RESULTS

OF THE

MAGNETICAL AND METEOROLOGICAL OBSERVATIONS

MADE AT

THE ROYAL OBSERVATORY, GREENWICH,

IN THE YEAR

1923.

UNDER THE DIRECTION OF

SIR FRANK DYSON, M.A., LL.D., F.R.S.,

ASTRONOMER ROYAL.

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GREENWICH MAGNETICAL AND METEOROLOGICAL OBSERVATIONS, 1923.

INTRODUCTION.

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

§ 1. *Personal Establishment and Arrangements.*

During the year 1923, the personal establishment in the Magnetical and Meteorological Department of the Royal Observatory consisted of the Superintendent, and three Computers. Mr. Walter William Bryant, who had been Superintendent since the beginning of 1904, died on January 31, after a short illness. Mr. William M. Witchell was transferred from the charge of Transit reductions to succeed him. The Computers employed during the year were :—G. F. Wells, E. H. Tibbitts, L. C. Burridge, D. Oliver and Miss E. W. Clack.

Mr. Wells was appointed Junior Assistant on May 17, remaining on the establishment. Mr. Tibbitts resigned on May 23.

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

The Magnetic Pavilion is constructed of non-magnetic materials, and stands in an enclosure in Greenwich Park, 350 yards to the east of the Observatory, on a site carefully chosen for its freedom from abnormal magnetic conditions. In the enclosure there are two sets of thermometers used for ordinary eye observations, the photographic wet-bulb and dry-bulb thermometers, thermometers for solar and terrestrial radiation, two earth thermometers, and two rain-gauges.

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

For a detailed description of the New Magnetograph House, which was completed in 1914, reference should be made to the Greenwich Observations for 1915.

The New Magnetograph House stands 50 feet north-west of the Magnetic Pavilion in which the absolute magnetic observations are made. The recording instruments are situated in a small inner chamber 15 feet long, 12 feet wide, and 8 feet high. This chamber is supported on small concrete piers and surrounded by an outer chamber, whose walls of non-conducting material are nearly 2 feet thick. Between the walls of the two chambers is an air space of from 2 to 3 feet. The inner chamber is electrically heated by about 50 suitably insulated low-temperature non-magnetic metallic resistance strips, each consuming 25 watts. The current used is alternating, and is therefore without effect upon the magnetic registration.

The temperature is controlled by a thermostat placed in the centre of the room, at the same level as the magnetic instruments. This actuates a relay, which switches the electric current into or out of the heating circuits.

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

The Magnetograph House contains also the photographic and standard barometers. The former is mounted on the south wall of the instrument room, $5\frac{1}{2}$ feet from the south-east corner of the room. The standard barometer is situated in the passage way, being supported on a board screwed to the north-west corner pillar of the inner room.

The north force and declination instruments record on the north-east drum; the vertical force instrument and the barometer record on the other drum. Both drums are horizontal and are 10 inches long by $5\frac{1}{2}$ inches in diameter. Their normal period of revolution is 30 hours and the scale 15 mm. to the hour. The

registering beams of light are focussed on the drum by an adjustable cylindrical lens. Two horizontal straight filament lamps mounted at suitable heights on the east and west walls of the chamber provide the time registration for the photographic sheets. The lamps are illumined for a period of one second centred at each exact hour of Greenwich time, the current being controlled by a relay connected to the Mean Solar clock in the Clock Room of the Observatory. The effect is to produce narrow dark hour lines right across the photographic records.

§ 3. *Subjects of Observation in the year* 1923.

The observations comprise determinations of absolute magnetic declination, horizontal force, and dip; continuous photographic record of the variations of declination and vertical force, and of the north component of horizontal force; eye observations of the ordinary meteorological instruments, including the barometer, dry- and wet-bulb thermometers, radiation and earth thermometers; continuous photographic record of the variations of the barometer, dry- and wet-bulb thermometers, and atmospheric potential gradient; continuous automatic record of the direction, pressure, and velocity of the wind, and of the amount of rain; registration of the duration of sunshine; 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.

A camera recording the trace of stars in the neighbourhood of the celestial Pole was brought into regular use at the beginning of 1920, with a view to obtaining an indication of the amount of cloud in the night sky.

Since 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, except in regard to the sunshine registers (see p. E xix).

§ 4. *Magnetic Instruments.*

DECLINATION MAGNET FOR ABSOLUTE DETERMINATIONS.—Since 1899 January 1, regular observations of declination have been made in the Magnetic Pavilion. The hollow cylindrical magnet Elliott No. 75 is used in conjunction with a telescope by Troughton and Simms, placed on a pier about 2 feet south of the magnet. The magnet is about 4 inches long, and at one end is an engraved glass scale for collimation. The telescope is 21 inches long, and the aperture of its object-glass is 2 inches; its horizontal circle is 16·6 inches in diameter, divided to 5′ and read by verniers to 5″. It has no vertical circle. The eye-piece has one fixed horizontal wire and one vertical wire, moved by a micrometer screw, the value of one revolution of which is 1′ 34″·2. The adopted collimation reading was $10^{r}\cdot140$.

The vertical axis of the telescope is adjusted by means of a fixed level, one division of which corresponds to 1″·15. The level correction for inequality of the pivots of the axis of the telescope was found in 1898 to be $-6^{div.}\cdot 0$ or $-6''\cdot 9$. On 1923 March 18 the theodolite was reversed on its Y's for greater convenience in observing, and the correction for inequality of pivots changed sign accordingly.

Since 1913 September the magnet has been suspended by a tungsten wire of 0·02 mm. diameter, and about 25 cm. length. The effect of 90° of torsion is to turn the magnet through about 4′. The torsion is found to change little or not at all; it is checked at intervals, and a correction on this account is made when necessary. The collimation error is eliminated by reversing the magnet in the middle of each month (turning the magnet with its carrier through 180° about the longitudinal axis), so that half the observations are made with the scale direct and half with the scale reversed.

The reading of the azimuth circle corresponding to the astronomical meridian is determined by observations of Polaris which, weather permitting, is observed once a week.

Declination observations have been made at least thrice weekly throughout 1923.

ABSOLUTE HORIZONTAL FORCE INSTRUMENT.—This instrument is of the Kew unifilar pattern, and rests on a slate slab in the Magnetic Pavilion. A full account of its construction and use is given in earlier volumes, and will not be repeated here.

Observations of the absolute horizontal magnetic force are made twice weekly. No observations of the moment of inertia of the deflecting magnet were made in 1923, but those made in 1924 which will be printed in the volume for 1924 have been used in the reduction of the observations for 1923.

DIP INDUCTOR.—The dip inductor is used in conjunction with a Broca mirror galvanometer, with electric light and scale. Observations are made in four positions to eliminate any small errors arising from slight asymmetry in the instrument. After the first adjustment, the ring is reversed about a horizontal axis and a second adjustment obtained: the instrument is then reversed in azimuth and two further adjustments made. The circles for the measurement of inclination and azimuth are each 8 inches in diameter, and are read by means of screw micrometers to one second of arc. The levels on the base can likewise be read to one second. A detailed description of the dip inductor will be found in the volume for 1915.

The observations are made thrice weekly.

THE DECLINATION VARIOMETER.—This instrument consists essentially of a magnet and mirror suspended by a fine phosphor-bronze strip 30 cm. long. The

torsion head to which the top of the fibre is attached is adjusted so that there shall be no torsion in the mean position of the magnet. A quarter revolution of the torsion head deflects the magnet through 8′.

The magnet consists of nine short pieces of steel 4·5 cm. long and of 1 mm. diameter, supported in an aluminium holder. The mounting of the movable mirror attached to this holder is also of aluminium. It can be turned relative to the magnet, so that the beam of light can be suitably adjusted in azimuth. The fixed mirror for base-line registration is situated beneath the magnet and mirror system. Both mirrors are of silvered glass, 2·5 cm. long and 1 cm. wide, and possess the necessary adjustments for tilt and orientation. The magnet is surrounded by copper blocks, rendering the instrument almost dead-beat.

The instrument rests on three foot-screws, which provide adjustment for level. It is completely enclosed by a tall brass cylinder with lid, resting on the concrete pier; this protects the instrument from dust, draughts, and accidental displacements. The lens which focusses the beam of light passing from lamp to mirror and mirror to drum is mounted in the side of this cylinder, the mirror chamber of the instrument itself being closed by a plane glass window.

The distance from the mirrors to the centre of the slit of the drum box is such that the scale value at the middle of the photographic sheets is 0′·58 per millimetre; at the present time this angle represents 3·11 γ, in terms of force. Since the beam of light, when directed towards the centre of the slit, makes an angle 11°·42′ with the normal to the drum, the scale value is not the same right across the sheet, the percentage difference of scale between the centre and edges being 0·4. This is allowed for, when necessary, in measuring the photographic traces.

The photographic sheets are changed generally at about 11 a.m. The time scale is 15 mm. per hour. The base-line value is determined from the absolute declination observations.

THE NORTH FORCE VARIOMETER.—The general construction of this instrument resembles that of the declination variometer. The suspension is of quartz, however, 20 cm. long, and the magnet system contains a single magnet similar to those in the declination instrument. In other respects the magnet and mirror systems of the two instruments are identical.

The torsion head is adjusted so that the magnetic axis of the magnet system is kept in the (geographical) east-west direction. The angle between this direction

and the line joining the mirror to the middle of the slit of the drum is 7°·30′. The mirror was adjusted relative to the magnetic axis so that the angle between the latter and the normal to the mirror agreed with the above angle to within a few minutes of arc. The magnet can consequently be maintained in the right direction by keeping the beam of light directed towards the middle of the photographic sheet.

The instrument is enclosed in a brass cylinder, in which is mounted the focussing lens, as in the case of the declination variometer. Through apertures in this casing also project two arms, one to the north and the other to the south of the instrument, to which they are attached. These are designed to support a deflecting magnet for the determination of the scale value of the variometer. The deflecting magnet is similar to those in the magnet system itself, but is cased in brass so as to be preserved from rust and made convenient for handling; its external diameter and length are 5 mm. and 7 cm. respectively. Deflections are made at two distances along both north and south arms, and in each position the magnet is used with its axis directed to the north and also to the south. Thus eight deflections are involved in each determination of scale value. The deflected positions are recorded on the photographic sheet, and the measurement is performed subsequently. The two adopted distances of the deflecting magnet from the magnet system are 27 cm. and 32 cm. The deflecting forces at these two distances are determined monthly by deflecting the absolute horizontal force magnet in the same way; the moment of the latter being known, the angle of deflection enables the deflecting force to be calculated readily in absolute measure. It is found that the magnetic moment of the deflecting magnet is slowly diminishing; the deflecting forces at the above two distances were 228·3 γ and 138·2 γ in the mean of 1923, and the present rates of diminution of their values are 1·5 γ and 0·9 γ per year.

The scale value determinations for the north force instrument are made once weekly. The adopted scale value for 1923 was 3·39 γ per mm. until June 12. From June 12 until the end of the year it was 3·28 γ per mm. It has been treated as constant during these periods, the difference from month to month being very small.

The base-line value of the instrument is determined by means of the absolute horizontal force observations, together with the absolute and photographic declination determinations. The base line is steadily changing (though at a decreasing rate), owing to the gradual diminution of the moment of the magnet system. The mean daily rate of change of base-line value during 1923 was 0·36 γ. The progressive change of base-line value is allowed for in the reductions.

The instrument is kept at a constant temperature, and therefore the records require no temperature correction in general. The temperature correction of the instrument was determined from observations secured when the whole room was heated up to a high temperature. It was found that a rise of temperature through 1° C. increased the base-line value of the instrument by 2 γ. When necessary the observations were corrected for temperature according to this determination.

THE QUARTZ-THREAD VERTICAL FORCE VARIOMETER.—For a detailed description of this instrument reference may be made to the *Philosophical Magazine*, vol. vii., sixth series, p. 393, 1904. The base of the instrument consists of a metal casting with uprights at the two ends, carrying attachments for the ends of the quartz fibre which supports the magnet system. The latter consists of two magnets, 8 cms. long and 1 mm. in diameter, which are attached by small platinum stirrups to two rods of fused quartz; these are fused to a quartz plate, the upper surface of which is optically worked and platinised to form a plane mirror. The quartz rods are drawn out at their other ends into fibres of about 0·008 to 0·010 cm. diameter; one of these is attached to a coiled quartz spring. The quartz spring and the other fibre are soldered to small brass rods fitting into clamps at the two ends of the metal base. The thread is under sufficient tension to stretch the spring through about two millimetres. A right-angled prism is supported in a frame above the mirror, so as to reflect the light in a horizontal direction; a single lens is placed beneath to focus the light on the recording drum. The prism frame is adjustable in azimuth in order to enable the trace to be brought to any desired part of the sheet. An adjustable mirror beneath the quartz fibre and adjacent to the mirror of the magnet system serves to give a base line.

The sensitiveness of the instrument is varied by adjusting the centre of gravity of the movable system. For this purpose a small vertical screw is fixed to one of the rods attached to the mirror and a small piece of brass can be moved up and down the screw, being fixed into any desired position by means of a little shellac.

SCALE VALUE OF VERTICAL FORCE VARIOMETER.—The scale value of the instrument is determined by the method of deflections, which in this case are produced electro-magnetically. The deflecting coil consists of two equal parallel circular rings of wire separated by a distance equal to their own radii. The wire is laid in V-grooves on a vulcanised fibre framework which rests permanently on the instrument pier. The leads and connections between the two separate rings are laid side by side. With such an arrangement a very uniform magnetic field

is produced at the centre of the coil, when an electric current circulates in the same direction round the two circles. The diameter of each circular turn of wire is 55·7 cm., and the distance between their two centres is 27·7 cm. If x, ρ represent axial and radial co-ordinates, measured in cms. from the centre of the coil as origin, the value of the axial magnetic force at (x, ρ), due to a current of strength A ampères, is—

$$3239A[1-0\cdot0129\frac{x^2-\frac{1}{2}\rho^2}{R^2} -1\cdot782\ \frac{x^4-3x^2\rho^2+\frac{3}{8}\rho^4}{R^4} \ldots]$$

where R is 31·06 cms., being the distance from the centre of the coil to a point on the circumference of either ring. The coil is placed so that its centre plane is horizontal, and with its centre as nearly as possible coincident with the vertical force magnets; there is no horizontal magnetic field produced by the coil in the plane of the magnets, and the vertical force produced is constant to within 0·5 per cent. throughout the space occupied by the magnets. Within this limit of error, also, an inclination of the magnets to the horizontal even by several degrees would not affect the vertical force to which they would be subject; and the horizontal forces on them, besides being inappreciable, would have a force and not a couple resultant.

In making scale value determinations, the current is supplied by a large dry cell, and is measured by an ammeter. Current strengths from 25 up to 100 milliampères are used, which from the above formula, allowing for the slight noncentrality of the magnets with respect to the coil, are found to produce deflecting forces in proportion, that for 100 milliampères being 323 γ.

The scale value determinations are made weekly. The scale value is found to remain nearly constant, but is not quite uniform across the sheet. The variation in force is computed from the scale value observations as a quadratic function of the ordinate.

The base line value is determined from the dip observations, in conjunction with the recorded values of north force and declination.

§ 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, north force, and vertical force are discussed, they are divided into two groups—one including

all days on which the traces show no very great 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.

The separation hitherto adopted has been based upon the judgment of the Superintendent of the department guided by the principle that, in general, a day on which a variation of more than 300 γ in horizontal force occurs, or, correspondingly, a variation of more than one degree in declination, is to be classed as a day of great disturbance. Days on which the variations exceed half these quantities are classed as days of lesser disturbance.

Following the principle thus defined, no days in the year 1923 are classed as days of great disturbance. Days of lesser disturbance are March 24–25; September 26–27–28; October 15–16–17. When two days are mentioned together, it is to be understood that the reference is usually to one set of photographic sheets extending from 11 a.m. to 11 a.m., and including the last half and the first half respectively of two consecutive civil days.

The mean ordinates for each hour are measured by the aid of an etched glass scale, the hour being the period of sixty minutes *commencing* at the time named in the table, and from the tables of these measures, for each calendar month, are obtained the mean monthly values for each hour of the day, and the mean daily value of the element for each day of the month. The daily mean is taken from the 24 mean ordinates. Tables I to XV contain the results for declination, north force, and vertical force. For each element the mean daily value and daily range are given for every day of the year, together with the monthly and annual mean diurnal inequalities for all days and for quiet and disturbed days (as selected by the International Committee). 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 days were omitted on account of great disturbance in the formation of these Tables.

The variations of declination are given in arc and those of north force and vertical force in C.G.S. measure.

The magnetic diurnal inequalities of declination, north force, and vertical force, for each month and for the year, as given in Tables IV, VIII, and XII, have been treated by the method of harmonic analysis, and the results are given in Table XVI.

The results of the absolute observations of declination, horizontal force and dip are given in Tables XVII, XVIII and XIX respectively. These tables contain also the values of the base-lines of the declination, north force and vertical force magnetograms respectively, deduced from the absolute observations.

Table XX contains an annual summary of the magnetic elements, giving the mean monthly values of declination, horizontal force and dip; also of the west, north and vertical components of the total force. The monthly mean diurnal ranges and the sums of hourly deviations from means of declination, north force and vertical force are also given.

In Tables VI, X, and XIV are given mean diurnal inequalities of declination, horizontal force, and vertical force derived from five quiet days each month. In Tables VII, XI, and XV are given similar inequalities derived from five disturbed days each month, both sets of days being selected by the International Committee.

Reduced copies of the magnetograms for certain disturbed days have been printed in each volume since 1882. The list of these days since the year 1889 has been selected so that the two Observatories of Val Joyeux (formerly of the Parc Saint Maur) and Greenwich should, in general, publish the magnetic registers for the same days of disturbance with a view to the comparison of the results. As far as possible the days of disturbance are those selected by the International Committee.

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

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

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

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

[TABLE

Year.	Declination West.	Horizontal Force,† C.G.S. Unit.	Dip.‡	Year.	Declination West.	Horizontal Force,† C.G.S. Unit.	Dip.‡
	° ′		° ′		° ′		° ′
1841	23 16·2	..	..	1882	18 22·3	0·1806	67 34·2
1842	23 14·6	..	..	1883	18 15·0	0·1812	67 31·7
1843	23 11·7	..	69 0·6	1884	18 7·6	0·1814	67 29·7
1844	23 15·3	..	69 0·3	1885	18 1·7	0·1817	67 28·0
1845	22 56·7	..	68 57·5	1886	17 54·5	0·1818	67 27·1
1846	22 49·6	0·1731	68 58·1	1887	17 49·1	0·1819	67 26·6
1847	22 51·3	0·1736	68 59·0	1888	17 40·4	0·1822	67 25·6
1848	22 51·8	0·1731	68 54·7	1889	17 34·9	0·1823	67 24·3
1849	22 37·8	0·1733	68 51·3	1890	17 28·6	0·1825	67 23·0
1850	22 23·5	0·1738	68 46·9	1891	17 23·4	0·1827	67 21·5
1851	22 18·3	0·1744	68 40·4	1892	17 17·4	0·1829	67 20·0
1852	22 17·9	0·1745	68 42·7	1893	17 11·4	0·1831	67 17·9
1853	22 10·1	0·1748	68 44·6	1894	17 4·6	0·1831	67 17·4
1854	22 0·8	0·1749	68 47·7	1895	16 57·4	0·1834	67 16·1*
1855	21 48·4	0·1756	68 44·6	1896	16 51·7*	0·1835*	67 15·1*
1856	21 43·5	0·1759	68 43·5	1897	16 45·8*	0·1838	67 13·5*
1857	21 35·4	0·1769	68 31·1	1898	16 39·2*	0·1840	67 12·1
1858	21 30·3	0·1762	68 28·3	1899	16 34·2	0·1843	67 10·5
1859	21 23·5	0·1761	68 26·9	1900	16 29·0	0·1846	67 8·8
1860	21 14·3	..	68 30·1	1901	16 26·0	0·1850	67 6·4
1861	21 5·5	0·1773	68 24·6	1902	16 22·8	0·1852	67 3·8
		0·1759	68 15·8	1903	16 19·1	0·1852	67 1·2
1862	20 52·6	0·1763	68 9·6	1904	16 15·0	0·1854	66 57·6
1863	20 45·9	0·1764	68 7·0	1905	16 9·9	0·1854	66 56·3
1864	..	0·1767	68 4·1	1906	16 3·6	0·1854	66 55·6
1865	20 33·9	0·1767	68 2·7	1907	15 59·8	0·1855	66 56·2
1866	20 28·0	0·1773	68 1·3	1908	15 53·5	0·1854	66 56·3
1867	20 20·5	0·1777	67 57·2	1909	15 47·6	0·1854	66 54·1
1868	20 13·1	0·1779	67 56·5	1910	15 41·2	0·1855	66 52·8
1869	20 4·1	0·1782	67 54·8	1911	15 33·0	0·1855	66 52·1
1870	19 53·0	0·1784	67 52·5	1912	15 24·3	0·1855	66 51·8
1871	19 41·9	0·1786	67 50·3	1913	15 15·2	0·1853	66 50·5
1872	19 36·8	0·1789	67 47·8	1914	15 6·3	0·1853	66 51·3
1873	19 33·4	0·1793	67 45·8	1915	14 56·5	0·1851	66 52·0
1874	19 28·9	0·1797	67 43·6	1916	14 46·9	0·1848	66 52·8
1875	19 21·2	0·1797	67 42·4	1917	14 37·1	0·1848	66 53·0
1876	19 8·3	0·1799	67 41·0	1918	14 27·8	0·1846	66 52·8
1877	18 57·2	0·1800	67 39·7	1919	14 18·2	0·1845	66 53·3
1878	18 49·3	0·1802	67 38·2	1920	14 8·6	0·1845	66 53·6
1879	18 40·5	0·1805	67 37·0	1921	13 57·6	0·1845	66 53·0
1880	18 32·6	0·1805	67 35·7	1922	13 46.7	0·1844	66 52·3
1881	18 27·1	0·1807	67 34·7	1923	13 35·1	0·1843	66 51·9

* Corrected for the effect of the iron in the new buildings.

† The values of the Horizontal Force from 1861 differ from those given in previous volumes, on account of the correction mentioned on p. E iv, 1914 volume.

‡ These values of the dip differ slightly in some instances from those given in previous volumes, on account of the correction mentioned on p. E v, 1912 volume.

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. From 1914 the Dip was determined with the Inductor.

§ 6. *Meteorological Instruments.*

STANDARD BAROMETER.—The standard barometer 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 $0^{in.}\cdot05$, subdivided by vernier to $0^{in.}\cdot002$. The barometer was mounted in 1840 on the southern wall of the western arm of the Upper Magnet Room at a height above mean sea level of 159 feet. It was transferred to the New Magnetograph House on 1917 April 3, where the height above mean sea level is 152 feet.

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

THE PHOTOGRAPHIC BAROMETER.—In consequence of the use of a horizontal drum for the new vertical force instrument, it became necessary to modify the lever mechanism of the photographic barometer on its removal to the Magnetograph House in 1916. On account of the optical magnification associated with a moving mirror at some distance from the instrument, the new mechanism had to be such as would reduce the motion of the plunger to a smaller amount at the end of the lever which carried the mirror. In the actual arrangement two levers are used, the one connected to the arm of the plunger resting in the free surface of the mercury, being 12 inches long from plunger to pivot. A pin with a rounded conical point is screwed into this lever at a distance of 1 inch from the pivot. On this pin rests the plane under-surface of a shorter lever, which is 4 inches long from its pivots to this pin, and is set at right angles to the first lever. Both levers are approximately horizontal in their mean position. On the short lever is mounted the moving mirror of the instrument. This mirror is 2·5 cm. long and 1 cm. wide, and is mounted horizontally in a suitable frame attached to the lever, just above its pivots. The first lever lies east and west, so that the axis about which the mirror turns is in the same direction. The motion of the beam of light is transformed so as to be horizontal by a fixed right-angled prism supported above the mirror. A lens of suitable focus is mounted in a vertical plane in front of the prism, and brings the beam of light from

the straight filament lamp, which also illuminates the vertical force variometer, to a focus on the drum. A base-line mirror, similar to the moving mirror, is mounted in a vertical plane behind the lower half of this lens. Provision is made for all necessary adjustments of level and azimuth and tilt of the base line and moving beams of light.

The barometer is mounted on the south wall of the instrument chamber, at a distance of 3 feet from the vertical force instrument. The levers and optical parts are screwed to a brass plate supported on a small shelf by the side of the barometer. The instrument is 12 feet from the recording drum, and consequently the scale value of the record is 3 cm. on the sheet for 1 cm. change of height of the mercury column of the standard barometer. In the photographic barometer both arms are, near the surface of the mercury, of the same bore, so that the plunger moves through only half the change of height of the standard barometer.

The photographic sheets being 24 cm. wide, the whole range of barometric motion can be included without changing the zero, as was formerly necessary, when the scale value was 4 to 1 in place of 3 to 1 as now.

The metal parts of the instrument are all of brass or aluminium, except the cast-iron plunger disc (which is 24 mm. in diameter and 4 mm. thick) and four small pivot screws, which are of steel. These are sufficiently far from the vertical force instrument to ensure that they do not affect its records. The weight of the plunger and lever mechanism is relieved by a balance weight on the far side of the pivot, so that the plunger rests on the mercury surface without appreciably depressing it. There is some evidence of a slight difference of behaviour according to whether the barometer is rising or falling.

The scale value of the instrument is actually determined experimentally by comparison with the readings of the standard photographic barometer. Readings of the latter are taken four times daily, and from them the base-line value of the barometer is adopted, having regard to the tendency referred to in the preceding paragraph.

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

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

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

The dry-bulb thermometer used throughout the year was Negretti and Zambra, No. 45354. The correction −0°·4 has been applied to the readings of this thermometer. The wet-bulb thermometer used throughout the year was Negretti and Zambra, No. 94737. The correction −0°·2 has been applied to the readings of this thermometer.

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

PHOTOGRAPHIC DRY-BULB AND WET-BULB THERMOMETERS.—The apparatus which has been in use since 1887 was designed by Sir William Christie, and from 1899 to 1917 stood in the same position in the Magnet Ground. It was transferred to the Magnetic Pavilion Enclosure on 1917 February 21. It is placed in a shed 8 feet square, standing upon posts about 8 feet high, and open to the north. The apparatus is screened from the direct rays of the sun, without impeding the circulation of the air. The recording mechanism is similar in general plan to that already described in connection with the magnetometers. The traces consist of broad bands, due to the free passage of light to the drum, above the mercury column in the dry-bulb, and through an air-bubble in that of the wet-bulb, crossed by fine lines caused by the shadows of the graduations on the thermometer tubes. The two traces fall on the same part of the cylinder as regards time scale. The stems of the thermometers are placed close together, each being covered by a vertical metal plate having a fine vertical slit, so that light passes through only at such parts of the bore of the tube as do not contain mercury. Further details of the thermometers and recording arrangements may be found in the volume for 1912. The scale value of the records is approximately 10° per inch.

RADIATION THERMOMETERS.—These thermometers are placed in the Magnetic Pavilion enclosure, in an open position about 50 feet south-west of the building. The thermometer for solar radiation is a 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 was Negretti and Zambra, No. 165157. The thermometer for radiation to the sky was a self-registering spirit minimum thermometer, Negretti and Zambra, No. 165654. On May 15 this was accidentally broken, and was replaced by Negretti and Zambra No. 193750. On November 24 the thermometer No. D11197 Negretti and Zambra was substituted, a crack having been discovered in the stem of Negretti and Zambra No. 193750. The thermometers are laid on short grass and freely exposed to the sky; they require no correction for index-error.

EARTH THERMOMETERS.—There are two thermometers now in use, the bulbs of which are sunk to depths of 4 and 1 feet below the surface. Both thermometers are read daily at noon, the readings of the longer being given in the daily results. The description of the deep sunk thermometers previously in use will be found in earlier volumes. A discussion by Professor Everett of the observations up to 1859 was given in an appendix to the volume for 1860.

OSLER'S ANEMOMETER.—This self-registering anemometer, devised by Mr. A. F. Osler, for continuous registration of the direction and pressure of the wind and of the amount of rain, is fixed above the north-western turret of the ancient part of the observatory. The direction of the wind is registered by means of a large vane (9ft. 2in. in length), connected by gearing with a rack-work carrying a pencil; the latter marks on a flat horizontally moving sheet of paper. The vane is 25 feet above the roof of the Octagon Room, 60 feet above the adjacent ground, and 215 feet above the mean level of the sea. A fixed mark on the north-eastern turret, in a known azimuth, as determined by celestial observation, is used for examining at any time the position of the direction plate over the registering table, to which reference is made by means of a direction pointer when adjusting a new sheet on the travelling board.

A circular pressure plate with an area of 192 square inches is attached 2 feet below the vane; moving with the latter, it is always kept directed against the wind. A light wind causes the plate to compress slender springs, the motion being registered on the horizontal sheet by a pencil connected with the plate by a flexible brass chain, which is always in tension. Higher wind pressures bring stiffer

springs into play behind the plate, and the two sets of springs are adjusted by screws and clamps so as to afford fixed scales on the sheet, the scale for light winds being double that for heavy winds. The scale is determined experimentally in lbs. per square foot from time to time.

The recording sheet is changed daily at noon. The time scale, ordinarily the same as that of the magnetic registers, can be increased 24-fold by altering the gearing.

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

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

In preceding volumes the values of wind velocity V given in the tables are three times the actual velocity v of the cups. From some tests of the Browning instrument, made by Mr. W. H. Dines at Hersham in 1889, on his whirling machine, it would appear that the relation between V and v is more correctly given by

$$V = 4{\cdot}0 + 2{\cdot}0\, v,$$

and that the instrument fails to record wind velocities less than 4 miles per hour. The values of the wind velocity given by the formula $V = 3\, v$ would thus be too high when V exceeds 12. Since the two formulæ agree, however, for $V = 12$, the mean values of the wind velocity (which seldom differ much from 12) will be approximately correct in either case; therefore, for the sake of continuity and simplicity, the formula $V = 3\, v$ will continue to be used. In this volume, however, the greatest hourly measures (p. E 74) are given according to both formulæ, and the least hourly measures omitted.

RAIN GAUGES.—During the year 1923 three rain gauges were employed, placed at different elevations above the ground.

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

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

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

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

The monthly amounts of rain collected in gauges Nos. 6 and 8 are given on page E 72 of the Meteorological Results.

ELECTROMETER.—The electric potential of the atmosphere is measured by means of a Thomson self-recording quadrant electrometer, made by White, of Glasgow. It is situated in a small hut in the Magnetic Enclosure and has the usual arrangements for photographic registration. The time scale is the same as for the magnetic registers, the hourly break of trace being made by the driving-clock itself. The Electrometer is connected by a fine wire directly with a small radium collector, carried on an insulated support, at a height of about 7 feet.

In use as originally designed, the needle was maintained at an approximately constant high potential; one pair of quadrants was connected to the variable potential—that is to the collector—and the other pair to earth. The charge on the needle was renewed each day by a small charging machine. Under these conditions, and provided that the potential of the needle is much greater than that of the collector, the deflection of the needle is approximately a linear function of the potential of the collector. When, however, the respective potentials are comparable in magnitude this is no longer true.

(If V_n, V_1, V_2 are respectively the potentials of the needle and of the two pairs of quadrants, the deflection θ of the needle is given by the approximate formula

$$\theta = k\ (V_1 - V_2)\ (V_n - \frac{V_1+V_2}{2}).$$

V_2 being made zero by connection to earth, we have θ proportional to $V_1\ (V_n - \frac{1}{2}V_1)$, with a maximum value when $V_n = V_1$).

It was found that the maximum deflection of the electrometer needle occurred for an atmospheric potential of about 1,800 volts—a quantity frequently exceeded in experience—and that for potentials greater than this the deflection actually diminished. The electrometer in the original form was therefore unsuitable for quantitative measurement of potential.

Early in 1923 the arrangements were altered as follows. The needle-charging apparatus was removed ; the variable potential was connected to the needle instead of to one pair of quadrants ; one pair of quadrants was connected to the positive terminal, and the other pair to the negative terminal of a battery of 50 Leclanché cells, the centre point of which was earthed, as was also the case of the instrument.

V_2 being thus equal in magnitude but opposite in sign to V_1, we have under the new conditions, so long as θ is a small angle, $\theta = 2kV_1V_n$, that is, θ is proportional to V_n.

The controlling force on the needle in the new arrangement is much smaller than in the old. It was therefore necessary to replace the old bifilar suspension by a single conducting filament of suitable torsional properties. After a number of experiments, the most satisfactory suspension was found to be fine copper fuse-wire with which both a steady zero and suitable sensitivity are obtained.

The new series of records began on May 3 but minor adjustments of the instrument interrupted regular registration until the end of June.

Determination of the scale of the variations recorded by the electrometer is made by comparison of the ordinates of the trace with simultaneous eye-observation of the readings of a multi-cellular voltmeter connected to a flame collector, the latter being set up approximately at the height of the collector of the electrometer, but removed to a distance of at least 15 feet from any object standing above the ground surface.

It is assumed that the effective height of the flame is 9 inches greater than its actual height.

The atmospheric potential-gradient is computed from these data and is expressed in terms of volts per metre.

1 mm. on the sheet was found, in the mean, to correspond to a potential gradient of 25 volts per metre.

SUNSHINE RECORDER.—The instrument in use is of the Campbell-Stokes pattern, with 4-inch glass globe. The recorded durations are those of *bright* sunshine, no register being obtained when the sun shines faintly through fog or cloud, or is very near the horizon. The hourly results relate to *apparent* time.

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

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

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

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

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

§ 7. *Meteorological Reductions.*

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

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

The barometer results are not reduced to sea-level, neither are they corrected for the effect of gravity, by reduction to the latitude of 45°.

The 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 table of factors for this purpose may be found in the Introductions for 1910 and previous years.

In the same way the mean hourly values of the dew-point temperature and degree of humidity in each month (pages E 69 and E 70) have been calculated from the corresponding mean hourly values of air and evaporation temperatures (pages E 68 and E 69).

The excess of the mean temperature of the air on each day above the average of 65 years, given in the " Daily Results of the Meteorological Observations," is found by comparing the numbers contained in column 6 with a table of average daily temperatures found by smoothing the accidental irregularities of the daily means deduced from the observations for the sixty-five years 1841–1905. In this series the mean daily temperature from 1841 to 1847 depends usually on 12 observations daily, in 1848 on 6 observations daily, and from 1849 to 1905 on 24 hourly readings from the photographic record. The smoothed numbers are given in Table VII, *Reduction of the Greenwich Meteorological Observations*, Part IV, and also in the Introduction for 1910.

The daily register of rain contained in column 16 is that recorded by the gauge No. 6, whose receiving surface is 5 inches above the ground. This gauge is read at 9^h, 15^h, and 21^h Greenwich 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 E 67 and E 74, is formed from the records of this gauge. In this numeration only those days are counted on which the fall amounted to or exceeded $0\cdot^{in.}005$.

The indications of atmospheric electricity are derived from Thomson's Electrometer. In addition to the general character of these indications described in column 17 of the daily register, a table is given on page 75 of monthly mean values of the potential gradient for every hour of the day. The values are expressed in volts per metre above the ground surface.

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

The mean amount of cloud given in the footnotes on the right-hand pages E 41 to E 65, and in the abstract table, page E 67, is the mean found from observations made at 9^h, 12^h (noon), 15^h, and 21^h of each civil day.

For understanding the divisions of time under the 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).

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

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

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

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

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

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

The following is the notation employed for electricity :—

N,	*negative*	m,	*moderate*	s,	*strong*
P,	*positive*	w,	*weak*	v,	*variable*
ss,	*very strong*	ww,	*very weak*	vv,	*very variable*

Zero potential is indicated by 0, and a dash (—) indicates accidental failure of the apparatus.

F. W. DYSON.

ROYAL OBSERVATORY, GREENWICH,
1924, *September.*

ROYAL OBSERVATORY, GREENWICH.

RESULTS

OF

MAGNETICAL OBSERVATIONS,

1923.

TABLE I.—HOURLY MEANS OF MAGNETIC DECLINATION.

January.

13° + Tabular Quantities.

	0h	1h	2h	3h	4h	5h	6h	7h	8h	9h	10h	11h	Noon.	13h	14h	15h	16h	17h	18h	19h	20h	21h	22h	23h	24h	Mean.
	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′
1	40·5	40·7	41·1	41·3	41·2	40·7	40·1	40·0	39·9	40·1	40·9	41·7	42·6	42·8	42·4	41·7	41·3	41·2	41·1	41·0	40·3	40·3	40·2	40·7	41·0	
2	41·1	41·5	41·6	41·7	41·6	40·8	40·6	40·1	39·9	39·8	41·3	42·5	43·2	43·6	43·4	42·4	41·8	40·1	40·6	40·4	39·2	39·5	39·8	40·3	41·1	
3	40·5	41·5	39·1	40·6	41·1	40·6	40·0	39·8	40·3	41·0	41·6	43·6	44·8	44·0	43·4	42·7	41·9	41·6	41·0	40·4	39·5	40·0	40·1	40·5	41·2	
4	40·4	40·5	40·1	40·0	40·8	40·5	40·6	40·1	39·8	40·6	41·1	42·7	43·2	42·8	42·8	43·1	42·7	42·0	41·6	41·3	40·5	39·2	35·0	38·5	40·8	
5	39·6	38·4	39·7	38·5	39·4	40·9	40·8	40·6	40·3	40·8	41·6	42·8	42·6	42·8	42·2	42·1	41·6	41·5	41·6	41·0	40·4	39·6	39·6	39·2	40·7	
6	39·6	39·0	40·9	40·6	40·7	40·9	40·8	40·6	40·5	40·3	41·8	41·8	42·6	42·8	42·0	42·8	42·3	42·2	41·7	41·0	37·8	37·4	39·5	39·0	40·8	
7*	38·8	38·8	40·0	40·0	40·6	40·7	40·3	40·4	39·6	39·7	41·1	42·5	42·3	42·1	41·9	41·5	41·5	41·1	41·3	40·7	40·4	39·8	39·8	39·6	40·6	
8*	39·5	40·7	39·9	40·8	41·0	40·6	40·3	40·3	40·1	40·5	41·0	41·0	41·8	42·7	42·3	41·8	41·4	41·1	40·8	40·5	40·1	40·0	39·8	39·9	40·7	
9	39·8	40·0	40·7	40·8	41·0	41·1	41·2	40·8	40·6	40·7	40·8	41·4	42·8	43·2	42·8	42·9	43·3	42·1	41·2	40·8	40·5	39·1	38·6	39·5	41·1	
10	40·0	40·4	40·6	40·5	42·3	39·8	39·5	39·7	40·3	41·3	41·4	41·6	42·7	43·0	42·6	42·1	41·8	42·7	43·9	42·8	40·3	40·4	39·8	40·0	41·2	
11	39·7	39·8	40·0	39·2	39·0	40·4	40·4	40·6	40·8	42·6	43·0	42·6	43·8	43·5	42·8	42·1	42·4	41·8	41·0	40·8	40·4	40·0	39·8	39·8	41·1	
12	40·2	40·3	40·3	40·6	40·4	39·8	40·4	40·8	41·6	41·6	41·7	43·3	44·5	43·1	41·8	41·4	41·4	41·5	40·8	41·2	40·7	40·1	40·1	39·9	41·1	
13**	40·3	40·4	40·7	40·6	41·2	40·8	40·8	43·4	42·3	41·2	41·3	42·0	42·8	42·5	42·2	42·1	41·8	41·1	39·5	40·4	36·8	31·9	36·9	40·1	40·6	
14	42·8	41·4	39·8	40·4	42·8	41·7	40·8	39·9	40·1	41·2	42·1	42·5	42·5	41·6	40·8	41·0	40·8	40·6	40·6	40·0	40·0	40·6	39·5	39·1	40·9	
15	40·0	40·1	40·7	40·5	40·6	40·4	40·0	39·9	39·8	40·3	40·6	42·3	43·3	42·6	42·1	41·5	41·1	41·0	40·8	40·6	41·0	41·0	39·4	38·8	40·8	
16	39·8	39·8	40·1	40·7	41·0	40·5	40·1	39·8	39·4	39·8	40·3	41·8	43·1	42·0	41·2	41·0	40·8	40·9	40·6	40·1	39·7	39·0	36·8	38·6	40·3	
17	39·6	40·5	40·8	40·7	40·8	40·4	40·0	39·8	39·2	39·3	39·8	41·0	42·6	43·3	41·8	41·5	41·6	41·3	40·7	40·2	39·6	39·8	38·8	38·8	40·5	
18*	40·1	39·9	40·2	40·9	41·0	40·6	40·2	40·0	39·8	40·0	40·8	42·0	43·2	41·9	40·8	41·0	41·1	40·9	40·6	40·5	39·8	39·2	39·6	40·3	40·6	
19*	40·6	40·9	41·0	41·2	40·8	40·6	40·4	39·8	39·7	40·1	41·3	42·2	43·0	42·8	41·8	41·3	41·0	40·5	40·4	39·8	39·7	39·1	39·5	39·7	40·8	
20**	40·2	40·1	40·5	40·8	40·8	40·9	40·6	40·0	39·8	40·4	41·2	42·6	43·3	42·7	42·2	42·8	41·4	42·9	39·8	38·8	39·0	38·4	32·4	30·0	40·1	
21**	37·3	41·6	43·8	39·6	40·6	42·7	41·6	40·3	39·3	39·3	40·2	42·1	43·2	43·7	42·6	41·6	41·8	40·8	39·0	38·7	38·9	39·2	38·0	35·8	40·5	
22	38·7	40·3	40·4	42·8	41·3	39·5	40·7	41·8	43·5	41·8	42·3	43·5	44·2	43·4	42·2	41·4	40·8	40·6	40·0	37·3	37·8	35·6	37·6	38·0	40·6	
23	40·1	40·8	40·0	40·5	40·1	40·8	41·5	41·2	40·8	41·1	41·8	42·7	44·0	43·2	42·4	41·4	39·7	37·3	40·5	39·8	39·1	37·8	38·6	38·5	40·6	
24	39·0	39·1	39·7	39·8	40·7	40·6	39·3	39·8	40·2	40·8	41·2	42·0	43·0	42·5	41·6	39·9	40·6	41·0	38·1	39·6	39·5	38·5	38·1	38·8	40·1	
25	39·3	39·6	39·6	39·5	39·7	39·8	39·1	39·3	39·5	40·8	41·8	42·7	43·4	42·8	41·6	41·0	41·3	40·8	40·4	39·8	39·7	39·3	39·6	39·8	40·4	
26	39·8	40·1	40·0	40·3	40·8	39·6	39·4	39·4	39·3	40·3	41·6	41·8	43·2	43·8	42·3	41·1	41·0	40·8	40·6	39·8	39·8	39·7	39·8	39·9	40·6	
27*	39·6	40·0	40·0	40·0	39·8	39·8	39·6	39·1	38·9	39·0	39·8	40·6	41·5	42·8	42·1	41·2	41·2	40·8	40·4	40·1	39·2	39·0	39·1	39·5	40·1	
28	39·8	40·3	41·5	40·1	39·8	39·7	39·6	39·0	38·9	39·8	40·8	42·0	43·0	43·4	42·5	41·2	40·6	40·0	39·9	40·1	39·8	39·0	39·3	40·0	40·4	
29**	40·0	40·4	40·5	40·6	40·3	39·6	40·3	39·9	39·0	39·6	39·7	41·0	42·6	42·8	43·3	42·7	42·8	44·6	41·4	40·8	39·9	34·7	36·4	37·6	40·4	
30**	38·3	38·8	39·5	36·9	38·3	38·4	39·0	40·0	39·8	38·5	39·3	41·4	43·1	43·1	44·2	41·4	40·9	40·3	39·0	38·5	38·5	39·1	39·3	39·0	39·8	
31	39·6	40·3	40·7	39·1	39·6	39·2	39·0	38·7	38·4	38·6	40·0	41·0	43·2	43·6	42·5	41·1	39·2	40·0	40·1	39·8	39·0	38·7	39·0	39·2	40·0	
Mean	39·8	40·2	40·4	40·3	40·6	40·4	40·2	40·0	40·4	40·4	41·1	42·1	43·1	42·9	42·3	41·7	41·4	41·1	40·6	40·2	39·6	38·9	38·7	39·0	40·6	
Mean*	39·7	40·1	40·2	40·6	40·6	40·5	40·2	39·9	39·6	39·9	40·8	41·7	42·4	42·5	41·8	41·4	41·2	40·9	40·7	40·3	39·8	39·4	39·6	39·8	40·6	
Mean**	39·2	40·3	41·0	39·7	40·2	40·5	40·5	40·7	40·0	39·8	40·3	41·8	43·0	43·0	42·9	42·1	41·8	41·9	39·7	39·4	38·6	36·7	36·6	36·5	40·3	

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13° + Tabular Quantities.

	0h	1h	2h	3h	4h	5h	6h	7h	8h	9h	10h	11h	Noon.	13h	14h	15h	16h	17h	18h	19h	20h	21h	22h	23h	24h	Mean.
	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′
1	39·6	39·5	39·7	39·8	39·3	39·0	39·3	39·3	39·0	39·1	39·6	40·5	42·7	44·0	43·6	43·4	41·2	42·5	40·6	37·4	39·6	39·5	37·9	35·8	40·1	
2	38·6	40·2	40·1	39·6	39·7	39·8	39·4	39·2	38·8	38·8	40·2	41·5	42·6	43·0	42·0	40·9	40·8	40·1	37·0	37·8	39·5	39·2	39·2	39·1	39·9	
3	39·6	39·8	40·0	39·8	39·8	39·6	39·6	39·2	38·9	39·5	40·6	43·3	44·7	45·6	44·9	45·3	44·6	44·0	41·1	40·3	36·6	35·9	35·3	35·6	40·6	
4	37·0	32·8	35·4	37·1	36·8	38·1	38·5	39·1	39·6	40·3	40·6	43·8	44·4	44·8	43·5	42·3	41·2	41·3	41·0	40·4	37·3	38·6	37·7	37·3	39·5	
5	37·7	37·5	37·9	39·0	38·4	39·0	39·6	39·5	39·0	39·0	40·6	41·7	42·8	44·6	44·8	44·4	43·0	42·1	41·3	40·0	39·6	38·6	39·0	39·0	40·3	
6	38·8	38·8	39·1	39·7	39·8	39·8	40·6	39·7	39·5	39·4	40·3	40·9	41·1	41·4	41·0	40·4	40·2	40·2	40·4	39·8	36·6	37·5	38·7	38·8	39·7	
7	38·9	39·3	39·5	39·7	39·8	40·0	39·6	39·0	38·8	39·4	40·2	40·9	41·3	42·5	41·8	41·9	42·2	40·4	37·4	38·8	37·6	38·1	38·4	38·2	39·7	
8	37·9	38·8	40·2	40·4	40·2	39·3	41·8	41·8	39·6	39·8	41·0	42·0	42·8	42·7	41·9	41·6	40·7	40·6	40·0	39·8	39·5	38·8	39·2	39·0	40·4	
9*	39·2	39·3	39·3	39·6	39·8	39·5	39·2	39·5	39·4	39·7	40·5	41·4	42·0	42·4	41·2	40·1	40·3	40·4	40·2	39·8	39·5	39·3	39·1	39·4	40·0	
10	39·5	39·0	39·4	39·7	38·6	38·8	39·1	39·8	38·5	39·8	41·0	43·2	44·3	44·1	43·8	41·8	41·1	40·8	39·6	39·2	38·4	36·6	36·6	38·6	40·1	
11	38·0	39·2	39·6	40·6	39·0	39·1	39·0	38·8	38·5	39·0	39·8	40·6	42·5	42·9	41·6	40·9	40·6	40·0	39·8	39·5	39·4	39·3	39·4	39·6	39·9	
12*	39·7	38·8	39·3	39·3	39·6	39·5	39·2	39·0	38·6	38·7	39·6	40·4	40·9	40·8	40·6	39·8	39·8	40·0	39·8	39·5	39·5	39·4	39·5	39·7	39·6	
13*	39·6	39·5	40·0	39·8	39·5	39·3	39·0	38·8	38·5	38·9	40·3	41·3	42·1	42·3	42·1	40·9	40·0	40·0	39·7	39·3	39·3	39·2	39·4	39·4	39·9	
14	39·4	39·4	39·7	39·6	39·2	39·0	38·8	38·9	38·0	37·8	39·7	41·2	42·3	42·6	42·1	40·8	40·2	40·6	40·6	39·9	34·4	37·0	35·6	35·8	39·3	
15	38·9	39·5	39·2	39·6	39·6	39·4	38·9	38·8	38·2	38·5	40·0	41·1	42·0	42·0	42·2	41·0	39·9	39·8	39·6	39·0	38·8	38·9	39·0	39·0	39·7	
16	39·3	39·6	39·7	39·6	39·6	38·8	38·8	38·2	37·8	38·4	39·7	41·2	42·0	42·9	43·6	41·8	42·3	41·3	39·0	37·6	38·1	38·3	38·5	38·8	39·8	
17**	39·0	39·4	40·0	39·6	39·6	39·0	39·6	39·0	38·8	39·0	40·3	40·9	42·0	42·8	42·0	41·3	40·8	40·7	40·0	34·6	36·8	36·3	36·2	37·8	39·4	
18	39·8	39·0	40·4	40·0	40·6	39·8	40·3	38·6	37·5	37·1	38·8	39·8	41·6	42·2	42·0	41·0	39·8	39·6	39·1	39·0	38·4	38·1	38·3	38·5	39·6	
19	38·9	39·3	39·4	39·5	39·3	39·0	39·0	38·7	37·5	37·4	38·3	39·8	42·6	42·8	43·2	39·7	39·8	39·9	39·7	39·0	37·8	37·7	38·3	38·8	39·4	
20	39·0	39·4	39·0	39·8	39·1	38·6	38·0	38·6	37·8	38·3	39·9	41·4	42·9	42·3	42·4	41·3	39·9	38·7	38·9	38·8	38·8	38·3	38·1	38·6	39·5	
21*	39·0	39·9	40·0	39·1	39·0	38·8	38·6	38·8	38·6	38·6	39·2	41·4	42·8	42·9	42·0	40·5	39·4	39·6	39·6	39·3	39·0	38·8	38·7	37·6	39·6	
22	36·6	35·9	36·0	35·6	36·8	36·5	36·7	38·8	38·8	38·9	40·2	42·2	42·5	42·6	41·8	40·4	39·6	39·3	39·0	38·6	38·8	38·9	38·9	38·9	38·8	
23*	38·8	38·9	39·0	39·0	39·0	38·8	38·7	38·4	37·6	37·5	39·3	41·3	42·6	43·0	42·4	40·8	39·8	40·0	40·0	39·9	39·6	39·4	39·1	39·1	39·7	
24	38·9	38·6	39·0	38·9	38·8	38·7	39·0	38·2	37·5	37·1	38·2	39·9	41·2	41·9	41·5	40·6	39·6	39·7	39·6	39·5	39·4	38·8	37·8	38·3	39·2	
25**	38·7	36·8	36·0	33·8	32·7	32·6	36·6	38·0	37·8	39·4	42·5	42·1	45·6	44·8	45·2	43·4	35·7	30·8	34·6	40·1	36·2	37·3	33·7	33·1	37·8	
26**	38·0	37·8	39·6	33·2	37·0	36·8	37·6	38·0	38·6	40·8	40·8	43·3	42·6	41·8	41·8	38·4	40·0	39·7	38·8	38·0	35·1	36·4	36·9	36·8	38·7	
27**	39·6	38·3	37·1	38·6	38·1	38·4	41·0	40·6	41·9	43·2	44·0	42·8	43·8	43·0	38·6	35·8	41·3	40·0	33·2	32·1	29·8	32·6	34·6	32·8	38·4	
28**	36·1	37·4	37·3	38·8	38·4	38·0	38·6	39·8	39·8	41·0	41·4	42·8	43·5	43·4	42·2	41·1	41·1	34·0	36·8	39·7	38·8	38·6	37·6	37·0	39·4	
Mean	38·7	38·6	39·0	38·9	38·8	38·7	39·1	39·1	38·7	39·1	40·2	41·5	42·6	42·9	42·4	41·1	40·5	39·9	39·2	38·8	37·9	38·0	37·9	37·9	39·6	
Mean*	39·3	39·3	39·5	39·4	39·4	39·2	38·9	38·9	38·5	38·7	39·8	41·2	42·1	42·3	41·7	40·4	39·9	40·0	39·9	39·6	39·4	39·2	39·2	39·0	39·8	
Mean**	38·3	37·9	38·0	36·8	37·2	37·0	38·7	39·1	39·4	40·7	41·8	42·4	43·5	43·2	42·0	40·0	39·8	37·0	36·7	36·9	35·3	36·2	35·8	35·5	38·7	

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

	0h	1h	2h	3h	4h	5h	6h	7h	8h	9h	10h	11h	Noon.	13h	14h	15h	16h	17h	18h	19h	20h	21h	22h	23h	24h
March.	13° + Tabular Quantities.																								Mean.
	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′
1	36·5	37·6	38·0	38·3	38·0	37·9	37·7	37·8	38·1	38·6	38·5	39·6	41·9	42·2	42·0	41·4	40·0	39·7	39·0	38·6	37·6	37·3	37·6	38·0	38·8
2	38·5	39·0	38·8	38·6	37·8	37·8	38·0	37·9	37·0	37·6	38·8	41·6	42·8	43·0	42·1	41·3	39·6	38·5	38·9	38·2	38·5	38·4	38·5	38·5	39·2
3	38·3	38·2	38·6	38·0	38·3	38·3	38·0	37·8	37·2	37·8	40·1	42·1	43·5	43·8	43·8	42·3	41·2	40·6	40·0	39·0	38·0	37·3	36·3	36·4	39·4
4	37·4	37·7	37·6	37·8	36·8	35·8	37·0	37·3	37·4	38·0	39·8	41·8	42·5	43·0	42·6	41·8	41·0	40·0	39·4	39·6	38·8	38·6	37·8	37·5	39·0
5	37·5	37·3	37·4	37·3	37·0	37·0	38·0	38·4	38·5	38·6	38·8	39·4	40·8	41·1	40·7	40·0	39·6	39·5	38·8	38·8	38·8	38·3	38·2	36·5	38·6
6	37·9	38·3	38·1	37·9	38·1	37·6	37·5	37·8	37·6	37·7	38·6	40·8	41·8	41·8	41·3	40·0	39·0	39·3	39·1	39·0	38·8	38·9	38·5	38·0	38·9
7	38·0	38·0	38·1	37·8	37·8	37·4	37·8	38·3	38·1	38·5	39·6	43·7	45·8	46·4	45·6	45·0	43·8	41·9	39·5	37·3	37·6	38·6	38·8	38·4	40·1
8*	38·3	38·4	38·2	38·1	38·4	38·2	38·0	37·8	37·3	37·3	38·8	39·8	41·2	41·5	40·7	39·3	38·8	39·1	39·6	39·0	38·8	38·7	38·5	38·2	38·8
9*	38·2	38·1	38·0	37·8	38·0	37·9	38·5	38·6	38·2	38·3	39·8	41·3	42·3	42·6	42·0	40·8	39·6	39·3	39·4	39·0	38·8	38·7	38·6	38·5	39·3
10*	38·4	38·3	38·2	38·6	38·3	38·8	38·5	37·8	37·0	37·5	38·0	40·7	42·7	43·1	41·8	40·3	39·2	39·3	39·4	39·0	38·8	38·6	38·7	38·6	39·2
11*	38·7	38·5	38·6	38·7	38·4	38·0	37·9	37·2	36·8	37·1	38·2	39·8	41·6	41·8	41·4	40·6	39·0	38·8	39·0	38·9	38·7	38·8	38·8	38·7	38·9
12	38·5	38·0	37·5	37·5	37·8	38·4	38·6	37·9	37·6	37·4	39·0	40·3	41·6	42·0	41·2	40·6	39·4	39·3	39·4	39·4	39·1	38·7	38·4	36·7	38·9
13	37·5	38·3	38·0	38·0	37·8	37·6	37·6	37·0	36·8	37·4	39·1	41·7	44·0	44·1	43·6	41·0	38·9	38·8	38·9	38·6	38·2	38·6	38·6	38·4	39·1
14	38·5	38·5	38·0	38·0	37·9	37·8	37·6	37·0	36·0	36·0	39·2	41·7	42·8	41·9	41·2	40·0	39·3	39·6	40·5	40·1	39·7	38·8	32·8	32·3	38·5
15**	36·8	38·0	38·3	37·4	37·4	37·5	37·8	38·1	37·6	38·0	40·1	42·0	43·7	43·1	42·2	42·2	40·0	39·5	38·0	38·8	38·8	38·0	35·3	36·4	39·0
16	38·2	39·1	39·0	38·8	38·1	39·1	39·4	37·7	35·9	37·8	40·5	41·8	44·3	42·6	42·0	40·8	38·8	38·7	38·4	36·8	36·5	33·9	36·9	36·9	38·8
17	36·6	35·5	35·9	37·1	37·4	37·3	37·6	38·6	39·6	37·9	38·8	42·3	43·7	43·0	41·3	39·8	38·8	38·7	38·7	38·3	37·8	37·4	37·5	38·0	38·6
18	38·0	37·9	38·0	38·3	38·3	39·0	38·0	36·1	35·4	35·6	38·5	41·3	43·3	44·2	43·0	40·0	39·4	38·6	37·9	38·2	38·0	35·0	35·8	36·6	38·5
19	37·8	37·8	37·5	39·4	38·9	38·0	37·5	36·9	36·7	37·1	39·6	41·9	45·5	45·3	43·8	41·0	39·0	38·7	38·6	38·3	38·1	38·2	38·5	38·4	39·3
20	38·5	38·6	38·5	38·5	38·1	37·8	36·8	35·6	35·3	37·0	39·6	41·6	43·2	43·0	41·9	39·8	38·7	38·4	39·1	39·1	38·2	35·3	36·9	37·5	38·6
21	38·4	38·3	38·0	37·8	37·6	37·2	36·8	35·9	35·9	37·5	38·8	41·8	44·8	45·2	43·9	43·1	41·9	40·3	39·8	38·5	36·9	34·0	34·6	35·0	38·8
22	33·9	33·1	34·8	36·2	36·2	36·1	36·3	35·8	36·0	37·3	39·6	42·0	44·0	44·6	43·7	41·4	39·8	38·6	38·4	38·3	38·2	38·1	38·3	38·5	38·3
23*	38·3	38·3	38·2	38·1	37·8	37·3	36·6	35·0	34·3	35·0	37·4	41·1	43·6	44·0	43·5	41·2	39·4	38·6	38·8	38·8	38·5	38·4	38·4	38·2	38·7
24**	38·3	38·2	38·2	37·9	37·4	37·0	36·6	35·3	34·7	36·8	41·8	48·0	52·2	52·6	48·1	51·6	49·8	38·4	30·6	36·1	34·2	22·0	24·8	27·6	38·7
25**	28·6	31·7	27·6	33·0	35·6	35·1	37·8	38·0	38·1	37·6	39·8	41·8	44·5	42·6	41·6	41·7	41·8	39·1	37·4	36·6	38·2	38·0	38·8	39·6	37·7
26**	38·5	38·6	40·0	40·5	38·2	37·9	35·8	35·6	38·2	38·8	39·8	41·7	44·8	45·6	44·6	38·1	39·8	39·4	35·6	35·8	35·8	36·4	36·2	37·6	38·9
27**	40·8	40·6	38·0	37·1	37·9	40·3	37·4	36·8	36·0	38·6	40·8	43·7	45·4	44·0	44·8	42·8	40·0	35·5	38·6	38·1	37·0	37·3	38·4	39·8	39·6
28	37·8	36·6	35·1	36·4	36·5	36·4	36·8	36·2	35·8	37·6	40·6	43·4	44·7	43·9	43·1	41·0	39·6	36·6	35·0	37·8	37·5	36·0	36·6	36·8	38·2
29	39·2	38·0	37·8	37·1	36·4	35·8	35·4	34·4	34·0	36·1	39·8	42·0	43·8	44·1	42·4	41·0	38·5	37·4	37·6	37·8	37·6	35·7	33·8	36·8	38·0
30	37·0	36·9	36·8	35·9	36·3	35·2	34·7	34·6	35·1	37·5	39·9	41·2	42·5	43·0	42·1	39·4	38·8	37·4	37·6	37·2	37·3	37·5	36·6	36·2	37·8
31	37·8	36·1	35·8	35·8	36·0	36·0	35·6	35·0	34·6	36·8	39·3	41·5	44·0	43·8	42·4	40·5	39·0	38·0	37·8	37·6	37·6	37·0	36·9	36·8	38·0
Mean	37·6	37·7	37·4	37·7	37·6	37·8	37·3	36·9	36·7	37·4	39·4	41·7	43·7	43·6	42·7	41·3	40·0	38·9	38·3	38·0	37·9	37·0	36·9	37·1	38·8
Mean*	38·4	38·3	38·2	38·3	38·2	38·0	37·9	37·3	36·7	37·0	38·4	40·5	42·3	42·6	41·9	40·4	39·2	39·0	39·2	38·9	38·7	38·6	37·6	37·4	39·0
Mean**	36·6	37·4	36·4	37·2	37·3	37·6	37·1	36·8	36·9	38·0	40·5	43·4	46·1	45·6	44·3	43·3	42·3	38·4	36·0	37·1	36·8	34·3	34·7	36·2	38·8
April.	13° + Tabular Quantities.																								Mean.
	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′
1	36·4	36·6	36·6	37·0	38·0	37·5	36·3	34·3	33·2	34·6	37·6	40·6	43·2	44·0	42·7	40·8	39·8	38·4	38·0	36·9	35·0	36·6	36·9	37·5	37·9
2*	37·1	36·9	36·8	37·5	37·0	36·4	35·6	34·2	33·6	35·6	38·8	41·0	43·1	43·6	42·3	40·6	39·2	38·4	38·0	38·0	37·8	37·0	36·4	36·6	38·0
3	36·2	36·6	36·4	36·6	36·8	36·8	36·0	34·0	33·5	34·6	37·6	40·6	43·4	44·0	43·8	42·3	40·8	39·3	38·6	37·8	37·8	38·0	37·8	37·8	38·2
4	37·8	37·9	37·7	37·6	36·9	36·6	35·6	33·8	33·2	35·0	38·3	40·4	42·6	44·3	44·6	43·3	41·6	39·6	38·0	38·2	38·0	37·1	38·2	37·8	38·5
5*	37·6	37·4	37·3	37·5	37·4	37·1	36·0	34·6	34·0	35·2	36·8	39·8	42·4	42·8	41·6	40·6	39·8	39·6	39·5	38·8	38·3	37·8	37·7	37·6	38·2
6	37·4	37·5	37·6	37·7	37·3	36·8	35·8	34·3	33·6	34·0	35·7	38·8	41·1	42·8	42·2	41·3	40·5	39·1	38·2	37·5	37·8	37·8	38·0	37·8	37·9
7	35·3	35·8	34·1	34·1	34·5	36·1	36·0	34·6	34·2	35·5	36·8	40·6	43·6	44·5	43·5	41·8	41·0	39·3	39·3	37·6	37·0	36·8	35·1	36·1	37·7
8	36·1	34·7	34·5	36·6	36·6	36·5	35·7	34·8	34·8	35·8	38·0	39·8	42·4	43·1	42·3	41·3	40·5	39·7	37·8	38·5	38·4	38·3	35·0	35·6	37·8
9	33·8	33·9	36·0	36·0	35·8	35·6	34·6	33·0	33·4	36·2	38·0	41·5	42·8	43·5	42·4	41·0	39·8	39·5	39·0	35·8	32·3	33·4	34·8	36·3	37·0
10	37·4	37·2	36·8	36·6	36·6	36·4	35·3	34·5	33·3	34·6	37·8	40·4	43·1	43·6	42·6	42·0	40·5	39·8	39·6	39·0	36·6	35·9	34·0	35·4	37·9
11	33·0	35·8	36·5	36·4	36·5	36·4	35·6	35·2	35·6	36·0	38·6	43·4	44·8	44·8	43·7	41·6	39·8	39·0	38·6	38·4	37·8	37·1	33·8	36·3	38·1
12**	36·2	36·6	38·6	38·8	37·6	37·4	36·6	36·2	34·5	35·0	38·6	40·8	43·4	43·8	44·3	42·5	40·6	35·6	37·7	37·0	34·8	35·3	34·7	36·4	38·0
13**	37·6	38·9	38·9	38·0	38·6	37·5	35·3	33·8	32·2	34·8	38·5	41·5	43·0	44·6	44·5	42·2	40·0	38·6	37·4	36·8	36·9	32·5	27·0	31·0	37·5
14	34·7	33·3	36·1	40·4	37·0	35·8	34·4	33·0	32·8	34·5	36·8	41·0	43·7	44·8	43·8	41·9	39·8	38·5	37·2	36·7	34·1	35·5	37·2	37·8	37·5
15	37·2	38·1	37·0	37·0	36·9	36·0	34·3	33·2	32·1	32·8	35·7	38·6	42·8	43·8	43·0	41·0	39·8	38·6	37·6	37·0	35·3	36·6	37·0	37·3	37·4
16	37·4	37·5	37·4	37·6	37·3	37·0	35·8	33·8	32·6	32·8	36·0	40·3	44·2	45·6	44·3	42·0	40·0	38·5	37·6	37·5	37·4	37·5	37·4	37·5	38·1
17*	37·4	37·3	37·2	37·1	36·9	36·6	36·3	33·8	32·9	34·3	37·8	42·1	44·4	44·5	42·7	40·5	39·0	38·0	37·6	37·2	37·0	36·8	36·6	37·0	38·0
18	37·4	37·6	37·4	37·2	37·0	36·7	35·0	33·0	32·6	33·2	35·8	40·8	43·8	43·7	42·8	41·0	39·7	38·5	37·8	37·5	37·2	36·9	35·8	36·6	37·7
19	36·9	37·1	37·8	37·9	36·8	36·0	34·5	32·4	31·8	34·5	38·8	42·9	44·3	43·8	42·0	39·9	38·6	38·0	37·8	37·8	37·5	37·3	36·2	35·8	37·8
20	35·7	36·4	36·3	36·1	36·8	36·7	35·5	34·0	33·3	34·2	37·2	41·6	44·0	44·3	42·8	41·0	39·9	39·2	37·0	34·6	35·1	34·0	35·8	35·6	37·4
21**	36·4	35·8	36·7	32·5	37·8	35·9	33·2	31·8	34·1	33·6	37·0	40·8	44·8	44·8	45·2	42·0	39·7	38·4	37·7	37·5	32·2	34·0	35·6	38·7	37·3
22**	35·6	35·3	37·4	35·6	36·8	37·6	34·3	33·6	33·7	34·4	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
23**	—	—	—	—	—	—	—	—	—	—	36·5	40·6	41·7	42·9	42·0	40·3	39·0	39·0	33·3	35·6	36·6	36·6	35·8	36·4	—
24	35·8	35·2	34·1	37·4	35·6	34·8	35·7	35·3	34·5	36·1	37·7	40·1	42·0	43·3	42·0	40·4	38·6	37·6	37·4	36·6	34·8	36·2	36·8	36·8	37·3
25	36·3	35·6	35·2	34·8	36·5	34·7	35·1	35·5	35·3	36·8	38·3	39·6	40·8	40·7	39·9	39·0	38·7	38·0	37·6	36·9	36·9	37·1	37·2	36·7	37·2
26*	35·6	36·0	35·8	35·4	35·2	35·0	34·6	34·0	33·8	34·8	36·3	39·6	40·9	40·8	40·0	38·9	39·0	38·3	37·1	36·8	37·1	37·1	37·1	36·8	36·9
27*	36·8	36·6	36·3	36·0	35·6	34·8	34·3	33·6	33·6	35·3	39·0	40·0	41·1	40·8	39·7	39·0	38·2	37·6	36·8	36·6	36·6	37·1	37·4	37·4	37·1
28	36·1	35·8	34·8	34·3	33·6	33·0	33·3	33·0	33·6	35·8	37·0	39·8	41·8	42·0	41·0	39·3	38·5	38·2	37·6	36·8	36·6	36·4	36·4	36·8	36·7
29	36·8	36·2	35·8	34·7	34·3	34·3	33·0	32·2	32·2	34·5	38·6	41·3	42·6	42·1	40·4	38·6	37·4	36·7	36·0	36·0	36·6	34·4	32·8	34·8	36·3
30	35·8	36·0	35·8	35·3	34·6	34·0	33·1	32·8	33·3	35·9	39·5	42·9	43·8	43·0	41·5	39·6	38·8	38·3	37·2	36·7	36·5	36·2	36·4	36·8	37·2
Mean	36·3	36·4	36·5	36·5	36·5	36·1	35·1	33·9	33·5	34·8	37·6	40·7	43·0	43·5	42·5	40·9	39·6	38·5	37·7	37·2	36·4	36·3	35·9	36·6	37·6
Mean*	36·9	36·8	36·7	36·7	36·4	36·0	35·4	34·0	33·6	35·0	37·7	40·5	42·4	42·5	41·3	39·9	39·0	38·4	37·8	37·5	37·5	37·2	37·0	37·0	37·6
Mean**	36·7	37·1	38·1	36·4	38·0	36·9	35·0	34·0	33·6	34·5	38·0	41·0	43·7	44·4	44·7	42·2	40·1	37·5	37·6	37·1	34·6	33·9	32·4	35·4	37·6

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

	0h	1h	2h	3h	4h	5h	6h	7h	8h	9h	10h	11h	Noon.	13h	14h	15h	16h	17h	18h	19h	20h	21h	22h	23h	24h
May.	13° + Tabular Quantities.																								Mean.
	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′
1*	36·9	36·4	36·4	36·1	35·6	35·0	34·1	33·7	33·8	34·4	35·8	38·5	40·6	41·5	40·6	39·4	39·0	38·6	37·6	36·6	36·3	36·3	36·4	36·4	36·9
2	36·2	36·1	36·0	36·0	35·9	35·4	34·7	34·3	34·4	36·0	38·4	40·8	42·1	42·0	41·1	40·1	39·6	39·0	37·8	37·0	36·8	36·4	36·6	36·5	37·5
3**	36·5	36·6	36·8	36·5	35·8	34·0	33·0	32·2	32·8	34·6	36·0	39·8	40·4	41·4	41·0	41·3	40·4	39·8	39·1	34·6	34·4	35·8	33·6	28·8	36·5
4	31·3	33·6	33·2	33·8	33·8	34·7	34·3	33·8	34·8	35·7	36·5	39·4	40·6	40·8	40·0	39·6	39·5	38·8	37·9	37·3	36·1	33·8	34·6	33·0	36·1
5	32·8	34·2	37·4	37·0	34·8	34·5	34·4	34·8	34·6	34·9	36·6	38·7	40·0	40·6	40·0	38·8	37·8	37·4	36·9	35·5	36·0	36·0	36·5	36·4	36·5
6	36·3	36·3	36·5	36·6	36·1	35·8	34·9	34·2	33·5	33·8	36·3	37·8	39·0	39·5	39·1	38·6	37·8	37·2	36·6	36·6	36·1	34·8	35·0	35·5	36·4
7	35·4	36·5	35·6	34·6	34·3	33·9	33·6	34·0	34·6	35·6	37·0	40·0	40·6	40·0	39·6	39·7	39·4	38·5	37·0	37·0	35·5	34·6	34·8	34·8	36·5
8	34·7	36·4	35·8	34·6	33·5	34·2	34·6	34·8	35·7	37·4	37·8	39·0	41·2	41·0	40·8	40·0	39·5	38·4	37·6	37·0	36·7	36·6	36·0	35·0	37·0
9	33·8	34·5	34·4	34·6	34·4	35·6	35·6	34·5	34·2	34·6	36·0	36·8	38·6	38·8	38·4	38·4	38·3	37·6	37·0	36·9	36·8	36·8	36·6	36·5	36·2
10	35·9	35·8	35·8	35·5	35·0	35·2	35·0	34·5	34·1	34·8	35·3	36·8	38·6	38·5	38·3	37·8	36·9	36·0	36·0	35·8	35·8	36·0	36·6	36·6	36·1
11	36·3	36·3	35·8	35·5	34·8	34·4	34·0	34·0	35·2	36·4	38·0	39·5	39·8	39·8	39·4	38·8	38·7	38·1	37·0	36·4	36·2	36·8	36·8	36·7	36·9
12*	36·8	36·6	36·5	36·0	35·6	34·5	34·0	33·0	33·0	33·4	36·3	39·0	40·2	40·0	38·8	37·0	36·2	36·0	36·2	36·6	36·6	37·0	36·9	37·0	36·4
13*	36·9	36·9	36·8	35·6	34·8	33·0	31·8	32·2	33·0	34·5	37·3	39·6	41·1	40·4	39·3	37·8	36·6	36·8	36·8	36·6	36·6	36·6	36·8	36·0	36·4
14	36·6	36·1	35·8	34·9	34·4	34·0	33·6	32·8	33·5	34·8	40·0	41·4	43·2	43·0	40·9	37·8	36·2	35·5	35·6	35·9	36·3	36·5	36·8	36·8	36·8
15	36·5	36·6	36·2	36·7	34·6	33·6	33·2	33·0	34·2	35·3	36·3	39·9	40·8	40·8	40·3	39·4	38·4	37·3	36·5	36·0	36·0	36·1	36·1	35·9	36·7
16	36·5	36·6	36·6	35·8	34·7	33·8	33·2	32·8	33·0	34·0	36·2	38·3	39·1	39·8	39·9	38·6	37·7	36·8	36·6	36·5	36·6	37·0	37·0	36·2	36·4
17**	35·8	35·8	35·2	32·4	31·0	29·6	29·6	30·1	31·6	33·5	35·4	37·1	39·6	40·7	43·0	43·5	41·2	38·8	31·0	36·0	36·7	29·8	33·6	28·8	35·0
18**	29·8	39·3	34·1	31·1	34·6	32·7	32·5	32·0	34·6	36·2	37·4	38·6	40·6	40·2	39·7	38·8	38·0	37·4	34·6	35·5	35·8	34·8	34·4	33·6	35·7
19	34·7	34·9	32·6	33·8	35·0	34·3	33·4	32·8	33·2	35·5	37·4	39·3	41·1	41·6	40·2	39·0	37·4	37·3	36·0	35·8	36·1	35·8	35·8	34·8	36·2
20	33·8	35·6	35·5	36·2	34·6	32·8	31·3	30·8	31·9	33·8	35·1	36·8	39·5	39·8	40·6	40·6	39·8	38·8	36·9	36·6	36·2	36·1	34·3	32·1	35·8
21	30·2	31·6	32·0	33·8	34·3	33·8	33·6	33·1	32·7	32·8	35·3	36·5	37·6	38·1	38·8	38·8	38·9	38·3	36·7	34·4	35·3	35·6	35·4	35·8	35·1
22*	35·5	35·4	35·0	35·0	34·1	33·8	33·3	32·7	32·8	32·7	35·4	37·4	39·9	40·6	40·8	39·9	38·8	38·3	37·4	36·2	34·8	35·8	36·2	36·0	36·2
23	35·5	34·1	34·3	34·2	33·5	32·8	31·8	31·8	31·5	32·6	34·0	36·9	38·6	39·1	38·7	38·0	37·6	37·5	36·8	36·4	35·9	36·4	35·3	(34·8)	35·3
24*	—	—	—	—	—	—	—	—	—	—	—	39·8	40·0	39·8	38·8	38·2	37·7	37·7	37·8	37·3	36·6	36·8	36·5	36·2	—
25	35·8	35·1	35·0	34·5	32·5	31·6	31·3	31·6	32·4	33·1	37·0	39·6	41·6	41·0	40·1	38·8	37·8	36·9	36·9	37·1	36·9	36·6	36·7	36·6	36·1
26	35·9	35·8	35·8	35·7	34·8	33·6	34·0	33·7	33·8	34·5	35·9	38·0	39·4	39·0	38·8	37·6	36·6	36·6	36·4	35·8	35·8	36·2	36·4	36·4	36·1
27	36·5	35·8	35·1	34·1	32·6	31·8	32·3	32·6	31·8	32·4	35·4	38·0	40·1	40·6	40·0	38·8	37·9	37·3	37·2	37·1	36·8	36·5	36·6	35·4	35·9
28	35·8	35·7	35·0	34·8	34·0	33·9	33·9	33·2	32·2	32·3	34·8	36·4	39·0	39·0	38·4	37·6	36·3	36·0	36·2	36·5	35·8	36·1	36·6	36·8	35·7
29**	35·7	36·0	35·7	34·8	33·8	32·9	32·7	32·2	33·0	34·4	37·2	41·6	45·3	45·6	45·2	42·8	43·0	40·1	35·9	34·6	33·2	33·2	36·0	37·6	37·2
30**	33·5	31·4	32·5	30·1	29·5	29·8	30·6	30·8	33·0	35·2	37·6	40·8	43·4	43·8	44·1	42·3	37·5	34·8	35·0	32·6	30·6	34·4	34·8	36·4	35·2
31	36·6	36·6	37·0	35·8	34·7	33·3	32·6	32·7	33·3	34·2	37·0	39·6	42·1	42·5	41·8	40·0	38·3	36·8	35·6	35·1	35·0	35·0	33·7	33·8	36·4
Mean	35·1	35·6	35·3	34·9	34·2	33·6	33·2	33·0	33·4	34·4	36·5	38·7	40·5	40·6	40·3	39·3	38·4	37·6	36·5	36·1	35·8	35·6	35·8	35·2	36·2
Mean*	36·5	36·3	36·2	35·7	35·0	34·1	33·3	32·9	33·2	33·8	36·2	38·6	40·5	40·6	39·9	38·5	37·7	37·4	37·0	36·6	36·1	36·4	36·6	36·4	36·5
Mean**	34·3	35·8	34·9	33·0	32·9	31·8	31·7	31·5	33·0	34·8	36·7	39·6	41·9	42·3	42·6	41·7	40·0	38·2	35·1	34·7	34·1	33·6	34·5	33·0	35·9
June.	13° + Tabular Quantities.																								Mean.
	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′
1	34·3	34·8	35·0	34·6	34·1	32·4	31·8	31·5	31·3	32·3	35·0	38·8	40·5	40·8	40·6	39·8	38·3	36·7	34·4	34·8	35·5	35·6	35·3	35·0	35·5
2	35·2	34·9	35·7	33·8	32·3	31·5	31·1	30·3	30·1	32·7	34·8	39·0	41·6	41·3	40·6	39·8	38·3	37·0	36·5	36·1	35·7	35·3	34·9	35·0	35·6
3	34·8	34·7	34·7	34·3	34·2	32·2	32·6	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
4**	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
5	—	—	—	—	—	—	—	—	—	—	35·8	39·0	40·0	40·8	41·3	39·6	38·4	37·7	36·6	35·6	34·8	34·8	34·8	35·2	—
6	34·8	34·4	34·3	33·9	32·6	31·5	30·8	30·4	31·3	34·5	36·1	38·5	39·6	40·0	40·8	41·6	41·0	38·3	38·0	34·3	33·2	35·6	35·8	35·1	35·7
7	34·0	33·8	34·6	35·6	34·2	33·3	33·4	32·7	32·1	33·3	35·9	37·6	39·4	40·2	39·8	38·6	38·4	37·2	36·2	35·8	35·6	35·8	35·6	35·6	35·8
8	35·4	34·6	34·8	34·1	33·1	32·0	31·4	30·6	30·4	31·4	33·8	36·0	38·4	39·1	38·8	38·6	38·1	36·8	35·8	34·3	35·0	35·4	35·8	35·6	35·0
9*	35·6	35·6	35·0	34·6	33·8	33·2	32·3	31·6	31·8	32·8	34·8	38·0	40·1	40·6	40·4	39·3	37·8	36·2	35·6	35·0	34·9	35·2	36·0	36·3	35·7
10*	36·0	36·3	35·4	34·6	34·0	31·8	31·6	31·7	31·8	33·0	35·6	38·3	40·5	40·8	40·0	38·5	36·8	35·3	34·8	35·0	35·6	35·8	36·0	35·9	35·6
11	35·6	35·5	34·7	34·1	32·8	31·6	30·6	29·9	30·6	32·8	36·0	39·0	39·6	39·2	38·2	37·8	36·5	35·3	35·4	35·6	36·0	36·3	35·9	35·6	35·2
12	35·5	35·0	34·8	34·3	33·4	32·3	32·3	32·1	33·5	35·6	37·6	39·2	40·6	40·0	39·0	38·2	36·8	35·4	35·0	35·5	36·5	36·6	37·4	36·4	36·0
13**	31·8	28·8	32·2	31·8	28·8	28·3	28·8	30·2	32·3	37·8	38·3	40·6	42·8	44·3	44·8	42·0	37·9	38·1	37·0	34·5	34·5	32·0	31·9	32·6	35·5
14**	33·9	36·0	35·8	34·6	32·8	32·7	32·4	31·0	31·6	32·8	36·1	38·8	39·9	40·8	39·7	39·9	40·2	38·8	34·3	34·7	35·6	35·0	31·3	33·6	35·5
15	34·0	37·5	34·3	36·0	34·0	33·1	31·3	29·1	29·4	31·3	34·5	35·0	36·2	36·6	39·6	39·0	39·7	39·0	37·8	36·2	34·4	34·8	34·4	34·0	35·0
16	34·5	33·9	36·6	36·8	33·8	31·8	30·8	30·1	30·3	32·2	35·0	37·8	39·8	40·6	41·6	40·7	38·8	37·2	36·1	34·8	34·6	34·6	34·2	34·3	35·5
17*	34·4	35·2	34·0	33·5	33·3	32·2	31·0	30·0	29·4	30·8	33·9	36·1	37·7	38·8	39·3	38·9	37·6	36·8	35·6	34·6	34·4	34·4	34·8	34·6	34·6
18*	34·6	34·4	34·4	33·7	32·4	30·8	30·6	30·0	30·4	32·0	36·5	38·0	39·6	40·6	40·4	39·2	37·8	36·4	35·6	35·0	35·0	34·8	34·8	35·0	35·1
19	34·1	34·2	34·1	33·8	32·6	31·1	29·8	28·6	30·8	31·4	35·3	37·9	40·3	40·6	40·1	40·8	38·8	37·0	36·4	35·8	35·0	34·3	34·2	33·8	35·0
20	33·4	33·8	33·6	33·6	32·7	30·8	29·9	29·3	29·4	31·0	33·1	36·8	37·8	39·0	40·0	40·0	39·8	38·0	37·5	36·2	35·4	34·1	32·2	33·6	34·6
21**	33·2	33·0	32·5	37·8	31·5	30·8	32·0	32·2	32·1	34·0	36·2	36·3	39·0	40·1	39·7	36·6	36·4	36·6	36·0	35·3	34·8	34·6	34·0	33·8	35·0
22	32·4	33·0	33·3	33·4	32·7	32·4	30·9	29·8	30·1	30·9	31·4	34·4	35·8	37·3	37·6	37·2	37·3	35·8	34·9	34·8	35·5	35·6	35·6	35·0	34·0
23	35·0	34·8	34·2	34·0	33·4	32·6	32·1	32·4	32·8	33·8	35·3	36·0	36·8	37·3	37·6	37·0	36·2	35·8	35·6	35·0	35·1	35·7	35·8	35·6	35·0
24*	35·7	34·5	34·3	32·8	32·0	31·1	31·8	32·3	31·8	31·6	32·9	34·7	36·0	36·0	35·8	35·6	35·2	—	—	—	—	—	—	—	—
25	35·0	34·8	34·6	34·4	32·5	30·8	31·0	32·0	33·2	34·0	35·6	36·8	37·8	37·5	36·9	36·4	35·7	35·8	36·6	36·5	36·0	35·8	35·5	35·6	35·0
26	35·1	34·6	33·8	33·0	31·8	30·2	28·8	28·2	29·8	32·6	35·8	39·0	40·6	40·8	40·0	37·9	35·8	34·8	34·8	34·6	34·8	35·0	34·8	34·6	34·6
27	34·2	33·6	33·1	32·8	31·6	33·1	33·0	32·2	32·3	33·3	35·8	38·7	39·1	41·0	40·7	39·5	37·1	35·8	33·5	33·6	33·9	34·0	34·0	34·3	35·0
28	32·4	31·7	31·8	30·6	32·4	29·8	30·4	31·8	32·3	32·7	35·1	38·6	41·5	42·4	42·0	40·0	37·6	36·0	34·5	33·8	33·8	34·1	34·2	34·6	34·7
29	34·3	34·4	33·8	33·7	32·1	31·0	30·2	29·7	29·8	31·4	33·3	37·1	39·4	40·6	40·5	38·8	36·9	35·7	35·6	34·8	34·6	34·8	34·8	34·4	34·7
30**	34·9	34·5	33·8	33·1	31·8	30·7	31·9	32·0	31·4	30·8	33·8	39·6	43·1	46·8	49·8	48·4	47·8	46·6	37·8	35·7	35·8	33·4	33·2	35·4	37·2
Mean	34·4	34·3	34·2	34·1	32·7	31·6	31·2	30·7	31·2	32·7	35·2	37·8	39·9	40·3	40·3	39·5	38·2	37·0	35·8	35·1	35·0	34·9	34·7	34·8	35·2
Mean*	35·2	35·4	34·7	34·1	33·4	32·0	31·4	30·8	30·9	32·2	35·2	37·6	39·5	40·2	40·0	39·0	37·5	36·2	35·4	34·9	35·0	35·1	35·4	35·5	35·3
Mean**	33·5	33·1	33·6	34·3	31·2	30·6	31·3	31·4	31·9	33·9	36·1	38·8	41·2	43·0	43·5	41·7	40·6	40·0	36·3	35·1	35·2	33·8	33·4	33·9	35·8

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

	0h	1h	2h	3h	4h	5h	6h	7h	8h	9h	10h	11h	Noon.	13h	14h	15h	16h	17h	18h	19h	20h	21h	22h	23h	24h	
July.	13° + Tabular Quantities.																									Mean.
	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′
1	35·6	35·8	36·5	34·7	32·8	33·0	33·0	33·4	32·6	31·8	32·0	34·4	37·1	38·8	39·0	38·2	37·8	36·8	36·2	35·4	34·8	34·5	33·8	33·9	35·1	
2	33·9	34·0	34·8	35·0	36·4	34·4	32·2	31·0	30·8	32·2	34·9	37·8	40·1	40·4	40·8	40·4	37·1	37·5	36·4	35·3	35·8	35·9	35·6	35·1	35·3	
3	35·1	35·5	34·9	34·2	34·6	33·8	32·2	33·1	33·2	34·3	35·4	36·9	39·0	39·3	39·1	37·5	36·3	35·7	35·3	34·8	35·0	34·8	34·5	34·6	35·4	
4	34·1	34·0	33·9	33·8	33·0	32·5	32·5	32·0	31·9	32·8	33·8	36·0	38·2	38·1	38·4	38·3	37·6	37·0	36·5	34·4	34·2	34·8	34·6	34·6	34·9	
5*	34·4	34·1	34·3	34·4	33·7	32·8	33·4	33·8	34·6	34·7	35·8	36·6	38·8	39·1	39·0	38·5	37·6	36·3	34·7	34·2	34·8	34·9	35·0	35·0	35·5	
6	34·6	34·1	34·0	33·8	33·3	31·4	30·8	29·8	30·4	31·9	33·5	36·3	38·1	39·9	39·8	39·5	38·6	37·8	37·2	33·8	34·7	35·2	35·3	35·4	35·0	
7**	35·0	34·2	34·6	33·8	35·6	32·8	31·1	31·6	32·7	33·1	34·0	36·5	38·6	39·8	39·6	39·1	38·3	37·5	36·4	36·4	35·8	33·8	33·6	33·8	34·0	35·3
8	34·1	34·2	34·0	34·4	34·6	31·8	30·6	29·6	29·8	31·3	33·0	34·8	36·0	37·0	37·0	36·8	35·8	35·2	35·0	35·4	35·4	35·0	34·7	34·6	34·2	
9	34·5	33·8	33·6	33·8	33·0	31·5	31·8	31·8	32·0	32·8	33·3	35·4	36·6	37·4	37·6	37·4	36·8	36·0	35·6	35·8	35·4	35·0	33·6	34·3	34·5	
10**	34·2	36·6	35·8	30·8	30·6	29·8	30·2	30·1	31·4	33·2	35·6	41·4	42·5	42·6	41·9	39·8	38·6	38·6	35·8	34·6	33·5	33·8	35·8	31·6	35·4	
11**	30·8	31·0	31·8	34·0	35·0	31·8	31·6	31·8	31·4	32·5	34·0	37·3	37·6	38·6	38·4	38·4	37·9	36·8	35·1	34·3	33·8	32·6	34·2	33·8	34·4	
12	36·6	34·3	33·0	32·1	31·8	31·2	30·6	29·8	29·0	30·8	33·1	36·2	37·8	37·9	38·0	35·8	35·8	36·0	36·1	35·8	35·0	34·6	34·6	34·4	34·6	
13	34·2	34·7	33·9	33·2	32·3	32·4	31·9	31·7	32·3	32·8	34·4	36·0	37·5	38·1	37·8	36·4	35·8	34·8	34·5	33·9	34·1	34·3	34·0	33·1	34·3	
14*	33·3	33·4	33·0	32·9	32·4	30·8	30·8	30·4	30·8	31·6	33·8	35·8	37·2	38·8	38·3	36·6	35·5	35·1	35·1	35·4	35·0	34·6	34·2	33·8	34·5	
15*	33·6	33·7	33·5	33·6	32·8	32·0	31·6	32·0	31·5	32·8	33·4	35·8	38·3	39·9	39·8	38·4	36·9	35·7	35·2	35·0	34·0	34·3	34·2	34·0	34·6	
16	33·4	33·5	32·3	32·0	31·2	30·3	30·1	30·7	30·6	30·8	32·5	34·6	36·6	37·2	38·3	37·3	36·4	35·8	35·7	35·3	34·9	34·6	32·5	33·3	33·7	
17	33·5	33·7	33·7	33·8	33·6	33·0	33·5	33·7	33·9	34·5	34·1	36·6	38·0	38·8	39·1	38·8	37·4	37·2	37·0	35·4	35·4	34·0	31·6	32·0	35·1	
18**	31·8	31·6	30·6	31·8	31·8	30·8	30·5	30·5	30·4	31·1	33·6	37·6	38·5	40·0	40·8	40·1	38·0	35·4	35·3	35·0	34·6	35·1	34·8	32·1	34·2	
19	31·8	31·6	32·0	34·6	35·3	35·1	32·8	32·6	32·6	34·0	35·0	37·5	38·4	38·4	38·1	37·8	36·4	36·4	35·6	35·0	34·8	34·6	32·8	32·6	34·8	
20	34·5	32·6	33·8	34·8	33·7	32·0	32·6	32·0	31·8	33·0	34·6	37·0	38·0	39·6	40·2	39·0	37·7	35·9	35·4	34·6	34·6	34·7	34·2	33·8	35·0	
21*	35·6	33·8	34·0	33·6	32·6	31·4	30·5	29·4	29·8	31·3	32·8	35·9	37·2	37·2	36·8	35·2	34·6	34·3	34·4	34·7	34·7	34·6	34·7	34·4	33·8	
22	34·1	33·9	33·5	33·0	32·7	31·4	30·6	29·9	29·6	30·4	32·6	35·5	36·2	38·0	37·9	37·2	35·6	35·6	35·8	35·7	35·0	35·8	35·6	35·8	34·2	
23**	32·0	28·8	25·5	25·4	32·2	33·0	29·8	31·3	30·0	30·8	32·3	35·2	38·8	40·6	39·7	36·3	35·4	35·5	35·1	34·3	34·6	34·8	34·8	34·4	33·4	
24*	34·2	34·6	33·8	33·0	32·0	30·8	30·3	30·1	31·1	32·0	36·0	37·2	36·5	35·8	34·4	34·0	33·9	34·2	34·1	33·9	34·5	34·1	33·9	33·8	33·7	
25	33·8	33·6	32·7	33·0	31·9	31·8	31·8	31·3	31·6	32·0	33·1	36·1	38·0	38·8	37·6	36·2	35·8	34·6	33·9	34·0	34·0	33·9	34·0	34·0	34·1	
26	33·5	33·6	33·5	32·9	32·4	31·5	31·7	30·6	30·6	32·1	33·4	35·8	36·8	37·7	37·8	36·9	35·8	34·6	33·9	33·8	33·7	34·0	34·4	33·8	33·9	
27	33·3	32·2	31·9	31·4	31·8	30·3	29·8	30·4	31·5	32·8	35·6	37·7	40·6	41·8	40·9	39·6	37·4	36·0	34·8	33·6	33·8	33·5	33·0	30·6	34·3	
28	31·8	32·3	33·4	32·9	32·4	31·2	31·9	31·7	32·2	32·8	33·4	35·2	37·5	38·8	38·6	36·9	35·8	34·6	34·4	33·6	33·1	33·2	33·7	34·3	34·0	
29	34·0	34·1	33·8	32·6	32·0	31·4	31·1	30·6	30·8	33·6	35·7	37·8	39·4	40·0	39·8	38·8	38·0	36·3	35·4	34·8	34·1	33·8	33·9	33·6	34·8	
30	33·5	33·4	33·1	32·9	31·8	30·8	30·4	29·4	29·8	31·8	34·0	36·1	38·0	38·4	37·2	35·8	35·1	34·5	34·8	34·6	33·8	33·9	34·0	34·0	33·8	
31	33·8	33·6	33·6	33·4	32·4	31·4	31·5	31·5	32·0	33·4	35·0	37·5	39·8	40·8	39·4	37·9	36·6	34·8	34·0	33·8	34·0	33·8	34·3	33·0	34·6	
Mean	33·8	33·6	33·3	33·1	33·0	31·9	31·4	31·2	31·4	32·4	34·0	36·5	38·1	38·9	38·8	37·7	36·7	35·9	35·3	34·7	34·5	34·4	34·2	33·8	34·5	
Mean*	34·2	33·9	33·7	33·5	32·7	31·6	31·3	31·1	31·6	32·5	34·4	36·3	37·6	38·2	37·7	36·5	35·7	35·1	34·7	34·6	34·6	34·5	34·4	34·2	34·4	
Mean**	32·8	32·4	31·7	31·2	33·0	31·6	30·6	31·1	31·2	32·1	33·9	37·6	39·2	40·3	40·1	38·7	37·6	36·8	35·5	34·9	34·5	34·0	34·7	33·0	34·5	
August.	13° + Tabular Quantities.																									Mean.
	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′
1*	32·8	32·6	32·5	32·4	30·9	29·4	29·6	29·9	30·8	32·6	34·6	37·0	37·6	38·1	38·0	36·7	36·0	34·8	34·2	34·1	33·3	33·9	33·6	33·5	33·7	
2	33·0	32·6	31·8	31·2	31·6	30·8	31·6	31·8	31·6	31·5	32·2	35·3	37·8	38·6	38·1	36·9	36·1	35·1	34·5	34·7	34·8	33·9	33·8	33·8	33·9	
3**	33·3	33·5	31·2	28·2	29·0	28·8	29·6	32·2	35·6	35·7	36·8	40·1	41·0	39·4	38·8	38·0	37·1	36·1	35·6	33·3	29·2	32·0	31·0	31·9	34·1	
4**	32·6	32·5	33·4	36·8	35·5	32·4	30·1	31·9	34·6	33·3	34·0	35·4	37·1	37·7	36·8	36·0	35·6	35·7	35·9	35·2	34·0	33·6	34·3	34·0	34·5	
5	32·9	32·9	32·5	31·5	31·4	30·8	30·1	30·1	30·6	31·6	33·5	35·7	36·6	37·3	36·8	35·8	35·1	34·7	34·2	34·6	34·5	34·0	33·8	33·6	33·5	
6**	33·2	33·0	32·8	32·6	31·4	30·7	30·6	31·0	31·8	35·0	37·0	38·8	40·0	39·6	38·8	38·0	34·9	33·6	33·9	33·9	30·6	31·0	31·1	32·0	34·0	
7	32·3	32·6	32·4	31·6	31·0	30·2	29·8	30·0	31·2	33·3	34·6	35·5	37·4	38·7	38·6	37·1	35·6	34·4	33·5	32·9	33·5	33·8	33·6	33·6	33·6	
8	33·8	34·2	33·3	32·0	30·8	30·6	30·8	30·7	30·3	31·6	34·8	36·6	37·8	37·8	36·8	34·8	33·5	33·1	33·2	33·6	33·4	32·5	33·0	33·4	33·4	
9	33·2	32·5	32·1	32·1	31·2	30·5	30·9	30·5	31·2	33·5	36·1	38·4	39·8	39·8	37·1	36·0	35·6	34·5	34·2	34·4	34·1	33·9	34·0	32·9	34·1	
10	32·5	33·0	32·4	32·5	30·1	29·3	29·4	29·5	29·8	31·8	34·4	36·6	38·8	38·8	37·8	35·6	33·0	31·8	31·5	33·0	33·8	33·7	33·7	33·6	33·2	
11	33·2	33·1	33·3	33·0	31·7	30·6	30·5	31·0	32·0	33·6	35·3	37·0	37·6	37·8	37·1	35·6	34·5	33·4	33·0	32·7	31·7	33·0	33·3	33·4	33·6	
12	33·4	33·4	33·0	32·8	32·4	31·7	31·1	30·4	30·8	32·6	34·0	37·8	39·3	39·4	38·4	36·6	34·5	33·0	32·8	33·0	33·3	33·8	32·8	30·4	33·8	
13**	31·3	31·4	33·5	32·3	29·8	30·1	28·8	28·8	30·6	33·0	35·5	37·8	39·4	40·0	38·8	36·6	35·8	35·4	35·0	34·4	31·2	27·5	29·6	30·2	33·2	
14	31·9	32·4	32·0	32·5	35·1	31·6	30·1	29·5	29·8	31·5	32·3	34·6	36·2	38·8	38·2	36·8	35·1	33·9	32·5	31·6	31·8	32·8	33·2	33·2	33·2	
15	32·6	32·6	32·8	32·5	32·0	30·1	29·4	29·2	30·5	32·5	34·8	38·2	39·3	38·8	39·5	38·1	36·4	34·0	32·5	32·4	33·0	32·8	33·2	33·2	33·8	
16	33·1	33·4	33·0	32·6	32·0	31·0	30·6	30·6	31·5	34·8	36·8	38·1	39·0	38·5	37·6	36·5	35·1	34·8	35·1	34·8	32·5	32·6	32·8	31·5	34·1	
17	29·6	29·9	31·5	30·8	31·3	31·2	30·8	30·8	30·5	31·4	33·8	35·7	37·0	36·8	36·4	35·0	33·8	33·5	33·6	33·6	33·8	33·5	33·1	32·9	32·9	
18*	32·8	32·7	32·7	32·4	31·8	30·8	30·0	30·4	31·6	33·0	34·8	36·8	37·8	37·6	36·0	34·4	33·2	33·2	33·4	33·8	33·7	33·5	33·1	32·8	33·4	
19	32·0	31·8	32·0	31·9	31·6	30·8	30·1	30·2	30·8	32·6	33·8	35·0	36·6	37·1	36·8	36·3	35·8	35·1	34·8	33·8	33·6	33·5	33·0	30·4	33·3	
20	30·3	29·8	31·0	30·5	30·1	30·6	29·8	30·3	31·6	32·8	34·4	36·8	38·2	38·0	36·8	35·2	33·6	33·2	33·1	32·8	32·7	32·8	32·2	31·8	32·8	
21*	32·2	32·3	31·9	31·8	31·6	31·0	30·7	30·8	31·6	32·4	34·8	37·3	38·2	37·6	36·3	34·8	33·8	33·2	33·4	33·7	33·3	33·4	33·4	31·6	33·4	
22	30·6	31·6	31·7	32·2	31·7	31·2	31·6	31·0	30·7	32·5	34·9	37·1	37·7	37·4	35·7	33·9	33·0	32·4	32·6	32·7	33·3	33·0	32·6	31·0	33·0	
23	31·4	32·7	32·0	32·0	30·9	30·6	30·5	30·4	31·2	33·4	35·8	37·4	38·8	38·8	37·9	36·0	34·0	33·2	32·9	33·5	33·1	32·8	33·0	33·3	33·6	
24**	33·1	32·9	32·8	32·2	31·1	29·9	29·3	28·9	30·0	33·1	36·4	38·8	39·7	39·4	39·0	36·8	35·0	33·8	32·9	32·8	32·8	32·9	32·1	31·9	33·6	
25	32·3	34·3	32·9	30·4	29·8	29·1	30·8	31·1	31·7	32·8	34·8	37·6	39·5	39·7	38·6	37·7	35·8	34·7	32·5	32·8	32·8	32·3	32·3	32·6	33·7	
26	33·7	32·6	32·0	31·9	31·8	31·8	32·0	31·8	31·4	31·8	33·5	35·4	37·8	38·0	36·9	35·6	34·7	34·1	33·9	33·4	33·1	32·9	32·8	33·0	33·6	
27	32·7	32·8	32·6	32·5	31·7	31·8	30·5	29·2	29·8	31·4	34·1	37·5	40·0	40·3	38·0	36·0	34·1	33·4	32·8	33·2	31·6	30·8	30·8	31·4	33·3	
28*	31·4	31·5	31·6	31·7	31·6	31·1	30·0	29·7	29·0	30·3	33·7	38·1	40·0	39·2	38·0	36·3	34·3	33·0	32·6	32·7	32·7	32·4	32·6	32·7	33·2	
29*	32·6	32·6	32·5	32·5	32·0	31·1	30·7	30·6	31·0	32·6	34·8	36·3	38·3	38·9	38·0	35·9	34·2	33·8	33·4	32·8	32·8	32·6	32·7	32·6	33·6	
30	32·4	32·2	32·0	31·8	31·7	31·4	30·8	30·4	30·4	31·2	32·8	35·3	37·7	39·3	38·7	36·8	35·2	34·0	33·7	33·4	33·0	32·7	32·2	32·3	33·4	
31	33·5	33·8	32·4	31·6	31·8	31·4	32·0	30·0	30·0	32·0	33·8	37·0	38·0	37·9	36·6	34·8	33·7	33·5	33·4	33·6	33·8	33·6	32·6	31·7	33·4	
Mean	32·4	32·6	32·4	32·0	31·5	30·7	30·4	30·4	31·1	32·6	34·6	36·9	38·4	38·5	37·6	36·1	34·8	33·9	33·6	33·5	32·9	32·8	32·8	32·5	33·5	
Mean*	32·4	32·3	32·2	32·2	31·6	30·7	30·2	30·3	30·8	32·2	34·5	37·1	38·4	38·3	37·3	35·6	34·3	33·6	33·4	33·4	33·2	33·1	33·1	32·6	33·5	
Mean**	32·7	32·7	32·7	32·4	31·4	32·4	29·7	30·4	32·5	34·0	35·9	38·2	39·4	39·2	38·4	37·1	35·7	34·9	34·7	33·9	31·6	31·4	31·6	32·0	33·9	

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

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	0h	1h	2h	3h	4h	5h	6h	7h	8h	9h	10h	11h	Noon.	13h	14h	15h	16h	17h	18h	19h	20h	21h	22h	23h	24h	Mean.
	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′
1	29·1	31·4	31·9	32·1	31·9	30·7	29·5	29·6	29·7	31·8	35·8	38·7	40·6	40·1	38·8	36·7	35·0	34·0	32·4	29·0	32·5	32·9	33·0	33·1	33·4	
2	32·8	32·8	32·4	32·1	31·9	31·1	30·3	30·8	31·8	32·4	34·8	37·6	38·8	38·8	37·5	35·8	34·7	34·0	33·8	33·7	33·8	33·3	32·3	32·7	33·7	
3	31·2	31·8	28·8	30·2	31·5	29·8	29·8	29·5	30·6	32·2	35·1	38·6	39·7	39·0	36·8	34·8	33·6	33·7	34·6	32·2	32·4	32·5	32·8	32·0	33·0	
4	31·7	31·8	31·9	31·6	31·6	31·1	30·6	29·7	29·8	31·6	32·9	34·5	38·8	38·0	37·0	35·0	33·1	32·9	32·8	33·0	33·0	32·9	32·8	32·5	32·9	
5	31·7	31·8	32·5	31·9	31·8	31·8	31·5	31·4	31·3	31·7	33·1	35·8	37·8	37·0	36·0	34·9	34·0	33·6	33·1	33·0	33·0	32·8	32·5	32·6	33·2	
6	32·1	31·9	32·0	31·9	31·6	31·2	30·6	30·1	30·8	32·1	33·8	35·6	37·2	38·0	36·9	35·1	34·2	33·6	33·8	33·2	32·9	32·2	32·1	32·7	32·7	
7*	32·7	32·4	32·0	32·0	31·7	31·4	30·8	29·6	28·8	29·8	31·2	34·1	36·7	35·8	36·4	34·8	33·8	33·4	33·0	32·6	32·6	32·5	32·2	32·6	32·6	
8*	32·4	32·6	31·8	31·1	30·5	30·8	30·5	30·1	30·4	31·9	34·0	37·0	37·8	37·2	36·1	35·1	34·4	33·8	33·4	33·0	32·8	32·8	32·9	32·7	33·1	
9**	32·4	32·3	32·0	31·4	30·9	30·7	30·2	29·5	29·4	30·4	32·4	36·8	38·6	38·4	37·0	35·5	33·7	33·4	33·5	32·9	33·2	32·4	25·7	28·7	32·6	
10**	28·3	27·9	28·6	29·8	32·2	30·4	29·8	30·4	30·7	32·0	35·8	37·8	38·9	38·4	36·5	35·4	34·1	33·2	32·8	31·8	32·5	32·6	32·7	32·9	32·7	
11	32·8	33·0	33·4	33·1	30·9	30·7	30·4	30·5	31·5	34·1	36·1	38·8	39·8	38·5	37·3	35·8	34·4	33·1	33·8	33·0	32·7	32·4	29·8	27·6	33·5	
12	30·6	31·1	31·8	31·8	32·0	31·3	30·7	29·8	29·5	30·0	32·5	35·3	38·0	38·0	37·0	35·4	33·8	33·2	32·7	32·5	32·5	32·0	32·6	32·5	32·8	
13	32·0	32·0	31·9	31·8	32·0	32·0	31·3	30·7	30·8	32·2	35·1	36·8	38·5	39·0	38·1	36·5	35·2	33·9	33·3	32·7	31·6	29·4	31·2	32·3	33·3	
14	32·1	31·7	31·6	31·2	30·6	30·4	31·1	29·8	30·5	32·8	34·3	36·8	37·6	37·3	36·2	35·2	34·5	32·3	32·1	31·5	31·2	31·7	32·2	32·1	32·8	
15	32·0	32·3	32·0	31·8	32·7	32·6	30·8	29·8	29·3	30·0	31·3	33·9	36·1	36·8	35·9	35·3	34·4	33·3	32·7	32·4	31·8	31·8	31·8	31·9	32·6	
16*	31·8	31·8	31·8	31·8	31·4	30·6	29·7	29·2	29·8	31·6	33·0	36·4	37·8	38·1	36·8	34·5	32·0	32·6	32·6	32·0	32·0	32·1	32·2	32·0	32·6	
17	32·1	32·0	31·8	31·8	31·5	30·8	29·5	28·9	29·7	31·6	33·7	36·0	36·7	35·8	34·8	34·0	33·4	32·8	33·1	33·3	33·4	32·4	32·2	33·5	32·7	
18	30·5	31·3	31·6	31·4	30·8	30·9	30·6	30·1	30·0	31·8	33·6	35·0	36·1	36·9	35·8	35·2	34·9	34·4	33·8	33·2	31·8	31·1	32·1	32·8	32·7	
19	32·2	31·4	31·7	31·7	31·5	31·2	30·2	29·9	30·0	31·2	32·3	34·4	35·7	36·1	35·4	34·0	33·5	33·4	33·4	32·9	32·5	32·4	31·9	32·3	32·5	
20	30·5	32·1	30·8	30·7	31·1	31·0	30·8	29·6	29·8	31·3	33·5	35·3	36·3	36·0	35·4	34·3	33·1	33·3	32·2	31·5	31·4	31·4	30·8	31·7	32·2	
21*	30·8	31·4	31·1	31·4	31·5	31·4	30·8	30·6	30·3	31·3	32·5	34·3	35·2	35·7	35·2	34·6	33·5	33·1	32·8	32·2	32·0	31·6	31·8	31·8	32·4	
22*	32·0	31·1	32·1	32·1	32·0	31·6	30·8	29·4	28·6	29·5	32·4	36·6	38·1	38·0	36·0	34·0	32·6	32·4	32·8	32·4	32·0	31·6	31·1	31·3	32·5	
23	30·4	30·5	29·8	29·6	31·4	30·8	29·8	29·6	29·8	30·8	32·8	36·3	38·4	37·5	35·6	34·2	33·4	32·4	32·7	32·1	31·8	31·6	—	—	—	
24	—	—	—	—	—	—	—	—	—	—	33·6	35·5	36·1	35·6	34·6	32·9	31·8	32·5	32·8	32·6	31·9	31·6	30·6	30·8	—	
25	31·1	30·8	31·6	30·8	29·8	30·5	29·8	29·5	30·0	31·4	32·6	32·6	35·0	35·0	35·1	34·8	33·7	33·8	34·1	32·8	31·9	29·8	30·5	31·6	32·0	
26**	31·8	31·9	31·8	33·1	32·8	33·8	33·5	34·4	33·4	31·3	32·6	35·8	38·5	38·0	37·4	36·9	36·8	36·7	31·2	32·8	23·1	17·8	16·1	11·9	31·4	
27**	12·2	19·7	21·6	30·4	29·8	38·8	31·5	29·1	29·9	32·4	35·8	39·1	39·6	37·8	37·1	37·1	36·0	30·4	15·5	22·5	25·5	24·6	34·4	20·8	29·6	
28**	27·6	36·1	30·4	28·3	29·6	29·6	29·8	29·1	29·6	30·8	33·0	35·8	36·6	36·4	35·3	34·1	31·8	32·6	32·2	31·5	29·8	29·3	30·7	30·4	31·7	
29	30·8	29·5	29·6	30·8	30·6	30·6	30·6	30·0	29·4	29·8	31·4	33·8	35·0	36·4	35·3	33·8	33·0	32·8	32·8	32·1	32·1	31·6	31·0	32·4	31·9	
30	29·5	30·6	30·5	30·9	31·4	31·1	30·8	30·0	29·8	30·4	31·8	33·6	34·6	35·4	34·5	33·6	33·0	33·3	33·1	32·1	31·2	30·9	30·8	30·9	31·8	
Mean	30·6	31·3	31·1	31·4	31·3	31·3	30·6	30·0	30·2	31·4	33·1	36·0	37·5	37·4	36·3	35·1	33·9	33·3	31·4	32·5	31·7	31·1	31·1	30·8	32·5	
Mean*	31·9	31·9	31·8	31·7	31·4	31·2	30·5	29·8	29·6	30·8	32·6	35·7	37·1	37·0	36·1	34·6	32·3	32·1	32·9	32·4	32·3	32·1	32·0	32·1	32·6	
Mean**	26·5	29·6	28·9	30·6	31·1	32·7	31·0	30·5	30·6	31·4	33·9	37·1	38·4	37·8	36·7	35·8	34·5	33·3	29·0	30·3	28·8	27·3	27·9	24·9	31·6	

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	0h	1h	2h	3h	4h	5h	6h	7h	8h	9h	10h	11h	Noon.	13h	14h	15h	16h	17h	18h	19h	20h	21h	22h	23h	24h	Mean.
	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′
1	30·4	31·6	31·4	31·1	30·3	30·6	32·4	31·7	30·5	30·9	32·6	35·1	34·6	35·0	34·4	34·6	33·5	32·6	32·6	32·9	32·6	32·4	31·6	31·9	32·4	
2*	32·1	32·2	32·2	31·9	32·1	31·6	30·9	30·5	29·6	29·6	31·5	33·3	34·8	36·3	35·8	34·9	33·4	33·6	33·4	32·9	32·6	32·4	32·2	32·2	32·6	
3*	32·1	31·9	32·2	32·0	31·8	31·6	31·2	30·5	29·6	30·6	32·6	34·3	35·6	35·5	34·8	33·8	32·8	32·6	32·5	32·6	32·4	32·2	32·3	32·0	32·9	
4	31·6	31·2	30·9	31·3	31·2	30·9	30·9	30·2	29·6	30·8	33·4	35·6	37·8	36·8	35·5	34·2	32·8	32·6	32·6	32·5	32·5	32·2	32·1	32·2	32·6	
5	31·8	31·4	31·3	32·7	31·2	31·6	31·4	31·1	31·3	32·4	34·3	35·4	36·6	36·9	36·8	35·4	34·3	34·3	33·8	32·6	32·2	32·0	31·9	31·6	33·1	
6	30·9	31·6	31·4	31·5	30·8	30·9	31·4	30·6	30·3	31·4	32·5	34·0	34·8	35·4	34·8	33·6	32·1	31·5	32·2	32·1	31·6	30·6	31·0	31·4	32·0	
7	31·8	31·9	31·9	32·1	32·4	31·6	31·4	30·6	30·7	31·4	32·6	35·8	37·2	36·6	34·8	33·2	31·8	31·6	31·4	31·5	31·6	31·9	31·8	32·2	32·5	
8	32·2	32·3	32·4	32·6	31·7	31·5	31·2	31·7	31·1	32·0	32·8	36·7	38·6	41·4	38·3	35·9	34·1	32·7	32·1	31·6	31·7	31·1	31·1	31·0	33·2	
9	29·4	28·6	29·5	29·6	29·8	29·9	29·9	29·6	29·4	30·8	33·2	35·3	37·2	37·2	36·3	34·6	33·4	33·0	32·6	32·2	31·8	30·6	30·8	31·0	32·0	
10	30·3	30·5	30·6	31·3	31·1	31·1	31·4	30·3	28·8	29·0	31·4	36·0	38·4	37·8	37·0	35·8	34·4	34·6	33·7	32·6	29·9	29·3	30·2	31·2	32·4	
11	31·3	31·9	30·6	29·6	32·1	36·8	33·0	30·6	30·6	30·0	32·4	36·6	38·4	38·4	35·7	34·3	34·0	33·4	32·8	32·2	31·2	30·9	30·7	31·2	32·9	
12	30·7	31·1	31·2	31·7	32·2	31·3	31·3	30·6	31·1	30·6	31·3	34·1	36·9	36·6	36·0	34·6	33·6	33·2	32·5	31·7	26·7	29·3	29·8	30·8	32·0	
13	31·6	31·9	31·7	32·0	32·2	31·6	31·5	30·4	29·4	29·6	31·4	34·6	36·7	37·4	36·4	34·6	33·0	32·4	32·2	31·4	30·8	30·7	30·6	31·1	32·3	
14	31·3	31·8	31·7	31·8	31·8	31·7	31·3	29·9	28·7	29·4	32·2	35·3	36·8	36·8	35·9	34·7	33·5	33·4	33·0	32·8	31·6	27·6	25·2	27·8	31·9	
15**	27·6	29·6	29·4	31·8	31·6	33·2	36·5	32·3	32·2	33·9	32·8	34·0	38·6	39·8	37·4	40·3	26·4	28·2	31·4	20·6	24·3	20·4	31·1	30·9	31·4	
16**	27·8	26·6	30·7	34·7	32·6	37·2	36·6	33·8	32·4	33·0	33·4	35·3	35·7	38·8	36·4	30·8	23·3	21·4	24·6	18·4	25·3	13·2	13·8	22·3	29·1	
17**	21·6	24·9	25·9	31·2	35·6	38·3	36·0	34·8	31·5	29·0	29·6	33·0	35·4	34·8	36·1	34·7	32·8	31·5	31·8	29·3	27·8	24·6	29·5	28·2	31·2	
18**	30·4	29·9	29·9	28·8	28·7	29·3	31·9	32·6	31·7	32·8	32·6	33·6	34·6	34·4	34·4	32·4	29·2	29·0	31·6	28·1	19·9	23·0	29·5	31·3	30·4	
19**	31·3	31·4	31·5	33·6	30·9	30·4	30·6	29·7	29·6	31·4	34·3	36·3	35·8	34·2	33·0	31·9	31·8	32·2	33·1	27·1	29·6	30·4	31·0	30·6	31·7	
20	34·3	30·2	30·3	30·5	30·1	29·9	29·7	28·9	29·1	29·4	31·9	33·1	34·4	34·2	33·8	32·8	32·2	31·7	31·7	29·8	30·8	29·6	28·2	29·6	31·1	
21	31·4	30·9	30·6	30·2	31·3	31·4	31·1	30·3	29·2	28·9	30·6	32·6	34·5	35·2	34·6	33·2	32·3	31·9	31·4	31·3	31·1	30·7	30·8	30·8	31·5	
22	31·0	30·9	30·7	30·6	30·9	30·9	29·8	29·7	28·6	28·8	31·6	33·6	34·8	34·4	34·4	31·6	32·2	32·3	31·7	31·5	31·4	31·3	29·6	29·9	31·3	
23*	30·4	31·4	31·2	30·8	30·7	30·6	30·8	30·6	29·8	30·5	32·6	34·4	34·6	33·6	32·4	31·3	31·4	31·6	31·6	31·6	31·0	30·9	30·9	30·6	31·5	
24*	30·5	31·1	31·0	30·9	30·9	30·6	30·4	30·0	29·6	31·4	35·6	37·1	36·6	35·6	33·7	31·9	31·6	31·6	31·4	31·1	31·0	30·9	31·2	31·4	32·0	
25	31·4	31·3	31·8	31·5	31·4	31·3	31·0	30·6	29·9	30·6	32·4	34·7	35·3	34·8	33·9	32·6	32·4	32·7	32·6	31·8	30·9	29·0	28·9	29·2	31·7	
26	29·3	29·4	29·3	29·5	29·7	30·6	30·4	29·8	29·6	30·6	32·8	35·0	35·9	35·3	34·3	33·0	32·6	32·6	32·6	32·1	31·6	31·2	30·2	28·8	31·5	
27	30·1	31·2	31·6	30·8	30·3	31·2	31·4	30·2	30·6	32·7	32·9	34·3	35·8	35·6	34·2	33·3	32·6	32·0	31·6	30·7	28·2	27·7	29·6	30·7	31·7	
28	31·4	31·6	31·6	31·6	31·4	31·1	30·6	29·6	29·0	29·8	31·8	33·6	34·2	33·9	32·8	32·1	31·7	31·6	31·3	31·1	31·2	30·9	30·2	29·7	31·4	
29	30·1	30·6	30·8	30·7	31·9	31·2	30·6	29·8	28·8	29·0	32·4	33·2	34·6	34·7	33·7	32·6	32·3	31·9	31·7	31·6	31·2	30·9	30·8	30·9	31·5	
30*	31·0	31·0	31·4	31·6	31·4	31·6	31·1	30·4	29·8	30·8	33·4	33·8	34·6	35·3	34·9	33·6	32·6	32·2	31·9	31·6	31·6	31·4	31·0	30·4	32·0	
31	30·6	30·9	31·0	30·9	30·6	30·3	29·8	29·7	29·4	31·3	33·9	35·8	37·2	35·8	34·1	33·2	32·4	32·2	32·5	28·9	25·2	28·9	28·3	29·4	31·3	
Mean	30·6	30·7	31·2	31·3	31·3	31·7	31·5	30·7	30·1	30·7	32·6	34·7	36·0	35·7	35·1	33·7	32·1	31·9	32·0	30·6	30·4	29·3	29·5	30·4	31·8	
Mean*	31·2	31·5	31·6	31·4	31·4	31·2	30·9	30·4	29·7	30·6	33·1	34·6	35·2	35·3	34·3	33·5	32·4	32·3	32·2	32·0	31·7	31·6	31·5	31·3	32·2	
Mean**	27·7	28·5	29·5	32·0	31·9	33·7	34·3	34·6	31·5	32·0	32·5	34·4	36·0	36·4	35·5	34·0	28·7	28·5	30·5	24·7	25·4	22·3	27·0	28·7	30·8	

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

	0h	1h	2h	3h	4h	5h	6h	7h	8h	9h	10h	11h	Noon.	13h	14h	15h	16h	17h	18h	19h	20h	21h	22h	23h	24h
November.	13° + Tabular Quantities.																								Mean.
	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′
1	30·9	31·5	32·1	29·9	30·8	30·4	30·0	29·9	30·2	31·9	34·7	35·8	36·3	35·6	33·8	32·6	32·6	32·7	32·5	31·9	31·7	30·6	31·3	31·4	32·1
2**	31·6	31·0	30·8	31·6	31·0	31·1	40·1	39·4	35·6	33·6	35·9	33·5	34·2	34·0	33·5	32·7	32·4	32·6	31·7	31·4	29·8	22·2	27·3	25·4	32·2
3	26·5	27·9	30·0	30·6	33·4	31·3	31·4	30·6	30·4	30·7	32·6	33·4	33·6	34·0	33·1	32·1	31·2	31·2	31·4	30·9	30·2	30·5	30·6	30·8	32·0
4	31·0	30·9	31·4	31·4	30·7	30·6	30·3	30·4	30·0	30·7	32·6	33·0	33·4	32·6	31·4	31·2	31·6	31·6	31·0	30·9	30·8	30·7	30·6	30·8	31·2
5*	31·1	30·9	31·6	31·1	31·2	31·0	30·6	29·9	30·6	31·1	32·0	33·4	33·5	33·3	32·6	32·4	32·8	32·0	31·6	31·0	30·6	30·6	30·9	31·0	31·5
6	31·4	31·6	31·3	31·0	30·7	30·8	30·7	30·6	30·9	31·8	33·6	34·0	33·8	33·4	32·6	32·5	32·4	32·4	30·6	31·4	31·2	31·4	30·9	31·1	31·6
7	31·4	31·4	31·1	31·2	31·3	30·8	30·6	30·1	29·8	30·5	32·1	33·6	34·3	33·8	32·9	32·8	34·5	34·3	33·3	31·1	30·6	27·8	24·2	28·0	31·3
8	29·0	30·9	31·6	31·2	31·2	30·6	30·1	29·4	28·9	29·4	32·2	33·8	34·2	33·6	33·1	32·6	32·4	31·9	31·4	30·8	30·5	30·5	30·6	30·6	31·3
9	31·1	30·9	31·6	30·8	31·4	31·3	29·9	29·2	28·6	29·6	31·8	33·9	34·8	34·0	32·9	32·0	31·6	31·3	30·9	30·4	29·6	30·1	30·6	31·2	
10*	31·0	31·0	31·6	32·1	32·1	31·5	31·2	30·3	29·3	29·8	31·0	32·8	34·1	34·3	33·4	32·6	32·0	31·5	31·4	31·0	30·4	30·1	30·2	29·9	31·4
11	30·5	30·9	31·4	31·5	31·4	31·2	31·2	30·6	29·9	30·0	31·2	33·0	33·6	33·9	32·3	31·6	31·6	31·1	31·0	30·8	30·7	29·8	30·1	29·7	31·2
12**	30·7	31·3	31·4	31·6	30·9	30·6	30·0	29·6	29·4	30·6	31·6	32·7	33·8	33·6	32·6	32·9	33·6	33·3	32·4	28·6	25·8	25·6	23·2	27·7	30·6
13	29·7	30·5	31·0	31·6	31·2	31·0	30·6	30·3	30·2	31·2	32·8	34·4	34·8	34·7	33·7	32·6	31·8	32·1	31·3	30·2	28·8	26·6	25·6	27·3	31·0
14	30·7	31·1	31·4	31·6	31·4	30·6	30·8	30·2	29·8	30·4	32·6	33·6	34·3	33·6	32·6	31·6	31·4	31·2	30·6	29·7	30·4	30·2	30·0	30·2	31·2
15*	30·4	30·6	30·8	31·6	31·3	30·8	30·4	30·1	30·0	30·4	31·6	32·6	33·4	32·7	31·8	31·4	30·9	30·7	30·6	30·6	30·5	30·5	30·6	30·6	31·0
16	30·6	31·0	31·1	31·4	31·5	31·1	30·6	30·6	30·4	30·6	31·4	32·4	32·5	32·4	31·7	31·8	31·2	31·2	31·0	30·6	30·4	28·8	28·6	29·0	30·9
17	30·0	30·7	30·0	30·6	30·7	31·0	30·6	30·6	30·4	30·6	31·4	32·6	32·4	32·4	32·0	31·6	31·6	31·2	31·2	31·0	30·6	30·0	29·8	30·2	31·0
18	30·6	31·3	31·2	31·2	31·3	31·4	31·0	30·6	30·6	31·0	32·1	32·6	32·6	31·8	31·4	31·4	31·4	31·3	31·5	30·9	30·6	30·6	30·3	30·4	31·2
19	30·6	29·8	29·7	30·4	29·6	29·8	30·6	30·4	30·2	30·4	31·0	32·0	32·8	33·0	32·4	31·4	31·2	31·4	31·0	31·0	30·6	30·6	30·6	30·6	30·9
20*	30·9	31·1	31·0	31·0	30·6	30·2	30·0	30·3	30·0	31·1	32·4	34·0	33·8	32·6	31·4	31·0	31·4	30·8	30·4	30·1	29·9	30·1	30·1	30·2	31·0
21	30·4	30·6	30·8	31·4	31·2	30·7	30·3	29·9	30·0	30·3	32·9	32·2	31·7	31·6	31·3	31·9	32·3	31·8	31·6	30·6	30·5	30·5	30·6	30·2	31·0
22**	30·2	30·4	30·6	30·5	30·6	30·6	30·4	30·3	30·2	30·4	31·2	32·3	32·9	32·5	31·6	31·6	31·5	33·4	32·4	33·3	31·2	29·3	27·8	25·2	30·9
23	26·9	26·4	29·9	30·6	30·8	30·8	30·4	30·0	29·8	29·8	30·6	32·5	33·5	33·2	32·6	31·6	31·3	30·9	30·6	30·4	30·1	29·8	30·3	30·2	30·5
24	30·1	30·4	30·8	30·4	30·6	30·5	29·7	29·8	29·6	29·8	31·0	32·6	33·0	32·4	31·0	31·1	31·4	30·9	30·4	30·0	28·9	29·6	30·1	30·3	30·6
25*	30·8	31·1	31·2	31·2	31·1	30·6	30·4	30·0	30·0	30·6	30·4	32·4	32·4	31·6	31·3	31·4	31·5	31·0	30·7	30·6	30·1	29·4	29·5	28·7	30·8
26	30·0	30·5	30·8	30·7	30·6	30·3	30·3	30·2	30·0	30·3	31·1	31·6	32·8	32·8	32·3	32·1	32·4	31·9	31·8	31·3	30·5	29·8	28·9	27·2	30·8
27**	28·4	28·5	28·8	30·2	30·8	30·3	29·9	30·0	30·4	30·8	31·4	31·5	32·8	33·3	34·3	33·6	32·4	30·6	29·3	28·5	26·6	26·9	28·6	29·6	30·3
28	28·2	29·1	29·5	31·2	31·6	32·2	33·2	33·6	33·1	32·4	32·3	32·2	32·4	32·5	31·6	32·0	31·9	30·8	31·0	30·6	29·2	28·5	25·2	26·8	30·9
29**	28·6	29·2	30·6	31·6	31·4	33·4	31·4	31·6	30·8	31·3	31·6	32·0	32·4	32·4	32·0	33·2	32·0	30·9	30·9	30·6	30·1	29·9	27·6	26·6	28·3	30·7
30	29·4	30·2	30·2	29·6	29·8	29·9	30·5	30·9	31·8	31·1	31·4	31·8	32·4	31·3	32·2	31·6	30·8	30·6	30·4	29·8	29·6	29·3	29·0	29·5	30·5
Mean	30·1	30·8	30·8	31·0	31·1	30·9	30·9	30·6	30·4	30·7	32·0	32·9	33·4	33·1	32·4	32·0	31·9	31·6	31·2	30·7	30·0	29·2	29·1	29·4	31·1
Mean*	30·8	30·9	31·2	31·4	31·3	30·8	30·5	30·1	30·0	30·6	31·7	33·0	33·4	32·9	32·1	31·8	31·7	31·2	30·9	30·7	30·3	30·1	30·3	30·1	31·1
Mean**	29·9	30·1	30·4	31·1	30·9	31·2	32·4	32·2	31·3	31·3	32·3	32·4	33·2	33·1	33·0	32·6	32·2	32·2	31·3	30·4	28·7	26·3	26·7	27·2	30·9
December.	13° + Tabular Quantities.																								Mean.
	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′
1	29·7	30·3	31·4	30·4	30·6	30·6	29·9	30·1	29·8	29·6	31·3	32·0	32·6	32·5	31·7	30·8	30·6	30·6	30·3	30·0	29·8	28·4	28·9	29·6	30·1
2*	30·4	30·2	30·2	30·5	30·4	30·4	30·4	29·7	29·8	29·8	30·8	31·4	31·8	31·6	30·8	30·8	30·4	29·8	29·8	29·6	29·6	30·2	30·0	30·2	30·4
3	30·3	30·4	30·5	30·6	30·5	30·4	29·8	29·8	29·6	30·0	30·6	31·8	32·8	32·3	32·2	31·4	30·9	31·0	30·4	30·2	30·2	29·6	29·3	29·6	30·6
4	30·3	30·6	30·8	31·0	30·7	31·6	31·0	31·3	31·0	30·8	32·5	33·8	33·8	36·2	35·5	33·9	30·8	39·3	39·3	30·6	29·4	27·6	29·4	29·3	31·3
5	29·8	29·6	29·8	30·4	29·2	29·1	29·4	29·6	29·7	29·8	30·6	32·1	32·4	32·2	31·3	31·4	31·5	31·4	30·6	29·8	29·9	29·6	29·6	29·8	30·4
6	30·0	29·2	29·8	30·0	30·3	30·2	29·8	29·6	29·2	29·6	30·9	32·8	32·9	32·8	31·6	31·1	30·5	30·0	30·2	29·6	29·4	29·0	28·6	29·2	30·3
7*	30·3	30·7	30·8	30·6	30·4	30·0	29·4	28·8	28·6	29·4	30·6	32·6	32·7	32·0	31·2	30·6	30·6	30·6	29·8	29·6	29·4	29·4	29·1	29·0	30·3
8	29·6	30·4	30·4	30·6	30·6	29·9	29·6	29·6	29·6	29·6	30·1	31·4	32·4	32·2	31·4	30·6	29·9	29·6	29·5	29·4	29·4	29·3	29·4	29·6	30·1
9	30·0	30·0	30·6	29·9	30·0	29·9	29·7	29·6	29·4	29·5	30·6	32·4	33·4	32·8	32·6	34·1	34·6	33·4	31·6	31·4	28·4	27·6	24·6	26·0	30·5
10	23·5	27·2	28·6	30·2	30·4	30·3	29·8	30·0	30·0	30·4	30·4	31·6	31·8	32·0	31·7	30·7	31·4	30·8	28·8	29·0	28·4	27·9	28·4	27·8	29·6
11	28·6	28·9	29·4	31·8	30·8	30·1	30·3	29·6	29·4	29·8	30·6	32·0	32·6	32·2	31·6	31·0	30·7	30·4	30·0	29·6	29·4	28·7	27·4	28·3	30·1
12	28·8	30·3	30·9	31·4	31·4	30·4	29·6	29·8	29·6	29·8	30·6	31·4	31·1	31·3	30·6	30·2	30·2	30·6	29·6	29·6	29·6	28·8	28·6	28·9	30·1
13	28·6	29·6	30·4	30·8	30·3	31·1	30·7	30·1	30·2	31·3	31·2	33·6	32·8	31·9	31·0	30·9	30·3	29·8	29·8	29·9	29·4	28·6	27·4	28·6	30·3
14	29·1	29·6	29·2	30·6	29·8	30·6	30·0	30·4	30·0	30·1	30·6	32·8	33·2	34·4	34·6	31·8	30·8	30·8	30·4	29·8	29·2	29·2	29·2	30·2	
15	27·9	27·6	29·4	29·4	29·8	29·6	29·6	29·6	30·1	30·3	31·2	31·8	31·6	31·9	31·7	30·6	30·6	29·8	29·9	29·3	27·6	28·6	28·8	27·3	29·7
16	27·2	28·6	29·4	29·8	29·6	29·9	29·9	30·0	29·9	29·8	30·3	30·6	30·6	30·6	30·6	30·1	29·8	29·6	29·6	29·4	29·6	29·6	29·4	29·6	29·7
17*	29·8	29·8	30·3	30·1	30·4	30·2	30·3	29·6	29·8	30·1	30·4	30·8	30·8	30·4	30·2	30·0	29·8	29·6	29·6	29·6	29·6	28·8	29·6	29·6	30·0
18	29·6	29·6	29·9	30·1	29·9	29·8	29·6	29·7	29·6	29·6	30·0	30·4	30·8	30·7	30·3	30·4	30·0	29·9	29·8	29·9	29·8	27·4	28·6	29·6	29·8
19	29·4	29·0	28·9	29·6	29·9	30·0	29·6	29·6	30·1	29·8	30·4	30·6	31·1	31·4	31·6	31·0	30·4	29·6	28·3	28·4	28·8	28·6	29·1	28·8	29·8
20	29·6	30·6	30·6	30·4	30·3	29·9	29·6	29·6	29·2	28·9	30·4	31·4	31·9	31·6	30·6	30·2	30·0	29·9	29·7	29·6	29·2	29·1	28·6	28·6	30·0
21*	28·8	28·9	28·8	30·4	30·1	29·6	29·6	29·8	29·6	29·6	29·8	30·8	32·2	31·8	31·4	30·8	30·4	30·6	30·2	29·6	29·3	29·3	29·2	29·2	30·0
22*	29·4	29·8	29·6	29·8	29·7	29·6	29·6	29·0	29·4	29·6	30·2	30·9	31·1	31·4	30·6	30·3	29·9	29·6	29·4	29·2	29·1	28·8	28·6	29·2	29·7
23**	29·4	29·6	29·6	29·9	30·0	29·6	29·3	28·9	28·8	28·8	29·9	30·6	31·4	31·6	30·9	31·0	31·4	31·0	31·3	25·1	27·0	28·3	28·6	29·2	29·6
24**	29·8	29·9	30·1	30·1	30·2	29·6	29·8	29·6	29·2	29·6	31·1	31·0	34·3	32·2	30·6	28·6	30·6	30·1	27·8	27·6	27·6	27·2	27·6	29·6	29·7
25**	27·6	29·6	29·8	29·8	29·8	30·1	29·8	29·6	28·6	28·6	29·2	30·8	30·9	31·2	31·2	29·3	29·6	30·3	29·8	26·9	27·6	28·6	27·2	26·2	29·3
26**	27·3	29·3	30·4	30·3	31·4	29·8	29·8	29·8	29·6	30·4	32·4	32·6	33·0	31·6	29·0	32·2	28·6	25·4	29·6	27·2	18·6	21·4	25·4	26·6	28·7
27**	27·3	29·1	29·6	31·4	32·8	30·3	31·2	30·8	30·4	30·4	29·8	30·6	31·3	31·4	31·4	28·8	27·6	29·4	27·6	25·6	27·6	28·4	28·4	27·2	29·5
28	28·4	28·0	29·6	32·2	30·6	29·6	29·2	29·4	28·6	29·6	29·6	30·0	31·4	31·4	31·6	31·3	28·9	25·8	29·6	29·6	27·2	27·4	29·1	28·3	29·4
29	29·6	29·6	29·9	30·2	29·3	29·8	29·6	29·3	28·9	29·4	29·6	30·1	29·9	30·8	30·9	29·8	29·6	28·9	29·0	28·2	28·4	27·8	27·9	28·2	29·4
30	29·4	29·4	29·4	29·4	29·6	29·6	29·2	28·9	28·9	29·6	30·8	30·9	30·9	31·3	29·9	29·3	29·6	29·2	28·8	26·6	27·6	28·6	29·0	29·0	29·4
31	29·0	29·6	30·9	28·9	29·1	29·2	29·3	29·0	28·6	29·8	30·9	31·2	31·6	31·8	31·1	30·3	30·4	30·2	29·8	28·6	28·6	28·6	28·6	30·0	29·8
Mean	29·0	29·2	30·0	30·3	30·3	30·0	29·8	29·7	29·5	29·8	30·6	31·5	32·0	31·9	31·3	30·8	30·3	29·9	29·7	29·0	28·6	28·4	28·5	28·7	29·9
Mean*	29·7	29·9	29·9	30·3	30·2	30·0	29·9	29·4	29·4	29·7	30·4	31·3	31·7	31·4	30·8	30·6	30·2	30·0	29·8	29·6	29·4	29·3	29·3	29·4	30·1
Mean**	28·3	29·5	29·9	30·3	30·8	29·9	30·0	29·7	29·3	29·6	30·5	31·1	32·2	31·6	30·6	30·0	29·6	29·2	29·2	26·5	25·7	26·8	27·4	27·8	29·4

TABLE II.—HOURLY MEANS OF NORTH COMPONENT OF MAGNETIC FORCE.

January. 17000 γ + Tabular Quantities (in γ).

	0h	1h	2h	3h	4h	5h	6h	7h	8h	9h	10h	11h	Noon.	13h	14h	15h	16h	17h	18h	19h	20h	21h	22h	23h	24h	Mean.
1	900	901	901	904	905	907	909	912	911	909	905	899	899	901	902	904	908	915	917	919	917	917	916	912	908	
2	909	909	910	914	916	917	917	919	916	909	906	899	903	905	907	907	906	903	908	909	907	900	905	906	909	
3	904	907	908	904	906	913	916	917	912	904	899	898	899	900	902	903	909	912	911	911	913	909	909	907	907	
4	909	907	906	904	909	909	910	913	908	905	894	900	907	908	907	905	907	909	909	908	900	898	906	901	906	
5	908	906	900	904	900	899	903	907	908	904	898	895	900	906	908	907	908	910	907	908	909	910	908	906	905	
6	904	903	901	906	907	912	913	912	908	904	903	909	915	911	908	904	901	897	903	905	907	902	906	908	906	
7*	905	901	902	902	903	906	910	911	906	902	899	903	906	908	909	909	907	904	905	906	906	904	907	907	905	
8*	904	902	904	903	907	907	909	910	909	904	903	901	903	903	905	907	909	912	913	914	913	912	911	910	907	
9	907	908	908	910	910	913	917	919	916	910	910	908	906	904	903	902	901	906	910	910	910	909	910	908	909	
10	908	908	908	906	910	918	922	918	910	908	905	898	900	901	903	903	903	894	887	885	896	899	903	903	904	
11	904	904	907	910	913	913	917	917	912	900	899	895	896	894	896	898	897	899	902	905	906	905	904	904	904	
12	901	902	902	906	909	911	911	911	908	908	906	902	904	909	910	910	910	909	903	900	901	910	909	908	907	
13**	904	904	905	905	912	912	914	922	923	923	923	914	916	912	909	905	904	903	904	900	899	904	898	902	909	
14	909	907	904	908	911	914	910	902	902	902	896	899	908	908	907	913	911	910	909	907	907	905	909	908	907	
15	903	905	906	908	909	910	912	915	911	905	907	906	900	905	907	906	906	910	916	917	915	910	909	905	909	
16	903	905	910	912	914	921	919	916	913	906	895	902	906	910	910	911	913	914	914	913	912	914	915	913	911	
17	911	906	907	909	910	913	914	915	911	906	901	899	905	907	907	909	912	917	916	915	914	914	919	921	911	
18*	920	916	913	911	914	915	916	918	919	916	912	909	912	915	915	911	913	915	915	916	914	912	911	910	915	
19*	909	910	910	912	917	916	918	918	915	912	915	903	905	907	910	913	913	913	913	915	915	915	914	913	912	
20**	913	913	914	916	917	919	922	924	926	925	919	925	927	915	921	909	921	910	896	902	909	912	917	925	917	
21**	901	901	906	910	911	906	915	912	910	904	896	888	892	900	906	911	898	893	902	912	908	906	906	923	905	
22	904	911	906	900	908	916	916	899	903	896	894	890	893	897	900	901	904	907	903	908	911	920	905	906	905	
23	914	906	907	907	909	907	905	913	916	907	902	885	870	901	905	905	897	902	897	904	907	916	925	912	905	
24	907	907	905	906	901	917	916	915	912	909	905	896	894	901	904	902	908	908	916	914	910	918	913	908	909	
25	908	906	907	908	907	910	916	910	908	905	893	900	903	907	905	904	906	907	908	911	911	917	915	911	908	
26	910	909	909	910	918	913	917	917	913	909	907	906	906	904	906	907	907	909	912	913	915	916	911	910	911	
27*	908	908	909	911	915	916	916	917	914	907	901	901	903	907	909	908	908	910	912	911	910	910	910	911	910	
28	911	912	913	914	915	917	919	919	915	906	902	900	897	895	904	907	910	910	909	908	907	906	910	912	909	
29**	916	916	917	915	921	924	929	940	925	912	907	907	909	911	914	911	913	908	901	915	906	919	915	908	915	
30**	911	911	921	911	913	921	916	911	913	907	901	889	883	890	895	893	902	895	904	915	916	911	910	909	906	
31	909	910	910	910	911	914	921	918	911	907	896	895	895	899	904	905	906	913	913	912	911	912	918	912	909	
Mean	908	907	908	908	911	913	915	915	912	907	903	901	903	905	907	906	907	907	908	909	909	910	910	910	908	
Mean*	909	907	908	908	911	912	914	915	913	908	906	903	906	908	910	910	910	911	912	912	912	911	911	910	910	
Mean**	909	909	913	911	915	916	919	922	919	914	909	905	905	906	909	906	908	902	901	909	908	910	909	913	910	

February. 17000 γ + Tabular Quantities (in γ).

	0h	1h	2h	3h	4h	5h	6h	7h	8h	9h	10h	11h	Noon.	13h	14h	15h	16h	17h	18h	19h	20h	21h	22h	23h	24h	Mean.
1	910	910	911	912	913	919	915	917	913	910	905	902	902	900	904	894	895	904	904	916	912	910	915	917	909	
2	905	909	910	911	912	912	913	912	910	909	908	909	909	911	912	914	917	913	907	903	909	911	911	912	910	
3	911	911	911	912	913	914	914	915	911	908	891	883	882	891	895	895	890	886	904	905	909	901	897	897	902	
4	905	910	909	903	919	915	918	913	903	895	893	889	883	889	896	900	895	899	910	908	914	914	912	910	904	
5	907	908	907	910	910	911	913	914	913	906	904	904	899	901	904	907	911	916	914	915	913	917	914	913	910	
6	915	915	917	921	924	922	924	927	918	911	909	906	905	907	908	910	911	913	915	913	910	909	914	913	914	
7	915	917	915	915	916	916	922	922	917	911	909	908	909	910	908	897	885	891	908	901	899	905	910	909	909	
8	909	912	907	905	912	920	909	911	913	909	906	901	896	895	900	904	908	909	913	913	915	924	916	913	909	
9*	914	913	913	912	914	914	916	917	914	910	908	906	907	911	911	914	915	916	918	922	920	918	916	916	914	
10	916	915	917	917	926	923	924	918	914	908	894	883	876	885	890	899	900	903	901	904	915	925	917	915	908	
11	910	910	912	911	914	913	917	918	915	905	906	907	906	905	899	907	909	913	912	914	916	917	917	914	911	
12*	915	911	910	911	913	916	921	923	917	907	904	907	908	910	913	910	914	917	918	919	920	918	918	917	914	
13*	916	916	917	917	917	918	920	922	916	908	906	903	904	908	911	912	913	916	918	918	920	918	918	919	915	
14	919	918	918	919	921	922	927	928	921	914	908	904	906	910	914	917	919	924	923	922	920	928	926	921	919	
15	914	913	915	916	917	921	923	926	922	916	907	903	902	906	915	918	919	919	919	917	916	918	917	917	916	
16	915	918	919	921	926	928	931	932	926	919	912	909	914	913	906	915	905	906	914	917	914	918	917	917	917	
17**	917	914	915	915	916	922	919	921	924	913	903	902	910	912	913	917	922	921	912	922	903	919	914	909	915	
18	913	913	912	918	922	929	942	928	924	910	900	894	891	897	903	906	911	912	913	913	914	915	917	919	913	
19	917	915	915	914	917	919	922	924	919	913	904	904	901	905	913	906	917	919	917	914	915	915	916	916	914	
20	916	918	917	918	921	927	927	926	923	919	908	899	900	904	915	919	912	916	918	919	920	920	919	919	917	
21*	917	920	919	919	918	922	930	929	922	918	912	906	906	912	913	916	920	922	922	922	921	920	918	917	918	
22	914	921	922	924	925	933	934	922	920	912	909	904	903	905	908	913	917	919	919	919	920	919	918	917	917	
23*	916	917	917	918	919	921	923	924	917	908	899	896	898	905	912	918	920	922	923	923	922	922	921	921	916	
24	920	918	917	918	921	923	925	929	925	920	913	907	907	908	914	918	921	922	924	924	927	926	926	924	920	
25**	926	927	942	942	932	934	923	930	936	903	901	900	894	873	876	894	897	939	898	877	876	929	904	911	911	
26**	900	902	916	912	898	911	903	903	877	864	880	891	892	900	897	897	904	903	903	910	923	917	912	911	902	
27**	905	905	907	904	901	910	917	915	892	885	883	885	897	900	896	883	888	887	909	895	920	902	921	901	901	
28**	895	902	898	897	901	903	898	907	900	897	895	900	900	897	902	902	896	893	909	908	910	906	910	912	902	
Mean	913	913	914	915	916	919	920	920	915	907	903	900	900	903	905	907	908	912	913	913	915	916	915	914	912	
Mean*	916	915	915	915	916	918	922	923	917	910	906	904	905	909	912	914	916	919	920	921	921	919	918	918	915	
Mean**	909	910	916	914	910	916	912	915	906	892	892	896	899	896	897	899	901	909	906	902	906	915	912	909	906	

TABLE II.—HOURLY MEANS OF NORTH COMPONENT OF MAGNETIC FORCE—*continued.*

	0h	1h	2h	3h	4h	5h	6h	7h	8h	9h	10h	11h	Noon.	13h	14h	15h	16h	17h	18h	19h	20h	21h	22h	23h	24h	
March.	17000 γ + Tabular Quantities (in γ).																									Mean.
1	908	907	906	906	908	911	913	912	913	912	904	906	909	908	907	904	903	905	913	909	910	911	917	913	909	
2	915	911	909	910	913	912	915	919	914	909	904	903	904	903	901	901	901	911	909	910	911	915	915	914	910	
3	915	917	914	913	911	914	919	920	918	910	905	906	907	908	910	900	902	904	908	910	915	915	913	913	911	
4	912	913	910	909	920	924	923	923	918	910	908	906	904	900	901	901	903	907	913	912	913	913	912	911	911	
5	911	911	912	912	917	918	917	918	918	911	908	908	912	917	917	915	913	913	914	917	916	917	920	921	915	
6	916	917	918	917	918	923	922	922	920	916	909	907	906	911	914	919	919	921	923	923	921	920	918	918	917	
7	917	917	917	918	922	924	927	927	924	918	907	906	903	911	909	903	894	891	911	901	909	918	919	916	913	
8*	915	914	919	918	915	919	921	923	918	913	906	903	907	913	918	919	917	920	921	922	922	920	919	920	917	
9*	919	920	920	920	924	923	925	928	926	921	912	910	908	911	914	915	917	920	922	924	924	923	924	923	920	
10*	922	920	920	921	922	922	928	929	926	918	912	910	911	912	915	916	917	919	923	924	925	925	925	924	920	
11*	922	921	921	925	929	929	931	933	930	926	923	920	917	916	915	914	916	921	922	923	923	925	925	924	923	
12	922	926	925	923	921	923	926	930	925	921	919	918	916	918	916	921	925	924	928	929	928	922	923	921	923	
13	920	919	919	920	921	922	924	926	920	915	915	914	913	907	906	912	912	918	922	924	924	923	922	922	918	
14	920	919	919	921	922	924	927	926	911	916	911	906	909	909	910	914	919	921	925	933	938	932	927	940	921	
15**	919	920	924	924	927	930	928	925	923	910	902	902	904	905	910	911	911	915	916	922	926	920	929	941	920	
16	923	919	918	920	923	917	915	927	910	906	899	896	894	888	901	906	910	918	918	929	927	931	925	936	915	
17	926	925	915	914	914	922	926	915	907	912	906	903	907	907	909	910	912	917	921	921	922	922	927	924	916	
18	922	921	922	924	923	923	926	925	910	900	894	892	893	899	906	914	920	914	912	918	923	926	935	922	915	
19	922	922	922	916	922	924	927	926	918	908	890	882	889	896	907	914	916	918	920	922	923	923	923	924	915	
20	922	922	922	923	924	925	925	924	912	899	894	895	905	914	920	924	928	926	927	930	932	930	929	923	920	
21	920	921	922	924	924	927	928	927	921	915	902	888	887	892	898	901	901	906	907	905	907	905	909	912	910	
22	920	919	924	920	920	921	921	921	915	907	901	894	892	888	896	900	908	916	920	921	922	921	923	922	913	
23*	922	923	922	923	924	926	928	928	922	912	904	898	899	899	906	914	920	922	923	924	924	926	926	928	919	
24**	929	928	928	931	931	930	930	930	926	910	879	866	866	878	894	906	886	911	861	868	890	960	910	909	907	
25**	896	924	914	896	876	885	874	856	876	873	872	858	877	869	880	898	891	893	917	908	909	907	915	907	890	
26**	910	905	907	895	900	891	903	894	865	865	867	877	859	865	877	910	901	907	913	917	911	919	907	909	895	
27**	901	903	899	901	897	902	909	905	897	879	865	867	868	881	882	887	890	907	899	904	904	909	915	919	895	
28	907	909	909	902	907	911	901	903	897	886	865	880	883	891	900	901	908	910	924	912	912	922	921	926	903	
29	914	921	910	914	912	915	914	914	902	890	889	894	894	896	898	908	904	907	914	916	918	921	923	908	908	
30	911	908	910	914	915	926	921	914	908	897	898	898	896	897	895	899	907	908	916	916	917	915	910	912	909	
31	921	915	915	916	920	921	924	925	916	904	898	894	899	904	909	911	907	906	909	916	917	921	917	919	913	
Mean	917	917	916	915	917	919	920	919	913	906	900	897	898	900	905	909	909	913	915	916	918	921	920	920	913	
Mean*	920	920	920	921	923	924	927	928	924	918	911	908	908	910	914	916	917	920	922	923	924	924	924	924	920	
Mean**	911	916	914	909	906	908	909	902	897	887	877	874	875	880	889	902	896	907	901	904	908	923	915	917	901	
April.	17000 γ + Tabular Quantities (in γ).																									Mean.
1	915	916	914	914	913	919	923	919	909	897	895	897	901	905	905	909	909	915	916	922	927	921	923	919	913	
2*	917	916	916	915	919	917	919	914	906	898	897	897	897	899	907	914	919	924	923	923	922	925	928	926	914	
3	923	927	929	931	929	928	928	925	909	894	887	883	883	894	902	912	917	917	915	922	924	925	924	922	915	
4	920	921	923	924	926	928	929	928	920	906	890	881	888	895	904	905	916	928	918	924	924	926	925	923	916	
5*	920	921	922	923	926	928	927	927	921	910	902	896	902	906	914	918	920	917	922	924	922	922	922	920	918	
6	920	920	920	921	922	923	928	930	930	924	913	896	894	897	901	908	913	926	928	925	926	923	924	923	918	
7	931	926	928	928	935	931	933	931	925	909	903	893	891	895	901	911	911	911	909	916	917	925	926	923	917	
8	923	925	917	916	918	921	921	921	916	911	908	903	902	904	907	913	919	923	921	925	925	924	927	931	918	
9	926	929	918	919	924	927	929	928	916	901	891	892	894	898	907	908	918	925	925	923	936	931	924	918	917	
10	917	918	921	922	925	929	935	934	929	914	902	900	901	902	908	912	913	924	932	938	935	934	942	945	922	
11	939	920	922	925	929	929	932	928	919	905	899	896	892	896	904	911	915	922	926	922	924	925	941	931	919	
12**	923	923	910	918	924	928	927	916	926	920	909	894	889	894	895	902	907	928	916	920	934	930	922	914	915	
13**	914	916	916	911	907	916	923	920	914	902	890	880	893	903	908	907	909	913	919	924	924	933	949	922	913	
14	915	934	911	905	915	915	921	919	905	897	895	893	900	905	903	909	916	919	920	920	922	921	921	920	912	
15	928	917	916	916	918	921	921	913	913	904	893	889	890	889	897	902	910	917	918	923	924	921	920	920	912	
16	918	917	917	917	918	919	922	921	913	901	891	889	890	892	903	913	922	925	926	925	925	924	923	923	914	
17*	921	922	921	923	924	925	924	921	912	893	881	876	880	893	901	909	918	923	924	922	921	921	923	921	913	
18	919	918	919	920	923	923	925	923	914	895	887	895	903	909	915	915	915	916	919	925	925	924	925	921	916	
19	920	920	919	920	921	923	923	920	907	895	886	890	898	906	913	918	921	922	924	925	924	923	928	926	916	
20	924	922	921	922	924	927	931	928	916	902	884	890	904	909	907	917	926	922	918	914	925	926	926	916	917	
21**	919	918	928	922	901	929	922	912	883	877	882	876	871	883	897	886	904	916	925	924	923	922	919	919	907	
22**	923	912	922	914	912	917	912	899	888	884	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
23**	—	—	—	—	—	—	—	—	—	—	891	889	894	896	901	905	924	916	916	918	926	920	921	924	—	
24	931	931	913	901	916	915	913	901	902	900	877	886	895	896	894	898	906	923	921	922	924	927	915	914	909	
25	920	916	918	913	912	918	920	915	911	901	900	904	907	905	904	904	909	913	918	916	916	916	918	923	912	
26*	924	912	911	911	913	914	916	910	906	898	888	896	901	902	906	916	914	916	921	920	918	917	916	916	911	
27*	916	915	914	912	913	914	914	908	907	904	901	902	903	905	911	915	917	922	925	923	921	917	915	915	913	
28	924	917	917	915	918	917	915	913	911	903	893	892	898	898	903	910	915	922	923	923	920	919	913	913	913	
29	917	916	916	917	917	915	919	918	913	905	893	891	897	903	909	911	916	921	927	927	926	927	933	925	915	
30	921	920	919	920	921	923	927	918	905	894	892	893	896	899	903	907	914	917	920	925	926	924	921	921	914	
Mean	922	921	919	918	919	922	923	919	912	902	894	892	895	899	904	909	915	920	921	923	924	924	925	922	912	
Mean*	920	917	917	917	919	920	920	916	910	901	894	893	897	901	908	914	918	920	923	922	921	920	921	920	914	
Mean**	919	919	918	917	911	924	924	916	908	900	894	883	884	893	900	898	907	919	920	923	927	928	930	918	912	

TABLE II.—HOURLY MEANS OF NORTH COMPONENT OF MAGNETIC FORCE—*continued.*

	0h	1h	2h	3h	4h	5h	6h	7h	8h	9h	10h	11h	Noon.	13h	14h	15h	16h	17h	18h	19h	20h	21h	22h	23h	24h	
May.	17000 γ + Tabular Quantities (in γ).																									Mean.
1*	924	921	917	918	918	920	925	923	921	917	905	902	903	904	907	913	918	915	923	927	928	927	927	925	918	
2	926	928	923	922	922	925	925	920	911	899	892	895	905	912	917	916	917	920	921	923	922	922	920	919	917	
3**	920	920	920	920	921	921	923	919	912	907	907	909	913	918	919	919	918	933	926	921	924	925	932	943	920	
4	921	923	925	915	913	912	911	911	907	898	901	903	905	906	905	909	917	918	922	925	919	921	917	921	914	
5	920	911	908	910	913	913	914	905	905	899	893	893	893	895	897	901	907	915	915	917	924	910	910	908	908	
6	909	909	910	909	910	910	912	912	912	909	900	901	904	903	902	904	906	913	918	917	914	916	916	912	910	
7	913	910	912	912	911	913	912	911	908	906	902	900	898	903	909	907	918	918	920	926	924	928	929	924	913	
8	922	919	917	917	918	926	924	922	922	908	904	893	888	895	896	900	909	909	921	922	922	922	922	934	914	
9	918	916	914	912	912	914	913	916	917	911	900	896	902	899	903	906	906	914	918	917	916	914	913	912	911*	
10	910	912	911	912	914	918	917	918	918	900	906	904	898	897	899	908	914	920	920	919	917	916	914	912	912	
11	914	916	916	916	917	916	919	921	923	918	909	905	904	901	896	906	913	916	922	920	919	918	918	917	914	
12*	914	914	914	915	916	916	917	913	912	909	904	899	901	900	905	910	918	922	918	918	919	921	920	920	913	
13*	918	917	919	919	916	920	919	915	907	899	896	894	898	907	914	916	919	920	922	922	920	922	922	924	914	
14	918	918	922	922	923	923	924	916	912	903	888	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
15	—	—	—	—	—	—	—	—	—	—	—	894	898	899	909	918	931	935	936	934	933	933	932	933	—	
16	933	933	931	930	933	935	932	929	925	915	910	911	913	920	928	937	941	941	943	939	937	941	945	943	931	
17**	941	939	950	952	948	947	939	935	933	926	917	911	915	927	943	915	915	931	943	925	931	943	944	951	934	
18**	935	903	935	945	921	915	909	901	890	883	897	906	903	902	915	917	931	938	950	935	930	938	935	931	919	
19	921	926	928	921	923	920	916	911	903	901	893	893	897	900	911	923	931	943	943	942	941	933	932	931	920	
20	943	925	929	921	927	931	931	927	921	915	906	901	901	903	911	915	929	935	947	933	929	931	937	939	925	
21	939	928	925	923	923	925	923	921	915	911	909	907	912	913	915	919	923	928	936	941	927	926	926	928	923	
22*	927	921	921	922	921	918	919	915	909	904	896	895	896	899	904	913	918	928	939	934	931	925	923	926	917	
23	932	927	923	923	926	927	923	917	916	914	907	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
24*	—	—	—	—	—	—	—	—	—	—	—	910	916	917	924	934	936	936	938	935	927	929	927	926	—	
25	927	926	930	929	935	934	938	938	932	917	914	917	914	925	927	927	932	932	930	930	932	930	929	927	928	
26	924	925	927	928	928	929	927	927	924	920	919	920	917	907	911	916	927	935	938	932	934	932	930	929	925	
27	932	930	929	928	930	928	922	918	922	917	910	907	908	912	916	922	930	924	924	934	932	932	933	931	924	
28	929	931	930	930	931	927	922	914	912	914	914	911	914	916	926	929	931	934	934	932	932	927	928	931	925	
29**	929	927	927	929	932	931	926	916	907	907	902	902	905	912	914	896	916	932	936	926	932	934	925	939	921	
30**	925	924	918	928	930	928	914	902	893	894	896	893	890	882	886	894	922	942	934	930	930	917	920	914	913	
31	916	916	915	912	912	916	910	904	892	885	890	894	896	897	908	914	921	927	929	930	931	932	932	924	912	
Mean	924	921	922	922	922	923	921	917	913	907	903	902	904	906	911	914	921	927	930	928	927	926	926	927	919	
Mean*	921	918	918	919	918	919	920	919	912	907	900	898	900	903	908	913	918	921	926	925	925	924	923	924	916	
Mean**	930	923	930	935	930	928	922	915	907	903	904	904	905	908	915	908	920	935	938	927	929	931	931	936	921	
June.	17000 γ + Tabular Quantities (in γ).																									Mean.
1	921	919	920	921	923	922	920	912	904	900	897	897	901	905	913	916	925	926	935	931	929	933	929	927	918	
2	933	933	929	928	925	924	921	917	906	902	899	894	896	901	911	917	920	926	928	927	925	926	923	921	918	
3	923	925	924	925	927	927	923	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
4**	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
5	—	—	—	—	—	—	—	—	—	—	893	876	891	899	910	910	917	922	923	925	925	923	921	917	—	
6	920	919	921	922	927	927	926	922	915	905	907	909	907	905	913	923	931	937	939	945	946	929	929	927	923	
7	937	933	926	927	929	927	919	917	914	909	911	907	910	910	919	924	922	931	933	929	927	926	925	926	922	
8	927	926	926	926	925	924	924	920	913	905	901	905	906	909	910	919	927	922	929	936	934	929	927	925	921	
9*	923	922	923	923	927	928	924	917	909	911	909	906	904	901	905	913	916	921	926	929	929	927	924	923	918	
10*	923	923	925	921	922	922	916	914	914	913	905	903	903	901	907	919	923	924	927	929	929	931	929	927	919	
11	929	931	933	934	936	934	929	921	912	902	903	897	911	921	922	923	925	932	939	936	935	933	931	930	925	
12	929	928	928	929	932	930	924	919	915	914	916	916	913	916	918	923	923	926	935	938	948	958	972	973	930	
13**	946	941	920	914	928	926	899	886	896	893	880	875	890	895	911	885	921	923	923	929	931	938	923	927	913	
14**	918	917	923	925	921	905	901	893	882	878	881	881	894	899	902	909	912	918	950	934	930	942	936	924	912	
15	928	924	920	914	918	908	904	906	899	896	894	887	902	903	923	917	918	927	925	935	933	933	934	927	916	
16	925	925	922	919	922	922	923	919	913	902	891	892	892	907	918	918	929	931	937	933	932	929	925	925	919	
17*	926	927	927	928	926	926	927	925	919	908	903	904	905	914	924	926	928	936	936	933	932	936	934	931	924	
18*	930	928	930	932	934	936	934	926	916	904	891	886	888	899	907	917	925	929	939	939	937	937	935	937	922	
19	932	929	930	932	937	939	941	941	941	927	917	899	899	897	917	927	933	935	937	937	940	939	942	941	930	
20	943	943	937	929	935	940	939	937	934	927	921	907	913	916	918	918	918	930	944	940	948	943	936	941	932	
21**	950	946	945	948	960	960	949	938	932	912	895	910	916	896	909	917	928	941	947	944	942	940	938	948	934	
22	939	932	931	931	928	933	936	928	914	916	915	908	908	903	916	926	928	931	939	944	937	934	934	931	927	
23	933	931	928	927	929	929	930	927	921	917	913	919	928	932	937	932	934	936	940	944	940	938	937	936	931	
24*	940	932	931	931	934	936	935	928	920	915	910	906	909	912	920	932	933	—	—	—	—	—	—	—	—	
25	(932)	932	932	935	940	938	936	932	924	918	905	905	908	921	929	941	937	941	941	937	935	936	933	931	930	
26	933	931	933	935	937	936	931	931	933	926	911	901	901	912	927	926	924	922	929	933	931	927	927	927	926	
27	922	924	928	926	928	924	921	919	919	906	898	885	878	894	885	903	919	934	931	933	938	930	926	933	917	
28	935	926	934	929	928	938	942	922	930	904	897	890	895	903	907	913	925	944	945	945	942	935	933	936	925	
29	931	927	926	923	930	930	928	927	919	911	900	891	892	899	906	917	924	933	935	933	930	933	939	936	922	
30**	937	938	936	941	943	951	943	935	920	913	901	895	895	892	904	910	914	930	892	912	917	919	920	914	920	
Mean	931	929	928	928	930	930	926	921	916	908	902	899	902	906	914	918	924	930	934	935	935	934	932	932	923	
Mean*	926	925	926	926	927	928	925	921	915	909	902	900	900	904	909	919	923	928	932	933	932	933	931	930	921	
Mean**	938	936	931	932	938	936	923	913	908	899	889	890	899	896	907	908	919	928	928	930	930	935	929	928	920	

TABLE II.—HOURLY MEANS OF NORTH COMPONENT OF MAGNETIC FORCE—*continued*.

	0h	1h	2h	3h	4h	5h	6h	7h	8h	9h	10h	11h	Noon.	13h	14h	15h	16h	17h	18h	19h	20h	21h	22h	23h	24h	
July.	17000 γ + Tabular Quantities (in γ).																									Mean.
1	919	920	916	919	919	914	915	906	908	908	908	899	895	895	907	917	920	928	931	933	932	934	930	929	917	
2	923	921	925	917	919	927	937	932	935	905	908	902	896	899	907	919	930	942	931	924	920	922	927	927	920	
3	925	924	925	925	925	932	927	919	917	915	915	913	916	918	920	926	931	929	934	936	934	934	931	930	926	
4	930	929	931	931	931	930	928	923	918	913	908	908	908	904	909	914	909	928	935	936	933	930	929	926	927	
5*	926	925	926	928	930	929	927	921	918	916	913	916	915	913	917	919	926	927	932	937	937	935	937	937	925	
6	937	937	935	934	936	937	935	929	924	923	910	912	910	915	922	918	928	935	946	952	949	947	951	947	932	
7**	938	933	928	931	925	925	925	915	908	904	904	906	913	910	905	911	915	921	928	933	932	927	925	923	920	
8	923	920	921	919	919	924	923	923	921	913	909	903	906	909	914	919	910	921	934	936	932	931	926	924	920	
9	924	921	922	920	924	924	924	923	922	916	904	900	896	898	907	907	920	926	934	939	939	938	937	934	921	
10**	937	939	935	934	934	930	925	921	913	913	907	895	906	902	904	928	928	936	946	935	928	928	932	930	924	
11**	924	913	916	910	916	906	906	906	904	903	902	898	877	895	904	913	919	918	932	937	929	927	931	922	913	
12	925	925	918	917	916	914	912	908	906	900	896	896	906	918	918	910	910	909	916	918	920	918	915	915	913	
13	917	915	914	915	913	909	907	903	903	903	903	902	898	898	907	912	912	913	915	923	920	922	920	914	911	
14*	914	913	912	912	913	915	913	909	901	899	904	905	903	903	905	910	912	916	920	922	922	920	920	919	912	
15*	917	917	917	919	916	916	913	911	907	899	896	897	898	903	909	909	914	919	926	932	932	929	924	923	915	
16	922	924	922	921	925	925	923	918	912	907	905	903	902	905	911	915	925	928	932	926	927	929	926	922	919	
17	923	925	923	925	926	927	931	930	931	929	921	914	906	903	921	923	922	935	935	934	932	920	928	928	925	
18**	926	931	927	927	930	939	939	931	924	922	915	915	899	906	908	912	922	938	945	938	938	940	936	942	927	
19	940	938	935	923	924	931	935	928	912	898	892	891	896	902	905	910	915	929	935	935	933	932	933	937	921	
20	931	933	925	923	931	932	922	920	917	912	898	903	905	905	905	912	919	921	927	932	927	925	923	925	920	
21*	924	924	922	922	923	923	925	918	910	900	892	891	900	902	911	917	919	923	925	928	926	924	925	922	917	
22	923	921	921	924	926	928	921	917	911	905	896	892	899	903	911	927	927	925	928	929	930	934	937	941	920	
23**	952	947	941	934	929	936	922	907	903	892	883	882	888	900	904	912	923	920	924	922	918	915	915	914	916	
24*	913	917	913	912	915	914	910	909	906	905	895	894	902	907	910	910	908	914	919	920	920	920	919	918	911	
25	920	920	918	918	921	923	921	918	912	902	899	896	900	912	917	926	926	923	921	917	917	919	922	924	916	
26	922	921	922	922	922	921	920	917	917	912	907	909	919	919	921	929	927	923	922	928	931	931	929	928	922	
27	930	927	922	924	928	941	933	927	920	917	910	909	910	913	902	907	915	928	928	925	928	930	932	938	923	
28	927	927	929	923	927	928	921	919	911	910	911	912	915	917	924	925	914	912	926	930	930	927	928	930	922	
29	931	936	932	931	932	930	928	925	920	912	908	907	909	919	922	922	913	915	923	931	931	929	929	927	923	
30	927	927	925	927	931	929	924	919	914	909	907	908	914	923	927	927	925	924	927	929	930	931	929	929	923	
31	929	925	929	931	931	929	924	919	917	914	903	899	909	909	913	910	912	919	927	931	932	932	935	936	922	
Mean	926	926	924	923	924	925	923	919	914	909	904	902	904	907	912	917	921	924	929	931	929	928	928	928	920	
Mean*	919	919	918	919	919	919	918	914	908	905	900	901	904	906	910	913	916	920	924	928	927	926	925	924	916	
Mean**	935	933	929	927	927	927	923	916	910	907	902	901	897	903	905	915	921	927	935	933	929	927	928	926	920	
August.	17000 γ + Tabular Quantities (in γ).																									Mean.
1	932	930	930	929	934	936	936	929	922	913	—	—	—	—	—	—	—	—	934	936	938	932	929	925	—	
2	923	926	934	930	932	931	927	925	920	910	902	897	900	906	917	929	932	937	941	946	937	935	933	940	925	
3**	935	950	948	943	937	937	937	918	907	902	882	880	895	908	909	913	911	925	938	929	939	940	937	925	923	
4**	923	923	925	922	937	947	915	900	896	904	908	907	901	895	894	906	915	923	928	926	921	928	924	923	916	
5	926	924	922	922	922	924	920	919	914	913	909	902	899	905	920	924	925	920	925	924	927	930	927	927	920	
6**	929	924	925	925	932	929	924	925	924	924	918	898	903	909	914	906	911	918	922	926	926	928	924	921	920	
7	922	924	923	926	927	925	922	915	909	900	900	907	908	902	905	905	906	915	923	932	929	925	925	922	917	
8	925	924	920	920	920	921	921	914	903	894	892	898	907	911	917	920	919	920	925	925	927	927	924	923	917	
9	924	922	920	922	922	921	920	914	901	894	891	900	906	905	906	916	916	919	926	926	926	924	924	923	915	
10	923	919	919	923	923	921	918	911	907	902	901	905	910	908	912	917	920	924	928	922	924	922	920	918	917	
11	916	916	916	919	917	916	912	910	902	901	896	902	902	904	909	917	919	914	920	928	932	925	922	920	914	
12	920	921	919	919	919	918	914	905	905	890	883	886	889	902	909	909	910	915	921	924	923	935	935	930	913	
13**	928	926	927	934	934	930	927	910	900	888	887	902	920	924	925	924	934	932	937	940	932	932	927	920	923	
14	921	923	927	926	919	935	923	913	907	894	893	893	896	888	904	915	914	927	919	920	917	918	918	922	914	
15	931	916	913	915	913	915	918	906	901	888	889	890	891	901	900	905	904	900	903	919	917	916	916	915	908	
16	912	912	912	913	913	914	908	902	894	888	892	894	902	906	910	912	921	922	928	929	932	926	924	927	912	
17	935	920	926	922	920	921	919	911	903	901	891	895	901	906	912	920	926	924	924	923	923	919	919	919	914	
18*	918	919	918	920	922	924	922	916	905	898	892	890	892	901	910	921	926	928	928	929	931	931	930	929	917	
19	931	928	929	928	930	929	927	921	916	903	901	905	913	920	921	920	924	928	925	931	935	933	933	941	924	
20	940	935	928	936	930	928	930	924	917	908	900	904	912	911	913	925	921	923	926	927	925	923	925	921	922	
21*	921	919	921	921	920	919	921	918	913	909	906	908	917	916	916	918	920	922	921	925	926	926	923	930	919	
22	929	921	920	920	924	923	925	918	912	908	912	919	920	920	918	923	928	933	930	931	928	928	931	946	924	
23	924	920	920	920	922	923	923	915	903	900	897	894	897	900	904	911	915	920	926	927	927	928	928	928	916	
24**	929	929	929	930	932	934	934	928	914	896	886	884	894	896	902	900	913	920	922	925	926	927	930	930	917	
25	931	927	934	924	927	926	922	916	910	909	908	914	916	911	916	924	920	924	931	928	930	922	922	923	921	
26	931	929	928	928	927	923	923	923	923	919	917	915	919	919	921	925	925	925	928	929	929	926	926	925	924	
27	927	926	925	924	923	921	921	913	908	903	900	902	900	900	904	918	925	929	929	929	938	931	931	929	919	
28*	929	926	926	927	927	928	929	930	912	902	894	892	898	906	912	919	927	928	932	931	930	930	928	926	920	
29*	926	926	926	924	925	929	928	921	912	903	897	898	907	914	918	925	932	933	935	935	935	933	933	931	925	
30	928	929	929	928	929	931	931	922	911	898	894	899	905	915	921	925	931	935	939	941	940	937	936	935	925	
31	943	939	934	937	935	936	937	930	911	898	883	891	894	907	915	919	928	932	933	930	929	928	927	931	923	
Mean	927	925	925	925	925	926	923	916	908	901	897	899	904	907	912	917	921	924	927	929	929	928	927	927	919	
Mean*	924	923	923	923	924	925	925	921	911	903	897	897	904	909	914	921	926	928	929	930	931	930	929	929	920	
Mean**	929	930	931	931	934	935	927	916	908	903	896	894	903	906	909	910	917	924	929	929	929	931	928	924	920	

TABLE II.—HOURLY MEANS OF NORTH COMPONENT OF MAGNETIC FORCE—*continued.*

September. 17000 γ + Tabular Quantities (in γ).

	0h	1h	2h	3h	4h	5h	6h	7h	8h	9h	10h	11h	Noon.	13h	14h	15h	16h	17h	18h	19h	20h	21h	22h	23h	24h	Mean.
1	933	924	926	925	930	932	926	914	908	897	896	897	908	913	919	916	918	917	916	927	923	926	927	924	918	
2	925	924	924	924	925	926	923	919	906	904	900	898	908	914	922	922	927	934	936	935	937	934	932	941	923	
3	944	942	932	924	928	925	917	905	901	898	896	898	903	909	915	921	927	930	936	935	935	927	931	931	921	
4	932	927	929	927	927	926	921	919	915	907	898	899	895	894	903	908	919	925	928	927	927	926	928	927	918	
5	927	930	927	925	925	923	921	917	915	911	905	910	910	911	916	918	920	926	926	924	924	926	924	924	920	
6	926	925	924	924	924	923	921	918	918	912	903	905	910	911	915	919	924	923	925	928	931	930	928	928	921	
7*	929	927	929	930	927	928	928	926	923	914	900	902	902	903	904	910	916	925	927	929	927	927	927	927	920	
8*	927	925	925	926	926	927	927	925	922	912	907	906	913	916	916	920	921	925	927	930	930	931	931	930	923	
9**	928	927	928	931	926	925	925	922	913	901	897	901	904	912	915	920	922	930	926	926	932	943	964	935	923	
10**	938	931	930	920	920	923	914	907	903	906	885	888	895	901	910	910	918	919	918	930	930	932	922	922	916	
11	922	921	921	921	922	922	921	918	909	898	891	884	894	907	915	919	916	921	923	929	929	928	929	927	916	
12	924	919	920	917	921	926	929	925	915	906	897	891	897	902	907	907	912	920	924	925	925	925	929	929	916	
13	926	925	925	927	925	925	924	919	914	909	906	910	913	902	900	911	920	928	932	934	928	923	921	922	919	
14	923	930	930	933	930	932	927	920	908	893	890	895	891	898	902	904	916	912	920	923	925	921	922	920	916	
15	921	921	920	924	920	920	924	920	914	905	907	904	910	915	917	925	924	921	921	923	922	925	926	922	919	
16*	923	924	923	923	924	924	926	924	918	910	897	896	901	906	909	909	919	925	926	925	924	923	923	922	918	
17	921	923	922	922	921	921	918	911	903	898	896	893	899	908	916	921	925	925	923	931	927	923	917	929	916	
18	931	921	924	926	930	925	920	912	907	898	891	898	904	912	916	916	918	922	925	928	929	928	932	932	919	
19	927	922	920	922	922	922	920	915	910	906	896	895	899	902	906	914	922	924	927	929	929	928	927	934	917	
20	932	926	931	928	927	927	927	926	920	914	910	906	913	917	920	921	920	925	930	936	934	931	943	936	925	
21*	933	933	929	928	927	928	927	926	920	913	909	909	913	918	920	921	923	925	927	930	932	933	931	930	924	
22*	930	928	928	929	930	933	935	933	924	911	903	897	906	911	919	922	924	928	928	934	934	937	940	934	925	
23	931	933	932	931	928	934	934	928	922	911	904	902	908	916	921	928	924	918	922	930	932	929	(929)	(929)	924	
24	—	—	—	—	—	—	—	—	—	—	898	899	905	917	920	923	923	924	925	925	927	938	925	925	—	
25	927	930	925	931	931	925	926	925	922	920	915	915	915	918	919	922	923	929	930	933	930	933	928	927	925	
26**	927	929	930	933	942	948	918	911	913	905	902	892	876	871	900	910	921	922	919	912	916	928	927	934	916	
27**	922	882	959	899	921	866	880	877	871	860	840	841	851	862	873	866	861	854	901	879	866	883	918	892	881	
28**	886	913	914	906	907	911	912	906	896	888	884	884	882	894	901	900	899	909	911	910	914	922	916	923	904	
29	923	907	912	907	913	915	912	913	911	902	891	885	887	901	912	917	917	917	917	915	917	917	917	919	910	
30	927	908	912	910	914	921	915	912	903	895	890	888	896	902	906	911	912	918	918	914	911	915	919	916	910	
Mean	926	923	926	923	925	924	921	917	911	904	897	896	900	905	911	913	918	921	924	925	925	926	928	926	917	
Mean*	928	927	927	927	927	928	929	927	921	912	903	902	907	911	914	916	921	926	927	930	929	930	930	929	922	
Mean**	920	916	932	918	923	915	910	905	898	892	882	881	882	888	900	901	904	907	915	911	912	922	929	921	908	

October. 17000 γ + Tabular Quantities (in γ).

	0h	1h	2h	3h	4h	5h	6h	7h	8h	9h	10h	11h	Noon.	13h	14h	15h	16h	17h	18h	19h	20h	21h	22h	23h	24h	Mean.
1	920	925	922	916	917	913	910	911	902	902	897	892	894	896	897	901	906	914	915	914	914	916	915	912	909	
2*	911	911	912	914	914	916	918	913	907	898	895	895	898	901	900	902	908	918	920	919	919	921	919	918	910	
3*	917	918	917	918	918	919	920	918	914	908	901	896	899	904	909	912	920	924	925	924	923	922	922	923	915	
4	921	922	920	919	919	921	921	924	916	906	897	895	895	903	912	915	917	919	922	923	923	923	922	922	916	
5	924	923	922	921	929	929	931	927	921	913	906	909	912	912	913	914	918	918	917	920	916	915	924	923	919	
6	929	926	925	925	929	930	927	927	924	916	910	907	908	910	916	916	914	917	920	922	921	917	919	924	920	
7	924	924	925	926	929	940	938	934	923	912	907	900	899	903	908	910	914	919	921	922	921	921	923	921	919	
8	921	922	923	929	936	947	938	936	928	913	898	888	887	888	891	903	915	921	925	927	926	924	923	921	918	
9	929	928	926	925	927	931	931	931	919	905	896	895	900	904	908	912	915	915	918	922	922	920	918	926	918	
10	932	929	923	921	925	929	922	932	927	917	912	917	916	915	915	919	926	917	926	932	920	922	919	922	922	
11	919	922	929	931	920	938	925	920	921	907	902	898	895	901	901	905	900	911	917	919	921	921	923	923	915	
12	921	920	921	923	927	927	929	926	903	897	890	901	896	905	912	912	916	921	927	918	911	915	921	920	915	
13	920	919	921	921	923	927	923	922	913	899	888	879	888	889	907	914	918	923	924	927	928	926	926	924	914	
14	922	923	922	924	926	927	928	924	912	901	890	888	896	904	913	922	928	930	936	931	927	929	947	926	920	
15**	932	924	926	926	931	934	934	921	884	864	880	888	881	844	846	870	874	868	876	936	924	909	897	918	899	
16**	937	928	922	908	911	904	929	924	916	880	881	879	850	869	872	872	896	884	856	863	870	888	886	876	892	
17**	915	934	913	907	902	873	877	887	886	901	899	891	883	889	888	881	885	895	905	905	903	921	922	917	899	
18**	911	914	915	919	920	911	916	922	906	894	896	899	902	904	903	894	900	918	918	908	960	916	901	904	910	
19**	908	914	914	908	916	916	918	922	910	901	903	903	901	899	903	906	901	909	904	915	911	907	910	915	909	
20	915	913	911	911	913	913	919	919	895	899	889	891	894	899	903	905	904	911	913	920	914	929	923	914	909	
21	909	915	914	913	906	914	913	913	909	901	896	891	890	890	897	904	910	914	918	917	916	916	917	917	908	
22	916	917	915	914	913	916	920	914	906	900	893	894	896	898	905	908	909	916	918	920	920	920	925	920	911	
23*	918	916	918	919	920	919	922	922	917	911	903	906	912	916	914	918	916	920	920	922	922	923	922	922	917	
24*	920	919	920	920	920	920	922	917	910	902	898	897	903	912	914	915	917	919	919	921	921	921	921	921	916	
25	921	920	920	922	923	924	923	922	914	907	903	904	907	911	916	920	924	926	925	926	918	917	919	916	917	
26	916	918	932	921	922	918	917	914	904	898	892	892	895	901	905	911	914	918	921	921	923	923	920	932	914	
27	915	914	921	926	927	931	930	926	888	899	898	898	896	897	898	902	908	910	915	916	923	925	924	924	913	
28	913	916	915	916	915	915	916	912	902	896	890	886	892	897	905	910	912	913	916	916	915	916	914	921	909	
29	918	914	914	916	914	918	918	915	909	898	890	890	894	898	904	908	911	916	918	918	918	917	919	916	910	
30*	916	917	918	920	918	918	918	917	913	903	895	894	894	898	901	905	909	915	918	919	921	920	920	918	912	
31	914	915	913	914	918	918	916	915	909	897	888	890	901	908	916	914	918	922	917	910	923	918	917	912	912	
Mean	919	920	920	919	920	921	921	920	910	901	896	895	896	899	903	906	910	914	917	918	919	919	919	918	913	
Mean*	916	916	917	918	918	918	920	917	912	904	898	898	901	906	908	910	914	919	920	921	921	921	921	920	914	
Mean**	921	923	918	914	916	908	915	915	900	888	892	892	883	881	882	885	891	895	892	905	914	908	903	905	902	

TABLE II.—HOURLY MEANS OF NORTH COMPONENT OF MAGNETIC FORCE—*continued.*

	0h	1h	2h	3h	4h	5h	6h	7h	8h	9h	10h	11h	Noon.	13h	14h	15h	16h	17h	18h	19h	20h	21h	22h	23h	24h
November.	17000 γ + Tabular Quantities (in γ).																								Mean.
1	911	907	911	910	908	912	916	913	910	900	896	896	905	912	917	918	918	922	923	922	920	919	920	921	913
2**	923	924	922	930	934	932	900	914	898	878	879	881	886	887	885	892	896	902	911	910	909	938	897	913	906
3	909	918	902	903	899	913	911	919	905	899	890	884	887	896	902	906	911	913	913	915	916	914	913	915	906
4	913	912	909	911	915	916	919	916	915	909	903	898	899	902	905	906	909	912	915	916	916	916	919	917	911
5*	916	915	915	916	919	920	921	922	920	919	914	909	911	910	908	906	905	913	916	914	913	913	915	915	914
6	914	914	919	919	921	923	921	916	912	909	906	906	908	913	912	911	911	915	916	919	921	922	921	921	915
7	918	918	917	919	919	923	923	923	917	909	905	904	912	918	917	915	906	900	904	920	920	918	934	924	916
8	920	912	913	917	919	920	922	920	913	903	895	893	899	905	909	914	918	922	923	924	923	922	922	920	915
9	920	919	916	920	919	922	923	922	915	905	898	899	900	906	910	914	915	917	920	921	922	921	920	920	915
10*	920	920	920	923	925	928	926	925	920	911	906	902	905	910	915	920	924	926	927	927	923	924	924	924	920
11	922	922	922	926	929	930	930	930	926	917	910	910	913	919	920	925	926	926	927	924	922	921	923	922	923
12**	920	922	922	923	926	930	928	928	928	920	912	910	917	921	923	915	901	900	896	907	915	919	925	911	917
13	911	911	913	914	918	925	925	927	915	907	905	901	902	906	910	908	918	915	917	911	914	913	911	911	913
14	909	911	912	915	916	919	920	917	905	896	893	893	896	901	906	911	917	921	921	923	921	918	920	919	912
15*	920	919	918	919	922	923	926	928	921	915	909	906	904	906	913	918	921	923	923	923	922	921	921	921	918
16	921	921	919	920	925	926	929	931	928	927	924	921	920	920	918	916	910	920	920	922	918	916	914	912	921
17	914	922	919	918	920	920	924	924	921	920	918	916	916	915	915	916	916	919	921	922	918	917	917	919	919
18	919	921	922	924	926	928	929	926	924	924	925	924	922	922	919	918	922	925	923	924	925	924	924	922	923
19	922	922	922	928	926	922	924	925	923	920	918	917	918	919	918	918	918	921	922	922	923	924	922	922	922
20*	920	922	921	922	924	925	924	922	918	913	912	911	912	917	921	920	919	922	924	925	925	925	924	924	921
21	922	922	924	925	926	926	926	924	923	926	927	925	927	927	925	931	929	925	930	927	923	925	928	928	926
22**	927	927	925	925	923	927	926	925	923	918	917	919	921	923	924	926	930	925	928	921	914	915	901	903	921
23	901	909	913	913	915	917	919	919	918	914	910	911	913	911	910	910	917	919	919	919	919	919	920	921	915
24	919	919	918	919	919	923	925	925	921	917	915	916	919	922	923	918	917	918	919	921	921	919	923	921	920
25*	920	921	923	921	923	925	927	925	921	919	916	917	919	920	920	916	920	921	922	923	923	921	921	927	921
26	923	924	924	926	926	927	928	929	925	921	915	913	914	920	919	917	915	919	917	918	918	917	916	919	920
27**	920	920	926	924	926	934	943	954	947	944	932	924	924	914	906	898	904	906	890	894	904	913	920	924	921
28	926	923	918	916	919	916	914	920	911	906	908	908	909	906	904	907	909	916	912	914	916	912	929	922	914
29**	919	918	918	921	926	936	937	929	916	911	901	901	894	896	913	914	911	914	918	918	918	918	926	924	917
30	919	920	940	936	919	924	919	918	902	904	911	909	906	900	911	914	918	926	922	916	916	918	916	914	916
Mean	918	918	918	920	921	924	924	924	918	913	909	907	909	911	913	914	915	917	918	919	919	920	920	920	917
Mean*	919	919	919	920	923	924	925	924	920	915	911	909	910	913	915	916	918	921	922	922	921	921	921	922	919
Mean**	922	922	923	925	927	932	927	930	922	914	908	907	908	908	910	909	908	909	909	910	912	921	914	915	916
December.	17000 γ + Tabular Quantities (in γ).																								Mean.
1	914	912	917	918	914	914	920	922	919	912	910	907	911	913	917	919	917	923	923	922	921	920	921	917	917
2*	916	917	919	919	922	921	922	920	919	919	918	915	912	913	915	918	919	921	921	918	921	920	921	919	919
3	919	919	921	922	925	924	927	927	921	917	916	915	917	918	917	915	914	916	921	923	920	920	924	923	920
4	925	925	925	927	929	929	939	935	928	918	907	890	891	895	897	905	909	917	917	918	908	913	913	915	916
5	915	914	913	919	920	922	917	917	915	912	908	910	913	916	917	919	915	915	915	918	917	918	919	918	916
6	916	923	920	918	921	925	925	925	922	915	910	908	912	918	920	924	923	926	924	922	924	921	918	918	921
7*	919	919	921	926	925	924	922	925	922	915	906	909	915	922	923	924	926	926	928	928	926	926	924	919	922
8	917	920	923	925	930	931	928	928	919	912	910	910	915	919	922	926	930	932	933	932	931	930	930	927	923
9	923	922	922	925	928	931	933	934	930	922	918	919	921	926	926	910	904	902	909	910	892	898	904	904	918
10	912	918	922	921	926	927	928	926	918	908	902	908	909	914	912	908	912	912	912	913	910	910	911	913	914
11	923	916	913	910	921	923	925	924	921	917	914	906	906	908	911	912	915	920	922	921	917	917	919	917	917
12	922	920	920	921	921	931	931	930	925	925	925	923	919	920	918	919	921	922	915	917	917	919	921	929	922
13	922	923	924	929	930	933	934	929	927	921	915	911	909	913	919	917	921	914	910	909	913	915	915	917	920
14	917	925	922	921	926	919	925	927	923	919	920	917	904	895	897	915	921	920	919	917	920	919	920	917	918
15	922	929	917	919	921	924	924	925	923	923	919	917	922	921	914	915	924	928	925	914	915	920	916	928	922
16	928	921	920	918	918	920	924	922	922	923	922	921	916	920	920	918	920	922	923	923	924	923	921	921	921
17*	920	921	922	922	924	926	928	930	928	926	923	921	923	924	924	923	925	927	928	926	925	925	923	921	924
18	920	920	921	921	924	926	928	928	927	926	923	928	928	931	928	925	924	925	925	933	930	938	926	924	926
19	921	926	924	925	926	930	933	936	938	934	933	928	926	924	921	920	918	916	916	923	923	924	923	922	925
20	920	921	922	923	924	925	928	928	928	928	924	922	922	923	925	925	925	926	924	921	924	923	929	919	925
21*	919	921	921	924	925	927	928	929	931	929	927	919	914	912	919	917	919	923	924	924	924	925	925	924	923
22*	926	923	924	924	925	926	927	927	924	925	923	923	922	921	921	919	922	925	925	924	924	923	923	922	924
23**	922	924	924	924	926	927	927	926	926	924	924	926	927	929	929	929	927	924	921	894	889	911	921	921	922
24**	921	921	924	925	927	933	927	933	943	933	929	(915)	901	903	902	903	893	901	907	911	911	919	917	921	918
25**	919	919	917	922	922	925	923	921	919	919	916	912	905	910	914	892	892	895	907	910	924	920	917	922	914
26**	922	917	930	912	920	926	924	930	932	924	890	902	907	882	895	888	883	908	905	912	932	933	904	908	912
27**	930	924	910	908	910	917	918	923	913	908	884	888	897	905	906	910	917	914	916	934	922	920	918	928	913
28	920	915	913	910	916	920	924	928	922	916	900	898	900	906	912	914	914	916	906	904	916	915	915	913	913
29	912	914	914	915	918	917	922	924	924	922	917	908	908	912	914	920	922	920	922	920	917	920	922	922	918
30	916	918	920	920	920	922	922	924	922	916	916	917	921	922	921	918	916	922	918	923	921	920	919	919	920
31	919	916	918	921	923	921	923	921	917	913	913	908	911	913	915	915	915	914	916	919	921	922	921	921	917
Mean	920	920	920	920	923	925	926	927	924	920	915	913	913	914	916	916	916	918	919	919	919	920	919	920	919
Mean*	920	920	921	923	924	925	925	926	925	923	919	917	917	918	920	920	922	924	925	924	924	924	923	921	922
Mean**	923	921	921	918	921	926	924	927	927	922	909	909	907	906	909	904	902	908	911	912	916	921	915	920	916

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

	0h	1h	2h	3h	4h	5h	6h	7h	8h	9h	10h	11h	Noon.	13h	14h	15h	16h	17h	18h	19h	20h	21h	22h	23h	24h	
January.	43000 γ + Tabular Quantities (in γ)																									Mean.
1	148	146	148	146	144	146	148	148	146	144	143	144	146	148	150	151	151	148	148	146	146	144	144	144	147	
2	144	144	144	144	143	144	146	146	146	144	141	138	146	143	148	148	150	151	151	148	148	150	148	148	146	
3	148	146	144	144	144	144	146	148	146	141	146	141	144	148	150	150	151	151	151	151	150	148	148	148	147	
4	146	148	148	148	148	148	148	151	148	144	141	141	156	151	154	154	154	156	156	156	156	159	162	159	151	
5	156	156	154	151	154	156	156	156	159	156	154	154	156	156	159	162	164	164	164	162	162	159	159	159	158	
6	156	154	156	156	156	156	156	156	154	151	151	151	154	159	162	159	162	162	162	162	162	162	159	156	157	
7*	154	154	156	154	156	154	156	156	154	151	148	148	148	151	156	156	156	156	156	159	156	156	156	154	154	
8*	154	151	151	151	151	154	156	156	154	154	151	148	146	151	151	156	156	156	159	156	154	154	154	151	153	
9	151	151	148	151	154	154	156	156	156	151	148	148	148	151	159	159	159	162	164	162	162	162	162	159	156	
10	156	156	154	156	154	154	156	159	159	156	156	154	156	159	162	164	162	167	167	172	172	169	167	162	160	
11	159	156	156	154	154	154	156	156	156	156	156	156	154	154	156	162	162	162	162	162	159	159	156	156	156	157
12	151	151	151	151	151	151	151	151	151	151	151	148	143	148	151	151	151	154	156	154	156	156	154	151	148	151
13**	148	148	148	146	146	146	151	146	146	141	141	138	143	148	146	148	148	151	154	154	154	154	154	148	148	
14	141	141	141	143	138	135	135	141	141	141	146	143	146	148	151	146	146	146	146	146	143	143	141	143	143	
15	141	141	143	141	141	141	146	143	141	141	138	135	138	143	143	146	143	146	143	141	138	141	141	141	142	
16	141	141	141	138	135	135	138	141	141	138	135	133	135	141	143	143	143	141	141	141	138	141	138	138	139	
17	138	135	135	135	135	138	138	141	138	138	138	133	130	138	141	141	143	141	141	141	138	143	141	138	138	
18*	135	143	135	135	135	141	141	141	141	141	141	138	141	146	143	141	141	146	143	141	138	141	141	141	140	
19*	141	138	138	138	138	141	141	141	141	141	138	138	141	146	146	146	146	146	146	143	141	141	141	138	141	
20**	138	135	138	135	135	135	138	141	133	130	125	125	130	141	141	138	138	143	146	148	146	143	141	135	137	
21**	135	130	125	130	130	130	130	133	133	135	135	133	133	141	143	143	146	148	151	146	143	146	146	141	138	
22	135	135	135	133	133	133	135	138	135	135	135	135	135	141	143	146	146	146	148	146	143	143	141	135	139	
23	135	130	133	133	135	135	138	135	133	130	130	128	130	138	141	141	143	151	148	146	143	141	138	135	137	
24	135	135	135	135	135	135	138	141	138	138	135	138	141	146	146	146	146	146	146	143	141	141	135	135	140	
25	135	133	133	133	133	135	135	138	135	130	130	128	130	135	141	135	138	138	141	135	135	135	130	133	134	
26	130	130	130	130	125	130	130	133	133	133	130	128	125	130	130	133	133	135	135	135	135	133	133	130	131	
27*	130	128	130	130	130	133	133	135	135	133	130	130	130	133	135	135	135	133	135	135	135	135	133	133	133	
28	130	128	130	130	128	128	130	130	130	130	133	135	133	135	138	141	138	135	135	135	135	135	135	135	133	
29**	133	130	130	130	130	128	130	133	133	133	133	130	128	130	135	135	135	138	143	141	141	143	141	141	134	
30**	135	135	128	125	128	128	133	135	135	135	133	130	133	135	143	146	148	146	146	146	141	141	141	138	137	
31	135	135	133	133	133	135	135	141	141	135	133	135	130	135	143	146	146	146	143	141	141	143	141	141	138	
Mean	142	141	141	141	140	141	143	144	143	141	140	139	140	144	147	147	148	149	149	148	147	147	146	144	144	
Mean*	143	143	142	142	142	145	145	146	145	144	142	140	141	145	146	147	147	147	148	147	145	145	145	143	144	
Mean**	138	136	134	133	134	133	136	138	136	135	133	131	133	139	142	142	143	145	148	147	145	145	145	141	139	
February.	43000 γ + Tabular Quantities (in γ)																									Mean.
1	141	141	141	141	141	141	141	146	146	146	143	146	143	146	148	151	156	154	154	156	151	148	146	146	146	
2	146	146	146	143	146	146	148	148	146	146	146	146	143	146	151	151	151	151	154	151	151	151	146	146	148	
3	146	148	148	148	146	146	148	151	151	146	146	146	146	151	156	159	162	162	162	159	162	156	156	156	152	
4	151	146	146	146	146	146	146	146	146	146	143	143	143	148	154	156	156	159	156	156	156	154	154	151	150	
5	151	151	151	151	154	154	154	151	154	148	146	146	146	146	151	151	151	156	159	156	156	156	154	151	152	
6	151	151	148	151	151	151	154	154	151	148	148	146	146	146	151	151	154	156	156	156	156	156	154	148	151	
7	148	146	146	146	146	151	151	151	151	146	146	146	146	146	154	156	159	162	162	162	159	159	156	154	152	
8	151	146	146	146	148	151	151	151	151	146	143	143	143	148	148	154	154	156	156	156	154	151	151	151	150	
9*	148	146	146	146	148	151	151	154	154	154	151	151	148	148	148	148	151	151	151	151	151	151	151	151	150	
10	148	146	146	143	143	146	146	151	151	151	148	148	151	154	156	159	159	162	159	159	159	156	154	151	152	
11	151	151	148	148	146	148	148	151	148	148	148	148	146	146	151	151	151	151	151	151	151	151	151	148	149	
12*	148	146	146	148	146	148	151	151	154	151	148	148	151	154	156	156	154	154	151	151	148	148	148	148	150	
13*	148	148	146	146	146	146	148	148	148	146	143	143	141	143	148	151	151	148	151	151	148	146	146	146	147	
14	146	146	143	143	146	146	148	148	148	146	141	141	143	143	148	151	151	148	148	148	151	151	146	146	147	
15	146	146	146	146	146	146	146	148	148	146	146	141	141	141	146	148	148	151	151	151	148	146	146	146	146	
16	146	146	146	143	143	143	143	146	143	138	135	135	135	138	143	146	151	151	151	154	148	148	146	146	144	
17**	143	143	143	143	143	143	146	148	146	141	148	148	148	141	146	148	146	146	148	151	151	148	146	143	147	
18	141	141	141	138	135	133	133	133	138	135	130	130	135	138	141	146	151	151	148	148	148	146	148	141	140	
19	141	141	141	143	146	146	146	151	151	146	141	135	135	138	146	151	151	151	151	151	148	148	148	146	146	
20	143	141	141	143	141	143	143	146	146	143	135	133	135	141	146	146	148	151	148	148	146	146	143	141	143	
21*	141	138	135	138	141	141	141	146	146	141	133	128	133	135	141	141	143	143	143	141	141	141	141	141	140	
22	138	138	135	135	135	133	135	138	138	135	128	130	133	138	141	146	146	146	146	143	143	141	141	141	138	
23*	138	138	141	141	141	141	141	146	146	143	133	130	133	133	135	141	141	141	141	141	141	138	138	135	139	
24	135	133	133	135	135	135	138	141	141	135	130	125	128	130	133	135	135	135	135	135	135	135	135	133	134	
25**	130	128	123	120	120	120	120	120	120	120	120	115	120	125	130	133	148	156	151	151	159	146	130	123	130	
26**	110	115	104	99	120	128	130	135	130	128	125	123	125	130	130	141	143	143	143	146	146	141	141	141	130	
27**	141	135	130	130	133	135	135	135	135	133	135	133	135	141	154	167	159	159	162	156	151	138	135	125	141	
28**	135	135	138	138	138	141	141	141	133	130	130	133	130	135	143	148	154	156	159	151	148	148	151	146	142	
Mean	143	142	141	141	142	143	144	146	145	142	140	139	139	142	146	149	151	152	152	151	150	148	147	144	145	
Mean*	145	143	143	144	144	145	146	149	150	147	142	140	141	143	146	148	148	147	147	147	146	145	145	144	145	
Mean**	132	131	128	126	131	133	134	136	133	130	132	130	132	134	141	147	150	152	153	151	151	144	141	136	138	

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

	0h	1h	2h	3h	4h	5h	6h	7h	8h	9h	10h	11h	Noon.	13h	14h	15h	16h	17h	18h	19h	20h	21h	22h	23h	24h	
March.	43000 γ + Tabular Quantities (in γ).																									Mean
1	141	141	143	141	141	143	141	141	141	138	135	133	135	138	141	146	148	146	146	146	143	146	146	143	142	
2	141	141	141	141	141	141	143	146	146	141	141	135	135	138	141	146	148	151	151	156	154	148	146	143	144	
3	143	143	143	143	141	143	143	146	146	141	135	133	135	138	141	146	146	146	146	148	148	148	148	146	143	
4	146	143	143	143	141	141	138	138	135	135	133	130	135	138	141	146	148	146	146	146	146	146	146	146	142	
5	143	143	143	143	143	143	141	141	141	141	141	135	135	135	138	141	143	146	143	143	141	141	141	138	141	
6	138	138	141	141	141	141	141	141	138	133	130	128	130	125	141	143	146	143	146	143	141	141	141	141	139	
7	141	141	141	141	141	141	143	143	146	143	138	130	130	135	143	146	151	154	156	156	156	151	146	146	144	
8*	143	141	141	141	143	146	146	146	143	141	135	133	133	135	141	146	146	143	146	143	143	143	143	141	142	
9*	141	141	138	141	141	141	143	146	146	143	141	135	135	138	138	143	148	146	146	146	146	143	143	143	142	
10*	141	141	141	141	141	141	141	146	146	141	138	133	133	141	141	143	146	143	143	143	143	143	143	141	141	
11*	141	141	138	135	135	135	135	135	135	135	130	125	123	125	130	135	141	138	141	141	138	141	138	138	135	
12	135	135	135	133	135	135	138	141	141	138	133	128	125	128	130	135	135	130	135	138	138	138	138	138	135	
13	135	135	135	135	135	135	138	138	135	130	125	120	115	117	125	130	135	138	138	135	135	135	133	135	132	
14	135	133	130	130	133	133	135	135	135	128	120	120	123	125	130	135	135	135	135	133	133	133	138	135	132	
15**	130	130	130	130	130	130	133	135	138	135	125	125	128	130	130	135	138	141	141	141	135	135	135	133	133	
16	128	128	130	130	130	133	133	135	130	123	115	117	120	130	138	143	143	141	135	135	135	130	130	130	131	
17	125	120	123	128	130	133	135	135	135	125	125	123	125	125	133	135	135	135	135	135	135	135	133	130	130	
18	130	130	130	130	130	130	128	130	128	125	120	117	115	120	130	138	138	138	135	135	135	135	133	128	137	
19	130	128	130	130	128	130	135	135	135	128	120	115	115	125	135	141	141	141	138	135	135	133	133	130	131	
20	130	130	130	133	133	135	135	138	135	128	120	115	115	120	128	133	135	135	135	133	133	135	130	130	130	
21	130	128	130	130	130	130	135	138	133	128	117	112	115	120	130	138	141	143	146	146	146	143	141	138	133	
22	133	125	125	128	130	133	135	135	135	135	125	120	120	125	130	135	143	143	141	141	143	135	135	135	133	
23*	135	130	130	133	135	135	141	135	130	120	117	120	125	135	135	141	141	141	141	141	141	138	135	135	134	
24**	133	133	133	133	130	135	135	138	135	125	115	110	120	130	138	151	175	209	204	188	177	159	130	133	145	
25**	135	99	89	87	104	115	125	130	135	138	138	130	135	146	151	151	154	159	162	151	151	151	146	141	134	
26**	138	141	135	130	130	133	141	146	143	141	135	135	133	143	154	172	162	156	156	156	154	146	141	141	143	
27**	138	125	130	135	135	135	141	143	138	135	130	130	133	141	148	159	167	175	167	162	159	156	151	138	145	
28	135	141	141	146	146	146	151	151	148	141	135	135	141	146	148	151	154	156	162	159	159	156	154	148	148	
29	151	143	146	141	143	148	151	156	151	146	141	141	143	151	154	159	162	162	159	156	156	156	154	151	151	
30	154	154	151	151	151	151	151	151	148	146	141	141	148	156	162	164	164	162	159	159	159	159	162	159	154	
31	156	148	151	151	151	151	154	151	154	154	135	135	135	146	154	162	162	162	159	159	159	156	159	156	153	
Mean	138	135	135	135	136	137	138	141	140	136	130	127	129	134	136	145	147	149	148	147	146	144	142	140	139	
Mean*	140	139	138	138	139	140	141	142	140	136	130	129	130	135	137	142	144	142	143	143	142	142	140	140	139	
Mean**	135	127	123	123	126	130	135	138	138	135	129	126	130	138	144	154	159	168	166	160	155	149	141	137	140	
April.	43000 γ + Tabular Quantities (in γ).																									Mean.
1	163	163	163	160	160	160	163	165	163	158	152	150	152	155	160	165	168	163	163	163	163	160	160	158	160	
2*	158	163	160	160	158	158	158	160	155	147	145	150	147	155	160	163	163	163	163	160	160	158	158	158	158	
3	158	158	158	158	158	158	163	165	158	152	147	147	150	155	160	163	163	158	165	163	160	158	158	158	158	
4	155	155	158	158	158	160	163	163	155	147	142	142	147	150	160	155	158	163	165	163	163	160	160	158	157	
5*	158	158	158	155	158	158	160	163	158	147	140	138	138	142	147	152	160	160	158	158	158	158	158	155	154	
6	155	152	152	152	152	158	163	163	155	147	140	132	132	138	142	145	152	158	163	163	160	160	158	158	152	
7	152	150	150	150	150	152	158	155	152	145	140	138	142	147	152	155	160	165	168	168	168	163	163	158	154	
8	158	155	152	152	158	158	158	152	152	145	140	138	142	147	152	155	158	160	163	158	158	158	160	158	154	
9	152	150	150	152	152	155	158	166	158	147	140	140	142	145	152	158	158	160	160	163	163	158	155	155	154	
10	152	152	152	152	152	152	158	160	152	155	138	132	135	142	147	152	152	152	152	152	152	152	150	147	149	
11	135	140	142	142	142	145	147	150	147	140	132	129	132	140	142	145	147	147	147	147	147	147	142	135	142	
12**	140	142	140	132	135	140	145	147	145	142	135	132	132	140	147	152	152	152	155	152	150	142	142	142	143	
13**	142	142	140	142	140	142	147	147	147	140	132	129	132	135	142	145	152	155	152	150	150	150	142	140	143	
14	135	127	132	132	140	142	147	152	152	147	140	129	132	142	147	152	158	155	152	152	152	150	147	145	144	
15	142	142	145	147	147	147	145	152	147	142	132	132	132	132	140	147	147	150	152	152	150	150	150	147	144	
16	147	145	147	145	145	147	152	152	147	140	127	124	124	129	140	145	150	150	147	147	145	145	142	142	143	
17*	142	142	142	142	142	145	147	147	142	132	121	121	124	135	142	147	150	150	147	147	145	142	142	142	141	
18	142	142	142	142	145	147	150	150	145	132	121	111	116	124	132	142	150	150	150	147	147	145	142	145	140	
19	142	142	142	142	142	147	150	152	142	132	127	127	129	140	142	147	147	147	147	147	145	145	142	142	142	
20	142	142	142	142	142	142	142	145	142	135	124	121	121	129	140	142	147	150	158	160	158	158	155	150	143	
21**	147	145	142	132	135	132	140	145	145	140	132	121	116	127	142	150	152	152	150	150	152	147	147	140	141	
22**	132	132	138	138	140	132	135	138	132	132	127	121	127	132	142	145	152	160	158	155	150	138	132	124	138	
23**	111	111	116	121	127	132	138	142	138	132	127	121	127	135	142	147	152	155	158	155	147	142	142	138	135	
24	132	127	127	129	132	138	140	142	138	127	124	124	124	129	138	142	145	130	147	145	142	140	140	138	135	
25	138	138	138	138	135	138	142	145	140	138	135	127	127	132	138	142	147	147	145	147	142	142	142	142	139	
26*	138	138	138	140	142	142	147	147	140	132	129	129	135	138	140	142	147	147	145	145	142	142	142	142	140	
27*	140	140	140	142	142	142	145	145	142	132	127	121	127	132	140	145	145	147	147	147	142	142	142	142	140	
28	142	138	140	140	142	142	140	138	135	129	129	129	127	132	140	142	142	145	145	145	145	145	142	142	139	
29	140	140	138	140	140	138	138	138	135	127	121	121	127	132	140	142	145	145	142	142	142	142	140	138	137	
30	138	138	135	138	138	140	142	138	135	127	121	111	113	121	132	138	140	142	142	142	140	140	140	140	135	
Mean	144	143	144	144	146	146	149	151	146	139	133	130	132	138	145	149	152	153	154	153	151	149	148	146	145	
Mean*	147	148	148	148	148	149	151	152	147	138	132	132	134	140	146	150	153	153	152	151	149	148	148	148	147	
Mean**	134	134	135	133	135	136	141	144	141	137	131	125	127	134	143	148	152	155	155	152	150	144	141	137	140	

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

	0h	1h	2h	3h	4h	5h	6h	7h	8h	9h	10h	11h	Noon.	13h	14h	15h	16h	17h	18h	19h	20h	21h	22h	23h	24h
May.	43000 γ + Tabular Quantities (in γ).																								Mean.
1*	141	141	141	143	143	146	148	148	146	139	130	122	126	134	144	147	149	149	149	147	147	144	144	144	142
2	145	145	145	145	150	150	150	150	150	148	141	135	133	139	146	151	156	161	159	156	154	151	151	151	148
3**	152	152	152	155	155	157	157	152	145	140	134	126	127	138	146	153	156	158	161	161	158	156	153	146	150
4	147	149	145	147	149	152	152	149	145	139	134	128	135	137	140	146	150	153	153	153	150	150	148	146	146
5	144	136	133	136	141	141	144	138	133	130	125	120	123	131	139	139	142	148	150	153	145	139	137	137	137
6	134	131	131	131	131	134	134	131	131	126	113	108	117	124	130	130	132	135	132	132	132	132	127	124	128
7	122	122	119	122	127	127	130	130	127	117	112	107	115	115	118	118	118	125	125	128	125	125	123	123	122
8	120	118	115	113	118	118	118	113	110	110	115	97	98	103	109	114	119	124	124	121	119	119	119	111	114
9	109	109	109	111	114	116	119	119	116	109	106	103	104	110	115	117	120	122	120	120	117	117	115	115	114
10	116	116	116	113	118	123	116	116	113	111	105	100	106	106	112	117	117	122	117	117	117	117	114	114	114
11	112	114	112	112	114	114	114	109	106	101	96	96	102	105	105	110	110	115	120	118	115	113	113	113	110
12*	110	110	119	119	119	119	110	107	100	95	92	92	91	93	103	108	111	114	114	111	111	111	108	108	107
13*	108	108	108	106	108	106	103	103	106	103	93	91	94	102	109	109	107	109	109	112	112	109	109	107	105
14	109	109	107	109	109	112	109	104	102	92	84	89	90	98	105	116	121	121	118	113	110	110	110	110	107
15	110	110	110	110	110	116	113	105	103	103	95	(93)	91	96	106	111	117	122	119	117	114	114	114	114	109
16	117	114	114	117	119	119	119	119	114	106	106	104	110	110	112	118	120	120	120	118	115	112	112	112	114
17**	112	112	107	107	112	118	118	112	107	100	97	97	101	103	113	121	129	150	155	139	129	126	121	108	116
18**	99	89	79	84	86	94	109	112	109	107	102	104	108	115	121	123	126	131	133	131	128	121	121	121	111
19	118	113	110	115	118	118	121	118	115	110	108	105	109	111	116	124	132	134	137	137	132	127	124	122	120
20	116	116	119	122	124	122	122	119	122	116	106	104	102	107	115	123	128	133	138	133	130	128	125	117	120
21	112	110	112	123	123	123	125	128	123	123	112	107	108	108	118	129	129	139	139	139	134	131	126	124	123
22*	119	122	122	125	127	130	130	130	119	114	109	104	108	110	118	123	128	136	138	136	136	131	131	128	124
23	126	126	126	128	131	131	133	131	126	118	115	110	116	127	132	134	142	142	142	140	142	(139)	(136)	(133)	130
24*	—	—	—	—	—	—	—	—	—	—	—	116	120	130	138	143	143	148	141	141	143	143	140	140	—
25	143	140	140	143	141	141	140	138	135	125	125	122	116	116	126	136	141	149	149	142	149	142	144	144	137
26	144	144	144	144	142	142	142	142	144	139	134	129	137	140	145	143	153	153	153	150	150	145	145	145	144
27	145	145	145	142	142	142	137	132	132	130	124	117	120	125	136	138	146	146	146	144	144	146	146	143	138
28	146	143	143	146	146	146	146	151	146	146	141	136	137	137	142	152	155	157	152	145	147	147	147	144	146
29**	145	143	148	148	146	148	148	148	143	133	122	117	123	139	154	159	167	176	180	176	167	162	157	146	150
30**	139	141	144	144	144	141	144	144	141	134	134	136	147	148	166	177	186	191	186	181	174	163	158	155	155
31	155	148	148	148	158	160	158	155	145	142	140	137	146	149	156	164	164	164	164	161	159	159	159	156	154
Mean	127	126	125	127	129	130	130	128	125	123	115	112	115	119	127	132	136	140	140	138	135	133	131	129	128
Mean*	120	120	123	123	124	125	123	122	118	113	106	102	105	110	119	122	124	127	128	127	127	124	123	122	120
Mean**	129	127	126	128	129	132	135	134	129	123	118	116	121	129	140	147	153	161	163	158	151	146	142	135	136
June.	43000 γ + Tabular Quantities (in γ).																								Mean.
1	156	159	159	159	161	167	169	164	159	148	143	138	144	152	157	162	168	170	173	168	165	164	160	157	159
2	157	152	152	154	160	162	162	162	160	149	139	137	135	140	148	158	163	171	169	163	163	163	158	158	156
3	158	158	161	163	163	163	161	163	163	158	153	148	146	154	159	164	170	170	170	170	164	164	162	159	161
4**	160	160	160	163	165	165	168	165	157	145	145	147	151	151	156	161	169	177	174	172	169	169	166	164	162
5	161	161	164	161	156	148	156	166	161	158	156	151	159	162	167	170	173	178	181	178	173	173	170	167	165
6	167	167	167	167	170	170	173	170	165	157	152	147	148	153	160	171	179	185	182	179	174	168	166	168	168
7	164	159	164	164	164	167	169	169	167	161	151	149	157	160	170	176	181	178	178	176	173	170	170	168	168
8	168	162	165	165	170	173	173	170	170	168	165	155	156	161	166	171	171	177	177	177	174	171	169	166	168
9*	166	169	169	166	171	174	177	177	174	169	151	146	157	162	164	167	170	175	172	172	172	167	167	164	167
10*	162	162	162	162	164	164	164	159	154	149	149	149	148	153	155	158	163	168	163	163	160	158	158	158	159
11	158	158	158	158	158	163	163	163	153	142	142	140	149	151	156	161	164	159	159	156	154	154	154	154	155
12	150	155	155	155	155	160	160	155	150	144	144	142	148	156	163	166	166	161	158	158	156	151	151	151	155
13**	145	140	133	115	130	140	148	145	143	140	135	140	144	154	164	175	188	188	183	175	169	159	154	149	152
14**	152	146	136	141	144	152	152	154	146	139	141	136	140	147	155	163	168	170	178	173	168	158	142	147	152
15	147	142	145	147	153	155	160	158	153	142	137	135	143	154	161	164	164	164	161	161	156	156	154	154	153
16	154	151	148	143	148	150	156	156	154	148	138	133	149	144	155	157	162	165	165	162	157	157	152	149	157
17*	150	148	148	150	150	150	150	153	150	150	140	130	136	141	146	149	157	157	157	154	154	151	149	146	150
18*	146	146	149	149	154	154	154	154	149	141	131	123	119	130	140	145	152	158	158	152	150	145	142	145	145
19	142	142	145	145	147	150	152	155	152	142	132	129	136	138	143	146	151	153	159	153	148	148	148	146	146
20	143	143	141	146	148	151	151	148	148	138	131	130	134	134	139	144	149	152	157	157	154	152	149	144	145
21**	142	144	142	137	137	139	142	144	142	139	139	139	143	145	150	155	161	161	161	155	153	150	150	145	146
22	140	143	145	148	148	150	153	150	150	148	140	133	136	144	151	156	156	159	156	156	154	151	149	146	153
23	146	146	146	149	151	154	151	151	146	141	139	141	147	152	152	152	152	152	155	155	155	152	147	147	150
24*	148	143	143	146	148	148	148	143	143	141	138	133	134	139	144	149	147	144	144	144	147	147	144	142	144
25	142	142	144	144	147	147	147	144	139	134	134	131	132	140	145	148	150	150	150	148	148	145	145	145	143
26	143	143	143	145	145	148	143	140	135	130	120	121	121	123	136	136	144	144	146	149	149	149	151	154	140
27	156	159	159	159	164	164	159	156	151	146	139	136	147	155	157	168	175	178	178	178	175	175	175	173	162
28	168	168	170	168	168	168	173	168	168	160	147	145	156	161	163	171	176	179	179	174	171	163	158	158	166
29	156	158	158	161	163	166	171	171	169	163	153	148	149	149	159	167	172	175	170	170	167	164	164	163	
30**	163	159	159	162	164	164	167	170	162	159	149	149	155	163	178	196	215	230	225	213	196	186	176	171	176
Mean	154	153	153	153	156	158	159	158	154	148	143	139	144	149	155	161	166	168	168	165	162	159	156	155	156
Mean*	155	154	154	155	157	158	159	157	154	150	142	136	139	145	150	154	158	160	159	157	157	154	152	151	153
Mean**	152	150	146	144	148	152	155	156	150	144	142	142	147	152	161	170	180	185	184	178	171	164	158	155	158

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

	0h	1h	2h	3h	4h	5h	6h	7h	8h	9h	10h	11h	Noon.	13h	14h	15h	16h	17h	18h	19h	20h	21h	22h	23h	24h	
July.	43000 γ + Tabular Quantities (in γ).																									Mean.
1	176	171	171	173	176	176	177	180	174	172	172	169	175	181	181	181	183	183	183	186	183	181	175	175	177	
2	173	170	170	168	170	170	170	170	168	170	175	173	171	174	177	187	195	203	200	197	197	187	184	179	179	
3	174	176	179	179	184	184	187	184	182	174	171	163	164	167	170	177	185	185	183	180	180	175	175	175	177	
4	172	172	175	175	180	180	183	180	177	159	154	154	162	159	162	164	170	172	176	176	172	171	168	168	170	
5*	165	165	169	169	172	177	177	172	161	151	141	146	160	162	162	167	173	179	179	176	174	166	169	169	167	
6	167	167	167	170	173	176	178	179	177	174	169	161	165	167	170	167	176	179	181	184	180	174	174	172	173	
7**	168	155	150	150	154	159	166	169	170	172	167	165	168	168	171	171	174	179	179	179	183	183	180	178	169	
8	176	176	174	174	175	175	177	177	178	176	173	168	167	172	174	177	179	179	183	183	180	180	175	175	176	
9	174	174	171	174	176	176	180	177	180	172	165	154	153	158	168	168	173	176	174	174	174	174	172	169	171	
10**	170	165	150	157	165	170	166	163	169	163	143	140	152	164	167	170	167	175	183	183	183	173	165	160	165	
11**	159	161	161	159	154	159	167	162	165	165	157	149	156	166	171	174	174	176	177	172	169	167	159	159	164	
12	158	147	152	155	158	160	166	164	161	153	148	151	154	157	162	162	165	162	161	161	158	158	155	155	158	
13	156	154	154	154	156	162	165	163	155	147	147	152	156	153	158	161	161	158	156	156	154	152	152	152	156	
14*	149	149	149	152	155	155	155	155	150	145	135	133	136	144	159	151	154	156	151	151	152	152	152	152	150	
15*	152	160	152	152	153	153	151	153	151	148	146	138	137	144	154	162	154	157	157	159	160	155	163	163	153	
16	150	163	163	163	166	161	164	164	159	164	146	139	142	147	152	152	157	157	160	157	166	166	153	151	157	
17	148	151	153	153	154	154	154	154	151	144	139	142	140	145	150	155	160	160	163	165	161	161	169	156	153	
18**	154	154	151	156	170	170	157	152	152	152	150	140	143	146	148	153	158	163	168	166	171	156	153	151	156	
19	149	149	149	149	149	149	152	152	147	144	147	139	140	145	153	155	160	173	160	160	158	155	155	153	151	
20	148	145	145	145	150	153	155	153	145	138	135	130	136	141	141	151	156	156	159	154	151	149	146	146	147	
21*	144	144	141	144	146	149	151	149	146	141	141	136	140	142	140	140	145	147	145	145	145	142	140	140	143	
22	137	137	137	137	137	140	140	140	132	125	122	122	122	127	132	135	137	137	140	137	137	137	135	132	134	
23**	122	120	118	122	120	113	118	118	120	118	113	120	126	133	141	138	143	148	146	143	143	138	136	136	129	
24*	133	133	133	133	136	138	141	141	138	136	133	136	128	133	133	138	141	138	138	136	136	133	133	133	135	
25	133	131	131	131	131	133	133	133	131	126	119	114	119	119	126	128	133	136	138	133	131	131	131	131	132	
26	131	131	131	131	133	138	141	143	141	136	133	131	135	137	137	142	147	145	140	135	132	132	132	135	136	
27	135	132	132	132	137	132	132	130	130	130	127	130	126	129	136	145	141	146	144	141	139	139	134	134	137	
28	128	128	130	133	138	140	145	140	140	138	135	133	132	134	134	142	144	144	144	142	139	139	137	137	137	
29	133	136	133	136	138	138	136	133	133	128	123	121	127	137	140	140	147	147	142	140	140	140	140	140	136	
30	136	136	139	139	141	146	144	139	134	131	131	119	115	118	123	130	138	143	140	140	138	138	135	135	134	
31	134	134	137	137	139	142	142	139	129	129	129	124	113	118	128	138	143	143	146	143	141	138	138	138	135	
Mean	152	151	151	152	154	156	157	156	153	149	145	142	144	148	152	156	159	161	161	160	159	156	154	153	153	
Mean*	149	150	149	150	152	154	155	154	149	144	139	138	140	145	150	152	153	155	154	153	153	150	151	151	150	
Mean**	155	151	146	149	153	154	155	153	155	154	146	143	149	155	160	161	163	168	171	169	170	163	159	157	157	
August.	43000 γ + Tabular Quantities (in γ).																									Mean.
1*	137	137	137	140	142	145	145	142	135	127	122	117	116	121	126	131	136	139	141	141	139	136	134	134	134	
2	133	133	133	130	138	140	143	140	138	135	130	123	122	124	132	139	139	139	139	139	136	133	133	128	134	
3**	128	128	123	121	127	132	132	132	130	120	117	120	116	121	131	134	139	141	144	141	140	135	128	125	129	
4**	125	128	128	125	114	109	112	114	112	112	109	112	113	118	123	128	131	131	133	133	130	130	125	125	122	
5	122	120	120	122	121	124	124	126	121	114	111	109	110	115	123	125	125	123	123	120	122	124	119	119	120	
6**	117	114	114	114	113	118	118	118	113	113	113	116	112	115	120	127	127	127	125	125	124	121	116	116	120	
7	114	111	111	114	115	115	115	113	113	110	108	100	99	104	114	119	119	119	122	119	116	116	113	113	113	
8	111	108	108	108	110	112	115	115	112	110	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
9	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
10	—	—	—	—	—	—	—	—	—	—	80	84	85	95	105	103	100	100	98	98	95	95	95	95	—	
11	94	94	92	94	94	97	94	94	89	89	87	84	86	88	88	93	98	98	98	98	96	91	91	91	92	
12	90	90	92	92	92	92	92	90	90	85	82	80	79	79	86	91	101	99	94	94	93	90	90	90	90	
13**	90	90	90	90	92	92	94	92	87	82	79	82	83	88	93	101	103	96	93	93	96	98	93	88	91	
14	87	87	87	90	90	87	87	87	87	82	80	82	84	86	96	104	106	106	104	101	99	91	89	86	91	
15	80	83	83	85	90	95	95	90	90	83	78	75	77	84	102	99	107	109	107	102	97	94	92	94	92	
16	91	93	93	96	98	101	103	101	96	86	78	81	87	90	97	105	107	107	105	102	102	102	102	102	97	
17	96	94	96	96	101	104	109	106	99	86	84	79	83	90	103	110	115	115	113	113	110	110	108	108	101	
18*	104	107	109	109	114	114	119	119	117	112	109	109	106	108	118	118	118	118	118	116	116	113	113	111	113	
19	110	110	110	110	112	115	112	115	112	110	105	110	106	111	116	116	119	116	119	119	119	116	114	111	113	
20	110	110	110	113	115	115	115	115	115	115	113	108	112	119	119	119	122	122	122	122	122	122	119	119	116	
21*	116	116	116	118	118	121	126	126	124	118	118	106	110	112	117	125	128	125	123	123	120	120	120	120	119	
22	116	116	116	119	122	124	127	122	122	116	111	101	108	115	121	128	128	126	126	123	121	121	121	115	119	
23	114	114	117	117	120	125	127	125	122	114	114	109	113	119	126	129	129	126	121	121	119	119	119	119	120	
24**	119	119	119	121	121	124	124	119	113	113	106	103	105	112	123	125	130	128	125	123	123	123	123	118	119	
25	118	118	112	112	118	120	123	123	118	105	97	97	104	111	119	124	122	122	124	122	124	127	122	124	117	
26	122	119	119	122	122	119	119	119	117	111	109	104	103	110	121	123	123	123	121	121	118	121	121	121	118	
27	117	120	120	120	122	122	125	125	120	115	115	112	108	114	119	124	129	129	129	126	124	124	121	119	122	
28*	120	118	118	120	120	120	128	128	123	123	107	102	106	109	117	124	124	124	124	119	117	117	117	114	118	
29*	114	117	117	117	119	122	124	122	117	109	109	112	111	111	116	118	121	123	121	121	121	121	118	118	117	
30	116	116	116	116	118	121	126	123	121	111	108	108	104	104	107	115	117	120	117	115	112	112	110	110	114	
31	107	104	104	107	110	115	120	120	115	110	104	99	91	93	96	101	109	109	106	103	101	101	101	103	105	
Mean	111	111	111	112	113	115	117	116	113	107	104	101	102	106	113	118	120	120	119	118	116	115	113	112	113	
Mean*	118	119	119	121	123	124	128	127	123	115	113	109	110	112	119	123	125	126	125	120	123	121	120	119	120	
Mean**	116	116	115	114	113	115	116	115	111	108	105	107	106	111	118	123	126	125	124	123	123	121	117	104	116	

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

	0h	1h	2h	3h	4h	5h	6h	7h	8h	9h	10h	11h	Noon.	13h	14h	15h	16h	17h	18h	19h	20h	21h	22h	23h	24h
September.	43000 γ + Tabular Quantities (in γ).																								Mean.
1	95	95	97	97	97	102	108	105	100	95	90	87	91	96	96	104	112	114	112	114	109	104	101	99	101
2	96	96	96	99	99	99	101	104	104	96	91	86	85	90	100	103	100	100	100	100	100	98	98	95	97
3	92	89	89	94	94	99	105	102	97	84	77	74	76	86	96	101	101	78	98	98	101	101	98	96	93
4	96	98	96	98	101	104	106	104	101	96	96	88	87	92	97	105	113	110	110	108	105	105	108	105	101
5	103	103	103	103	103	103	110	110	108	105	100	92	91	96	102	109	112	114	112	112	109	109	109	109	106
6	106	106	106	106	111	111	116	111	111	106	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
7*	—	—	—	—	—	—	—	—	—	—	110	107	106	109	114	116	119	119	116	116	116	116	116	114	—
8*	115	114	114	116	114	116	119	122	119	114	106	104	103	105	108	113	113	115	115	115	118	118	115	118	114
9**	105	118	115	113	113	115	115	115	113	108	105	100	102	107	112	117	117	120	117	120	122	122	114	117	113
10**	112	112	112	112	112	114	117	117	112	107	107	107	111	119	126	129	131	126	124	124	124	121	119	119	117
11	120	123	120	120	120	123	125	123	118	112	110	107	106	114	124	129	129	127	124	124	124	124	122	119	122
12	119	119	122	124	124	127	129	127	119	114	109	106	110	113	118	126	128	128	128	126	123	123	121	118	121
13	118	118	121	121	123	126	128	123	116	110	108	108	109	115	117	120	122	125	125	122	122	127	122	117	119
14	120	120	120	120	122	125	127	122	117	112	109	104	103	114	121	124	131	131	131	129	124	121	121	116	120
15	119	119	119	119	121	124	126	126	119	111	106	103	105	110	113	120	125	125	125	125	123	123	120	120	119
16*	118	120	118	118	118	118	120	118	115	110	105	102	104	109	114	122	119	119	117	119	117	114	114	119	115
17	111	111	108	108	111	113	118	116	111	105	98	103	104	104	104	110	112	115	112	112	112	112	115	107	110
18	104	104	102	104	104	107	112	117	112	107	102	102	103	106	111	111	111	111	114	111	114	111	111	103	108
19	101	103	103	103	106	106	111	114	111	106	101	96	92	92	95	100	105	108	108	110	110	110	108	108	104
20	106	106	102	102	106	106	108	110	108	105	100	100	96	96	101	109	109	109	112	112	109	109	104	104	105
21*	104	104	107	107	107	109	114	117	112	107	107	107	103	103	108	113	113	116	118	118	116	116	116	113	111
22*	113	113	113	113	113	116	118	123	123	116	108	108	110	115	117	122	122	122	122	122	122	122	122	120	117
23	120	122	120	120	120	117	120	120	120	117	112	105	106	114	121	129	129	127	127	127	127	127	127	127	121
24	121	121	119	121	119	121	127	129	127	121	114	114	116	121	127	132	129	129	129	132	129	127	127	127	124
25	127	124	127	124	124	127	127	129	127	121	116	116	120	120	120	126	131	133	131	131	131	128	126	126	126
26**	126	126	126	126	126	118	120	124	120	120	115	115	120	118	131	136	133	136	141	141	141	131	115	100	125
27**	92	62	62	62	72	72	85	115	123	126	126	131	131	141	149	154	170	186	180	162	159	152	105	110	122
28**	120	115	100	120	126	131	133	136	133	131	131	128	137	145	147	150	155	153	153	150	147	145	137	134	136
29	124	127	129	132	134	140	140	142	137	132	127	127	127	132	134	140	142	145	145	145	145	142	142	140	136
30	129	134	134	134	132	134	134	137	132	132	127	121	121	127	132	134	137	140	140	142	147	145	142	137	134
Mean	111	111	110	112	113	115	118	119	116	115	107	105	106	111	116	121	123	124	124	123	122	121	117	115	116
Mean*	112	113	113	114	113	115	118	120	117	112	107	105	105	109	112	118	117	118	118	119	118	118	117	115	114
Mean**	111	107	103	107	109	110	114	121	120	118	117	116	120	128	133	137	141	144	143	141	139	134	118	116	123
October.	43000 γ + Tabular Quantities (in γ).																								Mean.
1	134	131	129	131	134	134	136	139	136	134	131	131	134	134	136	139	142	144	144	142	139	136	136	134	136
2*	134	134	134	134	136	136	142	144	144	142	134	129	126	131	129	134	139	142	139	139	139	136	136	134	136
3*	134	134	131	131	134	136	136	142	139	134	126	121	123	129	129	134	136	136	134	134	134	134	131	131	133
4	129	129	129	126	129	129	131	134	129	123	118	121	113	118	123	129	129	129	129	129	126	126	126	123	126
5	121	121	121	121	118	123	123	129	126	118	116	113	117	119	122	130	132	132	130	132	132	130	127	127	124
6	124	124	124	122	122	124	127	132	130	124	122	122	122	122	124	130	130	132	132	132	132	135	132	130	127
7	130	130	127	127	127	124	124	124	127	124	124	124	125	131	136	138	138	136	136	133	136	136	136	133	130
8	133	131	133	131	131	125	128	126	126	126	131	125	128	133	138	146	146	144	141	141	138	138	138	136	134
9	136	133	133	131	131	136	136	141	136	131	125	125	129	134	139	147	150	150	147	147	145	145	145	142	138
10	137	137	137	137	139	142	145	147	145	139	129	126	132	137	142	145	152	150	152	150	150	152	150	134	142
11	147	147	145	142	142	137	132	142	139	137	132	132	138	143	153	164	164	164	161	158	156	153	153	151	147
12	151	151	148	148	148	151	153	158	158	156	153	148	148	153	156	164	164	161	161	161	164	164	158	156	156
13	153	153	153	153	156	158	158	164	164	158	153	151	149	152	154	162	162	159	159	159	159	157	154	152	156
14	152	152	152	152	—	—	—	—	—	149	144	139	145	148	150	155	155	150	153	153	155	155	145	142	—
15**	143	143	146	143	141	141	143	146	149	149	146	146	147	157	175	183	196	204	194	183	162	147	142	111	156
16**	111	126	129	116	124	137	137	147	152	152	152	155	169	179	190	205	213	190	180	153	140	120	107	89	149
17**	69	61	59	61	69	81	102	122	132	143	138	135	139	152	157	157	159	154	152	149	149	144	133	123	123
18**	129	129	129	127	127	127	132	132	129	132	134	134	138	141	148	151	154	154	148	146	143	125	130	135	136
19**	135	135	135	135	133	138	141	146	146	138	130	133	136	144	147	147	147	147	149	152	149	147	144	144	142
20	145	143	145	143	143	143	145	148	148	143	137	137	138	144	149	151	149	149	149	149	146	146	141	141	145
21	141	138	141	141	141	141	141	143	149	143	141	138	142	145	144	150	144	145	145	145	144	145	145	142	143
22	143	140	140	146	146	146	145	153	153	145	140	140	144	147	152	154	154	154	152	146	146	147	147	144	147
23*	142	145	148	145	145	148	145	147	148	142	137	137	141	146	149	148	149	146	146	144	141	141	144	141	144
24*	141	141	141	141	141	141	138	143	141	131	138	131	139	142	144	144	144	144	144	142	142	139	139	139	140
25	137	137	137	134	134	137	139	142	142	137	129	126	130	135	138	140	138	140	135	135	135	135	135	135	136
26	133	133	127	127	130	133	135	135	135	130	127	127	130	133	138	140	140	140	140	135	135	133	133	133	133
27	130	130	130	130	130	127	130	133	135	127	125	123	128	131	136	139	139	141	139	139	136	136	136	131	133
28	131	131	131	131	131	131	131	131	128	126	126	126	128	131	136	136	134	134	131	131	131	131	131	128	131
29	128	126	126	126	128	128	131	134	134	131	126	126	132	135	137	140	137	137	135	132	132	132	129	127	131
30*	127	129	127	127	127	127	132	135	132	127	125	127	127	129	132	132	132	135	132	132	132	129	127	127	130
31	125	125	125	125	127	127	132	132	129	122	119	119	120	123	128	130	133	133	133	133	133	130	128	128	127
Mean	132	132	132	131	132	134	136	140	139	135	130	131	134	138	143	147	148	148	146	144	142	139	137	133	138
Mean*	136	137	136	136	137	138	139	142	141	135	132	129	131	135	137	138	140	141	139	138	138	136	135	134	137
Mean**	117	119	120	116	119	125	131	139	142	143	140	141	146	155	163	169	174	171	165	157	149	137	131	120	141

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

	0h	1h	2h	3h	4h	5h	6h	7h	8h	9h	10h	11h	Noon.	13h	14h	15h	16h	17h	18h	19h	20h	21h	22h	23h	24h	
November.	43000 γ + Tabular Quantities (in γ).																									Mean.
1	126	123	118	123	128	130	133	138	136	133	128	128	133	133	133	133	130	133	133	130	128	128	128	126	130	
2**	123	120	123	123	123	126	128	128	128	123	123	123	128	133	133	133	136	136	133	133	133	130	128	126	128	
3	120	113	113	118	118	123	126	130	128	126	126	126	130	133	133	136	133	133	130	130	128	130	130	128	127	
4	126	126	126	123	123	123	123	123	123	120	118	120	126	128	128	128	128	126	126	126	126	126	126	126	125	
5*	123	120	120	118	120	123	123	123	126	118	115	113	115	118	123	123	126	126	126	123	123	123	123	123	121	
6	120	118	118	118	118	118	120	123	120	118	115	115	114	119	122	122	122	122	122	119	117	117	117	114	120	
7	114	114	114	112	112	114	117	117	117	117	114	112	112	114	122	119	119	122	122	122	119	119	117	112	116	
8	109	112	112	112	112	114	117	117	114	112	109	109	112	117	119	117	119	117	114	114	112	112	112	112	113	
9	112	112	112	109	109	112	112	114	114	112	109	112	111	116	118	118	116	116	113	113	111	111	111	108	112	
10*	108	106	106	108	108	108	108	111	108	106	103	101	106	111	113	111	111	111	111	108	108	108	106	106	108	
11	106	106	106	106	103	103	103	101	101	101	101	103	106	111	111	111	111	113	113	111	111	111	111	108	107	
12**	108	108	111	111	111	116	116	118	116	111	106	111	111	116	118	116	124	126	131	131	128	124	118	118	116	
13	118	116	116	118	121	124	126	128	126	121	118	121	124	126	128	128	131	131	134	131	131	131	131	128	125	
14	126	126	126	126	128	131	131	136	136	131	126	128	133	135	138	138	138	138	138	135	135	135	133	130	132	
15*	130	130	130	130	130	133	135	135	138	135	138	138	135	135	138	135	135	135	135	135	135	135	135	135	134	
16	133	130	130	130	130	133	135	135	133	130	130	130	129	129	129	129	134	137	134	134	132	132	134	134	132	
17	132	126	124	129	129	132	134	132	129	129	129	129	132	134	134	134	134	132	132	134	134	134	132	132	131	
18	132	126	129	126	124	124	126	126	124	124	124	124	123	128	132	128	131	133	133	133	133	133	133	133	132	
19	131	128	128	128	128	131	133	133	133	133	128	133	133	138	138	136	136	136	136	136	136	133	136	136	133	
20*	133	133	133	133	133	136	138	141	138	136	131	136	137	142	142	142	142	140	140	140	140	137	137	137	137	
21	137	137	135	135	135	135	137	137	137	135	132	135	136	141	141	136	136	139	139	139	139	139	136	136	137	
22**	136	136	136	136	136	136	139	139	139	136	131	131	133	138	140	140	140	140	140	140	146	146	146	151	139	
23	147	145	142	142	142	142	142	145	145	142	139	139	138	141	144	144	144	144	144	141	141	141	138	138	142	
24	138	138	138	138	138	138	131	141	138	136	133	136	140	145	145	143	143	143	140	140	140	143	137	137	139	
25*	137	137	137	137	137	137	137	135	135	132	132	137	139	142	147	142	142	142	142	139	139	142	139	136	138	
26	135	133	133	135	135	138	141	141	141	141	135	135	134	140	145	145	147	145	147	145	145	142	142	142	139	
27**	142	140	137	137	140	140	140	137	134	129	129	129	128	133	139	144	146	149	151	154	151	146	146	131	140	
28	128	128	128	133	133	139	139	139	139	136	136	139	139	134	146	146	146	146	144	144	141	141	139	139	139	
29**	136	133	133	133	133	131	133	133	133	133	133	139	138	143	143	143	143	143	140	140	138	138	138	132	137	
30	127	130	125	119	122	127	130	132	130	130	127	130	131	137	137	137	137	137	137	134	134	131	131	131	131	
Mean	126	125	125	125	127	128	130	129	126	124	124	125	127	131	133	132	133	133	133	132	131	130	130	128	129	
Mean*	126	125	125	125	126	127	128	129	129	125	124	125	126	130	133	131	131	131	131	129	129	129	128	127	128	
Mean**	129	127	128	128	129	130	131	131	130	126	124	127	128	133	135	135	138	139	139	140	139	137	134	132	132	
December.	43000 γ + Tabular Quantities (in γ).																									Mean.
1	131	129	126	129	131	131	137	137	134	131	131	131	133	138	136	138	136	136	136	136	136	136	133	130	133	
2*	130	130	130	128	130	130	130	130	128	128	130	130	129	132	135	132	132	132	132	132	132	132	132	129	131	
3	129	127	127	127	127	129	132	132	129	127	124	124	126	131	131	128	134	131	131	134	131	131	128	128	130	
4	126	126	123	123	123	128	128	128	131	128	126	128	133	133	133	135	138	138	135	133	133	138	135	133	131	
5	133	130	127	127	127	125	127	130	127	127	127	130	132	134	134	134	134	132	132	132	132	132	129	126	130	
6	129	126	126	124	124	126	126	124	126	126	124	124	125	131	131	128	128	128	125	125	125	125	125	125	126	
7*	128	125	125	125	123	125	128	128	128	125	123	123	127	135	135	132	130	130	130	127	127	127	127	130	128	
8	130	127	124	124	124	127	130	127	130	130	130	127	129	131	134	134	131	134	129	129	129	129	126	126	129	
9	126	123	126	126	126	123	123	123	123	123	123	123	125	128	133	133	133	138	138	138	146	146	143	141	130	
10	135	133	130	130	128	130	133	133	133	128	128	133	134	134	132	137	137	134	134	134	132	132	132	132	132	
11	129	127	127	127	127	132	132	132	127	124	124	127	127	127	132	134	137	137	134	132	132	132	132	129	130	
12	127	127	127	127	129	132	132	132	129	127	124	127	132	137	137	137	137	140	140	140	137	137	137	134	133	
13	132	134	132	132	137	137	137	140	137	134	134	137	137	137	142	142	145	147	147	147	147	147	147	145	140	
14	142	140	137	137	137	140	142	142	140	137	137	137	140	142	142	147	150	150	150	150	150	147	147	147	143	
15	145	140	140	142	142	145	145	145	142	140	142	137	142	147	147	150	150	147	147	147	150	150	147	147	145	
16	142	140	142	142	142	145	145	142	145	145	142	145	142	142	145	147	147	147	147	147	147	147	147	147	145	
17*	145	142	142	142	142	145	147	147	147	145	142	142	142	147	147	145	147	147	147	145	147	147	147	145	145	
18	145	145	142	142	142	145	147	150	147	147	145	142	142	147	147	147	150	150	147	147	147	147	145	145	146	
19	147	145	142	142	142	142	142	145	142	142	140	140	142	145	147	147	150	150	152	152	150	147	147	147	145	
20	145	142	145	142	145	145	145	147	145	142	140	142	145	145	145	145	147	147	147	147	147	147	147	145	145	
21*	145	145	142	142	142	142	145	145	142	142	140	140	142	142	145	145	147	147	147	145	145	142	142	142	143	
22*	142	140	140	140	140	142	142	142	142	140	137	137	137	137	137	140	142	145	142	140	140	140	137	140		
23**	137	134	134	134	134	134	132	132	132	129	127	127	129	132	134	137	137	134	137	140	147	145	142	137	135	
24**	137	134	132	132	132	134	137	137	132	127	127	127	133	141	143	143	148	151	146	143	143	143	143	138	138	
25**	135	135	133	133	135	135	133	133	133	133	133	138	138	141	143	143	146	143	143	141	143	138	135	133	137	
26**	133	133	128	128	128	128	128	130	130	128	130	133	133	138	148	151	156	156	151	146	143	135	135	135	137	
27**	130	122	125	128	128	130	133	135	138	138	138	138	134	139	144	144	147	144	142	142	136	136	134	134	136	
28	131	129	131	129	131	134	136	136	136	136	136	134	134	136	139	142	142	144	142	142	142	139	134	134	135	
29	134	131	131	129	131	134	134	136	134	134	134	134	131	131	134	139	139	139	139	139	139	139	137	135	135	
30	135	132	135	135	135	135	135	135	135	132	130	135	132	132	135	140	140	140	140	140	140	140	137	135	136	
31	135	132	130	130	132	135	137	140	137	135	137	137	137	140	140	140	143	140	140	140	140	137	135	135	137	
Mean	135	133	132	133	133	134	136	136	135	133	132	133	134	137	139	140	141	141	140	140	140	139	138	136	136	
Mean*	138	136	136	135	135	137	138	138	137	136	134	134	135	139	140	139	140	140	140	138	138	138	138	137	137	
Mean**	134	132	130	131	131	132	133	133	133	131	131	133	133	138	142	144	145	148	144	143	142	139	138	135	137	

TABLE IV.—MONTHLY and ANNUAL MEAN DIURNAL INEQUALITIES of MAGNETIC DECLINATION WEST.
(*The results in each month are diminished by the smallest hourly value.*)

1923.

Greenwich Civil Time. Hour commencing	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	For the Year.
	′	′	′	′	′	′	′	′	′	′	′	′	′
Midnight	1·1	0·8	0·9	2·8	2·1	3·7	2·6	2·0	0·6	1·3	1·0	0·6	1·02
1h.	1·5	0·7	1·0	2·9	2·6	3·6	2·4	2·2	1·3	1·4	1·7	0·8	1·23
2	1·7	1·1	0·7	3·0	2·3	3·5	2·1	2·0	1·1	1·9	1·7	1·6	1·28
3	1·6	1·0	1·0	3·0	1·9	3·4	1·9	1·6	1·4	2·0	1·9	1·9	1·27
4	1·9	0·9	0·9	3·0	1·2	2·0	1·8	1·1	1·3	2·0	2·0	1·9	1·06
5	1·7	0·8	1·1	2·6	0·6	0·9	0·7	0·3	1·3	2·4	1·8	1·6	0·71
6	1·5	1·2	0·6	1·6	0·2	0·5	0·2	0·0	0·6	2·2	1·8	1·4	0·37
7	1·3	1·2	0·2	0·4	0·0	0·0	0·0	0·0	0·0	1·4	1·5	1·3	0·00
8	1·7	0·8	0·0	0·0	0·4	0·5	0·2	0·7	0·2	0·8	1·3	1·1	0·03
9	1·7	1·2	0·7	1·3	1·4	2·0	1·2	2·2	1·4	1·4	1·6	1·4	0·85
10	2·4	2·3	2·7	4·1	3·5	4·5	2·8	4·2	3·1	3·3	2·9	2·2	2·56
11	3·4	3·6	5·0	7·2	5·7	7·1	5·3	6·5	6·0	5·4	3·8	3·1	4·57
Noon	4·4	4·7	7·0	9·5	7·5	9·2	6·9	8·0	7·5	6·7	4·3	3·6	6·00
13h.	4·2	5·0	6·9	10·0	7·6	9·6	7·7	8·1	7·4	6·4	4·0	3·5	6·09
14	3·6	4·5	6·0	9·0	7·3	9·6	7·6	7·2	6·3	5·8	3·3	2·9	5·48
15	3·0	3·2	4·6	7·4	6·3	8·8	6·5	5·7	5·1	4·4	2·9	2·4	4·42
16	2·7	2·6	3·3	6·1	5·4	7·5	5·5	4·4	3·9	2·8	2·8	1·9	3·47
17	2·4	2·0	2·2	5·0	4·6	6·3	4·7	3·5	3·3	2·6	2·5	1·5	2·77
18	1·9	1·3	1·6	4·2	3·5	5·1	4·1	3·2	1·4	2·7	2·1	1·3	2·09
19	1·5	0·9	1·3	3·7	3·1	4·4	3·5	3·1	2·5	1·3	1·6	0·6	1·68
20	0·9	0·0	1·2	2·9	2·8	4·3	3·3	2·5	1·7	1·1	0·9	0·2	1·21
21	0·2	0·1	0·3	2·8	2·6	4·2	3·2	2·4	1·1	0·0	0·1	0·0	0·81
22	0·0	0·0	0·2	2·4	2·8	4·0	3·0	2·4	1·1	0·2	0·0	0·1	0·74
23	0·3	0·0	0·4	3·1	2·2	4·1	2·6	2·1	0·8	1·1	0·3	0·3	0·83
Means	1·94	1·66	2·08	4·08	3·24	4·54	3·33	3·14	2·52	2·53	1·99	1·55	2·11

TABLE V.—DIURNAL RANGE of DECLINATION, on each CIVIL DAY, as deduced from Table I.

1923.

Day of Month.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.
d.	′	′	′	′	′	′	′	′	′	′	′	′
1	2·9	8·2	5·7	10·8	7·8	9·5	7·2	8·7	11·5	4·8	6·4	4·2
2	4·4	6·0	6·0	10·0	7·8	11·5	10·0	7·8	8·5	6·7	17·9	2·2
3	5·7	10·3	7·5	10·5	12.6	—	7·1	12·8	10·9	6·0	7·5	3·5
4	8·2	12·0	7·2	11·4	9·5	—	6·5	7·6	9·1	8·2	3·4	8·6
5	4·4	7·3	4·6	8·8	7·8	—	6·3	7·2	6·5	5·8	3·6	3·3
6	5·4	4·8	4·3	9·2	6·0	11·2	10·1	9·4	7·9	5·1	3·4	4·3
7	3·7	5·1	9·1	10·4	7·0	8·1	8·7	8·9	7·9	6·6	10·3	4·1
8	3·2	4·9	4·2	8·6	7·7	8·7	7·4	7·5	7·7	10·4	5·3	3·1
9	4·7	3·3	4·8	11·2	5·0	9·0	6·1	9·3	12·9	8·6	6·2	8·8
10	4·4	7·7	6·1	10·3	4·5	9·2	12·8	9·5	11·0	9·6	5·0	8·5
11	4·8	4·9	5·0	11·8	5·8	9·7	7·8	7·3	12·2	8·8	4·2	5·2
12	4·7	2·3	5·3	9·8	7·2	8·5	9·0	9·0	8·5	10·2	10·6	2·8
13	11·5	3·8	7·3	17·6	9·3	16·5	6·4	12·5	9·6	8·0	9·2	6·2
14	3·7	8·2	10·5	12·0	10·4	9·8	8·4	9·3	7·8	11·6	4·6	5·5
15	4·5	4·0	8·4	11·7	7·8	10·6	8·4	10·3	7·5	19·9	3·4	4·6
16	6·3	6·0	10·4	13·0	7·1	11·5	8·2	8·4	8·9	25·6	3·9	3·4
17	4·5	8·2	8·2	11·6	13·9	9·9	7·5	7·4	7·8	14·5	2·8	2·0
18	4·0	4·1	9·2	11·2	10·8	10·6	10·4	7·8	6·9	14·7	2·3	3·4
19	3·9	5·8	8·8	12·5	9·0	12·0	6·8	7·0	6·2	9·2	3·4	3·3
20	13·3	5·1	7·9	11·0	9·8	10·7	8·4	8·4	6·7	6·2	4·1	3·3
21	8·0	5·3	11·2	13·4	8·7	9·3	7·8	7·5	5·4	6·3	3·0	3·4
22	8·6	7·0	11·5	—	8·1	7·8	8·4	7·1	9·5	6·2	8·2	2·8
23	6·2	5·5	9·7	—	7·6	5·5	15·2	8·4	—	4·8	7·1	6·5
24	4·9	4·8	30·6	9·2	—	—	7·1	10·8	—	7·5	4·1	7·1
25	4·3	14·8	16·9	6·1	10·3	7·0	7·5	10·6	5·6	6·4	3·7	5·0
26	4·5	10·1	10·0	7·1	5·8	12·6	7·2	6·6	26·6	7·1	5·6	14·4
27	3·9	14·2	9·9	7·5	8·8	9·4	12·0	11·1	27·4	8·1	7·7	7·2
28	4·5	9·5	9·7	9·0	6·8	12·6	7·6	11·0	9·0	5·2	8·4	6·4
29	9·9		10·3	10·4	13·4	10·9	9·4	8·3	7·0	5·9	6·8	3·1
30	7·3		8·4	11·0	14·6	19·1	9·0	8·9	5·9	5·5	3·4	4·7
31	5·2		9·4		9·9		9·4	8·0		12·0		3·2
Means	5·7	6·9	9·0	10·6	8·7	10·4	8·5	8·9	9·7	8·9	5·9	5·0

The mean of the twelve monthly values is 7′·43.

TABLE VI.—MONTHLY and ANNUAL DIURNAL INEQUALITIES of MAGNETIC DECLINATION WEST from HOURLY ORDINATES, on FIVE SELECTED QUIET DAYS in each MONTH.

Each result is the mean of the corresponding hourly ordinates from the photographic registers, on (in general) five quiet days in each month, selected by the International Committee for comparison with results at other Observatories. The results in each case are diminished by the smallest hourly value. The days included are :—

January 7, 8, 18, 19, 27.	April 2, 5, 17, 26, 27.	July 5, 14, 15, 21, 24.	October 2, 3, 23, 24, 30.
February 9, 12, 13, 21, 23.	May 1, 12, 13, 22.	August 1, 18, 21, 28, 29.	November 5, 10, 15, 20, 25.
March 8, 9, 10, 11, 23.	June 9, 10, 17, 18.	September 7, 8, 16, 21, 22.	December 2, 7, 17, 21, 22.

1923.

Greenwich Civil Time. Hour commencing	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	For the Year.
	′	′	′	′	′	′	′	′	′	′	′	′	′
Midnight	0·3	0·8	1·7	3·3	3·6	4·4	3·1	2·2	2·3	1·5	0·8	0·4	1·88
1h.	0·7	0·8	1·6	3·2	3·4	4·6	2·8	2·1	2·3	1·8	0·9	0·6	1·92
2	0·8	1·0	1·5	3·1	3·3	3·9	2·6	2·0	2·2	1·9	1·2	0·6	1·86
3	1·2	0·9	1·6	3·1	2·8	3·3	2·4	2·0	2·1	1·7	1·4	1·0	1·81
4	1·2	0·9	1·5	2·8	2·1	2·6	1·6	1·4	1·8	1·7	1·3	0·9	1·50
5	1·1	0·7	1·3	2·4	1·2	1·2	0·5	0·5	1·6	1·5	0·8	0·7	0·98
6	0·8	0·4	1·2	1·8	0·4	0·6	0·2	0·0	0·9	1·2	0·5	0·6	0·57
7	0·5	0·4	0·6	0·4	0·0	0·0	0·0	0·1	0·2	0·7	0·1	0·1	0·11
8	0·2	0·0	0·0	0·0	0·3	0·1	0·5	0·6	0·0	0·0	0·0	0·1	0·00
9	0·5	0·2	0·3	1·4	0·9	1·4	1·4	2·0	1·2	0·9	0·6	0·4	0·79
10	1·4	1·3	1·7	4·1	3·3	4·4	3·3	4·3	3·0	3·4	1·7	1·1	2·60
11	2·3	2·7	3·8	6·9	5·7	6·8	5·2	6·9	6·1	4·9	3·0	2·0	4·54
Noon.	3·0	3·6	5·6	8·8	7·6	8·7	6·5	8·2	7·5	5·5	3·4	2·4	5·75
13h.	3·1	3·8	5·9	8·9	7·7	9·4	7·1	8·1	7·4	5·6	2·9	2·1	5·85
14	2·4	3·2	5·2	7·7	7·0	9·2	6·6	7·1	6·5	4·6	2·1	1·5	5·11
15	2·0	1·9	3·7	6·3	5·6	8·2	5·4	5·4	5·0	3·8	1·8	1·3	4·05
16	1·8	1·4	2·5	5·4	4·8	6·7	4·6	4·1	2·7	2·7	1·7	0·9	3·13
17	1·5	1·5	2·3	4·8	4·5	5·4	4·0	3·4	2·5	2·6	1·2	0·7	2·72
18	1·3	1·4	2·5	4·2	4·1	4·6	3·6	3·2	3·3	2·5	0·9	0·5	2·53
19	0·9	1·1	2·2	3·9	3·7	4·1	3·5	3·2	2·8	2·3	0·7	0·3	2·24
20	0·4	0·9	2·0	3·9	3·2	4·2	3·5	3·0	2·7	2·0	0·3	0·1	2·03
21	0·0	0·7	1·9	3·6	3·5	4·3	3·4	3·0	2·5	1·9	0·1	0·0	1·93
22	0·2	0·7	0·9	3·4	3·7	4·6	3·3	2·9	2·4	1·8	0·3	0·0	1·87
23	0·4	0·5	0·7	3·4	3·5	4·7	3·1	2·4	2·5	1·6	0·1	0·1	1·77
Means	1·17	1·28	2·18	4·03	3·58	4·48	3·26	3·26	2·98	2·42	1·15	0·77	2·40

TABLE VII.—MONTHLY and ANNUAL DIURNAL INEQUALITIES of MAGNETIC DECLINATION WEST from HOURLY ORDINATES, on FIVE SELECTED DISTURBED DAYS in each MONTH.

Each result is the mean of the corresponding hourly ordinates from the photographic registers, on (in general) five disturbed days in each month, selected by the International Committee for comparison with results at other Observatories. The results in each case are diminished by the smallest hourly value. The days included are :—

January 13, 20, 21, 29, 30.	April 12, 13, 21.	July 7, 10, 11, 18, 23.	October 15, 16, 17, 18, 19.
February 17, 25, 26, 27, 28.	May 3, 17, 18, 29, 30.	August 3, 4, 6, 13, 24.	November 2, 12, 22, 27, 29.
March 15, 24, 25, 26, 27.	June 13, 14, 21, 30.	September 9, 10, 26, 27, 28.	December 23, 24, 25, 26, 27.

1923.

Greenwich Civil Time. Hour commencing	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	For the Year.
	′	′	′	′	′	′	′	′	′	′	′	′	′
Midnight	2·7	3·0	2·3	4·3	2·8	2·9	2·2	3·0	1·6	5·4	3·6	2·6	1·65
1h.	3·8	2.6	3·1	4·7	4·3	2·5	1·8	3·0	4·7	6·2	3·8	3·8	2·31
2	4·5	2·7	2·1	5·7	3·4	3·0	1·1	3·0	4·0	7·2	4·1	4·2	2·37
3	3·2	1·5	2·9	4·0	1·5	3·7	0·6	2·7	5·7	9·7	4·8	4·6	2·36
4	3·7	1·9	3·0	5·6	1·4	0·6	2·4	1·7	6·2	9·6	4·6	5·1	2·44
5	4·0	1·7	3·3	4·5	0·3	0·0	1·0	2·7	7·8	11·4	4·9	4·2	2·44
6	4·0	3·4	2·8	2·6	0·2	0·7	0·0	0·0	6·1	12·0	6·1	4·3	2·14
7	4·2	3·8	2·5	1·6	0·0	0·8	0·5	0·7	5·6	12·3	5·9	4·0	2·11
8	3·5	4·1	2·6	1·2	1·5	1·3	0·6	2·8	5·7	9·2	5·0	3·6	2·05
9	3·3	5·4	3·7	2·1	3·3	3·3	1·5	4·3	6·5	9·7	5·0	3·9	2·95
10	3·8	6·5	6·2	5·6	5·2	5·5	3·3	6·2	9·0	10·2	6·0	4·8	4·65
11	5·3	7·1	9·1	8·6	8·1	8·2	7·0	8·5	12·2	12·1	6·1	5·4	6·76
Noon.	6·5	8·2	11·8	11·3	10·4	10·6	8·6	9·7	13·5	13·7	6·9	6·5	7·43
13h.	6·5	7·9	11·3	12·0	10·8	12·4	9·7	9·5	12·9	14·1	6·8	5·9	8·60
14	6·4	6·7	10·0	12·3	11·1	12·9	9·5	8·7	11·8	13·2	6·7	4·9	8·14
15	5·6	4·7	9·0	9·8	10·2	11·1	8·1	7·4	10·9	11·7	6·3	4·3	6·88
16	5·3	4·5	8·0	7·7	8·5	10·0	7·0	6·0	9·6	6·4	5·9	3·9	5·52
17	5·4	1·7	4·1	5·1	6·7	9·4	6·2	5·2	8·4	6·2	5·9	3·5	4·27
18	3·2	1·4	1·7	5·2	3·6	5·7	4·9	5·0	4·1	8·2	5·0	3·5	2·91
19	2·9	1·6	2·8	4·7	3·2	4·5	4·3	4·2	5·4	2·4	4·1	0·8	2·03
20	2·1	0·0	2·5	2·2	2·6	4·6	3·9	1·9	3·9	3·1	2·4	0·0	1·06
21	0·2	0·9	0·0	1·5	2·1	3·2	3·4	1·7	2·4	0·0	0·0	1·1	0·00
22	0·1	0·5	0·4	0·0	3·0	2·8	4·1	1·9	3·0	4·7	0·4	1·7	0·50
23	0·0	0·2	1·9	3·0	1·5	3·3	2·4	2·3	0·0	6·4	0·9	2·1	0·62
Means	3·76	3·42	4·46	5·22	4·40	5·13	3·92	4·26	6·71	8·55	4·63	3·70	3·42

TABLE VIII.—MONTHLY and ANNUAL MEAN DIURNAL INEQUALITIES of MAGNETIC NORTH FORCE.

(The results are expressed in C.G.S. units and in each case diminished by the smallest hourly value.)

1923.

Greenwich Civil Time. Hour commencing	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	For the Year.
Midnight	7γ	13γ	20γ	30γ	22γ	32γ	24γ	30γ	30γ	24γ	11γ	7γ	20·6γ
1h.	6	13	20	29	19	30	24	28	27	25	11	7	19·7
2	7	14	19	27	20	29	22	28	30	25	11	7	19·7
3	7	15	18	26	20	29	21	28	27	24	13	7	19·4
4	10	16	20	27	20	31	22	28	29	25	14	10	20·8
5	12	19	22	30	21	31	23	29	28	26	17	12	22·3
6	14	20	23	31	19	27	21	26	25	26	17	13	21·6
7	14	20	22	27	15	22	17	19	21	25	17	14	19·2
8	11	15	16	20	11	17	12	11	15	15	11	11	13·6
9	6	7	9	10	5	9	7	4	8	6	6	7	6·8
10	2	3	3	2	1	3	2	0	1	1	2	2	1·6
11	0	0	0	0	0	0	0	2	0	0	0	0	0·0
Noon	2	0	1	3	2	3	2	7	4	1	2	0	2·1
13h.	4	3	3	7	4	7	5	10	9	4	4	1	4·9
14	6	5	8	12	9	15	10	15	15	8	6	3	9·1
15	5	7	12	17	12	19	15	20	17	11	7	3	11·9
16	6	8	12	23	19	25	19	24	22	15	8	3	15·1
17	6	12	16	28	25	31	22	27	25	19	10	5	18·6
18	7	13	18	29	28	35	27	30	28	22	11	6	21·0
19	8	13	19	31	26	36	29	32	29	23	12	6	21·8
20	8	15	21	32	25	36	27	32	29	24	12	6	22·1
21	9	16	24	32	24	35	26	31	30	24	13	7	22·4
22	9	15	23	33	24	33	26	30	32	24	13	6	22·1
23	9	14	23	30	25	33	26	30	30	23	13	7	21·7
Means	7·3	11·5	15·5	22·3	16·5	23·7	17·9	21·7	21·3	17·5	10·1	6·3	15·8

TABLE IX.—DIURNAL RANGE of MAGNETIC NORTH FORCE, on each CIVIL DAY, as deduced from Table II.

(The results are corrected for Temperature and are expressed in C.G.S. units.)

1923.

Day of Month.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.
d.												
1	20γ	25γ	14γ	32γ	26γ	38γ	39γ	—γ	37γ	33γ	27γ	16γ
2	20	14	18	31	36	39	46	49	43	26	60	10
3	19	33	20	48	36	—	23	70	48	29	35	12
4	19	35	24	48	27	—	32	53	38	29	21	49
5	15	18	13	32	31	—	24	31	25	25	17	14
6	18	22	17	36	18	41	42	31	28	23	17	18
7	12	37	36	44	31	30	34	32	30	41	34	22
8	13	29	20	29	46	35	33	35	25	60	31	23
9	18	16	20	45	22	28	43	35	67	36	25	42
10	37	50	19	45	23	30	51	27	53	20	26	26
11	23	19	19	49	27	42	60	36	45	43	20	19
12	11	19	14	45	23	60	29	52	35	37	20	16
13	25	19	20	69	30	71	25	53	34	49	26	25
14	18	24	34	41	—	72	23	47	43	59	30	32
15	17	24	39	39	—	47	36	43	22	92	24	15
16	26	26	48	37	35	46	30	44	30	87	21	12
17	22	22	24	49	41	33	32	44	38	61	10	10
18	11	51	43	38	67	53	46	41	41	66	11	18
19	15	23	45	42	50	45	49	40	39	23	11	22
20	31	28	37	47	46	41	35	40	37	40	14	9
21	35	24	41	58	34	65	37	24	24	28	9	19
22	30	31	36	—	44	41	45	38	43	32	29	8
23	55	28	30	—	—	31	70	34	32	20	20	40
24	24	22	99	54	—	—	26	50	—	25	10	50
25	24	69	68	23	24	36	30	26	18	23	11	33
26	14	59	60	36	31	36	24	16	77	40	16	51
27	16	38	54	24	27	60	39	38	119	35	64	50
28	24	19	59	32	23	55	20	40	41	35	25	30
29	39		34	42	43	48	29	38	38	29	43	16
30	38		31	35	60	59	24	47	39	27	40	8
31	26		31		47		37	60		35		15
Means	23·1	29·4	34·4	41·1	35·1	45·5	35·9	40·3	41·0	38·9	24·9	23·5

The mean of the twelve monthly values is 34·4γ

TABLE X.—MONTHLY and ANNUAL MEAN DIURNAL INEQUALITIES of MAGNETIC NORTH FORCE from HOURLY ORDINATES, on SELECTED QUIET DAYS in each MONTH.

Each result is the mean of the corresponding hourly ordinates from the photographic registers, on (in general) five quiet days in each month, selected by the International Committee for comparison with results at other Observatories. The results in each case are diminished by the smallest hourly value. The days included are :—

January	7, 8, 18, 19, 27.	April	2, 5, 17, 26, 27.	July	5, 14, 15, 21, 24.	October	2, 3, 23, 24, 30.
February	9, 12, 13, 21, 23.	May	1, 12, 13, 22.	August	18, 21, 28, 29.	November	5, 10, 15, 20, 25.
March	8, 9, 10, 11, 23.	June	9, 10, 17, 18.	September	7, 8, 16, 21, 22.	December	2, 7, 17, 21, 22.

1923.

Greenwich Civil Time. Hour commencing	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	For the Year.
Midnight	6γ	12γ	12γ	27γ	23γ	26γ	19γ	27γ	26γ	18γ	10γ	3γ	17·3γ
1h.	4	11	12	24	20	25	19	26	25	18	10	3	16·3
2	5	11	12	24	20	26	18	26	25	19	10	4	16·6
3	5	11	13	24	21	26	19	26	25	20	11	6	17·2
4	8	12	15	26	20	27	19	27	25	20	14	7	18·2
5	9	14	16	27	21	28	19	28	26	20	15	8	19·2
6	11	18	19	27	22	25	18	28	27	22	16	8	20·0
7	12	19	20	23	21	21	14	24	25	19	15	9	18·4
8	10	13	16	17	14	15	8	14	19	14	11	8	13·2
9	5	6	10	8	9	9	5	6	10	6	6	6	7·1
10	3	2	3	1	2	2	0	0	1	0	2	2	1·4
11	0	0	0	0	0	0	1	0	0	0	0	0	0·0
Noon	3	1	0	4	2	0	4	7	5	3	1	0	2·4
13h.	5	5	2	8	5	4	6	12	9	8	4	1	5·7
14	7	8	6	15	10	11	10	17	12	10	6	3	9·5
15	7	10	8	21	15	19	13	24	14	12	7	3	12·7
16	7	12	9	25	20	23	16	29	19	16	9	5	15·7
17	8	15	12	27	23	28	20	31	24	21	12	7	18·9
18	9	16	14	30	28	32	24	32	25	22	13	8	21·0
19	9	17	15	29	27	33	28	33	28	23	13	7	21·7
20	9	17	16	28	27	32	27	34	27	23	12	7	21·5
21	8	15	16	27	26	33	26	33	28	23	12	7	21·1
22	8	14	16	28	25	31	25	32	28	23	12	6	20·6
23	7	14	16	27	26	30	24	32	27	22	13	4	20·1
Means	6·9	11·4	11.6	20·7	17·8	21·1	15·9	22·8	20·0	15·9	9·8	5·1	14·8

TABLE XI.—MONTHLY and ANNUAL MEAN DIURNAL INEQUALITIES of MAGNETIC NORTH FORCE from HOURLY ORDINATES, on SELECTED DISTURBED DAYS in each MONTH.

Each result is the mean of the corresponding hourly ordinates from the photographic registers, on (in general) five disturbed days in each month, selected by the International Committee for comparison with results at other Observatories. The results in each case are diminished by the smallest hourly value. The days included are :—

January	13, 20, 21, 29, 30.	April	12, 13, 21,	July	7, 10, 11, 18, 23.	October	15, 16, 17, 18, 19.
February	17, 25, 26, 27, 28.	May	3, 17, 18, 29, 30.	August	3, 4, 6, 13, 24.	November	2, 12, 22, 27, 29.
March	15, 24, 25, 26, 27.	June	13, 14, 21, 30.	September	9, 10, 26, 27, 28.	December	23, 24, 25, 26, 27.

1923.

Greenwich Civil Time. Hour commencing	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	For the Year.
Midnight	8γ	17γ	37γ	36γ	27γ	49γ	38γ	35γ	39γ	40γ	15γ	21γ	27·5γ
1h.	8	18	42	36	20	47	36	36	35	42	15	19	36·8
2	12	24	40	35	27	42	32	37	51	37	16	19	18·3
3	10	22	35	34	32	43	30	37	37	33	18	16	26·2
4	14	18	32	28	27	49	30	40	42	35	20	19	26·8
5	15	24	34	41	25	47	30	41	34	27	25	24	27·9
6	18	20	35	41	19	34	26	33	29	34	20	22	24·9
7	21	23	28	33	12	24	19	22	24	34	23	25	21·3
8	18	14	23	25	4	19	13	14	17	19	15	25	14·5
9	13	0	13	17	0	10	10	9	11	7	7	20	7·1
10	8	0	3	11	1	0	5	2	1	11	1	7	1·5
11	4	4	0	0	1	1	4	0	0	11	0	7	0·0
Noon	4	7	1	1	2	10	0	9	1	2	1	5	0·9
13h.	5	4	6	10	5	7	6	12	7	0	1	4	2·9
14	8	5	15	17	12	18	8	15	19	1	3	7	8·0
15	5	7	28	15	5	19	18	16	20	4	2	2	9·1
16	7	9	22	24	17	30	24	23	23	10	1	0	13·1
17	1	17	33	36	32	39	30	30	26	14	2	6	19·5
18	0	14	27	37	35	39	38	35	34	11	2	9	20·7
19	8	10	30	40	24	41	36	35	30	24	3	10	21·6
20	7	14	34	44	26	41	32	35	31	33	5	14	23·6
21	9	23	49	45	28	46	30	37	41	27	14	19	28·0
22	8	20	41	47	28	40	31	34	48	22	7	13	25·6
23	12	17	43	35	33	39	29	30	40	24	8	18	24·6
Means	9·3	13·8	27·1	28.7	18·4	30·6	23·1	25·7	26·7	20·9	9·4	13·8	17·9

TABLE XII.—MONTHLY and ANNUAL MEAN DIURNAL INEQUALITIES of VERTICAL MAGNETIC FORCE.

(The results are expressed in C.G.S. units, and in each case diminished by the smallest hourly value.)

1923.

Greenwich Civil Time. Hour commencing	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	For the Year.
Midnight	3γ	4γ	11γ	14γ	15γ	15γ	10γ	10γ	6γ	2γ	2γ	3γ	7·6γ
1h.	2	3	8	13	14	14	9	10	6	2	1	1	6·6
2	2	2	8	14	13	14	9	10	5	2	1	0	6·4
3	2	2	8	14	15	14	10	11	7	1	1	1	6·9
4	1	3	9	15	17	17	12	12	8	2	1	1	7·9
5	2	4	10	16	18	19	14	14	10	4	3	2	9·4
6	4	5	11	19	18	20	15	15	13	6	4	4	11·0
7	5	7	14	21	16	19	14	16	14	10	6	4	11·8
8	4	6	13	16	13	15	11	12	11	9	5	3	9·5
9	2	3	9	9	11	9	7	6	10	5	2	1	5·9
10	1	1	3	3	3	4	3	3	2	0	0	0	1·6
11	0	0	0	0	0	0	0	0	0	1	1	1	0·0
Noon	1	0	2	2	3	5	2	1	1	4	3	2	1·9
13h.	5	3	7	8	7	10	6	5	6	8	7	5	6·1
14	8	7	9	15	15	16	10	12	11	13	9	7	10·7
15	8	10	18	19	20	22	14	17	16	17	8	8	14·5
16	9	12	20	22	24	27	17	19	18	18	9	9	16·7
17	10	13	22	23	28	29	19	19	19	18	9	9	17·9
18	10	13	21	24	28	29	19	18	19	16	9	8	17·6
19	9	12	20	23	26	26	18	17	18	14	8	8	16·3
20	8	11	19	21	23	23	17	15	17	12	7	8	14·8
21	8	9	17	19	21	20	14	14	16	9	7	7	13·1
22	7	8	15	18	19	17	12	12	12	7	6	6	11·3
23	5	5	13	16	17	16	11	11	10	3	4	4	9·3
Means	4·8	6·0	12·0	15·2	16·0	16·7	11·4	11·6	10·6	7·6	4·7	4·3	9·8

TABLE XIII.—DIURNAL RANGE of VERTICAL MAGNETIC FORCE, on each CIVIL DAY, as deduced from Table III.

(The results are corrected for Temperature and expressed in C.G.S. units.)

1923.

Day of Month.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.
d.												
1	8γ	15γ	15γ	18γ	27γ	35γ	17γ	29γ	27γ	15γ	20γ	12γ
2	13	11	21	18	28	36	35	21	19	16	16	7
3	10	16	15	18	35	24	22	28	31	21	23	10
4	21	16	18	23	25	32	22	24	26	16	10	15
5	13	13	11	25	32	33	38	17	23	19	13	9
6	11	10	21	31	27	38	23	15	—	13	8	7
7	11	16	26	30	23	32	33	23	—	14	10	12
8	13	13	13	25	27	22	16	—	19	21	10	10
9	16	8	13	23	19	31	27	—	22	25	10	23
10	18	19	13	28	23	20	43	—	24	26	10	9
11	8	5	18	21	24	24	28	14	23	32	12	13
12	13	10	16	23	28	24	19	22	23	16	25	16
13	16	10	23	26	21	73	18	24	20	15	18	15
14	16	10	18	31	37	42	23	26	28	—	12	13
15	11	10	16	20	31	29	26	34	23	93	8	13
16	10	19	28	28	16	32	27	29	20	124	8	7
17	13	10	15	29	58	27	26	36	20	100	10	5
18	11	21	23	39	54	39	31	15	15	29	10	8
19	8	16	26	25	32	30	34	14	22	22	10	12
20	23	18	23	39	36	27	29	14	16	14	11	7
21	26	15	34	36	32	24	15	22	15	12	9	7
22	15	18	23	39	34	26	18	27	15	14	20	8
23	23	16	24	47	32	16	35	20	24	12	9	20
24	11	16	99	23	—	15	13	27	18	13	12	24
25	13	44	75	20	33	19	24	30	17	14	15	13
26	10	47	42	18	24	34	16	20	41	13	14	28
27	7	42	50	26	29	42	20	21	124	18	26	25
28	13	29	27	18	21	34	17	26	55	10	18	15
29	15		21	24	63	27	26	15	21	14	12	10
30	23		23	31	57	81	31	22	26	10	18	10
31	13		27		27		33	29		14		13
Means	13·9	17·6	26·4	26·7	31·8	32·2	25·3	23·0	27·0	25·8	13·6	12·8

The mean of the twelve monthly values is 23·0 γ.

TABLE XIV.—MONTHLY and ANNUAL MEAN DIURNAL INEQUALITIES of VERTICAL MAGNETIC FORCE from HOURLY ORDINATES, on SELECTED QUIET DAYS in each MONTH.

Each result is the mean of the corresponding hourly ordinates from the photographic registers on (in general) five quiet days in each month, selected by the International Committee for comparison with results at other Observatories. The results in each case are diminished by the smallest hourly value. The days included are :—

January	7, 8, 18, 19, 27.	April	2, 5, 17, 26, 27.	July	5, 14, 15, 21, 24.	October	2, 3, 23, 24, 30.
February	9, 12, 13, 21, 23.	May	1, 12, 13, 22.	August	1, 18, 21, 28, 29.	November	5, 10, 15, 20, 25.
March	8, 9. 10, 11, 23.	June	9, 10, 17, 18, 24.	September	8, 16, 21, 22.	December	2, 7, 17, 21, 22.

1923.

Greenwich Civil Time. Hour commencing	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	For the Year.
Midnight	3γ	5γ	11γ	15γ	18γ	19γ	11γ	9γ	7γ	7γ	2γ	4γ	9·2γ
1h.	3	3	10	16	18	18	12	10	8	8	1	2	9·0
2	2	3	9	16	21	18	11	10	8	7	1	2	8·9
3	2	4	9	16	21	19	12	12	9	7	1	1	9·3
4	2	4	10	16	22	21	14	14	8	8	2	1	10·1
5	5	5	11	17	23	22	16	15	10	9	3	3	11·5
6	5	6	12	19	21	23	17	19	13	10	4	4	12·7
7	6	9	13	20	20	21	16	18	15	13	5	4	13·2
8	5	10	11	15	16	18	11	14	12	12	5	3	10·9
9	4	7	7	6	11	14	6	6	7	6	1	2	6·3
10	2	2	1	0	4	6	1	4	2	3	0	0	2·0
11	0	0	0	0	0	0	0	0	0	0	1	0	0·0
Noon	1	1	1	2	3	3	2	1	0	2	2	1	1·5
13h.	5	3	6	8	8	9	7	3	4	6	6	5	5·7
14	6	6	8	14	17	14	12	10	7	8	9	6	9·7
15	7	8	13	18	20	18	14	14	13	9	7	5	12·1
16	7	8	15	21	22	22	15	16	12	11	7	6	13·4
17	7	7	13	21	25	24	17	17	13	12	7	6	14·0
18	8	7	14	20	26	23	16	16	13	10	7	6	13·7
19	7	7	14	19	25	21	15	11	14	9	5	4	12·5
20	5	6	13	17	25	21	15	14	13	9	5	4	12·2
21	5	5	13	16	22	18	12	12	13	7	5	4	10·9
22	5	5	11	16	21	16	13	11	12	6	4	4	10·2
23	3	4	11	16	20	15	13	10	10	5	3	3	9·3
Means	4·4	5·2	9·8	14·3	17·9	16·8	11·6	11·1	9·3	7·7	3·9	3·4	9·5

TABLE XV.—MONTHLY and ANNUAL MEAN DIURNAL INEQUALITIES of VERTICAL MAGNETIC FORCE from HOURLY ORDINATES, on SELECTED DISTURBED DAYS in each MONTH.

Each result is the mean of the corresponding hourly ordinates from the photographic registers, on (in general) five disturbed days in each month, selected by the International Committee for comparison with results at other Observatories. The results in each case are diminished by the smallest hourly value. The days included are :—

January	13, 20, 21, 29, 30.	April	12, 13, 21, 22, 23.	July	7, 10, 11, 18, 23.	October	15, 16, 17, 18, 19.
February	17, 25, 26, 27, 28.	May	3, 17, 18, 29, 30.	August	3, 4, 6, 13, 24.	November	2, 12, 22, 27, 29.
March	15, 24, 25, 26, 27.	June	4, 13, 14, 21. 30.	September	9, 10, 26, 27, 28.	December	23, 24, 25, 26, 27.

1923.

Greenwich Civil Time. Hour commencing	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December	For the Year.
Midnight	7γ	6γ	12γ	9γ	13γ	10γ	12γ	12γ	8γ	1γ	5γ	4γ	4·2γ
1h.	5	5	4	9	11	8	8	12	4	3	3	2	2·1
2	3	2	0	10	10	4	3	11	0	4	4	0	0·2
3	2	0	0	8	12	2	6	10	4	0	4	1	0·0
4	3	5	3	10	13	6	10	9	6	3	5	1	2·1
5	2	7	7	11	16	10	11	11	7	9	6	2	4·2
6	5	8	12	16	19	13	12	12	11	15	7	3	7·0
7	7	10	15	19	18	14	10	11	18	23	7	3	8·8
8	5	7	15	16	13	8	12	7	17	26	6	3	7·2
9	4	4	12	12	7	2	11	4	15	27	2	1	4·3
10	2	6	6	6	2	0	3	1	14	24	0	1	1·3
11	0	4	3	0	0	0	0	3	13	25	3	3	0·4
Noon	2	6	7	2	5	5	6	2	17	30	4	3	3·3
13h.	8	8	15	9	13	10	12	7	25	39	9	8	9·5
14	11	15	21	18	24	19	17	14	30	47	11	12	15·8
15	11	21	31	23	31	28	18	19	34	53	11	14	20·4
16	12	24	36	27	37	38	20	22	38	58	14	15	24·3
17	14	26	45	30	45	43	25	21	41	55	15	18	27·4
18	17	27	43	30	47	42	28	20	40	49	15	14	26·9
19	16	25	37	27	42	36	26	19	38	41	16	13	23·9
20	14	25	32	25	35	29	27	19	36	33	15	12	21·1
21	14	18	26	19	30	22	20	17	31	21	13	9	15·9
22	14	15	18	16	26	16	16	13	15	15	10	8	11·1
23	10	10	14	12	19	13	14	0	13	4	8	5	6·1
Means	7·8	11·8	17·3	15·2	20·3	15·8	13·6	11·5	19·8	25·2	8·0	6·5	10·3

TABLE XVI.—VALUES of the COEFFICIENTS and PHASE ANGLES in the PERIODICAL EXPRESSION.

$$V_t = m + a_1 \cos t + b_1 \sin t + a_2 \cos 2t + b_2 \sin 2t + a_3 \cos 3t + b_3 \sin 3t + a_4 \cos 4t + b_4 \sin 4t$$
$$= m + c_1 \sin (t + \alpha_1) + c_2 \sin (2t + \alpha_2) + c_3 \sin (3t + \alpha_3) + c_4 \sin (4t + \alpha_4),$$

in which t represents the time from Greenwich mean midnight converted into arc at the rate of 15° to each hour, and V_t the annual or monthly mean hourly value of the magnetic element at time t, as given in Tables IV, VIII and XII.

The coefficients, a, b, c, are given in units of 1γ (0·00001 C.G.S. units) for N.F. and V.F. and in minutes of arc ($1' = 5{\cdot}37\ \gamma$) for Declination.

If the inequalities are expressed relative to time reckoned from apparent midnight, the new phase angles $\alpha'_1, \alpha'_2, \alpha'_3, \alpha'_4$ may be obtained from $\alpha_1, \alpha_2, \alpha_3, \alpha_4$ by adding respectively, α, 2α, 3α, 4α, the value of α for each month being as follows :—

Jan.	+ 2°.19′.	April	+ 0°. 4′.	July	+ 1°.21′.	Oct.	− 3°.28′.
Feb.	+ 3°.29′.	May	− 0°.52′.	Aug.	+ 0°.59′.	Nov.	− 3°.47′.
Mar.	+ 2°.12′.	June	+ 0°. 4′.	Sept.	− 1°.11′.	Dec.	− 1°. 6′.

Month, 1923.	a_1	b_1	a_2	b_2	a_3	b_3	a_4	b_4	c_1	α_1	c_2	α_2	c_3	α_3	c_4	α_4
	DECLINATION WEST.															
	′	′	′	′	′	′	′	′	′	°	′	°	′	°	′	°
January ..	− 1·28	− 0·24	+ 0·18	+ 0·80	− 0·32	+ 0·04	+ 0·17	+ 0·23	1·30	259·4	0·82	12·7	0·31	277·1	0·28	36·5
February .	− 1·64	− 0·49	+ 0·50	+ 0·95	− 0·23	− 0·24	+ 0·18	+ 0·27	1·71	253·4	1·07	27·8	0·33	223·8	0·32	33·7
March	− 2·07	− 1·13	+ 0·95	+ 1·34	− 0·62	− 0·57	+ 0·30	+ 0·31	2·36	241·4	1·64	35·3	0·84	227·4	0·44	44·1
April	− 1·94	− 1·97	+ 1·16	+ 1·98	− 0·87	− 0·71	+ 0·48	+ 0·14	2·76	224·6	2·30	30·4	1·12	230·8	0·50	73·7
May	− 1·57	− 2·09	+ 1·14	+ 1·37	− 0·49	− 0·28	+ 0·09	+ 0·07	2·62	216·9	1·78	39·8	0·57	240·3	0·11	52·1
June	− 1·58	− 2·82	+ 1·43	+ 1·80	− 0·50	− 0·35	+ 0·05	− 0·06	3·23	209·3	2·30	38·5	0·61	235·0	0·08	140·2
July	− 1·28	− 2·29	+ 0·98	+ 1·35	− 0·45	− 0·46	+ 0·08	+ 0·09	2·62	209·2	1·67	36·0	0·64	224·4	0·12	41·6
August ...	− 1·90	− 1·84	+ 1·49	+ 1·11	− 0·69	− 0·28	+ 0·09	+ 0·16	2·65	225·9	1·86	53·3	0·75	247·9	0·18	29·4
September	− 2·12	− 1·37	+ 1·01	+ 1·28	− 0·80	− 0·54	+ 0·23	+ 0·11	2·52	237·1	1·63	38·3	0·96	236·0	0·24	64·5
October ..	− 1·91	− 0·50	+ 0·61	+ 1·28	− 0·62	− 0·39	+ 0·51	+ 0·32	1·97	255·3	1·42	25·5	0·73	237·8	0·60	57·9
November.	− 1·27	− 0·18	+ 0·14	+ 0·78	− 0·41	+ 0·13	+ 0·28	+ 0·15	1·28	261·9	0·79	10·2	0·44	287·6	0·32	61·8
December.	− 1·12	+ 0·09	+ 0·21	+ 0·75	− 0·35	− 0·07	+ 0·13	+ 0·04	1·12	274·6	0·78	15·6	0·36	258·7	0·13	72·9
For the Year	− 1·64	− 1·23	+ 0·82	+ 1·24	− 0·53	− 0·30	+ 0·22	+ 0·15	2·05	233·1	1·49	33·5	0·61	240·5	0·26	55·7
	NORTH FORCE.															
January ..	+ 2·0	+ 1·9	− 2·8	− 1·3	+ 1·5	− 1·8	− 0·1	+ 0·8	2·8	46·5	3·1	245·1	2·4	140·2	0·8	352·9
February..	+ 5·5	+ 2·8	− 4·5	− 1·6	+ 1·5	− 1·5	− 0·2	+ 0·8	6·2	63·0	4·8	250·4	2·1	135·0	0·8	346·0
March	+ 8·8	+ 1·5	− 4·3	− 1·9	+ 2·3	− 1·9	− 0·4	+ 0·6	8·9	80·3	4·7	246·2	3·0	129·6	0·8	326·3
April	+ 12·6	− 0·6	− 6·9	− 1·3	+ 2·7	− 1·7	+ 0·3	+ 1·3	12·6	92·8	7·0	259·3	3·2	122·2	1·3	13·0
May	+ 10·2	− 3·0	− 5·6	− 0·6	+ 0·9	− 0·3	+ 1·2	+ 0·3	10·6	106·4	5·6	263·9	0·9	108·4	1·2	76·0
June	+ 14·1	− 2·8	− 7·3	− 0·4	+ 1·1	− 1·0	+ 0·2	+ 0·6	14·4	101·2	7·3	266·9	1·5	173·7	0·6	18·4
July	+ 11·0	− 2·3	− 5·3	− 0·6	+ 1·0	− 0·6	+ 0·4	+ 0·7	11·2	101·8	5·3	263·5	1·2	121·0	0·8	29·7
August ...	+ 12·6	− 2·9	− 5·8	+ 1·7	+ 0·4	− 2·1	+ 0·8	+ 0·9	12·9	103·0	6·0	286·3	2·1	169·2	1·2	41·6
September	+ 12·6	− 1·2	− 5·4	+ 0·9	+ 1·4	− 1·7	0·0	+ 0·7	12·7	95·4	5·5	279·5	2·2	140·5	0·7	0·0
October ..	+ 10·9	+ 2·1	− 3·8	− 0·3	+ 1·4	− 1·4	+ 0·3	+ 1·5	11·1	79·1	5·9	267·1	2·0	135·0	1·5	11·3
November.	+ 4·3	+ 2·0	− 3·8	− 0·8	+ 1·3	− 1·7	+ 0·1	+ 0·7	4·7	65·1	3·8	258·1	2·1	142·6	0·7	8·1
December.	+ 2·1	+ 3·2	− 2·8	− 1·4	+ 1·4	− 0·8	− 0·1	+ 0·8	3·8	33·3	3·1	243·4	1·6	119·7	0·8	352·9
For the Year	+ 8·8	+ 0·1	− 5·0	− 0·6	+ 1·4	− 1·4	+ 0·2	+ 0·8	8·8	83·5	5·0	263·2	2·0	135·0	0·8	14·0
	VERTICAL FORCE.															
January ..	+ 0·6	− 3·7	− 1·9	− 0·5	+ 1·2	− 0·6	− 0·6	+ 0·3	3·8	170·8	2·0	255·3	1·3	116·6	0·7	296·6
February .	+ 1·1	− 4·1	− 3·4	− 1·1	+ 1·4	− 0·1	− 0·5	+ 0·1	4·3	165·0	3·6	252·1	1·4	94·1	0·5	281·3
March	+ 2·9	− 5·1	− 5·1	− 1·7	+ 2·7	+ 0·1	− 0·8	− 0·1	5·9	150·4	5·4	251·6	2·7	92·1	0·8	262·9
April	+ 4·3	− 3·3	− 6·7	− 0·7	+ 2·9	− 0·9	− 1·0	+ 0·9	5·4	127·5	6·7	264·0	3·0	107·2	1·3	312·0
May	+ 5·1	− 4·9	− 7·3	− 0·4	+ 2·2	− 0·2	− 0·4	− 0·1	7·1	133·9	7·3	266·9	2·2	95·2	0·4	256·0
June	+ 4·0	− 5·0	− 7·7	+ 0·1	+ 2·5	− 0·4	− 0·0	+ 0·7	6·4	141·3	7·7	270·8	2·5	99·1	0·7	360·0
July	+ 3·0	− 2·8	− 5·6	− 0·7	+ 1·6	− 0·5	− 0·1	+ 0·4	4·1	133·0	5·6	262·9	1·7	107·4	0·4	346·0
August ...	+ 2·8	− 2·6	− 5·8	+ 0·1	+ 2·5	− 0·6	− 0·5	+ 0·1	3·8	132·9	5·8	271·0	2·6	103·5	0·5	281·3
September.	+ 1·7	− 4·4	− 5·6	− 1·8	+ 2·3	− 0·7	− 1·2	+ 0·1	4·7	158·9	5·9	252·2	2·4	106·9	1·2	274·8
October ..	− 1·5	− 6·0	− 4·6	− 0·1	+ 2·3	− 0·4	− 1·0	+ 0·7	6·2	194·0	4·6	268·8	2·3	99·9	1·2	305·0
November.	− 0·5	− 3·4	− 1·9	− 0·3	+ 1·2	− 1·2	− 0·4	+ 0·7	3·4	188·4	1·9	261·0	1·7	135·0	0·8	330·2
December.	+ 0·3	− 3·6	− 1·6	− 0·3	+ 1·1	− 0·9	− 0·2	+ 0·3	3·6	175·2	1·6	259·4	1·4	129·3	0·3	326·3
For the Year	+ 2·0	− 4·1	− 4·8	− 0·6	+ 2·0	− 0·5	− 0·6	+ 0·3	4·6	154·0	4·8	262·9	2·1	104·0	0·7	296·6

TABLE XVII.—RESULTS of OBSERVATIONS of MAGNETIC DECLINATION, with DEDUCED VALUES of the BASE-LINE of the DECLINATION MAGNETOGRAMS.

Greenwich Civil Time, 1923.	Declination.	Deduced value of Base-line.	Greenwich Civil Time, 1923.	Declination.	Deduced value of Base-line.	Greenwich Civil Time, 1923.	Declination.	Deduced value of Base-line.
d h m	° ′	° ′	d h m	° ′	° ′	d h m	° ′	° ′
Jan. 2. 12. 0	13. 43·1	13. 58·7	Mar. 16. 11. 0	13. 41·1	13. 58·2	May 5. 10. 16	13. 36·8	13. 59·6
12. 44	43·5	58·9	12. 6	44·5	59·1	10. 59	38·2	59·4
4. 12. 47	42·5	58·3	13. 20	41·2	57·6	7. 9. 52	36·2	59·2
5. 12. 0	42·5	58·7	17. 11. 5	41·2	57·6	8. 10. 8	37·3	59·3
13. 0	42·9	58·9	12. 15	43·2	58·5	10. 42	38·2	59·4
9. 12. 0	42·1	58·1	20. 10. 58	40·7	58·6	10. 10. 37	35·7	59·4
12. 33	43·2	59·1	11. 32	41·4	58·4	11. 15	37·1	59·1
11. 11. 0	42·9	59·1	11. 58	42·2	58·4	11. 10. 16	38·5	59·5
12. 5	43·4	58·5	22. 11. 11	41·2	58·3	11. 47	41·2	14. 0·0
12. 11. 0	42·7	58·2	12. 20	43·6	58·6	12. 11. 12	38·9	13. 59·4
12. 0	44·4	58·7	23. 11. 47	41·6	58·6	11. 50	40·3	59·3
13. 11. 36	42·4	58·9	13. 11	44·2	58·8	15. 9. 50	36·0	59·3
15. 15. 50	41·4	59·0	24. 12. 5	49·5	58·4	10. 21	37·5	59·9
16. 11. 0	41·0	58·0	26. 10. 58	39·5	58·5	16. 11. 7	37·9	59·2
12. 0	42·9	58·7	11. 31	41·4	58·4	12. 0	39·4	59·4
13. 0	42·5	59·4	11. 56	43·7	58·2	17. 10. 0	34·8	58·8
18. 11. 37	42·5	58·4	28. 11. 58	44·2	58·7	12. 5	39·1	58·5
20. 11. 38	43·3	59·1	29. 13. 15	44·9	59·1	18. 11. 7	38·4	59·2
12. 35	43·2	58·8	31. 11. 50	43·2	59·2	23. 10. 30	35·3	59·3
23. 11. 12	42·6	58·6	13. 6	44·0	58·8	12. 4	39·0	59·6
12. 0	43·6	58·4				24. 11. 20	40·6	59·7
25. 11. 52	43·1	58·7	Apr. 3. 16. 0	41·6	59·0	25. 9. 13	32·6	58·9
26. 11. 10	41·6	58·5	4. 11. 3	40·0	59·2	13. 40	41·5	59·5
27. 12. 1	40·7	58·0	11. 37	40·9	59·0	26. 9. 30	34·9	59·2
30. 11. 31	41·2	57·8	12. 5	41·8	59·2	10. 3	35·9	59·3
12. 9	42·3	58·0	6. 11. 7	37·9	58·9	28. 9. 52	33·6	59·4
			13. 8	43·0	59·2	29. 10. 20	37·6	59·4
			15. 5	41·8	59·0	10. 52	39·3	59·3
Feb. 1. 12. 53	43·3	58·3	16. 15	41·1	59·2	11. 19	41·6	59·6
2. 16. 10	40·9	59·0	7. 12. 21	43·7	59·2	19. 20	34·3	59·7
5. 16. 30	43·8	14. 0·0	9. 10. 15	38·2	58·6	30. 14. 6	44·5	59·5
6. 12. 40	41·4	13. 58·9	10. 10. 44	37·7	58·9			
15. 8	40·2	58·6	11. 23	40·4	58·9	June 1. 9. 15	31·9	58·5
7. 12. 57	42·2	58·7	11. 58	41·7	58·7	11. 24	39·0	58·8
8. 11. 23	42·2	58·6	11. 10. 51	42·2	59·7	2. 10. 25	35·0	58·6
12. 20	42·9	58·9	12. 11. 20	40·5	59·2	5. 10. 35	36·2	58·4
9. 10. 38	40·9	58·7	13. 10. 55	41·4	59·7	11. 6	38·3	58·3
13. 7	42·8	59·4	12. 38	43·8	59·3	7. 11. 0	36·5	58·3
12. 11. 7	40·0	58·2	16. 11. 10	38·8	58·8	8. 9. 15	31·0	58·6
13. 10. 46	41·6	59·6	12. 0	43·2	59·2	12. 20	38·1	58·9
11. 22	41·5	58·7	15. 30	42·2	59·2	9. 11. 51	39·5	58·8
14. 11. 27	41·5	58·8	16. 10	40·7	58·7	12. 10. 14	37·2	58·7
16. 11. 15	41·2	58·4	17. 10. 55	40·1	59·1	10. 47	38·2	58·4
13. 0	42·3	58·3	11. 27	42·2	59·0	13. 11. 15	41·0	58·6
16. 18	43·0	59·6	11. 55	43·2	58·9	12. 20	40·8	59·6
20. 10. 46	40·6	58·3	14. 40	42·2	59·2	14. 20	39·5	58·5
11. 21	41·5	58·5	15. 37	40·6	59·2	15. 9. 28	31·2	58·5
12. 0	42·7	58·7	16. 28	39·3	59·0	9. 46	32·2	58·1
22. 12. 10	43·2	59·4	18. 12. 15	43·7	58·6	12. 34	38·6	58·5
12. 44	43·0	59·2	13. 30	44·3	59·3	19. 10. 0	33·2	58·7
16. 20	39·9	59·2	20. 11. 30	41·8	58·8	11. 20	37·6	58·5
23. 10. 36	39·4	57·4	12. 50	45·2	59·4	20. 10. 48	34·5	58·3
12. 20	43·0	59·0	21. 11. 40	41·9	58·9	12. 9	37·8	58·6
27. 11. 11	43·9	59·2	12. 20	45·2	59·2	21. 10. 30	37·0	59·0
11. 40	43·1	58·8	24. 9. 44	36·5	59·2	14. 3	39·9	58·4
			10. 16	37·5	59·5	15. 5	38·9	58·3
Mar. 2. 11. 5	41·5	58·6	10. 47	38·7	59·1	22. 10. 30	32·3	59·3
13. 13	43·9	59·9	14. 30	42·8	59·3	12. 10	35·2	59·5
3. 12. 16	43·1	58·3	27. 12. 6	42·0	59·5	26. 11. 40	40·2	58·7
6. 11. 20	40·8	58·6	13. 50	40·5	58·7	14. 40	39·9	58·9
11. 54	41·3	58·5	28. 10. 30	37·8	59·0	28. 9. 32	32·3	58·1
8. 11. 8	39·1	57·9	11. 21	40·1	59·2	29. 9. 55	32·5	58·5
15. 32	38·1	57·9				11. 49	38·1	58·7
9. 11. 3	41·1	58·5	May 1. 10. 14	36·0	59·2	30. 10. 54	35·4	58·6
13. 2	42·8	59·0	10. 48	37·6	59·4	12. 40	45·3	58·9
10. 12. 20	43·1	59·3	11. 17	38·5	57·7			
13. 11. 16	41·6	58·3	3. 9. 54	35·5	59·4	July 1. 11. 0	32·6	57·9
11. 50	43·6	58·8	4. 9. 55	36·1	59·1	3. 10. 3	34·6	58·5

TABLE XVII.—RESULTS of OBSERVATIONS of MAGNETIC DECLINATION, with DEDUCED VALUES of the BASE-LINE of the DECLINATION MAGNETOGRAMS—*continued.*

Greenwich Civil Time, 1923.	Declination.	Deduced value of Base-line.	Greenwich Civil Time, 1923.	Declination.	Deduced value of Base-line.	Greenwich Civil Time, 1923.	Declination.	Deduced value of Base-line.
d h m	° ′	° ′	d h m	° ′	° ′	d h m	° ′	° ′
July 3. 11. 9	13. 36·1	13. 58·9	Sept. 4. 10. 25	13. 32·7	13. 58·9	Nov. 2. 16. 4	13. 32·2	13. 59·4
11. 57	38·2	58·7	11. 50	36·2	59·5	6. 11. 5	33·9	59·7
5. 11. 22	35·9	58·2	5. 14. 54	35·7	58·9	13. 16	33·3	59·6
6. 10. 12	32·4	58·4	7. 9. 44	30·1	58·9	7. 11. 46	33·7	59·4
11. 40	36·6	58·5	11. 59	35·7	58·9	9. 11. 14	33·6	59·6
10. 11. 17	40·3	58·9	11. 10. 25	36·2	59·3	12. 27	34·6	59·4
12. 15	41·6	38·7	12. 15	40·2	59·1	13. 11. 35	34·8	59·9
11. 11. 40	37·7	58·9	16. 55	33·6	59·3	13. 5	35·1	59·7
14. 45	38·6	58·9	12. 10. 36	33·0	58·8	14. 15. 59	31·4	59·5
13. 10. 25	34·4	58·5	14. 10. 14	34·8	59·0	15. 11. 15	32·4	59·3
11. 56	37·0	59·1	11. 53	38·0	58·9	11. 35	32·5	59·6
14. 11. 22	36·0	58·8	15. 11. 12	33·0	58·8	16. 11. 47	32·3	59·4
16. 10. 15	31·7	58·5	11. 38	34·4	58·7	13. 10	32·4	59·4
11. 15	32·8	58·2	18. 11. 0	34·3	58·0	20. 11. 4	33·9	59·9
17. 12. 45	37·8	58·6	12. 36	36·2	58·6	12. 55	33·4	59·5
14. 25	39·1	58·6	19. 13. 15	36·2	59·6	22. 10. 38	31·3	59·5
18. 11. 2	35·4	58·4	20. 12. 45	36·7	59·0	23. 10. 43	31·5	59·5
20. 10. 12	33·9	58·5	21. 11. 22	34·6	59·3	11. 59	32·9	59·7
12. 6	37·5	58·8	12. 44	36·2	59·5	27. 11. 49	31·9	59·6
24. 10. 35	33·3	58·8	25. 11. 10	33·3	58·8	12. 53	33·8	59·6
11. 30	36·4	58·8	12. 50	35·8	59·2	28. 12. 52	32·3	59·4
26. 10. 37	33·7	58·5	26. 13. 2	40·8	59·1	30. 11. 55	31·7	59·4
27. 10. 45	35·9	58·5	28. 11. 36	36·3	59·0	13. 32	30·8	59·5
12. 5	38·9	58·9	12. 55	36·6	59·1			
31. 10. 17	35·2	59·2				Dec. 4. 11. 39	34·8	59·9
11. 45	37·6	58·5				5. 11. 37	32·0	59·7
						12. 43	32·5	59·6
Aug. 1. 10. 8	33·9	58·7	Oct. 5. 11. 14	35·2	59·4	7. 11. 55	33·2	59·9
3. 13. 47	39·5	58·8	12. 37	36·4	59·7	11. 12. 5	32·3	59·5
15. 10	37·9	58·2	15. 54	34·3	59·3	13. 0	32·3	59·5
7. 10. 37	34·8	58·8	9. 11. 10	34·5	59·5	12. 11. 57	31·0	59·4
11. 54	30·5	59·2	12. 46	37·4	59·7	13. 11. 38	33·9	14. 0·1
9. 10. 53	37·7	59·3	10. 13. 7	37·5	59·6	14. 10. 55	31·2	0·4
10. 13. 48	39·0	59·3	11. 12. 26	39·2	14. 0·2	13. 59·9	32·8	13. 59·3
14. 22	38·4	59·5	13. 11. 9	34·2	13. 59·9	12. 34	32·8	59·5
14. 9. 47	32·3	58·4	12. 30	37·0	59·9	15. 11. 26	31·6	59·7
11. 38	37·0	58·9	17. 10. 23	29·3	14. 0·1	11. 48	31·9	59·8
15. 9. 1	31·9	59·1	10. 49	31·5	0·2	17. 10. 56	30·9	59·4
10. 44	36·5	59·2	12. 57	34·9	0·3	18. 11. 16	29·9	14. 0·0
11. 6	37·6	58·8	19. 10. 43	35·1	0·1	13. 7	31·2	13. 59·6
17. 10. 38	34·1	58·9	23. 11. 20	34·6	13. 59·8	20. 13. 7	32·0	59·6
11. 5	35·1	58·9	13. 5	34·6	59·9	21. 12. 23	32·7	59·6
21. 9. 40	33·0	59·0	24. 10. 0	33·2	59·5	13. 1	32·3	59·6
10. 12	34·2	58·9	25. 10. 29	32·6	59·5	24. 12. 29	32·3	59·7
24. 10. 8	35·6	58·9	13. 5	35·3	59·7	13. 9	30·2	59·6
10. 40	37·1	59·1	15. 9	33·0	59·4	28. 11. 50	31·2	14. 0·1
28. 10. 44	35·1	59·1	26. 10. 26	32·5	59·4	12. 40	32·0	13. 59·3
11. 11	37·2	59·0	29. 9. 57	29·8	59·4	31. 15. 5	30·7	59·7
30. 10. 54	33·4	58·6	30. 11. 16	34·5	59·7			
31. 10. 10	33·1	58·9	13. 25	35·1	59·8			
12. 10	38·1	58·9	31. 10. 2	33·0	59·4			

TABLE XVIII.—RESULTS of DETERMINATIONS of the ABSOLUTE VALUE OF HORIZONTAL MAGNETIC FORCE from OBSERVATIONS made with the GIBSON INSTRUMENT in the MAGNETIC PAVILION, with DEDUCED VALUES of the BASE-LINE of the NORTH FORCE MAGNETOGRAMS.

Greenwich Civil Time, 1923.	In C.G.S. Units. Value of observed Horizontal Force.	In C.G.S. Units. Deduced value of North Force Base-line.	Greenwich Civil Time, 1923.	In C.G.S. Units. Value of observed Horizontal Force.	In C.G.S. Units. Deduced value of North Force Base-line.	Greenwich Civil Time, 1923.	In C.G.S. Units. Value of observed Horizontal Force.	In C.G.S. Units. Deduced value of North Force Base-line.
d h m h m	·18000+	·17000+	d h m h m	·18000+	·17000+	d h m h m	·18000+	·17000+
Jan. 2. 12 2–12 47	431	800	May 11. 10 56–11 54	436	853	Sept. 4. 11 2–11 58	432	854
5. 12 21–13 13	399	769	15. 9 47–10 49	433	—	7. 11 8–12 5	414	834
9. 11 47–12 36	435	804	17. 10 40–12 11	425	827	11. 16 5–16 55	434	840
12. 11 28–12 12	428	788	23. 11 12–12 10	427	840	14. 10 46–11 58	412	842
16. 11 46–12 48	435	808	26. 9 27–10 10	425	832	18. 11 40–12 45	439	864
20. 11 42–12 39	469	824	29. 10 15–11 0	418	836	21. 11 54–12 49	437	851
23. 11 15–11 58	417	815	29. 17 50–19 25	415	(807)	25. 11 48–12 55	430	845
26. 11 38–13 21	426	804	June 1. 10 5–11 28	414	843	28. 12 2–13 0	402	845
30. 11 28–12 20	407	808	5. 10 30–11 12	398	832	Oct. 2. 12 0–13 8	409	843
Feb. 6. 12 36–13 30	443	827	8. 11 17–12 27	419	853	5. 11 47–12 42	422	843
9. 11 30–12 15	428	812	12. 10 11–10 55	442	906	9. 11 55–12 50	414	849
13. 10 41–11 29	442	832	15. 11 10–12 40	405	719	13. 11 40–12 37	393	847
16. 12 52–13 36	442	823	20. 11 2–12 10	415	717	17. 11 26–12 25	390	835
20. 10 42–11 30	421	816	21. 14 26–15 12	438	732	19. 15 42–16 30	412	845
23. 10 50–11 40	418	821	22. 11 16–12 15	414	719	23. 11 58–13 3	417	839
27. 10 30–11 19	425	837	26. 13 50–14 48	451	743	25. 12 16–13 0	425	849
Mar. 2. 11 55–12 35	431	829	29. 10 43–11 56	428	748	30. 11 48–13 10	415	855
6. 11 17–12 1	428	827	30. 11 46–12 50	411	725	Nov. 1. 12 16–13 4	421	845
8. 11 46–12 20	425	826	July 3. 11 3–12 2	419	737	6. 11 53–13 24	428	856
13. 11 10–11 57	442	835	6. 10 50–11 47	420	729	9. 11 44–12 32	414	849
16. 11 58–12 45	408	824	10. 11 3–12 15	426	743	13. 12 10–13 0	423	856
20. 10 53–11 38	418	833	13. 11 5–12 2	420	744	16. 12 12–13 14	431	850
23. 12 19–13 17	428	839	17. 11 27–12 55	431	744	20. 11 19–12 25	427	853
26. 10 53–11 37	394	835	20. 11 20–12 12	406	798	23. 11 13–12 2	418	846
31. 12 18–13 13	429	837	24. 11 20–12 25	414	814	27. 12 12–13 0	431	853
Apr. 4. 11 0–11 45	420	852	27. 11 18–12 11	425	812	30. 11 47–13 3	432	867
6. 15 25–16 22	427	836	31. 10 54–11 50	428	828	Dec. 5. 11 52–12 50	420	851
10. 10 40–11 29	425	846	Aug. 3. 14 21–15 14	432	822	7. 11 52–13 5	432	859
13. 11 30–12 46	397	828	7. 11 9–11 59	427	825	11. 12 0–13 0	434	871
17. 10 51–11 34	414	857	10. 13 45–14 30	423	817	14. 11 11–12 38	421	856
21. 12 0–12 58	425	862	14. 10 13–11 44	404	822	18. 11 28–13 6	443	863
24. 9 40–10 22	401	839	17. 10 0–10 45	421	843	21. 12 9–13 7	425	859
27. 11 0–12 24	428	848	21. 9 38–10 19	429	836	24. 12 22–13 12	394	830
May 1. 10 10–10 55	421	846	24. 10 5–10 49	422	849	28. 11 50–12 56	397	848
4. 10 55–12 1	428	849	28. 10 40–11 19	413	837			
8. 10 0–10 50	440	865	31. 11 5–12 18	408	833			

TABLE XIX.—RESULTS of OBSERVATIONS of MAGNETIC DIP made with the DIP INDUCTOR, with DEDUCED VALUES of the BASE-LINE of the VERTICAL FORCE MAGNETOGRAMS.

Greenwich Civil Time, 1923.	Magnetic Dip.	Deduced Value of Vertical Force Base-line.	Greenwich Civil Time, 1923.	Magnetic Dip.	Deduced Value of Vertical Force Base-line.	Greenwich Civil Time, 1923.	Magnetic Dip.	Deduced Value of Vertical Force Base-line.	Greenwich Civil Time, 1923.	Magnetic Dip.	Deduced Value of Vertical Force Base-line.
d h	° ′	·42000+	d h	° ′	·42000+	d h	° ′	·42000+	d h	° ′	·42000+
Jan. 2. 11·8	66 52·2	872	Apr. 17. 11·8	66 53·5	631	July 13. 10·7	66 53·0	747	Oct. 19. 11·0	66 52·8	697
4. 12·6	66 51·6	596	18. 13·2	66 51·1	624	17. 10·1	66 51·8	784	23. 11·6	66 52·4	693
5. 12·0	66 53·4	642	20. 11·7	66 52·4	634	18. 11·6	66 51·1	734	24. 10·2	66 52·9	700
9. 11·6	66 50·9	577	24. 10·6	66 54·4	651	20. 11·0	66 52·3	780	26. 10·2	66 53·6	722
11. 12·0	66 52·8	622	26. 10·8	66 53·8	649	24. 11·0	66 53·7	810	30. 11·5	66 53·0	722
12. 11·2	66 52·5	639	27. 15·0	66 51·5	611	26. 11·0	66 52·4	785	31. 10·6	66 53·6	722
16. 11·5	66 53·5	678				27. 11·0	66 52·6	806			
18. 11·5	66 51·2	613	May 1. 11·1	66 51·7	612	31. 10·5	66 51·2	733	Nov. 2. 10·7	66 54·1	714
20. 12·8	66 50·2	616	3. 11·1	66 51·6	625				6. 11·5	66 52·5	725
23. 12·2	66 53·9	619	4. 10·4	66 51·9	604	Aug. 1. 10·4	66 51·3	—	7. 12·4	66 51·9	721
25. 11·8	66 52·1	629	8. 11·0	66 51·7	626	3. 14·0	66 51·1	753	9. 11·4	66 52·7	719
26. 15·3	66 51·7	616	10. 10·9	66 52·0	651	7. 10·9	66 52·0	767	10. 12·3	66 52·1	719
30. 12·5	66 53·1	604	11. 10·6	66 52·0	673	9. 11·1	66 52·4	—	13. 11·8	66 51·7	682
			15. 10·8	66 51·5	630	10. 14·9	66 51·3	749	14. 11·6	66 52·4	678
Feb. 1. 12·8	66 52·0	607	16. 11·8	66 52·5	679	14. 10·0	66 52·8	754	16. 12·0	66 51·6	713
8. 11·7	66 52·5	616	17. 10·3	66 51·4	667	15. 10·5	66 51·9	718	20. 12·7	66 51·6	685
9. 11·0	66 53·2	651	23. 10·8	66 52·6	697	17. 10·9	66 53·0	767	22. 10·8	66 51·7	697
13. 11·8	66 52·3	627	24. 11·0	66 51·8	674	21. 10·5	66 51·6	712	23. 10·9	66 52·9	717
14. 11·6	66 51·9	615	26. 10·3	66 51·5	662	24. 11·0	66 53·6	752	27. 12·0	66 50·9	664
16. 11·6	66 51·4	615	29. 11·1	66 52·1	680	28. 11·5	66 53·2	759	28. 12·6	66 52·4	688
20. 11·7	66 52·2	627	30. 14·7	66 53·7	653	30. 11·0	66 52·7	735	28. 10·7	66 52·7	706
22. 11·9	66 51·2	604				31. 10·7	66 51·9	687	30. 10·3	66 52·2	727
24. 11·6	66 51·6	625	June 1. 11·7	66 51·9	633				30. 13·3	66 53·9	746
27. 11·5	66 51·9	591	5. 11·4	66 54·3	671	Sept. 4. 10·7	66 51·9	706			
			7. 11·2	66 52·4	663	4. 18·2	66 51·3	730	Dec. 1. 12·1	66 52·5	692
Mar. 2. 11·4	66 51·9	614	8. 10·8	66 52·5	654	5. 15·1	66 50·8	704	4. 12·4	66 53·9	706
3. 12·5	66 51·8	628	12. 11·1	66 51·4	675	7. 10·6	66 53·1	734	5. 15·5	66 51·9	689
6. 12·2	66 51·8	629	13. 11·5	66 53·2	650	11. 15·7	66 51·4	687	6. 11·0	66 52·2	685
8. 11·5	66 52·6	642	14. 14·6	66 51·3	626	12. 10·9	66 52·2	691	6. 15·0	66 51·7	696
9. 11·3	66 52·1	634	15. 10·0	66 52·8	650	14. 10·5	66 52·7	697	7. 10·9	66 52·9	705
13. 12·1	66 51·0	633	19. 11·0	66 52·4	635	18. 11·2	66 52·0	694	8. 11·1	66 52·8	701
16. 11·6	66 52·4	637	20. 11·9	66 52·3	704	19. 12·0	66 53·5	747	11. 15·9	66 52·8	701
17. 11·3	66 52·2	643	21. 10·9	66 53·3	696	21. 11·6	66 51·6	695	12. 12·0	66 50·6	643
20. 11·8	66 52·3	646	21. 14·1	66 51·9	676	25. 11·4	66 51·2	673	13. 11·5	66 51·9	663
22. 11·4	66 53·0	651	22. 10·8	66 53·1	712	26. 12·8	66 53·6	672	14. 10·8	66 51·9	686
23. 12·0	66 52·8	655	26. 11·4	66 52·8	725	28. 11·8	66 53·6	676	15. 10·7	66 51·6	669
26. 11·8	66 53·6	593	28. 9·8	66 53·5	687				17. 11·4	66 51·4	661
29. 13·0	66 53·2	640	29. 10·3	66 53·3	684	Oct. 2. 11·5	66 53·2	688	18. 12·5	66 51·2	672
31. 12·0	66 52·0	619	30. 11·2	66 53·4	700	3. 11·5	66 52·8	684	20. 12·6	66 52·3	700
						5. 11·4	66 51·7	690	21. 11·4	66 52·3	699
Apr. 3. 16·2	66 51·5	602	July 3. 10·4	66 52·0	678	9. 11·4	66 53·2	700	24. 12·1	66 52·9	695
4. 11·9	66 53·7	630	5. 11·1	66 51·5	713	10. 12·9	66 51·7	692	28. 15·4	66 52·7	688
6. 11·4	66 53·0	624	6. 10·5	66 52·1	706	13. 11·4	66 54·4	673			
10. 11·7	66 52·9	648	10. 11·6	66 52·4	741	17. 11·1	66 53·8	686			
13. 11·1	66 54·0	649	11. 15·1	66 53·1	755	18. 13·0	66 53·3	710			

TABLE XX.—ANNUAL SUMMARY OF THE MAGNETIC ELEMENTS.

Month. 1923.	Mean Value of						Monthly Mean Diurnal Range of			Sum of Hourly Deviations from Mean of		
	Declination.	Horizontal Force.	Dip.	West Force.	North Force.	Vertical Force.	Declination.	North Force.	Vertical Force.	Declination.	North Force.	Vertical Force.
	° ′		° ′				′			′		
January	13. 40·6	·18431	66. 52·1	·04357	·17908	·43144	4·4	14γ	10γ	20·8	61γ	67γ
February ...	13. 39·6	·18434	66. 51·9	·04353	·17912	·43145	5·0	20	13	29·5	114	85
March	13. 38·8	·18434	66. 51·7	·04349	·17913	·43139	7·0	24	22	42·5	148	121
April	13. 37·6	·18433	66. 52·0	·04343	·17914	·43145	10·0	33	24	51·6	218	120
May	13. 36·2	·18436	66. 51·3	·04336	·17919	·43128	7·6	28	28	44·4	176	134
June	13. 35·2	·18440	66. 51·8	·04332	·17923	·43156	9·6	36	29	53·6	234	136
July	13. 34·5	·18436	66. 52·0	·04327	·17920	·43153	7·7	29	19	43·6	181	97
August	13. 33·5	·18433	66. 51·1	·04321	·17919	·43113	8·1	32	19	44·8	213	97
September ..	13. 32·5	·18430	66. 51·4	·04315	·17917	·43116	7·5	32	19	45·8	205	113
October	13. 31·8	·18425	66. 52·3	·04310	·17913	·43138	6·7	26	18	34·6	190	121
November...	13. 31·1	·18428	66. 51·8	·04308	·17917	·43129	4·3	17	9	21·4	19	67
December ..	13. 29·9	·18429	66. 52·0	·04301	·17919	·43136	3·6	14	9	18·3	68	64
For the year	13. 35·1	·18432	66. 51·8	·04329	·17916	·43137	6·8	25·4	18·3	37·6	158·3	101·8

ROYAL OBSERVATORY, GREENWICH.

MAGNETIC DISTURBANCES.

1923.

GREENWICH MAGNETICAL AND METEOROLOGICAL RESULTS, 1923.

MAGNETIC DISTURBANCES in DECLINATION, NORTH FORCE, and VERTICAL FORCE, recorded at the ROYAL OBSERVATORY, GREENWICH, in the Year 1923.

The following notes give a brief description of all magnetic movements (superposed on the ordinary diurnal movement) exceeding 3′ in Declination, 20γ in North Force, or 12γ in Vertical Force, as taken from the photographic records of the respective Magnetometers. The movements in North and Vertical Force are expressed in C. G. S. units. 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 movement in the same direction; " oscillations " 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 oscillations 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).

1923.

January

3^d 2^h to 3$\frac{1}{2}^h$ Wave in Dec. (− 3′). 10$\frac{3}{4}^h$ to 12^h Increase in Dec. (+ 4′).

4^d 21$\frac{1}{3}^h$ to 23^h Wave in Dec. (− 7′). 22^h to 22$\frac{1}{2}^h$ Wave in N.F. (+ 20).

6^d 19$\frac{3}{4}^h$ to 22^h Two consecutive waves in Dec. (− 4′, − 3′).

7^d 10^h to 10$\frac{1}{4}^h$ Double wave in V.F. (− 20, + 15).

10^d 3$\frac{3}{4}^h$ to 4$\frac{3}{4}^h$ Wave in Dec. (+ 4′). 19$\frac{1}{4}^h$ to 20$\frac{1}{2}^h$ Decrease in Dec. (− 4′).

13^d 6$\frac{1}{2}^h$ to 8^h Wave in Dec. (+ 3′). 19$\frac{1}{2}^h$ to 21$\frac{1}{4}^h$ Fluctuating decrease in Dec. (− 11′). 21$\frac{2}{3}^h$ to 24^h Fluctuating increase in Dec. (+ 13′).

14^d 3$\frac{2}{3}^h$ to 4$\frac{3}{4}^h$ Wave in Dec. (+ 5′).

16^d 21$\frac{1}{2}^h$ to 22$\frac{2}{3}^h$ Wave in N.F. (+ 20). 21$\frac{1}{2}^h$ to 23^h Wave in Dec. (− 4′).

17^d 23$\frac{1}{3}^h$ to 23$\frac{2}{3}^h$ Increase in Dec. (+ 3′).

20^d 17^h to 18$\frac{1}{2}^h$ Irregular decrease in N.F. (− 35). 17^h to 19$\frac{1}{2}^h$ Double wave in Dec. (± 3′). 22^h to 21^d 0$\frac{1}{3}^h$ Double-crested wave in Dec. (− 11′). 22$\frac{1}{2}^h$ to 24^h Truncated wave in N.F. (+ 35).

21^d 1$\frac{1}{2}^h$ to 3^h Wave in Dec. (+ 7′). 4$\frac{1}{2}^h$ to 5$\frac{2}{3}^h$ Wave in N.F. (− 20). 4$\frac{3}{4}^h$ to 7^h Two consecutive waves in Dec. (+ 4′). 19^h to 19$\frac{3}{4}^h$ Wave in Dec. (− 4′). 23^h to 22^d 0$\frac{1}{2}^h$ Wave in N.F. (+ 35), the ascent rather steep. 23^h to 22^d 0$\frac{3}{4}^h$ Truncated wave in Dec. (− 3′).

22^d 2$\frac{3}{4}^h$ to 4^h Wave in Dec. (+ 4′). 4$\frac{1}{2}^h$ to 6$\frac{1}{4}^h$ Wave in Dec. (− 3′). 6$\frac{1}{2}^h$ to 7^h Decrease in N.F. (− 20). 18$\frac{2}{3}^h$ to 19^h Increase in N.F. (+ 20). 19^h Sharp decrease in Dec. (− 3′). 19$\frac{3}{4}^h$ to 21^h Two consecutive waves in Dec. (+ 3′). 20$\frac{3}{4}^h$ to 22^h Truncated wave in N.F. (+ 20). 23$\frac{1}{2}^h$ to 23^d 1^h Increase in Dec. (+ 5′).

23^d 0^h to 0$\frac{1}{2}^h$ Wave in N.F. (+ 20). 11^h to 13$\frac{1}{2}^h$ Wave in N.F. (− 35). 16$\frac{1}{2}^h$ to 18^h Wave in Dec. (− 7′). 17^h to 18^h Irregular wave in N.F. (+ 20). 22$\frac{1}{4}^h$ to 23$\frac{1}{4}^h$ Wave in N.F. (+ 30).

24^d 4^h to 6^h Wave in Dec. (+ 4′). 5^h to 6^h Increase in N.F. (+ 20). 17$\frac{3}{4}^h$ to 19$\frac{1}{2}^h$ Wave in Dec. (− 5′).

26^d 3$\frac{1}{2}^h$ to 5^h Wave in Dec. (+ 3′).

29^d 8$\frac{1}{4}^h$ to 9$\frac{1}{4}^h$ Decrease in N.F. (− 25). 12$\frac{3}{4}^h$ to 13$\frac{1}{4}^h$ Wave in Dec. (+ 4′). 17^h to 18$\frac{1}{3}^h$ Wave in Dec. (+ 4′). 17$\frac{1}{2}^h$ to 18$\frac{2}{3}^h$ Wave in N.F. (− 25). 20^h to 22$\frac{1}{2}^h$ Double wave in N.F. (∓ 20). 21^h to 23$\frac{3}{4}^h$ Wave in Dec. (− 7′).

30^d 2^h to 4^h Double wave in Dec. (+ 5′, − 4′). 2$\frac{1}{4}^h$ to 3^h Wave in N.F. (+ 20). 2$\frac{1}{2}^h$ to 3$\frac{1}{2}^h$ Wave in V.F. (− 15). 10$\frac{3}{4}^h$ to 11^h Rapid increase in Dec. (+ 3′). 11$\frac{1}{3}^h$ to 11$\frac{2}{3}^h$ Sharp wave in Dec. (+ 4′). 15^h to 15$\frac{1}{2}^h$ Decrease in Dec. (− 4′).

1923.

February

1d 15¼h to 15⅝h Decrease in N.F. (− 20). 15⅝h to 17¼h Wave in Dec. (− 4′). 18½h to 20h Double wave in N.F. (∓ 20). 18½h to 19½h Wave in Dec. (− 9′). 22¼h to 2d 1h Truncated wave in Dec. (− 5′). 23⅝h to 2d 0¼h Decrease in N.F. (− 20).

2d 18h to 19⅝h Irregular wave in Dec. (− 4′).

3d 18h to 19h Increase in N.F. (+ 30). 19¾h to 21h Fluctuating decrease in Dec. (− 6′).

4d 1h to 3½h Two consecutive waves in Dec. (− 7′, − 3′). 2⅓h to 3¼h Wave in N.F. (+ 20), followed till 4½h by an increase (+ 25). 20¼h to 22h Double wave in Dec. (− 4′, + 3′).

6d 20h to 22h Double-crested wave in Dec. (− 5′, − 4′). 20⅝h to 21⅓h Wave in N.F. (+ 30).

7d 17½h to 18⅝h Wave in Dec. (− 7′). 17½h to 18h Increase in N.F. (+ 25).

8d 5½h to 6⅓h Increase in Dec. (+ 4′). 5¾h to 7¼h Wave in N.F. (− 20).

10d 21h to 23h Irregular wave in Dec. (− 3′). 21½h to 22½h Wave in N.F. (+ 25).

11d 13¾h to 14¾h Wave in N.F. (− 20).

14d 20h to 21½h Wave in Dec. (− 8′). 20⅓h to 22½h Three consecutive waves in N.F. (+ 20). 23h to 15d 0½h Increase in Dec. (+ 5′).

16d 18½h to 19¾h Wave in Dec. (− 3′).

17d 9h to 10h Decrease in N.F. (− 20). 18¾h to 20½h Irregular wave in Dec. (− 9′). 19h to 20h Wave in N.F. (+ 55). 21¼h to 22⅓h Wave in N.F. (+ 25). 21¼h to 23h Two consecutive serrated waves in Dec. (− 3′).

18d 0h to 1h Wave in Dec. (+ 3′). 6h to 7½h Flattened wave in Dec. (+ 3′). 6h to 7½h Wave in N.F. (+ 25).

19d 14¾h to 15⅝h Decrease in Dec. (− 5′).

22d 6h to 6¼h Wave in V.F. (+ 16). 6h to 7½h Increase in Dec. (+ 4′). 6¼h to 7¾h Decrease in N.F. (− 20).

25d 0½h to 1½h Decrease in Dec. (− 4′). 1½h to 3h Wave in Dec. (+ 3′). 1⅝h to 2⅛h Rapid increase in N.F. (+ 25). 3½h Very rapid decrease in Dec. (− 3′). 5½h to 7h Increase in Dec. (+ 7′). 7h to 9½h Flattened wave in N.F. (+ 35). 8½h to 11h Oscillating increase in Dec. (+ 7′).

25d 11h to 26d 11h. See Plate I.

26d 11h to 12h Wave in Dec. (+ 6′). 11⅓h to 12½h Serrated wave in N.F. (− 25). 15h A very rapid double wave in N.F. (± 15), with a corresponding movement in Dec. 15h to 16¼h Wave in Dec. (− 5′). 15h to 16h Increase in N.F. (+ 20). 19h to 19¾h Wave in Dec. (+ 3′). 20½h Sudden decrease in Dec. (− 6′), partially recovering till 20¾h (+ 4′). 20½h to 21h Wave in N.F. (+ 50). 21h to 21⅝h Wave in Dec. (+ 5′). 21½h to 22½h Wave in N.F. (+ 25). 21⅝h to 22½h Increase in Dec. (+ 3′). 23¾h to 27d 0½h Wave in Dec. (− 3′).

27d 1¼h to 2h Wave in Dec. (+ 4′). 3½h to 4¾h Wave in N.F. (− 20). 6½h to 8h Increase in Dec. (+ 5′). 7¼h to 8½h Decrease in N.F. (− 30). 10h to 11½h Two consecutive waves in Dec. (+ 3′). 12½h to 13½h Serrated wave in Dec. (+ 4′). 13h to 14½h Serrated wave in N.F. (+ 25). 13h to 15¼h Increase in V.F. (+ 35), partially returning till 17h (− 15). 14½h to 16½h Serrated wave in Dec. (− 10′). 17¼h to 18h Decrease in Dec. (− 5′). 18¼h to 20h General decrease in Dec. (− 5′), accompanied by a series of oscillations of which the principal were a wave from 18¼h to 18⅝h (− 9′), a double wave from 19h to 19⅝h (+ 3′, − 4′), a wave from 19⅝h to 20h (− 5′), and a double-crested wave from 20h to 20⅝h (− 10′, − 8′). 18⅓h to 20¼h Four consecutive waves in N.F. (+ 60, + 45, + 15, + 30), followed immediately till 20⅓h by a very rapid increase (+ 50). 20½h to 20¾h Wave in N.F. (+ 30). 20½h to 22h Oscillating increase in Dec. (+ 4′). 20h to 21½h Decrease in V.F. (− 15). 21h to 22h Oscillating decrease in N.F. (− 40). 22¼h to 22½h Wave in Dec. (− 9′), the return continuing further till 22⅝h (+ 5′). 22¼h to 23¼h Wave in N.F. (+ 75). 22½h to 24h Wave in V.F. (− 15). 22¾h to 28d 1h Wave in Dec. (− 9′).

28d 11h to 11¾h Increase in Dec. (+ 3′). 17h to 19h Wave in Dec. (− 14′). 17h to 18½h Irregular double wave in N.F. (∓ 25). 22½h to March 1d 1h Two consecutive waves in Dec. (− 3′, − 5′). 23½h to 23¾h Three rapid movements in V.F., the last a wave (+ 20). (Probably of local origin.)

March

2d 16½h to 18h Wave in Dec. (− 3′). 18½h to 22½h V.F. trace considerably disturbed.

5d 22½h to 23h Decrease in Dec. (− 4′), gradually recovering till 6d 0½h.

7d 10¼h to 12¼h Increase in Dec. (+ 7′). 17h to 18¼h Increase in N.F. (+ 25). 17h to 20h General decrease in Dec. (− 8′), followed till 20¾h by an increase (+ 3′).

1923.

March

14d 9h to 12½h Increase in Dec. (+ 8′). 21½h to 15d 0½h Wave in Dec. (− 10′). 22½h to 24h Wave in N.F. (+ 40). 22h to 23¾h Wave in V.F. (+ 12).

15d 11¼h to 12h Increase in Dec. (+ 4′). 21h to 22½h Irregular wave in N.F. (− 20). 22h to 24h Irregular wave in Dec. (− 5′). 23h to 16d 0½h Two consecutive waves in N.F. (+ 25). 23h to 24h Decrease in V.F. (− 12).

16d 5h to 6h Increase in Dec. (+ 3′), followed till 7h by an equal decrease. 6h to 8¼h Wave in N.F. (+ 20). 11⅔h to 13h Flattened wave in Dec. (+ 3′). 20½h to 22h Wave in N.F. (+ 25). 20⅔h to 22½h Wave in Dec. (− 4′). 23h to 17d 0⅓h Wave in N.F. (+ 20).

17d 0h to 1h Wave in Dec. (+ 3′). 0½h to 1½h Wave in N.F. (+ 20). 2⅓h to 3h Increase in Dec. (+ 4′). 9h to 9¼h Decrease in Dec. (− 3′). 20¾h to 21½h Wave in Dec. (− 3′).

18d 4h to 7h Slow wave in Dec. (+ 3′). 21½h to 22½h Wave in Dec. (− 7′). 21⅔h to 23⅓h Double-crested wave in N.F. (+ 25, + 20).

19d 3⅓h to 4½h Domed wave in Dec. (+ 3′).

20d 20⅔h to 21½h Wave in N.F. (+ 25). 20⅔h to 21⅔h Wave in Dec. (− 7′).

21d 21¼h to 22¼h Wave in Dec. (− 3′). 21¾h to 22d 0½h Wave in Dec. (− 3′).

24d 8h to 25d 8h. See Plate I.

25d 13h to 13⅔h Sharp wave in N.F. (− 40). 13¼h to 14h Increase in V.F. (+ 20). 18¼h to 18½h Very rapid increase in N.F. (+ 40), with a fluctuating partial return till 19½h (− 30). 18¼h to 18⅔h Wave in Dec. (− 6′). 18½h to 19½h Decrease in V.F. (− 15). 20h to 20½h Increase in Dec. (+ 3′). 22h to 23h Wave in Dec. (+ 4′).

26d 3h to 4h Truncated wave in Dec. (+ 3′). 3h to 3¾h Wave in N.F. (− 20). 8h to 8¾h Decrease in N.F. (− 30). 8h to 8⅓h Increase in Dec. (+ 3′). 11¾h to 12h Rapid increase in Dec. (+ 4′). 12h to 15½h Accelerated increase in V.F. (+ 40). Dec. and N.F. affected by continuous minor disturbances. 12h to 12¼h Decrease in N.F. (− 25). 14h to 16h Irregular double wave in Dec. (+ 4′, − 6′). 14h to 15¼h Accelerated increase in N.F. (+ 50), with a sharp wave superposed at 14¼h to 15h (− 25). 15⅔h to 16h Decrease in N.F. (− 20). 16h to 17h Decrease in V.F. (− 20). 18h to 19h Accelerated decrease in Dec. (− 7′). 18⅔h to 19½h Wave in N.F. (+ 30). 19h to 19½h Domed wave in Dec. (+ 3′). 19½h to 21h Wave in Dec. (+ 3′). 21¼h to 22h Wave in Dec. (+ 6′). 21h to 22⅔h Wave in N.F. (+ 30). 21⅓h to 21⅔h Decrease in V.F. (− 15).

27d 0¼h to 0½h Rapid increase in Dec. (+ 5′). 0¾h to 2½h Steady decrease in Dec. (− 5′). 4⅔h to 6h Wave in Dec. (+ 5′), with a corresponding wave in N.F. (− 15). 8h to 12⅓h Increase in Dec. (+ 11′). 12½h to 17½h General increase in V.F. (+ 50). 16⅔h to 18¼h Wave in Dec. (− 6′). 17h to 18¼h Flattened serrated wave in N.F. (+ 20). 22h to 24h Double-crested wave in Dec. (+ 5′). 22¾h to 23¾h Decrease in V.F. (− 20).

28d 9h to 10¼h Accelerated decrease in N.F. (− 40), followed till 12h by a steady recovery. 17h to 19½h Wave in Dec. (− 5′). 21½h to 22½h Wave in N.F. (+ 25). 21h to 22¾h Double-crested wave in Dec. (− 4′).

29d 0h to 2h Double-crested wave in Dec. (+ 3′, + 4′). 0½h to 2h Wave in N.F. (+ 20). 21h to 21⅔h Wave in Dec. (− 3′), followed immediately till 23½h by another wave (− 4′). 21¼h to 23h Double-crested wave in N.F. (+ 20).

30d 14½h to 15½h Decrease in Dec. (− 3′).

31d 0⅓h to 1½h Wave in Dec. (+ 4′) and in N.F. (+ 30), the ascent in each case being very rapid. 0½h to 1h Decrease in V.F. (− 12).

April

1d 20h to 21¼h Wave in Dec. (− 3′).

4d 11⅔h to 11¾h Wave in V.F. (+ 12). 16h to 17h Increase in N.F. (+ 30).

7d 0h to 1½h Wave in Dec. (− 3′). 4½h to 5h Increase in Dec. (+ 3′).

8d 1½h to 3h Wave in Dec. (− 4′). 22¼h to 22¾h Decrease in Dec. (− 5′).

9d 19h to 20h Oscillating increase in N.F. (+ 30). 19h to 20¼h Oscillating decrease in Dec. (− 8′), followed till 23h by a similar increase.

1923.

April

10d 19¾h to 11d 1½h an irregular series of five oscillations in Dec., increasing in amplitude and period; the last from 23½h to 11d 1½h (− 4′). 21¾h to 22¾h Serrated wave in N.F. (+ 25). 23½h to 11d 1h Wave in N.F. (+ 45), the ascent very steep. 23½h to 24h Decrease in V.F. (− 15).

11d 18h to 18½h Sharp wave in N.F. (+ 20). 21¾h to 23½h Double wave in Dec. (− 6′, + 4′), the first part truncated. 21¾h to 23½h Two consecutive waves in N.F. (+ 50, + 25).

12d 2h to 2¾h Increase in Dec. (+ 5′). 16½h to 18¼h Wave in Dec. (− 6′). 17h to 18h Wave in N.F. (+ 30). 20½h to 21½h Wave in N.F. (+ 30).

13d 21h to 14d 0½h Wave in Dec. (− 14′), with a minor wave superposed at 22h to 22⅓h (+ 4′). This was accompanied by a double-crested wave in N.F. (+ 30).

14d 0½h to 0¾h Decrease in Dec. (− 3′). 0½h to 2h Wave in N.F. (+ 35). 2¼h to 4h Wave in N.F. (− 30). 2¼h to 5h Wave in Dec. (+ 7′). 20h to 21h Wave in Dec. (− 3′).

15d 0h to 1h Wave in N.F. (+ 20). 0¼h to 1¼h Wave in Dec. (− 3′).

20d 18¾h to 20½h Wave in Dec. (− 4′). 18⅔h to 22h A series of small oscillations in N.F. 22½h to 24h Wave in N.F. (− 20), together with a wave in Dec. (− 4′).

21d 2h to 2¼h Increase in N.F. (+ 20). 2½h to 4h Wave in Dec. (− 8′). 2½h to 3¾h Wave in V.F. (− 15). 3¼h to 5½h Wave in N.F. (− 40). 4⅓h to 5½h Wave in Dec. (+ 4′). 7¾h to 8½h Increase in Dec. (+ 5′), immediately preceded by a rapid decrease (− 3′). 8h to 8½h Decrease in N.F. (− 40). 14h to 15h Wave in N.F. (+ 20). 20h to 22h Irregular wave in Dec. (− 7′). 20h to 21½h Wave in N.F. (+ 25). 22¾h to 23h Very rapid increase in Dec. (+ 6′), followed till 22d 1h by a fluctuating return. 23h to 23½h Wave in N.F. (− 20). 23h to 24h Decrease in V.F. (− 12).

22d 1h to 4h Slow wave in Dec. (+ 4′). 4h to 6h Wave in Dec. (+ 5′). 12h to 17h General increase in V.F. (+ 40). 21h to 21½h Decrease in V.F. (− 15). 23½h to 24h Rapid decrease in V.F. (− 20).

22d 10½h to 23d 10h. No register of Dec. and N.F.

23d 11h to 11½h Rapid increase in Dec. (+ 4′). 15h to 16¼h General increase in N.F. (+ 30). 17½h to 19¾h Wave in Dec. (− 7′). 17½h to 19½h Double wave in N.F. (∓ 20).

24d 0h to 4h Slow double wave in N.F. (± 20). 1¾h to 4h Double wave in Dec. (∓ 3′). 20½h to 22h Wave in N.F. (+ 35), the ascent very steep. 20½h to 21⅓h Wave in Dec. (− 6′).

25d 3½h to 5h Wave in Dec. (+ 3′).

29d 21⅓h to 23¼h Double-crested wave in Dec. (− 4′). 21½h to 23h Wave in N.F. (+ 25).

May

3d 18½h to 21½h Wave in Dec. (− 5′). 22¼h to 4d 1h Double-crested wave in Dec. (− 8′). 22⅓h to 24h Wave in N.F. (+ 50). 22¾h to 23¾h Irregular decrease in V.F. (− 15).

4d 20¾h to 21¾h Decrease in Dec. (− 3′). 23h to 5d 1h Wave in N.F. (+ 20).

5d 0¼h to 3h Oscillating increase in Dec. (+ 7′), followed till 5h by a decrease (− 4′). 19h to 21h Flattened wave in N.F. (+ 20).

7d 19h to 20¼h Wave in Dec. (− 3′). 20h to 8d 1½h N.F. trace affected continuously by small oscillations.

8d 0¾h to 1¼h Wave in Dec. (− 3′). 23h to 24h Wave in N.F. (+ 25).

14d 10h to 15d 11¾h. No register of N.F.

15d 21h 35m–38m. Short displacement of V.F. trace (+ 15).

17d 1½h to 2⅔h Wave in Dec. (+ 4′). 7h to 7⅔h Wave in Dec. (+ 3′). 13¼h to 14h Wave in Dec. (+ 3′), with wave in N.F. (+ 30). 13¼h to 15¼h Irregular increase in V.F. (+ 30). 14h to 15h Oscillating increase in Dec. (4′). 14h to 15½h Serrated truncated wave in N.F. (+ 60). 15½h to 17¼h Wave in Dec (− 4′). 16½h to 17½h Wave in N.F. (+ 45). 17¼h to 19h Steep wave in Dec. (− 19′), the return incomplete (+ 11′). 17½h to 19h Wave in N.F. (+ 60), with a temporary retrogression at 17¾h to 18h (− 20). 16½h to 21h Wave in V.F. (+ 40). 21h to 22¼h Wave in Dec. (− 9′). 21¼h to 22h Wave in N.F. (+ 45), followed immediately till 22½h by an increase (+ 40). 23h to 23½h Domed wave in N.F. (− 20), with a decrease in Dec. (− 5′). 22½h to 24h Decrease in V.F. (− 25).

18d 0h to 3h Wave in Dec. (+ 15′), with a wave in N.F. (− 60). 1h to 2h Accelerated decrease in V.F. (− 25). 3h to 4⅔h Increase in Dec. (+ 6′), followed till 6h by a decrease (− 5′). 3h to 5h Decrease in N.F. (− 50), rather rapid at first. 5h to 6½h Increase in V.F. (+ 25). 9¼h to 10¼h Wave in Dec. (+ 3′), with wave in N.F. (− 20). 17½h to 18¾h Wave in N.F. (+ 20) and in Dec. (− 3′). 21h to 22h Wave in N.F. (+ 20).

1923.

May

19d 2h to 4h Flattened wave in Dec. (− 4′). 23¾h to 20d 0¾h Truncated wave in Dec. (− 5′).

20d 0h to 1h Truncated wave in N.F. (+ 25). 15h to 16h Wave in N.F. (− 20). 17½h to 19½h Serrated wave in N.F. (+ 25). 17½h to 18h Decrease in Dec. (− 3′). 22h to 23h Wave in N.F. (+ 30). 22¼h Decrease in Dec. (− 3′), followed immediately till 23½h by a serrated wave (+ 5′).

21d 1h to 1½h Increase in Dec. (+ 3′). 18½h to 20h Wave in Dec. (− 4′). 18⅔h to 20h Wave in N.F. (+ 20).

23d 22½h to 24d 11h No register of Dec., N.F. and V.F.

29d 9h to 12¼h Increase in Dec. (+ 12′). 14½h to 15h Decrease in N.F. (− 30), followed till 17h by a fluctuating return. 12h to 18h General increase in V.F. (+ 60), rather rapid till 14½h. 17h to 19h Decrease in Dec. (− 10′). 17½h to 18¼h Wave in N.F. (+ 30). 19h to 19¾h Wave in N.F. − 40). 21h to 21½h Wave in N.F. (+ 20). 20¾h to 21½h Wave in Dec. (− 7′). 22¾h to 24h Wave in N.F. (+ 35). 23h to 30d 0¼h Wave in Dec. (+ 4′), the return continuing further till 1h (− 4′). 23¼h to 23¾h Decrease in V.F. (− 15).

30d 6h to 7h Decrease in N.F. (− 25). 11½h to 17h Steady increase in V.F. (+ 50), followed till 23h by a similar decrease (− 40). 15¼h to 16h Increase in N.F. (+ 30). 15h to 16h Fluctuating decrease in Dec. (− 5′). 16½h to 17h Rapid increase in N.F. (+ 55), followed till 17½h by a partial return (− 25). 16½h to 16¾h Rapid decrease in Dec. (− 8′), partially recovering till 17¼h (+ 4′). 19¼h to 21¼h Wave in Dec. (− 7′). 19½h to 20¼h Truncated wave in N.F. (− 20).

June

1d 17⅜h to 18⅓h Decrease in Dec. (− 3′). 18h to 18½h Increase in N.F. (+ 20). 16h 50m to 17h Short displacement of V.F. trace.

3d 6h to 5d 10h No register of Dec. and N.F.

5d 3½h to 7½h Slow wave in V.F. (− 15).

6d 15h to 15½h Increase in N.F. (+ 40), followed immediately till 17h by a wave (− 30). 17h to 17½h Decrease in Dec. (− 4′). 19h to 21h Wave in Dec. (− 6′). 19¾h to 21h Wave in N.F. (+ 25).

12d 20½h to 21h Wave in N.F. (+ 20). 23¼h Sharp waves in N.F. (− 25), and Dec. (− 3′). 23⅔h to 24h Rapid decrease in Dec. (− 6′).

13d 0¼h to 0⅓h Very rapid decrease in N.F. (− 40), with immediate partial recovery (+ 20). 0½h to 1½h Oscillating decrease in Dec. (− 4′). 2h to 4h Serrated double wave in Dec. (− 6′, + 13′). 2½h to 4⅓h Wave in N.F. (− 55), the ascent very steep. 2¾h to 4½h Wave in V.F. (− 25), the return continuing further till 6h (+ 15). 5¾h to 7h Decrease in N.F. (− 50). 5½h to 6¾h Serrated wave in Dec. (+ 4′). 6¾h to 7¼h Wave in Dec. (+ 4′), followed till 8h by an increase (+ 5′). 8⅓h to 8⅔h Wave in Dec. (+ 5′), the return continuing further till 9h (+ 3′). 9h 10m to 9h 45m No register of Dec., N.F. and V.F. 9¾h to 11h Oscillating decrease in N.F. (− 40), with increase in Dec. (+ 5′). 14⅓h to 15h Wave in N.F. (+ 30). 15h to 16h Decrease in Dec. (− 8′). 15¼h to 16½h Truncated wave in N.F. (− 40). 19¼h to 20¾h Wave in Dec. (− 5′), followed immediately by a rapid decrease (− 5′). 20¾h to 22⅓h Irregular wave in N.F. (+ 35), the ascent steep. 22½h to 23½h Wave in Dec. (+ 4′).

14d 1h to 1½h Increase in Dec. (+ 3′). 11h to 12h Wave in N.F. (− 20). 17¾h to 19h Serrated wave in Dec. (− 7′). 18h to 19¼h Wave in N.F. (+ 50). 18h to 18½h Increase in V.F. (+ 12). 21½h to 22h Wave in N.F. (+ 25). 21½h to 23h Double wave in Dec. (± 5′). 21⅔h to 22h Decrease in V.F. (− 20). 22¾h to 23½h Wave in N.F. (− 20).

15d 0½h to 2h Wave in Dec. (+ 6′). 2¾h to 4½h Wave in Dec. (+ 4′). 10¾h to 12h Wave in N.F. (− 25). 13h to 14½h Increase in N.F. (+ 30). 18h to 19h Wave in N.F. (+ 25). 18½h to 19h Decrease in Dec. (− 3′).

16d 1½h to 4½h Flattened wave in Dec. (+ 4′).

20d 16½h to 18¾h Increase in N.F. (+ 30). 21½h to 23h Truncated wave in Dec. (− 3′).

21d 2½h to 4½h Wave in Dec. (+ 9′). 3¼h to 4h Increase in N.F. (+ 30). 12¾h to 14h Wave in N.F. (− 30.) 15½h to 16¼h Wave in N.F. (− 20). 23h to 22d 0½h Wave in N.F. (+ 20).

23d 15½h to 16h Sharp wave in N.F. (− 20).

24d 17h to 25d 1½h No register of Dec. and N.F.

27d 14⅔h to 17h Increase in N.F. (+ 50). 23h to 28d 1h Wave in N.F. (+ 30).

28d 2h to 2½h Increase in N.F. (+ 20). 2½h to 4h Wave in Dec. (− 3′), followed till 5½h by a decrease (− 4′). 7h to 7⅓h Rapid decrease in N.F. (− 20). 16⅓h to 17⅓h Increase in N.F. (+ 30).

30d 9h to 14h Increase in Dec. (+ 20′), followed till 18h by numerous small oscillations. 18h to 18¼h Very rapid decrease in Dec. (− 10′). 12h to 24h Slow wave in V.F. (+ 80). 14h to 20h Continuous oscillation in N.F. The principal movements were a wave 14¼h to 14¾h (+ 30), followed by another till 15⅓h (+ 25); a double wave at 17h to 18½h (± 50), with marked serration, and a wave at 18½h to 19h (− 25). 21h to 22h Wave in Dec. (− 4′).

1923.
July

2d 3½h to 4½h Wave in N.F. (− 20). 3½h to 5h Wave in Dec. (+ 4′). 16h to 17½h Wave in Dec. (− 6′). 16⅔h to 18¼h Irregular wave in N.F. (+ 40).

6d 14h to 23h A series of oscillations in N.F., average period 45m; average amplitude (+ 15). 19h to 20½h Truncated wave in Dec. (− 3′), followed till 24h by six small oscillations.

7d 0¾h to 1½h Double-crested wave in Dec. (+ 3′). 4h to 5⅓h Flattened wave in Dec. (+ 3′).

8d 3⅓h to 5h Wave in Dec. (+ 3′). 17h to 17¾h Oscillating increase in N.F. (+ 30).

10d 1½h to 3h Double-crested wave in Dec. (+ 8′). 1¾h to 4h Wave in V.F. (− 15). 10½h to 11½h Accelerated increase in Dec. (+ 9′). 11½h to 12¾h Serrated wave in Dec. (− 4′), followed immediately till 13¾h by two successive waves (− 4′, − 3′). 11½h to 13h Serrated double wave in N.F. (∓ 35), followed immediately till 14½h by three consecutive waves (− 20, − 30, − 20). 12h to 14h Increase in V.F. (+ 30). 17h to 17½h Decrease in N.F. (− 20), followed immediately by an increase (+ 50). 17⅓h to 11d 5½h Continuous slow oscillation in Dec.; seven principal waves in all, viz., 17⅓h to 18⅔h (+ 5′); 18⅔h 20⅓h (+ 4′); 20⅓h to 21½h—double-crested—(+ 4′); 21½h to 23½h (+ 7′); 23½h to 11d 1h (+ 4′); 11d 1h to 2½h (+ 3′); 2½h to 5½h—double-crested—(+ 4′). During the same interval there were many small oscillations in N.F. of period 10 minutes or less. Also waves from 19¾h to 20⅓h (− 25); 20¾h to 21¼h (− 20); 23⅔h to 11d 0½h (− 20) and 11d 2½h to 3⅝h (− 20). 17⅓h to 18h Increase in V.F. (+ 15). 19h to 23h General decrease in V.F. (−30).

11d 11h to 13h Wave in N.F. (− 40). 18½h to 20h Wave in N.F. (+ 30). 21½h to 23h Wave in N.F. (+ 20) 22h to 23h Wave in Dec. (+ 3′).

12d 0h to 2h Wave in Dec. (+ 6′).

17d 21h to 22h Wave in N.F. (− 20). 21½h to 22h Decrease in Dec. (− 4′).

18d 13h to 14⅓h Wave in N.F. (+ 20). 14⅓h to 15h Wave in N.F. (+ 30). 15½h to 16¼h Oscillating increase in N.F. (+ 40). 16¼h to 17½h Truncated wave in N.F. (− 30). 23h to 23¼h Decrease in Dec. (− 3′).

19d 2½h to 3½h Increase in Dec. (+ 6′), followed till 4h by a decrease (− 3′). 4½h to 6h Wave in Dec. (+ 3′). 16h to 17h Increase in N.F. (+ 30).

20d 1¾h to 3h Increase in Dec. (+ 5′).

22d 21½h Sudden increase in N.F. (+ 20). 23½h to 23d 0⅔h Serrated wave in N.F. (+ 35).

23d 0h to 3h Irregular decrease in Dec. (− 15′), rapid till 0⅓h. 3h to 3¾h Wave in Dec. (+ 3′), followed till 6h by a serrated wave (+ 8′), superposed on a general increase (+ 6′). 5h to 6½h Wave in N.F. (+ 25).

29d 5h to 6h Decrease in Dec. (− 3′). 4½h to 5h Increase in N.F. (+ 20). 14h to 14½h Decrease in N.F. (− 20). 22¾h to 24h Wave in N.F. (+ 20). 22½h to 24h Wave in Dec. (− 4′).

28d 17½h to 18h Increase in N.F. (+ 20).

29d 11h to 14h Increase in V.F. (+ 20).

30d 13h to 16h Increase in V.F. (+ 20).

31d 11h to 15h Wave in V.F. (− 15).

August

1d 10h to 18½h No register of N.F.

3d 1h to 3½h Two consecutive waves in N.F. (+ 20). 1¼h to 2½h Wave in Dec. (− 3′), followed till 3h by a rapid decrease (− 5′). 9½h to 10¼h Wave in N.F. (− 20). 10⅔h to 12h Serrated wave in N.F. (− 45). 10¾h to 11h Increase in Dec. (+ 4′). 12½h to 13½h Serrated wave in N.F. (− 30). 18h to 19¼h Truncated wave in N.F. (+ 20). 20h to 21½h Double wave in Dec. (− 6′, + 4′). 20h to 21h Wave in N.F. (+ 20).

4d 2½h to 5h Truncated wave in Dec. (+ 7′). 4h to 7h Wave in N.F. (+ 50). 7h to 8¼h Increase in Dec. (+ 7′).

6d 20h to 20¼h Decrease in Dec. (− 5′).

8d 10¼h to 10d 10½h No register of V.F.

11d 19½h to 21h Wave in Dec. (− 3′).

12d 21h Rapid movement in N.F. (+ 30), partially returning till 21¼h. 22½h to 23h Decrease in Dec. (− 4′).

13d 18h to 18¼h Wave in N.F. (+ 20), the ascent very steep. 19h to 20¼h General increase in N.F. (+ 30), with several oscillations superposed. 20h to 23h Wave in Dec. (− 7′). 20½h Sudden decrease in N.F. (− 50), partially recovering till 21h (+ 30).

1923.

August

$14^d\ 3^h$ to $5\frac{3}{8}^h$ Wave in Dec. (+ 5′). $3\frac{3}{4}^h$ to $5\frac{1}{2}^h$ Wave in N.F. (− 35). $13\frac{1}{2}^h$ to $15\frac{3}{8}^h$ Increase in N.F. (+ 35). $18\frac{1}{2}^h$ to 19^h Wave in N.F. (− 20).

$15^d\ 14^h$ to $15\frac{1}{2}^h$ Wave in N.F. (− 20). 16^h to $17\frac{1}{4}^h$ Wave in N.F. (+ 20). $18\frac{3}{8}^h$ to $19\frac{1}{8}^h$ Increase in N.F. (+ 20).

$17^d\ 7\frac{1}{2}^h$ to 16^h Slow wave in V.F. (− 30).

$19^d\ 22\frac{1}{2}^h$ to $23\frac{1}{2}^h$ Decrease in Dec. (− 4′).

$22^d\ 23^h$ to 24^h Wave in N.F. (+ 25). 23^h to $23^d\ 1\frac{1}{8}^h$ Flattened wave in Dec. (− 3′).

$25^d\ 1^h$ to 3^h Wave in Dec. (+ 4′). 18^h to 19^h Wave in Dec. − 3′).

$31^d\ 0^h$ to 2^h Two consecutive waves in Dec. (+ 3′, + 4′). $23\frac{1}{4}^h$ to Sept. $1^d\ 1\frac{1}{2}^h$ Wave in Dec. (− 4′).

September

$1^d\ 19^h$ to 20^h Wave in Dec. (− 5′).

$3^d\ 0^h$ to $1\frac{1}{3}^h$ Wave in Dec. (− 4′), followed till $2\frac{1}{3}^h$ by a decrease (− 5′). 2^h to 3^h Decrease in N.F. (− 20). $19\frac{1}{2}^h$ to 20^h Wave in N.F. (− 20). $20\frac{1}{2}^h$ to 21^h Wave in Dec. (− 3′).

$4^d\ 11\frac{3}{4}^h$ to $12\frac{3}{4}^h$ Increase in Dec. (+ 5′).

$6^d\ 10\frac{1}{4}^h$ to $7^d\ 10\frac{1}{2}^h$ No register of V.F.

$9^d\ 21\frac{3}{4}^h$ to $22\frac{1}{4}^h$ Decrease in Dec. (− 9′), followed till $10^d\ 0\frac{1}{3}^h$ by a fluctuating recovery. 22^h to 23^h Wave in N.F. (+ 50).

$10^d\ 0\frac{1}{3}^h$ to $1\frac{1}{2}^h$ Wave in Dec. (− 5′). $0\frac{3}{4}^h$ to $1\frac{3}{4}^h$ Wave in N.F. (− 20). 3^h to $4\frac{1}{2}^h$ Increase in Dec. (+ 5′).

$11^d\ 22^h$ to 24^h Wave in Dec. (− 5′).

$13^d\ 20\frac{1}{3}^h$ to 23^h Wave in Dec. (− 5′).

$14^d\ 19\frac{1}{2}^h$ to $20\frac{1}{2}^h$ Wave in Dec. (− 3′), with a wave in N.F. (+ 20).

$17^d\ 19\frac{1}{2}^h$ to 24^h Several irregular movements in N.F., the largest a serrated wave at $21\frac{1}{2}^h$ to $22\frac{3}{4}^h$ (− 20). 23^h to 24^h Domed wave in Dec. (+ 3′).

$18^d\ 22\frac{1}{2}^h$ to $23\frac{1}{2}^h$ Wave in N.F. (+ 20). $22\frac{3}{8}^h$ to $23\frac{1}{3}^h$ Wave in Dec. (− 3′).

$20^d\ 22^h$ to 23^h Truncated wave in N.F. (+ 20).

$23^d\ 21\frac{3}{4}^h$ to $24^d\ 10\frac{1}{2}^h$ No register of Dec. and N.F.

$24^d\ 20\frac{3}{4}^h$ to 22^h Irregular wave in N.F. (+ 25).

$26^d\ 3^h$ to 5^h Increase in N.F. (+ 20), followed till $6\frac{3}{8}^h$ by an accelerated decrease (− 50).

$26^d\ 8^h$ to $28^d\ 8^h$. See Plate II.

$28^d\ 13^h$ to 14^h Increase in N.F. (+ 25). 16^h to 17^h Increase in N.F. (+ 25). 21^h to 22^h Wave in Dec. (− 4′). $21\frac{1}{4}^h$ to $22\frac{1}{4}^h$ Wave in N.F. (+ 20). $23\frac{1}{2}^h$ to $29^d\ 1^h$ Wave in N.F. (+ 30), with a wave in Dec. (+ 5′).

$29^d\ 23\frac{1}{2}^h$ to $30^d\ 0\frac{1}{2}^h$ Wave in Dec. (+ 6′). $23\frac{3}{4}^h$ to $30^d\ 0\frac{3}{4}^h$ Wave in N.F. (+ 25).

October

$1^d\ 0^h$ to $1\frac{1}{4}^h$ Wave in Dec. (− 3′). 0^h to $0\frac{1}{2}^h$ Increase in N.F. (+ 20).

$8^d\ 13^h$ to $14\frac{1}{3}^h$ Flattened wave in Dec. (+ 3′).

$9^d\ 0^h$ to $0\frac{3}{4}^h$ Decrease in Dec. (− 4′).

$10^d\ 10^h$ to 12^h Accelerated increase in Dec. (+ 8′).

$11^d\ 4^h$ to 7^h Wave in Dec. (+ 9′). $3\frac{3}{4}^h$ to $5\frac{1}{3}^h$ Wave in N.F. (− 25). 6^h to $6\frac{3}{8}^h$ Decrease in N.F. (− 20). 5^h to $7\frac{1}{2}^h$ Wave in V.F. (− 15). $14\frac{1}{2}^h$ to $14\frac{3}{4}^h$ Decrease in Dec. (− 3′).

$12^d\ 7\frac{3}{4}^h$ to $8\frac{1}{4}^h$ Decrease in N.F. (− 20 . $19\frac{3}{4}^h$ to 21^h Wave in Dec. (− 5′).

$14^d\ 3\frac{1}{2}^h$ to 9^h No register of V.F. $21\frac{1}{3}^h$ to 23^h Wave in Dec. (− 7′), with a wave in N.F. (+ 50).

$15^d\ 6^h$ to $17^d\ 6^h$. See Plate III.

1923.

October

17d 6h to 9½h Increase in V.F. (+ 50). 6h to 6½h Wave in Dec. (+ 3′). 8h to 9h Fluctuating decrease in Dec. (− 5′). 19h to 20h Irregular decrease in Dec. (− 5′). 21h to 22¾h Double wave in Dec. (∓ 5′). 21½h to 23⅜h Double wave in N.F. (∓ 40). 22½h to 24h Wave in V.F. (− 20).

18d 5h to 7h Wave in N.F. (− 30). 6h to 6¼h Increase in Dec. (+ 3′). 7⅔h to 8⅔h Decrease in N.F. (− 30). 12h to 13h and 16h to 16⅔h No register of Dec., N.F. and V.F. 17½h to 18h Increase in Dec. (+ 4′). 19½h to 22½h Serrated wave in Dec. (− 15′), having a secondary wave superposed at 19¾h to 20¼h (+ 7′). 19¾h to 21½h Wave in N.F. (+ 90), with a secondary wave superposed at 20h to 20⅓h (− 40). 20¾h to 23h Wave in V.F. (− 15).

19d 2⅔h to 4⅓h Truncated wave in Dec. (+ 3′). 19h to 20h Wave in Dec. (− 7′), the return incomplete. 19h to 19½h Increase in N.F. (+ 20).

20d 7½h to 8½h Decrease in N.F. (− 30). 21¼h to 23h Two consecutive waves in N.F. (+ 20, + 25).

24d 9h to 10½h Increase in Dec. (+ 6′).

26d 23h to 24h Wave in N.F. (+ 20).

27d 7h to 8h Accelerated decrease in N.F. (− 30), continuing till 9h in a wave (− 25). 8h to 10h Two consecutive waves in Dec. (+ 4′).

28d 20⅓h to 21½h Wave in N.F. (+ 25), the ascent steep. 20⅓h to 20½h Rapid decrease in Dec. (− 5′), recovering irregularly till 23h. 20½h to 20⅔h Short wave in V.F. (− 12).

31d 19½h to 21h Irregular wave in Dec. (− 7′). 20h to 21h Wave in N.F. (+ 30).

November

1d 0½h to 1½h Wave in Dec. (− 5′). 0h to 2h Wave in N.F. (+ 20).

2d 5h to 8h Wave in Dec. (+ 12′), with wave in N.F. (− 40). 8h to 10h Decrease in N.F. (− 50), partially recovering till 11h (+ 25). 20¾h to 22½h Serrated wave in N.F. (+ 70), followed till 23½h by an increase (+ 30). 20¾h to 22½h Truncated wave in Dec. (− 9′), followed till 24h by a wave (− 4′).

3d 4h to 5h Wave in Dec. (+ 4′), with a wave in N.F. (− 20).

7d 21¼h to 23h Double-crested wave in Dec. (− 6′). 21½h to 23¼h Wave in N.F. (+ 20).

12d 18½h to 20h Oscillating decrease in Dec. (− 8′). 18⅔h to 20h Increase in N.F. (+ 25). 20h to 21⅓h Wave in Dec. (− 4′). 21½h to 23h Irregular double-crested wave in N.F. (+ 40, + 20). 21⅓h to 23h Double-crested in Dec. (− 5′, − 7′).

13d 16h to 16½h Increase in N.F. (+ 25). 23h to 14d 0½h Increase in Dec. (+ 7′).

22d 16⅔h to 17⅔h Wave in Dec. (+ 3′). 19¾h to 21h Decrease in Dec. (− 5′). 22¼h to 23d 0½h Wave in Dec. (− 6′), the ascent rather steep.

23d 0½h to 1¾h General increase in N.F. (+ 25). 0½h to 2½h Wave in Dec. (− 5′).

24d 20¼h to 21h Wave in Dec. (− 3′).

27d 12h to 24h Nearly continuous minor oscillations in Dec. The most important movements were a wave at 16½h to 17½h (− 3′), and a wave at 20½h to 21½h (− 3′). 17⅔h to 18⅔h Decrease in N.F. (− 30). 19h to 22¼h General increase in N.F. (+ 40). 23⅓h to 28d 0½h Wave in Dec. (− 5′), with a wave in N.F. (+ 20).

28d 22h to 23½h Wave in Dec. (− 4′), with a wave in N.F. (+ 20).

29d 4½h to 6h Wave in Dec. (+ 5′). 5h to 5½h Increase in N.F. (+ 25). 20¾h to 21⅔h Decrease in Dec. (− 4′). 22½h to 23½h Wave in N.F. (+ 40). 23¼h to 30d 0¼h Wave in Dec. (+ 3′).

30d 1¾h to 4½h Broad wave in N.F. (+ 25). 2⅓h to 3⅓h Wave in Dec. (− 4′). 13½h to 14h Increase in N.F. (+ 20). 20¾h to 21¼h Wave in N.F. (+ 20).

December

4d 12h to 13½h Wave in Dec. (− 4′). 21h to 21¾h Wave in Dec. (− 4′).

9d 19½h to 20¼h Decrease in N.F. (− 30). 19⅔h to 20⅓h Decrease in Dec. (− 5′). 21½h to 22h Wave in N.F. (− 20). 21¾h to 23¾h Wave in Dec. (− 5′). 23¾h to 10d 1⅔h Wave in Dec. (− 7′).

10d 18h to 19½h Wave in N.F. (+ 20).

14d 1½h to 2½h Wave in N.F. (+ 20). 1⅔h to 2⅔h Wave in Dec. (− 3′). 11h to 16h Slow double-crested wave in N.F. (− 30). 13h to 15h Wave in Dec. (+ 4′).

1923.
December

15d 0h to 2h Wave in Dec. (− 3′). 0½h to 2h Wave in N.F. (+ 20). 23½h to 24h Wave in Dec. (− 3′), with wave in N.F. (+ 30).

18d 20¾h to 22½h Deeply serrated wave in Dec. (− 4′). 21h to 22½h Two consecutive waves in N.F. (+ 15, + 25).

19d 17¾h to 20¾h A series of oscillations in V.F. (about ± 15).

23d 18h to 19⅓h Irregular decrease in N.F. (− 45). 19h to 20⅔h Sharp wave in Dec. (− 10′). 20¼h to 21¼h Wave in N.F. (− 30), the return continuing further till 22h (+ 20).

24d 12¼h to 13¼h Wave in N.F. (− 25). 12¾h to 14h Wave in Dec. (− 4′). 16¼h to 17¾h Wave in N.F. (− 25). 16h to 18¼h Wave in Dec. (− 4′).

25d 14¾h to 17¾h Two consecutive waves in N.F. (− 25, − 30). 15h to 15½h Decrease in Dec. (− 4′). 19¼h to 20½h Wave in Dec. (− 8′). 19⅔h to 20½h Wave in N.F. (+ 25). 22½h to 23½h Wave in Dec. (− 3′).

26d 2h to 3h Wave in N.F. (+ 20). 2h to 2¼h Increase in Dec. (+ 3′), followed immediately by a wave (− 6′). 9h to 10½h Accelerated decrease in N.F. (− 50). 11h to 11¾h Increase in N.F. (+ 25). 11½h to 12h Increase in Dec. (+ 3′). 12h to 13h Wave in Dec. (− 3′). 13½h to 18½h A series of six consecutive waves in N.F.; 13½h to 14¾h (− 45); 14¾h to 15¾h (− 30); 15¾h to 16½h (− 30); 16½h to 17h (− 25); 17h to 17½h (− 25); 17½h to 18½h (− 20). During the same period somewhat similar movements occurred in Dec. 13½h to 15h Wave (− 9′); 15½h to 16h Wave (− 3′); 16¼h to 18h Three consecutive waves of increasing amplitude (− 3′, − 5′, − 8′). 19¾h to 20⅓h Wave in N.F. (+ 20), followed immediately till 22h by another (+ 65). 19h to 23h Wave in Dec. (− 15′), with a small wave superposed at 19½h to 20h (− 3′), and at 21¼h to 22h (− 3′).

27d 0h to 1¾h Wave in N.F. (+ 40). 3h to 5h Wave in N.F. (− 20). 3½h to 5¼h Irregular wave in Dec. (+ 4′), with steep ascent. 9¾h to 10¾h Wave in N.F. (− 30). 15⅓h to 16½h Wave in Dec. (− 6′). 18⅓h to 19½h Wave in Dec. (− 5′). 18¾h to 19½h Wave in N.F. (+ 25). 23h to 24h Wave in N.F. (+ 20).

28d 2h to 3½h Irregular increase in Dec. (+ 5′), followed till 5h by a decrease (− 4′). 17h to 18½h Wave in Dec. (− 7′). 16¾h to 17½h Wave in N.F. (− 25), followed till 18½h by a decrease (− 25). 19¾h to 20½h Fluctuating decrease in Dec. (− 6′), followed till 22½h by a similar increase.

30d 18¾h to 21h Wave in Dec. (− 3′).

31d 1⅔h to 3h Wave in Dec. (+ 3′).

EXPLANATION OF THE PLATES.

The magnetic motions figured on the Plates are those for days of disturbance selected by the International Committee—March 24d 8h to 25d 8h; September 26d 8h to 27d 8h and 27d 8h to 28d 8h; October 15d 6h to 16d 6h and 16d 6h to 17d 6h. In addition the disturbance on February 25–26 is figured.

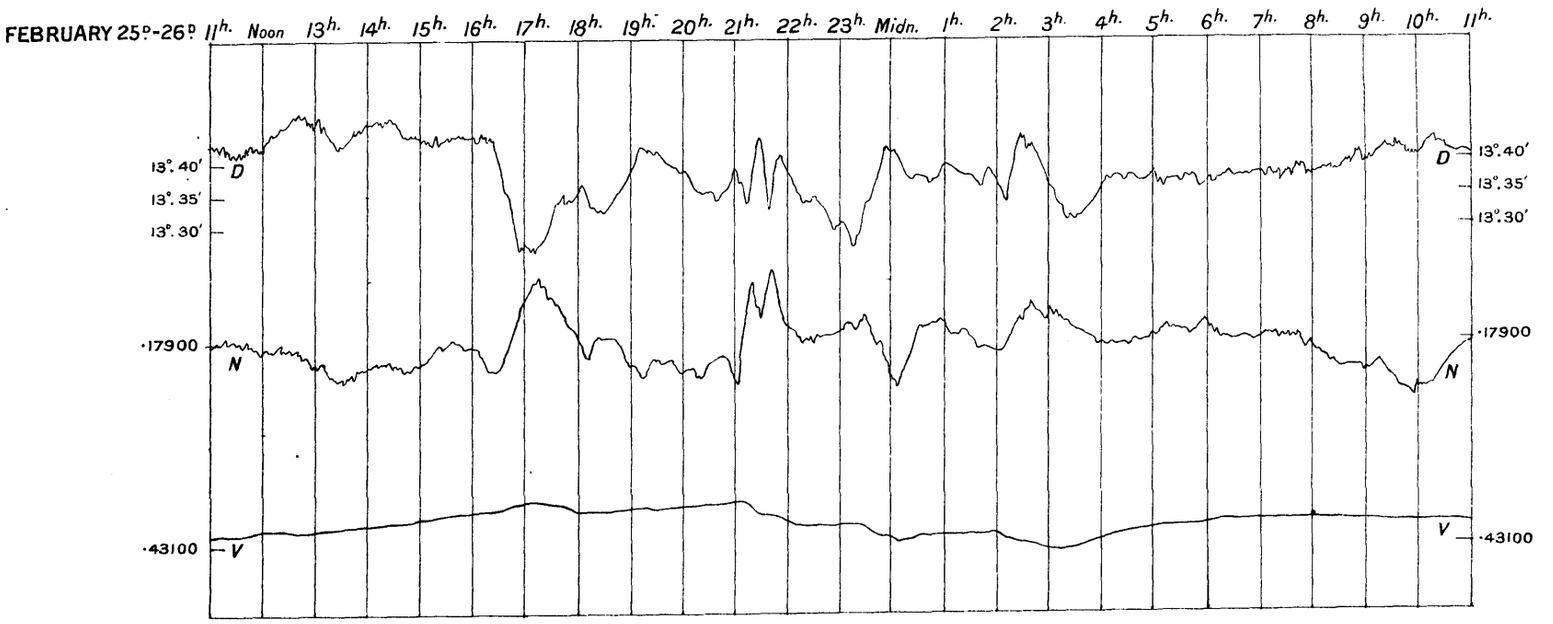
The time is Greenwich Civil Time (commencing at midnight and counting the hours from 0 to 24).

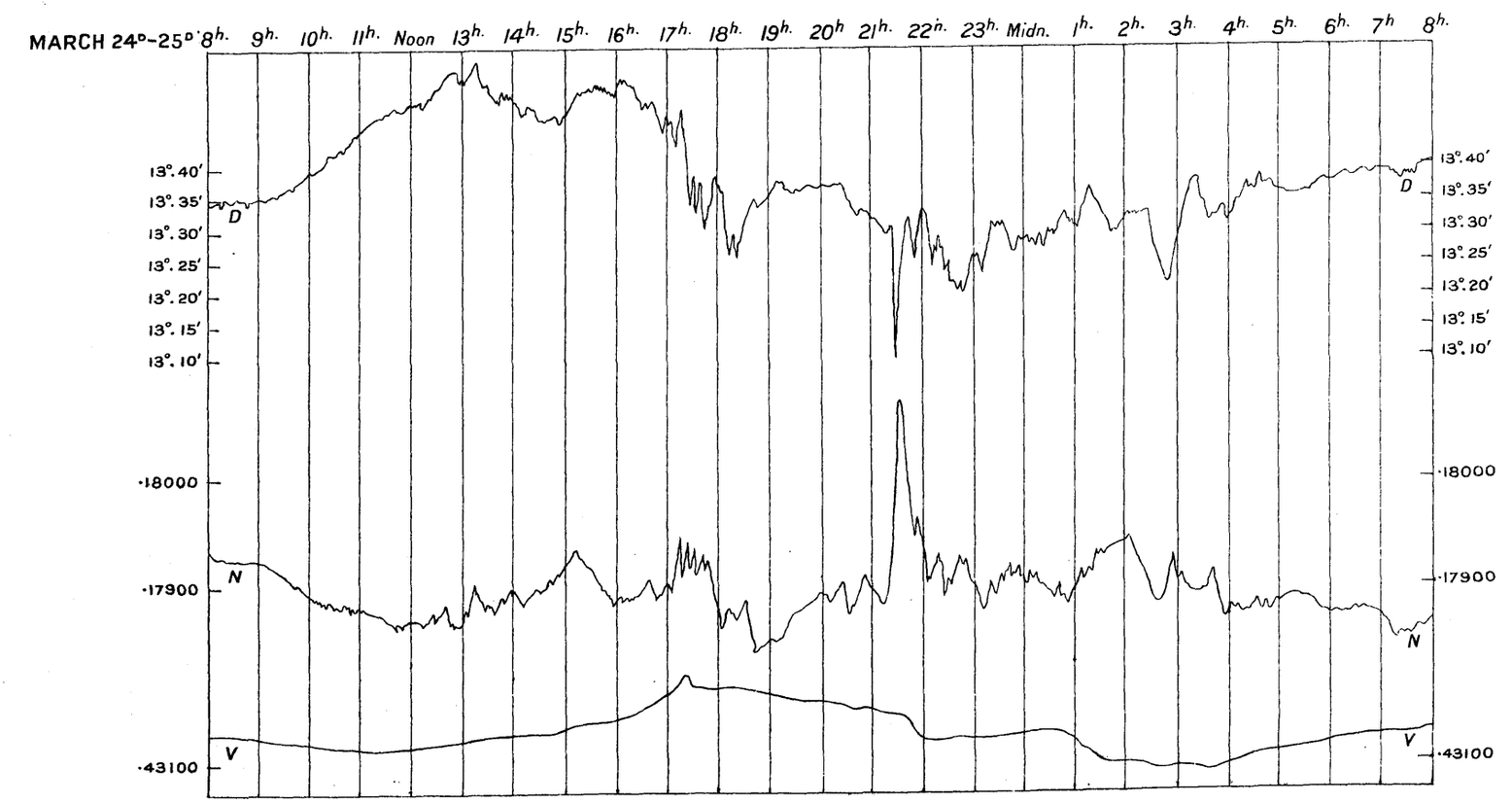
The magnetic declination, north force, and vertical force are indicated by the letters D, N and V, respectively. The declination (west) is expressed in arc; the unit for north and vertical force is γ (0·00001 C.G.S.), the corresponding scales being given on the side of each diagram.

Equal changes of amplitude in declination and north force correspond nearly to equal changes of absolute magnetic force, 0·001 of a C.G.S. unit being represented by 0·71 in. = 17·7 mm. in the declination curve and by 0·66 in. = 16·4 mm. in the north force curve. In the case of the vertical force curve the scale is somewhat smaller and is non-uniform; the mean value is 0·43 in. = 10·9 mm.

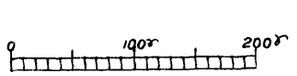
Upward motion indicates increase of declination, north force and vertical force.

MAGNETIC DISTURBANCES RECORDED AT THE ROYAL OBSERVATORY, GREENWICH, 1923.

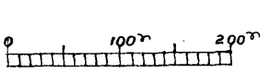




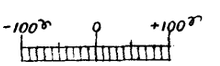
SCALES FOR MAGNETIC ELEMENTS IN C.G.S. UNITS.



Declination West.



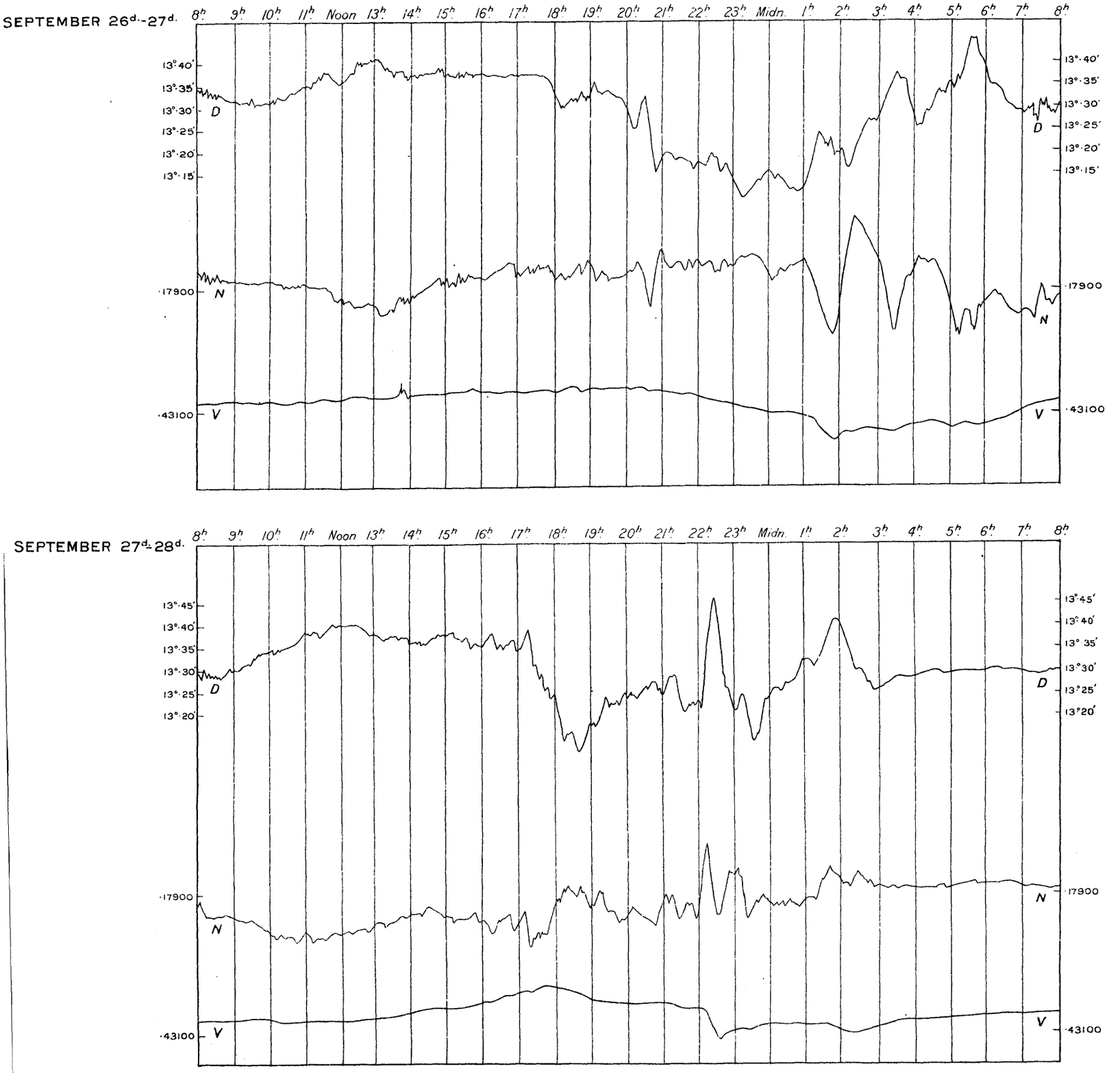
North Force.



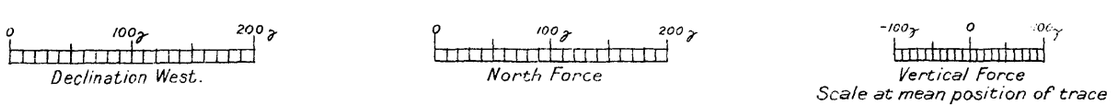
Vertical Force.
Scale at mean position of trace.

2058. 12/819. 124/1276. 450. 1:25.

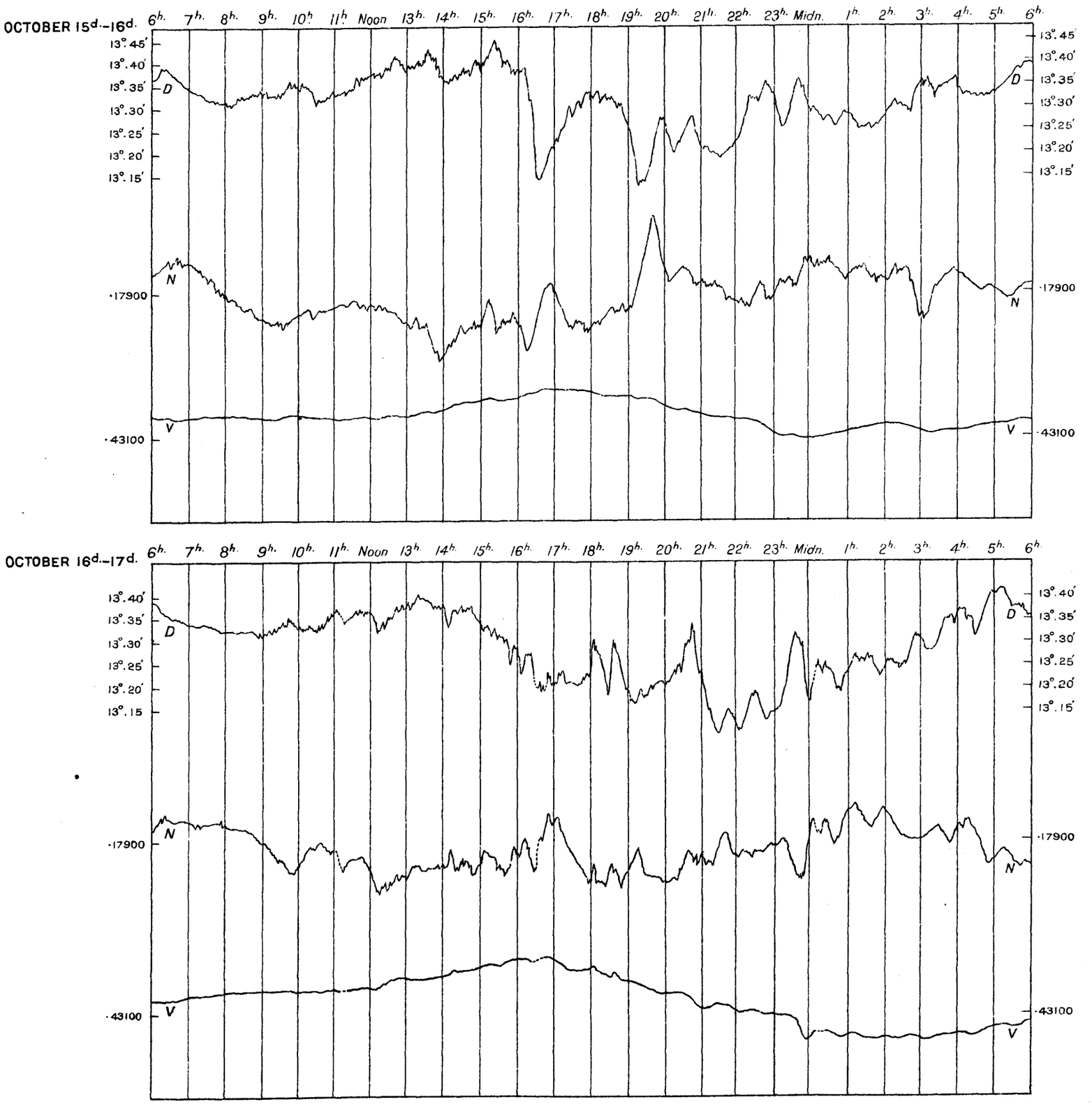
MAGNETIC DISTURBANCES RECORDED AT THE ROYAL OBSERVATORY, GREENWICH, 1923.



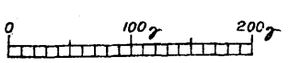
SCALES FOR MAGNETIC ELEMENTS IN C.G.S. UNITS.



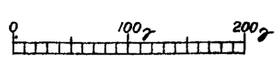
MAGNETIC DISTURBANCES RECORDED AT THE ROYAL OBSERVATORY, GREENWICH, 1923.



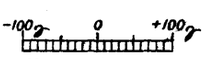
SCALES FOR MAGNETIC ELEMENTS IN C.G.S. UNITS.



Declination West.



North Force.



Vertical Force.

Scale at mean position of trace.

2058.

Malby & Sons, Lith.

ROYAL OBSERVATORY, GREENWICH.

RESULTS

OF

METEOROLOGICAL OBSERVATIONS.

1923.

MONTH and DAY, 1923.	Barometer.	Temperature.							Difference between the Air Temperature and Dew Point Temperature.			Degree of Humidity (Saturation = 100).	Temperature.			Rain collected in Gauge No. 6, whose receiving surface is 5 inches above the Ground	Electricity.	Daily Duration of Sunshine.	Sun above Horizon.
		Of the Air.					Of Evaporation.	Of the Dew Point.					Of Radiation.		Of the Earth 4 ft. below the Surface of the Soil.				
	Mean of 24 Hourly Values (corrected and reduced to 32° Fahrenheit).	Highest.	Lowest.	Daily Range.	Mean of 24 Hourly Values.	Excess above Average of 65 Years.	Mean of 24 Hourly Values.	Deduced Mean Daily Value.	Mean.	Greatest.	Least.		Highest in Sun's Rays.	Lowest on the Grass.					
	in.	°	°	°	°	°	°	°	c	°	°		°	°	°	in.		hours.	hours.
Jan. 1	29·673	42·8	32·4	10·4	37·5	− 1·1	36·0	33·9	3·6	5·0	1·4	87	46·3	29·0	44·0	0·000	..	3·6	7·8
2	29·624	51·8	42·8	9·0	47·1	+ 8·7	46·0	44·8	2·3	4·9	1·3	91	54·5	38·9	44·1	0·173	..	0·0	7·9
3	29·511	49·9	39·1	10·8	44·5	+ 6·2	42·2	39·5	5·0	9·2	1·8	83	62·0	30·5	44·1	0·002	..	3·5	7·9
4	29·845	43·8	30·4	13·4	38·1	− 0·2	36·9	35·2	2·9	7·3	0·0	90	47·4	27·6	43·9	0·002*	..	0·4	7·9
5	29·669	45·0	28·2	16·8	38·3	− 0·1	36·9	35·0	3·3	7·1	0·0	88	55·0	27·0	43·9	0·149	..	0·0	7·9
6	29·803	42·3	33·7	8·6	38·4	+ 0·3	36·2	33·2	5·2	8·4	1·9	82	42·0	27·0	43·8	0·000	..	2·0	8·0
7	29·796	51·7	34·1	17·6	45·2	+ 7·2	44·0	42·6	2·6	4·4	1·3	91	54·0	27·6	43·6	0·264	..	0·0	8·0
8	29·804	53·0	37·9	15·1	47·9	+10·0	46·0	43·9	4·0	7·3	1·9	87	65·1	30·1	43·6	0·015	..	0·1	8·0
9	29·806	48·1	34·1	14·0	40·7	+ 2·8	38·4	35·5	5·2	9·8	1·8	82	57·7	28·8	43·8	0·076	..	1·3	8·0
10	29·562	44·3	36·6	7·7	39·9	+ 2·0	36·7	32·6	7·3	10·0	4·0	76	56·0	29·6	43·5	0·000	..	0·4	8·1
11	29·657	41·9	33·1	8·8	37·4	− 0·5	35·4	32·6	4·8	8·5	2·7	83	44·4	28·1	43·4	0·006	..	0·8	8·1
12	29·917	42·9	34·1	8·8	38·6	+ 0·7	36·9	34·6	4·0	6·7	2·1	87	49·8	29·2	43·6	0·010	..	2·6	8·1
13	30·134	40·5	27·3	13·2	32·8	− 5·2	32·1	30·8	2·0	4·6	0·0	93	39·6	26·9	43·1	0·002*	..	0·0	8·2
14	30·054	51·7	37·8	13·9	44·6	+ 6·6	42·7	40·5	4·1	11·3	0·0	86	63·6	30·5	43·1	0·002	..	0·3	8·2
15	30·214	44·4	35·1	9·3	39·8	+ 1·7	37·2	33·8	6·0	8·3	3·9	79	50·9	28·9	43·0	0·000	..	0·4	8·2
16	30·199	45·6	33·3	12·3	42·3	+ 4·0	40·2	37·6	4·7	8·7	1·9	84	49·8	27·4	43·1	0·010	..	0·0	8·3
17	30·294	38·1	25·0	13·1	30·5	− 8·0	29·3	25·9	4·6	7·7	0·0	82	37·4	23·0	42·9	0·002*	..	0·6	8·3
18	30·292	44·8	30·2	14·6	39·2	+ 0·6	37·2	34·6	4·6	6·3	1·2	84	53·5	29·4	42·9	0·058	..	1·6	8·4
19	30·272	46·7	32·4	14·3	39·8	+ 1·1	38·7	37·3	2·5	4·9	0·3	91	56·8	28·4	42·6	0·053	..	0·6	8·4
20	29·912	47·0	34·8	12·2	41·3	+ 2·5	37·9	33·7	7·6	13·1	1·3	75	51·0	29·3	42·4	0·113	..	1·6	8·5
21	30·199	42·2	29·3	12·9	36·5	− 2·3	33·9	30·2	6·3	12·3	1·6	78	48·0	24·1	42·8	0·000	..	0·1	8·5
22	30·182	50·1	39·3	10·8	44·9	+ 6·1	42·7	40·1	4·8	8·3	0·9	84	62·7	31·1	42·3	0·000	..	4·7	8·6
23	30·394	46·5	29·4	17·1	36·9	− 2·0	33·6	28·9	8·0	12·5	4·6	73	43·5	23·4	42·4	0·000	..	2·4	8·6
24	30·379	47·0	32·2	14·8	40·5	+ 1·6	38·5	36·0	4·5	7·8	1·5	84	59·5	23·4	42·4	0·000	..	0·0	8·7
25	30·471	50·0	38·1	11·9	44·6	+ 5·5	42·4	39·8	4·8	9·3	1·3	84	61·5	29·1	42·2	0·000	..	0·5	8·7
26	30·425	44·9	37·6	7·3	42·7	+ 3·4	40·0	36·7	6·0	9·1	3·3	80	46·8	28·9	42·2	0·000	..	0·0	8·8
27	30·190	47·4	41·6	5·8	44·1	+ 4·6	41·7	38·9	5·2	8·4	2·9	81	54·2	32·9	42·3	0·000	..	0·0	8·8
28	30·130	49·1	40·7	8·4	44·8	+ 5·2	42·7	40·3	4·5	8·3	1·6	85	57·0	31·9	42·1	0·002	..	0·0	8·9
29	29·940	48·5	42·1	6·4	45·9	+ 6·2	44·3	42·5	3·4	7·0	0·2	88	55·6	35·3	42·2	0·105	..	0·0	8·9
30	29·942	53·6	46·9	6·7	50·3	+10·6	48·3	46·2	4·1	7·2	2·3	86	59·0	40·3	42·5	0·004	..	0·0	9·0
31	30·023	54·2	47·2	7·0	50·6	+10·9	48·6	46·5	4·1	7·9	1·9	87	62·8	40·4	42·6	0·001	..	0·8	9·0
Means	30·010	46·8	35·4	11·4	41·5	+ 2·9	39·5	36·9	4·6	8·1	1·6	84·2	53·1	29·6	43·0	Sum 1·049	..	0·9	8·3
Number of Column for Reference.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19

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

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

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

*Rainfall (Column 16). The amount entered on January 4, 13 and 17 are derived from frost or dew.

The mean reading of the *Barometer* for the month was 30^{in}·010, being 0^{in}·216 *higher* than the average for the 65 years, 1841–1905.

TEMPERATURE OF THE AIR.

The highest in the month was 54°·2 on January 31; the lowest in the month was 25°·0 on January 17; and the range was 29°·2.
The mean of all the highest daily readings in the month was 46°·8, being 3°·7 *higher* than the average for the 65 years, 1841–1905.
The mean of all the lowest daily readings in the month was 35°·4, being 1°·7 *higher* than the average for the 65 years, 1841–1905.
The mean of the daily ranges was 11°·4, being 2°·0 *greater* than the average for the 65 years, 1841–1905.
The mean for the month was 41°·5, being 2°·9 *higher* than the average for the 65 years, 1841–1905.

MONTH and DAY, 1923.	Record of the Night Sky. Polaris. Duration.	Polaris. Fraction of Total Exposure.	δ Ursae Minoris. Duration.	δ Ursae Minoris. Fraction of Total Exposure.	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	4·5	0·32	3·5	0·25	NW : SW	SW : SSW	0·9	0·02	206	7, ho.-fr : 2, m, ho.-fr : 1, cu, slt.-m	1, ci, m : 10, th.-cl, m, lu.-ha
2	9·3	0·67	8·9	0·63	SSW : SW	SW	5·9	0·45	465	10, r : 10, s, n, fq.-m.-r	10, n, m.-r, w: 10, m.-r, r, sq, w: 8, th.-cl
3	12·9	0·92	12·6	0·90	SW	WSW	3·0	0·33	400	1 : 1, s, ci.-s.	9, n, cu, sh : 1 : 3
4	12·7	0·91	8·4	0·60	WSW : W	NNW : SW : Calm	0·4	0·01	168	1, d, lu.-ha : 10, s, s.-cu, m, h	1, cu, h, m, ho.-fr : 0, h, ho.-fr, slt.-f
5	4·3	0·30	3·9	0·28	Calm : S	S : WNW	3·0	0·27	353	1, h, ho.-fr, f, m: 1, h, m, ho.-fr : 10, s, m	10, n, slt.-r : 10, slt.-r, r : 10, r, m.-r
6	7·6	0·54	6.9	0·49	NW : WNW : W	WNW : WSW : SW	3·0	0·19	317	10 : 0, h, m, ho.-fr: 1, h, m, ho.-fr	1, cu, h, m : 0, m, ho.-fr
7	0·0	0·00	0·0	0·00	SSW	WSW	3·2	0·25	364	10, r : 10, s, n, r, m.-r	10, slt.-m : 10 : 10
8	11·9	0·87	11·0	0·80	WSW : SW	SW : NNW	2·8	0·33	393	10 : 10 :10,n,s,m,oc.-m.-r	10, n, s, m, fq.-m.-r : 0, m
9	12·7	0·93	12·1	0·88	WSW : SSW	WSW : SW	9·0	0·46	487	0, lu.-ha : 10, n, oc,-slt.-r, w	6, cu, sh, sq, w : 0, w : 1, cu, slt.-d, w
10	12·8	0·93	10·8	0·79	SW	WSW	5·0	0·56	579	1, slt-ho.-fr, w : 1, w, slt.-ho.- fr: 7, cu.-n, ci, cu, w	8, cu, n, w : 0, d, w : v.-cl
11	1·3	0·09	0·5	0·04	WSW : W	WNW : W	2·0	0·16	341	0, ho.-fr : 0, ho.-fr : 1, cu, slt.-m, h	1, cu, h, slt.-m : 10, slt.-m, sh
12	10·2	0·74	9·4	0·68	NW : N	N : NNW	1·6	0·15	247	10, r :10, slt.-m:8,ci.-cu,cu.-n,h,slt.-m	3, cu, h, m : 1, th.-cl, m : 1, ho.-fr, m
13	0·0	0·00	0·0	0·00	Calm : SW	SSW	0·9	0·02	172	0, h, ho.-fr : f, ho.-fr : f, ho -fr.	10, f : 10, m : 10, slt.-r
14	13·5	0·98	13·2	0·96	SSW : SW	SW : NW	2·5	0·23	357	10 : 10, r, m.-r, m : 10, s, n, m.-r, m	9, cu, m : v.-cl : 1
15	4·3	0·31	3·0	0·22	SW	W : WSW	1·9	0·16	344	0, slt.-ho, fr :1,m,slt.-ho.-fr:p.-cl,cu,s,th.-cl,m,h	9, cu.-s, n, m : 4 : v.-cl
16	12·5	0·91	12·3	0·90	WSW : WNW : N	N : NE : Calm	0·9	0·12	248	10 : 10, m.-r, m: 10, s, n, m	10, s, n, slt.-m : 0, ho.-fr
17	2·2	0·16	0·0	0·00	Calm	Calm	0·0	0·00	80	0, ho.-fr : 0, ho.-fr, slt.-f	p.-cl,cu,th.-cl,m,ho.-fr: f, ho.-fr : 10, f
18	6·3	0·46	5·2	0·38	Calm	NNW : N	1·3	0·08	202	10 : 10, m.-r : 10, r, m	v.-cl, cu, n : 7 : 9
19	1·2	0·09	0·8	0·06	Calm : SW	SW : WSW	7·0	0·24	374	1 : f : p.-cl, f	10, s : 10, w : 10, r, w
20	13·5	1·00	13·5	1·00	WSW : NW	NW : N : NNW	9·0	0·58	514	10, r, w :v.-cl,w :10,ci.-s,n,oc.-slt.-r,sl.-sh,w	v.-cl, cu, sh, w : 0, w : 0, ho,-fr
21	2·0	0·15	1·2	0·09	NNW : Calm : W	WSW : SW	1·2	0·09	279	0, ho.-fr : 0, ho.-fr : 5, cu.-s,m	10, s, m : 10
22	8·5	0·63	7·8	0·58	SW : WSW	W : WNW	1·6	0·14	358	10 : 8, d : 9, s, th.-cl, h, m	9, cu, ci, th.-cl, m : 9 : 7, d
23	13·5	1·00	13·5	1·00	N : NNW	NW : Calm : SW	2·4	0·05	218	0, ho.-fr : 0, h, ho.-fr	0, h, m, ho.-fr : 0, slt.-m, ho.-fr
24	3·8	0·28	3·4	0·25	SSW : SW	SW : WSW	1·0	0·11	341	0, ho.-fr : 0, ho.-fr : 9, ci.-s, slt.-m	10, s, n : 10 : 3, slt.-d
25	5·2	0·39	4·7	0·35	SW : WSW	WSW : WNW	0·6	0·05	226	9 : 9, cu, s, m	9, s.-cu s, m : 9, slt.-m : 0, slt.-d, slt.-m
26	0·0	0·00	0·0	0·00	WSW : W : SW	WNW : WSW	0·7	0·05	214	10 : 10, slt.-m	10, n, slt.-m : 10 : 10
27	8·0	0·61	7·5	0·58	Calm : SW	WSW : W	0·7	0·08	275	10, sh, m.-r.-sh : 10,s,s.-cu,m.-r.-sh,slt.- m	10 : 10 : v.-cl, th.-cl, slt.-
28	1·5	0·12	0·8	0·06	WSW	WNW : W : WSW	0·7	0·11	297	v.-cl : 10, s, cu, fq.-slt.-r, m	10, s, n, m : 10 : 10
29	0·5	0·04	0·3	0·03	WSW : SW	WSW : W	1·6	0·18	391	10 : 9 :10, n, fq.-r	10, sc, s, fq.-r : 10 : 10, oc.-r
30	3·5	0·27	2·9	0·22	WSW : W : WNW	WNW : W : WSW	0·6	0·04	263	10 : 9, n, slt.-m	9, cu.-s, n, m : 10, slt.-m, m.-r
31	0·6	0.04	0·2	0·02	WSW : W	WSW : W	2·5	0·30	480	6 : 10 :10, n, s, m.-r.-sh	10,s,n,th.-cl,m.-r.-sh,w,p.-so.-ha: 10, th.-cl, w
Means	..	..	..	..	..	..	..	0·19	321		
Number of Column for Reference	20	21	22	23	24	25	26	27	28	29	30

The mean *Temperature of Evaporation* for the month was 39°·5, being 2°·3 *higher* than
The mean *Temperature of the Dew Point* for the month was 36°·9, being 1°·4 *higher* than
The mean *Degree of Humidity* for the month was 84·2, being 3·8 *less* than
The mean *Elastic Force of Vapour* for the month was 0in·219, being 0in·013 *greater* than
The mean *Weight of Vapour in a Cubic Foot of Air* for the month was 2grs·5, being 0gr·1 *greater* than
The mean *Weight of a Cubic Foot of Air* for the month was 555 grains, being 1 grain *greater* than
} the average for the 65 years, 1841–1905.

The mean amount of *Cloud* for the month (a clear sky being represented by 0 and an overcast sky by 10) was 7·1.

The mean proportion of *Sunshine* for the month (constant sunshine being represented by 1) was 0·109. The maximum daily amount of *Sunshine* was 4·7 hours on January 22.

The highest reading of the *Solar Radiation Thermometer* was 65°·1 on January 8; and the lowest reading of the *Terrestrial Radiation Thermometer* was 23°·0 on January 17.

The *Proportions of Wind* referred to the cardinal points were N. 4, E. 0, S. 8, W. 17. Two days were calm.

The *Greatest Pressure of the Wind* in the month was 9·0 lbs. on the square foot on January 9 and 20. The mean daily *Horizontal Movement of the Air* for the month was 321 miles; the greatest daily value was 579 miles on January 10; and the least daily value was 80 miles on January 17.

Rain (0in·005 or over) fell on 12 days in the month, amounting to 1in·049, as measured by gauge No. 6 partly sunk below the ground; being 0in·832 *less* than the average fall for the 65 years, 1841–1905.

MONTH and DAY, 1923.	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 65 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.	Of the Earth 4 ft. below the Surface of the Soil.	Rain collected in Gauge No. 6, whose receiving surface is 5 inches above the Ground.	Electricity.	Daily Duration of Sunshine.	Sun above Horizon.
	in.	°	°	°	°	°	°	°	°	°	°		°	°	°	in.		hours.	hours.
Feb. 1	29·916	54·8	50·2	4·6	52·3	+12·7	50·3	48·3	4·0	5·7	2·6	86	59·3	46·1	42·8	0·005	..	0·0	9·1
2	29·823	54·9	50·8	4·1	52·5	+13·0	50·9	49·3	3·2	4·6	2·4	89	65·0	49·0	43·1	0·018	..	0·0	9·1
3	29·831	54·3	45·3	9·0	50·6	+11·1	47·4	44·0	6·6	12·2	1·9	79	86·5	35·0	43·3	0·000	..	3·5	9·2
4	29·871	49·2	30·5	18·7	43·5	+ 4·0	41·2	38·5	5·0	11·7	0·0	82	73·4	26·0	43·6	0·000	..	3·7	9·2
5	29·905	48·6	25·9	22·7	36·0	− 3·6	34·5	32·3	3·7	8·9	0·0	87	79·9	24·4	43·9	0·000	..	4·7	9·3
6	29·467	44·4	36·5	7·9	40·3	+ 0·7	37·8	34·6	5·7	9·2	2·6	81	75·6	28·3	43·7	0·021	..	2·5	9·3
7	29·149	50·9	38·2	12·7	45·3	+ 5·8	43·9	42·3	3·0	5·4	0·2	89	58·2	30·4	43·6	0·286	..	0·0	9·4
8	28·910	50·9	37·2	13·7	46·4	+ 7·1	45·3	44·1	2·3	4·7	0·0	92	54·2	31·0	43·6	0·473	..	0·0	9·5
9	29·474	51·1	35·5	15·6	42·8	+ 3·7	41·0	38·8	4·0	7·3	0·5	86	78·1	29·9	43·6	0·000	..	4·6	9·5
10	29·407	46·1	43·2	2·9	44·4	+ 5·5	42·5	40·3	4·1	6·4	1·3	86	59·4	40·2	43·9	0·037	..	0·0	9·6
11	29·538	55·6	40·8	14·8	45·7	+ 6·9	43·4	40·8	4·9	10·9	0·7	84	99·1	32·7	43·9	0·071	..	5·4	9·7
12	29·835	50·0	34·9	15·1	42·8	+ 4·0	40·6	38·0	4·8	12·1	0·0	84	79·9	29·0	43·8	0·061	..	2·0	9·7
13	29·924	43·1	39·1	4·0	41·5	+ 2·5	40·3	38·8	2·7	4·8	0·0	91	58·0	38·7	43·9	0·364	..	0·0	9·8
14	29·912	40·9	37·7	3·2	38·9	− 0·4	38·4	37·8	1·1	3·7	0·0	96	45·8	32·8	43·9	0·157	..	0·0	9·8
15	29·753	44·2	35·2	9·0	39·6	+ 0·2	38·9	38·0	1·6	4·4	0·0	94	67·0	36·1	43·9	0·000	..	0·6	9·9
16	29·614	50·9	39·5	11·4	44·6	+ 5·1	42·6	40·3	4·3	8·9	0·2	85	89·0	30·8	43·6	0·013	..	3·6	10·0
17	29·564	51·6	36·9	14·7	43·3	+ 3·7	41·0	38·3	5·0	10·9	1·1	82	86·0	33·5	43·9	0·047	..	6·8	10·0
18	29·289	45·2	34·1	11·1	38·9	− 0·6	37·9	36·6	2·3	5·0	0·0	93	62·7	30·1	43·3	0·204	..	0·1	10·1
19	29·225	38·4	35·2	3·2	36·4	− 3·1	35·4	34·0	2·4	4·7	0·0	91	47·0	29·2	43·3	0·041	..	0·0	10·1
20	29·481	35·8	31·9	3·9	34·3	− 5·2	32·6	29·7	4·6	6·9	1·3	83	41·0	31·0	43·3	0·000	..	0·0	10·2
21	29·152	49·3	32·5	16·8	38·8	− 0·8	37·4	35·5	3·3	6·4	0·5	89	92·1	30·1	43·2	0·209	..	1·3	10·3
22	28·982	48·3	32·4	15·9	40·0	+ 0·3	38·2	35·9	4·1	10·2	0·0	86	88·0	27·6	43·1	0·194	..	3·3	10·3
23	29·010	46·0	35·0	11·0	40·0	+ 0·2	38·3	36·1	3·9	8·9	0·0	86	68·8	29·9	42·9	0·080	..	2·5	10·4
24	29·105	45·3	38·4	6·9	43·1	+ 3·1	41·9	40·5	2·6	3·7	1·2	91	54·0	34·5	42·9	0·022	..	0·0	10·5
25	29·377	50·6	40·7	9·9	44·7	+ 4·6	43·0	41·0	3·7	7·2	0·9	87	66·8	31·6	42·8	0·001	..	0·0	10·5
26	28·962	57·2	44·7	12·5	48·1	+ 7·9	44·9	41·4	6·7	14·0	0·0	78	102·2	36·5	43·0	0·187	..	3·2	10·6
27	28·807	50·0	41·9	8·1	45·8	+ 5·5	42·2	38·1	7·7	10·8	4·7	75	76·0	36·0	43·0	0·060	..	0·6	10·7
28	29·075	52·7	41·9	10·8	46·3	+ 6·0	43·0	39·3	7·0	12·6	1·1	77	97·0	38·6	43·0	0·103	..	4·3	10·7
Means	29·441	48·6	38·1	10·5	43·1	+ 3·6	41·2	39·0	4·1	7·9	0·8	86·0	71·8	33·2	43·4	Sum 2·654	..	1·9	9·9
Number of Column for Reference.	1	2	3	4	5	6	7	8	9	10	11	2	13	14	15	16	17	18	19

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

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

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

The mean reading of the *Barometer* for the month was 29^{in}·441, being 0^{in}·361 *lower* than the average for the 65 years, 1841–1905.

TEMPERATURE OF THE AIR.

The highest in the month was 57°·2 on February 26; the lowest in the month was 25°·9 on February 5; and the range was 31°·3.

The mean of all the highest daily readings in the month was 48°·6, being 3°·4 *higher* than the average for the 65 years, 1841–1905.

The mean of all the lowest daily readings in the month was 38°·1, being 3°·9 *higher* than the average for the 65 years, 1841–1905.

The mean of the daily ranges was 10°·5, being 0°·5 *less* than the average for the 65 years, 1841–1905.

The mean for the month was 43°·1, being 3°·6 *higher* than the average for the 65 years, 1841–1905.

MONTH and DAY, 1923.	Record of the Night Sky. Polaris. Duration.	Polaris. Fraction of Total Exposure.	δ Ursae Minoris. Duration.	δ Ursae Minoris. Fraction of Total Exposure.	Wind as Deduced from Self-Registering Anemometers. Osler's. General Direction. A.M.	P.M.	Pressure on the Square Foot. Greatest.	Mean of 24 Hourly Measures.	Robinson's Horizontal Movement of the Air.	Clouds and Weather. A.M.	P.M.
	hours.		hours.				lbs.	lbs.	miles.		
Feb. 1	0·0	0·00	0·0	0·00	WSW	WSW	4·5	0·70	648	10, r, w : 10, w : 10, n, s, w	10, n, oc.-m.-r, w : 10, w : 10, oc.-m.-r, w
2	1·5	0·12	0·7	0·05	WSW	WSW	5·7	0·52	562	10, oc.-m.-r, w : 10, n, sc, oc.-m.-r, w	10, s, sc, slt.-r, w : 10, w : 10, w
3	4·0	0·32	3·3	0·26	WSW	W : WSW	2·3	0·23	432	10,th.-cl,lu.-ha,w:10,th.-cl,w,so.-ha:7,ci.-s,w,so.-ha	9, n, s, w : 10, th.-cl, slt.-d : 9, s, d
4	12·7	1·00	12·7	1·00	WSW: NW: NNW	NNE : Calm	1·5	0·07	233	10, d : 8 : p.-cl, h	7, cu, s.-cu : 0, m, ho.-fr : 0, m, ho.-fr
5	11·8	0·92	11·0	0·86	Calm : SSW	SSW : S : SSE	1·1	0·04	214	0, m, ho.-fr : 0, m, ho.-fr : 0, m	4, cu : 0 : 0, ho.-fr
6	8·0	0·63	7·7	0·60	SSE : S	S : SSE : SSW	2·4	0·34	430	4 : 2 : 7, cu	7, ci, ci.-cu, w : 10, slt.-r, w : 4, slt.-r, w
7	0·0	0·00	0·0	0·00	SSW : SSE	S : SSW	4·2	0·39	451	1 : 10, s, n, fq.-r, w	10, sc, s, fq.-r, w : 10, fq.-r : 10, w
8	9·8	0·78	9·2	0·72	SSE	SSW : S	4·6	0·31	371	10, r, w : 10, r, w : 10, s, sc, r	10, s, th.-cl, r, slt.-sq: 0, slt.-m
9	4·5	0·35	1·7	0·13	Calm : SW	SW : Calm : SE	0·5	0·01	163	v.-cl : v.-cl, m : 8, s, cu, m	1, cu : 1 : 10, th.-cl
10	3·2	0·27	2·9	0·24	SE	SE	2·3	0·20	287	10 : 10 : 10, s, n, fq.-r, slt.-r	10, s, n, fq.-slt.-r : 10, oc.-m.-r, r: 9, m.-r
11	9·7	0·79	9·1	0·74	S : SSW	SSW	2·3	0·12	285	7, oc.-shs : v.-cl, sh : 1, ci, cu.-s	v.-cl,cu.-s,cu.-n,shs: 0 : p.-cl,m.-r.-sh
12	0·0	0·00	0·0	0·00	SW	SW : SSW : Calm	0·1	0·00	165	1, slt.-ho.-fr :1,slt.-ho.-fr,h,m:6, cu, n, ci, th.-cl	10, n, s, th.-cl, so.-ha: 10, slt.-r
13	0·0	0·00	0·0	0·00	Calm : NNW : NE	E : ESE	0·6	0·03	182	10, r : 10, r, m :10,s,n,oc.-m.-r,m	9, cu, n : 10 : 10
14	0·0	0·00	0·0	0·00	ESE : E	Calm	0·6	0·01	130	10, r : 10, n, s, r, m.-r	10, m.-r : 10,m.-r,glm,f: 10, f, slt.-f
15	1·3	0·11	1·3	0·11	Calm : E	ESE : SE	0·5	0·02	148	10, slt.-f : 10, slt.-f, f : 10, slt.-f	9 : 10 : 10
16	4·4	0·36	4·1	0·33	SE : SSW : SW	SW : S : SSE	1·0	0·05	252	10, r : 0	9,n,s.-cu,sh : 1 : v.-cl
17	0·0	0·00	0·0	0·00	SSE : SW : WSW	WSW : ENE : E	1·3	0·13	316	10, r : 0 : 1	8, s, cu, h : 10 : 10
18	7·5	0·64	6·8	0·58	E : ESE	ESE : Calm : SW	1·5	0·13	270	10 : 10, r : 10, s, n, r	10, s, sc, r, m, h : 8, oc.-r, h : 1
19	0·0	0·00	0·0	0·00	SW : NW	N	1·0	0·05	239	0, m : 10, m : 10,s,n,r,oc.-m.-r	10, n, oc.-r,-slt.-r : 10, oc.-slt.-r
20	0·0	0·00	0·0	0·00	N : NNE	NE : E : Calm	1·0	0·06	246	10 : 10, s, n	10, s, n : 10
21	10·3	0·88	10·3	0·88	Calm : SE : SSE	WSW : W	2·1	0·10	281	10 : 10, oc.-r : 10, n, oc.-slt.-r	10, t.-sm, r, sl, h: v.-cl, sh : 1
22	..	..	..	..	WSW : SW	SSE : SSW	4·8	0·15	307	0, d, ho.-fr: 1, d, ho.-fr :7,th.-cl,p.-so.-ha	10, p.-so.-ha, oc.-m.-r, r : v.-cl, r, w
23	4·9	0·42	4·7	0·40	WSW : WNW	WNW : Calm	4·8	0·30	394	10, r, w : 10, slt.-r, w : 10, sc, s	1, cu : 1, ho.-fr : 1, s, ho.-fr
24	0·0	0·00	0·0	0·00	SSE : SE	SE : ESE : Calm	0·6	0·05	182	10, r, m.-r : 10, s, sc, oc.-m.-r	10, sc, fq.-m.-r : 10 : 10
25	2·7	0·24	2·7	0·24	Calm	WSW : W : SW	0·6	0·00	143	10 : 10, s, m	10, m, slt.-sh: 1, slt.-m : 10, slt.-m
26	9·9	0·88	9·2	0·82	SSW : SSE : SW	SW	8·0	0·53	477	10 : 10, r, m.-r : 10, sc, r, w	8, cu.-n, w : v.-cl, w :v.-cl, lu.-ha, w
27	2·8	0·25	2·4	0·21	SW	WSW	8·4	0·80	636	v.-cl, th.-cl, w, sh:v.-cl,th.-cl,w,shs:10,sh,so.-ha, w	9 n,cu.-s,fq.-slt.-r,w :10, fq.-slt-r, w:10, cu.-s, sc, m.-r, w
28	4·4	0·39	4·0	0·36	WSW	WSW : W	6·6	0·45	509	v.-cl, m.-r.-sh, w: 9, w : 4, cu, s, w	3, cu.-n, shs: 10, sh, r : 9
Means	..	..	..	..	..	..	..	0·21	320		
Number of Column for Reference	20	21	22	23	24	25	26	27	28	29	30

The mean *Temperature of Evaporation* for the month was 41°·2, being 3°·5 *higher* than
The mean *Temperature of the Dew Point* for the month was 39°·0, being 3°·6 *higher* than
The mean *Degree of Humidity* for the month was 86·0, being 0·5 *greater* than
The mean *Elastic Force of Vapour* for the month was 0in·238, being 0in·031 *greater* than
The mean *Weight of Vapour in a Cubic Foot of Air* for the month was 2grs·7, being 0grs·3 *greater* than
The mean *Weight of a Cubic Foot of Air* for the month was 542 grains, being 11 grains *less* than
} the average for the 65 years, 1841–1905.

The mean amount of *Cloud* for the month (a clear sky being represented by 0 and an overcast sky by 10) was 7·8.

The mean proportion of *Sunshine* for the month (constant sunshine being represented by 1) was 0·191. The maximum daily amount of *Sunshine* was 6·8 hours on February 17.

The highest reading of the *Solar Radiation Thermometer* was 102°·2 on February 26; and the lowest reading of the *Terrestrial Radiation Thermometer* was 24°·4 on February 5.

The *Proportions of Wind* referred to the cardinal points were N. 1, E. 5, S. 11, W. 8. Three days were calm.

The *Greatest Pressure of the Wind* in the month was 8·4 lbs. on the square foot on February 27. The mean daily *Horizontal Movement of the Air* for the month was 320 miles; the greatest daily value was 648 miles on February 1; and the least daily value was 130 miles on February 14.

Rain (0in·005 or over) fell on 21 days in the month, amounting to 2in·654 as measured by gauge No. 6 partly sunk below the ground; being 1in·174 *greater* than the average fall for the 65 years, 1841–1905.

MONTH and DAY, 1923.	Barometer.	Temperature.							Difference between the Air Temperature and Dew Point Temperature.			Degree of Humidity (Saturation = 100).	Temperature.			Rain collected in Gauge No. 6, whose receiving surface is 5 inches above the Ground.	Electricity.	Daily Duration of Sunshine.	Sun above Horizon.
		Of the Air.					Of Evaporation.	Of the Dew Point.					Of Radiation.		Of the Earth 4 ft. below the Surface of the Soil.				
	Mean of 24 Hourly Values (corrected and reduced to 32° Fahrenheit).	Highest.	Lowest.	Daily Range.	Mean of 24 Hourly Values.	Excess above Average of 65 Years.	Mean of 24 Hourly Values.	Deduced Mean Daily Value.	Mean.	Greatest.	Least.		Highest in Sun's Rays.	Lowest on the Grass.					
	in.	°	°	°	°	°	°	°	°	°	°		°	°	°	in.		hours.	hours.
Mar. 1	29·313	52·0	42·0	10·0	46·1	+ 5·7	42·5	38·4	7·7	14·9	1·9	75	73·0	36·0	43·1	0·146	..	1·1	10·8
2	29·197	55·0	39·5	15·5	46·5	+ 6·1	42·5	38·0	8·5	17·0	1·0	73	109·0	34·0	43·3	0·027	..	6·9	10·9
3	29·218	53·0	35·1	17·9	41·7	+ 1·2	39·0	35·7	6·0	13·1	0·0	80	80·6	28·5	43·4	0·000	..	2·7	10·9
4	29·766	47·4	34·9	12·5	40·4	− 0·3	38·7	36·5	3·9	8·3	1·0	87	85·7	28·4	43·6	0·000	..	4·5	11·0
5	29·977	49·3	33·2	16·1	42·1	+ 1·2	40·1	37·6	4·5	8·8	1·3	85	73·8	27·1	43·4	0·000	..	1·0	11·1
6	29·783	52·8	37·5	15·3	44·5	+ 3·5	42·7	40·6	3·9	9·9	0·0	87	84·9	32·7	43·5	0·078	..	0·3	11·1
7	29·515	51·4	40·5	10·9	44·0	+ 3·0	42·3	40·3	3·7	7·9	0·5	86	84·0	33·0	43·3	0·389	..	0·9	11·2
8	29·708	46·5	38·3	8·2	42·3	+ 1·2	40·4	38·1	4·2	12·6	0·2	86	72·8	37·7	43·3	0·038	..	0·6	11·2
9	29·895	41·6	35·9	5·7	38·3	− 2·7	36·3	33·6	4·7	8·3	1·9	84	49·6	35·2	43·5	0·018	..	0·0	11·3
10	29·809	46·8	36·1	10·7	39·6	− 1·3	37·7	35·2	4·4	10·6	0·0	85	88·7	29·8	43·5	0·021	..	1·0	11·4
11	29·893	42·8	34·5	8·3	39·2	− 1·8	36·9	33·9	5·3	9·1	2·2	82	61·9	30·6	43·3	0·000	..	0·0	11·5
12	30·051	49·1	27·2	21·9	38·1	− 3·0	35·8	32·7	5·4	12·7	0·0	81	107·3	19·7	43·3	0·182	..	4·0	11·5
13	29·964	43·8	36·9	6·9	41·9	+ 0·6	41·0	39·9	2·0	2·9	1·1	93	52·9	30·8	43·5	0·704	..	0·0	11·6
14	30·114	44·5	35·0	9·5	39·4	− 2·1	37·3	34·6	4·8	9·4	0·5	83	57·8	28·3	43·1	0·001*	..	0·0	11·6
15	29·995	40·5	37·6	2·9	39·2	− 2·5	38·1	36·7	2·5	4·7	0·7	91	43·0	37·2	43·2	0·072	..	0·0	11·7
16	30·048	46·0	40·5	5·5	42·1	+ 0·2	40·8	39·2	2·9	5·8	0·0	90	62·0	39·7	43·1	0·003	..	0·0	11·8
17	30·065	50·1	38·8	11·3	43·6	+ 1·6	41·5	39·0	4·6	8·9	1·9	84	103·3	33·9	43·1	0·000	..	4·0	11·8
18	30·111	49·0	37·4	11·6	42·7	+ 0·7	39·9	36·5	6·2	14·3	0·5	79	105·2	31·8	43·1	0·000	..	5·8	11·9
19	29·997	50·5	35·9	14·6	41·4	− 0·5	39·1	36·2	5·2	13·1	0·0	82	109·2	30·2	43·2	0·000	..	3·9	12·0
20	29·888	52·9	31·7	21·2	41·3	− 0·6	39·7	37·7	3·6	11·7	0·0	88	96·3	28·0	43·2	0·108	..	1·3	12·0
21	29·851	54·8	40·3	14·5	46·2	+ 4·3	44·1	41·7	4·5	10·7	0·0	85	104·4	35·9	43·3	0·049	..	2·7	12·1
22	29·826	46·8	36·1	10·7	42·3	+ 0·3	41·2	39·9	2·4	5·2	0·7	91	59·0	31·1	43·2	0·000	..	0·0	12·2
23	29·733	46·5	40·2	6·3	42·9	+ 0·7	42·2	41·4	1·5	3·9	0·0	94	59·0	33·6	43·3	0·080	..	0·0	12·3
24	29·885	57·6	38·7	18·9	46·0	+ 3·6	43·1	39·8	6·2	13·6	0·5	80	102·1	30·1	43·6	0·000	..	8·6	12·3
25	29·977	61·2	38·7	22·5	50·0	+ 7·3	47·9	45·7	4·3	9·0	0·9	85	108·6	30·1	43·7	0·000	..	3·0	12·4
26	30·047	63·2	47·6	15·6	53·5	+10·5	51·8	50·2	3·3	8·6	0·0	89	117·0	37·3	43·7	0·158	..	3·7	12·4
27	29·909	70·6	44·9	25·7	57·4	+14·1	52·2	47·5	9·9	19·9	1·0	69	129·0	36·3	44·0	0·042	..	6·7	12·5
28	29·935	60·0	46·1	13·9	51·7	+ 8·0	48·0	44·3	7·4	15·2	1·8	76	122·0	39·7	44·2	0·014	..	6·2	12·6
29	30·082	56·9	41·0	15·9	47·1	+ 3·0	45·1	42·9	4·2	10·8	0·0	86	108·3	34·2	44·6	0·062	..	2·2	12·7
30	30·147	57·3	37·8	19·5	47·0	+ 2·5	44·2	41·0	6·0	16·7	0·0	80	105·0	31·4	44·8	0·000	..	2·6	12·7
31	29·865	59·6	42·1	17·5	50·2	+ 5·3	46·2	42·0	8·2	13·4	2·8	74	119·4	35·3	45·0	0·007	..	2·9	12·8
Means	29·857	51·6	38·1	13·5	44·2	+ 2·3	41·9	39·3	4·9	10·7	0·7	83·5	88·2	32·5	43·5	Sum 2·199	..	2·5	11·8
Number of Column for Reference	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19

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

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

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

*Rainfall (Column 16). The amount entered on March 14 is derived from dew.

The mean reading of the *Barometer* for the month was $29^{in}\cdot857$, being $0^{in}\cdot111$ *higher* than the average for the 65 years, 1841–1905.

TEMPERATURE OF THE AIR.

The highest in the month was 70°·6 on March 27; the lowest in the month was 27°·2 on March 12; and the range was 43°·4.

The mean of all the highest daily readings in the month was 51°·6, being 1°·8 *higher* than the average for the 65 years, 1841–1905.

The mean of all the lowest daily readings in the month was 38°·1, being 3°·0 *higher* than the average for the 65 years, 1841–1905.

The mean of the daily ranges was 13°·5, being 1°·2 *less* than the average for the 65 years, 1841–1905.

The mean for the month was 44°·2, being 2°·3 *higher* than the average for the 65 years, 1841–1905.

MONTH and DAY, 1923.	Record of the Night Sky. Polaris. Duration.	Polaris. Fraction of Total Exposure.	δ Ursae Minoris. Duration.	δ Ursae Minoris. Fraction of Total Exposure.	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	4·3	0·38	4·2	0·37	W : WSW	W : SW : SSW	2·4	0·34	463	v.-cl, w : 9, s, n, w	10,n,s,p.-so.-ha,w: 10, th. cl, p.-so.-ha: 10, r
2	9·7	0·86	9·0	0·80	W : WSW	WSW : SW	4·4	0·45	473	7, w : 0, w : 2, cu, ci.-cu, w	7, cu, cu.-s, w : 10, r : 10, th.-cl, lu.-ha
3	8·7	0·81	6·2	0·57	SW : Calm : WNW	WNW : NW : Calm	0·3	0·01	144	10,th.-cl,lu.-ha,d,slt.-ho.-fr: 0,h,slt.-ho.-fr: 0, cu,h	2, h : 0, h, m, ho.-fr
4	4·5	0·42	3·9	0·37	Calm : NNE	NNE : Calm	0·9	0·05	178	0, slt.-f, ho.-fr : 1, ho.-fr : 10, s	p.-cl, cu : 10
5	5·5	0·51	5·1	0·47	SSE : S : SW	SW : WSW	1·3	0·10	269	v.-cl, slt.-ho.-fr : 9 : 10	10, s, n, slt.-r : 10
6	9·8	0·91	9·6	0·90	WSW : SW	SW : WSW	1·7	0·13	311	9, d, m, lu.-ha : 10, s, n, m	10, p.-so.-ha : 10, r : 0
7	0·0	0·00	0·0	0·00	WSW	WSW : NW : NNW	1·6	0·15	367	0 : v.-cl, sh : 9,oc.-slt.-r,p.-so.-ha	10,n,fq.-r,m,p.-so.-ha,slt.-r,sm,bl: 10, fq.-r
8	0·0	0·00	0·0	0·00	N : NNE	NNE : NE	2·4	0·25	406	10, r : 10, s, m, oc.-slt.-r	10,cu,cu.-n,fq.-slt.-r : 10, fq.-slt.-r
9	0·0	0·00	0·0	0·00	NE : NNE	NE : E	2·2	0·12	335	10 : 10, s, n, fq.-m.-r	10, slt.-r : 10, slt.-r
10	1·4	0·13	0·8	0·08	NE	ESE : SE	0·3	0·02	196	10 : 10,r,m.-r,slt.-m : 10, cu.-s, n, m.-r	9 : p.-cl : 10
11	6·3	0·61	6·1	0·59	Calm : E : NE	NE : E : Calm	0·1	0·02	167	9 : 10, slt.-m, m.-r	10, s, n, slt.-m : 10
12	0·0	0·00	0·0	0·00	Calm : SSW	SW : SSW : S	0·5	0·05	203	0, ho.-fr : 0,slt.-m,ho.-fr: 7,ci,cu.-n,p.-so.-ha	9,ci.-s,n,p.-so.-ha: 10 : 10, r
13	4·7	0·46	2·4	0·23	S : Calm : ENE	NE : ENE	0·2	0·01	206	10, r : 10, s, r, m	10, r, m : 10, r, slt.-m : 0, h
14	0·0	0·00	0·0	0·00	Calm : NE : E	E : NE	1·2	0·11	287	1, d : 10, m : 10, s, n	10, s, n, slt.-r : 10
15	0·0	0·00	0·0	0·00	NE : ENE	ENE : E	3·2	0·32	446	10 : 10, slt.-r,hy.-sh: 10,s,n,oc.-m.-r,w	10, s, n, m.-r, w : 10, m.-r
16	2·7	0·26	2·6	0·25	E : ENE	ENE : NE	1·2	0·13	334	10, m.-r, sh : 10, s, n, oc.-m.-r	10, s : 10
17	10·3	1·00	10·3	1·00	NE : ENE	E	2·6	0·19	350	v.-cl : 10, s, n	p.-cl, cu, s : 0
18	10·0	0·98	8·8	0·85	ENE : E	E : ENE	5·4	0·48	451	0, d : 2, d : p.-cl, cu, w	3, cu, cu.-s, w : 1, w : 3, d
19	10·0	0·97	9·8	0·95	ENE : E	E : NE	2·1	0·18	309	0, d : 9 : p.-cl, cu, ci.-cu	10, th.-cl, p.-so.ha: 10 : 0, d, m
20	0·5	0·05	0·2	0·02	Calm : E	E : ENE : NE	1·0	0·03	161	0, m, hy.-d, ho.-fr : 1, m, f, ho.-fr	9, slt.-sh : 10, slt.-r, hy.-sh : 10, hy.-sh, m.-r
21	3·7	0·36	3·4	0·34	Calm : N	NE : Calm	0·4	0·05	134	10 : 10, r, fq.-slt.-r: 9 ,th.cl,h,fq.-slt.-r	7 th.-cl, ci.-s, cu : 10, th.-cl : 10, slt.-m, h
22	1·2	0·12	0·0	0·00	Calm	Calm	0·1	0·00	80	v.cl, f : 10, m : 10, s, m, glm	10, s, m : 10, th.-cl, m, d
23	0·0	0·00	0·0	0·00	Calm : ENE : NE	NNE : NNW : NW	1·0	0·05	173	10, m : 10, f, m.-r : 10, n, s, r, m	10, n, s, m.-r : 10
24	8·1	0·86	8·1	0·85	WSW : SW	SW : S : SSE	0·3	0·03	183	10 : 1, cu, h, slt.-m	3, cu, h : 0, h : 3, d
25	0·6	0·07	0·0	0·00	Calm : SE : S	SSW : SW : Calm	0·7	0·04	141	2, d : p.-cl, m, d : 9, s, n, h	9, h : 10, th.-cl : 10, m.-r
26	5·9	0·62	3·4	0·36	Calm	Calm : ENE : SE	1·2	0·02	105	10, r, m : 7, cu, cu.-s, h, slt.-m, r	9, cu.-n, hy.-sh : 1, d : 3, l, t, r, m, d
27	1·3	0·13	0·9	0·10	Calm : ESE : SSE	S : SE : SSW	1·8	0·09	195	v.-cl : 2 : 9,cu,th-cl,fq.-p.-so.-ha	9,ci.-s,ci,fq.-p.-so.-ha: p.-cl, th.-cl : 10, r
28	4·3	0·45	4·0	0·42	SW : SSW	SW : SSW	2·2	0·16	308	10, r : 9 : 6, cu	3, cu : v-cl : 10
29	6·8	0·72	6·0	0·64	SSW : SW	SW : SSW	2·2	0·06	222	v.-cl : 10 : 10,s,n,oc.-slt.-r,sh	9, n, cu, oc.-slt.-r: 9 : 1
30	1·8	0·18	0·5	0·05	SSE : Calm	SE : ESE : Calm	0·3	0·01	130	v.-cl : 9, cu, ci, th.-cl, m	10, cu, s : 10
31	3·1	0·35	2·8	0·31	Calm : SE	S : SW : Calm	0·6	0·02	139	8, d, th.-cl: 7, th.-cl : 9, cu, s, sh	9, cu, s : 7 : 6
Means	..	..	..	..	..	..	..	0·12	254		
Number of Column for Reference	20	21	22	23	24	25	26	27	28	29	30

The mean *Temperature of Evaporation* for the month was 41°·9, being 2°·5 *higher* than
The mean *Temperature of the Dew Point* for the month was 39°·3, being 3°·0 *higher* than
The mean *Degree of Humidity* for the month was 83·5, being 3·0 *greater* than
The mean *Elastic Force of Vapour* for the month was 0in·240, being 0·in026 *greater* than
The mean *Weight of Vapour in a Cubic Foot of Air* for the month was 2grs·8, being 0grs·3 *greater* than
The mean *Weight of a Cubic Foot of Air* for the month was 549 grains, being equal to
} the average for the 65 years, 1841–1905.

The mean amount of *Cloud* for the month (a clear sky being represented by 0 and an overcast sky by 10) was 7·6.

The mean proportion of *Sunshine* for the month (constant sunshine being represented by 1) was 0·210. The maximum daily amount of *Sunshine* was 8·6 hours on March 24.

The highest reading of the *Solar Radiation Thermometer* was 129°·0 on March 27; and the lowest reading of the *Terrestrial Radiation Thermometer* was 19°·7 on March 12.

The *Proportions of Wind* referred to the cardinal points were N. 6, E. 8, S. 6, W. 5. Six days were calm.

The *Greatest Pressure of the Wind* in the month was 5·4 lbs. on the square foot on March 18. The mean daily *Horizontal Movement of the Air* for the month was 254 miles; the greatest daily value was 473 miles on March 2; and the least daily value was 80 miles on March 22.

Rain (0in·005 or over) fell on 18 days in the month, amounting to 2in·199 as measured by gauge No. 6 partly sunk below the ground; being 0in·679 *greater* than the average fall for the 65 years, 1841–1905.

MONTH and DAY, 1923.	Barometer.	Temperature.							Difference between the Air Temperature and Dew Point Temperature.			Degree of Humidity (Saturation = 100).	Temperature.			Rain collected in Gauge No. 6, whose receiving surface is 5 inches above the Ground.	Electricity.	Daily Duration of Sunshine.	Sun above Horizon.
		Of the Air.					Of Evaporation.	Of the Dew Point.					Of Radiation.		Of the Earth 4 ft. below the Surface of the Soil.				
	Mean of 24 Hourly Values (corrected and reduced to 32° Fahrenheit).	Highest.	Lowest.	Daily Range.	Mean of 24 Hourly Values.	Excess above Average of 65 Years.	Mean of 24 Hourly Values.	Deduced Mean Daily Value.	Mean.	Greatest.	Least.		Highest in Sun's Rays.	Lowest on the Grass.					
	in.	°	°	°	°	°	°	°	°	°	°		°	°	°	in.		hours.	hours.
Apr. 1	29·830	59·8	39·2	20·6	47·2	+ 1·9	45·0	42·6	4·6	14·1	0·0	85	119·4	33·0	45·2	0·000	..	3·0	12·8
2	29·983	57·1	40·5	16·6	47·3	+ 1·6	45·0	42·5	4·8	14·5	0·0	84	113·0	36·0	45·3	0·000	..	6·7	12·9
3	29·938	59·8	39·9	19·9	48·2	+ 2·2	44·4	40·2	8·0	18·1	0·2	74	112·0	34·0	45·5	0·000	..	4·9	13·0
4	29·659	63·2	35·2	28·0	48·2	+ 2·0	43·8	39·0	9·2	24·9	0·0	71	123·3	31·1	45·8	0·000	..	10·5	13·0
5	29·514	55·9	39·5	16·4	47·7	+ 1·4	43·7	39·3	8·4	18·0	1·1	74	113·8	30·6	45·8	0·009	..	2·3	13·1
6	29·510	46·3	41·1	5·2	43·9	− 2·4	42·1	39·9	4·0	5·9	2·2	86	64·0	40·8	45·8	0·076	..	0·0	13·2
7	29·496	57·8	40·8	17·0	47·8	+ 1·5	45·3	42·6	5·2	12·2	0·0	83	113·0	35·1	45·9	0·001	..	1·9	13·2
8	29·609	50·8	39·8	11·0	44·6	− 1·5	40·8	36·4	8·2	16·4	0·2	73	110·0	32·8	45·8	0·005	..	8·8	13·3
9	29·616	43·4	33·1	10·3	38·3	− 7·7	34·3	28·9	9·4	14·9	1·8	69	88·4	27·5	45·8	0·000	..	2·8	13·4
10	29·541	53·1	31·2	21·9	43·6	− 2·3	40·2	36·2	7·4	15·4	1·0	75	106·9	26·4	45·9	0·053	..	0·2	13·4
11	29·502	63·9	46·5	17·4	53·5	+ 7·7	50·5	47·6	5·9	10·5	1·1	80	118·9	43·6	45·9	0·348	..	1·2	13·5
12	29·282	68·0	48·8	19·2	54·6	+ 8·7	52·3	50·0	4·6	11·5	0·0	84	123·9	45·7	45·9	0·208	..	3·1	13·5
13	29·207	58·2	42·9	15·3	49·9	+ 3·8	46·7	43·3	6·6	14·3	0·0	78	120·0	38·8	46·0	0·095	..	4·9	13·6
14	29·255	56·5	36·4	20·1	45·0	− 1·4	41·4	37·2	7·8	14·3	0·5	74	126·0	30·9	46·2	0·030	..	9·8	13·7
15	29·343	57·5	35·3	22·2	46·1	− 0·7	43·1	39·7	6·4	14·2	0·0	79	120·9	30·1	46·5	0·000	..	7·8	13·7
16	29·588	53·9	41·4	12·5	47·3	+ 0·1	44·7	41·8	5·5	10·0	0·7	82	87·8	34·8	46·5	0·000	..	0·2	13·8
17	29·914	52·9	40·1	12·8	44·9	− 2·7	40·9	36·3	8·6	14·7	2·5	72	127·8	39·0	46·5	0·000	..	5·2	13·9
18	29·753	51·8	40·6	11·2	44·3	− 3·7	40·6	36·3	8·0	13·3	2·7	73	98·7	37·0	46·8	0·000	..	1·2	13·9
19	29·515	50·1	39·6	10·5	44·6	− 3·7	41·7	38·3	6·3	8·1	4·3	78	78·9	35·1	46·8	0·000	..	0·0	14·0
20	29·507	58·0	39·7	18·3	46·4	− 2·1	43·2	39·6	6·8	14·2	0·0	78	118·0	34·9	46·9	0·000	..	2·8	14·1
21	29·397	54·5	37·8	16·7	45·1	− 3·6	41·0	36·3	8·8	16·2	2·1	71	100·3	33·0	46·9	0·000	..	4·4	14·1
22	29·452	57·2	38·0	19·2	48·2	− 0·5	43·0	37·3	10·9	19·8	2·0	66	105·4	28·5	47·0	0·008	..	0·7	14·2
23	29·670	50·7	32·4	18·3	42·6	− 6·0	38·4	33·3	9·3	14·9	1·8	71	90·0	19·1	46·7	0·000	..	1·8	14·2
24	29·871	52·3	37·6	14·7	43·9	− 4·7	38·2	31·4	12·5	21·1	5·1	61	117·4	28·7	46·9	0·002	..	10·0	14·3
25	29·472	52·2	35·4	16·8	46·1	− 2·5	44·2	41·0	5·1	6·5	1·4	87	65·8	26·3	46·7	0·169	..	0·0	14·4
26	29·309	57·5	41·2	16·3	48·4	− 0·2	45·0	41·3	7·1	12·3	1·5	77	118·9	33·1	46·7	0·282	..	4·5	14·4
27	29·661	55·1	37·9	17·2	45·7	− 3·0	40·9	35·5	10·2	17·3	3·1	68	113·4	30·8	46·7	0·000	..	6 0	14·5
28	29·710	59·9	36·0	23·9	47·4	− 1·4	42·4	36·8	10·6	21·3	1·9	67	126·0	28·7	46·9	0·000	..	10·2	14·5
29	29·674	60·2	42·8	17·4	50·3	+ 1·3	47·4	44·3	6·0	12·1	1·3	81	123·6	34·6	46·8	0·081	..	0·8	14·6
30	29·775	62·2	48·9	13·3	53·7	+ 4·6	51·2	48·8	4·9	9·4	0·8	83	114·0	42·6	47·0	0·004	..	0·4	14·7
Means	29·585	56·0	39·3	16·7	46·8	− 0·4	43·4	39·5	7·4	14·3	1·3	76·1	108·7	33·4	46·3	Sum 1·371	..	3·9	13·8
Number of Column for Reference	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19

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

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

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

The mean reading of the *Barometer* for the month was 29^{in}·585, being 0^{in}·163 *lower* than the average for the 65 years, 1841–1905.

Temperature of the Air.

The highest in the month was 68°·0 on April 12; the lowest in the month was 31°·2 on April 10; and the range was 36°·8.

The mean of all the highest daily readings in the month was 56°·0, being 1°·2 *lower* than the average for the 65 years, 1841–1905.

The mean of all the lowest daily readings in the month was 39°·3, being 0°·3 *higher* than the average for the 65 years, 1841–1905.

The mean of the daily ranges was 16°·7, being 1°·5 *less* than the average for the 65 years, 1841–1905.

The mean for the month was 46°·8, being 0°·5 *lower* than the average for the 65 years, 1841–1905.

MONTH and DAY, 1923.	Record of the Night Sky. Polaris. Duration.	Polaris. Fraction of Total Exposure.	δ Ursae Minoris. Duration.	δ Ursae Minoris. Fraction of Total Exposure.	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.		
Apr. 1	5·1	0·57	2·5	0·28	Calm	Calm : ESE	0·6	0·03	136	2, d : 9, d : 9, s	9, cu.-s, n : 9, th.-cl, lu.-ha : 10,th.-cl,m,lu.-ha
2	..	..	..	..	Calm : ESE	E : ESE	1·2	0·11	185	10, th.-cl, lu.-ha : 10 : 7	0 : 9 : 10
3	9·0	1·00	9·0	1·00	Calm	ESE : E : Calm	0·7	0·03	120	10, th.-cl, hy.-d : 10 : 7, cu.-s, ci, h	1, cu.-s, h : v.-cl : 0, h, d
4	9·0	1·00	9·0	1·00	Calm : SE	SE : E	1·6	0·09	183	1, m, d : 1 : 1	0 : 1, d
5	0·0	0·00	0·0	0·00	Calm : ESE	ESE : E : ENE	1·4	0·10	236	1, d : 7, d : 9, s, n	10, oc.-slt.-r : 10, fq.-slt.-r
6	0·0	0·00	0·0	0·00	ENE	E : ENE	1·4	0·17	306	10, r : 10, s, n, fq.-slt.-r	10, s, n, slt.-r : 10 : 10, slt.-r
7	5·0	0·59	4·9	0·58	ENE : Calm	Calm : ESE : E	0·4	0·01	126	10 : 10, oc.-m.-r : 10, s,slt.-m	9, cu.-s : v.-cl, d : 0, d
8	8·5	1·00	8·5	1·00	ENE	ENE	8·8	0·55	484	9, r : p.-cl, d, w : 8,cu.-s,w	3, cu, w : 0, w : 0
9	2·8	0·32	2·3	0·26	ENE : NE	ENE : NE	8·6	0·19	348	0 : 0 : 9, slt.-sn, w	9, n, s : 9,th.-cl,slt.-ho.-fr: 6,th.-cl,slt.-ho.-fr
10	0·0	0·00	0·0	0·00	Calm : E : ESE	ESE : E : SE	2·1	0·11	250	10 : 10, s, n, so.-ha	10, th.-cl, so.-ha: 10, slt.-r : 10, oc.-m.-r
11	1·0	0·12	0·4	0·05	SE : Calm	ESE : E	2·4	0·04	152	10, r : 10, t : 10, cu.-s	9, cu, oc.-slt.-r : 10, l : 10, r, l, t
12	0·8	0·09	0·6	0·07	Var. : Calm : E	SE : SSW : SW	3·6	0·11	258	8, r, l : 9 : 8,ci,ci.-cu,cu.-s	10, s, n, r : 10, fq -r
13	5·7	0·67	5·3	0·63	SSW	SSW : SW	2·6	0·25	349	9, sh : p.-cl, r : 8, cu, ci, so.-ha	9, cu, n : 10, fq.-slt.-r : 10, th.-cl
14	7·5	0·94	7·5	0·94	SW : SSW	SW : SSW : Calm	3·8	0·18	299	0 : 3, cu.-s, cu, shs	7, cu.-s, n, r: 2 : 1, d
15	2·4	0·30	1·9	0·24	S : SSE	SSE : SE	1·2	0·12	227	1, d : 1, d : p.-cl, cu	9, s, n : 9, oc.-slt.-r
16	0·3	0·04	0·2	0·03	Calm : ENE : E	E : ENE : NE	1·6	0·15	255	9 : 10, n, slt.-r	10, s.-cu, n : v.-cl, d : 9
17	0·1	0·02	0·1	0·01	NE	NE : E : ESE	0·6	0·07	203	10 : 8, cu.-s, n	8, cu.-s : 9 : 10
18	2·2	0·27	1·2	0·15	E : ENE	ESE : E	1·2	0·07	229	10 : 10, s, n	9, cu.-s, n : 7
19	..	..	..	..	E : ESE	ESE : E : ENE	1·2	0·06	229	9, h : 10, s, n, m.-r	10, s, n, m.-r : v.-cl, th.-cl
20	5·4	0·68	5·2	0·65	NNE : NE	ENE : NE	3·0	0·22	346	10 : 10	v.-cl : 9, cu : 5
21	2·7	0·37	2·3	0·30	NE : NNE	NE : NNE	3·0	0·38	471	9 : 7, w	9, w : 9, sh
22	6·0	0·81	5·0	0·67	NE : NNE	NE : NNE	3·5	0·42	502	3 : 10, m.-r : 10, s, n, w	10, s, n, w : v.-cl, p.-so.-ha, w: th.-cl, h
23	1·3	0·18	1·1	0·14	NNE : NNW	NNW : N	0·7	0·03	190	0, ho.-fr : 9, cu.-n	9, s.-cu : 9
24	..	..	..	..	NNE : N : NNW	NNW: Calm: SSW	1·5	0·08	218	10, m.-r : p.-cl : 2, cu, h	p.-cl, cu, h: p.-cl, h : 0
25	0·0	0·00	0·0	0·00	SSW	SSW : SW	6·4	0·49	470	0 : 9, fq.-r, w:10,s,n,oc.-m.-r,w	10, s, sc, oc.-slt.-r, w: 10, r
26	7·5	1·00	7·5	1·00	SW	SW : W : WSW	17·8	0·29	375	10, r : 10, s, n, r, w	v.-cl, oc.-shs, w : 8, shs : 0
27	5·7	0·76	5·2	0·69	WSW:Calm:NNW	Calm	0·6	0·03	172	0, d : 5, cu, h	6, cu.-s, h : 8, h : 1, d
28	4·9	0·70	4·1	0·58	Calm : WSW	WSW : SW	2·0	0·10	250	1 : 1, slt.-h	5 : p.-cl : th.-cl,lu.-ha
29	1·8	0·25	1·4	0·19	SW : WSW	WSW : SW	1·1	0·10	274	10 : 10, r : 10, s, n, slt.-r	10, s, n : 7, cu, d, sh
30	1·1	0·16	0·7	0·11	WSW	WSW : SW	2·6	0·36	454	10 : 10, oc.-slt.-r	10, s, n : 9, cu.-s
Means	..	..	..	..	..	..	..	0·16	277		
Number of Column for Reference	20	21	22	23	24	25	26	27	28	29	30

The mean *Temperature of Evaporation* for the month was 43°·4, being 0°·5 *lower* than
The mean *Temperature of the Dew Point* for the month was 39°·5, being 0°·6 *lower* than
The mean *Degree of Humidity* for the month was 76·1, being 0·3 *greater* than
The mean *Elsatic Force of Vapour* for the month was 0in·242, being 0in·006 *less* than
The mean *Weight of Vapour in a Cubic Foot of Air* for the month was 2grs·8, being 0grs·1 *less* than
The mean *Weight of a Cubic Foot of Air* for the month was 541 grains, being 2 grains *less* than
} the average for the 65 years, 1841–1905.

The mean amount of *Cloud* for the month (a clear sky being represented by 0 and an overcast sky by 10) was 7·6.

The mean proportion of *Sunshine* for the month (constant sunshine being represented by 1) was 0·281. The maximum daily amount of *Sunshine* was 10·5 hours on April 4.

The highest reading of the *Solar Radiation Thermometer* was 127°·8 on April 17; and the lowest reading of the *Terrestrial Radiation Thermometer* was 19°·1 on April 23.

The *Proportions of Wind* referred to the cardinal points were N. 5, E. 10, S. 6, W. 4. Five days were calm.

The *Greatest Pressure of the Wind* in the month was 17·8 lbs. on the square foot on April 26. The mean daily *Horizontal Movement of the Air* for the month was 277 miles; the greatest daily value was 502 miles on April 22; and the least daily value was 120 miles on April 3.

Rain (0in·005 or over) fell on 12 days in the month, amounting to 1in·371 as measured by gauge No. 6 partly sunk below the ground; being 0in·195 *less* than the average fall for the 65 years, 1841–1905.

MONTH and DAY, 1923.	Barometer.	Temperature.							Difference between the Air Temperature and Dew Point Temperature.			Degree of Humidity (Saturation = 100).	Temperature.			Rain collected in Gauge No. 6, whose receiving surface is 5 inches above the Ground.	Electricity.	Daily Duration of Sunshine.	Sun above Horizon.
		Of the Air.					Of Evaporation.	Of the Dew Point.					Of Radiation.		Of the Earth 4 ft. below the Surface of the Soil.				
	Mean of 24 Hourly Values (corrected and reduced to 32° Fahrenheit).	Highest.	Lowest.	Daily Range.	Mean of 24 Hourly Values.	Excess above Average of 65 Years.	Mean of 24 Hourly Values.	Deduced Mean Daily Value.	Mean.	Greatest.	Least.		Highest in Sun's Rays.	Lowest on the Grass.					
	in.	°	°	°	°	°	°	°	°	°	°		°	°	°	in.		hours.	hours.
May 1	29·973	62·1	46·3	15·8	54·7	+ 5·4	51·5	48·4	6·3	10·8	1·9	79	108·0	38·2	47·1	0·000	..	2·5	14·7
2	30·039	70·7	41·7	29·0	57·5	+ 8·0	52·9	48·7	8·8	16·3	0·5	73	119·6	34·5	47·5	0·000	..	8·2	14·8
3	29·982	76·5	49·6	26·9	62·1	+12·3	56·8	52·2	9·9	20·1	1·0	71	149·5	40·7	47·8	0·043	..	7·9	14·9
4	29·840	80·2	49·5	30·7	65·9	+15·9	58·9	53·2	12·7	23·8	0·6	64	129·0	48·9	48·0	0·000	..	12·3	14·9
5	29·707	80·6	52·3	28·3	65·6	+15·3	59·2	54·0	11·6	22·1	1·0	67	144·0	46·5	48·4	0·000	..	6·4	15·0
6	29·757	71·8	55·4	16·4	61·2	+10·7	55·8	51·2	10·0	22·5	0·0	70	139·0	45·0	48·9	0·000	..	7·7	15·0
7	29·904	67·3	48·0	19·3	56·8	+ 6·1	51·7	47·0	9·8	15·6	2·7	69	138·0	45·1	49·1	0·000	..	4·4	15·1
8	29·855	63·5	48·1	15·4	53·7	+ 2·7	48·4	43·2	10·5	19·8	2·1	68	129·5	46·7	49·7	0·033	..	1·6	15·1
9	29·621	61·0	44·4	16·6	51·9	+ 0·7	46·6	41·2	10·7	16·8	4·0	67	108·4	38·1	49·7	0·025	..	2·1	15·2
10	29·575	53·6	40·2	13·4	45·2	− 6·3	40·7	35·5	9·7	19·0	3·0	69	110·3	35·0	49·8	0·004	..	4·4	15·2
11	29·239	56·1	38·5	17·6	45·9	− 5·9	41·9	37·3	8·6	16·4	0·9	73	127·9	33·1	49·9	0·133	..	8·8	15·3
12	29·418	51·7	34·1	17·6	41·8	−10·3	38·5	34·5	7·3	13·9	1·4	76	117·0	28·1	49·8	0·136	..	8·5	15·3
13	29·445	56·8	38·4	18·4	44·8	− 7·6	40·8	36·2	8·6	21·0	0·0	72	130·9	32·9	49·2	0·090	..	6·4	15·4
14	29·547	60·5	40·4	20·1	47·6	− 5·0	42·5	36·8	10·8	21·5	0·9	67	133·9	34·2	49·6	0·000	..	8·8	15·5
15	29·527	56·2	41·2	15·0	46·4	− 6·4	43·5	40·2	6·2	12·3	0·0	80	131·5	38·3	49·6	0·182	..	4·3	15·5
16	29·504	53·8	37·9	15·9	43·7	− 9·3	40·2	36·1	7·6	14·7	1·7	74	120·2	28·3	49·4	0·086	..	8·3	15·5
17	29·750	55·4	37·4	18·0	45·0	− 8·1	39·7	33·5	11·5	18·4	3·8	64	117·0	31·0	49·4	0·002	..	7·7	15·6
18	29·906	54·0	39·3	14·7	46·1	− 7·2	40·9	35·0	11·1	14·8	5·3	66	99·6	30·5	49·4	0·000	..	3·6	15·7
19	29·793	59·1	39·9	19·2	49·4	− 4·1	45·5	41·3	8·1	11·4	2·9	74	115·0	33·9	49·4	0·000	..	0·4	15·7
20	29·699	60·1	47·1	13·0	51·9	− 1·9	47·7	43·5	8·4	12·7	3·7	74	119·0	44·5	49·3	0·000	..	0·4	15·7
21	29·699	63·0	47·8	15·2	54·6	+ 0·4	50·1	45·8	8·8	15·1	1·4	72	117·4	36·8	49·3	0·001	..	1·6	15·8
22	29·814	66·8	44·5	22·3	54·5	− 0·1	50·6	46·8	7·7	15·0	1·5	75	120·0	32·5	49·4	0·044	..	3·3	15·8
23	29·809	63·2	42·3	20·9	52·0	− 2·9	49·7	47·4	4·6	10·0	1·7	84	108·0	40·9	49·7	0·391	..	0·5	15·9
24	29·998	58·5	37·4	21·1	47·9	− 7·4	43·2	38·0	9·9	15·7	1·1	70	125·9	33·4	49·8	0·000	..	9·8	15·9
25	29·699	60·7	40·7	20·0	48·7	− 6·8	44·6	40·2	8·5	16·4	2·4	72	117·0	32·4	49·9	0·012	..	3·3	16·0
26	29·676	58·8	36·8	22·0	48·0	− 7·8	43·3	38·1	9·9	16·7	1·0	69	124·6	26·5	49·9	0·000	: wP	4·8	16·0
27	29·796	55·9	43·5	12·4	47·7	− 8·3	44·1	40·1	7·6	14·6	2·6	76	106·6	35·8	49·8	0·000	wP : wP	1·2	16·0
28	29·845	58·2	44·4	13·8	49·9	− 6·3	47·8	45·6	4·3	12·4	1·3	86	112·5	43·8	49·8	0·171	wP : v, wP : wP, v	1·7	16·1
29	29·895	51·0	44·1	6·9	47·9	− 8·5	47·1	46·2	1·7	3·2	1·0	94	64·7	41·3	49·8	0·584	v, mP : v, mP : mP	0·0	16·1
30	29·924	62·7	42·8	19·9	50·3	− 6·4	48·3	46·2	4·1	10·0	0·4	86	132·1	39·3	49·9	0·000	mP : mP, wP : wP	4·9	16·1
31	29·979	55·5	44·1	11·4	48·3	− 8·8	45·5	42·5	5·8	11·1	3·7	81	86·6	44·9	49·9	0·000	wP : mP : mP, wP	0·0	16·2
Means	29·749	61·5	43·2	18·3	51·2	− 1·9	47·0	42·8	8·4	15·6	1·8	73·6	119·4	37·5	49·3	Sum 1·937	..	4·7	15·5
Number of Column for Reference.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19

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

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

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

The mean reading of the *Barometer* for the month was 29^{in}·749, being 0^{in}·045 *lower* than the average for the 65 years, 1841–1905.

TEMPERATURE OF THE AIR.

The highest in the month was 80°·6 on May 5; the lowest in the month was 34°·1 on May 12; and the range was 46°·5.

The mean of all the highest daily readings in the month was 61°·5, being 2°·4 *lower* than the average for the 65 years, 1841–1905.

The mean of all the lowest daily readings in the month was 43°·2, being 0°·5 *lower* than the average for the 65 years, 1841–1905.

The mean of the daily ranges was 18°·3, being 1°·9 *less* than the average for the 65 years, 1841–1905.

The mean for the month was 51°·2, being 1°·9 *lower* than the average for the 65 years, 1841–1905.

MONTH and DAY, 1923.	Record of the Night Sky. Polaris. Duration.	Polaris. Fraction of Total Exposure.	δ Ursae Minoris. Duration.	δ Ursae Minoris. Fraction of Total Exposure.	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	7·0	1·00	7·0	1·00	WSW : SW	SW	2·3	0·24	358	10	9, cu.-s : p.-cl, d : 7, th.-cl, lu.-ha, d
2	2·6	0·37	2·5	0·36	Calm : Var.	W : Var. : Calm	0·3	0·01	138	8, lu.-ha : 10, th.-cl : 9, th.-cl, h, so.-ha	1, ci, h : v.-cl : 9, sh, l
3	6·9	0·99	6·8	0·97	Calm	SSW	1·0	0·05	177	10, sh : 9 : 9, cu, s, n	p.-cl, ci, sh, p.-so.-ha : 1, d
4	5·9	0·85	5·7	0·81	Calm : SW	SW	1·8	0·13	212	0, d : 0	7, ci, s, p.-so.-ha : 7, so.-ha : 1, d
5	5·7	0·88	5·7	0·88	Calm	SSW : S : SW	2·0	0·10	188	7, sh : 9 : 10, s, n, slt.-sh	10 : 1 : 0
6	1·0	0·15	0·7	0·10	Calm : WSW	Calm : SW : WNW	0·9	0·03	184	v.-cl : 9 : 5, cu, n	2, cu.-s, so.-ha : 10 : 9, th.-cl
7	0·0	0·00	0·0	0·00	Calm : NNE	NNE : ESE	1·0	0·07	194	10 : 9, ci, cu	9, s, n : 10, slt.-r
8	0·0	0·00	0·0	0·00	Calm : ESE	E : ESE	0·8	0·03	168	10 : 10, s, n	10, s, n : 10, slt.-r
9	4·2	0·64	4·1	0·63	NNE : Calm	WSW : NNW	1·3	0·06	192	10, sh : 9, cu.-s, h	9, cu.-s, n : v.-cl, sh : 4
10	0·9	0·14	0·3	0·05	NNW	NNW : NW : WSW	2·2	0·30	374	9 : 10, n, s	9, cu.-s, n, w, h : p.-cl : 10, r
11	6·3	0·96	6·2	0·96	SW : WSW	W : WNW : WSW	7·5	0·52	550	9, r, w : v.-cl, w : 7, cu.-n, w	v.-cl, n, cu, shs, h, w, t : v.-cl, sh, hl, w : 1
12	3·8	0·64	3·8	0·63	W : WSW	Var. : WSW	8·6	0·10	328	0, slt.-ho.-fr : 1 : v.-cl, cu, n, fq.-r	v.-cl, oc.-shs, hl, sl, sn, l, t : 2, r : 1, slt.-d
13	3·0	0·50	2·7	0·44	SW : WSW	W : WSW	6·2	0·23	398	5, r : 10 : 9, cu	7, cu, n, slt.-r, w, hl, sl : 6, sh, w
14	4·0	0·66	0·7	0·12	WSW : W	W : SW	2·0	0·11	357	7 : v.-cl : 9, cu.-s, n, ci	8, cu.-n : 9, th.-cl
15	..	..	..	..	SW	SW	7·9	0·30	393	th.-cl, sh : 10, sh, p.-so.-ha : 9, s, n, sh, w	10, r, w : 10, r : 9, sh
16	5·5	0·92	5·2	0·87	WSW : W	W : WSW	9·1	0·23	415	1 : 2 : v.-cl, n, oc.-shs, w	v.-cl, cu, sh, sl, w : 2, cu : 1, sh
17	5·6	0·94	5·2	0·86	WSW : WNW	WNW	2·1	0·10	381	v.-cl : 9, r : 8, cu.-n, sh	p.-cl : 7, slt.-sh : 3
18	3·0	0·50	0·4	0·06	W : NW	NW : WNW	1·0	0·03	263	v.-cl : 9, cu, n	10, s, n : 10, th.-cl
19	0·0	0·00	0·0	0·00	Calm : WSW	WSW	1·3	0·04	239	9 : 9, cu.-s, n, sh	10, s, n : 10
20	0·0	0·00	0·0	0·00	WSW : SW	SW	1·9	0·10	298	10 : 10, s, n, oc.-slt.-r	10, s, n, oc.-slt.-r : 10, m.-r
21	4·0	0·73	3·7	0·68	SW : WSW	WSW : WNW	1·4	0·10	320	9, sh : 10, cu, s	10, cu, n : 7 : v.-cl
22	0·0	0·00	0·0	0·00	SW	SW : WSW	1·8	0·09	289	6 : 10, slt.-r : 10, n, r	7, cu : 9 : 10, slt.-r
23	3·8	0·70	3·5	0·63	SW : WSW	WSW : NW : NNE	2·7	0·16	337	10 : 9, cu.-n, fq.-r	10, r : 10, r
24	5·5	1·00	5·5	1·00	NNE : NE	Calm : SSW	0·4	0·02	184	1 : p.-cl, cu	9, cu.-n : 1, s
25	5·5	1·00	5·5	1·00	SW	SW : W : NW	1·2	0·05	269	1 : 9, r : 8, sh	9, slt.-sh : 0
26	0·8	0·17	0·5	0·10	Calm	N : NE	1·0	0·01	161	0, ho.-fr : v.-cl : 9	9 : 8 : 10
27	0·0	0·00	0·0	0·00	Calm : N : NE	NNE	1·1	0·06	231	10 : 10, s, n, p.-so.-ha	10 : 10, r
28	0·0	0·00	0·0	0·00	N : NNW	N : E	1·4	0·06	218	10, r : 9, cu.-s, n, sh	8, shs : 10, r
29	1·5	0·30	1·0	0·20	N	NNE : Calm	1·5	0·11	299	10, r : 10, fq.-m.-r : 10, r	10, r : 10, r
30	0·0	0·00	0·0	0·00	Calm : NNE	NE : E	1·4	0·05	228	10, m : 10	8 : 10
31	0·0	0·00	0·0	0·00	NE : NNE	NE : NNE	1·8	0·08	315	10 : 10, s, n	10, s, n : 10
Means	..	..	..	..	..	..	..	0·12	279		
Number of Column for Reference	20	21	22	23	24	25	26	27	28	29	30

The mean *Temperature of Evaporation* for the month was 47°·0, being 2°·0 *lower* than
The mean *Temperature of the Dew Point* for the month was 42·8°, being 2°·2 *lower* than
The mean *Degree of Humidity* for the month was 73·6, being 0·6 *less* than
The mean *Elastic Force of Vapour* for the month was 0in·275, being 0in·024 *less* than
The mean *Weight of Vapour in a Cubic Foot of Air* for the month was 3grs·1, being 0grs·3 *less* than
The mean *Weight of a Cubic Foot of Air* for the month was 539 grains, being 1 grain *greater* than
} the average for the 65 years, 1841–1905.

The mean amount of *Cloud* for the month (a clear sky being represented by 0 and an overcast sky by 10) was 8·0.
The mean proportion of *Sunshine* for the month (constant sunshine being represented by 1) was 0·303. The maximum daily amount of *Sunshine* was 12·3 hours on May 4.
The highest reading of the *Solar Radiation Thermometer* was 149°·5 on May 3; and the lowest reading of the *Terrestrial Radiation Thermometer* was 26°·5 on May 26.
The *Proportions of Wind* referred to the cardinal points were N. 6, E. 2, S. 6, W. 12. Five days were calm.
The *Greatest Pressure of the Wind* in the month was 9·1 lbs. on the square foot on May 16. The mean daily *Horizontal Movement of the Air* for the month was 279 miles; the greatest daily value was 550 miles on May 11; and the least daily value was 138 miles on May 2.
Rain (0in·005 or over) fell on 13 days in the month, amounting to 1in·937 as measured by gauge No. 6 partly sunk below the ground; being 0in·022 *greater* than the average fall for the 65 years, 1841–1905.

MONTH and DAY, 1923.	Barometer.	Temperature.							Difference between the Air Temperature and Dew Point Temperature.			Degree of Humidity (Saturation = 100).	Temperature.			Rain collected in Gauge No. 6, whose receiving surface is 5 inches above the Ground.	Electricity.	Daily Duration of Sunshine.	Sun above Horizon.
		Of the Air.					Of Evaporation.	Of the Dew Point.					Of Radiation.		Of the Earth 4 ft. below the Surface of the Soil.				
	Mean of 24 Hourly Values (corrected and reduced to 32° Fahrenheit).	Highest.	Lowest.	Daily Range.	Mean of 24 Hourly Values.	Excess above Average of 65 Years.	Mean of 24 Hourly Values.	Deduced Mean Daily Value.	Mean.	Greatest.	Least.		Highest in Sun's Rays.	Lowest on the Grass.					
	in.	°	°	°	°	°	°	°	°	°	°		°	°	°	in.		hours.	hours.
June 1	29·990	56·2	45·3	10·9	50·1	— 7·3	47·9	45·6	4·5	6·7	1·9	85	76·0	45·0	50·0	0·003	wP : mP, wP : wP	0·0	16·2
2	30·128	53·5	42·3	11·2	49·4	— 8·4	46·8	44·0	5·4	8·1	1·9	82	74·8	38·8	49·9	0·000	wP : mP : mP, wP	0·0	16·2
3	29·914	71·0	35·4	35·6	54·0	— 4·1	48·5	43·1	10·9	20·8	0·0	66	110·0	29·5	50·0	0·000	wP : mP, wP : mP, wP	8·4	16·3
4	29·735	52·7	43·3	9·4	48·6	— 9·7	44·6	40·3	8·3	12·9	2·1	73	104·0	36·8	50·0	0·031	wP : mP : mP	1·7	16·3
5	29·820	57·5	42·4	15·1	48·2	—10·2	44·1	39·6	8·6	14·7	3·0	72	113·0	35·6	50·0	0·021	mP, wP : mP, sP : sP, wP	2·3	16·3
6	29·856	57·0	46·3	10·7	50·8	— 7·5	49·3	47·7	3·1	8·0	0·2	89	89·0	39·5	50·1	0·130	mP : mP, wP : wP	0·1	16·3
7	30·027	66·0	45·6	20·4	54·9	— 3·3	51·6	48·4	6·5	12·6	0·2	78	114·2	37·4	50·2	0·000	wP, mP : mP : mP, wP	0·7	16·4
8	29·945	64·5	46·3	18·2	54·6	— 3·5	50·6	46·8	7·8	13·8	1·5	75	123·9	37·2	50·2	0·000	wP : wP : mP, wP	2·6	16·4
9	29·837	66·5	53·4	13·1	58·8	+ 0·8	56·4	54·2	4·6	6·7	2·8	85	111·3	50·5	50·2	0·000	wP : wP	0·1	16·4
10	29·915	70·7	52·0	18·7	60·0	+ 1·9	55·0	50·6	9·4	19·9	1·7	71	137·2	43·3	50·4	0·000	wwP : wP	7·1	16·5
11	30·117	65·6	48·2	17·4	55·7	— 2·5	49·5	43·6	12·1	21·0	3·8	65	125·0	36·8	50·8	0·000	wwP : mP : .., mP	9·7	16·5
12	30·185	65·9	44·6	21·3	54·4	— 4·0	49·4	44·5	9·9	17·5	1·2	69	126·8	29·8	50·9	0·082	wP, mP : mP : wP	4·7	16·5
13	29·846	72·0	52·6	19·4	60·6	+ 2·1	55·8	51·6	9·0	20·5	1·2	72	132·8	50·8	51·0	0·000	wwP, mP : mP, ..	6·8	16·5
14	29·960	63·2	47·6	15·6	54·8	— 3·9	49·7	44·8	10·0	15·1	4·1	69	121·6	36·7	51·1	0·000	.. : sP, wP	3·0	16·5
15	29·849	62·7	47·4	15·3	53·4	— 5·4	50·4	47·4	6·0	13·6	0·0	80	111·0	36·4	51·3	0·100	wP, mP : wP, vN	0·1	16·5
16	29·790	56·8	48·3	8·5	51·0	— 7·9	47·0	42·8	8·2	14·1	3·3	74	108·0	42·1	51·3	0·000	wP : wP, mP : mP, wP	0·5	16·5
17	29·990	61·0	40·6	20·4	50·6	— 8·4	45·6	40·4	10·2	18·7	2·0	69	125·0	29·6	51·6	0·006	wP : wP	7·9	16·5
18	29·985	65·3	38·2	27·1	52·2	— 7·0	47·9	43·5	8·7	16·1	0·2	72	123·8	28·1	51·7	0·000	wwP : wP, mP : mP, ..	0·2	16·6
19	29·911	60·9	51·1	9·8	55·0	— 4·5	51·3	47·8	7·2	13·5	0·6	77	94·2	45·4	51·6	0·019	.. : mP	0·5	16·6
20	29·981	59·2	49·1	10·1	52·4	— 7·5	47·5	42·5	9·9	14·8	5·1	70	109·9	43·9	51·7	0·008	wP : wP, mP : mP	0·9	16·6
21	30·057	68·6	47·5	21·1	57·4	— 2·9	52·9	48·8	8·6	13·5	4·2	73	114·9	40·6	51·8	0·000	wP : mP : wP	1·6	16·6
22	30·029	72·1	54·7	17·4	62·3	+ 1·7	57·0	52·5	9·8	16·1	1·4	70	139·9	44·2	51·8	0·000	wwP : mP : mP	4·9	16·6
23	30·095	79·2	51·9	27·3	65·3	+ 4·4	58·5	53·0	12·3	21·4	2·4	64	144·0	39·0	52·0	0·000	wP : mP : mP	13·9	16·6
24	30·044	72·8	60·2	12·6	65·1	+ 3·9	57·7	51·7	13·4	18·0	8·8	61	135·7	52·2	52·0	0·000	wP : wP	6·8	16·6
25	29·946	61·0	49·0	12·0	55·7	— 5·7	52·4	49·3	6·4	11·3	0·8	80	84·0	47·0	52·2	0·076	wP : wP : wwP	0·0	16·6
26	29·927	63·9	46·2	17·7	53·9	— 7·6	50·6	47·4	6·5	12·7	0·6	78	117·9	36·9	52·4	0·000	wwP : wP : wP	2·8	16·6
27	29·984	66·3	43·4	22·9	55·6	— 6·0	52·5	49·6	6·0	12·5	0·2	81	112·3	34·0	52·8	0·000	wwP : wP, mP : mP, wP	0·8	16·5
28	30·022	71·7	49·2	22·5	60·2	— 1·4	54·2	48·9	11·3	20·4	1·0	66	135·0	39·9	52·9	0·000	wwP : mP : mP, wP	1·7	16·5
29	30·025	78·3	51·2	27·1	61·6	— 0·0	55·8	50·8	10·8	23·1	0·2	69	135·0	38·7	53·0	0·000	wP : mP : mP, wP	10·7	16·5
30	29·931	71·3	47·7	23·6	59·6	— 1·9	54·1	49·2	10·4	17·8	0·0	68	133·3	35·3	52·9	0·000	wwP : mP : mP, wP	3·7	16·5
Means	29·961	65·1	47·4	17·7	55·5	— 3·9	51·2	47·0	8·5	15·2	1·9	73·4	116·1	39·4	51·3	Sum 0·476	..	3·5	16·5
Number of Column for Reference.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19

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

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

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

The mean reading of the *Barometer* for the month was 29^{in}·961, being 0^{in}·146 *higher* than the average for the 65 years, 1841–1905.

Temperature of the Air.

The highest in the month was 79°·2 on June 23; the lowest in the month was 35°·4 on June 3; and the range was 43°·8.

The mean of all the highest daily readings in the month was 65°·1, being 5°·6 *lower* than the average for the 65 years, 1841–1905.

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

The mean of the daily ranges was 17°·7, being 3°·1 *less* than the average for the 65 years, 1841–1905.

The mean for the month was 55°·5, being 3°·9 *lower* than the average for the 65 years, 1841–1905.

MONTH and DAY, 1923.	Record of the Night Sky. Polaris. Duration.	Polaris. Fraction of Total Exposure.	δ Ursae Minoris. Duration.	δ Ursae Minoris. Fraction of Total Exposure.	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.		
June 1	0·0	0·00	0·0	0·00	NNE : N	Calm : NNE	0·6	0·04	223	10, m.-r : 10	10, slt.-sh : 10
2	3·6	0·71	3·6	0·71	N	N : NNE	0·8	0·04	224	10, sh : 10, oc.-m.-r	10, s, n : 10
3	0·0	0·00	0·0	0·00	Calm	W : NNW	1·5	0·07	218	0 : 2 : th.-cl,h,m	10,th.-cl,m,so.-ha : 10, s, n : 10
4	1·9	0·39	1·7	0·33	NNW : N	NNE : N	3·0	0·21	388	10, r : 9, sh : 9	9 : p.-cl
5	0·0	0·00	0·0	0·00	N : Calm	N : SW	0·3	0·00	159	10 : 10,oc.-m.-r: 10, shs	9, cu.-n : v.-cl : 10
6	1·3	0·25	0·9	0·17	WNW : NW	Calm	1·8	0·06	225	10, r : 10, s : 10, sh	10, fq.-slt.-r, glm : 10, m, r : 10, m
7	5·0	1·00	4·9	0·99	Calm : NW	SW	0·5	0·02	177	10 : 10, s, n	9, cu.-s, n : 9 : 1, cu
8	0·0	0·00	0·0	0·00	SW	SW	4·5	0·38	416	2 : 9 : 9, cu, n, w	9, cu, n, w : 9, slt.-sh,w : 10
9	1·6	0·35	1·2	0·26	SW	SW : SSW	3·0	0·41	451	10 : 10, n	10, n : v.-cl : 9
10	4·5	1·00	4·4	0·99	SSW : SW	SSW : W	3·7	0·43	487	9 : 10, sh	p.-cl, w : p.-cl, w : 1, s, ci, w
11	4·5	1·00	4·5	1·00	WSW : WNW	NNW : N	2·1	0·27	377	1 : 8, cu	8, cu.-s, n : 2 : 0
12	0·0	0·00	0·0	0·00	NNW : W	W : WSW	2·6	0·20	354	2 : 10, so.-ha	10, s, r, w : 10, slt.-r, w
13	0·0	0·00	0·0	0·00	WSW : W	WNW : NNW	7·0	0·45	495	10 : 10, cu.-s, n, w	p.-cl, cu : v.-cl, w : 9, n, w
14	1·2	0·26	1·0	0·23	NNW : N	N : Calm	2·0	0·13	258	10 : 9, cu, n	9, cu, n : 10
15	0·3	0·06	0·1	0·03	SW : WSW	WSW	1·4	0·04	242	10 : 10, so.-ha, sh	10, s, n, fq.-r : 10 : 10, r
16	0·0	0·00	0·0	0·00	NW : N	N : Calm	3·4	0·24	346	9 : 10, oc.-r : 10, n	10, n : 10, m.-r.-sh
17	3·8	0·84	3·8	0·84	Calm : N	N : Calm	1·2	0·11	242	10, m.-r : 9 : 9, cu.-n	9 : 8, th.-cl : 0, d
18	0·0	0·00	0·0	0·00	Calm	W : Calm	0·2	0·00	142	7 : 10, m : 10, s, n	10, n : 9, s, n
19	0·0	0·00	0·0	0·00	Calm:WSW:NW	N	1·6	0·10	273	10 :10,oc.-slt.-r: 10, s, oc.-m.-r	9, cu.-s, n : 10, n
20	0·5	0·11	0·4	0·08	NNE	NE : N	2·2	0·16	329	10 : 10, slt.-shs	10, cu.-s, n : 9
21	2·7	0·60	2·6	0·58	NW : W	NW : WNW	1·5	0·06	260	9 : 8, cu.-s : 10, s,n	10, s, n : 9, oc.-slt.-shs,slt.-m
22	4·5	1·00	4·5	1·00	W : NNW	NNW	2·0	0·14	342	9 : 8	7, cu, cu.-s, so.-ha : 1, s
23	0·7	0·15	0·6	0·13	NW : WNW	WNW : NNW	1·0	0·05	235	0 : 2, cu.-s	2, cu.-s : p.-cl : 8, cu, ci, s
24	0·0	0·00	0·0	0·00	NNW : NW	NW : NNW	1·6	0·12	281	9 : p.-cl : 9, cu	9, cu : 10
25	0·5	0·11	0·5	0·10	NW	N : Calm	1·3	0·08	241	10 : 10, slt.-sh	10, oc.-slt.-r : 10, n, r
26	4·4	0·97	4·4	0·97	Calm	WSW	0·4	0·00	134	10 : 10	9, h : 10, th.-cl, m
27	1·8	0·41	1·6	0·35	SW	SW : Calm	0·5	0·02	168	1 : 9 : 9, cu	10, cu, n : 10 : 1, slt.-m, d
28	4·4	0·98	4·2	0·93	Calm	Calm : NNW	0·5	0·03	143	10 : 9	9 : 10
29	4·5	1·00	4·5	1·00	NNW : Calm	Calm : NE	0·6	0·01	123	1, d : 0 : 4	p.-cl : 1, slt.-m, h, d
30	0·8	0·17	0·4	0·09	Calm : NW	NW : NNW	1·4	0·05	193	0, m, d : 9, th.-cl, so.-ha	9, s : 9, oc.-slt.-r : 8,ci.-s,slt.-m
Means	..	..	..	..	..	..	..	0·13	272		
Number of Column for Reference	20	21	22	23	24	25	26	27	28	29	30

The mean *Temperature of Evaporation* for the month was 51°·2, being 3°·7 *lower* than
The mean *Temperature of the Dew Point* for the month was 47°·0, being 3°·9 *lower* than
The mean *Degree of Humidity* for the month was 73·4, being 0·2 *less* than
The mean *Elastic Force of Vapour* for the month was 0in·323, being 0in·050 *less* than
The mean *Weight of Vapour in a Cubic Foot of Air* for the month was 3grs·7, being 0grs·5 *less* than
The mean *Weight of a Cubic Foot of Air* for the month was 538 grains, being 7 grains *greater* than
} the average for the 65 years, 1841–1905.

The mean amount of *Cloud* for the month (a clear sky being represented by 0 and an overcast sky by 10) was 8·5.
The mean proportion of *Sunshine* for the month (constant sunshine being represented by 1) was 0·211. The maximum daily amount of *Sunshine* was 13·9 hours on June 23.
The highest reading of the *Solar Radiation Thermometer* was 144°·0 on June 23; and the lowest reading of the *Terrestrial Radiation Thermometer* was 28°·1 on June 18.
The *Proportions of Wind* referred to the cardinal points were N. 12, E. 1, S. 2, W. 10. Five days were calm.
The *Greatest Pressure of the Wind* in the month was 7·0 lbs. on the square foot on June 13. The mean daily *Horizontal Movement of the Air* for the month was 272 miles; the greatest daily value was 495 miles on June 13; and the least daily value was 123 miles on June 29.
Rain (0in·005 or over) fell on 9 days in the month, amounting to 0in·476 as measured by gauge No. 6 partly unk below the ground; being 1in·562 *less* than the average fall for the 65 years, 1841–1905.

MONTH and DAY, 1923.	Barometer.	Temperature.							Difference between the Air Temperature and Dew Point Temperature.			Degree of Humidity (Saturation = 100).	Temperature.			Rain collected in Gauge No. 6, whose receiving surface is 5 inches above the Ground.	Electricity.	Daily Duration of Sunshine	Sun above Horizon.
		Of the Air.					Of Evaporation.	Of the Dew Point.					Of Radiation.		Of the Earth 4 ft. below the Surface of the Soil.				
	Mean of 24 Hourly Values (corrected and reduced to 32° Fahrenheit).	Highest.	Lowest.	Daily Range.	Mean of 24 Hourly Values.	Excess above Average of 65 Years.	Mean of 24 Hourly Values.	Deduced Mean Daily Value.	Mean.	Greatest.	Least.		Highest in Sun's Rays.	Lowest on the Grass.					
	in.	°	°	°	°	°	°	°	°	°	°		°	°	°	in.		hours.	hours.
July 1	29·908	67·0	54·4	12·6	59·3	− 2·2	52·6	46·7	12·6	20·2	6·5	63	128·9	51·0	53·0	0·000	wP : wP	2·4	16·5
2	29·863	71·8	51·4	20·4	60·5	− 1·1	54·1	48·5	12·0	20·5	4·3	65	127·8	43·5	53·1	0·000	wP : mP, wP : wP	1·4	16·5
3	29·826	68·3	49·9	18·4	59·1	− 2·7	55·3	51·9	7·2	15·0	0·8	77	122·4	40·8	53·2	0·004	wwP : wP : wwP	1·6	16·5
4	29·910	76·0	52·8	23·2	63·5	+ 1·4	56·9	51·4	12·1	21·6	3·1	65	150·6	40·7	53·6	0·000	**wwP** : wP : wP	9·3	16·5
5	29·988	84·2	52·3	31·9	67·2	+ 4·9	60·0	54·3	12·9	24·2	2·8	63	158·0	40·6	53·7	0·000	wP : wP	12·0	16·4
6	29·981	85·1	56·5	28·6	70·6	+ 8·2	63·1	57·4	13·2	26·7	2·5	63	152·5	48·4	54·0	0·000	wwP : wP : wP	13·9	16·4
7	29·897	90·1	58·2	31·9	75·4	+13·0	65·5	58·4	17·0	32·0	1·3	55	162·8	48·1	54·4	0·000	wP : wP	10·2	16·4
8	29·931	83·2	60·1	23·1	70·5	+ 8·1	63·0	57·3	13·2	26·4	4·7	63	165·0	46·7	54·7	0·000	wP : wP	8·0	16·3
9	29·953	84·7	52·2	32·5	69·2	+ 6·8	60·2	53·2	16·0	33·7	1·2	56	164·2	38·6	55·0	0·500	wP : mP, wP : wP	14·2	16·3
10	29·832	83·0	61·2	21·8	71·3	+ 8·8	66·9	63·6	7·7	20·5	0·6	76	148·6	59·1	56·0	1·379	v, wP : mP : v, ..	7·2	16·3
11	29·979	92·2	61·4	30·8	76·7	+14·0	69·3	64·1	12·6	27·1	0·2	65	161·0	54·6	56·1	0·000	.. : mP, wP : wP	12·8	16·3
12	30·020	89·6	65·9	23·7	78·0	+15·1	68·6	62·1	15·9	29·3	0·7	58	159·0	56·2	56·5	0·000	wP, mP : wP : wP	13·8	16·2
13	29·935	92·1	64·2	27·9	77·0	+13·9	67·2	60·3	16·7	27·7	5·4	57	163·2	53·1	56·9	0·000	wP, mP : mP, wP : wP	13·1	16·2
14	29·901	84·5	62·9	21·6	72·0	+ 8·7	65·2	60·1	11·9	20·8	2·4	66	156·2	51·7	57·0	0·023	mP, v : mP : mP	6·2	16·2
15	29·754	83·0	60·8	22·2	69·5	+ 6·1	63·7	59·2	10·3	16·2	2·0	69	158·0	51·0	57·3	0·004	**wP** : wP	9·4	16·2
16	29·692	78·4	59·6	18·8	67·2	+ 3·8	59·7	53·7	13·5	24·4	1·1	62	153·9	50·2	57·8	0·011	**wwP** : mP : sP, mP	8·6	16·1
17	29·735	71·3	53·5	17·8	60·6	− 2·8	55·8	51·6	9·0	18·5	2·1	72	136·8	39·5	57·8	0·022	**wP** : wP : wwP	1·3	16·1
18	29·807	72·9	54·7	18·2	62·4	− 0·9	55·1	48·9	13·5	23·5	2·5	61	146·0	43·5	57·9	0·004	**wwP** : mP : mP	7·5	16·0
19	29·929	72·8	49·9	22·9	59·7	− 3·5	55·3	51·4	8·3	21·6	0·0	74	146·6	36·1	58·0	0·039	**wP** : mP, wP : wwP	5·8	16·0
20	30·013	83·9	59·4	24·5	71·0	+ 7·8	64·2	59·0	12·0	24·0	1·5	66	155·8	52·4	58·1	0·000	wP : mP : mP, wP	12·3	15·9
21	30·109	82·8	58·4	24·4	69·4	+ 6·2	62·7	57·5	11·9	22·8	0·8	65	159·0	48·5	58·0	0·000	wP : mP : mP, wP	11·1	15·9
22	30·092	80·4	58·8	21·6	68·0	+ 4·9	61·9	57·1	10·9	19·2	1·7	68	147·3	49·8	58·0	0·000	wP : wP	7·9	15·9
23	29·815	78·1	54·9	23·2	63·4	+ 0·4	59·5	56·2	7·2	18·6	0·6	78	158·0	47·1	58·2	0·047	wP : wP	5·9	15·8
24	29·751	77·1	57·1	20·0	66·9	+ 4·0	58·1	51·1	15·8	26·0	3·3	51	146·3	47·1	58·2	0·000	**wP, mP** : mP : mP, **wP**	13·8	15·8
25	29·679	71·9	57·3	14·6	63·5	+ 0·8	60·2	57·5	6·0	14·2	1·3	81	116·3	48·3	58·3	0·106	wwP : wwP	0·2	15·7
26	29·700	70·2	53·0	17·2	60·4	− 2·1	52·4	45·4	15·0	24·9	2·0	58	130·2	43·3	58·3	0·000	**wwP** : mP, sP : sP, mP	12·7	15·7
27	29·823	72·2	48·2	24·0	60·1	− 2·3	52·8	46·4	13·7	23·1	4·4	61	139·4	34·7	58·4	0·000	**wP** : mP : **wP**	7·1	15·7
28	29·556	68·8	55·3	13·5	61·3	− 1·0	58·6	56·3	5·0	11·8	0·9	84	117·0	47·4	58·1	0·083	.. : ..	2·5	15·6
29	29·557	73·0	52·2	20·8	61·9	− 0·4	56·6	52·1	9·8	18·5	1·0	70	136·0	44·2	58·2	0·000	.. : wP	5·7	15·5
30	29·477	73·9	57·9	16·0	62·4	+ 0·1	57·2	52·8	9·6	21·2	0·6	71	140·0	52·6	58·1	0·083	**wP** : **wP**	5·6	15·5
31	29·274	67·0	52·3	14·7	58·5	− 3·7	55·3	52·4	6·1	14·6	0·9	80	99·4	46·3	58·1	0·289	.. : ..	2·7	15·5
Means	29·829	78·4	56·3	22·0	66·3	+ 3·7	59·9	54·8	11·6	22·2	2·0	66·5	145·4	46·9	56·6	Sum 2·594	..	7·9	16·1
Number of Column for Reference	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19

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

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

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

The mean reading of the *Barometer* for the month was 29^{in}·829, being 0^{in}·030 *higher* than the average for the 65 years, 1841–1905.

TEMPERATURE OF THE AIR.

The highest in the month was 92°·2 on July 11; the lowest in the month was 48°·2 on July 27; and the range was 44°·0.
The mean of all the highest daily readings in the month was 78°·4, being 4°·2 *higher* than the average for the 65 years, 1841–1905.
The mean of all the lowest daily readings in the month was 56°·3, being 3°·0 *higher* than the average for the 65 years, 1841–1905.
The mean of the daily ranges was 22°·0, being 1°·1 *greater* than the average for the 65 years, 1841–1905.
The mean for the month was 66°·3, being 3°·7 *higher* than the average for the 65 years, 1841–1905.

MONTH and DAY, 1923.	Record of the Night Sky. Polaris. Duration.	Polaris. Fraction of Total Exposure.	δ Ursae Minoris. Duration.	δ Ursae Minoris. Fraction of Total Exposure.	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	0·0	0·00	0·0	0·00	NNW	NNW	1·0	0·03	195	10 : 10	10 : 8 : 10
2	4·1	0·91	4·0	0·89	Calm	SW	0·6	0·03	155	10 : 7 : 7, cu	9 : 6 : 1, d
3	0·2	0·04	0·1	0·03	SW	SW	1·0	0·08	224	2 : 10	10, fq.-slt.-r : 10
4	3·3	0·73	3·1	0·70	SW	SW : WSW	1·0	0·11	238	10 : 8 : 9, cu	5, cu . 1, d
5	4·5	1·00	4·5	1·00	Calm	Calm : ESE	1·6	0·06	163	v.-cl : v.-cl : 2	1 : 0, d
6	4·5	1·00	4·5	1·00	Calm : ESE	ESE	2·2	0·15	221	1 : 0	0 : 0
7	0·8	0·16	0·5	0·10	Calm : SE	S : SW	1·2	0·08	197	1 : 7, cu	5, cu : 8 : 10
8	5·0	1·00	5·0	1·00	W	W : WSW	1·2	0·10	246	10 : 9	6, cu : 1
9	0·0	0·00	0·0	0·00	Calm	Calm : ESE	1·0	0·05	168	0 : 1, cu	1, cu.-s : 2, d : 8, t.-sm
10	1·7	0·33	1·2	0·23	Calm : NE	Calm	1·1	0·04	183	10, t.-sm : 10, slt.-r, t : 9, th.-cl	10, th.-cl : 10, slt.-t.-sm : 9, l
11	5·0	1·00	5·0	1·00	Calm	Calm	0·2	0·00	105	3 : 2, cu	1, cu : 1, slt.-d
12	3·5	0·69	3·1	0·63	Calm : ESE	ESE	0·6	0·04	160	0 : 0	0 : 1
13	4·9	0·98	3·5	0·69	Calm : ENE	S	1·6	0·07	200	2 : 2, cu.-s	1, s : 1
14	4·6	0·92	4·3	0·85	S : SW	SW	0·5	0·02	179	3 : 9, r : 9	9, cu.-s, n : p.-cl : 1, s, d
15	0·0	0·00	0·0	0·00	SW	SW	3·4	0·19	295	1 : 1, cu, ci	7, cu, n : 7 : 10, shs
16	3·0	0·60	2·6	0·53	SW : WSW	W	2·2	0·16	362	10, m.-r : 10, oc.-m.-r : 9	p.-cl, w : 7, w : 6
17	0·7	0·13	0·5	0·10	WSW	WSW	1·5	0·09	292	3 : 8 : 9	10, slt.-sh : 10, oc.-slt.-r : 9, sh
18	3·5	0·70	3·2	0·64	WSW : W	WNW	1·2	0·10	267	8, sh : 9, cu.-s, n	9, cu.-s, n : 9
19	..	..	..	..	Calm : WSW	WSW	2·6	0·14	271	1 : 1, so.-ha : 6, s, n	10, n, fq.-r : 10, slt.-r : 10
20	5·0	1·00	5·0	1·00	WSW	W : WNW	2·8	0·24	350	10 : 9 : 2, cu	1 : 1
21	5·5	1·00	5·5	1·00	W	W : WNW	1·8	0·16	298	3 : 8 : p.-cl, cu	7 : 1
22	5·0	0·91	4·9	0·90	WSW	W : WSW	2·0	0·17	330	1 : 7 : 10, n	3, cu : 1 : 1
23	0·5	0·08	0·3	0·05	WSW : SW	WSW	3·1	0·30	407	9 : p.-cl, cu, cu.-s	9, r : 10 : 10, m.-r
24	2·9	0·53	2·6	0·47	NW	W : WSW	2·0	0·15	289	10 : 3 : 8, cu	3, cu.-ci : 2 : 5
25	5·3	0·96	5·2	0·95	WSW	W	2·5	0·23	352	10 : 10, n	10, r : 3
26	5·5	1·00	5·5	1·00	W : WNW	WNW	5·4	0·50	459	2 : 1 : 7, n, s, cu	7, s, n, cu, w : 1, s, ci, w
27	0·2	0·03	0·1	0·01	WNW	WNW : WSW	1·8	0·13	261	1 : p.-cl	9, s, n, cu : 10, oc.-slt.-r
28	5·6	0·94	5·5	0·92	SW : SSW	SW : WSW	4·2	0·30	364	10, sh : 10, s, n, r	10, r : 9, slt.-sh : v.-cl
29	0·7	0·12	0·7	0·12	WSW : SW	SW	2·2	0·17	307	3 : p.-cl : 9, s,-cu, n	10, s.-cu, n : 10 : v.-cl
30	3·0	0·50	3·0	0·50	WSW	SW	4·5	0·53	410	9, sh : 9, s, ci.-cu, w	10, n, slt.-shs : 9, slt.-shs
31	3·2	0·53	3·0	·050	SW	SSW : SW	4·1	0·41	385	0 : 9	10, sh : 10, fq.-hy.-r : 6
Means	..	..	..	..	..	..	..	0·16	269		
Number of Column for Reference	20	21	22	23	24	25	26	27	28	29	30

The mean *Temperature of Evaporation* for the month was 59°·9, being 2°·0 *higher* than
The mean *Temperature of the Dew Point* for the month was 54°·8, being 1°·0 *higher* than
The mean *Degree of Humidity* for the month was 66·5, being 6·3 *less* than
The mean *Elastic Force of Vapour* for the month was 0in·430, being 0in·015 *greater* than
The mean *Weight of Vapour in a Cubic Foot of Air* for the month was 4grs·7, being 0grs·1 *greater* than
The mean *Weight of a Cubic Foot of Air* for the month was 524 grains, being 3 grains *less* than
} the average for the 65 years, 1841–1905.

The mean amount of *Cloud* for the month (a clear sky being represented by 0 and an overcast sky by 10) was 6·1.
The mean proportion of *Sunshine* for the month (constant sunshine being represented by 1) was 0·494. The maximum daily amount of *Sunshine* was 14·2 hours on July 9.
The highest reading of the *Solar Radiation Thermometer* was 165°·0 on July 8; andthe lowest reading of the *Terrestrial Radiation Thermometer* was 34°·7 on July 27.
The *Proportions of Wind* referred to the cardinal points were N.2, E. 4, S. 6, W. 15. Four days were calm.
The *Greatest Pressure of the Wind* in the month was 5·4 lbs. on the square foot on July 26. The mean daily *Horizontal Movement of the Air* for the month was 269 miles; the greatest daily value was 459 miles on July 26; and the least daily value was 105 miles on July 11.
Rain (0in·005 or over) fell on 11 days in the month, amounting to 2in·594 as measured by gauge No. 6 partly sunk below the ground; being 0in·195 *greater* than the average fall for the 65 years, 1841–1905.

MONTH and DAY 1923.	BAROMETER.	TEMPERATURE.							Difference between the Air Temperature and Dew Point Temperature.			Degree of Humidity (Saturation = 100).	TEMPERATURE.			Rain collected in Gauge No. 6, whose receiving surface is 5 inches above the Ground.	Electricity.	Daily Duration of Sunshine.	Sun above Horizon.
		Of the Air.					Of Evaporation.	Of the Dew Point.					Of Radiation.		Of the Earth 4 ft. below the Surface of the Soil.				
	Mean of 24 Hourly Values (corrected and reduced to 32° Fahrenheit).	Highest.	Lowest.	Daily Range.	Mean of 24 Hourly Values.	Excess above Average of 65 Years.	Mean of 24 Hourly Values.	Deduced Mean Daily Value.	Mean.	Greatest.	Least.		Highest in Sun's Rays.	Lowest on the Grass.					
	in.	°	°	°	°	°	°	°	°	°	°		°	°	°	in.		hours.	hours.
Aug. 1	29·508	73·9	50·3	23·6	60·8	− 1·4	54·3	48·6	12·2	22·7	2·2	64	143·6	44·1	58·0	0·015	.. : ..	13·8	15·4
2	29·670	76·1	54·3	21·8	63·2	+ 1·1	57·0	51·8	11·4	22·6	1·2	66	152·9	44·8	58·1	0·000	.. : wP	8·9	15·4
3	29·891	73·9	54·1	19·8	62·3	+ 0·2	53·9	46·7	15·6	28·2	5·2	57	154·0	41·6	58·0	0·000	wP : wP, mP : mP, wP	12·7	15·3
4	30·108	78·1	49·8	28·3	62·7	+ 0·6	55·4	49·2	13·5	25·5	1·2	61	157·2	35·5	58·0	0·000	wP : wP	12·8	15·2
5	29·944	80·2	45·9	34·3	65·2	+ 3·1	56·4	49·2	16·0	28·7	1·7	56	157·2	30·8	58·1	0·000	wP : wP	13·2	15·2
6	29·893	80·6	55·1	25·5	66·6	+ 4·4	58·3	51·6	15·0	26·9	1·6	59	150·6	44·0	58·2	0·000	wP : wP : wP, mP	11·0	15·1
7	29·864	81·1	54·8	26·3	67·2	+ 5·0	59·5	53·4	13·8	24·5	2·3	61	155·4	42·1	58·3	0·000	wP : wP	11·4	15·1
8	29·920	85·0	58·3	26·7	69·0	+ 6·7	61·9	56·3	12·7	23·7	2·3	64	161·8	46·0	58·4	0·000	wP : wP	13·2	15·0
9	29·912	90·7	55·2	35·5	72·8	+10·5	63·5	56·5	16·3	33·0	2·9	57	164·5	43·3	58·7	0·000	wP : mP, wP : wP	11·4	15·0
10	30·025	81·1	61·8	19·3	69·5	+ 7·2	61·7	55·6	13·9	24·5	2·8	61	152·2	50·4	58·7	0·000	wP, mP : mP : mP, wP	7·0	14·9
11	30·094	77·9	56·2	21·7	66·7	+ 4·3	57·3	49·8	16·9	27·5	4·6	55	146·6	42·1	58·9	0·000	.. : mP : mP, wP	10·3	14·9
12	30·099	80·0	50·1	29·9	64·8	+ 2·3	56·8	50·2	14·6	25·0	1·4	59	152·8	36·8	59·0	0·000	wP : wP	12·5	14·8
13	29·964	88·2	53·1	35·1	70·2	+ 7·7	62·7	56·9	13·3	25·9	2·8	63	162·0	40·4	59·2	0·000	wP : mP : mP	9·2	14·7
14	29·975	85·5	65·9	19·6	72·3	+ 9·8	65·7	60·7	11·6	21·7	4·0	67	155·0	55·6	59·2	0·000	wP, mP : wP, mP	6·2	14·7
15	29·910	70·7	55·8	14·9	62·6	+ 0·2	56·5	51·3	11·3	23·8	1·0	67	121·0	44·6	59·1	0·168	wP, v : sP, mP	7·2	14·6
16	29·986	68·8	48·1	20·7	58·7	− 3·6	51·2	44·5	14·2	21·7	3·6	59	118·4	36·5	59·2	0·000	mP, wP : sP, mP : mP	5·1	14·6
17	29·638	67·9	54·4	13·5	59·0	− 3·1	55·4	52·2	6·8	14·6	2·8	78	122·2	47·1	59·1	0·124	wP : ..	2·1	14·5
18	29·478	68·9	55·2	13·7	60·1	− 1·8	56·3	53·0	7·1	15·9	0·6	77	127·6	46·1	59·1	0·154	.. : v, mP	4·9	14·5
19	29·738	69·9	52·0	17·9	60·7	− 1·0	55·8	51·6	9·1	16·7	3·0	71	107·9	43·2	59·0	0·000	wP, mP : wP	4·2	14·4
20	29·705	68·9	54·7	14·2	60·8	− 0·7	58·5	56·5	4·3	7·2	1·0	86	92·7	49·0	59·0	0·010	wP : wP	0·0	14·3
21	29·496	70·9	54·1	16·8	63·5	+ 2·2	58·7	54·7	8·8	14·9	2·4	74	124·2	42·8	59·0	0·000	wP : wP : mP, wP	6·8	14·3
22	29·597	71·3	52·5	18·8	60·0	− 1·1	53·0	46·8	13·2	26·4	2·8	62	142·0	41·8	59·0	0·000	wP : wP	13·4	14·2
23	29·664	69·3	50·3	19·0	57·5	− 3·4	53·5	49·9	7·6	19·4	0·9	76	135·7	39·9	58·9	0·405	wP : wP : vN, wP	5·3	14·1
24	29·395	65·9	54·2	11·7	58·6	− 2·2	56·2	54·0	4·6	9·7	1·0	85	117·6	46·2	58·7	0·503	wP, mP : v : mP	5·0	14·1
25	29·812	67·0	49·7	17·3	57·2	− 3·5	52·8	48·8	8·4	15·7	2·1	73	108·8	41·0	58·7	0·000	mP : mP	2·7	14·0
26	29·553	72·6	54·9	17·7	62·0	+ 1·3	58·2	55·0	7·0	14·0	1·1	78	134·9	48·2	58·6	0·007	wP : wP	4·9	13·9
27	29·446	70·9	52·8	18·1	57·6	− 3·0	53·3	49·4	8·2	20·0	1·4	74	144·9	43·3	58·7	0·084	wP, mP : vv, wP	9·4	13·9
28	29·613	67·4	51·2	16·2	57·4	− 3·0	51·1	45·4	12·0	21·5	4·4	64	128·7	39·9	58·5	0·000	mP : mP	10·2	13·8
29	29·487	59·2	47·6	11·6	54·0	− 6·3	52·0	50·0	4·0	7·1	0·8	86	79·0	37·2	58·1	0·437	wP : v, mP	0·0	13·8
30	29·654	65·8	47·2	18·6	55·2	− 4·9	47·7	40·5	14·7	20·8	6·7	58	131·5	33·5	58·1	0·000	wP, mP : mP	12·6	13·7
31	29·766	68·0	43·9	24·1	54·5	− 5·4	48·7	43·1	11·4	22·2	1·7	66	136·0	30·7	58·0	0·000	mP : mP, wP : mP	9·8	13·6
Means	29·768	74·1	53·0	21·0	62·3	+ 0·7	56·2	51·1	11·3	21·0	2·4	67·2	136·7	42·2	58·6	Sum 1·907	..	8·3	14·5
Number of Column for Reference.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19

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

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

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

The mean reading of the *Barometer* for the month was 29^{in}·768, being 0^{in}·015 *lower* than the average for the 65 years, 1841–1905.

TEMPERATURE OF THE AIR.

The highest in the month was 90°·7 on August 9; the lowest in the month was 43°·9 on August 31; and the range was 46°·8.

The mean of all the highest daily readings in the month was 74°·1, being 1°·4 *higher* than the average for the 65 years, 1841–1905.

The mean of all the lowest daily readings in the month was 53°·0, being equal to the average for the 65 years, 1841–1905.

The mean of the daily ranges was 21°·0, being 1°·3 *greater* than the average for the 65 years, 1841–1905.

The mean for the month was 62°·3, being 0°·7 *higher* than the average for the 65 years, 1841–1905.

MONTH and DAY, 1923.	Record of the Night Sky. Polaris. Duration.	Polaris. Fraction of Total Exposure.	δ Ursae Minoris. Duration.	δ Ursae Minoris. Fraction of Total Exposure.	Wind as Deduced from Self-Registering Anemometers. Osler's. General Direction. A.M.	P.M.	Pressure on the Square Foot. Greatest.	Mean of 24 Hourly Measures.	Robinson's. Horizontal Movement of the Air.	Clouds and Weather. A.M.	P.M.
	hours.		hours.				lbs.	lbs.	miles.		
Aug. 1	3·1	0·51	3·0	0·50	WSW	WSW : SW	3·5	0·48	428	5, sh : 5 : 8	9, cu.-s : 8 : 7
2	6·0	1·00	6·0	1·00	SSW	SSW : SW	6·3	0·62	375	9 : 8	6, w : 1, slt.-d
3	5·9	0·99	5·9	0·99	SW : WSW	WNW	6·5	0·70	530	0 : 7 : 8, w	3, cu, w : 3, w : 1, ci
4	6·0	1·00	6·0	1·00	Calm	Calm	0·8	0·01	137	0 : 1 : 3, cu, ci	2, ci, cu : 6 : 1
5	6·0	1·00	6·0	1·00	Calm	SSW : Calm	2·0	0·06	194	0 : 2, ci, s	8 : p.-cl : 1, ci
6	4·5	0·75	4·1	0·69	Calm : W	W : Calm	1·2	0·04	212	0 : 1 : p.-cl,th.-cl	9, ci, so.-ha: 2 : 0
7	5·7	0·94	5·6	0·93	Calm : WSW	WSW : Calm	3·0	0·10	238	7 : 7 : 2, cu	p.-cl, cu, ci : 7 : 1
8	6·0	1·00	6·0	1·00	Calm	SW	1·0	0·03	165	p.-cl : 7 : 7, s, ci, cu	7, s, ci, cu : 1
9	3·3	0·55	3·0	0·49	Calm : WSW	W	2·1	0·09	249	1 : 1	p.-cl, cu : 8, t : 9
10	3·7	0·61	3·5	0·58	WNW : Calm	Calm : NNE	0·6	0·03	163	8 : 9 : 9, cu	8 : 8 : p.-cl
11	6·5	1·00	6·5	1·00	NE	Calm	1·0	0·02	156	p.-cl : p.-cl : 6, s, ci	9,s,p.-so.-ha: 5 : 1
12	6·5	1·00	6·5	1·00	Calm	S : Calm	0·6	0·05	131	1 : 5, cu, ci	8, ci, s, cu : p.-cl : 1
13	3·2	0·49	2·8	0·43	Calm	WNW	4·0	0·15	264	1 : 1, cu	9, n : 9 : 1, ci
14	1·4	0·22	1·1	0·17	Calm	Calm	0·2	0·00	113	6 : 7 : 3	9, n, cu : 9 : p.-cl
15	6·5	1·00	6·5	1·00	N	N	3·7	0·28	348	10, l : 10, r : 10	p.-cl : 1
16	0·4	0·06	0·3	0·05	W : NW	NW : W	1·5	0·11	263	0 : 7, th.-cl : 9, so.-ha	8 : 9 : 9
17	0·2	0·02	0·2	0·02	SW	WSW : WNW	4·8	0·23	404	10 : 9 : 10, r	10, oc.-r : 10, m.-r.-sh
18	6·6	0·94	6·4	0·92	WSW	WNW	5·9	0·16	383	10, sh : 9, cu, n, shs	9, t, l, r : 2 : 1, ci.-s
19	1·8	0·26	1·6	0·23	WSW	W	1·0	0·05	253	p.-cl : p.-cl : 9, n, cu	10, n : 9
20	1·5	0·21	1·1	0·16	SW	SW	1·2	0·06	234	10 : 10, s, n, sh	10 : 10
21	6·7	0·95	6·6	0·95	SW	SW : W	4·2	0·29	380	10, m.-r.-sh : 10, n, m.-r.-sh, w	8, n, cu, ci, w : 1, ci
22	7·0	1·00	7·0	1·00	WSW	WSW	5·5	0·47	534	1 : p.-cl, cu.-s, w	p.-cl, cu, w : 2, w : 0
23	0·5	0·07	0·5	0·07	SW	SW : S	3·0	0·22	320	1 : 2 : 9, n, cu.-s	10, s, n, r : 10, r : 10, m.-r
24	2·6	0·38	2·4	0·34	SSW : Calm	Calm : NW	1·8	0·06	197	10, r : 8 : 10, r, l, t	10, r, l, t : 3 : v.-cl
25	0·0	0·00	0·0	0·00	NNW : WSW	WSW : SW	1·6	0·10	274	10 : 1 : 10, s, p.-so.-ha	10, s, n, m.-r.-sh : 10, m.-r, sh
26	7·9	0·98	7·8	0·98	SW	SW	4·6	0·08	348	10, sh : 10, oc.-shs	8, cu, n : 1 : 2, d
27	2·2	0·28	1·7	0·22	SW : W	W : WSW	8·5	0·14	352	1, d : 3 : 7	8, fq.-shs, oc.-t : v.-cl, sh : 10, m.-r.-sh
28	6·2	0·77	5·9	0·74	W	WNW : W	6·6	0·43	516	10 : 3, w : 8, w	8, w : 5, w : 6, lu.-ha
29	3·1	0·39	3·0	0·37	Calm	S : SW	13·2	0·45	377	8 : 10, n, fq.-r	10, n, fq.-r : 10, fq.-r, w
30	8·0	1·00	8·0	1·00	W	W : SW	10·5	0·93	650	5, w, g : 2, w : 3, cu, w	5, w : 1, w : 0
31	8·0	1·00	7·9	0·99	SW	SW	2·0	0·13	252	0 : 0 : p.-cl,cu,ci	6, so.-ha : 8 : 1
Means	..	..	..	..	..	..	..	0·21	305		
Number of Column for Reference	20	21	22	23	24	25	26	27	28	29	30

The mean *Temperature of Evaporation* for the month was 56°·2, being 1°·3 *lower* than
The mean *Temperature of the Dew Point* for the month was 51°·1, being 2°·9 *lower* than
The mean *Degree of Humidity* for the month was 67·2, being 9·1 *less* than
The mean *Elastic Force of Vapour* for the month was 0in·375, being 0in·043 *less* than
The mean *Weight of Vapour in a Cubic Foot of Air* for the month was 4grs·1, being 0grs·5 *less* than
The mean *Weight of a Cubic Foot of Air* for the month was 527 grains, being 1 grain *less* than
} the average for the 65 years, 1841–1905.

The mean amount of *Cloud* for the month (a clear sky being represented by 0 and an overcast sky by 10) was 6·0.

The mean proportion of *Sunshine* for the month (constant sunshine being represented by 1) was 0·570. The maximum daily amount of *Sunshine* was 13·8 hours on August 1.

The highest reading of the *Solar Radiation Thermometer* was 164°·5 on August 9; and the lowest reading of the *Terrestrial Radiation Thermometer* was 30°·7 on August 31.

The *Proportions of Wind* referred to the cardinal points were N. 3, E. 0, S. 8, W. 16. Four days were calm.

The *Greatest Pressure of the Wind* in the month was 13·2 lbs. on the square foot on August 29. The mean daily *Horizontal Movement of the Air* for the month was 305 miles; the greatest daily value was 650 miles on August 30; and the least daily value was 113 miles on August 14.

Rain (0in·005 or over) fell on 10 days in the month, amounting to 1in·907 as measured by gauge No. 6 partly sunk below the ground; being 0in·437 *less* than the average fall for the 65 years, 1841–1905.

MONTH and DAY, 1923.	Barometer.	Temperature.							Difference between the Air Temperature and Dew Point Temperature.			Degree of Humidity (Saturation = 100).	Temperature.			Rain collected in Gauge No. 6, whose receiving surface is 5 inches above the Ground.	Electricity	Daily Duration of Sunshine.	Sun above Horizon.
		Of the Air.					Of Evaporation.	Of the Dew Point.					Of Radiation.		Of the Earth 4 ft. below the Surface of the Soil.				
	Mean of 24 Hourly Values (corrected and reduced to 32° Fahrenheit).	Highest.	Lowest.	Daily Range.	Mean of 24 Hourly Values.	Excess above Average of 65 years.	Mean of 24 Hourly Values.	De-duced Mean Daily Value.	Mean.	Greatest.	Least.		Highest in Sun's Rays.	Lowest on the Grass.					
	in.	°	°	°	°	°	°	°	°	°	°		°	°	°	in.		hours.	hours.
Sept. 1	29·778	67·0	43·3	23·7	53·5	− 6·3	48·9	44·4	9·1	20·1	1·5	71	128·9	29·5	56·9	0·032	wP, mP : mP, v : mP	9·6	13·6
2	30·071	63·9	46·3	17·6	54·1	− 5·6	48·5	43·0	11·1	18·0	3·6	66	120·0	35·3	56·9	0·000	wP : wP : wP, mP	7·4	13·5
3	30·180	66·9	40·3	26·6	53·1	− 6·5	47·9	42·7	10·4	21·5	1·1	68	111·4	29·4	56·4	0·000	wP, mP : mP, sP : mP, wP	8·6	13·5
4	30·075	60·4	42·3	18·1	52·6	− 6·9	50·3	48·0	4·6	9·5	0·6	84	77·4	28·6	56·1	0·101	wP : wP : mP	0·0	13·4
5	30·148	69·3	45·3	24·0	56·7	− 2·7	51·7	47·1	9·6	17·7	3·6	70	120·0	34·0	56·0	0·000	mP : mP	7·6	13·3
6	30·152	69·5	47·8	21·7	56·7	− 2·5	53·8	51·1	5·6	13·7	0·0	82	123·4	36·5	56·2	0·000	wP	6·1	13·3
7	30·073	71·4	50·3	21·1	59·4	+ 0·4	56·3	53·6	5·8	13·0	0·6	82	111·9	42·2	57·0	0·000	wP : mP	1·7	13·2
8	30·155	70·2	43·2	27·0	55·7	− 3·1	50·6	45·8	9·9	20·8	1·1	69	120·9	31·3	57·0	0·000	wP : mP, wP : wP	10·5	13·1
9	29·962	76·0	42·9	33·1	58·7	+ 0·1	54·2	50·2	8·5	19·7	0·0	73	137·0	28·2	57·0	0·000	wP	9·5	13·1
10	29·892	72·0	53·5	18·5	61·4	+ 3·0	57·6	54·3	7·1	16·3	0·2	78	121·4	42·6	56·9	0·000	wP : mP : wP	3·9	13·0
11	29·888	71·8	54·0	17·8	60·8	+ 2·7	56·5	52·8	8·0	23·1	0·2	75	131·4	45·7	56·9	0·000	wwP : wP : wP, mP	6·0	12·9
12	29·749	73·7	50·4	23·3	60·3	+ 2·3	54·3	49·0	11·3	19·7	2·4	66	135·0	42·6	57·0	0·000	wP : mP : mP, wP	11·5	12·9
13	29·662	77·4	48·2	29·2	60·9	+ 3·1	56·3	52·4	8·5	18·9	0·8	73	139·6	38·0	57·0	0·000	wP : wP : mP, wP	8·2	12·8
14	29·462	70·8	54·7	16·1	61·1	+ 3·4	57·7	54·7	6·4	14·6	0·0	80	132·0	47·3	57·0	0·186	wP	5·8	12·8
15	29·436	65·0	46·0	19·0	54·4	− 3·2	51·5	48·7	5·7	16·1	0·0	81	121·4	37·3	57·0	0·145	wP, mP : mP, v : mP	5·9	12·7
16	29·746	63·0	41·1	21·9	51·0	− 6·5	46·5	41·8	9·2	20·3	0·0	71	121·5	30·7	56·9	0·000	mP : mP, wP : wP, mP	11·1	12·6
16	29·656	63·3	39·0	24·3	51·8	− 5·4	47·2	42·5	9·3	20·8	0·0	71	129·0	31·3	57·0	0·000	wP	11·5	12·5
18	29·335	60·6	46·4	14·2	52·3	− 4·6	48·7	45·0	7·3	14·9	0·0	77	107·0	35·2	56·9	0·062	wP : mP, v : mP	5·9	12·5
19	29·654	60·9	44·0	16·9	51·4	− 5·1	48·1	44·7	6·7	16·0	0·8	78	117·9	36·6	56·7	0·035	mP : mP, wP : mP, wP	5·9	12·4
20	29·585	59·5	47·2	12·3	52·9	− 3·3	48·4	43·9	9·0	15·4	3·6	72	110·1	39·9	56·5	0·018	wP, mP : mP, sP : sP, mP	6·6	12·4
21	29·446	62·4	46·3	16·1	52·7	− 3·2	49·2	45·7	7·0	16·3	0·0	78	105·5	35·5	56·2	0·210	vN, mP : mP : sP, mP	3·6	12·3
22	29·464	61·1	46·5	14·6	53·3	− 2·3	51·0	48·7	4·6	7·0	1·8	84	95·1	35·7	56·1	0·152	wP : mP : mP, wP	0·2	12·2
23	29·300	61·8	42·9	18·9	51·8	− 3·6	48·8	45·8	6·0	13·5	0·2	80	109·3	34·0	56·1	0·074	wP : v, wP : v, mP	5·3	12·2
24	29·621	64·0	44·5	19·5	53·1	− 2·2	49·3	45·5	7·6	17·0	1·0	75	123·1	37·5	56·0	0·018	wP, mP : mP : mP, wP	8·9	12·1
25	29·519	64·9	51·4	13·5	56·2	+ 1·0	52·0	48·0	8·2	15·6	2·0	74	119·9	45·1	55·9	0·152	wP : mP : mP, wP	6·6	12·0
26	29·919	66·0	53·0	13·0	58·1	+ 2·9	54·8	51·8	6·3	10·4	0·4	80	92·3	44·8	55·9	0·000	wP : mP : wP	1·5	12·0
27	30·122	68·4	47·8	20·6	56·8	+ 1·7	53·9	51·2	5·6	13·0	0·6	82	111·0	38·3	55·8	0·000	wP, mP : wP, mP	3·5	11·9
28	30·117	73·9	51·1	22·8	61·1	+ 6·2	57·3	54·0	7·1	13·8	2·2	78	130·0	41·3	55·8	0·000	wP : mP, wP : wP	6·2	11·8
29	30·236	73·4	57·7	15·7	64·5	+ 9·8	62·6	61·0	3·5	8·9	0·0	89	98·4	42·2	55·8	0·000	wP : mP	0·1	11·8
30	30·180	75·1	54·4	20·7	66·7	+12·3	63·6	61·1	5·6	12·5	0·0	82	112·0	41·9	55·7	0·000	wP	2·9	11·7
Means	29·819	67·5	47·4	20·1	56·4	− 0·8	52·6	49·0	7·5	15·9	0·9	76·3	117·1	37·3	56·5	Sum 1·185	..	6·1	12·6
Number of Column for Reference	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19

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

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

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

The mean reading of the *Barometer* for the month was 29in·819, being 0in·008 *higher* than the average for the 65 years, 1841–1905.

Temperature of the Air.

The highest in the month was 77°·4 on September 13; the lowest in the month was 39°·0 on September 17; and the range was 38°·4.

The mean of all the highest daily readings in the month was 67°·5, being 0°·2 *higher* than the average for the 65 years, 1841–1905.

The mean of all the lowest daily readings in the month was 47°·4, being 1°·7 *lower* than the average for the 65 years, 1841–1905.

The mean of the daily ranges was 20°·1, being 1°·9 *greater* than the average for the 65 years, 1841–1905.

The mean for the month was 56°·4, being 0°·8 *lower* than the average for the 65 years, 1841–1905.

MONTH and DAY, 1923.	Record of the Night Sky. Polaris. Duration.	Polaris. Fraction of Total Exposure.	δ Ursae Minoris. Duration.	δ Ursae Minoris. Fraction of Total Exposure.	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	6·2	0·73	6·2	0·73	WSW : SW	WSW : W	2·3	0·13	259	2 : 2 : p.-cl, cu, s, sh	7, cu, ci : 6 : 9
2	..	..	..	..	W : WNW	NW	1·5	0·09	235	1 : 3, ci	9, s, n : 8 : 6
3	7·0	0·82	6·8	0·80	Calm	Calm : SSW	0·7	0·00	130	1, m, d : 1 : 7, n, cu	8 : 2 : 1, d, m
4	7·2	0·84	6·4	0·76	SSW	SW : NNW	2·3	0·11	245	v.-cl : 10, r, m.-r	10, m.-r : 10 : 0
5	8·5	1·00	8·5	1·00	NNW : SW	W	2·1	0·17	296	p.-cl : 9, slt.-m : 3, ci	1, ci : 0, d
6	7·3	0·86	7·3	0·86	WSW	WSW	0·5	0·00	194	0, d : 3, m : 10	0 : 0, d
7	6·9	0·81	6·6	0·78	WSW	W : N	1·8	0·13	269	0, d : 10, m : 10, s	p.-cl, cu, ci : 9 : 6
8	9·0	1·00	9·0	1·00	Calm	Calm	0·2	0·00	100	0, d : 1, m	1, ci : 0, d
9	5·6	0·62	4·6	0·51	Calm	SW	1·6	0·04	144	0, d : 0, m, d : p.-cl,cu,n	8, cu, n : 2 : 6
10	0·4	0·05	0·2	0·02	Calm	NNE : ENE	1·2	0·03	139	9 : 8, cu, m	9, cu.-s, n : 10
11	9·0	1·00	9·0	1·00	Calm	SW	1·0	0·03	171	9 : 8, cu.-s	2 : 1 : 0
12	8·3	0·92	8·1	0·90	WSW	WSW : WNW	2·3	0·11	342	0 : 1 : 2, th.-cl	p.-cl, th.-cl, ci : p.-cl : 0
13	4·1	0·45	3·7	0·41	Calm	SW	1·6	0·02	152	1, d : 6 : 1, ci	8, cu.-s : 2 : 10
14	0·0	0·00	0·0	0·00	SW	SW : SSW	3·1	0·17	262	10 : 9 : 8, cu	8, cu.-s, n : 10, r, sh
15	9·5	1·00	9·5	1·00	WSW	WSW : SW	1·5	0·05	221	10, sh : p.-cl : p.-cl,s,cu	10, r : p.-cl,oc.-slt.-r: 0
16	9·3	0·97	9·1	0·96	WSW	WSW	2·6	0·11	267	0 : 0	p.-cl, cu : 1, d
17	7·3	0·77	7·2	0·76	SW : SSW	SSW : S	4·1	0·23	293	0, d : 1 : p.-cl	3, ci : 3
18	9·0	0·95	8·9	0·94	SSW : WSW	WSW : SW	4·0	0·24	364	3, sh : 9, r : 7, fq.-r, t	10 : 2 : 0
19	1·5	0·16	1·5	0·16	WSW	SW	3·0	0·23	351	0 : 1 : 3	10, m.-r : 10, r : 10, r
20	0·3	0·03	0·3	0·03	WSW : W	W : WSW	6·3	0·43	519	10, shs : 1 : p.-cl, w	10,oc.-m.-r,w: 9, w : 10, m.-r.-sh
21	6·1	0·65	5·9	0·63	WSW	NW : WSW	4·0	0·31	396	10, r : 9, w	9, w : 2
22	6·3	0·63	6·2	0·62	WSW : SW	WSW : SW	3·1	0·19	302	10, sh : 10 : 10,s,n,oc.-slt.-r	10, s, n, r, so.-ha : 10, fq.-r : 7
23	4·8	0·48	4·4	0·44	SW : SSW	SSW : WSW	4·3	0·30	376	3 : 7, oc.-shs	7, sh : 10, oc.-r : p.-cl
24	1·0	0·10	0·9	0·09	WSW	SW : SSE	2·5	0·15	296	v.-cl : 3, cu.-s, n	7 : 10, m.-r.-sh : 10, r, m.-r
25	4·5	0·45	3·9	0·39	S : SSW : SW	SW : WSW	7·6	0·80	521	10, r, m.-r : 1 : 2, cu, w	8, shs, w : 8, w : 10, w
26	8·1	0·81	8·0	0·80	WSW : W	W : WSW	4·6	0·29	344	10, w : 1 : 9, cu.-s, n	10 : 9 : p.-cl
27	8·1	0·81	8·0	0·80	SW	SW	1·9	0·07	238	1, d : 8	9, s, n : 9 : 8
28	4·2	0·42	4·1	0·41	WSW	W	2·0	0·09	275	p.-cl : p.-cl, cu.-s	10, s, n, m.-r.-sh : 10
29	0·0	0·00	0·0	0·00	WSW	Calm	0·3	0·01	155	0 : 10 : 10, cu.-s, n	10 : 10, m
30	9·3	0·88	9·3	0·88	Calm	SW : Calm	0·3	0·02	130	10 : 10	p.-cl : 1 : 0
Means	..	..	..	..	..	..	..	0·16	266		
Number of Column for Reference	20	21	22	23	24	25	26	27	28	29	30

The mean *Temperature of Evaporation* for the month was 52°·6, being 1°·5 *lower* than
The mean *Temperature of the Dew Point* for the month was 49°·0, being 2°·2 *lower* than
The mean *Degree of Humidity* for the month was 76·3, being 3·9 *less* than
The mean *Elastic Force of Vapour* for the month was 0in·348, being 0in·029 *less* than
The mean *Weight of Vapour in a Cubic Foot of Air* for the month was 3grs·9, being 0grs·3 *less* than
The mean *Weight of a Cubic Foot of Air* for the month was 534 grains, being 1 grain *greater* than
} the average for the 65 years, 1841–1905.

The mean amount of *Cloud* for the month (a clear sky being represented by 0 and an overcast sky by 10) was 6·1.

The mean proportion of *Sunshine* for the month (constant sunshine being represented by 1) was 0·480. The maximum daily amount of *Sunshine* was 11·5 hours on September 12 and 17.

The highest reading of the *Solar Radiation Thermometer* was 139°·6 on September 13; and the lowest reading of the *Terrestrial Radiation Thermometer* was 28°·2 on September 9.

The *Proportions of Wind* referred to the cardinal points were N. 2, E. 0, S. 9, W. 15. Four days were calm.

The *Greatest Pressure of the Wind* in the month was 7·6 lbs. on the square foot on September 25. The mean daily *Horizontal Movement of the Air* for the month was 266 miles; the greatest daily value was 521 miles on September 25; and the least daily value was 100 miles on September 8.

Rain (0in·005 or over) fell on 12 days in the month, amounting to 1in·185 as measured by gauge No. 6 partly sunk below the ground; being 0in·963 *less* than the average fall for the 65 years, 1841–1905.

MONTH and DAY 1923.	Barometer.	Temperature.							Difference between the Air Temperature and Dew Point Temperature.			Degree of Humidity (Saturation = 100).	Temperature.			Rain collected in Gauge No. 6, whose receiving surface is 5 inches above the Ground.	Electricity.	Daily Duration of Sunshine.	Sun above Horizon.
		Of the Air					Of Evaporation.	Of the Dew Point.					Of Radiation.		Of the Earth 4 ft. below the Surface of the Soil.				
	Mean of 24 Hourly Values (corrected and reduced to 32° Fahrenheit).	Highest.	Lowest.	Daily Range.	Mean of 24 Hourly Values.	Excess above Average of 65 Years.	Mean of 24 Hourly Values.	Deduced Mean Daily Value.	Mean.	Greatest.	Least.		Highest in Sun's Rays.	Lowest on the Grass.					
	in.	°	°	°	°	°	°	°	°	°	°		°	°	°	in.		hours.	hours.
Oct. 1	29·950	58·8	52·4	6·4	56·3	+ 2·2	55·5	54·8	1·5	1·7	0·0	95	68·6	38·7	55·9	0·064	wP	0·0	11·7
2	29·894	60·9	49·1	11·8	54·3	+ 0·6	51·5	48·8	5·5	11·7	0·8	81	107·6	44·9	56·0	0·120	wP : mP : mP	4·1	11·6
3	29·514	49·6	41·4	8·2	45·3	− 8·0	43·0	40·4	4·9	8·2	1·8	83	66·6	35·0	55·9	0·806	mP : mP, v : mP, wP	0·1	11·5
4	29·726	54·6	42·0	12·6	47·5	− 5·5	43·3	38·6	8·9	14·8	5·2	72	92·2	35·0	55·9	0·004	wP : sP, mP	6·1	11·4
5	29·823	50·9	33·5	17·4	44·1	− 8·7	41·0	37·4	6·7	12·4	0·5	76	79·6	27·0	55·7	0·000	wP : mP : mP	0·2	11·4
6	29·735	59·0	47·8	11·2	51·7	− 0·8	49·0	46·3	5·4	14·2	0·8	82	98·0	41·3	55·3	0·053	wP : mP, sP : mP	1·7	11·3
7	29·781	61·7	45·4	16·3	52·4	+ 0·1	50·5	48·6	3·8	11·9	0·8	87	97·2	39·8	55·0	0·276	wP : wP : wP, wN	3·2	11·3
8	29·670	60·2	51·5	8·7	55·4	+ 3·4	52·5	49·7	5·7	15·3	1·0	82	90·7	46·7	55·0	0·226	wP, mP : mP, sP : mP, wP	4·8	11·2
9	29·667	67·8	52·0	15·8	58·7	+ 7·1	54·9	51·5	7·2	19·1	0·0	77	105·9	42·5	55·0	0·060	wP : mP : mP	2·8	11·1
10	29·751	62·0	51·6	10·4	56·3	+ 5·0	54·0	51·8	4·5	6·5	0·6	85	70·0	43·9	54·9	0·053	wP	0·0	11·0
11	29·687	55·0	49·6	5·4	52·0	+ 1·1	50·5	49·0	3·0	5·5	1·6	90	67·8	47·8	54·7	0·258	wP : mP : mP	0·0	11·0
12	29·278	57·4	44·2	13·2	50·9	+ 0·3	50·2	49·6	1·3	4·5	0·0	95	64·4	38·5	54·8	0·854	wP : wN, wP : mP, wP	0·0	10·9
13	29·236	55·9	41·9	14·0	47·2	− 3·1	43·6	39·6	7·6	13·7	1·8	76	99·0	35·2	54·7	0·000	wP : mP, sP : mP	7·4	10·9
14	29·500	53·3	36·8	16·5	43·8	− 6·3	41·6	39·0	4·8	11·6	1·0	83	96·7	32·9	54·5	0·070	wP : mP, vv : mP	5·8	10·8
15	29·800	55·8	34·3	21·5	43·0	− 6·9	40·3	37·1	5·9	14·5	0·8	80	87·2	29·9	54·2	0·001	mP	9·2	10·7
16	29·844	55·5	40·7	14·8	48·0	− 1·8	44·8	41·3	6·7	12·0	2·7	78	95·9	33·5	54·1	0·000	mP, wP : mP : mP, wP	3·8	10·7
17	30·038	56·9	48·0	8·9	51·5	+ 1·9	49·1	46·7	4·8	10·8	0·4	84	87·3	40·0	53·9	0·000	wP : mP : mP	2·6	10·6
18	29·925	58·3	41·8	16·5	51·3	+ 2·0	49·1	46·8	4·5	9·8	0·2	85	79·2	35·4	53·7	0·048	wP	0·5	10·5
19	29·593	66·6	48·5	18·1	57·2	+ 8·1	55·6	54·2	3·0	8·7	0·6	89	96·8	48·9	53·5	0·597	wP : wP, mP : wP, v	1·6	10·5
20	29·544	58·3	47·2	11·1	51·7	+ 2·9	49·0	46·3	5·4	12·5	1·0	82	98·8	44·0	53·2	0·127	v, wP : mP : wP	4·6	10·4
21	29·153	59·2	46·0	13·2	53·6	+ 5·0	51·2	48·9	4·7	8·6	1·0	84	88·0	39·6	53·3	0·162	wwP : wP, vN : wP	0·4	10·4
22	29·169	58·0	45·7	12·3	48·9	+ 0·6	45·6	42·1	6·8	15·7	2·1	78	103·3	39·1	53·2	0·138	wP : wP, v : mP, wP	6·9	10·3
23	28·947	58·1	46·1	12·0	51·1	+ 3·0	49·3	47·4	3·7	6·5	0·6	87	64·0	38·4	53·3	0·404	wP : wP, mP	0·0	10·2
24	28·894	58·2	45·2	13·0	50·1	+ 2·2	46·7	43·1	7·0	14·6	1·1	77	98·0	37·2	53·1	0·010	mP : ..	7·1	10·2
25	29·244	59·3	45·7	13·6	51·7	+ 4·0	47·4	43·0	8·7	15·2	2·3	73	103·2	38·3	53·0	0·064	.. : mP, v	6·7	10·1
26	29·294	58·4	43·6	14·8	51·0	+ 3·4	47·7	44·3	6·7	12·1	2·3	78	92·8	36·0	52·8	0·295	wP, v : mP : mP, wP	6·0	10·0
27	29·126	59·8	50·3	9·5	53·9	+ 6·4	50·5	47·2	6·7	10·7	3·2	78	97·5	43·9	52·8	0·216	wP, wN : wP, mP : mP, wP	1·0	10·0
28	29·333	59·9	46·7	13·2	52·7	+ 5·3	49·3	45·9	6·8	11·5	2·7	78	100·1	38·7	52·6	0·000	wP : mP	3·6	9·9
29	29·772	58·4	42·5	15·9	50·6	+ 3·3	47·3	43·8	6·8	12·1	1·7	78	91·9	35·3	52·6	0·000	wP : mP : mP, wP	4·6	9·8
30	29·782	56·3	52·5	3·8	54·6	+ 7·4	52·3	50·1	4·5	7·2	1·8	84	59·1	46·9	52·3	0·007	mP : wP	0·0	9·8
31	29·939	55·4	38·9	16·5	49·5	+ 2·4	47·7	45·8	3·7	13·3	0·0	88	68·7	33·4	52·3	0·120	wP, mP, : mP, sP : sP, wP	1·4	9·7
Means	29·568	58·0	45·3	12·8	51·2	+ 1·2	48·5	45·8	5·4	11·2	1·3	82·1	87·6	39·0	54·1	Sum 5·033	..	3·1	10·7
Number of Column for Reference.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19

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

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

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

The mean reading of the *Barometer* for the month was 29$^{in.}$·568, being 0$^{in.}$·153 *lower* than the average for the 65 years, 1841–1905.

TEMPERATURE OF THE AIR.

The highest in the month was 67°·8 on October 9; the lowest in the month was 33°·5 on October 5; and the range was 34°·3.

The mean of all the highest daily readings in the month was 58°·0, being 0°·5 *higher* than the average for the 65 years, 1841–1905.

The mean of all the lowest daily readings in the month was 45°·3, being 2°·1 *higher* than the average for the 65 years, 1841–1905.

The mean of the daily ranges was 12°·8, being 1°·5 *less* than the average for the 65 years, 1841–1905.

The mean for the month was 51°·2, being 1°·2 *higher* than the average for the 65 years, 1841–1905.

MONTH and DAY, 1923.	Record of the Night Sky. Polaris. Duration.	Polaris. Fraction of Total Exposure.	δ Ursae Minoris. Duration.	δ Ursae Minoris. Fraction of Total Exposure.	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.		
Oct. 1	0·0	0·00	0·0	0·00	SW : W	WSW	1·0	0·06	226	0, m, d : 10, m : 10, m, m.-r	10, s, m, m.-r : 10, slt.-m, m.-r
2	1·5	0·14	1·1	0·10	Calm : WSW	WSW : NNE	2·5	0·10	269	10, m.-r : 8 : 6, cu.-s, n	10, s : 10, r, m.-r : 10, m.-r
3	0·7	0·07	0·6	0·06	N : Calm : SW	NNE : N	5·3	0·21	320	10 : 7 : 10, s, fq.-r	10, s, r, w : 10, r, w
4	9·0	0·86	8·8	0·84	N	N	11·3	1·28	581	10, w : 10, w : 8, oc.-shs, w	p.-cl, w : 1
5	0·7	0·06	0·4	0·04	N : WSW	SW	1·5	0·04	206	1 : 1, m : p.-cl,ci.-s,so.-ha	10, ci, cu : 10, sh
6	9·7	0·91	8·8	0·82	SW : WSW	W : WSW	2·2	0·09	277	10, r, m.-r : 10, s, n	8, cu, cu.-n: 2 : 0, d
7	1·5	0·14	1·4	0·12	WSW	WSW	2·6	0·16	325	p.-cl : 2 : 9,cu.-s,n,so.-ha	10, n : 10 : 10, r
8	0·0	0·00	0·0	0·00	WNW	WNW : WSW	3·5	0·19	314	10, r : 8 : 7	10, p.-so.-ha : 10, r
9	3·1	0·29	2·7	0·25	WSW : W	W	7·9	0·79	560	10, r, w : 10, w	6, w : 7, cu, w : 9
10	0·0	0·00	0·0	0·00	WSW	SW : WSW	6·0	0·58	435	10 : 10, s, n, m.-r	10, n, sc, m.-r, w : 10, m.-r, r, w
11	0·0	0·00	0·0	0·00	WSW : W	WSW : SW	2·0	0·16	282	10, r : 10, r : 10, n	10, n, r : 10 : 10
12	9·1	0·85	8·9	0·83	Calm : SSW	SSW:NNW:WSW	7·0	0·56	343	10 : 10, r : 10, r, w	10, n, r, w : 9 : 1
13	9·4	0·84	9·1	0·81	WSW	SW : WSW	4·8	0·69	432	0 : 2 : 6, n, cu, w	7, cu, w : 3 : 1
14	10·8	0·96	10·4	0·93	WSW	W : NW	3·5	0·06	199	0 : 2 : p.-cl, cu, shs	v.-cl., ci, cu, shs : 1, m : 0, m
15	8·1	0·72	6·7	0·60	WSW	WSW	1·1	0·02	201	0, ho.-fr : 1, cu, m	p-cl, cu.-s, cu : 1, ho.-fr, m
16	..	..	..	..	SW : WSW	W : WSW	2·0	0·13	318	9 : 9 : 7, cu	9, cu.-s, n : 9 : p.-cl, d
17	5·3	0·47	5·2	0·46	WSW : W	WSW	2·1	0·09	233	10 : 10 : 9, s	10, s : 10
18	0·0	0·00	0·0	0·00	S	S	2·6	0·12	227	0 : 8 : 10, n, m.-r, r	10, n : 10
19	0·0	0·00	0·0	0·00	S : SSW	SW : Calm	5·6	0·38	315	10, shs : v.-cl, w : 9, oc.-slt.-r, w	10, n, r : 10, r
20	1·8	0·15	1·6	0·13	Calm : WSW	WSW : SSW	1·2	0·07	184	10, r, m.-r : 9	8,cu.-s,ci.-s : 10, sh : 10
21	10·8	0·90	10·4	0·86	SSW	SW	6·2	0·74	480	10, oc.-m.-r, w : 10, n, r, w	10, fq.-r, w : 1
22	10·4	0·87	9·8	0·82	SW	SW : SSW	10·0	0·59	485	3 : 3 : p.-cl, cu.-s, w	9, cu.-n, r, t, w : 0 : 2
23	10·7	0·89	10·5	0·87	S	S : SSW	5·0	0·52	404	10, lu.-ha : 10, s, n, r, m.-r	10, n, r, w : 3, w : 0
24	12·0	1·00	11·8	0·98	SSW : SW	SW	5·4	0·52	418	2, sh : 10 : 5, cu, w	3, cu, sh, w : p.-cl : 0, d
25	10·0	0·83	9·9	0·82	SW	SW	8·0	0·88	487	0 : 0 : p.-cl, cu.-s, w	2, cu, w : 3, r : 0
26	6·1	0·51	5·7	0·47	S : SW	SW : S	7·5	0·94	472	2 : 10, r, w : p.-cl, w	6, w : 3 : p.-cl
27	8·9	0·71	8·7	0·70	S : SSW	SW : SSW	5·7	1·12	512	10, r : 10, s, r	9, w : p.-cl
28	10·6	0·84	10·2	0·82	SSW	SW	3·9	0·40	327	3 : 10 : 8	8, oc.-shs : 8 : 1
29	3·7	0·29	3·2	0·26	SW	SW	5·2	0·52	362	0 : 8, cu.-s	9, s, cu.-s : 9 : 9, cu.-s, slt.-sh
30	0·0	0·00	0·0	0·00	SW	SW	3·5	0·73	407	10 : 10, s, n	10, s, n : 10, slt.-r
31	7·1	0·57	6·6	0·53	WSW : Calm	Calm	0·2	0·00	124	10, r : 10 : 8, cu, h, m	8, h, m : p.-cl, slt.-f : 1, slt.-f
Means	..	..	..	..	..	..	..	0·41	346		
Number of Column for Reference	20	21	22	23	24	25	26	27	28	29	30

The mean *Temperature of Evaporation* for the month was 48°·5, being 0°·6 *higher* than
The mean *Temperature of the Dew Point* for the month was 45°·8, being 0°·1 *higher* than
The mean *Degree of Humidity* for the month was 82·1, being 2·9 *less* than
The mean *Elastic Force of Vapour* for the month was 0in·308, being 0in·001 *greater* than
The mean *Weight of Vapour in a Cubic Foot of Air* for the month was 3grs·5, being the same as
The mean *Weight of a Cubic Foot of Air* for the month was 536 grains, being 4 grains *less* than
} the average for the 65 years, 1841–1905.

The mean amount of *Cloud* for the month (a clear sky being represented by 0 and an overcast sky by 10) was 7·2.

The mean proportion of *Sunshine* for the month (constant sunshine being represented by 1) was 0·291. The maximum daily amount of *Sunshine* was 9·2 hours on October 15.

The highest reading of the *Solar Radiation Thermometer* was 107°·6 on October 2; and the lowest reading of the *Terrestrial Radiation Thermometer* was 27°·0 on October 5.

The *Proportions of Wind* referred to the cardinal points were N. 3, E. 0, S. 12, W. 14. Two days were calm.

The *Greatest Pressure of the Wind* in the month was 11·3 lbs. on the square foot on October 4. The mean daily *Horizontal Movement of the Air* for the month was 346 miles; the greatest daily value was 581 miles on October 4; and the least daily value was 124 miles on October 31.

Rain (0in·005 or over) fell on 23 days in the month, amounting to 5in·033 as measured by gauge No. 6 partly sunk below the ground; being 2in·251 *greater* than the average fall for the 65 years, 1841–1905.

MONTH and DAY, 1923.	BAROMETER.	TEMPERATURE.							Difference between the Air Temperature and Dew Point Temperature.			Degree of Humidity (Saturation = 100).	TEMPERATURE.			Rain collected in Gauge No. 6, whose receiving surface is 5 inches above the Ground.	Electricity.	Daily Duration of Sunshine.	Sun above Horizon.
		Of the Air.					Of Evaporation.	Of the Dew Point.					Of Radiation.		Of the Earth, 4 ft. below the Surface of the Soil.				
	Mean of 24 Hourly Values (corrected and reduced to 32° Fahrenheit).	Highest.	Lowest.	Daily Range.	Mean of 24 Hourly Values.	Excess above Average of 65 Years.	Mean of 24 Hourly Values	Deduced Mean Daily Value.	Mean.	Greatest.	Least.		Highest in Sun's Rays.	Lowest on the Grass.					
	in.	°	°	°	°	°	°	°	°	°	°		°	°	°	in.		hours.	hours.
Nov. 1	29·982	49·7	36·9	12·8	44·8	— 2·2	44·3	43·9	0·9	2·6	0·2	96	57·2	33·4	52·2	0·178	wP : v, wP : wP	0·0	9·7
2	29·901	51·9	40·5	11·4	45·4	— 1·4	43·3	39·9	5·5	9·1	0·9	85	73·6	31·7	52·2	0·000	wP, mP : mP, .. : mP, wP	3·7	9·6
3	29·638	57·7	44·9	12·8	52·9	+ 6·3	50·3	47·7	5·2	10·0	1·6	83	65·9	36·5	52·1	0·011	wP : wP : wP, mP	0·0	9·6
4	29·648	52·6	41·3	11·3	45·5	— 0·9	41·2	36·3	9·2	16·2	4·7	71	85·9	34·6	51·9	0·000	wP	8·0	9·5
5	29·469	51·2	39·3	11·9	44·0	— 2·1	42·1	39·8	4·2	8·1	1·1	85	75·0	32·0	51·8	0·195	wP : wP : wP, v	0·3	9·4
6	29·495	44·6	36·2	8·4	40·5	— 5·3	38·4	35·7	4·8	10·0	1·4	84	52·5	27·0	51·3	0·000	wP, mP : mP : mP	0·2	9·4
7	29·762	41·7	27·3	14·4	35·4	—10·0	33·4	30·2	5·2	10·0	0·0	81	55·8	18·6	51·1	0·000	wP : mP : mP, wP	2·7	9·3
8	29·615	47·0	23·4	23·6	35·3	— 9·7	32·9	29·2	6·1	14·3	0·0	77	75·0	14·1	50·9	0·294	.. : wwN, v	6·7	9·2
9	29·387	42·2	34·0	8·2	37·9	— 6·7	36·8	35·4	2·5	8·7	0·5	91	48·9	27·3	49·4	0·284	v, wP : wP : wP, wN	0·0	9·2
10	29·984	47·8	37·1	10·7	41·4	— 2·9	38·5	34·9	6·5	10·4	3·9	78	67·9	28·1	50·1	0·013	wwN : mP : mP	3·6	9·2
11	30·111	47·3	29·4	17·9	38·7	— 5·3	36·0	32·4	6·3	10·4	0·0	79	65·0	19·7	49·7	0·000	wP	6·7	9·1
12	29·828	49·7	26·0	23·7	38·5	— 5·2	37·0	35·0	3·5	8·9	0·0	87	69·6	14·0	49·3	0·004*	.. : mP	4·9	9·0
13	29·395	54·8	44·5	10·3	49·4	+ 5·9	46·6	43·6	5·8	10·9	3·0	81	72·9	42·4	49·1	0·074	wP : wP, mP : mP, wP	0·5	9·0
14	29·127	50·2	36·2	14·0	44·5	+ 1·2	41·0	37·0	7·5	14·3	2·9	74	72·4	27·4	48·8	0·185	wP, mP : sP : sP, mP	5·8	8·9
15	29·164	49·6	31·1	18·5	42·2	— 0·9	39·6	36·4	5·8	11·3	1·9	81	56·0	22·1	48·6	0·108	wP : wP, wN : mP, wP	1·0	8·9
16	29·398	49·0	38·7	10·3	43·3	+ 0·5	39·5	35·0	8·3	12·8	5·8	73	66·4	30·0	48·6	0·000	wP : mP : mP	2·9	8·8
17	29·454	46·9	36·9	10·0	41·8	— 0·8	38·9	35·4	6·4	10·6	2·5	79	71·6	30·5	48·2	0·194	wP : mP : mP	3·9	8·8
18	29·469	42·2	31·9	10·3	36·7	— 5·7	34·9	32·3	4·4	9·8	2·1	85	46·0	24·9	48·0	0·000	mP : mP	1·8	8·7
19	29·401	44·1	33·0	11·1	38·5	— 3·8	35·9	32·5	6·0	9·2	2·4	79	52·5	25·2	47·9	0·001*	.. : mP	0·3	8·7
20	29·362	39·2	29·9	9·3	35·1	— 7·1	33·3	30·4	4·7	6·3	2·4	82	47·0	21·9	47·5	0·000	.. : wP	0·0	8·6
21	29·452	40·3	34·1	6·2	37·6	— 4·5	36·0	33·8	3·8	6·0	2·3	86	48·7	26·9	47·2	0·003	..	0·0	8·6
22	29·577	39·6	34·3	5·3	37·0	— 5·1	35·8	34·1	2·9	5·1	2·0	89	44·0	28·4	47·0	0·018	.. : mP	0·0	8·5
23	29·690	39·9	32·2	7·7	36·0	— 6·0	33·9	30·7	5·3	7·4	2·9	81	48·1	26·1	46·9	0·000	mP, sP : sP, mP : mP	0·1	8·5
24	29·930	36·7	31·7	5·0	33·3	— 8·7	32·5	31·0	2·3	3·7	1·2	91	36·9	30·2	46·6	0·000	mP	0·0	8·4
25	29·978	33·9	25·5	8·4	29·2	—12·7	28·9	27·9	1·3	2·8	0·0	95	41·1	20·6	46·4	0·000	mP : sP : sP, ssP	0·2	8·4
26	29·757	30·3	22·7	7·6	26·9	—14·9	26·9	26·9	0·0	1·3	0·0	100	33·6	25·0	46·1	0·000	ssP : sP : sP, mP	0·0	8·3
27	29·648	34·5	26·9	7·6	30·2	—11·5	29·6	27·8	2·4	4·0	0·9	90	47·0	25·0	46·0	0·000	mP : mP : mP, wP	0·3	8·3
28	29·374	36·9	33·2	3·7	35·0	— 6·5	33·9	32·2	2·8	5·6	0·8	89	38·7	32·0	45·8	0·080	wP : mP : mP	0·0	8·3
29	29·476	36·4	33·1	3·3	34·7	— 6·5	33·8	32·4	2·3	4·7	1·7	91	41·8	30·2	45·6	0·000	mP	0·0	8·2
30	29·880	37·9	27·5	10·4	33·3	— 7·7	32·5	31·0	2·3	5·8	1·9	91	44·5	18·1	45·4	0·000	mP : sP, mP : mP	0·2	8·2
Means	29·612	44·2	33·3	10·9	38·8	— 4·7	36·9	34·4	4·5	8·3	1·7	84·5	56·7	26·8	48·7	Sum 1·642	..	1·8	8·9
Number of Column for Reference.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19

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

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

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

*Rainfall (Column 16). The amounts entered on November 12 and 19 are derived from fog and frost.

The mean reading of the *Barometer* for the month was 29^{in}·612, being 0^{in}·146 *lower* than the average for the 65 years, 1841–1905.

TEMPERATURE OF THE AIR.

The highest in the month was 57°·7 on November 3; the lowest in the month was 22°·7 on November 26; and the range was 35°·0.

The mean of all the highest daily readings in the month was 44°·2, being 4°·8 *lower* than the average for the 65 years, 1841–1905.

The mean of all the lowest daily readings in the month was 33°·3, being 4°·6 *lower* than the average for the 65 years, 1841–1905.

The mean of the daily ranges was 10°·9, being 0°·2 *less* than the average for the 65 years, 1841–1905.

The mean for the month was 38°·8, being 4°·7 *lower* than the average for the 65 years, 1841–1905.

MONTH and DAY, 1923.	Record of the Night Sky. Polaris. Duration.	Polaris. Fraction of Total Exposure.	δ Ursæ Minoris. Duration.	δ Ursæ Minoris. Fraction of Total Exposure.	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	1·4	0·11	1·3	0·10	Calm	Calm	0·0	0·00	96	10, slt.-f : 10, m : 10, m, r	10, m, r : 10, slt.-f : 10, m
2	5·4	0·43	5·1	0·41	Calm	WSW	1·2	0·05	203	10, m : 10, m : 7,cu.-s,m	9, cu.-s, slt.-m : 2, d
3	10·7	0·85	10·7	0·85	SW	SW : WSW	5·4	0·78	579	10, m.-r : 10, s, n, w	10, s, n, sh, w: 10, oc.-slt.-r, w : 1, w
4	11·1	0·89	10·7	0·86	WSW	WSW	5·7	0·77	549	0, w : 0, w : p.-cl,cu,w	3, cu, w : 0 : 0, d
5	0·5	0·04	0·0	0·00	SW	SSW	0·8	0·03	212	0 : 7 : 10	10 : 10 : 10, r
6	8·2	0·65	6·9	0·55	NNW : Calm	NNW	0·6	0·03	179	10 : 3,m,ho.-fr : 3, cu, m	p.-cl. ci, cu : 10 : 1, ho.-fr
7	11·5	0·92	11·2	0·90	NNW : W	WNW : Calm	0·7	0·04	219	0, ho.-fr : 0, ho.-fr	p.-cl, h, m : 7, h, slt.-f : 0,slt.-f,ho.-fr
8	1·4	0·11	1·1	0·09	Calm	S	1·2	0·04	161	0, ho.-fr : 0, ho.-fr : r,f,slt.-ho.-fr	3, cu : 8 : 10, r
9	5·0	0·40	4·8	0·39	Calm	Calm : ENE	3·0	0·05	192	10, r : 1, m : 10,th.-cl,m	p.-cl, m : 10, slt.-r
10	11·2	0·87	10·5	0·81	NE	NNE	4·5	0·50	443	1 : 10 : 7, cu-s, n	v.-cl, cu, w : 1 : 1
11	10·5	0·81	10·4	0·80	NNE	Calm	1·3	0·04	185	9 : 1, ho.-fr : 7, th.-cl, m, h	8, th.-cl : 2, slt.-f : 0,slt.-f,ho.-fr
12	11·0	0·85	9·1	0·70	Calm	SW	1·1	0·07	218	0, ho.-fr : 1,slt.-f,ho.-fr: p.-cl,th.-cl	9, th.-cl : 7, th.-cl : 3, th.-cl
13	0·0	0·00	0·0	0·00	SW	SW	9·2	1·47	601	0, d : 7, w : 9, s, w	10, s, n, w : 10, r, w
14	11·5	0·88	11·2	0·86	SSW:SW:WNW	W : WSW	9·8	0·76	518	10, r, w : 9, w : 3, cu, w	3, cu, w : 0 : 2, ho.-fr
15	12·5	0·96	12·1	0·93	SW : S	S : SW	12·5	1·05	551	0, ho.-fr : 1 : 10, n, r	8, r, w : 2 : 2, w, g
16	11·0	0·85	10·7	0·82	SSW : SW	SW : SSW	10·2	0·63	501	0, g, w : 1 : 9, shs	p.-cl,cu,cu.-n,w : 1, w, lu.-ha : p.-cl, lu.-ha
17	11·5	0·85	11·0	0·81	SSW : SW	SW	6·4	0·58	550	1, sh : 8,r,sl.-sq,w: p.-cl, ci.-cu, w	6, cu, w : 3, w : 8,th.-cl,ho.-fr
18	11·8	0·87	11·2	0·83	SW : WSW	WSW	2·2	0·11	305	1, ho.-fr : 8,ho.-fr,m: th.-cl, m	p.-cl,th.-cl,m: 8, slt.-sh : 0, ho.-fr
19	13·3	0·99	13·1	0·97	WSW : WNW	NW	2·2	0·15	365	3, ho.-fr : 3, ho.-fr : p.-cl	8, cu, n : 1 : 0
20	1·0	0·07	0·6	0·05	SW : WSW	WNW : NNW	0·5	0·01	233	0, ho.-fr : 1, ho.-fr : 7,cu.-s,m	9, m, glm : 10 : 10
21	..	..	..	..	NNW	NNW : NW	0·9	0·03	203	10 : 10, n, sh	8, cu.-s, n : 8 : 10
22	7·8	0·58	7·4	0·55	WNW : NNW	NNW	0·4	0·02	206	10, r, m : 10 : 10,s,n,m.-r	10, s, n : 10, oc.-m.-r : 7,p.-lu.-ha, ho.-fr
23	0·0	0·00	0·0	0·00	NNW	NNW : NNE	0·8	0·03	201	7, ho.-fr : 10 : 10	9, cu.-s, n : 10 : 10
24	0·0	0·00	0·0	0·00	NNW	Calm	0·0	0·00	116	10 : 10, m	10, m : 10, m
25	0·0	0·00	0·0	0·00	Calm	Calm	0·0	0·00	97	10, m : 10, m	p.-cl, m : f, ho.-fr
26	0·0	0·00	0·0	0·00	Calm	Calm	0·0	0·00	42	f, ho.-fr : f, ho.-fr	f, ho.-fr : f, ho.-fr
27	0·3	0·02	0·0	0·00	Calm	Calm : E	1·0	0·03	126	f, ho.-fr : f, ho.-fr : f, th.-cl	6, cu : 10 : 10
28	0·0	0·00	0·0	0·00	E : NE	NNE : Calm	2·1	0·10	262	10 : 10, s, n	10, s, n : 10, slt.-sn : 10, fq.-sl,-sn
29	3·0	0·22	2·8	0·20	Calm : NNE	NNE : N	0·9	0·06	207	10 : 10, s, n	10 : 10
30	10·5	0·78	7·3	0·54	NNW	Calm : SW	1·1	0·02	176	10 : 10 : 7	p.-cl, m : 2, f, ho.-fr : 1, f, ho.-fr
Means	..	..	..	..	..	..	..	0·25	283		
Number of Column for Reference	20	21	22	23	24	25	26	27	28	29	30

The mean *Temperature of Evaporation* for the month was 36°·9, being 5°·0 *lower* than
The mean *Temperature of the Dew Point* for the month was 34°·4, being 5°·6 *lower* than
The mean *Degree of Humidity* for the month was 84·5, being 2·8 *less* than
The mean *Elastic Force of Vapour* for the month was 0in·199, being 0in·048 *less* than
The mean *Weight of Vapour in a Cubic Foot of Air* for the month was 2grs·3, being 0grs·5 *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 65 years, 1841–1905.

The mean amount of *Cloud* for the month (a clear sky being represented by 0 and an overcast sky by 10) was 6·3.

The mean proportion of *Sunshine* for the month (constant sunshine being represented by 1) was 0·202. The maximum daily amount of *Sunshine* was 8·0 hours on November 4.

The highest reading of the *Solar Radiation Thermometer* was 85°·9 on November 4; and the lowest reading of the *Terrestrial Radiation Thermometer* was 14°·0 on November 12.

The *Proportions of Wind* referred to the cardinal points were N. 7, E. 2, S. 6, W. 9. Six days were calm.

The *Greatest Pressure of the Wind* in the month was 12·5 lbs. on the square foot on November 15. The mean daily *Horizontal Movement of the Air* for the month was 283 miles; the greatest daily value was 601 miles on November 13; and the least daily value was 42 miles on November 26.

Rain (0in·005 or over) fell on 12 days in the month, amounting to 1in·642 as measured by gauge No. 6 partly sunk below the ground; being 0in·578 *less* than the average fall for the 65 years, 1841–1905.

MONTH and DAY, 1923.	Barometer.	Temperature.							Difference between the Air Temperature and Dew Point Temperature.			Degree of Humidity (Saturation = 100).	Temperature.			Rain collected in Gauge No. 6, whose receiving surface is 5 inches above the Ground.	Electricity.	Daily Duration of Sunshine.	Sun above Horizon.
		Of the Air.					Of Evaporation.	Of the Dew Point.					Of Radiation.		Of the Earth 4 ft. below the Surface of the Soil.				
	Mean of 24 Hourly Values (corrected and reduced to 32° Fahrenheit).	Highest.	Lowest.	Daily Range.	Mean of 24 Hourly Values.	Excess above Average of 65 Years.	Mean of 24 Hourly Values.	Deduced Mean Daily Value.	Mean.	Greatest.	Least.		Highest in Sun's Rays.	Lowest on the Grass.					
	in.	°	°	°	°	°	°	°	°	°	°		°	°	°	in.		hours.	hours.
Dec. 1	29·819	45·4	26·2	19·2	37·1	− 3·8	34·7	31·3	5·8	8·0	2·5	80	61·0	15·7	45·4	0·000	mP	1·1	8·1
2	29·305	47·1	32·8	14·3	40·9	− 0·0	39·9	38·7	2·2	5·6	0·0	92	55·0	24·0	45·1	0·122	wP : vN, mP : mP	0·1	8·1
3	29·388	39·0	29·9	9·1	34·2	− 6·9	33·5	32·3	1·9	5·4	0·3	93	35·0	19·7	45·0	0·003*	mP : mP : mP, wP	0·0	8·1
4	29·224	46·0	28·9	17·1	37·2	− 4·1	36·1	34·6	2·6	6·8	1·0	90	53·0	18·4	45·0	0·045	wP : v : sP	0·1	8·1
5	29·238	40·3	32·1	8·2	36·4	− 5·1	35·7	34·7	1·7	2·8	0·3	94	50·2	22·2	44·7	0·007*	mP	0·0	8·0
6	29·733	39·9	27·3	12·6	36·5	− 5·0	35·9	35·1	1·4	3·5	0·0	95	47·2	21·6	44·7	0·000	mP : mP, sP : sP	0·1	8·0
7	29·592	45·1	27·4	17·7	36·8	− 4·5	36·2	35·4	1·4	4·5	0·0	86	48·6	21·8	44·3	0·095	ssP, sP : sP, mP : mP, wP	0·0	8·0
8	29·318	48·0	39·5	8·5	45·3	+ 4·3	43·4	41·2	4·1	6·6	1·7	86	51·8	30·0	44·2	0·007	wP, mP : mP, .. : ..	0·0	8·0
9	29·751	41·0	26·5	14·5	34·5	− 6·1	32·9	30·2	4·3	7·3	0·5	84	41·0	19·5	44·1	0·000	..	2·6	7·9
10	30·040	44·8	25·3	19·5	37·5	− 2·9	36·3	34·7	2·8	6·3	0·0	90	51·0	18·1	44·1	0·000	.. : .. : mP	0·0	7·9
11	30·144	47·3	42·9	4·4	45·1	+ 4·9	44·5	43·8	1·3	3·0	1·1	95	53·4	35·1	44·1	0·000	mP : ..	0·0	7·9
12	30·157	46·0	42·5	3·5	44·4	+ 4·1	43·9	43·4	1·0	3·1	0·9	96	49·4	37·9	44·1	0·022	.. : mP, sP	0·0	7·8
13	30·201	48·2	41·7	6·5	44·0	+ 3·5	42·2	40·0	4·0	6·3	2·8	86	67·0	35·0	44·0	0·001	sP, mP : mP : mP	0·5	7·8
14	30·279	44·1	33·6	10·5	39·8	− 0·9	37·8	35·2	4·6	7·6	1·9	84	52·0	25·1	44·1	0·000	mP : mP, sP : mP, wP	1·4	7·8
15	30·149	44·5	35·0	9·5	41·2	+ 0·4	38·2	34·4	6·8	9·2	2·5	77	48·4	27·8	44·1	0·000	wP, mP : sP : sP	0·2	7·8
16	30·099	48·7	34·2	14·5	41·9	+ 1·2	40·0	37·6	4·3	8·0	2·2	86	54·7	27·2	44·2	0·002	mP : ..	1·1	7·8
17	30·049	49·5	42·6	6·9	46·3	+ 5·9	44·3	42·0	4·3	6·1	2·8	86	54·5	37·4	44·3	0·000	.. : mP	0·2	7·8
18	30·013	48·2	39·7	8·5	45·6	+ 5·6	42·1	38·0	7·6	11·8	2·1	75	55·4	31·2	44·2	0·000	wP, mP : sP : sP	1·1	7·8
19	30·018	40·5	31·6	8·9	37·4	− 2·1	34·8	31·2	6·2	8·2	0·9	79	45·5	26·0	44·2	0·035	mP : mP : mP, ..	0·0	7·8
20	30·148	36·1	28·5	7·6	33·2	− 5·8	31·6	28·5	4·7	10·4	1·4	82	41·5	21·1	44·1	0·029	.. : wP	1·2	7·8
21	30·016	35·7	28·5	7·2	32·3	− 6·4	30·9	27·9	4·4	9·3	0·9	83	39·0	21·1	44·0	0·091	..	0·0	7·8
22	29·542	49·8	31·9	17·9	41·7	+ 3·3	40·2	38·3	3·4	5·8	1·2	89	47·5	31·2	44·0	0·155	mP, v : mP, sP : mP, vN	0·0	7·8
23	29·537	45·2	36·3	8·9	41·3	+ 3·1	38·2	34·3	7·0	11·4	3·5	77	52·0	28·4	43·8	0·000	wP : mP	3·9	7·8
24	29·630	41·7	30·4	11·3	37·8	− 0·4	36·3	34·3	3·5	7·3	1·4	87	42·5	24·2	43·8	0·079	wP : vN, mP : sP	0·0	7·8
25	29·828	47·9	24·3	23·6	32·8	− 5·6	31·2	27·9	4·9	11·1	0·0	82	44·6	18·0	43·7	0·430	sP, mP : mP : sN, wN	2·7	7·8
26	29·463	48·0	32·7	15·3	40·5	+ 1·9	39·1	37·3	3·2	5·6	0·9	89	46·0	31·6	43·4	0·094	wP : mP	0·0	7·8
27	29·504	46·3	32·7	13·6	38·6	− 0·2	37·7	36·5	2·1	4·0	0·9	93	41·2	31·6	43·2	0·238	wP : mP, sP : sP : mP	0·0	7·8
28	29·476	49·9	36·3	13·6	42·9	+ 4·0	41·5	39·8	3·1	6·3	1·5	89	48·0	27·9	43·2	0·052	wP : mP : mP	0·0	7·8
29	30·201	38·0	27·7	10·3	35·1	− 3·9	33·6	31·3	3·8	6·3	1·9	85	38·0	22·0	43·0	0·012	mP : mP, sP : sP, mP	0·0	7·8
30	29·888	40·9	35·6	5·3	38·1	− 0·8	37·7	37·1	1·0	1·7	0·2	97	40·1	32·0	43·0	0·319	v, wP : wP, mP : wP	0·0	7·8
31	30·110	42·7	32·3	10·4	36·0	− 2·7	35·3	34·2	1·8	5·2	0·5	94	39·3	31·5	43·0	0·061	wP : mP : mP	0·1	7·8
Means	29·802	44·4	32·8	11·6	39·1	− 0·8	37·6	35·5	3·6	6·6	1·2	87·1	48·2	26·3	44·1	Sum 1·899	..	0·5	7·9
Number of Column for Reference	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19

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

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

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

*Rainfall (Column 16). The amounts entered on December 3 and 5 are derived from frost.

The mean reading of the *Barometer* for the month was 29^{in}·802, being 0^{in}·017 *higher* than the average for the 65 years, 1841–1905.

TEMPERATURE OF THE AIR.

The highest in the month was 49°·9 on December 28; the lowest in the month was 24°·3 on December 25; and the range was 25°·6.
The mean of all the highest daily readings in the month was 44°·4, being 0°·2 *higher* than the average for the 65 years, 1841–1905.
The mean of all the lowest daily readings in the month was 32°·8, being 2°·2 *lower* than the average for the 65 years, 1841–1905.
The mean of the daily ranges was 11°·6, being 2°·4 *greater* than the average for the 65 years, 1841–1905.
The mean for the month was 39°·1, being 0°·8 *lower* than the average for the 65 years, 1841–1905.

MONTH and DAY, 1923.	Record of the Night Sky. Polaris. Duration.	Polaris. Fraction of Total Exposure.	δ Ursae. Minoris. Duration.	δ Ursae. Minoris. Fraction of Total Exposure.	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.		
Dec. 1	0·0	0·00	0·0	0·00	SSW : S	SSW : S	3·0	0·22	345	o, ho.-fr : o, ho.-fr : 9, cu.-s, n	8,ci, cu.-s, slt.-sh: 9 : 10, w
2	3·5	0·26	0·3	0·02	S	WSW	5·4	0·37	322	10, r, w : 10, n, r	9, r : p.-cl : 7, ho.-fr
3	3·7	0·28	0·3	0·02	WSW	Calm	0·2	0·00	164	10, th.-cl, ho.-fr : 9,th.-cl,h,ho.-fr: 3, h, m, ho.-fr	p.-cl, cu, h, m,ho.-fr: o, slt.-f, ho.-fr
4	9·5	0·71	0·8	0·06	Calm : S	SSW	4·0	0·21	287	p.-cl,ho.-fr: 10 : 10, fq.-slt.-r	9,cu,ci,n,slt.-sh : 9, sh : o, ho.-fr
5	0·0	0·00	0·0	0·00	Calm	NE : NNE	0·2	0·00	193	1, ho.-fr : 2, ho.-fr : 10, n, m	9, ci, cu.-s : 10 : 10, n
6	0·0	0·00	0·0	0·00	N	N : Calm	1·0	0·05	189	10 : 10	7, cu : f, slt.-ho.-fr
7	0·0	0·00	0·0	0·00	Calm	S : SSW	5·2	0·34	311	f, ho.-fr : 9, cu.-s	10, slt.-m.-r : 10, slt.-r, w
8	4·7	0·34	4·0	0·29	SW : WSW	WSW: Calm : N	2·9	0·23	290	10, m.-r, w : 10, s, so.-ha	10 : 10, m
9	7·8	0·57	3·3	0·24	N	N : Calm	0·2	0·00	171	p.-cl,ho.-fr: 1, m : o, m, h	2, h, m : 1 : o, ho.-fr
10	0·4	0·03	0·1	0·01	SW	SW	0·5	0·03	216	o, ho.-fr : 9, ho.-fr : 10	10 : 10, m.-r
11	0·5	0·04	0·3	0·02	SW	SW : SSW	0·2	0·00	156	10 : 10, oc.-m.-r	10 : 9 : 10
12	0·0	0·00	0·0	0·00	SSW	SSW	0·1	0·00	158	10 : 10, m.-r : 10, m.-r	10 : 10
13	4·7	0·34	4·2	0·30	Calm : SW	W : NNE	1·4	0·09	241	10 : 10, m.-r : 7, ci, cu	10, s, m.-r : 10, m.-r : 10
14	5·2	0·38	3·6	0·26	N : WSW	WSW	2·8	0·16	276	7, ho.-fr : 1, ho.-fr, m : 7, th.-cl, m	9, ci.-s : 10 : 10
15	9·5	0·69	8·2	0·60	WSW : NNW	NW : WSW	1·5	0·15	319	9, sh : 2 : p.-cl	p.-cl : p.-cl : 1, slt.-ho.-fr
16	7·7	0·56	7·3	0·53	WSW	W	2·9	0·30	417	9 : 10, sh : v.-cl	10, slt.-r : 2
17	11·1	0·81	10·7	0·78	W : WSW	WSW	2·0	0·23	390	10, sh : 10 : 10, s, n	10 : 10, th.-cl, lu.-ha : p.-cl, d
18	7·1	0·51	6·5	0·47	WSW:W:WNW	WNW : NW	4·3	0·46	457	2 : 1 : 8, cu.-s, w	9, w : v.-cl : 2
19	10·5	0·76	10·1	0·74	W : NW	NNW	4·0	0·34	391	10 : 9, cu.-s, n	9 : 10, sn, sl : o, w
20	9·7	0·73	9·4	0·68	NNW : N	N : NNW	4·3	0·63	476	3, w : 8, sn.-sh, w : 9	2 : 1 : o
21	0·0	0·00	0·0	0·00	NW	NNW	2·2	0·12	282	9 : 10	10, sn : 10, sn
22	4·5	0·32	3·9	0·28	Calm : WSW	WNW	2·5	0·28	377	10, fq.-sn : 10, r	10, s, n, slt.-sh : 10, oc.-m.-r
23	10·0	0·71	9·8	0·70	NW:WNW:NNW	NNW : NW	9·8	0·59	506	v.-cl : 9, w : 3, w	3, cu, w : 1
24	13·5	0·96	13·3	0·95	W : WSW	WSW : N	5·4	0·20	373	10 : 10, s, n, r, m.-r	10, s, n : 1, ho.-fr
25	0·0	0·00	0·0	0·00	Calm	SSW : WSW	4·3	0·18	243	o, ho.-fr : o, ho.-fr : p.-cl, ho.-fr	10, slt.-r : 10, r, m.-r, w
26	0·0	0·00	0·0	0·00	WSW : WNW : N	NNE : Calm	2·5	0·14	283	10, m,-r : 10, n, m.-r	10, n : 10, n : 10, sn
27	0·0	0·00	0·0	0·00	Calm : NW	NNW : SW	1·9	0·04	189	10, sn, r : 10, s, m	10 : 10 : 10, r, m.-r
28	10·8	0·77	10·3	0·74	WSW : N	N	5·0	0·41	399	10, r, m.-r : 10, fq.-slt.-r, w	10, n : v.-cl : v.-cl
29	0·0	0·00	0·0	0·00	NNW : WSW	WSW	0·2	0·00	195	o : 2 : 3, ci.-cu,h	7, h : 10 : 10, r
30	0·0	0·00	0·0	0·00	Calm	E : ESE	1·0	0·02	165	10, r : 10, s, m, r, m.-r	10, r, m.-r : 10, r, m.-r
31	0·0	0·00	0·0	0·00	ESE : Calm	SW : WSW	0·4	0·01	178	10, r, m.-r : 10, s	10, s, m.-r : 10, m.-r, r
Means	..	..	..	..	..	..	..	0·19	289		
Number of Column for Reference	20	21	22	23	24	25	26	27	28	29	30

The mean *Temperature of Evaporation* for the month was 37°·6, being 0°·9 *lower* than
The mean *Temperature of the Dew Point* for the month was 35°·5, being 1°·2 *lower* than
The mean *Degree of Humidity* for the month was 87·1, being 1·5 *less* than
The mean *Elastic Force of Vapour* for the month was 0in·208, being 0in·010 *less* than
The mean *Weight of Vapour in a Cubic Foot of Air* for the month was 2grs·4, being 0grs·2 *less* than
The mean *Weight of a Cubic foot of Air* for the month was 544 grains, being 8 grains *less* than
} the average for the 65 years, 1841–1905.

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

The mean proportion of *Sunshine* for the month (constant sunshine being represented by 1) was 0·067. The maximum daily amount of *Sunshine* was 3·9 hours on December 23.

The highest reading of the *Solar Radiation Thermometer* was 67°·0 on December 13; and the lowest reading of the *Terrestrial Radiation Thermometer* was 15°·7 on December 1.

The *Proportion of Wind* referred to the cardinal points were N. 7, E. 2, S. 8, W. 11. Three days were calm.

The *Greatest Pressure of the Wind* in the month was 9·8 lbs. on the square foot on December 23. The mean daily *Horizontal Movement of the Air* for the month was 289 miles; the greatest daily value was 506 miles on December 23; and the least daily value was 156 miles on December 11.

Rain (0in·005 or over) fell on 18 days in the month, amounting to 1in·899 as measured by gauge No. 6 partly sunk below the ground; being 0in·072 *greater* than the average fall for the 65 years, 1841–1905.

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

MAXIMA.		MINIMA.		MAXIMA.		MINIMA.		MAXIMA.		MINIMA.	
Greenwich Civil Time, 1923.	Reading.	Greenwich Civil Time, 1923.	Reading.	Greenwich Civil Time, 1923.	Reading.	Greenwich Civil Time, 1923.	Reading.	Greenwich Civil Time, 1923.	Reading.	Greenwich Civil Time, 1923.	Reading.
January.		January.		May.		May.		September.		September.	
d. h. m.	in.	d. h. m.	in.	d. h. m.	in.	d. h. m.	in.	d. h. m.	in.	d. h. m.	in.
1. 19. 25	29·837	3. 0. 10	29·469	10. 14. 0	29·640	11. 11. 50	29·155	19. 12. 20	29·711	20. 3. 10	29·522
4. 23. 0	29·976	5. 20. 15	29·376	12. 20. 40	29·546	13. 15. 40	29·406	20. 20. 5	29·639	21. 4. 50	29·271
6. 22. 25	30·013	7. 13. 0	29·703	14. 21. 0	29·598	16. 5. 0	29·408	21. 23. 0	29·638	23. 15. 5	29·223
8. 23. 20	29·991	10. 13. 20	29·514	18. 8. 20	29·926	21. 2. 0	29·628	24. 13. 0	29·706	25. 3. 30	29·404
13. 10. 45	30·195	14. 12. 55	29·974	22. 8. 40	29·832	25. 16. 0	29·597	27. 10. 0	30·163	28. 4. 0	30·082
15. 10. 35	30·257	16. 5. 40	30·148	28. 23. 5	29·959	29. 16. 0	29·873	29. 22. 0	30·261		
17. 21. 40	30·344	18. 13. 30	30·242	31. 10. 0	30·021	31. 17. 20	29·914				
19. 9. 20	30·415	20. 12. 50	29·817								
21. 9. 20	30·239	22. 22. 20	30·136	June.		June.		October.		October.	
23. 11. 0	30·464	24. 14. 20	30·347	2. 13. 20	30·151	4. 4. 0	29·669			3. 14. 40	29·295
25. 11. 5	30·508	29. 21. 0	29·837	5. 10. 0	29·848	6. 3. 40	29·773	4. 22. 0	29·881	6. 5. 0	29·708
31. 9. 0	30·057			7. 10. 20	30·056	9. 5. 10	29·799	7. 8. 50	29·842	8. 2. 30	29·577
				12. 1. 50	30·289	13. 13. 50	29·763	8. 16. 30	29·734	9. 4. 0	29·545
February.		February.		14. 13. 20	30·005	16. 4. 0	29·651	10. 3. 0	29·895	10. 21. 0	29·595
		3. 4. 0	29·799	17. 23. 0	30·037	20. 3. 0	29·873	11. 11. 0	29·736	12. 14. 55	29·011
3. 11. 0	29·876	4. 4. 0	29·779	20. 23. 0	30·104	22. 4. 0	29·993	17. 23. 30	30·087	21. 15. 0	29·063
4. 23. 15	29·995	8. 9. 45	28·740	23. 7. 20	30·123	26. 4. 0	29·902	22. 22. 0	29·226	23. 14. 55	28·757
9. 18. 40	29·604	10. 21. 35	29·342	29. 7. 0	30·045	30. 18. 0	29·881	25. 22. 0	29·443	26. 8. 0	29·145
13. 23. 50	30·009	17. 3. 0	29·472					26. 18. 0	29·391	27. 9. 40	29·027
17. 20. 40	29·661	18. 16. 0	29·117	July.		July.		31. 23. 0	30·060		
20. 11. 40	29·547	22. 23. 55	28·693	1. 23. 20	29·930	3. 4. 0	29·817				
23. 19. 0	29·169	24. 9. 0	29·052	5. 23. 0	30·008	7. 17. 0	29·851				
25. 18. 0	29·442	27. 6. 0	28·777	9. 5. 30	30·000	10. 18. 0	29·787	November.		November.	
28. 9. 10	29·137	28. 16. 0	29·057	12. 5. 0	30·049	16. 5. 0	29·657			3. 17. 0	29·523
				22. 8. 0	30·143	24. 2. 0	29·696	4. 9. 30	29·679	5. 23. 0	29·313
March.		March.		24. 11. 0	29·792	25. 16. 20	29·619	7. 20. 0	29·808	9. 6. 0	29·266
1. 13. 25	29·430	2. 0. 20	29·099	27. 9. 0	29·866	28. 16. 0	29·441	11. 8. 0	30·166	14. 3. 50	28·841
2. 10. 35	29·286	3. 5. 0	29·102	29. 9. 0	29·588	31. 19. 0	29·119	15. 3. 40	29·447	15. 20. 40	28·911
5. 7. 5	30·022	7. 16. 5	29·435					16. 19. 40	29·589	17. 5. 40	29·295
9. 19. 0	29·907	10. 23. 0	29·758	August.		August.		17. 22. 0	29·581	20. 13. 55	29·317
12. 8. 20	30·093	13. 5. 0	29·884	1. 23. 0	29·725	2. 17. 0	29·611	25. 8. 30	30·017	28. 15. 0	29·285
14. 11. 55	30·142	15. 15. 0	29·944	4. 9. 0	30·154	7. 17. 0	29·831	30. 22. 0	29·956		
18. 9. 5	30·141	23. 14. 50	29·692	12. 7. 0	30·151	13. 15. 0	29·921				
26. 8. 50	30·080	27. 20. 50	29·841	14. 9. 0	30·025	15. 3. 0	29·845				
30. 8. 10	30·203			16. 6. 0	30·037	18. 12. 0	29·407	December.		December.	
				19. 9. 0	29·770	21. 15. 55	29·417			2. 16. 0	29·212
April.		April.		23. 1. 10	29·769	24. 6. 0	29·297	4. 0. 0	29·523	4. 18. 0	29·062
		1. 4. 0	29·765	25. 9. 55	29·889	27. 5. 0	29·416	6. 19. 0	29·846	8. 3. 50	29·208
2. 21. 50	30·025	7. 4. 30	29·473	28. 23. 10	29·768	29. 21. 0	29·062	14. 10. 0	30·367	15. 2. 0	30·087
8. 21. 5	29·683	13. 19. 0	29·143	30. 23. 0	29·808	31. 18. 0	29·735	15. 22. 0	30·212	18. 5. 0	29·963
17. 13. 10	29·943	21. 18. 0	29·307					18. 21. 0	30·073	19. 22. 0	29·989
24. 10. 50	29·920	26. 12. 0	29·228	September.		September.		20. 20. 0	30·250	23. 5. 30	29·392
28. 8. 10	29·739	29. 9. 5	29·654	3. 8. 0	30·210	4. 15. 0	30·020	24. 1. 0	29·753	24. 15. 0	29·468
				6. 9. 0	30·201	7. 16. 40	30·023	25. 10. 30	30·002	26. 4. 0	29·269
May.		May.		8. 9. 0	30·194	10. 4. 0	29·864	26. 18. 40	29·662	28. 5. 0	29·018
2. 10. 0	30·062	5. 19. 10	29·520	11. 0. 30	29·949	15. 0. 40	29·346	29. 12. 0	30·268	30. 13. 15	29·744
7. 22. 30	29·958	10. 1. 5	29·514	16. 23. 0	29·877	18. 4. 20	29·174	31. 11. 0	30·188		

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 *152* feet; no correction has been applied to the readings to reduce to sea level.

HIGHEST and LOWEST READINGS of the BAROMETER in each Month for the YEAR 1923.

	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.
	in.	in.	in.	in.	in.	in.	in.	in.	in.	in.	in.	in.
Highest.....	30·508	30·009	30·203	30·025	30·062	30·269	30·143	30·154	30·261	30·087	30·166	30·367
Lowest	29·376	28·693	29·099	29·143	29·155	29·651	29·119	29·062	29·174	28·757	28·841	29·018
Range	1·132	1·316	1·104	0·882	0·907	0·638	1·024	1·092	1·087	1·330	1·325	1·349

The highest reading in the year was $30^{in.}$·508. on January 25. The lowest reading in the year was $28^{in.}$·693. on February 22. The range of reading in the year was $1^{in.}$·815.

MONTHLY RESULTS of METEOROLOGICAL ELEMENTS for the YEAR 1923.

MONTH, 1923.	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 the Average of 65 Years.	Mean Temperature of Evaporation.	Mean Temperature of the Dew Point.	Mean Degree of Humidity. (Saturation = 100.)
	in.	°	°	°	°	°	°	°	°	°	°	
January	30·010	54·2	25·0	29·2	46·8	35·4	11·4	41·5	+ 2·9	39·5	36·9	84·2
February	29·441	57·2	25·9	31·3	48·6	38·1	10·5	43·1	+ 3·6	41·2	39·0	86·0
March	29·857	70·6	27·2	43·4	51·6	38·1	13·5	44·2	+ 2·3	41·9	39·3	83·5
April	29·585	68·0	31·2	36·8	56·0	39·3	16·7	46·8	— 0·4	43·4	39·5	76·1
May	29·749	80·6	34·1	46·5	61·5	43·2	18·3	51·2	— 1·9	47·0	42·8	73·6
June	29·961	79·2	35·4	43·8	65·1	47·4	17·7	55·5	— 3·9	51·2	47·0	73·4
July	29·829	92·2	48·2	44·0	78·4	56·3	22·0	66·3	+ 3·7	59·9	54·8	66·5
August	29·768	90·7	43·9	46·8	74·1	53·0	21·0	62·3	+ 0·7	56·2	51·1	67·2
September	29·819	77·4	39·0	38·4	67·5	47·4	20·1	56·4	— 0·8	52·6	49·0	76·3
October	29·568	67·8	33·5	34·3	58·0	45·3	12·8	51·2	+ 1·2	48·5	45·8	82·1
November	29·612	57·7	22·7	35·0	44·2	33·3	10·9	38·8	— 4·7	36·9	34·4	84·5
December	29·802	49·9	24·3	25·6	44·4	32·8	11·6	39·1	— 0·8	37·6	35·5	87·1
		Highest	Lowest	Annual Range								
Means	29·750	92·2	22·7	69·5	58·0	42·5	15·5	49·7	+ 0·2	46·3	42·9	78·4

MONTH, 1923.	Mean Elastic Force of Vapour.	Mean Weight of Vapour in a Cubic Foot of Air.	Mean Weight of a Cubic Foot of Air.	Mean Temperature at Noon of the Earth 4 feet below the surface of the soil.	Mean Amount of Cloud (0-10).	RAIN. Number of Rainy Days (0·005 or over).	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	0·219	2·5	555	43·0	7·1	12	1·049	60	7	0	0	49	312	203	71	42	0·19	321
February	0·238	2·7	542	43·4	7·8	21	2·654	22	16	53	103	113	178	102	11	74	0·21	320
March	0·240	2·8	549	43·5	7·6	18	2·199	41	145	121	24	57	133	53	14	156	0·12	254
April	0·242	2·8	541	46·3	7·6	12	1·371	43	114	180	58	44	135	19	11	116	0·16	277
May	0·275	3·1	539	49·3	8·0	13	1·937	79	78	28	7	12	232	142	58	108	0·12	279
June	0·323	3·7	538	51·3	8·5	9	0·476	186	36	3	0	4	128	99	140	124	0·13	272
July	0·430	4·7	524	56·6	6·1	11	2·594	15	12	43	30	30	273	193	50	98	0·16	269
August	0·375	4·1	527	58·6	6·0	10	1·907	36	10	0	7	57	258	210	60	106	0·21	305
September	0·348	3·9	534	56·5	6·1	12	1·185	16	3	2	3	53	331	180	25	107	0·16	266
October	0·308	3·5	536	54·1	7·2	23	5·033	42	3	2	4	109	346	169	21	48	0·41	346
November	0·199	2·3	551	48·7	6·3	12	1·642	101	47	19	4	36	218	75	65	155	0·25	283
December	0·208	2·4	544	44·1	7·7	18	1·899	115	12	13	16	91	195	115	105	82	0·19	289
Sums	..	..	..	..	..	171	23·946	756	483	464	256	655	2739	1560	631	1216	..	..
Means	0·284	3·2	540	49·6	7·2	..	..	..	..	..	..	..	..	..	..	..	0·19	290

The greatest recorded pressure of the wind on the square foot in the year was 17·8 lbs., on April 26.
The greatest recorded daily horizontal movement of the air in the year was 650 miles, on August 30.
The least recorded daily horizontal movement of the air in the year was 42 miles, on November 26.

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

Hour, Greenwich Civil Time.	1923. January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Yearly Means.
	in.	in.	in.	in.	in.	in.	in.	in.	in.	in.	in.	in.	in.
Midnight	30·000	29·468	29·846	29·593	29·758	29·968	29·846	29·761	29·819	29·591	29·621	29·806	29·756
1h	30·000	29·464	29·845	29·589	29·752	29·963	29·841	29·761	29·816	29·586	29·617	29·800	29·753
2	30·005	29·460	29·844	29·585	29·747	29·957	29·837	29·762	29·810	29·575	29·616	29·796	29·749
3	30·003	29·454	29·841	29·581	29·744	29·953	29·833	29·764	29·804	29·566	29·608	29·790	29·745
4	30·003	29·448	29·840	29·577	29·740	29·952	29·834	29·767	29·801	29·560	29·605	29·784	29·743
5	30·002	29·446	29·843	29·579	29·742	29·954	29·838	29·770	29·805	29·555	29·602	29·779	29·743
6	30·002	29·442	29·849	29·584	29·747	29·957	29·841	29·776	29·813	29·551	29·605	29·780	29·746
7	30·007	29·440	29·857	29·589	29·749	29·962	29·844	29·782	29·820	29·554	29·611	29·784	29·750
8	30·015	29·444	29·865	29·594	29·752	29·966	29·846	29·786	29·827	29·558	29·621	29·794	29·756
9	30·023	29·444	29·870	29·594	29·753	29·967	29·844	29·786	29·832	29·563	29·624	29·804	29·759
10	30·024	29·441	29·874	29·595	29·754	29·969	29·842	29·782	29·833	29·561	29·626	29·813	29·760
11	30·022	29·441	29·874	29·592	29·752	29·970	29·839	29·778	29·827	29·561	29·621	29·812	29·757
Noon	30·008	29·434	29·869	29·585	29·748	29·969	29·835	29·771	29·824	29·556	29·608	29·803	29·751
13h	29·998	29·428	29·860	29·582	29·747	29·967	29·829	29·768	29·819	29·549	29·597	29·797	29·745
14	29·996	29·425	29·855	29·574	29·743	29·961	29·823	29·763	29·815	29·546	29·592	29·793	29·740
15	30·000	29·424	29·849	29·571	29·741	29·957	29·816	29·758	29·810	29·549	29·594	29·798	29·739
16	30·003	29·425	29·846	29·568	29·740	29·953	29·810	29·753	29·807	29·553	29·597	29·805	29·738
17	30·007	29·428	29·849	29·569	29·738	29·950	29·806	29·748	29·809	29·565	29·604	29·812	29·740
18	30·011	29·433	29·856	29·573	29·740	29·952	29·804	29·749	29·814	29·575	29·610	29·817	29·745
19	30·018	29·437	29·862	29·582	29·746	29·956	29·805	29·757	29·824	29·583	29·617	29·820	29·751
20	30·021	29·439	29·867	29·594	29·755	29·961	29·812	29·765	29·832	29·589	29·621	29·817	29·756
21	30·022	29·442	29·868	29·597	29·764	29·968	29·820	29·772	29·835	29·594	29·623	29·815	29·760
22	30·024	29·441	29·868	29·598	29·763	29·971	29·823	29·776	29·835	29·595	29·621	29·812	29·761
23	30·026	29·440	29·866	29·599	29·763	29·970	29·824	29·778	29·835	29·594	29·620	29·810	29·760
24	30·021	29·440	29·865	29·596	29·760	29·966	29·823	29·779	29·830	29·591	29·618	29·808	29·758
Means 0h.–23h.	30·010	29·441	29·857	29·585	29·749	29·961	29·829	29·768	29·819	29·568	29·612	29·802	29·750
Means 1h.–24h.	30·010	29·440	29·857	29·585	29·749	29·961	29·828	29·768	29·820	29·568	29·612	29·802	29·750
Number of Days employed	31	28	31	30	31	30	31	31	30	31	30	31	..

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

Hour, Greenwich Civil Time.	1923. January.	February	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Yearly Means.
	°	°	°	°	°	°	°	°	°	°	°	°	°
Midnight	40·0	41·9	41·7	42·8	46·9	51·4	60·9	57·0	51·7	49·2	37·5	37·8	46·6
1h	39·7	41·9	41·2	42·3	46·0	50·5	59·9	56·3	51·0	48·8	37·0	37·5	46·0
2	39·6	41·6	40·6	41·7	45·4	49·7	59·0	55·8	50·4	48·4	36·8	37·6	45·6
3	39·4	41·5	40·2	41·3	45·1	49·3	58·2	55·0	49·9	48·6	36·6	37·4	45·2
4	39·3	41·3	39·8	41·2	44·8	49·3	57·4	54·3	49·7	48·6	36·6	37·5	45·0
5	39·2	41·0	39·9	41·2	45·1	50·0	57·8	54·0	49·6	48·5	36·4	37·5	45·0
6	39·1	41·0	40·1	42·1	46·6	51·5	59·9	55·4	49·6	48·4	36·2	37·6	45·6
7	39·1	40·9	40·8	43·8	48·8	53·5	63·0	58·6	51·6	48·8	36·0	37·9	46·9
8	39·6	41·1	42·2	45·8	51·0	55·3	65·8	61·9	54·6	50·0	36·5	37·8	48·5
9	40·2	42·4	44·4	48·0	52·6	57·3	68·6	64·4	57·6	51·9	37·8	38·5	50·3
10	41·3	43·8	46·1	49·7	54·2	58·1	70·7	66·2	59·9	53·7	39·3	39·3	51·9
11	42·8	45·2	47·7	51·4	55·4	59·2	72·0	68·0	61·9	55·0	41·0	40·4	53·3
Noon	44·3	46·4	48·9	52·6	56·7	59·9	73·4	69·2	62·8	55·6	42·0	41·2	54·4
13h	44·9	46·9	49·4	53·4	57·5	60·5	74·5	69·7	63·8	55·9	42·8	41·7	54·2
14	45·3	46·6	49·7	53·5	58·0	61·7	74·8	69·9	64·6	55·5	43·1	41·9	55·4
15	44·8	46·2	49·2	52·7	56·9	61·4	74·3	69·8	64·4	54·5	42·5	41·7	54·9
16	44·2	45·7	48·5	52·0	56·8	61·1	73·8	69·7	63·7	53·7	41·3	41·1	54·3
17	43·4	44·7	47·4	50·8	56·1	60·2	72·7	68·6	62·2	52·5	40·6	40·5	53·3
18	42·9	43·7	46·0	49·4	54·7	58·9	71·2	67·1	60·0	51·6	40·0	39·9	52·1
19	42·2	43·0	44·6	47·7	52·9	57·6	68·7	64·7	58·0	50·9	39·4	39·4	50·8
20	41·8	42·1	43·8	46·4	51·1	55·8	66·2	62·4	56·2	50·1	38·8	39·0	49·5
21	41·7	41·9	43·0	45·4	49·7	54·5	64·4	60·8	55·1	49·6	38·2	38·7	48·6
22	41·1	41·7	42·6	44·6	48·6	53·4	63·1	59·4	54·0	49·3	37·8	38·5	47·8
23	40·8	41·7	42·1	43·8	47·8	52·7	61·7	57·9	52·9	49·1	37·5	38·4	47·2
24	40·4	41·6	41·7	43·0	46·7	51·7	60·7	56·8	51·9	48·7	37·2	38·2	46·6
Means 0h.–23h.	41·5	43·1	44·2	46·8	51·2	55·5	66·3	62·3	56·5	51·2	38·8	39·1	49·7
Means 1h.–24h.	41·5	43·1	44·2	46·8	51·2	55·5	66·3	62·3	56·5	51·2	38·8	39·1	49·7
Number of Days employed	31	28	31	30	31	30	31	31	30	31	30	31	..

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

Hour, Greenwich Civil Time.	1923. January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Yearly Means.
	°	°	°	°	°	°	°	°	°	°	°	°	°
Midnight	38·4	40·4	40·5	40·9	44·7	48·7	57·8	53·8	49·9	47·4	35·9	36·7	44·6
1h	38·1	40·5	40·1	40·6	44·2	48·1	57·3	53·5	49·4	47·0	35·5	36·4	44·2
2	37·9	40·3	39·5	40·3	43·8	47·6	56·9	53·2	48·7	46·8	35·4	36·5	43·9
3	37·5	40·2	39·1	39·9	43·5	47·2	56·3	52·7	48·4	46·8	35·2	36·3	43·6
4	37·3	39·9	38·7	39·8	43·3	47·4	55·8	52·2	48·1	46·8	35·2	36·4	43·4
5	37·3	39·7	38·8	39·8	43·5	48·1	56·0	51·9	48·1	46·8	35·0	36·3	43·4
6	37·4	39·6	39·0	40·4	44·6	49·1	57·2	53·0	48·2	46·8	34·9	36·4	43·9
7	37·7	39·6	39·6	41·7	46·0	50·4	58·6	54·7	49·8	47·2	34·8	36·7	44·7
8	38·1	39·9	40·8	43·2	47·3	51·6	59·9	56·6	51·9	48·2	35·2	36·6	45·8
9	38·8	41·0	42·5	44·5	48·2	52·6	61·1	57·6	53·7	49·5	36·4	37·2	46·9
10	39·7	42·0	43·5	45·3	49·0	53·1	61·7	58·0	54·9	50·4	37·3	37·6	47·7
11	40·9	42·8	44·3	46·1	49·6	53·3	62·1	58·8	55·7	50·9	38·3	38·7	48·5
Noon	41·8	43·6	44·9	46·6	50·2	53·6	62·4	59·1	56·1	51·0	39·0	39·1	48·9
13h	42·1	43·8	45·0	46·8	50·6	53·7	63·1	59·4	56·7	51·0	39·5	39·6	49·3
14	42·3	43·6	45·1	46·9	50·7	54·5	63·3	59·6	56·9	50·6	39·8	39·7	49·4
15	41·8	43·4	44·7	46·6	50·0	54·2	63·1	59·6	56·8	50·3	39·5	39·5	49·1
16	41·5	43·1	44·3	46·3	49·8	54·0	63·1	59·7	56·5	49·7	38·8	39·1	48·8
17	41·0	42·3	43·9	45·8	49·3	53·8	62·6	59·1	55·8	49·1	38·4	38·6	48·3
18	40·5	41·6	43·1	45·0	48·7	53·1	62·2	58·3	54·8	48·9	38·1	38·3	47·7
19	40·0	41·1	42·5	44·3	47·7	52·4	61·3	57·1	53·9	48·6	37·7	37·8	47·0
20	39·7	40·6	42·0	43·6	47·1	51·6	60·2	56·6	53·2	48·1	37·0	37·6	46·4
21	39·6	40·4	41·5	42·9	46·2	50·8	59·5	55·8	52·3	47·7	36·5	37·4	45·9
22	39·2	40·3	41·1	42·5	45·6	50·1	58·9	55·2	51·6	47·4	36·2	37·4	45·5
23	39·1	40·2	40·9	41·8	45·3	49·5	58·1	54·4	50·9	47·2	35·9	37·3	45·1
24	38·8	40·2	40·5	41·2	44·6	49·0	57·6	53·7	50·2	46·8	35·5	37·1	44·6
Means. 0h.–23h.	39·5	41·2	41·9	43·4	47·0	51·2	59·9	56·2	52·6	48·5	36·9	37·6	46·3
Means. 1h.–24h.	39·5	41·2	41·9	43·4	47·0	51·2	59·9	56·2	52·6	48·5	36·9	37·6	46·3
Number of Days employed	31	28	31	30	31	30	31	31	30	31	30	31	..

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

Hour, Greenwich Civil Time.	1923. January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Yearly Means.
	°	°	°	°	°	°	°	°	°	°	°	°	°
Midnight	36·3	38·5	39·0	38·7	42·3	45·9	55·1	50·8	48·2	45·4	33·7	35·2	42·4
1h	36·0	38·8	38·7	38·5	42·1	45·6	55·1	50·9	47·7	45·0	33·4	34·9	42·2
2	35·7	38·7	38·1	38·6	41·9	45·4	55·0	50·8	46·9	45·1	33·5	35·0	42·1
3	35·0	38·6	37·7	38·1	41·6	44·9	54·6	50·5	46·8	44·9	33·2	34·8	41·7
4	34·7	38·1	37·3	38·0	41·6	45·3	54·4	50·1	46·4	44·9	33·2	34·9	41·6
5	34·8	37·9	37·4	38·0	41·6	46·1	54·4	49·8	46·5	45·0	33·0	34·7	41·6
6	35·2	37·9	37·6	38·3	42·4	46·7	54·9	50·7	46·7	45·1	33·0	34·8	41·9
7	35·9	38·0	38·1	39·3	43·0	47·4	54·9	51·2	48·0	45·4	33·0	35·1	42·4
8	36·2	38·4	39·1	40·2	43·4	48·1	55·1	52·1	49·3	46·3	33·3	35·0	43·0
9	37·0	39·3	40·4	40·7	43·8	48·3	55·3	52·0	50·2	47·1	34·5	35·4	43·7
10	37·7	39·8	40·5	40·6	43·9	48·6	54·8	51·4	50·5	47·2	34·7	35·4	43·8
11	38·7	40·0	40·6	40·6	44·1	48·1	54·7	51·5	50·4	47·0	34·9	36·6	43·9
Noon	38·9	40·4	40·6	40·6	44·2	48·1	54·3	51·2	50·4	46·7	35·3	36·5	43·9
13h	38·8	40·3	40·3	40·3	44·3	47·7	54·9	51·4	50·8	46·4	35·5	37·0	44·0
14	38·8	40·2	40·2	40·4	44·1	48·3	55·0	51·6	50·5	46·0	35·8	37·2	44·0
15	38·3	40·2	39·9	40·5	43·7	48·0	55·0	51·7	50·5	46·2	35·9	36·8	43·9
16	38·3	40·1	39·7	40·5	43·4	47·8	55·3	52·0	50·5	45·8	35·7	36·6	43·8
17	38·2	39·5	40·0	40·7	42·9	48·2	55·1	51·7	50·3	45·6	35·6	36·2	43·7
18	37·7	39·2	39·8	40·3	42·9	48·0	55·4	51·3	50·2	46·2	35·6	36·2	43·6
19	37·3	38·8	40·0	40·6	42·5	47·7	55·6	50·8	50·2	46·2	35·5	35·7	43·4
20	37·1	38·8	39·8	40·4	42·9	47·6	55·3	51·6	50·4	46·0	34·6	35·8	43·4
21	37·0	38·5	39·7	40·0	42·5	47·3	55·4	51·5	49·6	45·7	34·2	35·6	43·1
22	36·8	38·5	39·3	40·0	42·4	46·8	55·3	51·5	49·2	45·3	34·0	35·9	42·9
23	37·0	38·3	39·5	39·5	42·5	46·3	55·0	51·3	48·9	45·1	33·7	35·8	42·7
24	36·8	38·4	39·0	38·8	42·3	46·3	54·9	50·8	48·5	44·8	33·1	35·6	42·4
Means. 0h.–23h.	37·0	39·0	39·3	39·7	42·9	47·2	55·0	51·2	49·1	45·8	34·4	35·7	43·0
Means. 1h.–24h.	37·0	39·0	39·3	39·7	42·9	47·2	55·0	51·2	49·1	45·8	34·3	35·7	43·0

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.	1923. January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Yearly Means.
Midnight	87	89	91	86	85	82	82	80	88	88	87	91	86
1h	87	90	91	87	87	84	84	82	89	87	87	91	87
2	87	90	91	89	88	86	87	84	89	89	88	91	88
3	85	90	91	89	88	86	88	85	89	87	88	91	88
4	84	89	91	89	89	87	89	86	89	87	88	91	88
5	85	90	91	89	88	87	88	85	89	88	88	90	88
6	86	89	91	87	86	84	84	85	90	89	89	90	87
7	89	90	90	84	80	79	75	77	88	89	89	90	85
8	88	91	89	82	76	77	69	70	82	87	89	90	82
9	89	89	86	76	72	72	62	64	76	84	88	89	79
10	88	86	82	71	68	71	58	59	71	78	84	86	75
11	86	82	77	67	66	67	54	55	67	75	79	87	72
Noon	81	81	73	65	63	65	51	53	64	72	78	84	69
13h	79	79	71	61	61	63	51	52	63	70	76	85	68
14	78	80	70	61	60	62	51	52	60	70	76	84	67
15	78	81	70	64	61	61	51	52	61	73	78	84	68
16	79	81	72	66	61	62	52	53	62	75	81	84	69
17	81	82	76	70	61	64	54	54	65	78	83	85	71
18	82	84	80	71	65	67	57	57	70	82	85	87	74
19	84	85	84	77	68	70	62	61	75	85	86	87	77
20	85	89	86	81	74	75	68	68	81	86	85	89	81
21	85	89	88	82	76	76	73	71	82	87	86	90	82
22	85	89	88	84	80	78	76	75	84	87	86	91	84
23	86	89	91	85	83	80	79	79	87	87	87	91	85
24	88	89	91	86	85	82	82	80	88	87	86	91	86
Means. 0h–23h	84	86	84	78	74	74	69	68	78	82	85	88	79
Means. 1h–24h	84	86	84	78	74	74	69	68	78	82	85	88	79

TOTAL AMOUNT of SUNSHINE registered in each HOUR of the DAY in each MONTH, as derived from the RECORDS of the CAMPBELL-STOKES SELF-REGISTERING INSTRUMENT for the YEAR 1923.

Month, 1923.	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		°
January	..	..	..	..	..	2·6	4·6	5·5	6·2	6·0	3·4	..	..	..	..	..	28·3	258·7	0·109	18
February	..	..	..	1·7	5·5	6·9	9·0	8·6	7·7	6·0	4·7	2·5	0·1	..	..	..	52·7	276·5	0·191	26
March	..	..	0·8	2·9	7·3	6·8	8·0	10·2	10·3	10·1	8·1	7·7	3·7	0·7	..	..	76·6	365·3	0·210	37
April	..	2·5	7·0	10·2	10·4	10·2	10·9	14·1	11·7	13·5	9·3	7·4	6·3	2·5	0·1	..	116·1	412·9	0·281	48
May	1·3	6·3	8·6	10·3	10·0	10·3	10·8	12·8	14·2	13·5	12·1	11·5	11·8	10·3	2·0	..	145·8	481·0	0·303	57
June	1·4	4·8	7·4	8·7	8·9	7·0	6·6	7·8	6·8	9·0	7·5	9·1	7·1	6·2	4·8	1·1	104·2	494·2	0·211	62
July	3·8	12·7	15·0	18·9	20·3	18·2	18·1	17·5	18·6	19·3	19·7	18·5	17·9	14·6	12·1	1·0	246·2	497·9	0·494	60
August	0·9	12·6	18·9	22·8	21·7	22·6	21·1	21·5	19·2	18·7	15·5	17·0	17·7	17·0	9·7	0·3	257·2	451·0	0·570	52
September ...	..	0·6	9·3	16·8	16·9	17·9	17·9	16·1	17·0	18·1	17·2	15·1	12·7	6·5	..	..	182·1	379·5	0·480	42
October	..	..	0·4	6·6	10·9	12·0	12·9	13·7	11·0	10·8	8·7	7·1	2·1	..	..	..	96·2	330·9	0·291	30
November ..	..	..	..	0·7	4·7	6·2	6·6	8·3	8·5	9·0	7·6	2·2	..	..	..	..	53·8	266·3	0·202	20
December ...	..	..	..	..	..	1·6	2·6	4·4	3·7	3·7	0·4	..	..	..	..	..	16·4	244·1	0·067	16
For the Year	7·4	39·5	67·4	99·6	116·6	122·3	129·1	140·5	134·9	137·7	114·2	98·1	79·4	57·8	28·7	2·4	1375·6	4458·3	0·309	..

The hours are reckoned from "apparent" midnight.

READINGS of THERMOMETERS on the ORDINARY STAND in the MAGNETIC PAVILION ENCLOSURE in the YEAR 1923.

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

JANUARY.

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

FEBRUARY.

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

MARCH.

Days of the Month.	Dry Bulb Thermometers, 4 ft. above the Ground.						Wet Bulb Thermometers, 4 ft. above the Ground.			
	Maximum.	Minimum.	9h	Noon.	15h	21h	9h	Noon.	15h	21h
d	°	°	°	°	°	°	°	°	°	°
1	52·0	42·0	45·8	48·1	50·9	45·8	41·8	42·8	43·4	44·7
2	55·0	41·5	46·0	52·2	50·8	41·5	42·0	44·4	44·0	40·1
3	53·0	35·7	40·5	47·6	49·8	38·5	39·7	43·7	44·0	36·7
4	47·4	34·9	37·7	45·0	45·8	40·5	37·2	42·2	43·1	39·6
5	49·3	33·2	41·6	45·9	48·4	43·4	39·4	42·9	44·1	42·2
6	52·8	42·6	42·6	50·0	49·6	43·6	41·7	45·8	44·8	41·8
7	51·4	40·5	44·6	46·1	45·6	45·5	42·5	43·9	44·3	43·7
8	46·5	38·7	42·7	43·5	44·3	38·7	41·4	41·3	41·1	37·2
9	41·6	35·9	37·5	39·0	40·7	38·5	35·1	37·5	38·9	37·4
10	46·8	36·1	37·6	42·8	44·8	39·8	37·1	40·8	40·4	38·7
11	42·8	36·3	38·8	41·9	41·8	38·9	37·0	38·6	37·8	36·7
12	49·1	27·2	41·0	45·5	45·6	38·9	39·1	40·2	40·2	37·1
13	43·8	38·3	42·4	43·6	43·1	40·7	41·8	42·9	42·0	39·2
14	44·5	35·0	40·3	43·9	41·4	38·6	39·2	40·3	38·5	36·5
15	40·2	37·6	39·1	40·1	40·1	39·8	38·2	38·7	38·6	39·0
16	46·0	39·5	42·8	45·6	42·6	41·6	41·8	43·4	41·1	40·1
17	50·1	38·8	43·0	48·0	48·3	42·3	41·7	44·5	44·5	40·3
18	49·0	37·4	42·9	48·2	47·8	41·4	40·4	42·8	40·9	39·4
19	50·5	36·1	42·4	49·2	46·8	39·1	40·7	43·0	41·8	37·8
20	52·9	31·7	37·5	47·6	50·2	44·6	37·0	44·7	45·9	43·2
21	54·8	42·0	44·4	50·6	54·2	43·5	43·4	47·4	48·3	42·7
22	46·8	36·1	42·2	45·0	46·5	42·6	41·4	42·8	44·1	41·9
23	46·5	40·2	44·5	45·7	43·5	43·0	44·1	44·1	42·7	42·0
24	57·6	38·7	44·9	52·9	55·8	41·0	42·6	47·4	48·7	39·9
25	61·2	38·7	53·7	57·0	59·7	50·5	51·7	53·7	55·2	49·6
26	63·2	47·6	55·4	60·6	60·0	49·7	53·7	56·3	57·4	49·0
27	70·6	44·9	61·2	68·3	65·6	55·6	56·2	57·7	55·2	50·8
28	60·0	46·1	52·8	57·5	56·6	47·3	48·3	49·9	49·8	45·2
29	56·9	43·6	48·5	50·7	52·2	43·6	45·8	47·9	48·0	42·7
30	57·3	37·8	46·6	54·6	54·1	47·0	45·3	49·0	46·6	44·3
31	59·6	42·1	54·5	57·9	56·5	48·6	48·8	51·0	49·5	45·8
Means	51·6	38·6	44·4	48·9	49·2	43·0	42·5	44·9	44·7	41·5

APRIL.

Days of the Month.	Dry Bulb Thermometers, 4 ft. above the Ground.						Wet Bulb Thermometers, 4 ft. above the Ground.			
	Maximum.	Minimum.	9h	Noon.	15h	21h	9h	Noon.	15h	21h
d	°	°	°	°	°	°	°	°	°	°
1	59·8	39·2	47·6	55·6	54·5	45·3	46·0	50·3	49·4	44·4
2	57·1	40·5	48·4	54·8	54·9	44·5	46·8	49·6	48·3	43·5
3	59·8	40·5	48·6	57·6	58·3	44·9	46·0	50·1	48·4	43·7
4	63·2	35·2	52·3	61·5	57·5	46·2	45·8	48·9	48·7	44·5
5	55·9	39·5	51·5	54·5	52·5	46·4	46·7	47·5	45·8	43·8
6	46·8	42·2	43·6	44·6	45·1	42·2	42·4	42·9	42·5	40·8
7	57·8	40·8	46·4	55·0	55·7	46·4	45·5	49·6	49·4	45·5
8	50·8	41·1	44·7	46·5	47·5	42·6	40·9	41·9	41·7	36·9
9	43·4	33·8	39·8	42·5	41·3	33·9	34·8	36·5	35·4	32·8
10	53·1	31·2	41·1	51·1	52·6	50·4	37·7	43·1	46·3	48·4
11	63·9	46·5	55·1	60·5	60·5	51·6	52·9	55·9	55·4	46·9
12	68·0	48·2	54·3	65·4	56·5	49·5	51·7	59·0	53·9	48·2
13	58·2	45·6	52·0	54·5	54·6	46·5	48·2	48·2	48·1	44·8
14	56·5	38·7	48·6	52·1	46·1	40·7	43·2	45·9	42·9	39·0
15	57·5	35·3	51·1	53·0	52·1	47·3	46·7	47·1	46·1	45·4
16	53·9	41·4	50·6	52·1	52·0	43·6	48·5	48·0	48·1	41·2
17	52·9	40·1	46·1	49·5	50·9	43·1	41·2	42·9	43·6	40·8
18	51·8	40·6	45·3	47·6	48·6	42·1	41·4	42·9	42·9	39·6
19	50·1	39·6	45·3	46·2	49·5	44·3	41·9	43·3	45·1	42·0
20	58·0	40·2	45·7	53·9	55·6	44·6	43·8	49·6	49·8	40·0
21	54·5	37·8	45·5	50·5	52·6	46·5	40·3	43·4	45·4	43·7
22	57·2	43·1	47·5	55·0	54·9	43·4	44·1	46·6	45·3	38·8
23	50·7	32·4	44·3	46·2	49·3	46·3	39·4	40·0	42·5	40·2
24	52·3	37·6	45·6	48·9	50·2	40·6	38·8	38·9	39·7	37·1
25	52·2	35·4	46·2	49·6	51·6	49·8	43·8	47·7	49·9	48·1
26	57·5	44·3	49·0	54·0	52·3	45·3	45·5	49·4	47·4	41·5
27	55·1	37·9	47·5	50·2	54·4	44·6	42·9	42·8	44·7	41·7
28	59·9	36·0	51·2	57·5	57·4	46·7	45·1	46·1	47·3	42·8
29	60·2	42·8	51·5	52·0	55·5	50·1	49·5	48·4	51·1	48·9
30	62·2	48·9	54·6	55·7	57·6	52·6	52·3	52·4	53·5	50·6
Means	56·0	39·9	48·0	52·6	52·7	45·4	44·5	46·6	46·6	42·9

READINGS of THERMOMETERS on the ORDINARY STAND in the MAGNETIC PAVILION ENCLOSURE—*continued.*

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

MAY.

Days of the Month.	Dry Bulb Thermometers, 4 ft. above the Ground.						Wet Bulb Thermometers, 4 ft. above the Ground.			
	Maximum.	Minimum.	9h	Noon.	15h	21h	9h	Noon.	15h	21h
d	°	°	°	°	°	°	°	°	°	°
1	62·1	50·8	56·3	57·9	58·7	51·1	52·4	53·0	54·3	49·7
2	70·7	41·7	58·3	65·6	69·6	59·3	53·1	58·3	60·6	54·6
3	76·5	49·6	64·1	68·6	74·7	59·9	59·8	60·8	63·1	55·5
4	80·2	49·5	76·9	77·5	77·6	61·5	65·7	63·5	64·7	58·8
5	80·6	52·3	67·2	75·5	75·5	65·5	60·1	64·9	63·7	59·3
6	71·8	55·4	59·1	67·4	68·6	58·1	55·7	56·7	56·2	54·6
7	67·3	51·0	61·4	65·3	61·5	51·1	54·8	56·8	55·3	46·8
8	63·5	48·1	54·1	60·7	60·4	52·2	50·2	53·0	51·8	46·0
9	61·0	46·1	54·2	57·6	55·9	46·3	47·6	49·3	48·1	43·4
10	53·6	40·2	43·6	45·8	52·5	44·6	40·8	42·1	44·5	39·9
11	56·1	40·9	49·4	52·9	46·5	40·9	43·1	45·7	42·7	38·9
12	51·7	34·1	45·4	50·8	39·3	41·3	41·0	44·8	37·2	38·2
13	56·8	38·4	43·5	48·6	51·0	44·6	41·7	42·8	43·3	40·3
14	60·5	40·4	48·3	51·4	54·6	46·7	43·7	44·6	44·9	42·4
15	56·2	41·6	48·7	52·1	46·1	42·2	44·9	47·4	44·5	40·8
16	53·8	37·9	42·0	44·3	48·6	41·8	40·1	40·2	43·4	38·2
17	55·4	37·4	46·0	47·5	52·8	45·3	41·2	40·2	43·5	39·6
18	54·0	39·3	48·2	50·4	50·5	45·9	41·9	42·9	43·7	41·6
19	59·1	39·9	52·1	55·6	53·6	52·1	47·0	49·9	48·4	47·8
20	60·1	47·1	52·8	54·9	55·0	50·8	47·7	49·3	49·4	47·8
21	63·0	49·6	56·9	60·1	58·7	53·4	52·1	52·0	51·6	48·0
22	66·8	44·5	50·1	60·7	65·4	55·7	49·2	55·0	56·2	52·5
23	63·2	44·6	57·1	60·3	52·4	44·7	52·1	56·1	51·1	43·7
24	58·5	37·4	49·5	55·7	54·2	46·7	43·8	47·8	45·9	43·7
25	60·7	40·7	50·6	54·5	55·9	47·6	47·5	48·6	48·6	42·0
26	58·8	36·8	52·1	56·8	53·7	48·6	46·3	48·1	46·6	44·0
27	55·9	43·5	49·3	52·7	51·6	45·6	44·7	46·1	45·2	43·0
28	58·2	44·4	49·8	53·2	56·7	49·3	47·8	50·0	51·0	48·0
29	51·0	44·7	48·1	48·7	49·9	48·8	47·3	48·0	48·9	48·2
30	62·7	42·8	47·7	56·9	58·6	50·7	47·5	52·6	54·7	48·0
31	55·5	44·1	46·5	48·7	53·2	48·8	43·8	45·4	48·1	45·9
Means	61·5	43·7	52·6	56·7	56·9	49·7	48·2	50·2	50·0	46·2

JUNE.

Days of the Month.	Dry Bulb Thermometers, 4 ft. above the Ground.						Wet Bulb Thermometers, 4 ft. above the Ground.			
	Maximum.	Minimum.	9h	Noon.	15h	21h	9h	Noon.	15h	21h
d	°	°	°	°	°	°	°	°	°	°
1	56·2	45·3	48·9	52·7	55·4	51·3	46·8	49·9	52·0	49·6
2	53·5	45·8	49·9	52·1	52·4	48·3	47·8	48·7	48·8	45·2
3	71·0	35·4	57·1	64·6	68·6	55·2	51·2	55·1	57·2	51·1
4	55·2	45·8	50·3	49·7	51·0	45·8	45·8	43·9	45·1	41·9
5	57·5	42·4	45·6	48·5	53·5	51·6	42·8	45·3	46·8	46·2
6	57·0	47·7	51·7	55·1	51·6	47·8	49·7	50·8	50·4	47·6
7	66·0	45·6	56·4	57·8	65·1	53·6	52·2	52·0	57·8	51·9
8	64·5	46·3	60·1	59·5	60·4	53·4	53·6	53·2	53·9	50·3
9	66·5	53·2	59·5	62·8	62·0	59·4	57·0	59·7	59·6	56·7
10	70·7	54·6	59·8	59·5	67·1	54·6	56·9	56·7	56·7	49·5
11	65·6	48·2	58·8	59·7	61·8	53·4	51·3	53·2	51·9	47·7
12	65·9	44·6	58·1	62·0	59·7	53·1	51·6	53·2	53·5	50·8
13	72·0	51·3	64·5	68·6	70·6	56·3	60·6	60·1	59·8	49·8
14	63·2	51·1	54·6	56·4	58·8	53·6	49·6	50·3	51·8	49·4
15	62·7	47·4	56·7	56·3	53·9	54·6	51·1	52·0	52·6	54·1
16	56·8	48·3	50·5	49·1	51·2	49·8	47·9	46·4	46·7	45·3
17	61·0	44·8	51·7	52·8	55·4	47·0	46·0	46·3	47·8	44·3
18	65·3	38·2	53·6	58·8	62·1	54·7	49·7	52·0	54·3	51·1
19	60·9	51·8	55·6	56·7	58·5	53·9	54·9	53·1	51·6	47·8
20	59·2	49·1	52·6	56·4	56·5	50·5	48·8	49·4	48·9	46·0
21	68·6	47·5	61·2	64·1	64·4	58·5	54·6	57·1	56·9	55·7
22	72·1	54·7	64·7	69·1	68·5	61·2	59·7	61·5	59·6	55·0
23	79·2	51·9	66·2	72·9	76·6	66·7	59·4	62·9	63·9	60·0
24	72·8	60·2	68·2	67·2	69·7	63·1	59·7	57·4	59·3	56·2
25	63·2	50·4	58·6	56·8	53·5	50·4	54·7	53·6	51·3	49·1
26	63·9	46·2	56·7	58·1	59·6	53·1	51·9	51·8	53·6	50·8
27	66·3	43·4	61·8	61 7	64·3	53·9	57·1	55·7	56·9	52·8
28	71·7	49·2	60·9	68·4	68·6	62·4	54·5	56·5	57·1	56·7
29	78·3	51·2	62·7	70·8	75·4	56·2	56·1	60·8	61·6	54·8
30	71·3	47·7	63·4	68·8	67·1	61·6	55·7	58·0	57·4	55·8
Means	65·3	48·0	57·3	59·9	61·4	54·5	52·6	53·6	54·2	50·8

JULY.

Days of the Month.	Dry Bulb Thermometers, 4 ft. above the Ground.						Wet Bulb Thermometers, 4 ft. above the Ground.			
	Maximum.	Minimum.	9h	Noon.	15h	21h	9h	Noon.	15h	21h
d	°	°	°	°	°	°	°	°	°	°
1	67·0	54·4	58·1	60·2	63·6	59·5	50·9	51·9	54·0	53·3
2	71·8	51·4	61·4	68·8	67·4	58·4	54·0	57·7	57·1	54·5
3	68·3	49·9	64·7	62·3	64·5	60·5	58·0	56·8	59·7	56·2
4	76·0	57·1	63·8	67·6	74·5	58·6	56·7	57·8	61·7	54·6
5	84·2	52·3	71·1	79·3	81·5	63·6	62·3	66·6	67·8	58·3
6	85·1	56·5	73·2	82·5	83·8	67·5	66·1	68·8	68·1	62·2
7	90·1	58·2	84·0	87·2	88·7	74·3	67·9	67·7	70·4	66·3
8	83·2	64·6	68·5	72·7	81·6	66·4	62·7	63·6	66·6	60·2
9	84·7	52·2	74·7	81·8	83·3	65·2	62·7	63·9	62·6	62·7
10	83·0	61·2	75·2	81·1	80·3	67·2	68·2	71·1	71·1	66·7
11	92·2	61·4	79·4	86·3	90·5	74·9	71·4	71·8	73·7	71·3
12	89·6	65·9	83·8	87·5	88·0	72·7	71·0	71·9	70·0	65·3
13	92·1	64·2	81·1	90·5	89·2	72·2	69·9	74·7	70·8	67·7
14	84·5	62·9	72·6	80·7	81·5	70·3	66·0	68·1	67·0	65·1
15	83·0	61·2	74·9	78·1	77·7	65·1	65·8	67·8	67·7	61·1
16	78·4	60·1	68·1	74·2	75·7	65·8	63·8	60·8	60·5	56·9
17	71·3	53·5	62·1	66·5	64·6	60·0	56·6	56·7	57·9	56·8
18	72·9	54·7	63·6	65·7	69·2	62·9	56·6	54·7	56·5	54·5
19	72·8	49·9	66·4	69·3	63·5	58·4	56·2	58·3	58·7	57·6
20	83·9	57·1	70·4	79·2	82·6	71·6	64·9	67·7	68·5	63·7
21	82·8	58·4	68·5	76·8	78·3	71·6	62·7	65·9	66·0	64·1
22	80·4	58·8	67·9	73·1	78·4	67·3	62·1	64·7	67·3	60·1
23	78·1	54·9	66·8	72·5	65·8	61·8	60·7	63·0	62·8	61·0
24	77·1	57·1	64·7	71·6	75·6	64·2	56·5	58·9	61·0	58·8
25	71·9	60·8	64·2	69·4	62·5	61·4	61·6	61·8	61·3	57·7
26	70·2	53·0	62·1	63·7	66·8	59·1	52·8	53·0	53·6	50·2
27	72·2	48·2	59·7	67·0	69·3	61·3	51·8	55·3	57·0	55·4
28	68·8	58·2	64·7	61·6	63·9	58·5	60·7	60·3	61·4	54·7
29	73·0	52·2	65·8	66·1	68·0	62·3	59·6	57·8	59·8	57·8
30	73·9	57·9	63·4	68·1	64·1	60·4	57·1	58·1	58·1	56·6
31	67·0	52·7	61·5	65·1	59·0	53·3	56·2	57·1	57·6	51·9
Means	78·4	56·8	68·6	73·4	74·3	64·4	61·1	62·4	63·1	59·5

AUGUST.

Days of the Month.	Dry Bulb Thermometers, 4 ft. above the Ground.						Wet Bulb Thermometers, 4 ft. above the Ground.			
	Maximum.	Minimum.	9h	Noon.	15h	21h	9h	Noon.	15h	21h
d	°	°	°	°	°	°	°	°	°	°
1	73·9	50·3	63·1	66·5	68·3	61·1	57·2	56·4	56·7	56·4
2	76·1	54·3	69·5	71·6	70·1	59·3	60·3	58·6	59·8	55·2
3	73·9	54·1	61·5	70·2	72·6	60·4	54·9	55·8	57·1	51·5
4	78·1	49·8	65·4	71·4	76·8	58·4	58·6	59·9	61·1	53·3
5	80·2	45·9	73·0	77·7	78·9	63·0	61·2	62·5	62·7	58·0
6	80·6	55·1	66·9	75·0	78·5	66·1	59·1	60·9	61·9	57·8
7	81·1	54·8	70·4	76·8	78·5	65·1	62·0	64·6	63·8	58·4
8	85·0	58·3	69·7	76·5	80·7	66·5	63·0	65·6	68·3	61·4
9	90·7	55·2	74·5	84·8	88·1	74·3	62·2	64·8	70·5	68·9
10	81·1	61·8	67·3	77·1	74·9	68·9	61·5	63·5	62·2	60·6
11	77·9	57·8	69·4	75·1	75·4	62·3	58·2	59·7	60·2	56·7
12	80·0	50·1	71·0	76·5	75·6	62·1	60·0	62·9	61·5	55·0
13	88·2	53·1	74·6	83·8	80·8	72·1	63·8	68·0	70·7	67·6
14	85·5	65·9	72·2	78·6	80·2	66·2	65·2	67·8	68·2	63·0
15	70·7	57·0	58·4	63·7	70·5	58·5	57·4	57·0	57·6	50·6
16	68·8	48·1	60·2	64·6	65·8	60·7	52·0	53·0	54·3	52·6
17	67·9	54·4	62·5	58·7	62·6	60·7	55·3	57·9	60·0	56·9
18	68·9	56·3	62·5	63·8	62·4	59·4	57·9	57·4	58·0	54·8
19	69·9	52·0	62·4	66·6	66·6	61·6	57·4	58·7	58·2	56·9
20	68·9	54·7	59·5	63·5	66·9	62·8	57·3	60·4	63·4	60·6
21	70·9	58·6	65·6	67·7	68·0	58·6	61·1	59·9	62·6	53·1
22	71·3	52·5	62·6	65·8	69·3	57·4	55·0	55·0	55·8	51·2
23	69·3	50·3	62·8	66·5	60·6	56·2	55·8	56·7	55·8	54·9
24	65·9	54·2	56·8	63·4	58·3	59·6	55·7	58·6	56·6	54·9
25	67·0	49·7	57·5	62·7	61·4	57·6	51·9	54·7	55·6	54·5
26	72·6	57·1	64·6	63·0	67·2	57·7	61·3	60·8	60·9	55·2
27	70·9	52·8	63·1	68·3	57·7	53·9	56·5	56·9	54·2	50·8
28	67·4	51·7	59·6	62·9	64·1	54·3	53·0	53·7	52·3	48·8
29	59·2	47·6	53·1	57·2	56·1	58·0	52·0	54·9	54·4	56·3
30	65·8	48·2	55·9	61·7	63·5	52·0	48·1	50·9	51·9	47·0
31	68·0	43·9	59·3	64·7	63·6	51·4	52·2	53·7	52·5	48·1
Means	74·1	53·4	64·4	69·2	69·8	60·8	57·6	59·1	59·6	55·8

READINGS of THERMOMETERS on the ORDINARY STAND in the MAGNETIC PAVILION ENCLOSURE—*concluded.*

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

SEPTEMBER.

Days of the Month.	Dry Bulb Thermometers, 4 ft. above the Ground.						Wet Bulb Thermometers, 4 ft. above the Ground.			
	Maximum.	Minimum.	9h	Noon.	15h	21h	9h	Noon.	15h	21h
d	°	°	°	°	°	°	°	°	°	°
1	67·0	43·3	54·0	52·1	64·5	54·5	50·2	49·1	54·7	50·6
2	63·9	46·3	55·9	58·7	61·8	53·5	49·8	49·7	52·2	48·1
3	66·9	40·3	57·1	58·8	65·5	50·6	51·8	51·0	53·5	47·7
4	60·4	42·3	53·0	55·7	57·5	54·5	51·7	54·8	56·8	49·7
5	69·3	45·3	53·3	64·7	69·0	57·5	50·2	55·2	58·7	54·3
6	69·5	47·8	52·6	58·5	67·7	58·3	51·8	55·0	60·0	54·6
7	71·4	50·3	58·7	66·4	69·3	58·8	57·7	61·7	63·6	52·0
8	70·2	43·2	56·5	66·6	68·8	51·1	52·4	56·0	57·2	49·1
9	76·0	42·9	59·8	70·9	73·5	59·2	55·6	60·7	62·8	57·4
10	72·0	53·5	61·3	68·0	69·5	58·2	57·7	60·7	60·8	56·2
11	71·8	54·2	59·9	64·8	70·4	58·8	57·1	59·6	59·9	55·6
12	73·7	50·4	58·9	69·1	73·2	58·3	53·2	59·1	61·9	55·4
13	77·4	48·2	62·9	72·8	73·5	58·0	58·6	62·7	63·3	55·9
14	70·8	54·7	63·8	67·6	67·6	57·6	59·4	60·5	61·7	57·0
15	65·0	49·1	58·0	63·6	53·5	49·3	52·4	54·7	52·2	47·3
16	63·0	41·1	52·1	58·8	60·7	49·6	48·1	50·0	50·7	46·9
17	63·3	39·0	57·7	61·3	62·4	49·7	50·9	52·4	51·3	48·0
18	60·6	46·7	55·6	54·2	56·1	50·0	50·4	49·9	49·2	47·0
19	60·9	44·0	53·5	57·9	57·1	52·4	48·7	50·2	50·0	50·8
20	59·5	47·2	52·7	57·6	55·9	52·1	47·6	49·5	49·5	48·1
21	62·4	46·6	57·1	58·7	57·0	47·2	53·2	53·9	50·5	43·8
22	61·1	46·3	57·8	59·6	56·1	51·4	54·3	56·1	53·0	50·0
23	61·8	42·9	53·1	58·7	60·1	50·7	50·5	54·3	53·0	47·7
24	64·0	44·5	54·1	61·8	60·5	53·2	50·6	53·1	51·9	51·4
25	64·9	51·4	59·5	61·8	57·6	55·0	54·1	53·0	52·7	49·8
26	66·0	53·1	59·4	63·7	64·0	57·2	56·5	58·5	58·0	55·9
27	68·4	47·8	58·6	63·5	65·7	55·5	55·8	57·8	58·5	54·0
28	73·9	51·1	61·6	69·6	67·1	64·6	55·6	62·1	63·0	62·0
29	73·4	57·7	62·0	68·3	72·0	66·6	60·2	64·4	66·9	66·4
30	75·1	57·7	68·8	71·7	74·8	58·1	64·8	65·8	67·2	57·4
Means	67·5	47·6	57·4	62·8	64·4	55·1	53·7	56·1	56·8	52·3

OCTOBER.

Days of the Month.	Dry Bulb Thermometers, 4 ft. above the Ground.						Wet Bulb Thermometers, 4 ft. above the Ground.			
	Maximum.	Minimum.	9h	Noon.	15h	21h	9h	Noon.	15h	21h
d	°	°	°	°	°	°	°	°	°	°
1	58·8	52·4	57·1	57·5	57·9	57·7	56·8	56·4	56·8	56·7
2	60·9	49·7	54·5	59·9	57·3	50·5	50·5	54·4	53·9	48·8
3	51·1	41·5	47·8	46·5	42·8	43·8	44·8	44·7	41·8	42·4
4	54·6	43·7	48·2	53·7	53·0	44·4	45·2	46·4	45·8	41·0
5	50·9	33·5	43·3	49·1	49·3	47·4	40·8	43·7	43·8	44·6
6	59·0	47·2	52·6	54·7	56·8	49·6	51·9	49·5	49·8	47·8
7	61·7	45·4	52·1	58·3	56·3	54·1	49·9	52·8	52·1	52·8
8	60·2	51·5	55·5	58·5	57·6	53·9	53·2	52·5	50·2	53·4
9	67·8	52·3	62·7	65·2	60·9	52·5	60·1	58·8	51·9	48·8
10	62·0	51·6	54·4	57·1	61·0	60·4	51·9	54·8	59·2	58·7
11	61·1	49·6	52·6	54·1	53·1	49·7	50·8	51·8	51·6	48·5
12	57·4	47·4	52·7	57·3	54 0	47 6	52·5	55·9	54·0	46·0
13	55·9	42·0	48·2	51·7	52·3	47·0	44·3	46·3	46·7	44·8
14	53·3	36·8	44·9	51·6	46·7	42·2	42·7	46·7	43·8	40·5
15	55 8	34 3	42 8	51·7	54·4	39·4	40·7	46·5	46·8	38·5
16	55·5	38·9	48·2	55·1	53·6	49·5	44·7	49·3	48·8	47·7
17	56·9	47·5	53·1	54·9	54·6	50·4	50·3	49·6	51·1	49·2
18	58·3	41·8	52·6	52·5	55·9	55·1	49·9	49·9	51·5	53·6
19	66·6	48·5	63·0	64·6	55·4	49·1	59·8	61·3	54·8	48·6
20	58·3	47·2	50·6	56·9	55·8	51·5	49·4	50·4	50·1	49·0
21	59·2	46·7	55·8	57·5	53·8	47·0	53·2	54·0	51·9	44·9
22	58·0	49·7	51·7	55·4	47·6	47·6	47·0	48·4	46·5	44·8
23	58·1	46·1	52·3	57·1	55·6	48·6	51·8	56·7	54·3	45·5
24	58·2	45·2	50·5	54·3	55·7	48·6	46·8	47·6	49·5	46·4
25	59·3	47·2	54·1	56·2	55·4	47·9	49·3	49·4	49·3	45·8
26	58·4	43·6	48·2	54·4	57·2	50·9	47·2	47·9	51·0	48·9
27	59·8	50·3	52·3	55·6	55·6	53·1	50·8	52·9	50·0	48·4
28	59·9	49·3	52·6	56·8	56·1	49·7	49·9	50·8	51·1	47·2
29	58·4	42·5	50·7	56·9	55·4	52·6	47·2	51·0	49·8	49·3
30	56·3	52·2	54·4	54·7	55·8	54·6	52·2	52·9	53·0	53·4
31	55·4	42·0	49·5	53·1	54·1	42·3	48·8	48·9	48·5	41·7
Means	58·3	45·7	51·9	55·6	54·5	49·6	49·5	51·0	50·3	47·7

NOVEMBER.

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

DECEMBER.

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

AMOUNT of RAIN COLLECTED in each MONTH of the YEAR 1923.

Gauges partly sunk in the ground in the Magnetic Pavilion Enclosure.	Gauge Number.	Monthly Amount of Rain collected in each Gauge. January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Sums.	Height of Receiving Surface. Above the Ground.	Above Mean Sea Level.
		in.	in.	in.	in.	in.	in.	in.	in.	in.	in.	in.	in.	in.	ft. in.	ft. in.
	6	1·049	2·654	2·199	1·371	1·937	0·476	2·594	1·907	1·185	5·033	1·642	1·899	23·946	0 5	149 6
	8	1·033	2·641	2·202	1·350	1·912	0·468	2·567	1·889	1·165	4·996	1·632	1·894	23·749	1 0	150 1
Number of Rainy Days (0.005in.or over).	..	12	21	18	12	13	9	11	10	12	23	12	18	171	..	..

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,	1923. January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Mean for the Year.
h	miles.	miles.	miles.	miles.	miles.	miles.	miles.	miles.	miles.	miles.	miles.	miles.	miles.
1	12·6	12·7	9·1	9·2	9·5	9·6	9·2	11·3	9·0	12·1	11·1	11·6	10·6
2	12·5	12·6	9·3	9·3	8·9	9·3	9·1	10·6	9·4	12·5	11·0	11·3	10·5
3	13·4	13·8	9·9	9·1	9·8	9·8	8·5	10·6	9·6	12·6	11·6	11·4	10·8
4	13·0	13·1	9·3	8·7	9·3	9·8	8·3	10·4	9·0	12·9	10·3	10·8	10·4
5	13·0	13·3	8·9	9·3	9·7	9·9	8·6	10·2	9·5	12·7	9·8	10·8	10·5
6	12·5	13·2	8·5	9·6	9·0	10·4	9·1	10·4	9·5	13·1	10·6	11·4	10·6
7	12·4	13·2	8·4	10·4	10·2	11·1	9·5	10·4	9·1	13·5	10·5	11·0	10·8
8	12·8	12·9	9·3	11·1	10·5	11·2	10·2	11·1	9·3	13·1	10·6	11·7	11·2
9	12·5	13·5	10·1	12·1	12·5	12·3	12·0	12·4	11·2	14·6	10·8	12·0	12·2
10	13·0	14·1	10·5	12·6	11·6	11·9	12·0	13·6	12·0	16·6	11·9	11·9	12·6
11	12·8	14·2	11·6	13·2	12·4	12·5	12·8	13·9	12·5	17·7	12·3	12·2	13·2
Noon	14·2	15·3	12·6	14·0	14·2	13·3	13·8	15·1	14·3	18·4	12·5	12·5	14·2
13h	14·1	14·3	13·4	12·9	13·5	12·5	12·8	15·0	13·7	17·5	13·5	12·9	13·8
14	14·6	15·3	14·2	14·8	14·3	12·8	13·2	16·1	13·9	18·2	14·8	13·4	14·6
15	14·5	13·6	13·6	13·8	14·0	12·4	12·9	15·2	13·0	17·3	13·9	13·1	13·9
16	14·8	13·3	13·9	15·2	14·2	13·0	13·5	15·9	13·4	16·9	13·2	12·5	14·2
17	13·4	12·4	12·2	13·9	13·8	13·4	13·2	15·2	12·9	15·3	12·4	12·1	13·3
18	13·9	12·1	12·0	13·3	13·4	13·1	13·3	14·3	11·9	13·5	12·5	12·3	13·0
19	14·1	13·0	10·5	12·1	13·2	12·1	12·6	14·4	11·5	13·9	12·3	12·7	12·7
20	13·6	12·9	9·5	11·1	11·6	10·9	11·2	12·2	10·5	13·1	11·7	12·0	11·7
21	13·5	12·5	9·1	10·6	11·0	10·1	10·4	11·7	11·1	12·5	11·3	12·1	11·3
22	13·7	13·2	9·7	10·7	12·3	10·3	11·7	12·3	11·2	13·5	11·6	13·1	11·9
23	13·0	12·6	8·9	9·8	10·6	9·8	10·5	11·4	9·7	12·8	11·7	12·2	11·1
Midnight	13·2	12·5	9·0	9·7	9·7	10·0	10·2	10·8	9·0	11·5	11·1	12·3	10·7
Means	13·4	13·3	10·6	11·5	11·6	11·3	11·2	12·7	11·1	14·4	11·8	12·1	12·1
Greatest Hourly Measures (1)	32	34	28	33	34	31	27	40	30	35	44	30	..
Greatest Hourly Measures (2)	25	27	23	26	27	25	22	31	24	27	33	24	..

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

MONTHLY MEAN VALUES of the ATMOSPHERIC POTENTIAL GRADIENT for every HOUR of the DAY.

Potential expressed in volts per metre above earth's surface.

Month. 1923.	0h	1h	2h	3h	4h	5h	6h	7h	8h	9h	10h	11h	Noon.	13h	14h	15h	16h	17h	18h	19h	20h	21h	22h	23h	24h	Mean
	v.	v.	v.	v.	v.	v.	v.	v.	v.	v.	v.	v.	v.	v.	v.	v.	v.	v.	v.	v.	v.	v.	v.	v.	v.	v.
July ...	100	78	58	55	42	42	55	105	170	230	227	225	230	225	198	172	185	202	180	160	165	145	128	100	145	
August ...	143	128	117	112	115	133	170	215	260	265	242	223	205	200	195	193	225	252	245	233	245	228	212	173	197	
September	190	173	155	132	140	152	183	220	252	248	272	243	245	242	230	242	240	285	312	300	275	245	227	205	225	
October...	190	165	143	140	140	140	157	190	228	245	250	275	260	262	273	268	317	330	335	288	263	242	223	198	230	
November	218	202	193	180	178	202	233	267	302	308	275	308	305	320	318	310	310	318	315	297	290	280	263	260	269	
December	288	210	228	262	258	252	263	260	238	228	260	340	357	375	370	355	363	375	380	365	363	347	300	260	304	