·1	58·5	− 0·6	56·0	53·8	4·7	10·0	0·6	84	74·0	48·6	0·148	3·5	wP : vP, vN : mP
7	...	29·887	68·1	49·8	18 3	57·4	− 1·5	53·8	50·5	6·9	16·0	0·6	78	118·8	42·2	0·046	0·0	wP : mP : vP, vN
8	...	29·927	59·1	47·5	11 6	55·1	− 3·6	53·0	51·0	4·1	10·3	0·8	87	80·0	39·7	0·163	7·0	wP : vN, wP : wP
9	Perigee: New	29·894	65·9	50·0	15·9	58·1	− 0·4	52·7	47·8	10·3	16·6	1·9	69	109·3	43·1	0·000	3·0	wP : mP : mP
10	In Equator	29·974	65·6	45·2	20·4	54·3	− 4·0	50·4	46·6	7·7	16·3	1·7	75	111·2	38·9	0·000	0·0	wP : mP : mP
11	...	30·011	68 6	41·2	27 4	55·3	− 2·8	50·7	46·4	8·9	20·5	1·7	72	123·0	30·6	0·000	2·0	wP
12	...	29·817	59·1	48·9	10·2	55·1	− 2·9	52·8	50 6	4·5	9·9	0·4	85	77·1	43·3	0·038	6·0	wP : wP, vN : wP
13	...	29·712	68·8	52·0	16·8	58·8	+ 0·9	54·1	49·9	8·9	18·5	1·0	72	123·0	42·2	0·000	0·0	wwP : mP : mP
14	...	29·567	59·1	45·3	13·8	54·1	− 3·7	52·5	50·9	3·2	8·5	0·8	89	78·3	35·0	0·179	3·0	wP : wP, wN : vP, ssN
15	...	29·773	67·7	51·1	16 6	56·6	− 1·1	54·6	52·8	3·8	11·9	0·6	87	118·6	43·0	0·022	0·0	wwP : wP : wP
16	First Quarter	29·994	71·4	46·8	24·6	57·3	− 0·2	54·7	52·4	4·9	17·6	0·6	84	122·6	38·7	0·000	6·0	wP
17	Greatest Declination S.	30·055	68·7	49·9	18·8	59·0	+ 1·7	54·7	50·8	8·2	17·1	1·6	75	115·1	40·6	0·000	4·0	wP
18	...	30·128	64·1	45·2	18·9	54·6	− 2·3	50·6	46·8	7·8	17·8	1·4	75	121·6	30·6	0·000	6·0	wP
19	...	30·090	64·1	47·6	16·5	55·2	− 1·3	49·9	44·8	10·4	18·2	2·2	69	117·7	38·0	0·000	5·0	wP : wP : mP
20	...	30·074	61·0	40·5	20·5	52·0	− 4·1	46·1	40·1	11·9	20·3	5·3	64	115·9	29·0	0·000	0·0	wP : wP : mP
21	...	29·991	59·9	42·4	17·5	52·3	− 3·4	46·7	41·0	11·3	18·8	4·7	66	117·1	29·8	0·000	0·0	wP : wP : sP
22	...	29·882	58·3	49·4	8·9	53·3	− 2·1	49·4	45·5	7·8	15·0	3·6	75	112·0	40·4	0·007*	0·0	mP
23	Apogee	29·939	60·5	49·6	10·9	53·3	− 1·9	50·2	47·1	6·2	13·1	2·0	79	112·4	47·3	0·082	0·0	wP : mP : wP, wN
24	Full : In Equator	29·829	61·0	47·7	13·3	54·0	− 1·1	51·4	48·9	5·1	10·6	1·9	82	117·0	42·1	0·113	0·0	wwP : vP, ssN : wP
25	...	29·658	59·0	42·9	16·1	50·7	− 4·3	48·8	46·8	3·9	7·4	1·5	87	108·4	34·0	0·000	0·0	wP : mP
26	...	29·799	65·7	38·8	26·9	51·3	− 3·6	48·5	45·6	5·7	15·7	1·1	81	119·7	29·9	0·000	0·0	mP : wP : mP
27	...	29·874	65·2	39·6	25·6	51·5	− 3·4	49·2	46·9	4·6	14·4	0·6	84	108·0	28·6	0·000	3·0	mP : wP
28	...	29·946	65·5	45·5	20·0	54·2	− 0·6	51·6	49·1	5·1	15·8	0·6	82	101·6	37·2	0·000	0·0	mP : wP : wP
29	...	29·985	63·9	46·1	17·8	54·4	− 0·2	51·9	49·4	5·0	15·5	1·0	83	106·3	36·0	0·000	0·0	wP : mP
30	...	29·861	62·0	40·2	21·8	51·4	− 3·0	50·0	48·6	2·8	10·3	0·9	90	93·0	32·8	0·045	1·8	mP : wP
Means	...	29·894	64·7	46·9	17·8	55·4	− 1·8	51·9	48·6	6·8	14·9	1·7	78·2	108·8	38·4	Sum 1·340	2·5	...
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.

* Rainfall (Column 16). Amount entered on September 22 is derived partly from dew (0in·005).

The mean reading of the *Barometer* for the month was 29in·894, being 0in·088 *higher* than the average for the 50 years, 1841–1890.

TEMPERATURE OF THE AIR.

The highest in the month was 74°·6 on September 5; the lowest in the month was 38°·8 on September 26; and the range was 35°·8.
The mean of all the highest daily readings in the month was 64°·7, being 2°·6 *lower* than the average for the 50 years, 1841–1890.
The mean of all the lowest daily readings in the month was 46°·9, being 2°·2 *lower* than the average for the 50 years, 1841–1890.
The mean of the daily ranges was 17°·8, being 0°·4 *less* than the average for the 50 years, 1841–1890.
The mean for the month was 55°·4, being 1°·8 *lower* than the average for the 50 years, 1841–1890.

MONTH and DAY, 1904.	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.		
Sept. 1	0·0	13·5	WNW : NNW : N	NW : NNW	1·5	0·18	271	10, c.-r : 10, oc.-slt.-r : 10, c.-r	10, oc.-r : p.-cl : 10
2	2·2	13·5	WSW : SW	W : WSW : SW	0·6	0·03	189	10 : p.-cl : 10	8, cu, th.-cl : 9 : 10
3	3·8	13·4	SW	SW : NNW	2·5	0·28	316	10 : 10, r : 10, sc, oc.-r	p.-cl : 1, li.-cl, prh : 0, d
4	10·7	13·3	NNW : WSW : SE	SSW : SW : S	1·1	0·03	157	0, hy.-d : 1, li.-cl	2, li.-cl : 2, ci, ci.-s : 0, d
5	12·1	13·3	S : SSW	SW : SSE	2·3	0·21	268	1, th.-cl, hy.-d : 1, li.-cl : p.-cl	1, cu : 1, th.-cl : p.-cl
6	0·1	13·2	SSW : WSW	SSW	1·9	0·05	206	0, d : p.-cl : 10, oc.-r	10, fq.-r : 9 : 9, th.-cl
7	8·8	13·2	SW : WSW : W	W : SW : WSW	1·7	0·08	233	p.-cl, hy.-d : 2, li.-cl : 5, cu, th.-cl	8, cu, th.-cl, hy.-sh : p.-cl, sh.-r : 0, d
8	0·0	13·1	SW : SSW	SSW : SW	2·9	0·24	264	p.-cl : 10, slt.-r : 10, c.-r	10, sc, oc.-r : 9
9	5·2	13·0	WSW	W : WSW	1·6	0·09	244	9 : 10	9, cu, n : 5, cu, li.-cl : p.-cl, d
10	4·4	13·0	WSW : W	NNW : WNW	0·7	0·03	197	0, d : 1, li.-cl, d : p.-cl	8, cu, th.-cl : 5, cu, th.-cl : 0, slt.-f
11	10·9	12·9	NNE : N : NE	ESE : E	1·2	0·10	201	0, hy.-d : 1, th.-cl	1, th.-cl : 1, th.-cl : 0
12	0·0	12·9	E : ESE	ESE : SSE : S	3·4	0·19	258	th.-cl, d : p.-cl : 10, fq.-r	10, oc.-slt.-r : p.-cl, oc.-slt.-r : 0, d
13	5·7	12·8	SSW : WSW : WNW	W : WSW	0·9	0·01	196	p.-cl, d : p.-cl : 7, cu, th.-cl	8, cu, ci.-cu, ci.-s, n, so.-ha : p.-cl, so.-ha : p.-cl
14	0·7	12·7	SW : SSW : SSE	SE : SSW : WSW	0·7	0·02	170	p.-cl, d : li.-cl : 10, r	10, c.-r : p.-cl, sh.-r : 10
15	3·5	12·7	NNE : N	N : SE : S	0·1	0·00	114	10 : 10, slt.-f : 8, th.-cl, h	9, cu, n, glm, slt.-r : 10, n : 2, th.-cl, slt.-f
16	6·4	12·6	S : NE : SE	SE : ESE	1·3	0·05	160	1, slt.-f, hy.-d : p.-cl : 8, cu, ci.-s, li.-cl	6, cu, li.-cl : 3, ci, th.-cl : o, m, lu.-ha, lu.-co, d
17	9·9	12·5	ESE	ESE : E	2·3	0·18	234	0, h, hy.-d : 0 : 2, cu, th.-cl	1, th.-cl : 0 : 0, d
18	11·3	12·5	ESE : E	E : ESE	3·2	0·20	250	0, hy.-d : 0	1, ci : 0, d
19	11·2	12·4	ESE	E : ESE	3·9	0·30	292	0, hy.-d : 0	0 : 0, d
20	10·9	12·3	ESE : E	E : ENE	3·0	0·25	271	0, hy.-d : 0	0 : 0
21	10·6	12·3	ENE : E	ENE : NE	4·0	0·43	332	0, hy.-d : 0 : 1, li.-cl	3, cu.-s, li.-cl : 6, cu.-s, lu.-co : 9
22	1·7	12·2	ENE : NE	NE : NNE	3·1	0·23	321	p.-cl : 9 : 7, ci, ci.-s, ci.-cu, cu, cu.-s, n	10, sc, oc.-slt.-r : 10, oc.-slt.-r
23	1·5	12·1	NE	ENE : NE : NNE	2·5	0·24	313	10, oc.-slt.-r : 10 : 10, sc	9 : 10, fq.-r : 10, sc, oc.-shs
24	5·5	12·1	NNE : NE	ENE : NE : NNE	2·3	0·22	268	9, oc.-shs : 7, cu, ci.-cu, n, th.-cl	8, cu, n, hy.-sh : v, shs.-r : p.-cl lu.-co
25	1·3	12·0	NNE : N	Variable	0·1	0·00	100	9 : 10 : 9, cu, th.-cl, h	10, glm, slt.-f : p.-cl, h, hy.-d : 1, slt.-f, d
26	8·1	11·9	WSW	SW : SSW	0·9	0·03	163	0, slt.-f, hy.-d : 0, slt.-f : 5, cu, ci, ci.-s	6, cu : p.-cl, ci.-cu : 1, d
27	6·2	11·9	Variable : Calm : NE	ESE	0·2	0·00	105	0, f : 0, f : 2, ci, th.-cl, slt.-f	1, ci, th.-cl : th.-cl : 0, h, hy.-d
28	3·5	11·8	ESE : Calm	ESE : NE	0·3	0·00	103	tk.-f, hy.-d : f : f, so.-ha	2, ci, li.-cl, so.-ha : 4, ci, li.-cl, prh : p.-cl, lu.-ha, prs, d
29	7·3	11·7	NNE	NNE : N	0·9	0·04	159	p.-cl, slt.-f : 10, m : 6, cu, th.-cl	1, th.-cl : 0 : 0, d, slt.-f
30	1·2	11·7	Calm : WSW	SW : SSW	1·8	0·13	206	0, f : 0, slt.-f : 7, th.-cl, so.-ha	10, ci.-s, so.-ha : 10, oc.-slt.-r : 10, sc, oc.-slt.-r
Means	5·5	12·6	...	...	...	0·13	219		
Number of Column for Reference.	19	20	21	22	23	24	25	26	27

The mean *Temperature of Evaporation* for the month was 51°·9, being 2°·3 *lower* than
The mean *Temperature of the Dew Point* for the month was 48°·6, being 2°·8 *lower* than
The mean *Degree of Humidity* for the month was 78·2, being 2·6 *less* than
The mean *Elastic Force of Vapour* for the month was 0in·343, being 0in·036 *less* than
The mean *Weight of Vapour in a Cubic Foot of Air* for the month was 3grs·8, being 0gr·4 *less* than
The mean *Weight of a Cubic Foot of Air* for the month was 537 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 5·3.

The mean proportion of *Sunshine* for the month (constant sunshine being represented by 1) was 0·435. The maximum daily amount of *Sunshine* was 12·1 hours on September 5.

The highest reading of the *Solar Radiation Thermometer* was 131°·9 on September 5; and the lowest reading of the *Terrestrial Radiation Thermometer* was 28°·6 on September 27.

The mean daily distribution of *Ozone* for the 12 hours ending 9h was 0·9; for the 6 hours ending 15h was 1·2; and for the 6 hours ending 21h was 0·4.

The *Proportions of Wind* referred to the cardinal points were N. 5, E. 9, S. 7, and W. 7. Two days were calm.

The *Greatest Pressure of the Wind* in the month was 4·0 lbs. on the square foot on September 21. The mean daily *Horizontal Movement of the Air* for the month was 219 miles; the greatest daily value was 332 miles on September 21; and the least daily value was 100 miles on September 25.

Rain fell on 11 days in the month, amounting to 1in·340, as measured by gauge No. 6 partly sunk below the ground; being 0in·911 *less* than the average fall for the 50 years, 1841–1890.

MONTH and DAY, 1904.	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	...	29·658	61·0	44·3	16·7	56·0	+ 1·9	54·1	52·3	3·7	8·9	0·6	88	94·0	33·2	0·091	5·2	wP : mP
2	Greatest Declination N: Last Quarter.	29·847	59·9	39·5	20·4	49·0	− 4·8	46·5	43·8	5·2	10·3	0·4	82	112·2	29·8	0·119	0·0	mP : mP : vN, wP
3	...	30·070	61·9	44·8	17·1	52·8	− 0·7	50·2	47·6	5·2	11·6	1·9	83	96·0	35·6	0·083	0·0	wP
4	...	30·045	66·5	37·9	28·6	53·4	+ 0·2	50·6	47·8	5·6	16·6	0·0	81	106·0	30·4	0·000	3·5	wP : mP : wP
5	...	29·725	58·9	50·8	8·1	55·1	+ 2·1	53·6	52·1	3·0	6·7	0·4	90	72·0	45·9	0·111	2·5	wP
6	...	29·439	57·6	48·3	9·3	53·4	+ 0·7	49·1	44·8	8·6	14·6	2·1	73	96·6	43·1	0·000	3·0	wP : sP : mP
7	...	29·498	50·2	42·2	8·0	47·4	− 5·1	45·8	44·1	3·3	6·1	1·3	89	62·2	35·8	0·549	0·0	vP, vN : mP : mP
8	Perigee : In Equator	29·870	51·3	39·5	11·8	45·0	− 7·1	41·0	36·4	8·6	16·2	1·6	72	90·9	30·7	0·000	0·0	wP : sP : sP
9	New	30·094	52·1	32·2	19·9	45·3	− 6·4	43·3	41·0	4·3	11·6	0·3	85	76·0	33·2	0·000	0·0	mP : vP : mP
10	...	30·078	59·2	46·8	12·4	52·8	+ 1·5	50·8	48·8	4·0	8·6	0·6	87	85·1	42·0	0·021	3·5	wwP : wP : wP
11	...	30·060	58·7	50·6	8·1	54·0	+ 3·0	53·5	53·0	1·0	3·0	0·0	97	75·0	44·0	0·004	1·7	wP
12	...	30·128	57·2	41·1	16·1	52·3	+ 1·7	50·0	47·7	4·6	10·6	0·6	84	81·9	31·6	0·000	0·8	wP : wP : mP
13	...	30·278	57·3	32·6	24·7	45·6	− 4·7	43·6	41·3	4·3	12·6	1·0	86	100·0	24·3	0·000	4·0	mP
14	Greatest Declination S.	30·017	55·7	35·6	20·1	45·8	− 4·3	42·9	39·6	6·2	15·6	0·0	79	102·0	28·0	0·000	0·0	mP
15	...	29·854	54·0	31·9	22·1	43·5	− 6·4	40·9	37·8	5·7	14·6	0·5	80	90·9	20·7	0·000	0·0	mP : wP : mP
16	First Quarter	29·831	56·0	36·4	19·6	48·1	− 1·7	46·2	44·1	4·0	11·2	1·6	87	84·3	27·3	0·000	2·5	wP : mP
17	...	29·742	61·0	50·8	10·2	56·1	+ 6·5	54·8	53·6	2·5	4·2	0·0	92	73·0	45·7	0·222	9·5	wwP
18	...	30·005	66·5	54·7	11·8	60·8	+11·3	58·4	56·3	4·5	8·6	0·0	86	100·3	45·8	0·000	0·0	wwP : wP : ...
19	...	30·269	62·7	52·5	10·2	55·7	+ 6·4	55·1	54·6	1·1	4·9	0·0	96	82·9	44·1	0·000	0·0	... : wwP
20	Apogee	30·115	64·9	48·9	16·0	55·7	+ 6·7	54·8	54·0	1·7	8·5	0·0	94	95·4	47·6	0·009*	0·0	wP : wwP : wwP
21	...	29·812	58·7	52·4	6·3	56·0	+ 7·2	54·7	53·5	2·5	4·4	0·8	91	72·5	48·4	0·000	0·0	... : wwP
22	In Equator	29·630	59·5	45·0	14·5	53·5	+ 5·0	51·4	49·4	4·1	11·6	0·2	86	77·8	36·3	0·213	0·0	wwP : wP
23	...	29·650	59·0	47·0	12·0	54·3	+ 6·1	53·0	51·7	2·6	7·0	0·2	91	78·1	39·0	0·197	2·0	wwP : wwP : wwP, wwN
24	Full	29·841	59·9	51·2	8·7	54·5	+ 6·6	53·4	52·3	2·2	5·3	0·2	92	84·3	45·0	0·003	0·0	wwP
25	...	30·057	54·1	41·5	12·6	49·0	+ 1·4	46·0	42·8	6·2	13·6	1·5	79	73·0	31·3	0·000	0·0	wP : mP
26	...	30·049	53·9	43·5	10·4	49·2	+ 1·8	46·7	44·0	5·2	8·0	1·5	83	63·4	36·0	0·000	0·0	wP : mP : wP
27	...	30·079	52·6	36·2	16·4	46·3	− 1·0	45·5	44·6	1·7	4·8	0·0	94	62·3	31·2	0·006*	0·0	wwP : ...
28	...	30·023	57·3	42·6	14·7	50·8	+ 3·6	48·1	45·3	5·5	12·3	0·8	82	92·2	32·5	0·000	2·0	... : wP : wP
29	Greatest Declination N.	30·081	56·0	39·5	16·5	48·1	+ 1·1	45·0	41·6	6·5	14·3	0·7	78	90·4	29·7	0·008*	0·5	wP : wP : mP
30	...	29·964	51·3	46·1	5·2	48·4	+ 1·4	46·9	45·3	3·1	4·2	0·6	89	53·0	40·9	0·004	1·5	wwP
31	Last Quarter	29·964	48·7	46·1	2·6	47·5	+ 0·7	46·9	46·2	1·3	1·5	0·2	96	49·7	44·0	0·100	0·0	wwP : wP : wP
Means	...	29·928	57·5	43·6	13·9	51·1	+ 1·1	49·1	47·0	4·1	9·4	0·6	86·2	83·0	36·6	Sum 1.740	1·4	...
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.

* Rainfall (Column 16). Amounts entered on October 20, 27, and 29 are derived from fog and dew.

· The mean reading of the *Barometer* for the month was 29^{in}·928, being 0^{in}·212 *higher* than the average for the 50 years, 1841–1890.

TEMPERATURE OF THE AIR.

The highest in the month was 66°·5 on October 4 and 18; the lowest in the month was 31°·9 on October 15; and the range was 34°·6.
The mean of all the highest daily readings in the month was 57°·5, being 0°·2 *lower* than the average for the 50 years, 1841–1890.
The mean of all the lowest daily readings in the month was 43°·6, being 0°·3 *higher* than the average for the 50 years, 1841–1890.
The mean of the daily ranges was 13°·9, being 0°·5 *less* than the average for the 50 years, 1841–1890.
The mean for the month was 51°·1, being 1°·1 *higher* than the average for the 50 years, 1841–1890.

MONTH and DAY, 1904.	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.	Rolinson's. Horizontal Movement of the Air.	CLOUDS AND WEATHER. A.M.	CLOUDS AND WEATHER. P.M.
	hours.	hours.			lbs.	lbs.	miles.		
Oct. 1	0·5	11·6	SSW : SW	NNW : NW : W	2·7	0·38	311	10, oc.-slt.-r : 10, oc.-slt.-r : 10, sc, fq.-r, glm	10, fq.-r : p.-cl : 0
2	0·5	11·5	WSW : SW	NNE : NE : ENE	0·9	0·04	174	0, d : p.-cl : p.-cl,so.-ha	9, r, slt.-f : 10, r : 10, fq.-r
3	2·6	11·5	ENE : NE	ENE : E : ESE	2·5	0·15	275	p.-cl : 10, slt.-r : 10	5, cu, th.-cl : 0, hy.-d
4	4·8	11·4	Calm : SW	SW : WSW	0·7	0·02	151	0, hy.-d, lu.-ha: 0,slt.-f,hy.-d: 3, ci, ci.-s, th.-cl, so.-ha	8, ci, ci.-s, so.-ha, prh : 8, ci.-cu : 9
5	0·0	11·3	WSW : W	WSW : SW	9·8	0·47	382	9 : 9, th.-cl, so.-ha	10, oc.-slt.-r : 10, fq.-r, w : 10, sc, w
6	2·0	11·3	WSW : W : WNW	WNW : W : WSW	12·0	1·19	534	p.-cl, w : p.-cl, w : 6,cu.-s,n,w	10, sc, w : li.-cl : 10
7	0·0	11·2	WSW : Variable : N	N : NW	2·6	0·28	276	10 : 10, r : 10, sc, fq.-r	10, sc, oc.-r : p.-cl, sh.-r : 1
8	7·6	11·1	W : WNW : NNW	NNW : N : NW	5·7	0·52	384	p.-cl : p.-cl : 4, th.-cl, w	6, w : 2 : 0
9	2·0	11·1	WSW	WSW : SW	0·5	0·01	167	0, hy.-d, ho.-fr: 0 : 6, th.-cl, h	8, th.-cl : 8, th.-cl : th.-cl
10	0·2	11·0	SW	WSW : SW	0·5	0·02	182	10, r : 10 : 9	9, cu.-s, ci.-s, li.-cl, slt.-r : 10 : 10, slt.-r
11	0·0	10·9	SW : S	Calm : SW	0·0	0·00	70	10, oc.-slt.-r : 0, slt.-f : 10, glm	10, glm : 10, f : 10, f
12	1·9	10·9	NNW : N : NNE	NNE : NE	1·8	0·15	219	10, f : 9 : 7,ci,li.-cl,so.-ha	6,cu,ci, th.-cl,so.-ha: 0
13	5·6	10·8	NE : Calm	ESE : E	1·4	0·05	150	0, slt.-f, hy.-d, ho.-fr : p.-cl,slt.-f: 5, cu.-s, li.-cl,slt.-f	5, cu.-s,li.-cl: 2, th.-cl, d : 1,th.-cl,hy.-d
14	7·1	10·7	E : ESE	ESE : E	3·1	0·19	223	0,hy.-d,ho.-fr: 1, li.-cl : 3,ci.-s,so.-ha	6,cu,ci.-s,so.-ha: 2, s, ci.-s : 1, th.-cl
15	8·2	10·7	E : ESE	ESE : SE	1·0	0·03	156	0, slt.-f, hy.-d, ho. : 0, slt.-f : 1	1, th.-cl : 2, th.-cl : p.-cl, ho.-fr
16	1·6	10·6	SE : Variable : Calm	WSW : SW	0·9	0·03	161	p.-cl,ho.-fr: 9 : 9	9, th.-cl, so.-ha : 10, th.-cl
17	0·0	10·6	SW	WSW	9·2	0·86	485	10, shs.-r : 10, fq.-r : 10, sc, slt.-r, w	10, sc : 10, sc, slt.-r : 10, oc.-m.-r
18	2·6	10·5	WSW : W	W : WSW	2·3	0·29	324	10 : 10 : p.-cl, h	8, th.-cl : 6, th.-cl, lu.-ha, lu.-co : p.-cl, f, hy.-d
19	2·0	10·5	WSW : Calm	WSW : S : Calm	0·1	0·00	80	tk.-f : f : 5, th.-cl, f	2, ci, th.-cl : p.-cl, f : tk.-f
20	1·0	10·4	Calm : SE	SE	0·5	0·00	105	f : f : 8, ci, ci.-cu, th.-cl, so.-ha	4,th.-cl,so.-ha: 4, th.-cl, lu.-ha : p.-cl
21	0·0	10·3	SE : SSE : WSW	WSW : SW	0·8	0·02	178	10, slt.-f : 10, slt.-f : 9	10, oc.-m.-r : 10
22	2·8	10·2	SW : Variable : NNW	Variable : SE : SSE	0·8	0·03	167	10, oc.-slt.-r : 10, th.-r : 10, glm	4, cu.-s,ci.-s, th.-cl: 3, th.-cl, lu.-ha, hy.-d : th.-cl
23	0·0	10·2	ESE : SSE	SE : Calm	0·4	0·00	103	10, oc.-r : 10, slt.-r : 10	10, : 10, slt.-r
24	1·3	10·1	Calm : Variable : N	SW : WSW : N	0·6	0·01	114	10, slt.-sh : 10 : 10,glm,slt.-f	10 : 10, slt.-sh : p.-cl, lu.-co
25	5·6	10·0	N : NNW : NW	NW : W : WSW	1·0	0·05	220	1, slt.-f, hy.-d : 1, th.-cl, slt.-f: 5, th.-cl, h	5,cu,th.-cl,h: 5, th.-cl : p.-cl, lu.-ha
26	0·0	10·0	WSW : W : NW	NNW : WNW	1·7	0·09	241	8 : 9 : 9, th.-cl, so.-ha	6,th.-cl,so.-ha,h: 2, th.-cl, slt.-f, hy.-d : th.-cl,f,lu.-ha
27	0·7	9·9	Variable : Calm	Calm : SE	0·1	0·00	90	p.-cl, f : tk.-f : f	1,th.-cl,h,f, : p.-cl, h : 9
28	7·6	9·9	SE	ESE : E	0·8	0·02	172	9 : p.-cl, d : 1, th.-cl	1, ci, ci.-s : 1,li.-cl,hy.-d: 0, hy.-d
29	7·7	9·8	ENE : E	ENE : NE	3·4	0·28	307	0, hy.-d, slt.-f, ho.-fr : 0, slt.-f : 0	0 : 1 : p.-cl
30	0·0	9·8	E	E : ENE : NE	3·3	0·38	336	10 : 10 : 10,sc,oc.-m.-r	10,sc,oc.-m.-r : 10, m.-r
31	0·0	9·7	NE	NE	0·5	0·03	193	10, m.-r : 10, m.-r	10, m.-r : 10 : 10
Means	2·4	10·6	...	...	...	0·18	224		
Number of Column for Reference.	19	20	21	22	23	24	25	26	27

The mean *Temperature of Evaporation* for the month was 49°·1, being 1°·1 *higher* than
The mean *Temperature of the Dew Point* for the month was 47°·0, being 1°·1 *higher* than
The mean *Degree of Humidity* for the month was 86·2, being 0·6 *greater* than
The mean *Elastic Force of Vapour* for the month was 0in·323, being 0in·014 *greater* than
The mean *Weight of Vapour in a Cubic Foot of Air* for the month was 3grs·6, being 0gr·1 *greater* than
The mean *Weight of a Cubic Foot of Air* for the month was 542 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 6·6.

The mean proportion of *Sunshine* for the month (constant sunshine being represented by 1) was 0·230. The maximum daily amount of *Sunshine* was 8·2 hours on October 15.

The highest reading of the *Solar Radiation Thermometer* was 112°·2 on October 2; and the lowest reading of the *Terrestrial Radiation Thermometer* was 20°·7 on October 15.

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

The *Proportions of Wind* referred to the cardinal points were N. 4, E. 8, S. 6, and W. 10. Three days were calm.

The *Greatest Pressure of the Wind* in the month was 12·0 lbs. on the square foot on October 6. The mean daily *Horizontal Movement of the Air* for the month was 224 miles; the greatest daily value was 534 miles on October 6; and the least daily value was 70 miles on October 11.

Rain fell on 10 days in the month, amounting to 1in·740, as measured by gauge No. 6 partly sunk below the ground; being 1in·071 *less* than the average fall for the 50 years, 1841–1890.

MONTH and DAY, 1904.	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	...	30·109	49·9	45·9	4·0	48·2	+ 1·5	47·2	46·1	2·1	4·0	1·5	93	54·0	42·0	0·011	0·0	wP
2	...	30·296	52·9	46·2	6·7	48·9	+ 2·4	45·8	42·5	6·4	10·8	2·3	79	74·9	44·2	0·000	0·0	wP : mP : mP
3	...	30·182	56·4	45·5	10·9	50·5	+ 4·2	47·2	43·7	6·8	10·3	2·5	78	79·0	42·4	0·000	0·0	wP
4	In Equator	30·081	56·2	44·2	12·0	49·7	+ 3·6	47·5	45·2	4·5	8·0	1·1	85	85·6	39·1	0·000	0·0	wP
5	Perigee	29·965	56·1	47·4	8·7	51·2	+ 5·3	47·2	43·0	8·2	14·2	3·4	74	79·8	42·0	0·000	0·0	wP : mP : mP
6	...	29·869	53·0	43·4	9·6	47·9	+ 2·4	46·0	43·9	4·0	11·4	1·1	87	65·0	37·0	0·179	0·0	wP, wN : mP : vP, vN
7	New	29·526	50·9	42·0	8·9	48·4	+ 3·3	47·3	46·1	2·3	7·7	0·6	92	59·1	37·3	0·587	0·0	wwP: wN
8	...	29·669	49·6	40·4	9·2	45·2	+ 0·6	41·3	36·8	8·4	10·9	4·2	73	65·2	34·6	0·000	2·2	mP : mP : vP
9	...	29·441	59·0	49·6	9·4	55·5	+ 11·5	52·8	50·2	5·3	11·2	1·8	83	59·3	46·0	0·229	2·8	wwP, wwN : wwP
10	...	29·799	55·4	45·2	10·2	48·3	+ 4·7	45·2	41·8	6·5	11·8	1·3	79	63·8	36·0	0·316	0·0	wP : vP : wP, vN
11	Greatest Declination S.	29·773	58·8	46·3	12·5	52·1	+ 8·9	49·5	46·9	5·2	11·4	0·8	83	82·9	42·6	0·084	0·0	wwN, wwP : wP : wP
12	...	30·048	53·4	36·4	17·0	47·0	+ 4·1	44·2	41·0	6·0	11·4	2·2	80	70·7	29·4	0·000	0·0	wP : mP : mP
13	...	30·269	53·4	31·3	22·1	41·3	− 1·5	40·0	38·3	3·0	7·6	0·2	90	68·0	25·7	0·000	0·0	mP : wP : wP
14	...	30·402	51·5	33·2	18·3	39·9	− 2·7	38·5	36·7	3·2	11·3	0·0	89	67·9	24·4	0·000	0·0	wwP : mP
15	First Quarter	30·359	53·6	30·0	23·6	41·2	− 1·3	39·3	36·9	4·3	12·2	0·0	85	70·8	21·8	0·000	0·0	wP : vP : wP
16	...	30·275	49·9	37·2	12·7	43·9	+ 1·5	42·9	41·7	2·2	4·2	0·2	92	58·0	28·0	0·000	0·0	wP : wwP
17	Apogee	30·320	45·2	39·2	6·0	43·2	+ 0·9	43·0	42·8	0·4	2·2	0·2	98	46·2	27·2	0·000	0·0	wwP
18	In Equator	30·209	42·9	35·6	7·3	39·0	− 3·3	38·8	38·5	0·5	2·7	0·0	98	42·9	35·6	0·023*	0·0	wP
19	...	29·997	51·0	40·6	10·4	46·7	+ 4·5	45·7	44·6	2·1	9·2	0·2	93	59·0	39·0	0·018	0·0	wP
20	...	29·906	46·9	35·0	11·9	43·0	+ 0·9	40·4	37·3	5·7	10·7	1·8	80	51·3	28·0	0·000	0·0	wP : wP : mP
21	...	29·665	42·5	30·6	11·9	37·9	− 4·2	35·6	32·5	5·4	13·4	0·5	81	56·6	24·0	0·072	0·0	wP : mP : mP, ssN
22	...	29·278	36·9	30·2	6·7	34·3	− 7·9	32·4	29·2	5·1	10·8	1·5	81	42·2	25·5	0·000	0·0	mP : sP
23	Full	29·372	36·9	28·4	8·5	32·9	− 9·2	30·1	24·5	8·4	10·2	1·5	71	49·4	22·0	0·113	0·0	mP : sP : sP, ssN
24	...	29·520	32·6	25·8	6·8	29·9	− 12·2	29·0	26·2	3·7	7·0	1·5	85	34·0	21·2	0·000	0·5	mP
25	Greatest Declination N.	29·606	35·1	26·3	8·8	33·1	− 8·9	31·9	29·5	3·6	4·7	1·6	87	35·6	20·1	0·000	3·5	wP : mP
26	...	29·764	32·8	23·2	9·6	29·3	− 12·6	28·9	27·6	1·7	2·4	0·0	93	38·4	18·0	0·000	0·2	mP : wP : mP
27	...	29·738	34·6	25·9	8·7	29·7	− 11·9	29·0	26·8	2·9	5·4	0·0	88	34·8	22·2	0·000	0·8	mP
28	...	29·645	39·1	30·7	8·4	35·3	− 6·0	34·4	33·0	2·3	3·1	1·0	91	41·9	23·6	0·000	0·5	mP, wN : wP : wwP
29	...	29·858	40·9	30·2	10·7	36·6	− 4·4	35·5	34·0	2·6	3·9	0·3	91	42·0	25·6	0·000	1·5	wwP : wP : wP
30	Last Quarter	29·870	48·1	36·5	11·6	42·8	+ 2·1	41·2	39·3	3·5	5·5	1·6	87	52·3	31·3	0·014	0·5	wP : ... : wwP
Means	...	29·892	47·5	36·7	10·8	42·4	− 0·8	40·6	38·2	4·2	8·3	1·2	85·5	57·7	31·2	Sum 1·646	0·4	...
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.

* Rainfall (Column 16). Amount entered on November 18 is derived from fog.

The mean reading of the *Barometer* for the month was 29^{in}·892, being 0^{in}·148 *higher* than the average for the 50 years, 1841–1890.

TEMPERATURE OF THE AIR.

The highest in the month was 59°·0 on November 9; the lowest in the month was 23°·2 on November 26; and the range was 35°·8.
The mean of all the highest daily readings in the month was 47°·5, being 1°·3 *lower* than the average for the 50 years, 1841–1890.
The mean of all the lowest daily readings in the month was 36°·7, being 0°·9 *lower* than the average for the 50 years, 1841–1890.
The mean of the daily ranges was 10°·8, being 0°·5 *less* than the average for the 50 years, 1841–1890.
The mean for the month was 42°·4, being 0°·8 *lower* than the average for the 50 years, 1841–1890.

MONTH and DAY, 1904.	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.		
Nov. 1	0·0	9·6	NE : NNE	NE : NNE	0·9	0·03	174	10, oc.-m.-r : 10 : 10	10, oc.-m.-r : 10, oc.-m.-r : 10
2	1·1	9·6	NE	NE : NNE : N	0·8	0·01	131	9, d : 10 : 6, cu.-s	9 : 10 : 10
3	4·2	9·5	WSW : W	W : WSW	1·4	0·14	284	10 : 10 : 3.ci.-cu.ci.-s, h	p.-cl : 5, th.-cl : th.-cl
4	2·1	9·4	WSW	W : WSW	0·5	0·01	181	9 : 9 : 7, ci, ci.-cu	8 : 10 : 10
5	2·4	9·4	WSW : W	W : WSW	1·0	0·03	204	10 : 10 : 9, cu.-s, ci.-cu	9, cu, ci. cu, th.-cl : 9
6	0·0	9·3	W : WSW	W : WNW : Variable	0·9	0·03	188	9 : 9 : 9, sh.-r	9 : 10, oc.-r : 10, fq.-th.-r
7	0·0	9·3	Variable : SW	SSW : SW : NNW	12·8	0·46	312	10, fq.-r : 10, c.-r	10, sc, fq.-r : 10, fq.-r : p.-cl, hy.-sh, hy.-sqs
8	2·4	9·2	NW : WNW : W	WNW : W : WSW	13·0	1·80	638	p.-cl, w : 0 : 3, sc, ci.-s, th.-cl, w	9, sc, w : p.-cl : 10, st.-w
9	0·0	9·2	WSW : W	W	15·5	2·91	867	10, sc, sh.-r, st.-w : 10, fq.-r, st.-w : 10, sc, oc.-hy.-shs, st.-w	10, sc, st.-w : 10, sc, st.-w : p.-cl, st.-w
10	0·6	9·1	W : WSW : WNW	WNW : NNW : NNE	9·0	0·49	258	p.-cl, li.-shs, w : 1 : p.-cl, glm	10 : 10, c.-r
11	3·7	9·1	ESE : SE	SE : Variable : W	4·6	0·41	360	10, c.-r, : 10 : 8, cu, th.-cl	7, cu, ci.-cu : p.-cl : p.-cl
12	5·0	9·0	W : WNW	W : NW : SW	1·2	0·12	257	1, d, slt.-f : 0, slt.-f : 1, ci. s, th.-cl	1, th.-cl : 0, slt.-f : 0, slt.-f
13	5·4	8·9	SW : S : ENE	SSE : E	0·0	0·00	111	0, slt.-f : 0, f : 0, f	0 : 0, ho.-fr : 0, f. ho.-fr
14	4·3	8·9	E : ENE : NE	SE : ESE	0·0	0·00	104	tk.-f, ho.-fr : tk.-f : 0, f	1, ci : 0, hy.-d, ho. fr
15	5·2	8·8	SE : Calm : Variable	SW : SSW	0·5	0·01	130	0, f, ho.-fr : 0, tk.-f : 0, tk.-f	0 : 0, slt.-f, d, lu.-ha : 2, th.-cl, slt.-f, ho.-fr
16	0·0	8·8	WSW : W : N	NNE : NE	1·2	0·02	172	10, f : 10, slt.-f : 10, slt.-f	8, th.-cl, h : 5, th.-cl, slt.-f : p.-cl, m, hy.-d
17	0·0	8·7	N : NNE : NE	N : SSW : WSW	0·0	0·00	102	10 : p.-cl : 10, slt.-f. glm	10, slt.-f, glm : 10, f : 10, slt.-f
18	0·0	8·7	WSW	WSW : SW	0·4	0·01	194	10, f : 10 slt.-f	10, f, glm : 10, f : 10, m.-r
19	0·0	8·7	WSW : W	WSW : NW : NNW	1·1	0·10	270	10 : 10	10 : 10, oc.-slt.-r : 10
20	0·0	8·6	W : WSW	W : WNW	1·3	0·07	249	9 : 10	p.-cl : p.-cl : li.-cl
21	4·6	8·6	WSW	WSW : SW : SSW	4·0	0·10	250	th.-cl, ho.-fr : p.-cl : 5, th.-cl	1, th.-cl : p.-cl, slt.-r : 10
22	0·0	8·5	W	WNW	9·0	1·13	580	8 : 0, ho.-fr : 10, sc, sn, w	9, slt.-sn, w : p.-cl, w : p.-cl, lu.-co
23	5·0	8·5	W : WSW	WSW : W : NW	2·0	0·18	331	0, ho.-fr : 0 : 1	4, ci, th.-cl : 8 : 10, oc.-sn
24	0·0	8·4	N : WNW : WSW	WSW : NW : NNW	0·7	0·01	139	10 : 10 : p.-cl, slt.-f, glm, so.-ha	p.-cl, so.-ha : 10, slt.-f : 10
25	0·0	8·4	NNW : NW	N : NNW : WSW	1·3	0·15	224	10 : 10	8, cu, n, th.-cl : p.-cl : 0, slt.-f, ho.-fr
26	0·0	8·3	W : NW : N	WSW	0·2	0·00	117	0, ho.-fr : f : slt.-f	0, f : f, ho. fr : p.-cl, tk.-f, ho.-fr
27	0·0	8·3	WSW : W	W : WSW	0·4	0·00	236	0, f, ho.-fr : p.-cl, ho.-fr : 6, th.-cl, slt.-f	2, th.-cl, slt.-f : 0, slt.-f, ho.-fr : p.-cl, h, ho.-fr
28	0·0	8·2	WSW	N : NNW : NW	0·1	0·00	145	p.-cl, slt.-f, ho.-fr : 9, slt.-f : 9, f, glm	10, slt.-f, glm : 10, slt.-f : 8, th.-cl, ho.-fr
29	0·0	8·2	NNW : SW : WSW	WSW : W : WNW	0·8	0·04	207	8, ho.-fr : 9, slt.-f : 10, slt.-f	9, th.-cl : p.-cl : 9
30	0·0	8·2	WSW	WSW : W	1·6	0·25	355	10 : 10 : 9, fq.-r	9, oc.-slt.-r : p.-cl : 1
Means	1·5	8·8	...	...	...	0·28	259		
Number of Column for Reference.	19	20	21	22	23	24	25	26	27

The mean *Temperature of Evaporation* for the month was 40°·6, being 1°·0 *lower* than
The mean *Temperature of the Dew Point* for the month was 38°·2, being 1°·5 *lower* than
The mean *Degree of Humidity* for the month was 85·5, being 2·0 *less* than
The mean *Elastic Force of Vapour* for the month was 0in·231, being 0in·013 *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 551 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 7·2.

The mean proportion of *Sunshine* for the month (constant sunshine being represented by 1) was 0·173. The maximum daily amount of *Sunshine* was 5·4 hours on November 13.

The highest reading of the *Solar Radiation Thermometer* was 85°·6 on November 4; and the lowest reading of the *Terrestrial Radiation Thermometer* was 18°·0 on November 26.

The mean daily distribution of *Ozone* for the 12 hours ending 9h was 0·2; 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. 5, E. 2, S. 5, and W. 17. One day was calm.

The *Greatest Pressure of the Wind* in the month was 15·5 lbs. on the square foot on November 9. The mean daily *Horizontal Movement of the Air* for the month was 259 miles; the greatest daily value was 867 miles on November 9; and the least daily value was 102 miles on November 17.

Rain fell on 10 days in the month, amounting to 1in·646, as measured by gauge No. 6 partly sunk below the ground; being 0in·620 *less* than the average fall for the 50 years, 1841–1890.

MONTH and DAY, 1904.	Phases of the Moon.	BAROMETER. Mean of 24 Hourly Values (corrected and reduced to 32°·0 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	...	29·818	49·6	43·6	6·0	47·5	+ 6·9	45·0	42·3	5·2	8·8	2·5	83	56·6	36·5	0·000	3·5	wwP : wP : wP
2	In Equator	29·600	52·3	41·8	10·5	46·4	+ 5·8	44·6	42·6	3·8	10·0	1·3	87	73·2	36·6	0·002	5·0	wP : wP : wwP
3	Perigee	29·565	46·9	42·0	4·9	44·4	+ 3·6	43·5	42·5	1·9	7·6	0·6	93	54·2	34·7	0·060	0·2	wwP : wP
4	...	29·570	53·4	41·5	11·9	50·5	+ 9·4	49·4	48·2	2·3	4·4	1·8	92	56·8	35·0	0·010	9·0	wwP
5	...	29·433	53·7	44·3	9·4	49·9	+ 8·6	47·0	43·9	6·0	9·6	2·2	81	66·8	37·3	0·088	3·8	wwP : wP : wP
6	...	29·300	48·6	38·2	10·4	44·6	+ 3·3	43·4	42·0	2·6	4·8	0·8	91	48·6	32·1	1·106	0·0	wwP, vN : vN : wP
7	New	29·205	41·5	36·3	5·2	39·1	− 1·9	38·0	36·6	2·5	3·0	1·1	91	42·0	29·9	0·013	0·0	wP : wP, wN : wP
8	Greatest Declination S.	29·489	38·8	26·3	12·5	34·8	− 5·8	33·5	31·4	3·4	8·5	1·0	87	41·3	17·1	0·004	0·2	wP : mP
9	...	29·333	43·8	26·2	17·6	37·3	− 3·0	36·1	34·4	2·9	8·6	0·7	89	43·8	17·0	0·051	2·8	wP : wP, wN : ...
10	...	29·195	45·3	38·3	7·0	42·7	+ 2·8	41·9	40·9	1·8	4·1	0·0	94	47·3	36·6	0·270	0·0	... : ... : wwP, wwN
11	...	29·414	44·4	31·5	12·9	36·0	− 3·8	34·8	33·0	3·0	5·2	0·9	89	46·0	29·1	0·024	1·2	wP : mP : ...
12	...	28·867	46·2	39·1	7·1	43·2	+ 3·3	41·8	40·1	3·1	7·3	0·9	89	57·6	33·5	0·078	0·8	... : vP : wwP, wwN
13	...	29·353	43·0	33·5	9·5	39·9	− 0·2	38·1	35·8	4·1	6·4	2·3	86	49·0	26·8	0·024	0·0	wwP : wP
14	First Quarter	29·383	44·3	30·6	13·7	39·8	− 0·4	39·0	38·0	1·8	3·0	0·5	94	44·3	24·9	0·335	0·0	wwP : vN, wP : mP
15	Apogee : In Equator	29·559	45·2	37·6	7·6	41·5	+ 1·2	40·4	39·0	2·5	4·4	0·7	92	57·6	32·1	0·000	0·5	mP
16	...	29·759	56·0	42·7	13·3	51·6	+ 11·4	49·8	48·0	3·6	7·0	0·4	88	67·0	36·0	0·024	6·5	wP
17	...	30·033	54·8	49·2	5·6	52·3	+ 12·3	49·9	47·5	4·8	8·0	2·2	84	58·2	43·0	0·022	0·0	wP
18	...	30·224	54·0	32·4	21·6	47·4	+ 7·7	45·7	43·8	3·6	6·1	0·7	88	60·0	27·8	0·024	0·0	wP : mP
19	...	30·424	39·3	28·8	10·5	35·6	− 3·7	35·6	35·6	0·0	0·8	0·0	100	41·6	26·7	0·004*	0·0	sP : mP
20	...	30·347	38·5	29·3	9·2	34·0	− 5·0	33·4	32·3	1·7	3·6	0·0	93	53·8	20·2	0·006*	0·0	mP : vP : wP
21	...	30·284	31·5	24·8	6·7	29·0	− 9·8	29·0	29·0	0·0	1·1	0·0	100	36·9	14·9	0·000	0·0	wP
22	Full	30·241	31·6	26·6	5·0	29·0	− 9·6	28·9	28·6	0·4	1·6	0·0	98	35·0	18·0	0·000	0·0	wP
23	Greatest Declination N.	30·155	36·7	29·2	7·5	32·4	− 6·0	32·1	31·4	1·0	1·3	0·0	96	39·3	29·2	0·009*	0·0	wP : wwP
24	...	30·029	34·3	29·5	4·8	32·2	− 6·1	32·1	31·9	0·3	3·0	0·0	99	38·8	29·5	0·000	0·0	wP : sP
25	...	29·879	39·9	30·5	9·4	35·2	− 3·1	34·2	32·6	2·6	4·4	0·0	90	47·7	22·0	0·000	0·0	mP
26	...	29·827	37·4	34·1	3·3	36·4	− 2·0	35·7	34·7	1·7	1·7	0·7	94	40·8	27·3	0·024	0·5	vP : mP
27	Perigee	30·082	40·9	34·8	6·1	38·2	− 0·2	37·6	36·8	1·4	4·3	0·2	95	45·2	27·5	0·014	2·0	mP
28	...	30·255	48·1	35·1	13·0	42·8	+ 4·3	41·0	38·8	4·0	4·6	1·1	86	49·1	27·8	0·028	1·5	vP, wN : mP
29	In Equator : Last Quarter	30·202	55·7	48·1	7·6	51·5	+ 12·9	49·2	46·9	4·6	7·8	1·9	84	69·0	46·0	0·000	0·7	wP
30	...	29·801	52·7	42·8	9·9	48·0	+ 9·4	44·5	40·7	7·3	13·9	2·3	76	60·2	36·6	0·029	2·8	wwP : wN, mP : mP
31	...	30·095	44·5	34·8	9·7	39·8	+ 1·2	36·4	32·0	7·8	11·5	4·3	74	55·2	26·0	0·000	1·5	mP : sP : sP
Means	...	29·765	44·9	35·6	9·3	41·1	+ 1·4	39·7	38·1	3·0	5·7	1·0	89·8	51·1	29·6	Sum 2·249	1·4	...
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.

* Rainfall (Column 16). Amounts entered on December 19, 20 and 23 are derived from fog.

The mean reading of the *Barometer* for the month was 29^{in}·765, being 0^{in}·026 *lower* than the average for the 50 years, 1841–1890.

TEMPERATURE OF THE AIR.

The highest in the month was 56°·0 on December 16; the lowest in the month was 24°·8 on December 21; and the range was 31°·2.
The mean of all the highest daily readings in the month was 44°·9, being 0°·9 *higher* than the average for the 50 years, 1841–1890.
The mean of all the lowest daily readings in the month was 35°·6, being 0°·8 *higher* than the average for the 50 years, 1841–1890.
The mean of the daily ranges was 9°·3, being 0°·1 *greater* than the average for the 50 years, 1841–1890.
The mean for the month was 41°·1, being 1°·4 *higher* than the average for the 50 years, 1841–1890.

MONTH and DAY, 1904.	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	0·1	8·1	WSW : W	WSW	1·7	0·13	302	9 : 9	9 : 10
2	0·9	8·1	SW	WSW : SW	0·8	0·04	224	10 : 10 : 8, ci.-cu	9, ci.-cu : 9 : 9, sh.-r
3	3·3	8·1	SSW : WSW	WSW : SW	1·0	0·09	235	9, sh.-r : 9, slt.-f : p.-cl, slt.-f	1, th.-cl, h : 0
4	0·0	8·0	SW	SW	12·0	0·98	491	p.-cl : 10 : 10, oc.-slt.-r	10,sc,fq.-r,w : 10,oc.-slt.-r,w: 10,oc.-slt.-r,w
5	3·2	8·0	SW : WSW	WSW : SW	8·5	0·78	462	10,oc.-shs,w: 10 : 3, ci, ci.-s, s,so.-ha	2, ci, li.-cl : li.-cl, sh.-r : 0, d
6	0·0	8·0	SW : WSW	Variable : W : WSW	4·8	0·37	319	p.-cl, r : 10, shs.-r : 10, c.-r, glm	10, c.-r, slt.-f, glm: p.-cl, oc.-r, m: th.-cl
7	0·0	7·9	WSW	WSW	1·3	0·06	225	p.-cl : 10,slt.-f,glm: 10, fq.-r	8 : 0, d : 1, hy.-d, l
8	0·1	7·9	WSW : NW : NNW	NNW : WSW : SW	5·4	0·42	322	9 : 9 : 10, w	p.-cl : 0, slt.-f : 0, h, slt.-f, ho.-fr
9	0·0	7·9	SE	SE : SSE	1·5	0·12	226	0, ho.-fr : p.-cl : 10, fq.-r	10, sc, slt.-r : 9, oc.-slt.-r : 9, oc.-shs
10	0·0	7·9	SSE : SW	N	2·3	0·20	217	9, oc.-r : 9, shs.-r : 10, slt.-f, glm	10, gt.-glm : 10, fq.-r : 10, slt.-r
11	0·7	7·9	NW : WSW	SW : SSE	1·6	0·10	224	10 : 10 : p.-cl, so.-ha	p.-cl : 10, sl, sn, slt.-r : 10
12	4·0	7·8	SSW : SW : W	Variable	2·5	0·16	243	10, shs.-r : 10 : 3, ci.-s, th.-cl	p.-cl : 10, oc.-slt.-r : 9
13	0·0	7·8	W : NW : NNW	NNW : NW	2·6	0·37	332	p.-cl, r : 10 : 10, oc.-slt.-r	10, sc : p.-cl : 0, h
14	0·0	7·8	SW : S : SSE	S : W	2·3	0·12	257	3, th.-cl : 9 : 10, sc, r	10, sc, oc.-r : 9 : 1, th.-cl
15	0·4	7·8	W : WSW	WSW : SW : SSW	0·8	0·04	218	0 : 1, th.-cl : 8,ci.-s,ci.-cu	8,ci.-cu,th.-cl: 10 : p.-cl, h, d, lu.-ha
16	0·6	7·8	SSW : SW : WSW	WSW : SW	5·2	0·65	430	10,oc.-m.-r: 9,oc.-th.-r: 10, sc	p.-cl, sc : 9, sc, w : p.-cl, lu.-co
17	0·1	7·8	SW : WSW	SW	3·7	0·63	416	9, oc.-r : 9 : 10, sc	9, sc : 9, sc : p.-cl
18	0·0	7·8	SW : WSW : NNE	NNE : Variable	3·2	0·33	245	p.-cl : p.-cl : 9,sc,n,oc.-r	p.-cl : th.-cl,slt.-f,hy.-d: p.-cl, f
19	0·0	7·8	Variable : Calm : ESE	ESE	0·1	0·00	85	9, f : f : f	10, f : 10, f
20	2·6	7·8	E : ENE : SE	ESE	0·2	0·00	125	10, f : 10, f : p.-cl, slt.-f	0, slt.-f : 0, f, ho.-fr, lu.-co
21	0·9	7·8	SE : ESE : E	Calm : E	0·0	0·00	67	0, f, ho.-fr: tk.-f, ho.-fr: tk.-f	tk.-f : tk.-f : f, ho.-fr
22	0·0	7·8	Calm : SW	Variable : Calm	0·0	0·00	49	f, ho.-fr : tk.-f	tk.-f, glm : tk.-f, fr
23	0·0	7·8	Variable : Calm	NE	0·1	0·00	84	f, ho.-fr : f : 10, slt.-f	10, slt.-f : 10, slt.-f
24	0·0	7·8	Variable : Calm	Calm : ENE	0·1	0·00	56	10, slt.-f, fr : 10, slt.-f	10, slt.-f : 10, slt.-f
25	0·0	7·8	Calm : ENE : ESE	E : NE	0·0	0·00	94	10, slt.-f : p.-cl, ho.-fr: 8, ci.-cu, cu.-s	4, th.-cl : 2, th.-cl, ho.-fr: 10, slt.-f
26	0·0	7·8	NNE : NE	NE : ENE	0·1	0·00	116	10 : 10	10 : 10 : 10, oc.-slt.-r
27	0·0	7·8	NE	Variable : SSW	0·0	0·00	76	10 : 10, slt.-f, oc.-slt.-r	10, slt.-f : 10, slt.-f
28	0·0	7·8	WSW : SW : W	W : WSW	1·3	0·10	272	10 : 10, m : 10, oc.-slt.-r	10, oc.-th.-r : 9 : p.-cl
29	3·0	7·8	WSW : W	WSW : W	3·8	0·75	513	10, oc.-slt.-r: 10 : p.-cl, h	5,ci.-cu,th.-cl: 9 : 9
30	1·3	7·8	W : NW	NW	21·5	2·91	819	9, oc.-shs, st.-w: 10, st.-w : 6,ci.-cu,ci.-s,st.-w, sh.-r	8, ci.-cu, ci.-s, th.-cl,st.-w : p.-cl, w : p.-cl
31	2·7	7·8	NNW : N	N	4·3	0·55	366	p.-cl, ho.-fr: 0 : 3, ci, ci.-s	th.-cl : 2, th.-cl : p.-cl
Means	0·8	7·9	...	...	...	0·32	262		
Number of Column for Reference.	19	20	21	22	23	24	25	26	27

The mean *Temperature of Evaporation* for the month was 39°·7, being 1°·4 *higher* than
The mean *Temperature of the Dew Point* for the month was 38°·1, being 1°·6 *higher* than
The mean *Degree of Humidity* for the month was 89·8, being 1·3 *greater* than
The mean *Elastic Force of Vapour* for the month was 0in·230, being 0in·014 *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 551 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 7·5.

The mean proportion of *Sunshine* for the month (constant sunshine being represented by 1) was 0·098. The maximum daily amount of *Sunshine* was 4·0 hours on December 12.

The highest reading of the *Solar Radiation Thermometer* was 73°·2 on December 2; and the lowest reading of the *Terrestrial Radiation Thermometer* was 14°·9 on December 21.

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

The *Proportions of Wind* referred to the cardinal points were N. 4, E. 4, S. 8, and W. 12. Three days were calm.

The *Greatest Pressure of the Wind* in the month was 21·5 lbs. on the square foot on December 30. The mean daily *Horizontal Movement of the Air* for the month was 262 miles; the greatest daily value was 819 miles on December 30; and the least daily value was 49 miles on December 22.

Rain fell on 18 days in the month, amounting to 2in·249, as measured by gauge No. 6 partly sunk below the ground; being 0in·479 *greater* than the average fall for the 50 years, 1841–1890.

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

MAXIMA.			MINIMA.			MAXIMA.			MINIMA.		
	Greenwich Civil Time, 1904.	Reading.		Greenwich Civil Time, 1904.	Reading.		Greenwich Civil Time, 1904.	Reading.		Greenwich Civil Time, 1904.	Reading.
	d h m	in.		d h m	in.		d h m	in.		d h m	in.
January	1. 21. 10	29·869	January	4. 18. 15	29·369	April	2. 9. 30	30·055	April	3. 6. 30	29·650
	6. 10. 10	30·168		8. 19. 5	29·498		4. 22. 45	29·984		6. 5. 0	29·549
	9. 20. 40	29·919		10. 13. 0	29·617		6. 21. 30	29·803		7. 9. 55	29·621
	10. 23. 0	29·799		14. 7. 50	28·822		8. 21. 20	29·829		9. 4. 55	29·745
	17. 20. 5	30·210		18. 13. 5	30·048		11. 9. 50	29·910		13. 6. 0	29·228
	19. 22. 50	30·414		21. 8. 35	30·282		14. 9. 35	29·453		15. 12. 20	29·178
	22. 20. 50	30·516		27. 22. 15	29·529		17. 6. 50	29·783		17. 16. 55	29·697
	29. 9. 40	29·852		31. 13. 35	29·044		18. 21. 5	30·058		20. 16. 5	29·735
							21. 21. 5	29·994		22. 20. 55	29·495
February	1. 11. 5	29·234	February	2. 6. 45	29·089		24. 12. 10	29·984		25. 1. 0	29·844
	2. 23. 15	29·175		3. 14. 40	28·902		25. 21. 25	30·050		30. 4. 55	29·725
	5. 18. 35	29·388		6. 13. 20	29·196	May	1. 7. 50	29·859	May	2. 14. 15	29·464
	7. 11. 35	29·503		8. 16. 20	28·780		4. 22. 45	30·015		7. 10. 5	29·323
	9. 4. 35	29·008		9. 19. 35	28·484		9. 20. 50	29·717		10. 9. 30	29·580
	10. 11. 0	28·800		10. 17. 15	28·693		13. 7. 45	30·074		14. 16. 55	29·788
	12. 6. 50	29·732		13. 6. 45	29·045		15. 22. 45	29·935		17. 3. 30	29·552
	13. 20. 35	29·177		14. 16. 50	28·798		19. 22. 55	30·063		21. 8. 50	29·705
	16. 7. 30	29·373		17. 5. 0	28·618		22. 11. 30	29·858		26. 16. 20	29·610
	19. 11. 45	29·913		20. 6. 5	29·613		29. 7. 50	30·000		31. 4. 55	29·685
	21. 10. 25	29·707		21. 23. 50	29·490		31. 14. 10	29·781			
	23. 11. 20	30·038		26. 15. 5	29·797				June	1. 7. 20	29·685
	28. 9. 20	30·107				June	4. 7. 35	30·134		6. 15. 40	29·943
			March	1. 2. 15	29·698		6. 22. 45	30·027		10. 2. 30	29·551
March	2. 0. 35	29·872		2. 14. 40	29·764		12. 22. 55	30·015		15. 3. 0	29·558
	3. 4. 55	29·862		7. 21. 50	29·363		17. 5. 45	29·923		18. 0. 10	29·788
	11. 9. 45	30·206		14. 15. 15	29·495		18. 22. 15	30·006		20. 19. 0	29·835
	16. 9. 0	29·933		17. 16. 30	29·656		22. 10. 10	30·219		25. 5. 0	29·340
	19. 11. 30	29·990		21. 5. 15	29·735		28. 6. 45	30·057			
	22. 8. 5	30·122		22. 20. 35	29·968				July	1. 4. 40	29·687
	23. 22. 15	30·176		25. 14. 10	29·782	July	4. 11. 0	29·920		5. 15. 40	29·834
	27. 20. 55	30·146		30. 2. 5	29·104		9. 8. 5	30·089		12. 16. 15	29·825
	31. 13. 5	29·534		31. 22. 50	29·388		13. 21. 45	29·989		15. 15. 20	29·730

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, 1904.		Reading.	Greenwich Civil Time, 1904.		Reading.	Greenwich Civil Time, 1904.		Reading.	Greenwich Civil Time, 1904.		Reading.
	d h m	in.		d h m	in.		d h m	in.		d h m	in.
July	18. 8. 20	30·118	July	20. 17. 30	29·748	October	9. 8. 45	30·126	October	12. 3. 35	30·012
	22. 23. 10	29·900		25. 16. 45	29·429		13. 8. 45	30·335		17. 8. 45	29·656
	29. 9. 25	29·956		30. 16. 20	29·812		19. 12. 5	30·301		22. 8. 15	29·586
August	3. 7. 50	30·057	August	5. 2. 55	29·746		27. 9. 35	30·120		28. 5. 35	29·992
	5. 22. 45	29·883		6. 15. 0	29·774		29. 8. 25	30·126		31. 3. 20	29·938
	8. 12. 40	30·030		11. 16. 30	29·645	November	2. 9. 45	30·323	November	7. 19. 40	29·279
	13. 1. 20	30·030		15. 4. 25	29·566		8. 17. 40	29·774		9. 14. 30	29·370
	16. 8. 10	29·959		17. 18. 20	29·474		10. 17. 25	29·929		11. 4. 5	29·716
	21. 0. 15	29·935		22. 16. 45	29·482		14. 20. 55	30·446		16. 15. 5	30·250
	25. 9. 15	30·012		26. 17. 0	29·802		17. 11. 0	30·356		22. 12. 0	29·197
	28. 9. 0	30·055		31. 13. 15	29·598		26. 20. 40	29·837		28. 7. 10	29·604
September	2. 8. 55	30·009	September	3. 11. 20	29·740		29. 23. 40	29·949	December	3. 5. 35	29·517
	4. 7. 25	30·010		6. 3. 25	29·670	December	4. 2. 30	29·638		5. 1. 0	29·364
	7. 22. 20	30·011		9. 1. 20	29·842		5. 10. 20	29·482		6. 15. 45	28·973
	11. 10. 40	30·037		14. 16. 20	29·476		7. 2. 20	29·235		7. 10. 30	29·126
	18. 8. 35	30·156		22. 17. 30	29·863		8. 19. 10	29·689		10. 6. 35	29·116
	23. 11. 15	29·969		25. 16. 0	29·617		11. 9. 25	29·514		12. 13. 5	28·778
	29. 10. 5	30·009	October	1. 7. 55	29·564		13. 23. 10	29·563		14. 14. 50	29·242
October	3. 22. 10	30·183		6. 2. 0	29·277		19. 9. 15	30·456		26. 6. 0	29·802
	6. 18. 40	29·548		7. 5. 20	29·321		28. 19. 50	30·309		30. 8. 10	29·607

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 1904.
[Extracted from the preceding Table.]

MONTH, 1904.	Readings of the Barometer.		Range.
	Highest.	Lowest.	
	in.	in.	in.
January	30·516	28·822	1·694
February	30·107	28·484	1·623
March	30·206	29·104	1·102
April	30·058	29·178	0·880
May	30·074	29·323	0·751
June	30·219	29·340	0·879
July	30·118	29·429	0·689
August	30·057	29·474	0·583
September	30·156	29·476	0·680
October	30·335	29·277	1·058
November	30·446	29·197	1·249
December	30·456	28·778	1·678

The highest reading in the year was $30^{in.}·516$ on January 22. The lowest reading in the year was $28^{in.}·484$ on February 9.
The range of reading in the year was $2^{in.}·032$.

MONTHLY RESULTS of METEOROLOGICAL ELEMENTS for the YEAR 1904.

MONTH, 1904.	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.....	29·784	54·8	23·8	31·0	43·7	33·8	9·8	39·5	+ 1·0	38·0	36·0	87·3
February....	29·416	54·2	27·2	27·0	44·4	34·5	9·9	39·5	0·0	37·2	33·9	80·7
March.....	29·799	59·1	26·4	32·7	47·3	33·7	13·7	40·5	− 1·2	38·3	35·4	82·6
April.....	29·768	66·9	33·2	33·7	57·7	40·7	17·0	49·3	+ 2·2	45·1	40·5	72·1
May	29·780	75·1	34·2	40·9	62·0	45·4	16·6	53·4	+ 0·3	49·8	46·3	77·5
June.....	29·875	76·1	43·9	32·2	68·4	48·6	19·8	57·7	− 1·6	53·1	48·8	72·8
July.....	29·859	85·2	49·2	36·0	77·3	55·2	22·1	65·5	+ 3·0	59·5	54·7	68·5
August.....	29·849	91·0	43·5	47·5	73·0	51·8	21·3	61·7	+ 0·1	56·6	52·3	71·8
September...	29·894	74·6	38·8	35·8	64·7	46·9	17·8	55·4	− 1·8	51·9	48·6	78·2
October.....	29·928	66·5	31·9	34·6	57·5	43·6	13·9	51·1	+ 1·1	49·1	47·0	86·2
November...	29·892	59·0	23·2	35·8	47·5	36·7	10·8	42·4	− 0·8	40·6	38·2	85·5
December...	29·765	56·0	24·8	31·2	44·9	35·6	9·3	41·1	+ 1·4	39·7	38·1	89·8
Means.....	29·801	Highest 91·0	Lowest 23·2	Annual Range 67·8	57·4	42·2	15·2	49·8	+ 0·3	46·6	43·3	79·4

MONTH, 1904.	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.....	0·212	2·4	553	1·5	7·6	16	2·515	32	39	67	94	213	195	32	43	29	0·47	317
February ...	0·195	2·3	546	0·7	7·3	19	2·546	32	78	84	79	120	229	39	30	5	0·61	363
March.....	0·207	2·4	552	1·1	7·5	12	1·362	102	204	94	47	53	118	79	15	32	0·30	284
April.....	0·252	2·9	542	1·4	6·7	13	1·005	79	47	20	22	34	162	267	77	12	0·55	363
May	0·315	3·5	537	5·1	7·3	14	1·923	60	52	75	51	55	200	198	17	36	0·23	250
June.....	0·345	3·9	534	5·2	6·3	8	0·871	94	164	84	38	34	132	119	37	18	0·26	268
July.....	0·428	4·7	525	4·2	5·0	14	2·231	18	43	116	48	36	270	185	12	16	0·16	233
August.....	0·393	4·4	529	3·7	5·3	8	1·235	80	49	27	52	55	182	200	60	39	0·23	240
September...	0·343	3·8	537	2·5	5·3	11	1·340	70	91	121	81	77	126	88	28	38	0·13	219
October.....	0·323	3·6	542	1·4	6·6	10	1·740	50	82	107	91	12	149	132	46	75	0·18	224
November...	0·231	2·7	551	0·4	7·2	10	1·646	70	59	13	35	23	147	295	64	14	0·28	259
December...	0·230	2·6	551	1·4	7·5	18	2·249	56	44	55	49	37	232	138	50	83	0·32	262
Sums.....	...	...	...	...	...	153	20·663	743	952	863	687	749	2142	1772	479	397	...	...
Means.....	0·289	3·3	542	2·4	6·6	...	...	...	...	...	...	...	...	...	...	...	0·31	273

The greatest recorded pressure of the wind on the square foot in the year was 24·0 lbs. on February 21.
The greatest recorded daily horizontal movement of the air in the year was 867 miles on November 9.
The least recorded daily horizontal movement of the air in the year was 49 miles on December 22.

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

Hour, Greenwich Civil Time.	1904. 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	29·802	29·412	29·808	29·768	29·789	29·881	29·867	29·865	29·898	29·930	29·899	29·779	29·808
1h	29·796	29·411	29·804	29·763	29·785	29·878	29·863	29·862	29·895	29·927	29·896	29·770	29·804
2	29·797	29·412	29·799	29·759	29·780	29·873	29·860	29·857	29·890	29·918	29·895	29·768	29·801
3	29·793	29·410	29·793	29·755	29·776	29·869	29·857	29·852	29·887	29·912	29·889	29·762	29·796
4	29·789	29·408	29·792	29·750	29·773	29·871	29·856	29·850	29·887	29·909	29·887	29·754	29·794
5	29·784	29·409	29·793	29·749	29·775	29·873	29·858	29·850	29·888	29·907	29·886	29·746	29·793
6	29·782	29·408	29·799	29·756	29·781	29·877	29·862	29·852	29·894	29·912	29·888	29·746	29·796
7	29·783	29·414	29·807	29·764	29·785	29·882	29·866	29·856	29·900	29·919	29·895	29·746	29·801
8	29·788	29·425	29·814	29·769	29·787	29·885	29·870	29·858	29·903	29·928	29·902	29·752	29·807
9	29·795	29·430	29·816	29·773	29·786	29·884	29·869	29·857	29·907	29·932	29·905	29·758	29·809
10	29·798	29·432	29·815	29·776	29·785	29·883	29·869	29·857	29·907	29·934	29·908	29·765	29·811
11	29·794	29·433	29·812	29·777	29·783	29·882	29·867	29·851	29·903	29·935	29·904	29·761	29·808
Noon	29·780	29·424	29·805	29·773	29·781	29·879	29·862	29·846	29·900	29·931	29·894	29·755	29·803
13h	29·770	29·414	29·798	29·771	29·778	29·875	29·857	29·843	29·894	29·926	29·887	29·749	29·797
14	29·764	29·406	29·790	29·770	29·777	29·871	29·853	29·839	29·888	29·923	29·881	29·746	29·792
15	29·764	29·400	29·784	29·765	29·774	29·867	29·848	29·835	29·882	29·922	29·880	29·750	29·789
16	29·767	29·400	29·781	29·762	29·771	29·861	29·844	29·834	29·880	29·921	29·880	29·757	29·788
17	29·770	29·403	29·782	29·762	29·769	29·859	29·842	29·830	29·880	29·928	29·884	29·767	29·790
18	29·775	29·411	29·789	29·766	29·769	29·861	29·844	29·831	29·885	29·937	29·886	29·775	29·794
19	29·780	29·419	29·795	29·770	29·773	29·864	29·846	29·837	29·891	29·941	29·889	29·784	29·799
20	29·785	29·423	29·797	29·781	29·779	29·869	29·854	29·846	29·897	29·944	29·890	29·790	29·805
21	29·785	29·425	29·800	29·786	29·786	29·881	29·866	29·854	29·901	29·948	29·892	29·792	29·810
22	29·787	29·428	29·800	29·788	29·789	29·884	29·870	29·857	29·901	29·947	29·892	29·794	29·811
23	29·787	29·430	29·799	29·787	29·788	29·884	29·873	29·859	29·899	29·945	29·894	29·797	29·812
24	29·785	29·430	29·798	29·784	29·785	29·881	29·874	29·856	29·898	29·940	29·892	29·795	29·810
Means 0h.–23h.	29·784	29·416	29·799	29·768	29·780	29·875	29·859	29·849	29·894	29·928	29·892	29·765	29·801
Means 1h.–24h.	29·784	29·417	29·799	29·769	29·780	29·875	29·860	29·848	29·894	29·929	29·891	29·766	29·801
Number of Days employed.	31	29	31	30	31	30	31	31	30	31	30	31	...

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

Hour, Greenwich Civil Time.	1904. January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Yearly Means.
	°	°	°	°	°	°	°	°	°	°	°	°	°
Midnight	38·4	38·3	37·8	45·6	49·8	52·3	59·3	56·4	51·9	49·2	41·1	40·1	46·7
1h	38·4	38·3	37·5	44·9	49·3	51·7	58·4	55·8	51·5	49·0	41·0	39·8	46·3
2	38·3	38·0	37·4	44·5	48·8	51·3	58·1	55·3	51·1	48·7	40·6	39·8	46·0
3	38·4	38·0	37·1	44·2	48·3	50·9	57·7	55·0	50·8	48·3	40·2	39·7	45·7
4	38·3	38·0	36·9	43·9	48·0	50·6	57·5	54·4	50·4	48·0	39·8	39·8	45·5
5	38·4	38·0	36·9	43·9	48·0	50·8	57·8	54·3	50·3	47·9	39·8	40·0	45·5
6	38·3	37·9	36·9	44·3	48·9	51·9	59·3	55·3	50·3	47·7	39·6	40·0	45·9
7	38·3	37·9	37·2	45·8	50·3	54·0	61·6	57·7	51·5	48·2	39·6	40·1	46·8
8	38·4	38·0	38·2	47·7	52·5	57·0	64·7	61·2	53·7	48·9	40·0	40·4	48·4
9	38·9	39·0	40·0	49·9	54·4	59·5	67·9	64·1	56·4	50·8	40·8	40·8	50·2
10	39·4	40·2	41·9	51·8	56·1	61·3	70·0	66·1	58·5	52·8	42·0	41·4	51·8
11	40·4	41·4	43·4	52·9	57·2	62·6	72·0	67·9	60·2	54·4	43·5	42·0	53·2
Noon	41·4	42·2	44·7	53·9	58·0	63·9	73·0	69·2	61·3	55·3	45·0	42·8	54·2
13h	41·8	42·7	45·3	55·0	59·1	65·1	74·1	69·3	61·9	56·0	46·3	43·4	55·0
14	42·0	42·8	45·6	55·1	59·5	65·4	74·5	69·9	61·9	56·0	46·5	43·3	55·2
15	41·6	42·6	45·5	55·5	59·0	65·2	74·4	69·5	61·9	55·9	46·2	42·9	55·0
16	41·0	41·9	44·6	55·0	58·8	64·9	73·5	68·3	60·6	55·0	45·3	42·3	54·3
17	40·4	40·9	43·7	54·0	57·9	63·6	71·8	67·3	59·1	53·5	44·7	41·9	53·2
18	39·9	39·9	42·3	52·8	56·6	62·1	69·6	65·6	57·6	52·2	44·2	41·5	52·0
19	39·5	39·2	41·2	51·0	54·9	60·0	67·1	63·1	55·6	51·1	43·4	41·3	50·6
20	39·3	38·7	40·2	49·6	53·2	57·9	64·8	60·9	54·4	50·1	42·9	41·0	49·4
21	39·2	38·2	39·4	48·4	52·1	56·0	62·8	59·1	53·5	49·5	42·2	40·6	48·4
22	39·0	38·0	39·1	47·4	51·0	54·6	61·1	57·9	53·0	49·2	41·8	40·3	47·7
23	38·9	37·9	38·6	46·6	50·4	53·4	60·2	56·9	52·4	49·0	41·4	40·1	47·2
24	38·7	38·0	38·2	45·8	49·8	52·5	59·3	56·2	52·0	48·9	41·0	39·8	46·7
Means 0h.–23h.	39·5	39·5	40·5	49·3	53·4	57·7	65·5	61·7	55·4	51·1	42·4	41·1	49·8
Means 1h.–24h.	39·5	39·5	40·5	49·3	53·4	57·7	65·5	61·7	55·4	51·1	42·4	41·1	49·8
Number of Days employed.	31	29	31	30	31	30	31	31	30	31	30	31	...

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

Hour, Greenwich Civil Time.	1904. January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Yearly Means.
	°	°	°	°	°	°	°	°	°	°	°	°	°
Midnight	37·3	36·5	36·6	43·2	48·1	50·4	56·9	54·3	50·2	48·3	39·6	39·1	45·0
1h	37·3	36·5	36·4	42·9	47·8	49·9	56·5	54·0	49·9	48·1	39·6	38·9	44·8
2	37·2	36·5	36·3	42·6	47·5	49·7	56·4	53·6	49·5	47·9	39·3	38·8	44·6
3	37·2	36·3	36·1	42·4	47·1	49·5	56·1	53·3	49·2	47·5	39·0	38·8	43·5
4	37·1	36·3	36·0	42·2	46·9	49·2	55·8	53·0	48·9	47·2	38·7	38·9	44·2
5	37·2	36·3	35·9	42·3	46·9	49·3	55·8	52·8	48·8	47·2	38·6	39·0	44·2
6	37·2	36·2	36·0	42·7	47·5	50·1	56·8	53·5	48·7	46·9	38·6	39·0	44·4
7	37·2	36·1	36·2	43·7	48·4	51·5	57·9	54·9	49·6	47·3	38·6	39·1	45·0
8	37·4	36·2	36·8	44·9	49·5	52·9	59·4	56·7	51·1	47·9	38·9	39·3	45·9
9	37·6	36·8	38·0	45·9	50·4	54·0	60·7	57·9	52·8	49·1	39·5	39·4	46·8
10	38·1	37·6	39·3	46·5	51·3	54·8	61·5	58·6	53·9	50·3	40·4	39·9	47·7
11	38·8	38·3	40·2	46·8	51·6	55·5	62·4	59·1	54·5	51·2	41·5	40·4	48·4
Noon	39·5	38·9	40·8	47·3	52·1	56·0	62·7	59·5	54·9	51·4	42·5	41·0	48·9
13h	39·5	39·2	41·2	47·7	52·6	56·6	63·3	59·6	55·0	51·7	43·3	41·4	49·3
14	39·6	39·3	41·3	47·9	52·6	57·0	63·5	59·7	54·9	51·7	43·5	41·3	49·4
15	39·4	39·1	41·2	48·0	52·5	56·8	63·0	60·0	55·0	51·7	43·1	41·0	49·2
16	39·1	38·8	40·5	47·6	52·2	56·5	62·7	59·4	54·2	51·2	42·5	40·7	48·8
17	38·8	38·2	40·1	47·2	52·1	56·1	61·9	58·9	53·7	50·5	42·1	40·4	48·3
18	38·4	37·7	39·4	46·4	51·2	55·3	61·1	58·5	53·2	49·9	41·9	40·1	47·8
19	38·1	37·2	38·9	45·8	50·6	54·3	60·4	57·5	52·5	49·3	41·5	39·9	47·2
20	38·0	36·8	38·3	45·3	50·0	53·5	59·5	56·8	51·8	48·8	41·2	39·7	46·6
21	37·9	36·4	37·9	44·8	49·4	52·5	58·9	55·8	51·4	48·3	40·7	39·5	46·1
22	37·9	36·2	37·6	44·2	48·9	51·7	58·2	55·2	51·0	48·1	40·3	39·2	45·7
23	37·8	36·0	37·4	43·8	48·5	50·9	57·5	54·7	50·6	48·0	39·9	39·1	45·4
24	37·6	36·2	37·1	43·3	48·2	50·4	57·0	54·2	50·3	48·0	39·5	38·8	45·1
Means 0h.–23h.	38·1	37·2	38·3	45·1	49·8	53·1	59·5	56·6	51·9	49·1	40·6	39·7	46·6
Means 1h.–24h.	38·1	37·2	38·3	45·1	49·8	53·1	59·5	56·5	51·9	49·1	40·6	39·7	46·6
Number of Days employed.	31	29	31	30	31	30	31	31	30	31	30	31	...

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

Hour, Greenwich Civil Time.	1904. January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Yearly Means.
	°	°	°	°	°	°	°	°	°	°	°	°	°
Midnight	35·8	34·1	35·0	40·5	46·3	48·5	54·8	52·3	48·5	47·3	37·7	37·8	43·2
1h	35·8	34·1	34·9	40·6	46·2	48·2	54·8	52·3	48·3	47·1	37·8	37·7	43·1
2	35·7	34·4	34·8	40·4	46·1	48·1	54·9	52·0	47·9	47·0	37·7	37·5	43·0
3	35·6	34·0	34·7	40·3	45·8	48·0	54·7	51·7	47·5	46·6	37·5	37·6	42·8
4	35·5	34·0	34·7	40·2	45·7	47·7	54·3	51·6	47·3	46·3	37·3	37·7	42·7
5	35·6	34·0	34·6	40·4	45·7	47·7	54·0	51·3	47·2	46·4	37·0	37·7	42·6
6	35·7	33·9	34·7	40·8	46·0	48·3	54·6	51·8	47·0	46·0	37·3	37·7	42·8
7	35·7	33·7	34·8	41·3	46·4	49·1	54·7	52·4	47·7	46·3	37·3	37·8	43·1
8	36·0	33·8	34·9	41·9	46·5	49·1	55·0	52·8	48·6	46·8	37·5	37·9	43·4
9	35·9	33·9	35·4	41·7	46·5	49·1	55·0	52·7	49·5	47·3	37·9	37·7	43·6
10	36·4	34·3	36·1	41·1	46·8	49·2	54·9	52·5	49·8	47·8	38·4	38·0	43·8
11	36·8	34·5	36·4	40·7	46·5	49·4	55·2	52·2	49·5	48·1	39·1	38·4	43·9
Noon	37·1	34·9	36·3	40·8	46·8	49·5	55·1	52·0	49·4	47·7	39·6	38·8	44·0
13h	36·6	35·0	36·5	40·7	46·9	49·6	55·4	52·1	49·1	47·6	39·9	39·0	44·0
14	36·6	35·1	36·4	41·0	46·5	50·1	55·6	51·8	48·9	47·6	40·1	38·9	44·1
15	36·7	34·9	36·3	40·9	46·7	49·9	54·8	52·6	49·1	47·7	39·6	38·7	44·0
16	36·7	35·0	35·7	40·5	46·3	49·6	54·8	52·4	48·6	47·6	39·3	38·8	43·8
17	36·8	34·8	35·8	40·5	46·9	49·9	54·5	52·2	48·9	47·6	39·1	38·5	43·8
18	36·9	34·8	35·9	40·0	46·2	49·5	54·5	52·7	49·2	47·6	39·2	38·3	43·7
19	36·3	34·6	36·0	40·4	46·5	49·3	55·1	52·8	49·6	47·4	39·3	38·1	43·8
20	36·3	34·2	35·9	40·7	46·8	49·5	55·1	53·3	49·3	47·4	39·2	38·0	43·8
21	36·2	34·0	35·9	40·9	46·7	49·2	55·6	52·8	49·3	47·0	38·9	38·1	43·7
22	36·5	33·8	35·7	40·6	46·7	48·9	55·7	52·8	49·0	46·9	38·4	37·8	43·6
23	36·3	33·4	35·8	40·6	46·5	48·4	55·1	52·7	48·8	46·9	38·0	37·8	43·4
24	36·1	33·8	35·6	40·5	46·5	48·3	55·0	52·3	48·6	47·0	37·6	37·5	43·3
Means 0h.–23h.	36·2	34·3	35·5	40·7	46·4	49·0	54·9	52·3	48·7	47·2	38·5	38·1	43·5
Means 0h.–24h.	36·2	34·3	35·6	40·7	46·4	49·0	54·9	52·3	48·7	47·2	38·5	38·1	43·5

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.	1904. January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Yearly Means.
Midnight	91	85	90	83	88	87	86	86	88	94	88	92	88
1h	91	85	91	86	90	88	88	88	89	94	89	93	89
2	91	87	91	86	91	89	89	89	89	94	90	92	90
3	90	85	91	86	92	90	89	89	89	94	90	93	90
4	90	85	92	86	92	90	89	90	90	94	91	93	90
5	90	85	92	87	92	90	87	90	90	95	90	92	90
6	91	86	92	88	90	87	85	88	89	94	92	92	90
7	91	85	91	85	87	83	79	83	87	94	92	92	87
8	92	85	88	81	81	74	71	75	83	93	91	91	84
9	90	83	84	74	74	69	63	66	78	88	90	89	79
10	90	80	81	67	71	65	59	62	73	83	88	89	76
11	88	77	76	64	67	62	55	57	68	79	84	88	72
Noon	86	76	72	61	66	59	53	54	65	76	82	86	70
13h	83	75	72	59	64	57	53	54	63	73	79	84	68
14	82	74	71	59	62	57	52	52	63	74	79	84	67
15	84	74	71	58	64	57	51	54	63	75	78	85	68
16	85	78	71	58	64	57	52	56	65	76	80	88	69
17	88	79	74	60	67	61	54	58	69	80	81	89	72
18	88	82	79	63	68	63	58	63	73	84	82	89	74
19	89	84	82	67	73	67	65	69	81	87	85	89	78
20	90	85	85	72	79	74	71	76	82	91	86	90	82
21	90	85	88	75	82	78	77	80	86	92	88	91	84
22	91	85	88	78	85	81	83	83	86	92	89	91	86
23	92	84	90	81	87	83	84	86	88	93	89	92	87
24	91	85	90	82	89	86	86	87	88	94	88	92	88
Means 0h.–23h.	89	82	83	73	78	74	71	73	79	87	86	90	80
Means 1h.–24h.	89	82	83	73	78	74	71	73	79	87	86	90	80

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 1904.

Month, 1904.	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	...	..	...	...	0·5	3·6	4·1	4·6	6·0	4·3	2·8	0·5	...	...	...	...	26·4	258·1	0·102	18
February	...	...	...	0·1	3·7	8·9	9·1	8·5	7·7	6·8	5·1	1·0	...	...	...	...	50·9	286·6	0·178	26
March	...	...	0·4	4·1	5·3	9·3	11·1	10·0	10·2	10·7	11·1	9·2	3·4	0·2	...	...	85·0	366·6	0·232	37
April	...	0·7	5·7	8·5	11·9	14·4	13·2	12·6	13·4	13·6	15·6	14·6	13·3	7·7	0·1	...	145·3	414·1	0·351	48
May	0·3	4·2	5·6	8·3	9·5	11·8	12·7	11·0	13·8	12·9	10·6	10·2	11·1	8·6	5·1	0·1	135·8	481·7	0·282	57
June	1·9	9·6	13·1	14·4	14·8	15·4	15·0	15·8	16·3	14·3	15·4	17·2	14·2	11·5	7·3	2·0	198·2	494·4	0·401	62
July	2·8	13·3	16·1	17·1	18·4	19·9	22·2	21·4	21·7	22·7	23·2	21·5	19·1	16·2	14·0	4·0	273·6	497·4	0·550	60
August	0·1	6·1	16·9	18·4	21·7	20·5	20·5	21·6	18·7	18·4	17·8	15·5	15·8	14·8	6·0	0·1	232·9	450·1	0·517	52
September	...	0·1	5·6	10·2	13·0	16·1	15·7	17·5	17·1	17·0	18·4	15·4	13·2	5·4	...	...	164·7	378·5	0·435	41
October	...	...	...	0·9	5·7	9·0	10·4	8·5	9·1	9·4	10·5	8·4	4·0	...	...	...	75·9	329·5	0·230	30
November	...	...	...	...	0·9	3·2	5·9	7·1	8·2	8·8	7·4	4·5	...	...	...	...	46·0	265·4	0·173	20
December	...	...	...	...	0·1	1·1	4·1	4·4	6·1	5·2	2·6	0·3	...	...	...	...	23·9	243·8	0·098	16
For the Year	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1458·6	4466·2	0·327	...

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 1904.

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

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

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

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	52·5	39·3	...	...	...	...	0·0	0·0	...	...	...	...	1	53·4	38·2	...	...	...	...	+0·9	−1·1	...	...	...	...
2	53·3	38·7	46·1	52·0	51·1	46·7	−2·4	−0·5	−1·2	−0·7	−0·2	−0·1	2	54·8	38·0	46·4	52·1	51·4	46·6	−0·9	−1·2	−0·9	−0·6	+0·1	−0·2
3	55·8	45·9	...	...	...	...	+0·2	−0·3	...	...	...	...	3	55·6	44·8	...	...	...	...	0·0	−1·4	...	...	...	...
4	51·3	38·7	...	...	...	...	0·0	+0·2	...	...	...	...	4	51·2	37·4	...	...	...	...	−0·1	−1·1	...	...	...	...
5	53·6	42·4	46·9	51·0	52·0	51·0	−0·4	−0·4	−0·8	−0·3	−0·1	0·0	5	53·9	41·8	47·1	51·4	52·3	50·9	−0·1	−1·0	−0·6	+0·1	+0·2	−0·1
6	58·0	46·7	53·8	55·0	57·3	47·2	+0·9	−0·2	+0·8	+0·3	+0·6	+0·3	6	57·9	45·7	53·6	56·0	57·9	47·0	+0·8	−1·2	+0·6	+1·3	+1·2	+0·1
7	53·2	37·3	48·7	50·9	51·1	48·1	−0·3	0·0	+1·0	+0·1	−0·3	+0·8	7	53·5	35·8	48·9	51·1	51·7	48·0	0·0	−1·5	+1·2	+0·3	+0·3	+0·7
8	63·0	42·9	47·7	53·9	61·8	54·9	−1·0	−0·3	0·0	+0·1	+0·8	+0·2	8	64·0	41·9	47·9	54·4	61·6	55·0	0·0	−1·3	+0·2	+0·6	+0·6	+0·3
9	55·6	43·3	49·1	51·4	55·5	43·7	+0·3	+0·1	+0·2	+0·4	+0·2	+0·1	9	55·7	42·2	49·0	51·4	55·7	43·3	+0·4	−1·0	+0·1	+0·4	+0·4	−0·3
10	51·1	37·7	...	...	...	...	−0·9	−0·1	...	...	...	...	10	51·5	36·9	...	...	...	...	−0·5	−0·9	...	...	...	...
11	57·1	36·3	47·5	53·6	57·1	44·9	+0·5	−0·2	+0·2	+1·6	+1·2	+1·1	11	57·6	35·1	46·7	53·9	57·6	44·2	+1·0	−1·4	−0·6	+1·9	+1·7	+0·4
12	60·9	39·6	51·1	55·2	60·6	54·8	−0·2	+2·4	−0·7	−0·6	−0·4	+1·0	12	61·8	37·6	51·2	55·7	61·1	54·4	+0·7	+0·4	−0·6	−0·1	+0·1	+0·6
13	57·8	49·6	54·0	54·3	57·0	49·9	−0·1	+0·1	−0·6	−0·1	+0·2	+0·2	13	57·9	49·4	55·1	54·8	57·9	50·0	0·0	−0·1	+0·5	+0·4	+1·1	+0·3
14	65·5	43·9	52·9	62·2	61·8	58·2	−1·4	+1·1	−0·3	−0·8	−0·1	+0·7	14	67·0	42·9	53·6	62·6	62·2	58·8	+0·1	+0·1	+0·4	−0·4	+0·3	+1·3
15	58·2	47·6	55·3	57·2	49·7	48·1	−0·4	+0·4	−0·1	−0·2	+0·1	+0·7	15	58·8	46·5	55·3	57·6	49·9	47·4	+0·2	−0·7	−0·1	+0·2	+0·3	0·0
16	59·8	41·1	50·6	54·3	58·9	52·8	−0·5	+2·1	+0·3	+0·6	+1·1	+3·5	16	60·0	39·9	50·4	54·1	59·3	52·6	−0·3	+0·9	+0·1	+0·4	+1·5	+3·3
17	62·7	40·3	...	...	...	...	−0·9	+2·8	...	...	...	...	17	63·5	38·8	...	...	...	...	−0·1	+1·3	...	...	...	...
18	62·1	37·6	50·0	59·0	61·9	51·4	−1·0	+3·1	−2·1	−0·7	0·0	+0·6	18	65·0	36·2	51·1	61·6	63·8	50·4	+1·9	+1·7	−1·0	+1·9	+1·9	−0·4
19	62·4	41·5	53·4	57·1	62·3	49·7	−1·5	+0·6	−0·3	−1·4	−1·0	+0·6	19	65·4	39·6	54·2	57·7	64·3	48·9	+1·5	−1·3	+0·5	−0·8	+1·0	−0·2
20	64·0	41·5	50·0	62·0	63·9	49·3	0·0	+0·4	−0·2	+0·3	+0·3	+0·4	20	63·8	40·4	48·8	63·7	63·3	48·9	−0·2	−0·7	−1·4	+2·0	−0·3	0·0
21	51·0	43·1	49·9	47·9	48·9	43·4	−0·9	+2·3	−0·1	+0·2	+0·2	+1·7	21	51·0	41·0	48·9	47·8	48·8	43·1	−0·9	+0·2	−1·1	+0·1	+0·1	+1·4
22	52·9	36·3	48·3	52·9	48·2	46·2	−1·8	+3·1	−0·4	+0·6	−0·4	−0·6	22	53·5	35·7	48·7	53·4	48·2	46·3	−1·2	+2·5	0·0	+1·1	−0·4	−0·5
23	55·7	44·5	46·8	54·1	55·3	50·8	−1·2	+0·1	−0·2	+0·1	−1·1	+1·1	23	58·3	43·3	46·1	54·7	55·8	50·7	+1·4	−1·1	−0·9	+0·7	−0·6	+1·0
24	60·0	46·3	...	...	...	...	−0·9	+0·1	...	...	...	...	24	61·3	45·9	...	...	...	...	+0·4	−0·3	...	...	...	...
25	55·1	44·1	49·0	53·5	52·8	46·1	−0·3	+0·6	+0·3	+1·5	+0·7	+1·3	25	55·7	43·1	48·8	52·4	52·6	45·7	+0·3	−0·4	+0·1	+0·4	+0·5	+0·9
26	50·6	35·3	46·9	48·3	50·2	46·2	−1·2	+1·5	−0·8	−0·3	+0·2	−0·3	26	50·8	34·0	47·0	48·9	50·2	46·3	−1·0	+0·2	−0·7	+0·3	+0·2	−0·2
27	56·2	39·3	48·8	52·2	55·8	50·0	−0·7	+0·1	−0·1	+0·4	+0·2	+0·6	27	57·0	38·4	49·0	52·3	55·4	49·9	+0·1	−0·8	+0·1	+0·5	−0·2	+0·5
28	58·3	45·3	52·7	54·1	54·9	50·9	−0·6	+0·2	0·0	−0·2	+0·2	+0·2	28	58·8	44·6	53·3	55·0	55·6	50·6	−0·1	−0·5	+0·6	+0·7	+0·9	−0·1
29	55·3	48·6	52·7	55·2	54·8	51·2	−1·0	+0·1	−0·2	+0·1	+0·1	+0·2	29	56·2	48·2	53·0	55·9	54·6	50·9	−0·1	−0·3	+0·1	+0·8	−0·1	−0·1
30	59·5	50·4	53·6	57·8	59·5	52·0	−1·1	0·0	−0·1	+1·1	−0·2	+0·3	30	60·0	50·0	54·0	58·4	60·0	52·1	−0·6	−0·4	+0·3	+1·7	+0·3	+0·4
Means	57·1	42·2	50·2	54·4	55·9	49·5	−0·6	+0·6	−0·2	+0·1	+0·1	+0·6	Means	57·8	41·1	50·3	54·9	56·3	49·3	+0·1	−0·4	−0·1	+0·6	+0·5	+0·4

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	62·0	45·7	...	...	...	...	−1·0	+0·1	...	...	...	...	1	63·0	45·3	...	...	...	...	0·0	−0·3	...	...	...	...
2	53·0	46·1	49·2	47·7	48·2	47·1	−1·6	+0·4	−0·6	−1·0	+0·1	+0·1	2	53·2	45·1	50·0	48·6	47·3	46·7	−1·4	−0·6	+0·2	−0·1	−0·8	−0·3
3	56·6	39·3	51·0	55·6	53·2	47·9	−1·0	+0·1	+0·1	+0·1	+0·4	−0·4	3	57·5	37·7	52·0	56·1	53·5	48·2	−0·1	−1·5	+1·1	+0·6	+0·7	−0·1
4	59·6	41·3	51·9	57·1	58·9	49·9	−0·5	+0·5	+0·2	+1·3	+0·2	+1·2	4	61·5	40·2	51·8	56·9	59·5	49·0	+1·4	−0·6	+0·1	+1·1	+0·8	+0·3
5	63·1	45·0	55·7	62·1	61·3	51·5	−0·8	+2·2	−0·1	−0·5	+0·7	−0·1	5	64·6	43·3	56·0	61·7	61·8	51·4	+0·7	+0·5	+0·2	−0·9	+1·2	−0·2
6	57·2	43·3	49·9	49·9	48·9	44·8	−1·3	−0·3	+0·2	−0·4	+0·4	+0·1	6	57·4	43·0	50·6	50·4	49·1	45·0	−1·1	−0·6	+0·9	+0·1	+0·6	+0·3
7	48·2	42·1	47·1	44·9	47·6	44·2	−1·0	−0·2	0·0	−0·2	+0·6	+0·3	7	48·1	41·1	47·8	45·4	47·3	44·0	−1·1	−1·2	+0·7	+0·3	+0·3	+0·1
8	46·1	39·3	...	...	...	...	−1·4	+0·4	...	...	...	...	8	48·7	38·2	...	...	...	...	+1·2	−0·7	...	...	...	...
9	53·9	34·5	43·8	48·7	51·8	46·3	−0·6	+0·3	+0·2	−0·1	+0·2	−0·5	9	54·2	33·0	44·0	49·6	52·3	46·4	−0·3	−1·2	+0·4	+0·8	+0·7	−0·4
10	49·4	42·3	45·2	45·4	46·6	45·8	−0·8	+1·7	−0·2	+0·2	−0·5	+1·3	10	49·3	41·3	45·3	44·9	46·6	45·8	−0·9	+0·7	−0·1	−0·3	−0·5	+1·3
11	55·1	39·4	46·1	51·9	54·8	47·9	−1·8	+3·2	−0·2	−0·4	−0·6	+1·2	11	58·1	38·0	46·9	53·7	56·9	47·7	+1·2	+1·8	+0·6	+1·4	+1·5	+1·0
12	63·0	43·7	51·8	59·5	60·6	56·7	−1·1	+0·4	−0·1	−0·2	−0·1	0·0	12	64·7	43·5	52·9	61·3	61·5	56·6	+0·6	+0·2	+1·0	+1·6	+0·8	−0·1
13	66·5	49·4	59·5	62·8	65·5	59·1	−2·0	−0·1	+0·1	−0·9	−0·8	+0·2	13	68·5	49·2	61·0	64·1	66·7	58·1	0·0	−0·3	+1·6	+0·4	+0·4	−0·8
14	70·4	55·3	61·8	67·7	67·9	55·8	+0·5	+0·8	−0·6	+1·0	−0·1	+1·1	14	72·2	55·1	62·5	68·7	68·6	55·6	+2·3	+0·6	+0·1	+2·0	+0·6	+0·9
15	68·7	45·3	...	...	...	...	−0·2	+0·9	...	...	...	...	15	68·7	44·0	...	...	...	...	−0·2	−0·4	...	...	...	...
16	72·0	45·3	65·0	68·0	70·1	65·8	−0·6	+2·8	−0·1	+0·3	+0·5	+1·1	16	74·3	44·4	65·4	68·7	71·9	65·7	+1·7	+1·9	+0·3	+1·0	+2·3	+1·0
17	66·7	53·9	57·1	64·0	65·0	54·1	−1·9	+0·1	+0·3	−0·8	+0·5	+0·1	17	68·2	53·5	57·2	64·6	65·9	53·7	−0·4	−0·3	+0·4	−0·2	+1·4	−0·3
18	62·0	46·3	55·4	58·9	61·0	52·3	−0·9	+0·3	0·0	+0·9	+0·9	+0·9	18	63·5	45·1	55·9	59·3	62·6	52·0	+0·6	−0·9	+0·5	+1·3	+2·5	+0·6
19	60·2	42·6	52·9	59·1	59·3	53·0	−0·8	+0·4	+0·2	+1·7	−0·7	+0·3	19	61·9	40·7	52·9	59·6	60·0	52·6	+0·9	−1·5	+0·2	+2·2	0·0	−0·1
20	60·0	41·8	59·6	58·5	56·0	47·8	−2·2	+2·6	+1·2	−0·8	+0·5	+0·5	20	62·8	39·4	60·1	59·1	56·7	47·3	+0·6	+0·2	+1·7	−0·2	+1·2	0·0
21	49·2	46·2	47·2	48·9	48·7	48·9	−0·6	+0·1	−0·4	0·0	−0·1	+0·2	21	50·2	45·1	47·0	48·7	48·6	48·6	+0·4	−1·0	−0·6	−0·2	−0·2	−0·1
22	57·4	47·3	...	...	...	...	−2·5	+0·2	...	...	...	...	22	60·6	46·6	...	...	...	...	+0·7	−0·5	...	...	...	...
23	66·4	50·3	...	...	...	...	−1·5	+0·5	...	...	...	...	23	68·3	48·8	...	...	...	...	+0·4	−1·0	...	...	...	...
24	54·9	50·3	53·2	54·4	53·9	52·0	−1·0	−0·1	−0·5	−0·3	−0·4	+0·1	24	56·2	49·2	53·5	54·7	53·7	51·7	+0·3	−1·2	−0·2	0·0	−0·6	−0·2
25	66·3	50·3	59·0	62·0	65·3	56·9	−2·6	+0·5	−1·6	−0·8	−0·5	+2·2	25	69·1	49·5	61·8	64·1	68·1	56·0	+0·2	−0·3	+1·2	+1·3	+2·3	+1·3
26	73·2	49·3	66·1	68·2	72·9	63·9	−1·9	+2·8	−0·8	−0·2	−2·1	+1·9	26	76·8	48·9	66·5	70·2	73·5	64·0	+1·7	+2·4	−0·4	+1·8	−1·5	+2·0
27	68·3	57·5	64·3	62·0	68·2	57·9	−2·5	−0·2	−0·4	0·0	−0·5	0·0	27	70·8	57·3	64·9	62·4	69·2	57·8	0·0	−0·4	+0·2	+0·4	+0·5	−0·1
28	61·7	54·8	55·1	58·6	60·0	60·0	−1·2	+0·6	−0·1	−0·3	−1·9	+0·2	28	62·5	54·6	55·1	60·4	60·5	60·0	−0·4	+0·4	−0·1	+1·5	−1·4	+0·2
29	68·1	54·3	...	...	...	...	−0·7	+0·1	...	...	...	...	29	68·8	53·3	...	...	...	...	0·0	−0·9	...	...	...	...
30	66·1	52·5	55·0	64·9	63·2	59·9	−0·6	+0·3	−0·4	−0·2	−0·5	+0·2	30	67·7	51·1	54·9	65·6	65·4	59·2	+1·0	−1·1	−0·5	+0·5	+1·7	−0·5
31	60·4	54·0	59·6	57·9	55·9	54·5	−0·5	+0·5	+0·7	−0·2	−0·7	+0·7	31	60·9	53·3	59·8	58·0	56·0	53·9	0·0	−0·2	+0·9	−0·1	−0·6	+0·1
Means	60·8	46·7	54·5	57·5	58·6	53·0	−1·2	+0·7	−0·1	−0·1	−0·2	+0·5	Means	62·3	45·8	55·0	58·3	59·3	52·7	+0·3	−0·3	+0·4	+0·7	+0·6	+0·2

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	60·0	49·3	55·5	53·1	59·2	52·5	−1·9	+0·6	−0·1	−0·6	−1·2	+0·3	1	60·7	48·9	55·7	53·4	59·5	52·3	−1·2	+0·2	+0·1	−0·3	−0·9	+0·1
2	57·5	49·9	54·2	54·9	57·0	54·0	−0·6	+0·7	−0·1	−0·2	−0·3	+0·1	2	58·1	48·9	54·6	55·4	57·0	53·7	0·0	−0·3	+0·3	+0·3	−0·3	−0·2
3	63·1	49·3	52·5	57·9	61·8	49·9	−0·8	+0·4	−0·2	0·0	−1·0	+1·0	3	63·7	48·2	53·0	59·2	62·1	49·0	−0·2	−0·7	+0·3	+1·3	−0·7	+0·1
4	67·2	44·4	59·9	66·1	64·8	53·0	−0·9	+0·5	+0·2	−0·1	+0·3	+0·6	4	68·4	43·1	59·1	66·8	65·4	52·7	+0·3	−0·8	−0·6	+0·6	+0·9	+0·3
5	69·8	47·3	...	...	...	...	−0·7	+0·6	...	...	...	...	5	71·9	46·5	...	...	...	...	+1·4	−0·2	...	...	...	...
6	70·6	47·6	61·0	69·7	67·6	57·1	−0·6	+0·8	+2·1	+0·5	−0·1	+0·3	6	73·2	46·6	60·1	69·3	67·8	56·7	+2·0	−0·2	+1·2	+0·1	+0·1	−0·1
7	65·0	48·9	57·0	63·3	64·6	51·3	−1·0	+0·1	−0·7	+0·1	−0·2	+0·6	7	67·3	48·4	56·0	62·7	65·4	51·1	+1·3	−0·4	−1·7	−0·5	+0·6	+0·4
8	61·7	47·9	51·1	56·0	61·2	51·1	−2·1	+0·5	−0·2	−0·4	−0·7	+0·2	8	63·5	47·3	51·0	57·7	61·6	51·0	−0·3	−0·1	−0·3	+1·3	−0·3	+0·1
9	58·3	47·3	52·9	57·3	56·9	54·8	−1·6	+0·3	−0·8	−0·5	+1·2	+0·2	9	60·7	46·6	55·6	58·6	57·3	54·6	+0·8	−0·4	+1·9	+0·8	+1·6	0·0
10	62·3	53·3	57·3	57·0	61·4	55·0	−2·6	+0·8	−0·4	−0·2	−2·3	+0·1	10	65·5	52·4	58·0	57·6	62·9	54·7	+0·6	−0·1	+0·3	+0·4	−0·8	−0·2
11	60·1	50·9	54·6	57·1	58·0	56·8	−1·8	+0·7	−0·2	+0·4	0·0	0·0	11	60·6	50·0	54·4	57·3	57·2	56·7	−1·3	−0·2	−0·4	+0·6	−0·8	−0·1
12	65·4	50·3	...	...	...	...	−1·9	+0·3	...	...	...	...	12	67·3	50·0	...	...	...	...	0·0	0·0	...	...	...	...
13	72·4	49·3	61·0	66·0	70·7	58·0	−1·6	+1·7	−0·7	−0·7	+0·6	+0·3	13	73·2	48·2	63·6	66·6	71·6	58·0	−0·8	+0·6	+1·9	−0·1	+1·5	+0·3
14	71·0	54·5	65·3	67·3	65·9	57·3	−2·3	+1·1	−1·1	−0·7	−0·5	+0·2	14	73·1	54·0	68·0	67·6	66·4	57·1	−0·2	+0·6	+1·6	−0·4	0·0	0·0
15	64·8	53·7	59·3	61·2	62·6	59·0	−1·7	+0·2	−0·6	−0·3	−0·3	+0·1	15	65·1	53·4	60·2	62·0	63·1	59·0	−1·4	−0·1	+0·3	+0·5	+0·2	+0·1
16	69·0	54·3	62·1	68·0	68·3	57·1	−1·6	−0·2	0·0	−0·2	+0·8	+0·2	16	70·7	53·9	63·0	68·8	68·9	57·0	+0·1	−0·6	+0·9	+0·6	+1·4	+0·1
17	71·0	54·4	63·2	67·9	64·7	57·0	−2·7	+0·2	+0·3	+0·1	−0·6	+0·1	17	71·9	53·4	65·2	68·6	65·6	57·7	−1·8	−0·8	+2·3	+0·8	+0·3	+0·8
18	67·8	48·6	59·3	63·2	65·1	58·6	−2·5	+0·3	−1·1	+0·4	−2·3	+0·6	18	69·2	47·5	59·8	63·9	65·8	58·1	−1·1	−0·8	−0·6	+1·1	−1·6	+0·1
19	64·6	48·3	...	...	...	...	−3·5	+0·8	...	...	...	...	19	66·7	46·5	...	...	...	...	−1·4	−1·0	...	...	...	...
20	69·8	54·1	60·5	65·1	68·7	58·4	−2·2	+0·3	+0·4	−1·9	−1·1	+0·5	20	72·4	53·5	62·4	67·6	70·1	58·0	+0·4	−0·3	+2·3	+0·6	+0·3	+0·1
21	62·2	49·3	59·5	61·3	61·4	58·9	−1·7	+0·7	+0·7	+0·3	+0·7	+0·3	21	63·3	48·3	60·0	61·6	61·7	58·0	−0·6	−0·3	+1·2	+0·6	+1·0	−0·6
22	70·1	47·3	62·0	65·6	69·0	61·1	−2·2	+3·0	+0·2	−1·9	−1·4	+0·3	22	72·1	46·2	63·6	67·4	69·8	60·7	−0·2	+1·9	+1·8	−0·1	−0·6	−0·1
23	69·8	50·6	64·1	67·0	69·3	62·5	−1·3	+3·6	+1·4	+1·1	−0·1	+2·2	23	72·2	49·3	63·0	67·9	69·9	62·3	+1·1	+2·3	+0·3	+2·0	+0·5	+2·0
24	73·6	50·9	...	...	...	...	−2·5	+3·1	...	...	...	...	24	75·4	49·8	...	...	...	...	−0·7	+2·0	...	...	...	...
25	64·1	51·3	57·1	63·3	59·5	53·0	−1·7	−0·2	−0·5	−0·2	−1·5	+1·2	25	64·5	50·8	57·9	63·1	59·9	52·0	−1·3	−0·7	+0·3	−0·4	−1·1	+0·2
26	65·6	47·3	...	...	..	...	−2·3	+0·1	...	...	...	...	26	65·7	46·8	...	...	...	...	−2·2	−0·4	...	...	...	...
27	68·6	49·9	59·6	63·5	65·9	58·6	−1·3	+0·6	+0·3	+0·8	+0·5	+2·3	27	68·8	50·8	57·6	64·1	66·6	58·6	−1·1	+1·5	−1·7	+1·4	+1·2	+2·3
28	71·7	47·3	65·0	70·5	68·8	58·9	−0·2	+2·8	+1·0	+0·1	+0·9	+2·0	28	72·6	45·8	65·1	70·4	69·8	58·5	+0·7	+1·3	+1·1	0·0	+1·9	+1·6
29	72·0	49·4	68·9	72·0	70·7	55·3	−1·3	+4·2	+0·2	−1·0	+0·1	+0·6	29	73·5	47·3	69·0	73·1	71·5	55·0	+0·2	+2·1	+0·3	+0·1	+0·9	+0·3
30	74·1	50·5	67·3	71·9	74·1	62·2	+0·2	+2·1	+1·3	+0·5	+1·8	+0·4	30	75·3	48·8	68·1	73·1	75·3	61·5	+1·4	+0·4	+2·1	+1·7	+3·0	−0·3
Means	66·8	49·9	59·6	63·4	64·7	56·5	−1·6	+1·0	+0·1	−0·2	−0·3	+0·6	Means	68·2	49·0	60·2	64·2	65·3	56·2	−0·2	+0·1	+0·6	+0·5	+0·3	+0·3

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

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	78·1	56·6	...	...	...	...	−0·9	+0·4	...	...	...	...	1	80·7	55·3	...	...	...	...	+1·7	−0·9	...	...	...	...
2	82·0	55·3	72·5	79·5	80·5	67·5	−1·0	+2·3	+1·2	+0·8	−0·1	+3·3	2	83·8	54·1	71·3	79·8	81·3	67·0	+0·8	+1·1	0·0	+1·1	+0·7	+2·8
3	87·0	56·5	78·7	85·2	85·9	69·7	−0·4	+2·5	−1·9	−0·4	+1·2	+2·2	3	88·3	56·6	80·1	85·0	88·2	69·0	+0·9	+2·6	−0·5	−0·6	+3·5	+1·5
4	89·7	60·9	81·9	88·6	83·2	65·9	−1·3	+3·6	−1·6	−0·5	−1·5	+0·1	4	91·0	59·5	83·0	88·1	84·2	65·6	0·0	+2·2	−0·5	−1·0	−0·5	−0·2
5	76·1	62·3	68·7	76·0	76·1	62·5	−2·5	+1·5	−0·6	+0·2	−1·2	+0·4	5	78·2	60·6	69·0	75·7	75·8	62·0	−0·4	−0·2	−0·3	−0·1	−1·5	−0·1
6	70·1	57·4	62·9	67·6	69·6	61·5	−1·8	+0·3	0·0	−0·1	−0·1	0·0	6	70·8	56·4	63·2	68·1	70·6	60·6	−1·1	−0·7	+0·3	+0·4	+0·9	−0·9
7	72·6	54·7	...	...	...	...	−2·1	+0·3	...	...	...	...	7	73·4	53·6	...	...	...	...	−1·3	−0·8	...	...	...	...
8	73·8	57·5	67·1	71·8	71·7	64·2	−0·8	+0·6	+0·6	+1·0	+2·0	+1·9	8	73·7	57·1	66·9	70·3	72·2	63·8	−0·9	+0·2	+0·4	−0·5	+2·5	+1·5
9	73·4	53·5	66·2	71·3	71·0	61·1	−0·6	+3·3	+2·5	+0·8	+1·7	+1·3	9	74·9	53·4	64·4	71·3	71·8	60·3	+0·9	+3·2	+0·7	+0·8	+2·5	+0·5
10	70·6	55·5	65·2	68·0	68·4	61·9	−1·7	+3·0	+2·1	−0·3	−0·9	+3·4	10	71·8	54·5	64·3	69·0	69·0	61·3	−0·5	+2·0	+1·2	+0·7	−0·3	+2·8
11	61·9	54·3	59·9	59·5	58·4	55·5	−1·0	+1·9	−1·0	−0·4	−0·4	−0·3	11	62·5	53·3	60·1	60·1	58·8	55·2	−0·4	+0·9	−0·8	+0·2	0·0	−0·6
12	69·7	49·9	62·9	68·3	69·7	57·2	−1·5	+0·1	−0·2	−0·1	+0·1	+2·3	12	70·8	48·5	63·6	69·2	70·0	57·0	−0·4	−1·3	+0·5	+0·8	+0·4	+2·1
13	73·7	46·7	67·7	73·6	72·9	58·7	−1·3	+1·3	+0·6	+0·9	+1·4	+0·9	13	75·1	46·6	68·2	74·0	74·2	58·2	+0·1	+1·2	+1·1	+1·3	+2·7	+0·4
14	73·3	56·5	...	...	...	...	−1·7	+2·0	...	...	...	...	14	73·5	55·1	...	...	...	...	−1·5	+0·6	...	...	...	...
15	71·3	57·6	65·1	66·9	67·8	59·3	−0·9	−0·2	+0·6	+0·4	−0·2	−0·1	15	71·5	57·0	65·4	67·6	68·3	58·8	−0·7	−0·8	+0·9	+1·1	+0·3	−0·6
16	68·9	51·3	61·0	66·5	68·0	59·8	−2·3	+1·0	−0·4	+1·2	−1·7	+0·1	16	72·1	49·5	62·2	67·0	68·7	59·3	+0·9	−0·8	+0·8	+1·7	−1·0	−0·4
17	64·6	54·1	56·4	60·0	61·7	58·6	−1·2	+0·5	−0·3	−0·2	−1·3	−0·1	17	65·5	53·3	56·4	60·7	62·2	58·0	−0·3	−0·3	−0·3	+0·5	−0·8	−0·7
18	65·0	52·0	57·6	62·0	63·7	58·5	−1·9	+0·5	−0·4	+0·5	−1·3	0·0	18	66·3	50·8	57·6	62·4	64·4	57·8	−0·6	−0·7	−0·4	+0·9	−0·6	−0·7
19	65·5	50·4	60·8	62·6	64·1	58·9	−2·7	+0·9	+0·1	−0·1	−0·8	+0·2	19	67·1	49·2	61·8	63·2	64·6	58·0	−1·1	−0·3	+1·1	+0·5	−0·3	−0·7
20	66·9	47·5	56·8	62·6	66·9	54·9	−0·7	+2·0	+0·7	−0·1	+0·2	+2·2	20	67·4	46·5	57·1	63·2	67·4	55·7	−0·2	+1·0	+1·0	+0·5	+0·7	+3·0
21	66·6	46·4	...	...	...	...	−2·3	+2·9	...	...	...	...	21	68·0	45·1	...	...	...	...	−0·9	+1·6	...	...	...	...
22	66·0	49·8	58·2	63·9	59·1	54·8	−3·2	+2·0	−0·1	−0·2	+0·2	+0·1	22	68·1	48·5	58·8	64·4	59·4	54·5	−1·1	+0·7	+0·5	+0·3	+0·5	−0·2
23	63·1	53·3	58·1	61·2	57·9	55·0	−1·8	+0·4	−0·5	−0·2	+0·2	+0·3	23	63·8	52·4	58·1	61·6	58·2	55·0	−1·1	−0·5	−0·5	+0·2	+0·5	+0·3
24	63·8	47·9	54·9	61·7	61·5	53·0	−0·5	+0·4	−0·1	+0·8	+0·9	+0·6	24	63·5	46·4	54·2	62·4	61·8	52·1	−0·8	−1·1	−0·8	+1·5	+1·2	−0·3
25	66·0	46·7	56·6	64·9	64·9	57·4	−2·7	+0·9	0·0	+1·4	−1·5	−0·1	25	68·1	45·2	56·4	65·4	66·8	57·0	−0·6	−0·6	−0·2	+1·9	+0·4	−0·5
26	70·0	52·2	62·5	68·5	67·9	60·6	−2·0	+0·2	−0·1	−1·2	−0·4	−0·1	26	70·8	51·8	63·1	69·2	68·5	59·9	−1·2	−0·2	+0·5	−0·5	+0·2	−0·8
27	71·6	53·2	61·5	68·2	70·9	60·8	−1·1	+0·2	+0·4	+0·2	0·0	+3·9	27	72·3	52·2	61·9	68·8	70·9	61·6	−0·4	−0·8	+0·8	+0·8	0·0	+4·7
28	78·3	52·6	...	...	...	...	−0·2	+3·1	...	...	...	...	28	79·2	52·4	...	...	...	...	+0·7	+2·9	...	...	...	...
29	79·3	54·3	71·0	78·7	78·2	61·8	−0·6	+2·7	+1·1	+1·2	+0·5	+0·9	29	80·6	52·9	71·6	79·4	78·2	60·8	+0·7	+1·3	+1·7	+1·9	+0·5	−0·1
30	79·6	55·0	69·3	79·1	76·3	63·1	−2·3	+2·4	−0·2	−1·2	−0·3	−0·2	30	79·9	54·3	70·0	79·8	77·6	63·0	−2·0	+1·7	+0·5	−0·5	+1·0	−0·3
31	63·6	54·0	56·5	58·1	59·5	55·7	−0·2	+0·6	−0·3	−0·1	−0·8	0·0	31	63·6	53·7	57·2	58·3	59·0	55·0	−0·2	+0·3	+0·4	+0·1	−1·3	−0·7
Means	71·7	53·4	63·8	69·0	69·1	59·9	−1·5	+1·4	+0·1	+0·2	−0·2	+0·9	Means	72·8	52·4	64·1	69·4	69·7	59·5	−0·4	+0·4	+0·3	+0·5	+0·5	+0·5

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	61·6	52·9	56·1	56·8	61·3	58·0	−1·2	−0·1	−0·2	+0·1	−0·5	−0·1	1	61·9	52·2	56·0	56·7	61·9	57·4	−0·9	−0·8	−0·3	0·0	+0·1	−0·7
2	68·1	52·2	57·1	63·5	67·5	59·6	−1·4	+0·8	−0·5	−0·7	+0·8	−0·1	2	70·5	50·6	57·8	63·9	69·8	59·2	+1·0	−0·8	+0·2	−0·3	+3·1	−0·5
3	64·6	55·1	57·7	59·5	64·1	55·7	−0·2	−0·1	−0·8	−0·1	+0·1	+0·1	3	64·6	55·1	58·0	59·4	63·6	55·1	−0·2	−0·1	−0·5	−0·2	−0·4	−0·5
4	68·8	44·1	...	...	...	...	−2·8	+1·9	...	...	...	...	4	70·5	42·5	...	...	...	...	−1·1	+0·3	...	...	...	...
5	73·8	53·3	66·7	73·1	73·0	61·1	−0·8	+1·1	−1·0	+0·4	+0·4	+0·4	5	74·3	53·0	67·7	72·2	72·8	61·0	−0·3	+0·8	0·0	−0·5	+0·2	+0·3
6	63·7	54·3	62·5	58·7	56·0	54·7	−0·6	+0·3	+0·1	+0·1	−0·7	+0·7	6	64·5	53·5	62·9	58·3	56·6	54·0	+0·2	−0·5	+0·5	−0·3	−0·1	0·0
7	67·2	51·3	58·7	63·9	65·9	53·5	−0·9	+0·4	−0·4	+0·7	−0·9	−0·8	7	67·3	50·3	59·3	64·6	66·8	52·8	−0·8	−0·6	+0·2	+1·4	0·0	−1·5
8	58·7	49·3	53·1	56·7	58·3	58·5	−0·4	+1·8	−0·7	−1·0	0·0	+0·1	8	59·1	48·0	53·9	57·7	58·7	58·2	0·0	+0·5	+0·1	0·0	+0·4	−0·2
9	65·0	54·3	57·5	60·0	61·9	55·5	−0·9	+0·1	−0·8	+0·3	−0·5	−0·2	9	66·0	53·7	57·8	60·3	62·4	55·0	+0·1	−0·5	−0·5	+0·6	0·0	−0·7
10	64·2	45·5	54·9	63·9	63·5	52·9	−1·4	+0·3	−0·9	+0·2	+0·5	+3·2	10	65·1	43·9	55·2	64·4	64·1	52·6	−0·5	−1·3	−0·6	+0·7	+1·1	+2·9
11	66·1	44·3	...	...	...	...	−2·5	+3·1	...	...	...	...	11	66·3	43·3	...	...	...	...	−2·3	+2·1	...	...	...	...
12	58·9	49·4	57·0	56·8	57·3	55·9	−0·2	+0·5	−0·7	−0·1	−0·4	+1·1	12	59·5	48·2	57·3	57·1	57·1	55·6	+0·4	−0·7	−0·4	+0·2	−0·6	+0·8
13	68·7	54·3	58·9	66·6	63·5	55·7	−0·1	+0·3	−0·6	0·0	−0·6	+0·4	13	69·5	54·3	60·0	67·4	64·0	55·1	+0·7	+0·3	+0·5	+0·8	−0·1	−0·2
14	59·0	47·5	57·6	56·0	56·1	54·2	−0·1	+2·2	−0·5	−0·1	+0·2	+1·2	14	59·8	47·2	58·8	56·7	56·4	54·2	+0·7	+1·9	+0·7	+0·6	+0·5	+1·2
15	66·5	51·3	55·5	66·5	62·7	55·8	−1·2	+0·2	−0·4	+2·5	+0·3	+1·2	15	67·0	51·2	56·1	67·0	62·8	54·6	−0·7	+0·1	+0·2	+3·0	+0·4	0·0
16	70·2	48·1	56·9	66·0	68·9	55·1	−1·2	+1·3	−0·7	−0·2	+0·2	+0·4	16	71·8	46·2	57·3	67·0	69·4	54·4	+0·4	−0·6	−0·3	+0·8	+0·7	−0·3
17	67·4	50·7	60·9	66·8	65·3	55·1	−1·3	+0·8	−0·8	−0·6	−1·0	−0·2	17	68·5	49·5	62·2	67·3	66·1	54·4	−0·2	−0·4	+0·5	−0·1	−0·2	−0·9
18	63·6	46·7	...	...	...	...	−0·5	+1·5	...	...	...	...	18	64·7	44·5	...	...	...	...	+0·6	−0·7	...	...	...	...
19	64·1	48·7	57·6	64·1	62·1	54·0	0·0	+1·1	−0·3	+1·4	+0·5	+0·3	19	64·3	47·0	58·7	63·6	62·1	53·1	+0·2	−0·6	+0·8	+0·9	+0·5	−0·6
20	60·8	42·9	55·6	60·2	59·2	49·5	−0·2	+2·4	−0·7	+0·5	−0·2	+0·9	20	61·5	40·1	57·0	60·2	59·9	48·2	+0·5	−0·4	+0·7	+0·5	+0·5	−0·4
21	59·3	44·1	54·9	58·8	58·2	51·3	−0·6	+1·7	−0·8	−0·2	−0·2	+0·7	21	60·1	42·2	55·6	58·6	58·8	50·3	+0·2	−0·2	−0·1	−0·4	+0·4	−0·3
22	57·5	49·5	55·3	56·1	54·2	52·2	−0·8	+0·1	−1·6	+0·3	−0·2	+0·3	22	58·1	48·4	56·0	56·6	54·0	52·0	−0·2	−1·0	−0·9	+0·8	−0·4	+0·1
23	59·5	49·4	52·8	55·2	59·5	53·3	−1·0	−0·2	+0·1	−0·3	+1·4	−0·2	23	59·9	49·1	52·9	55·3	59·9	53·1	−0·6	−0·5	+0·2	−0·2	+1·8	−0·4
24	60·1	49·3	56·2	58·8	58·6	49·9	−0·9	+0·1	−1·4	+0·1	−0·1	+0·6	24	61·3	48·3	57·0	59·4	59·0	49·0	+0·3	−0·9	−0·6	+0·7	+0·3	−0·3
25	56·8	47·7	...	...	...	...	−2·2	+0·2	...	...	...	...	25	58·1	46·8	...	...	...	...	−0·9	−0·7	...	...	...	...
26	64·6	41·4	51·9	63·8	60·7	48·9	−1·1	+2·6	−3·4	+1·5	+0·9	+2·3	26	65·6	40·1	55·8	64·4	60·9	49·0	−0·1	+1·3	+0·5	+2·1	+1·1	+2·4
27	64·0	41·3	46·5	63·5	61·5	53·2	−1·2	+1·7	−0·4	+1·3	−0·5	+2·8	27	65·5	40·4	46·3	64·6	62·0	52·1	+0·3	+0·8	−0·6	+2·4	0·0	+1·7
28	64·9	46·1	49·9	59·9	64·9	54·6	−0·6	+0·6	+0·3	+0·2	−0·5	+1·1	28	66·2	45·1	49·7	60·3	65·5	53·8	+0·7	−0·4	+0·1	+0·6	+0·1	+0·3
29	63·3	49·1	52·9	62·3	63·2	53·3	−0·6	+0·9	+0·2	+1·0	+0·9	+1·4	29	63·9	48·2	53·0	63·0	61·6	52·0	0·0	0·0	+0·3	+1·7	−0·7	+0·1
30	61·1	40·7	49·1	57·6	58·7	56·5	−0·9	+0·5	−1·9	+1·9	+0·1	−0·2	30	62·1	40·1	50·1	57·9	58·7	56·4	+0·1	−0·1	−0·9	+2·2	+0·1	−0·3
Means	63·7	48·5	55·9	61·4	61·8	54·5	−0·9	+0·9	−0·7	+0·4	0·0	+0·7	Means	64·6	47·4	56·6	61·7	62·1	53·9	−0·1	−0·1	0·0	+0·7	+0·3	+0·1

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	61·2	51·9	59·3	55·4	58·7	52·1	+0·2	+1·7	−0·4	+0·1	+0·2	+1·1	1	61·4	50·2	59·3	55·1	58·9	51·0	+0·4	0·0	−0·4	−0·2	+0·4	0·0
2	58·7	41·9	...	...	...	...	−1·2	+2·4	...	...	...	...	2	59·5	40·4	...	...	...	...	−0·4	+0·9	...	...	...	...
3	61·0	47·3	51·3	58·5	61·0	50·8	−0·9	−0·7	−0·4	−0·6	−0·4	+0·7	3	61·8	46·5	51·7	59·8	61·8	49·8	−0·1	−1·5	0·0	+0·7	+0·4	−0·3
4	65·4	41·2	47·7	63·6	63·5	56·9	−1·1	+3·3	−1·8	+0·8	0·0	0·0	4	66·5	40·4	49·1	63·9	64·1	57·0	0·0	+2·5	−0·4	+1·1	+0·6	+0·1
5	58·6	50·5	55·0	57·3	58·1	52·7	−0·3	−0·3	−0·1	−0·3	−0·2	−0·3	5	58·6	50·2	55·3	57·9	58·2	52·3	−0·3	−0·6	+0·2	+0·3	−0·1	−0·7
6	57·6	48·7	53·8	55·1	54·5	49·3	0·0	−0·4	−0·5	+0·3	+0·1	+0·1	6	57·1	48·5	54·2	55·3	54·5	48·9	−0·5	−0·6	−0·1	+0·5	+0·1	−0·3
7	50·1	45·3	46·5	49·9	50·0	45·7	−0·1	+0·4	0·0	−0·3	+0·1	+0·8	7	51·3	43·9	46·0	50·0	50·6	45·0	+1·1	−1·0	−0·5	−0·2	+0·7	+0·1
8	51·8	40·1	45·2	49·3	51·5	44·0	+0·5	−0·1	−0·3	+0·4	+0·5	+1·1	8	52·0	38·8	45·6	48·9	52·0	43·7	+0·7	−1·4	+0·1	0·0	+1·0	+0·8
9	54·0	34·6	...	...	...	...	+1·9	+2·4	...	...	...	...	9	54·2	32·9	...	...	...	...	+2·1	+0·7	...	...	...	...
10	58·0	46·9	52·2	57·1	57·1	52·9	−1·2	+0·1	−0·9	−0·4	0·0	+0·1	10	58·5	46·6	53·2	58·0	57·5	52·9	−0·7	−0·2	+0·1	+0·5	+0·4	+0·1
11	57·0	52·0	54·0	55·9	56·2	53·8	−1·7	+1·0	+0·1	−0·4	−0·3	+1·1	11	58·5	51·4	54·2	55·8	56·3	54·1	−0·2	+0·4	+0·3	−0·5	−0·2	+1·4
12	56·6	46·3	53·8	54·9	56·0	46·6	−0·6	+1·2	−0·7	−0·4	−0·6	+1·5	12	56·8	45·0	53·8	55·7	56·8	46·4	−0·4	−0·1	−0·7	+0·4	+0·2	+1·3
13	56·0	36·1	44·2	53·8	53·1	44·9	−1·3	+3·5	+0·7	0·0	−1·4	+0·5	13	57·5	35·0	44·9	54·4	53·6	44·0	+0·2	+2·4	+1·4	+0·6	−0·9	−0·4
14	54·2	39·3	47·9	53·0	50·8	42·2	−1·5	+3·7	−2·0	−0·5	+0·1	+0·8	14	55·4	37·7	49·1	53·6	50·7	41·0	−0·3	+2·1	−0·8	+0·1	0·0	−0·4
15	53·2	36·6	41·5	52·2	52·4	42·0	−0·8	+4·7	−0·2	+0·1	−0·1	+1·7	15	53·5	34·3	42·2	52·3	52·7	41·0	−0·5	+2·4	+0·5	+0·2	+0·2	+0·7
16	54·7	38·3	...	...	...	...	−1·3	+1·9	...	...	...	...	16	56·5	36·0	...	...	...	...	+0·5	−0·4	...	...	...	...
17	60·6	50·3	55·1	58·1	60·0	58·1	−0·4	0·0	−0·3	−0·3	0·0	−0·6	17	60·9	50·0	55·3	58·3	60·0	58·2	−0·1	−0·3	−0·1	−0·1	0·0	−0·5
18	66·3	57·0	60·3	66·3	65·3	57·1	−0·2	+0·7	−0·1	−0·2	−0·3	+0·3	18	66·1	55·3	60·3	65·4	65·8	56·3	−0·4	−1·0	−0·1	−1·1	+0·2	−0·5
19	61·6	52·6	54·7	61·6	60·0	54·3	−1·1	+0·1	+0·6	+0·2	0·0	+0·4	19	62·8	52·9	54·0	62·1	60·2	54·0	+0·1	+0·4	−0·1	+0·7	+0·2	+0·1
20	64·1	49·0	51·7	60·5	63·0	56·0	−0·8	+0·1	−1·0	−1·8	+0·9	+1·2	20	65·0	48·5	52·0	62·0	63·5	55·3	+0·1	−0·4	−0·7	−0·3	+1·4	+0·5
21	58·4	53·1	56·0	57·2	57·3	56·2	−0·3	+0·7	−0·9	+0·1	−0·2	+0·2	21	58·7	52·6	56·3	57·6	57·6	56·0	0·0	+0·2	−0·6	+0·5	+0·1	0·0
22	59·0	47·6	53·2	56·0	58·8	48·2	−0·5	+2·5	0·0	+0·3	−0·1	+2·5	22	59·2	46·5	53·0	56·9	59·0	48·3	−0·3	+1·4	−0·2	+1·2	+0·1	+2·6
23	58·6	47·3	...	...	...	...	−0·4	+2·3	...	...	...	...	23	59·9	46·6	...	...	...	...	+0·9	+1·6	...	...	...	...
24	59·0	52·0	52·8	55·6	57·1	54·6	−0·9	+0·8	0·0	+0·1	−0·3	−0·3	24	59·3	52·0	52·9	56·0	57·0	54·4	−0·6	+0·8	+0·1	+0·5	−0·4	−0·5
25	55·0	43·4	48·7	51·8	54·7	45·9	−0·1	+1·9	+0·1	+0·3	+0·8	+0·2	25	55·8	41·9	48·6	51·4	54·0	45·8	+0·7	+0·4	0·0	−0·1	+0·1	+0·1
26	54·1	43·4	49·5	52·2	54·1	49·2	+0·2	−0·1	−0·2	+0·1	+0·4	+1·2	26	54·1	42·9	49·5	52·0	54·1	48·8	+0·2	−0·6	−0·2	−0·1	+0·4	+0·8
27	54·2	37·6	41·2	46·3	52·9	49·8	+1·6	+1·4	−0·6	−0·5	+0·5	+0·4	27	54·3	38·0	41·3	46·6	53·4	49·7	+1·7	+1·8	−0·5	−0·2	+1·0	+0·3
28	56·9	45·5	50·9	56·9	54·0	46·0	−0·4	+0·6	−1·1	+0·2	0·0	+1·0	28	57·6	43·7	52·3	57·6	54·4	45·0	+0·3	−1·2	+0·3	+0·9	+0·4	0·0
29	55·6	40·5	45·0	55·2	55·2	47·1	−0·4	+1·0	−0·7	−0·5	−0·3	+0·2	29	56·5	38·8	45·2	55·8	55·8	46·8	+0·5	−0·7	−0·5	+0·1	+0·3	−0·1
30	50·6	46·6	...	...	...	...	−0·7	+0·1	...	...	...	...	30	50·9	45·4	...	...	...	...	−0·4	−1·1	...	...	...	...
31	48·8	46·0	47·2	48·2	48·6	47·6	+0·1	−0·1	−0·1	+0·1	−0·1	−0·1	31	48·5	45·1	47·6	48·0	48·3	47·2	−0·2	−1·0	+0·3	−0·1	−0·4	−0·5
Means	57·1	45·4	50·7	55·5	56·3	50·2	−0·4	+1·2	−0·4	−0·1	0·0	+0·6	Means	57·7	44·5	51·0	55·8	56·6	49·7	+0·1	+0·2	−0·1	+0·2	+0·2	+0·2

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

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

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 1904.

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

JANUARY.

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

FEBRUARY.

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
	°	°	°	°	°	°	°	°
1	33·1	38·0	39·1	37·1	+1·4	−0·7	−0·6	+0·1
2	39·2	41·6	42·4	38·3	−0·2	−0·4	−0·4	+2·6
3	41·5	43·4	45·3	38·9	−0·3	−0·4	−0·3	+0·2
4	37·5	40·2	41·2	39·1	−0·2	−0·6	−0·4	+0·3
5	42·1	42·2	43·0	37·8	+0·4	−0·3	−0·5	+1·0
6	39·2	41·1	40·1	37·5	−0·5	0·0	0·0	+0·7
8	42·3	43·1	43·3	39·8	+0·1	−1·2	−1·0	0·0
9	41·0	40·1	40·7	39·3	+0·1	0·0	−0·1	−0·8
10	40·1	42·1	42·8	37·9	−0·3	0·0	+0·1	0·0
11	37·1	38·1	38·6	37·1	−0·4	−0·2	+0·2	+0·4
12	37·2	42·8	42·8	47·7	+0·3	−0·1	−0·2	0·0
13	42·1	43·3	42·1	37·1	−0·6	+0·2	−0·4	−0·2
15	32·3	35·8	37·4	34·0	−0·3	0·0	0·0	+0·3
16	33·1	36·2	36·9	33·5	−0·4	−0·6	0·0	+0·1
17	34·7	34·0	34·1	32·3	0·0	+0·2	−0·8	0·0
18	32·7	35·1	36·4	35·1	−0·1	−0·4	−0·3	+0·1
19	31·1	34·2	36·1	38·1	−0·1	+0·4	−0·5	−0·5
20	47·7	50·0	49·3	47·4	−0·7	0·0	−0·2	−0·2
22	40·4	42·1	42·1	37·5	−0·3	−0·3	−0·2	+0·2
23	33·8	35·2	35·6	33·2	−0·2	−0·4	−0·2	+0·5
24	33·9	35·1	33·5	31·5	−0·1	−0·4	−0·2	+0·1
25	32·8	33·3	33·2	30·8	+0·1	−0·4	−0·1	+0·1
26	31·9	33·2	32·9	31·2	−0·5	−0·8	+0·1	−0·5
27	30·2	32·1	32·3	31·2	+0·2	+0·1	+0·3	+0·3
29	26·5	29·0	28·1	28·0	−1·0	−0·3	+0·1	−0·2
Means	36·5	38·5	38·8	36·5	−0·1	−0·3	−0·2	+0·2

MARCH.

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

APRIL.

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

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

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

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

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 1904.

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

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	36·3	29·0	31·3	32·1	36·3	31·0	−0·6	0·0	0·0	−0·3	+0·3	+0·3	28·9	29·4	31·6	29·1	0·0	− 0·1	+ 0·1	+ 0·2
2	37·6	28·5	34·0	36·3	37·6	36·4	+0·1	+0·2	+0·5	+0·1	+0·1	+0·6	33·4	35·1	36·7	35·7	+ 0·3	0·0	+ 0·1	+ 0·4
3	36·7	29·9	35·4	36·6	36·3	33·2	−0·1	+0·7	0·0	−0·1	−0·2	+0·3	33·6	35·2	35·4	33·0	0·0	0·0	+ 0·6	+ 0·2
4	38·0	33·0	36·1	37·1	37·8	37·0	−0·4	+0·4	0·0	−0·3	0·0	0·0	35·6	36·1	36·1	35·8	0·0	− 0·3	− 0·1	0·0
5	40·9	35·3	37·8	39·0	40·0	37·9	−0·3	+0·4	−0·1	−0·1	−0·1	+0·1	36·2	37·0	37·6	36·2	− 0·1	− 0·2	− 0·3	− 0·3
6	38·4	34·3	…	…	…	…	+0·2	+0·2	…	…	…	…	…	…	…	…	…	…	…	…
7	42·3	36·4	39·6	40·2	40·7	42·3	−0·3	+0·2	−0·1	−0·1	−0·2	−0·3	39·0	39·8	40·1	42·0	− 0·1	− 0·1	− 0·2	− 0·3
8	57·4	40·3	47·7	55·7	56·1	45·0	−0·3	+1·0	0·0	0·0	0·0	+0·4	45·4	50·5	49·6	42·9	− 0·1	+ 0·3	− 0·3	+ 0·2
9	58·7	34·2	42·2	56·4	55·4	41·4	−0·4	−0·2	+0·4	−0·4	+0·3	−0·3	41·1	51·0	49·2	40·8	+ 0·1	− 0·2	− 0·1	− 0·1
10	45·0	37·3	40·1	43·6	43·9	37·3	−1·2	+0·3	−0·1	−0·7	+0·1	0·0	37·3	38·9	39·1	35·3	+ 0·2	− 0·6	+ 0·1	− 0·3
11	47·2	33·6	37·4	44·5	47·2	37·0	−0·2	+0·6	−0·1	−0·2	−0·2	+0·7	35·8	39·6	40·8	35·4	0·0	+ 0·4	+ 0·2	+ 0·9
12	43·3	27·8	33·7	40·0	42·8	32·7	+0·2	+0·6	−0·6	−0·3	−0·1	+0·2	32·7	36·9	38·2	31·4	− 0·4	0·0	+ 0·1	+ 0·1
13	46·5	30·2	…	…	…	…	−1·4	+0·7	…	…	…	…	…	…	…	…	…	…	…	…
14	48·0	35·2	40·1	45·7	47·0	41·7	−0·8	+1·0	−0·5	0·0	−0·4	+0·6	39·0	41·4	41·4	39·1	0·0	− 0·1	− 0·5	+ 0·2
15	46·2	35·2	37·0	42·8	45·3	37·2	−0·6	+0·2	−0·3	−0·1	+0·4	+0·5	35·1	38·1	39·6	34·7	− 0·5	0·0	+ 0·1	0·0
16	48·8	27·8	40·1	48·2	47·3	37·0	−1·2	+0·9	+0·3	+0·7	+0·1	0·0	36·2	40·0	38·9	34·2	− 0·3	+ 0·5	− 0·3	− 0·1
17	47·8	29·5	38·0	46·6	46·8	34·3	−0·8	+0·2	+0·5	+1·3	+0·1	+0·5	35·3	41·2	40·9	34·0	+ 0·4	+ 0·4	+ 0·2	+ 0·3
18	52·0	27·4	37·1	48·4	50·5	45·1	−0·9	+1·0	−0·4	−0·3	−1·0	+0·3	35·7	41·1	44·1	42·1	+ 0·2	− 0·5	− 0·5	0·0
19	54·0	42·0	48·4	52·0	53·2	50·1	−1·5	+0·6	−0·3	−0·3	−0·4	−0·1	45·6	48·9	50·1	49·6	0·0	− 0·2	+ 0·3	− 0·1
20	52·2	47·2	…	…	…	…	−1·3	0·0	…	…	…	…	…	…	…	…	…	…	…	…
21	51·8	43·2	48·0	51·6	45·3	43·2	−0·4	+0·1	−0·5	−0·4	−0·3	+0·1	45·7	48·5	44·2	39·2	− 0·3	− 0·4	− 0·2	− 0·1
22	52·8	32·6	43·8	51·5	52·0	47·7	−1·2	+0·8	+0·4	+0·2	−0·1	+0·2	39·6	43·2	46·0	45·0	+ 0·3	− 0·1	0·0	+ 0·2
23	47·7	40·9	44·0	45·2	45·8	41·0	+0·2	+0·5	0·0	−0·2	+0·1	−0·3	39·4	40·0	40·8	38·0	0·0	0·0	+ 0·3	+ 0·1
24	49·0	38·2	43·3	46·7	47·2	39·6	−1·0	0·0	−0·4	−0·2	−0·1	−0·1	39·6	40·9	40·1	37·1	− 0·2	− 0·1	+ 0·3	+ 0·4
25	39·6	35·1	37·1	39·0	39·1	37·2	−0·3	+0·3	0·0	+0·1	−0·2	−0·1	36·7	37·1	36·9	36·7	0·0	0·0	0·0	0·0
26	48·0	35·5	40·4	45·7	47·2	43·8	−0·9	+0·2	−0·3	+0·1	−0·1	0·0	39·2	41·9	42·3	41·0	− 0·3	− 0·1	− 0·3	+ 0·1
27	43·8	36·6	…	…	…	…	0·0	+1·8	…	…	…	…	…	…	…	…	…	…	..	…
28	49·8	32·5	38·4	46·7	49·8	42·6	−1·8	+1·1	−0·3	−0·1	−0·2	−0·1	37·0	42·9	44·0	40·3	0·0	− 0·2	− 0·4	0·0
29	52·5	40·0	46·5	52·1	44·8	40·0	−1·3	+0·4	−0·4	−0·3	−0·6	0·0	43·1	45·1	42·1	38·3	− 0·3	− 0·3	− 0·8	0·0
30	45·9	33·4	37·8	42·4	45·3	37·5	−1·1	+0·2	−0·2	−1·0	−0·5	−0·1	35·4	39·0	40·8	37·1	− 0·2	− 0·7	− 0·7	− 0·2
31	47·4	35·6	40·9	44·0	47·1	40·9	−1·4	+0·3	−0·2	+0·3	−0·6	+0·1	39·6	40·0	41·2	39·9	+ 0·5	+ 0·3	− 0·5	+ 0·2
Means	46·6	34·8	39·9	44·8	45·5	39·6	−0·7	+0·5	−0·1	−0·1	−0·1	+0·1	37·8	40·7	41·0	37·9	0·0	− 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	51·2	39·8	...	...	...	...	−1·3	+0·5	...	...	...	...	...	...	...	...	...	...	...	...
2	53·9	39·4	47·0	51·8	50·4	46·8	−1·8	+0·2	−0·3	−0·9	−0·9	0·0	42·9	43·2	43·2	45·1	− 0·3	− 0·3	− 0·7	+ 0·1
3	54·4	46·2	...	...	...	...	−1·2	0·0	...	...	...	...	...	...	...	...	...	...	...	...
4	50·6	39·2	...	...	...	...	−0·7	+0·7	...	...	...	...	..	..	...	...	...	...	...	...
5	53·6	43·2	47·3	51·0	52·0	50·9	−0·4	+0·4	−0·4	−0·3	−0·1	−0·1	44·8	47·8	50·0	48·3	+ 0·1	+ 0·1	+ 0·3	0·0
6	56·2	47·2	52·9	54·0	56·2	47·2	−0·9	+0·3	−0·1	−0·7	−0·5	+0·3	49·0	45·1	47·0	43·8	− 0·3	− 0·5	− 0·3	+ 0·3
7	52·5	37·6	47·3	50·7	50·6	47·6	−1·0	+0·3	−0·4	−0·1	−0·8	+0·3	41·6	44·3	44·0	41·7	− 0·3	0·0	− 0·8	+ 0·2
8	63·0	43·5	47·2	53·5	61·1	55·0	−1·0	+0·3	−0·5	−0·3	+0·1	+0·3	46·2	51·0	56·0	51·4	− 0·5	− 0·2	+ 0·1	+ 0·1
9	55·2	43·7	48·9	50·5	55·2	43·7	−0·1	+0·5	0·0	−0·5	−0·1	+0·1	46·1	42·8	45·0	39·5	− 0·2	− 0·2	+ 0·1	+ 0·3
10	51·1	38·2	...	...	...	...	−0·9	+0·4	...	...	...	...	...	...	...	...	...	...	...	...
11	56·0	37·2	47·0	51·2	55·7	44·6	−0·6	+0·7	−0·3	−0·8	−0·2	+0·8	41·8	43·0	47·0	41·0	− 0·1	− 0·6	+ 0·1	+ 0·4
12	60·9	37·4	52·0	55·7	60·9	54·3	−0·2	+0·2	+0·2	−0·1	−0·1	+0·5	46·0	47·2	50·9	49·3	+ 0·3	0·0	+ 0·3	0·0
13	57·0	49·4	54·3	53·9	55·9	50·0	−0·9	−0·1	−0·3	−0·5	−0·9	+0·3	52·1	50·1	46·3	45·1	0·0	− 0·6	− 0·8	+ 0·2
14	66·2	43·6	52·3	62·6	61·4	58·0	−0·7	+0·8	−0·9	−0·4	−0·5	+0·5	49·6	55·0	56·1	54·9	− 0·5	− 0·3	− 0·2	+ 0·2
15	58·3	47·8	55·1	57·3	49·3	47·9	−0·3	+0·6	−0·3	−0·1	−0·3	+0·5	53·1	53·7	48·1	46·0	+ 0·2	0·0	− 0·3	− 0·1
16	59·2	40·0	50·1	53·2	57·2	49·8	−1·1	+1·0	−0·2	−0·5	−0·6	+0·5	46·6	47·6	48·9	45·6	− 0·1	− 0·5	− 0·2	0·0
17	62·0	38·3	...	...	...	...	−1·6	+0·8	...	...	...	...	...	...	...	...	...	...	...	...
18	62·1	35·4	51·2	59·3	62·0	51·0	−1·0	+0·9	−0·9	−0·4	+0·1	+0·2	47·1	51·4	51·6	45·3	− 0·2	− 0·2	+ 0·2	+ 0·3
19	63·0	41·6	53·1	57·8	63·0	49·6	−0·9	+0·7	−0·6	−0·7	−0·3	+0·5	48·0	51·2	51·0	42·7	− 0·4	− 0·7	− 0·3	+ 0·6
20	63·2	41·2	50·0	60·7	62·9	48·9	−0·8	+0·1	−0·2	−1·0	−0·7	0·0	46·7	52·1	53·0	44·9	0·0	− 0·8	− 0·2	0·0
21	51·0	42·0	49·2	47·4	48·3	42·0	−0·9	+1·2	−0·8	−0·3	−0·4	+0·3	44·8	43·5	43·5	39·2	− 0·2	− 0·3	− 0·2	+ 0·5
22	53·0	34·2	48·4	51·9	48·0	46·8	−1·7	+1·0	−0·3	−0·4	−0·6	0·0	42·9	45·8	45·0	45·1	− 0·2	− 0·3	− 0·7	− 0·2
23	56·1	44·8	46·5	54·2	56·1	49·8	−0·8	+0·4	−0·5	+0·2	−0·3	+0·1	45·3	49·0	50·1	47·9	− 0·4	+ 0·2	− 0·4	+ 0·1
24	59·7	46·5	...	...	...	...	−1·2	+0·3	...	...	...	...	...	...	...	...	...	...	...	...
25	55·4	43·9	48·4	51·3	52·0	45·0	0·0	+0·4	−0·3	−0·7	−0·1	+0·2	41·9	41·4	42·6	39·7	+ 0·4	− 0·9	+ 0·1	+ 0·3
26	50·0	34·6	47·0	48·0	49·7	46·3	−1·8	+0·8	−0·7	−0·6	−0·3	−0·2	40·3	41·2	41·1	42·1	− 0·7	− 0·2	− 0·6	+ 0·2
27	56·0	39·9	49·0	51·6	55·3	50·0	−0·9	+0·7	+0·1	−0·2	−0·3	+0·6	43·3	44·3	46·7	45·3	0·0	− 0·1	+ 0·4	+ 0·5
28	56·3	45·5	52·0	53·6	54·3	50·5	−2·6	+0·4	−0·7	−0·7	−0·4	−0·2	48·7	49·3	49·2	48·0	− 0·4	− 0·6	− 0·5	0·0
29	54·9	49·0	52·6	54·4	54·1	50·9	−1·4	+0·5	−0·3	−0·7	−0·6	−0·1	50·1	51·4	52·0	50·6	− 0·2	− 0·5	− 0·5	0·0
30	59·4	50·6	53·6	56·9	59·4	52·1	−1·2	+0·2	−0·1	+0·2	−0·3	+0·4	51·7	53·8	54·8	47·6	− 0·1	+ 0·1	− 0·4	+ 0·2
Means	56·7	42·0	50·1	53·9	55·5	49·1	−1·0	+0·5	−0·4	−0·4	−0·4	+0·2	46·3	47·7	48·5	45·4	− 0·2	− 0·3	− 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	61·2	46·2	...	...	..	...	−1·8	+0·6	...	...	...	...	...	...	...	...	...	...	...	...
2	53·0	46·2	49·1	48·0	47·8	47·2	−1·6	+0·5	−0·7	−0·7	−0·3	+0·2	45·9	46·3	47·2	44·5	− 0·4	− 0·4	− 0·1	+ 0·4
3	55·4	39·8	50·6	55·2	52·6	48·3	−2·2	+0·6	−0·3	−0·3	−0·2	0·0	44·2	46·6	45·9	44·6	− 0·5	+ 0·7	+ 0·2	+ 0·4
4	59·3	41·5	51·2	55·2	58·0	48·9	−0·8	+0·7	−0·5	−0·6	−0·7	+0·2	45·3	47·2	48·6	45·4	− 0·2	− 0·5	− 0·3	+ 0·1
5	62·2	43·8	55·0	60·7	59·6	51·6	−1·7	+1·0	−0·8	−1·9	−1·0	0·0	47·6	50·9	50·3	48·0	− 0·7	− 1·2	− 0·4	0·0
6	56·1	44·0	49·2	49·7	48·1	44·7	−2·4	+0·4	−0·5	−0·6	−0·4	0·0	44·0	44·2	44·0	43·1	− 0·3	− 0·1	− 0·3	− 0·2
7	47·6	42·6	46·9	44·6	47·0	44·0	−1·6	+0·3	−0·2	−0·5	0·0	+0·1	43·1	42·8	43·0	40·2	− 0·9	0·0	0·0	0·0
8	46·3	39·2	...	...	...	...	−1·2	+0·3	...	...	...	...	...	...	...	...	...	...	...	...
9	53·0	34·6	43·1	48·9	51·1	46·8	−1·5	+0·4	−0·5	+0·1	−0·5	0·0	41·2	44·3	44·4	43·9	− 0·4	+ 0·1	− 0·3	0·0
10	49·3	41·3	45·2	45·0	46·8	44·9	−0·9	+0·7	−0·2	−0·2	−0·3	+0·4	44·8	44·3	43·2	43·3	− 0·1	− 0·3	− 0·5	+ 0·1
11	55·8	37·0	46·0	52·0	55·0	47·0	−1·1	+0·8	−0·3	−0·3	−0·4	+0·3	44·0	47·2	49·2	46·0	− 0·3	− 0·6	− 0·3	+ 0·3
12	62·8	44·2	51·8	58·9	60·3	56·7	−1·3	+0·9	−0·1	−0·8	−0·4	0·0	50·0	53·7	55·3	55·1	− 0·4	− 0·8	− 0·3	0·0
13	65·9	49·5	58·6	63·0	65·0	59·0	−2·6	0·0	−0·8	−0·7	−1·3	+0·1	54·6	57·3	58·6	55·8	− 0·5	− 0·9	− 1·3	0·0
14	69·8	55·0	62·0	66·2	67·5	55·0	−0·1	+0·5	−0·4	−0·5	−0·5	+0·3	56·9	57·9	57·8	51·1	− 0·1	− 0·1	− 0·1	+ 0·3
15	67·8	45·2	...	...	...	...	−1·1	+0·8	...	...	...	...	...	...	...	...	...	...	...	...
16	70·9	43·7	63·8	67·0	69·1	65·0	−1·7	+1·2	−1·3	−0·7	−0·5	+0·3	55·1	56·0	55·0	57·7	− 1·1	− 1·0	− 0·3	− 0·2
17	66·9	53·9	56·7	64·0	64·2	53·9	−1·7	+0·1	−0·1	−0·8	−0·3	−0·1	52·9	56·3	55·3	45·0	− 0·2	− 1·0	− 0·1	0·0
18	61·0	46·5	54·6	58·2	59·6	51·5	−1·9	+0·5	−0·8	+0·2	−0·5	+0·1	47·2	48·1	49·4	47·0	− 0·7	+ 0·2	− 0·6	− 0·1
19	59·1	42·8	52·0	56·3	59·1	53·1	−1·9	+0·6	−0·7	−1·1	−0·9	+0·4	43·7	48·1	49·1	46·0	− 0·8	− 0·2	− 0·2	0·0
20	59·8	40·2	58·6	58·3	55·5	47·4	−2·4	+1·0	+0·2	−1·0	0·0	+0·1	51·1	49·2	46·6	44·2	− 0·3	− 0·6	+ 0·1	0·0
21	49·2	46·3	47·1	49·0	48·6	48·5	−0·6	+0·2	−0·5	+0·1	−0·2	−0·2	46·1	46·9	46·4	47·1	− 0·7	+ 0·1	− 0·3	− 0·5
22	57·0	47·3	...	...	...	...	−2·9	+0·2	...	...	...	...	...	...	...	...	...	...	...	...
23	65·6	50·2	...	...	...	...	−2·3	+0·4	...	...	...	...	...	...	...	...	...	...	...	...
24	54·5	50·9	53·2	54·2	53·6	51·8	−1·4	+0·5	−0·5	−0·5	−0·7	−0·1	52·0	52·2	52·0	50·1	− 0·6	− 0·8	− 0·6	− 1·1
25	67·0	50·3	59·4	62·4	65·1	55·2	−1·9	+0·5	−1·2	−0·4	−0·7	+0·5	56·0	58·9	60·1	54·7	− 1·0	+ 0·1	− 0·6	+ 0·3
26	74·0	47·2	66·2	68·0	73·4	62·2	−1·1	+0·7	−0·7	−0·4	−1·6	+0·2	61·3	64·5	65·3	61·1	− 0·9	+ 0·1	− 0·6	− 0·5
27	68·2	57·8	63·9	62·3	66·8	57·8	−2·6	+0·1	−0·8	+0·3	−1·9	−0·1	62·2	61·1	62·0	56·6	− 0·9	+ 0·3	− 1·3	− 0·1
28	61·7	54·6	55·0	58·4	60·4	60·0	−1·2	+0·4	−0·2	−0·5	−1·5	+0·2	54·5	56·5	58·2	56·8	− 0·1	− 0·4	− 1·3	0·0
29	67·6	55·0	...	...	...	...	−1·2	+0·8	...	...	...	...	...	...	...	...	...	...	...	...
30	66·1	52·3	54·9	64·7	63·2	59·8	−0·6	+0·1	−0·5	−0·4	−0·5	+0·1	53·9	60·0	60·2	58·1	− 0·5	− 0·1	− 0·3	− 0·2
31	60·4	53·9	58·7	57·6	55·7	53·9	−0·5	+0·4	−0·2	−0·5	−0·9	+0·1	58·0	56·8	55·0	52·9	0·0	− 0·3	− 0·8	− 0·1
Means	60·5	46·5	54·1	57·1	58·1	52·6	−1·5	+0·5	−0·5	−0·5	−0·6	+0·1	50·2	51·9	52·1	49·5	− 0·5	− 0·3	− 0·4	0·0

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	60·3	49·2	55·5	53·2	60·0	52·2	−1·6	+0·5	−0·1	−0·5	−0·4	0·0	54·0	52·6	56·0	49·7	− 0·1	0·0	− 0·1	− 0·1
2	57·2	49·6	54·0	54·6	57·0	53·8	−0·9	+0·4	−0·3	−0·5	−0·3	−0·1	50·0	51·6	53·5	52·2	− 0·7	− 0·4	− 0·4	− 0·3
3	62·1	49·0	52·4	57·7	61·2	49·0	−1·8	+0·1	−0·3	−0·2	−1·6	+0·1	49·4	52·7	54·7	47·7	− 0·4	− 0·2	− 0·7	0·0
4	67·4	44·4	59·2	65·1	64·1	52·4	−0·7	+0·5	−0·5	−1·1	−0·4	0·0	53·0	57·1	58·2	49·2	− 0·8	− 0·9	− 0·5	0·0
5	70·0	47·2	...	...	...	...	−0·5	+0·5	...	...	...	...	...	...	...	...	...	...	...	...
6	70·5	47·2	59·0	69·1	67·4	56·8	−0·7	+0·4	+0·1	−0·1	−0·3	0·0	53·9	60·0	57·2	52·7	+ 0·1	− 0·5	− 0·2	− 0·1
7	64·9	49·0	57·8	63·0	64·0	50·9	−1·1	+0·2	+0·1	−0·2	−0·8	+0·2	52·3	55·4	56·1	48·0	0·0	− 0·1	− 0·3	+ 0·1
8	62·1	47·4	51·0	56·0	62·1	50·8	−1·7	0·0	−0·3	−0·4	+0·2	−0·1	48·2	50·2	53·9	46·5	− 0·3	− 0·5	− 0·1	− 0·5
9	58·8	47·2	53·2	57·0	56·4	54·6	−1·1	+0·2	−0·5	−0·8	+0·7	0·0	46·7	49·4	50·0	50·3	− 0·4	− 0·4	+ 0·3	− 0·2
10	62·6	52·8	57·4	57·0	62·0	55·0	−2·3	+0·3	−0·3	−0·2	−1·7	+0·1	54·2	53·9	57·3	52·2	− 0·3	− 0·1	− 0·7	− 0·2
11	60·3	50·2	54·8	56·8	57·8	56·7	−1·6	0·0	0·0	+0·1	−0·2	−0·1	53·0	54·8	55·4	54·4	− 0·2	− 0·1	+ 0·4	− 0·1
12	65·4	50·4	...	...	...	...	−1·9	+0·4	...	...	...	...	...	...	...	...	...	...	...	...
13	71·0	48·6	60·9	65·6	69·1	58·0	−3·0	+1·0	−0·8	−1·1	−1·0	+0·3	57·2	58·0	59·4	53·1	+ 0·1	− 0·7	− 0·6	+ 0·1
14	70·6	54·2	65·1	67·0	65·1	57·1	−2·7	+0·8	−1·3	−1·0	−1·3	0·0	60·4	59·3	60·1	56·8	− 0·3	− 1·1	− 0·7	+ 0·1
15	64·0	54·0	59·3	61·4	62·5	59·0	−2·5	+0·5	−0·6	−0·1	−0·4	+0·1	54·4	55·0	55·2	55·9	− 0·3	− 0·1	− 0·1	+ 0·4
16	68·2	54·7	61·7	67·8	66·0	57·0	−2·4	+0·2	−0·4	−0·4	−1·5	+0·1	54·6	57·2	56·0	52·0	− 0·4	− 0·4	− 0·7	− 0·8
17	70·0	54·3	62·7	67·0	64·7	57·0	−3·7	+0·1	−0·2	−0·8	−0·6	+0·1	55·3	56·8	56·0	53·0	− 0·4	− 0·4	− 0·5	+ 0·1
18	68·3	48·9	60·0	62·2	66·2	58·2	−2·0	+0·6	−0·4	−0·6	−1·2	+0·2	53·2	54·4	55·1	53·0	+ 0·2	− 0·3	− 0·6	+ 0·1
19	64·8	48·2	...	...	...	...	−3·3	+0·7	...	...	...	...	...	...	...	...	...	...	...	...
20	69·2	54·2	59·2	65·7	68·1	58·2	−2·8	+0·4	−0·9	−1·3	−1·7	+0·3	54·0	58·1	59·1	54·0	− 0·7	− 0·6	− 1·5	+ 0·4
21	62·0	49·2	58·4	60·6	60·1	58·3	−1·9	+0·6	−0·4	−0·4	−0·6	−0·3	51·1	52·3	52·0	51·6	0·0	+ 0·2	− 0·3	+ 0·5
22	70·1	45·5	61·5	66·9	69·6	60·6	−2·2	+1·2	−0·3	−0·6	−0·8	−0·2	52·5	57·2	58·3	55·0	− 0·3	− 0·3	− 0·4	0·0
23	70·0	48·2	62·0	65·8	68·6	60·6	−1·1	+1·2	−0·7	−0·1	−0·8	+0·3	55·2	56·6	58·2	57·1	− 0·2	0·0	− 0·4	+ 0·1
24	73·4	49·2	...	...	...	...	−2·7	+1·4	...	...	...	...	...	...	...	...	...	...	...	...
25	65·2	51·8	57·2	63·1	60·4	52·1	−0·6	+0·3	−0·4	−0·4	−0·6	+0·3	52·6	55·3	55·1	50·0	− 0·2	− 0·2	− 0·3	+ 0·3
26	66·0	46·9	...	...	...	...	−1·9	−0·3	...	...	...	...	...	...	...	...	...	...	...	...
27	68·0	49·7	58·6	62·3	65·4	56·6	−1·9	+0·4	−0·7	−0·4	0·0	+0·3	53·0	53·7	54·2	53·0	− 0·7	− 0·4	− 0·1	+ 0·6
28	71·0	45·3	62·8	70·0	68·0	57·4	−0·9	+0·8	−1·2	−0·4	+0·1	+0·5	55·6	56·7	58·8	54·1	− 1·2	− 0·2	+ 0·3	+ 0·2
29	71·9	47·2	68·0	71·4	70·1	55·0	−1·4	+2·0	−0·7	−1·6	−0·5	+0·3	56·6	59·6	58·6	50·8	− 1·1	− 1·1	+ 0·1	+ 0·3
30	72·4	48·3	65·9	70·5	71·7	62·0	−1·5	−0·1	−0·1	−0·9	−0·6	+0·2	57·7	59·9	61·0	57·3	+ 0·1	− 0·8	− 0·4	+ 0·4
Means	66·6	49·4	59·1	63·1	64·3	56·0	−1·8	+0·5	−0·4	−0·6	−0·7	+0·1	53·5	55·5	56·4	52·4	− 0·3	− 0·4	− 0·3	+ 0·1

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

JULY.

Days of the Month.	Readings of Dry-Bulb Thermometers in a Stevenson's Screen, 4 ft. above the ground.						Excess above readings of Thermometers on the ordinary stand, 4 ft. above the ground.						Readings of the Wet-Bulb Thermometer in a Stevenson's Screen, 4 ft. above the ground.				Excess above readings of the Thermometer on the ordinary stand, 4 ft. above the ground.			
	Maximum.	Minimum.	9h	Noon.	15h	21h	Maximum.	Minimum.	9h	Noon.	15h	21h	9h	Noon.	15h	21h	9h	Noon.	15h	21h
d	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	c	°
1	70·4	53·5	64·3	68·7	67·1	56·2	−2·5	+0·4	−0·4	−0·6	−1·8	−0·1	55·2	56·3	57·1	54·8	0·0	+ 0·1	− 1·3	+ 0·1
2	67·0	51·3	61·0	64·9	62·0	56·0	−2·5	+0·5	−0·6	−0·8	−0·3	+0·4	54·2	55·9	56·0	53·6	− 0·4	− 0·4	+ 0·2	+ 0·2
3	69·1	54·3	...	...	...	...	−0·8	+0·8	...	...	...	...	...	...	...	...	...	...	...	...
4	70·1	50·2	61·0	67·1	68·9	60·0	−3·8	+1·0	−0·7	−2·1	−1·0	+0·2	54·5	56·1	57·5	56·1	− 0·6	− 1·5	− 0·1	+ 0·2
5	64·6	54·8	59·8	61·7	63·9	61·3	−1·4	+0·2	−0·4	−0·1	−1·0	+0·1	56·1	57·5	60·1	57·8	+ 0·1	− 0·2	− 0·2	+ 0·4
6	75·6	52·8	65·6	73·3	71·9	62·1	−3·5	+0·5	−1·7	−1·8	−1·2	+0·2	58·4	63·0	63·8	59·0	− 1·2	− 1·3	− 0·8	+ 0·3
7	65·7	55·2	62·8	65·2	65·7	61·0	−1·4	+0·3	−0·1	−0·3	−0·2	−0·3	59·6	62·1	61·9	58·9	0·0	+ 0·4	+ 0·1	− 0·4
8	80·0	54·0	65·3	76·3	78·3	65·8	−2·2	+0·5	−0·2	0·0	−1·5	+0·9	61·4	63·5	63·3	57·0	0·0	+ 0·1	− 0·4	+ 0·7
9	81·2	55·6	71·4	77·8	81·1	66·6	−0·8	+1·1	+0·1	−0·5	+0·2	+0·2	61·2	64·1	65·8	62·0	+ 0·1	− 0·3	+ 1·1	+ 0·9
10	79·2	55·8	...	...	...	...	−0·9	+1·0	...	...	...	...	...	...	...	...	...	...	...	...
11	73·8	55·1	70·2	72·1	72·1	60·5	−1·4	+0·6	−0·5	−0·3	−1·7	−0·1	61·9	59·1	59·6	56·8	− 0·8	− 0·3	− 0·2	+ 0·1
12	73·0	57·2	69·6	70·7	70·6	63·4	−1·0	+0·5	−0·2	−1·4	−0·4	−0·2	61·0	60·8	63·2	61·0	− 0·2	− 0·7	− 0·2	+ 0·2
13	78·3	57·2	68·8	76·5	76·3	66·0	−2·5	+0·3	−1·1	−0·4	−0·9	0·0	60·9	64·2	64·0	61·0	− 0·8	0·0	− 1·1	0·0
14	80·3	54·7	69·5	78·0	78·0	66·9	−2·7	+0·9	−1·6	−2·6	−0·3	+0·9	60·6	64·3	65·2	60·4	− 1·2	− 2·2	− 0·3	+ 0·4
15	83·8	59·5	76·1	79·0	81·8	68·3	−1·4	+0·3	−1·6	−0·7	−1·1	−0·1	64·2	66·4	66·1	62·2	− 1·1	− 0·5	− 1·8	+ 0·2
16	78·2	59·0	68·0	74·2	77·3	66·1	−2·5	+0·8	−0·7	−2·5	−2·2	+0·1	62·1	64·7	64·9	62·9	− 0·3	− 1·3	− 1·1	0·0
17	83·8	55·2	...	...	...	...	−1·2	+1·0	...	...	...	...	...	...	...	...	...	...	...	...
18	74·0	57·2	69·3	73·3	71·0	59·0	−1·5	+0·6	−0·6	−0·6	−1·7	−0·1	59·2	59·6	60·2	55·2	− 1·1	− 0·9	− 1·3	− 0·3
19	72·7	55·0	67·6	72·6	71·0	58·2	−1·6	+0·8	−0·9	−0·8	−0·6	0·0	60·2	62·6	57·1	55·1	− 0·3	− 0·7	− 0·5	0·0
20	76·2	57·8	68·6	75·6	75·4	68·0	−3·4	+0·4	−1·0	−2·0	−0·5	−0·1	60·9	64·6	65·3	60·4	− 0·5	− 0·9	− 0·4	0·0
21	78·4	55·2	68·0	74·2	76·4	64·1	−4·1	+0·4	−0·5	−2·2	−0·4	+0·1	60·7	61·8	62·0	57·2	− 0·1	− 1·0	− 0·3	− 0·1
22	75·4	55·0	67·1	69·6	73·0	63·0	−4·2	+0·2	−1·1	−0·3	−1·7	−0·2	59·6	60·1	61·2	60·0	− 0·6	− 0·1	− 1·4	+ 0·1
23	78·9	58·4	70·2	75·2	76·4	65·4	−3·0	+0·2	−2·5	−1·1	−1·1	+0·3	62·1	63·7	64·0	61·1	− 1·2	− 0·2	− 1·0	+ 0·2
24	79·3	57·2	...	...	...	...	−2·9	+0·9	...	...	...	...	...	...	...	...	...	...	...	...
25	72·3	53·9	68·2	65·4	71·8	62·0	−0·8	+0·7	−0·2	−0·1	−0·3	−0·6	62·2	63·1	65·6	61·8	− 0·2	− 0·1	− 0·5	− 0·2
26	74·0	57·1	64·1	68·5	72·0	63·6	−3·0	+0·2	−0·8	−1·3	−0·7	0·0	59·2	61·3	61·8	61·1	− 1·2	− 0·5	− 1·0	− 0·3
27	66·2	58·3	58·8	63·9	66·2	61·0	−1·7	+0·1	0·0	−1·0	−0·8	−0·4	58·0	60·6	60·8	59·0	0·0	− 0·3	− 0·6	− 0·4
28	73·8	59·1	63·0	69·7	73·0	63·7	−3·1	+0·6	−0·4	−1·0	−0·6	+0·3	60·2	62·0	61·7	58·6	− 0·2	− 0·7	− 0·7	− 0·1
29	73·3	53·0	70·9	69·0	69·2	63·0	−3·8	+0·8	−1·4	−1·3	−1·5	+0·1	61·4	61·2	62·2	62·6	0·0	− 0·5	− 0·4	+ 0·1
30	81·8	60·7	69·4	77·3	79·2	63·1	−2·1	+0·3	−0·2	−0·8	−1·1	−0·3	65·4	67·7	65·2	62·2	− 0·1	− 0·4	− 0·3	− 0·2
31	76·3	60·6	...	...	...	...	−2·0	+0·1	...	...	...	...	...	...	...	...	...	...	...	...
Means	75·1	55·9	66·9	71·5	72·7	62·9	−2·2	+0·5	−0·7	−1·0	−0·9	+0·1	60·0	61·8	62·1	59·1	− 0·5	− 0·6	− 0·6	+ 0·1

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	76·4	56·9	...	...	...	...	−2·6	+0·7	...	...	...	...	...	...	...	...	...	...	...	...
2	81·1	53·5	72·0	77·6	79·8	65·0	−1·9	+0·5	+0·7	−1·1	−0·8	+0·8	62·0	65·3	66·0	61·3	+ 0·5	− 0·2	− 0·7	+ 0·3
3	86·1	54·4	79·2	84·8	84·6	68·2	−1·3	+0·4	−1·4	−0·8	−0·1	+0·7	66·0	68·0	67·0	63·1	− 0·6	− 0·7	− 0·9	+ 0·3
4	89·5	58·5	83·0	87·1	83·2	66·1	−1·5	+1·2	−0·5	−2·0	−1·5	+0·3	67·8	69·1	68·8	62·0	− 0·5	− 1·2	− 0·9	+ 0·1
5	75·8	62·0	68·2	74·1	75·6	62·1	−2·8	+1·2	−1·1	−1·7	−1·7	0·0	62·2	63·0	64·6	58·0	− 0·9	− 1·5	− 1·0	− 0·3
6	70·3	57·4	62·2	67·1	68·4	61·7	−1·6	+0·3	−0·7	−0·6	−1·3	+0·2	59·8	63·1	64·7	56·3	− 1·0	− 0·8	− 0·2	+ 0·1
7	71·9	54·8	...	...	...	...	−2·8	+0·4	...	...	...	...	...	...	...	...	...	...	...	...
8	72·3	57·3	65·5	70·1	69·6	63·0	−2·3	+0·4	−1·0	−0·7	−0·1	+0·7	56·4	57·0	58·8	56·6	− 0·8	− 0·5	− 0·7	+ 0·5
9	71·8	50·5	63·0	69·0	68·7	60·2	−2·2	+0·3	−0·7	−1·5	−0·6	+0·4	55·6	56·0	57·2	56·2	− 0·3	− 1·5	− 0·9	+ 0·3
10	70·2	53·6	62·8	67·0	68·6	59·0	−2·1	+1·1	−0·3	−1·3	−0·7	+0·5	56·1	57·3	58·1	53·8	− 0·3	− 0·5	− 0·2	+ 0·3
11	61·4	53·2	61·1	60·0	57·9	56·2	−1·5	+0·8	+0·2	+0·1	−0·9	+0·4	55·8	56·5	56·0	53·3	0·0	+ 0·3	− 0·4	+ 0·2
12	69·5	50·2	63·4	66·6	68·8	56·3	−1·7	+0·4	+0·3	−1·8	−0·8	+1·4	56·2	57·2	57·0	52·0	+ 0·6	− 2·1	− 0·4	+ 0·1
13	72·1	46·5	67·2	72·0	70·0	58·1	−2·9	+1·1	+0·1	−0·7	−1·5	+0·3	56·9	60·0	59·0	54·2	+ 0·3	− 0·3	− 1·9	0·0
14	72·8	55·4	...	...	...	...	−2·2	+0·9	...	...	...	...	...	...	...	...	...	...	...	...
15	70·4	58·4	64·2	66·3	67·1	59·5	−1·8	+0·6	−0·3	−0·2	−0·9	+0·1	57·6	59·2	57·9	56·1	− 0·1	− 0·3	− 0·1	+ 0·5
16	68·3	51·3	60·3	65·0	67·3	59·6	−2·9	+1·0	−1·1	−0·3	−2·4	−0·1	55·4	57·0	58·6	55·1	− 1·0	− 0·2	− 0·2	− 0·3
17	65·0	54·1	56·2	60·3	62·2	59·0	−0·8	+0·5	−0·5	+0·1	−0·8	+0·3	56·0	59·1	60·1	56·5	− 0·3	0·0	− 0·6	+ 0·7
18	65·7	51·8	57·9	60·6	64·1	58·7	−1·2	+0·3	−0·1	−0·9	−0·9	+0·2	52·6	53·0	55·5	55·0	− 0·2	− 0·7	− 1·1	+ 0·7
19	66·0	50·8	60·6	62·2	63·6	58·8	−2·2	+1·3	−0·1	−0·5	−1·3	+0·1	53·9	53·1	54·4	53·2	− 0·1	− 0·1	− 1·0	− 0·1
20	66·1	46·2	55·9	62·0	66·1	52·5	−1·5	+0·7	−0·2	−0·7	−0·6	−0·2	52·9	55·0	57·8	51·0	+ 0·1	− 0·8	+ 0·6	− 0·2
21	65·7	44·3	...	...	...	...	−3·2	+0·8	...	...	...	...	...	...	...	...	...	...	...	...
22	66·2	48·6	58·0	63·6	58·3	54·4	−3·0	+0·8	−0·3	−0·5	−0·6	−0·3	55·6	56·6	54·3	53·7	− 0·4	− 0·7	− 1·1	− 0·2
23	63·6	53·3	58·2	60·9	57·7	54·8	−1·3	+0·4	−0·4	−0·5	0·0	+0·1	54·6	54·8	52·8	51·1	0·0	− 0·3	− 0·1	− 0·4
24	62·7	47·8	54·7	60·3	60·2	52·5	−1·6	+0·3	−0·3	−0·6	−0·4	+0·1	50·2	51·9	51·7	50·6	− 0·8	− 0·2	− 0·1	− 0·1
25	66·2	46·5	55·4	64·3	65·6	57·4	−2·5	+0·7	−1·2	+0·8	−0·8	−0·1	50·9	52·3	53·9	54·1	− 0·8	+ 0·3	− 1·1	0·0
26	69·6	52·2	62·2	68·6	67·5	60·9	−2·4	+0·2	−0·4	−1·1	−0·8	+0·2	59·5	60·2	60·4	57·1	− 0·5	− 0·7	− 0·7	0·0
27	71·0	53·5	61·1	67·2	70·1	57·5	−1·7	+0·5	0·0	−0·8	−0·8	+0·6	57·1	58·4	60·0	55·2	− 0·6	− 0·9	− 0·1	0·0
28	77·8	50·5	...	...	...	...	−0·7	+1·0	...	...	...	...	...	...	...	...	...	...	...	...
29	79·2	53·0	70·2	77·6	78·0	61·2	−0·7	+1·4	+0·3	+0·1	+0·3	+0·3	61·6	63·0	64·0	58·6	+ 0·3	− 0·8	+ 0·3	+ 0·2
30	80·9	53·8	69·2	79·4	75·7	63·9	−1·0	+1·2	−0·3	−0·9	−0·9	+0·6	62·2	65·7	65·9	60·8	− 0·6	− 1·4	− 0·7	+ 0·1
31	63·9	53·6	56·2	58·0	60·0	55·3	+0·1	+0·2	−0·6	−0·2	−0·3	−0·4	55·0	56·6	56·9	54·3	− 0·9	− 0·3	− 0·2	− 0·5
Means	71·3	52·7	63·4	68·1	68·4	59·3	−1·9	+0·7	−0·4	−0·7	−0·8	+0·3	57·3	58·8	59·3	55·7	− 0·3	− 0·6	− 0·6	+ 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	62·0	52·2	55·9	57·2	61·2	58·1	−0·8	−0·8	−0·4	+0·5	−0·6	0·0	55·0	55·4	57·1	53·4	+ 0·1	+ 0·4	− 0·6	− 0·2
2	67·4	52·2	57·2	63·7	66·0	59·9	−2·1	+0·8	−0·4	−0·5	−0·7	+0·2	53·8	57·6	57·7	56·9	− 0·1	+ 0·6	− 0·9	+ 0·1
3	64·1	55·2	58·0	59·2	63·4	55·6	−0·7	0·0	−0·5	−0·4	−0·6	0·0	56·6	57·6	57·1	49·2	− 0·2	− 0·5	− 0·5	− 0·1
4	68·0	43·0	...	...	...	...	−3·6	+0·8	...	...	...	...	...	...	...	...	...	...	...	...
5	73·7	53·3	67·4	72·8	72·0	60·6	−0·9	+1·1	−0·3	+0·1	−0·6	−0·1	60·9	61·7	61·2	56·9	− 0·1	− 0·2	− 0·3	+ 0·1
6	63·8	54·1	62·4	58·0	56·0	54·1	−0·5	+0·1	0·0	−0·6	−0·7	+0·1	58·0	55·6	54·4	53·8	+ 0·1	− 0·3	− 0·6	+ 0·1
7	66·1	51·4	59·8	63·0	66·1	53·8	−2·0	+0·5	+0·7	−0·2	−0·7	−0·5	55·6	56·2	57·2	52·0	+ 0·3	− 0·4	− 0·4	0·0
8	58·3	48·3	53·1	56·9	58·0	58·3	−0·8	+0·8	−0·7	−0·8	−0·3	−0·1	52·1	55·0	54·1	57·8	− 0·6	− 0·8	− 0·6	− 0·1
9	64·6	54·4	57·8	59·5	61·7	55·9	−1·3	+0·2	−0·5	−0·2	−0·7	+0·2	52·9	52·3	53·0	51·0	− 0·4	0·0	− 0·4	+ 0·2
10	63·2	45·6	55·2	62·0	63·2	50·1	−2·4	+0·4	−0·6	−1·7	+0·2	+0·4	51·0	53·3	55·0	49·1	− 0·6	− 1·3	− 0·2	− 0·2
11	67·8	42·2	...	...	...	...	−0·8	+1·0	...	...	...	...	...	...	...	...	...	...	...	...
12	58·8	49·5	57·2	56·9	57·3	55·3	−0·3	+0·6	−0·5	0·0	−0·4	+0·5	53·2	53·3	53·3	55·0	− 0·6	− 0·3	− 0·5	+ 0·4
13	67·1	54·8	58·8	66·0	64·0	56·0	−1·7	+0·8	−0·7	−0·6	−0·1	+0·7	55·7	56·3	54·9	52·3	− 0·3	− 0·7	+ 0·2	+ 0·2
14	58·6	46·5	57·3	55·8	55·9	53·2	−0·5	+1·2	−0·8	−0·3	0·0	+0·2	54·0	53·7	54·2	52·7	− 0·7	− 0·2	− 0·2	− 0·1
15	66·2	51·2	55·3	63·2	62·9	54·8	−1·5	+0·1	−0·6	−0·8	+0·5	+0·2	54·0	57·4	58·4	54·0	− 0·6	− 0·1	+ 0·6	+ 0·3
16	69·4	47·4	57·4	65·1	69·3	54·6	−2·0	+0·6	−0·2	−1·1	+0·6	−0·1	56·9	58·0	60·5	53·0	− 0·5	− 0·8	+ 0·2	− 0·1
17	68·0	50·6	62·4	66·8	66·1	55·3	−0·7	+0·7	+0·7	−0·6	−0·2	0·0	58·1	59·1	58·6	51·9	+ 0·4	0·0	− 0·5	+ 0·1
18	63·8	46·2	...	...	...	...	−0·3	+1·0	...	...	...	...	...	...	...	...	...	...	...	...
19	63·6	48·8	58·4	63·3	61·4	53·4	−0·5	+1·2	+0·5	+0·6	−0·2	−0·3	52·2	53·8	52·1	47·6	− 0·3	+ 0·5	− 0·2	− 0·1
20	60·9	42·2	57·0	60·0	59·6	49·0	−0·1	+1·7	+0·7	+0·3	+0·2	+0·4	47·1	50·0	50·1	45·9	− 0·1	0·0	+ 0·4	+ 0·4
21	59·4	42·3	56·6	59·0	58·4	50·6	−0·5	−0·1	+0·9	0·0	0·0	0·0	49·0	49·2	49·4	47·3	+ 0·5	− 0·1	0·0	+ 0·2
22	58·0	49·5	57·3	55·9	54·0	52·0	−0·3	+0·1	+0·4	+0·1	−0·4	+0·1	49·9	49·3	50·3	50·2	+ 0·5	− 0·5	− 0·3	− 0·3
23	59·4	50·0	52·2	55·1	58·5	53·1	−1·1	+0·4	−0·5	−0·4	+0·4	−0·4	47·2	50·3	52·0	52·0	− 0·3	− 0·4	+ 0·2	+ 0·1
24	60·1	49·2	57·0	58·7	58·6	49·2	−0·9	0·0	−0·6	0·0	−0·1	−0·1	53·0	53·0	53·9	48·0	− 0·5	− 0·2	0·0	− 0·4
25	57·0	47·9	...	...	...	...	−2·0	+0·4	...	...	...	...	...	...	...	...	...	...	...	...
26	64·6	40·2	56·6	62·0	60·0	47·0	−1·1	+1·4	+1·3	−0·3	+0·2	+0·4	52·0	54·1	53·2	46·6	+ 0·6	− 0·8	− 0·1	+ 0·2
27	64·0	40·2	47·0	63·0	62·2	51·1	−1·2	+0·6	+0·1	+0·8	+0·2	+0·7	46·9	55·0	55·3	50·6	+ 0·1	− 0·2	− 0·4	+ 0·7
28	65·6	46·4	49·7	58·9	65·6	53·8	+0·1	+0·9	+0·1	−0·8	+0·2	+0·3	49·6	55·6	56·2	52·1	+ 0·1	− 0·5	+ 0·3	− 0·2
29	63·1	48·9	52·6	61·4	62·1	52·6	−0·8	+0·7	−0·1	+0·1	−0·2	+0·7	51·4	54·9	54·7	51·0	− 0·7	− 0·1	− 0·1	+ 0·1
30	60·7	40·3	50·9	57·0	58·2	56·7	−1·3	+0·1	−0·1	+1·3	−0·4	0·0	50·5	53·8	53·9	54·9	+ 0·1	+ 0·7	− 0·7	0·0
Means	63·6	48·1	56·6	60·8	61·6	54·0	−1·1	+0·6	−0·1	−0·2	−0·2	+0·1	52·9	54·7	54·9	51·7	− 0·1	− 0·2	− 0·2	+ 0·1

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	61·8	51·3	59·4	55·0	58·6	51·4	+0·8	+1·1	−0·3	−0·3	+0·1	+0·4	58·6	54·2	53·7	48·5	− 0·2	− 0·5	0·0	+ 0·7
2	58·3	40·5	...	...	...	...	−1·6	+1·0	...	...	...	...	...	...	...	...	...	...	...	...
3	61·5	47·2	51·6	58·8	61·5	50·1	−0·4	−0·8	−0·1	−0·3	+0·1	0·0	49·0	54·0	55·6	48·8	− 0·3	− 0·7	+ 0·2	− 0·1
4	65·7	38·6	49·3	64·0	63·3	57·0	−0·8	+0·7	−0·2	+1·2	−0·2	+0·1	48·6	54·1	55·6	55·1	− 0·4	+ 0·6	− 0·2	− 0·3
5	58·6	51·4	55·0	57·2	58·0	52·6	−0·3	+0·6	−0·1	−0·4	−0·3	−0·4	53·0	53·8	54·9	52·0	− 0·3	− 0·6	− 0·4	− 0·3
6	57·7	49·3	54·0	54·9	54·2	49·3	+0·1	+0·2	−0·3	+0·1	−0·2	+0·1	47·7	48·3	48·3	46·7	− 0·2	0·0	− 0·3	− 0·1
7	50·4	45·4	46·2	50·4	49·7	45·6	+0·2	+0·5	−0·3	+0·2	−0·2	+0·7	45·9	48·2	47·5	43·0	− 0·2	+ 0·1	− 0·3	+ 0·4
8	51·2	40·5	45·1	48·6	51·1	43·8	−0·1	+0·3	−0·4	−0·3	+0·1	+0·9	41·7	43·0	43·9	40·8	− 0·2	− 0·3	+ 0·2	+ 0·4
9	54·3	33·2	...	...	...	...	+2·2	+1·0	...	...	...	...	...	...	...	...	...	...	...	...
10	57·9	47·4	52·8	56·4	56·9	52·9	−1·3	+0·6	−0·3	−1·1	−0·2	+0·1	51·0	52·3	53·0	52·0	− 0·4	− 0·9	− 0·1	+ 0·3
11	57·2	51·3	53·7	56·4	56·8	53·0	−1·5	+0·3	−0·2	+0·1	+0·3	+0·3	53·4	55·1	55·1	52·8	− 0·1	0·0	− 0·2	+ 0·1
12	56·6	45·9	54·0	54·8	56·3	45·9	−0·6	+0·8	−0·5	−0·5	−0·3	+0·8	52·0	51·6	51·6	43·8	− 0·1	− 0·4	− 0·3	+ 0·2
13	56·3	33·5	42·5	53·8	54·4	44·3	−1·0	+0·9	−1·0	0·0	−0·1	−0·1	42·0	48·8	49·2	43·7	− 0·7	− 0·1	− 0·1	− 0·1
14	55·0	37·9	50·3	53·2	50·8	42·0	−0·7	+2·3	+0·4	−0·3	+0·1	+0·6	46·6	47·0	45·0	40·0	+ 0·7	− 0·4	− 0·3	+ 0·2
15	53·5	32·2	42·0	52·4	52·4	40·7	−0·5	+0·3	+0·3	+0·3	−0·1	+0·4	41·8	45·2	45·5	38·2	+ 0·5	− 0·4	0·0	+ 0·5
16	55·2	37·4	...	...	...	...	−0·8	+1·0	...	...	...	...	...	...	...	...	...	...	...	...
17	60·8	50·8	55·1	58·3	60·0	58·2	−0·2	+0·5	−0·3	−0·1	0·0	−0·5	54·0	56·5	57·2	57·8	− 0·4	− 0·1	− 0·3	0·0
18	65·7	57·0	60·1	65·7	65·2	57·0	−0·8	+0·7	−0·3	−0·8	−0·4	+0·2	58·0	61·1	60·9	56·3	0·0	− 0·5	− 0·4	+ 0·2
19	62·0	52·5	54·3	61·4	60·0	54·2	−0·7	0·0	+0·2	0·0	0·0	+0·3	53·8	58·6	57·3	54·0	− 0·3	− 0·1	− 0·7	+ 0·1
20	64·2	49·1	52·1	62·2	62·3	55·1	−0·7	+0·2	−0·6	−0·1	+0·2	+0·3	52·0	59·1	59·7	54·0	− 0·6	− 0·2	+ 0·3	+ 0·1
21	58·3	53·2	56·8	57·0	57·3	55·9	−0·4	+0·8	−0·1	−0·1	−0·2	−0·1	55·4	55·7	54·9	54·3	− 0·4	− 0·1	− 0·1	− 0·1
22	59·6	45·6	52·9	55·5	59·4	46·1	+0·1	+0·5	−0·3	−0·2	+0·5	+0·4	51·9	52·0	52·1	45·4	− 0·2	+ 0·1	+ 0·3	+ 0·4
23	58·8	45·4	...	...	...	...	−0·2	+0·4	...	...	...	...	...	...	...	...	...	...	...	...
24	59·7	51·3	52·9	55·4	57·2	54·9	−0·2	+0·1	+0·1	−0·1	−0·2	0·0	52·0	53·8	54·6	54·0	− 0·3	0·0	− 0·5	0·0
25	54·9	42·4	48·7	51·3	53·8	46·0	−0·2	+0·9	+0·1	−0·2	−0·1	+0·3	46·1	46·5	47·7	44·0	0·0	− 0·1	0·0	+ 0·4
26	54·0	44·2	49·6	52·0	54·0	48·9	+0·1	+0·7	−0·1	−0·1	+0·3	+0·9	46·4	48·0	50·0	47·0	− 0·1	+ 0·2	+ 0·2	+ 0·5
27	53·0	36·3	41·4	45·8	53·0	49·6	+0·4	+0·1	−0·4	−1·0	+0·6	+0·2	41·3	45·5	50·9	49·1	− 0·4	− 0·2	+ 0·3	0·0
28	58·2	45·5	51·9	58·2	54·2	45·7	+0·9	+0·6	−0·1	+1·5	+0·2	+0·7	47·8	50·8	49·0	44·0	− 0·5	+ 0·1	+ 0·2	+ 0·3
29	56·1	40·2	45·6	56·0	55·7	47·0	+0·1	+0·7	−0·1	+0·3	+0·2	+0·1	44·3	49·3	47·4	45·2	0·0	0·0	− 0·1	− 0·3
30	50·4	46·5	...	...	...	...	−0·9	0·0	...	...	...	...	...	...	...	...	...	...	...	...
31	48·6	46·2	47·2	48·2	48·6	47·3	−0·1	+0·1	−0·1	+0·1	−0·1	−0·4	46·8	47·8	48·2	46·3	− 0·1	0·0	− 0·1	− 0·4
Means	57·3	44·8	50·9	55·5	56·3	49·8	−0·3	+0·6	−0·2	−0·1	0·0	+0·2	49·3	51·5	51·9	48·3	− 0·2	− 0·2	− 0·1	+ 0·1

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

(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.

1904.

Days of the Month.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.
d	°	°	°	°	°	°	°	°	°	°	°	°
1	52·84	52·07	51·12	50·26	49·57	49·30	49·53	50·30	51·38	52·46	53·07	53·17
2	52·83	52·05	51·09	50·22	49·54	49·30	49·55	50·34	51·43	52·50	53·11	53·18
3	52·85	52·03	51·06	50·20	49·53	49·30	49·57	50·38	51·46	52·54	53·12	53·16
4	52·82	51·99	51·03	50·17	49·52	49·29	49·60	50·42	51·54	52·57	53·13	53·16
5	52·80	51·97	51·01	50·15	49·50	49·32	49·62	50·43	51·59	52·59	53·14	53·16
6	52·75	51·93	50·97	50·12	49·48	49·32	49·65	50·45	51·61	52·61	53·14	53·15
7	52·73	51·90	50·95	50·11	49·45	49·31	49·66	50·48	51·63	52·62	53·15	53·13
8	52·73	51·86	50·93	50·08	49·44	49·31	49·69	50·53	51·68	52·65	53·13	53·12
9	52·68	51·83	50·90	50·04	49·43	49·31	49·71	50·56	51·73	52·67	53·13	53·12
10	52·63	51·78	50·86	50·01	49·41	49·31	49·73	50·59	51·75	52·70	53·15	53·11
11	52·65	51·76	50·83	49·99	49·41	49·31	49·75	50·61	51·78	52·72	53·16	53·09
12	52·65	51·74	50·80	49·97	49·40	49·34	49·77	50·63	51·81	52·75	53·15	53·09
13	52·63	51·72	50·77	49·94	49·40	49·34	49·80	50·70	51·85	52·76	53·15	53·08
14	52·60	51·67	50·73	49·93	49·40	49·35	49·83	50·74	51·87	52·77	53·16	53·07
15	52·55	51·62	50·72	49·90	49·41	49·34	49·85	50·76	51·93	52·80	53·17	53·07
16	52·53	51·59	50·68	49·87	49·37	49·34	49·87	50·79	51·97	52·83	53·18	53·07
17	52·50	51·54	50·66	49·85	49·37	49·34	49·90	50·83	52·02	52·87	53·17	53·09
18	52·48	51·53	50·63	49·83	49·36	49·35	49·92	50·86	52·07	52·92	53·17	53·07
19	52·47	51·47	50·62	49·82	49·35	49·38	49·95	50·91	52·11	52·93	53·15	53·02
20	52·42	51·48	50·58	49·80	49·35	49·39	49·97	50·94	52·13	52·94	53·17	53·00
21	52·39	51·43	50·55	49·76	49·33	49·41	50·00	50·98	52·16	52·96	53·15	52·96
22	52·36	51·40	50·53	49·75	49·32	49·42	50·02	51·02	52·17	52·97	53·14	52·94
23	52·32	51·36	50·49	49·71	49·33	49·42	50·05	51·06	52·22	52·98	53·13	52·90
24	52·28	51·33	50·46	49·68	49·31	49·45	50·06	51·09	52·27	52·94	53·14	52·91
25	52·26	51·28	50·42	49·67	49·31	49·45	50·07	51·13	52·28	52·97	53·14	52·90
26	52·26	51·25	50·41	49·65	49·32	49·46	50·12	51·18	52·30	53·00	53·17	52·86
27	52·25	51·22	50·37	49·63	49·30	49·46	50·15	51·23	52·34	53·00	53·14	52·88
28	52·22	51·20	50·35	49·62	49·31	49·47	50·17	51·28	52·35	53·03	53·16	52·89
29	52·18	51·14	50·33	49·60	49·30	49·51	50·19	51·30	52·40	53·05	53·15	52·88
30	52·14		50·28	49·58	49·30	49·53	50·23	51·32	52·44	53·07	53·17	52·86
31	52·13		50·26		49·30		50·27	51·36		53·07		52·82
Means	52·51	51·63	50·69	49·90	49·39	49·37	49·88	50·81	51·94	52·81	53·15	53·03

The mean of the twelve monthly values is 51°·26

(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.

1904.

Days of the Month.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.
d	°	°	°	°	°	°	°	°	°	°	°	°
1	50·81	48·54	47·19	46·23	46·96	48·80	51·51	54·71	56·90	56·71	55·31	53·51
2	50·74	48·49	47·17	46·23	46·98	48·82	51·61	54·77	56·90	56·70	55·30	53·42
3	50·74	48·43	47·12	46·21	47·05	48·90	51·70	55·01	56·88	56·70	55·26	53·30
4	50·66	48·35	47·11	46·21	47·10	49·00	51·79	55·13	56·94	56·66	55·22	53·17
5	50·60	48·28	47·07	46·22	47·16	49·11	51·86	55·16	57·00	56·63	55·17	53·04
6	50·41	48·21	47·02	46·22	47·19	49·20	52·00	55·31	56·94	56·56	55·11	52·96
7	50·38	48·16	47·00	46·22	47·22	49·29	52·06	55·33	56·96	56·50	55·09	52·78
8	50·33	48·10	46·94	46·22	47·28	49·35	52·20	55·44	56·94	56·47	54·98	52·62
9	50·17	48·04	46·91	46·22	47·33	49·43	52·30	55·53	56·97	56·43	54·91	52·59
10	50·11	47·97	46·83	46·23	47·39	49·47	52·39	55·60	56·99	56·41	54·90	52·46

(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.*

1904.

Days of the Month.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December
d	°	°	°	°	°	°	°	°	°	°	°	°
11	50·01	47·92	46·80	46·23	47·44	49·60	52·46	55·66	56·98	56·38	54·87	52·36
12	50·00	47·90	46·73	46·26	47·51	49·70	52·56	55·72	56·97	56·31	54·76	52·30
13	49·83	47·87	46·72	46·27	47·58	49·81	52·66	55·91	57·00	56·29	54·66	52·14
14	49·71	47·81	46·66	46·30	47·63	49·89	52·76	56·00	57·06	56·22	54·66	52·11
15	49·72	47·74	46·60	46·31	47·67	49·93	52·87	56·04	57·02	56·18	54·61	52·02
16	49·64	47·70	46·57	46·33	47·72	50·04	52·93	56·11	57·02	56·15	54·59	51·91
17	49·57	47·66	46·53	46·34	47·77	50·16	53·00	56·18	57·06	56·13	54·51	51·80
18	49·51	47·63	46·49	46·40	47·82	50·22	53·12	56·26	57·02	56·13	54·44	51·70
19	49·45	47·60	46·48	46·45	47·86	50·33	53·22	56·34	57·03	56·06	54·43	51·58
20	49·35	47·59	46·42	46·44	47·92	50·47	53·34	56·40	56·98	56·00	54·34	51·52
21	49·31	47·52	46·41	46·49	47·92	50·54	53·43	56·51	56·97	55·93	54·22	51·41
22	49·23	47·52	46·39	46·52	48·00	50·65	53·52	56·53	56·95	55·85	54·16	51·32
23	49·16	47·46	46·32	46·56	48·10	50·74	53·66	56·60	56·92	55·78	54·02	51·21
24	49·08	47·42	46·31	46·60	48·14	50·86	53·71	56·63	56·93	55·70	54·00	51·18
25	49·02	47·38	46·30	46·64	48·22	50·91	53·81	56·69	56·91	55·61	53·91	51·12
26	49·00	47·35	46·28	46·69	48·31	50·93	53·93	56·77	56·87	55·59	53·80	51·09
27	48·95	47·30	46·26	46·74	48·38	51·06	54·08	56·80	56·82	55·50	53·78	51·03
28	48·88	47·24	46·25	46·80	48·44	51·20	54·22	56·88	56·81	55·52	53·72	50·98
29	48·80	47·22	46·25	46·85	48·54	51·31	54·32	56·91	56·81	55·46	53·63	50·93
30	48·72		46·23	46·90	48·61	51·41	54·50	56·92	56·77	55·41	53·59	50·83
31	48·67		46·22		48·64		54·60	56·91		55·37		50·72
Means	49·70	47·81	46·63	46·41	47·74	50·04	52·97	56·02	56·94	56·11	54·53	51·97

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

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

1904.

Days of the Month.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.
d	°	°	°	°	°	°	°	°	°	°	°	°
1	47·92	45·51	45·07	45·17	48·32	52·37	56·32	61·11	60·70	58·05	55·22	50·46
2	47·73	45·49	44·97	45·19	48·42	52·41	56·40	61·21	60·68	57·94	55·14	50·27
3	47·61	45·46	44·84	45·22	48·50	52·61	56·53	61·31	60·61	57·89	55·03	50·05
4	47·40	45·40	44·71	45·26	48·65	52·72	56·72	61·43	60·66	57·82	54·91	49·88
5	47·21	45·45	44·58	45·33	48·78	52·89	56·81	61·41	60·59	57·72	54·81	49·80
6	47·04	45·49	44·47	45·41	48·83	52·98	57·01	61·42	60·53	57·60	54·71	49·74
7	46·94	45·52	44·35	45·51	48·91	53·07	57·05	61·57	60·48	57·47	54·61	49·52
8	46·92	45·46	44·28	45·63	49·03	53·19	57·22	61·74	60·36	57·39	54·52	49·54
9	46·72	45·49	44·22	45·76	49·14	53·37	57·36	61·83	60·32	57·30	54·40	49·58
10	46·69	45·38	44·20	45·86	49·20	53·50	57·47	61·84	60·27	57·21	54·32	49·51
11	46·68	45·30	44·22	46·00	49·26	53·69	57·57	61·83	60·15	57·04	54·22	49·44
12	46·63	45·35	44·30	46·13	49·28	53·96	57·74	61·82	60·03	56·89	54·04	49·36
13	46·60	45·34	44·36	46·22	49·28	54·00	57·90	62·00	60·00	56·71	53·95	49·20
14	46·52	45·31	44·38	46·34	49·31	54·10	58·20	61·96	59·97	56·61	53·91	49·14
15	46·64	45·33	44·40	46·44	49·33	54·12	58·43	61·86	59·81	56·50	53·79	48·98

(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.*

1904.

Days of the Month.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.
d	°	°	°	°	°	°	°	°	°	°	°	°
16	46·69	45·39	44·41	46·59	49·49	54·30	58·59	61·80	59·70	56·39	53·72	48·92
17	46·69	45·38	44·42	46·75	49·64	54·47	58·82	61·73	59·62	56·26	53·54	48·80
18	46·66	45·36	44·43	46·92	49·83	54·61	59·04	61·71	59·53	56·12	53·33	48·72
19	46·59	45·30	44·43	47·03	50·08	54·74	59·26	61·70	59·48	55·92	53·18	48·60
20	46·46	45·23	44·41	47·19	50·32	54·98	59·50	61·61	59·36	55·81	53·02	48·61
21	46·39	45·13	44·44	47·32	50·51	55·11	59·70	61·59	59·27	55·77	52·77	48·63
22	46·32	45·07	44·50	47·50	50·74	55·29	59·88	61·46	59·13	55·72	52·56	48·62
23	46·25	45·06	44·61	47·61	50·91	55·43	60·09	61·37	59·00	55·67	52·41	48·61
24	46·13	45·11	44·72	47·70	51·03	55·57	60·20	61·25	58·91	55·70	52·30	48·52
25	46·02	45·17	44·83	47·82	51·27	55·63	60·31	61·14	58·76	55·70	52·04	48·30
26	45·89	45·21	44·92	47·91	51·30	55·77	60·51	61·10	58·61	55·71	51·72	48·24
27	45·80	45·22	44·99	48·01	51·40	55·90	60·62	60·97	58·51	55·70	51·57	48·10
28	45·67	45·22	45·04	48·11	51·53	56·04	60·81	60·94	58·39	55·71	51·31	47·94
29	45·59	45·15	45·07	48·18	51·72	56·13	60·91	60·88	58·30	55·61	51·01	47·83
30	45·54		45·09	48·24	51·90	56·22	61·02	60·80	58·17	55·50	50·78	47·73
31	45·52		45·12		52·04		61·04	60·71		55·38		47·63
Means	46·56	45·32	44·61	46·61	49·93	54·31	58·68	61·45	59·66	56·54	53·43	48·98

The mean of the twelve monthly values is 52°·17.

(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.

1904.

Days of the Month.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.
d	°	°	°	°	°	°	°	°	°	°	°	°
1	42·36	42·39	40·74	42·81	48·31	54·43	58·61	64·20	61·55	56·39	52·63	44·50
2	41·92	42·26	40·41	42·89	48·55	54·50	58·92	64·30	61·42	56·45	52·58	44·81
3	41·81	42·12	40·16	43·09	48·70	54·30	59·11	64·49	61·13	56·36	52·47	45·26
4	41·82	42·10	40·01	43·41	48·72	54·33	59·19	64·74	61·09	56·15	52·38	45·36
5	42·06	42·18	39·92	43·64	48·77	54·40	59·17	64·90	60·85	55·94	52·31	45·68
6	42·16	42·23	39·99	43·88	48·90	54·69	59·38	64·99	60·69	55·90	52·29	46·16
7	42·21	42·25	40·09	44·21	49·10	55·06	59·38	65·09	60·62	55·82	52·18	46·14
8	42·31	42·02	40·20	44·42	49·11	55·36	59·76	64·98	60·40	55·59	52·06	46·07
9	42·36	42·10	40·54	44·69	48·84	55·54	60·01	64·83	60·21	55·13	51·88	45·71
10	42·50	42·00	40·94	45·04	48·49	55·55	60·36	64·67	60·20	54·57	51·62	45·24
11	42·51	42·11	41·27	45·11	48·39	55·57	60·78	64·46	59·85	54·34	51·68	45·08
12	42·59	42·20	41·30	45·14	48·31	55·62	61·16	64·28	59·51	54·47	51·53	44·91
13	42·60	42·15	41·27	45·27	48·52	55·70	61·52	64·01	59·38	54·53	51·40	44·71
14	43·03	42·28	41·16	45·68	49·09	55·91	61·88	63·73	59·11	54·27	51·04	44·73
15	43·38	42·29	41·22	46·03	49·64	56·23	62·29	63·70	59·12	53·91	50·58	44·52
16	43·23	42·15	41·31	46·54	50·41	56·61	62·62	63·50	59·06	53·51	50·09	44·41
17	42·90	41·89	41·28	46·87	50·91	56·91	63·10	63·32	59·02	53·18	49·70	44·76
18	42·42	41·65	41·20	46·91	51·60	57·14	63·30	63·15	58·93	53·23	49·47	45·29
19	42·22	41·40	41·16	47·11	52·00	57·32	63·48	62·86	58·77	53·58	49·30	45·52
20	42·37	41·13	41·50	47·20	52·10	57·52	63·62	62·53	58·47	53·99	49·16	45·44

(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.*

1904.

Days of the Month.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.
d	°	°	°	°	°	°	°	°	°	°	°	°
21	42·27	41·11	42·05	47·34	52·02	57·60	63·68	62·32	58·12	54·23	48·94	45·12
22	41·98	41·80	42·55	47·52	52·09	57·76	63·90	62·02	57·81	54·43	48·86	44·56
23	41·69	42·31	42·71	47·41	52·00	57·82	63·99	61·76	57·46	54·75	47·93	44·03
24	41·30	42·41	42·83	47·44	52·01	58·01	64·08	61·52	57·38	54·52	47·40	43·67
25	41·09	42·29	42·86	47·54	52·24	58·14	64·22	61·29	57·25	54·50	46·62	43·27
26	40·86	42·05	42·80	47·68	52·49	58·22	64·50	61·11	57·09	54·43	46·08	43·19
27	40·89	41·76	42·62	47·64	52·86	58·13	64·31	61·07	56·81	54·02	45·70	43·03
28	41·35	41·63	42·66	47·60	53·36	58·17	64·30	61·22	56·51	53·70	45·20	43·02
29	41·96	41·15	42·64	47·73	53·76	58·26	64·09	61·32	56·51	53·41	44·78	43·14
30	42·21		42·80	48·00	54·00	58·43	64·10	61·50	56·51	53·12	44·59	43·57
31	42·43		42·82		54·23		64·09	61·48		52·86		43·99
Means	42·15	41·98	41·45	45·86	50·63	56·44	62·03	63·20	59·03	54·56	49·75	44·67

The mean of the twelve monthly values is 50°·98.

(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.

1904.

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

(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.*

1904.

Days of the Month.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.
d	°	°	°	°	°	°	°	°	°	°	°	°
26	38·0	37·9	41·1	47·0	57·9	59·0	65·9	61·0	53·0	51·0	37·0	38·8
27	42·8	37·1	41·1	47·9	59·1	59·0	64·8	60·9	53·6	48·2	34·6	40·3
28	44·5	32·8	41·0	50·0	58·2	60·0	64·8	62·6	54·1	52·0	38·0	40·3
29	41·5	34·9	45·1	50·9	58·8	61·0	65·7	63·2	56·0	49·0	38·4	45·9
30	42·7		40·8	51·8	58·0	62·0	67·0	64·0	54·0	49·9	40·4	45·1
31	41·3		41·2		58·8		66·6	62·0		50·4		47·2
Means	39·6	39·7	40·3	47·8	53·4	58·8	65·5	63·1	56·7	52·1	44·4	42·4

The mean of the twelve monthly values is 50°·32.

(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.

1904.

Days of the Month.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.
d	°	°	°	°	°	°	°	°	°	°	°	°
1	32·3	39·8	32·9	47·3	57·3	55·1	69·2	73·8	56·9	58·8	48·7	47·8
2	33·4	42·4	36·4	51·1	51·0	56·0	68·2	76·3	63·1	52·9	49·3	48·1
3	43·3	44·3	36·3	51·6	55·0	57·7	63·3	82·9	59·7	57·2	52·1	43·8
4	41·5	42·3	37·2	49·0	56·2	65·0	66·7	86·7	64·2	58·3	51·8	52·4
5	42·3	43·9	39·1	50·8	60·9	67·1	63·1	74·4	71·2	56·3	51·8	48·2
6	36·6	42·2	36·4	54·9	54·2	68·7	73·0	67·7	62·6	54·7	49·7	48·8
7	43·0	39·3	40·7	50·6	47·0	68·2	65·8	69·6	63·8	49·6	50·4	40·4
8	43·8	46·0	52·0	53·7	46·1	57·6	73·9	73·1	57·2	48·6	46·0	38·2
9	38·2	42·0	51·7	50·9	49·1	57·2	78·2	71·3	60·6	48·8	57·1	40·0
10	45·7	45·9	43·8	48·6	46·8	58·5	77·9	69·1	60·8	55·6	48·0	45·0
11	43·0	46·0	43·2	52·2	51·4	55·9	73·0	63·0	65·0	56·8	54·2	34·2
12	44·3	42·7	39·8	55·3	58·4	62·9	73·0	70·0	58·0	54·3	48·4	41·3
13	52·8	47·6	42·3	54·3	64·3	67·8	75·3	73·1	63·0	52·6	44·7	41·6
14	43·9	44·8	44·3	61·1	65·6	69·4	76·5	72·9	53·6	52·6	40·8	40·6
15	39·6	38·3	41·9	57·2	61·1	62·6	81·9	68·1	63·6	48·1	41·2	41·8
16	36·8	39·1	44·2	53·6	69·0	68·2	73·3	64·2	63·9	50·4	46·3	53·0
17	35·0	36·1	43·8	58·8	64·8	70·4	79·6	64·8	63·8	57·3	43·3	52·6
18	43·0	36·4	42·9	58·1	61·8	64·6	75·0	61·8	60·7	64·1	39·2	48·6
19	44·5	34·6	52·1	55·1	58·7	58·4	74·3	63·8	62·3	59·8	48·7	37·8
20	35·4	51·2	53·2	59·7	60·6	66·7	76·1	62·1	59·3	57·6	43·4	37·2
21	39·4	50·4	50·8	50·0	50·1	61·8	75·4	66·5	58·2	57·4	37·2	34·6
22	35·3	47·7	49·4	52·6	54·0	66·0	72·8	63·4	55·4	54·8	34·1	30·0
23	31·3	39·6	45·3	53·3	63·0	69·3	77·8	61·5	54·7	55·5	32·3	32·6
24	30·6	39·7	46·4	50·6	55·6	71·1	79·1	61·0	59·2	54·3	30·0	33·7
25	32·8	36·3	38·8	53·1	62·4	62·2	68·0	62·4	54·5	49·2	34·2	36·8
26	44·1	36·8	44·6	48·1	68·3	64·8	68·2	68·3	58·2	52·1	32·0	37·4
27	47·9	37·1	39·7	52·7	63·9	63·9	64·2	67·0	57·0	45·7	30·1	38·4
28	47·3	33·9	44·2	55·2	58·8	68·8	69·2	73·8	56·0	53·8	35·7	43·6
29	42·6	31·1	50·2	55·3	67·5	72·6	70·0	75·0	58·1	52·3	34·6	51·8
30	44·4		41·6	57·8	63·0	71·2	75·0	75·6	55·0	49·3	43·6	47·6
31	40·4		45·1		59·7		71·6	61·1		48·3		40·1
Means	40·5	41·3	43·6	53·4	58·2	64·3	72·5	69·1	60·0	53·8	43·3	42·2

The mean of the twelve monthly values is 53°·52.

ABSTRACT of the CHANGES of the DIRECTION of the WIND, as derived from the Records of OSLER'S ANEMOMETER in the Year 1904.

(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. 0	1. 2¾	E.	E.N.E.		22½
1. 16	1. 18¾	E.N.E.	E.	22½	
2. 13¼	2. 14¼	E.	E.S.E.	22½	
2. 17	2. 18	E.S.E.	S.S.E.	45	
3. 23½	4. 0	S.S.E.	S.S.W.	45	
4. 7¼	4. 7½	S.S.W.	S.S.E.		45
4. 14	4. 14½	S.S.E.	S.E.		22½
5. 0½	5. 1	S.E.	S.S.E.	22½	
5. 3½	5. 4½	S.S.E.	E.S.E.		45
5. 9¼	5. 9½	E.S.E.	E.N.E.		45
5. 17	5. 17¼	E.N.E.	N.N.E.		45
6. 6¼	6. 6½	N.N.E.	N.E.	22½	
6. 9	6. 9¾	N.E.	E.S.E.	67½	
6. 11	6. 11¼	E.S.E.	E.N.E.		45
6. 12¼	6. 12½	E.N.E.	S.S.E.	90	
6. 13¼	6. 13½	S.S.E.	S.E.		22½
6. 15	6. 15¼	S.E.	S.W.	90	
6. 16½	6. 16¾	S.W.	S.		45
6. 20¼	6. 22¼	S.	S.E.	315	
6. 23¼	6. 23½	S.E.	S.	45	
7. 21	7. 22½	S.	S.S.W.	22½	
8. 18¼	8. 18¾	S.S.W.	S.W.	22½	
9. 11	9. 12	S.W.	W.N.W.	67½	
9. 14	9. 14½	W.N.W.	W.S.W.		45
9. 16	9. 16½	W.S.W.	S.W.		22½
9. 19½	9. 20	S.W.	S.S.W.		22½
10. 14¾	10. 16¼	S.S.W.	S.W.	22½	
10. 21¾	10. 22	S.W.	S.S.W.		22½
11. 18½	11. 19¼	S.S.W.	S.		22½
12. 8¾	12. 9	S.	S.W.	45	
12. 15¾	12. 16	S.W.	S.S.W.		22½
12. 18	12. 18½	S.S.W.	S.		22½
12. 23	12. 23½	S.	S.S.W.	22½	
13. 10¼	13. 10½	S.S.W.	S.W.	22½	
13. 20	13. 20½	S.W.	S.S.W.		22½
14. 8	14. 8½	S.S.W.	S.W.	22½	
14. 16¼	14. 16¾	S.W.	W.S.W.	22½	
15. 4½	15. 5	W.S.W.	S.W.		22½
15. 11½	15. 12	S.W.	W.S.W.	22½	
15. 15½	15. 16	W.S.W.	S.W.		22½
16. 1	16. 1½	S.W.	W.S.W.	22½	
16. 7¾	16. 8	W.S.W.	W.	22½	
16. 9½	16. 9¾	W.	W.N.W.	22½	
16. 11¼	16. 11½	W.N.W.	N.W.	22½	
16. 18¼	16. 18½	N.W.	W.N.W.		22½
17. 2½	17. 4¼	W.N.W.	N.W.	22½	
17. 6¼	17. 7	N.W.	W.S.W.		67½
17. 11	17. 12	W.S.W.	N.N.W.	90	
17. 14¼	17. 14½	N.N.W.	N.W.		22½
17. 17	17. 17¾	N.W.	W.S.W.		67½
17. 20	17. 20½	W.S.W.	S.W.		22½
Jan.—*cont.*					
18. 7	18. 11	S.W.	W.	45	
18. 14	18. 15	W.	N.W.	45	
18. 21½	18. 22½	N.W.	N.N.W.	22½	
19. 8½	19. 8¾	N.N.W.	N.	22½	
19. 11¼	19. 11½	N.	E.N.E.	67½	
19. 12½	19. 13½	E.N.E.	E.S.E.	45	
19. 15½	19. 16	E.S.E.	E.N.E.		45
19. 19¼	19. 19½	E.N.E.	E.	22½	
20. 5½	20. 6	E.	E.N.E.		22½
20. 13	20. 13¼	E.N.E.	E.	22½	
20. 15½	20. 15¾	E.	W.S.W.	157½	
20. 16¼	20. 18¼	W.S.W.	E.S.E.	225	
20. 20¼	20. 21	E.S.E.	S.	67½	
21. 1¾	21. 2	S.	S.W.	45	
21. 8½	21. 11	S.W.	N.	135	
21. 21¾	21. 22	N.	N.N.W.		22½
22. 11½	22. 12	N.N.W.	N.N.E.	45	
22. 23½	23. 0	N.N.E.	S.	157½	
23. 1¼	23. 1½	S.	W.	90	
23. 3	23. 3¼	W.	N.N.E.		247½
23. 5¼	23. 5½	N.N.E.	S.	157½	
23. 7	23. 7¼	S.	S.E.		45
23. 15	23. 15½	S.E.	E.		45
23. 17	23. 17½	E.	N.E.		45
24. 0½	24. 2	N.E.	E.	45	
24. 3½	24. 5½	E.	S.E.	45	
24. 17¾	24. 20½	S.E.	S.W.	90	
25. 7½	25. 8	S.W.	S.S.E.		67½
25. 13	25. 13½	S.S.E.	S.E.		22½
26. 1½	26. 1¾	S.E.	S.S.E.	22½	
26. 5¾	26. 7¾	S.S.E.	S.	22½	
26. 10	26. 10½	S.	S.S.W.	22½	
26. 15½	26. 16	S.S.W.	S.		22½
26. 21	26. 21½	S.	S.S.W.	22½	
28. 11½	28. 12	S.S.W.	S.W.	22½	
29. 12½	29. 13½	S.W.	S.S.W.		22½
29. 17½	29. 18½	S.S.W.	S.		22½
30. 20	30. 21¼	S.	S.S.W.	22½	
31. 1¾	31. 2¼	S.S.W.	S.		22½
31. 4½	31. 5½	S.	S.S.E.		22½
31. 7¾	31. 8¼	S.S.E.	E.S.E.		45
31. 10	31. 10¼	E.S.E.	E.		22½
31. 11¼	31. 11¾	E.	S.S.E.	67½	
31. 14	31. 14½	S.S.E.	S.S.W.	45	
31. 16¾	31. 17½	S.S.W.	N.		202½
31. 19¾	31. 20	N.	N.N.W.		22½
31. 21	31. 21¼	N.N.W.	W.S.W.		90
31. 23¼	31. 23¾	W.S.W.	W.	22½	
			Sums	3105	1845
February.					
d h	d h				
1. 0¾	1. 1	W.	W.S.W.		22½
1. 4¼	1. 4½	W.S.W.	S.W.		22½
1. 10¼	1. 10½	S.W.	S.S.W.		22½
1. 15½	1. 17½	S.S.W.	S.E.		67½
2. 0½	2. 1	S.E.	E.S.E.		22½
2. 8	2. 8½	E.S.E.	S.E.	22½	
2. 17	2. 17½	S.E.	S.S.E.	22½	
2. 22¾	2. 23	S.S.E.	S.E.		22½
3. 0¾	3. 1	S.E.	E.S.E.		22½
3. 5½	3. 6½	E.S.E.	E.N.E.		45
3. 7¾	3. 8½	E.N.E.	E.S.E.	45	
3. 12	3. 12½	E.S.E.	S.E.	22½	
3. 14½	3. 16	S.E.	S.W.	90	
4. 0¾	4. 1	S.W.	S.S.W.		22½
4. 4¼	4. 4½	S.S.W.	S.		22½
4. 7¾	4. 8¼	S.	S.S.W.	22½	
4. 9½	4. 10	S.S.W.	S.W.	22½	
4. 16½	4. 19½	S.W.	S.E.		90
5. 0½	5. 1¾	S.E.	S.S.W.	67½	
5. 6¾	5. 7	S.S.W.	S.S.E.		45
5. 7¾	5. 9	S.S.E.	S.S.W.	45	
5. 16½	5. 19½	S.S.W.	S.E.		67½
6. 0	6. 3½	S.E.	S.S.W.	67½	
6. 12¾	6. 13½	S.S.W.	S.W.	22½	
7. 15	7. 15¼	S.W.	S.S.W.		22½
7. 16½	7. 19	S.S.W.	S.E.		67½
8. 6	8. 6½	S.E.	S.S.W.	67½	
8. 18	8. 19	S.S.W.	S.W.	22½	
9. 2½	9. 3	S.W.	S.S.W.		22½
9. 5¾	9. 10¼	S.S.W.	S.E.		67½
9. 11¾	9. 12½	S.E.	S.	45	
9. 19	9. 21	S.	W.S.W.	67½	
10. 1	10. 3	W.S.W.	S.S.W.		45
10. 9¾	10. 10	S.S.W.	S.W.	22½	
10. 13½	10. 13¾	S.W.	S.S.W.		22½
10. 15½	10. 15¾	S.S.W.	S.		22½
10. 18¼	10. 18½	S.	S.S.W.	22½	
11. 2¼	11. 2½	S.S.W.	S.W.	22½	
11. 7½	11. 8¼	S.W.	W.N.W.	67½	
11. 10	11. 10¼	W.N.W.	S.W.		67½
11. 12¼	11. 13	S.W.	S.		45
11. 14¼	11. 15	S.	N.N.W.		202½
11. 19¾	11. 20	N.N.W.	S.W.		112½
12. 5	12. 7	S.W.	S.		45
12. 16	12. 19½	S.	S.S.W.	22½	
13. 2	13. 3	S.S.W.	S.W.	22½	
13. 20¼	13. 20½	S.W.	S.S.W.		22½
14. 10	14. 11	S.S.W.	S.W.	22½	
14. 18½	14. 20½	S.W.	W.	45	
15. 2¾	15. 3¼	W.	S.W.		45
15. 12½	15. 13	S.W.	S.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.
				°	°
Feb.—*cont.*					
d h	d h				
16. 0½	16. 1	S.S.W.	S.W.	22½	
16. 7¼	16. 7½	S.W.	S.S.W.		22½
16. 12½	16. 13¼	S.S.W.	S.		22½
16. 15	16. 16¼	S.	S.E.		45
16. 18½	16. 20½	S.E.	E.N.E.		67½
16. 23½	16. 23¾	E.N.E.	N.E.		22½
17. 3½	17. 4½	N.E.	N.W.		90
17. 5¾	17. 6½	N.W.	W.S.W.		67½
17. 10	17. 12½	W.S.W.	N.W.	67½	
17. 16½	17. 18	N.W.	W.S.W.		67½
17. 20¼	17. 20½	W.S.W.	S.W.		22½
18. 1¼	18. 2¼	S.W.	N.N.E.	157½	
18. 3½	18. 3¾	N.N.E.	N.		22½
18. 7½	18. 8	N.	N.N.W.		22½
18. 16½	18. 17	N.N.W.	N.W.		22½
19. 9¾	19. 10½	N.W.	W.		45
19. 12	19. 12¼	W.	W.S.W.		22½
19. 16	19. 16½	W.S.W.	S.W.		22½
20. 3½	20. 4	S.W.	W.S.W.	22½	
20. 12	20. 12¼	W.S.W.	S.W.		22½
21. 13	21. 13½	S.W.	S.S.W.		22½
21. 17½	21. 18	S.S.W.	S.W.	22½	
22. 0	22. 0½	S.W.	W.S.W.	22½	
22. 3½	22. 6¼	W.S.W.	W.N.W.	45	
22. 9	22. 9¼	W.N.W.	N.W.	22½	
22. 12	22. 12¼	N.W.	N.N.W.	22½	
22. 15	22. 18	N.N.W.	N.N.E.	45	
23. 0¾	23. 1	N.N.E.	N.E.	22½	
23. 3	23. 3½	N.E.	E.N.E.	22½	
23. 4½	23. 5½	E.N.E.	E.	22½	
23. 10	23. 10¼	E.	E.S.E.	22½	
23. 16	23. 16½	E.S.E.	E.		22½
24. 2¼	24. 2½	E.	E.N.E.		22½
24. 18½	24. 19	E.N.E.	N.E.		22½
25. 10¼	25. 11¼	N.E.	E.	45	
25. 13½	25. 13¾	E.	E.N.E.		22½
25. 19	25. 23¼	E.N.E.	S.E.	67½	
26. 15¼	26. 18	S.E.	E.		45
26. 21¼	26. 21½	E.	E.N.E.		22½
27. 3	27. 4¼	E.N.E.	N.N.E.		45
27. 6½	27. 7¼	N.N.E.	N.N.W.		45
27. 9¼	27. 9½	N.N.W.	N.N.E.	45	
27. 15	27. 15½	N.N.E.	N.E.	22½	
27. 18	27. 19¼	N.E.	E.	45	
27. 23½	28. 0¾	E.	N.N.E.		67½
28. 2½	28. 3	N.N.E.	N.E.	22½	
28. 13	28. 13½	N.E.	E.N.E.	22½	
28. 17	28. 17½	E.N.E.	N.N.E.		45
29. 3	29. 4	N.N.E.	E.N.E.	45	
29. 6¼	29. 6½	E.N.E.	N.E.		22½
29. 9½	29. 9¾	N.E.	E.N.E.	22½	
29. 11½	29. 11¾	E.N.E.	E.	22½	
29. 13½	29. 13¾	E.	E.N.E.		22½
29. 17	29. 17¼	E.N.E.	E.	22½	
29. 19	29. 19½	E.	N.E.		45
29. 22½	29. 22¾	N.E.	N.N.E.		22½
			Sums	1822½	2430

Greenwich Civil Time. From	Greenwich Civil Time. To	Change of Direction. From	Change of Direction. To	Amount of Motion. Direct.	Amount of Motion. Retrograde.
				°	°
March.					
d h	d h				
1. 20	1. 22¼	N.N.E.	N.N.W.		45
2. 1½	2. 1¾	N.N.W.	N.	22½	
2. 7	2. 7¼	N.	N.N.E.	22½	
2. 12	2. 12¼	N.N.E.	N.E.	22½	
2. 18¾	2. 21¼	N.E.	E.	45	
3. 4½	3. 6½	E.	N.E.		45
3. 10¾	3. 11	N.E.	N.N.E.		22½
3. 13	3. 13¼	N.N.E.	N.E.	22½	
3. 16	3. 16¼	N.E.	N.N.E.		22½
4. 5	4. 5¼	N.N.E.	N.E.	22½	
4. 11½	4. 11¾	N.E.	E.N.E.	22½	
4. 17¾	4. 18	E.N.E.	N.E.		22½
5. 9½	5. 10	N.E.	E.N.E.	22½	
6. 0½	6. 0¾	E.N.E.	N.E.		22½
6. 7½	6. 7¾	N.E.	E.N.E.	22½	
7. 7½	7. 9	E.N.E.	E.	22½	
7. 22	7. 22½	E.	S.S.E.	67½	
8. 4½	8. 6	S.S.E.	S.	22½	
8. 17½	8. 19½	S.	S.E.		45
8. 22¼	8. 22½	S.E.	N.E.		90
9. 1½	9. 3¾	N.E.	S.	135	
9. 4¾	9. 5½	S.	N.E.	225	
9. 14¼	9. 14½	N.E.	E.	45	
9. 16½	9. 18¼	E.	N.		90
9. 20¼	9. 20½	N.	N.N.E.	22½	
10. 12	10. 12½	N.N.E.	N.		22½
11. 5	11. 5¼	N.	N.N.E.	22½	
11. 9¼	11. 9½	N.N.E.	N.		22½
11. 14½	11. 14¾	N.	N.N.W.		22½
11. 17	11. 17¼	N.N.W.	N.	22½	
11. 20	11. 20¾	N.	E.	90	
11. 23½	12. 0	E.	S.E.	45	
12. 2¾	12. 3	S.E.	N.E.		90
12. 9	12. 10	N.E.	E.	45	
12. 18½	12. 20½	E.	S.E.	45	
12. 23	13. 0	S.E.	E.N.E.		67½
13. 1¼	13. 1½	E.N.E.	S.S.W.	135	
13. 6½	13. 6¾	S.S.W.	S.E.		67½
13. 8	13. 9	S.E.	S.S.W.	67½	
13. 11¼	13. 11½	S.S.W.	S.W.	22½	
13. 17¼	13. 17½	S.W.	S.S.W.		22½
14. 0½	14. 1¾	S.S.W.	S.		22½
14. 5½	14. 6	S.	S.S.W.	22½	
14. 8½	14. 8½	S.S.W.	S.W.	22½	
14. 22	14. 22¼	S.W.	N.	135	
15. 1	15. 1¼	N.	N.N.E.	22½	
15. 5¼	15. 5½	N.N.E.	N.		22½
15. 9	15. 10½	N.	N.E.	45	
15. 12	15. 12¼	N.E.	E.N.E.	22½	
15. 14½	15. 15	E.N.E.	E.S.E.	45	
15. 21	15. 22½	E.S.E.	S.S.W.	90	
16. 5½	16. 5¾	S.S.W.	S.		22½
16. 8½	16. 8¾	S.	S.S.W.	22½	
16. 11¾	16. 12½	S.S.W.	S.E.		67½
16. 17½	16. 17¾	S.E.	E.S.E.		22½
17. 0½	17. 0¾	E.S.E.	E.		22½
17. 4¾	17. 5¼	E.	N.E.		45
17. 6½	17. 7¾	N.E.	E.N.E.	22½	
17. 11½	17. 12½	E.N.E.	E.S.E.	45	

Greenwich Civil Time. From	Greenwich Civil Time. To	Change of Direction. From	Change of Direction. To	Amount of Motion. Direct.	Amount of Motion. Retrograde.
				°	°
March—*cont.*					
d h	d h				
17. 15¼	17. 15½	E.S.E.	S.E.	22½	
17. 19½	17. 20	S.E.	S.S.E.	22½	
18. 2	18. 2¼	S.S.E.	S.S.W.	45	
18. 4	18. 4½	S.S.W.	W.S.W.	45	
18. 10	18. 11	W.S.W.	W.	22½	
18. 18	18. 18½	W.	W.S.W.		22½
19. 9	19. 10½	W.S.W.	W.	22½	
19. 18½	19. 19	W.	W.S.W.		22½
20. 12	20. 12¼	W.S.W.	S.W.		22½
20. 20½	20. 20¾	S.W.	W.S.W.	22½	
20. 23¾	21. 0	W.S.W.	S.W.		22½
21. 7½	21. 8	S.W.	W.S.W.	22½	
21. 12	21. 12½	W.S.W.	W.N.W.	45	
21. 14	21. 14¼	W.N.W.	N.N.E.	90	
22. 0¼	22. 0½	N.N.E.	N.		22½
22. 2	22. 2¼	N.	W.		90
22. 10	22. 11½	W.	W.N.W.	22½	
22. 21¼	22. 21½	W.N.W.	N.W.	22½	
22. 23¼	24. 0½	N.W.	N.	45	
23. 6	23. 7	N.	N.N.E.	22½	
23. 13¾	23. 14	N.N.E.	N.E.	22½	
24. 6½	24. 7	N.E.	E.N.E.	22½	
24. 12	24. 12¼	E.N.E.	E.	22½	
24. 15	24. 15¼	E.	E.N.E.		22½
24. 23¼	24. 23½	E.N.E.	N.E.		22½
25. 6	25. 7	N.E.	E.N.E.	22½	
26. 0	26. 1	E.N.E.	N.E.		22½
26. 10½	26. 12	N.E.	E.N.E.	22½	
26. 16½	26. 16¾	E.N.E.	N.N.E.		45
26. 19½	26. 21½	N.N.E.	E.N.E.	45	
27. 10	27. 10½	E.N.E.	E.	22½	
27. 13½	27. 16½	E.	S.E.	45	
27. 22	27. 22½	S.E.	S.S.E.	22½	
28. 4	28. 4¼	S.S.E.	S.W.	67½	
28. 18¾	28. 19	S.W.	S.S.W.		22½
29. 0	29. 0½	S.S.W.	S.W.	22½	
29. 6½	29. 8	S.W.	W.S.W.	22½	
30. 0	30. 0½	W.S.W.	W.	22½	
30. 12½	30. 12¾	W.	N.	90	
30. 13¼	30. 13½	N.	W.S.W.		112½
30. 15½	30. 17½	W.S.W.	S.S.E.	270	
30. 20½	30. 23	S.S.E.	W.S.W.	90	
31. 0¾	31. 1½	W.S.W.	W.N.W.	45	
31. 5½	31. 7	W.N.W.	N.N.E.	90	
31. 11¾	31. 12½	N.N.E.	S.W.		157½
31. 23	31. 23¾	S.W.	W.S.W.	22½	
			Sums	3217½	1552½

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. 11½	1. 12	W.S.W.	W.N.W.	45	
1. 21½	1. 22	W.N.W.	W.		22½
2. 5½	2. 6	W.	W.S.W.		22½
2. 13¼	2. 13½	W.S.W.	S.W.		22½
3. 7½	3. 7¾	S.W.	W.	45	
3. 10½	3. 11	W.	W.N.W.	22½	
3. 13	3. 13½	W.N.W.	W.		22½
3. 16	3. 17	W.	W.S.W.		22½
3. 18	3. 18½	W.S.W.	W.	22½	
4. 5½	4. 6	W.	W.N.W.	22½	
4. 16¼	4. 17¼	W.N.W.	W.		22½
4. 20½	4. 20¾	W.	W.S.W.		22½
5. 12	5. 12¼	W.S.W.	W.	22½	
5. 18½	5. 19½	W.	W.S.W.		22½
6. 6	6. 9½	W.S.W.	N.W.	67½	
6. 14¾	6. 15	N.W.	W.	45	
6. 21½	6. 22	W.	W.S.W.		22½
7. 7	7. 7½	W.S.W.	W.	22½	
7. 11½	7. 12	W.	W.N.W.	22½	
7. 13	7. 13½	W.N.W.	N.W.	22½	
7. 21½	7. 22½	N.W.	W.	45	
8. 2	8. 2½	W.	W.S.W.		22½
8. 9½	8. 10	W.S.W.	W.	22½	
8. 22	8. 22½	W.	W.S.W.		22½
9. 6¾	9. 8½	W.S.W.	W.N.W.	45	
9. 14	9. 14½	W.N.W.	W.		22½
10. 10	10. 10¼	W.	W.N.W.	22½	
10. 12	10. 12¼	W.N.W.	N.W.	22½	
10. 19¼	10. 19½	N.W.	W.N.W.		22½
11. 0	11. 0½	W.N.W.	W.		22½
11. 6½	11. 8	W.	N.W.	45	
11. 9¼	11. 9½	N.W.	N.N.W.	22½	
11. 11¾	11. 12	N.N.W.	N.W.		22½
11. 14¾	11. 15	N.W.	W.	45	
11. 18	11. 18½	W.	S.W.	45	
11. 23½	11. 23¾	S.W.	S.S.E.	67½	
12. 21	12. 21½	S.S.E.	S.	22½	
13. 1	13. 2¾	S.	S.S.W.	22½	
13. 6½	13. 7	S.S.W.	S.W.	22½	
13. 11¼	13. 11½	S.W.	W.S.W.	22½	
13. 18	13. 18½	W.S.W.	S.W.		22½
14. 0½	14. 1½	S.W.	S.S.W.		22½
14. 10¾	14. 11	S.S.W.	S.S.E.		45
14. 13¼	14. 13½	S.S.E.	E.S.E.		45
14. 14½	14. 15½	E.S.E.	S.	67½	
14. 21½	14. 22¾	S.	W.N.W.	112½	
15. 0½	15 2¼	W.N.W.	S.S.W.		90
15. 5¼	15. 5¾	S.S.W.	W.	67½	
15. 8¼	15. 8½	W.	E.N.E.	157½	
15. 9½	15. 10	E.N.E.	N.E.		22½
15. 12½	15. 13½	N.E.	N.W.		90
15. 16½	15. 19½	N.W.	S.W.		90
15 23½	15. 23¾	S.W.	W.S.W.	22½	
16. 2¾	16. 3½	W.S.W.	S.W.		22½
16. 6¾	16. 7	S.W.	W.	45	
16. 10½	16. 11	W.	N.N.W.	67½	
16. 12	16. 12¼	N.N.W.	N.W.		22½
16. 13¼	16. 13½	N.W.	N.N.E.	67½	
16. 18	16. 20	N.N.E.	N.N.W.		45
April—*cont.*					
16. 22	16. 22¾	N.N.W.	W.S.W.		90
17. 7	17. 8	W.S.W.	S.E.		112½
17. 11¾	17. 12¾	S.E.	W.	135	
17. 15	17. 15½	W.	W.S.W.		22½
18. 9	18. 10½	W.S.W.	E.	202½	
18. 11¾	18. 12¾	E.	E.S.E.	22½	
18. 20½	18. 22½	E.S.E.	N.E.		67½
19. 10	19. 10¾	N.E.	E.N.E.	22½	
19. 19¼	19. 21½	E.N.E.	N.N.E.		45
21. 23	21. 23¼	N.N.E.	W.S.W.		135
22. 5¼	22. 5½	W.S.W.	S.W.		22½
22. 8	22. 8½	S.W.	W.S.W.	22½	
22. 12¼	22. 14½	W.S.W.	S.W.		22½
22. 19½	22. 20½	S.W.	N.W.	90	
23. 2½	23. 3	N.W.	N.N.W.	22½	
23. 4½	23. 7	N.N.W.	N.E.	67½	
23. 9¾	23. 10	N.E.	E.	45	
23. 15	23. 16	E.	E.S.E.	22½	
23. 20½	23. 21¾	E.S.E.	N.	247½	
24. 0½	24. 1	N.	W.N.W.		67½
24. 5	24. 5½	W.N.W.	N.N.W.	45	
24. 13½	24. 17	N.N.W.	W.S.W.		90
25. 1	25. 2	W.S.W.	N.	112½	
26. 0½	26. 1	N.	N.N.W.		22½
26. 3¼	26. 3½	N.N.W.	S.W.		112½
26. 7½	26. 7¾	S.W.	W.	45	
26. 9½	26. 10	W.	W.N.W.	22½	
26. 17¾	26. 21½	W.N.W.	W.S.W.		45
27. 7	27. 8½	W.S.W.	N.N.W.	90	
27. 11	27. 11½	N.N.W.	N.W.		22½
27. 20½	27. 21	N.W.	W.S.W.		67½
28. 15½	28. 16	W.S.W.	W.	22½	
28. 18	28. 19	W.	S.W.		45
29. 11¼	29. 11½	S.W.	W.S.W.	22½	
29. 15	29. 17	W.S.W.	S.W.		22½
30. 8¾	30. 9	S.W.	W.S.W.	22½	
30. 19	30. 21¼	W.S.W.	W.	22½	
			Sums	2497½	2115
May.					
1. 3	1. 4	W.	W.S.W.		22½
1. 21	1. 23	W.S.W.	S.W.		22½
2. 4½	2. 4¾	S.W.	W.	45	
2. 8	2. 8½	W.	W.S.W.		22½
2. 11	2. 11½	W.S.W.	S.W.		22½
2. 14¼	2. 14½	S.W.	N.W.	90	
2. 15½	2. 17	N.W.	W.		45
3. 2½	3. 2¾	W.	W.S.W.		22½
3. 6½	3. 7	W.S.W.	W.	22½	
3. 9¼	3. 9½	W.	W.S.W.		22½
3. 13	3. 13¼	W.S.W.	W.	22½	
3. 18	3. 18¼	W.	W.S.W.		22½
3. 20¾	3. 21	W.S.W.	W.	22½	
May—*cont.*					
3. 23	4. 1½	W.	W.N.W.	22½	
4. 5½	4. 8	W.N.W.	N.	67½	
4. 13¼	4. 13½	N.	N.N.E.	22½	
4. 18	4. 18¼	N.N.E.	S.E.	112½	
4. 20¾	4. 21	S.E.	S.S.E.	22½	
4. 22¾	5. 1	S.S.E.	S.S.W.	45	
5. 6½	5. 8	S.S.W.	S.W.	22½	
5. 17	5. 18	S.W.	W.S.W.	22½	
6. 0¼	6. 0½	W.S.W.	W.	22½	
6. 6½	6. 7½	W.	W.N.W.	22½	
6. 10¼	6. 10½	W.N.W.	W.		22½
6. 12¾	6. 13	W.	W.S.W.		22½
7. 8	7. 8½	W.S.W.	W.	22½	
7. 10½	7. 11½	W.	N.N.W.	67½	
7. 20½	7. 21	N.N.W.	N.	22½	
8. 5	8. 5½	N.	N.N.E.	22½	
8. 9¼	8. 9½	N.N.E.	E.N.E.	45	
8. 13½	8. 14	E.N.E.	S.	112½	
8. 21½	8. 22¼	S.	W.S.W.	67½	
9. 12½	9. 13	W.S.W.	W.	22½	
9. 16	9. 16¼	W.	W.S.W.		22½
9. 18½	9. 19¾	W.S.W.	S.W.		22½
9. 23	10. 0	S.W.	S.S.W.		22½
10. 3	10. 3½	S.S.W.	E.		112½
10. 5¼	10. 5½	E.	E.S.E.	22½	
10. 7¾	10. 11¾	E.S.E.	N.		112½
10. 17¼	10. 18¼	N.	E.S.E.	112½	
10. 19½	10. 19¾	E.S.E.	S.	67½	
10. 23	10. 23¼	S.	N.N.E.		157½
11. 6	11. 6½	N.N.E.	N.E.	22½	
11. 9¾	11. 10½	N.E.	S.E.	90	
11. 13¼	11. 13½	S.E.	S.W.	90	
11. 14¼	11. 14¾	S.W.	E.		135
11. 15¾	11. 16½	E.	S.E.	45	
11. 18½	11. 18¾	S.E.	S.	45	
12. 0½	12. 0¾	S.	S.S.E.		22½
12. 6½	12. 9	S.S.E.	W.S.W.	90	
12. 18¼	12. 18½	W.S.W.	S.W.		22½
13. 18½	13. 19	S.W.	S.S.W.		22½
14. 1	14. 1½	S.S.W.	S.W.	22½	
14. 9¾	14. 10	S.W.	W.S.W.	22½	
14. 13	14. 13¼	W.S.W.	W.	22½	
14. 15	14. 15½	W.	W.N.W.	22½	
14. 19	14. 19½	W.N.W.	W.		22½
15. 0	15. 0½	W.	W.S.W.		22½
16. 4¾	16. 5¾	W.S.W.	S.E.		112½
16. 8¼	16. 8½	S.E.	S.	45	
16. 12½	16. 12¾	S.	S.S.E.		22½
16. 16¼	16. 16½	S.S.E.	S.E.		22½
16. 19	16. 20½	S.E.	S.	45	
16. 23½	17. 2	S.	S.W.	45	
17. 4¾	17. 7¼	S.W.	W.	45	
18. 2	18. 2½	W.	W.S.W.		22½
18. 9	18. 9½	W.S.W.	W.	22½	
19. 0	19. 1½	W.	W.S.W.		22½
19. 3½	19. 7½	W.S.W.	N.N.W.	90	
19. 14¼	19. 14½	N.N.W.	N.	22½	
19. 21½	19. 23¼	N.	N.E.	45	
20. 8	20. 8¼	N.E.	S.E.	90	

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				
20. 9½	20. 10	S.E.	E.S.E.		22½
20. 16½	20. 16¾	E.S.E.	E.		22½
21. 16	21. 17¼	E.	N.E.		45
21. 19½	21. 20	N.E.	N.N.E.		22½
22. 3¾	22. 4½	N.N.E.	S.	157½	
22. 8¼	22. 8½	S.	E.S.E.		67½
22. 10¼	22. 10½	E.S.E.	S.W.	112½	
22. 12	22. 12¾	S.W.	N.	135	
22. 15¼	22. 16	N.	N.E.	45	
22. 20¾	22. 21	N.E.	E.N.E.	22½	
22. 23	22. 23¼	E.N.E.	E.	22½	
23. 1¼	23. 2	E.	N.E.		45
23. 2¾	23. 3	N.E.	W.N.W.		112½
23. 5¾	23. 6	W.N.W.	N.N.E.	90	
23. 7½	23. 7¾	N.N.E.	W.S.W.		135
23. 8¾	23. 9	W.S.W.	S.W.		22½
23. 9½	23. 9¾	S.W.	W.S.W.	22½	
23. 19½	23. 21	W.S.W.	S.W.		22½
25. 1	25. 2½	S.W.	S.S.E.		67½
25. 6	25. 6¼	S.S.E.	E.N.E.		90
25. 7¼	25. 7½	E.N.E.	E.S.E.	45	
25. 9¼	25. 10½	E.S.E.	E.N.E.		45
25. 13¼	25. 13½	E.N.E.	E.S.E.	45	
25. 17¾	25. 18	E.S.E.	S.E.	22½	
26. 22¼	26. 22½	S.E.	S.W.	90	
27. 5½	27. 6½	S.W.	N.E.	180	
27. 9	27. 10	N.E.	W.S.W.		157½
27. 13½	27. 14½	W.S.W.	S.W.		22½
28. 2½	28. 3½	S.W.	W.S.W.	22½	
28. 15½	28. 16½	W.S.W.	W.	22½	
29. 6¾	29. 7	W.	N.	90	
29. 8¼	29. 8½	N.	N.N.E.	22½	
29. 14	29. 14½	N.N.E.	N.E.	22½	
29. 21¾	29. 22¼	N.E.	E.	45	
30. 0	30. 1	E.	E.N.E.		22½
30. 5½	30. 6¼	E.N.E.	E.	22½	
30. 9	30. 11½	E.	E.S.E.	22½	
30. 13½	30. 14	E.S.E.	E.		22½
31. 5½	31. 6	E.	E.S.E.	22½	
31. 7½	31. 8	E.S.E.	S.W.	112½	
31. 15¾	31. 16½	S.W.	S.		45
			Sums	3487½	2137½
June.					
1. 0¼	1. 0½	S.	S.E.		45
1. 4¼	1. 4½	S.E.	E.		45
1. 6	1. 6¼	E.	E.S.E.	22½	
1. 9	1. 10½	E.S.E.	W.N.W.	180	
1. 13½	1. 13¾	W.N.W.	N.	67½	
1. 15½	1. 16½	N.	N.W.		45
1. 22	1. 22½	N.W.	N.N.W.		22½
2. 3½	2. 4½	N.N.W.	N.W.	22½	
2. 6½	2. 7½	N.W.	N.N.W.	22½	

Greenwich Civil Time. From	Greenwich Civil Time. To	Change of Direction. From	Change of Direction. To	Amount of Motion. Direct.	Amount of Motion. Retrograde.
				°	°
June—*cont.*					
d h	d h				
2. 13½	2. 14	N.N.W.	N.	22½	
2. 18¾	2. 19¼	N.	N.N.E.	22½	
3. 4½	3. 5	N.N.E.	N.E.	22½	
3. 15¼	3. 16¼	N.E.	S.E.	90	
3. 22	3. 23½	S.E.	N.E.		90
4. 14½	4. 15	N.E.	E.	45	
4. 16½	4. 17	E.	N.E.		45
5. 4¾	5. 5	N.E.	N.N.E.		22½
5. 8	5. 8¼	N.N.E.	N.E.	22½	
5. 11½	5. 12	N.E.	E.N.E.	22½	
5. 15¼	5. 15½	E.N.E.	E.	22½	
5. 18¾	5. 19	E.	E.N.E.		22½
5. 21½	5. 22	E.N.E.	N.E.		22½
6. 12	6. 12¼	N.E.	E.N.E.	22½	
6. 18½	6. 20½	E.N.E.	N.E.		22½
7. 0	7. 1	N.E.	E.N.E.	22½	
8. 16½	8. 16¾	E.N.E.	S.E.	67½	
8. 18¼	8. 18¾	S.E.	E.N.E.		67½
8. 21	8. 22	E.N.E.	N.E.		22½
8. 23¼	9. 0	N.E.	E.N.E.	22½	
9. 12	9. 12¼	E.N.E.	E.	22½	
9. 16¾	9. 17¾	E.	N.E.	45	
9. 22	9. 22¼	N.E.	N.N.E.		22½
10. 1¾	10. 2	N.N.E.	N.E.	22½	
10. 5	10. 6½	N.E.	E.N.E.	22½	
10. 9¾	10. 10	E.N.E.	E.	22½	
10. 14	10. 14¼	E.	E.S.E.	22½	
10. 15½	10. 17	E.S.E.	N.E.		67½
11. 2	11. 2½	N.E.	N.N.E.	22½	
11. 7¾	11. 8	N.N.E.	N.E.	22½	
11. 11½	11. 11¾	N.E.	N.N.E.		22½
11. 16	11. 16½	N.N.E.	N.E.	22½	
11. 23	11. 23½	N.E.	N.N.E.		22½
12. 8	12. 9	N.N.E.	N.		22½
12. 11	12. 12½	N.	N.E.	45	
12. 18½	12. 19¾	N.E.	S.	135	
13. 3	13. 3½	S.	S.W.	45	
13. 18½	13. 20½	S.W.	S.S.W.		22½
14. 0	14. 2½	S.S.W.	S.		22½
14. 7	14. 9½	S.	S.W.	45	
14. 22½	14. 23½	S.W.	S.S.W.		22½
15. 2	15. 2½	S.S.W.	S.W.	22½	
15. 6½	15. 7½	S.W.	W.S.W.	22½	
15. 15	15. 16½	W.S.W.	S.W.		22½
16. 0¾	16. 3	S.W.	W.S.W.	22½	
17. 18	17. 18½	W.S.W.	S.W.		22½
17. 21	17. 22¾	S.W.	W.S.W.	22½	
18. 5	18. 7	W.S.W.	W.N.W.	45	
18. 19¾	18. 20	W.N.W.	W.		22½
18. 21½	18. 22	W.	W.S.W.		22½
19. 15	19. 15½	W.S.W.	W.	22½	
19. 17¾	19. 18	W.	W.N.W.	22½	
19. 22¾	20. 0	W.N.W.	W.		22½
20. 8½	20. 9	W.	W.S.W.		22½
20. 19½	20. 20	W.S.W.	W.	22½	
21. 6¼	21. 8½	W.	N.	90	
21. 12¾	21. 13	N.	N.N.W.		22½
22. 2¾	22. 3	N.N.W.	S.W.		112½
22. 6	22. 6½	S.W.	W.	45	

Greenwich Civil Time. From	Greenwich Civil Time. To	Change of Direction. From	Change of Direction. To	Amount of Motion. Direct.	Amount of Motion. Retrograde.
				°	°
June—*cont.*					
d h	d h				
22. 17	22. 19¼	W.	N.	90	
23. 12½	23. 13	N.	N.N.E.	22½	
23. 17½	23. 17¾	N.N.E.	E.	67½	
23. 19¾	23. 19¾	E.	S.E.	45	
23. 21	23. 21¼	S.E.	S.	45	
24. 0	24. 0¼	S.	S.S.W.	22½	
24. 6	24. 9	S.S.W.	S.W.		337½
24. 16¼	24. 16½	S.W.	W.S.W.	22½	
25. 4½	25. 5	W.S.W.	W.	22½	
25. 14¼	25. 16	W.	N.N.W.	67½	
25. 17½	25. 17¾	N.N.W.	N.	22½	
25. 21½	25. 21¾	N.	N.N.W.		22½
25. 23¼	25. 23½	N.N.W.	S.W.		112½
26. 4½	26. 4½	S.W.	W.S.W.		22½
26. 6¼	26. 6½	S.S.W.	W.S.W.	45	
26. 9	26. 9¼	W.S.W.	W.	22½	
26. 15½	26. 15¾	W.	N.	90	
26. 16½	26. 16¾	N.	N.N.W.		22½
26. 17¾	26. 21¾	N.N.W.	N.N.E.	45	
26. 22¾	26. 23	N.N.E.	N.N.W.		45
27. 0¾	27. 1	N.N.W.	N.	22½	
27. 7	27. 7¼	N.	N.N.E.	22½	
27. 11¾	27. 12	N.N.E.	N.		22½
27. 17	27. 17¼	N.	N.N.E.	22½	
27. 19¼	27. 21½	N.N.E.	S.	157½	
27. 23	28. 0¼	S.	E.N.E.	247½	
28. 2	28. 3½	E.N.E.	W.N.W.	225	
28. 4½	28. 4¾	W.N.W.	S.E.		157½
28. 6¼	28. 6½	S.E.	E.N.E.		67½
28. 12¾	28. 14	E.N.E.	S.E.	67½	
28. 17¼	28. 17½	S.E.	S.S.E.	22½	
28. 18¾	28. 19	S.S.E.	S.	22½	
28. 22¾	28. 23	S.	S.E.		45
29. 5½	29. 7½	S.E.	S.S.E.	22½	
29. 9¼	29. 11½	S.S.E.	E.S.E.		45
29. 20½	29. 23	E.S.E.	E.		22½
30. 7	30. 7½	E.	E.S.E.	22½	
30. 16½	30. 17¾	E.S.E.	S.W.	112½	
			Sums	3082½	1957½
July.					
1. 6	1. 6½	S.W.	W.S.W.	22½	
1. 18½	1. 19	W.S.W.	S.W.		22½
1. 20½	1. 20¾	S.W.	W.S.W.	22½	
2. 17½	2. 18½	W.S.W.	S.W.		22½
3. 7	3. 8¾	S.W.	W.S.W.	22½	
3. 14	3. 14½	W.S.W.	W.N.W.	45	
3. 17½	3. 18	W.N.W.	W.		22½
4. 0	4. 2	W.	W.S.W.		22½
4. 6	4. 7½	W.S.W.	W.	22½	
4. 19½	4. 20	W.	W.S.W.		22½
5. 18	5. 18½	W.S.W.	W.	22½	
5. 22¾	5. 23¼	W.	W.S.W.		22½
6. 13	6. 13½	W.S.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.
				°	°
July—*cont.*					
d h	d h				
6. 23	6. 23½	S.W.	W.S.W.	22½	
7. 2½	7. 3	W.S.W.	W.	22½	
7. 7¼	7. 7½	W.	N.	90	
7. 9	7. 10½	N.	W.N.W.		67½
7. 11¾	7. 12¼	W.N.W.	N.E.	112½	
7. 15½	7. 17	N.E.	S.E.	90	
7. 18½	7. 19½	S.E.	E.		45
7. 22¾	7. 23	E.	S.E.	45	
8. 2¾	8. 3	S.E.	S.W.	90	
8. 9	8. 9¼	S.W.	W.S.W.	22½	
8. 14¾	8. 15	W.S.W.	W.N.W.	45	
8. 18½	8. 19	W.N.W.	N.	67½	
9. 2½	9. 2¾	N.	N.E.	45	
9. 6½	9. 6¾	N.E.	E.N.E.	22½	
9. 16	9. 16¼	E.N.E.	S.E.	67½	
9. 19¼	9. 22¼	S.E.	E.S.E.		22½
10. 22½	10. 23	E.S.E.	E.		22½
11. 4	11. 4½	E.	E.N.E.		22½
11. 10	11. 10½	E.N.E.	E.	22½	
11. 21¼	11. 21½	E.	E.N.E.		22½
12. 3¼	12. 3½	E.N.E.	E.	22½	
12. 13	12. 13¼	E.	E.S.E.	22½	
13. 0½	13. 1	E.S.E.	S.W.	112½	
13. 4¼	13. 4½	S.W.	W.S.W.	22½	
13. 14¼	13. 14½	W.S.W.	S.W.		22½
13. 22	13. 23	S.W.	W.S.W.	22½	
14. 4	14. 4½	W.S.W.	S.W.		22½
14. 23	14. 23¼	S.W.	S.S.W.		22½
15. 3¾	15. 4	S.S.W.	S.S.E.		45
15. 6	15. 6¼	S.S.E.	E.S.E.		45
15. 8¼	15. 10	E.S.E.	S.W.	112½	
15. 18	15. 18½	S.W.	W.S.W.	22½	
16. 18	16. 18½	W.S.W.	S.W.		22½
16. 21½	16. 22	S.W.	W.S.W.	22½	
17. 4½	17. 4¾	W.S.W.	N.	112½	
17. 7	17. 8	N.	N.N.E.	22½	
17. 19	17. 19½	N.N.E.	E.	67½	
18. 1	18. 1½	E.	E.N.E.		22½
18. 7½	18. 8	E.N.E.	E.	22½	
18. 12½	18. 13	E.	E.S.E.	22½	
18. 17½	18. 18	E.S.E.	E.		22½
19. 6	19. 6½	E.	E.S.E.	22½	
19. 10	19. 10¼	E.S.E.	E.		22½
19. 12½	19. 13	E.	E.S.E.	22½	
19. 18½	19. 21	E.S.E.	E.		22½
20. 1½	20. 2	E.	E.S.E.	22½	
20. 7½	20. 8	E.S.E.	S.E.	22½	
20. 10½	20. 12½	S.E.	S.W.	90	
20. 13½	20. 14¼	S.W.	W.S.W.	22½	
20. 16	20. 16¼	W.S.W.	W.	22½	
20. 18	20. 18¼	W.	N.W.	45	
20. 22	21. 0½	N.W.	W.S.W.		67½
22. 19¾	22. 20	W.S.W.	S.W.		22½
23. 15½	23. 16	S.W.	W.S.W.	22½	
23. 23	23. 23¾	W.S.W.	S.S.W.		45
24. 5¼	24. 5½	S.S.W.	S.E.		67½
24. 7½	24. 9½	S.E.	S.W.	90	
25. 2	25. 3½	S.W.	S.S.E.		67½
25. 7	25. 7¼	S.S.E.	E.N.E.		90
July—*cont.*					
d h	d h				
25. 9½	25. 10	E.N.E.	E.	22½	
25. 11½	25. 12¼	E.	E.N.E.		22½
25. 13½	25. 14½	E.N.E.	E.S.E.	45	
25. 18½	25. 19¼	E.S.E.	S.S.E.	45	
25. 20½	25. 20¾	S.S.E.	S.W.	67½	
26. 13½	26. 13¾	S.W.	W.S.W.	22½	
26. 15¾	26. 16	W.S.W.	S.W.		22½
26. 20	26. 21	S.W.	N.E.		180
27. 9½	27. 10	N.E.	N.N.E.		22½
27. 12	27. 13	N.N.E.	W.N.W.		90
27. 17¼	27. 17½	W.N.W.	W.		22½
28. 4	28. 4¼	W.	W.S.W.		22½
28. 11¼	28. 11¾	W.S.W.	W.	22½	
28. 19¼	28. 19½	W.	W.N.W.	22½	
28. 20¼	28. 20½	W.N.W.	W.S.W.		45
29. 3¼	29. 3½	W.S.W.	S.S.W.		45
29. 12¾	29. 13½	S.S.W.	S.W.	22½	
29. 18½	29. 20	S.W.	S.		45
30. 1	30. 3½	S.	E.		90
30. 5¼	30. 5½	E.	S.S.E.	67½	
30. 7¼	30. 8	S.S.E.	W.S.W.	90	
30. 10	30. 10¼	W.S.W.	S.S.W.		45
30. 11	30. 11½	S.S.W.	S.		22½
30. 12¾	30. 14½	S.	S.W.	45	
31. 2½	31. 3	S.W.	W.S.W.	22½	
31. 7½	31. 8	W.S.W.	W.	22½	
31. 10½	31. 10¾	W.	W.S.W.		22½
31. 18½	31. 19	W.S.W.	S.W.		22½
			Sums	2430	1710
August.					
1. 1	1. 2	S.W.	W.S.W.	22½	
1. 8	1. 8½	W.S.W.	W.	22½	
1. 11¾	1. 12¼	W.	S.W.		45
2. 7¾	2. 8¼	S.W.	N.E.		180
2. 9¼	2. 9½	N.E.	S.E.	90	
2. 11½	2. 11¾	S.E.	S.	45	
2. 13	2. 13¼	S.	S.S.E.		22½
2. 16¼	2. 16½	S.S.E.	S.	22½	
3. 19	3. 20	S.	S.E.		45
4. 8¼	4. 8½	S.E.	S.S.W.	67½	
4. 11¾	4. 12	S.S.W.	S.W.	22½	
4. 13½	4. 14	S.W.	W.	45	
4. 17½	4. 19¾	W.	S.S.W.		67½
4. 21¼	4. 21½	S.S.W.	W.S.W.	45	
5. 7¾	5. 8½	W.S.W.	W.	22½	
5. 12	5. 12¼	W.	W.S.W.		22½
5. 22½	5. 23	W.S.W.	S.W.		22½
6. 11½	6. 12¼	S.W.	W.S.W.	22½	
6. 18	6. 18½	W.S.W.	W.	22½	
6. 23½	7. 0	W.	W.S.W.		22½
7. 8	7. 8¼	W.S.W.	W.	22½	
7. 11¼	7. 11½	W.	N.W.	45	
Aug.—*cont.*					
d h	d h				
7. 16½	7. 16¾	N.W.	W.N.W.		22½
7. 19¾	7. 20	W.N.W.	W.S.W.		45
8. 2¾	8. 3¼	W.S.W.	N.N.E.	135	
8. 4¾	8. 5	N.N.E.	N.E.	22½	
8. 8½	8. 9	N.E.	N.		45
8. 14¼	8. 14½	N.	N.N.E.	22½	
8. 16¼	8. 16½	N.N.E.	N.W.		67½
8. 19	8. 20½	N.W.	N.N.E.	67½	
8. 21¾	8. 22	N.N.E.	E.N.E.	45	
9. 0	9. 0½	E.N.E.	N.N.E.		45
9. 3¾	9. 4	N.N.E.	N.		22½
9. 6¾	9. 7	N.	N.N.E.	22½	
9. 9¼	9. 10¾	N.N.E.	N.W.		67½
9. 14¼	9. 14½	N.W.	N.N.W.	22½	
9. 16½	9. 19¼	N.N.W.	N.N.E.	45	
9. 22	9. 23¼	N.N.E.	W.S.W.	225	
10. 0¾	10. 1	W.S.W.	N.	112½	
10. 9½	10. 10	N.	N.W.		45
10. 14¼	10. 15	N.W.	W.S.W.		67½
10. 16¼	10. 17	W.S.W.	N.W.	67½	
10. 20½	10. 23	N.W.	S.W.		90
11. 4¼	11. 4½	S.W.	S.S.W.		22½
11. 7½	11. 8½	S.S.W.	S.W.	22½	
11. 11	11. 12¼	S.W.	W.	45	
12. 7¾	12. 8	W.	W.N.W	22½	
12. 19¼	12. 20¾	W.N.W.	W.S.W.		45
13. 7¾	13. 8	W.S.W.	S.W.		22½
13. 20½	13. 21	S.W.	S.S.W.		22½
14. 2½	14. 3½	S.S.W.	S.W.	22½	
14. 8½	14. 9	S.W.	W.S.W.	22½	
15. 12	15. 12½	W.S.W.	W.	22½	
15. 19¼	15. 20¾	W.	W.S.W.		22½
16. 9¼	16. 11	W.S.W.	W.	22½	
16. 12	16. 12¼	W.	W.S.W.		22½
16. 16	16. 16¼	W.S.W.	S.W.		22½
17. 4	17. 4½	S.W.	S.S.W.		22½
17. 6¾	17. 7	S.S.W.	S.		22½
17. 9½	17. 10¼	S.	S.E.		45
17. 11¼	17. 11½	S.E.	S.	45	
17. 12½	17. 13½	S.	S.W.	45	
17. 16	17. 16½	S.W.	W.S.W.	22½	
17. 19½	17. 19¾	W.S.W.	W.	22½	
17. 22¼	17. 22½	W.	W.S.W.		22½
18. 2	18. 2½	W.S.W.	W.	22½	
18. 6	18. 9	W.	N.N.W.	67½	
18. 12	18. 12¼	N.N.W.	N.W.		22½
18. 15¾	18. 17½	N.W.	W.		45
18. 23¼	19. 1	W.	W.S.W.		22½
19. 6	19. 7	W.S.W.	W.	22½	
19. 10	19. 10½	W.	W.N.W.	22½	
19. 19¾	19. 20	W.N.W.	N.N.W.	45	
19. 23½	19. 23¾	N.N.W.	W.S.W.		90
20. 8¼	20. 9½	W.S.W.	N.	112½	
20. 16	20. 17	N.	E.		270
20. 19½	20. 20½	E.	S.S.W.	112½	
20. 21¾	20. 23¼	S.S.W.	N.E.	202½	
21. 15¼	21. 15½	N.E.	E.	45	
21. 18	21. 18¼	E.	N.N.E.		67½
21. 21	21. 22½	N.N.E.	S.E.	112½	

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				
22. 6¾	22. 7	S.E.	S.	45	
22. 9½	22. 9¾	S.	S.S.E.		22½
22. 12¾	22. 14¼	S.S.E.	S.W.	67½	
22. 16½	22. 16¾	S.W.	N.E.		180
22. 22	22. 22½	N.E.	N.N.E.		22½
23. 7½	23. 7¾	N.N.E.	N.E.	22½	
23. 9¾	23. 10	N.E.	N.N.E.		22½
23. 12¼	23. 12½	N.N.E.	N.E.	22½	
23. 14¼	23. 14¾	N.E.	E.N.E.	22½	
23. 16½	23. 16¾	E.N.E.	N.E.		22½
24. 0	24. 0½	N.E.	N.N.E.		22½
24. 19	24. 20	N.N.E.	N.		22½
25. 6	25. 6½	N.	W.		90
25. 7¾	25. 8	W.	N.	90	
25. 10	25. 10¼	N.	N.N.E.	22½	
25. 12¾	25. 13	N.N.E.	W.N.W.		90
25. 14¾	25. 16¼	W.N.W.	S.W.		67½
26. 8½	26. 9¼	S.W.	W.S.W.	22½	
26. 16¼	26. 16½	W.S.W.	W.	22½	
27. 0¾	27. 1½	W.	W.S.W.		22½
27. 6½	27. 7¼	W.S.W.	W.	22½	
27. 9¾	27. 10¼	W.	W.N.W.	22½	
27. 14¼	27. 15	W.N.W.	N.N.W.	45	
27. 19¾	27. 20	N.N.W.	S.		157½
28. 0	28. 0¼	S.	S.W.	45	
28. 5	28. 5¼	S.W.	E.S.E.		112½
28. 7¾	28. 8	E.S.E.	S.E.	22½	
29. 2½	29. 2¾	S.E.	E.		45
29. 6¾	29. 7	E.	S.E.	45	
29. 14¾	29. 15	S.E.	E.S.E.		22½
29. 18¼	29. 19	E.S.E.	E.		22½
30. 8	30. 8¼	E.	E.S.E.	22½	
30. 10	30. 12	E.S.E.	S.	67½	
30. 13½	30. 16¼	S.	W.S.W.	67½	
30. 23¼	30. 23½	W.S.W.	S.W.		22½
31. 3½	31. 3¾	S.W.	W.S.W.	22½	
31. 12	31. 12½	W.S.W.	W.	22½	
31. 19	31. 19¼	W.	N.N.W.	67½	
31. 20¾	31. 23	N.N.W.	W.N.W.		45
			Sums	3195	2767½
September.					
1. 4	1. 8½	W.N.W.	N.	67½	
1. 13	1. 13¾	N.	N.W.		45
1. 17	1. 17¼	N.W.	N.N.W.	22½	
1. 23½	1. 23¾	N.N.W.	W.N.W.		45
2. 0¾	2. 2¾	W.N.W.	W.S.W.		45
2. 6¼	2. 6½	W.S.W.	S.W.		22½
2. 7	2. 7¼	S.W.	W.	45	
2. 9	2. 9½	W.	W.S.W.		22½
2. 11	2. 11¼	W.S.W.	W.	22½	
2. 14	2. 14½	W.	W.S.W.		22½
2. 16	2. 18	W.S.W.	S.W.		22½
Sept.—*cont.*					
3. 13½	3. 13¾	S.W.	N.N.W.	112½	
4. 2¼	4. 2¾	N.N.W.	W.S.W.		90
4. 7½	4. 9	W.S.W.	S.E.		112½
4. 10½	4. 12	S.E.	S.S.W.	67½	
4. 12¾	4. 13	S.S.W.	S.W.	22½	
4. 17	4. 18	S.W.	S.		45
5. 9	5. 9½	S.	S.S.W.	22½	
5. 12	5. 12¼	S.S.W.	S.W.	22½	
5. 15	5. 16¼	S.W.	S.S.E.		67½
6. 1¼	6. 2½	S.S.E.	S.S.W.	45	
6. 6	6. 7½	S.S.W.	W.S.W.	45	
6. 11½	6. 13½	W.S.W.	S.S.W.		45
7. 0¼	7. 3½	S.S.W.	W.S.W.	45	
7. 9	7. 10¼	W.S.W.	W.	22½	
7. 16½	7. 17	W.	N.W.	45	
7. 17¾	7. 18¾	N.W.	S.W.		90
7. 20½	7. 20¾	S.W.	W.S.W.	22½	
7. 22½	7. 23¼	W.S.W.	S.W.		22½
8. 5	8. 5¼	S.W.	S.S.W.		22½
8. 20¾	8. 21½	S.S.W.	S.W.	22½	
8. 23½	9. 1	S.W.	W.S.W.	22½	
9. 9½	9. 10½	W.S.W.	W.N.W.	45	
9. 12	9. 12½	W.N.W.	W.		22½
9. 20¾	9. 22	W.	W.S.W.		22½
10. 8	10. 10½	W.S.W.	N.W.	67½	
10. 16¾	10. 17¼	N.W.	W.N.W.		22½
10. 18¾	10. 19	W.N.W.	W.S.W.		45
10. 21½	10. 21¾	W.S.W.	W.N.W.	45	
10. 23	11. 0¼	W.N.W.	N.N.E.	90	
11. 2	11. 2½	N.N.E.	N.		22½
11. 7	11. 9¼	N.	N.E.	45	
11. 12	11. 13¾	N.E.	E.S.E.	67½	
11. 18	11. 20½	E.S.E.	E.		22½
12. 3¾	12. 4¼	E.	E.S.E.	22½	
12. 15	12. 16¾	E.S.E.	S.S.E.	45	
12. 21½	13. 0¼	S.S.E.	S.S.W.	45	
13. 3	13. 3¼	S.S.W.	W.S.W.	45	
13. 7½	13. 8	W.S.W.	W.	22½	
13. 9¼	13. 9½	W.	W.N.W.	22½	
13. 11½	13. 11¾	W.N.W.	W.		22½
13. 15¾	13. 16¼	W.	W.S.W.		22½
13. 23	13. 23½	W.S.W.	S.W.		22½
14. 1½	14. 2	S.W.	S.S.W.		22½
14. 5½	14. 6¼	S.S.W.	S.S.E.	45	
14. 11½	14. 11¾	S.S.E.	S.E.	22½	
14. 15½	14. 16¼	S.E.	S.S.E.		22½
14. 17½	14. 18	S.S.E.	S.S.W.	45	
14. 21¼	14. 22½	S.S.W.	W.S.W.	45	
15. 0½	15. 2	W.S.W.	N.N.E.	135	
15. 11½	15. 12	N.N.E.	N.		22½
15. 15	15. 15½	N.	S.E.	135	
15. 20¼	15. 21½	S.E.	S.	45	
16. 5	16. 5½	S.	N.E.		135
16. 8½	16. 8¾	N.E.	S.S.E.	112½	
16. 11¼	16. 11½	S.S.E.	S.E.		22½
16. 15¼	16. 15½	S.E.	E.S.E.		22½
20. 11½	20. 12	E.S.E.	E.		22½
20. 17½	21. 19¾	E.	E.N.E.		22½
22. 10½	22. 11¼	E.N.E.	N.E.		22½
Sept.—*cont.*					
22. 15¾	22. 16	N.E.	N.N.E.		22½
22. 22½	22. 22¾	N.N.E.	N.E.	22½	
23. 12	23. 12½	N.E.	E.N.E.	22½	
23. 14¾	23. 15¼	E.N.E.	N.E.		22½
23. 19½	23. 19¾	N.E.	N.N.E.		22½
24. 7¼	24. 7½	N.N.E.	N.E.	22½	
24. 12½	24. 12¾	N.E.	E.	45	
24. 14	24. 15¼	E.	N.N.E.		67½
24. 16¼	24. 17	N.N.E.	E.N.E.	45	
24. 18	24. 18½	E.N.E.	N.E.		22½
24. 20¾	24. 21¼	N.E.	N.N.E.		22½
25. 11¾	25. 12	N.N.E.	S.E.		247½
25. 13¼	25. 13½	S.E.	S.W.	90	
25. 15	25. 15¼	S.W.	W.S.W.	22½	
25. 16¾	25. 17	W.S.W.	N.N.E.	135	
25. 18¾	25. 19	N.N.E.	E.N.E.	45	
25. 19½	25. 20	E.N.E.	W.S.W.	180	
26. 11¼	26. 11½	W.S.W.	S.W.		22½
26. 14¾	26. 15	S.W.	S.S.W.		22½
27. 1¼	27. 2¼	S.S.W.	S.E.		67½
27. 3¼	27. 3½	S.E.	N.E.		90
27. 6½	27. 7	N.E.	S.S.W.	157½	
27. 9½	27. 10	S.S.W.	N.E.		157½
27. 12¼	27. 12½	N.E.	E.S.E.	67½	
28. 9¾	28. 10	E.S.E.	E.N.E.		45
28. 13½	28. 14½	E.N.E.	E.S.E.	45	
28. 20¼	28. 21¼	E.S.E.	N.E.		67½
29. 2¼	29. 2½	N.E.	N.N.E.		22½
29. 17½	29. 18	N.N.E.	N.		22½
29. 20½	29. 21¼	N.	N.N.E.	22½	
29. 22¾	30. 1	N.N.E.	W.S.W.	225	
30. 10¾	30. 11	W.S.W.	S.W.		22½
30. 17½	30. 19½	S.W.	S.S.W.		22½
			Sums	2925	2295
October.					
1. 4	1. 6	S.S.W.	S.W.	22½	
1. 9½	1. 11¼	S.W.	N.N.W.	112½	
1. 17	1. 17¼	N.N.W.	N.W.		22½
1. 20	1. 23	N.W.	W.S.W.		67½
2. 10¼	2. 11	W.S.W.	S.W.		22½
2. 12¼	2. 12½	S.W.	N.N.E.	157½	
2. 14¾	2. 16½	N.N.E.	E.N.E.	45	
3. 14¾	3. 17¼	E.N.E.	E.S.E.	45	
3. 19¾	3. 21	E.S.E.	E.N.E.		45
4. 4½	4. 4¾	E.N.E.	N.		67½
4. 9	4. 9¾	N.	S.W.	225	
4. 12½	4. 13¾	S.W.	W.S.W.		22½
5. 6½	5. 9¾	W.S.W.	W.		22½
5. 12½	5. 14½	W.	S.W.		45
5. 22¼	6. 0	S.W.	W.S.W.	22½	
6. 2	6. 2¾	W.S.W.	W.	22½	
6. 6½	6. 7	W.	W.N.W.	22½	

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.
				°	°
Oct.—*cont.*					
d h	d h				
6. 16½	6. 17¼	W.N.W.	W.		22½
6. 19¼	6. 21	W.	W.S.W.		22½
7. 2¼	7. 6½	W.S.W.	N.		247½
7. 18	7. 20¼	N.	N.W.		45
7. 22¼	7. 22¾	N.W.	W.		45
8. 8¾	8. 10¼	W.	N.N.W.	67½	
8. 15¼	8. 16¼	N.N.W.	N.	22½	
8. 18¼	8. 19	N.	N.N.W.		22½
9. 0¾	9. 1¼	N.N.W.	W.S.W.		90
9. 17½	9. 17¾	W.S.W.	S.W.		22½
11. 7	11. 7¼	S.W.	S.		45
11. 10¼	11. 10½	S.	N.N.E.	202½	
11. 10¾	11. 11	N.N.E.	E.S.E.	90	
11. 21	11. 21½	E.S.E.	S.W.	112½	
12. 0¼	12. 1½	S.W.	N.N.W.	112½	
12. 5¼	12. 6¼	N.N.W.	N.	22½	
12. 7¾	12. 8	N.	N.N.E.	22½	
12. 16	12. 16¾	N.N.E.	N.E.	22½	
13. 9	13. 9¼	N.E.	E.N.E.	22½	
13. 10½	13. 11¼	E.N.E.	E.S.E.	45	
13. 19½	13. 20½	E.S.E.	E.		22½
14. 8¼	14. 9	E.	E.S.E.	22½	
14. 16½	14. 18	E.S.E.	E.		22½
15. 9½	15. 9¾	E.	E.S.E.	22½	
15. 17¼	15. 17½	E.S.E.	S.E.	22½	
16. 10½	16. 11¾	S.E.	W.S.W.	112½	
16. 16	16. 18	W.S.W.	S.W.		22½
17. 9	17. 11½	S.W.	W.S.W.	22½	
18. 7½	18. 8¾	W.S.W.	W.	22½	
18. 19	18. 20½	W.	W.S.W.		22½
19. 7¼	19. 8¼	W.S.W.	N.N.E.		225
19. 10¼	19. 10½	N.N.E.	W.		112½
19. 11½	19. 11¾	W.	W.S.W.		22½
19. 16	19. 16½	W.S.W.	S.W.		22½
19. 17¾	19. 18	S.W.	S.		45
19. 23¼	19. 23½	S.	E.		90
20. 0½	20. 1¼	E.	N.E.		45
20. 3½	20. 3¾	N.E.	S.S.W.	157½	
20. 5¾	20. 6	S.S.W.	E.		112½
20. 7½	20. 7¾	E.	S.E.	45	
20. 14¾	20. 15	S.E.	E.N.E.		67½
20. 15¾	20. 16	E.N.E.	S.E.	67½	
20. 23¾	21. 0¼	S.E.	E.N.E.		67½
21. 1	21. 2¼	E.N.E.	S.E.	67½	
21. 5¼	21. 5½	S.E.	S.S.E.	22½	
21. 9½	21. 10	S.S.E.	W.S.W.	90	
21. 18	21. 19	W.S.W.	S.W.		22½
22. 5½	22. 5¾	S.W.	W.N.W.	67½	
22. 8½	22. 8¾	W.N.W.	N.N.W.	45	
22. 13	22. 14	N.N.W.	W.S.W.		90
22. 16	22. 16½	W.S.W.	S.E.		112½
22. 18¼	22. 18½	S.E.	S.S.E.	22½	
22. 21¾	22. 22	S.S.E.	E.S.E.		45
23. 6	23. 10¾	E.S.E.	S.	67½	
23. 12¼	23. 13¾	S.	S.E.		45
24. 3½	24. 3¾	S.E.	W.S.W.	112½	
24. 5¼	24. 6½	W.S.W.	N.	112½	
24. 9	24. 9¼	N.	N.N.E.	22½	
24. 10¾	24. 11	N.N.E.	S.W.		157½
Oct.—*cont.*					
d h	d h				
24. 12¾	24. 13	S.W.	W.S.W.	22½	
24. 21½	24. 21¾	W.S.W.	N.	112½	
25. 3¾	25. 5½	N.	N.W.		45
25. 6¾	25. 8	N.W.	N.N.W.	22½	
25. 9½	25. 9¾	N.N.W.	W.S.W.		90
25. 10½	25. 10¾	W.S.W.	N.W.	67½	
25. 15¾	25. 16	N.W.	W.N.W.		22½
25. 17	25. 19½	W.N.W.	W.S.W.		45
26. 5¾	26. 6¾	W.S.W.	W.N.W.	45	
26. 8½	26. 8¾	W.N.W.	N.W.	22½	
26. 13½	26. 13¾	N.W.	W.N.W.		22½
26. 17	26. 17½	W.N.W.	N.N.W.	45	
26. 19½	26. 19¾	N.N.W.	W.		67½
26. 21	26. 21½	W.	N.N.W.	67½	
26. 22¾	26. 23	N.N.W.	N.	22½	
27. 2¾	27. 3¾	N.	S.W.		135
27. 5	27. 5¼	S.W.	S.E.		90
28. 12½	28. 13½	S.E.	E.S.E.		22½
28. 18½	28. 18¾	E.S.E.	E.		22½
28. 23¼	29. 0	E.	E.N.E.		22½
29. 9¼	29. 9½	E.N.E.	E.	22½	
29. 11	29. 11½	E.	E.N.E.		22½
29. 16	29. 16½	E.N.E.	N.E.		22½
29. 23½	30. 0¼	N.E.	E.	45	
30. 15¼	30. 15½	E.	E.N.E.		22½
30. 19¾	30. 20½	E.N.E.	N.E.		22½
			Sums	3082½	2880
November.					
2. 16	2. 16¾	N.E.	N.N.E.		22½
2. 18½	2. 18¾	N.N.E.	N.		22½
2. 23½	2. 23¾	N.	N.N.W.		22½
3. 0¼	3. 0½	N.N.W.	W.N.W.		45
3. 1¾	3. 2	W.N.W.	W.S.W.		45
3. 13½	3. 13¾	W.S.W.	W.	22½	
3. 15	3. 16	W.	W.S.W.		22½
4. 11	4. 13	W.S.W.	W.	22½	
4. 18	4. 19	W.	W.S.W.		22½
5. 10	5. 10¾	W.S.W.	W.	22½	
5. 17	5. 18	W.	W.S.W.		22½
5. 19½	5. 19¾	W.S.W.	W.	22½	
6. 2	6. 2¾	W.	W.S.W.		22½
6. 9½	6. 9¾	W.S.W.	W.	22½	
6. 14	6. 14¼	W.	W.N.W.	22½	
6. 19	6. 19¼	W.N.W.	S.W.		67½
6. 20¾	6. 21	S.W.	S.S.E.		67½
6. 23¼	6. 23½	S.S.E.	E.S.E.		45
7. 1½	7. 1¾	E.S.E.	S.S.E.	45	
7. 3	7. 3¼	S.S.E.	S.W.	67½	
7. 5	7. 6	S.W.	S.S.W.		22½
7. 17	7. 18	S.S.W.	S.W.	22½	
7. 19½	7. 20¼	S.W.	N.N.W.	112½	
8. 0	8. 0½	N.N.W.	N.W.		22½
Nov.—*cont.*					
d h	d h				
8. 1¾	8. 5	N.W.	W.		45
8. 10	8. 10¼	W.	W.N.W.	22½	
8. 15½	8. 18	W.N.W.	W.S.W.		45
9. 6½	9. 7	W.S.W.	W.	22½	
9. 15	9. 18¼	W.	W.S.W.		22½
9. 20	9. 22¾	W.S.W.	W.N.W.	45	
10. 1½	10. 2¾	W.N.W.	N.N.W.	45	
10. 6½	10. 8½	N.N.W.	N.N.E.	45	
10. 11¾	10. 13	N.N.E.	S.E.	112½	
10. 19¾	10. 20½	S.E.	S.S.E.	22½	
11. 3¼	11. 4¼	S.S.E.	S.	22½	
11. 5½	11. 6¾	S.	W.		270
11. 9	11. 9¼	W.	W.S.W.		22½
11. 11	11. 11¼	W.S.W.	W.	22½	
12. 14	12. 14½	W.	N.W.	45	
12. 16	12. 16¼	N.W.	N.N.W.	22½	
12. 18¼	12. 18¾	N.N.W.	S.W.		112½
13. 1¼	13. 2½	S.W.	S.		45
13. 6½	13. 6¾	S.	E.N.E.		112½
13. 11½	13. 12¼	E.N.E.	S.E.	67½	
13. 14¾	13. 15	S.E.	S.S.E.	22½	
13. 19¾	13. 20	S.S.E.	E.		67½
14. 0½	14. 0¾	E.	E.N.E.		22½
14. 5	14. 5½	E.N.E.	N.E.		22½
14. 12¼	14. 13	N.E.	S.E.	90	
14. 15½	14. 15¾	S.E.	E.S.E.		22½
14. 18	14. 19	E.S.E.	S.E.	22½	
15. 8½	15. 8¾	S.E.	N.N.W.		157½
15. 10¾	15. 11¼	N.N.W.	S.W.		112½
15. 15	15. 16	S.W.	S.S.W.		22½
15. 19	15. 19½	S.S.W.	S.W.	22½	
15. 22½	15. 22¾	S.W.	W.S.W.	22½	
16. 7½	16. 8¼	W.S.W.	W.	22½	
16. 10½	16. 11½	W.	N.N.E.	112½	
17. 9½	17. 10¾	N.N.E.	N.		22½
17. 14	17. 14¼	N.	S.S.W.		157½
17. 18¼	17. 18½	S.S.W.	W.S.W.	45	
19. 18½	19. 19	W.S.W.	N.W.	67½	
19. 22	19. 22½	N.W.	N.N.W.	22½	
20. 1	20. 1¼	N.N.W.	W.		67½
20. 4½	20. 5½	W.	W.S.W.		22½
20. 8	20. 8¼	W.S.W.	W.	22½	
20. 16½	20. 16¾	W.	W.N.W.	22½	
20. 20¾	20. 21½	W.N.W.	W.S.W.		45
21. 14	21. 14½	W.S.W.	S.W.		22½
21. 15¾	21. 16½	S.W.	S.S.W.		22½
21. 18	21. 19¾	S.S.W.	W.S.W.	45	
21. 23¼	21. 23¾	W.S.W.	W.	22½	
22. 11	22. 12½	W.	W.N.W.	22½	
22. 22¾	23. 0	W.N.W.	W.		22½
23. 16¼	23. 17¼	W.	W.S.W.		22½
23. 18¾	23. 19¼	W.S.W.	W.	22½	
23. 21¼	23. 21¾	W.	N.W.	45	
24. 1	24. 1¾	N.W.	N.	45	
24. 5½	24. 5¾	N.	W.N.W.		67½
24. 7¾	24. 8¼	W.N.W	N.	67½	
24. 9¾	24. 10	N.	W.S.W.		112½
24. 12	24. 12¼	W.S.W.	N.N.W.	90	
24. 13	24. 13½	N.N.W.	W.S.W.		90

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

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. 17¼	24. 17¾	W.S.W.	N.N.W.	90	
25. 11½	25. 13¼	N.N.W.	N.	22½	
25. 16¼	25. 17¾	N.	N.N.W.		22½
25. 22	25. 22¼	N.N.W.	W.S.W.		90
26. 1½	26. 1¾	W.S.W.	N.W.	67½	
26. 4½	26. 4¾	N.W.	N.	45	
26. 12¼	26. 12½	N.	W.S.W.		112½
27. 2	27. 3¾	W.S.W.	W.	22½	
27. 18	27. 18¾	W.	W.S.W.		22½
28. 12½	28. 12¾	W.S.W.	N.N.W.	90	
29. 2½	29. 4	N.N.W.	S.W.		112½
29. 10	29. 10¼	S.W.	W.S.W.	22½	
29. 14¼	29. 14¾	W.S.W.	W.	22½	
29. 17½	29. 18¼	W.	W.S.W.		22½
			Sums	2115	2632½
December.					
1. 7½	1. 8½	W.S.W.	W.	22½	
1. 13¼	1. 14¼	W.	W.S.W.		22½
1. 22½	2. 0	W.S.W.	S.W.		22½
2. 11	2. 12	S.W.	W.S.W.	22½	
2. 14¼	2. 16	W.S.W.	S.W.		22½
2. 23	2. 23½	S.W.	S.S.W.		22½
3. 4¼	3. 4½	S.S.W.	W.S.W.	45	
3. 7	3. 7½	W.S.W.	W.N.W.	45	
3. 9¼	3. 9½	W.N.W.	W.S.W.		45
3. 14	3. 15	W.S.W.	S.W.		22½
5. 2	5. 2½	S.W.	W.S.W.	22½	
5. 12¼	5. 14¾	W.S.W.	S.W.		22½
6. 9½	6. 9¾	S.W.	W.S.W.	22½	
6. 12½	6. 13	W.S.W.	N.W.	67½	
6. 14	6. 15¼	N.W.	E.N.E.		247½
6. 15¾	6. 17	E.N.E.	N.N.W.		90
6. 19	6. 19½	N.N.W.	W.S.W.		90
7. 9	7. 9½	W.S.W.	S.W.		22½
7. 12	7. 12¼	S.W.	W.S.W.	22½	
8. 4	8. 6¼	W.S.W.	N.W.	67½	
8. 9½	8. 10¼	N.W.	N.N.W.	22½	
8. 16½	8. 18¼	N.N.W.	W.S.W.		90
8. 20¼	8. 20½	W.S.W.	S.W.		22½
8. 23	9. 2½	S.W.	E.S.E.		112½
Dec.—*cont.*					
d h	d h				
9. 4½	9. 5½	E.S.E.	S.E.	22½	
9. 16	9. 16¾	S.E.	S.S.E.	22½	
10. 6	10. 7½	S.S.E.	S.W.	67½	
10. 10¾	10. 11	S.W.	W.S.W.	22½	
10. 11¾	10. 13	W.S.W.	N.	112½	
11. 0¼	11. 1¾	N.	N.W.		45
11. 5	11. 5½	N.W.	W.S.W.		67½
11. 12½	11. 14	W.S.W.	S.W.		22½
11. 16¾	11. 18¼	S.W.	S.S.E.		67½
11. 19¾	11. 22¼	S.S.E.	S.S.W.	45	
12. 3½	12. 4	S.S.W.	S.W.	22½	
12. 5¾	12. 6	S.W.	W.	45	
12. 11½	12. 12	W.	W.S.W.		22½
12. 13¾	12. 15¾	W.S.W.	E.N.E.		180
12. 17	12. 17½	E.N.E.	N.E.		22½
12. 18¾	12. 20	N.E.	N.		45
12. 22	13. 0½	N.	W.		90
13. 2½	13. 2¾	W.	N.W.	45	
13. 3¾	13. 4¾	N.W.	N.	45	
13. 6½	13. 7¾	N.	N.W.		45
13. 8½	13. 9¼	N.W.	N.N.W.	22½	
13. 14	13. 16	N.N.W.	N.W.		22½
13. 20¾	13. 21	N.W.	W.N.W.		22½
13. 22¼	13. 22¾	W.N.W.	S.W.		67½
14. 3½	14. 3¾	S.W.	S.		45
14. 6½	14. 7½	S.	S.S.E.		22½
14. 8¾	14. 9	S.S.E.	S.S.W.	45	
14. 10	14. 10¾	S.S.W.	S.		22½
14. 14¾	14. 15¾	S.	W.	90	
14. 17	14. 17¼	W.	W.N.W.	22½	
14. 18½	14. 19	W.N.W.	W.		22½
14. 21	14. 22¼	W.	W.S.W.		22½
15. 15¾	15. 16	W.S.W.	S.W.		22½
15. 19½	15. 20½	S.W.	S.S.W.		22½
16. 2¼	16. 2½	S.S.W.	S.W.	22½	
16. 9½	16. 10	S.W.	W.S.W.	22½	
16. 19	16. 21	W.S.W.	S.W.		22½
17. 4	17. 4½	S.W.	W.S.W.	22½	
17. 9	17. 10	W.S.W.	S.W.		22½
18. 8	18. 8¼	S.W.	W.S.W.	22½	
18. 10¼	18. 10¾	W.S.W.	N.N.E.	135	
18. 19½	18. 19¾	N.N.E.	E.S.E.	90	
20. 0	20. 0½	E.S.E.	E.		22½
20. 3½	20. 5	E.	E.N.E.		22½
20. 8¾	20. 9	E.N.E.	E.S.E.	45	
20. 22	20. 23	E.S.E.	S.E.	22½	
Dec.—*cont.*					
d h	d h				
21. 3	21. 3¾	S.E.	E.		45
21. 5¾	21. 6	E.	E.S.E.	22½	
21. 10	21. 10¼	E.S.E.	E.		22½
22. 3¾	22. 4	E.	E.S.E.	22½	
22. 7¾	22. 8	E.S.E.	S.W.	112½	
22. 12	22. 12½	S.W.	W.	45	
22. 14	22. 14¼	W.	W.S.W.		22½
22. 15¾	22. 16	W.S.W.	S.E.		112½
22. 17	22. 17¼	S.E.	E.S.E.		22½
22. 20¼	22. 21½	E.S.E.	S.	67½	
23. 0¾	23. 1	S.	S.W.	45	
23. 2¾	23. 4¼	S.W.	N.N.E.	157½	
23. 6	23. 6¼	N.N.E	S.W.	202½	
23. 10¾	23. 11	S.W.	W.S.W.	22½	
23. 11¾	23. 12¼	W.S.W.	N.W.	67½	
23. 13½	23. 13¾	N.W.	N.E.	90	
23. 22½	23. 22¾	N.E.	N.N.E.		22½
24. 2	24. 2¼	N.N.E.	W.S.W.	225	
24. 3½	24. 9	W.S.W.	E.S.E.	225	
24. 10¾	24. 11	E.S.E.	S.S.E.	45	
24. 14¾	24. 15	S.S.E.	E.N.E.		90
25. 1	25. 1¼	E.N.E.	N.W.	247½	
25. 2¼	25. 2½	N.W.	E.S.E.	157½	
25. 6¾	25. 7	E.S.E.	E.N.E.		45
25. 9¾	25. 10	E.N.E.	E.S.E.	45	
25. 12	25. 12¼	E.S.E.	E.		22½
25. 18½	25. 18¾	E.	N.E.		45
26. 1¼	26. 1½	N.E.	N.N.E.		22½
26. 6½	26. 7	N.N.E.	N.E.	22½	
26. 19½	26. 21	N.E.	E.N.E.	22½	
27. 1	27. 1¼	E.N.E.	N.E.		22½
27. 13¼	27. 13½	N.E.	E.	45	
27. 16¾	27. 17	E.	S.E.	45	
27. 18¼	27. 18½	S.E.	S.S.W.	67½	
28. 0	28. 0¼	S.S.W.	W.S.W.	45	
28. 3¾	28. 4	W.S.W.	S.W.		22½
28. 7	28. 9¼	S.W.	W.	45	
28. 15½	28. 16	W.	W.S.W.		22½
29. 4	29. 6	W.S.W.	W.	22½	
30. 7½	30. 8½	W.	N.W.	45	
31. 0	31. 1½	N.W.	N.N.W.	22½	
31. 10½	31. 11½	N.N.W.	N.	22½	
31. 22½	31. 23½	N.	N.E.	45	
			Sums	3622½	2385

Excess of Motion in each Month.

1904.	Direct. °	Retrograde. °
January	1260	
February		607½
March	1665	
April	382½	
May	1350	
June	1125	
July	720	
August	427½	
September	630	
October	202½	
November		517½
December	1237½	

The whole excess of direct motion for the year was 7875°.

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	1904.												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	12·5	14·9	10·4	13·4	8·3	9·6	7·1	8·0	7·6	8·7	9·5	10·1	10·0
2	12·8	14·6	10·2	12·9	8·0	9·2	7·1	8·1	7·1	8·3	10·0	10·0	9·9
3	12·3	14·2	10·5	12·7	8·2	9·6	7·5	8·0	7·7	8·5	10·1	10·1	10·0
4	12·5	14·0	10·8	13·2	7·7	8·8	8·0	7·5	7·5	8·4	10·4	10·4	9·9
5	12·5	13·7	10·5	13·3	7·9	8·9	7·4	7·7	7·0	8·1	10·6	10·9	9·9
6	12·6	14·3	10·5	13·2	7 9	8·7	8·0	8·0	7·2	8·4	10·2	11·3	10·0
7	12·7	15·2	10·5	13·5	8·5	9·4	8·2	8·0	7·0	8·5	10·2	10·8	10·2
8	12·6	14·4	10·9	13·4	9·2	10·2	8·5	8·5	7·5	8·3	9·8	10 6	10·3
9	12·6	14·5	11·2	15·1	9·9	10·8	9·1	10·0	8·3	8·2	9·9	11·3	10·9
10	13·3	15·2	12·5	17·1	10·6	12·2	9·8	10·2	9·7	9·6	10·2	11·0	11·8
11	13·5	16·1	12·5	16·7	11·0	11·8	10·5	10·7	10·1	10·6	10·8	12·0	12·2
Noon.	14·6	16·2	13·5	17·9	11·5	12·7	11·1	12·2	10·5	10·8	10·8	11·6	12·8
13h	15·3	16·0	13·2	18·5	12·5	12·3	11·5	11·9	11·6	10·9	12·2	11·1	13·1
14	15·1	16·3	13·1	17·9	14·2	12·9	12·9	12·6	11·9	11·3	12·1	11·5	13·5
15	14·5	16·2	14·3	18·0	13·8	13·5	13·0	13·1	12·4	11·3	11·9	11·1	13·6
16	13·3	16·6	13·9	18·2	13·3	13·2	13·4	12·6	11·9	10·8	11·3	10·6	13·3
17	12·5	15·6	13·5	18·3	13·2	12·9	12·5	12·7	12·0	10·5	11·5	11·2	13·0
18	13·1	15·1	12·8	16·7	12·8	12·2	12·5	12·3	10·5	9·3	10·8	10·9	12·4
19	13·4	15·0	11·9	15·3	11·0	12·2	11·3	12·2	9·1	9·3	10·9	11·3	11·9
20	13·6	15·4	12·0	14·4	11·1	11·8	10·2	10·3	8·6	9·6	11·3	10·7	11·6
21	13·4	15·3	12·1	13·7	11·0	11·2	9·6	9·8	8·9	9·4	11·4	10·9	11·4
22	12·5	15·3	11·1	13·0	10·4	11·7	8·7	9·2	8·5	8·7	11·2	10·8	10·9
23	12·7	14·6	11·0	13·1	9·5	11·2	8·0	8·5	8·4	8·4	11·1	10·6	10·6
Midnight.	12·7	14·2	10·5	13·1	9·0	10·4	7·3	8·1	7·8	7·9	10·7	10·6	10·2
Means.....	13·2	15·1	11·8	15·1	10·4	11·1	9·7	10·0	9·1	9·3	10·8	10·9	11·4
Greatest Hourly Measures.....	39	42	30	37	31	30	29	35	24	33	43	45	...
Least Hourly Measures.....	1	1	0	0	0	1	0	1	0	0	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.)

1904.

Days of the Month.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.
d												
1	...	+ 678	+1433	+ 983	+ 916	+ 171	+ 436	+ 394	+ 448	+ 451	+ 378	+ 190
2	+ 808	+ 121	+ 495	+ 880	+ 475	+ 511	+ 352	+ 460	+ 543	+ 375	+ 652	+ 190
3	+ 300	+ 220	+ 986	+ 546	+1248	+ 535	+ 337	+ 420	+ 530	+ 454	+ 556	+ 210
4	+ 660	+ 549	+ 818	+1006	+1305	+ 627	+ 598	+ 304	+ 524	+ 608	+ 459	+ 90
5	+ 747	+ 574	+ 918	+ 665	+ 685	+ 346	+ 467	+ 484	+ 387	+ 300	+ 726	+ 229
6	+1006	+ 610	+ 465	+ 784	+ 692	+ 558	+ 543	+ 391	+ 392	+ 792	+ 473	− 17
7	+ 545	+1022	+ 481	+1215	+ 768	+ 569	+ 500	+ 455	+ 607	+ 622	+ 85	+ 335
8	+ 641	+ 225	+ 665	+ 755	+ 438	+ 647	+ 581	+ 805	+ 400	+1019	+ 720	+ 599
9	+1062	+ 164	+ 779	+ 760	+ 488	+ 740	+ 445	+ 854	+ 691	+ 880	+ 92	...
10	...	+ 521	+ 914	+ 875	+ 528	+ 454	+ 283	+ 811	+ 838	+ 378	+ 326	...
11	+ 429	+ 992	+1034	+1077	+ 440	+ 502	+ 435	+ 391	+ 425	+ 256	+ 297	+ 426
12	...	+ 457	+ 458	...	+ 430	+ 351	+ 134	+ 716	+ 249	+ 571	+ 662	+ 228
13	...	+ 657	+ 647	+ 491	+ 452	+ 406	+ 518	+ 538	+ 479	+ 720	+ 591	+ 209
14	+ 245	+ 738	...	+ 688	+ 542	+ 356	+ 586	+ 155	+ 288	+ 665	+ 366	+ 298
15	+ 782	+1460	...	+ 905	+ 555	+ 346	+ 397	+ 329	+ 273	+ 650	+ 456	+ 822
16	+1158	+ 691	+ 624	+1345	+ 481	+ 352	+ 390	+ 479	+ 328	+ 700	+ 236	+ 346
17	+1101	+1055	+ 610	+ 813	+ 601	+ 408	+ 433	+ 248	+ 391	+ 167	...	+ 284
18	+ 485	+1636	+ 956	+ 974	+ 711	+ 795	+ 392	+ 634	+ 503	+ 205	+ 477	+ 450
19	+ 380	+1343	+ 450	+1034	+1148	+ 490	+ 400	+ 736	+ 548	...	+ 299	+ 992
20	+ 726	+ 404	+ ...	+1095	+ 490	+ 560	+ 343	+ 658	+ 637	+ 218	+ 474	+ 688
21	+ 435	+ 345	+ 502	+1207	+ 7	+1025	+ 492	+ 367	+ 715	...	+ 729	+ 304
22	+ 594	+ 986	+1077	+ 669	+ 240	+ 916	+ 579	+ 251	+ 843	+ 275	+1007	+ 347
23	...	+ 899	+1153	+ 902	+ 332	+ 978	+ 591	+ 694	+ 454	+ 95	+1169	+ 175
24	...	+1073	+1002	+ 964	+ 463	+ 497	+ 499	+ 937	+ 256	+ 123	+ 906	+ 721
25	...	+1090	+ 389	+1379	+ 480	+ 621	+ 499	+ 805	+ 522	+ 432	+ 647	+ 964
26	+ 408	+ 817	...	+1736	+ 353	+1457	+ 382	+ 571	+ 742	+ 517	+ 588	+ 677
27	+ 79	+1332	+ 317	+1581	+ 227	+ 858	+ 508	+ 753	+ 755	...	+ 840	+ 807
28	...	+1257	+ 657	+ 890	+ 281	+ 598	+ 442	+ 475	+ 582	...	+ 408	+ 518
29	+ 681	+1193	+ 493	+ 635	+ 297	+ 491	+ 509	+ 385	+ 625	+ 430	+ 392	+ 327
30	− 657		+ 652	+ 678	+ 168	+ 457	+ 332	+ 426	+ 705	...	...	+ 603
31	+ 249		+1298		+ 234		+ 329	+ 273		...		+ 250
Means	+ 559	+ 797	+ 751	+ 949	+ 531	+ 554	+ 443	+ 523	+ 523	+ 476	+ 536	+ 457

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.	1904.												Yearly Means.
	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	
Midnight.	+ 503	+ 678	+ 692	+1012	+ 606	+ 574	+ 597	+ 575	+ 531	+ 461	+ 412	+ 420	+ 588
1h	+ 528	+ 620	+ 706	+ 940	+ 575	+ 519	+ 495	+ 531	+ 492	+ 439	+ 516	+ 382	+ 562
2	+ 518	+ 646	+ 678	+ 791	+ 549	+ 481	+ 495	+ 497	+ 460	+ 386	+ 499	+ 395	+ 533
3	+ 489	+ 622	+ 634	+ 612	+ 504	+ 478	+ 449	+ 473	+ 399	+ 382	+ 455	+ 343	+ 487
4	+ 502	+ 603	+ 597	+ 713	+ 471	+ 462	+ 430	+ 444	+ 407	+ 363	+ 468	+ 292	+ 479
5	+ 453	+ 635	+ 561	+ 581	+ 401	+ 467	+ 406	+ 447	+ 432	+ 344	+ 456	+ 320	+ 459
6	+ 359	+ 639	+ 544	+ 571	+ 401	+ 512	+ 456	+ 436	+ 408	+ 326	+ 429	+ 331	+ 451
7	+ 360	+ 799	+ 607	+ 813	+ 463	+ 527	+ 450	+ 461	+ 370	+ 289	+ 417	+ 325	+ 490
8	+ 490	+ 880	+ 753	+ 937	+ 472	+ 552	+ 420	+ 434	+ 399	+ 325	+ 439	+ 308	+ 534
9	+ 645	+ 980	+ 950	+ 990	+ 524	+ 547	+ 398	+ 487	+ 503	+ 368	+ 465	+ 352	+ 601
10	+ 669	+1078	+1051	+1113	+ 541	+ 642	+ 434	+ 620	+ 610	+ 502	+ 554	+ 462	+ 690
11	+ 690	+ 971	+1061	+1092	+ 440	+ 636	+ 426	+ 635	+ 574	+ 572	+ 598	+ 491	+ 682
Noon.	+ 698	+ 779	+1011	+1019	+ 451	+ 627	+ 407	+ 482	+ 575	+ 572	+ 625	+ 574	+ 652
13h	+ 637	+ 834	+ 772	+ 897	+ 439	+ 566	+ 329	+ 479	+ 471	+ 567	+ 620	+ 561	+ 598
14	+ 547	+ 738	+ 779	+ 790	+ 464	+ 407	+ 291	+ 455	+ 501	+ 560	+ 600	+ 573	+ 559
15	+ 607	+ 863	+ 826	+ 942	+ 555	+ 476	+ 308	+ 475	+ 497	+ 577	+ 622	+ 592	+ 612
16	+ 554	+ 900	+ 754	+1007	+ 584	+ 503	+ 310	+ 518	+ 581	+ 596	+ 681	+ 549	+ 628
17	+ 693	+ 926	+ 953	+1027	+ 602	+ 555	+ 376	+ 591	+ 568	+ 594	+ 677	+ 585	+ 679
18	+ 563	+ 885	+ 713	+1158	+ 657	+ 609	+ 383	+ 609	+ 650	+ 606	+ 643	+ 576	+ 671
19	+ 603	+ 962	+ 681	+1148	+ 606	+ 624	+ 418	+ 493	+ 635	+ 574	+ 595	+ 513	+ 654
20	+ 620	+ 906	+ 686	+1082	+ 573	+ 615	+ 495	+ 593	+ 655	+ 541	+ 502	+ 501	+ 647
21	+ 564	+ 737	+ 674	+1189	+ 604	+ 652	+ 621	+ 665	+ 645	+ 504	+ 565	+ 506	+ 661
22	+ 553	+ 762	+ 679	+1227	+ 634	+ 648	+ 625	+ 614	+ 612	+ 506	+ 542	+ 527	+ 661
23	+ 576	+ 681	+ 658	+1133	+ 640	+ 617	+ 611	+ 529	+ 567	+ 472	+ 486	+ 496	+ 622
24	+ 471	+ 727	+ 684	+1014	+ 576	+ 588	+ 590	+ 563	+ 535	+ 448	+ 406	+ 470	+ 589
Means 0h.–23h.	+ 559	+ 797	+ 751	+ 949	+ 531	+ 554	+ 443	+ 523	+ 523	+ 476	+ 536	+ 457	+ 592
Means 1h.–24h.	+ 558	+ 799	+ 751	+ 949	+ 530	+ 555	+ 443	+ 522	+ 523	+ 476	+ 536	+ 459	+ 592
Number of Days employed.	23	29	27	29	31	30	31	31	30	25	28	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.	1904. January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Yearly Means.
Midnight.	+ 438	+ 445	+ 660	+ 813	+ 446	+ 414	+ 559	+ 474	+ 399	+ 400	+ 303	+ 316	+ 472
1^h	+ 467	+ 398	+ 687	+ 692	+ 432	+ 354	+ 464	+ 421	+ 365	+ 383	+ 440	+ 265	+ 447
2	+ 451	+ 499	+ 712	+ 501	+ 426	+ 370	+ 462	+ 416	+ 370	+ 330	+ 396	+ 267	+ 433
3	+ 406	+ 488	+ 652	+ 338	+ 366	+ 394	+ 340	+ 397	+ 281	+ 273	+ 359	+ 203	+ 375
4	+ 415	+ 473	+ 620	+ 558	+ 316	+ 306	+ 386	+ 353	+ 303	+ 259	+ 386	+ 149	+ 377
5	+ 302	+ 504	+ 602	+ 86	+ 202	+ 328	+ 283	+ 343	+ 344	+ 208	+ 371	+ 194	+ 314
6	+ 92	+ 454	+ 541	+ 21	+ 173	+ 288	+ 390	+ 356	+ 314	+ 160	+ 369	+ 196	+ 279
7	+ 82	+ 654	+ 598	+ 389	+ 228	+ 224	+ 369	+ 329	+ 284	+ 117	+ 331	+ 162	+ 314
8	+ 271	+ 690	+ 721	+ 667	+ 185	+ 320	+ 336	+ 156	+ 275	+ 172	+ 387	+ 118	+ 358
9	+ 428	+ 843	+ 873	+ 821	+ 297	+ 386	+ 269	+ 74	+ 422	+ 202	+ 391	+ 129	+ 428
10	+ 372	+ 878	+ 930	+ 911	+ 345	+ 452	+ 334	+ 176	+ 544	+ 351	+ 497	+ 280	+ 506
11	+ 461	+ 756	+ 909	+ 891	+ 185	+ 446	+ 431	+ 214	+ 449	+ 474	+ 621	+ 292	+ 511
Noon.	+ 462	+ 469	+ 792	+ 854	+ 300	+ 408	+ 470	− 167	+ 473	+ 506	+ 666	+ 399	+ 469
13^h	+ 407	+ 650	+ 204	+ 743	+ 327	+ 534	+ 298	− 60	+ 288	+ 431	+ 657	+ 455	+ 411
14	+ 248	+ 507	+ 357	+ 701	+ 347	− 34	+ 222	+ 240	+ 429	+ 463	+ 531	+ 493	+ 375
15	+ 340	+ 682	+ 412	+ 809	+ 504	+ 196	+ 312	+ 269	+ 431	+ 476	+ 493	+ 539	+ 455
16	+ 190	+ 776	+ 209	+ 907	+ 568	+ 488	+ 333	+ 486	+ 597	+ 521	+ 657	+ 493	+ 519
17	+ 410	+ 729	+ 553	+ 979	+ 605	+ 468	+ 474	+ 559	+ 522	+ 400	+ 629	+ 512	+ 570
18	+ 191	+ 625	+ 93	+ 982	+ 610	+ 502	+ 361	+ 473	+ 513	+ 381	+ 549	+ 502	+ 482
19	+ 332	+ 672	+ 18	+ 818	+ 533	+ 668	+ 359	− 83	+ 430	+ 344	+ 427	+ 430	+ 412
20	+ 437	+ 627	+ 139	+ 721	+ 446	+ 568	+ 447	+ 307	+ 535	+ 386	+ 176	+ 444	+ 436
21	+ 376	+ 451	+ 444	+ 1137	+ 532	+ 612	+ 785	+ 503	+ 547	+ 344	+ 487	+ 442	+ 555
22	+ 341	+ 445	+ 666	+ 1257	+ 581	+ 608	+ 728	+ 416	+ 499	+ 367	+ 431	+ 492	+ 569
23	+ 420	+ 416	+ 706	+ 1128	+ 572	+ 582	+ 536	+ 173	+ 425	+ 364	+ 314	+ 465	+ 508
24	+ 263	+ 519	+ 776	+ 1052	+ 545	+ 594	+ 579	+ 456	+ 402	+ 387	+ 133	+ 440	+ 512
Means 0^h.–23^h.	+ 347	+ 589	+ 546	+ 738	+ 397	+ 412	+ 414	+ 284	+ 418	+ 346	+ 453	+ 343	+ 441
Means 1^h.–24^h.	+ 340	+ 592	+ 551	+ 748	+ 401	+ 419	+ 415	+ 284	+ 418	+ 346	+ 446	+ 348	+ 442
Number of Days employed.	12	16	9	9	12	5	8	7	11	9	7	13	...

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

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

Hour. Greenwich Civil Time.	1904. January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December	Yearly Means.
Midnight.	+ 575	+ 989	+ 662	+1140	+ 752	+ 618	+ 582	+ 608	+ 599	+ 548	+ 458	+ 555	+ 674
1h	+ 595	+ 894	+ 646	+1113	+ 718	+ 566	+ 544	+ 567	+ 560	+ 521	+ 550	+ 536	+ 651
2	+ 592	+ 849	+ 589	+ 971	+ 693	+ 518	+ 512	+ 516	+ 508	+ 459	+ 539	+ 568	+ 609
3	+ 580	+ 812	+ 566	+ 826	+ 657	+ 515	+ 501	+ 492	+ 460	+ 487	+ 494	+ 526	+ 576
4	+ 597	+ 784	+ 533	+ 833	+ 638	+ 492	+ 494	+ 460	+ 457	+ 466	+ 514	+ 476	+ 562
5	+ 619	+ 865	+ 495	+ 858	+ 593	+ 496	+ 495	+ 469	+ 476	+ 459	+ 503	+ 497	+ 569
6	+ 650	+ 961	+ 486	+ 964	+ 619	+ 551	+ 532	+ 451	+ 451	+ 454	+ 463	+ 522	+ 592
7	+ 663	+1073	+ 559	+1068	+ 674	+ 573	+ 538	+ 500	+ 458	+ 415	+ 464	+ 560	+ 629
8	+ 730	+1240	+ 737	+1103	+ 718	+ 590	+ 506	+ 512	+ 452	+ 451	+ 484	+ 571	+ 675
9	+ 881	+1349	+ 979	+1066	+ 731	+ 576	+ 496	+ 597	+ 529	+ 509	+ 516	+ 645	+ 739
10	+ 994	+1499	+1076	+1222	+ 711	+ 659	+ 539	+ 730	+ 630	+ 637	+ 603	+ 781	+ 840
11	+ 941	+1402	+1097	+1242	+ 625	+ 665	+ 504	+ 725	+ 616	+ 692	+ 618	+ 775	+ 825
Noon.	+ 955	+1305	+1091	+1058	+ 589	+ 672	+ 412	+ 636	+ 610	+ 670	+ 654	+ 827	+ 790
13h	+ 888	+1175	+1039	+ 979	+ 548	+ 566	+ 362	+ 615	+ 557	+ 707	+ 647	+ 713	+ 733
14	+ 873	+1136	+ 991	+ 888	+ 565	+ 496	+ 309	+ 502	+ 526	+ 681	+ 664	+ 651	+ 690
15	+ 898	+1158	+1046	+1012	+ 607	+ 502	+ 299	+ 518	+ 530	+ 709	+ 729	+ 666	+ 723
16	+ 952	+1135	+1031	+1121	+ 621	+ 492	+ 288	+ 483	+ 548	+ 709	+ 749	+ 601	+ 728
17	+1002	+1276	+1148	+1067	+ 637	+ 530	+ 319	+ 567	+ 570	+ 767	+ 754	+ 650	+ 774
18	+ 968	+1318	+ 985	+1285	+ 741	+ 584	+ 367	+ 609	+ 712	+ 785	+ 727	+ 664	+ 812
19	+ 897	+1407	+ 934	+1299	+ 687	+ 581	+ 429	+ 638	+ 736	+ 746	+ 697	+ 593	+ 804
20	+ 820	+1284	+ 871	+1231	+ 690	+ 604	+ 469	+ 665	+ 711	+ 686	+ 659	+ 583	+ 773
21	+ 769	+1139	+ 704	+1220	+ 690	+ 675	+ 530	+ 713	+ 692	+ 643	+ 622	+ 619	+ 751
22	+ 784	+1244	+ 576	+1237	+ 725	+ 643	+ 584	+ 680	+ 672	+ 634	+ 597	+ 625	+ 750
23	+ 746	+1292	+ 543	+1186	+ 727	+ 619	+ 621	+ 637	+ 643	+ 577	+ 543	+ 589	+ 727
24	+ 697	+1229	+ 554	+1064	+ 648	+ 597	+ 563	+ 590	+ 617	+ 515	+ 499	+ 559	+ 678
Means 0h.–23h.	+ 790	+1149	+ 808	+1083	+ 665	+ 574	+ 468	+ 579	+ 569	+ 600	+ 594	+ 616	+ 708
Means 1h.–24h.	+ 795	+1159	+ 803	+1080	+ 661	+ 573	+ 467	+ 578	+ 569	+ 599	+ 595	+ 617	+ 708
Number of Days employed.	11	8	14	13	15	20	17	21	18	14	18	11	...

AMOUNT of RAIN COLLECTED in each MONTH of the YEAR 1904.

MONTH, 1904.	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	16	1·160	1·192	1·816	2·080	2·422	2·515	2·442	2·485
February	19	1·348	1·436	1·810	2·175	2·456	2·546	2·403	2·423
March	12	0·523	0·655	0·920	1·203	1·320	1·362	1·190	1·214
April	13	0·376	0·383	0·707	0·800	0·943	1·005	0·952	0·983
May	14	1·030	1·131	1·568	1·773	1·897	1·923	1·867	1·892
June	8	0·525	0·562	0·778	0·865	0·909	0·871	0·884	0·895
July	14	1·481	2·024	2·212	2·347	2·246	2·231	2·408	2·411
August	8	0·766	0·829	1·085	1·232	1·265	1·235	1·237	1·283
September	11	0·731	0·890	1·189	1·352	1·434	1·340	1·404	1·449
October	10	0·802	0·989	1·406	1·601	1·682	1·740	1·687	1·727
November	10	0·880	1·046	1·419	1·400	1·600	1·646	1·610	1·637
December	18	1·325	1·588	1·948	2·068	2·252	2·249	2·243	2·272
Sums	153	10·947	12·725	16·858	18·896	20·426	20·663	20·327	20·671
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.

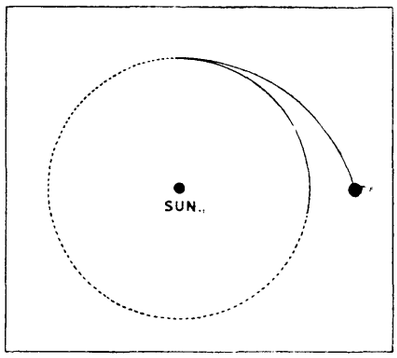
OBSERVATIONS

OF

PARHELIA AND PARASELENÆ.

1904.

OBSERVATIONS OF PARHELIA AND PARASELENÆ, MADE AT THE ROYAL OBSERVATORY, GREENWICH, IN THE YEAR 1904.



THE PARHELION OF 1904 APRIL 20.

A faint partial solar halo with a brightly coloured contact arch was seen at 14^h; shortly afterwards a bright mock sun appeared on the contact arch to the north of the sun. The phenomena faded gradually and disappeared shortly before 15^h.

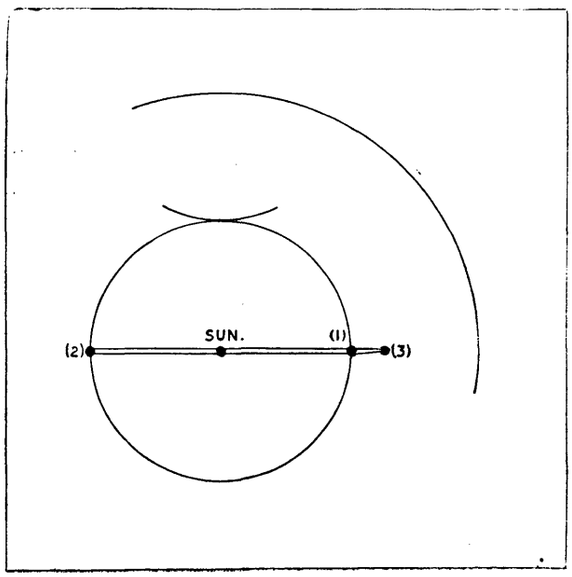
DAVID J. R. EDNEY.

THE PARHELIA OF 1904 JUNE 29.

h m

16 0. The ordinary halo of 22° radius is now first visible.

16 50. The upper portion of the halo noticed as being much brighter than usual, and two minutes later a very brilliant and prismatically coloured inverted contact arch appeared.



h m

16 57. A mock sun (1) is now seen to the north of the sun on the halo.

16 59. A mock sun (2) appeared to the south of the sun on the halo.

17 2. A halo of 45° radius is now forming above the sun.

17 5. The Parhelic Circle is now visible as passing through the sun and mock suns, extending fully 5° beyond the latter.

17 7. The 45° halo is very bright and coloured, the colours ranging from red to green, the former being nearest to the sun.

17 10. The 45° halo is an arc of 95° on the northern side of the sun and 20° on the southern side.

17 15. The mock suns (1) and (2) and the parhelic circle have now disappeared.

17 17. The 45° halo is gradually fading, becoming invisible by $17^h\ 20^m$.

17 20. The 22° halo is getting fainter, but the contact arch still remains as bright as before.

17 24. The mock sun (1) has reappeared and is very bright and prismatically coloured.

h m

17 25. Another but slightly fainter mock sun (3) has appeared about 5° north of the northern mock sun before mentioned and the mock sun (2) has again appeared.

17 27. The mock suns (2) and (3) have disappeared.

17 31. The mock sun (1) has disappeared.

17 34. The whole of the phenomena, save the upper part of the halo which still appears brightly coloured, has disappeared.

17 39. Upper portion of halo faint, and about 7° in length.

17 43. Upper portion of halo brighter, and about 15° in length.

18 10. The upper portion of the halo has now entirely disappeared.

HENRY G. S. BARRETT.

The Paraselenæ of 1904 July 24.

h m

21 15. Lunar halo of 22° radius is first seen.

21 18. Mock moon on the halo to the west of the moon.

21 22. Mock moon bright.

21 24. Mock moon on the halo to the east of the moon.

21 27. The eastern mock moon has disappeared, but the western mock moon has brightened considerably and is coloured prismatically (from red to green, red being nearest the moon).

21 32. The eastern mock moon is again visible.

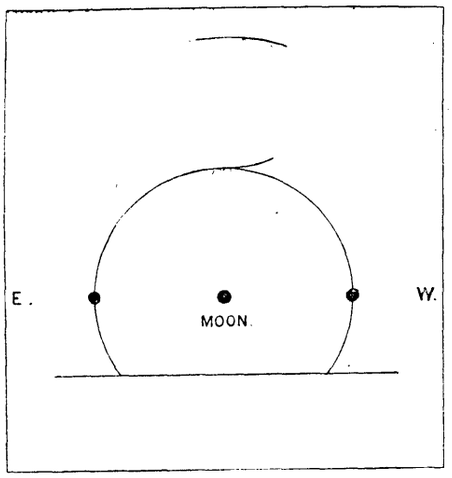
21 34. The eastern mock moon is as bright as the western one.

21 36. The western mock moon has nearly disappeared.

21 38. The western half of an inverted contact arch is now visible.

21 43. The contact arch has disappeared.

21 47. A portion of a halo of 45° radius is now visible above the moon, 12° in length, 4° being towards the east, and 8° towards the west. Its position is just below o, ξ, and μ Herculis.



21 50. Since $21^h\ 35^m$ slow moving clouds have been passing over the eastern mock moon, and now they cover the halo, except the western portion near the mock moon, and the 45° halo.

21 52. The western mock moon is now covered, and a corona is visible through a break in the clouds near the moon.

22 35. The clouds have now dispersed, but all the phenomena except a bright corona have disappeared.

Henry G. S. Barrett.

The Parhelion of 1904 July 31.

h m

15 15. A bright solar halo is first seen.

15 30. A mock sun is seen on the halo to the north of the sun, and throwing out a tapering spur to the length of about 4°.

15 40. Cumulus clouds covering the parhelion, and on their dispersion 5^m later the mock sun and spur had disappeared. The halo remained visible until $15^h\ 50^m$.

Albert E. Showell.
Henry G. S. Barrett.

The Paraselenæ of 1904 August 27.

h m

20 50. A bright mock moon (1) is visible to the west of the moon at a distance of about 22° (there is no doubt as to its nature, as clouds are passing over, but the object remains still).

21 5. A lunar halo has formed and the mock moon is seen on the halo and has brightened considerably.

21 15. An inverted contact arch appears on the upper portion of the halo, and is rather flatter than the halo (that is to say, it is of a greater radius). There is also an arc commencing at a point 10° below the moon and 3° eastwards, and intersecting the halo at a point about 3° below the mock moon (1). Shown on the diagram by a b.

21 17. A mock moon (2) has now appeared about 5° to the west of the mock moon (1).

21 20. The halo is rather faint, but the mock moons remain of the same intensity as before.

21 23. The mock moon (1) throws out a spur which nearly connects it with the mock moon (2). The arc a b disappears.

21 25. A mock moon (3) appears on the halo midway between mock moon (1) and the upper portion of the halo where the contact arch touches it.

21 27. An arc appears in the position marked c d in the diagram, intersecting the halo at the position occupied by the mock moon (3).

21 29. A mock moon (4) appears on the halo to the east of the moon.

21 32. The mock moon (4) throws out a spur some 5° in length; the arc c d disappears.

THE PARASELENÆ OF 1904 AUGUST 27—*continued.*

h m

21 35. The spur of mock moon (1) has now disappeared. The halo is getting very bright.

21 37. The spur of mock moon (4) has now disappeared.

21 39. A mock moon (5) appears at a position 45° west of the moon.

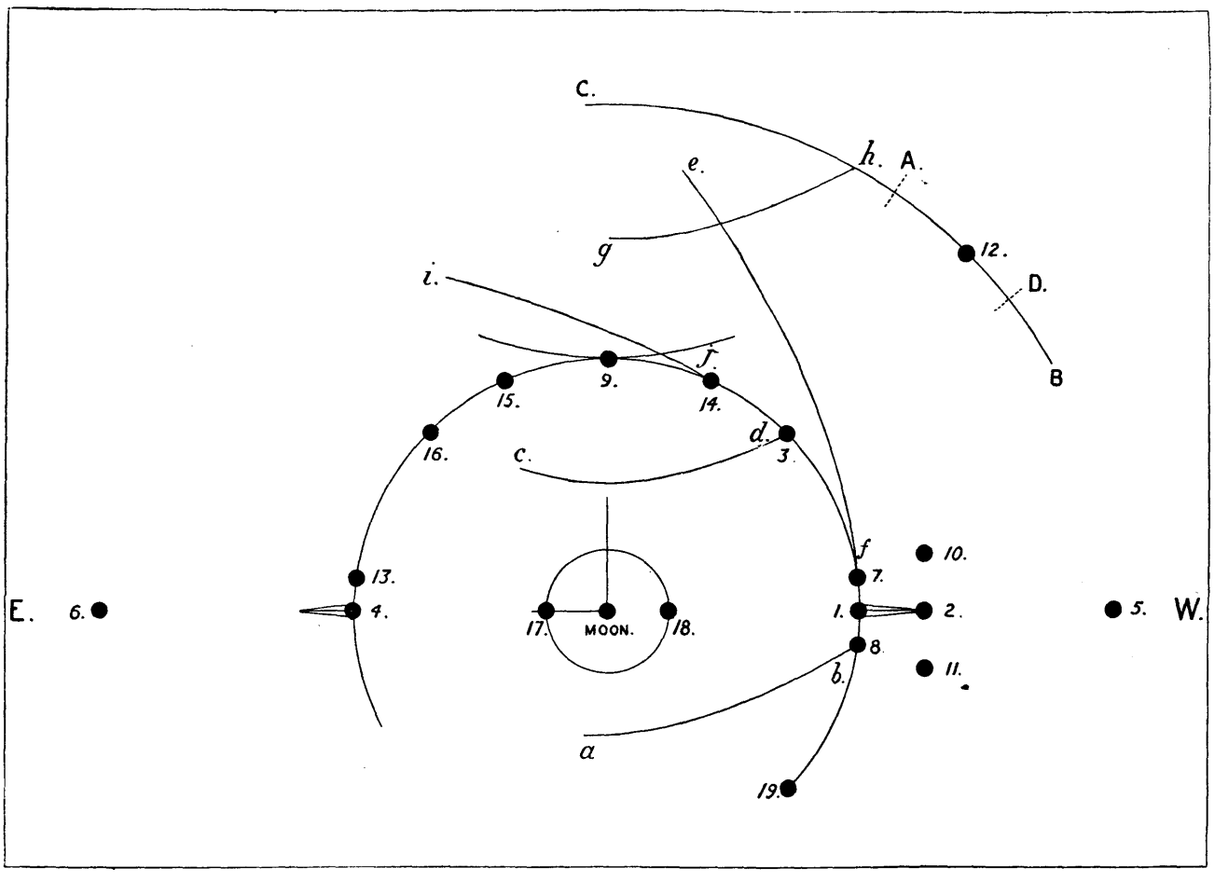
21 42. A portion of a halo of 45° radius appears in the centre of the arc of a quadrant from the vertical to the mock moon (5). It is about 20° in length. (Shown in the diagram by A B.)

21 45. A mock moon (6) appears at a position 45° east of the moon.

21 48. A mock moon (7) appears about 3° above mock moon (1) on the halo, and is considerably the brighter.

21 49. An arc appears in the position marked *e f* in diagram.

21 53. The 45° halo disappears.



21 54. The mock moon (6) has disappeared.

21 57. The mock moon (5) has disappeared.

21 58. The mock moon (7) has disappeared and (4) is getting fainter.

22 0. The arc *e f* has disappeared, as have also the mock moons with the exception of (1).

22 5. The mock moon (1) disappears.

22 8. The mock moon (1) reappears.

22 12. Two other mock moons are now visible, one below (1), shown on diagram by (8), and one on the upper portion of the halo in the position marked (9) in the diagram.

22 18. The mock moon (1) disappears.

22 26. The mock moons (8) and (9) disappear.

22 28. The mock moon (9) is again visible for about three minutes.

22 29. The mock moons (3) and (1) are again visible.

22 31. The mock moon (3) disappears.

22 33. The mock moon (4) noticed as being very bright and throwing out a tapering spur. The halo is now very faint.

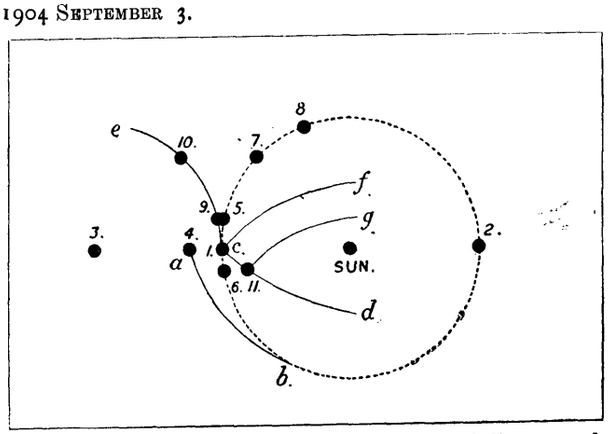
THE PARASELENÆ OF 1904 AUGUST 27—*continued.*

h	m	
22	35.	The mock moon (4) disappears and the halo is very diffused as also is the mock moon (1).
22	36.	The mock moon (1) has disappeared.
22	37.	The mock moon (6) has again become visible.
22	38.	The mock moon (2) reappears, and there are two other mock moons (10) and (11) on either side vertically at a distance of 5°.
22	42.	The mock moon (2) has disappeared.
22	43.	The mock moons (1) and (5) are very diffused.
22	45.	A portion of the 45° halo is now visible, and is shown on the diagram by the portion included between C. and D.
22	46.	A mock moon is now visible on the 45° halo at a position marked (12), and the arc *g h* is also now visible.
22	48.	The mock moons (5) and (10) disappear.
22	49.	A bright vertical lunar bar is now visible for a length of about 10°. The arc *g h* is now getting faint.
22	50.	An arc in the position *i j* is now visible and remained so for four minutes.
22	52.	The mock moon (4) is now getting very bright.
22	56.	The mock moon (4), after gradually getting fainter, has nearly disappeared. A mock moon now appears in the position marked (13) at a point about 3° above the mock moon (4).
22	57.	The 45° halo has now disappeared.
22	59.	The mock moon (11) has disappeared, and (2) has again become visible.
23	0.	The mock moons (3) and (8) have reappeared.
23	1.	The mock moon (10) has reappeared.
23	5.	The mock moons (3), (7), (8), (9) and (2) are now all visible, and another has become visible at a position marked (14) on the diagram.
23	6.	The mock moon (8) has disappeared, and (1) has again become visible.
23	10.	The mock moons (1), (2), (3), (7), (8), (9), (13) and (14) are now all visible, also another which has appeared in the position marked in the diagram by (15). A horizontal band of light 7° in length is visible to the east of the moon.
23	11.	A small complete halo about 10° in diameter is now visible around the moon.
23	13.	All the mock moons, with the exception of (1) and (8) have disappeared, but three new mock moons have become visible, one being on the halo at a position marked (16). The other two, (17) and (18), are situated on the small halo horizontally on either side of the moon.
23	15.	The mock moon (1), the horizontal band of light and the small halo have disappeared.
23	17.	The mock moons (13) and (15) have again become visible, and (16), (17) and (18) have disappeared. (1) and (8) are now very bright.
23	18.	The small halo (10° in diameter) has reappeared, and is complete but rather faint.
23	19.	A mock moon has now appeared at a position marked (19). (On this side, the west, the sky is perfectly cloudless.)
23	20.	The mock moon (4) reappears and is very bright, the rest of the phenomena, except the halo and the mock moon (19), has disappeared.
23	24.	The eastern portion of the halo is very diffused, and is about 2° in breadth.
23	35.	The whole of the phenomena have now disappeared and the sky is practically cloudless.

HENRY G. S. BARRETT.

THE PARHELIA OF 1904 SEPTEMBER 3.

h	m	
16	40.	A mock sun (1) is seen to the east of the sun at 22°.
16	41.	A mock sun (2) is seen to the west of the sun at 22°.
16	45.	A mock sun (3) is seen to the east of the sun at 45°.
16	48.	A mock sun (4) is now visible.
16	58.	The arcs marked *a b* and *c d* are now visible.
17	10.	The mock suns (5) and (6) are now visible.
17	12.	The mock sun (7) is first seen.
17	16.	The mock sun (8) is visible.
17	21.	The arc *c e* is first seen with mock suns in the positions (9) and (10).
17	23.	The arc *c f* first seen.
17	25.	The arc *h g* first seen, and there is a mock sun in the position marked (11). The various mock suns and arcs seen remained intermittently visible till $17^h\ 45^m$, when all the phenomena had disappeared. (No halo was seen at any time during these observations.)



HENRY G. S. BARRETT.

THE PARHELION OF 1904 SEPTEMBER 28.

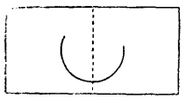


Fig. 1.

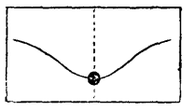


Fig. 2.

h m

16 32. A portion of an inverted arch of about 10° diameter is visible at a height of about 30° above the sun, and is prismatically coloured (red being nearest the sun.) (Diagram 1.)

The arch varied in length and brightness until $16^h\ 45^m$ when it was replaced by a mock sun at its lowest point which gradually faded and was nearly invisible at $16^h\ 52^m$.

16 55. The mock sun has become very bright, and the arch has assumed the appearance shown in diagram 2.

16 56. A bright sun pillar about 10° in length is visible above the sun.

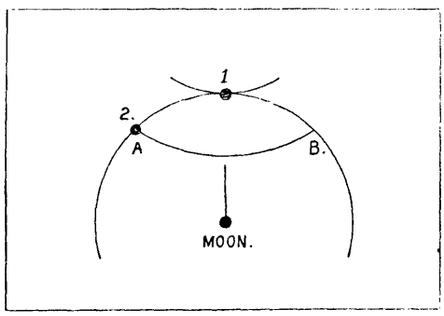
The arch gradually grew fainter and had disappeared by $17^h\ 20^m$, but the mock sun remained visible till $17^h\ 50^m$, when dark clouds came up covering it.

HENRY G. S. BARRETT.

THE PARASELENÆ OF 1904 SEPTEMBER 28.

h m

20 45. A bright vertical lunar bar is visible above the moon.



h m

20 54. A lunar halo is first seen.

20 56. The arc A B is now seen, and is about 1° in breadth.

21 1. The arc A B disappears.

21 2. A bright mock moon (1) is now visible.

21 17. The vertical lunar bar is now invisible owing to clouds over the moon; there is an indication of an inverted contact arch above the moon, and the mock moon is very bright.

21 24. The mock moon (1) has disappeared.

21 27. The contact arch has disappeared.

21 32. The upper portion of the halo very bright.

21 34. The contact arch and the mock moon (1) are again visible.

21 36. Through a break in the clouds near the moon it was seen that the vertical lunar bar still existed and was about 2° in length.

21 39. The contact arch and the mock moon (1) disappear.

21 42. The eastern half of the contact arch again visible and about 6° in length.

21 45. Clouds covering the halo.

21 50. The eastern half of the halo is now visible but is faint.

21 52. A mock moon (2) visible for about 4 minutes.

22 10. None of the phenomena are now visible.

22 23. The halo was again seen, and lasted till $22^h\ 38^m$.

HENRY G. S. BARRETT.

THE PARHELIA OF 1904 OCTOBER 4.

h m

12 28. Two mock suns visible on a halo (visible since $11^h\ 15^m$) east and west of the sun. The eastern is slightly the fainter of the two.

12 33. Both the mock suns are invisible, and the halo is becoming fainter.

HENRY G. S. BARRETT.

ROYAL OBSERVATORY, GREENWICH.

OBSERVATIONS

OF

LUMINOUS METEORS.

1904.

Month and Day, 1904.	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		°	
February 14	21. 17. 30±	H.B.	2	White	1·2	None	12	1
February 23	20. 47. 30±	H.B.	3	White	0·4	None	10	2
March 9	4. 55.	A.C.	1	Reddish	2±	None	60	3
April 15	21. 22. +	H.B.	2	Reddish	1·4	None	30	4
,,	21. 23. −	H.B.	3	White	0·6	None	12	5
April 18	20. 42.	H.B.	3	White	0·4	None	15	6
April 19	21. 36. −	H.B.	1	White	0·5	None	30	7
April 20	21. 16. 45	H.B.	3	White	0·4	None	10	8
,,	21. 28. 6	H.B.	>1	Bluish-white	3·5	Faint: 2 sec.	35	9
,,	21. 41. 38	H.B.	2	White	0·5	None	15	10
,,	21. 50. 31	H.B.	3	White	0·6	None	15	11
,,	22. 15. 21	H.B	1	White	1·0	None	30	12
April 21	21. 12. 24	S.&H.B.	4	Bluish-white	0·2	None	15	13
,,	21. 26. 48	P.	3	White	0·5	None	3	14
,,	22. 6. 15	H.B.	2	White	0·5	None	15	15
,,	22. 14. 54	S.	4	Bluish-white	0·3	None	8	16
,,	22. 29. 21	S.	1	Bluish-white	0·7	Bright	12	17
,,	22. 48. 0	S.	>1	Bluish-white	1·5	Bright	20	18
,,	22. 50. 48	S.	2	Bluish-white	0·5	None	8	19
,,	22. 58. 5	S.	2	Bluish-white	1·0	None	10	20
,,	23. 2. 47	S.	1	White	0·8	Bright	15	21
,,	23. 14. 59	S.	>1	White	1·3	Bright	40	22
,,	23. 24. 9	S.	>1	Bluish-white	1·0	Bright	20	23
,,	23. 47. 0	S.	>1	Bluish-white	0·8	Bright	15	24
,,	23. 54. 32	S.	1	Bluish-white	1·2	Bright	25	25
May 2	22. 28. 0	H.B.	1 at commencement: gradually faded.	White	4·5	Faint	60	26
May 5	21. 34. 30	H.B.	2	White	0·6	None	8	27
,,	22. 9. 45	H.B.	3	White	0·4	None	6	28
,,	22. 32. 30	H.B.	2	White	0·5	None	15	29
May 14	21. 47.	H.B.	1	White	0·4	None	8	30
June 3	22. 21. −	H.B.	1	White	1·4	None	...	31
June 20	21. 55. 20	H.B.	♀ at maximum.	White	4·8	...	90	32
,,	22. 11. 45	H.B.	2	White	0·6	None	12	33
June 29	23. 12. +	H.B.	3	...	<0·2	None	4	34
July 1	22. 53. 30	H.B.	2	Reddish	0·4	None	8	35

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 midway between θ and κ Boötis, burst just before reaching γ Boötis. Brightness alternating between 4 and 2.
2	From a point midway between λ and κ Draconis towards 5 Ursæ Minoris.
3	From a point near γ Draconis to a point midway between ι and α Andromedæ.
4	From the direction of 15 Ursæ Majoris passed directly over ζ Aurigæ.
5	From a point 3° west of κ Cephei towards α Camelopardi.
6	From a point midway between 55 and 50 Aurigæ towards 2 Aurigæ.
7	From a point 2° west of α Serpentis, disappeared when 5° distant in a direct line from Spica.
8	From θ Draconis travelled towards a point midway between ϕ and χ Draconis.
9	From a point 3° S.W. of α Libræ to a point a little beyond ζ Boötis.
10	From a point 3° below κ Cephei towards 9 Cephei.
11	From a point 3° above δ Serpentis towards δ Boötis.
12	From a point midway between γ Draconis and ι Herculis towards a point just below α Cephei.
13	From 83 Ursæ Majoris passed midway between δ and 74 Ursæ Majoris.
14	From β Draconis towards 16 Draconis.
15	From a point a little to the north of β Boötis towards ι Draconis.
16	From a point 2° north of ζ Draconis towards θ Draconis.
17	From a point midway between η and ζ Ursæ Majoris to χ Ursæ Majoris.
18	From ϵ Boötis towards ϵ Virginis.
19	From β Ursæ Minoris to a point 3° north of μ Draconis.
20	From ϵ Ursæ Majoris towards ν Ursæ Majoris.
21	From β Herculis to a point a little beyond δ Serpentis.
22	From α Lyræ towards ζ Ursæ Majoris.
23	From β Draconis to a point a little to the north of α Draconis.
24	From α Herculis towards δ Ophiuchi.
25	From α Draconis to a point midway between α and β Ursæ Majoris.
26	From a point between Polaris and P. IX. 37 a little nearer the former, passed over a point $\frac{1}{3}$ of the distance between ζ and ϵ Ursæ Majoris.
27	From a point 5° east of α Draconis passed towards a point midway between ζ and η Ursæ Minoris.
28	From 15 Draconis passed over a point $\frac{2}{3}$ distance between η Ursæ Minoris and 35 Draconis.
29	From a point 5° north of 5 Ursæ Minoris passed directly over Polaris.
30	Directed from a point midway between γ Draconis and ι Herculis just passed over ϵ Lyræ.
31	From 95 Herculis passed midway between γ and β Lyræ and disappeared between γ and δ Cygni. (First magnitude at commencement nearly disappeared when passing between β and γ Lyræ but brightened again towards end of path.)
32	From a point midway between α Herculis and α Ophiuchi passed over π Herculis and η Ursæ Minoris and disappeared about 45° above the horizon. A red trail 7° in length immediately followed the meteor throughout its path.
33	From 57 Cygni passed parallel to a line joining α and ζ Cygni.
34	Directed from ν Coronæ Borealis passed over δ Coronæ Borealis and disappeared 1° beyond that star.
35	Directed from λ Draconis the meteor followed a curved path passing over 38 Ursæ Majoris and disappeared near 32 Ursæ Majoris.

Month and Day, 1904.	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		°	
July 4	23. 5.	H.B.	3	...	0·4	None	8	1
,,	23. 9. 30	H.B.	2	White	0·6	None	28	2
July 5	23. 35.	H.B.	2	White	0·2	None	5	3
July 10	22. 50. 30	H.B.	3	...	0·6	None	17	4
July 11	22. 37.	H.B.	2	White	0·4	None	10	5
July 13	22. 24.	H.B.	3	...	0·3	None	12	6
,,	23. 2.	H.B.	2	Bluish	0·6	Bluish : 2 secs.	14	7
July 15	22. 32.	H.B.	2	White	0·2	None	8	8
,,	22. 52.	H.B.	2	...	0·2	None	2	9
July 16	22. 30.	H.B.	1·5	White	0·4	None	8	10
July 18	23. 4.	H.B.	3	White	0·6	None	10	11
,,	23. 30.	H.B.	2	Bluish-white	0·6	None	12	12
July 21	22. 23.	H.B.	3	...	0·5	None	12	13
July 22	22. 40.	H.B.	3	White	0·4	None	6	14
,,	22. 50. 30	H.B.	2	...	0·2	None	½	15
July 24	23. 38.	H.B.	2	White	0·4	None	8	16
July 31	21. 42.	H.B.	4	...	0·5	None	6	17
August 1	22. 53.	H.B.	4	...	0·3	None	4	18
August 2	21. 28.	H.B.	2	White	0·4	None	8	19
,,	22. 35.	H.B.	3	White	0·4	None	10	20
,,	23. 44.	H.B.	2	White	0·5	Faint : 2 secs.	12	21
August 3	22. 45.	H.B.	3	...	0·4	None	10	22
,,	22. 45. +	H.B.	4	...	0·5	None	15	23
,,	23. 10.	H.B.	2	White	0·2	None	8	24
August 4	21. 39.	H.B.	2	Bluish-white	...	None	4	25
,,	21. 53.	H.B.	1	White	1·5	Reddish : 7 secs.	19	26
,,	22. 10.	H.B.	2	White	0·4	...	...	27
,,	22. 20.	H.B.	3	...	0·8	None	12	28

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

No. for Reference.	Path of Meteor in the Sky.
1	From a point midway between κ and 13 Delphini passed over a point $\frac{1}{3}$ of the distance from γ Equulei towards 16 Delphini.
2	From a point 3° below ζ Herculis passed over π Herculis.
3	From the direction of η Aquilæ passed 1° beyond a point midway between κ and 32 Aquilæ.
4	From a point midway between δ and β Equulei passed in a curved path about $\frac{1}{4}$° above ϵ Pegasi and disappeared about midway between ϵ and λ Pegasi.
5	From a point midway between δ and o Cygni passed just below α Cephei.
6	From ϵ Aquarii passed just below α Capricorni.
7	From a point just below 41 Ophiuchi, and directed from 68 Ophiuchi disappeared just before reaching a point $\frac{1}{3}$ of the distance between ϵ Ophiuchi and 18 Scorpii.
8	Directed from ζ Ophiuchi disappeared just before reaching θ Ophiuchi.
9	Passed midway between ζ and ν Cephei moving towards 30 Cephei.
10	Commenced 1° above a point 1° to the west of γ Equulei passed over a point 1½° west of α Equulei.
11	From a point midway between o and 107 Herculis passed towards a point 1° to the east of α Ophiuchi.
12	Directed from B^2 Cephei disappeared just before reaching 2 Ursæ Minoris.
13	Directed from ϵ Herculis passed ½° beyond a point midway between ϕ and τ Herculis.
14	From a point about 1° north of the middle of a line joining 16 Draconis and 42 Herculis moved towards ι Draconis.
15	Meteor almost stationary at a point exactly midway between α and 10 Draconis, the slight motion seemed to be towards a point $\frac{1}{3}$ distance from ϵ to δ Ursæ Majoris.
16	Directed from a point midway between Arcturus and 9 Boötis passed about 1° beyond τ Boötis.
17	Directed from a point $\frac{1}{3}$ of distance from σ to ϵ Boötis passed just below 12 Boötis and just above 16 Boötis moving in a slightly curved path towards α Comæ Berenices.
18	Directed from 24 Persei moving towards θ Persei ($43\frac{1}{2}°+36°$ to $42\frac{1}{2}°+40°$.)
19	From a point 2° south of the middle of a line joining σ and 41 Herculis, towards a point between η Ophiuchi and ν Serpentis a little nearer the latter star.
20	Directed from o Andromedæ passed over a point $\frac{1}{3}$ of distance from π to η Pegasi and disappeared 4° beyond that point.
21	From a point 2° below 111 Herculis moved towards 4 Aquilæ.
22	From a point 3° to the west of 49 H Cassiopeiæ moved towards a point midway between α and κ Draconis.
23	From a point 1° from 49 H Cassiopeiæ, reckoned towards γ Camelopardi, passed towards 2 Lyncis.
24	From a point just below α Vulpeculæ towards 11 Aquilæ.
25	From just below a point $\frac{1}{3}$ of distance between ϵ and α Serpentis towards β Libræ.
26	From a point midway between λ and 33 Pegasi passed towards 27 Aquarii.
27	Stationary at a point 1° from 12 Boötis reckoned in the direction of Arcturus.
28	Directed from α Coronæ and commencing when opposite to ι Serpentis passed towards a point midway between δ and α Serpentis.

Month and Day, 1904.		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	6	21. 51.	H.B.	3	...	0·4	None	6	1
	,,	22. 43.	H.B.	3	...	0·4	None	7	2
	,,	22. 43. +	H.B.	4	...	0·4	None	5	3
	,,	22. 45.	H.B.	2	White	0·8	None	12	4
	,,	23. 5.	H.B.	1	White	1·4	None	18	5
	,,	23. 12.	H.B.	2	Bluish-white	0·5	None	9	6
August	9	21. 18. 54	H.B.	2	Bluish-white	2·0	Faint	8	7
	,,	21. 53. 48	H.B.	>1	Reddish	0·8	None	4	8
August	10	20. 55. 34	H.B.	= 4	Reddish	1·5	Faint : 2 secs.	12	9
	,,	21. 10. 51	H.B.	3	...	0·6	None	10	10
	,,	21. 14. 14	P.&H.B.	1	White	0·8	None	15	11
	,,	21. 19. 29	P.&H.B.	1	White	0·5	None	25	12
	,,	21. 26. 57	H.B.	2	White	0·4	None	7	13
	,,	21. 27. 3	S.&P.	>1	Blue	1·5	Bright	7	14
	,,	21. 29. 43	H.B.	2	White	0·6	None	8	15
	,,	21. 41. 25	S.&P.	2	White	0·6	Faint : long	15	16
	,,	21. 48. 32	S.&P.	2	White	0·7	None	8	17
	,,	21. 55. 7	H.B.	4	...	0·4	None	6	18
	,,	21. 59. 51	S.	2	Bluish-white	0·7	None	12	19
	,,	22. 10. 57	H.B.	3	...	0·2	None	6	20
	,,	22. 52. 45	H.B.	2	Bluish-white	0·6	None	8	21
	,,	22. 52. 46	S.	1	White	1·5	Faint	20	22
	,,	22. 54. 54	S.	2	White	0·8	Bright	20	23
	,,	23. 1. 6	H.B.	3	...	0·4	None	6	24
	,,	23. 12. 1	S.&P.	3	Bluish-white	1·0	None	15	25
	,,	23. 12. 7	P.	2	White	0·8	None	10	26
	,,	23. 14. 10	P.	1	White	1·3	Long	20	27
	,,	23. 15. 44	S.&H.B.	2	White	1·4	Bright	30	28
	,,	23. 25. 6	S.&H.B.	1	White	0·8	Bright	20	29
	,,	23. 27. 57	S.&H.B.	1	White	1·5	None	20	30
	,,	23. 28. 11	S.&H.B.	>1	White	1·5	Bright	25	31
	,,	23. 33. 55	H.B.	3	...	0·6	None	7	32
	,,	23. 35. 58	H.B.	1	White	0·7	None	12	33
	,,	23. 36. 41	S.&H.B.	2	White	1·5	None	25	34
	,,	23. 38. 18	S.&P.	3	White	0·5	None	8	35
	,,	23. 40. 7	P.&H.B.	2	Bluish-white	1·0	None	15	36
	,,	23. 48. 41	P.	1	White	1·3	Long	25	37
	,,	23. 51. 47	H.B.	4	White	1·2	None	15	38
	,,	23. 53. 52	S.	2	Bluish-white	1·0	None	20	39
	,,	23. 55. 39	H.B.	1	White	1·2	None	15	40
	,,	23. 56. 49	S.	1	White	1·3	Bright	25	41
August	11	0. 18. 27	S.	2	Bluish-white	1·2	None	20	42
	,,	0. 28. 45	H.B.	1	White	1·0	None	25	43
	,,	0. 58. 13	S.&H.B.	1	Bluish-white	0·8	None	15	44
	,,	1. 14. 49	P.	2	White	0·5	None	10	45
	,,	1. 28. 40	P.&H.B.	1	Bluish-white	2·0	Bright	40	46
	,,	1. 43. 57	S.	1	White	1·2	2 secs.	20	47
	,,	1. 52. 43	H.B.	2	Bluish-white	0·8	None	15	48
	,,	1. 52. 55	S.&H.B.	1	Bluish-white	0·6	None	15	49
	,,	2. 15. 34	S.&P.	3	White	0·5	None	12	50
	,,	2. 49. 37	P.	1	Bluish	2·0	Bright	30	51
	,,	3. 0. 43	S.&H.B.	1	White	0·8	None	15	52
	,,	3. 1. 30	S.	1	White	1·8	Bright : 2 secs.	25	53
	,,	3. 26. 48	S:P.&H.B.	1	Reddish	1·5	Bright	20	54
	,,	3. 27. 40	S.	2	White	0·8	None	15	55
	,,	3. 36. 27	P.	1	Bluish-white	0·6	None	15	56
	,,	3. 36. 31	P.&H.B.	1	White	0·7	None	20	57
	,,	3. 39. 35	S:P.&H.B.	4	White	2·5	Bright : 4 secs.	45	58
	,,	21. 4. 21	H.B.	3	...	0·3	None	10	59

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 a point midway between γ and β Draconis passed 2° beyond 104 Herculis.
2	Directed from δ Draconis to a point a little west of κ Draconis.
3	Directed from a point midway between ϵ and ζ Ursæ Majoris towards 38 Ursæ Majoris. ($182\frac{1}{2}^\circ + 60$ to $178^\circ + 62^\circ$.)
4	Directed from a point midway between η and θ Cephei disappeared when 2° in a direct line from c Draconis.
5	From a point midway between β and η Draconis directly towards η Ursæ Majoris, disappeared when 4° from that star.
6	Directed from θ Pegasi moved towards β Aquarii. ($328^\circ + 3^\circ$ to $323^\circ - 4^\circ$.)
7	Directed from τ Cassiopeiæ towards 72 Pegasi. ($353^\circ + 49^\circ$ to $352^\circ + 41^\circ$.)
8	Directed from 5 Lacertæ towards 9 Aquarii. ($330^\circ + 35^\circ$ to $328^\circ + 31\frac{1}{2}^\circ$.)
9	Directed from ι Persei passed over a point midway between 51 and 54 Andromedæ, the point being nearly in the centre of the path.
10	From a point $\frac{1}{3}$ of distance between ϵ Cassiopeiæ and δ Cassiopeiæ towards 31 Cephei.
11	Directed from γ Persei towards a point midway between α and β Camelopardi. ($50^\circ + 57^\circ$ to $69^\circ + 64^\circ$.)
12	Directed from a point midway between 72 and 50 Cassiopeiæ passed over Polaris and 5° beyond it.
13	Directed from 51 Andromedæ towards θ Andromedæ. ($17^\circ + 44^\circ$ to $8^\circ + 42^\circ$.)
14	From a point near ψ Cassiopeiæ towards Polaris.
15	From a point midway between α and η Cephei towards ϵ Ursæ Minoris.
16	From a point near α Cygni to a point a little beyond γ Cygni.
17	From a point between β and η Pegasi towards o Andromedæ.
18	From a point a little above θ Persei towards a point midway between 60 and 62 Andromedæ.
19	From β Andromedæ towards α Andromedæ.
20	Directed from 4 Persei towards ϕ Andromedæ. ($27^\circ + 54^\circ$ to $20^\circ + 50^\circ$.)
21	Directed from 29 Persei towards α Camelopardi. ($50^\circ + 53^\circ$ to $55^\circ + 57^\circ$.)
22	From δ Cassiopeiæ towards σ Andromedæ.
23	From α Persei towards Polaris.
24	From κ Persei towards 16 Persei. ($44^\circ + 44^\circ$ to $41^\circ + 38\frac{1}{2}^\circ$.)
25	From just below α Cygni towards α Cassiopeiæ.
26	From ν Cygni towards β Cygni.
27	From a point near α Lyræ fell in a westerly direction.
28	From a point $\frac{1}{3}$ of distance from α to β Persei passed midway between γ and δ Cassiopeiæ.
29	From a point 1° west of γ Cassiopeiæ towards a point midway between ζ and ν Cephei.
30	From γ Cassiopeiæ passed over a point midway between α and ι Cephei.
31	Directed from ι Persei passed 5° beyond a point $\frac{1}{3}$ of distance between α and γ Cassiopeiæ.
32	Directed from θ Persei and commencing when on a line joining ι and κ Persei towards a point midway between 53 and 58 Persei.
33	Directed from τ Andromedæ over σ Piscium. ($23^\circ + 39\frac{1}{2}^\circ$ to $14^\circ + 30\frac{1}{2}^\circ$.)
34	Directed from a point between α and γ Persei, a little nearer to the latter star, passed over Polaris and 2° beyond it.
35	From a point midway between ϕ and θ Cassiopeiæ passed midway between γ and β Cassiopeiæ.
36	From a point midway between 4 Persei and 54 Andromedæ towards α Lacertæ.
37	From η Pegasi towards ϵ Pegasi.
38	From μ Persei towards π Aurigæ.
39	From δ Cassiopeiæ towards α Cephei.
40	From a point midway between α and δ Persei towards 46 Aurigæ.
41	From α Persei towards α Arietis.
42	From a point midway between γ and β Cephei towards Capella.
43	From τ Persei towards γ Cephei.
44	From a point a little to the south of α Cephei towards κ Cygni.
45	From α Cygni towards δ Cygni.
46	Directed from θ Persei towards β Pegasi.
47	From a point midway between α and β Cassiopeiæ to a point a little to the south of α Cygni.
48	From a point midway between η and β Pegasi towards ϵ Pegasi.
49	From β Trianguli towards ϵ Piscium.
50	From γ Arietis towards ξ Piscium.
51	From α Persei towards Polaris.
52	From ζ Cassiopeiæ towards ν Cygni.
53	From a point just above α Persei towards β Aurigæ.
54	From ϵ Andromedæ towards θ Piscium.
55	From β Persei towards ι Aurigæ.
56	From δ Cygni to θ Cephei.
57	From σ Andromedæ towards α Pegasi.
58	From a point midway between ι and θ Persei towards α Cephei.
59	From σ Aquilæ to a point midway between ν and ι Aquilæ.

Month and Day, 1904.	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	21. 5.34	H.B.	2	White	0.4	None	15	1
,,	21. 7. 5	H.B.	3	...	0.3	None	12	2
,,	21. 8.53	H.B.	4	...	0.4	None	8	3
,,	21. 8.58	S.	1	White	1.5	Bright	40	4
,,	21.18.50	H.B.	2	Bluish-white	0.5	None	8	5
,,	21.21. 3	H.B.	3	White	0.4	None	6	6
,,	21.25. 7	H.B.	2	Bluish-white	1.2	None	35	7
,,	21.25.39	S.	1	White	1.5	Bright	20	8
,,	21.26.46	S.	1	White	2.2	Bright	40	9
,,	21.28. 6	S.	2	Bluish-white	0.8	None	12	10
,,	21.28.20	S.	2	Bluish-white	0.8	None	30	11
,,	21.30.50	S.	2	Bluish-white	0.8	None	15	12
,,	21.33.58	S.&H.B.	3	...	0.5	None	7	13
,,	21.34.50	S.	3	Bluish-white	0.5	None	15	14
,,	21.36.55	S.	2	Bluish-white	1.2	None	20	15
,,	21.40.50	H.B.	2	White	0.8	None	10	16
,,	21.41.39	S.	1	White	1.5	Bright	30	17
,,	21.45.19	S.&H.B.	2	White	0.6	None	12	18
,,	21.46.22	S.	2	Bluish-white	1.5	None	25	19
,,	21.48.47	H.B.	3	...	0.6	None	8	20
,,	21.53.30	H.B.	3	White	0.8	None	12	21
,,	21.53.44	H.B.	2	White	1.0	None	7	22
,,	21.57.39	S.	3	Bluish-white	1.0	None	15	23
,,	22. 1.57	H.B.	4	...	0.6	None	6	24
,,	22. 5.42	S.&H.B.	2	White	1.2	None	15	25
,,	22. 7.56	S.&H.B.	1	Bluish-white	0.6	None	10	26
,,	22. 9.35	H.B.	2	Bluish-white	0.4	None	20	27
,,	22.10. 2	S.	2	White	1.0	Bright	20	28
,,	22.11.38	S.	1	White	2.5	Bright	50	29
,,	22.16.18	S.&H.B.	>1	Bluish-white	1.7	Long : 2 secs.	35	30
,,	22.17. 5	P.	2	White	1.0	Long	25	31
,,	22.18.17	S.	2	White	1.2	None	20	32
,,	22.19.13	P.	3	...	0.6	None	8	33
,,	22.19.16	P.	2	White	0.5	None	7	34
,,	22.22.13	H.B.	3	...	0.4	None	6	35
,,	22.22.50	S.&H.B.	2	Reddish	2.5	Faint : 4 secs.	25	36
,,	22.26.30	S.&P.	1	White	1.2	Bright	20	37
,,	22.28.36	S.&P.	2	Bluish-white	0.8	None	20	38
,,	22.28.57	S.	3	White	1.0	None	15	39
,,	22.29.47	P.	2	Bluish-white	0.7	Slight	10	40
,,	22.30. 6	H.B.	>1	Bluish-white	1.4	Slight	8	41
,,	22.32. 9	P.	2	Bluish-white	1.5	Bright	30	42
,,	22.32.55	S.	2	Bluish-white	1.5	None	25	43
,,	22.34.57	S.	>1	Bluish-white	1.5	Bright : 2 secs.	20	44
,,	22.36. 5	S.	3	Bluish-white	0.8	None	15	45
,,	22.37.38	H.B.	2	Bluish-white	0.2	None	6	46
,,	22.39.50	H.B.	2	White	0.4	None	8	47
,,	22.41.56	S.&H.B.	1	Bluish-white	1.0	None	12	48
,,	22.45. 4	H.B.	3	White	0.6	None	8	49
,,	22.47.39	S.&H.B.	3	White	0.5	None	10	50
,,	22.48. 5	P.	2	White	0.5	None	10	51
,,	22.49.59	S.	2	Bluish-white	1.5	None	20	52
,,	22.52.23	S.&H.B.	1	White	1.2	Short : 3 secs.	8	53
,,	22.55.35	H.B.	1	Bluish-white	1.6	Faint : 2 secs.	15	54
,,	22.55.35	H.B.	1	Bluish-white	2.2	3 secs.	25	55
,,	22.56.55	S.&P.	2	Bluish-white	1.0	None	22	56
,,	22.58.14	H.B.	2	Bluish-white	0.5	None	7	57
,,	22.58.14	P.	2	Bluish-white	0.8	Slight	10	58
,,	22.58.29	S.	2	Bluish-white	1.5	None	25	59
,,	22.58.31	S.	2	Bluish-white	1.0	None	20	60
,,	23. 0.53	S.	3	Bluish-white	0.8	None	15	61
,,	23. 3.23	H.B.	2	White	1.0	None	12	62
,,	23. 5.30	H.B.	1	White	0.8	Faint : 4 secs.	8	63
,,	23. 6.33	S.	2	White	1.2	Bright	15	64
,,	23. 7.22	S.&P.	1	White	1.5	Long	30	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 γ Cassiopeiæ passed midway between α and ι Cephei.
2	Directed from ζ Cassiopeiæ towards a point midway between ζ and μ Cygni.
3	From ν Cassiopeiæ towards β Camelopardi.
4	From α Cassiopeiæ towards π Pegasi.
5	From o Ursæ Majoris passed midway between 23 and u Ursæ Majoris.
6	From ρ Cassiopeiæ towards ξ Cassiopeiæ.
7	From a point just below ζ Cygni passed over α Aquilæ.
8	From a point 5° north of ϵ Cassiopeiæ to γ Cephei.
9	From P. VI. 75 to a point a little south of λ Draconis.
10	From a point a little south of Polaris towards β Ursæ Minoris.
11	From δ Cassiopeiæ to Polaris.
12	From 43 Camelopardi to λ Ursæ Majoris.
13	From 52 Cygni to ν Cygni.
14	From β Andromedæ to α Andromedæ.
15	From γ Andromedæ towards β Andromedæ.
16	From ϕ Andromedæ towards 56 Pegasi.
17	From a point midway between α and γ Persei towards 43 Camelopardi.
18	From a point midway between α and γ Cassiopeiæ towards β Lacertæ.
19	From ϵ Cassiopeiæ towards γ Cephei.
20	From β Lacertæ to a point midway between α and γ Cygni.
21	From a point midway between β Trianguli and γ Andromedæ towards ρ Piscium.
22	Directed from γ Persei passed over 12 Persei and 2° beyond it.
23	From γ Andromedæ towards β Andromedæ.
24	From a point midway between γ Persei and P. III. 57 towards 4 Persei.
25	From a point midway between α and β Camelopardi towards o Ursæ Majoris.
26	From a point midway between γ and ι Persei towards 12 Persei.
27	From δ Andromedæ towards θ Piscium.
28	From γ Cassiopeiæ towards o Andromedæ.
29	From α Cassiopeiæ towards o Andromedæ.
30	Directed from γ Camelopardi passed over κ Draconis and 1° beyond it.
31	From a point midway between α and γ Cygni towards α Aquilæ.
32	From α Persei towards Capella.
33	From 11 Camelopardi towards 31 Camelopardi.
34	Directed from α Cygni towards ζ Cygni.
35	Directed from 58 Andromedæ passed over α Trianguli, the latter star being near the middle of the path.
36	From a point midway between α and ι Cephei passed just over 47 Cassiopeiæ.
37	From a point midway between γ and β Andromedæ passed 5° beyond δ Andromedæ.
38	From δ Persei towards β Trianguli.
39	From α Persei towards Capella.
40	From α Cephei towards α Cygni.
41	From κ Cassiopeiæ towards 62 Andromedæ.
42	From β Cassiopeiæ towards π^1 Cygni.
43	From β Andromedæ to a point a little east of α Andromedæ.
44	From η Persei over a point $\frac{1}{3}$ of the distance of ϵ towards δ Cassiopeiæ.
45	From α Persei towards ζ Cassiopeiæ.
46	From Polaris towards a point midway between λ and κ Draconis.
47	From α Arietis towards ξ Piscium.
48	From a point midway between β and γ Trianguli towards a point midway between α and λ Arietis.
49	From a point midway between β and γ Andromedæ towards χ Pegasi.
50	From a point between ϵ and δ Cassiopeiæ (a little nearer the former) towards β Cassiopeiæ.
51	From α Pegasi towards ζ Aquarii.
52	From λ Draconis towards ζ Ursæ Majoris.
53	From a point midway between α and ι Cephei towards τ Andromedæ.
54	From γ Persei towards a point midway between α and β Camelopardi.
55	From B Persei towards 55 Camelopardi.
56	From a point midway between α and β Camelopardi towards a point midway between α and β Ursæ Majoris.
57	From γ Cassiopeiæ towards δ Cephei.
58	From δ Cephei passed between α and γ Cassiopeiæ.
59	From Polaris towards β Ursæ Minoris.
60	From 5 Ursæ Minoris towards A^1 Draconis.
61	From ϵ Persei towards Capella.
62	From κ Delphini towards θ Aquilæ.
63	From a point a little below γ Persei over a point midway between γ and 50 Andromedæ moving 3° beyond that point.
64	From γ Andromedæ to μ Andromedæ.
65	From Polaris towards α Ursæ Majoris.

Month and Day, 1904.	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	23. 9.25	H.B.	3	White	0·6	None	6	1
,,	23. 10. 1	H.B.	2	White	0·8	None	12	2
,,	23. 10. 55	P.	2	Bluish-white	0·8	None	7	3
,,	23. 13. 9	S.	3	Bluish-white	0·6	None	10	4
,,	23. 13. 30	S.	3	White	0·5	None	6	5
,,	23. 14. 31	H.B.	4	...	0·4	None	6	6
,,	23. 19. 45	P.	2	White	0·3	None	7	7
,,	23. 20. 0	S.	>1	White	2·0	Bright	35	8
,,	23. 22. 11	S.	4	...	1·0	None	15	9
,,	23. 23. 2	S.&P.	2	White	1·0	None	7	10
,,	23. 24. 59	S.	1	White	2·5	Bright	35	11
,,	23. 25. 49	H.B.	2	White	0·6	None	20	12
,,	23. 28. 55	H.B.	3	White	0·4	None	8	13
,,	23. 29. 15	P.	2	White	1·0	None	5	14
,,	23. 30. 35	H.B.	>1	White	1·2	Bright : 4 secs.	25	15
,,	23. 33. 30	H.B.	3	Bluish-white	0·6	None	8	16
,,	23. 34. 57	P.	1	White	0·3	None	10	17
,,	23. 37. 14	H.B.	2	White	0·4	None	8	18
,,	23. 38. 6	H.B.	>1	Bluish-white	0·8	Slight	10	19
,,	23. 38. 39	S.	2	Bluish	1·0	None	15	20
,,	23. 43. 18	P.	2	Bluish-white	0·7	None	12	21
,,	23. 44. 36	S.&H.B.	1	Bluish-white	1·2	Bright : 4 secs.	15	22
,,	23. 46. 32	S.&P.	1	White	1·5	None	10	23
,,	23. 48. 5	H.B.	2	White	0·6	None	8	24
,,	23. 51. 23	S.&H.B.	>1	Bluish-white	1·4	Bright : 4 secs.	12	25
,,	23. 52. 6	H.B.	2	Bluish-white	0·6	None	8	26
,,	23. 52. 27	S.&P.	1	White	1·5	Bright	20	27
,,	23. 55. 26	H.B.	1	White	0·8	1 sec.	10	28
,,	23. 56. 2	S.	2	Bluish-white	1·0	Short : 1 sec.	15	29
,,	23. 57. 8	S.&P.	3	Bluish-white	0·5	None	15	30
,,	23. 59. 31	H.B.	1	Bluish-white	0·6	Reddish : 3 secs.	1	31
August 12	0. 0. 50	P.	2	Bluish-white	0·7	Short	10	32
,,	0. 2. 28	H.B.	3	White	0·6	None	10	33
,,	0. 4. 0	H.B.	2	Bluish-white	0·8	None	5	34
,,	0. 6. 16	H.B.	4	...	1·0	None	20	35
,,	0. 7. 53	S.	2	White	1·5	None	20	36
,,	0. 9. 3	S.&P.	2	Blue	1·0	Bright : 4 secs.	10	37
,,	0. 13. 32	P.&H.B.	1	Reddish	0·8	Bright : 2 secs.	4	38
,,	0. 14. 55	H.B.	1	Bluish-white	0·8	Bright	6	39
,,	0. 16. 14	S.	1	Bluish-white	1·0	Faint	15	40
,,	0. 16. 16	S.	1	White	1·0	None	12	41
,,	0. 17. 20	S.	2	White	0·7	None	15	42
,,	0. 17. 44	P.	2	White	1·0	None	15	43
,,	0. 20. 1	P.	2	White	1·0	None	10	44
,,	0. 21. 28	H.B.	2	White	0·8	None	7	45
,,	0. 23. 40	H.B.	2	Bluish-white	0·5	Faint	6	46
,,	0. 23. 48	S.	...	...	...	Bright : 3 secs.	...	47
,,	0. 25. 49	S.&H.B.	2	White	0·4	None	8	48
,,	0. 26. 58	H.B.	3	Bluish-white	0·5	None	16	49
,,	0. 27. 33	S.	2	White	1·5	None	20	50
,,	0. 27. 46	P.	3	White	1·2	None	20	51
,,	0. 29. 40	H.B.	2	White	0·8	None	7	52
,,	0. 33. 37	H.B.	1	Bluish-white	1·4	Slight : 4 secs.	25	53
,,	0. 34. 15	P.	2	Bluish-white	0·5	None	15	54
,,	0. 35. 1	S.	2	White	1·0	None	15	55
,,	0. 35. 6	S.	1	White	1·5	None	20	56
,,	0. 36. 5	S.	2	Bluish-white	0·8	None	15	57
,,	0. 36. 50	S.	2	White	1·0	None	15	58
,,	0. 40. 35	P.	2	Bluish-white	0·5	Slight	15	59
,,	0. 41. 49	H.B.	3	Bluish-white	0·6	None	20	60
,,	0. 42. 43	P.	2	White	1·0	None	15	61
,,	0. 44. 15	P.	2	White	1·5	None	20	62
,,	0. 44. 59	H.B.	3	White	0·8	None	8	63

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 κ Andromedæ passed across and a little beyond α Lacertæ.
2	From a point midway between μ and ζ Cygni towards 1 Aquarii.
3	From α Pegasi towards γ Aquarii.
4	From γ Andromedæ towards ζ Andromedæ.
5	From α Cygni towards ρ Cygni.
6	From π Andromedæ towards ψ Pegasi.
7	From η Pegasi towards μ Cygni.
8	From γ Cassiopeiæ towards ϵ Cygni.
9	From α Cassiopeiæ towards α Lacertæ.
10	From γ Andromedæ towards 54 Andromedæ.
11	From α Andromedæ towards β Arietis.
12	From η Piscium towards 20 Ceti.
13	From τ Andromedæ towards σ Piscium.
14	From β Trianguli to α Trianguli.
15	From ζ Andromedæ towards ϕ Aquarii.
16	From B[1] Camelopardi towards o Ursæ Majoris.
17	From α Pegasi towards ζ Aquarii.
18	From 9 Aurigæ to a point $\frac{1}{4}^\circ$ to the north of Capella.
19	From 48 Persei towards ι Aurigæ.
20	From β Cassiopeiæ towards α Cygni.
21	From γ Cassiopeiæ to a point 5° beyond β Cassiopeiæ.
22	From a point midway between α and β Camelopardi towards 50 Aurigæ.
23	From γ Persei towards β Trianguli.
24	Directed from γ Trianguli towards β Arietis.
25	From a point midway between γ Persei and P. III. 57 passed over a point $\frac{1}{3}$ of distance from ϵ to δ Cassiopeiæ.
26	From a point midway between δ and μ Persei towards ι Aurigæ.
27	From γ Camelopardi towards Polaris.
28	From P. III. 57 towards γ Andromedæ.
29	From α Andromedæ towards α Pegasi.
30	From μ Andromedæ towards α Andromedæ.
31	Passed across 34 Persei moving from P. II. 236.
32	Directed from Polaris towards a point midway between γ and β Ursæ Minoris.
33	Directed from 43 Camelopardi towards 24 Lyncis.
34	Directed from γ Camelopardi passed just over 53 Persei.
35	From 5 Lacertæ towards λ Cygni.
36	From Polaris towards κ Draconis.
37	From ι Persei to ρ Persei.
38	From a point midway between B Persei and P. III. 57 to a point midway between γ and η Persei.
39	From P. III. 57 towards Capella.
40	From Polaris to κ Draconis.
41	From ϵ Cassiopeiæ towards γ Cephei.
42	From α Persei towards Polaris.
43	From ρ Persei towards the Pleiades.
44	From α Cassiopeiæ towards α Lacertæ.
45	From a point 2° north of γ Persei passed towards a point midway between μ and λ Persei.
46	From P. III. 57 towards β Aurigæ.
47	From a point 5° south of α Trianguli towards η Piscium.
48	From δ Persei to a point midway between ζ and o Persei.
49	From a point midway between α and δ Persei towards o Persei.
50	From Polaris to β Ursæ Minoris.
51	From a point midway between γ Andromedæ and β Trianguli towards a point midway between β and κ Persei.
52	From θ Aurigæ over a point $\frac{1}{3}$ of distance from β Tauri to ι Aurigæ.
53	From β Arietis towards a point $\frac{1}{3}$ of distance from γ to β Andromedæ.
54	From Polaris to α Ursæ Majoris.
55	From γ Cassiopeiæ towards Polaris.
56	From γ Cassiopeiæ towards β Andromedæ.
57	From γ Andromedæ to a point 5° east of o Andromedæ.
58	From α Persei towards ϵ Cassiopeiæ.
59	From γ Cassiopeiæ towards Polaris.
60	From α Camelopardi towards λ Draconis.
61	From α Trianguli towards Jupiter ($1^h\ 54^m : +10^\circ\ 11'$).
62	From α Andromedæ towards ϵ Pegasi.
63	From a point midway between α and β Arietis passed just below Jupiter ($1^h\ 54^m : +10^\circ\ 11'$).

Month and Day, 1904.	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	0. 46. 59	S.	2	...	...	...	15	1
,,	0. 47. 18	S.	2	...	...	...	15	2
,,	0. 47. 32	H.B.	3	White	1·0	None	8	3
,,	0. 48. 0	H.B.	...	White	0·6	None	15	4
,,	0. 51. 34	S.	1	Bluish-white	1·5	Bright	20	5
,,	0. 52. 0	P.	2	Bluish-white	1·0	None	15	6
,,	0. 52. 45	H.B.	3	Bluish-white	1·0	None	15	7
,,	0. 55. 48	H.B.	1	White	1·4	Bright	15	8
,,	0. 57. 23	S.	3	White	0·6	None	8	9
,,	0. 57. 56	H.B.	2	Bluish-white	1·0	None	15	10
,,	0. 58. 5	H.B.	4	Bluish-white	0·4	None	6	11
,,	0. 59. 50	H.B.	...	...	...	...	...	12
,,	1. 0. 1	H.B.	...	...	...	...	...	13
,,	1. 0. 10	H.B.	...	...	...	...	...	14
,,	1. 0. 28	H.B.	...	...	...	...	...	15
,,	1. 1. 10	H.B.	1	Red	0·3	None	4	16
,,	1. 2. 24	H.B.	...	...	...	...	...	17
,,	1. 2. 47	H.B.	...	...	...	...	...	18
,,	1. 4. 29	H.B.	1	Red	0·6	None	8	19
,,	1. 4. 33	S.	1	White	...	None	15	20
,,	1. 7. 6	S.	1	White	1·0	...	15	21
,,	1. 7. 9	H.B.	1	Bluish-white	1·2	Bright: 6 secs.	12	22
,,	1. 8. 6	H.B.	2	Bluish white	0·8	None	10	23
,,	1. 8. 48	S.	2	Bluish-white	1·3	Bright	20	24
,,	1. 9. 28	S.	1	Bluish-white	1·0	None	10	25
,,	1. 9. 34	S.	2	White	1·0	None	15	26
,,	1. 9. 36	S.&H.B.	2	White	0·8	None	15	27
,,	1. 10. 12	H.B.	3	Bluish-white	0·4	None	8	28
,,	1. 12. 59	H.B.	2	White	0·6	None	12	29
,,	1. 14. 2	S.	3	...	0·6	None	10	30
,,	1. 16. 9	P.	3	...	...	...	...	31
,,	1. 16. 32	S.	2	White	0·6	None	10	32
,,	1. 16. 36	S.&P.	2	White	3·0	Bright	50	33
,,	1. 18. 0	S.	3	...	...	...	...	34
,,	1. 18. 55	H.B.	3	...	0·6	...	...	35
,,	1. 20. 10	H.B.	3	...	0·4	...	...	36
,,	1. 21. 40	S.&H.B.	...	...	...	...	...	37
,,	1. 22. 19	H.B.	2	White	1·5	Bright	20	38
,,	1. 23. 52	H.B.	3	White	1·3	None	15	39
,,	1. 24. 50	H.B.	3	...	0·4	None	7	40
,,	1. 26. 20	H.B.	...	...	...	...	...	41
,,	1. 26. 42	S.&P.	2	White	0·8	None	8	42
,,	1. 27. 42	S	3	Bluish-white	1·2	None	15	43
,,	1. 28. 3	H.B.	3	...	...	...	...	44
,,	1. 28. 18	S.&P.	2	White	1·5	Bright	15	45
,,	1. 28. 55	H.B.	2	White	0·5	None	8	46
,,	1. 32. 10	H.B.	2	...	...	...	...	47
,,	1. 32. 47	S.&P.	2	Bluish-white	0·8	None	15	48
,,	1. 33. 0	H.B.	2	White	0·5	None	6	49
,,	1. 34. 59	S.&P.	2	White	0·8	None	10	50
,,	1. 37. 47	H.B.	...	...	...	...	...	51
,,	1. 37. 52	P.	2	White	1·2	None	15	52
,,	1. 38. 0	S.&H.B.	...	...	...	...	...	53
,,	1. 38. 8	S.&P.	1	White	1·0	Bright	20	54
,,	1. 39. 27	P.	3	Bluish-white	0·5	None	7	55
,,	1. 39. 37	P.	2	White	0·5	None	8	56
,,	1. 40. 4	H.B.	2	White	0·4	None	8	57
,,	1. 40. 58	P.	2	White	1·5	None	20	58
,,	1. 42. 25	H.B.	2	White	1·0	None	12	59
,,	1. 42. 47	S.&H.B.	2	White	1·2	None	12	60
,,	1. 43. 20	P.	2	White	1·0	None	12	61
,,	1. 43. 27	H.B.	2	Bluish-white	1·0	None	10	62
,,	1. 43. 36	S.&H.B.	2	Bluish-white	0·8	None	8	63
,,	1. 44. 47	H.B.	3	White	0·6	None	8	64
,,	1. 45. 10	S.&H.B.	3	White	0·6	None	10	65

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

No. for Reference.	Path of Meteor in the Sky.
1	From γ Persei towards Polaris.
2	From Capella towards κ Aurigæ.
3	From the Pleiades towards λ Tauri.
4	From a point 3° west of γ Ursæ Majoris towards α Ursæ Majoris.
5	From α Persei towards γ Andromedæ.
6	From α Cygni towards ϵ Cassiopeiæ.
7	From Polaris towards κ Draconis.
8	From α Aquilæ passed midway between δ and ι Aquilæ.
9	From P. III. 57 passed midway between Capella and β Aurigæ.
10	From β Arietis to a point 1° north of Jupiter (1^h54^m: $+10°11'$).
11	From ϵ Aurigæ fell vertically downwards.
12	From ζ Cephei towards α Cygni.
13	From β Camelopardi towards 18 Lyncis.
14	From μ Persei towards 2 Aurigæ.
15	From 43 Persei passed over λ Persei.
16	From a point midway between γ Persei and P. III. 57 passed over δ Persei and $\frac{1}{2}$° beyond it.
17	From ϵ Cassiopeiæ passed 4° west of β Camelopardi.
18	From η Persei towards α Cassiopeiæ.
19	From λ Persei towards 2 Aurigæ.
20	From ϵ Cassiopeiæ towards α Andromedæ.
21	From β Trianguli towards λ Arietis.
22	From κ Delphini to a point 1° north of θ Aquilæ.
23	Directed from a point a little below γ Persei to a point just below α Camelopardi.
24	From ϵ Cassiopeiæ passed just below α Andromedæ.
25	From P. III. 57 towards β Camelopardi.
26	From κ Cassiopeiæ towards ζ Cephei.
27	From γ Cygni towards β Delphini.
28	From a point midway between ϵ and δ Cassiopeiæ to a point midway between γ and κ Cassiopeiæ.
29	From α Trianguli to a point 6° below γ Pegasi.
30	From ϵ Cassiopeiæ passed over β Cassiopeiæ.
31	From γ Trianguli to a point $\frac{1}{2}$° to the west of α Arietis.
32	From α Persei towards Capella.
33	From ϵ Cassiopeiæ towards α Cygni.
34	Directed from γ Persei towards Polaris.
35	From δ Andromedæ to θ Piscium.
36	From a point 6° west of γ Pegasi towards δ Aquarii.
37	From β Trianguli passed over 50 Andromedæ.
38	From δ Persei towards δ Cassiopeiæ.
39	From λ Persei towards ι Aurigæ.
40	From ψ Persei to a point midway between o and ζ Persei.
41	From α Camelopardi to 24 Lyncis.
42	From o Ursæ Majoris towards θ Ursæ Majoris.
43	From Polaris towards λ Draconis.
44	From δ Persei passed over a point 1° south of ι Aurigæ.
45	From Capella towards α Ursæ Majoris.
46	From 19 Aurigæ passed over 46 Aurigæ.
47	From γ Persei towards a point midway between Aldebaran and ι Aurigæ.
48	From α Persei towards Polaris.
49	From A^1 Tauri passed over λ Tauri.
50	From β Tauri fell vertically downwards.
51	From δ Persei towards α Ceti.
52	From γ Persei towards Polaris.
53	From γ Persei towards γ Andromedæ.
54	From γ Persei towards α Persei.
55	From γ Andromedæ towards β Andromedæ.
56	From Capella towards β Aurigæ.
57	From γ Persei to a point midway between ϵ and μ Persei.
58	From a point midway between δ Persei and ϵ Cassiopeiæ passed 2° east of Polaris.
59	From γ Andromedæ towards γ Pegasi.
60	From α Cassiopeiæ towards α Andromedæ.
61	From β Andromedæ towards γ Pegasi.
62	From Polaris towards λ Draconis.
63	From a point 5° south of Polaris towards λ Draconis.
64	From the Pleiades passed 1° south of Aldebaran.
65	From Polaris towards κ Draconis.

Month and Day, 1904.	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	1. 46. 5	S.	3	White	0·4	None	6	1
,,	1. 50. 20	H.B.	3	White	0·6	None	10	2
,,	1. 51. 15	H.B.	3	White	0·4	None	8	3
,,	1. 52. 25	H.B.	2	White	1·2	None	12	4
,,	1. 53. 53	H.B.	3	White	0·4	None	8	5
,,	1. 54. 59	S.&P	4	White	2·0	Bright : 4 secs.	20	6
,,	1. 56. 25	P.	1	White	1·4	Bright	15	7
,,	2. 0. 20	S.&P.	2	White	1·2	None	12	8
,,	2. 0. 45	H.B.	...	...	...	...	...	9
,,	2. 1. 19	S.&P.	3	...	...	...	3	10
,,	2. 1. 30	S.&P.	2	White	0·6	None	12	11
,,	2. 1. 52	H.B.	3	...	...	...	...	12
,,	2. 1. 52	H.B.	3	...	...	...	...	13
,,	2. 3. 0	H.B.	2	...	0·8	Bright : 3 secs.	...	14
,,	2. 3. 25	H.B.	3	...	...	...	...	15
,,	2. 3. 30	H.B.	3	...	...	...	...	16
,,	2. 3. 30	H.B.	3	...	...	...	...	17
,,	2. 4. 25	S.&H.B.	2	White	1·4	None	8	18
,,	2. 4. 42	S.&P.	1	White	1·5	Bright	20	19
,,	2. 5. 10	S.&P.	3	...	0·6	None	8	20
,,	2. 6. 52	H.B.	2	White	1·4	None	20	21
,,	2. 7. 14	S.	2	White	0·8	None	10	22
,,	2. 7. 56	S.&P.	3	Bluish-white	0·5	None	8	23
,,	2. 9. 41	H.B.	3	White	0·4	None	6	24
,,	2. 9. 44	P.	2	Bluish-white	0·6	None	8	25
,,	2. 10. 10	S.	1	Reddish	1·4	Bright	25	26
,,	2. 11. 12	P.	2	White	0·6	Bright	15	27
,,	2. 13. 46	H.B.	2	White	0·6	None	15	28
,,	2. 14. 36	S.	3	White	0·4	None	8	29
,,	2. 14. 45	P.	2	White	0·5	None	8	30
,,	2. 15. 17	S.	3	White	0·7	None	10	31
,,	2. 18. 12	H.B.	3	...	1·0	None	15	32
,,	2. 19. 7	P.	1	White	0·6	Bright	12	33
,,	2. 19. 56	S.	3	White	1·0	None	12	34
,,	2. 21. 8	S.	2	Bluish-white	0·8	None	10	35
,,	2. 21. 42	S.&P.	1	Bluish-white	1·0	Bright	10	36
,,	2. 22. 3	H.B.	3	White	0·6	None	6	37
,,	2. 22. 42	S.	>1	White	2·0	Bright : 2 secs.	25	38
,,	2. 23. 55	S.	2	White	0·5	None	8	39
,,	2. 24. 0	S.	3	White	0·5	None	8	40
,,	2. 24. 42	P.	2	White	1·0	None	12	41
,,	2. 26. 45	P.	3	Bluish-white	0·6	None	10	42
,,	2. 28. 40	H.B.	2	White	0·8	None	6	43
,,	2. 29. 46	H.B.	2	White	0·6	None	6	44
,,	2. 32. 32	P.	3	White	0·7	None	8	45
,,	2. 33. 0	S.	2	Bluish-white	0·6	None	12	46
,,	2. 34. 48	H.B.	3	White	0·4	None	8	47
,,	2. 35. 55	H.B.	3	White	0·7	None	12	48
,,	2. 36. 50	H.B.	2	White	0·6	None	10	49
,,	2. 37. 15	S.	2	Bluish-white	0·6	None	10	50
,,	2. 37. 47	S.	...	Bluish-white	...	...	...	51
,,	2. 37. 49	H.B.	...	Bluish-white	0·8	...	12	52
,,	2. 37. 52	H.B.	3	...	0·8	None	12	53
,,	2. 39. 24	S.	1	White	0·8	None	15	54
,,	2. 39. 26	P.	1	White	1·4	None	10	55
,,	2. 39. 30	S.&P.	2	Bluish	0·6	None	8	56
,,	2. 39. 38	S.&H.B.	1	White	1·0	None	15	57
,,	2. 40. 5	H.B.	1	White	0·5	Slight	6	58
,,	2. 40. 47	H.B.	2	...	...	...	...	59
,,	2. 40. 47	H.B.	3	...	...	...		60
,,	2. 40. 47	H.B.	3	...	...	...		61
,,	2. 43. 19	S.	2	White	0·6	None	12	62
,,	2. 45. 38	S.&H.B.	2	White	1·0	None	10	63
,,	2. 46. 45	H.B.	2	White	1·0	None	10	64
,,	2. 48. 3	P.&H.B.	2	Bluish-white	0·8	None	15	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 Capella towards β Aurigæ.
2	From τ Andromedæ towards χ Pegasi.
3	From the Pleiades passed across ϵ Tauri.
4	From a point midway between Capella and β Aurigæ towards ϵ Geminorum.
5	From ξ^2 Ceti towards ζ Ceti.
6	From Capella towards ϵ Cassiopeiæ.
7	From α Cephei towards α Cygni.
8	From δ Persei towards the Pleiades.
9	From ι Persei to a point midway between σ and 16 Persei.
10	From δ Persei towards ϵ Persei.
11	From δ Persei towards 35 Arietis.
12	From P. III. 57 towards β Camelopardi.
13	From ϵ Cassiopeiæ towards Polaris.
14	From β Arietis passed 3° below Jupiter ($1^h\ 54^m$: $+10°\ 11'$).
15	From α Persei to ζ Persei.
16	From ϵ Aurigæ towards κ Aurigæ.
17	From γ Tauri passed over 66 Tauri.
18	From λ Persei towards ϵ Persei.
19	From α Persei towards Polaris.
20	From λ Persei towards ι Aurigæ.
21	From η Piscium towards η Ceti.
22	From κ Persei towards Capella.
23	From α Andromedæ towards α Pegasi.
24	From κ Tauri passed over Aldebaran.
25	From γ Andromedæ towards β Andromedæ.
26	From γ Persei towards Jupiter ($1^h\ 54^m$: $+10°\ 11'$).
27	From δ Persei towards α Arietis.
28	From γ Trianguli towards β Arietis.
29	From δ Persei passed over γ Andromedæ.
30	From γ Persei towards ϵ Cassiopeiæ.
31	From δ Persei towards ι Aurigæ.
32	From β Cassiopeiæ fell downwards at an angle of 25° from the vertical towards the north.
33	From δ Persei towards β Trianguli.
34	From α Persei towards β Trianguli.
35	From α Persei to Capella.
36	From Polaris towards δ Draconis.
37	From ζ Draconis towards μ Draconis.
38	From γ Persei to a point 10° east of Polaris.
39	From α Andromedæ to β Andromedæ.
40	From α Ursæ Majoris towards δ Ursæ Majoris.
41	From Polaris towards ζ Draconis.
42	From α Ursæ Majoris towards δ Ursæ Majoris.
43	From λ Persei towards β Aurigæ.
44	From a point 1° north of ι Aurigæ fell parallel to a line joining ι Aurigæ and β Tauri.
45	From γ Persei towards ϵ Cassiopeiæ.
46	From α Persei towards β Trianguli.
47	From the Pleiades passed over π Tauri.
48	From θ Tauri to a point 2° north of μ Geminorum.
49	From ι Persei passed towards β Trianguli.
50	From γ Andromedæ towards β Andromedæ.
51	From Capella to β Aurigæ.
52	From α Andromedæ towards α Pegasi.
53	From 58 Aurigæ passed between 71 Geminorum and Castor.
54	From γ Persei towards ϵ Cassiopeiæ.
55	From α Persei towards Capella.
56	From Capella towards γ Andromedæ.
57	From α Persei towards β Trianguli.
58	From β Pegasi towards θ Pegasi.
59	From β Aurigæ passed over 71 Geminorum.
60	From ξ Persei towards κ Tauri.
61	From π Andromedæ towards χ Pegasi.
62	From γ Persei towards γ Andromedæ.
63	From δ Persei passed over ι Aurigæ.
64	From a point 5° north of the Pleiades towards Aldebaran.
65	From α Arietis to a point 3° east of Jupiter ($1^h\ 54^m$: $+10°\ 11'$).

Month and Day, 1904.	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	2. 50. 53	S.&P.	2	White	0·8	None	10	1
,,	2. 52. 7	S.&P.	2	White	1·4	None	8	2
,,	2. 52. 29	S.	2	White	0·5	None	8	3
,,	2. 53. 25	H.B.	>1	Bluish-white	1·5	None	20	4
,,	2. 53. 53	S.&P.	3	White	0·6	None	10	5
,,	2. 54. 45	H.B.	2	White	0·5	None	6	6
,,	2. 58. 18	H.B.	3	White	0·5	None	8	7
,,	2. 59. 17	S.&H.B.	2	White	0·5	None	5	8
,,	3. 10. 36	S.&P.	3	White	0·6	None	8	9
,,	3. 12. 59	S.	2	Bluish-white	0·8	None	10	10
,,	3. 13. 28	H.B.	1	Bluish-white	1·4	None	25	11
,,	3. 17. 34	P.	1	White	1·5	Bright	25	12
,,	3. 20. 36	S.	2	White	0·8	None	10	13
,,	3. 24. 34	P.&H.B.	2	White	0·3	None	5	14
,,	3. 28. 9	S.&H.B.	2	White	1·0	None	12	15
,,	3. 32. 44	S.	1	White	1·4	None	15	16
,,	3. 38. 38	P.	2	Reddish	2·5	Brilliant	35	17
,,	3. 42. 46	S.&P.	2	White	1·0	None	12	18
,,	3. 44. 49	H.B.	2	White	0·8	None	10	19
,,	21. 14. 26	H.B.	2	White	0·4	None	8	20
,,	21. 17. 43	S.&P.	1	White	2·0	Bright	25	21
,,	21. 24. 34	S.&P.	3	Bluish-white	0·5	None	10	22
,,	21. 27. 37	H.B.	3	...	0·6	None	8	23
,,	21. 27. 48	S.&P.	2	White	0·5	None	10	24
,,	21. 30. 0	S.&P.	2	White	1·0	Slight	15	25
,,	21. 34. 40	H.B.	2	Bluish-white	0·4	None	8	26
,,	21. 34. 44	P.	2	...	0·8	None	20	27
,,	21. 44. 2	H.B.	2	White	0·6	None	8	28
,,	21. 45. 52	H.B.	2	Bluish-white	0·8	None	12	29
,,	21. 47. 42	S.&H.B.	2	White	1·2	None	15	30
,,	21. 49. 43	H.B.	2	Bluish-white	1·4	None	20	31
,,	21. 51. 14	S.&H.B.	1	White	0·8	Slight	12	32
,,	21. 53. 21	P.	2	Bluish-white	0·8	Slight	10	33
,,	21. 54. 6	H.B.	3	Bluish-white	0·6	None	8	34
,,	21. 55. 57	H.B.	2	White	0·5	None	8	35
,,	21. 56. 51	S.&H.B.	1	White	0·8	None	12	36
,,	22. 0. 54	H.B.	2	Bluish-white	0·8	None	12	37
,,	22. 2. 7	P.	1	White	1·5	Long : 3 secs.	10	38
,,	22. 4. 21	H.B.	3	...	0·6	None	12	39
,,	22. 5. 13	P.	2	Bluish-white	0·5	None	8	40
,,	22. 8. 30	S.	2	Bluish-white	1·0	None	12	41
,,	22. 13. 7	H.B.	4	...	0·4	None	8	42
,,	22. 20. 59	H.B.	2	White	1·2	None	15	43
,,	22. 23. 56	P.&H.B.	1	Bluish-white	2·5	Long : 2 secs.	25	44
,,	22. 26. 48	S:P.&H.B.	>1	Bluish-white	1·5	None	25	45
,,	22. 29. 12	S:P.&H.B.	>1	White	2·5	Long : 2 secs.	50	46
,,	22. 32. 22	H.B.	2	Bluish-white	1·2	Short	25	47
,,	22. 34. 46	S.&H.B.	2	White	1·0	None	12	48
,,	22. 42. 57	H.B.	3	...	1·0	None	8	49
,,	22. 46. 12	P.	2	White	1·0	Slight	10	50
,,	22. 47. 55	S.	2	Bluish-white	0·8	Slight	12	51
,,	22. 50. 9	S:P.&H.B.	1	White	2·0	Bright : 2 secs.	30	52
,,	22. 50. 27	S.&P.	2	White	1·3	Bright	15	53
,,	22. 50. 52	S.&P.	2	White	1·0	Slight	15	54
,,	22. 52. 12	P.	2	White	0·3	None	5	55
,,	22. 55. 42	S.	2	Bluish-white	0·5	None	10	56
,,	22. 55. 43	S.	3	Bluish-white	0·6	None	10	57
,,	22. 58. 12	H.B.	3	...	0·4	None	5	58
,,	22. 59. 50	S.	2	White	1·2	Bright	15	59
,,	23. 0. 17	S.	1	White	1·5	Bright	15	60
,,	23. 0. 52	H.B.	1	White	1·3	Bright	20	61
,,	23. 2. 38	H.B.	3	...	0·4	None	6	62
,,	23. 2. 47	H.B.	3	...	2·0	None	20	63
,,	23. 3. 2	H.B.	2	White	0·6	None	8	64
,,	23. 6. 42	H.B.	3	...	0·6	None	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 Polaris towards κ Draconis.
2	From λ Draconis towards ψ Draconis.
3	From γ Persei towards ϵ Cassiopeiæ.
4	From ι Persei towards β Andromedæ.
5	From Polaris to κ Draconis.
6	From β Aurigæ towards Castor.
7	From δ Aurigæ passed midway between 21 and 16 Lyncis.
8	From Aldebaran towards μ Tauri.
9	From γ Cassiopeiæ to ι Cassiopeiæ.
10	From γ Cygni to ϕ Cygni.
11	From γ Persei towards β Cephei.
12	From γ Cephei towards η Draconis.
13	From γ Andromedæ to β Andromedæ.
14	From α Pegasi to ζ Pegasi.
15	From α Cygni to ζ Cygni.
16	From θ to ν Andromedæ.
17	From α Persei towards β Pegasi.
18	From β Andromedæ towards α Andromedæ.
19	From β Pegasi to a point 3° south of ι Pegasi
20	From a point midway between β and η Pegasi towards θ Pegasi.
21	From ϵ Cassiopeiæ towards β Cephei.
22	From 51 Andromedæ towards α Cassiopeiæ.
23	From α Cygni towards ζ Draconis.
24	From a point 5° east of α Cygni towards ϵ Cygni.
25	From a point just below α Cassiopeiæ towards κ Andromedæ.
26	From η Pegasi towards θ Pegasi.
27	From P. XXII. 258 towards δ Draconis.
28	From a point a little below θ Cassiopeiæ towards ν Cassiopeiæ.
29	From a point midway between γ and τ Andromedæ to a point 3° south of β Arietis.
30	From μ Andromedæ towards 58 Piscium.
31	From λ Pegasi towards a point midway between ζ and θ Pegasi.
32	From υ Andromedæ passed nearly over and 4° beyond α Cassiopeiæ.
33	From γ Cygni towards β Cygni.
34	Directed from ι Pegasi passed over υ Cygni and 3° beyond it.
35	From ζ Cassiopeiæ towards 50 Andromedæ.
36	From κ Andromedæ passed just below η Pegasi.
37	From a point midway between α Andromedæ and ψ Pegasi towards 104 Piscium.
38	From a point 5° south of δ Cygni passed over γ Cygni.
39	From α Pegasi towards γ Aquarii.
40	From β Cassiopeiæ passed over ζ Cassiopeiæ.
41	From γ Persei towards δ Cassiopeiæ.
42	From ι Cephei passed just over 50 Cassiopeiæ.
43	From ω Piscium towards 88 Aquarii.
44	From P. III. 57 passed over 72 Cassiopeiæ.
45	Directed from β Andromedæ passed over λ Andromedæ.
46	From γ Persei passed over κ Draconis and 5° beyond it.
47	From α Pegasi passed over γ Piscium.
48	From α Trianguli towards η Piscium.
49	From δ Andromedæ towards η Piscium.
50	From a point 5° south of ζ Cassiopeiæ towards a point midway between α Cephei and α Cygni.
51	From β Andromedæ towards χ Pegasi.
52	From γ Andromedæ to a point midway between α Cephei and α Cygni.
53	From γ Persei towards Polaris.
54	From κ Draconis towards ϵ Ursæ Majoris.
55	From α Cassiopeiæ passed over α Lacertæ.
56	From β Trianguli towards β Persei.
57	From β Trianguli passed over α Trianguli.
58	From β Andromedæ to τ Andromedæ.
59	From δ Persei towards ϵ Cassiopeiæ.
60	From α Persei to a point 5° south east of β Persei.
61	From a point near β Pegasi passed over α Pegasi.
62	From θ Andromedæ towards μ Cygni.
63	From ϵ Cassiopeiæ towards δ Cygni.
64	Directed from a point midway between α and δ Cygni passed over γ Lyræ.
65	From γ Cassiopeiæ towards δ Cephei.

Month and Day, 1904.	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	23. 7.47	S.	1	White	2·5	Slight	25	1
,,	23. 8.44	H.B.	2	White	0·8	None	12	2
,,	23. 10. 5	P.	2	Bluish-white	0·6	Slight	12	3
,,	23. 12. 17	S.&H.B.	2	White	1·0	Short	8	4
,,	23. 14. 57	H.B.	2	White	0·5	None	10	5
,,	23. 22. 14	H.B.	3	...	0·8	None	20	6
,,	23. 24. 10	H.B.	1	Reddish	0·6	2 secs.	2	7
,,	23. 29. 8	H.B.	3	...	0·5	None	7	8
,,	23. 31. 12	H.B.	4	Bluish-white	2·0	Long : 2 secs.	25	9
,,	23. 32. 38	H.B.	3	White	0·4	None	10	10
,,	23. 32. 55	H.B.	3	...	0·4	None	6	11
,,	23. 38. 34	P.&H.B.	2	White	0·5	Short : 3 secs.	10	12
,,	23. 48. 50	H.B.	2	White	0·6	None	6	13
,,	23. 50. 42	S.	1	White	1·0	Bright	15	14
,,	23. 52. 59	H.B.	1	Bluish-white	2·0	Faint	25	15
,,	23. 54. 47	H.B.	2	White	0·8	None	15	16
,,	23. 57. 36	S.	2	White	0·6	None	10	17
,,	23. 58. 38	S.	1	White	1·0	Slight	10	18
,,	23. 59. 39	S.	2	Bluish-white	0·8	None	12	19
August 13	0. 0. 35	P.	2	Bluish-white	0·8	None	10	20
,,	0. 1. 29	S.&P.	1	Bluish-white	1·5	Bright	20	21
,,	0. 1. 48	S.	4	White	1·7	Bright	25	22
,,	0. 8. 31	H.B.	2	White	0·8	Long : 2 secs.	15	23
,,	0. 11. 26	H.B.	1	White	3·0	Bright	25	24
,,	0. 12. 0	S.	>1	White	2·0	Bright	35	25
,,	0. 28. 15	H.B.	3	...	0·6	None	10	26
,,	0. 29. 39	H.B.	2	Reddish	0·6	Slight	2	27
,,	0. 29. 51	H.B.	2	White	1·5	Faint : 2 secs.	15	28
,,	0. 31. 48	S.&P.	2	Bluish-white	0·8	None	15	29
,,	0. 37. 49	S.	2	White	0·8	Bright	15	30
,,	0. 40. 35	P.	1	White	0·6	None	12	31
,,	0. 44. 8	S.	2	Bluish-white	0·4	None	8	32
,,	0. 45. 29	P.	>1	White	2·0	Bright	20	33
,,	0. 47. 7	H.B.	3	White	0·4	None	8	34
,,	1. 0. 31	H.B.	2	White	0·6	None	12	35
,,	1. 0. 48	P.&H.B.	2	Bluish-white	1·0	Slight	15	36
,,	1. 20. 36	S.&P.	3	Bluish-white	0·6	None	12	37
,,	1. 28. 51	S.	3	White	0·5	None	10	38
,,	1. 36. 35	S.&H.B.	2	White	0·5	None	10	39
,,	1. 48. 33	S.&H.B.	2	Bluish-white	1·0	None	15	40
,,	1. 51. 48	S.&H.B.	1	Reddish	2·0	Bright	25	41
,,	1. 59. 30	P.	...	Bluish-white	0·6	None	10	42
,,	2. 12. 43	S.	...	White	1·0	None	12	43
,,	2. 23. 41	S.&P.	2	White	1·4	Slight	20	44
,,	2. 35. 50	P.&H.B.	>1	Bluish-white	1·0	None	25	45
,,	2. 42. 34	H.B.	3	...	0·8	None	10	46
,,	2. 54. 53	S.	2	White	0·6	None	10	47
,,	3. 0. 36	S.	1	White	1·6	Bright	20	48
,,	3. 5. 34	S.&H.B.	1	White	1·0	None	15	49
,,	3. 7. 51	S.	>1	Bluish-white	2·0	Bright	25	50
,,	3. 17. 12	P.	2	White	...	None	10	51
,,	3. 17. 22	S.&P.	3	...	0·4	None	8	52
,,	3. 20. 46	S.&H.B.	2	...	0·6	None	10	53
,,	3. 32. 38	P.&H.B.	4	Reddish	2·5	Bright	30	54
,,	3. 38. 13	H.B.	2	White	1·0	Slight	12	55
,,	3. 39. 48	P.	3	Bluish-white	0·6	Slight	10	56
,,	3. 43. 0	H.B.	1	White	2·0	Bright	25	57
,,	3. 46. 33	S.	1	White	1·5	Bright	20	58
,,	20. 52. 27	H.B.	2	White	0·6	None	8	59
,,	20. 58. 27	H.B.	1	Reddish	1·5	Long : 7 secs.	20	60
,,	21. 2. 53	H.B.	2	Yellowish	7+	Short	40	61
,,	21. 18. 14	H.B.	1	Reddish	2·0	Long : 1 sec.	25	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	From α Persei towards α Ursæ Majoris.
2	From β Trianguli passed over α Trianguli.
3	From τ Andromedæ towards χ Pegasi.
4	From a point midway between γ and η Persei towards ϕ Andromedæ.
5	From a point midway between λ and κ Draconis towards ζ Ursæ Majoris.
6	Directed from γ Persei passed midway between 7 Camelopardi and 9 Aurigæ disappearing near β Aurigæ.
7	From P. II. 236 towards 12 Persei.
8	Directed from η Persei to a point midway between 7 and β Camelopardi.
9	From ϵ Cassiopeiæ passed over a point midway between α and β Cephei and 10° beyond it.
10	From β Trianguli passed over a point midway between α and 35 Arietis.
11	From ϵ Persei fell vertically downwards.
12	From γ Persei towards α Trianguli.
13	From 72 Ophiuchi to a point midway between γ and β Ophiuchi.
14	From γ Persei towards Capella.
15	From a point midway between γ and β Ursæ Minoris to a point midway between η Ursæ Majoris and λ Boötis.
16	From ω Piscium fell vertically downwards.
17	From β Cassiopeiæ to δ Cephei.
18	From ζ Cassiopeiæ to β Lacertæ.
19	From α Lyræ towards α Herculis.
20	From γ Cygni towards β Lyræ.
21	From Polaris to a point midway between ζ and ϵ Ursæ Majoris.
22	From γ Persei towards γ Ursæ Minoris.
23	From β Delphini to a point midway between 69 and θ Aquilæ.
24	From ϵ Cassiopeiæ towards a point midway between γ and β Lyræ.
25	From β Pegasi towards α Aquilæ.
26	From ϵ Arietis to a point 3° east of Jupiter ($1^h\ 54^m$: $+10°\ 12'$).
27	From a point just below α Persei towards a point midway between β and ϵ Persei.
28	From P. III. 57 passed over δ Cassiopeiæ.
29	From Polaris towards β Ursæ Minoris.
30	From γ Andromedæ towards β Andromedæ.
31	From ι Persei towards Capella.
32	From δ Cassiopeiæ to β Cassiopeiæ.
33	From α Persei towards β Camelopardi.
34	From Capella towards β Aurigæ.
35	From γ Cygni towards 2 Cygni.
36	From θ Persei to ω Andromedæ.
37	From ϕ Piscium to a point midway between δ Piscium and γ Pegasi.
38	From β Trianguli towards ρ Piscium.
39	From λ Cephei towards χ Draconis.
40	From α Cassiopeiæ towards β Andromedæ.
41	From ϕ Andromedæ to Polaris.
42	From α Andromedæ towards λ Pegasi.
43	From ϵ Cygni towards α Vulpeculæ.
44	From γ Persei towards Polaris.
45	From α Cygni towards γ Draconis.
46	From β Cassiopeiæ to ζ Cassiopeiæ.
47	From κ Persei towards δ Trianguli.
48	From η Persei towards o Cephei.
49	From ϕ Cassiopeiæ towards β Lacertæ.
50	From α Pegasi towards η Cygni.
51	From λ Cephei towards τ Draconis.
52	From Capella towards β Aurigæ.
53	From δ Persei to ϵ Aurigæ.
54	From β Andromedæ towards α Pegasi.
55	From κ Pegasi towards ϕ Piscium.
56	From β Lacertæ to a point a little south of α Cygni.
57	From ν Persei towards λ Cephei.
58	From α Persei towards α Cassiopeiæ.
59	From ψ Pegasi towards ω Piscium.
60	From 78 Pegasi towards α Pegasi.
61	Appeared as a pear-shaped ball of fire moving from a point midway between Polaris and γ Cephei and passing just over 18 Lyncis. The rate of motion became perceptibly slower towards the end of its path.
62	Directed from P. III. 57 passed over and 5° beyond a point midway between Polaris and γ Cephei.

Month and Day, 1904.		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	13	21. 23. 3	H.B.	1	White	1·5	Long : 2 secs.	30	1
	,,	21. 25. 42	H.B.	3	...	0·6	None	8	2
	,,	21. 32. 30	S.&H.B.	3	...	0·5	None	12	3
	,,	22. 2. 41	H.B.	3	...	0·4	None	6	4
	,,	22. 27. 28	S.	3	White	2·0	None	25	5
	,,	22. 28. 28	H.B.	2	Bluish-white	0·8	None	20	6
	,,	22. 30. 41	H.B.	2	White	1·5	Bright	25	7
	,,	22. 40. 33	H.B.	5	White	0·6	None	2	8
	,,	22. 41. 52	S.	2	Bluish-white	1·0	None	15	9
	,,	22. 45. 13	S.&H.B.	3	...	0·8	None	10	10
	,,	22. 47. 17	S.&H.B.	2	...	0·6	None	12	11
	,,	22. 55. 14	S.&H.B.	2	...	0·8	None	15	12
	,,	23. 9. 48	S.&H.B.	1	White	1·2	Slight	15	13
	,,	23. 22. 16	S.&H.B.	2	Bluish-white	0·6	None	12	14
	,,	23. 38. 22	S.&H.B.	1	White	0·8	2 secs.	10	15
	,,	23. 52. 49	S.&H.B.	2	White	1·2	Slight : 1 sec.	15	16
	,,	23. 58. 14	H.B.	2	White	2·5	Bright	30	17
August	14	1. 21. 12	S.	2	Bluish-white	1·0	None	15	18
	,,	1. 29. 5	S.	3	Bluish-white	0·5	None	10	19
	,,	1. 36. 37	S.	4	Reddish	2·5	Bright : 3 secs.	30	20
	,,	1. 41. 47	S.	1	White	1·5	Bright : 2 secs.	20	21
	,,	2. 18. 3	S.	2	White	1·2	Slight	15	22
	,,	2. 25. 31	S.	1	White	3·0	Bright : 3 secs.	30	23
	,,	2. 26. 46	S.	3	...	0·8	None	15	24
	,,	2. 37. 34	S.	3	Bluish-white	0·5	None	10	25
	,,	2. 52. 49	S.	2	Bluish-white	0·8	Slight	15	26
	,,	3. 7. 37	S.	1	Reddish	2·0	Bright	30	27
	,,	3. 9. 35	S.	2	Bluish-white	1·0	None	15	28
	,,	3. 14. 39	S.	2	White	1·5	Bright	20	29
	,,	3. 19. 35	S.	2	White	1·5	Bright : 3 secs.	20	30
	,,	3. 26. 1	S.	3	White	0·8	None	15	31
	,,	3. 27. 37	S.	3	...	0·3	None	5	32
	,,	3. 30. 47	S.	2	White	1·5	Bright	20	33
	,,	3. 32. 35	S.	4	Reddish	3·0	Bright : 5 secs.	25	34
	,,	3. 37. 2	S.	2	Bluish-white	0·6	None	10	35
October	3	19. 2.	H.B.	3	...	0·5	None	7	36
	,,	20. 0.	H.B.	3	White	1·5	None	20	37
	,,	23. 10.	H.B.	4	...	0·4	None	5	38
October	28	18. 10.	H.B.	3	...	0·3	None	12	39
October	29	18. 21.	H.B.	1	Yellowish	3·5	Train 10° in length	25	40
November	8	18. 26.	H.B.	2	...	0·8	None	12	41
November	11	23. 20.	H.B.	3	...	0·4	None	8	42
November	12	18. 40.	H.B.	2	...	0·2	None	6	43
November	14	22. 8.	H.B.	3rd. at commencement when it burst, the meteor exceeded 1st.	Yellowish burst into bluish-white	1·8	Faint streak	8	44
	,,	22. 15.	H.B.	3	...	0·5	None	4	45
	,,	22. 27.	P.	>1	White	1·5	Long : bright	20	46
	,,	22. 48. 35	S.P.&H.B.	3	...	0·5	None	12	47

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 to a point midway between β and ζ Pegasi.
2	From η Persei passed over and 1° beyond 51 Andromedæ.
3	From a point midway between ϵ and δ Cassiopeiæ towards 30 Cephei.
4	From 1 Vulpeculæ passed over and 2° beyond 31 Aquilæ.
5	From β Pegasi towards α Cassiopeiæ.
6	From β Pegasi towards θ Pegasi.
7	From γ Cassiopeiæ towards 63 Cygni.
8	Passed 1° below Jupiter ($1^h\ 54^m$: $+10°\ 12'$) at an angle of 45° towards the south.
9	From ι Persei towards γ Andromedæ.
10	From P. III. 57 passed over 72 Cassiopeiæ.
11	Passed over a point midway between ϵ and γ Cassiopeiæ towards β Persei.
12	Passed over a point midway between δ and ϵ Persei moving towards η Persei.
13	From γ Persei towards β Pegasi.
14	From a point 1° south of 52 Persei towards γ Cephei.
15	From γ Cassiopeiæ towards ζ Cephei.
16	From a point midway between β and μ Andromedæ towards γ Pegasi.
17	From Polaris towards ϵ Persei.
18	From θ Cephei towards γ Draconis.
19	From α Andromedæ to ι Pegasi.
20	From α Lyræ towards α Aquilæ.
21	From α Cassiopeiæ towards β Lacertæ.
22	From δ Persei towards γ Andromedæ.
23	From γ Cephei towards γ Ursæ Minoris.
24	From ζ Cephei towards δ Cygni.
25	From β Pegasi to ι Pegasi.
26	From α Cassiopeiæ towards δ Cephei.
27	From a point near α Cygni towards ξ Draconis.
28	From a point a little to the east of ϵ Cassiopeiæ to o Cephei.
29	From Polaris to a point a little beyond β Ursæ Minoris.
30	From β Pegasi towards ζ Cassiopeiæ.
31	From γ Cassiopeiæ towards ξ Cephei.
32	From α Cygni to o Cygni.
33	From δ Persei to a point about 5° to the east of β Camelopardi
34	From α Persei towards α Cassiopeiæ.
35	From α Andromedæ towards 56 Pegasi.
36	From a point $\frac{1}{2}$° south east of ϵ Pegasi towards 20 Aquarii.
37	From o Aquarii towards 70 Aquilæ.
38	From 27 Tauri towards 41 Tauri.
39	Commencing almost exactly at 128 Vulpeculæ passed over 31 Aquilæ.
40	Directed from 72 Pegasi passed over and 10° beyond a point midway between γ Pegasi and ω Piscium.
41	Passed over δ Herculis in a line inclined 15° to the vertical towards the north, the star being very near the centre of the meteor's path.
42	Directed from a point midway between Capella and ϵ Aurigæ passed to a point midway between β and θ Aurigæ.
43	Directed from 34 Cygni passed just over 48 Cygni.
44	Directed from 132 Tauri the meteor burst when midway between ϵ and μ Geminorum.
45	Passed over ψ Eridani moving towards μ Leporis.
46	From a point near ξ Draconis passed above α Lyræ.
47	Directed from 2 Aurigæ towards υ^1 Tauri.

Month and Day, 1904.	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 14	22. 55. 51	P.	2	...	0·5	None	6	1
,,	23. 2. 35	H.B.	3	...	0·6	None	8	2
,,	23. 7. 34	S:P.&H.B.	3	...	4·0	None	35	3
,,	23. 8. 49	S.&P.	2	White	3·0	Bright	25	4
,,	23. 8. 52	P.	3	...	0·5	None	7	5
,,	23. 18. 17	P.	2	White	1·5	Faint	20	6
,,	23. 19. 13	P.	3	White	1·0	Faint	10	7
,,	23. 31. 49	E:P.&H.B.	3	...	0·6	None	8	8
,,	23. 32. 39	S.	1	Bluish-white	1·5	Bright	20	9
,,	23. 37. 57	E:P.&H.B.	3	...	0·4	None	5	10
,,	23. 42. 20	S.	2	White	1·0	Bright	15	11
,,	23. 55. 20	E:P.&H.B.	2	White	2·0	None	10	12
,,	23. 58. 59	E.&P.	3	...	0·4	...	4	13
November 15	0. 0. 45	S.	3	...	...	...	15	14
,,	0. 3. 28	E.&P.	2	...	1·5	Bright : long.	14	15
,,	0. 5. 4	S.	2	Bluish-white	0·7	...	12	16
,,	0. 8. 42	S.&H.B.	3	...	0·6	...	6	17
,,	0. 12. 42	S.&H.B.	2	White	1·0	...	12	18
,,	0. 14. 4	S.&P.	1	Bluish-white	1·0	Streak : 4 secs.	25	19
,,	0. 16. 57	H.B.	2	White	0·6	None	10	20
,,	0. 20. 49	E:S.&P.	1	...	1·0	4 secs.	15	21
,,	0. 21. 7	H.B.	2	White	0·8	...	20	22
,,	0. 25. 2	E:S.&H.B.	2	Bluish	0·4	Streak : 3 secs.	4	23
,,	0. 28. 4	S.&H.B.	2	White	0·8	...	15	24
,,	0. 30. 11	S.&H.B.	3	...	1·1	...	10	25
,,	0. 30. 27	E.&S.	1	...	0·6	Streak : 2 secs.	15	26
,,	0. 30. 50	E.&S.	2	...	...	...	8	27
,,	0. 31. 43	H.B.	3	...	0·6	...	10	28
,,	0. 39. 40	E.&H.B.	2	...	0·8	...	12	29
,,	0. 42. 32	E.&H.B.	2	...	0·5	Faint	6	30
,,	0. 46. 4	E.&P.	2	Bluish-white	1·0	Faint	5	31
,,	0. 52. 15	H.B.	2	White	1·0	None	12	32
,,	0. 52. 58	E.	2	Bluish-white	0·8	Faint	8	33
,,	0. 54. 47	H.B.	5	...	0·4	...	6	34
,,	0. 59. 58	S.&P.	2	Bluish-white	0·7	Faint	15	35
,,	1. 2. 41	E.&P.	2	Bluish-white	1·0	Faint	15	36
,,	1. 7. 0	S.	2	Bluish-white	1·0	Bright	20	37
,,	1. 12. 34	E:S.&P.	>1	Yellowish	0·8	Bright : short	7	38
,,	1. 14. 18	E.&S.	2	White	0·5	Faint	5	39
,,	1. 17. 12	E.&S.	2	Bluish-white	0·8	Bright	12	40
,,	1. 17. 24	P.	2	Bluish-white	1·0	Faint	15	41
,,	1. 19. 3	H.B.	2	White	1·0	Streak : 2 secs.	15	42
,,	1. 22. 39	H.B.	3	...	0·6	None	8	43
,,	1. 26. 24	E.	2	...	0·5	Faint	10	44
,,	1. 28. 20	S.&H.B.	2	Yellowish	0·2	None	3	45
,,	1. 31. 59	S.	3	Bluish-white	0·8	Faint	12	46
,,	1. 32. 24	E:S.&H.B.	3	Bluish-white	0·5	Streak	10	47
,,	1. 36. 34	E:S.&H.B.	2	White	0·5	Bright	10	48
,,	1. 42. 43	E:S.&P.	2	White	0·8	Bright	15	49
,,	1. 44. 9	H.B.	3	Bluish-white	0·4	None	10	50
,,	1. 44. 47	P.	2	White	1·0	None	20	51
,,	1. 46. 35	P.	2	Bluish-white	1·0	Bright	15	52
,,	1. 48. 35	H.B.	3	...	0·4	None	6	53
,,	1. 51. 9	S.	2	Bluish-white	0·6	Faint	15	54
,,	1. 52. 50	H.B.	2	White	0·4	Streak	10	55
,,	1. 55. 10	H.B.	3	...	0·4	None	6	56
,,	1. 56. 26	P.	3	Bluish-white	0·5	Faint	8	57
,,	1. 56. 46	P.&H.B.	>1	Yellowish	1·5	Bright : 2 secs.	40	58
,,	1. 59. 8	H.B.	3	White	0·6	None	8	59
,,	2. 5. 36	S:P.&H.B.	>1	White	1·5	Streak : 17 secs.	20	60
,,	2. 8. 50	S.	2	White	0·8	Streak : 2 secs.	12	61
,,	2. 9. 51	D:S:P.&H.B.	1	Bluish-white	0·6	Streak : 2 secs.	6	62
,,	2. 9. 52	S.&P.	2	Bluish-white	0·8	Bright	15	63

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 η Persei towards ϵ Cassiopeiæ.
2	From a point midway between η Tauri and τ^2 Arietis towards 30 Tauri.
3	From a point midway between ζ and β Tauri passed over 8 Monocerotis.
4	From a point midway between Capella and β Aurigæ towards α Ursæ Majoris.
5	Passed near Capella moving in a north-westerly direction.
6	From β Canis Minoris moved towards the west parallel to the horizon.
7	From a point midway between Procyon and β Canis Minoris moved towards the west parallel to the horizon.
8	Passed over a point midway between κ and δ Geminorum moving towards ζ Cancri.
9	From β Ursæ Majoris towards δ Aurigæ.
10	Directed from a point midway between Castor and Pollux towards γ Cancri.
11	From β Cephei towards α Lyræ.
12	Directed from β Ursæ Majoris passed a little below γ Ursæ Majoris.
13	Moving from ϵ Leonis disappeared at ι Cancri.
14	From Polaris towards δ Cassiopeiæ.
15	From P. VIII. 245 passed over 31 Lyncis.
16	From ϵ Ursæ Majoris passed over and about 5° beyond ζ Ursæ Majoris.
17	From H Ursæ Majoris passed midway between α Ursæ Majoris and P. X. 126.
18	From a point midway between ζ and η Draconis towards ζ Ursæ Minoris.
19	From α Camelopardi towards α Cassiopeiæ.
20	From 5 Monocerotis towards β Canis Majoris.
21	From P. XII. 230 towards Polaris.
22	From β Ursæ Majoris towards a point midway between ζ and η Draconis.
23	From the direction of ζ Leonis to δ Cancri.
24	From δ Ursæ Majoris towards γ Boötis.
25	Moving parallel to the line joining Pollux and Castor and commencing near the former passed towards δ Aurigæ.
26	From λ Ursæ Majoris towards α Ursæ Majoris.
27	From α Ursæ Majoris to a point a little north of λ Draconis.
28	From γ Cephei to a point midway between α and β Cephei.
29	From ξ Ursæ Majoris towards α Canum Venaticûm.
30	From a point midway between ϵ and μ Leonis towards κ Leonis.
31	From θ Ursæ Majoris to a point a little north of ψ Ursæ Majoris.
32	From β Tauri passed midway between γ Geminorum and α Orionis.
33	From a point near λ Ursæ Majoris towards 37 Ursæ Majoris.
34	From β Leonis Minoris passed midway between ψ and λ Ursæ Majoris.
35	From η Leonis to a point midway between ζ and θ Hydræ.
36	From the direction of ζ Ursæ Majoris to a point midway between η and θ Draconis.
37	From δ Leonis towards α Hydræ.
38	From the direction of o Leonis towards θ Hydræ.
39	From ϵ Leonis to κ Leonis.
40	From a point near δ Geminorum towards a point midway between γ and ν Geminorum.
41	From α Ursæ Majoris passed above λ Draconis.
42	Directed from ϵ Leonis towards a point midway between Pollux and κ Geminorum.
43	From a point midway between o and η Leonis towards α Hydræ.
44	From λ Ursæ Majoris towards Polaris.
45	From γ Ursæ Majoris fell nearly vertically downwards.
46	From ζ Leonis towards δ Cancri.
47	From a point 1° north of ι Cancri towards Castor.
48	From 55 Ursæ Majoris towards ζ Ursæ Majoris.
49	From a point midway between α and β Canum Venaticûm to a point 5° above γ Boötis.
50	Directed from a point midway between ζ and μ Leonis towards θ Ursæ Majoris.
51	From a point 5° south of Procyon towards Sirius.
52	From a point near β Ursæ Majoris towards κ Draconis.
53	From δ Leonis passed over 93 Leonis.
54	From κ Leonis to a point about 3° beyond ζ Cancri.
55	From η Ursæ Majoris passed midway between ζ and η Draconis.
56	From α Canum Venaticûm towards γ Boötis.
57	From β Ursæ Majoris towards κ Draconis.
58	From λ Ursæ Majoris passed towards a point midway between α and β Cephei.
59	From a point 2° below ξ Ursæ Majoris towards 14 Canum Venaticûm.
60	From 55 Ursæ Majoris towards η Ursæ Majoris.
61	From γ Leonis towards γ Cancri.
62	From a point midway between γ and η Leonis towards ι Leonis.
63	From ν Cancri towards Pollux.

Month and Day, 1904.	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 15	2. 9. 53	P.&H.B.	2	White	0·4	Faint	4	1
,,	2. 12. 20	S.&P.	2	Bluish-white	0·5	None	8	2
,,	2. 15. 51	H.B.	2	Bluish-white	0·6	Streak	12	3
,,	2. 15. 58	H.B.	>1	White	1·0	Bright streak : 60 secs.	15	4
,,	2. 17. 55	H.B.	2	Bluish-white	0·4	None	6	5
,,	2. 21. 42	H.B.	3	...	0·5	None	8	6
,,	2. 22. 36	S.	1	Bluish-white	0·7	Streak	12	7
,,	2. 25. 6	H.B.	1	White	1·2	Faint	25	8
,,	2. 26. 38	S.&H.B.	2	Bluish-white	0·8	Streak	15	9
,,	2. 26. 48	S.	2	Bluish-white	1·0	None	12	10
,,	2. 30. 44	H.B.	2	White	0·6	None	8	11
,,	2. 30. 47	S.	2	White	1·0	Bright	12	12
,,	2. 32. 46	H.B.	2	...	0·5	Bright	6	13
,,	2. 37. 38	S.	1	White	0·8	Bright	15	14
,,	2. 38. 34	H.B.	...	...	...	...	...	15
,,	2. 39. 21	S.	2	White	0·8	Streak	12	16
,,	2. 40. 59	S.	3	Bluish-white	0·6	None	10	17
,,	2. 42. 27	S.	1	Bluish-white	1·0	Bright : 6 secs.	15	18
,,	2. 45. 59	S.&H.B.	2	Bluish-white	0·6	Bright : 10 secs.	10	19
,,	2. 46. 53	S.	1	Bluish-white	0·8	1 sec.	12	20
,,	2. 47. 17	S.	2	White	0·8	Bright	5	21
,,	2. 47. 30	S.	2	Bluish-white	1·0	4 secs.	15	22
,,	2. 49. 8	P.&H.B.	2	Bluish-white	1·5	None	15	23
,,	2. 54. 5	H.B.	2	Green	0·4	Green streak	4	24
,,	2. 59. 39	H.B.	2	White	0·6	None	6	25
,,	3. 2. 42	H.B.	2	White	0·2	None	3	26
,,	3. 3. 37	H.B.	...	...	...	...	...	27
,,	3. 3. 50	H.B.	...	...	...	...	...	28
,,	3. 4. 22	H.B.	...	...	...	...	...	29
,,	3. 5. 31	H.B.	...	...	...	...	...	30
,,	3. 12. 34	S.	3	Bluish-white	1·5	None	20	31
,,	3. 14. 30	H.B.	2	...	1·5	None	25	32
,,	3. 14. 48	H.B.	2	...	0·5	None	8	33
,,	3. 17. 58	S.&H.B.	1	White	0·8	Bright	15	34
,,	3. 21. 52	S.	2	White	0·6	Streak	12	35
,,	3. 22. 12	H.B.	2	White	0·4	Streak	8	36
,,	3. 23. 29	H.B.	2	White	1·5	None	20	37
,,	3. 26. 24	H.B.	2	Bluish-white	0·8	None	12	38
,,	3. 27. 46	P.	>1	White	2·0	Streak : 45 secs.	25	39
,,	4. 24. 42	S:P.&H.B.	>4	...	3·0	Brilliant : 114 secs.	40	40
,,	22. 34. 25	S.	2	Bluish-white	1·0	Slight	15	41
,,	22. 42. 0	S.	2	Bluish-white	0·8	Slight	12	42
,	23. 19. 36	H.B.	1	...	1·5	Streak	20	43
,,	23. 22. 24	H.B.	2	White	1·0	None	15	44
,,	23. 26. 3	H.B.	3	...	0·6	None	8	45
,,	23. 29. 52	H.B.	3	...	0·4	None	5	46
,,	23. 34. 32	S:P.&H.B.	1	White	1·5	Faint	35	47
,,	23. 45. 57	H.B.	4	...	0·5	None	6	48
,,	23. 47. 58	H.B.	4	...	0·6	None	12	49
November 16	0. 4. 18	H.B.	3	...	0·5	None	10	50
,,	0. 6. 51	S.	2	White	1·5	Bright : 3 secs.	35	51
,,	0. 38. 29	S.	1	White	1·5	Bright : 4 secs.	20	52
,,	0. 50. 16	H.B.	3	...	0·6	None	8	53
,,	0. 53. 24	S.	3	Bluish-white	0·6	Slight	12	54
,,	0. 57. 16	S.	3	...	0·5	None	10	55
,,	0. 57. 26	S:P.&H.B.	4	Yellowish	1·5	Bright : 5 secs.	40	56
,,	1. 49. 39	H.B.	2	...	0·6	None	12	57
,,	1. 50. 8	P.	2	Bluish-white	1·0	None	15	58
,,	1. 51. 55	S.	2	Bluish-white	0·5	Streak	15	59
,,	1. 52. 46	S.	2	Bluish-white	1·5	Streak	25	60
,,	2. 1. 13	H.B.	3	...	0·6	None	5	61

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

No. for Reference.	Path of Meteor through the Stars.
1	From a point midway between Regulus and o Leonis passed close to α Hydræ.
2	From ϵ Leonis towards κ Geminorum.
3	From ι Ursæ Majoris towards Pollux.
4	From ν Ursæ Majoris towards a point midway between α and β Canum Venaticûm.
5	From a point midway between ζ and γ Leonis towards 54 Leonis.
6	From δ Cancri moved parallel to the line joining Castor and Pollux.
7	From Sirius to η Leporis.
8	From β Leonis moved in a north-easterly direction.
9	From a point midway between ζ and γ Leonis towards P. XII. 29.
10	From ι Ursæ Majoris towards δ Aurigæ.
11	From γ Monocerotis passed over δ Canis Majoris.
12	From γ Leonis towards θ Hydræ.
13	From a point 1° below δ Leonis passed over 93 Leonis.
14	Passed across γ Ursæ Majoris towards a point between β and γ Ursæ Minoris.
15	Directed from o Leonis passed over and a little beyond α Hydræ.
16	From a point 5° N.E. of β Leonis towards π Leonis.
17	From δ Leonis towards β Leonis.
18	From Polaris to γ Cephei.
19	Directed from ϵ Leonis passed a little to the south of Pollux.
20	From γ Leonis towards δ Cancri.
21	From β Aurigæ towards ζ Persei.
22	From β Aurigæ towards ζ Persei.
23	Directed from δ Leonis fell at an angle of 45° towards the north.
24	Moving parallel to a line joining η Leonis and Regulus disappeared at a point $\frac{1}{4}$° west of 31 Leonis.
25	Moving in the continuation of a line joining γ and δ Leonis and commencing when opposite to 93 Leonis.
26	From Regulus passed over 31 Leonis.
27	Directed from β Canum Venaticûm passed over a point 2° below ϵ Ursæ Majoris.
28	From a point 2° below β Ursæ Majoris passed over 5 Ursæ Minoris.
29	Directed from 54 Leonis moved parallel to a line joining ζ and δ Leonis.
30	From a point midway between ζ and μ Leonis towards β Ursæ Majoris.
31	From a point midway between ϕ and χ Ursæ Majoris fell vertically downwards.
32	From δ Ursæ Majoris towards ν Draconis.
33	From η Ursæ Majoris passed over ι and θ Boötis.
34	From a point midway between ζ and η Ursæ Majoris moved towards a point 3° below θ Draconis.
35	From ϵ Ursæ Majoris towards η Draconis.
36	From δ Leonis passed midway between β and 93 Leonis.
37	From η Ursæ Majoris to a point 5° below β Draconis.
38	From η Ursæ Majoris towards 16 Draconis.
39	Moved parallel to a line joining β and γ Draconis.
40	From a point midway between Castor and Pollux towards the Pleiades. A very brilliant meteor which burst at the end of its path and lit up the entire sky.
41	From a point near γ Ursæ Majoris towards β Ursæ Minoris.
42	From Polaris towards α Camelopardi.
43	From 46 Aurigæ passed over 15 Lyncis.
44	From η Persei to a point 2° north-east of Polaris.
45	Directed from 132 Tauri towards δ Geminorum.
46	From a point midway between λ and η Aurigæ towards δ Aurigæ.
47	From a point midway between γ and λ Geminorum towards ϵ Hydræ.
48	Directed from 18 Ursæ Majoris passed over o Ursæ Majoris.
49	From Castor towards 31 Lyncis.
50	From 10 Leonis Minoris passed over and beyond 15 Ursæ Majoris.
51	From ζ Cancri towards Aldebaran.
52	From a point 3° west of β Ursæ Minoris towards Polaris.
53	From γ Geminorum towards 6 Canis Minoris.
54	From 31 Lyncis to a point 4° north of Capella.
55	From ι Ursæ Majoris towards Castor.
56	From a point $\frac{1}{2}$° north-west of θ Ursæ Majoris to a point midway between Polaris and 47 Cassiopeiæ.
57	Commencing at a point 2° east of the centre of a line joining ζ and β Cancri to a point $\frac{1}{2}$° south of β Canis Minoris.
58	From ζ Ursæ Majoris towards η Ursæ Majoris.
59	From a point midway between ϵ and ζ Leonis towards κ Ursæ Majoris.
60	From ϵ Leonis towards Procyon.
61	Passed over 16 and 5 Ursæ Majoris.

Month and Day, 1904.	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	3. 39. 26	S:P.&H.B.	...	...	...	...	...	1
,,	3. 40. 48	H.B.	2	...	0·5	...	15	2
November 17	5. 2. 11	S.&H.B.	3	...	0·7	None	12	3
,,	5. 9. 6	H.B.	2	White	0·5	Faint streak	10	4
,,	5. 18. 9	S.	3	...	0·4	None	10	5
,,	5. 20. 56	H.B.	2	Bluish-white	0·5	None	10	6
,,	5. 22. 7	S.&H.B.	2	White	0·5	None	25	7
,,	5. 25. 56	H.B.	3	...	0·4	None	5	8
,,	5. 32. 7	S.&H.B.	>1	Bluish-white	2·0	Faint streak	35	9
,,	5. 42. 6	S.&H.B.	2	White	0·6	None	10	10
,,	5. 45. 44	S.&H.B.	2	...	0·5	None	15	11
,,	5. 48 41	S.	3	...	0·5	None	10	12
,,	6. 0. 14	S.&H.B.	2	...	0·6	Streak	20	13
,,	6. 2. 3	S.&H.B.	2	Bluish-white	0·5	None	10	14
,,	6. 8. 41	S.	2	white	0·4	None	10	15
,,	6. 19. 37	H.B.	2	Bluish-white	0·5	None	15	16
,,	6. 24. 31	S.&H.B.	1	Yellowish	0·6	None	10	17
December 7	22. 12.	A.C.	>1	Whiteish	3–4	Streak	30	18

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	A brilliant double flash like lightning at this time, probably from a very bright meteor. The meteor itself could not be seen owing to the dense fog which seemed to clear somewhat after this meteor.
2	Directed from β Cancri to a point $\frac{1}{3}$ of the distance from Procyon towards Sirius.
3	Directed from μ Leonis towards θ Ursæ Majoris.
4	From Castor towards θ Aurigæ.
5	From 23 Ursæ Majoris towards Polaris.
6	Directed from a point midway between θ and β Aurigæ to a point midway between Capella and ϵ Aurigæ.
7	Directed from 54 Leonis towards η Ursæ Majoris.
8	From β Virginis passed over Mars ($11^h\ 56^m : +\ 2^\circ\ 5'$).
9	From 133 Tauri towards γ Monocerotis.
10	From Regulus passed over and a little beyond γ Cancri.
11	From a point 5° west of ϵ Leonis towards β Cancri.
12	From ι Hydræ towards κ Hydræ.
13	From Castor towards θ Aurigæ.
14	Directed from ζ Leonis passed near and beyond Regulus.
15	From Regulus towards ι Leonis.
16	From α Canum Venaticûm towards δ Boötis.
17	From θ Leonis passed over and a little beyond o Virginis.
18	From 26 Lyncis to a point about $\frac{1}{3}$ distance between λ and ψ Ursæ Majoris.

NUMBER of METEORS counted during the METEOR SHOWER of 1904 November 14–15.

Hours of Observation.					Number of Meteors counted in each period.	Number of Meteors in each hour.	Remarks.	
1904 November 14.								
	h	m		h m				
From	22	0	to	22 10	1		Cloudless	No special watch kept.
,,	22	10	,,	22 20	1		,,	,,
,,	22	20	,,	22 30	1	5	,,	,,
,,	22	30	,,	22 40	0		,,	,,
,,	22	40	,,	22 50	1		,,	,,
,,	22	50	,,	23 0	1		,,	
,,	23	0	,,	23 10	4		,,	
,,	23	10	,,	23 20	2		,,	
,,	23	20	,,	23 30	0	13	,,	
,,	23	30	,,	23 40	4		,,	
,,	23	40	,,	23 50	1		,,	
,,	23	50	,,	24 0	2		,,	
November 15.								
From	0	0	to	0 10	4		,,	
,,	0	10	,,	0 20	3		,,	
,,	0	20	,,	0 30	4	22	,,	
,,	0	30	,,	0 40	5		,,	
,,	0	40	,,	0 50	2		,,	
,,	0	50	,,	1 0	4		,,	
,,	1	0	,,	1 10	2		,,	
,,	1	10	,,	1 20	5		,,	
,,	1	20	,,	1 30	3	24	,,	
,,	1	30	,,	1 40	3		,,	
,,	1	40	,,	1 50	5		,,	
,,	1	50	,,	2 0	6		,,	
,,	2	0	,,	2 10	5		,,	
,,	2	10	,,	2 20	4		,,	
,,	2	20	,,	2 30	5	31	,,	
,,	2	30	,,	2 40	8		,,	
,,	2	40	,,	2 50	7		,,	
,,	2	50	,,	3 0	2		,,	

NUMBER of METEORS counted during the METEOR SHOWER of 1904 November 14–15—*concluded.*

Hours of Observation.					Number of Meteors counted in each period.	Number of Meteors in each hour.	Remarks.
1904 November 15—*continued.*							
	h m			h m			
From	3 0	to	3	10	5		Cloudless.
,,	3 10	,,	3	20	4		,,
,,	3 20	,,	3	30	6		,,
,,	3 30	,,	3	33	1		,,
,,	3 33	,,	3	38	14	67	,,
,,	3 38	,,	3	43	11		,,
,,	3 43	,,	3	48	7		,,
,,	3 48	,,	3	53	9		,,
,,	3 53	,,	4	0	10		,,
,,	4 0	,,	4	5	10		,,
,,	4 5	,,	4	10	22		,,
,,	4 10	,,	4	15	11		,,
,,	4 15	,,	4	20	12		,,
,,	4 20	,,	4	25	6		,,
,,	4 25	,,	4	30	17	143	,,
,,	4 30	,,	4	35	12		,,
,,	4 35	,,	4	40	12		,,
,,	4 40	,,	4	45	12		,,
,,	4 45	,,	4	50	11		,,
,,	4 50	,,	4	55	9		,,
,,	4 55	,,	5	0	9		,,
,,	5 0	,,	5	5	15		,,
,,	5 5	,,	5	10	12		,,
,,	5 10	,,	5	15	9		,,
,,	5 15	,,	5	20	12		,,
,,	5 20	,,	5	25	6		Foggy.
,,	5 25	,,	5	30	4	72	,,
,,	5 30	,,	5	35	4		,,
,,	5 35	,,	5	40	1		,,
,,	5 40	,,	5	45	2		,,
,,	5 45	,,	5	50	1		,,
,,	5 50	,,	5	55	3		,,
,,	5 55	,,	6	0	3		,,
,,	6 0	,,	6	5	2		,,
,,	6 5	,,	6	10	2		,,
,,	6 10	,,	6	15	0		,,
,,	6 15	,,	6	20	3		,,
,,	6 20	,,	6	25	0		,,
,,	6 25	,,	6	30	1		,,