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RESULTS OF THE MAGNETIC & METEOROLOGICAL OBSERVATIONS

MADE AT THE

ABINGER MAGNETIC STATION, SURREY

AND

THE ROYAL OBSERVATORY, GREENWICH

RESPECTIVELY

IN THE YEAR

1930

UNDER THE DIRECTION OF

SIR FRANK DYSON, K.B.E., Sc.D., D.Sc., LL.D., F.R.S.,

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THE ROYAL OBSERVATORY, GREENWICH

AND

ABINGER MAGNETIC STATION, SURREY.

MAGNETIC AND METEOROLOGICAL OBSERVATIONS, 1930.

Introduction.

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

Personal Establishment and Arrangements.

During the year 1930 the staff employed in the Magnetic and Meteorological Department of the Royal Observatory consisted of W. M. Witchell, Superintendent, W. Stevens, G. F. Wells, P. L. Rickerby and three computers. Computers employed during the year were :—D. Oliver, F. W. Reece, N. Harrild and Miss E. W. Clack.

In consequence of the electrification of the railways in the neighbourhood of Greenwich, magnetic observations are now carried on at an out-station about six miles from the town of Dorking in Surrey, and one and a half miles from the village of Abinger. Mr. Stevens, resident observer and assistant-in-charge, is assisted by Mr. Rickerby.

The Magnetic Station at Abinger, near Dorking, Surrey.

The Station was established in 1924 on a site on the northern slope of Leith Hill. It is approximately 26 miles from the Royal Observatory in a direction a little south

of south-west. The geographical position is Latitude 51° 11′ 5″ N., Longitude 0° 23′ 12″ W.; and the height above sea level is approximately 800 feet. The nearest railway track approaches to about $2\frac{1}{2}$ miles.

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

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

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

A smaller pavilion, measuring 16 feet by 12 feet, erected in 1926 for the testing and standardising of magnetic instruments (work formerly carried on at Kew Observatory), is situated about 40 feet south-east of the Magnetic Pavilion, and contains three concrete piers passing through the floor without contact. The unifilar magnetometer, mounted until August 1928 in the Magnetic Pavilion, is at present used in the Testing Pavilion.

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

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

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

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

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

It should be mentioned that in order to dispense with the necessity of continuously running an alternator in circuit with the storage battery, the illuminating lamps for the recording drums and also the hourly-signal lamps are lit by *direct* current, special care being taken with the return circuit. Experiments have shown that, with the precautions taken, the effect of this current on the variometer records is negligible. Alternating current for heating the chamber or for general illumination is supplied as required, the alternating generator being started and stopped automatically by the thermostat at the same time as the heating circuit is switched in and out. Very considerable saving in running cost is effected by this device.

THE INSTRUMENTS AT ABINGER.

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

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

The magnet is suspended by tungsten wire, of diameter 0·02 mm. Frequent reversals are made to eliminate the collimation error of the magnet from the results, and the position of torsional zero of the suspension wire is also frequently checked. 90° of torsion deflects the magnet about 3′ of arc.

ABSOLUTE HORIZONTAL FORCE INSTRUMENTS.

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

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

A hollow marble cylinder of 50 cms. diameter rests, with its axis horizontal, on a brass support which can be turned in azimuth. The azimuth may be read to 10″ of arc from a graduated circle on the base-plate, by the usual vernier attachment. On the periphery of the cylinder, near each end and at a mean distance of 25 cms. from each other, are two windings, in series, of ten turns of bare silver wire, the method of winding the ten loops in a double spiral being that adopted in the original instrument

referred to above. The whole forms a Helmholtz-Gaugain system at the centre of which a very uniform magnetic field parallel to the axis exists when an electric current is passing through the coils.

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

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

Situated outside the observing pavilion, at the south-west corner, is a storage battery of 25 cells which produces the current required for the observation. The amount of current employed is very accurately adjusted to a specific quantity by rheostat according to the indications of a Broca galvanometer in a potentiometer circuit in which the E.M.F. across a known resistance is balanced against that of a Weston standard cell.

Every precaution is taken in arranging the circuits both to eliminate accidental magnetic fields and to secure the highest degree of insulation. The latter has been found, in practice, to be of great importance, especially as regards the insulation of the galvanometer circuit, as any stray current here will lead to a difference of potential between the terminals of the standard cell and the standard resistance. It is desirable that the resistance of the galvanometer should be as low as possible consistent with sensitivity.

Theory of the observation :—

If a horizontal magnetic field whose intensity is slightly greater than that of the earth is imposed at an angle of nearly 180° with the earth's field, a position angle can be found at which the resultant of the two forces becomes directed at right angles to the earth's field. The intensity F, of the imposed field, and its angle α with the earth's field being known, the horizontal intensity of the earth's field can then be calculated from the simple relation : $H = F \cos \alpha$.

An observation proceeds as follows :—

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

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

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

After preliminary details have been gone over, a complete observation of horizontal intensity is readily obtained in two minutes.

The constants of the coil and of the potentiometer at various standard temperatures have been precisely determined by the National Physical Laboratory and are checked from time to time. The electrical constants on which the reduction of observations made in 1930 is based were verified in April 1930 and again in January 1931. The factor at present adopted to convert the measure from international units of current to C.G.S. units is 0·99997.

If F be the factor of the coil and i be the current passing in ampères, then the intensity of the field at the centre of the coil in γ units is $Fi \times 10^4$. The adopted value of the factor "F" of the coil is $3{\cdot}59570\ (1—4{\cdot}3t \times 10^{-6})$, t being temperature Centigrade.

The observed values of horizontal force obtained with this instrument are subject to a correction of -2γ for the effect of the field of the declination magnet which is suspended permanently at a distance of about 12 feet geographically to the north. The effect was determined experimentally by reversal of the magnet. The application of the correction is made in the reduction of the observations.

A KEW-PATTERN UNIFILAR MAGNETOMETER by Messrs. C. F. Casella & Co. (No. 181) is also in occasional use to determine absolute horizontal force. Deflection observations are made at three distances, namely, 22·5 cms., 30 cms. and 40 cms. 9 observations of the moment of inertia of the collimator magnet were made during the year 1930. The mean observed value of log. K from these determinations, 2·42406 has been used in the reductions and is based on the Greenwich Standard Inertia Cylinder. (See Appendix II of the Magnetic Results, 1926).

The adopted values of the distribution constants P and Q derived from 33 determinations made during the same period are +10·34 and −1652 respectively.

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

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

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

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

The observation consists in an adjustment of the current until the artificial field imposed at the centre of the coil exactly annuls the vertical component of the earth's field. The intensity of this component is then easily calculable from a knowledge of the dimensions of the coil and the amount of current indicated by potentiometer measurement. (*c.f.* p. D 13).

The adopted Constant of the Coil is $F=3{\cdot}59643\ (1-7{\cdot}9\ t\times10^{-6})$.

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

This consists of a diamond-shaped vibrating test-coil about 2 cms. long suspended by bronze strip stretched horizontally between two supports and carrying a light plane mirror. The principle of the instrument requires that the axis of rotation of the detector coil should be horizontal, and its plane vertical in the equilibrium position. The method of securing these adjustments is included in the full description of the instrument mentioned above.

A weak alternating current, supplied from a generator at some distance from the instrument, passes through the test coil. The reaction between this current and the magnetic field causes the coil to receive an alternating rotatory force which will only vanish when the vertical field is annulled. The resulting vibration is brought to a maximum by adjustment of the generator frequency to synchronism with the natural frequency of the coil (about 15 per second), and high sensitivity is thus obtained. Microscopic vibration is exhibited by projection, from the mirror, of an image of cross wires to a screen erected about 2 metres distant.

ABSOLUTE INCLINATION INSTRUMENT.—An Earth Inductor by The Cambridge Instrument Co., in conjunction with a Broca galvanometer, is used to determine magnetic inclination. About six determinations are made each week. Observations are made in four positions to eliminate any small errors arising from slight asymmetry in the instrument. After the first adjustment, the coil-support is reversed about a horizontal axis and a second adjustment is obtained : the instrument is then reversed in azimuth and two further adjustments are made. The circle for the measurement of Inclination is 8 inches in diameter, and is read by means of screw micrometers to one second of arc. The levels on the base can likewise be read to one second. A detailed description of the Dip Inductor will be found in the volume for 1915. Since 1929, January 1, the observations of Inclination have not been used for determination of vertical force.

THE DECLINATION VARIOMETER.—The magnet is a single short needle of chromium steel, 10 mm. long and 0·4 mm. in diameter. The mirror for reflecting a beam of light on to the recording drum is of platinised quartz, $2\frac{1}{2}$ mm. square, and is fastened by shellac to a small piece of stout aluminium foil. The foil is shaped above the mirror to form two small V hooks, by which it is hung on to the magnet. A small mica damping vane is fixed to the foil below the mirror, and the needle is rendered aperiodic by adjusting brass damping plates on either side of the vane. Adjustment of the beam of light is made solely by adjusting the position of the illuminating lamp, which has sliding attachment to a vertical wooden pillar capable of being fixed in any desired position in the room.

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

The focussing lens is mounted in the side of the magnet chamber and a plane glass window admits light through the brass covering-cylinder. A base-line mirror similar to the magnet-mirror is mounted within the magnet chamber on a small brass prism resting on a shelf fixed to the back plate of the chamber in such a position that it is at the same height as the magnet-mirror and about one centimetre to the right. Adjustment is obtained by two point-ended screws passing through the back plate and forming two of the supports of a three point system. The distance of the magnet-mirror from the recording cylinder is such that the geometric scale-value at the centre of the photographic sheet is 0′·610 per mm. As the beam is not normal to the drum, however, the scale value varies from 0′·605 at the top of the sheet to 0′·615 at the bottom. Expressed as magnetic force the corresponding mean scale-value would be $3{\cdot}29\gamma$ per mm. at the present time.

THE HORIZONTAL FORCE VARIOMETER.—In setting up this variometer the decision was taken to revert to the former Greenwich practice of recording horizontal force instead of the north component (recorded from 1915 to 1926). The general construction of the instrument is in all respects similar to that of the declination variometer. The suspension filament is of quartz ·012 mm. diameter. The needle is adjusted to a position at right angles to the magnetic meridian by means of the torsion head in the following manner. Orientation marks have been drawn on the western wall of the room subtending successive degrees of azimuth at the centre of the variometer pier. An ordinary magnetometer distance-bar securely held beneath the base of the variometer in a wooden frame is by this means easily set at right angles to the magnetic meridian, and upon it is placed, about 25 cms. from the variometer, the usual carrier

with a magnet mounted in position. A relatively strong magnetic field is thus imposed at right angles to that of the earth, and the torsion head is adjusted until the needle of the variometer is negligibly disturbed by the reversal of the imposed field. The magnet is then transferred to an equal distance on the opposite side of the variometer, and the experiment is repeated. Any error due to imperfect correspondence of the centre of the distance-bar with the point of suspension of the variometer needle is eliminated by setting the torsion head to the mean position.

An adjustment of orientation was made on August 24, 1927, and the needle is considered to be still within 20′ of the correct azimuth.

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

The adopted scale value was $2{\cdot}60\gamma$ per mm. between April 1 and November 17, and $2{\cdot}62\gamma$ per mm. for the remainder of the year.

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

The magnet system consists of two magnets, 8 cms. long and 1 mm. in diameter, which are attached by small platinum stirrups to two rods of fused quartz; these are fused to a quartz plate, the upper surface of which is optically worked and platinised to form a plane mirror. The quartz rods are drawn out at their other ends into fibres

of about 0·008 to 0·010 cm. diameter ; one of these is fused to a coiled quartz spring. The quartz spring and the other fibre are soldered to small brass rods fitting into clamps at the two ends of the metal base. The thread is under sufficient tension to stretch the spring through about two millimetres. A right-angled prism is supported in a frame above the mirror, so as to reflect the light in a horizontal direction ; a single lens is placed beneath to focus the light on the recording drum. The prism frame is adjustable in azimuth in order to enable the trace to be brought to any desired part of the sheet. An adjustable mirror beneath the quartz fibre and adjacent to the mirror of the magnet system serves to give a base line.

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

The degree of sensitivity to which the variometer was at first adjusted was rather high and seemed to be gradually increasing. It was diminished to about one-third on 1926, September 14. The scale value is obtained by electro-magnetic deflections. The radius of the coil used in these experiments is 30·15 cms. The mean of the scale values adopted in 1930 is 2·45$_\gamma$ per mm. Slight deviations from this value occur when the standard temperature of the room is raised or lowered from the mean. The value is sensibly uniform over the range allowed by the photographic sheet.

MAGNETIC REDUCTIONS.

The time used is Greenwich Mean Time.

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

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

In the case of declination, ten observations are made, on an average, each week-day, and four in the case of horizontal intensity. Previous to 1929 the base-line value for vertical force traces was computed from absolute observations of Inclination combined with simultaneous values of horizontal intensity taken from the magnetograms. From 1929, January 1, the values have been obtained directly from observations of vertical intensity with the Coil-magnetometer.

There is evidence that the values of Inclination observed with the Inductor have been systematically too great. The error is connected with the practical difficulty of adjusting the bearings of the revolving coil so that the coil may spin freely and yet its axis may have no freedom to move from the line which is assumed for its position relative to the graduated circles. The amount in 1928 was in the neighbourhood of 0′·9. It was not considered practicable to make a retrospective correction for this, and consequently a discontinuity arises in the definitive values of vertical force at the time of changing the method of deriving the base-line value of the magnetograms.

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

Disturbed Days.—No day in the year 1930 is classed as a day of great disturbance. Days of lesser disturbance in conformity with the list issued by the International Committee from De Bilt Observatory, Holland, are February 12–13 ; March 12 ; May 5, 31 ; June 16–17 ; July 9–10 ; September 18–19 ; October 17–18 ; November 25–26 ; December 3–4. Where two days are mentioned together, it is to be understood that the reference is to a series of 24 consecutive hours comprising parts of two consecutive days.

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

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

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

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

From the inequalities in declination, horizontal force and vertical force, corresponding inequalities in north force, west force and inclination have been computed and appear at the same opening of the page. In general, the computations are carried to one significant figure beyond the actual figure printed.

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

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

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

Table XII contains the mean monthly and annual values of the components of magnetic force collected together. In this table corrections have been applied, when necessary, to the values of H.F. and V.F. taken from Table IV, to remove the effect of any small secular changes in potentiometer constants found at the periodical re-measurement of the constants at the National Physical Laboratory.

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

Reduced copies of the magnetograms for certain disturbed days have been in each volume since 1882. The days are now those selected by an International Committee the time-limits of the traces being determined in consultation with the Director of

Val Joyeux Observatory, University of Paris, with a view to the comparison of the results of the two stations.

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

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

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

On p. D 60 is printed a table giving the mean annual values of Magnetic Elements determined at the Royal Observatory, Greenwich, over the whole period of observation, together with those determined at the Abinger Station since 1925.

F. W. DYSON.

ROYAL OBSERVATORY, GREENWICH.

1931, *June* 20.

ROYAL OBSERVATORY, GREENWICH.

ABINGER MAGNETIC STATION.

Results of Magnetic Observations

1930

GREENWICH MAGNETIC AND METEOROLOGICAL RESULTS 1930

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

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

* Denotes an International Quiet Day. ** Denotes an International Disturbed Day.

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

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

* Denotes an International Quiet Day. ** Denotes an International Disturbed Day.

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

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

* Denotes an International Quiet Day. ** Denotes an International Disturbed Day.

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

July. 12° + 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
	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′
1	24·1	21·9	23·4	21·9	23·2	22·9	21·4	20·4	20·3	21·3	23·6	26·9	27·7	29·9	29·9	29·2	28·9	26·4	27·4	25·3	24·3	23·4	21·4	21·4	
2	21·5	22·0	21·6	21·2	22·5	22·9	20·5	20·5	21·1	22·8	24·9	26·8	27·3	30·6	30·6	29·2	29·5	29·1	26·9	23·6	22·9	23·6	25·6	21·9	
3	20·7	20·7	22·7	23·1	21·4	20·1	21·4	21·7	22·3	22·5	23·7	25·7	28·5	29·5	29·7	27·8	27·6	27·5	26·8	22·0	23·1	22·2	24·8	24·1	
4	22·8	23·1	22·8	21·5	20·5	20·4	20·5	20·7	24·5	25·3	26·8	27·8	27·8	28·8	28·8	29·3	29·4	26·8	24·8	26·1	26·9	24·8	25·6	21·8	
5	19·8	20·8	22·7	22·2	21·5	19·8	21·1	19·8	20·9	22·8	25·0	28·6	30·0	30·1	29·0	27·2	26·4	25·1	25·4	24·0	23·9	24·5	23·9	24·9	
6	22·8	22·4	25·7	26·8	23·5	20·5	20·4	20·9	21·8	22·9	25·8	28·8	30·6	31·4	29·6	27·9	25·9	25·4	24·5	24·4	24·1	23·9	23·9	23·9	
7	23·7	23·4	23·9	22·7	21·2	19·2	17·9	17·6	19·6	23·3	25·7	27·8	29·9	30·0	28·4	27·0	25·9	25·2	25·2	20·3	22·4	24·2	24·2	24·0	
8*	23·8	24·7	24·0	22·4	21·9	21·0	21·3	22·3	22·5	22·9	24·9	26·7	28·5	28·3	27·5	25·9	25·9	24·9	24·9	25·3	25·5	24·9	22·5	22·9	
9	22·7	24·0	22·8	22·6	21·0	20·0	20·4	21·0	20·4	21·3	24·0	27·0	28·6	29·0	28·5	29·8	31·1	32·1	33·9	33·9	28·9	26·5	24·3	24·6	
10**	22·6	16·1	20·1	25·3	17·4	20·2	19·7	21·5	21·5	24·7	27·7	29·1	30·9	31·2	31·3	29·5	28·1	23·9	24·5	26·1	25·7	20·6	21·7	20·5	
11**	19·0	18·6	22·1	24·3	14·0	16·0	16·1	17·8	19·0	21·1	23·7	25·3	26·8	28·3	29·3	28·2	26·3	26·8	26·2	22·7	20·4	19·4	24·7	23·7	
12**	23·4	21·7	20·6	22·2	26·6	29·6	27·0	24·0	19·6	21·6	24·5	25·9	28·8	29·4	30·0	26·0	27·0	27·0	25·2	22·9	16·2	16·7	21·7	25·1	
13**	26·0	23·3	25·0	24·7	25·9	25·0	24·0	21·6	22·3	23·0	25·1	27·7	28·3	27·5	29·9	27·3	24·4	24·2	25·0	23·2	22·9	22·9	24·9	22·9	
14	24·4	21·7	22·0	21·0	21·1	22·0	20·5	19·3	19·1	20·7	23·5	27·1	28·6	29·2	29·3	27·7	25·7	25·2	24·1	22·3	23·2	23·8	23·6	23·3	
15	23·9	26·0	24·1	23·4	23·7	22·4	21·8	20·4	21·4	23·4	24·2	27·0	28·5	27·5	26·5	25·1	23·1	21·9	24·5	25·5	25·2	25·0	23·5	23·1	
16	24·2	22·5	23·0	23·5	22·5	21·8	23·5	27·2	27·0	27·5	29·5	29·5	30·4	32·3	31·2	30·8	28·9	27·4	25·4	20·4	19·2	22·4	23·9	26·9	
17	25·1	19·1	22·1	19·9	18·9	18·4	22·9	23·9	22·4	21·9	22·7	22·9	24·3	24·3	23·3	24·3	24·3	23·1	24·1	25·7	24·9	24·3	23·3	23·3	
18	22·3	22·1	22·4	22·4	22·6	24·3	26·5	25·7	23·3	22·3	23·6	25·6	27·8	28·0	27·3	25·0	26·1	26·0	26·3	25·1	24·3	24·6	24·3	24·3	
19	23·6	22·7	24·1	22·7	20·3	19·1	19·6	20·6	21·9	23·3	25·2	26·1	27·9	28·7	28·3	26·1	25·3	25·3	25·5	25·3	21·4	22·5	22·6	21·3	
20*	21·4	22·2	21·6	23·8	22·3	20·7	21·6	22·5	23·3	24·0	24·8	26·3	27·2	26·3	26·5	26·3	26·8	27·3	27·0	26·3	24·3	24·8	24·3	23·8	
21*	24·2	24·9	23·2	22·2	21·5	22·2	26·2	27·0	24·2	23·0	22·2	22·7	24·2	25·2	25·8	26·0	25·2	25·2	25·2	24·0	24·2	23·8	23·7	23·2	
22*	23·6	23·1	23·2	22·6	21·9	20·1	20·6	20·5	21·5	23·5	25·8	29·1	30·2	30·8	28·6	27·1	26·4	26·5	25·8	23·4	22·4	24·1	25·3	25·9	
23*	25·6	24·7	23·8	23·1	22·1	20·5	20·1	20·1	21·6	23·4	25·1	27·4	28·0	27·7	27·4	26·0	26·0	25·4	24·0	23·8	25·3	25·7	25·0	24·4	
24	23·2	23·1	24·4	23·9	22·2	21·6	20·9	20·4	22·0	23·1	24·8	25·7	26·9	27·1	26·1	25·9	25·1	25·0	26·1	25·7	25·8	23·6	23·1	20·8	
25**	17·1	9·6	12·8	13·1	15·1	13·4	11·8	15·1	18·1	21·6	27·1	31·2	33·1	33·8	30·3	29·3	29·1	22·2	23·6	23·7	24·8	20·7	18·8	21·7	
26	23·1	20·2	18·6	20·1	17·4	23·5	24·6	25·9	21·5	23·1	25·6	28·1	28·1	29·5	27·1	26·1	26·1	25·7	21·1	23·7	24·4	24·4	23·7	22·8	
27	20·3	19·1	18·7	21·0	21·1	19·8	18·8	19·1	20·1	21·1	23·1	25·8	26·7	27·9	27·2	24·6	24·7	24·3	22·2	24·0	24·7	24·3	21·5	22·5	
28	21·1	18·8	21·3	20·3	18·8	18·5	18·7	19·4	19·4	21·1	24·5	28·5	30·5	30·5	29·1	28·7	25·8	25·9	26·0	25·9	18·9	22·2	22·9	22·6	
29	22·3	20·8	22·3	24·3	21·0	18·9	18·7	18·3	18·8	20·8	23·3	27·0	28·9	31·3	32·0	30·4	27·9	26·9	25·3	22·9	24·6	23·3	22·5	21·3	
30	21·7	21·8	21·4	21·0	22·0	19·0	20·9	24·7	25·4	22·6	23·9	25·0	27·2	27·8	27·4	26·5	28·3	25·5	26·5	25·9	24·2	23·5	22·7	21·9	
31	21·9	19·2	19·5	20·4	22·4	21·2	21·5	20·8	21·4	22·9	23·9	25·2	27·5	28·8	28·4	27·3	26·2	25·8	25·0	22·7	20·2	23·4	23·1	23·1	
Mean	22·6	21·4	22·1	22·3	21·2	20·8	21·0	21·3	21·6	22·7	24·8	26·6	28·4	29·1	28·5	27·3	26·7	25·8	25·4	24·4	23·5	23·4	23·5	23·2	
Mean*	23·7	23·9	23·2	22·8	21·9	20·9	22·0	22·5	22·6	23·4	24·6	26·4	27·6	27·7	27·2	26·3	26·1	25·9	25·4	24·6	24·3	24·7	24·2	24·0	
Mean**	21·6	17·9	20·1	21·9	19·8	20·8	19·7	20·0	20·1	22·4	25·6	27·8	29·6	30·0	30·2	28·1	27·0	24·8	24·9	23·7	22·0	20·1	22·4	22·8	

August. 12° + 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
	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′
1	23·6	24·6	22·2	18·9	20·6	20·0	19·1	19·2	19·6	19·7	21·0	24·3	27·6	28·6	29·3	28·0	27·2	26·6	24·9	24·6	24·6	23·9	22·9	23·0	
2*	21·8	21·8	22·0	22·7	23·7	23·1	21·7	21·7	20·8	22·0	23·9	28·1	29·8	30·8	30·5	29·8	28·8	26·4	24·6	24·8	23·8	23·8	23·7	23·3	
3*	23·4	22·8	22·6	22·1	22·6	20·5	20·0	20·4	21·4	22·4	23·8	25·9	27·8	29·2	28·4	27·3	26·2	26·2	24·8	24·6	24·8	23·1	22·2	20·4	
4*	21·4	20·9	21·7	20·7	22·0	20·8	21·5	21·0	21·2	22·8	24·9	27·2	29·3	29·4	28·7	27·2	25·6	24·5	23·8	24·1	23·2	23·6	22·3	21·7	
5	21·1	21·2	21·4	20·7	19·7	19·2	19·7	19·7	20·4	22·2	24·7	26·4	28·4	30·7	29·7	28·4	27·7	25·7	24·7	23·2	21·7	23·3	21·7	23·2	
6**	22·2	26·6	23·6	20·6	24·7	31·6	32·0	24·4	26·6	27·1	27·2	28·6	32·0	32·8	34·6	25·6	28·6	25·0	21·9	20·6	14·6	18·6	22·4	23·6	
7**	17·4	20·6	21·5	18·6	18·3	23·6	25·6	26·2	26·4	26·2	25·6	27·6	28·2	29·6	28·2	26·8	26·6	25·6	20·1	19·6	22·9	23·1	18·3	18·2	
8**	15·6	15·5	22·1	18·4	22·6	21·8	21·6	21·2	23·0	22·9	23·6	26·0	29·6	32·0	29·2	28·7	26·8	22·6	22·9	21·7	22·9	22·2	22·0	21·9	
9**	26·3	26·6	29·3	24·6	23·6	30·0	23·6	23·0	22·2	24·0	24·6	25·6	26·6	25·6	25·1	24·2	24·2	22·0	23·6	21·2	21·3	18·1	23·6	20·6	
10	20·3	22·0	22·2	23·4	23·0	23·6	22·7	21·9	21·9	22·3	22·5	25·1	26·8	26·5	26·9	26·0	26·2	19·2	24·5	23·4	23·9	23·2	21·6	17·4	
11	16·0	20·0	24·7	24·3	24·3	21·0	21·0	20·6	20·1	22·8	25·0	29·0	29·4	27·7	27·8	25·2	24·5	23·5	20·5	21·6	17·5	22·1	22·1	23·1	
12**	23·6	23·3	24·7	27·0	26·0	22·7	20·2	21·8	20·6	21·2	24·1	26·9	29·6	29·2	28·2	26·2	22·2	21·6	20·6	18·2	19·6	20·2	21·4	18·5	
13	21·4	27·1	24·2	20·2	22·2	25·2	22·0	22·8	23·2	24·5	26·5	26·2	25·2	25·4	26·6	25·5	25·2	20·8	23·2	23·3	23·8	23·2	23·2	22·9	
14	25·9	23·3	24·8	23·3	21·6	21·2	22·8	21·2	22·6	22·7	25·2	27·2	26·9	26·8	26·8	25·9	24·2	23·6	22·2	21·2	9·2	20·6	22·2	21·6	
15	23·6	23·5	21·0	20·1	21·1	27·6	25·8	25·1	25·1	24·5	25·8	—	—	—	—	—	—	—	—	—	—	24·0	23·4	23·1	
16	22·5	22·5	23·9	24·7	24·4	23·9	25·5	25·4	24·4	24·5	24·5	25·8	26·8	27·3	28·8	29·2	28·8	26·1	23·2	21·9	20·8	22·8	22·8	18·8	
17*	19·2	21·5	21·8	22·7	21·5	20·5	20·2	20·2	21·2	22·3	23·8	26·3	28·5	29·4	30·1	28·0	26·7	26·0	23·7	21·8	23·9	22·8	24·7	24·3	
18	20·9	22·1	23·7	22·4	21·0	20·4	20·2	20·5	21·2	23·0	24·3	26·7	27·2	27·9	27·0	25·4	24·5	22·9	23·6	22·1	19·8	20·1	17·3	19·8	
19	20·3	21·7	26·2	21·7	19·7	20·0	19·7	21·0	23·6	28·7	31·9	31·9	31·7	32·0	28·3	27·6	23·0	23·3	24·0	23·9	23·8	24·5	23·6	23·2	
20	23·1	23·3	24·6	22·3	20·3	18·4	18·7	18·7	20·1	22·2	25·2	27·2	28·2	28·1	28·4	27·0	26·2	24·2	24·7	23·7	17·2	18·4	23·2	23·4	
21	21·7	20·6	19·4	19·9	19·6	19·6	20·6	20·8	21·6	23·0	24·9	27·6	28·8	27·6	29·2	30·6	27·3	27·7	26·6	23·8	19·7	19·1	21·7	20·3	
22	20·5	19·4	16·5	24·5	19·6	18·2	19·5	21·3	21·5	23·0	25·5	27·5	28·5	29·1	28·0	25·8	24·2	24·3	23·8	23·6	20·1	23·7	21·6	25·5	
23	22·4	17·5	20·9	22·4	19·1	18·1	16·9	18·4	19·1	20·3	22·9	26·9	30·4	31·6	29·4	27·3	24·4	21·7	23·4	21·5	18·6	16·4	21·0	22·9	
24	25·4	20·5	18·8	22·2	21·2	20·0	18·8	18·5	19·2	21·1	24·0	26·0	29·8	30·1	30·1	27·1	24·7	23·5	24·2	24·1	21·3	19·2	20·6	24·3	
25	23·4	22·6	21·8	22·6	22·6	20·2	19·2	17·9	18·4	21·5	25·4	29·1	31·4	30·6	30·1	27·2	25·0	23·4	23·6	22·6	20·6	22·4	22·3	23·0	
26	22·7	22·8	21·3	21·7	20·7	19·1	18·3	18·1	19·3	21·4	24·3	27·8	30·4	30·8	30·6	26·8	23·9	22·9	23·3	22·9	19·7	21·2	18·7	20·3	
27	22·1	22·9	22·0	21·4	22·8	18·7	20·2	20·1	19·7	21·8	24·5	28·5	30·9	31·8	30·6	27·9	26·4	23·3	23·2	23·6	20·8	22·3	22·6	23·1	
28*	23·0	22·3	22·7	22·4	21·2	20·7	19·7	19·2	19·2	21·2	23·6	25·8	27·9	28·2	28·2	25·9	24·8	24·0	21·3	23·5	23·4	20·6	21·5	21·4	
29	21·6	18·3	19·7	19·2	20·7	19·4	19·0	18·8	19·4	20·5	22·9	24·8	27·5	28·5	28·9	26·5	25·2	24·0	22·1	18·2	18·2	19·5	21·8	21·1	
30	22·1	20·9	19·9	19·5	23·0	19·0	18·6	19·1	20·1	21·8	24·8	26·2	28·3	28·4	27·4	25·7	24·3	23·9	24·2	23·5	23·8	21·3	14·8	17·7	
31	21·4	25·4	18·4	15·4	20·0	18·0	17·0	17·9	19·9	22·4	24·9	28·4	29·4	29·9	29·4	27·4	26·1	24·8	22·7	23·6	21·9	23·3	21·6	21·5	
Mean	21·7	22·0	22·3	21·7	21·7	21·3	20·9	20·7	21·3	22·7	24·7	27·0	28·8	29·2	28·8	27·0	25·7	24·0	23·3	22·6	20·9	21·6	21·7	21·7	
Mean*	21·8	21·9	22·2	22·1	22·2	21·1	20·6	20·5	20·8	22·1	24·0	26·7	28·7	29·4	29·2	27·6	26·4	25·4	23·6	23·8	23·8	22·8	22·9	22·2	
Mean**	21·0	22·5	24·2	21·8	23·0	25·9	24·6	23·3	23·8	24·3	25·0	26·9	29·2	29·8	29·1	26·3	25·7	23·4	21·8	20·3	20·3	20·4	21·5	20·6	

* Denotes an International Quiet Day. ** Denotes an International Disturbed Day.

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

September. 12° + 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
	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′
1	24·7	20·9	20·3	20·6	23·5	28·7	24·4	24·8	22·4	23·7	25·6	28·1	30·5	28·5	31·3	27·9	22·3	22·3	21·7	23·6	23·1	20·9	22·0	23·0	
2	24·7	30·2	21·4	19·9	21·4	23·3	20·8	20·1	21·1	22·2	25·2	27·2	29·1	29·7	28·7	27·1	25·6	24·6	23·8	23·2	23·5	23·0	22·4	22·8	
3**	22·8	20·7	20·7	20·9	22·9	22·3	20·6	20·7	23·5	23·2	25·9	29·1	30·3	36·5	35·3	33·2	24·1	23·8	22·0	19·7	17·8	15·8	13·5	17·5	
4	23·8	21·3	21·0	19·8	23·8	18·9	17·8	16·3	19·0	23·8	24·8	27·6	28·2	27·9	26·5	23·9	21·6	21·7	21·0	19·9	20·5	21·6	21·6	22·7	
5	22·1	24·0	23·3	24·6	21·0	19·7	19·4	18·7	19·1	20·0	23·7	27·1	27·4	28·5	26·1	23·9	23·7	20·8	17·5	22·0	15·9	18·2	20·2	20·4	
6**	21·6	25·8	26·7	23·0	20·3	20·2	21·3	21·8	20·3	23·3	24·9	29·3	30·4	30·4	27·4	25·1	23·4	18·1	20·4	21·5	21·8	21·4	20·4	20·6	
7	23·3	23·2	22·7	22·5	21·2	20·9	19·3	20·6	21·6	22·3	24·0	28·0	28·2	27·8	23·0	21·9	21·2	20·5	20·0	19·8	19·7	20·6	19·4	18·2	
8	18·1	18·4	19·0	17·8	17·1	18·3	19·5	17·9	19·2	22·1	24·7	28·1	29·2	29·3	27·0	24·3	24·0	22·0	23·0	20·8	18·0	21·5	22·3	22·2	
9	22·0	22·0	22·0	21·6	21·3	21·1	20·6	20·9	22·0	22·9	27·7	30·2	31·8	34·4	30·1	26·2	23·6	16·3	20·8	21·3	16·3	20·4	17·1	21·0	
10	20·7	23·5	21·8	19·5	20·4	20·5	19·5	19·5	20·2	21·5	23·3	26·5	28·3	27·8	27·3	24·2	23·1	22·8	22·2	19·8	21·4	22·0	22·3	22·4	
11	22·5	22·5	22·5	21·9	21·4	20·4	19·6	18·8	21·9	23·9	25·7	28·4	29·8	30·7	30·2	26·7	24·3	23·4	21·7	21·5	23·2	22·9	21·4	17·9	
12	20·8	22·4	21·6	20·7	21·5	20·9	19·5	19·3	19·4	21·5	23·6	26·5	28·2	29·4	28·5	26·3	24·2	22·9	21·3	20·0	19·7	19·9	16·4	16·5	
13	17·7	20·8	20·7	20·6	20·0	19·5	18·5	18·0	18·2	20·0	22·5	25·2	27·3	27·9	26·8	25·4	24·0	23·0	22·8	22·5	21·8	20·5	20·5	20·9	
14*	15·1	16·4	15·8	18·5	19·5	20·5	19·9	19·2	19·4	21·5	24·5	27·0	29·5	29·4	28·2	25·3	23·9	23·0	23·0	22·8	20·5	21·5	21·4	21·2	
15*	19·9	20·3	19·8	19·4	19·4	21·6	24·3	21·4	19·4	20·8	22·2	24·6	25·9	26·1	25·3	24·1	22·9	22·7	23·2	22·7	22·9	22·9	22·9	22·8	
16*	22·4	22·1	22·1	22·1	21·6	21·1	19·6	18·9	19·1	21·0	24·1	26·7	29·0	28·6	27·2	25·8	22·0	21·6	23·0	23·0	23·0	23·0	23·0	22·6	
17	22·4	22·1	22·1	21·9	21·9	21·1	19·5	18·7	18·5	20·1	24·6	28·6	30·2	31·8	30·7	28·1	25·7	24·6	23·1	22·5	22·6	22·1	22·1	22·1	
18**	22·1	22·1	21·7	21·1	21·1	21·1	21·0	20·1	19·5	21·7	25·1	34·7	36·1	42·1	36·0	33·7	32·9	22·0	12·1	16·1	14·9	13·6	16·4	17·7	
19	11·2	15·7	25·5	19·8	19·6	20·3	19·2	19·2	18·8	22·2	25·2	26·2	28·2	28·5	26·3	23·4	25·3	19·6	22·0	23·0	22·2	23·6	17·6	20·2	
20	22·0	22·2	23·9	21·9	21·4	21·2	20·2	19·0	18·2	19·7	21·9	26·6	28·2	29·2	27·2	26·5	25·2	24·0	23·4	19·9	21·2	22·2	22·2	22·7	
21	22·5	22·5	22·3	22·2	22·2	21·3	20·7	21·2	23·2	26·2	27·7	29·2	29·9	31·2	30·9	28·9	27·3	24·7	23·0	22·5	21·2	21·7	20·2	20·7	
22	23·3	22·8	19·6	20·3	19·3	20·3	19·5	19·8	20·3	22·3	24·3	26·0	27·0	26·3	25·3	24·3	23·3	23·3	22·9	22·3	22·3	22·3	22·1	22·3	
23	21·4	21·4	20·9	20·4	20·8	20·1	19·4	17·2	20·9	22·1	23·1	26·4	28·7	28·7	27·7	26·8	25·4	24·4	21·4	22·4	22·4	21·3	19·4	20·8	
24	20·5	17·9	19·8	18·5	19·5	20·1	19·5	18·5	18·5	20·5	23·3	27·5	28·5	28·1	27·8	26·7	23·8	23·3	22·6	21·8	21·1	21·5	21·7	22·5	
25	23·4	21·4	21·4	21·4	21·4	21·0	19·9	18·2	17·9	20·2	23·4	26·7	28·9	30·3	29·6	27·3	25·1	24·0	19·0	19·3	22·0	21·3	16·8	17·6	
26*	20·8	21·2	21·7	21·2	21·2	21·2	20·1	19·1	18·8	20·3	23·1	26·1	29·0	29·5	27·6	25·2	24·2	23·1	23·1	22·9	23·1	22·9	22·3	22·0	
27*	20·4	21·1	22·1	22·2	21·4	21·7	20·8	20·5	20·4	21·4	24·2	26·3	28·1	28·8	27·6	25·0	23·6	23·0	22·9	22·2	21·6	21·6	21·6	21·2	
28	21·0	20·5	20·5	22·1	19·7	19·9	22·2	20·5	20·4	19·8	22·8	26·6	29·2	29·7	30·0	29·3	26·3	24·7	20·4	17·2	16·7	14·1	18·2	19·7	
29**	21·4	20·9	20·3	20·9	26·6	26·1	27·6	24·3	22·8	20·5	21·8	27·0	30·2	30·6	29·9	26·6	22·1	21·8	15·7	11·2	16·2	20·2	22·7	17·7	
30**	19·2	14·0	22·2	28·2	44·2	37·5	37·2	28·8	24·2	23·9	22·2	22·5	23·7	25·5	25·8	24·6	23·1	21·6	21·6	22·0	21·8	21·6	21·4	21·1	
Mean	21·1	21·3	21·5	21·2	21·9	21·7	21·1	20·1	20·3	21·8	24·2	27·3	29·0	29·8	28·4	26·3	24·2	22·5	21·4	21·0	20·6	20·9	20·4	20·7	
Mean*	19·7	20·2	20·3	20·7	20·6	21·2	20·9	19·8	19·4	21·0	23·6	26·1	28·3	28·5	27·2	25·1	23·3	22·7	23·0	22·7	22·2	22·4	22·2	22·0	
Mean**	21·4	20·7	22·3	22·8	27·0	25·4	25·5	23·1	22·1	22·5	24·0	28·5	30·1	33·0	30·9	28·6	25·1	21·5	18·4	18·1	18·5	18·5	18·9	18·9	

October. 12° + 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
	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′
1	20·8	20·8	20·4	20·5	21·4	22·0	24·1	25·1	23·4	23·3	24·1	27·0	27·0	25·6	26·6	23·0	22·3	18·0	16·0	21·4	22·0	21·0	19·4	20·8	
2	21·4	19·2	23·0	21·0	20·8	20·9	20·3	20·0	19·0	20·0	22·0	27·0	28·2	28·0	27·7	22·7	23·2	22·5	18·1	21·0	21·5	18·2	12·2	21·6	
3**	21·1	22·3	24·5	23·5	22·4	21·0	20·0	20·0	19·0	20·5	26·0	(30·0)	29·1	30·1	25·1	26·5	21·5	13·9	14·2	15·2	15·3	18·1	20·3	17·6	
4	20·8	19·5	21·4	20·4	21·9	23·5	20·5	18·9	19·9	22·6	25·1	27·6	28·2	28·1	25·7	22·7	21·4	20·2	20·6	14·4	17·0	19·9	17·8	18·2	
5	22·1	20·7	20·0	20·0	20·6	21·4	24·7	21·7	20·0	19·9	22·5	26·1	26·8	30·0	27·2	25·2	18·8	18·2	21·1	17·7	21·7	19·8	19·5	20·1	
6	21·5	24·1	21·1	19·7	20·5	21·1	19·6	19·1	19·4	20·6	23·4	26·0	28·9	27·9	26·6	23·6	21·3	21·9	20·8	12·8	18·8	18·5	18·8	20·1	
7	20·3	22·4	22·8	21·4	21·3	21·3	20·7	19·2	18·1	19·9	21·7	24·6	27·6	27·4	24·6	23·8	22·9	21·0	16·2	15·2	17·0	13·9	17·0	18·0	
8	20·9	20·5	24·6	25·2	26·4	29·0	27·9	23·5	23·2	24·4	26·4	28·4	28·8	28·1	26·9	25·7	24·1	18·0	19·1	16·3	17·4	20·4	21·4	21·4	
9	21·5	23·5	21·5	19·8	19·9	20·3	20·1	19·9	19·5	20·5	22·5	25·8	27·9	28·1	26·3	25·2	23·1	19·5	21·0	21·5	19·9	16·0	15·5	20·5	
10	21·0	21·4	21·4	21·7	21·4	21·4	21·2	19·8	18·4	18·4	20·9	24·4	27·4	27·8	26·8	25·1	23·2	19·4	20·1	17·9	19·2	19·6	21·4	21·4	
11*	21·3	20·3	21·0	21·3	22·8	21·8	21·1	20·7	20·6	22·3	23·9	26·2	27·6	27·7	26·9	24·9	23·2	22·6	21·6	21·0	21·5	21·2	21·2	21·2	
12	21·1	21·4	21·6	21·8	21·7	21·4	21·1	19·9	19·1	20·1	23·1	26·1	28·1	28·4	26·4	24·1	22·6	22·7	21·6	21·1	20·8	21·2	21·2	21·2	
13*	21·1	21·4	21·5	21·7	22·0	21·6	21·3	20·6	19·1	20·0	22·6	26·0	28·1	28·2	27·8	26·0	23·3	23·0	23·0	21·4	21·0	20·9	20·0	20·0	
14**	20·4	21·3	22·8	20·9	21·9	24·1	22·1	21·1	19·1	19·1	21·1	23·7	27·0	26·8	28·6	28·2	26·6	25·2	24·2	23·2	11·2	7·8	12·0	13·2	
15	15·8	18·9	20·3	20·7	20·9	20·6	20·3	19·6	18·8	19·3	20·6	22·3	24·4	25·4	25·4	24·4	23·2	22·2	22·4	22·0	21·6	21·4	21·3	20·6	
16*	20·4	20·4	20·7	20·7	21·4	21·4	21·0	20·0	18·4	17·7	20·4	22·8	23·4	24·1	23·9	22·8	21·8	21·1	20·6	20·5	19·4	19·4	19·4	20·5	
17**	21·1	20·9	20·9	21·4	21·4	23·0	27·2	25·9	25·6	22·5	23·0	26·4	26·8	32·1	33·4	32·4	26·4	17·9	15·4	18·4	10·8	2·4	7·4	11·6	
18	16·5	19·5	19·5	17·5	20·4	19·4	19·1	18·5	18·5	19·5	21·3	24·0	25·6	25·3	25·6	25·6	24·4	23·5	22·8	21·4	19·6	20·1	18·0	16·8	
19	19·3	20·4	19·7	20·7	20·7	19·8	19·8	19·7	20·5	20·1	21·7	23·7	24·7	24·3	23·7	23·1	22·4	21·7	21·6	20·7	15·9	17·5	18·4	18·2	
20	17·2	16·8	18·7	19·7	20·0	20·1	21·2	19·9	22·2	23·7	24·1	24·7	26·6	26·3	25·6	20·2	16·1	18·6	16·0	17·0	20·2	18·9	19·1	18·5	
21	21·4	18·4	17·7	21·4	22·4	21·8	20·0	19·5	18·3	20·2	21·3	23·3	24·9	25·3	25·3	23·7	23·1	21·9	17·2	18·2	19·6	19·6	20·3	20·6	
22	20·8	21·1	20·8	21·5	21·4	20·7	20·3	19·6	19·1	19·1	21·5	24·1	25·0	25·0	24·0	23·0	19·4	16·9	20·0	21·4	20·9	20·4	20·0	19·7	
23*	19·9	20·9	20·0	21·0	21·3	20·9	20·6	20·1	19·0	20·0	22·4	25·0	24·4	25·0	24·4	23·3	22·8	23·0	21·0	21·9	20·4	19·8	19·3	20·0	
24*	20·3	21·0	21·0	21·1	21·5	21·0	20·6	20·0	19·1	19·7	22·3	25·0	25·4	24·9	23·9	22·3	22·3	22·7	21·8	21·9	21·5	20·7	20·6	20·8	
25	20·0	20·1	21·0	20·1	21·1	20·8	20·4	20·0	19·6	20·2	22·6	25·2	26·5	26·8	27·0	28·0	24·5	24·6	14·9	19·0	19·8	18·7	19·4	13·0	
26**	15·5	12·2	13·8	24·2	22·2	20·6	24·7	25·5	24·2	21·1	23·1	28·7	30·1	32·8	30·5	22·9	17·0	22·4	19·0	15·0	18·0	17·0	18·9	25·4	
27**	21·9	19·8	19·5	20·3	27·1	23·0	20·3	22·2	21·9	21·8	25·5	26·8	25·8	26·1	18·4	14·3	13·9	18·2	16·6	17·8	10·3	13·9	21·8	19·6	
28	19·9	24·7	25·0	21·7	22·0	22·7	22·7	21·7	21·7	22·2	23·1	24·5	27·1	25·7	24·1	23·1	21·8	14·2	11·7	12·7	15·1	17·3	18·4	19·1	
29	22·7	24·0	19·2	20·4	22·3	21·0	20·3	21·9	22·0	21·8	23·0	24·0	24·8	22·3	23·8	17·4	21·2	20·4	13·3	19·4	20·3	13·2	14·3	18·0	
30	17·1	20·6	19·1	20·5	22·1	23·0	21·7	23·0	21·7	20·7	21·7	22·9	23·2	23·3	19·8	20·8	20·8	12·8	18·3	16·3	13·0	18·9	18·8	19·8	
31	19·8	20·3	20·8	22·2	22·8	22·2	21·6	21·3	21·2	20·8	22·8	23·2	24·2	22·8	22·6	16·8	19·8	18·6	19·6	19·0	17·8	16·6	15·4	17·5	
Mean	20·5	20·6	20·8	21·1	21·8	21·7	21·5	20·9	20·3	20·7	22·8	25·3	26·6	26·8	25·6	23·6	21·6	20·2	19·0	18·8	18·3	17·8	18·3	19·2	
Mean*	20·6	20·8	20·8	21·2	21·8	21·3	20·9	20·3	19·2	19·9	22·3	25·0	25·8	26·0	25·4	23·9	22·7	22·5	21·6	21·3	20·8	20·4	20·1	20·5	
Mean**	20·0	19·3	20·3	22·1	23·0	22·3	22·9	22·9	22·0	21·0	23·7	27·1	27·8	29·6	27·2	24·9	21·1	19·5	17·9	17·9	13·1	11·8	16·1	17·5	

* Denotes an International Quiet Day. ** Denotes an International Disturbed Day.

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

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

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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
	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′
1	19·4	18·0	17·4	19·7	18·0	18·4	19·1	18·9	19·4	19·4	20·7	21·5	22·7	21·5	20·4	20·1	20·2	19·5	19·4	19·2	19·3	18·9	18·4	18·8	
2	19·2	19·7	20·1	19·6	19·6	18·8	19·2	19·0	18·9	19·8	20·9	21·8	21·9	21·4	21·0	20·4	19·6	19·3	19·2	19·4	18·0	18·4	19·3	19·7	
3**	20·0	20·5	19·7	20·8	21·3	21·1	20·2	20·1	20·3	25·1	24·1	24·0	27·4	27·5	34·2	25·2	29·2	25·2	23·5	13·4	13·0	7·2	11·4	4·2	
4**	3·2	5·0	7·1	12·3	17·8	23·7	26·0	31·2	24·1	22·3	23·4	24·4	24·6	26·6	27·8	25·6	21·5	20·4	19·7	20·0	19·3	18·5	17·9	17·8	
5	15·3	18·0	19·2	18·9	18·9	18·8	18·7	18·7	18·9	19·7	20·1	20·4	20·7	20·6	19·6	19·6	19·4	19·1	18·9	19·1	18·9	18·5	18·5	18·8	
6	18·4	19·4	18·7	19·4	19·6	19·4	19·3	18·9	18·2	19·2	20·3	21·1	21·1	21·4	20·6	20·1	20·5	20·2	16·4	20·1	19·2	18·8	18·6	19·1	
7	18·1	17·1	18·4	19·5	20·0	20·3	20·1	19·9	19·6	20·1	20·6	21·1	22·1	22·7	22·5	21·8	20·2	20·5	19·8	19·6	19·1	18·7	18·1	18·6	
8*	18·6	19·2	19·6	19·9	20·0	19·5	19·4	19·2	19·1	19·3	20·5	21·1	22·6	22·0	21·6	21·2	20·6	20·1	19·6	19·5	19·1	18·9	18·9	18·7	
9	18·8	19·1	19·6	20·1	20·1	20·1	20·0	19·7	19·7	19·9	20·4	21·1	22·0	23·0	23·0	22·2	21·3	18·0	20·5	20·0	19·3	18·6	18·6	18·2	
10	18·7	19·3	19·9	20·0	20·3	20·2	19·8	19·8	19·4	19·4	20·8	22·2	22·5	22·7	22·2	21·1	21·0	20·5	19·5	19·4	19·1	17·3	18·6	18·9	
11	19·3	18·7	19·0	19·9	19·5	19·5	19·2	18·8	18·8	19·4	19·3	20·0	20·7	20·9	20·9	20·4	20·1	19·4	18·9	19·2	19·1	18·3	18·4	18·4	
12	18·4	19·0	19·5	19·7	19·8	19·2	19·2	19·2	18·9	19·3	20·2	21·1	21·8	21·8	22·3	23·8	23·8	22·6	21·3	21·2	19·3	12·8	11·8	13·9	
13**	15·7	16·7	18·1	16·9	18·1	19·3	19·4	18·9	18·6	17·6	19·4	21·1	22·5	22·6	22·5	24·5	21·0	19·9	20·5	18·7	17·8	14·5	8·2	15·6	
14	18·5	18·6	18·8	19·6	20·0	19·3	19·1	19·2	18·8	18·9	20·0	21·2	21·1	20·6	20·6	18·9	14·9	17·6	19·6	18·4	18·0	17·8	14·2	16·0	
15	18·5	19·4	19·8	19·6	19·5	18·8	18·8	19·3	19·0	18·5	19·5	20·7	21·8	22·3	22·5	20·7	20·3	19·5	19·3	19·5	18·4	19·1	19·0	19·3	
16*	18·9	19·0	19·0	19·3	19·0	18·6	18·5	18·5	18·5	18·9	19·9	21·4	21·4	20·7	20·4	20·4	19·5	19·4	19·2	19·1	19·0	18·7	18·9	19·0	
17*	19·2	19·4	19·2	19·4	19·4	18·2	18·6	18·6	18·6	18·9	20·4	20·9	21·3	21·4	20·9	20·1	19·5	19·3	19·1	19·0	19·1	19·0	18·9	19·1	
18*	19·3	19·4	19·7	19·7	19·3	18·8	18·7	18·7	19·1	19·7	20·4	21·4	21·0	21·3	21·0	20·6	20·4	20·0	19·5	19·1	18·9	18·7	18·7	18·9	
19	18·7	19·1	19·1	19·0	18·5	18·6	18·6	18·7	19·3	20·1	20·9	21·5	22·3	22·1	23·3	22·7	21·1	20·1	19·4	19·2	19·1	19·0	15·8	18·1	
20**	18·9	19·4	19·7	19·9	19·9	19·2	19·5	19·2	19·3	19·6	21·0	21·2	21·8	21·4	20·5	21·3	21·1	19·3	11·1	11·0	18·7	19·5	18·4	14·2	
21**	13·2	14·6	16·7	18·2	20·2	20·3	25·1	25·1	21·8	24·8	22·6	24·2	21·3	20·7	18·3	17·9	17·2	11·8	13·8	18·3	18·3	14·8	14·0	16·3	
22	18·9	18·6	20·0	19·3	20·7	20·3	18·9	18·6	18·6	18·9	19·7	21·1	21·9	22·7	21·2	21·5	13·7	17·6	16·2	15·2	16·4	17·6	18·4	19·2	
23	18·1	19·6	19·1	20·1	20·3	20·4	20·0	19·3	19·0	19·1	19·6	20·1	20·9	21·7	21·1	17·7	14·5	18·7	19·0	18·7	17·2	14·0	16·4	20·0	
24	18·1	18·0	19·5	22·0	19·5	19·6	20·0	21·0	20·7	19·5	20·7	21·8	21·8	22·6	22·0	21·9	21·2	17·0	14·5	18·1	17·2	18·0	17·8	18·2	
25	20·0	19·0	21·1	19·0	18·5	19·0	19·4	20·0	19·4	19·4	19·7	20·8	20·4	20·8	20·4	20·3	19·4	19·3	19·0	18·0	16·3	17·0	17·3	18·5	
26	18·4	18·3	18·7	19·3	19·7	20·0	20·3	21·9	20·0	19·0	19·0	19·8	20·5	21·0	20·8	21·6	20·8	16·9	17·0	19·0	18·5	15·0	13·8	17·5	
27	18·5	18·5	18·6	18·6	19·8	19·5	19·1	19·4	19·5	19·5	19·4	19·0	20·3	20·0	19·2	19·0	18·5	19·3	19·6	18·2	17·9	16·9	16·4	17·7	
28	18·1	18·4	18·6	18·5	20·0	19·7	19·5	19·0	19·0	19·3	19·5	19·7	20·0	20·0	19·9	19·8	19·1	19·1	19·1	18·8	18·7	18·6	18·4	18·1	
29	18·9	19·3	19·2	19·2	19·1	19·2	18·9	18·8	19·2	19·4	20·2	21·2	21·2	21·2	21·2	20·7	20·2	20·2	19·5	17·2	18·8	18·4	16·2	14·2	
30	18·2	19·2	19·2	19·2	19·2	19·2	19·0	18·8	18·9	19·2	20·5	21·6	21·5	21·2	20·7	20·7	20·0	19·3	18·6	17·7	18·5	18·8	18·5	18·7	
31*	19·0	18·6	18·5	18·5	18·6	17·8	18·2	18·3	18·5	19·1	20·0	20·7	21·3	21·0	20·3	20·2	19·7	19·6	19·5	18·3	18·3	18·3	18·4	18·5	
Mean	17·9	18·3	18·7	19·2	19·5	19·5	19·7	19·8	19·4	19·8	20·4	21·3	21·8	21·9	21·7	21·0	20·0	19·3	18·7	18·4	18·3	17·4	17·0	17·5	
Mean*	19·0	19·1	19·2	19·4	19·3	18·6	18·7	18·7	18·8	19·2	20·2	21·1	21·5	21·3	20·8	20·5	19·9	19·7	19·4	19·0	18·9	18·7	18·8	18·8	
Mean**	14·2	15·2	16·3	17·6	19·5	20·7	22·0	22·9	20·8	21·9	22·1	23·0	23·5	23·8	24·7	22·9	22·0	19·3	17·7	16·3	17·4	14·9	14·0	13·6	

* Denotes an International Quiet Day. ** Denotes an International Disturbed Day.

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

	0h	1h	2h	3h	4h	5h	6h	7h	8h	9h	10h	11h	Noon	13h	14h	15h	16h	17h	18h	19h	20h	21h	22h	23h	24h
January.	18000 γ + Tabular Quantities (in γ).																								
1	545	561	562	558	558	557	566	560	555	544	544	544	544	537	531	528	536	537	536	536	536	549	552	555
2	553	555	551	552	555	557	557	560	557	549	544	541	549	540	544	547	546	555	546	547	538	546	551	555
3**	555	555	557	560	561	562	567	567	575	555	541	536	524	525	514	525	510	549	533	512	525	528	552	549
4**	552	556	552	559	572	569	549	545	520	509	510	502	509	493	494	518	507	499	507	541	522	547	531	537
5**	525	532	536	525	539	544	533	538	530	532	507	489	483	494	509	473	495	515	510	518	516	520	513	517
6**	532	536	545	556	565	557	565	563	554	552	541	518	502	500	495	507	518	521	516	518	536	518	520	536
7**	540	548	545	540	527	536	542	544	534	536	515	517	535	524	507	525	524	507	508	528	528	546	538	541
8	533	531	528	540	545	557	552	552	546	533	520	516	528	537	541	528	540	538	550	548	549	565	555	549
9	542	546	552	548	544	549	549	546	548	544	538	535	542	543	542	545	548	552	553	554	550	552	552	558
10	557	550	552	553	557	559	561	561	553	545	543	538	540	544	544	536	549	553	555	551	559	557	553	554
11*	554	554	554	555	557	559	562	562	562	557	554	550	546	552	552	552	552	554	554	557	560	559	556	555
12*	557	559	561	558	559	562	565	565	559	552	546	543	544	548	547	542	543	552	558	561	560	561	556	557
13	556	562	564	565	574	591	573	570	564	556	549	545	546	552	554	557	558	552	557	557	557	554	554	554
14*	562	558	557	557	561	567	570	567	554	544	541	542	549	549	552	556	556	559	561	561	561	559	556	554
15	556	554	555	558	559	562	563	561	553	545	542	547	551	555	553	554	557	561	551	553	543	545	553	546
16	553	551	549	551	551	555	561	553	549	548	548	545	545	543	546	545	551	556	560	563	558	556	552	554
17	554	554	552	556	559	559	561	559	555	545	538	542	547	551	559	547	548	545	540	525	535	520	530	541
18	537	535	535	543	551	551	552	549	545	532	523	523	532	541	545	548	549	558	563	547	551	555	553	545
19	556	545	549	547	549	555	551	558	537	527	524	523	524	531	526	544	542	544	557	559	558	558	551	565
20	556	546	543	546	555	564	557	556	548	540	538	540	544	543	559	567	560	562	534	553	540	519	530	537
21	532	549	536	555	551	543	546	543	534	526	520	517	523	530	535	549	550	547	550	552	556	551	568	545
22	545	551	553	544	551	556	561	555	547	530	523	533	532	531	549	547	548	546	545	551	553	547	551	543
23	556	555	545	549	551	553	558	555	547	535	534	530	537	543	542	552	551	551	552	553	556	548	553	547
24	549	548	548	558	558	558	556	556	552	551	547	545	551	556	558	557	545	548	548	548	549	553	556	553
25	556	551	551	555	558	553	558	560	559	556	553	548	552	551	553	552	551	557	558	557	557	560	558	557
26*	556	558	556	556	558	559	558	556	553	552	553	553	553	558	558	560	560	561	564	564	563	562	561	561
27*	561	561	561	561	562	564	566	564	561	554	548	549	550	555	559	564	561	561	564	566	566	567	566	565
28	564	559	559	563	566	569	572	571	564	551	543	538	545	562	569	566	566	562	547	547	549	553	558	564
29	563	562	566	573	571	574	570	574	558	555	542	522	531	540	544	546	546	551	553	551	546	558	561	556
30	553	556	560	567	567	564	567	572	556	543	540	522	507	519	524	535	541	548	551	551	553	543	564	551
31	556	549	552	558	555	561	565	555	543	538	523	523	526	537	541	547	547	547	557	550	559	554	559	559
Mean	551	551	551	554	556	559	559	558	551	543	537	533	535	538	540	543	544	547	546	548	548	549	550	550
Mean*	558	558	558	557	559	562	564	563	558	552	548	547	548	552	554	555	554	557	560	562	562	562	559	558
Mean**	541	545	547	548	553	554	551	551	543	537	523	512	511	507	504	510	511	518	515	523	525	532	531	536
February.	18000 γ + Tabular Quantities (in γ).																								
1	561	561	561	554	557	568	570	556	546	541	540	532	516	531	518	542	536	539	538	550	554	552	555	544
2	550	553	560	555	550	555	560	555	552	534	537	535	514	539	544	544	541	544	547	547	554	542	563	560
3	556	550	550	547	554	559	552	557	552	538	523	509	516	507	539	546	550	540	563	546	565	553	545	555
4	552	555	554	555	552	552	552	552	533	526	529	529	529	532	544	552	557	559	552	555	554	571	552	552
5	552	561	558	560	561	564	566	562	549	531	531	533	523	526	537	544	551	555	560	560	557	557	557	555
6*	555	556	558	559	562	563	565	560	555	545	536	534	537	544	546	542	542	549	560	563	563	563	560	561
7	561	560	560	560	565	567	566	562	552	542	536	536	536	539	546	550	552	558	561	563	568	565	563	563
8*	563	560	562	563	565	567	567	564	557	544	523	521	531	538	543	542	532	539	544	538	538	546	547	546
9*	547	547	550	552	555	559	562	560	550	537	531	532	540	552	560	560	562	562	563	565	566	565	560	560
10*	560	560	561	563	568	568	568	569	560	542	530	527	534	534	541	540	547	552	557	558	556	552	558	560
11	557	559	571	568	562	562	563	566	559	552	547	547	553	558	560	562	563	562	565	565	563	562	563	564
12**	560	554	548	554	557	565	587	566	554	553	552	544	542	550	533	542	531	541	557	563	559	559	552	450
13**	475	518	489	497	505	508	520	531	508	489	508	487	461	485	505	530	530	512	499	513	492	508	524	532
14**	532	526	502	523	521	525	529	523	526	513	517	513	516	515	495	497	502	510	546	523	527	508	523	539
15**	539	527	533	533	531	531	530	524	532	534	515	505	518	518	519	510	508	531	526	542	537	526	536	533
16**	546	536	544	557	536	539	526	534	529	505	503	516	521	529	507	529	527	521	552	524	546	555	536	539
17	526	513	522	541	539	538	536	545	550	534	529	520	517	530	525	520	522	539	527	537	534	534	541	542
18	542	543	547	549	544	548	547	544	554	544	535	513	527	523	517	518	536	526	531	541	536	538	544	539
19	539	536	539	552	565	537	546	546	545	535	526	526	518	526	534	528	523	525	536	537	552	544	542	542
20	543	548	555	541	541	546	552	557	550	544	542	529	527	529	531	534	541	521	534	533	540	539	539	552
21	537	542	534	539	541	544	552	554	550	538	528	523	523	526	531	536	536	544	551	551	550	550	555	546
22*	544	542	542	550	548	547	550	556	556	545	536	529	531	534	539	543	544	548	552	555	550	551	550	547
23	549	550	548	551	551	553	558	561	563	560	550	542	544	540	545	551	544	556	555	551	564	561	560	562
24	562	557	558	560	562	561	569	572	571	537	535	532	530	530	539	539	543	545	551	530	552	562	561	561
25	556	558	553	561	563	544	553	545	545	535	501	517	501	514	522	527	534	515	540	538	544	536	543	527
26	549	553	535	540	548	543	544	548	544	537	525	524	529	532	537	546	517	530	551	553	551	545	549	551
27	557	558	553	551	558	561	556	551	545	540	532	529	534	545	549	545	537	546	552	542	547	552	556	566
28	548	551	559	549	555	558	566	560	539	543	525	524	534	534	504	518	528	527	533	540	557	557	567	553
Mean	547	548	547	549	551	551	554	553	547	536	529	525	525	531	533	537	537	540	547	546	549	548	550	547
Mean*	554	553	555	557	560	561	562	562	556	543	531	529	535	540	546	545	545	550	555	556	555	555	555	555
Mean**	530	532	523	533	530	534	538	536	530	519	519	513	512	519	512	522	520	525	536	533	532	531	534	519

* Denotes an International Quiet Day. ** Denotes an International Disturbed Day.

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

	0h	1h	2h	3h	4h	5h	6h	7h	8h	9h	10h	11h	Noon	13h	14h	15h	16h	17h	18h	19h	20h	21h	22h	23h	24h
March.	18000 γ + Tabular Quantities (in γ).																								
1**	558	561	566	566	570	549	547	545	543	526	497	523	511	524	532	537	529	517	532	558	571	547	556	559	
2**	551	555	554	553	550	545	542	537	529	498	496	509	509	530	532	522	552	529	553	543	551	569	545	550	
3	551	549	548	547	551	551	553	551	524	511	524	517	511	530	534	540	548	550	551	553	548	569	558	553	
4	545	551	552	543	544	544	555	556	548	537	524	529	528	528	545	537	545	547	549	558	555	557	558	557	
5*	556	555	554	555	558	560	562	561	551	539	533	531	530	534	536	545	545	551	553	556	558	556	556	556	
6	556	556	556	558	559	562	564	561	554	543	538	531	535	543	551	547	551	557	560	561	560	560	559	558	
7*	559	560	560	560	561	563	564	564	559	549	535	530	530	539	543	547	551	556	561	563	561	563	561	562	
8*	561	561	561	561	563	565	566	567	561	553	543	540	542	545	545	546	551	553	558	561	562	563	564	564	
9*	564	564	563	563	563	566	565	565	563	560	552	547	547	550	555	555	553	560	565	566	567	565	565	565	
10*	565	563	563	564	567	568	568	566	557	547	542	544	547	550	558	564	566	565	568	568	566	559	557	554	
11	556	557	560	563	563	563	563	561	556	554	557	557	552	563	563	547	555	561	573	578	529	526	547	548	
12**	552	539	543	539	552	517	550	516	527	527	516	495	437	489	517	531	510	502	514	504	516	514	522	514	
13**	542	536	532	524	532	542	544	524	521	513	514	513	494	499	514	532	516	535	525	503	540	540	538	510	
14**	525	536	531	522	519	521	543	499	527	517	514	510	508	499	523	552	526	536	532	550	536	518	527	563	
15	573	532	519	517	517	533	523	499	529	519	512	511	526	530	538	534	525	524	531	534	542	542	544	560	
16	555	552	559	544	526	528	542	546	531	513	518	512	499	529	531	527	533	543	552	590	552	526	538	551	
17	553	534	534	534	530	530	531	535	535	516	510	513	521	529	539	539	539	547	546	563	566	560	547	545	
18	555	560	559	552	542	544	544	542	537	529	527	523	529	536	536	543	538	540	589	536	538	556	540	532	
19	554	534	538	540	539	535	521	534	537	530	518	496	506	516	523	544	539	544	547	550	548	554	551	543	
20	540	551	560	554	556	564	551	551	538	528	524	520	527	529	532	538	534	547	556	564	545	549	566	545	
21	543	551	553	552	547	547	546	533	537	527	527	530	539	544	537	545	551	537	535	536	543	553	545	562	
22	545	552	575	569	569	568	566	549	519	514	517	520	518	532	537	537	530	514	534	544	545	565	547	545	
23	546	549	550	553	553	555	557	557	556	533	529	528	539	543	540	550	560	568	566	557	555	556	565	569	
24	555	563	555	566	560	550	555	539	463	496	504	513	513	497	507	507	529	538	550	557	552	551	552	550	
25	555	555	550	550	542	555	563	555	547	539	534	532	536	534	542	526	540	548	559	560	557	552	550	574	
26	550	555	555	550	553	565	557	552	544	531	508	510	526	534	531	542	560	542	550	552	560	560	563	565	
27	565	566	565	561	557	558	557	532	507	513	492	511	518	529	534	531	540	548	554	547	540	544	547	557	
28	572	554	555	551	552	558	550	530	529	518	505	476	508	516	523	544	545	555	560	557	552	594	560	555	
29	565	573	548	543	541	542	547	536	534	525	510	487	516	529	538	546	544	557	550	556	560	562	563	560	
30	555	555	562	560	574	550	542	541	529	512	503	505	513	527	539	547	550	559	550	555	557	558	553	556	
31	552	557	559	552	554	555	554	548	538	523	513	509	509	521	548	553	556	559	562	555	562	558	556	554	
Mean	554	553	553	551	551	550	551	544	537	527	521	519	520	529	536	541	542	545	551	555	551	553	552	553	
Mean*	561	561	560	561	562	564	565	565	558	550	541	538	539	544	547	551	553	557	561	563	563	561	561	560	
Mean**	546	545	545	541	545	535	545	524	529	516	507	510	492	508	524	535	527	524	531	544	543	538	538	539	
April.	18000 γ + Tabular Quantities (in γ).																								
1	561	564	566	565	569	559	559	556	536	524	518	524	523	531	545	533	559	533	558	554	558	575	562	557	
2	555	558	554	552	555	552	557	546	533	527	523	528	527	539	550	556	554	562	566	565	562	567	567	558	
3*	559	562	572	567	570	565	553	554	545	528	518	520	533	546	554	553	555	559	562	560	559	559	562	559	
4*	559	561	562	562	559	559	557	552	541	(530)	(519)	521	531	541	544	552	567	567	565	564	560	559	559	561	
5*	562	558	562	559	570	562	557	552	546	541	541	547	554	559	561	563	562	563	565	565	563	564	562	559	
6	559	567	557	561	560	559	559	560	554	543	533	533	529	542	549	532	533	554	538	542	542	533	520	554	
7**	529	537	552	548	557	534	535	538	536	522	516	524	537	531	539	548	552	541	578	538	534	570	544	498	
8**	471	536	502	521	520	518	517	500	503	507	499	437	471	497	517	528	513	528	531	562	590	565	542	552	
9	563	543	537	535	524	534	534	527	514	512	498	482	511	508	528	542	535	550	539	553	540	553	554	537	
10**	521	530	539	537	550	534	538	518	493	483	460	469	516	542	532	540	521	566	532	534	565	542	542	563	
11	534	542	534	545	532	521	522	508	487	491	506	527	516	538	540	531	550	538	576	573	569	540	539	553	
12	553	585	556	553	519	528	513	528	512	493	489	498	522	540	540	550	563	571	568	560	559	534	544	549	
13	520	558	549	529	537	514	516	515	506	503	493	516	536	538	542	547	553	563	545	541	542	543	547	560	
14	555	543	525	536	540	534	529	529	516	501	498	514	533	545	547	547	540	545	550	550	546	537	542	537	
15	542	540	545	550	562	568	556	527	514	490	485	484	503	532	542	539	547	540	550	547	558	550	555	555	
16	554	536	548	534	540	547	540	530	528	507	514	528	515	514	532	540	551	552	554	554	555	556	572	565	
17	542	543	547	532	530	542	547	537	516	498	508	522	521	527	543	548	553	553	553	557	556	550	549	547	
18	545	555	553	546	549	549	544	538	532	527	520	510	517	520	536	536	527	559	541	555	546	549	563	551	
19	547	547	551	552	558	563	563	560	545	534	529	517	482	503	536	554	566	575	559	562	554	560	568	553	
20**	557	556	548	553	554	538	574	539	518	535	489	476	504	509	516	500	555	533	531	538	548	546	563	543	
21	549	538	526	538	526	551	545	517	509	483	495	504	496	504	486	537	543	550	554	559	554	561	572	569	
22**	518	544	526	538	548	539	547	539	531	483	497	497	519	527	536	539	540	531	562	605	542	543	542	572	
23	534	542	539	539	542	539	527	516	524	529	529	517	514	519	528	544	549	562	551	588	585	536	542	542	
24	543	545	541	548	541	533	523	530	520	502	524	533	529	507	513	533	536	585	548	548	548	552	550	554	
25	556	564	548	542	535	543	548	541	526	520	517	509	521	532	499	525	551	550	546	551	554	554	554	556	
26	555	560	558	560	542	542	529	511	532	541	538	534	532	521	524	535	538	547	547	542	560	553	551	556	
27*	550	550	550	546	551	551	552	545	528	491	495	503	532	532	538	534	532	545	554	561	553	552	555	555	
28*	553	545	546	547	547	547	553	550	538	534	(530)	530	542	550	547	550	560	568	576	566	558	560	560	559	
29	555	558	557	560	560	560	558	558	550	542	531	536	532	541	543	545	563	571	564	566	568	580	603	543	
30	539	543	541	547	543	545	545	537	527	521	521	517	527	534	545	550	584	597	558	586	584	583	572	569	
Mean	545	550	546	547	546	544	543	535	525	515	511	512	521	529	535	540	548	555	554	558	557	554	555	553	
Mean*	557	555	558	556	559	557	554	551	540	525	521	524	538	546	549	550	555	560	564	563	559	559	560	559	
Mean**	519	541	533	539	546	533	542	527	516	506	492	481	509	521	528	531	536	540	547	555	556	553	547	546	

* Denotes an International Quiet Day. ** Denotes an International Disturbed Day.

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

	0h	1h	2h	3h	4h	5h	6h	7h	8h	9h	10h	11h	Noon	13h	14h	15h	16h	17h	18h	19h	20h	21h	22h	23h	24h
May.	18000 γ + Tabular Quantities (in γ).																								
1	576	568	551	550	550	547	550	549	543	534	527	521	524	539	549	555	560	568	564	565	563	563	563	560	
2*	558	564	555	555	560	563	562	558	550	540	532	533	545	550	556	565	573	581	585	584	576	575	573	572	
3*	564	560	558	558	559	560	564	556	546	534	527	529	534	549	543	542	555	566	566	566	566	563	564	573	
4	581	581	585	576	571	550	546	556	559	545	534	521	513	522	521	550	547	560	559	561	565	566	571	561	
5**	571	559	541	557	507	510	487	506	492	451	414	471	492	481	509	514	554	539	562	546	552	528	525	537	
6**	529	537	540	533	516	531	515	523	519	503	500	495	497	515	541	540	575	558	549	550	553	559	589	539	
7	549	513	547	531	506	526	533	520	496	494	521	523	531	538	544	559	578	554	592	585	564	547	542	575	
8	542	537	526	531	527	525	531	523	507	501	511	528	531	527	552	554	557	562	563	552	552	571	574	552	
9	537	544	536	531	533	514	512	503	520	520	519	513	526	531	531	549	555	562	537	550	546	551	551	567	
10	529	534	533	546	527	530	527	523	520	510	514	531	543	546	551	552	545	559	552	558	557	548	546	548	
11	549	554	544	542	542	542	535	528	523	518	517	523	531	539	548	540	549	557	554	552	552	563	572	583	
12	581	532	529	523	526	530	531	524	495	507	507	519	516	513	523	536	539	559	561	561	553	562	579	557	
13	544	546	542	544	544	512	537	534	519	495	502	519	541	557	546	555	574	571	554	570	555	546	544	549	
14	559	542	547	534	537	540	534	529	537	532	526	521	529	537	550	555	553	558	558	560	550	553	572	554	
15	549	547	550	553	553	545	539	535	514	506	509	520	522	529	529	536	552	571	569	570	562	555	569	576	
16**	556	553	555	560	553	542	547	533	527	537	530	536	545	529	548	563	542	632	564	568	546	556	555	579	
17**	566	537	519	539	522	529	462	521	532	517	478	488	508	503	519	510	541	547	556	566	550	542	551	550	
18	550	542	540	537	541	533	532	527	521	517	516	523	507	534	534	545	584	608	576	572	555	549	544	550	
19	550	542	541	542	541	543	550	547	534	520	511	533	536	542	555	559	547	575	584	566	562	559	555	559	
20	554	545	553	549	534	538	508	524	519	519	521	524	524	529	537	553	552	560	569	562	558	559	558	564	
21	568	558	540	552	538	543	523	527	515	521	513	522	532	531	539	558	553	578	558	586	558	565	559	557	
22	556	559	558	567	532	551	544	536	490	502	523	508	509	516	534	540	545	555	572	565	563	560	558	556	
23	552	551	551	546	545	547	530	534	521	515	527	529	532	538	538	559	561	566	571	571	566	561	560	556	
24*	555	555	550	547	547	545	542	541	540	545	540	540	543	553	553	556	561	567	571	573	566	566	571	574	
25	568	560	553	545	540	546	547	545	545	545	551	558	556	554	553	560	581	540	572	567	571	576	562	567	
26	562	551	553	553	547	553	538	536	527	528	533	534	540	541	541	545	554	560	560	567	557	556	557	557	
27*	556	558	553	551	551	555	547	542	540	540	548	553	548	538	546	560	562	564	566	572	565	564	565	569	
28*	568	568	563	560	560	555	552	545	533	537	542	540	545	545	556	555	566	556	557	567	563	560	560	560	
29	563	563	566	560	566	563	555	546	525	520	525	534	535	540	554	555	578	563	575	561	568	563	567	573	
30	530	568	565	559	557	557	555	539	532	530	531	533	539	540	546	546	586	575	610	589	581	581	560	533	
31**	535	516	548	528	530	522	506	475	477	488	488	497	496	493	510	538	561	590	623	571	545	525	517	538	
Mean	555	550	548	547	541	540	534	532	523	518	517	523	528	532	541	549	559	567	568	566	559	558	559	560	
Mean*	560	561	556	554	555	556	553	548	542	539	538	539	543	547	551	556	563	567	569	572	567	566	567	570	
Mean**	551	540	541	543	526	527	503	512	509	499	482	497	508	504	525	533	555	573	571	560	549	542	547	549	
June.	18000 γ + Tabular Quantities (in γ).																								
1**	538	487	532	532	506	508	495	494	480	466	479	499	501	532	535	538	540	560	582	592	566	549	541	547	
2**	553	558	532	532	527	527	525	495	488	504	501	484	504	509	536	533	572	566	572	628	566	554	539	548	
3	539	555	556	522	540	527	482	509	496	481	482	473	517	528	530	532	554	558	580	574	569	554	561	554	
4	556	543	538	542	534	516	500	491	486	486	495	494	501	508	526	530	552	557	561	566	586	560	550	544	
5	542	535	535	537	542	539	533	531	539	544	544	537	535	531	540	543	545	566	554	562	561	567	554	550	
6	558	560	542	540	540	544	532	517	539	537	530	541	540	539	543	536	554	548	572	559	557	561	566	576	
7**	571	567	537	540	537	532	516	542	533	529	516	519	515	502	513	551	547	565	546	563	562	563	572	569	
8	555	549	545	541	548	531	521	507	511	516	524	527	526	519	544	552	561	556	568	583	559	562	565	561	
9	560	555	555	544	544	554	530	525	520	507	515	516	537	536	544	560	556	570	565	559	557	574	557	553	
10	547	550	560	548	545	536	529	526	509	507	518	533	544	544	548	552	547	561	565	567	559	552	554	552	
11*	555	554	553	554	553	546	542	536	539	534	532	536	541	535	541	546	552	555	561	567	565	565	566	567	
12**	568	576	575	567	575	562	572	570	549	555	552	546	532	546	529	573	565	542	565	552	561	562	626	572	
13	541	536	533	543	546	542	536	477	494	509	507	503	540	548	548	541	538	574	565	567	565	559	562	559	
14	563	554	546	557	541	534	526	518	494	502	507	520	523	533	533	536	542	548	550	552	554	551	550	549	
15*	549	549	550	550	551	550	544	538	528	518	515	523	532	543	550	550	560	562	569	576	578	578	579	575	
16**	574	577	576	581	581	602	594	529	485	476	437	432	422	494	507	507	503	521	546	546	531	524	526	542	
17	533	528	540	537	522	520	519	506	499	483	467	507	514	525	531	540	542	555	570	557	572	559	546	548	
18	547	545	548	543	530	533	532	526	515	505	510	519	523	538	527	553	574	600	582	558	549	553	553	549	
19	540	543	538	538	540	531	535	525	519	509	501	509	506	525	543	542	553	566	566	566	567	567	565	566	
20	566	554	541	536	538	545	541	526	527	525	509	519	527	526	535	548	558	571	580	569	564	555	554	561	
21	562	547	549	551	548	552	551	548	538	522	517	525	552	540	552	558	565	551	557	565	565	566	564	562	
22	559	550	547	555	558	547	551	536	538	535	526	532	537	535	539	540	545	556	565	570	564	565	564	561	
23*	561	560	556	554	557	559	557	556	545	534	526	530	535	543	551	552	553	562	562	564	564	564	561	560	
24*	560	558	557	556	560	557	551	543	537	534	525	542	555	554	548	548	552	565	554	562	564	562	560	557	
25*	556	557	558	557	554	553	553	551	544	541	551	558	562	566	567	563	564	569	569	580	575	575	575	577	
26	579	577	574	576	576	566	560	558	549	546	552	548	556	540	543	536	569	573	567	563	563	563	565	571	
27	578	586	592	583	562	556	551	549	545	545	534	538	525	556	569	564	556	553	577	574	582	574	556	574	
28	560	564	567	541	544	556	555	537	509	538	543	537	535	548	574	535	557	571	592	598	566	582	567	551	
29	561	558	552	554	558	532	528	532	522	519	526	530	512	545	554	560	572	568	592	579	564	577	571	561	
30	546	545	545	549	532	564	553	543	530	525	527	532	530	540	535	545	558	575	576	587	566	571	558	565	
Mean	556	553	551	549	546	544	537	528	520	518	516	520	525	534	541	546	554	562	568	570	564	562	561	559	
Mean*	556	556	555	554	555	553	549	545	539	532	530	538	545	548	551	552	556	563	563	570	569	569	568	567	
Mean**	561	553	550	550	545	546	540	526	507	506	497	496	495	517	524	540	545	551	562	576	557	550	561	556	

* Denotes an International Quiet Day. ** Denotes an International Disturbed Day.

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

	0h	1h	2h	3h	4h	5h	6h	7h	8h	9h	10h	11h	Noon	13h	14h	15h	16h	17h	18h	19h	20h	21h	22h	23h	24h
July.	18000 γ + Tabular Quantities (in γ).																								
1	557	549	551	554	547	551	546	534	527	519	517	520	527	535	551	561	553	555	570	567	566	562	569	556
2	542	547	548	549	547	548	545	540	542	532	525	517	525	543	525	545	569	582	584	597	563	557	569	555
3	538	549	547	550	555	548	543	543	543	540	536	534	548	535	556	553	573	574	577	584	566	561	560	561
4	552	562	562	547	547	543	547	521	513	516	523	542	542	531	537	539	561	574	594	568	563	565	582	570
5	558	544	544	542	551	544	546	539	524	540	544	539	526	542	543	557	557	560	582	586	563	561	568	566
6	554	544	544	537	543	544	544	542	537	532	525	531	547	555	552	550	550	565	561	559	560	563	557	555
7	553	552	551	560	565	560	551	540	539	538	536	539	542	542	547	556	561	561	572	566	563	557	556	555
8*	553	557	556	552	548	547	549	548	544	543	544	547	553	553	556	548	563	564	552	563	565	563	564	561
9	553	555	549	551	555	550	542	535	531	528	524	526	529	537	539	578	596	603	615	630	598	615	579	591
10**	602	584	593	540	547	551	531	532	486	472	481	498	513	527	537	542	547	563	575	558	557	550	540	552
11**	544	567	573	522	503	544	539	529	518	507	494	498	514	530	548	555	560	560	550	542	537	553	552	549
12**	547	556	546	557	540	554	492	518	531	526	486	501	512	513	528	534	560	563	579	566	575	557	546	555
13**	555	547	548	537	547	513	522	529	521	505	496	496	511	524	554	568	546	581	563	565	569	544	549	550
14	552	550	544	547	540	529	534	524	513	508	504	503	500	514	544	546	550	566	563	570	560	555	553	550
15	550	547	548	544	552	548	549	550	546	533	526	527	521	531	542	560	557	564	552	557	552	550	552	550
16	557	550	552	557	560	561	544	537	544	518	524	539	544	547	520	551	544	554	578	583	559	545	540	547
17	550	552	541	547	550	543	529	516	538	534	520	523	523	511	544	546	557	554	565	552	557	557	553	555
18	552	550	551	550	549	547	541	548	555	550	542	531	535	542	547	552	560	552	563	567	574	563	557	557
19	555	552	553	557	555	547	541	531	513	514	530	537	534	532	535	542	551	557	563	560	562	555	554	551
20*	551	550	550	551	555	551	549	541	538	542	516	550	539	534	537	543	547	552	561	565	562	558	560	557
21*	560	566	555	550	552	558	552	557	555	550	544	544	534	531	538	544	551	557	560	563	563	559	558	562
22*	563	561	559	558	557	557	552	552	544	542	544	547	544	542	539	539	546	553	559	566	563	552	552	552
23*	548	547	547	547	547	547	543	542	539	542	546	537	534	544	546	547	561	560	552	560	561	563	563	565
24	565	553	548	550	551	548	548	551	555	558	556	545	545	546	550	548	558	553	558	571	582	593	601	571
25**	553	591	564	556	566	564	550	530	513	506	504	501	524	532	566	554	573	541	569	567	571	584	556	572
26	551	566	551	553	561	554	519	527	514	506	505	506	527	519	522	534	548	558	574	565	556	561	558	556
27	501	543	539	545	540	543	538	522	516	514	516	528	534	552	549	561	567	565	565	560	560	560	564	574
28	554	547	552	562	550	547	544	537	528	522	522	523	525	533	547	565	556	564	569	570	568	560	555	571
29	560	556	554	560	562	549	534	542	532	528	517	475	514	535	544	547	548	564	584	564	559	559	587	552
30	542	545	545	545	560	549	528	533	522	522	525	530	539	539	546	553	579	560	558	568	560	569	558	556
31	567	557	551	547	543	547	546	548	532	527	515	513	525	530	535	545	560	571	571	564	558	554	555	556
Mean	556	555	552	549	550	548	540	537	531	526	523	524	530	535	543	550	558	563	569	569	564	562	560	559
Mean*	555	556	553	552	552	552	549	548	544	544	545	545	541	541	543	544	554	557	557	563	563	559	559	559
Mean**	560	569	565	542	541	545	527	528	514	503	492	499	515	525	547	551	557	562	567	560	562	558	549	556
August.	18000 γ + Tabular Quantities (in γ).																								
1	553	556	561	551	545	554	553	545	528	529	526	527	533	530	540	540	551	558	563	566	564	561	568	561
2*	558	551	552	552	551	558	562	559	553	543	535	540	532	527	538	551	559	555	566	563	564	561	567	566
3*	564	556	554	551	550	558	553	550	539	535	534	527	523	540	545	553	560	571	564	568	566	566	579	557
4*	558	558	560	553	551	550	554	549	545	539	531	530	538	548	557	560	564	563	562	564	561	564	569	569
5	556	552	554	558	561	558	554	548	542	538	542	553	559	569	558	560	574	564	579	561	561	571	556	582
6**	574	564	566	570	560	577	567	564	523	551	532	514	470	493	543	543	553	538	528	541	557	566	541	553
7**	583	558	535	530	530	529	526	507	481	490	465	457	506	501	509	522	543	568	569	557	548	574	586	551
8**	560	535	529	558	564	543	519	514	502	506	475	495	527	501	519	538	546	582	561	582	545	568	549	550
9**	553	540	535	547	535	506	514	526	475	473	478	488	493	509	527	540	530	554	553	558	565	545	557	549
10	545	545	548	547	535	536	526	512	499	495	519	522	514	519	514	528	548	556	549	556	551	551	560	560
11	550	534	539	539	544	550	534	510	516	503	490	521	535	550	550	534	549	544	555	550	568	550	548	553
12**	555	559	545	541	544	529	526	522	500	498	511	519	522	526	534	546	555	579	589	570	544	571	555	542
13	542	546	547	550	544	534	544	528	507	506	511	526	531	544	550	544	552	549	557	565	551	550	556	551
14	552	547	542	548	539	542	537	520	530	518	521	530	531	544	542	539	543	550	578	563	609	548	544	542
15	543	557	563	560	568	535	550	498	531	531	524	—	—	—	—	—	—	—	—	—	—	545	544	544
16	544	544	547	550	545	542	540	544	527	534	529	521	524	541	531	541	530	534	531	544	564	546	545	551
17*	544	548	547	545	544	542	540	538	532	526	516	522	532	536	544	536	560	563	552	560	565	554	557	563
18	560	543	545	543	545	545	543	538	531	529	528	530	539	547	545	549	558	564	558	557	550	539	558	546
19	547	543	546	545	546	554	552	551	513	468	477	500	537	525	543	534	547	546	553	560	555	556	552	546
20	546	549	556	549	548	538	532	539	532	528	528	537	545	546	550	535	546	550	560	559	564	550	548	553
21	555	565	545	543	545	540	538	537	533	537	545	540	544	550	572	562	547	574	582	552	565	542	554	563
22	588	563	530	539	546	543	519	498	517	514	512	521	521	540	537	547	547	552	556	557	555	561	560	571
23	555	555	542	545	557	550	540	507	516	534	532	526	530	537	537	526	566	559	558	563	585	554	542	550
24	564	558	547	539	547	529	529	520	517	509	497	516	526	534	543	545	547	546	546	549	551	562	546	550
25	559	547	543	536	536	537	534	523	512	517	522	525	525	537	534	547	548	553	560	549	555	556	554	559
26	554	551	546	550	556	545	539	528	519	519	520	525	528	533	543	538	550	564	562	559	563	558	577	549
27	546	547	549	548	561	542	540	535	526	524	516	523	535	529	546	546	564	549	550	554	547	544	547	545
28*	542	544	544	546	542	541	535	527	520	513	506	514	522	534	548	555	563	557	555	557	554	549	546	554
29	578	550	546	543	542	540	535	532	524	519	522	530	538	542	552	544	557	566	557	570	560	550	547	550
30	552	552	550	550	550	543	538	529	519	515	516	521	531	543	551	553	554	551	556	556	562	552	572	538
31	539	553	564	541	534	548	540	537	523	521	524	530	543	545	547	545	549	545	561	561	566	557	551	550
Mean	556	550	547	547	547	543	539	531	520	518	515	521	528	534	542	543	552	557	559	559	561	556	556	554
Mean*	553	551	551	549	548	550	549	545	538	531	524	527	529	537	546	551	561	562	560	562	562	559	564	562
Mean**	565	551	542	549	547	537	530	527	496	504	492	495	504	506	526	538	545	564	560	562	552	565	558	549

* Denotes an International Quiet Day. ** Denotes an International Disturbed Day.

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

	0h	1h	2h	3h	4h	5h	6h	7h	8h	9h	10h	11h	Noon	13h	14h	15h	16h	17h	18h	19h	20h	21h	22h	23h	24h
September.	18000 γ + Tabular Quantities (in γ).																								
1	563	555	548	552	571	550	519	519	515	511	486	486	475	499	518	508	527	534	532	536	542	543	539	542
2	547	563	557	535	518	521	532	516	510	493	490	515	528	536	546	549	546	546	547	554	562	562	554	556
3**	558	559	555	551	528	535	525	518	514	505	519	502	495	512	524	544	516	533	536	531	544	553	527	519
4	521	538	542	556	512	516	522	521	502	467	467	486	518	527	530	530	536	538	538	544	541	544	541	544
5	542	540	544	537	542	546	542	520	516	515	516	515	518	547	525	550	551	540	544	554	568	560	540	542
6**	542	545	551	546	549	554	537	529	538	510	462	469	501	529	525	542	538	522	543	540	542	544	546	553
7	538	537	533	537	538	533	523	508	499	510	497	515	516	528	538	544	544	537	535	545	547	541	540	549
8	535	530	538	532	535	526	530	521	512	505	502	516	529	537	532	548	546	533	541	541	563	548	548	550
9	551	551	551	549	550	552	543	522	527	510	485	499	506	526	516	537	522	522	533	542	546	543	558	550
10	545	537	560	535	543	539	529	518	516	507	509	517	525	527	529	530	535	547	545	546	544	546	550	548
11	546	547	548	548	551	551	552	548	529	518	515	511	518	531	536	525	537	541	542	547	553	554	556	560
12	539	543	544	544	543	550	540	537	529	516	513	516	519	529	531	533	545	545	551	543	539	560	542	533
13	532	541	545	558	549	545	546	539	527	519	512	515	520	530	538	545	546	547	548	552	550	541	545	546
14*	539	538	542	543	543	543	542	539	537	525	519	524	526	526	530	536	540	543	547	552	547	543	541	547
15*	545	548	551	550	555	550	556	556	538	525	514	520	524	529	534	539	539	541	545	554	551	550	550	549
16*	547	547	548	551	555	559	555	544	529	519	516	515	517	525	535	544	542	552	552	550	552	555	555	555
17	553	554	555	555	555	558	555	548	545	537	526	529	520	515	513	519	532	545	552	555	558	559	559	558
18**	555	552	552	552	551	551	552	555	545	543	464	445	476	469	488	505	500	485	488	550	521	523	564	554
19	501	495	503	509	521	516	495	493	499	499	477	483	500	517	513	528	521	524	533	538	551	550	535	530
20	533	536	530	533	534	532	532	529	521	518	522	523	522	519	532	539	537	539	539	543	543	550	550	550
21	548	547	547	548	549	551	548	533	491	461	485	512	530	534	510	522	505	530	530	540	539	544	546	535
22	542	548	534	533	538	535	533	527	520	527	535	540	544	539	539	538	540	545	546	548	548	547	544	545
23	544	540	540	543	548	546	548	544	518	509	513	534	533	535	535	539	538	551	540	551	551	552	551	545
24	566	548	547	551	548	546	542	538	514	497	520	523	525	530	540	539	530	543	546	550	553	551	550	556
25	559	551	550	551	551	551	548	540	531	522	520	525	535	538	545	551	547	552	540	540	545	556	562	553
26*	548	546	548	551	551	552	549	546	538	525	516	516	524	533	538	551	556	553	553	556	556	556	552	553
27*	555	551	556	553	555	555	552	543	530	520	512	516	529	535	534	539	551	556	559	556	556	556	556	550
28	553	551	555	559	559	559	561	546	551	539	522	505	494	512	530	530	543	548	526	547	538	540	546	546
29**	551	569	559	544	546	535	540	538	497	468	493	490	456	450	488	507	521	531	567	540	537	538	562	543
30**	538	572	544	547	534	496	468	452	442	473	486	495	501	504	512	520	533	532	538	542	540	539	534	534
Mean	545	546	546	545	544	542	537	530	519	510	504	509	514	522	527	534	536	539	541	546	548	548	548	547
Mean*	547	546	549	550	552	552	551	546	534	523	515	518	524	530	534	542	546	549	551	554	552	552	551	551
Mean**	549	559	552	548	542	534	524	518	507	500	485	480	486	493	507	524	522	521	534	541	537	539	547	541
October.	18000 γ + Tabular Quantities (in γ).																								
1	533	536	535	538	546	544	542	530	513	501	492	482	485	497	507	506	517	524	546	536	538	543	553	541
2	538	525	528	536	538	542	526	531	525	514	509	506	500	518	523	530	533	532	544	549	547	544	552	542
3**	539	541	541	547	552	530	543	543	528	521	478	(477)	527	527	513	495	499	534	522	512	562	523	532	546
4	554	532	531	537	528	530	527	527	506	484	487	476	488	505	517	534	527	532	531	559	536	531	547	532
5	545	537	536	538	542	536	531	518	518	496	498	493	507	519	512	513	516	520	528	523	555	542	541	544
6	536	540	547	542	534	549	535	536	527	500	516	522	527	523	538	536	533	536	542	539	542	533	539	535
7	541	539	541	549	547	538	541	533	530	524	518	524	531	530	535	532	520	531	547	538	521	550	546	543
8	542	544	544	559	554	544	541	520	510	490	489	484	491	498	507	512	515	516	519	531	536	538	539	542
9	545	549	557	544	541	546	548	541	529	517	512	508	518	518	531	535	536	531	550	546	547	544	564	546
10	547	550	550	549	550	550	551	547	537	524	514	513	524	529	534	537	534	535	539	537	535	537	545	546
11*	547	545	545	545	548	555	552	542	525	517	516	521	524	531	532	534	532	533	534	530	544	547	549	547
12	548	548	549	551	551	551	549	547	543	533	523	518	527	533	543	542	544	548	547	548	556	549	548	548
13*	548	549	551	552	553	553	552	551	543	535	527	527	534	538	542	540	542	542	541	548	546	547	548	548
14**	546	548	555	552	570	589	600	590	583	568	543	530	518	524	553	550	540	548	561	529	482	466	480	495
15	510	518	523	520	525	527	529	529	527	520	513	507	509	512	520	529	535	538	540	543	544	543	542	538
16*	537	539	538	540	539	543	545	545	541	532	526	513	515	524	528	534	537	542	542	539	536	537	541	545
17**	549	551	554	554	558	557	536	523	545	531	512	474	460	484	494	499	505	492	445	410	406	437	463	483
18	503	494	492	498	502	507	510	515	515	518	512	505	492	518	527	525	520	525	531	534	512	518	521	539
19	539	534	528	534	536	540	533	533	511	501	515	512	519	523	528	527	531	534	538	534	534	543	534	531
20	540	534	533	528	530	537	531	538	518	458	505	520	524	525	525	502	527	519	538	547	536	541	555	549
21	555	538	533	533	533	539	539	526	523	525	523	523	532	537	536	531	529	528	551	539	536	544	541	541
22	541	540	539	539	545	545	544	544	538	533	523	521	529	538	543	538	524	531	528	536	541	542	542	548
23*	541	542	541	541	543	546	547	546	541	536	531	533	533	544	545	546	546	542	546	546	548	550	542	544
24*	544	544	546	546	546	548	546	547	544	537	533	536	540	544	546	548	551	549	549	552	546	547	549	550
25	550	552	552	549	549	555	555	556	549	541	540	546	555	555	549	547	534	528	512	541	538	541	541	564
26**	548	546	537	532	546	558	552	521	516	521	516	517	480	461	489	496	491	488	506	552	543	519	559	558
27**	537	516	526	532	529	520	526	530	511	516	489	467	486	524	489	502	508	512	547	534	558	521	524	526
28	529	517	529	534	539	535	535	517	526	487	503	513	509	482	517	532	528	503	508	521	542	528	532	532
29	532	532	538	530	530	542	536	515	502	479	470	483	511	494	516	489	530	535	545	538	534	541	535	532
30	530	537	540	547	529	555	533	521	516	513	517	511	517	508	511	530	520	521	563	538	610	531	526	534
31	538	536	538	544	544	545	543	537	534	531	518	472	512	523	525	525	521	529	548	534	537	547	532	536
Mean	540	537	539	540	541	544	541	536	528	516	512	508	514	519	525	526	527	528	535	534	537	533	538	539
Mean	543	544	544	545	546	549	548	546	539	531	527	526	529	536	539	540	542	542	542	543	544	546	546	547
Mean**	544	540	543	543	551	551	551	541	537	531	508	493	494	504	508	508	509	515	516	507	510	493	512	522

* Denotes an International Quiet Day. ** Denotes an International Disturbed Day.

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

	0h	1h	2h	3h	4h	5h	6h	7h	8h	9h	10h	11h	Noon	13h	14h	15h	16h	17h	18h	19h	20h	21h	22h	23h	24h
November.	18000 γ + Tabular Quantities (in γ).																								
1	532	524	532	534	538	539	538	541	533	528	518	506	501	511	516	519	510	507	519	530	536	542	542	542	
2	541	539	538	540	543	545	546	544	537	531	528	524	526	530	532	495	524	535	541	546	548	548	547	547	
3	546	533	534	533	535	539	544	544	537	529	528	526	530	535	538	541	543	545	545	548	554	551	554	552	
4**	552	552	552	555	558	576	573	559	546	533	498	487	500	514	515	525	532	533	535	536	537	555	548	552	
5	539	537	538	539	545	542	545	542	537	531	526	525	527	534	534	528	522	531	534	550	550	532	535	538	
6	540	543	543	546	546	551	548	546	539	533	532	529	522	534	539	542	539	546	547	545	545	547	548	547	
7	547	547	547	550	550	552	552	549	541	535	532	532	537	531	543	547	553	551	533	541	539	545	545	547	
8	549	547	543	545	550	552	551	547	542	526	528	533	539	545	537	539	542	542	550	545	545	547	549	543	
9	558	549	539	546	535	539	539	539	537	525	519	526	536	542	543	544	548	540	548	548	542	551	546	546	
10	545	544	546	547	550	551	547	558	547	538	535	529	534	538	545	546	549	550	553	554	549	548	552	548	
11	542	541	545	547	548	550	550	546	540	533	529	529	535	543	546	548	551	554	554	554	551	550	550	554	
12*	558	548	547	542	546	550	552	547	540	535	534	537	539	542	543	545	547	549	548	548	551	550	550	548	
13	548	548	550	551	553	554	554	553	548	543	539	541	545	547	550	553	555	558	559	565	558	559	558	556	
14**	554	551	554	549	553	561	556	556	552	550	552	554	555	553	558	560	565	550	524	501	478	472	507	502	
15	507	501	494	515	523	522	515	522	519	516	487	511	520	531	530	530	530	537	539	539	537	537	530	532	
16	528	529	530	534	532	534	537	542	541	535	536	536	536	537	537	537	539	539	537	536	536	539	539	534	
17	539	529	537	532	534	539	540	537	530	527	531	523	525	532	532	534	535	538	540	537	534	544	541	541	
18	536	538	539	539	541	540	536	537	537	534	531	534	536	539	539	524	531	541	547	540	551	544	536	540	
19*	541	539	539	539	544	544	541	541	536	532	531	531	534	539	541	545	551	547	548	549	549	549	547	544	
20*	547	548	549	552	552	553	553	551	545	539	536	536	536	541	547	549	552	549	549	549	549	547	546	549	
21*	545	547	549	551	552	552	551	550	545	540	537	540	543	547	548	550	553	556	555	555	551	558	550	549	
22*	549	549	552	552	555	555	555	553	548	538	530	532	541	549	554	557	562	564	559	560	559	559	559	559	
23	558	558	560	560	562	567	566	566	562	556	550	544	540	540	540	538	538	538	529	504	504	510	514	515	
24**	529	529	542	554	546	535	538	548	522	534	531	490	505	519	526	505	487	520	491	521	520	538	562	515	
25**	535	553	540	533	524	541	532	530	506	461	468	480	455	469	475	488	465	464	498	514	507	514	530	530	
26**	528	519	510	520	517	520	519	511	526	519	509	503	502	511	521	507	520	528	528	533	536	533	541	538	
27	537	539	536	539	547	543	540	540	537	515	515	500	524	552	525	520	533	526	542	529	543	543	542	539	
28	547	536	537	542	546	548	546	546	533	526	521	509	517	525	535	537	541	544	540	535	546	540	542	554	
29	541	537	538	547	550	547	553	548	537	534	536	533	538	542	526	519	529	543	547	526	524	534	537	542	
30	543	541	541	544	550	543	554	552	538	536	533	528	523	532	536	537	532	531	529	526	531	538	541	540	
Mean	542	540	540	543	544	546	546	545	538	530	526	524	527	534	535	534	536	539	539	539	539	541	543	541	
Mean*	548	546	547	547	550	551	550	548	543	537	534	535	539	544	547	549	553	553	552	552	552	553	550	550	
Mean**	540	541	540	542	540	547	544	541	530	519	512	503	503	513	519	517	514	519	515	521	516	522	538	527	
December.	18000 γ + Tabular Quantities (in γ).																								
1	542	553	541	543	549	550	549	548	546	533	528	531	532	530	531	532	533	540	545	548	545	544	545	545	
2	545	544	547	548	549	553	552	550	547	543	543	539	540	537	537	540	541	540	545	545	541	541	548	552	
3**	552	570	568	574	578	569	569	570	558	545	540	519	502	503	477	459	429	416	421	413	438	453	485	473	
4**	470	476	485	513	530	510	507	530	509	499	481	482	484	487	492	499	513	515	518	511	520	523	526	520	
5	537	519	522	524	524	528	530	532	534	532	536	538	541	538	535	535	535	534	536	535	531	532	533	534	
6	530	532	535	534	534	536	535	536	537	539	541	545	546	546	544	542	541	542	540	531	534	539	538	534	
7	555	543	531	535	542	549	549	548	549	551	545	545	544	539	535	529	536	541	544	541	541	540	536	540	
8*	542	540	543	544	545	545	545	545	548	547	547	547	550	546	545	548	551	551	550	549	548	547	548	546	
9	545	544	545	548	551	552	555	558	561	556	551	551	545	541	540	540	543	544	544	543	543	546	546	548	
10	543	544	549	551	553	555	555	554	552	547	548	545	544	542	545	546	552	553	553	553	548	545	546	545	
11	551	554	551	551	554	557	556	553	553	551	548	547	544	545	548	550	551	553	549	548	546	545	546	548	
12	546	547	550	553	556	560	561	561	558	555	556	553	555	553	549	541	544	547	558	561	537	539	541	530	
13**	537	532	561	549	549	548	555	558	551	551	550	543	534	531	548	545	509	530	540	536	541	537	553	536	
14	540	542	540	543	548	551	552	556	552	555	554	540	537	540	543	545	542	540	545	545	540	544	542	549	
15	546	543	543	548	548	549	551	555	555	550	543	537	534	531	543	551	551	553	554	553	541	541	550	549	
16*	547	543	545	548	547	548	551	551	549	547	547	544	544	548	549	551	552	553	547	549	552	552	551	550	
17*	549	549	549	550	553	553	551	552	553	551	548	545	549	552	553	553	554	556	556	553	553	552	550	549	
18*	549	548	549	551	551	552	551	551	554	557	557	558	556	559	560	557	557	556	554	554	552	553	553	553	
19	553	552	550	552	552	555	556	555	554	554	557	564	564	553	548	544	554	566	564	553	549	545	548	553	
20**	552	551	552	552	553	564	566	560	558	558	557	551	558	556	557	558	523	510	503	518	518	535	532	531	
21**	530	522	530	541	541	545	533	533	496	488	517	514	509	519	501	514	501	497	513	539	538	538	556	524	
22	527	532	535	538	532	537	541	538	532	527	527	528	531	528	524	514	520	523	525	537	526	543	549	523	
23	550	534	537	541	543	541	548	540	541	540	530	527	530	539	535	508	509	524	537	542	535	536	543	547	
24	545	539	544	536	544	547	552	539	540	537	535	534	511	517	516	530	524	514	531	530	535	542	541	539	
25	547	545	545	545	543	547	547	544	541	531	528	517	518	537	543	540	537	543	543	539	539	538	542	547	
26	543	543	545	548	552	550	549	555	551	547	550	545	540	539	537	532	530	534	544	548	538	542	540	536	
27	540	542	543	546	551	547	553	553	557	549	543	547	548	545	541	534	535	540	544	—	—	—	(552)	547	
28	545	544	547	552	555	557	553	551	549	547	545	545	550	548	545	541	541	549	551	551	551	549	548	543	
29	544	544	548	550	554	557	557	558	559	552	549	548	551	553	561	562	561	553	548	545	543	537	534	536	
30	541	547	548	551	553	554	554	556	554	548	551	548	549	548	545	547	550	551	551	552	555	548	548	548	
31*	549	547	545	547	549	551	551	551	552	552	551	551	551	553	557	556	558	556	558	558	558	558	554	553	
Mean	542	541	543	545	548	549	549	550	546	543	542	539	538	539	538	537	535	536	539	539	538	540	542	540	
Mean*	547	545	546	548	549	550	550	550	551	551	550	549	550	552	553	553	554	554	553	553	553	552	551	550	
Mean**	528	530	539	546	551	547	546	550	534	528	529	522	517	519	515	515	495	494	499	503	511	517	530	517	

* Denotes an International Quiet Day. ** Denotes an International Disturbed Day.

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

	0h	1h	2h	3h	4h	5h	6h	7h	8h	9h	10h	11h	Noon	13h	14h	15h	16h	17h	18h	19h	20h	21h	22h	23h	24h
January.	42000 γ + Tabular Quantities (in γ).																								
1	931	927	917	922	924	927	927	927	929	929	928	929	924	930	937	937	939	941	941	941	939	936	932	929	
2	928	927	927	928	929	929	929	929	927	922	921	921	926	930	931	932	934	933	933	933	932	932	929	929	
3**	928	928	928	928	928	929	928	927	922	917	923	930	927	933	945	948	955	952	946	951	952	950	942	935	
4**	934	930	931	929	924	923	924	926	929	930	933	931	932	941	963	961	963	966	972	954	953	953	945	941	
5**	926	933	924	925	928	926	927	929	926	925	928	930	937	948	957	974	980	978	969	964	959	952	950	951	
6**	946	941	939	931	919	923	928	930	930	930	929	927	930	942	952	967	982	962	961	962	957	950	945	938	
7**	931	922	918	925	928	929	933	934	932	932	932	942	942	947	951	955	956	957	964	962	957	950	945	935	
8	934	933	933	934	936	937	933	930	930	930	930	928	930	935	943	945	950	947	945	943	942	940	934	933	
9	933	929	929	932	933	935	937	937	934	934	934	932	933	937	939	939	939	938	938	938	937	937	936	934	
10	929	929	930	930	931	932	932	932	933	929	925	924	926	931	936	936	938	937	937	937	937	934	933	933	
11*	931	929	928	928	927	929	929	930	929	929	928	929	926	927	930	931	932	932	932	932	931	930	930	930	
12*	927	927	925	926	925	925	925	925	925	922	923	924	924	930	930	932	931	931	930	928	927	927	927	927	
13	927	925	924	922	922	917	917	919	920	918	917	917	918	920	922	922	925	925	929	929	930	930	930	929	
14*	927	927	925	925	923	923	922	920	921	922	923	924	922	926	928	928	928	928	929	927	926	927	927	926	
15	926	927	927	926	925	925	923	924	925	925	924	929	929	931	930	927	926	927	930	931	932	935	932	935	
16	931	929	929	929	928	929	925	925	925	925	927	927	928	933	935	935	935	933	932	931	930	928	927	927	
17	927	927	928	929	927	928	927	927	927	926	924	919	922	927	929	930	932	942	955	960	953	952	949	945	
18	939	937	935	937	935	935	933	931	927	924	923	922	925	926	927	931	931	934	935	936	940	935	934	933	
19	935	930	926	925	920	923	926	925	925	922	921	921	926	935	940	942	940	939	941	939	937	933	931	929	
20	922	925	927	928	930	927	927	926	922	920	918	915	919	924	933	934	933	935	944	947	947	952	948	946	
21	939	935	924	927	922	925	928	932	932	932	930	928	930	935	939	935	934	936	939	938	936	936	936	931	
22	932	932	931	931	931	932	931	932	932	933	931	929	927	934	935	934	937	938	938	940	939	939	936	939	
23	935	929	930	932	932	932	932	934	935	937	938	937	933	934	937	936	936	935	939	939	937	937	938	937	
24	938	935	934	930	931	931	932	933	933	932	932	933	933	934	935	932	935	938	939	942	942	940	940	938	
25	936	936	934	931	929	930	932	931	929	929	929	931	930	931	935	936	936	935	936	935	935	934	934	934	
26*	934	931	930	929	929	929	929	929	929	926	923	919	919	924	929	928	927	928	930	930	930	930	930	930	
27*	929	929	929	929	929	929	929	929	929	926	924	924	926	929	931	930	929	929	930	930	930	929	929	929	
28	930	930	930	929	929	927	927	927	927	925	924	920	920	925	927	927	927	929	932	935	936	936	935	932	
29	930	930	929	927	925	923	923	922	924	922	923	927	928	931	935	937	936	936	935	935	935	934	932	930	
30	931	931	931	930	928	928	928	926	926	926	923	923	927	936	943	946	943	942	938	937	934	934	933	931	
31	928	928	931	928	928	930	928	928	928	925	923	927	928	931	932	934	934	936	936	936	936	933	933	933	
Mean	932	930	929	929	928	928	928	928	928	927	926	926	927	932	937	938	940	939	941	940	939	938	936	934	
Mean*	930	929	927	927	927	927	927	927	927	925	924	924	923	927	930	930	929	930	930	929	929	929	929	928	
Mean**	933	931	928	928	925	926	928	929	928	927	929	932	934	942	954	961	967	963	962	959	956	951	945	940	
February.	42000 γ + Tabular Quantities (in γ).																								
1	931	930	923	923	922	926	925	928	929	934	935	932	936	938	942	949	945	949	945	942	938	936	936	933	
2	922	925	923	923	926	928	930	931	928	926	927	930	928	931	932	935	935	937	939	945	941	936	931	926	
3	924	924	924	929	932	933	933	935	935	929	929	929	934	940	950	946	944	949	944	942	936	927	932	931	
4	929	929	929	929	932	932	932	934	933	932	932	932	933	934	934	934	936	937	937	938	936	932	929	929	
5	929	927	924	926	929	931	932	933	934	932	932	935	933	935	937	940	939	939	937	935	934	934	932	932	
6*	929	929	929	929	931	931	932	932	931	929	924	925	924	923	926	939	939	939	937	935	932	932	931	929.	
7	927	926	927	926	927	927	929	930	932	930	926	926	927	928	927	931	931	931	931	932	930	928	927	925	
8*	925	925	924	924	924	925	925	926	928	926	923	925	929	930	933	932	936	938	938	939	940	938	936	924	
9*	931	929	928	926	926	926	927	929	930	928	922	919	922	(922)	924	926	927	924	923	924	924	924	924	934	
10*	925	923	922	922	922	921	921	924	925	925	922	919	921	927	929	927	929	929	927	927	925	927	927	925	
11	926	923	919	914	916	917	919	921	921	918	916	915	917	918	922	923	923	923	922	922	922	922	923	923	
12**	924	922	923	922	922	921	915	912	917	917	916	915	917	920	922	928	933	937	937	932	932	939	906	884	
13**	906	913	913	921	928	933	933	933	929	926	922	919	928	940	962	957	948	955	965	963	958	950	945	944	
14**	926	919	890	909	926	931	933	931	930	926	925	926	931	946	964	973	975	973	959	953	947	943	944	934	
15**	919	915	922	923	924	925	928	929	932	929	926	929	936	939	953	974	975	966	959	951	943	942	936	936	
16**	937	925	919	908	909	918	922	925	926	926	925	930	931	935	952	964	957	952	952	948	947	932	931	926	
17	926	926	926	926	926	926	928	928	929	929	931	931	932	936	941	954	962	955	953	951	946	943	941	936	
18	935	933	933	931	926	925	925	931	933	933	929	926	930	931	936	938	945	949	959	951	945	943	941	934	
19	924	926	931	928	916	919	923	928	935	936	935	928	924	926	932	941	953	953	947	946	944	938	937	935	
20	933	932	926	926	928	931	931	931	932	928	925	919	924	928	931	935	941	946	948	951	952	946	941	936	
21	933	932	931	931	931	932	928	928	928	928	926	924	928	928	933	938	940	939	938	937	936	936	933	933	
22*	932	931	931	929	927	927	927	928	932	929	924	919	920	920	925	928	930	931	933	933	934	935	936	936	
23	933	930	928	927	926	926	925	922	922	920	917	916	917	919	924	931	936	936	933	933	936	932	932	933	
24	932	928	928	926	926	925	920	921	924	924	926	924	923	925	932	936	936	933	933	938	937	930	928	928	
25	928	927	926	924	914	919	924	926	932	933	931	932	933	937	941	949	946	949	955	943	937	933	924	917	
26	910	908	916	923	925	926	927	925	925	919	918	917	920	925	927	935	944	946	937	932	930	931	932	930	
27	927	923	923	924	918	921	921	923	924	921	917	916	920	922	926	930	931	930	930	930	930	928	926	920	
28	921	924	923	920	919	922	922	920	921	921	918	918	919	926	939	941	946	946	949	941	935	931	926	925	
Mean	927	925	924	924	924	926	927	927	929	927	925	924	926	930	936	940	942	943	942	940	937	935	932	929	
Mean*	928	927	927	926	926	926	926	928	929	927	923	921	923	924	928	930	932	932	932	932	931	931	931	930	
Mean**	922	919	913	917	922	926	926	926	927	925	923	924	929	936	951	959	958	957	954	949	945	941	932	925	

* Denotes an International Quiet Day. ** Denotes an International Disturbed Day.

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

	0h	1h	2h	3h	4h	5h	6h	7h	8h	9h	10h	11h	Noon	13h	14h	15h	16h	17h	18h	19h	20h	21h	22h	23h	24h
March.	42000 γ + Tabular Quantities (in γ).																								
1**	925	921	917	904	901	911	913	918	921	918	918	918	923	936	938	951	950	953	948	940	925	921	921	911	
2**	912	913	910	913	917	920	921	921	922	917	918	916	921	925	935	949	959	947	945	933	930	921	921	922	
3	918	910	908	918	923	923	923	924	923	923	921	918	923	928	930	938	940	938	933	930	930	926	918	920	
4	921	916	913	920	922	924	926	930	930	928	925	920	921	925	933	938	939	935	933	932	928	927	925	925	
5*	924	924	924	925	925	925	927	929	927	921	914	912	911	913	918	926	929	930	930	929	927	925	925	925	
6	924	924	924	924	925	925	925	928	928	923	919	919	921	915	919	925	929	928	927	926	925	924	924	923	
7*	923	923	923	923	923	924	925	928	927	923	918	914	912	913	919	925	927	928	928	926	925	924	923	922	
8*	922	921	921	921	922	923	923	924	925	921	916	909	911	916	918	922	925	925	923	923	923	923	922	922	
9*	921	921	921	921	921	921	921	923	923	920	913	908	914	916	920	922	923	921	921	921	921	921	921	921	
10*	921	920	919	920	919	919	919	922	921	917	911	908	906	911	916	921	923	919	921	921	921	923	925	925	
11	924	923	922	921	921	920	919	921	921	920	916	911	908	909	909	913	921	921	922	921	933	952	946	942	
12**	935	929	924	912	884	874	894	892	895	901	906	903	918	944	940	945	957	970	972	962	952	940	934	923	
13**	907	895	893	898	902	904	901	912	922	922	923	919	917	924	946	958	962	963	954	945	934	925	913	916	
14**	908	911	904	908	917	920	920	918	924	920	915	912	915	926	952	973	947	944	946	944	939	936	938	924	
15	903	893	900	903	910	910	914	919	919	914	912	914	920	933	950	965	960	969	951	939	934	931	931	926	
16	914	914	911	915	918	920	918	917	912	912	908	907	911	922	925	933	944	940	939	931	923	925	926	911	
17	912	915	922	925	920	917	922	924	920	913	916	919	919	924	931	939	942	949	945	939	926	922	921	924	
18	920	907	904	908	913	920	924	925	924	921	919	919	923	927	931	942	945	945	950	937	938	935	927	926	
19	913	903	906	915	924	926	923	926	919	911	900	902	912	917	924	931	930	932	933	932	931	932	925	922	
20	914	917	914	911	914	914	917	920	920	917	913	910	914	919	928	939	941	936	936	933	931	928	925	911	
21	916	919	917	913	915	918	922	922	922	918	915	912	917	920	924	931	938	950	952	949	945	939	937	932	
22	927	927	907	893	888	890	889	894	895	902	903	901	902	912	916	928	944	951	947	940	935	927	922	924	
23	926	926	925	923	923	923	926	926	923	922	918	913	913	919	923	924	926	926	926	928	930	930	927	922	
24	918	916	914	908	906	910	916	917	913	917	921	923	922	929	940	940	941	944	943	936	932	930	930	928	
25	929	927	925	924	924	923	924	920	916	912	909	909	909	912	922	931	936	934	930	927	927	929	928	919	
26	916	912	909	914	909	912	917	920	917	906	900	905	910	916	920	927	936	933	934	933	930	928	927	926	
27	924	921	918	919	919	922	927	925	927	919	913	916	918	923	929	936	941	941	939	939	936	933	930	927	
28	915	908	915	919	920	924	923	924	920	918	914	914	924	925	935	940	938	935	929	930	932	923	915	918	
29	912	903	900	906	914	919	925	929	929	924	914	913	918	922	935	941	945	942	934	931	929	925	924	921	
30	923	925	920	914	913	913	921	925	923	918	913	913	918	926	931	936	935	937	934	931	929	927	925	926	
31	925	925	920	924	926	926	930	931	926	920	914	913	918	924	931	933	933	933	933	933	931	930	928	929	
Mean	919	916	915	915	915	917	919	921	921	917	914	913	916	922	929	936	939	939	937	934	931	929	926	923	
Mean*	922	922	922	922	922	922	923	925	925	920	914	910	911	914	918	923	925	925	925	924	923	923	923	923	
Mean**	917	914	910	907	904	906	910	912	917	916	916	914	919	931	942	955	955	955	953	945	936	929	925	919	
April.	42000 γ + Tabular Quantities (in γ).																								
1	922	914	914	919	918	919	924	924	919	916	911	918	930	947	959	954	957	951	949	945	942	934	923	927	
2	929	923	920	923	927	929	931	929	924	917	915	912	918	924	932	936	939	937	932	931	929	928	922	921	
3*	917	920	917	913	913	915	922	928	926	919	907	900	902	911	922	931	932	930	927	925	924	924	923	923	
4*	923	922	922	923	924	924	929	927	918	910	905	902	905	910	919	926	929	927	928	927	924	924	924	924	
5*	922	922	921	921	919	917	921	921	915	909	901	895	900	907	912	919	920	920	919	920	920	920	920	920	
6	921	917	916	914	912	915	920	923	919	913	906	900	901	908	923	942	951	956	960	959	950	938	919	891	
7**	908	919	913	902	901	906	915	918	913	910	905	901	904	911	923	937	941	960	968	942	935	925	909	884	
8**	868	879	883	879	895	902	913	916	922	924	921	918	943	938	939	944	948	959	955	945	933	913	915	917	
9	913	909	910	910	913	921	925	925	921	916	912	913	915	921	932	938	955	954	949	945	935	932	918	901	
10**	901	909	904	890	891	897	903	907	912	904	900	904	915	924	939	956	955	959	953	949	934	922	926	904	
11	899	912	898	900	902	909	909	911	903	906	907	906	919	927	931	938	952	947	946	931	922	921	920	922	
12	920	899	896	896	893	901	903	910	908	905	905	905	920	933	936	941	945	946	945	932	927	920	923	907	
13	894	892	885	898	903	909	915	919	911	907	905	908	919	928	941	941	941	952	946	940	936	932	926	915	
14	914	911	897	901	917	920	924	923	920	915	912	912	914	923	929	936	937	937	939	942	938	933	929	919	
15	913	910	907	907	902	899	905	914	916	915	914	915	916	923	938	954	953	956	951	942	930	924	925	913	
16	909	907	907	901	902	909	917	920	918	911	911	906	902	915	919	922	929	932	930	928	928	927	927	911	
17	905	906	902	907	910	910	918	917	915	911	907	904	905	914	918	926	932	935	935	934	934	931	927	926	
18	927	925	921	923	925	927	918	919	924	917	908	905	911	916	926	935	939	944	949	946	941	931	931	924	
19	925	926	925	926	927	926	921	917	916	911	902	896	900	911	918	920	923	933	950	966	941	935	928	925	
20**	923	922	924	924	924	923	908	901	907	907	903	912	917	923	936	956	966	975	971	958	945	937	931	909	
21	913	911	919	913	915	915	920	918	916	918	920	913	912	921	936	947	940	941	947	944	941	929	921	891	
22**	882	881	886	897	908	915	920	921	916	910	910	910	915	924	930	937	951	959	959	937	932	932	928	890	
23	901	914	912	914	921	923	922	923	915	912	907	900	898	909	922	932	941	949	946	942	922	921	926	926	
24	926	922	918	920	924	927	926	925	919	914	913	910	909	913	924	932	943	960	948	941	937	935	933	929	
25	929	921	919	924	924	929	929	929	924	919	914	909	911	921	931	939	939	943	941	935	936	934	931	931	
26	929	926	914	910	913	919	919	915	914	916	909	909	911	917	924	929	930	937	941	941	938	931	930	927	
27*	927	930	930	930	930	927	927	926	922	920	916	917	920	922	928	933	938	943	945	944	936	933	932	928	
28*	925	925	925	925	923	924	925	925	923	920	913	912	915	922	930	933	936	941	935	934	930	930	927	925	
29	925	925	926	927	927	927	925	921	915	909	905	903	905	910	923	937	939	939	937	935	933	933	912	908	
30	918	923	926	926	926	929	931	928	921	916	911	909	907	910	920	926	931	938	945	945	933	928	927	927	
Mean	914	914	912	912	914	917	920	920	917	913	909	908	912	919	929	937	941	945	945	940	934	929	924	916	
Mean*	923	924	923	922	922	921	925	925	921	916	908	905	908	914	922	928	931	932	931	930	927	926	925	924	
Mean**	896	902	902	898	904	909	912	913	914	911	908	909	919	924	933	946	954	962	961	946	936	926	922	901	

* Denotes an International Quiet Day. ** Denotes an International Disturbed Day.

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

	0h	1h	2h	3h	4h	5h	6h	7h	8h	9h	10h	11h	Noon	13h	14h	15h	16h	17h	18h	19h	20h	21h	22h	23h	24h
May.	42000 γ + Tabular Quantities (in γ).																								
1	926	924	923	918	917	918	920	923	921	913	906	902	902	904	911	916	921	927	925	925	924	923	923	923	
2*	923	923	921	923	923	923	924	926	922	915	906	899	896	900	909	911	914	918	918	920	918	918	918	918	
3*	919	919	921	922	923	924	924	924	922	915	907	900	897	902	914	921	922	927	929	925	922	921	920	919	
4	918	917	911	895	897	892	894	903	907	901	895	889	894	912	917	924	928	936	943	946	944	938	929	927	
5**	928	894	879	849	843	861	879	891	896	895	904	912	918	946	949	953	967	961	967	952	941	923	920	919	
6**	915	908	907	899	858	882	897	898	902	903	907	906	919	929	930	937	949	942	947	939	935	934	913	896	
7	873	855	872	878	890	903	907	909	906	908	906	901	904	911	919	935	953	948	952	939	931	914	913	897	
8	894	906	905	905	908	904	907	910	908	911	917	918	918	922	936	945	950	954	953	941	936	930	919	914	
9	894	893	905	914	916	913	920	920	920	914	910	908	920	930	940	950	950	945	946	945	938	922	914	903	
10	895	894	893	894	904	914	915	916	913	906	910	906	910	916	924	927	930	935	933	935	933	928	929	928	
11	927	922	923	925	926	925	922	921	918	916	910	909	915	920	924	925	927	929	929	929	928	927	926	918	
12	906	892	896	894	905	910	908	904	900	901	899	897	904	913	929	935	935	938	937	938	936	933	917	906	
13	899	899	913	923	923	914	911	915	911	910	911	912	915	919	929	935	944	944	944	941	932	930	929	927	
14	920	912	909	913	916	918	918	917	916	913	908	907	909	915	922	931	935	945	942	940	936	934	925	920	
15	925	927	927	925	928	929	927	927	920	924	920	917	914	918	928	933	937	942	945	943	937	935	931	914	
16**	914	916	913	913	902	893	902	903	906	901	901	902	901	902	913	925	936	962	988	973	957	943	926	914	
17**	912	911	901	898	907	911	909	920	924	920	908	914	918	924	942	950	955	958	960	954	949	918	912	899	
18	916	921	917	907	909	918	920	924	919	914	909	906	907	924	926	931	943	958	953	955	940	930	931	929	
19	926	918	893	913	919	924	926	926	917	912	911	908	913	914	921	929	934	941	941	943	941	935	932	925	
20	921	921	924	923	917	912	911	915	913	908	902	902	905	913	928	935	936	940	940	936	937	934	931	925	
21	920	915	913	903	909	918	919	920	921	920	915	911	915	916	922	930	933	944	949	948	941	935	928	927	
22	925	920	915	908	913	918	918	918	913	918	910	911	910	913	922	930	935	939	944	944	941	937	934	933	
23	931	924	922	923	928	931	929	929	920	916	915	910	914	915	919	926	933	935	936	936	932	932	930	930	
24*	930	929	927	927	930	928	926	922	917	910	905	904	905	909	915	924	930	930	932	939	938	933	932	928	
25	922	925	926	926	922	925	925	922	918	916	910	903	904	914	924	931	943	948	947	941	937	933	927	927	
26	921	909	910	918	909	917	920	925	921	919	910	908	913	918	920	925	931	932	933	932	929	927	927	927	
27*	927	927	927	929	930	930	928	925	916	913	908	900	905	915	922	926	931	933	931	930	927	925	926	926	
28*	925	925	925	927	930	931	929	927	920	914	910	910	915	920	931	941	944	943	939	932	928	927	927	927	
29	927	927	926	927	925	925	925	922	918	918	914	909	909	915	925	929	936	938	944	944	937	930	928	925	
30	920	918	919	922	922	920	918	918	925	923	918	902	903	913	918	921	930	937	951	948	944	937	920	918	
31**	883	828	869	894	871	891	908	913	919	920	915	913	912	918	931	933	937	943	957	952	942	927	922	900	
Mean	916	910	911	911	910	914	916	917	915	913	909	906	909	916	925	931	937	941	944	941	936	929	925	919	
Mean*	925	925	924	926	927	927	926	925	919	913	907	903	904	909	918	925	928	930	930	929	927	925	925	924	
Mean**	910	891	894	891	876	888	899	905	909	908	907	909	914	924	933	940	949	953	964	954	945	929	919	906	
June.	42000 γ + Tabular Quantities (in γ).																								
1**	901	885	883	885	883	903	914	927	925	927	932	927	929	935	933	941	947	954	952	949	931	927	920	909	
2**	897	894	895	893	903	906	917	918	922	921	915	913	922	926	932	937	952	957	954	954	934	930	915	906	
3	900	893	884	885	891	898	909	915	916	917	909	910	922	929	934	943	954	952	956	952	929	928	925	908	
4	914	916	922	925	922	925	922	926	925	922	917	916	922	927	932	937	948	948	951	949	942	925	922	908	
5	917	921	925	927	932	932	930	928	920	915	915	911	918	923	926	930	934	939	939	943	940	936	926	929	
6	929	922	924	925	931	932	930	925	923	918	905	917	928	945	946	946	946	941	940	944	945	940	944	935	
7**	929	924	906	895	909	919	916	906	912	915	912	913	916	922	933	942	942	943	944	947	942	939	920	890	
8	902	899	898	894	904	911	918	915	915	913	908	905	912	919	924	926	928	931	935	943	935	931	928	925	
9	924	921	922	921	918	915	916	916	914	913	904	904	913	919	931	936	938	938	933	931	931	926	925	921	
10	923	913	912	917	921	921	922	922	919	915	906	904	909	915	925	931	932	936	938	937	932	930	930	928	
11*	927	927	928	929	931	928	926	926	922	913	906	900	906	917	922	926	930	933	933	932	929	928	927	923	
12**	923	922	922	921	920	919	917	912	905	903	895	895	897	904	918	936	956	963	966	965	956	941	914	890	
13	903	913	914	917	925	925	927	923	919	913	903	899	905	913	924	935	946	956	949	944	935	929	924	921	
14	917	915	912	916	921	926	926	923	920	921	917	920	922	921	926	929	933	933	932	932	931	929	931	929	
15*	930	931	931	932	932	931	930	932	929	922	916	908	910	915	920	924	927	927	928	930	930	929	928	926	
16**	926	928	927	925	924	921	916	913	901	892	894	918	925	954	957	959	955	955	960	965	964	954	922	933	
17	920	899	909	906	917	922	930	937	936	935	927	926	922	928	939	943	946	951	954	954	954	943	938	936	
18	931	920	919	918	923	931	934	936	932	932	927	927	928	933	940	950	957	967	965	957	948	941	935	926	
19	921	921	924	929	933	933	937	935	928	922	920	922	926	931	940	939	946	945	943	943	940	940	937	933	
20	924	917	914	915	910	919	927	928	924	922	917	919	917	925	932	939	943	946	948	942	942	941	940	935	
21	926	928	931	933	934	935	936	936	934	929	926	924	922	927	935	944	957	948	942	937	936	936	936	935	
22	934	933	934	935	935	929	928	926	931	931	928	931	932	934	938	939	940	940	942	944	942	941	939	938	
23*	939	937	935	936	937	937	939	940	939	928	924	917	922	929	936	941	946	944	941	939	937	937	935	934	
24*	934	934	934	934	933	932	930	929	927	924	924	915	914	922	929	934	939	938	934	934	934	933	932	931	
25*	933	932	929	929	930	930	929	929	927	918	908	903	908	918	922	925	925	928	928	928	928	926	925	925	
26	927	927	926	925	926	924	924	926	926	919	912	912	918	929	939	943	946	939	939	936	934	933	931	929	
27	930	924	907	905	906	913	911	915	913	912	908	913	910	914	917	922	932	944	951	942	940	931	930	921	
28	901	901	901	900	906	906	908	904	901	908	910	914	918	924	934	935	943	948	952	945	941	931	904	916	
29	916	909	910	900	894	901	909	916	916	915	912	911	914	926	928	931	939	943	945	940	936	923	918	910	
30	907	917	920	919	912	906	909	911	914	920	917	912	907	912	920	931	933	938	943	944	938	931	926	921	
Mean	920	917	917	916	919	921	923	923	921	919	914	914	917	925	931	937	942	944	945	943	939	934	928	922	
Mean*	933	932	931	932	933	932	931	931	929	921	916	909	912	920	926	930	933	934	933	933	932	931	929	928	
Mean**	915	911	907	904	908	914	916	915	913	912	910	913	918	928	935	943	950	954	955	956	945	938	918	906	

* Denotes an International Quiet Day. ** Denotes an International Disturbed Day.

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

	0h	1h	2h	3h	4h	5h	6h	7h	8h	9h	10h	11h	Noon	13h	14h	15h	16h	17h	18h	19h	20h	21h	22h	23h	24h
July.	42000 γ + Tabular Quantities (in γ).																								
1	914	911	916	918	921	922	923	924	924	923	918	914	911	914	921	930	931	936	938	936	934	931	926	920	
2	920	921	921	921	921	922	924	928	926	924	920	917	918	926	925	922	923	933	941	941	939	936	926	916	
3	918	921	921	921	922	922	923	923	918	911	907	904	906	909	916	928	932	932	940	944	938	933	928	915	
4	916	909	902	906	912	915	916	913	914	904	904	904	909	917	931	934	938	943	948	938	933	930	925	914	
5	911	915	918	921	921	921	920	918	911	908	905	898	902	914	919	929	931	935	941	932	930	929	926	919	
6	917	919	919	912	916	920	919	920	919	917	916	914	917	921	923	926	930	934	933	932	930	928	925	924	
7	925	925	922	912	906	906	910	909	909	908	904	904	907	915	918	923	929	930	930	931	930	928	925	924	
8*	924	924	919	920	922	923	922	922	919	916	916	914	913	915	922	926	932	932	931	929	926	925	925	922	
9	921	921	917	921	921	922	920	916	910	901	899	900	902	912	921	920	920	920	920	921	922	923	921	921	
10**	913	898	893	878	885	903	910	909	910	922	924	929	928	927	939	945	948	957	951	941	938	935	928	918	
11**	915	909	881	839	863	895	912	924	926	926	921	917	921	926	930	934	940	942	945	957	951	939	932	927	
12**	924	916	912	920	909	900	902	914	915	914	946	916	917	920	926	937	940	940	939	942	945	930	925	922	
13**	915	919	922	923	918	916	924	926	924	921	917	916	919	928	935	953	964	964	956	952	939	931	930	919	
14	911	912	917	923	926	926	926	922	916	910	901	896	902	909	918	926	935	942	940	938	932	928	928	926	
15	926	923	924	927	926	927	924	925	922	922	921	920	921	924	930	936	943	951	942	934	931	930	929	928	
16	927	925	927	927	926	925	917	917	910	898	899	897	905	915	922	937	941	942	943	942	938	928	922	920	
17	909	904	898	904	912	918	923	927	926	922	920	922	918	923	935	937	943	947	948	941	937	931	928	927	
18	927	927	927	927	927	927	923	917	913	910	907	900	910	918	927	934	941	941	941	938	933	928	928	928	
19	928	926	925	924	926	928	930	929	923	918	913	911	913	922	930	935	936	933	931	937	937	934	931	928	
20*	928	929	928	929	926	925	925	923	916	918	913	908	912	920	923	925	926	925	925	929	931	931	930	928	
21*	927	924	921	924	929	932	932	927	927	926	914	914	915	918	926	929	930	934	932	932	934	933	931	928	
22*	928	926	926	923	926	925	923	921	921	916	907	905	907	911	923	928	928	929	929	934	935	933	931	928	
23*	927	928	927	927	929	929	927	923	922	919	910	905	908	918	922	924	928	927	927	928	924	924	924	922	
24	920	920	921	921	923	920	918	919	919	912	914	914	914	915	923	925	927	932	932	932	931	927	913	913	
25**	906	907	909	914	904	894	897	897	894	894	894	892	904	915	940	941	941	947	948	941	934	916	915	914	
26	907	905	902	897	902	899	901	899	902	900	902	907	918	924	935	938	936	935	939	931	928	926	924	925	
27	922	918	920	922	925	926	925	922	918	915	913	910	911	919	924	934	933	931	930	928	924	923	924	916	
28	911	915	916	911	916	920	921	921	916	911	906	899	900	905	917	931	932	933	933	928	928	926	923	919	
29	918	918	920	913	907	909	911	911	912	911	907	899	912	915	925	936	939	938	943	937	934	930	920	913	
30	919	922	923	925	925	919	923	923	918	917	914	909	909	912	915	918	925	934	935	935	933	929	924	922	
31	915	908	909	911	914	918	923	924	922	921	915	915	919	922	924	930	929	928	930	931	934	929	926	924	
Mean	919	918	916	915	916	918	919	919	917	914	911	909	912	918	925	931	935	937	938	936	933	929	926	922	
Mean*	927	926	924	925	926	927	926	923	921	919	912	909	911	916	923	926	929	929	929	930	930	929	928	926	
Mean**	917	912	903	895	896	902	909	914	914	915	912	914	918	924	934	942	947	950	948	947	942	931	926	922	
August.	42000 γ + Tabular Quantities (in γ).																								
1	923	915	914	912	920	919	921	920	915	914	913	907	903	906	913	918	923	925	925	927	927	926	923	920	
2*	919	919	919	919	919	918	918	916	910	908	908	910	909	915	925	926	928	931	932	928	926	925	923	920	
3*	918	917	917	919	922	922	922	920	915	912	907	903	907	915	916	920	922	925	925	927	925	925	921	917	
4*	919	919	919	919	920	918	913	910	908	906	906	903	903	905	912	915	918	923	926	924	924	921	921	915	
5	917	918	919	919	921	919	917	919	915	909	904	901	902	907	904	911	919	924	935	935	934	927	914	909	
6**	908	904	888	902	903	881	875	886	891	896	899	901	903	923	950	980	970	983	975	959	935	909	918	922	
7**	894	895	884	900	910	909	907	904	909	914	911	920	925	931	943	943	937	938	947	945	936	931	900	899	
8**	898	888	879	884	883	890	898	907	909	907	900	915	915	920	941	934	939	952	949	952	926	917	915	919	
9**	916	894	894	891	902	902	908	915	909	913	915	922	926	932	938	942	942	943	938	938	928	923	921	911	
10	919	922	921	919	916	917	917	920	919	921	917	914	917	928	930	934	939	951	939	936	933	929	927	920	
11	910	909	912	917	922	924	926	926	923	913	915	915	916	923	933	942	943	942	942	940	935	929	928	925	
12**	925	921	916	902	894	898	907	911	911	913	907	897	901	917	927	936	948	949	951	938	932	928	902	908	
13	910	894	881	900	908	912	917	922	923	921	917	908	911	923	928	931	936	940	940	936	927	928	923	918	
14	915	916	919	920	921	926	924	927	922	917	914	913	919	924	926	933	939	939	938	939	930	918	920	919	
15	919	899	902	906	911	904	902	908	914	913	910	906	911	923	935	949	958	945	938	933	929	928	928	926	
16	926	926	926	921	921	917	921	921	923	924	919	917	918	925	924	939	949	956	956	948	939	926	928	921	
17*	916	916	917	922	926	929	928	928	924	917	910	909	910	912	919	924	932	938	940	942	933	931	925	916	
18	916	918	919	921	924	926	927	927	923	915	908	907	910	912	915	922	924	928	929	931	932	931	923	916	
19	917	919	916	915	921	922	922	923	919	916	911	910	912	909	921	929	939	939	934	933	932	929	928	927	
20	927	925	919	915	918	918	917	920	917	913	910	913	912	913	917	923	930	934	930	928	929	925	925	925	
21	924	919	913	918	921	921	921	920	919	920	912	906	906	909	918	924	926	926	933	940	935	931	928	920	
22	900	897	896	886	883	902	905	913	915	910	909	902	907	915	921	929	930	929	931	932	932	930	926	916	
23	901	907	911	906	911	913	915	917	920	914	910	909	910	917	939	946	953	947	939	935	926	919	921	922	
24	916	906	911	913	913	918	923	924	921	914	912	915	917	921	929	940	951	957	944	934	931	928	924	924	
25	909	911	913	916	919	924	928	926	925	921	916	913	914	919	928	935	935	933	930	928	928	927	925	924	
26	921	921	921	922	923	925	927	927	921	918	916	911	908	914	926	933	938	938	930	929	928	924	916	914	
27	919	921	919	920	917	913	918	916	915	911	906	908	911	916	929	938	946	943	935	930	928	929	926	925	
28*	923	924	925	922	926	927	928	926	926	920	917	917	915	921	924	929	935	937	938	936	931	929	929	926	
29	921	910	915	918	924	927	928	927	922	921	919	915	908	911	921	927	930	934	933	932	930	926	926	924	
30	924	919	921	919	916	918	919	919	916	914	908	905	902	906	914	923	927	925	927	927	925	925	922	919	
31	920	914	903	904	908	910	918	918	917	915	908	909	909	914	920	925	930	933	934	929	928	915	922	924	
Mean	916	912	911	912	914	915	917	918	917	914	911	910	911	917	925	932	937	939	938	935	930	925	922	919	
Mean*	919	919	919	920	923	923	922	930	917	913	910	908	909	914	919	923	927	931	932	931	928	926	924	919	
Mean**	908	900	892	896	898	896	899	905	906	909	906	911	914	925	940	947	947	953	952	946	931	922	911	912	

* Denotes an International Quiet Day. ** Denotes an International Disturbed Day.

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

	0h	1h	2h	3h	4h	5h	6h	7h	8h	9h	10h	11h	Noon	13h	14h	15h	16h	17h	18h	19h	20h	21h	22h	23h	24h
September.	42000 γ + Tabular Quantities (in γ)																								
1	920	913	917	919	909	895	892	902	907	907	904	909	914	942	947	956	972	963	951	944	939	934	931	925	
2	921	902	891	891	904	909	911	917	918	914	911	912	910	910	914	923	925	919	920	921	921	921	920	920	
3**	920	915	915	914	913	911	912	913	914	909	910	906	917	928	957	987	981	969	958	949	934	914	911	915	
4	896	888	894	887	894	910	918	923	918	912	906	909	914	918	925	928	930	932	930	929	928	926	924	923	
5	923	923	918	915	919	921	923	925	929	923	909	905	911	919	926	944	946	956	953	933	930	916	917	920	
6**	921	918	913	910	917	923	925	924	920	911	913	923	934	944	953	956	957	956	948	942	936	934	929	919	
7	923	923	927	928	929	931	932	930	931	926	923	926	927	931	943	947	948	947	944	940	933	930	923	916	
8	916	917	920	921	924	926	928	928	928	924	920	916	917	925	934	940	944	943	941	939	935	928	928	927	
9	922	928	928	928	928	929	930	931	929	922	918	917	922	931	941	945	951	963	951	941	938	934	925	920	
10	921	914	909	913	917	922	925	928	924	923	925	924	926	933	940	943	942	940	937	934	931	929	928	927	
11	927	928	928	928	930	930	932	931	927	922	920	913	915	924	934	938	943	942	942	940	933	931	930	926	
12	923	925	928	929	930	929	928	925	921	918	916	917	919	925	933	941	943	938	936	936	937	934	916	918	
13	922	925	927	922	918	925	929	928	925	923	917	910	912	917	926	928	929	929	927	927	928	928	927	921	
14*	913	916	913	914	916	921	927	930	927	922	916	909	912	920	929	932	934	934	930	930	930	932	930	928	
15*	924	924	923	923	926	928	929	926	926	920	917	913	914	918	925	930	933	935	932	931	929	928	928	925	
16*	924	924	923	923	924	926	930	929	927	921	913	909	911	917	924	929	931	938	933	930	929	926	925	924	
17	922	922	922	920	922	922	925	925	922	915	906	901	905	911	921	931	931	931	928	929	926	926	924	923	
18**	922	922	922	922	922	922	924	924	922	913	907	905	916	937	952	956	975	996	993	947	938	940	931	897	
19	904	910	898	911	915	914	916	921	921	915	908	918	919	926	937	949	947	952	948	940	935	924	926	930	
20	931	928	926	926	928	929	931	931	926	922	915	920	929	932	935	940	941	942	941	942	939	937	936	934	
21	934	934	934	932	932	931	932	929	922	917	925	916	920	925	929	939	947	949	946	942	937	931	929	928	
22	929	910	917	922	925	926	927	927	921	918	913	911	914	915	918	924	927	927	927	926	928	929	930	929	
23	929	929	930	929	928	927	927	925	922	914	917	913	919	924	929	934	936	936	937	935	933	932	930	930	
24	923	916	923	924	926	927	930	928	920	916	908	906	911	918	928	933	937	942	939	935	930	930	930	925	
25	921	923	925	926	929	927	929	926	922	916	910	912	916	921	924	929	932	934	936	938	936	932	928	924	
26*	925	926	927	927	927	927	927	927	924	920	913	910	910	915	919	926	931	930	928	930	927	927	927	927	
27*	926	926	925	925	925	926	928	930	928	923	921	919	917	919	925	929	931	931	928	928	927	926	925	923	
28	924	923	922	917	916	919	922	917	916	913	910	909	919	920	926	931	935	937	938	944	939	929	925	926	
29**	925	912	903	901	901	900	908	912	914	921	925	920	923	942	946	952	956	950	945	929	930	930	903	907	
30**	887	868	865	850	839	836	849	883	907	920	921	921	925	925	927	933	939	939	938	936	935	936	935	934	
Mean	921	918	917	917	918	919	922	923	922	918	915	913	917	924	932	939	942	943	940	936	932	929	926	923	
Mean*	922	923	922	922	924	926	928	928	926	921	916	912	913	918	924	929	932	934	930	930	928	928	927	925	
Mean**	915	907	904	899	898	898	904	911	915	915	915	915	923	935	947	957	962	962	956	941	935	931	922	914	
October.	42000 γ + Tabular Quantities (in γ).																								
1	933	932	931	931	932	932	932	927	922	920	922	926	932	934	939	943	947	948	943	936	936	935	932	924	
2	919	919	922	924	928	929	932	934	932	927	922	919	924	933	933	941	940	938	938	934	934	932	934	928	
3**	928	928	926	920	917	920	927	929	928	923	916	925	932	940	956	974	970	962	952	947	927	924	931	925	
4	918	920	925	924	923	923	927	932	930	929	928	932	941	943	952	960	955	948	945	941	934	936	935	932	
5	927	925	929	930	930	929	928	925	923	919	923	921	929	935	943	952	963	960	947	945	939	924	930	930	
6	925	923	922	923	925	927	927	931	929	927	926	923	925	930	938	945	945	941	938	938	933	930	931	930	
7	931	929	928	928	927	929	930	932	932	924	918	917	920	924	935	939	941	941	941	934	932	928	922	922	
8	924	924	924	919	913	911	912	920	925	925	924	925	934	944	954	960	957	955	950	946	934	934	932	931	
9	931	929	918	919	925	928	930	929	926	921	918	917	919	926	933	936	938	939	937	933	931	930	926	921	
10	925	926	927	927	927	927	929	931	930	923	916	911	914	921	928	936	937	941	937	936	935	932	931	929	
11*	929	926	926	926	927	926	926	928	928	925	920	920	923	926	931	937	941	939	939	941	936	933	931	929	
12	930	930	930	930	929	929	931	930	927	921	913	913	915	920	927	932	933	932	931	932	926	925	924	924	
13*	925	925	925	925	925	925	927	928	928	924	918	913	916	921	925	932	935	933	934	933	932	930	928	926	
14**	925	924	922	919	922	913	908	906	908	908	907	910	911	914	922	922	929	929	930	938	944	937	938	943	
15	941	939	935	936	936	936	936	934	933	929	928	928	926	927	930	934	934	934	934	934	933	933	932	931	
16*	931	928	929	928	929	930	931	933	934	929	927	926	926	924	929	934	934	934	934	935	935	936	936	934	
17**	933	931	930	928	928	928	926	932	933	931	932	934	946	960	981	1016	1033	1052	1001	1010	1018	983	969	972	
18	953	953	953	952	950	948	948	946	945	941	938	939	940	940	944	947	947	947	947	948	952	959	959	952	
19	950	941	942	939	936	936	936	936	933	939	936	937	938	937	940	943	942	941	941	941	945	939	938	936	
20	926	916	918	925	928	931	933	934	930	931	933	931	933	934	941	955	960	953	949	938	937	938	936	929	
21	925	925	929	931	928	927	929	928	931	926	923	920	921	927	933	938	941	942	941	934	934	934	932	933	
22	934	933	933	932	931	931	930	931	931	926	919	917	920	925	932	937	941	944	940	938	935	933	932	932	
23*	932	932	933	931	930	930	930	930	928	923	922	923	926	928	933	935	935	935	936	933	933	930	930	930	
24*	931	931	931	931	931	931	930	930	929	924	917	915	921	924	930	933	933	932	931	931	929	929	929	929	
25	927	927	924	923	924	925	925	925	924	919	913	909	912	917	924	929	929	936	946	942	934	934	934	923	
26**	895	882	894	890	887	906	912	919	922	922	918	921	941	968	979	993	998	978	966	947	927	929	925	902	
27**	891	910	923	923	917	918	928	930	931	931	926	935	942	947	959	978	972	961	955	939	935	926	919	920	
28	925	919	919	924	928	930	932	935	937	934	935	932	935	945	948	945	947	950	957	955	945	939	937	935	
29	925	920	923	925	930	929	932	935	936	932	938	940	944	948	956	964	962	950	948	942	940	937	931	930	
30	929	928	923	920	918	923	920	926	932	935	936	939	945	945	952	954	952	957	946	940	926	920	931	933	
31	932	931	931	928	927	926	925	926	928	927	926	935	944	940	946	954	954	949	945	941	942	924	929	927	
Mean	927	926	927	926	926	927	928	929	929	926	924	924	929	934	941	948	950	948	945	941	938	934	933	930	
Mean*	930	928	929	928	928	928	929	930	929	925	921	919	922	925	930	934	936	935	935	935	933	932	931	930	
Mean**	914	915	919	916	914	917	920	923	924	923	920	925	934	946	959	977	980	976	961	956	950	940	936	932	

* Denotes an International Quiet Day. ** Denotes an International Disturbed Day.

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

	0h	1h	2h	3h	4h	5h	6h	7h	8h	9h	10h	11h	Noon	13h	14h	15h	16h	17h	18h	19h	20h	21h	22h	23h	24h
November.	42000 γ + Tabular Quantities (in γ).																								
1	926	926	926	929	930	930	932	935	934	934	931	933	938	952	956	958	958	957	955	949	945	943	941	939	
2	938	936	936	935	934	934	935	937	939	935	930	932	936	939	947	957	952	946	941	938	937	937	936	937	
3	930	931	932	932	933	935	935	938	937	933	927	931	931	932	935	935	935	935	935	935	935	933	935	935	
4**	934	933	932	931	928	925	924	925	929	922	926	932	940	941	944	949	946	942	939	939	939	938	930	927	
5	928	929	930	930	931	931	932	932	932	926	928	928	928	934	937	939	941	940	939	937	931	930	932	931	
6	932	931	931	929	929	931	929	929	931	930	929	929	931	936	937	937	936	936	934	931	931	931	931	930	
7	931	931	931	931	931	931	931	931	930	926	920	921	927	934	935	933	933	932	935	934	934	932	931	930	
8	931	929	930	931	931	931	931	932	934	932	928	928	933	936	938	943	940	940	940	939	945	939	933	933	
9	928	923	923	925	926	929	931	931	931	926	924	928	932	937	939	939	938	939	940	937	937	937	934	933	
10	934	933	934	933	933	934	933	928	930	928	926	925	929	932	936	939	938	938	937	936	934	933	934	930	
11	932	932	932	932	932	933	933	933	932	929	927	928	928	933	934	933	935	934	934	933	932	931	931	929	
12*	927	926	927	928	929	930	931	933	932	930	928	928	929	931	934	932	934	934	933	933	931	930	929	929	
13	929	928	927	927	928	929	929	930	930	929	927	927	928	929	931	930	930	930	930	929	928	930	930	928	
14**	927	924	923	923	922	923	923	923	924	922	920	917	918	922	927	929	930	933	960	982	989	984	970	957	
15	940	935	933	936	927	928	932	941	943	940	937	943	943	946	946	946	943	944	943	943	944	945	946	946	
16	945	942	940	938	937	937	937	936	936	935	935	935	937	941	942	941	941	940	939	941	941	941	941	942	
17	939	937	937	936	934	936	936	936	936	925	926	931	935	939	939	940	941	942	939	939	941	939	937	937	
18	937	934	932	932	932	932	932	933	934	932	933	934	938	937	938	938	942	939	938	937	937	932	932	934	
19*	934	932	932	932	931	932	932	932	932	929	927	929	932	935	938	938	937	935	934	934	932	932	932	933	
20*	932	930	930	930	929	929	929	929	929	927	924	929	932	934	935	935	934	934	932	931	930	929	931	929	
21*	931	931	931	931	931	932	931	930	931	926	922	924	931	937	939	941	939	937	937	935	935	935	933	934	
22*	934	934	934	934	933	933	934	932	931	930	929	933	936	939	940	938	935	934	932	930	930	929	929	929	
23	928	927	928	928	928	926	926	925	923	921	920	924	929	933	934	935	936	937	940	946	953	951	945	939	
24**	936	930	922	916	904	904	917	921	925	926	926	924	935	940	944	948	966	966	968	959	948	944	921	921	
25**	907	892	897	901	900	892	909	921	926	931	939	939	961	973	975	988	993	989	964	955	947	939	929	923	
26**	904	889	911	924	929	934	936	936	938	934	934	939	945	948	948	949	958	951	948	947	939	936	936	932	
27	930	926	925	930	931	932	934	934	936	934	936	938	943	942	944	947	952	948	946	944	942	939	937	937	
28	933	930	929	928	929	932	934	934	937	936	936	937	939	940	940	941	941	940	940	941	940	937	935	931	
29	927	930	931	929	929	933	933	934	935	934	932	934	934	936	937	944	944	941	939	939	945	941	938	935	
30	934	932	933	931	931	931	931	930	931	931	929	930	936	942	942	942	941	944	944	945	944	944	941	939	
Mean	931	928	929	929	928	929	930	931	932	930	929	930	935	938	940	942	943	942	941	941	940	938	935	934	
Mean*	932	931	931	931	931	931	931	931	931	928	926	929	932	935	937	937	936	935	934	933	932	931	931	931	
Mean**	922	914	917	919	917	916	922	925	928	927	929	930	940	945	948	953	959	956	956	956	952	948	937	932	
December.	42000 γ + Tabular Quantities (in γ).																								
1	935	929	928	928	929	931	933	935	935	934	935	936	936	937	942	942	942	941	940	939	937	937	937	937	
2	935	935	933	933	933	933	934	933	933	931	931	934	935	936	936	936	937	938	937	936	936	937	937	935	
3**	934	933	927	926	925	924	924	924	923	921	921	927	936	947	979	1042	1028	1097	1117	1077	1027	991	974	952	
4**	940	931	919	910	899	889	897	895	898	916	929	937	946	955	961	959	958	956	955	954	953	951	950	950	
5	947	944	945	944	944	943	942	940	937	937	939	939	939	941	942	943	943	944	942	942	942	942	942	942	
6	942	941	939	939	939	938	937	937	936	932	931	934	936	941	941	940	940	939	939	940	940	939	939	939	
7	938	930	932	933	934	934	933	931	930	926	925	926	929	935	938	937	941	939	936	936	935	934	934	933	
8*	933	933	933	933	933	933	932	930	928	923	923	925	928	930	931	933	933	935	935	934	933	932	932	931	
9	931	930	930	930	930	931	930	928	925	921	920	920	920	923	929	931	935	937	936	934	934	932	931	929	
10	930	929	929	929	930	930	930	930	929	927	925	925	924	928	932	934	934	932	932	931	930	930	930	928	
11	927	925	925	925	925	927	927	927	925	925	922	921	920	925	927	929	932	930	932	930	930	929	929	927	
12	926	925	926	926	926	927	928	926	926	923	921	921	923	925	927	928	931	932	933	933	935	943	937	936	
13**	933	932	926	921	924	925	927	928	928	927	924	920	921	927	933	935	938	947	943	943	945	942	942	937	
14	933	929	928	928	928	928	928	927	926	926	924	924	925	932	933	934	935	936	934	934	934	936	936	933	
15	930	928	929	928	928	929	929	930	930	928	925	925	928	931	932	934	935	934	934	934	936	938	937	934	
16*	932	930	928	927	927	927	928	928	929	928	928	924	928	930	930	932	932	931	931	932	930	929	930	930	
17*	930	928	927	926	926	926	926	926	926	924	924	924	924	926	926	928	929	929	929	928	928	928	929	930	
18*	930	929	927	926	926	926	926	926	924	924	925	925	926	927	927	926	928	928	928	928	927	926	927	927	
19	927	926	926	926	925	926	925	924	923	921	923	924	925	926	926	927	931	930	928	927	927	927	927	928	
20**	928	927	928	928	926	928	926	924	924	921	921	924	926	928	931	932	935	948	968	952	951	942	939	940	
21**	937	934	935	933	930	930	927	928	929	935	939	942	947	953	954	959	957	961	961	950	941	941	934	932	
22	936	937	936	934	934	933	934	934	932	932	932	931	933	938	941	944	951	949	948	945	942	938	935	925	
23	927	930	933	934	934	935	935	934	933	931	931	930	932	937	940	944	956	951	948	943	942	941	935	930	
24	924	929	930	929	930	934	934	934	934	931	929	929	932	940	945	949	950	952	953	947	944	940	937	937	
25	936	930	931	931	933	934	934	935	936	934	933	933	939	940	941	941	941	940	939	938	940	939	938	934	
26	931	933	933	933	933	934	934	931	930	930	930	927	927	931	934	936	939	941	941	939	938	937	936	935	
27	934	932	933	933	932	933	933	933	931	931	930	930	928	930	933	938	940	939	(940)	—	—	—	(934)	933	
28	933	933	934	933	932	931	931	931	930	931	931	931	931	931	931	933	935	936	936	935	935	934	934	934	
29	933	933	932	932	932	933	933	934	933	934	935	935	934	934	932	931	934	934	936	939	939	941	943	943	
30	939	935	933	931	931	931	931	931	930	930	931	931	931	932	931	935	936	936	937	938	936	936	936	936	
31*	935	932	932	931	930	932	932	932	932	932	932	932	934	935	935	935	934	934	934	933	933	933	933	933	
Mean	933	931	931	930	929	929	930	929	929	928	928	929	931	934	937	940	942	945	942	942	940	938	937	935	
Mean*	932	930	929	929	928	929	929	928	928	927	926	926	928	930	930	931	931	931	931	931	930	930	930	930	
Mean**	934	931	927	924	921	919	920	920	920	924	927	930	935	942	952	965	963	982	989	975	963	953	948	942	

* Denotes an International Quiet Day. ** Denotes an International Disturbed Day.

TABLE IV.—DAILY MEAN AND EXTREME VALUES OF MAGNETIC ELEMENTS AS RECORDED BY THE MAGNETOGRAPHS.

Date.	Declination West.						Horizontal Force.						Vertical Force.					
	Mean Value for the Day.	Maximum.		Minimum.		Range.	Mean Value for the Day.	Maximum.		Minimum.		Range.	Mean Value for the Day.	Maximum.		Minimum.		Range.
		G.M.T.			G.M.T.			G.M.T.			G.M.T.			G.M.T.			G.M.T.	
JAN.	12°+	h m	12°+	12°+	h m		18000γ+	h m	18000γ+	18000γ+	h m	γ	42000γ+	h m	42000γ+	42000γ+	h m	γ
	′		′	′		′												
1	30·2	14 44	36·8	21·2	20 24	15·6	547	1 57	578	520	20 17	58	931	17 22	944	913	2 10	31
2	30·3	12 52	35·4	26·7	21 1	8·7	550	7 47	565	531	20 58	34	929	16 50	937	914	9 59	23
3**	30·7	14 4	38·1	21·4	22 20	16·7	543	8 35	586	487	16 37	99	936	16 59	965	913	9 38	52
4**	30·2	13 35	41·0	11·4	21 25	29·6	529	19 14	577	452	13 57	125	941	19 12	983	918	6 11	65
5**	29·1	14 46	39·2	16·2	19 40	23·0	516	17 54	555	436	15 35	119	944	15 55	988	920	3 1	68
6**	29·1	14 22	44·8	13·1	19 54	31·7	532	3 50	575	460	16 1	115	943	16 20	994	915	4 49	79
7**	29·1	13 0	35·4	18·1	18 50	17·3	531	23 6	562	481	10 57	81	941	18 56	970	916	2 17	54
8	30·0	13 6	35·2	22·1	0 1	13·1	541	21 51	583	504	11 47	79	936	16 18	954	922	11 46	32
9	30·2	12 21	35·0	27·8	22 57	7·2	547	23 44	564	526	11 30	38	935	14 46	942	927	11 30	15
10	29·7	12 44	33·5	24·4	20 23	9·1	551	20 27	567	524	15 41	43	932	16 17	940	921	11 27	19
11*	29·7	13 2	32·1	27·1	8 52	5·0	555	8 38	565	542	12 34	23	930	16 6	934	922	12 33	12
12*	30·3	13 45	34·2	27·6	9 3	6·6	555	2 0	569	534	15 50	35	927	15 37	936	918	9 28	18
13	30·1	17 13	34·1	25·3	9 8	8·8	559	5 30	607	538	11 55	69	923	18 54	933	910	5 50	23
14*	29·6	13 48	33·0	26·7	8 55	6·3	556	6 24	573	534	10 36	39	925	18 54	932	917	7 51	15
15	29·6	17 37	33·1	20·1	23 43	13·0	553	17 30	571	527	20 54	44	928	21 28	938	917	9 59	21
16	29·6	12 46	33·4	21·0	0 0	12·4	552	19 14	567	538	13 47	29	929	16 10	938	922	8 47	16
17	31·2	16 33	40·4	26·3	21 40	14·1	547	14 28	568	506	19 18	62	934	19 30	964	916	12 3	48
18	29·8	13 8	34·6	22·4	24 0	12·2	544	18 25	568	519	11 0	49	932	0 14	941	920	10 58	21
19	29·9	13 28	37·0	19·3	0 20	17·7	545	0 34	576	514	14 15	62	930	15 10	946	916	11 24	30
20	29·6	16 6	37·1	19·4	21 2	17·7	547	15 20	581	508	21 24	73	931	21 38	956	912	11 23	44
21	29·4	13 33	36·4	20·8	22 17	15·6	542	22 40	585	509	0 23	76	932	14 30	945	920	2 4	25
22	29·0	12 30	34·9	22·1	18 54	12·8	546	6 1	570	514	13 16	56	934	19 14	945	925	11 57	20
23	29·9	13 44	35·2	24·7	21 24	10·5	548	1 27	564	523	11 11	41	935	18 50	943	927	1 44	16
24	29·6	13 26	32·9	25·5	18 53	7·4	552	3 28	565	538	18 44	27	935	18 56	945	927	9 37	18
25	29·8	12 55	35·0	25·5	1 10	9·5	555	7 6	570	546	15 47	24	933	14 55	939	924	8 37	15
26*	29·8	13 17	33·9	27·3	8 5	6·6	558	18 24	567	548	9 59	19	928	0 24	937	915	12 47	22
27*	29·6	13 23	33·4	26·5	9 26	6·9	561	21 14	574	546	10 52	28	929	18 55	934	921	10 49	13
28	29·8	13 32	34·9	26·5	8 43	8·4	559	14 48	574	535	11 17	39	929	20 20	938	917	11 59	21
29	29·8	13 32	35·6	26·0	20 41	9·6	555	7 8	589	513	11 21	76	930	15 30	940	916	9 59	24
30	29·3	13 23	36·1	19·3	21 33	16·8	548	22 13	581	500	12 54	81	932	15 6	951	918	10 38	33
31	29·4	13 38	34·6	19·4	20 32	15·2	548	20 40	588	513	10 43	75	931	20 34	940	918	10 4	22
Mean	29·8	—	35·7	22·6	—	13·1	548	—	574	515	—	59	932	—	948	919	—	29
No. of Days used.	31	—	31	31	—	31	31	—	31	31	—	31	31	—	31	31	—	31
FEB.	12°+	h m	12°+	12°+	h m		18000γ+	h m	18000γ+	18000γ+	h m	γ	42000γ+	h m	42000γ+	42000γ+	h m	γ
	′		′	′		′												
1	28·7	13 33	36·8	17·8	17 33	19·0	547	5 33	583	503	14 20	80	934	17 40	953	919	4 15	34
2	28·8	11 55	35·4	17·7	19 15	17·7	547	22 23	575	501	12 24	74	931	19 27	953	915	0 40	38
3	28·9	13 10	36·9	16·3	17 37	20·6	545	18 10	582	492	13 38	90	935	14 45	956	922	1 52	34
4	29·3	12 19	35·5	23·7	22 4	11·8	548	21 34	588	514	10 6	74	933	18 55	941	924	22 0	17
5	30·0	13 12	37·2	26·5	9 1	10·7	550	6 30	570	513	12 44	57	933	15 47	943	922	2 20	21
6*	29·1	13 17	33·8	24·3	18 40	9·5	553	18 58	571	529	11 21	42	931	16 20	942	920	13 55	22
7	29·6	12 42	34·9	23·5	19 54	11·4	555	19 58	581	531	11 17	50	928	19 53	936	922	10 40	14
8*	29·8	14 52	35·7	25·9	9 24	9·8	548	6 1	568	516	10 59	52	930	20 17	942	920	10 24	22
9*	29·4	12 50	35·2	26·4	23 43	8·8	554	20 10	570	527	10 58	43	925	0 4	934	916	11 18	18
10*	29·8	14 40	35·5	25·7	9 1	9·8	553	5 8	571	522	11 26	49	925	17 27	933	916	11 22	17
11	29·3	2 14	35·5	25·2	23 58	10·3	560	2 36	579	543	11 2	36	920	23 12	927	913	11 39	14
12**	27·3	13 35	42·7	−6·7	22 48	49·4	549	22 5	600	418	23 29	182	921	21 54	957	861	23 10	96
13**	27·3	14 24	44·2	8·7	1 45	35·5	505	19 12	563	449	12 28	114	937	18 35	974	893	0 30	81
14**	28·5	13 32	41·1	16·0	20 36	25·1	519	18 6	607	469	15 4	138	938	18 2	985	878	2 28	107
15**	28·6	14 12	38·2	18·1	19 40	20·1	527	19 51	563	481	16 30	82	938	15 54	990	911	1 24	79
16**	27·0	14 22	38·0	14·4	1 17	23·6	532	18 23	588	484	10 40	104	933	15 11	969	900	3 54	69
17	27·5	14 18	37·0	19·8	0 16	17·2	532	8 20	560	487	15 2	73	937	16 14	966	919	1 4	47
18	28·9	14 44	36·4	13·1	18 20	23·3	537	18 44	562	482	18 10	80	936	18 30	966	921	11 25	45
19	28·5	15 3	35·1	21·1	19 56	14·0	537	4 4	577	506	15 55	71	934	17 12	961	912	4 54	49
20	28·6	14 50	34·3	17·4	23 6	16·9	540	23 8	574	512	17 21	62	934	20 23	957	914	11 40	43
21	28·3	15 3	33·6	23·4	21 57	10·2	541	22 6	585	516	11 40	69	932	16 10	942	921	11 38	21
22*	27·9	13 15	33·8	22·6	22 54	11·2	545	23 7	563	526	11 24	37	929	23 3	941	917	12 18	24
23	29·0	14 11	37·0	20·6	1 15	16·4	553	20 39	574	530	11 20	44	927	17 6	940	912	12 20	28
24	28·8	14 20	34·8	17·8	19 50	17·0	551	7 34	579	521	19 26	58	928	15 44	942	916	7 12	26
25	27·5	12 46	36·6	8·1	22 1	28·5	536	18 18	585	478	18 3	107	933	18 14	969	909	4 52	60
26	27·8	13 31	33·9	18·9	0 12	15·0	541	1 0	574	505	16 55	69	926	17 7	954	904	1 10	50
27	28·1	12 13	35·6	22·8	23 13	12·8	548	23 14	583	524	11 25	59	924	15 44	936	912	11 19	24
28	29·0	13 50	37·3	20·9	22 38	16·4	543	22 18	587	489	14 14	98	928	16 51	953	914	10 3	39
Mean	28·6	—	36·5	18·9	—	17·6	543	—	578	502	—	76	931	—	952	912	—	40
No of Days used.	28	—	28	28	—	28	28	—	28	28	—	28	28	—	28	28	—	28

* Denotes an International Quiet Day. ** Denotes an International Disturbed Day.

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

Date.	Declination West.						Horizontal Force.						Vertical Force.					
	Mean Value for the Day.	Maximum.		Minimum.		Range.	Mean Value for the Day.	Maximum.		Minimum.		Range.	Mean Value for the Day.	Maximum.		Minimum.		Range.
MAR.	12°+	G.M.T. h m	12°+	12°+	G.M.T. h m		18000γ+	G.M.T. h m	18000γ+	18000γ+	G.M.T. h m	γ	42000γ+	G.M.T. h m	42000γ+	42000γ+	G.M.T. h m	γ
	′		′	′		′												
1**	28·4	12 38	39·1	16·5	20 34	22·6	543	19 54	594	482	10 29	112	925	15 34	958	898	4 40	60
2**	28·5	14 47	36·9	11·1	17 50	25·8	538	21 10	587	468	15 50	119	925	16 10	971	907	0 3	64
3	28·6	1 57	34·8	22·2	21 50	12·6	543	21 38	587	495	8 59	92	924	16 26	945	905	2 12	40
4	28·1	13 26	34·3	24·0	19 20	10·3	546	19 34	566	513	13 41	53	927	16 6	943	911	2 14	32
5*	28·4	14 3	34·5	24·1	8 44	10·4	550	7 3	567	527	12 4	40	924	17 49	934	908	12 57	26
6	28·5	13 3	33·8	24·2	9 6	9·6	553	19 55	566	524	11 43	42	924	16 26	931	913	13 38	18
7*	28·0	12 4	33·5	23·2	8 44	10·3	554	7 8	568	525	11 20	43	923	8 31	931	910	12 40	21
8*	28·0	13 37	31·8	24·1	8 20	7·7	556	7 7	571	540	12 23	31	921	8 22	929	906	11 47	23
9*	27·8	12 56	31·6	24·7	9 3	6·9	560	20 33	570	542	12 26	28	920	16 3	926	906	11 28	20
10*	28·2	12 45	34·7	23·6	9 11	11·1	560	6 33	571	539	10 47	32	919	23 5	928	904	11 59	24
11	27·9	14 23	34·7	20·1	23 15	14·6	556	18 47	590	497	20 51	93	922	21 15	957	905	14 47	52
12	24·5	12 9	42·4	6·4	17 52	36·0	518	7 1	571	397	12 30	174	925	18 1	991	869	5 46	122
13**	27·2	14 19	40·4	13·1	21 13	27·3	527	19 19	617	472	12 50	145	923	16 50	972	892	1 23	80
14**	26·8	14 24	39·6	12·8	19 44	26·8	526	15 18	586	465	7 29	121	928	15 15	985	900	2 49	85
15**	27·0	14 32	38·2	18·3	1 23	19·9	530	0 36	592	486	7 10	106	926	17 14	975	890	1 14	85
16	27·5	15 16	35·8	17·6	20 30	18·2	537	19 14	607	481	12 12	126	921	16 36	946	902	11 55	44
17	27·5	13 38	36·4	16·1	17 36	20·3	537	20 10	594	502	10 6	92	925	17 46	959	909	0 1	50
18	26·7	13 48	36·7	11·6	18 19	25·1	543	18 28	633	516	12 38	117	926	18 17	967	901	1 55	66
19	27·4	13 43	37·8	15·2	1 12	22·6	535	0 24	571	484	11 41	87	920	18 14	936	895	1 38	41
20	27·1	12 40	34·9	23·0	4 5	11·9	545	22 43	606	517	11 40	89	922	15 45	943	907	11 19	36
21	28·0	13 15	35·2	20·4	23 4	14·8	543	23 11	586	522	10 4	64	927	17 53	956	910	11 17	46
22	26·5	13 57	36·7	17·2	3 45	19·5	542	2 29	585	483	17 24	102	915	17 40	956	886	6 37	70
23	27·8	13 51	36·7	20·3	8 5	16·4	551	23 20	584	521	11 31	63	924	20 50	933	910	12 34	23
24	29·3	12 46	38·6	20·4	18 25	18·2	534	4 3	581	442	8 26	139	925	14 50	952	904	4 39	48
25	27·7	14 12	37·4	20·5	23 23	16·9	548	23 30	589	513	14 46	76	923	16 5	942	906	11 20	36
26	28·3	12 30	38·2	20·6	7 44	17·6	546	16 44	586	492	10 52	94	919	16 41	944	895	10 23	49
27	27·4	13 44	36·4	17·0	21 2	19·4	541	5 40	576	476	8 40	100	927	17 28	948	907	10 31	41
28	27·2	13 47	36·6	17·7	20 40	18·9	542	21 25	620	453	11 29	167	923	15 7	943	903	1 8	40
29	27·3	13 51	36·0	19·7	21 59	16·3	543	1 22	585	458	11 13	127	923	16 35	952	898	1 54	54
30	27·3	13 11	34·7	20·5	20 54	14·2	544	4 40	587	495	10 59	92	924	17 54	942	908	4 58	34
31	27·1	12 44	36·1	20·7	8 26	15·4	546	1 50	572	500	12 20	72	927	17 27	936	909	10 59	27
Mean	27·6	—	36·3	18·9	—	17·4	543	—	586	494	—	92	923	—	949	902	—	47
No. of Days used.	31	—	31	31	—	31	31	—	31	31	—	31	31	—	31	31	—	31
APRIL	12°+	h m	12°+	12°+	h m		18000γ+	h m	18000γ+	18000γ+	h m	γ	42000γ+	h m	42000γ+	42000γ+	h m	γ
	′		′	′		′												
1	27·4	13 11	37·1	20·0	7 45	17·1	550	4 15	576	521	14 59	55	931	14 34	963	909	10 20	54
2	27·5	14 10	36·0	20·4	20 54	15·6	551	22 12	583	515	12 5	68	926	16 52	942	909	9 59	33
3*	27·4	14 3	35·6	20·2	8 12	15·4	553	2 46	577	513	10 42	64	920	17 27	936	897	11 40	39
4*	26·9	13 25	33·2	19·8	8 4	13·4	552	20 9	578	516	10 40	62	921	7 8	932	900	11 40	32
5*	27·0	13 33	33·3	20·8	8 13	12·5	558	4 37	577	536	9 21	41	916	0 4	927	892	11 35	35
6	27·2	14 17	38·3	13·7	23 7	24·6	546	23 14	595	507	22 48	88	924	18 27	964	879	23 28	85
7**	25·3	14 28	37·7	10·7	24 0	27·0	539	18 55	619	444	24 0	175	919	18 21	976	872	23 50	104
8**	25·1	12 58	35·2	5·7	0 55	29·5	518	20 40	627	392	11 45	235	920	17 32	965	848	0 44	117
9	26·5	12 57	38·0	16·8	23 7	21·2	531	0 20	586	460	11 1	126	924	17 0	967	894	23 54	73
10**	27·7	11 43	39·9	19·2	4 22	20·7	528	17 33	614	448	11 27	166	919	17 25	973	882	3 52	91
11	26·1	11 58	37·9	14·0	20 34	23·9	534	18 31	603	457	8 59	146	918	16 26	959	881	0 5	78
12	26·2	12 38	37·3	17·6	2 59	19·7	539	1 8	623	467(?)	10 26	156	917	18 47	952	887	4 8	65
13	26·5	0 30	36·6	16·7	17 34	19·9	534	17 37	594	479	10 24	115	919	17 31	960	879	0 47	81
14	25·7	13 19	34·8	17·2	19 33	17·6	535	0 13	568	487	10 30	81	923	19 30	945	892	2 21	53
15	25·5	13 48	36·0	17·6	1 1	18·4	537	4 58	586	466	11 12	120	923	17 37	961	895	5 12	66
16	25·5	12 48	34·8	10·6	23 9	24·2	540	22 53	603	490	12 53	113	916	16 52	935	898	4 35	37
17	26·4	13 27	35·7	17·1	0 0	18·6	538	19 3	566	492	9 32	74	918	17 34	940	898	0 52	42
18	26·0	13 9	34·7	13·9	22 2	20·8	540	21 6	576	505	11 50	71	926	18 50	956	899	11 15	57
19	26·0	12 47	34·9	6·9	19 15	28·0	547	19 31	594	470	12 28	124	924	19 15	978	892	11 38	86
20**	27·7	6 1	46·1	15·8	23 2	30·3	534	23 0	601	442	10 59	159	929	17 26	983	893	7 54	90
21	26·7	13 7	37·2	18·8	0 36	18·4	532	23 16	604	442	14 40	162	923	15 3	957	871	24 0	86
22**	26·5	13 15	38·3	11·7	0 21	26·6	536	19 6	656	464	9 49	192	919	17 31	972	869	0 2	103
23	26·1	12 13	35·0	11·9	21 2	23·1	539	19 27	625	495	11 40	130	921	19 24	958	890	0 0	68
24	27·1	12 59	33·7	14·1	17 9	19·6	537	17 27	622	476	9 22	146	927	17 24	970	904	12 15	66
25	26·1	13 44	32·9	19·1	7 56	13·8	539	1 14	572	473	14 55	99	928	17 50	946	907	11 38	39
26	26·3	1 48	33·9	14·8	19 58	19·1	542	20 8	577	501	7 19	76	923	20 5	947	905	10 58	42
27*	26·1	12 47	34·7	19·7	19 36	15·0	540	19 44	578	479	9 50	99	929	18 57	949	910	11 0	39
28*	26·8	13 8	32·7	21·2	17 35	11·5	551	17 48	613	522	11 18	91	926	17 43	954	909	11 0	45
29	26·7	13 44	39·1	12·0	22 10	27·1	556	22 34	637	509	13 53	128	923	17 27	945	893	23 6	52
30	27·5	17 52	37·2	16·5	0 14	20·7	551	17 19	632	511	9 45	121	925	18 55	957	904	12 58	53
Mean	26·5	—	36·3	15·8	—	20·5	541	—	599	483	—	116	923	—	956	892	—	64
No. of Days used.	30	—	30	30	—	30	30	—	30	30	—	30	30	—	30	30	—	30

* Denotes an International Quiet Day. ** Denotes an International Disturbed Day.

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

Date.	Declination West.						Horizontal Force.						Vertical Force.					
	Mean Value for the Day.	Maximum.		Minimum.		Range.	Mean Value for the Day.	Maximum.		Minimum.		Range.	Mean Value for the Day.	Maximum.		Minimum.		Range.
MAY	12°+	G.M.T. h m	12°+	12°+	G.M.T. h m		18000γ+	G.M.T. h m	18000γ+	18000γ+	G.M.T. h m	γ	42000γ+	G.M.T. h m	42000γ+	42000γ+	G.M.T. h m	γ
	′		′	′		′												
1	26·7	13 51	33·9	18·9	7 58	15·0	552	0 55	581	510	11 55	71	918	17 22	930	899	11 49	31
2*	26·9	13 27	34·0	21·0	8 41	13·0	561	17 3	588	527	11 10	61	916	7 41	929	893	12 43	36
3*	26·7	13 47	32·6	21·3	7 41	11·3	554	23 7	579	523	10 37	56	918	18 30	933	895	12 41	38
4	26·6	13 26	39·1	16·9	3 59	22·2	554	3 5	600	493	14 10	107	915	18 58	951	885	11 45	66
5**	25·5	12 57	40·1	5·5	2 22	34·6	517	0 50	624	398	10 21	226	914	18 25	975	833	4 1	142
6**	26·5	4 2	39·6	15·6	23 0	24·0	534	22 11	604	463	12 17	141	915	17 53	958	845	4 27	113
7	24·6	13 27	35·4	4·2	1 58	31·2	540	18 47	593	466	9 7	127	909	18 43	965	842	1 0	123
8	26·6	13 4	34·2	14·1	0 22	20·1	539	22 17	596	489	9 30	107	921	18 0	960	883	0 4	77
9	25·7	14 5	41·7	14·1	21 14	27·6	535	23 3	593	490	7 22	103	922	16 11	958	885	1 10	73
10	25·3	14 8	31·5	18·1	0 52	13·4	539	20 56	580	500	10 12	80	916	17 15	939	889	1 22	50
11	26·4	14 28	32·2	20·0	24 0	12·2	544	24 0	604	509	10 2	95	922	17 20	933	906	11 9	27
12	24·5	14 10	33·5	12·9	0 40	20·6	536	0 2	605	487	8 28	118	914	19 41	942	883	2 50	59
13	25·8	13 54	36·1	18·0	20 9	18·1	542	19 34	598	482	9 6	116	922	16 42	950	891	1 8	59
14	26·0	14 50	33·3	19·7	6 24	13·6	545	22 9	592	516	11 39	76	922	17 38	947	903	11 41	44
15	26·1	14 21	33·4	19·5	22 38	13·9	544	22 50	599	493	9 20	106	928	19 2	949	912	12 31	37
16**	25·9	15 28	38·6	3·9	18 54	34·7	552	17 27	657	504	16 1	153	921	18 58	1016	889	5 30	127
17**	26·5	13 33	38·1	16·6	20 55	21·5	527	20 59	651	428	6 24	223	924	18 42	964	888	23 0	76
18	25·6	3 18	34·1	16·6	17 24	17·5	543	17 33	627	480	12 41	147	925	17 34	965	899	12 0	66
19	26·0	1 41	37·9	20·1	7 35	17·8	548	17 43	601	494	10 20	107	923	19 11	951	885	2 13	66
20	26·0	12 57	32·4	19·9	8 44	12·5	542	15 24	576	488	6 28	88	922	17 52	945	897	12 16	48
21	25·4	2 52	35·0	18·1	18 45	16·9	546	19 10	612	499	8 36	113	924	19 6	960	900	3 56	60
22	26·5	1 36	34·6	17·5	7 3	17·1	542	3 10	586	450	8 50	136	924	19 2	949	901	3 57	48
23	25·3	1 10	32·8	18·2	7 20	14·6	547	15 55	618	506	9 38	112	926	15 55	942	909	11 40	33
24*	25·6	12 17	32·5	19·6	6 3	12·9	554	23 47	584	534	11 2	50	924	19 50	942	902	12 40	40
25	26·1	13 7	31·8	19·9	6 54	11·9	557	16 9	610	501	17 30	109	926	18 4	957	898	11 50	59
26	25·8	3 56	32·3	19·1	6 49	13·2	548	19 27	573	516	8 37	57	921	18 42	937	902	1 43	35
27*	26·1	12 50	32·4	19·6	6 47	12·8	555	19 34	576	534	13 15	42	923	17 10	935	898	11 42	37
28*	26·2	14 5	34·5	19·0	7 24	15·5	555	16 22	579	529	8 23	50	927	16 20	949	907	10 58	42
29	26·0	12 37	30·6	19·0	7 31	11·6	555	24 0	591	511	9 5	80	926	18 37	949	906	11 56	43
30	25·1	14 53	33·9	12·8	24 0	21·1	556	18 32	643	515	23 37	128	924	18 31	959	890	23 29	69
31**	23·4	18 52	35·5	5·7	0 31	29·8	526	18 7	683	449	12 59	234	912	17 59	976	805	1 31	171
Mean	25·9	—	34·8	16·3	—	18·5	545	—	603	493	—	110	921	—	952	888	—	64
No. of Days used.	31	—	31	31	—	31	31	—	31	31	—	31	31	—	31	31	—	31
JUNE.	12°+	h m	12°+	12°+	h m		18000γ+	h m	18000γ+	18000γ+	h m	γ	42000γ+	h m	42000γ+	42000γ+	h m	γ
	′		′	′		′												
1**	24·8	15 3	32·8	15·5	1 59	17·3	525	19 56	662	449	8 55	213	922	19 44	966	876	1 32	90
2**	24·7	14 51	34·2	13·5	2 2	20·7	536	19 29	665	473	7 58	192	921	19 23	967	887	2 3	80
3	25·1	14 27	32·4	15·9	1 7	16·5	532	18 33	605	449	11 50	156	919	18 31	964	883	2 13	81
4	24·8	14 38	32·1	18·5	23 40	13·6	530	20 44	630	476	7 24	154	928	18 53	956	899	23 23	57
5	24·2	12 51	30·0	17·8	6 27	12·2	544	21 47	583	517	11 59	66	927	19 27	946	909	11 58	37
6	24·6	14 21	29·8	18·2	7 4	11·6	547	23 15	612	511	7 23	101	933	19 10	952	908	10 20	44
7**	26·0	14 1	35·6	15·7	23 30	19·9	542	22 44	596	487	13 50	109	922	19 5	954	891	3 36	63
8	25·2	14 29	34·1	12·1	1 27	22·0	543	19 24	594	493	13 20	101	917	19 22	950	888	3 5	62
9	25·8	13 48	33·1	19·2	6 29	13·9	546	17 40	593	499	9 26	94	922	17 35	945	901	10 59	44
10	24·8	13 57	31·1	18·8	5 43	12·3	544	18 58	581	496	9 0	85	922	18 48	944	901	11 2	43
11*	25·1	12 58	31·1	19·7	6 3	11·4	550	23 3	582	528	13 38	54	924	17 33	936	897	11 30	39
12**	25·0	14 33	39·3	15·2	8 52	24·1	562	15 21	658	491	14 3	167	923	16 40	976	882	23 37	94
13	26·0	14 24	32·4	17·8	0 20	14·6	539	17 10	585	460	7 43	125	923	16 57	963	894	0 8	69
14	25·3	2 1	31·6	18·3	6 10	13·3	537	0 24	570	488	8 42	82	924	17 11	936	910	2 17	26
15*	25·1	13 44	31·5	19·3	7 29	12·2	551	19 40	588	506	10 35	82	926	15 54	936	908	12 20	28
16**	25·7	8 29	45·5	13·3	22 40	32·2	526	6 26	608	372	12 22	236	933	14 57	973	883	8 50	90
17	24·6	1 27	32·9	15·7	20 0	17·2	530	18 30	593	455	10 30	138	932	20 6	962	893	1 37	69
18	24·3	16 8	31·0	14·5	17 8	16·5	542	17 26	636	489	9 5	147	937	17 14	976	915	3 34	61
19	25·1	13 52	31·8	14·2	8 58	17·6	540	17 27	579	476	10 59	103	933	16 40	952	916	10 57	36
20	25·0	13 2	31·4	18·5	9 4	12·9	545	18 54	609	498	10 51	111	929	18 44	955	909	4 51	46
21	24·8	13 18	32·0	17·2	7 3	14·8	549	16 25	586	499	12 45	87	934	16 35	963	917	12 42	46
22	25·2	13 10	30·9	19·4	5 44	11·5	549	19 47	579	513	10 44	66	935	19 46	947	918	7 52	29
23*	24·3	12 58	30·3	18·2	8 40	12·1	553	20 44	566	520	10 37	46	935	16 48	948	914	11 38	34
24*	24·7	14 15	30·1	18·5	7 21	11·6	553	17 25	569	520	10 35	49	930	16 51	943	912	11 58	31
25*	25·3	12 7	29·7	20·9	7 12	8·8	561	19 44	584	538	9 21	46	924	18 12	933	901	11 23	32
26	25·4	13 58	31·3	19·4	7 42	11·9	561	2 12	582	525	15 27	57	929	16 27	948	908	10 58	40
27	24·5	14 20	35·7	13·1	5 34	22·6	562	2 15	608	506	12 28	102	921	18 22	955	900	3 54	55
28	23·5	14 52	34·6	12·5	2 22	22·1	555	19 19	631	495	8 25	136	919	18 30	957	894	3 8	63
29	24·7	14 34	31·3	18·0	8 0	13·3	551	18 37	624	502	12 49	122	919	18 34	956	890	4 40	66
30	24·9	14 6	32·0	18·6	0 43	13·4	550	18 58	618	516	8 54	102	921	18 54	952	901	5 52	51
Mean	25·0	—	32·7	16·9	—	15·8	545	—	603	492	—	111	926	—	954	900	—	54
No. of Days used.	30	—	30	30	—	30	30	—	30	30	—	30	30	—	30	30	—	30

* Denotes an International Quiet Day. ** Denotes an International Disturbed Day.

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

Date.	Declination West.						Horizontal Force.						Vertical Force.					
	Mean Value for the Day.	Maximum.		Minimum.		Range.	Mean Value for the Day.	Maximum.		Minimum.		Range.	Mean Value for the Day.	Maximum.		Minimum.		Range.
JULY	12°+	G.M.T. h m	12°+	12°+	G.M.T. h m		18000γ+	G.M.T. h m	18000γ+	18000γ+	G.M.T. h m	γ	42000γ+	G.M.T. h m	42000γ+	42000γ+	G.M.T. h m	γ
	′		′	′		′												
1	24·4	14 24	31·2	19·1	7 54	12·1	548	22 33	578	508	11 55	70	923	18 1	943	908	1 18	35
2	24·6	13 58	33·4	19·6	7 24	13·8	550	19 16	621	502	14 29	119	925	19 7	949	914	10 55	35
3	24·2	13 1	32·6	18·7	5 55	13·9	554	16 18	602	507	13 17	95	922	19 14	948	899	11 34	49
4	24·9	16 16	31·0	16·9	7 11	14·1	550	22 47	607	498	9 13	109	920	18 10	955	896	11 38	59
5	24·1	12 20	32·2	18·4	1 0	13·8	551	19 2	643	505	12 34	138	920	18 58	947	893	11 37	54
6	24·9	13 20	32·4	19·7	6 24	12·7	548	17 41	576	519	10 30	57	922	17 40	938	910	10 56	28
7	23·9	13 36	31·2	16·9	7 3	14·3	553	18 34	578	529	10 56	49	918	19 46	934	900	11 32	34
8*	24·4	13 42	29·1	20·1	6 12	9·0	554	16 40	575	539	9 0	36	922	17 42	936	911	12 57	25
9	25·8	18 7	35·8	19·0	5 31	16·8	563	18 10	651	521	10 16	130	916	14 57	941	896	11 2	45
10**	24·2	3 18	34·5	13·3	1 49	21·2	541	0 46	665	463	9 0	202	922	17 42	969	868	4 1	101
11**	22·5	14 1	30·2	9·6	4 25	20·6	537	2 22	618	487	10 37	131	920	19 18	963	829	3 24	134
12**	24·3	5 34	32·2	8·2	20 34	24·0	539	20 40	612	469	6 20	143	922	20 38	954	892	6 4	62
13**	24·9	15 10	32·2	12·7	16 54	19·5	539	17 2	653	477	5 49	176	932	16 59	991	911	11 18	80
14	24·7	14 14	30·8	17·8	8 23	13·0	538	19 37	584	491	12 19	93	921	17 27	945	893	11 41	52
15	24·2	12 23	29·2	18·4	17 7	10·8	546	17 13	589	514	12 33	75	929	17 10	963	918	10 56	45
16	25·9	13 45	33·5	16·3	20 39	17·2	548	19 1	627	507	14 55	120	923	18 54	954	892	9 21	62
17	22·9	6 57	26·6	17·4	1 37	9·2	542	16 41	582	494	13 37	88	925	17 56	955	894	2 57	61
18	24·7	13 35	29·2	21·7	1 36	7·5	551	20 3	581	527	11 36	54	925	17 54	944	899	11 40	45
19	23·7	14 1	29·7	18·3	6 6	11·4	545	20 30	581	506	9 9	75	927	20 27	940	906	12 18	34
20*	24·4	17 39	28·0	20·1	5 27	7·9	550	18 48	572	524	13 23	48	924	20 51	936	904	11 44	32
21*	24·1	6 58	29·7	20·7	5 10	9·0	553	1 10	572	528	13 46	44	927	17 50	939	912	11 56	27
22*	24·7	13 18	31·5	19·3	5 40	12·2	552	18 57	570	532	14 24	38	923	20 15	938	901	11 7	37
23*	24·4	14 13	28·7	19·5	7 11	9·2	550	19 23	570	523	11 54	47	923	15 59	932	903	11 55	29
24	24·0	13 1	27·8	15·4	24 0	12·4	559	22 19	658	536	23 59	122	921	18 17	938	910	10 0	28
25**	21·5	13 18	36·9	5·9	1 57	31·0	550	1 47	610	473	11 5	137	915	17 34	958	886	11 0	72
26	23·9	13 42	31·0	15·0	4 22	16·0	541	18 50	608	490	11 6	118	916	18 42	948	889	5 54	59
27	22·6	13 42	28·9	17·5	22 43	11·4	547	22 50	592	499	9 32	93	922	15 20	939	905	12 3	34
28	23·3	12 20	31·3	15·5	20 38	15·8	549	23 10	584	517	10 37	67	918	15 51	938	896	12 1	42
29	23·9	14 2	33·9	16·7	8 5	17·2	547	18 56	620	459	11 38	161	920	18 55	948	896	11 37	52
30	23·6	16 55	29·3	17·5	5 43	11·8	547	16 27	589	506	9 4	83	922	17 50	941	906	11 39	35
31	23·4	13 29	30·2	17·4	1 52	12·8	547	17 9	580	507	11 40	73	922	19 47	936	905	1 25	31
Mean	24·1	—	31·1	16·9	—	14·2	548	—	602	505	—	97	922	—	947	898	—	49
No. of Days used.	31	—	31	31	—	31	31	—	31	31	—	31	31	—	31	31	—	31
AUG.	12°+	h m	12°+	12°+	h m		18000γ+	h m	18000γ+	18000γ+	h m	γ	42000γ+	h m	42000γ+	42000γ+	h m	γ
	′		′	′		′												
1	23·5	14 58	30·1	17·9	3 22	12·2	549	22 14	587	518	13 22	69	918	19 40	930	898	12 18	32
2*	24·7	13 40	32·0	19·9	8 29	12·1	553	22 34	577	520	13 10	57	920	18 8	935	902	12 24	33
3*	23·9	13 38	30·3	19·6	23 10	10·7	553	22 29	587	514	12 18	73	918	18 59	932	900	11 40	32
4*	23·7	12 57	30·7	19·8	8 9	10·9	554	22 45	581	527	11 26	54	915	18 36	928	899	12 11	29
5	23·5	13 50	32·7	18·5	4 52	14·2	559	23 13	606	531	10 0	75	917	18 32	942	899	11 55	43
6**	25·6	6 11	38·3	1·5	20 55	36·8	545	21 16	614	432	12 52	182	919	15 18	992	867	6 32	125
7**	23·5	13 55	32·1	8·7	0 27	23·4	530	0 35	615	412	11 24	203	918	18 54	955	879	2 14	76
8**	23·2	13 57	33·7	6·2	19 29	27·5	536	19 34	653	444	10 50	209	914	19 32	969	875	2 52	94
9**	24·2	5 34	33·0	16·6	21 28	16·4	527	19 47	590	449	8 58	141	919	17 32	952	886	3 9	66
10	23·2	14 18	29·6	13·2	24 0	16·4	535	17 26	590	484	9 20	106	925	17 26	966	909	11 38	57
11	23·1	12 34	30·5	9·9	20 27	20·6	538	20 35	615	464	10 12	151	925	15 50	955	901	0 47	54
12**	23·2	12 26	31·5	11·7	18 40	19·8	541	18 51	666	484	9 29	182	918	18 50	963	889	5 3	74
13	23·9	1 57	32·8	17·1	17 36	15·7	541	19 40	588	495	9 43	93	919	17 52	948	878	2 12	70
14	23·0	11 41	28·9	−0·4	20 7	29·3	544	20 17	658	505	7 5	153	924	20 10	949	909	11 0	40
15	—	—	—	—	—	—	—	—	—	—	—	—	921	16 10	969	894	1 30	75
16	24·6	16 26	30·8	16·2	23 29	14·6	540	20 36	583	510	16 39	73	929	17 9	961	914	10 54	47
17*	23·8	14 39	31·5	18·5	0 50	13·0	544	19 54	579	511	10 51	68	924	19 13	946	906	10 40	40
18	22·7	13 36	28·8	13·0	22 10	15·8	545	18 17	577	523	10 55	54	921	19 22	935	906	12 1	29
19	24·8	13 13	37·1	19·0	4 55	18·1	537	13 11	580	447	9 57	133	923	16 48	943	901	13 28	42
20	23·2	14 33	29·3	15·6	21 12	13·7	545	20 43	585	521	15 29	64	921	17 7	937	906	10 38	31
21	23·4	15 32	32·6	13·7	20 52	18·9	551	18 39	595	515	11 50	80	921	19 40	946	900	13 1	46
22	23·1	12 59	30·5	12·3	2 18	18·2	541	0 19	611	486	7 11	125	913	20 30	937	876	4 4	61
23	22·2	13 58	33·5	12·7	21 14	20·8	544	17 50	598	486	7 40	112	921	16 30	962	899	0 14	63
24	23·1	14 2	31·8	16·5	2 18	15·3	538	21 25	584	486	10 34	98	924	17 10	964	903	1 6	61
25	23·6	12 40	33·0	16·7	7 36	16·3	540	0 34	569	509	8 30	60	923	15 41	940	905	1 9	35
26	22·9	13 11	32·7	16·6	8 4	16·1	545	22 25	589	509	9 24	80	923	16 52	943	901	12 20	42
27	23·8	13 10	34·0	17·0	5 34	17·0	542	16 10	576	513	10 38	63	922	16 48	950	902	12 6	48
28*	23·0	14 17	29·5	18·9	7 10	10·6	540	17 4	571	503	10 43	68	926	18 38	943	912	12 24	31
29	21·9	14 18	30·2	16·1	19 31	14·1	546	19 4	595	512	9 24	83	923	19 1	938	905	12 58	33
30	22·4	13 1	29·6	12·6	22 9	17·0	544	22 12	591	510	10 57	81	918	20 9	931	899	12 56	32
31	22·9	13 44	31·0	14·0	3 25	17·0	545	20 56	590	520	10 3	70	918	17 46	938	900	2 19	38
Mean	23·5	—	31·7	14·3	—	17·4	543	—	597	495	—	102	921	—	948	897	—	51
No. of Days used.	30	—	30	30	—	30	30	—	30	30	—	30	31	—	31	31	—	31

* Denotes an International Quiet Day. ** Denotes an International Disturbed Day.

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

Date.	DECLINATION WEST.						HORIZONTAL FORCE.						VERTICAL FORCE.					
	Mean Value for the Day.	Maximum.		Minimum.		Range.	Mean Value for the Day.	Maximum.		Minimum.		Range.	Mean Value for the Day.	Maximum.		Minimum.		Range.
SEPT.	12°+	G.M.T. h m	12°+	12°+	G.M.T. h m		18000γ+	G.M.T. h m	18000γ+	18000γ+	G.M.T. h m	γ	42000γ+	G.M.T. h m	42000γ+	42000γ+	G.M.T. h m	γ
	′		′	′		′												
1	24·4	14 30	33·6	19·2	3 30	14·4	528	4 53	583	447	12 50	136	926	16 40	980	886	6 29	94
2	24·2	1 10	35·2	19·1	7 3	16·1	537	1 22	572	468	9 55	104	914	16 7	928	886	3 0	42
3**	23·5	14 39	39·6	0·8	20 54	38·8	529	21 18	624	466	13 54	158	928	15 47	1006	899	21 37	107
4	22·3	12 43	29·1	15·0	8 0	14·1	524	3 9	571	454	10 14	117	915	17 34	935	882	0 45	53
5	22·0	13 42	30·2	9·2	20 30	21·0	538	18 54	617	495	12 2	122	925	18 6	964	901	11 50	63
6**	23·3	12 4	34·5	14·7	17 40	19·8	532	23 4	568	448	10 14	120	930	15 0	966	903	10 11	63
7	22·1	11 52	31·3	16·6	23 39	14·7	531	22 53	558	480	8 2	78	931	15 5	953	914	23 58	39
8	21·8	13 27	30·5	13·2	20 20	17·3	533	20 31	579	496	10 19	83	928	16 10	950	911	11 55	39
9	23·1	13 9	35·9	11·1	20 11	24·8	533	22 57	580	472	10 44	108	932	17 10	968	912	10 40	56
10	22·5	12 28	29·5	16·6	3 8	12·9	534	2 32	568	502	9 22	66	927	15 56	947	905	2 50	42
11	23·5	13 58	32·1	17·0	23 17	15·1	540	23 24	568	506	11 44	62	930	17 3	948	909	11 37	39
12	22·1	13 54	30·9	14·0	22 43	16·9	537	21 42	610	510	10 53	100	928	15 38	947	912	22 23	35
13	21·9	13 32	28·5	15·7	0 0	12·8	539	3 23	566	508	10 24	58	924	6 34	931	906	11 54	25
14*	22·0	12 40	30·9	14·0	0 44	16·9	538	19 45	557	513	10 58	44	924	15 45	936	905	12 2	31
15*	22·4	13 6	26·9	18·7	8 52	8·2	542	7 4	565	511	10 38	54	925	17 36	937	910	12 11	27
16*	23·0	12 50	29·9	18·3	7 40	11·6	542	6 17	563	509	10 29	54	924	17 15	943	907	12 34	36
17	23·6	13 29	33·4	17·3	8 40	16·1	544	20 30	566	500	14 44	66	921	16 7	934	900	12 17	34
18**	23·5	13 27	48·9	2·5	18 59	46·4	523	22 48	606	404	10 51	202	934	17 52	1013	888	24 0	125
19	21·8	13 54	30·7	9·3	0 30	21·4	514	21 11	568	456	10 55	112	925	17 40	959	887	0 1	72
20	22·9	13 27	31·2	17·4	8 17	13·8	534	21 42	558	507	13 35	51	932	19 28	944	913	11 36	31
21	24·3	14 23	34·3	19·2	22 2	15·1	528	22 2	559	449	9 24	110	932	17 10	954	912	9 17	42
22	22·6	1 0	28·9	18·0	4 49	10·9	539	1 0	572	514	8 40	58	923	17 33	932	908	1 48	24
23	22·7	12 41	30·2	16·5	7 10	13·7	540	22 38	557	489	9 46	68	928	18 50	940	911	11 38	29
24	22·2	13 2	31·0	16·7	3 36	14·3	540	0 58	578	478	9 7	100	925	17 10	945	899	11 24	46
25	22·4	13 47	31·3	14·7	22 38	16·6	544	22 34	571	515	10 56	56	926	19 28	941	906	10 56	35
26*	22·9	13 17	31·6	18·2	7 24	13·4	544	19 50	562	510	10 37	52	924	16 10	933	907	11 57	26
27*	22·9	13 35	30·0	19·4	1 9	10·6	545	22 45	561	503	10 19	58	925	16 24	934	916	12 59	18
28	22·1	14 29	31·1	5·8	21 6	25·3	540	19 15	569	483	12 17	86	924	19 12	951	904	11 18	47
29**	22·7	13 7	34·4	6·6	19 3	27·8	524	18 30	617	421	13 29	196	923	16 44	964	894	5 44	70
30**	24·9	4 39	48·0	12·1	1 37	35·9	516	3 8	584	410	8 11	174	906	16 50	945	823	5 5	122
Mean	22·9	—	32·8	14·2	—	18·6	534	—	576	481	—	95	925	—	951	901	—	50
No. of Days used.	30	—	30	30	—	30	30	—	30	30	—	30	30	—	30	30	—	30
OCT.	12°+	h m	12°+	12°+	h m		18000γ+	h m	18000γ+	18000γ+	h m	γ	42000γ+	h m	42000γ+	42000γ+	h m	γ
	′		′	′		′												
1	22·3	12 9	28·9	9·9	18 2	19·0	524	22 40	576	467	11 30	109	933	17 12	953	917	8 6	36
2	21·6	12 24	30·2	4·8	22 13	25·4	530	22 38	579	478	12 3	101	930	15 40	946	915	11 52	31
3**	21·5	11 49	33·1	3·4	20 3	29·7	526	20 20	610	435	10 56	175	934	15 54	979	911	4 50	68
4	21·5	12 47	30·7	11·9	19 34	18·8	523	19 40	583	460	12 1	123	935	15 9	965	915	0 55	50
5	21·9	13 20	31·7	14·9	17 4	16·8	525	20 46	579	480	11 40	99	934	16 25	972	915	9 32	57
6	21·5	12 45	30·7	6·7	19 54	24·0	534	20 4	559	490	9 19	69	931	15 53	950	919	2 7	31
7	20·8	12 50	29·3	11·4	21 31	17·9	535	21 17	562	510	10 6	52	929	17 28	946	914	11 37	32
8	23·7	6 4	30·6	9·5	19 52	21·1	524	19 56	583	476	12 18	107	932	15 29	963	909	5 46	54
9	21·6	13 21	29·9	11·7	22 16	18·2	538	22 35	590	504	11 40	86	928	17 52	942	914	10 58	28
10	21·7	12 40	29·1	16·8	17 18	12·3	538	18 41	554	511	10 50	43	928	17 40	947	909	11 59	38
11*	22·7	13 41	28·4	19·6	8 12	8·8	537	5 30	558	513	10 41	45	930	15 56	941	918	10 44	23
12	22·4	13 21	30·1	18·7	19 1	11·4	544	20 21	568	512	11 24	56	926	15 59	937	909	11 22	28
13*	22·6	12 50	29·2	18·5	8 42	10·7	544	4 49	556	527	11 40	29	926	16 14	937	911	11 42	26
14**	21·3	12 31	32·4	2·7	21 8	29·7	543	6 59	611	457	21 28	154	922	19 59	950	902	10 55	48
15	21·4	14 10	26·0	12·1	0 14	13·9	527	21 59	546	501	0 0	45	933	0 1	946	925	13 15	21
16*	20·9	13 40	24·9	17·0	9 22	7·9	536	7 27	547	506	11 53	41	931	15 45	938	922	13 16	16
17**	21·4	16 30	36·0	−16·4	21 35	52·4	501	17 17	575	391	20 26	184	963	17 14	1118	923	6 58	195
18	20·9	12 42	27·1	14·7	23 27	12·4	514	23 46	559	483	12 19	76	948	0 6	964	935	10 54	29
19	20·8	13 32	25·1	10·2	20 10	14·9	529	0 55	558	489	9 10	69	939	0 44	955	931	8 19	24
20	20·5	12 40	27·6	11·7	19 7	15·9	528	19 12	577	440	9 10	137	935	15 50	965	914	1 18	51
21	21·1	14 27	25·9	12·0	18 22	13·9	535	18 38	569	511	8 14	58	931	18 20	944	917	11 18	27
22	21·1	13 11	25·9	12·9	17 10	13·0	537	23 20	551	512	17 4	39	932	17 21	949	915	11 34	34
23*	21·5	11 36	26·3	18·4	8 54	7·9	543	21 10	557	527	10 20	30	930	18 27	941	920	9 44	21
24*	21·7	12 44	25·8	18·6	9 4	7·2	545	19 50	557	531	10 21	26	928	17 49	936	914	11 23	22
25	21·4	15 24	28·8	7·5	23 58	21·3	546	23 41	596	491	18 18	105	926	18 46	956	907	11 37	49
26**	21·9	13 52	36·5	6·0	0 4	30·5	523	22 35	609	417	13 4	192	930	16 14	1005	873	1 11	132
27**	20·3	4 28	29·7	4·3	16 34	25·4	518	18 27	583	451	11 14	132	934	15 46	984	888	0 33	96
28	20·9	12 34	28·7	4·5	19 50	24·2	521	20 0	565	464	13 24	101	937	18 27	962	918	2 26	44
29	20·5	1 6	27·8	7·9	18 20	19·9	520	22 12	569	457	10 14	112	938	15 42	975	917	1 34	58
30	20·0	13 8	26·3	−0·1	19 59	26·4	532	20 10	641	491	17 20	150	935	18 1	965	913	4 5	52
31	20·4	20 59	25·4	13·2	20 31	12·2	531	20 50	586	453	11 40	133	935	16 5	960	923	7 37	37
Mean	21·4	—	29·0	10·2	—	18·8	531	—	575	482	—	93	933	—	961	914	—	47
No. of Days used.	31	—	31	31	—	31	31	—	31	31	—	31	31	—	31	31	—	31

* Denotes an International Quiet Day. ** Denotes an International Disturbed Day.

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

Date.	Declination West.						Horizontal Force.						Vertical Force.					
	Mean Value for the Day.	Maximum.		Minimum.		Range.	Mean Value for the Day.	Maximum.		Minimum.		Range.	Mean Value for the Day.	Maximum.		Minimum.		Range.
NOV.	12°+	G.M.T. h m	12°+	12°+	G.M.T. h m		18000γ+	G.M.T. h m	18000γ+	18000γ+	G.M.T. h m	γ	42000γ+	G.M.T. h m	42000γ+	42000γ+	G.M.T. h m	γ
	′		′	′		′												
1	20·8	12 30	25·8	16·4	0 6	9·4	527	7 30	546	490	13 8	56	940	13 51	962	923	0 41	39
2	21·1	11 57	25·4	9·7	24 0	15·7	541	24 0	575	485	15 30	90	939	15 45	961	925	10 40	36
3	20·5	12 42	24·9	8·5	0 10	16·4	540	0 5	576	523	10 50	53	934	7 24	940	924	10 38	16
4**	21·6	13 47	28·7	14·1	22 10	14·6	538	21 43	592	480	11 30	112	934	15 30	951	915	9 46	36
5	19·9	13 41	25·5	14·4	21 20	11·1	536	19 40	578	513	16 40	65	932	16 50	946	918	9 20	28
6	20·9	11 20	24·8	17·6	8 41	7·2	542	5 17	555	518	12 24	37	932	15 8	940	927	3 32	13
7	20·7	12 37	25·5	17·0	19 41	8·5	544	16 59	559	522	13 0	37	931	18 49	940	917	10 56	23
8	20·9	13 56	26·4	8·2	20 20	18·2	543	20 44	562	521	10 3	41	934	20 36	950	925	11 0	25
9	20·4	12 39	26·7	13·6	2 4	13·1	541	0 26	578	509	10 53	69	932	17 52	943	921	10 47	22
10	20·9	6 41	24·1	15·6	24 0	8·5	546	22 48	573	525	11 20	48	933	15 8	941	920	11 2	21
11	20·8	13 16	23·8	15·5	0 4	8·3	545	23 58	561	527	10 58	34	932	16 50	936	924	11 36	12
12*	21·0	11 55	24·4	18·5	3 18	5·9	546	0 3	563	530	10 24	33	930	18 9	936	924	10 21	12
13	21·2	12 37	24·7	18·4	21 39	6·3	552	19 34	591	536	10 38	55	929	19 30	938	923	10 4	15
14**	20·8	18 50	38·9	19·6	21 40	19·3	540	16 10	573	394	20 33	179	936	20 36	1021	914	13 0	107
15	20·0	12 28	26·0	18·7	2 30	7·3	522	5 27	540	470	10 40	70	940	0 0	958	924	4 39	34
16	20·8	12 30	23·8	14·5	23 46	9·3	536	23 58	550	517	0 1	33	939	14 39	946	932	11 18	14
17	21·2	11 39	25·5	15·7	0 0	9·8	535	21 38	554	522	8 21	32	937	17 31	944	920	9 26	24
18	20·6	12 58	24·3	12·3	20 41	12·0	538	20 50	572	507	15 54	65	935	16 10	944	929	9 58	15
19*	20·7	12 20	25·0	17·9	9 0	7·1	542	16 37	554	528	10 23	26	933	16 10	940	924	10 22	16
20*	20·6	13 2	24·4	18·4	22 31	6·0	547	5 44	557	532	12 1	25	931	14 47	939	922	10 21	17
21*	20·8	12 8	24·9	17·8	21 40	7·1	549	21 50	563	535	10 51	28	933	15 16	946	921	10 51	25
22*	20·8	11 46	24·0	18·2	8 42	5·8	552	16 51	565	525	10 29	40	933	14 52	944	926	10 22	18
23	20·7	13 18	25·5	8·5	20 50	17·0	542	7 20	569	493	20 50	76	933	21 10	958	919	10 58	39
24**	19·3	12 (15)	30·3	8·6	21 56	21·7	525	22 11	625	446	18 24	179	934	18 31	978	899	4 57	79
25**	18·8	4 57	37·1	4·4	22 51	32·7	505	18 8	583	436	11 58	147	937	16 27	999	885	5 20	114
26**	19·3	11 23	23·8	7·1	0 0	16·7	521	19 43	562	486	15 54	76	935	16 27	963	883	1 35	80
27	19·7	1 18	24·5	9·4	17 55	15·1	534	18 14	567	486	11 38	81	938	16 18	955	921	1 44	34
28	20·3	12 57	25·5	14·4	19 14	11·1	537	23 38	569	501	11 16	68	936	19 30	946	926	3 30	20
29	19·2	3 0	22·4	9·9	20 9	12·5	538	6 22	560	512	19 57	48	936	16 8	949	925	0 19	24
30	19·8	12 3	24·9	14·4	17 5	10·5	537	6 30	557	520	16 56	37	937	19 59	946	925	10 47	21
Mean	20·5	—	26·0	13·9	—	12·1	538	—	568	503	—	65	934	—	952	919	—	33
No. of Days used.	30	—	30	30	—	30	30	—	30	30	—	30	30	—	30	30	—	30
DEC.	12°+	h m	12°+	12°+	h m		18000γ+	h m	18000γ+	18000γ+	h m	γ	42000γ+	h m	42000γ+	42000γ+	h m	γ
	′		′	′		′												
1	19·5	12 21	23·5	14·5	2 0	9·0	541	1 27	560	522	9 46	38	936	16 28	944	924	1 49	20
2	19·8	11 25	22·3	16·4	20 40	5·9	544	23 18	555	535	17 14	20	935	14 6	939	927	9 40	12
3**	20·8	15 12	44·5	−1·8	23 46	46·3	508	15 8	610	383	17 31	227	966	17 52	1150	917	10 0	233
4**	20·0	7 27	33·6	0·7	0 0	32·9	504	4 38	550	462	0 30	88	934	14 15	963	880	5 40	83
5	19·1	12 24	21·3	10·5	0 10	10·8	532	0 20	556	514	1 40	42	942	0 16	953	934	8 58	19
6	19·5	13 16	22·3	14·4	18 30	7·9	538	18 37	549	524	19 27	25	938	14 8	946	929	10 20	17
7	19·9	15 7	23·7	15·8	1 51	7·9	542	0 38	569	517	15 48	52	933	0 22	943	921	10 40	22
8*	19·9	12 33	23·3	18·4	0 30	4·9	547	12 10	556	540	0 40	16	931	17 9	938	919	9 38	19
9	20·1	13 52	23·9	15·3	17 39	8·6	548	8 32	564	535	14 45	29	929	17 43	941	916	11 40	25
10	20·1	11 45	23·4	16·0	21 30	7·4	549	16 10	556	535	13 39	21	930	15 54	937	922	12 59	15
11	19·4	13 43	21·7	17·4	22 39	4·3	550	5 28	558	542	12 41	16	927	18 56	935	918	12 38	17
12	19·6	16 58	24·9	9·5	22 18	15·4	550	19 48	568	519	23 19	49	929	21 24	947	917	11 20	30
13**	18·7	15 37	25·7	5·0	22 22	20·7	543	2 40	571	501	16 50	70	932	17 32	951	917	11 39	34
14	18·7	12 51	22·6	12·3	22 50	10·3	545	7 28	561	530	16 31	31	930	17 0	939	920	11 17	19
15	19·7	14 16	23·3	16·6	20 53	6·7	547	19 19	558	526	13 14	32	931	21 45	940	923	11 28	17
16*	19·4	12 34	21·9	17·9	8 43	4·0	549	17 14	555	540	1 18	15	929	19 20	933	923	12 0	10
17*	19·5	13 47	22·1	17·8	5 35	4·3	551	18 21	558	542	11 28	16	927	18 19	932	918	12 44	14
18*	19·7	11 21	22·1	18·2	22 53	3·9	554	14 6	563	544	1 28	19	927	18 16	932	918	8 55	14
19	19·8	14 21	25·2	13·4	22 30	11·8	554	17 46	575	540	14 52	35	926	16 44	935	918	9 37	17
20**	19·0	18 2	26·4	−4·9	18 51	31·3	545	19 1	584	464	19 58	120	933	18 49	982	918	10 22	64
21**	18·7	9 34	29·0	5·0	18 14	24·0	522	22 23	569	472	9 14	97	941	18 20	969	925	8 11	44
22	19·0	4 57	25·4	7·6	19 7	17·8	532	22 51	577	490	16 2	87	937	16 42	956	919	23 31	37
23	18·9	13 59	22·6	8·6	16 5	14·0	536	23 59	561	467	15 45	94	937	16 30	960	926	9 35	34
24	19·6	13 12	24·2	12·2	18 28	12·0	534	6 11	559	498	12 29	61	937	18 8	957	920	0 24	37
25	19·3	2 48	21·9	15·0	20 0	6·9	539	23 47	558	498	12 5	60	936	16 45	944	929	1 28	15
26	19·0	7 24	22·5	11·6	17 43	10·9	543	7 20	558	524	16 38	34	934	17 50	947	922	11 47	25
27	18·9	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
28	19·1	4 51	21·4	17·7	23 47	3·7	548	4 48	561	536	16 17	25	933	16 51	939	927	10 18	12
29	19·2	12 21	21·9	11·0	23 10	10·9	550	15 48	566	523	23 1	43	935	23 36	948	929	14 36	19
30	19·4	12 8	22·7	16·8	19 26	5·9	550	20 14	561	535	0 4	26	934	19 31	940	926	9 38	14
31*	19·1	12 41	22·0	17·3	5 32	4·7	553	19 21	562	545	2 38	17	933	14 51	938	928	10 23	10
Mean	19·4	—	24·4	12·2	—	12·2	542	—	564	513	—	51	934	—	953	921	—	32
No. of Days used.	31	—	30	30	—	30	30	—	30	30	—	30	30	—	30	30	—	30

* Denotes an International Quiet Day. ** Denotes an International Disturbed Day.

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

"All" Days.

DECLINATION WEST.

Month and Season, 1930.	Greenwich Mean Time. Hour commencing—																							
	0.	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	Noon.	13.	14.	15.	16.	17.	18	19.	20.	21.	22.	23.
	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′
Jan.	−1·73	−1·24	−1·08	−0·71	−0·40	−0·62	−0·49	−0·66	−1·20	−0·62	+0·83	+2·06	+3·52	**+3·87**	+3·00	+2·34	+1·79	+1·30	+0·40	−0·98	−2·04	**−2·76**	−2·39	−2·16
Feb.	−2·19	−2·28	−1·19	−0·64	−0·79	−0·99	−0·45	−0·87	−1·02	−0·74	+0·52	+2·63	+4·27	**+5·38**	+4·88	+3·33	+1·81	+0·73	−0·93	−1·41	−1·81	−1·95	**−3·23**	−2·98
Mar.	−1·21	−0·88	−0·74	−1·66	−1·47	−1·31	−1·17	−2·16	−2·23	−1·56	+0·64	+3·53	+5·80	**+6·18**	+5·60	+3·33	+1·46	−0·93	−1·25	−1·46	−2·11	**−2·41**	−2·19	−1·84
Apr.	**−2·65**	−1·38	−1·47	−1·52	−2·05	−1·91	−2·17	−2·61	−2·90	−1·23	+1·50	+4·66	+6·40	**+7·13**	+5·95	+4·11	+1·95	+0·29	−0·72	−2·32	−2·56	−1·95	−2·53	−1·99
May	−2·20	−1·63	−1·92	−2·03	−1·91	−2·67	−3·56	**−3·58**	−3·17	−1·36	+0·97	+3·31	+5·27	**+5·96**	+5·70	+4·66	+3·32	+2·09	+0·33	−0·90	−1·07	−1·78	−1·92	−1·96
June	−1·41	−1·59	−1·70	−1·94	−2·17	−3·20	**−3·54**	−3·21	−3·16	−2·18	−0·18	+2·82	+4·50	**+5·21**	+5·17	+4·11	+3·12	+2·20	+0·95	−0·24	−0·44	−0·69	−1·12	−1·31
July	−1·42	−2·63	−1·93	−1·81	−2·85	**−3·22**	−3·06	−2·75	−2·51	−1·32	+0·69	+2·53	+4·32	**+4·99**	+4·47	+3·28	+2·63	+1·72	+1·37	+0·33	−0·54	−0·71	−0·61	−0·90
Aug.	−1·72	−1·44	−1·17	−1·78	−1·72	−2·18	−2·61	**−2·76**	−2·20	−0·74	+1·21	+3·56	+5·30	**+5·73**	+5·36	+3·55	+2·19	+0·52	−0·13	−0·91	−2·55	−1·91	−1·81	−1·79
Sept.	−1·72	−1·51	−1·34	−1·67	−0·96	−1·16	−1·80	**−2·78**	−2·58	−1·03	+1·32	+4·48	+6·12	**+6·92**	+5·53	+3·41	+1·39	−0·40	−1·50	−1·87	−2·24	−1·98	−2·47	−2·15
Oct.	−0·93	−0·80	−0·59	−0·31	+0·40	+0·29	+0·09	−0·51	−1·10	−0·70	+1·35	+3·93	+5·16	**+5·35**	+4·22	+2·16	+0·15	−1·19	−2·38	−2·61	−3·07	**−3·59**	−3·07	−2·22
Nov.	−1·77	−1·13	−0·71	−0·65	+0·20	+0·05	−0·26	−0·51	−0·92	−0·39	+1·24	+2·75	**+3·51**	+3·23	+2·60	+1·17	+0·25	+0·05	−0·30	−0·82	−1·36	**−2·34**	−1·89	−1·98
Dec.	−1·54	−1·17	−0·69	−0·23	+0·06	+0·06	+0·24	+0·40	−0·04	+0·32	+1·01	+1·83	+2·32	**+2·42**	+2·28	+1·60	+0·55	−0·12	−0·71	−0·99	−1·11	−2·06	**−2·46**	−1·94
Year	−1·71	−1·47	−1·21	−1·25	−1·14	−1·41	−1·57	−1·83	−1·92	−0·96	+0·93	+3·17	+4·71	**+5·20**	+4·56	+3·09	+1·72	+0·52	−0·41	−1·18	−1·74	−2·01	**−2·14**	−1·94
Winter	−1·81	−1·46	−0·92	−0·56	−0·23	−0·38	−0·24	−0·41	−0·80	−0·36	+0·90	+2·32	+3·41	**+3·73**	+3·19	+2·11	+1·10	+0·49	−0·39	−1·05	−1·58	−2·28	**−2·49**	−2·27
Equinox	−1·63	−1·14	−1·04	−1·29	−1·02	−1·02	−1·26	−2·02	−2·20	−1·13	+1·20	+4·15	+5·87	**+6·40**	+5·33	+3·25	+1·24	−0·56	−1·46	−2·07	−2·50	−2·48	**−2·57**	−2·05
Summer	−1·69	−1·82	−1·68	−1·89	−2·16	−2·82	**−3·19**	−3·08	−2·76	−1·40	+0·67	+3·06	+4·85	**+5·47**	+5·18	+3·90	+2·82	+1·63	+0·63	−0·43	−1·15	−1·27	−1·37	−1·49

INCLINATION.

	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′
Jan.	−0·23	−0·32	−0·36	−0·53	−0·73	−0·90	**−0·91**	−0·83	−0·37	+0·13	+0·56	**+0·81**	+0·68	+0·62	+0·61	+0·50	+0·47	+0·25	+0·31	+0·21	+0·16	+0·07	−0·11	−0·15
Feb.	−0·42	−0·49	−0·47	−0·65	−0·72	−0·71	**−0·89**	−0·79	−0·38	+0·32	+0·73	+0·98	**+1·06**	+0·78	+0·84	+0·66	+0·72	+0·56	+0·06	+0·06	−0·23	−0·27	−0·46	−0·32
March	−0·86	−0·85	**−0·91**	−0·74	−0·72	−0·66	−0·67	−0·12	+0·37	+0·91	+1·26	**+1·35**	+1·34	+0·91	+0·62	+0·55	+0·51	+0·35	−0·12	−0·48	−0·34	−0·52	−0·50	−0·66
Apr.	−0·50	−0·88	−0·68	−0·69	−0·60	−0·39	−0·25	+0·31	+0·89	+1·50	**+1·62**	+1·52	+1·05	+0·71	+0·57	+0·44	+0·04	−0·30	−0·23	−0·65	−0·77	−0·72	−0·91	**−1·01**
May	−0·86	−0·66	−0·53	−0·46	−0·05	+0·09	+0·59	+0·75	+1·27	**+1·53**	+1·49	+1·02	+0·77	+0·70	+0·39	+0·04	−0·52	−0·89	−0·91	−0·88	−0·56	−0·64	−0·87	**−1·06**
June	−0·91	−0·77	−0·68	−0·53	−0·30	−0·08	+0·44	+1·06	+1·53	+1·63	**+1·63**	+1·30	+1·09	+0·68	+0·40	+0·27	−0·11	−0·58	−0·99	**−1·19**	−0·92	−0·94	−1·03	−1·08
July	−0·60	−0·58	−0·46	−0·29	−0·29	−0·12	+0·46	+0·67	+1·01	+1·22	**+1·34**	+1·22	+0·92	+0·75	+0·45	+0·11	−0·34	−0·58	−0·97	**−0·98**	−0·72	−0·71	−0·72	−0·75
Aug.	**−1·00**	−0·73	−0·56	−0·52	−0·43	−0·18	+0·17	+0·73	+1·44	+1·52	**+1·58**	+1·17	+0·74	+0·50	+0·24	+0·32	−0·14	−0·39	−0·58	−0·65	−0·90	−0·73	−0·87	−0·79
Sept.	−0·82	−1·00	**−1·02**	−0·97	−0·87	−0·69	−0·30	+0·26	+0·92	+1·45	**+1·76**	+1·39	+1·14	+0·79	+0·71	+0·40	+0·43	+0·25	−0·02	−0·50	−0·68	−0·83	−0·91	−0·89
Oct.	−0·78	−0·65	−0·73	−0·83	−0·72	**−1·06**	−0·87	−0·44	+0·05	+0·77	+0·99	**+1·31**	+1·02	+0·81	+0·62	+0·78	+0·76	+0·61	+0·04	0·00	−0·29	−0·13	−0·47	−0·64
Nov.	−0·39	−0·32	−0·32	−0·47	−0·61	**−0·72**	−0·65	−0·56	−0·07	+0·37	+0·63	**+0·84**	+0·75	+0·40	+0·37	+0·50	+0·38	+0·17	+0·13	+0·11	+0·10	−0·09	−0·31	−0·26
Dec.	−0·04	−0·03	−0·17	−0·38	−0·55	−0·63	−0·66	**−0·68**	−0·48	−0·27	−0·21	−0·01	+0·14	+0·20	+0·32	−0·49	**+0·69**	+0·68	+0·42	+0·41	+0·43	+0·26	+0·03	+0·11
Year	−0·62	−0·61	−0·57	−0·59	−0·55	−0·50	−0·30	+0·03	+0·52	+0·92	**+1·12**	+1·08	+0·89	+0·65	+0·51	+0·42	+0·24	−0·01	−0·24	−0·38	−0·39	−0·44	−0·59	**−0·63**
Winter	−0·27	−0·29	−0·33	−0·51	−0·65	−0·74	**−0·78**	−0·72	−0·33	+0·14	+0·43	+0·65	**+0·66**	+0·50	+0·54	+0·54	+0·57	+0·42	+0·23	+0·20	+0·12	−0·01	−0·21	−0·16
Equinox	−0·74	**−0·85**	−0·84	−0·81	−0·73	−0·70	−0·52	+0·00	+0·56	+1·16	**+1·41**	+1·39	+1·14	+0·81	+0·63	+0·54	+0·44	+0·23	−0·08	−0·41	−0·52	−0·55	−0·70	−0·80
Summer	−0·84	−0·69	−0·56	−0·45	−0·27	−0·07	+0·42	+0·80	+1·31	+1·48	**+1·51**	+1·18	+0·88	+0·66	+0·37	+0·19	−0·28	−0·61	−0·86	**−0·93**	−0·78	−0·76	−0·87	−0·92

HORIZONTAL FORCE.

	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
Jan.	+ 3·0	+ 3·7	+ 3·7	+ 6·2	+ 8·8	+11·4	**+11·6**	+10·5	+ 3·5	− 4·4	−11·0	**−14·7**	−12·3	− 9·3	− 7·3	− 4·9	− 3·8	− 0·8	− 1·1	+ 0·2	+ 0·5	+ 1·2	+ 2·9	+ 2·8
Feb.	+ 4·4	+ 4·9	+ 3·9	+ 6·7	+ 7·9	+ 8·4	**+11·3**	+10·2	+ 4·7	− 6·3	−13·3	−17·4	**−17·6**	−12·0	−10·2	− 5·7	− 5·7	− 3·2	+ 3·8	+ 3·1	+ 6·4	+ 5·6	+ 7·3	+ 3·8
Mar.	+10·8	+ 9·6	+ 9·7	+ 7·3	+ 7·3	+ 6·9	+ 8·2	+ 0·8	− 6·7	−16·1	−22·7	**−24·7**	−23·1	−14·2	− 7·0	− 2·7	− 0·9	+ 1·6	+ 7·9	**+11·5**	+ 8·2	+ 9·9	+ 8·4	+ 9·6
Apr.	+ 3·8	+ 9·4	+ 5·5	+ 5·8	+ 5·4	+ 3·4	+ 2·3	− 5·6	−15·6	−26·2	**−29·8**	−29·0	−20·1	−11·9	− 5·8	− 0·5	+ 7·5	+14·4	+13·1	**+17·3**	+16·2	+13·3	+14·3	+12·0
May	+10·5	+ 5·2	+ 3·5	+ 2·5	− 3·9	− 4·4	−11·0	−12·8	−21·4	−26·2	**−27·3**	−21·4	−16·5	−12·4	− 4·1	+ 3·9	+14·8	+21·9	**+23·4**	+21·6	+14·8	+13·2	+14·5	+14·9
June	+10·8	+ 7·5	+ 5·9	+ 3·6	+ 1·2	− 1·1	− 8·0	−17·1	−24·9	−27·4	**−29·5**	−24·8	−20·1	−10·8	− 3·9	+ 0·4	+ 8·4	+16·4	+22·6	**+25·1**	+18·9	+17·2	+15·8	+14·3
July	+ 7·5	+ 6·7	+ 4·1	+ 1·2	+ 1·8	− 0·1	− 8·1	−11·3	−17·3	−21·7	**−24·9**	−23·9	−18·0	−13·1	− 5·3	+ 2·4	+10·4	+14·9	**+21·0**	+20·5	+15·6	+13·5	+12·2	+11·0
Aug.	+12·8	+ 7·3	+ 4·0	+ 3·8	+ 3·5	+ 0·3	− 4·3	−11·9	−23·1	−25·4	**−27·8**	−22·1	−15·3	− 9·1	− 1·5	+ 0·3	+ 8·9	+13·7	+15·9	+15·9	**+17·4**	+12·8	+13·3	+11·0
Sept.	+10·1	+11·6	+11·5	+10·7	+ 9·7	+ 7·4	+ 2·8	− 4·8	−15·1	−24·6	**−30·6**	−25·8	−20·3	−12·1	− 7·6	− 0·0	+ 1·1	+ 4·1	+ 6·8	+11·8	+13·2	**+13·9**	+13·7	+12·1
Oct.	+ 9·2	+ 6·6	+ 8·0	+ 9·4	+10·6	**+13·1**	+10·6	+ 4·9	− 2·4	−14·4	−18·7	**−23·1**	−16·9	−11·7	− 5·6	− 4·9	− 4·0	− 2·3	+ 4·5	+ 3·7	+ 6·4	+ 2·4	+ 6·9	+ 8·3
Nov.	+ 4·2	+ 2·0	+ 2·2	+ 4·8	+ 6·4	+ **8·3**	+ 7·9	+ 7·0	+ 0·1	− 7·4	−11·8	**−14·2**	−11·1	− 4·3	− 2·8	− 4·2	− 1·9	+ 0·7	+ 1·1	+ 1·0	+ 0·9	+ 3·0	+ 5·1	+ 3·6
Dec.	+ 0·1	− 0·8	+ 1·1	+ 3·7	+ 6·1	+ 7·4	+ 7·8	+ **8·0**	+ 4·8	+ 1·4	+ 0·4	− 2·2	− 3·5	− 3·0	− 3·5	− 4·6	**− 6·9**	− 5·5	− 2·7	− 2·3	− 3·7	− 2·1	+ 0·8	− 1·3
Year	+ 7·3	+ 6·1	+ 5·3	+ 5·5	+ 5·4	+ 5·1	+ 2·6	− 1·8	− 9·5	−16·6	**−20·6**	−20·3	−16·2	−10·3	− 5·4	− 1·7	+ 2·3	+ 6·3	+ 9·7	**+10·8**	+ 9·6	+ 8·7	+ 9·6	+ 8·5
Winter	+ 2·9	+ 2·5	+ 2·7	+ 5·4	+ 7·3	+ 8·9	+ **9·7**	+ 8·9	+ 3·3	− 4·2	− 8·9	**−12·1**	−11·1	− 7·2	− 6·0	− 4·9	− 4·6	− 2·2	+ 0·3	+ 0·5	+ 1·0	+ 1·9	+ 4·0	+ 2·2
Equinox	+ 8·5	+ 9·3	+ 8·7	+ 8·3	+ 8·3	+ 7·7	+ 6·0	− 1·2	−10·0	−20·3	−25·5	**−25·7**	−20·1	−12·5	− 6·5	− 2·0	+ 0·9	+ 4·5	+ 8·1	**+11·1**	+11·0	+ 9·9	+10·8	+10·5
Summer	+10·4	+ 6·7	+ 4·4	+ 2·8	+ 0·7	− 1·3	− 7·9	−13·3	−21·7	−25·2	**−27·4**	−23·1	−17·5	−11·4	− 3·7	+ 1·8	+10·6	+16·7	+20·7	**+20·8**	+16·7	+14·2	+14·0	+12·8

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

"All" Days.

NORTH COMPONENT.

Month and Season, 1930.	Greenwich Mean Time. Hour commencing—																							
	0.	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	Noon.	13.	14.	15.	16.	17.	18.	19.	20.	21.	22.	23.
	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
Jan.	+ 4·9	+ 5·0	+ 4·9	+ 6·9	+ 9·1	+11·9	**+11·9**	+11·0	+ 4·8	− 3·6	−11·7	**−16·7**	−16·1	−13·6	−10·6	− 7·5	− 5·8	− 2·3	− 1·5	+ 1·3	+ 2·9	+ 4·4	+ 5·6	+ 5·2
Feb.	+ 6·8	+ 7·4	+ 5·2	+ 7·3	+ 8·6	+ 9·4	**+11·6**	+11·0	+ 5·8	− 5·3	−13·6	−20·0	**−22·1**	−17·9	−15·6	− 9·4	− 7·7	− 4·0	+ 4·8	+ 4·7	+ 8·3	+ 7·7	+10·9	+ 7·1
Mar.	+11·9	+10·4	+10·3	+ 9·0	+ 8·8	+ 8·3	+ 9·4	+ 3·3	− 4·0	−13·9	−22·9	−28·2	**−29·3**	−21·0	−13·3	− 6·5	− 2·6	+ 2·6	+ 9·2	+12·9	+10·4	**+12·5**	+10·7	+11·5
Apr.	+ 6·8	+10·8	+ 7·1	+ 7·4	+ 7·6	+ 5·5	+ 4·8	− 2·5	−11·9	−24·2	−30·8	**−33·7**	−27·0	−19·9	−12·5	− 5·2	+ 5·1	+13·7	+13·6	**+19·6**	+18·8	+15·2	+16·9	+14·0
May	+12·8	+ 7·0	+ 5·6	+ 4·8	− 1·6	− 1·2	− 6·6	− 8·4	−17·3	−24·0	**−27·8**	−24·7	−22·2	−19·0	−10·6	− 1·6	+10·6	+19·0	**+22·5**	+22·1	+15·7	+15·0	+16·4	+16·8
June	+12·2	+ 9·2	+ 7·7	+ 5·8	+ 3·7	+ 2·6	− 3·7	−13·0	−20·7	−24·3	**−28·6**	−27·5	−24·8	−16·6	− 9·8	− 4·4	+ 4·6	+13·5	+21·0	**+24·8**	+19·0	+17·6	+16·7	+15·5
July	+ 9·0	+ 9·6	+ 6·2	+ 3·3	+ 5·1	+ 3·6	− 4·4	− 7·9	−14·0	−19·7	−25·1	**−26·3**	−22·6	−18·6	−10·3	− 1·4	+ 7·1	+12·6	+18·9	**+19·7**	+15·9	+14·0	+12·6	+11·8
Aug.	+14·5	+ 8·8	+ 5·3	+ 5·8	+ 5·4	+ 2·8	− 1·2	− 8·5	−20·0	−24·0	**−28·6**	−25·7	−21·1	−15·5	− 7·7	− 3·8	+ 6·2	+12·8	+15·7	+16·6	**+19·9**	+14·7	+15·1	+12·8
Sept.	+11·9	+13·1	+12·8	+12·4	+10·6	+ 8·6	+ 4·8	− 1·5	−11·8	−22·9	**−31·4**	−30·4	−26·9	−19·8	−13·8	− 3·9	− 0·5	+ 4·5	+ 8·4	+13·7	+15·5	+15·9	**+16·2**	+14·3
Oct.	+10·1	+ 7·4	+ 8·5	+ 9·5	+ 9·9	**+12·5**	+10·3	+ 5·4	− 1·1	−13·3	−19·8	**−27·1**	−22·5	−17·6	−10·3	− 7·3	− 4·1	− 0·9	+ 7·1	+ 6·6	+ 9·8	+ 6·5	+ 9·3	+10·7
Nov.	+ 6·1	+ 3·3	+ 3·0	+ 5·4	+ 6·0	**+ 8·1**	+ 8·0	+ 7·4	+ 1·2	− 6·8	−13·0	**−17·0**	−14·9	− 7·9	− 5·7	− 5·5	− 2·2	+ 0·6	+ 1·4	+ 1·9	+ 2·5	+ 5·6	+ 7·2	+ 5·8
Dec.	+ 1·9	+ 0·6	+ 1·9	+ 3·9	+ 5·9	+ 7·2	+ 7·3	**+ 7·4**	+ 4·7	+ 1·0	− 0·8	− 4·3	− 6·1	− 5·7	− 6·1	− 6·3	**− 7·4**	− 5·2	− 1·8	− 1·1	− 2·3	+ 0·3	+ 3·6	+ 1·0
Year	+ 9·1	+ 7·7	+ 6·5	+ 6·8	+ 6·6	+ 6·6	+ 4·4	+ 0·3	− 7·0	−15·1	−21·2	**−23·5**	−21·3	−16·1	−10·5	− 5·2	+ 0·3	+ 5·6	+ 9·9	**+11·9**	+11·4	+10·8	+11·8	+10·5
Winter	+ 4·9	+ 4·1	+ 3·8	+ 5·9	+ 7·4	+ 9·2	**+ 9·7**	+ 9·2	+ 4·1	− 3·7	− 9·8	−14·5	**−14·8**	−11·3	− 9·5	− 7·2	− 5·8	− 2·7	+ 0·7	+ 1·7	+ 2·9	+ 4·5	+ 6·8	+ 4·8
Equinox	+10·2	+10·4	+ 9·7	+ 9·6	+ 9·2	+ 8·7	+ 7·3	+ 1·2	− 7·2	−18·6	−26·2	**−29·9**	−26·4	−19·6	−12·5	− 5·7	− 0·5	+ 5·0	+ 9·6	+13·2	**+13·6**	+12·5	+13·3	+12·6
Summer	+12·1	+ 8·7	+ 6·2	+ 4·9	+ 3·2	+ 2·0	− 4·0	− 9·5	−18·0	−23·0	**−27·5**	−26·1	−22·7	−17·4	− 9·6	− 2·8	+ 7·1	+14·5	+19·5	**+20·8**	+17·6	+15·3	+15·2	+14·2

WEST COMPONENT.

	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
Jan.	− 8·5	− 5·8	− 4·9	− 2·4	− 0·2	− 0·8	− 0·1	− 1·2	− 5·6	− 4·2	+ 2·0	+ 7·7	+15·9	**+18·4**	+14·3	+11·3	+ 8·6	+ 6·7	+ 1·9	− 5·1	−10·6	**−14·3**	−12·0	−10·8
Feb.	−10·6	−11·0	− 5·4	− 1·9	− 2·5	− 3·4	+ 0·1	− 2·4	− 4·4	− 5·3	− 0·1	+10·1	+18·7	**+25·8**	+23·5	+16·3	+ 8·3	+ 3·2	− 4·1	− 6·8	− 8·2	− 9·1	**−15·5**	−14·9
Mar.	− 4·1	− 2·6	− 1·8	− 7·2	− 6·2	− 5·4	− 4·4	−11·2	**−13·2**	−11·7	− 1·5	+13·3	+25·6	**+29·5**	+28·0	+17·0	+ 7·5	− 4·6	− 4·9	− 5·2	− 9·4	−10·6	− 9·7	− 7·7
Apr.	−13·2	− 5·3	− 6·6	− 6·8	− 9·6	− 9·3	−11·0	−15·0	**−18·6**	−12·1	+ 1·5	+18·4	+29·4	**+35·0**	+30·1	+21·6	+11·9	+ 4·6	− 1·0	− 8·5	−10·0	− 7·4	−10·3	− 7·9
May	− 9·4	− 7·5	− 9·4	−10·2	−10·9	−15·0	−21·1	**−21·6**	−21·3	−12·8	− 0·7	+12·9	+24·3	+28·8	**+29·2**	+25·4	+20·7	+15·7	+ 6·8	− 0·1	− 2·5	− 6·6	− 7·0	− 7·1
June	− 5·1	− 6·8	− 7·7	− 9·5	−11·2	−17·1	−20·4	−20·6	**−22·0**	−17·4	− 7·3	+ 9·6	+19·4	+25·2	**+26·4**	+21·8	+18·3	+15·1	+ 9·9	+ 4·1	+ 1·7	+ 0·0	− 2·5	− 3·8
July	− 5·9	−12·4	− 9·3	− 9·3	−14·6	−17·0	**−17·9**	−16·9	−16·9	−11·6	− 1·7	+ 8·2	+18·9	**+23·5**	+22·4	+17·8	+16·1	+12·3	+11·7	+ 6·1	+ 0·5	− 0·9	− 0·6	− 2·4
Aug.	− 6·3	− 6·0	− 5·3	− 8·6	− 8·3	−11·4	−14·7	**−17·1**	−16·5	− 9·3	+ 0·4	+14·0	+24·7	**+28·2**	+27·9	+18·8	+13·4	+ 5·7	+ 2·7	− 1·4	− 9·7	− 7·3	− 6·7	− 7·1
Sept.	− 6·9	− 5·5	− 4·6	− 6·5	− 3·0	− 4·5	− 8·9	−15·7	**−16·8**	−10·7	+ 0·4	+18·1	+27·9	**+33·9**	+27·5	+18·0	+ 7·6	− 1·2	− 6·5	− 7·3	− 9·0	− 7·5	−10·1	− 8·7
Oct.	− 2·9	− 2·8	− 1·4	+ 0·4	+ 4·4	+ 4·3	+ 2·7	− 1·6	− 6·3	− 6·8	+ 3·1	+15·8	+23·6	**+25·7**	+21·1	+10·3	− 0·1	− 6·8	−11·6	−13·0	−14·8	**−18·4**	−14·7	− 9·9
Nov.	− 8·4	− 5·5	− 3·3	− 2·4	+ 2·4	+ 2·0	+ 0·3	− 1·2	− 4·8	− 3·6	+ 4·0	+11·5	**+16·1**	+16·1	+13·1	+ 5·3	+ 0·9	+ 0·4	− 1·3	− 4·1	− 7·0	**−11·7**	− 8·9	− 9·7
Dec.	− 8·1	− 6·3	− 3·4	− 0·4	+ 1·6	+ 1·9	+ 2·9	+ 3·8	+ 0·8	+ 2·0	+ 5·4	+ 9·2	+11·5	**+12·1**	+11·3	+ 7·5	+ 1·4	− 1·8	− 4·3	− 5·7	− 6·6	−11·3	**−12·8**	−10·5
Year	− 7·5	− 6·5	− 5·3	− 5·4	− 4·8	− 6·3	− 7·7	−10·1	**−12·1**	− 8·6	+ 0·5	+12·4	+21·3	**+25·2**	+22·9	+15·9	+ 9·6	+ 4·1	− 0·1	− 3·9	− 7·1	− 8·8	− 9·2	− 8·4
Winter	− 8·9	− 7·2	− 4·3	− 1·8	+ 0·3	− 0·1	+ 0·8	− 0·3	− 3·5	− 2·8	+ 2·8	+ 9·6	+15·6	**+18·1**	+15·6	+10·1	+ 4·8	+ 2·1	− 2·0	− 5·4	− 8·1	−11·6	**−12·3**	−11·5
Equinox	− 6·8	− 4·1	− 3·6	− 5·0	− 3·6	− 3·7	− 5·4	−10·9	**−13·7**	−10·3	+ 0·9	+16·4	+26·6	**+31·0**	+26·7	+16·7	+ 6·7	− 2·0	− 6·0	− 8·5	−10·8	−11·0	−11·2	− 8·6
Summer	− 6·7	− 8·2	− 7·9	− 9·4	−11·3	−15·1	−18·5	−19·1	**−19·2**	−12·8	− 2·3	+11·2	+21·8	+26·4	**+26·5**	+21·0	+17·1	+12·2	+ 7·8	+ 2·2	− 2·5	− 3·7	− 4·2	− 5·1

VERTICAL COMPONENT.

	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
Jan.	− 0·9	− 2·4	− 3·9	− 3·9	− 4·8	− 4·4	− 4·3	− 4·1	− 4·6	− 5·8	**− 6·2**	− 6·0	− 5·1	− 0·2	+ 4·2	+ 5·7	+ 7·1	+ 6·9	**+ 8·1**	+ 7·7	+ 6·6	+ 5·2	+ 3·1	+ 1·5
Feb.	− 4·1	− 5·6	**− 7·1**	− 6·8	− 6·5	− 4·8	− 4·4	− 3·4	− 2·2	− 3·8	− 5·7	− 6·6	− 4·4	− 1·1	+ 5·0	+ 9·7	+11·5	**+11·8**	+11·0	+ 9·1	+ 6·7	+ 3·9	+ 1·0	− 2·2
Mar.	− 4·3	− 7·0	− 8·9	− 8·5	− 8·0	− 6·6	− 4·2	− 2·3	− 2·9	− 6·0	− 9·4	**−10·8**	− 7·6	− 1·8	+ 5·2	+12·8	+15·5	**+15·9**	+14·0	+10·2	+ 7·3	+ 5·1	+ 2·5	− 0·4
Apr.	− 8·2	− 8·4	−10·6	−10·4	− 8·2	− 5·4	− 3·0	− 2·5	− 5·4	− 9·3	−13·3	**−15·0**	−10·5	− 3·1	+ 6·2	+14·1	+18·9	**+22·8**	+22·4	+17·7	+11·0	+ 6·1	+ 1·9	**− 7·0**
May	− 5·3	−10·5	−10·1	−10·0	−10·5	− 7·2	− 5·1	− 3·6	− 5·7	− 8·3	−11·9	**−14·5**	−11·6	− 4·7	+ 3·7	+10·3	+16·3	+20·2	**+22·9**	+20·0	+15·0	+ 8·6	+ 3·7	− 1·8
June	− 6·0	− 8·8	− 9·6	− 9·8	− 7·4	− 5·2	− 3·3	− 3·0	− 5·0	− 7·7	−12·4	**−12·7**	− 9·1	− 1·7	+ 4·9	+10·3	+15·8	+18·0	**+18·4**	+17·2	+12·3	+ 7·4	+ 1·4	− 3·8
July	− 3·2	− 4·6	− 6·0	− 7·3	− 5·9	− 4·3	− 3·0	− 3·1	− 5·4	− 8·2	−11·7	**−13·5**	−10·3	− 4·5	+ 3·1	+ 9·2	+12·4	+14·8	**+15·3**	+13·7	+11·2	+ 7·0	+ 3·4	− 0·2
Aug.	− 4·9	− 8·3	−10·1	− 8·9	− 6·4	− 5·6	− 4·0	− 2·5	− 4·1	− 6·5	−10·2	**−11·0**	− 9·8	− 3·7	+ 4·7	+11·6	+15·9	**+18·2**	+16·8	+14·5	+ 9·4	+ 4·6	+ 1·0	− 1·6
Sept.	− 4·7	− 7·6	− 8·2	− 8·7	− 7·5	− 6·4	− 3·8	− 2·1	− 3·4	− 7·3	−10·7	**−12·0**	− 8·0	− 0·9	+ 6·9	+13·8	+17·1	**+18·0**	+14·9	+10·3	+ 7·1	+ 3·8	+ 0·4	− 2·3
Oct.	− 5·6	− 7·0	− 6·4	− 6·8	− 6·9	− 6·1	− 5·0	− 3·6	− 3·8	− 6·7	**− 9·2**	− 8·7	− 4·1	+ 0·8	+ 8·1	+15·3	**+16·8**	+15·4	+11·5	+ 8·4	+ 4·8	+ 1·0	0·0	− 2·6
Nov.	− 3·8	**− 6·3**	− 5·8	− 5·3	− 6·0	− 5·4	− 4·0	− 3·0	− 2·1	− 4·6	− 5·9	− 4·1	+ 0·1	+ 3·9	+ 6·0	+ 7·7	**+ 8·6**	+ 7·5	+ 6·8	+ 6·2	+ 5·5	+ 3·6	+ 0·9	− 0·8
Dec.	− 0·9	− 2·7	− 3·5	− 4·4	− 4·8	− 4·6	− 4·4	− 4·9	− 5·5	**− 6·1**	− 6·0	− 5·5	− 3·5	0·0	+ 2·9	+ 6·3	+ 7·7	**+10·6**	+ 8·1	+ 8·4	+ 6·0	+ 4·2	+ 2·7	+ 0·6
Year	− 4·3	− 6·6	− 7·5	− 7·6	− 6·9	− 5·5	− 4·0	− 3·2	− 4·2	− 6·7	− 9·4	**−10·0**	− 7·0	− 1·4	+ 5·1	+10·6	+13·6	**+15·0**	+14·2	+12·0	+ 8·6	+ 5·0	+ 1·8	− 1·7
Winter	− 2·4	− 4·3	− 5·1	− 5·1	− 5·5	− 4·8	− 4·3	− 3·9	− 3·6	− 5·1	**− 6·0**	− 5·6	− 3·2	+ 0·7	+ 4·5	+ 7·4	+ 8·7	**+ 9·2**	+ 8·5	+ 7·9	+ 6·2	+ 4·2	+ 1·9	− 0·2
Equinox	− 5·7	− 7·5	− 8·5	− 8·6	− 7·7	− 6·1	− 4·0	− 2·6	− 3·9	− 7·3	−10·7	**−11·6**	− 7·6	− 1·3	+ 6·6	+14·0	+17·1	**+18·0**	+15·7	+11·7	+ 7·6	+ 4·0	+ 1·2	− 3·1
Summer	− 4·9	− 8·1	− 9·0	− 9·0	− 7·6	− 5·6	− 3·9	− 3·1	− 5·1	− 7·7	−11·6	**−12·9**	−10·2	− 3·7	+ 4·1	+10·4	+15·1	+17·8	**+18·4**	+16·4	+12·0	+ 6·9	+ 2·4	− 1·9

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

International Quiet Days.

DECLINATION WEST.

Month and Season, 1930.	Greenwich Mean Time. Hour commencing— 0.	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	Noon.	13.	14.	15.	16.	17.	18.	19.	20.	21.	22.	23.
	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′
Jan.	−0·86	−0·32	−0·52	−0·54	−0·30	−0·78	−0·98	−1·38	**−1·92**	−1·42	−0·18	+1·26	+2·14	**+2·62**	+2·30	+1·52	+1·18	+0·72	+0·32	−0·22	−0·60	−0·82	−0·60	−0·54
Feb.	−1·60	−1·10	−0·92	−1·08	−1·02	−1·04	−1·22	−1·72	**−2·52**	−2·46	−0·66	+2·10	+3·90	**+4·48**	+4·32	+2·76	+1·02	+0·74	−0·06	+0·16	−0·16	−0·72	−1·56	−2·06
Mar.	−0·53	−0·71	−0·87	−0·83	−0·73	−0·85	−0·93	−2·09	**−3·41**	−2·95	−0·93	+1·91	+3·67	**+4·05**	+3·37	+1·89	+0·47	+0·15	+0·27	+0·09	+0·09	−0·11	−0·35	−0·67
Apr.	−0·78	−0·78	−0·74	−1·30	−1·80	−2·16	−3·02	−4·68	**−5·00**	−2·76	+0·70	+3·68	+5·28	**+5·96**	+4·54	+2·76	+1·16	−0·22	+0·20	−0·42	+0·28	+0·10	−0·60	−0·48
May	−0·55	−0·77	−1·35	−2·05	−2·87	−3·85	−4·73	**−4·99**	−4·35	−2·77	−0·27	+2·61	+4·93	**+5·77**	+5·37	+4·25	+3·17	+2·03	+0·91	−0·29	+0·09	+0·13	−0·07	−0·33
June	−0·36	−0·58	−0·72	−1·44	−2·58	−4·08	−4·38	**−4·62**	−4·14	−2·04	+0·36	+3·12	+4·32	**+4·56**	+4·32	+2·74	+1·88	+1·20	+0·68	+0·60	+0·64	+0·68	+0·06	−0·20
July	−0·68	−0·48	−1·24	−1·58	−2·46	**−3·50**	−2·44	−1·92	−1·78	−1·04	+0·16	+2·04	+3·22	**+3·26**	+2·76	+1·86	+1·66	+1·46	+0·98	+0·16	−0·06	+0·26	−0·24	−0·36
Aug.	−2·06	−1·96	−1·66	−1·70	−1·62	−2·70	−3·20	**−3·32**	−3·06	−1·68	+0·18	+2·84	+4·84	**+5·58**	+5·36	+3·82	+2·60	+1·60	−0·18	−0·06	0·00	−1·04	−0·94	−1·60
Sept.	−2·92	−2·42	−2·34	−1·96	−2·02	−1·42	−1·70	−2·82	**−3·22**	−1·64	+0·98	+3·50	+5·66	**+5·84**	+4·54	+2·44	+0·68	+0·04	+0·40	+0·08	−0·42	−0·26	−0·40	−0·68
Oct.	−1·28	−1·08	−1·04	−0·72	−0·08	−0·54	−0·96	−1·60	**−2·64**	−1·94	+0·44	+3·12	+3·90	**+4·10**	+3·50	+1·98	+0·80	+0·60	−0·28	−0·54	−1·12	−1·48	−1·78	−1·38
Nov.	−0·51	−0·33	−0·43	−0·39	−0·29	−0·69	−1·05	−1·49	**−1·73**	−1·25	+0·71	+2·67	**+3·25**	+2·57	+1·79	+1·01	+0·75	+0·33	−0·17	−0·51	−0·79	−1·21	−1·19	−1·03
Dec.	−0·52	−0·40	−0·32	−0·16	−0·26	**−0·94**	−0·84	−0·86	−0·76	−0·34	+0·72	+1·58	**+2·00**	+1·76	+1·32	+0·98	+0·42	+0·16	−0·14	−0·52	−0·64	−0·80	−0·76	−0·68
Year	−1·05	−0·91	−1·01	−1·15	−1·34	−1·88	−2·12	−2·62	**−2·88**	−1·86	+0·18	+2·54	+3·93	**+4·21**	+3·62	+2·33	+1·32	+0·73	+0·24	−0·12	−0·22	−0·44	−0·70	−0·83
Winter	−0·87	−0·54	−0·55	−0·54	−0·47	−0·86	−1·02	−1·36	**−1·73**	−1·37	+0·15	+1·90	+2·82	**+2·86**	+2·43	+1·57	+0·84	+0·49	−0·01	−0·27	−0·55	−0·89	−1·03	−1·08
Equinox	−1·38	−1·25	−1·25	−1·20	−1·16	−1·24	−1·65	−2·80	**−3·57**	−2·32	+0·30	+3·05	+4·63	**+4·99**	+3·99	+2·27	+0·78	+0·14	+0·15	−0·20	−0·29	−0·44	−0·78	−0·80
Summer	−0·91	−0·95	−1·24	−1·69	−2·38	−3·53	−3·69	**−3·71**	−3·33	−1·88	+0·11	+2·65	+4·33	**+4·79**	+4·45	+3·17	+1·33	+1·57	+0·60	+0·10	+0·17	+0·01	−0·30	−0·62

INCLINATION.

	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′
Jan.	−0·01	−0·04	−0·06	−0·04	−0·19	−0·37	**−0·51**	−0·42	−0·08	+0·27	+0·48	**+0·54**	+0·46	+0·30	+0·29	+0·21	+0·23	+0·03	−0·14	−0·27	−0·30	−0·28	−0·11	−0·07
Feb.	−0·21	−0·18	−0·31	−0·52	−0·67	−0·75	**−0·85**	−0·77	−0·30	+0·52	+1·16	**+1·30**	+0·94	+0·58	+0·32	+0·40	+0·47	+0·16	−0·20	−0·24	−0·18	−0·23	−0·22	−0·23
Mar.	−0·30	−0·28	−0·27	−0·28	−0·41	−0·52	**−0·55**	−0·45	−0·04	+0·42	+0·82	**+0·87**	+0·84	+0·62	+0·50	+0·38	+0·32	+0·04	−0·23	−0·37	−0·39	−0·28	−0·24	−0·23
Apr.	−0·38	−0·26	−0·49	−0·36	−0·59	−0·44	−0·17	+0·10	+0·72	+1·56	**+1·63**	+1·30	+0·43	+0·12	+0·14	+0·21	−0·05	−0·36	**−0·67**	−0·62	−0·40	−0·43	−0·51	−0·48
May	−0·21	−0·26	+0·08	+0·23	+0·19	+0·17	+0·29	+0·59	**+0·89**	+0·88	+0·80	+0·58	+0·33	+0·23	+0·24	+0·10	−0·32	−0·49	−0·65	**−0·90**	−0·62	−0·57	−0·64	−0·87
June	−0·05	−0·02	+0·02	+0·07	+0·03	+0·14	+0·36	+0·68	+1·03	+1·23	**+1·23**	+0·49	+0·11	+0·13	+0·08	+0·17	−0·03	−0·44	−0·50	**−0·97**	−0·96	−0·96	−0·05	−0·93
July	−0·16	−0·25	−0·12	+0·01	+0·05	+0·05	+0·23	+0·22	+0·43	+0·38	+0·10	+0·01	+0·34	+0·50	+0·54	**+0·56**	0·00	−0·22	−0·22	**−0·61**	−0·58	−0·36	−0·40	−0·48
Aug.	−0·35	−0·23	−0·22	−0·05	+0·14	−0·01	+0·04	+0·26	+0·62	+0·96	**+1·33**	+1·14	+0·97	+0·60	+0·12	−0·09	−0·65	−0·58	−0·40	−0·60	−0·68	−0·52	−0·91	**−0·93**
Sept.	−0·36	−0·28	−0·52	−0·55	**−0·66**	−0·60	−0·46	−0·11	+0·59	+1·22	**+1·57**	+1·26	+0·90	+0·66	+0·54	+0·17	0·00	−0·19	−0·43	−0·61	−0·57	−0·56	−0·50	−0·55
Oct.	−0·15	−0·21	−0·23	−0·29	−0·34	**−0·56**	−0·51	−0·33	+0·16	+0·53	**+0·72**	**+0·72**	+0·60	+0·19	+0·17	+0·19	+0·15	+0·12	+0·07	+0·02	−0·09	−0·24	−0·27	−0·38
Nov.	−0·08	+0·01	−0·04	−0·04	−0·23	−0·28	−0·24	−0·11	+0·25	+0·59	**+0·73**	+0·70	+0·57	+0·33	+0·18	−0·01	−0·33	−0·33	−0·27	−0·33	−0·33	**−0·41**	−0·26	−0·22
Dec.	+0·30	**+0·38**	+0·30	+0·15	+0·08	+0·03	+0·03	+0·01	−0·09	−0·09	−0·05	+0·01	0·00	−0·07	−0·14	−0·12	**−0·21**	−0·20	−0·10	−0·10	−0·12	−0·12	−0·02	+0·05
Year	−0·16	−0·14	−0·16	−0·14	−0·22	−0·26	−0·20	−0·03	+0·35	+0·71	**+0·88**	+0·74	+0·54	+0·35	+0·25	+0·18	−0·03	−0·21	−0·31	**−0·47**	−0·44	−0·41	−0·34	−0·44
Winter	0·00	+0·04	−0·03	−0·11	−0·25	−0·34	**−0·39**	−0·32	−0·06	+0·32	+0·58	**+0·64**	+0·49	+0·29	+0·16	+0·12	+0·05	−0·09	−0·18	−0·24	−0·23	−0·26	−0·15	−0·12
Equinox	−0·30	−0·26	−0·38	−0·37	−0·50	**−0·53**	−0·42	−0·20	+0·36	+0·93	**+1·19**	+1·04	+0·69	+0·40	+0·34	+0·24	+0·11	−0·10	−0·32	−0·40	−0·36	−0·38	−0·38	−0·41
Summer	−0·19	−0·19	−0·06	+0·07	+0·10	+0·09	+0·23	+0·44	+0·74	+0·86	**+0·87**	+0·56	+0·44	+0·37	+0·25	+0·19	−0·25	−0·43	−0·44	−0·77	−0·71	−0·60	−0·50	−0·80

HORIZONTAL FORCE.

	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
Jan.	+ 1·0	+ 1·0	+ 0·8	+ 0·4	+ 2·4	+ 5·2	**+ 7·2**	+ 5·8	+ 0·8	− 5·2	− 8·6	**− 9·6**	− 8·6	− 4·6	− 3·4	− 2·2	− 2·6	+ 0·4	+ 3·2	+ 4·8	+ 5·0	+ 4·6	+ 2·0	+ 1·4
Feb.	+ 3·2	+ 2·4	+ 4·0	+ 6·8	+ 9·0	+10·2	**+11·8**	+11·2	+ 5·0	− 8·0	−19·4	**−22·0**	−16·0	−10·2	− 4·8	− 5·2	− 5·2	− 0·6	+ 4·6	+ 5·2	+ 4·0	+ 4·8	+ 4·4	+ 4·2
Mar.	+ 4·9	+ 4·5	+ 4·1	+ 4·5	+ 6·3	+ 8·3	**+ 8·9**	+ 8·5	+ 2·1	− 6·5	−15·1	**−17·7**	−16·9	−12·5	− 8·7	− 4·7	− 2·9	+ 0·9	+ 4·9	+ 6·7	+ 6·7	+ 5·1	+ 4·5	+ 4·1
Apr.	+ 5·8	+ 4·4	+ 7·6	+ 5·4	+ 8·6	+ 6·0	+ 3·6	− 0·2	−11·2	−26·0	**−30·2**	−26·6	−12·4	− 5·2	− 2·0	− 0·4	+ 4·4	+ 9·6	**+13·6**	+12·4	+ 7·8	+ 8·0	+ 8·8	+ 7·8
May	+ 4·4	+ 5·2	0·0	− 1·6	− 0·4	− 0·2	− 2·4	− 7·4	−14·0	−16·6	**−18·0**	−16·8	−12·8	− 8·8	− 5·0	− 0·2	+ 7·6	+11·0	+13·2	**+16·6**	+11·4	+ 9·8	+10·8	+13·8
June	+ 2·8	+ 2·2	+ 1·4	+ 0·8	+ 1·6	− 0·4	− 4·0	− 8·6	−14·8	−21·2	**−23·6**	−15·6	− 8·4	− 5·2	− 2·0	− 1·6	+ 2·8	+ 9·2	+ 9·6	**+16·4**	+15·8	+15·4	+14·8	+13·8
July	+ 3·5	+ 4·7	+ 1·9	+ 0·1	+ 0·3	+ 0·5	− 2·5	− 3·5	− 7·5	− 7·7	− 6·7	− 6·5	**−10·7**	**−10·7**	− 8·3	− 7·3	+ 2·1	+ 5·7	+ 5·3	**+11·9**	+11·3	+ 7·5	+ 7·9	+ 7·9
Aug.	+ 4·4	+ 2·6	+ 2·6	+ 0·6	− 1·2	+ 1·0	0·0	− 4·2	−11·0	−17·6	**−24·4**	−22·2	−19·4	−11·8	− 2·4	+ 2·2	+12·4	+13·0	+11·0	+13·6	+13·2	+10·0	**+14·8**	+13·0
Sept.	+ 4·4	+ 3·6	+ 6·6	+ 7·2	+ 9·4	+ 9·4	+ 8·4	+ 3·2	− 8·0	−19·6	**−27·0**	−24·2	−18·4	−12·8	− 8·2	− 0·6	+ 3·2	+ 6·6	+ 8·8	**+11·2**	+10·0	+ 9·6	+ 8·4	+ 8·4
Oct.	+ 2·4	+ 2·8	+ 3·2	+ 3·8	+ 4·8	**+ 8·0**	+ 7·4	+ 5·2	− 2·2	− 9·6	−14·4	**−15·0**	−11·8	− 4·8	− 2·4	− 0·6	+ 0·6	+ 0·6	+ 1·4	+ 2·0	+ 3·0	+ 4·6	+ 4·8	+ 5·8
Nov.	+ 1·0	− 0·8	+ 0·2	+ 0·2	+ 2·8	+ 3·8	+ 3·4	+ 1·4	− 4·2	−10·2	**−13·4**	−11·8	− 8·4	− 3·4	− 0·4	+ 2·2	**+ 6·0**	**+ 6·0**	+ 4·8	+ 5·2	+ 4·8	+ 5·6	+ 3·4	+ 2·8
Dec.	− 3·4	**− 5·2**	− 4·4	− 2·6	− 1·6	− 0·8	− 0·8	+ 0·6	+ 0·6	+ 0·2	− 0·6	− 1·6	− 0·6	+ 1·0	+ 2·2	+ 2·4	**+ 3·8**	**+ 3·8**	+ 2·4	+ 2·0	+ 2·0	+ 1·8	+ 0·6	− 0·4
Year	+ 2·9	+ 2·3	+ 2·3	+ 2·1	+ 3·5	+ 4·3	+ 3·4	+ 0·9	− 5·4	−12·3	**−16·8**	−15·8	−12·0	− 7·4	− 3·8	− 1·3	+ 2·7	+ 5·5	+ 6·9	**+ 9·0**	+ 7·9	+ 7·2	+ 7·1	+ 6·9
Winter	+ 0·5	− 0·7	+ 0·2	+ 1·2	+ 3·2	+ 4·6	**+ 5·4**	+ 4·5	+ 0·6	− 5·8	−10·5	**−11·3**	− 8·4	− 4·3	− 1·6	− 0·7	+ 0·5	+ 2·4	+ 3·8	+ 4·3	+ 4·0	+ 4·2	+ 2·6	+ 2·0
Equinox	+ 4·4	+ 3·8	+ 5·4	+ 5·2	+ 7·3	+ 7·9	+ 7·1	+ 4·2	− 4·8	−15·4	**−21·7**	−20·9	−14·9	− 8·8	− 5·3	− 1·6	+ 1·3	+ 4·4	+ 7·2	**+ 8·1**	+ 6·9	+ 6·8	+ 6·6	+ 6·5
Summer	+ 3·8	+ 3·7	+ 1·5	− 0·0	+ 0·1	+ 0·2	− 2·2	− 5·9	−11·8	−15·8	**−18·2**	−15·3	−12·8	− 9·1	− 4·4	− 1·7	+ 6·2	+ 9·7	+ 9·8	**+14·6**	+12·9	+10·7	+12·1	+12·1

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

International Quiet Days.

NORTH COMPONENT.

Month and Season, 1930.	Greenwich Mean Time. Hour commencing— 0.	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	Noon.	13.	14.	15.	16.	17.	18.	19.	20.	21.	22.	23.
	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
Jan.	+ 2·0	+ 1·4	+ 1·4	+ 1·0	+ 2·7	+ 6·0	+ **8·2**	+ 7·3	+ 3·0	− 3·5	− 8·2	−10·8	**−10·9**	− 7·5	− 6·0	− 3·9	− 3·9	− 0·4	+ 2·8	+ 4·9	+ 5·6	+ 5·4	+ 2·6	+ 2·0
Feb.	+ 5·0	+ 3·6	+ 5·0	+ 7·9	+10·0	+11·2	+**12·9**	+12·9	+ 7·8	− 5·0	−18·2	−**23·9**	−20·1	−15·1	− 9·7	− 8·3	− 6·3	− 1·4	+ 4·6	+ 4·9	+ 4·1	+ 5·5	+ 6·1	+ 6·5
Mar.	+ 5·4	+ 5·2	+ 5·0	+ 5·4	+ 7·0	+ 9·1	+ 9·8	+**10·7**	+ 6·0	− 3·0	−13·7	−19·5	−**20·7**	−16·9	−12·4	− 6·8	− 3·4	+ 0·7	+ 4·5	+ 6·5	+ 6·5	+ 5·1	+ 4·8	+ 4·8
Apr.	+ 6·6	+ 5·2	+ 8·3	+ 6·8	+10·5	+ 8·4	+ 7·0	+ 5·2	− 5·2	−22·2	−**30·3**	−30·2	−18·2	−12·0	− 7·2	− 3·6	+ 3·0	+ 9·6	+**13·1**	+12·6	+ 7·3	+ 7·7	+ 9·3	+ 8·2
May	+ 4·9	+ 6·0	+ 1·6	+ 0·8	+ 2·9	+ 4·2	+ 3·1	− 1·5	− 8·7	−13·0	−17·3	−**19·4**	−18·2	−15·3	−11·1	− 5·1	+ 3·8	+ 8·4	+11·9	+**16·6**	+11·0	+ 9·4	+10·6	+13·9
June	+ 3·2	+ 2·8	+ 2·2	+ 2·4	+ 4·5	+ 4·3	+ 1·1	− 3·1	− 9·7	−18·4	−**23·5**	−18·8	−13·2	−10·3	− 6·9	− 4·7	+ 0·6	+ 7·6	+ 8·6	+**15·3**	+14·7	+14·3	+14·4	+13·7
July	+ 4·2	+ 5·1	+ 3·3	+ 1·9	+ 3·1	+ 4·5	+ 0·4	− 1·2	− 5·3	− 6·3	− 6·7	− 8·7	−14·2	−**14·2**	−11·3	− 9·3	+ 0·1	+ 3·9	+ 4·1	+**11·5**	+11·1	+ 7·0	+ 8·0	+ 8·1
Aug.	+ 6·7	+ 4·8	+ 4·5	+ 2·6	+ 0·7	+ 4·1	+ 3·7	− 0·3	− 7·2	−15·3	−24·1	−**25·0**	−24·5	−18·0	− 8·5	− 2·3	+ 9·1	+10·9	+11·0	+13·4	+12·9	+11·0	+**15·5**	+14·5
Sept.	+ 7·7	+ 6·3	+ 9·2	+ 9·3	+**11·5**	+10·8	+10·2	+ 6·4	− 4·1	−17·3	−27·5	−**27·7**	−24·5	−19·3	−13·3	− 3·4	+ 2·4	+ 6·4	+ 8·1	+10·9	+10·3	+ 9·1	+ 8·7	+ 9·0
Oct.	+ 3·8	+ 4·0	+ 4·3	+ 4·5	+ 4·8	+ **8·4**	+ 8·3	+ 6·9	+ 0·9	− 7·1	−14·6	−**18·3**	−16·0	− 9·4	− 6·4	− 2·9	− 0·3	− 0·1	+ 1·7	+ 2·6	+ 4·2	+ 6·2	+ 6·7	+ 7·2
Nov.	+ 1·6	− 0·4	+ 0·7	+ 0·7	+ 3·1	+ 4·5	+ 4·5	+ 3·1	− 2·1	− 8·5	−13·9	−**14·6**	−12·0	− 6·3	− 2·4	+ 1·0	+ 5·0	+ 5·5	+ 4·9	+ 5·7	+ 5·6	**6·9**	+ 4·7	+ 3·9
Dec.	− 2·7	− **4·6**	− 3·9	− 2·4	− 1·3	+ 0·3	+ 0·2	+ 0·4	+ 1·5	+ 0·6	− 1·4	− 3·4	− 2·9	− 1·0	+ 0·6	+ 1·2	+ 3·2	+ **3·5**	+ 2·5	+ 2·6	+ 2·7	+ 2·7	+ 1·5	+ 0·4
Year	+ 4·0	+ 3·3	+ 3·5	+ 3·4	+ 5·0	+ 6·3	+ 5·8	+ 3·9	− 1·9	− 9·9	−16·6	−**18·4**	−16·3	−12·1	− 7·9	− 4·0	+ 1·1	+ 4·6	+ 6·5	+ **9·0**	+ 8·0	+ 7·5	+ 7·7	+ 7·7
Winter	+ 1·5	0·0	+ 0·8	+ 1·8	+ 3·6	+ 5·5	+ **6·5**	+ 5·9	− 2·6	− 4·1	−10·4	−**13·2**	−11·5	− 7·5	− 4·4	− 2·5	− 0·5	+ 1·8	+ 3·7	+ 4·5	+ 4·5	+ 5·1	+ 3·7	+ 3·2
Equinox	+ 5·9	+ 5·2	+ 6·7	+ 6·5	+ 8·5	+ **9·2**	+ 8·8	+ 7·3	− 0·6	−12·4	−21·5	−**23·9**	−19·9	−14·4	− 9·8	− 4·2	+ 0·4	+ 4·2	+ 6·9	+ 8·2	+ 7·1	+ 7·0	+ 7·4	+ 7·3
Summer	+ 4·8	+ 4·7	+ 2·9	+ 1·9	+ 2·8	+ 4·3	+ 2·1	− 1·5	− 7·7	−13·3	−17·9	−**18·0**	−17·5	−14·5	− 9·5	− 5·4	+ 3·4	+ 7·7	+ 8·9	+**14·2**	+12·4	+10·4	+12·1	+12·6

WEST COMPONENT.

	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
Jan.	− 4·3	− 1·5	− 2·6	− 2·8	− 1·1	− 3·0	− 3·6	− 6·0	−**10·0**	− 8·6	− 2·8	+ 4·6	+ 9·4	+**12·8**	+11·4	+ 7·6	+ 5·7	+ 3·9	+ 2·4	− 0·1	− 2·1	− 3·3	− 2·7	− 2·6
Feb.	− 7·8	− 5·3	− 4·0	− 4·2	− 3·5	− 3·3	− 3·9	− 6·7	−12·2	−**14·7**	− 7·6	+ 6·4	+17·1	+21·4	+**21·8**	+13·4	+ 4·3	+ 3·8	+ 0·7	+ 2·0	+ 0·0	− 2·8	− 7·3	−10·0
Mar.	− 1·7	− 2·8	− 3·7	− 3·4	− 2·5	− 2·7	− 3·0	− 9·2	−**17·5**	−16·9	− 8·1	+ 6·3	+15·7	+**18·7**	+15·9	+ 9·0	+ 1·9	+ 1·0	+ 2·5	+ 1·9	+ 1·9	+ 0·5	− 0·9	− 2·7
Apr.	− 2·9	− 3·2	− 2·3	− 5·7	− 7·7	−10·1	−15·2	−24·7	−**28·8**	−20·1	− 2·8	+13·7	+25·2	+**30·3**	+23·5	+14·5	+ 7·1	+ 0·9	+ 4·0	+ 0·4	+ 3·2	+ 2·2	− 1·3	− 0·9
May	− 2·0	− 3·0	− 7·1	−11·1	−15·2	−20·3	−25·4	−**27·9**	−25·9	−18·2	− 5·3	+10·2	+23·3	+**28·5**	+27·2	+22·4	+18·3	+13·1	+ 7·6	+ 2·0	+ 2·9	+ 2·8	+ 1·9	+ 1·2
June	− 1·3	− 2·6	− 3·5	− 7·4	−13·3	−21·6	−24·0	−**26·2**	−25·0	−15·3	− 3·2	+13·1	+21·0	+**22·9**	+22·4	+14·1	+10·5	+ 8·3	+ 5·6	+ 6·7	+ 6·8	+ 6·9	+ 3·5	+ 1·9
July	− 2·8	− 1·5	− 6·1	− 8·3	−12·9	−**18·3**	−13·4	−10·9	−11·0	− 7·1	− 0·6	+ 9·4	+14·7	+**14·9**	+12·8	+ 8·2	+ 9·2	+ 8·9	+ 6·3	+ 3·4	+ 2·1	+ 3·0	+ 0·4	− 0·2
Aug.	− 9·9	− 9·8	− 8·2	− 8·8	− 8·3	−14·0	−16·9	−18·4	−**18·5**	−12·6	− 4·3	+10·2	+21·4	+26·9	+**27·8**	+20·6	+16·4	+11·2	+ 1·4	+ 2·6	+ 2·8	− 3·3	− 1·8	− 5·7
Sept.	−14·5	−12·0	−10·9	− 8·8	− 8·6	− 5·5	− 7·2	−14·2	−**18·7**	−12·8	− 0·6	+13·3	+25·9	+**28·0**	+22·2	+12·7	+ 4·3	+ 1·6	+ 4·0	+ 2·8	− 0·1	+ 0·7	− 0·3	− 1·8
Oct.	− 6·2	− 5·1	− 4·8	− 3·0	+ 0·6	− 1·1	− 3·5	− 7·3	−**14·4**	−12·3	− 0·8	+13·2	+18·0	+**20·6**	+17·9	+10·3	+ 4·4	+ 3·3	− 1·2	− 2·4	− 5·3	− 6·8	− 8·4	− 6·0
Nov.	− 2·5	− 1·9	− 2·2	− 2·0	− 0·9	− 2·8	− 4·8	− 7·6	−**10·0**	− 8·8	+ 0·9	+11·5	+**15·3**	+12·8	+ 9·3	+ 5·8	+ 5·2	+ 3·0	+ 0·1	− 1·6	− 3·1	− 5·2	− 5·5	− 4·8
Dec.	− 3·5	− 3·2	− 2·6	− 1·4	− 1·7	− 5·1	− 4·6	− **4·7**	− 3·9	− 1·8	+ 3·7	+ 8·0	+**10·4**	+ 9·5	+ 7·4	+ 5·7	+ 3·0	+ 1·7	− 0·2	− 2·3	− 2·9	− 3·8	− 3·9	− 3·7
Year	− 5·0	− 4·3	− 4·8	− 5·6	− 6·3	− 9·0	−10·5	−13·6	−**16·3**	−12·4	− 2·6	+10·0	+18·1	+**20·6**	+18·3	+12·0	+ 7·5	+ 5·1	+ 2·8	+ 1·3	+ 0·5	− 0·8	− 2·2	− 2·9
Winter	− 4·5	− 3·0	− 2·9	− 2·6	− 1·8	− 3·6	− 4·2	− 6·3	− **9·0**	− 8·5	− 1·5	+ 7·6	+13·1	+**14·1**	+12·5	+ 8·1	+ 4·6	+ 3·1	+ 0·8	− 0·5	− 2·0	− 3·8	− 4·9	− 5·3
Equinox	− 6·3	− 5·8	− 5·4	− 5·2	− 4·6	− 4·9	− 7·2	−13·9	−**19·9**	−15·5	− 3·1	+11·6	+21·2	+**24·4**	+19·9	+11·6	+ 4·4	+ 1·7	+ 2·3	+ 0·7	− 0·1	− 0·9	− 2·7	− 2·9
Summer	− 4·0	− 4·2	− 6·2	− 8·9	−12·4	−18·6	−19·9	−**20·9**	−20·1	−13·3	− 3·4	+10·7	+20·1	+**23·3**	+22·6	+16·3	+13·6	+10·4	+ 5·2	+ 3·7	+ 3·7	+ 2·4	+ 1·0	− 0·7

VERTICAL COMPONENT.

	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
Jan.	+ 2·0	+ 1·0	− 0·2	− 0·2	− 1·0	− 0·6	− 0·8	− 1·0	− 1·0	− 2·6	− 3·4	− 3·6	− **4·2**	− 0·4	+ 2·0	+ 2·2	+ 1·8	+ 2·0	+ **2·6**	+ 1·8	+ 1·2	+ 1·0	+ 1·0	+ 0·8
Feb.	+ 0·4	− 0·6	− 1·2	− 2·0	− 2·0	− 2·0	− 1·6	− 0·2	+ 1·2	− 0·6	− 5·0	− **6·6**	− 4·8	− 3·6	0·0	+ 1·8	+ **4·2**	+ **4·2**	+ 3·6	+ 3·6	+ 3·0	+ 3·2	+ 2·8	+ 1·6
Mar.	+ 1·0	+ 0·6	+ 0·4	+ 0·8	+ 0·8	+ 1·2	+ 1·8	+ 4·0	+ 3·4	− 0·8	− 6·8	−**11·0**	−10·4	− 7·4	− 3·0	+ 2·0	+ **4·2**	+ 3·4	+ 3·4	+ 2·8	+ 2·2	+ 2·0	+ 2·0	+ 1·8
Apr.	+ 0·5	+ 1·5	+ 0·7	+ 0·1	− 0·5	− 0·9	+ 2·5	+ 3·1	− 1·5	− 6·7	−13·9	−**17·1**	−13·9	− 7·9	− 0·1	+ 6·1	+ 8·7	+ **9·9**	+ 8·5	+ 7·7	+ 4·5	+ 3·9	+ 2·9	+ 1·7
May	+ 3·2	+ 3·0	+ 2·6	+ 4·0	+ 5·6	+ 5·6	+ 4·6	+ 3·2	− 2·2	− 8·2	−14·4	−**19·0**	−18·0	−12·4	− 3·4	+ 3·0	+ 6·6	+ **8·6**	+ 8·2	+ 7·6	+ 5·0	+ 3·2	+ 3·0	+ 2·0
June	+ 4·8	+ 4·4	+ 3·6	+ 4·2	+ 4·8	+ 3·8	+ 3·0	+ 3·4	+ 1·0	− 6·8	−12·2	−**19·2**	−15·8	− 7·6	− 2·0	+ 2·2	+ 5·6	+ **6·2**	+ 5·0	+ 4·8	+ 3·8	+ 2·8	+ 1·6	0·0
July	+ 2·9	+ 2·3	+ 0·3	+ 0·7	+ 2·5	+ 2·9	+ 1·9	− 0·7	− 2·9	− 4·9	−11·9	−**14·7**	−12·9	− 7·5	− 0·7	+ 2·5	+ 4·9	+ 5·5	+ 4·9	+ **6·5**	+ 6·1	+ 5·3	+ 4·3	+ 1·7
Aug.	− 1·6	− 1·6	− 1·2	− 0·4	+ 2·0	+ 2·2	+ 1·2	− 0·6	− 4·0	− 8·0	−11·0	−**12·2**	−11·8	− 7·0	− 1·4	+ 2·2	+ 6·4	+10·2	+**11·6**	+10·8	+ 7·2	+ 5·6	+ 3·2	− 1·8
Sept.	− 2·2	− 1·4	− 2·4	− 2·2	− 1·0	+ 1·0	+ 3·6	+ 3·8	+ 1·8	− 3·4	− 8·6	−**12·6**	−11·8	− 6·8	− 0·2	+ 4·6	+ 7·4	+ **9·0**	+ 5·6	+ 5·2	+ 3·8	+ 3·2	+ 2·4	+ 0·8
Oct.	+ 0·4	− 0·8	− 0·4	− 1·0	− 0·8	− 0·8	− 0·4	+ 0·6	+ 0·2	− 4·2	− 8·4	−**9·8**	− 6·8	− 4·6	+ 0·4	+ 5·0	+ **6·4**	+ 5·4	+ 5·6	+ 5·4	+ 3·8	+ 2·4	+ 1·6	+ 0·4
Nov.	− 0·3	− 1·3	− 1·1	− 0·9	− 1·3	− 0·7	− 0·5	− 0·7	− 0·9	− 3·5	− **5·9**	− 3·3	+ 0·1	+ 3·3	+ **5·3**	+ 4·9	+ 3·9	+ 2·9	+ 1·7	+ 0·7	− 0·3	− 0·9	− 1·1	− 1·1
Dec.	+ **2·5**	+ 0·9	− 0·1	− 0·9	− 1·1	− 0·7	− 0·7	− 1·1	− 1·7	− 2·9	− 3·1	− **3·5**	− 1·5	+ 0·1	+ 0·3	+ 1·3	+ 1·7	+ 1·9	+ 1·9	+ 1·5	+ 0·7	+ 0·1	+ 0·7	+ 0·7
Year	+ 1·1	+ 0·7	+ 0·1	+ 0·2	+ 0·7	+ 0·9	+ 1·2	+ 1·2	− 0·6	− 4·4	− 8·7	−**11·1**	− 9·3	− 5·2	− 0·2	+ 3·2	+ 5·2	+ **5·8**	+ 5·2	+ 4·9	+ 3·4	+ 2·7	+ 2·0	+ 0·7
Winter	+ 1·2	0·0	− 0·7	− 1·0	− 1·4	− 1·0	− 0·9	− 0·8	− 0·6	− 2·4	− **4·4**	− 4·3	− 2·6	− 0·2	+ 1·9	+ 2·6	+ **2·9**	+ 2·8	+ 2·5	+ 1·9	+ 1·2	+ 0·9	+ 0·9	+ 0·5
Equinox	− 0·1	− 0·0	− 0·4	− 0·6	− 0·4	+ 0·1	+ 1·9	+ 2·9	+ 1·0	− 3·8	− 9·4	−**12·6**	−10·7	− 6·7	− 0·7	+ 4·4	+ 6·7	+ **6·9**	+ 5·8	+ 5·3	+ 3·6	+ 2·9	+ 2·2	+ 1·2
Summer	+ 2·3	+ 2·0	+ 1·3	+ 2·1	+ 3·7	+ 3·6	+ 2·7	+ 1·3	− 2·0	− 7·0	−12·4	−**16·3**	−14·6	− 8·6	− 1·9	+ 2·5	+ 5·9	+ **7·6**	+ 7·4	+ 7·4	+ 5·5	+ 4·2	+ 3·0	+ 0·5

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

International Disturbed Days.

DECLINATION WEST.

Month and Season, 1930.	Greenwich Mean Time. Hour commencing— 0.	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	Noon.	13.	14.	15.	16.	17.	18.	19.	20.	21.	22.	23.
	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′
Jan.	−2·04	−1·84	−1·28	−0·34	+1·28	+0·26	+0·56	+1·84	+1·70	+1·68	+2·38	+2·86	+5·08	**+5·86**	+4·96	+3·68	+1·78	+0·28	−0·78	−4·42	−4·88	**−7·92**	−6·16	−4·92
Feb.	−5·36	**−7·00**	−3·12	−1·10	−1·18	−0·96	−0·12	−0·98	−0·22	+1·00	+1·70	+3·42	+6·64	**+8·80**	+8·14	+5·70	+5·56	+3·76	−2·66	−3·54	−3·72	−3·14	−6·94	−4·78
Mar.	−1·71	−1·07	−0·75	−2·47	−3·29	−2·89	+0·69	+0·87	+0·67	+0·45	+2·39	+5·67	**+9·05**	+6·85	+8·03	+3·41	+1·17	−4·27	−3·31	−4·13	−4·21	−3·79	**−5·07**	−2·25
Apr.	**−4·98**	−3·74	−3·02	−2·96	−3·32	−1·84	−0·12	−0·86	−1·28	+0·54	+3·60	+6·20	+6·70	**+7·76**	+7·52	+5·40	+1·94	−0·14	−3·52	−4·14	−3·06	−1·28	−3·28	−2·02
May	−4·26	−2·66	−3·98	−3·52	−1·26	−3·32	−2·02	−1·54	−1·66	−0·56	+2·06	+4·22	+7·24	+7·38	**+8·16**	+7·12	+5·02	+4·44	−0·18	−2·64	−3·08	−4·12	**−5·60**	−5·32
June	−2·49	−3·81	−2·91	−1·31	−1·81	−2·15	−1·43	−2·39	−0·81	−2·55	−1·85	+3·13	+5·07	+5·99	**+6·13**	+5·59	+4·73	+3·89	+2·19	−0·67	−2·31	−2·59	−3·45	**−4·15**
July	−1·85	**−5·61**	−3·35	−1·55	−3·67	−2·63	−3·75	−3·47	−3·37	−1·07	+2·15	+4·37	+6·11	+6·57	**+6·69**	+4·59	+3·51	+1·35	+1·43	+0·25	−1·47	−3·41	−1·11	−0·69
Aug.	−2·93	−1·43	+0·29	−2·11	−0·91	+1·99	+0·65	−0·63	−0·19	+0·33	+1·07	+2·99	+5·25	**+5·89**	+5·11	+2·35	+1·73	−0·59	−2·13	**−3·69**	**−3·69**	−3·51	−2·41	−3·39
Sept.	−2·16	−2·88	−1·26	−0·76	+3·44	+1·86	+1·96	−0·44	−1·52	−1·06	+0·40	+4·94	+6·56	**+9·44**	+7·30	+5·06	+1·54	−2·12	−5·22	**−5·48**	−5·08	−5·06	−4·70	−4·66
Oct.	−1·29	−1·99	−0·99	+0·77	+1·71	+1·05	+1·57	+1·65	+0·67	−0·29	+2·45	+5·83	+6·47	**+8·29**	+5·91	+3·57	−0·21	−1·77	−3·41	−3·37	−8·17	**−9·45**	−5·21	−3·81
Nov.	−2·47	−3·07	−1·63	−0·55	+2·29	+2·25	+0·53	+0·87	+0·83	+1·71	+2·67	+4·07	+4·49	**+4·65**	+4·27	+0·09	−2·71	−0·79	−1·17	−1·77	−1·49	**−4·87**	−4·29	−3·85
Dec.	−5·23	−4·19	−3·17	−1·81	+0·03	+1·29	+2·61	+3·47	+1·39	+2·45	+2·67	+3·55	+4·09	+4·33	**+5·23**	+3·47	+2·57	−0·11	−1·71	−3·15	−2·01	−4·53	−5·45	**−5·81**
Year	−3·06	−3·27	−2·10	−1·48	−0·56	−0·42	+0·09	−0·13	−0·32	+0·22	+1·81	+4·27	+6·06	**+6·82**	+6·45	+4·17	+2·22	+0·33	−1·71	−3·06	−3·60	**−4·47**	**−4·47**	−3·80
Winter	−3·78	−4·03	−2·30	−0·95	+0·61	+0·71	+0·90	+1·30	+0·93	+1·71	+2·36	+3·48	+5·08	**+5·91**	+5·65	+3·24	+1·80	+0·79	−1·58	−3·22	−3·03	−5·12	**−5·71**	−4·84
Equinox	−2·54	−2·42	−1·51	−1·36	−0·37	−0·46	+1·03	+0·31	−0·37	−0·09	+2·21	+5·66	+7·20	**+8·09**	+7·19	+4·36	+1·11	−2·08	−3·87	−4·28	**−5·13**	−4·90	−4·57	−3·19
Summer	−2·88	−3·38	−2·49	−2·12	−1·91	−1·53	−1·64	−2·01	−1·51	−0·96	+0·86	+3·68	+5·92	+6·46	**+6·52**	+4·91	+3·75	+2·27	+0·33	−1·69	−2·64	**−3·41**	−3·14	−3·39

INCLINATION.

	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′
Jan.	−0·93	−1·31	−1·50	−1·57	−1·97	**−2·00**	−1·78	−1·76	−1·21	−0·85	+0·17	+0·96	+1·12	+1·60	**+2·17**	+1·99	+2·09	+1·47	+1·69	+0·99	+0·77	+0·20	+0·11	−0·40
Feb.	−0·61	−0·83	−0·38	−0·94	−0·59	−0·72	**−1·04**	−0·85	−0·44	+0·25	+0·17	+0·61	+0·84	+0·54	**+1·48**	+1·07	+1·15	+0·76	−0·04	+0·01	−0·05	−0·11	−0·57	+0·26
Mar.	−1·26	−1·35	−1·46	−1·23	**−1·58**	−0·87	−1·45	+0·04	−0·18	−0·68	+1·28	+1·04	**+2·42**	+1·67	+0·95	+0·57	+1·13	+1·33	+0·76	−0·32	−0·53	−0·39	−0·49	−0·77
Apr.	+0·08	−1·21	−0·72	−1·24	−1·51	−0·48	−1·03	+0·03	+0·79	+1·39	+2·23	**+3·04**	+1·39	+0·74	+0·56	+0·72	+0·61	+0·62	+0·10	−0·92	−1·24	−1·37	−1·03	**−1·59**
May	−1·56	−1·38	−1·32	**−1·60**	−0·82	−0·57	+1·35	+0·96	+1·24	+1·88	**+3·02**	+2·05	+1·48	+2·01	+0·85	+0·53	−0·66	−0·79	−1·31	−0·88	−0·41	−0·39	−1·05	−1·51
June	**−1·81**	−1·41	−1·36	−1·44	−0·97	−0·86	−0·40	+0·54	+1·76	+1·79	+2·34	+2·52	**+2·73**	+1·55	+1·25	+0·39	+1·26	+0·02	−0·72	−1·65	−0·68	−0·43	−1·72	−1·74
July	−1·45	**−2·18**	−2·14	−0·87	−0·72	−0·86	+0·59	+0·68	+1·61	+2·37	**+3·02**	+2·63	+1·67	+1·13	−0·01	−0·04	−0·35	−0·55	−0·99	−0·52	−0·81	−0·86	−0·37	−0·97
Aug.	**−2·23**	−1·53	−1·15	−1·54	−1·28	−0·69	−0·17	+0·25	+2·34	+1·92	**+2·62**	+2·60	+2·07	+2·22	+1·29	+0·73	+0·22	−0·88	−0·63	−0·89	−0·67	−1·83	−1·65	−1·05
Sept.	−1·90	**−2·85**	−2·46	−2·30	−1·90	−1·40	−0·59	+0·04	+0·91	+1·40	+2·43	**+2·73**	+2·58	+2·47	+1·83	+1·02	+1·29	+1·37	+0·28	−0·60	−0·52	−0·81	−1·56	−1·37
Oct.	−2·11	−1·86	−1·90	−2·03	**−2·60**	−2·51	−2·45	−1·69	−1·33	−1·02	+0·50	+1·63	+1·82	+1·50	+1·65	+2·10	**+2·20**	+1·66	+1·11	+1·57	+1·20	+2·05	+0·71	−0·09
Nov.	−1·32	−1·64	−1·45	−1·57	−1·46	**−1·97**	−1·58	−1·30	−0·50	+0·20	+0·79	+1·41	**+1·65**	+1·14	+0·83	+1·11	+1·50	+1·08	+1·32	+0·95	+1·20	+0·62	−0·73	−0·19
Dec.	−0·48	−0 71	−1 45	−1·98	−2·37	−2·21	−2·09	**−2·40**	−1·31	−0·78	−0·76	−0·18	+0·27	+0·34	+0·91	+1·32	+2·60	**+3·24**	+3·08	+2·38	+1·53	+0·82	−0·24	+0·52
Year	−1·30	−1·52	−1·44	**−1·53**	−1·48	−1·26	−0·89	−0·46	+0·31	+0·77	+1·48	**+1·75**	+1·67	+1·41	+1·15	+0·96	+1·00	+0·78	+0·39	+0·01	−0·02	−0·21	−0·72	−0·74
Winter	−0·84	−1·12	−1·20	−1·52	−1·60	**−1·73**	−1·62	−1 58	−0·87	−0·30	+0·09	+0·70	+0·97	+0·91	+1·35	+1·37	**+1·84**	+1·64	+1·51	+1·08	+0·86	+0·38	−0·36	+0·05
Equinox	−1·30	−1·82	−1·64	−1·70	**−1·90**	−1·32	−1·38	−0·40	+0·05	+0·61	+1·61	**+2·11**	+2·05	+1·60	+1·25	+1·10	+1·31	+1·25	+0·56	−0·07	−0·27	−0·13	−0·59	−0·96
Summer	**−1·76**	−1·63	−1·49	−1·36	−0·95	−0·75	+0·34	+0·61	+1·74	+1·99	**+2·75**	+2·45	+1·99	+1·73	+0·85	+0·40	−0·13	−0·55	−0·91	−0·99	−0·64	−0·88	−1·20	−1·32

HORIZONTAL FORCE.

	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
Jan.	+10·5	+15·1	+16·7	+17·7	+22·5	**+23·3**	+20·9	+21·1	+12·3	+ 6·5	− 7·5	−17·9	−19·7	−23·1	**−26·5**	−20·7	−19·5	−12·1	−15·5	− 6·9	− 4·9	+ 1·5	+ 0·5	+ 5·7
Feb.	+ 4·1	+ 5·9	− 3·1	+ 6·5	+ 3·7	+ 7·3	**+12·1**	+ 9·3	+ 3·5	− 7·5	− 7·3	−13·3	**−14·7**	− 6·9	−14·5	− 4·7	− 6·7	− 1·3	+ 9·7	+ 6·7	+ 5·9	+ 4·9	+ 7·9	− 7·7
Mar.	**+15·2**	+15·0	+14·8	+10·4	+14·2	+ 4·4	+14·8	− 6·2	− 1·0	−14·2	−23·0	−20·4	**−38·6**	−22·2	− 6·8	+ 4·4	− 3·8	− 6·6	+ 0·8	+13·2	+12·4	+ 7·2	+ 7·2	+ 8·8
Apr.	−11·8	+ 9·6	+ 2·4	+ 8·4	+14·8	+ 1·6	+11·2	− 4·2	−14·8	−25·0	−38·8	**−50·4**	−21·6	− 9·8	− 3·0	0·0	+ 5·2	+ 8·8	+15·8	+24·4	**+24·8**	+22·2	+15·6	+14·6
May	+20·2	+ 9·2	+ 9·4	+12·2	− 5·6	− 4·4	−27·8	−19·6	−21·8	−32·0	**−49·2**	−33·8	−23·6	−27·0	− 5·8	+ 1·8	+23·4	**+42·0**	+39·6	+29·0	+18·0	+10·8	+16·2	+17·4
June	+22 8	+15·0	+12·4	+12·4	+ 7·2	+ 8·2	+ 2·4	−12·0	−31·0	−32·0	−41·0	−42·0	**−43·2**	−21·4	−14·0	+ 2·4	+ 7·4	+12·8	+24·2	**+38·2**	+19·2	+12·4	+22·8	+17·6
July	+18·9	**+27·7**	+23·5	+ 1·1	− 0·7	+ 3·9	−14·5	−13·7	−27·5	−38·1	**−49·1**	−42·5	−26·5	−16·1	+ 5·3	+ 9·3	+15·9	+20·3	+25·9	+18·3	+20·5	+16·3	+ 7·3	+14·3
Aug.	**+29·1**	+15·3	+ 6·1	+13·3	+10·7	+ 0·9	− 5·5	− 9·3	−39·7	−32·3	**−43·7**	−41·3	−32·3	−29·9	− 9·5	+ 1·9	+ 9·5	+28·3	+24·1	+25·7	+15·9	+28·9	+21·7	+13·1
Sept.	+24·2	**+34·8**	+27·6	+23·4	+17·0	+ 9·6	− 0·2	− 6·2	−17·4	−24·8	−39·8	**−44·4**	−38·8	−31·8	−17·2	− 1·0	− 3·0	− 4·0	+ 9·8	+16·0	+12·2	+14·8	+22·0	+16·0
Oct.	+21·6	+18·2	+20·4	+21·2	+28·8	+28·6	**+29·2**	+19·2	+14·4	+ 9·2	−14·6	**−29·2**	−28·0	−18·2	−14·6	−13·8	−13·6	− 7·4	− 6·0	−14·8	−12·0	−29·0	−10·6	− 0·6
Nov.	+13·7	+14·9	+13·7	+16·3	+13·7	**+20·7**	+17·7	+14·9	+ 4·5	− 6·5	−14·3	**−23·1**	−22·5	−12·7	− 6·9	− 8·9	−12·1	− 6·9	−10·7	− 4·9	−10·3	− 3·5	+11·7	+ 1·5
Dec.	+ 3·9	+ 5·9	+14·9	+21·5	**+25·9**	+22·9	+21·7	+25·9	+10·1	+ 3·9	+ 4·7	− 2·5	− 6·9	− 5·1	− 9·3	− 9·3	**−29·3**	−30·7	−25·3	−20·9	−13·3	− 7·1	+ 6·1	− 7·5
Year	+14·4	**+15·6**	+13·2	+13·7	+12·7	+10·6	+ 6·8	+ 1·6	− 9·0	−16·1	−27·0	**−30·1**	−26·4	−18·7	−10·2	− 3·2	− 2·2	+ 3·6	+ 7·7	+10·3	+ 7·4	+ 6·6	+10·7	+ 7·8
Winter	+ 8·1	+10·5	+10·6	+15·5	+16·5	**+18·6**	+18·1	+17·8	+ 7·6	− 0·9	− 6·1	−14·2	**−16·0**	−12·0	−14·3	−10·9	−16·9	−12·8	−10·5	− 6·5	− 5·7	− 1·1	+ 6·6	− 2·0
Equinox	+12·3	**+19·4**	+16·3	+15·9	+18·7	+11·1	+13·8	+ 0·7	− 4·7	−13·7	−29·1	**−36·1**	−31·8	−20·5	−10·4	− 2·6	− 3·8	− 2·3	+ 5·1	+ 9·7	+ 9·4	+ 3·8	+ 8·6	+ 9·7
Summer	+22·8	+16·8	+12·9	+ 9·8	+ 2·9	+ 2·2	−11·4	−13·7	−30·0	−33·6	**−45·8**	−39·9	−31·4	−23·6	− 6·0	+ 3·9	+14·1	+25·9	**+28·5**	+27·8	+18·4	+17·1	+17·0	+15·6

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

International Disturbed Days.

NORTH COMPONENT.

Month and Season, 1930.	Greenwich Mean Time. Hour commencing—																							
	0.	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	Noon.	13.	14.	15.	16.	17.	18.	19.	20.	21.	22.	23.
	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
Jan.	+12·6	+16·9	+17·8	+17·7	+20·5	**+22·5**	+19·8	+18·5	+10·1	+ 4·4	−10·1	−20·8	−25·1	−29·3	**−31·6**	−24·5	−21·1	−12·1	−14·2	− 1·7	+ 0·8	+10·6	+ 7·6	+11·2
Feb.	+10·2	+13·8	+ 0·6	+ 7·6	+ 5·0	+ 8·2	+12·0	+10·2	+ 3·7	− 8·5	− 9·1	−16·9	−22·0	−16·9	**−23·6**	−11·2	−13·0	− 5·6	+12·6	+10·6	+10·1	+ 8·4	**+15·7**	− 2·0
Mar.	+16·8	+15·9	+15·3	+13·0	+17·7	+ 7·6	+13·7	− 7·1	− 1·8	−14·4	−25·2	−26·5	**−48·2**	−29·6	−15·9	+ 0·4	− 5·1	− 1·5	+ 4·6	**+17·7**	+17·0	+11·4	+12·9	+11·2
Apr.	− 5·8	+13·7	+ 5·8	+11·6	+18·3	+ 3·7	+11·1	− 3·1	−13·0	−25·1	−42·1	**−56·4**	−28·8	−18·5	−11·6	− 6·2	+ 2·8	+ 8·8	+19·5	**+28·6**	+27·8	+23·2	+19·0	+16·6
May	+24·7	+12·1	+13·8	+16·0	− 4·0	− 0·5	−24·8	−17·4	−19·4	−30·6	−50·5	**−37·9**	−31·4	−34·9	−15·1	− 6·5	+17·1	+35·9	**+38·9**	+31·4	+21·1	+15·3	+22·3	+23·1
June	+25·2	+19·1	+15·5	+13·6	+ 9·1	+10·5	+ 4·0	− 9·0	−29·4	−28·3	−37·9	−44·6	**−48·1**	−27·8	−20·7	− 4·1	+ 1·8	+ 8·0	+21·1	**+38·1**	+21·4	+15·1	+26·3	+22·0
July	+20·6	**+33·5**	+26·8	+ 2·9	+ 3·6	+ 6·8	− 9·9	− 9·4	−23·0	−36·0	**−50·5**	−46·6	−32·9	−23·3	− 2·5	+ 3·8	+11·5	+18·3	+23·7	+17·6	+21·7	+19·9	+ 8·4	+14·8
Aug.	+31·8	+16·6	+ 5·6	+15·4	+11·5	− 1·4	− 6·1	− 8·4	−38·6	−31·9	**−43·9**	−43·8	−37·6	−36·0	−15·2	− 0·9	+ 7·3	+28·3	+26·0	+29·4	+19·8	**+32·3**	+24·0	+16·7
Sept.	+26·1	**+37·3**	+28·4	+23·7	+12·6	+ 7·2	− 2·5	− 5·6	−15·3	−23·0	−39·3	**−49·1**	−45·5	−42·0	−25·2	− 6·8	− 4·7	− 1·5	+15·6	+22·0	+17·8	+20·3	+26·9	+21·0
Oct.	+22·6	+20·1	+21·1	+19·8	+26·2	**+26·7**	**+26·7**	+16·9	+13·3	+ 9·3	+11·4	**−35·2**	−34·8	−27·3	−21·1	−17·6	−13·0	− 5·2	− 1·9	− 10·6	− 2·3	− 17·5	− 4·4	+ 3·8
Nov.	+16·2	**+18·1**	+15·3	+16·6	+10·7	+17·6	+16·7	+13·6	+ 3·4	− 8·3	+10·9	**−27·3**	−27·2	−17·8	−11·7	− 8·8	− 8·7	− 5·8	− 9·1	− 2·7	− 8·3	+ 2·2	+16·4	+ 5·9
Dec.	+ 9·8	+10·6	+18·2	+23·1	**+25·3**	+20·9	+18·2	+21·3	+ 8·3	+ 1·0	− 7·7	− 6·5	−11·5	−10·0	−15·1	−13·1	**−31·6**	−29·9	−22·8	−16·8	−10·7	− 1·7	+12·2	− 0·6
Year	+17·6	**+19·0**	+15·4	+15·1	+13·0	+10·8	+ 6·6	+ 1·7	− 8·5	−16·0	−24·5	**−34·3**	−32·8	−26·1	−17·4	− 8·0	− 4·7	+ 3·1	+ 9·5	+13·6	+11·4	+11·6	+15·6	+12·0
Winter	+12·2	+14·9	+13·0	+16·3	+15·4	**+17·3**	+16·7	+15·9	+ 6·4	− 2·9	− 4·0	−17·9	**−21·5**	−18·5	−20·5	−14·4	−18·6	−13·4	− 8·4	− 2·7	− 2·0	+ 4·9	+13·0	+ 3·6
Equinox	+14·9	**+21·8**	+17·7	+17·0	+18·7	+11·3	+12·3	+ 0·3	− 4·2	−13·3	−23·8	**−41·8**	−39·3	−29·4	−18·5	− 7·6	− 5·0	+ 0·2	+ 9·5	+14·4	+15·1	+ 9·4	+13·6	+13·2
Summer	+25·6	+20·3	+15·4	+12·0	+ 5·1	+ 3·9	− 9·2	−11·1	−27·6	−31·7	**−45·7**	−43·2	−37·5	−30·5	−13·4	− 1·9	+ 9·4	+22·6	+27·4	**+29·1**	+21·0	+20·7	+20·3	+19·2

WEST COMPONENT.

	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
Jan.	− 8·5	− 6·5	− 3·2	+ 2·0	+11·6	+ 6·4	+ 7·4	+14·2	+11·6	+10·2	+10·9	+11·3	+22·6	**+26·0**	+20·5	+15·0	+ 5·2	− 1·1	− 7·4	−24·8	−26·8	**−41·4**	−32·4	−24·7
Feb.	−27·4	**−35·6**	−17·1	− 4·4	− 5·4	− 3·5	+ 2·0	− 3·2	− 0·4	+ 3·7	+ 7·4	+15·2	+31·9	**+44·9**	+39·8	+29·0	+27·9	+19·5	−11·9	−17·2	−18·4	−15·5	−34·9	−26·8
Mar.	− 5·8	− 2·4	− 0·8	−10·8	−14·3	−14·3	+ 6·8	+ 3·3	+ 3·3	− 0·7	+ 7·7	+25·5	+39·4	+31·4	**+40·9**	+18·9	+ 5·4	−23·9	−17·3	−19·0	−19·5	−18·4	**−25·2**	−10·0
Apr.	**−28·8**	−17·7	−15·4	−13·8	−14·3	− 9·4	+ 1·8	− 5·4	− 9·9	− 2·5	+10·7	+21·9	+30·7	+38·8	**+39·0**	+28·5	+11·3	+ 1·1	−15·2	−16·6	−10·8	− 2·0	−14·0	− 7·5
May	−18·1	−12·1	−19·0	−16·0	− 7·9	−18·4	−16·6	−12·3	−13·4	− 9·8	+ 0·3	+15·0	+33·1	+33·1	**+41·8**	+37·9	+31·5	+32·4	+ 7·5	− 7·7	−12·4	−19·4	**−26·1**	−24·3
June	− 8·2	−16·9	−12·7	− 4·3	− 8·0	− 9·6	− 7·0	−15·2	−10·9	**−20·3**	−18·5	+ 7·5	+17·5	+27·0	+29·3	**+30·0**	+26·5	+23·2	+16·7	+ 4·6	− 8·1	−11·0	−13·3	−18·1
July	− 5·7	−23·6	−12·6	− 7·9	−19·5	−13·0	−22·9	−21·2	**−23·7**	−13·8	+ 0·8	+13·9	+26·5	+31·2	**+36·4**	+26·2	+21·9	+11·5	+13·1	+ 5·2	− 3·4	−14·5	− 4·3	− 0·6
Aug.	− 9·2	− 4·3	+ 2·8	− 8·3	− 2·5	+10·7	+ 2·3	− 5·3	− 9·5	− 5·2	− 3·7	+ 6·9	+20·8	+24·6	**+24·9**	+12·8	+11·2	+ 3·0	− 6·1	−14·0	**−16·1**	−12·3	− 8·1	−15·1
Sept.	− 6·2	− 7·7	− 0·7	+ 1·0	+21·8	+11·9	+10·3	− 3·7	−11·7	−10·9	− 6·4	+16·5	+26·3	**+43·0**	+34·8	+26·5	+ 7·5	−12·0	−25·4	**−25·5**	−24·2	−23·5	−20·1	−21·2
Oct.	− 2·2	− 6·6	− 0·9	+ 8·6	+15·2	+11·7	+14·5	+12·8	+ 6·6	+ 0·4	+ 9·8	+24·5	+28·1	**+39·8**	+28·0	+15·9	− 4·0	−10·9	−19·3	−20·9	−45·6	**−56·0**	−29·7	−20·2
Nov.	−10·1	−13·0	− 5·7	+ 0·6	+15·0	+16·3	+ 6·6	+ 7·8	+ 5·3	+ 7·6	+11·0	+16·5	+18·8	**+21·8**	+21·0	− 0·4	−16·9	− 5·6	− 8·5	−10·4	−10·1	**−26·4**	−20·1	−20·0
Dec.	**−26·7**	−20·8	−13·5	− 4·9	+ 5·7	+11·7	+18·4	+23·8	+ 9·5	+13·7	+13·1	+18·2	+20·1	+21·7	**+25·6**	+16·3	+ 7·3	− 7·2	−14·4	−21·1	−13·4	−25·4	−27·4	**−32·2**
Year	−13·1	−13·9	− 8·2	− 4·9	− 0·2	+ 0·0	+ 2·0	− 0·4	− 3·6	− 2·3	+ 3·6	+16·1	+26·3	**+31·9**	+31·8	+21·4	+11·2	+ 2·5	− 7·4	−14·0	−17·4	**−22·2**	−21·3	−18·4
Winter	−18·2	−19·0	− 9·9	− 1·7	+ 6·7	+ 7·7	+ 8·6	+10·7	+ 6·5	+ 8·8	+10·6	+15·3	+23·4	**+28·6**	+26·7	+15·0	+ 5·9	+ 1·4	−10·6	−18·4	−17·2	−27·2	**−28·7**	−25·9
Equinox	−10·8	− 8·6	− 4·5	− 3·8	+ 2·1	− 0·0	+ 8·4	+ 1·8	− 2·9	− 3·4	+ 5·5	+22·1	+31·1	**+38·3**	+35·7	+22·5	+ 5·1	−11·4	−19·3	−20·5	**−25·0**	−25·0	−22·3	−14·7
Summer	−10·3	−14·2	−10·4	− 9·1	− 9·5	− 7·6	−11·1	−13·5	−14·4	−12·3	− 5·3	+10·8	+24·5	+29·0	**+33·1**	+26·7	+22·8	+17·5	+ 7·8	− 3·0	−10·0	−14·3	−13·0	**−14·5**

VERTICAL COMPONENT.

	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
Jan.	− 7·7	− 9·9	−12·7	−13·1	**−15·3**	−14·7	−12·7	−11·5	−12·9	−13·9	−11·7	− 8·7	− 7·1	+ 1·5	+12·9	+20·3	**+26·5**	+22·3	+21·7	+17·9	+14·9	+10·3	+ 4·7	− 0·7
Feb.	−11·2	−14·8	**−20·2**	−17·0	−11·8	− 8·0	− 7·4	− 7·6	− 6·8	− 8·8	−10·8	− 9·8	− 5·0	+ 2·4	+17·0	**+25·6**	+24·0	+23·0	+20·8	+15·8	+11·8	+ 7·6	− 1·2	− 8·8
Mar.	− 7·9	−11·5	−15·7	−18·3	**−21·1**	−19·5	−15·5	−13·1	− 8·5	− 9·7	− 9·3	−11·7	− 6·5	+ 5·7	+16·9	+29·9	+29·7	**+30·1**	+27·7	+19·5	+10·7	+ 3·3	+ 0·1	− 6·1
Apr.	**−24·8**	−19·2	−19·2	−22·8	−17·4	−12·6	− 9·4	− 8·6	− 7·2	−10·2	−13·4	−12·2	− 2·4	+ 2·8	+12·2	+24·8	+33·0	**+41·2**	+40·0	+25·0	+14·6	+ 4·6	+ 0·6	−20·4
May	− 6·9	−25·9	−23·5	−26·7	**−41·1**	−29·7	−18·3	−12·3	− 7·9	− 9·5	−10·3	− 7·9	− 3·7	+ 6·5	+15·7	+22·3	+31·5	+35·9	**+46·5**	+36·7	+27·5	+11·7	+ 1·3	−11·7
June	− 9·1	−13·7	−17·7	**−20·5**	−16·5	−10·7	− 8·3	− 9·1	−11·3	−12·7	−14·7	−11·1	− 6·5	+ 3·9	+10·3	+18·7	+26·1	+30·1	+30·9	+31·7	+21·1	+13·9	− 6·1	−18·7
July	− 5·7	−10·5	−18·9	**−27·5**	−26·5	−20·7	−13·3	− 8·3	− 8·5	− 6·9	− 9·9	− 8·3	− 4·1	+ 1·3	+12·1	+20·1	+24·7	**+28·1**	+25·9	+24·7	+19·5	+ 8·3	+ 4·1	+ 0·1
Aug.	− 9·4	−17·2	**−25·4**	−21·8	−19·2	−21·6	−18·6	−13·0	−11·8	− 9·0	−11·2	− 6·6	− 3·6	+ 7·0	+22·2	+29·4	+29·6	**+35·4**	+34·4	+28·8	+13·8	+ 4·0	− 6·4	− 5·8
Sept.	− 9·2	−17·2	−20·6	−24·8	**−25·8**	**−25·8**	−20·6	−13·0	− 8·8	− 9·4	− 9·0	− 9·2	− 1·2	+11·0	+22·8	+32·6	+37·4	**+37·8**	+32·2	+16·4	+10·4	+ 6·6	− 2·4	− 9·8
Oct.	−22·3	−21·7	−17·7	−20·7	**−22·5**	−19·7	−16·5	−13·5	−12·3	−13·7	−16·9	−11·7	− 2·3	+ 9·1	+22·7	+39·9	**+43·7**	+39·7	+24·1	+19·5	+13·5	+ 3·1	− 0·3	− 4·3
Nov.	−13·6	**−21·6**	−18·2	−16·2	−18·6	−19·6	−13·4	−10·0	− 6·8	− 8·2	− 6·2	− 5·0	+ 4·6	+ 9·6	+12·4	+17·4	**+23·4**	+21·0	+20·6	+21·2	+17·2	+13·0	+ 2·0	− 3·2
Dec.	− 7·5	−10·5	−14·9	−18·3	−21·1	**−22·7**	−21·7	−22·1	−21·5	−17·9	−15·1	−11·9	− 6·7	+ 0·1	+ 9·7	+23·5	+21·3	+39·9	**+46·9**	+33·3	+21·5	+11·5	+ 5·9	+ 0·3
Year	−11·3	−16·1	−18·7	−20·6	**−21·4**	−18·8	−14·6	−11·8	−10·4	−10·8	−11·5	− 9·5	− 3·7	+ 5·1	+15·6	+25·4	+29·2	**+32·0**	+31·0	+24·2	+16·4	+ 8·2	+ 0·2	− 7·4
Winter	−10·0	−14·2	−16·5	−16·2	**−16·7**	−16·3	−13·8	−12·8	−12·0	−12·2	−11·0	− 8·9	− 3·6	+ 3·4	+13·0	+21·7	+23·8	+26·6	**+27·5**	+22·1	+16·4	+10·6	+ 2·9	− 3·1
Equinox	−16·1	−17·4	−18·3	−21·7	**−21·7**	−19·4	−15·5	−12·1	− 9·2	−10·8	−12·2	−11·2	− 3·1	+ 7·2	+18·7	+31·8	+36·0	**+37·2**	+31·0	+20·1	+12·3	+ 4·4	− 0·5	−10·2
Summer	− 7·8	−16·8	−21·4	−24·1	**−25·8**	−20·7	−14·6	−10·7	− 9·9	− 9·5	−11·5	− 8·5	− 4·5	+ 4·7	+15·1	+22·6	+28·0	+32·4	**+34·4**	+30·5	+20·5	+ 9·5	− 1·8	− 9·0

TABLE VIII.—HARMONIC COMPONENTS OF THE DIURNAL INEQUALITY OF MAGNETIC FORCE.

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

Month and Season.	North Force.								West Force.								Vertical Force.							
	a_1	b_1	a_2	b_2	a_3	b_3	a_4	b_4	a_1	b_1	a_2	b_2	a_3	b_3	a_4	b_4	a_1	b_1	a_2	b_2	a_3	b_3	a_4	b_4
"ALL" DAYS.																								
1930.	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
Jan.	+ 8·7	+ 5·7	− 5·5	− 1·9	+ 2·3	− 1·7	− 0·4	+ 0·7	− 9·8	− 2·6	− 0·3	+ 6·8	− 1·0	− 1·1	+ 2·1	+ 1·0	+ 1·8	− 6·5	− 2·1	− 0·1	+ 0·9	− 0·6	− 0·6	+ 0·2
Feb.	+12·1	+ 4·8	− 6·2	− 4·0	+ 2·4	− 1·1	− 0·8	+ 1·1	−12·4	− 3·7	+ 0·8	+ 7·8	− 1·6	− 3·8	− 0·5	+ 1·9	− 0·3	− 8·1	− 4·0	− 0·5	+ 1·6	+ 0·1	− 0·7	− 0·1
Mar.	+17·2	+ 0·5	− 8·1	− 1·1	+ 2·6	− 0·8	− 0·7	+ 1·4	−10·5	− 5·8	+ 5·9	+10·1	− 2·1	− 4·7	+ 1·2	+ 3·1	+ 0·5	−10·1	− 5·5	− 0·4	+ 3·2	− 0·2	− 0·6	− 0·3
Apr.	+19·7	− 5·8	− 9·9	+ 0·1	+ 1·6	− 1·9	+ 0·2	+ 1·1	−13·3	− 9·8	+ 6·4	+11·0	− 3·1	− 4·4	+ 1·4	+ 1·0	+ 0·9	−13·1	− 9·5	− 0·5	+ 2·4	+ 0·1	− 0·4	+ 0·6
May	+18·0	−10·9	− 7·2	+ 0·4	+ 1·7	+ 0·9	+ 2·1	+ 0·2	−11·0	−15·9	+ 4·5	+10·4	− 2·3	− 1·7	+ 1·1	− 0·5	+ 2·5	−13·5	− 8·2	− 2·4	+ 1·9	+ 0·4	− 0·4	+ 0·6
June	+19·8	− 9·8	− 7·2	+ 0·6	− 0·6	− 0·6	+ 1·3	+ 0·8	− 6·9	−16·9	+ 3·9	+ 8·9	− 2·2	− 2·4	+ 1·0	+ 0·5	+ 1·3	−11·8	− 7·7	− 1·2	+ 1·6	− 0·4	− 0·5	+ 0·8
July	+16·9	− 7·9	− 7·7	+ 0·4	+ 0·8	+ 0·3	+ 0·6	+ 0·3	− 7·7	−15·4	+ 3·6	+ 5·8	− 1·8	− 1·8	+ 1·1	+ 0·4	+ 3·2	− 9·8	− 6·3	− 0·8	+ 2·0	− 0·3	− 0·6	+ 0·5
Aug.	+18·1	− 8·2	− 6·2	+ 1·6	+ 0·3	− 1·7	+ 1·5	+ 0·7	−10·8	−10·8	+ 5·7	+ 9·6	− 2·3	− 2·4	+ 1·3	+ 0·7	+ 0·9	−10·8	− 7·1	− 0·9	+ 2·5	+ 0·2	− 0·2	− 0·2
Sept.	+20·5	− 2·1	− 7·7	+ 1·3	+ 1·3	− 2·5	− 0·7	+ 1·0	−11·8	− 6·9	+ 6·7	+10·6	− 3·9	− 5·2	+ 1·4	+ 1·1	+ 0·1	−10·6	− 6·5	+ 0·5	+ 3·3	− 0·1	− 0·6	+ 0·1
Oct.	+14·5	+ 2·5	− 7·4	− 0·5	+ 2·3	− 2·0	− 0·2	+ 1·4	−11·3	+ 2·3	+ 4·4	+ 9·8	− 2·4	− 4·2	+ 2·2	+ 2·2	− 1·1	− 9·7	− 5·0	+ 1·8	+ 2·7	− 0·2	− 0·8	− 0·2
Nov.	+ 8·1	+ 2·4	− 4·6	− 0·6	+ 2·5	− 2·2	− 0·1	+ 0·8	− 8·6	− 0·5	+ 1·2	+ 4·8	− 3·0	− 2·0	+ 1·8	+ 1·1	− 1·0	− 6·8	− 2·0	+ 0·2	+ 0·9	− 1·2	− 0·6	+ 0·4
Dec.	+ 2·7	+ 5·1	− 1·7	− 1·9	+ 0·4	− 0·9	+ 0·2	+ 0·1	− 9·0	+ 1·6	+ 0·1	+ 3·6	− 1·3	− 1·3	+ 0·1	+ 1·0	+ 1·5	− 7·0	− 2·4	+ 0·3	+ 0·7	− 0·0	+ 0·0	+ 0·0
Year	+14·7	− 2·0	− 6·7	− 0·5	+ 1·5	− 1·2	+ 0·3	+ 0·8	−10·3	− 7·0	+ 3·6	+ 8·3	− 2·3	− 2·9	+ 1·2	+ 1·1	+ 0·8	− 9·8	− 5·5	− 0·3	+ 2·0	− 0·2	− 0·5	+ 0·2
W.	+ 7·9	+ 4·5	− 4·5	− 2·1	+ 1·9	− 1·5	− 0·3	+ 0·7	−10·0	− 1·3	+ 0·5	+ 5·8	− 1·7	− 2·1	+ 0·9	+ 1·3	+ 0·5	− 7·1	− 2·6	− 0·0	+ 1·0	− 0·4	− 0·5	+ 0·1
Eq.	+18·0	− 1·2	− 8·2	− 0·1	+ 2·0	− 1·8	− 0·3	+ 1·2	−11·7	− 5·0	+ 5·9	+10·4	− 2·9	− 4·6	+ 1·6	+ 1·8	+ 0·1	−10·9	− 6·6	+ 0·3	+ 2·9	− 0·1	− 0·6	+ 0·1
S.	+18·2	− 9·2	− 7·2	+ 0·8	+ 0·5	− 0·2	+ 1·4	+ 0·5	− 9·1	−14·8	+ 4·4	+ 8·7	− 2·2	− 2·1	+ 1·1	+ 0·3	+ 2·0	−11·5	− 7·3	− 1·3	+ 2·0	− 0·0	− 0·4	+ 0·4
QUIET DAYS.																								
Year	+10·0	+ 0·2	− 6·2	− 0·6	+ 1·8	− 1·1	+ 0·1	+ 1·0	− 5·6	− 8·9	+ 4·1	+ 6·5	− 3·2	− 2·8	+ 1·3	+ 1·1	+ 3·6	− 2·7	− 4·1	+ 0·2	+ 2·0	− 0·3	− 0·7	+ 0·2
W.	+ 5·7	+ 0·8	− 4·7	− 0·8	+ 1·4	− 1·5	− 0·1	+ 0·7	− 5·0	− 4·5	+ 1·8	+ 4·9	− 2·3	− 2·0	+ 1·1	+ 1·1	+ 1·0	− 2·4	− 1·1	+ 0·4	+ 1·1	− 0·4	− 0·3	+ 0·3
Eq.	+12·1	+ 1·1	− 8·0	− 0·1	+ 2·6	− 1·7	− 0·1	+ 1·5	− 6·1	− 8·1	+ 4·3	+ 7·3	− 4·6	− 4·8	+ 2·3	+ 1·5	+ 3·6	− 2·5	− 4·9	− 0·1	+ 2·9	− 0·0	− 1·0	+ 0·3
S.	+12·5	− 1·7	− 5·6	− 0·6	+ 1·1	− 0·3	+ 1·0	+ 0·7	− 5·7	−14·3	+ 6·2	+ 7·1	− 2·7	− 1·8	+ 0·5	+ 0·6	+ 6·2	− 3·2	− 6·3	+ 2·0	+ 2·1	− 0·6	− 0·8	+ 0·1
DISTURBED DAYS.																								
Year	+21·8	− 0·6	− 8·1	− 0·8	+ 2·3	− 0·3	− 0·8	+ 0·5	−18·5	− 3·4	+ 1·4	+10·2	− 0·6	− 4·8	+ 1·0	+ 1·2	− 3·0	−23·2	− 8·0	− 1·4	+ 2·2	+ 1·5	+ 0·2	+ 0·1
W.	+12·1	+11·7	− 4·0	− 3·0	+ 1·1	− 1·0	− 0·9	+ 0·8	−21·4	+ 3·1	− 1·9	+ 7·5	− 1·1	− 3·9	+ 0·0	+ 0·9	− 1·5	−20·4	− 6·4	− 0·2	+ 1·3	+ 0·1	− 0·5	+ 0·0
Eq.	+23·3	+ 1·4	−10·2	− 0·9	+ 2·8	+ 0·2	− 2·6	+ 0·6	−19·4	− 2·2	− 5·7	+12·3	− 0·3	− 7·3	+ 0·8	+ 2·4	− 6·0	−24·2	− 9·1	+ 1·8	+ 4·1	+ 1·2	− 1·0	− 0·3
S.	+29·2	−14·5	−10·8	+ 2·2	+ 2·7	+ 0·8	+ 1·0	+ 0·9	−14·2	−14·5	+ 0·3	+11·0	− 0·5	− 3·3	+ 2·0	+ 0·4	− 3·0	−26·1	− 8·3	− 4·3	+ 1·9	+ 1·8	+ 0·6	+ 1·5

TABLE IX.—HARMONIC COMPONENTS OF THE DIURNAL INEQUALITY OF MAGNETIC FORCE.

Values of c_n, α_n in the series $\Sigma\, c_n \sin(n\mathrm{T} + \alpha_n)$, T being reckoned in hours from Midnight, Abinger Local Mean Time, and converted into arc at the rate of 15° to each hour. New phase-angles expressing the inequalities relative to apparent local time may be obtained from the tabulated angles by applying corrections α, 2α, 3α, 4α, respectively, where α has the following values :—

	° ′		° ′		° ′		° ′
January	+2 19	April	+0 4	July	+1 22	October	−3 28
February	+3 28	May	−0 51	August	+0 59	November	−3 42
March	+2 12	June	+0 5	September	−1 12	December	−1 6

	° ′
Winter	+0 12
Equinox	−0 36
Summer	+0 24

Month and Season.	North Force.								West Force.								Vertical Force.							
	c_1	α_1	c_2	α_2	c_3	α_3	c_4	α_4	c_1	α_1	c_2	α_2	c_3	α_3	c_4	α_4	c_1	α_1	c_2	α_2	c_3	α_3	c_4	α_4
"ALL" DAYS.																								
1930.	γ	°	γ	°	γ	°	γ	°	γ	°	γ	°	γ	°	γ	°	γ	°	γ	°	γ	°	γ	°
Jan.	10·3	57·3	5·8	251·9	2·9	127·8	0·8	334·3	10·2	255·6	6·8	358·6	1·5	224·2	2·3	64·7	6·8	165·1	2·1	269·2	1·0	123·5	0·6	289·3
Feb.	13·0	68·8	7·4	238·3	2·6	115·8	1·3	326·1	12·9	253·9	7·9	6·7	4·1	204·0	2·0	347·5	8·1	182·7	4·0	264·4	1·6	87·3	0·7	259·5
Mar.	17·3	88·7	8·1	263·0	2·7	108·6	1·5	335·5	12·0	241·3	11·7	31·1	5·2	204·8	3·3	23·1	10·1	177·6	5·5	266·6	3·2	94·9	0·6	248·5
Apr.	20·5	106·8	9·9	270·5	2·5	140·9	1·1	13·3	16·5	234·2	12·7	30·8	5·4	216·9	1·7	57·0	13·2	176·6	9·5	267·9	2·4	89·0	0·7	328·2
May	21·1	121·6	7·2	274·1	1·9	61·7	2·1	86·8	19·3	215·2	11·3	24·0	2·9	234·4	1·2	113·9	13·7	170·1	8·5	254·3	1·9	80·4	0·7	324·5
June	22·1	116·6	7·2	275·9	0·8	227·7	1·5	60·9	18·2	202·6	9·7	24·2	3·3	224·7	1·2	63·8	11·8	174·1	7·8	261·6	1·7	105·7	0·9	329·9
July	18·6	115·4	7·7	273·8	0·9	71·5	0·7	66·4	17·3	207·0	6·8	33·1	2·5	227·6	1·2	73·4	10·3	162·3	6·4	263·9	2·0	99·5	0·7	309·3
Aug.	19·9	114·7	6·4	285·0	1·7	170·2	1·6	66·4	15·2	225·5	11·1	31·4	3·3	225·5	1·5	61·3	10·9	175·7	7·1	264·0	2·5	85·7	0·2	231·7
Sept.	20·7	96·5	7·8	280·1	2·8	154·4	1·2	327·9	13·6	240·1	12·6	33·2	6·5	218·4	1·8	52·1	10·6	180·0	6·5	275·5	3·3	93·6	0·6	281·7
Oct.	14·7	80·6	7·4	266·9	3·1	133·0	1·4	355·1	11·6	282·0	10·7	25·1	4·8	210·5	3·1	47·1	9·7	186·7	5·3	290·2	2·7	95·0	0·8	255·1
Nov.	8·5	74·2	4·7	262·9	3·4	132·7	0·8	353·4	8·6	267·1	5·0	14·5	3·6	237·2	2·1	60·5	6·9	188·9	2·0	275·1	1·4	144·7	0·8	305·4
Dec.	5·8	28·6	2·5	223·0	1·0	156·2	0·2	73·1	9·2	280·1	3·6	1·6	1·8	226·0	1·0	4·9	7·2	168·5	2·4	277·5	0·7	93·7	0·0	..
Year	14·8	98·0	6·7	266·6	1·9	130·0	0·8	20·6	12·5	236·0	9·0	24·1	3·7	219·0	1·6	48·0	9·8	175·5	5·5	267·5	2·0	96·5	0·5	294·7
W.	9·1	60·8	5·0	246·0	2·4	129·5	0·7	340·8	10·1	262·9	5·8	5·3	2·7	221·2	1·5	35·6	7·1	176·5	2·6	270·8	1·1	113·3	0·5	286·1
Eq.	18·0	94·3	8·2	270·0	2·7	133·9	1·3	347·1	12·8	247·2	11·9	30·2	5·4	213·1	2·4	41·8	10·9	179·9	6·7	273·7	2·9	93·4	0·6	278·2
S.	20·4	117·1	7·2	276·8	0·6	112·8	1·5	72·6	17·3	212·1	9·7	27·8	3·0	227·8	1·2	76·8	11·7	170·7	7·5	260·6	2·0	92·1	0·6	315·1
QUIET DAYS.																								
Year	10·0	89·3	6·2	265·0	2·1	122·6	1·0	7·6	10·5	212·7	7·7	33·3	4·3	229·4	1·7	51·9	4·5	127·1	4·1	273·1	2·1	100·5	0·8	288·5
W.	5·8	81·9	4·8	260·8	2·0	138·4	0·7	355·2	6·7	228·7	5·3	20·5	3·0	230·4	1·5	47·8	2·6	157·1	1·2	288·8	1·2	112·9	0·4	317·5
Eq.	12·1	85·3	8·0	270·1	3·1	124·0	1·5	356·6	10·1	217·3	8·5	31·5	6·7	224·9	2·7	57·6	4·4	125·2	4·9	269·6	2·9	91·8	1·0	289·9
S.	12·6	98·0	5·6	265·2	1·1	105·9	1·2	57·4	15·4	202·2	9·4	41·7	3·3	237·6	0·8	84·5	7·0	117·6	6·3	272·6	2·2	106·1	0·9	278·3
DISTURBED DAYS.																								
Year	21·8	92·0	8·2	265·5	2·3	97·6	0·9	303·5	18·8	260·0	10·3	8·7	4·9	188·6	1·6	40·0	23·4	187·8	8·2	260·6	2·7	56·3	0·2	57·1
W.	16·8	46·4	5·0	233·7	1·5	131·3	1·2	311·9	21·6	278·7	7·7	346·4	4·1	197·1	0·9	4·0	20·4	184·5	6·4	269·2	1·3	85·8	0·5	276·4
Eq.	23·3	87·1	10·3	265·7	2·8	87·5	2·6	283·7	19·5	264·0	13·6	25·5	7·3	183·6	2·6	20·6	25·0	194·3	9·2	282·0	4·3	75·1	1·1	256·4
S.	32·6	116·8	11·0	282·5	2·8	75·4	1·4	50·4	20·3	224·8	11·0	2·6	3·3	189·9	2·0	81·3	26·3	186·9	9·3	243·5	2·6	47·9	1·6	25·3

TABLE X.—RANGE of MEAN DIURNAL INEQUALITIES for the MONTHS, YEAR and SEASONS of 1930.

Month and Season.	"All" Days.			Quiet Days.			Disturbed Days.			"All" Days.			Quiet Days.			Disturbed Days.		
	D.	I.	H.	D.	I.	H.	D.	I.	H.	N.	W.	V.	N.	W.	V.	N.	W.	V.
	′	′	γ	′	′	γ	′	′	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
January	6·63	1·72	26·3	4·54	1·05	16·8	13·78	4·17	49·8	28·6	32·7	14·3	19·1	22·8	6·8	54·1	67·4	41·8
February	8·61	1·95	28·9	7·00	2·15	33·8	15·80	2·52	26·8	33·7	41·3	18·9	36·8	36·5	10·8	39·3	80·5	45·8
March	8·59	2·26	36·2	7·46	1·42	26·6	14·12	4·00	53·8	41·8	42·7	26·7	31·4	36·2	15·2	65·9	66·1	51·2
April	9·78	2·63	47·1	10·96	2·30	43·8	12·74	4·63	75·2	53·3	53·6	37·8	43·4	59·1	27·0	85·0	67·8	66·0
May	9·54	2·59	50·7	10·76	1·79	34·6	13·76	4·62	91·2	50·3	50·8	37·4	36·0	56·4	27·6	76·8	67·9	87·6
June	8·75	2·82	54·6	9·18	2·20	40·0	10·28	4·54	81·4	53·4	48·4	31·1	38·8	49·1	25·4	86·2	50·3	52·2
July	8·21	2·32	45·9	6·76	1·17	22·6	12·30	5·20	76·8	46·0	41·4	28·8	25·7	33·2	21·2	84·0	60·1	55·6
August	8·49	2·58	45·2	8·90	2·26	39·2	9·58	4·85	72·8	48·5	45·3	29·2	40·5	46·3	23·8	76·2	41·0	60·8
September	9·70	2·78	44·5	9·06	2·23	38·2	14·92	5·58	79·2	47·6	50·7	30·0	39·2	46·7	21·6	86·4	68·5	63·6
October	8·94	2·37	36·2	6·74	1·28	23·0	17·74	4·80	58·4	39·6	44·1	26·0	26·7	35·0	16·2	61·9	95·8	66·2
November	5·85	1·56	22·5	4·98	1·14	19·4	9·52	3·62	43·8	25·1	27·8	14·9	21·5	25·3	11·2	45·4	48·2	45·0
December	4·88	1·37	14·9	2·94	0·59	9·0	11·04	5·64	55·2	14·8	24·9	16·7	8·1	15·1	6·0	56·9	57·8	69·6
Year	7·34	1·75	31·4	7·09	1·35	25·8	11·29	3·28	45·7	35·4	37·3	25·0	27·4	36·9	16·9	53·3	54·1	53·4
Winter	6·22	1·44	21·8	4·59	1·03	16·7	11·62	3·57	34·6	24·5	30·4	15·2	19·7	23·1	7·3	38·8	57·3	44·2
Equinox	8·97	2·26	36·8	8·56	1·72	29·8	13·22	4·01	55·5	43·5	44·7	29·6	33·1	44·3	19·5	63·6	63·3	58·9
Summer	8·66	2·44	48·2	8·50	1·67	32·8	9·93	4·51	74·3	48·3	45·7	31·3	32·2	44·2	23·9	74·8	47·6	60·2

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

Month, 1930.	"All" Days.			Quiet Days.			Disturbed Days.		
	Declination West.	Horizontal Force.	Vertical Force.	Declination West.	Horizontal Force.	Vertical Force.	Declination West.	Horizontal Force.	Vertical Force.
	′	γ	γ	′	γ	γ	′	γ	γ
January	+0·05	+0·6	0·0	+0·42	+ 1·6	−2·2	−1·00	− 3·6	+ 1·2
February	−0·06	−0·1	−0·3	−0·18	+ 1·0	0·0	−0·32	− 5·8	+ 0·4
March	+0·06	+0·1	+0·0	−0·24	− 1·0	+0·4	+0·82	+ 2·6	− 6·0
April	−0·10	+0·5	+0·0	+0·34	+ 0·8	0·0	+0·06	+ 7·2	+ 2·4
May	−0·24	−1·1	−0·8	+0·14	+ 7·6	−1·8	−0·12	− 6·8	− 9·8
June	+0·19	+0·8	+0·6	+0·14	+11·4	−4·4	−1·78	−10·8	−11·8
July	−0·02	−0·2	+0·2	+0·26	+ 3·4	−1·8	+0·70	− 9·2	− 0·2
August	−0·01	+0·1	−0·1	+0·20	+ 7·8	−1·4	−1·12	− 8·6	− 2·0
September	−0·07	−0·8	+0·4	+1·28	+ 2·4	+1·0	−1·66	−15·4	− 5·6
October	−0·11	0·0	−0·2	−0·06	+ 2·8	+0·2	−1·82	−23·4	+10·6
November	+0·04	+0·2	+0·3	−0·12	+ 2·0	−0·8	−0·66	− 8·0	+ 1·4
December	−0·01	+0·3	−0·2	−0·12	+ 2·2	−2·4	−0·38	− 9·2	+ 4·0
Year 1930	—	—	—	+0·17	+ 3·5	−1·1	−0·61	− 7·6	− 1·3

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

Month, 1930.	Declination (West).	Inclination.	Horizontal Force.	North Force.	West Force.	Vertical Force.	Total Force.
	° ′	° ′					
January	12 29·8	66 38·0	·18548	·18109	·04014	·42931	·46766
February	12 28·6	66 38·3	·18543	·18105	·04006	·42929	·46763
March	12 27·6	66 38·1	·18543	·18106	·04001	·42922	·46756
April	12 26·5	66 38·2	·18541	·18105	·03995	·42921	·46754
May	12 25·9	66 37·9	·18545	·18110	·03992	·42920	·46755
June	12 25·0	66 38·0	·18545	·18111	·03987	·42923	·46757
July	12 24·1	66 37·7	·18548	·18115	·03983	·42919	·46755
August	12 23·5	66 38·0	·18543	·18111	·03979	·42917	·46751
September	12 22·9	66 38·7	·18534	·18103	·03974	·42921	·46752
October	12 21·4	66 39·1	·18531	·18102	·03966	·42928	·46756
November	12 20·5	66 38·7	·18538	·18110	·03963	·42930	·46762
December	12 19·4	66 38·3	·18542	·18115	·03957	·42928	·46762
Year 1930	12 24·6	66 38·2	·18542	·18109	·03985	·42924	·46757

TABLE XIII.—DAILY MEAN VALUE OF THE BASE-LINE OF THE DECLINATION MAGNETOGRAMS AT ABINGER MAGNETIC STATION.

1930 Day	January	February	March	April	May	June	July	August	September	October	November	December
	° ′	° ′	° ′	° ′	° ′	° ′	° ′	° ′	° ′	° ′	° ′	° ′
1	12. 24·9	12. 24·8	12. 23·2	12. 23·8 / 24·4	12. 25·0	12. 15·9	12. 16·4	12. 16·6	12. 17·9	12. 15·9	12. 15·9	12. 14·4
2	24·8	24·9	23·1	24·8	24·9	15·8	16·7	16·8	17·1	16·0	15·9	14·9
3	24·9	24·8	23·2	24·7	25·2	16·0	16·8	16·8	16·8	16·0	15·9	15·3
4	25·2	24·7	23·6	24·8	25·8	16·2	16·8	16·7	16·9	16·7	15·3	15·1
5	24·9	24·9	23·6	24·9	25·5	16·3	16·7	16·8	17·3	17·5	14·2	14·6
6	24·8	24·5	23·7	24·7	25·2	16·5	17·0	16·7	17·4	17·0	13·8	14·0
7	24·7	24·2	23·5	24·3	25·2	16·9	17·0	16·6	17·5	16·3	13·7	14·1
8	24·9	23·9	23·8	24·5	24·8	16·9	16·8	16·7	17·0	16·4	14·2	14·1
9	24·9	23·5	23·6	24·7	24·7	16·0	17·3	16·6	17·1	16·6	14·7	14·1
10	24·8	23·4	23·7	24·5	24·7	15·9	17·1	16·7	17·3	16·3	15·1	13·7
11	24·4	23·3	23·5	24·2	24·9	16·1	16·8	17·3	17·5	16·2	14·8	13·2
12	24·5	23·2	23·4	24·2	25·0	16·1	16·3	17·2	17·6	16·2	14·4	13·3
13	24·2	23·3	23·2	24·0	25·2	16·4	15·8	17·2	17·5	15·9	14·2	13·6
14	24·6	23·4	23·1	23·8	25·4	16·3	16·4	17·3	17·6	16·2	14·3	13·6
15	24·8	23·7	23·5	23·7	25·5	16·2	16·6	17·0	17·1	16·4	14·6	13·5
16	25·0	23·3	23·6	24·0	25·7	16·2	16·3	16·7	16·8	16·4	14·6	13·2
17	25·0	23·1	23·4	23·8	25·9	16·3	16·3	16·7	17·2	16·4	14·4 / 13·1	13·4
18	25·3	23·0	23·3	24·0	26·1	16·5	16·1	16·8	17·1	16·8	12·8	13·3
19	25·4	22·8	23·2	23·4	25·5	16·6	16·5	16·7	17·4	16·7	13·1	13·7
20	25·4	22·9	22·7	23·0	25·1	16·4	16·3	16·6	17·2	16·6	13·5	14·1
21	24·9	22·8	22·6	23·3	25·2	16·7	16·3	16·7	17·1	16·1	13·9	14·3
22	25·1	22·7	22·7	23·4	25·2	17·1	16·1	16·4	17·3	16·0	14·6	14·2
23	25·3	22·8	22·8	23·5	25·2	16·9	15·9	16·4	17·3	16·0	14·4	13·9
24	25·3	22·7	22·8	23·9	25·2	16·7	16·1	16·6	17·6	15·9	13·8	13·9
25	25·6	22·6	22·8	24·2	25·6	16·2	16·1	16·5	17·2	15·2	14·3	13·9
26	25·4	22·6	22·9	24·4	25·7	16·3	16·0	16·9	17·1	15·1	14·4	14·0
27	25·2	23·0	23·0	24·6	25·9 / 15·3	16·3	16·2	17·1	16·6	14·7	14·8	13·9
28	25·2	23·2	23·3	25·0	15·3	16·0	16·6	18·0	16·1	14·6	15·0	14·1
29	25·1		23·4	25·1	15·3	15·9	17·0	18·5	16·1	15·1	14·1	14·2
30	25·0		23·7	24·9	15·4	16·2	17·1	19·5	16·4	15·8	14·4	14·3
31	24·8		23·7		15·5		16·6	19·3		15·8		14·3

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

Greenwich Mean Time, 1930.	No. of Obs.	Observed Horizontal Force.	Deduced Value of Base Line.
		γ	γ
Jan. 1. 9 59–10 12	6	18544	18605
1. 15 40–15 53	4	18531	18607
2. 10 2–10 14	7	18544	18605
2. 16 23–16 35	5	18542	18603
3. 9 48–10 2	8	18537	18606
3. 16 15–16 26	4	18508	18603
4. 10 16–10 34	6	18510	18603
6. 10 24–10 44	6	18537	18603
6. 10 51–11 0	6	18537	18606
7. 10 30–10 46	6	18508	18604
7. 11 57–12 9	4	18530	18603
8. 11 43–12 0	6	18517	18605
8. 12 50–12 58	6	18535	18603
10. 15 37–16 0	8	18530	18604
11. 9 57–10 10	7	18555	18604
11. 10 58–11 8	6	18552	18604
13. 15 46–16 10	10	18556	18604
14. 10 17–10 31	8	18541	18604
14. 12 57–13 11	6	18548	18603
15. 9 56–10 5	6	18538	18603
15. 15 0–15 18	6	18555	18603
16. 11 0–11 19	8	18543	18602
16. 15 28–15 44	6	18542	18602
17. 9 26– 9 39	8	18545	18603
17. 11 26–11 40	6	18541	18603
18. 10 14–10 30	8	18523	18603
20. 11 4–11 20	6	18534	18601
20. 15 9–15 28	8	18571	18602
21. 10 32–10 49	6	18518	18600
21. 11 37–11 46	4	18515	18601
22. 11 5–11 19	8	18532	18602
22. 14 55–15 13	6	18551	18603
23. 11 38–11 54	6	18528	18602
23. 14 56–15 7	4	18547	18602
24. 11 9–11 27	6	18544	18602
24. 15 55–16 5	4	18552	18602
25. 10 1–10 16	7	18553	18603
25. 11 39–11 45	4	18547	18603
27. 12 15–12 30	6	18548	18601
28. 10 21–10 39	6	18541	18601
28. 15 12–15 23	4	18564	18602
29. 10 52–11 8	8	18533	18604
29. 15 32–15 42	4	18544	18601
30. 15 40–15 50	8	18540	18603
31. 10 11–10 28	6	18521	18601
Feb. 1. 9 53–10 6	6	18536	18602
3. 16 35–16 55	8	18546	18604
4. 11 18–11 34	6	18529	18603
4. 15 36–15 47	4	18554	18603
5. 10 26–10 40	5	18531	18602
5. 10 48–11 2	5	18530	18601
5. 11 7–11 17	5	18532	18603
5. 11 22–11 38	6	18534	18603
6. 11 10–11 24	6	18530	18601
7. 10 15–10 30	6	18535	18601
7. 12 35–12 44	4	18540	18603
8. 10 11–10 28	6	18526	18602
10. 11 8–11 24	6	18526	18601
11. 11 1–11 50	15	18548	18604
11. 20 3–20 9	4	18565	18605
12. 11 14–11 30	6	18552	18603
12. 11 43–12 0	6	18527	18602
13. 15 52–16 1	5	18529	18603
Feb. 14. 10 3–10 27	6	18514	18602
14. 11 9–11 25	6	18508	(18596)
14. 21 26–21 37	6	18501	18602
15. 11 2–11 22	13	18496	18602
17. 10 29–10 56	16	18528	18603
18. 16 5–16 35	12	18535	18603
19. 9 54–10 28	16	18529	18603
20. 11 20–11 48	16	18525	18602
21. 10 11–10 53	12	18526	18601
22. 11 15–11 37	8	18529	18603
24. 12 47–13 0	8	18529	18604
25. 10 11–10 26	9	18494	18597
26. 12 18–12 39	10	18527	18603
26. 14 22–14 37	10	18538	18603
26. 14 50–15 3	10	18548	18604
26. 15 16–15 30	10	18541	18602
26. 15 52–16 4	10	18539	18602
26. 16 18–16 31	10	18511	18602
27. 10 2–10 10	2	18533	18603
28. 10 50–11 28	8	18520	18602
Mar. 1. 10 21–10 47	8	18490	18603
3. 10 58–11 26	8	18516	18602
4. 12 18–12 34	6	18529	18604
5. 16 52–17 3	4	18548	18603
5. 19 45–19 53	3	18558	18603
6. 8 31– 8 55	10	18551	18603
7. 10 23–10 53	12	18533	18602
8. 10 53–11 11	8	18541	18602
10. 10 53–11 20	12	18542	18602
11. 14 22–14 46	12	18563	18603
12. 10 18–10 44	12	18515	18601
13. 10 2–10 24	12	18512	18602
14. 11 11–11 30	12	18508	18602
15. 10 21–10 38	12	18511	18602
17. 10 48–11 26	8	18512	18601
18. 10 47–11 8	8	18530	18601
18. 12 47–13 5	10	18526	18604
19. 10 4–10 25	12	18530	18602
19. 12 36–13 6	8	18511	18602
20. 10 27–10 52	12	18525	18603
21. 9 39–10 5	12	18525	18604
22. 10 38–11 23	12	18516	18602
24. 11 30–12 16	12	18512	18602
25. 10 21–11 6	12	18532	18602
26. 10 8–10 44	12	18506	18601
27. 10 7–11 11	13	18498	18601
27. 15 51–16 12	8	18537	18603
28. 10 3–10 40	12	18504	18603
29. 10 0–10 25	12	18515	18602
31. 10 13–10 33	12	18512	18601
April 1. 9 50–10 36	11	18518	18602
1. 11 9–11 19	4	18520	18601
1. 14 46–14 58	6	18521	18626
2. 11 2–11 35	12	18530	18629
3. 10 33–11 12	12	18517	18627
3. 11 50–12 12	8	18526	18628
4. 11 42–12 11	12	18524	18628
5. 11 5–11 30	12	18549	18628
5. 12 45–12 52	4	18557	18629
7. 10 35–10 55	11	18517	18628
7. 9 54–10 19	12	18514	18627
April 8. 15 7–16 7	16	18528	18628
9. 10 1–10 31	14	18510	18628
9. 16 33–16 41	4	18514	18628
10. 10 55–11 25	16	18460	18628
10. 14 28–14 38	6	18534	18629
12. 11 28–12 4	15	18498	18628
14. 9 18– 9 48	8	18500	18627
15. 9 57–10 34	12	18487	18627
16. 9 58–10 25	15	18510	18628
17. 9 46–10 32	15	18505	18627
18. 10 50–11 10	6	18510	18628
19. 10 24–11 7	11	18526	18628
21. 10 6–10 22	6	18588	18630
22. 9 51–10 36	15	18489	18630
23. 8 29– 9 56	14	18521	18630
May. 1. 10 30–10 51	12	18524	18629
2 9 12– 9 35	12	18540	18628
3. 9 56–10 10	6	18529	18628
5. 8 59– 9 20	12	18468	18627
6. 8 50– 9 8	10	18517	18628
7. 8 47– 9 8	8	18477	18627
8. 8 46– 9 26	14	18499	18626
9. 8 47– 9 27	13	18525	18627
9. 10 49–10 58	6	18526	18628
10. 8 51– 9 28	12	18511	18628
12. 8 58– 9 26	12	18505	18627
13. 8 59– 9 30	12	18496	18628
14. 9 5– 9 42	12	18533	18629
15. 8 59– 9 44	13	18504	18627
16. 8 57– 9 34	12	18538	18628
17. 9 0– 9 34	12	18524	18628
19. 9 50–10 23	12	18501	18627
20. 8 28– 9 54	13	18516	18627
21. 10 34–11 49	12	18513	18628
22. 9 35–10 10	18	18518	18628
23. 10 21–10 45	8	18527	18628
24. 10 45–11 7	8	18537	18628
26. 10 15–10 56	16	18532	18628
27. 10 53–11 52	12	18553	18695
27. 13 49–14 0	4	18540	18694
28. 9 38–10 35	14	18541	18694
28. 15 3–15 29	8	18564	18694
29. 9 12– 9 55	15	18521	18692
29. 15 10–15 39	9	18554	18692
30. 8 52– 9 32	15	18529	18691
30. 16 32–17 10	6	18594	18692
31. 7 34– 7 47	6	18573	(18691)
June 1. 10 5–10 36	7	18476	18692
2. 8 32– 9 23	12	18498	18692
2. 15 45–16 24	12	18549	18690
2. 17 50–18 7	6	18578	18691
3. 9 15–10 0	12	18481	18690
3. 15 53–16 27	15	18543	18691
4. 8 56– 9 26	12	18482	18690
4. 15 48–16 21	14	18532	18690
5. 10 22–11 14	12	18546	18690
5. 15 26–15 46	12	18541	18690
6. 7 4– 7 18	8	18518	18691
6. 20 42–20 43	1	18559	18718
7. 7 16– 7 50	12	18541	18718

April 1. Temperature raised to 16°·0

June 6. Temperature raised to 21°·0

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

Greenwich Mean Time, 1930.	No. of Obs.	Observed Horizontal Force.	Deduced Value of Base Line.
		γ	γ
June 8. 8 40– 8 55	8	18512	18715
9. 8 4– 8 15	6	18525	18718
10. 8 26–10 16	15	18512	18718
10. 16 18–16 35	6	18546	18718
11. 9 45–10 26	12	18533	18719
11. 16 5–16 14	4	18551	18719
12. 7 46– 8 7	12	18566	18719
12. 9 0– 9 8	5	18550	18718
13. 9 51–10 54	14	18511	18718
14. 10 52–11 32	10	18513	18718
16. 15 58–16 11	6	18503	18718
17. 9 5–10 8	18	18481	18718
18. 9 54–10 14	12	18509	18717
18. 10 36–10 43	5	18509	18717
19. 10 14–10 43	16	18501	18717
20. 9 44–10 23	18	18521	18717
21. 10 31–10 54	12	18519	18716
23. 10 9–11 1	16	18525	18716
24. 10 25–10 43	8	18523	18716
24. 13 46–14 9	12	18554	18717
24. 15 19–15 30	6	18551	18717
25. 8 25– 8 50	13	18543	18717
25. 14 55–15 18	12	18562	18717
26. 10 41–11 7	12	18557	18718
26. 12 12–12 14	2	18558	18717
26. 14 3–14 4	1	18542	18719
26. 14 38–14 41	2	18543	18717
26. 15 11–15 15	3	18542	18718
26. 15 46–15 48	2	18534	18718
27. 11 6–11 29	12	18529	18717
27. 14 2–14 20	8	18563	18718
28. 9 5– 9 30	12	18533	18719
28. 9 44–10 8	12	18550	18717
28. 10 28–10 36	6	18544	(18721)
30. 16 5–16 21	8	18540	18717
July 1. 10 6–10 21	8	18514	18716
1. 11 19–11 36	8	18525	18718
2. 9–50–10 13	12	18526	18717
2. 11 26–11 41	8	18516	18718
3. 15 37–16 2	8	18562	18717
4. 10 6–10 45	13	18522	18717
5. 10 54–11 36	16	18536	18716
7. 8 51– 9 13	10	18539	18716
7. 16 4–16 33	12	18561	18716
8. 7 45– 7 58	6	18547	18716
8. 8 46– 8 57	6	18543	18716
8. 16 23–16 45	8	18571	18716
9. 8 53– 9 1	4	18528	18715
9. 9 30– 9 45	8	18526	18716
9. 16 26–16 44	6	18597	18715
10. 11 42–12 4	6	18492	18714
11. 8 58– 9 10	3	18509	18715
11. 15 27–15 44	8	18555	18716
12. 11 7–11 16	6	18487	18717
12. 12 4–12 8	1	18513	18715
14. 10 15–10 52	12	18501	18716
15. 11 34–12 7	12	18526	18715
15. 16 3–16 16	4	18581	18717
16. 10 1–11 11	16	18525	18716
17. 10 39–11 8	10	18517	18714
18. 9 20– 9 51	12	18549	18716
19. 9 38–10 22	12	18523	18716
21. 10 32–10 52	8	18541	18715

Greenwich Mean Time, 1930.	No. of Obs.	Observed Horizontal Force.	Deduced Value of Base Line.
		γ	γ
July 22. 9 26–10 1	12	18542	18716
23. 9 6– 9 38	12	18542	18716
24. 8 37– 9 53	8	18557	18718
24. 11 53–12 13	8	18547	18718
25. 10 49–11 18	8	18502	(18716)
26. 9 15– 9 52	8	18506	18718
28. 11 6–11 37	12	18522	18716
29. 10 10–10 33	12	18520	18717
29. 14 32–14 50	6	18547	18717
30. 8 53– 9 17	12	18514	18717
30. 15 49–15 57	4	18510	18715
31. 10 39–11 11	8	18513	18716
31. 14 1–14 20	6	18533	18716
Aug. 1. 9 48–10 3	8	18527	18717
1. 15 59–16 17	6	18499	18717
2. 9 11– 9 47	12	18543	18716
4. 8 30– 8 57	8	18546	18717
5. 9 42–10 6	8	18533	18716
5. 14 24–14 37	6	18561	18718
6. 7 5– 7 17	6	18569	18716
6. 8 14– 8 22	4	18526	(18719)
6. 9 1– 9 10	4	18531	18717
7. 11 1–11 7	4	18535	(18715)
8. 9 11– 9 57	12	18507	18717
9. 6 24– 6 44	8	18515	18716
9. 8 59– 9 8	4	18463	18716
9. 9 50–10 2	6	18478	18717
10. 11 3–11 10	3	18521	18718
11. 9 49–10 3	8	18479	18716
11. 15 36–16 9	6	18544	18715
12. 9 52–10 11	8	18502	18716
12. 15 1–15 8	4	18527	18717
13. 10 13–10 30	8	18509	18716
14. 10 21–10 43	9	18520	18716
15. 10 1–10 17	8	18527	18716
16. 10 13–10 36	12	18531	18717
18. 10 45–11 2	8	18526	18715
19. 9 16– 9 47	8	18465	18714
20. 9 29–10 3	8	18526	18715
21. 9 17– 9 43	8	18536	18715
22. 10 15–10 36	8	18515	18715
23. 9 16– 9 42	8	18535	18715
25. 15 49–16 10	8	18547	18715
26. 10 42–11 4	8	18521	18715
27. 9 48–10 9	8	18524	18713
27. 15 45–15 55	4	18540	18714
28. 11 52–12 3	8	18516	18714
29. 9 31– 9 52	8	18518	18713
30. 9 2– 9 26	8	18514	18709
30. 21 35–21 48	6	18553	18709
31. 10 57–11 7	6	18528	18711
31. 19 30–19 41	6	18558	18709
Sept. 1. 11 37–12 2	8	18491	18708
1. 19 46–20 4	6	18544	18710
2. 11 48–12 10	8	18526	18711
2. 15 7–15 26	6	18550	18711
3. 10 32–10 52	8	18524	18712
4. 9 38–10 7	8	18471	18709
5. 22 0–22 18	8	18539	18710
6. 9 55– 9 40	8	18469	18710
8. 19 5–19 49	8	18543	18712
9. 11 20–11 41	8	18501	18711

Greenwich Mean Time, 1930.	No. of Obs.	Observed Horizontal Force.	Deduced Value of Base Line.
		γ	γ
Sept. 10. 9 12– 9 40	8	18507	18711
11. 10 18–10 40	8	18513	18710
12. 11 5–11 31	8	18518	18711
13. 9 51–10 14	8	18513	18711
15. 15 55–16 12	8	18540	18711
16. 11 9–11 29	8	18513	18711
17. 8 40– 9 50	6	18543	18711
17. 11 2–11 8	4	18531	18711
18. 11 5–11 13	4	18531	18710
18. 15 20–15 33	6	18501	18711
19. 10 3–10 19	8	18488	18711
20. 10 15–10 32	8	18522	18711
22. 10 43–10 57	8	18538	18713
23. 9 7– 9 26	8	18537	18712
24. 9 1– 9 13	3	18481	18712
25. 7 47– 8 39	9	18527	18712
26. 10 46–11 0	8	18514	18713
27. 9 35–10 0	10	18518	18713
29. 9 15– 9 36	12	18470	18712
30. 4 57– 4 12	6	18499	(18714)
30. 6 16– 6 24	4	18470	18715
Oct. 2. 9 34– 9 54	8	18514	18687
3. 9 38–10 24	8	18510	18685
4. 8 42– 9 8	8	18496	18685
6. 10 0–10 30	8	18513	18683
6. 16 5–16 30	8	18534	18685
7. 10 30–10 50	8	18519	18684
7. 16 27–16 41	6	18517	18684
8. 10 15–10 45	8	18487	18684
8. 16 11–16 37	6	18514	18684
9. 10 16–10 38	8	18514	18684
9. 16 49–17 2	6	18534	18684
10. 11 46–12 6	8	18514	18685
11. 11 36–11 52	8	18523	18685
13. 11 10–11 30	8	18529	18688
13. 16 48–16 58	4	18546	18686
14. 9 59–10 27	8	18548	18686
15. 11 32 11 47	8	18506	18685
16. 11 20–11 42	8	18510	18684
17. 10 30–10 52	8	18503	18683
18. 10 52–11 3	6	18504	18684
20. 10 25–10 46	8	18508	18682
20. 14 48–15 4	8	18525	18684
21. 10 29–10 52	8	18521	18684
22. 10 5–10 9	2	18524	18684
22. 10 59–11 4	3	18521	18684
22. 11 52 11 57	4	18520	18684
23. 10 23–10 44	8	18532	18684
24. 9 32– 9 54	8	18534	18683
25. 9 56–10 28	8	18539	18685
27. 18 48–18 56	4	18560	18686
28. 10 51–11 13	10	18514	18687
28. 13 2–13 4	2	18487	18688
29. 10 1–10 15	8	18475	18684
30. 11 20–11 47	6	18512	18684
31. 10 43–10 55	8	18501	18684
Nov. 1. 12 53–13 12	8	18503	18683
3. 10 15–10 38	8	18525	18683
4. 10 8–10 57	8	18496	18682
5. 10 8–10 22	8	18525	18685
6. 15 10–15 32	8	18541	18685

Oct. 1. Temperature lowered to 16°·0

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

Greenwich Mean Time, 1930.	No. of Obs.	Observed Horizontal Force.	Deduced Value of Base Line.	Greenwich Mean Time, 1930.	No. of Obs.	Observed Horizontal Force.	Deduced Value of Base Line.	Greenwich Mean Time, 1930.	No. of Obs.	Observed Horizontal Force.	Deduced Value of Base Line.
h m h m		γ	γ	h m h m		γ	γ	h m h m		γ	γ
Nov. 7. 11 25–11 32	4	18531	18685	Nov. 26. 15 25–15 49	8	18504	18659	Dec. 8. 20 27–20 52	8	18547	18658
7. 12 58–13 2	2	18526	18687	27. 10 35–11 9	15	18517	18661	9. 10 22–10 55	16	18550	18658
7. 15 15–15 18	2	18548	18687	27. 14 50–15 5	8	18523	18662	10. 11 22–11 44	8	18543	18656
8. 10 52–11 14	8	18531	18687	28. 11 55–12 21	12	18513	18660	11. 11 19–11 42	8	18549	18659
10. 12 56–13 8	8	18537	18686	28. 15 35–15 54	8	18538	18663	12. 10 18–10 43	8	18556	18659
11. 11 59–12 12	8	18534	18685	29. 11 25–11 46	8	18533	18660	13. 12 20–12 31	8	18535	18658
12. 11 7 11 26	8	18534	18683	29. 12 46–12 59	6	18542	18662	15. 20 45–20 58	5	18540	18656
13. 9 59–10 30	8	18540	18686					16. 10 53–11 20	8	18545	18657
14. 10 24–10 53	8	18551	18685	Dec. 1. 10 21–10 36	8	18527	18658	17. 11 15–11 41	8	18544	18657
15. 9 55–10 34	8	18498	18685	1. 12 26–12 43	9	18531	18659	18. 11 1–11 29	8	18559	18658
				1. 16 41–16 58	8	18533	18658	19. 11 5–11 30	8	18562	18658
17. 10 18–10 43	8	18531	18662	2. 10 57–11 3	4	18540	18658	20. 10 57–11 20	8	18553	18659
17. 15 51–16 27	8	18536	18662	2. 14–31–14 46	8	18538	18659	22. 9 47–10 2	8	18529	18658
18. 10 25–10 41	8	18531	18661	2. 15 12–15 21	5	18538	18657	22. 11 5–11 12	4	18526	18657
18. 17 15–17 33	8	18539	18661	2. 15 42–15 52	7	18541	18658	23. 8 45– 8 54	4	18549	18660
18. 18 17–18 21	3	18548	18663	2. 16 20–16 31	5	18541	18657	23. 11 11–11 36	8	18526	18658
19. 9 48–10 25	8	18529	18661	2. 19 50–19 58	4	18542	18657	24. 11 4–11 23	2	18533	18656
19. 14 53–15 6	4	18544	18662	3. 10 28–10 59	13	18536	18657	24. 14 42–15 2	8	18526	18656
20. 11 23–11 39	8	18536	18663	3. 21 5–21 16	8	18446	18657	25. 10 49–11 8	6	18528	18656
21. 12 32–12 57	8	18544	18662	4. 9 59–10 14	8	18473	18657	26. 11 59–12 14	6	18544	18658
22. 10 52–11 8	8	18532	18663	4. 10 20–10 29	4	18486	18656	27. 11 21–11 43	8	18546	18658
24. 9 37– 9 50	8	18542	18663	4. 15 36–16 2	8	18502	18655	29. 10 49–11 13	8	18547	18657
24. 16 42–17 4	8	18504	18663	5. 10 11–11 2	10	18533	18657	30. 11 30–11 47	8	18549	18659
25. 10 12–10 31	8	18457	18657	5. 15 2–15 24	6	18534	18657	30. 15 16–15 26	6	18548	18660
25. 16 26–16 44	8	18472	18658	6. 9 54–10 19	8	18539	18658	31. 10 7–10 34	8	18551	18658
26. 9 51–10 12	8	18516	18659	6. 12 58–13 12	6	18547	18659	31. 11 56–12 7	4	18550	18657
26. 11 24–11 48	8	18505	18659	8. 11 8–11 29	8	18547	18659	31. 16 9–16 21	6	18659	18659

Nov. 17. Temperature lowered to 11°·0

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

Greenwich Mean Time, 1930.	Observed Horizontal Force.	Deduced Value of Base Line.	Greenwich Mean Time, 1930.	Observed Horizontal Force.	Deduced Value of Base Line.	Greenwich Mean Time, 1930.	Observed Horizontal Force.	Deduced Value of Base Line.
h m h m	γ	γ	h m h m	γ	γ	h m h m	γ	γ
Jan. 2. 10 7–11 5	18535	18595	Feb. 25. 10 16–11 27	(18533)	(18628)	Mar. 21. 11 14–12 15	18543	18614
15. 10 6–11 2	18534	18594	26. 10 16–11 15	18523	18600	22. 10 25–11 15	18525	18608
16. 11 1–11 47	18541	18600				28. 10 59–12 2	18482	18607
18. 10 10–11 8	18518	18597						
22. 10 3–11 8	18519	18598						
23. 10 11–11 4	18531	18601	Mar. 1. 11 22–12 7	(18521)	(18601)	April 5. 12 3–13 0	18556	18629
29. 10 31–11 34	18526	18598	4. 11 7–12 10	18528	18602	9. 10 26–11 29	18484	18633
30. 10 5–11 8	18528	18593	5. 10 28–12 0	18532	18603			
			6. 10 56–11 55	18536	18606			
Feb. 12. 12 19–13 7	18554	18611	7. 10 8–11 16	18530	18599	Dec. 30. 11 52–13 6	18554	18661
19. 10 42–12 8	18532	18610	12. 10 2–11 34	18512	18603	30. 14 31–15 53	18554	18665
20. 9 47–10 28	18556	18615	13. 10 6–11 15	18514	18600	31. 9 40–10 48	18554	18661
21. 11 8–12 0	18527	18606	18. 12 6–13 11	18531	18606	31. 12 31–13 20	18555	18662
22. 10 14–11 0	18547	18614	20. 10 4–11 24	18524	18603	31. 14 40–16 20	18560	18661

April 1. Temperature raised to 16°·0 Nov. 17. Temperature lowered to 11°·0

TABLE XV.—DAILY VALUE of the BASE-LINE of the VERTICAL FORCE MAGNETOGRAMS at the ABINGER MAGNETIC STATION DEDUCED from OBSERVATIONS OF VERTICAL FORCE made with the DYE COIL-MAGNETOMETER.

1930 Day	January	February	March	April	May	June	July	August	September	October	November	December
	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
1	43087	43093	43097	—	43154	—	43139	43167	43203	—	43152	43141
2	084	—	—	—	157	43164	138	170	204	43141	—	140
3	088	091	098	—	156	166	136	—	208	140	156	135
4	084	092	096	—	—	167	139	173	208	141	—	141
5	—	091	098	—	160	166	139	173	208	—	155	139
6	087	091	097	—	158	164	—	173	209	142	158	140
7	091	088	097	—	159	223	133	179	—	139	159	—
8	088	090	094	—	157	220	—	179	220	141	165	144
9	(097)	—	—	—	160	226	143	177	218	141	—	142
10	087	095	097	—	158	227	143	—	218	144	160	144
11	081	097	097	43147	—	227	149	177	220	145	162	143
12	—	096	098	146	165	227	152	178	221	—	164	145
13	085	097	097	—	163	230	—	178	216	148	164	146
14	082	096	098	150	162	234	153	181	—	146	164	—
15	080	096	098	150	161	235	151	186	220	149	160	144
16	087	—	—	152	163	236	154	185	227	149	—	146
17	087	099	099	153	162	234 / 131	157	—	227	145	140	147
18	085	—	—	151	—	127	158	187	226	144	139	154
19	—	100	—	152	164	126	158	189	231	—	145	148
20	083	103	—	—	167	130	—	191	233 / 269	148	—	148
21	083	099	—	152	166	129	160	192	271	150	146	—
22	085	100	—	153	167	—	164	192	270 / 157	151	145	149
23	086	—	—	155	164	136	164	—	157	155	—	150
24	087	—	—	154	165	136	162	196	157	155	—	152
25	085	100	—	150	—	135	164	193	157	154	144	—
26	—	100	—	155	167	135	164	195	160	—	144	154
27	089	099	—	—	165	139	—	194	160	150	149	—
28	088	097	—	154	164	138	167	194 / 191	—	154	141	161
29	—		—	155	163	—	167	189	163	153	145	151
30	085		—	155	165	139	167	191	166	155	—	151
31	091		—		162		165	196		153		152

April 1. Temperature raised to 16°·0
June 6. Temperature raised to 21°·0

Oct 1. Temperature lowered to 16°·0
Nov. 17. Temperature lowered to 11°·0

TABLE XV(A).—DAILY VALUE of the BASE-LINE of the VERTICAL FORCE MAGNETOGRAMS at the ABINGER MAGNETIC STATION, DEDUCED from OBSERVATIONS of MAGNETIC DIP made with the EARTH INDUCTOR.

1930 Day	January.	February	March	April	May	June	July	August	September	October	November	December
	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
1	43079	43084*	43095*	43107 141	43166	—	43154	43192	43219	—	—	—
2	080	082*	094*	148	165	43183	157	200	227	43156	43158	43158
3	081	086*	102*	150	164	179	—	—	—	—	—	—
4	077	079*	098*	150	158	182	165	191	228	154	165	—
5	064	080*	090*	148	164	168	158	182	235	157	—	—
6	086	079*	096	—	164	—	—	200	228	162	165	—
7	085	087*	128	148	166	238	—	—	232	152	—	—
8	083	088*	100	150	169	242	160	189	—	160	—	—
9	081	—	—	155	164	234	168	184	237	—	—	156
10	078	085*	090	153	165	237	169	—	235	161	—	150
11	086	082*	098	155	162	245	166	187	233	—	—	149
12	—	086*	(078)	151	167	242	174	193	242	—	—	153
13	084	087*	096	148	169	249	165	208	238	164	184	—
14	079	086*	099	155	171	243	{166 153*	207	243	—	176	152
15	084	094*	100	156	168	—	151*	205	—	—	179	—
16	078	090*	102	151	177	241	155*	205	241	163	176	153
17	078	—	095	154	173	136	150*	—	242	—	—	146
18	078	—	096	155	172	143	173	206	—	165	151	151
19	—	090*	104	160	173	138	166	201	250	163	—	153
20	082	087*	103	159	172	144	—	206	—	—	—	152
21	084	097*	103	163	172	145	178	210	277	162	157	—
22	072	094*	103	161	176	—	177	212	—	164	—	148
23	079*	—	—	167	175	144	177	206	173	—	149	157
24	081*	—	102	154	158	145	175	209	195	—	141	154
25	081*	086*	107	162	—	141	—	—	193	167	—	153
26	072*	—	105	160	178	158	178	219	208	—	155	—
27	081*	092*	102	—	181	153	172	211	178	174	151	157
28	082*	097*	102	155	178	153	183	209	—	—	156	155
29	085*		109	166	176	148	192	207	—	—	—	150
30	081*		108	160	177	157	—	—	176	172	154	164
31	091*		108		180		184	—		—		156

April 1. Temperature raised to 16°·0
June 6. Temperature raised to 21°·0
October 1. Temperature lowered to 16°·0
November 17. Temperature lowered to 11°·0
* Observations made with the Greenwich Inductor.

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

Year.	Declination West.	Horizontal Force.	Vertical Force.	Dip.	Year.	Declination West.	Horizontal Force.	Vertical Force.	Dip.
	° ′	C.G.S. Unit	C.G.S. Unit	° ′		° ′	C.G.S. Unit	C.G.S. Unit	° ′
1841	23 16·2	..	..	..	1883	18 15·0	0·1812	0·4381	67 31·7
1842	23 14·6	..	..	..	1884	18 7·6	0·1814	0·4379	67 29·7
1843	23 11·7	..	..	69 0·6	1885	18 1·7	0·1817	0·4380	67 28·0
1844	23 15·3	..	..	69 0·3	1886	17 54·5	0·1818	0·4377	67 27·1
1845	22 56·7	..	..	68 57·5	1887	17 49·1	0·1819	0·4380	67 26·6
1846	22 49·6	0·1731	..	68 58·1	1888	17 40·4	0·1822	0·4383	67 25·6
1847	22 51·3	0·1736	..	68 59·0	1889	17 34·9	0·1823	0·4380	67 24·3
1848	22 51·8	0·1731	..	68 54·7	1890	17 28·6	0·1825	0·4381	67 23·0
1849	22 37·8	0·1733	..	68 51·3	1891	17 23·4	0·1827	0·4380	67 21·5
1850	22 23·5	0·1738	..	68 46·9	1892	17 17·4	0·1829	0·4379	67 20·0
1851	22 18·3	0·1744	..	68 40·4	1893	17 11·4	0·1831	0·4373	67 17·9
1852	22 17·9	0·1745	..	68 42·7	1894	17 4·6	0·1831	0·4374	67 17·4
1853	22 10·1	0·1748	..	68 44·6	1895	16 57·4	0·1834	0·4378	67 16·1
1854	22 0·8	0·1749	..	68 47·7	1896	16 51·7	0·1835	0·4382	67 15·1
1855	21 48·4	0·1756	..	68 44·6	1897	16 45·8	0·1838	0·4377	67 13·5
1856	21 43·5	0·1759	..	68 43·5	1898	16 39·2	0·1840	0·4377	67 12·1
1857	21 35·4	0·1769	..	68 31·1	1899	16 34·2	0·1843	0·4380	67 10·5
1858	21 30·3	0·1762	..	68 28·3	1900	16 29·0	0·1846	0·4380	67 8·8
1859	21 23·5	0·1761	..	68 26·9	1901	16 26·0	0·1850	0·4381	67 6·4
1860	21 14·3	..	..	68 30·1	1902	16 22·8	0·1852	0·4377	67 3·8
1861	21 5·5	0·1773	..	68 24·6	1903	16 19·1	0·1852	0·4368	67 1·2
					1904	16 15·0	0·1854	0·4359	66 57·6
1861		0·1759		68 15·8	1905	16 9·9	0·1854	0·4355	66 56·3
1862	20 52·6	0·1763	0·4403	68 9·6	1906	16 3·6	0·1854	0·4353	66 55·6
1863	20 45·9	0·1764	0·4396	68 7·0	1907	15 59·8	0·1855	0·4357	66 56·2
1864	..	0·1767	0·4393	68 4·1	1908	15 53·5	0·1854	0·4356	66 56·3
1865	20 33·9	0·1767	0·4388	68 2·7	1909	15 47·6	0·1854	0·4348	66 54·1
1866	20 28·0	0·1773	0·4397	68 1·3	1910	15 41·2	0·1855	0·4345	66 52·8
1867	20 20·5	0·1777	0·4392	67 57·2	1911	15 33·0	0·1855	0·4342	66 52·1
1868	20 13·1	0·1779	0·4395	67 56·5	1912	15 24·3	0·1855	0·4340	66 51·8
1869	20 4·1	0·1782	0·4396	67 54·8	1913	15 15·2	0·1853	0·4333	66 50·5
1870	19 53·0	0·1784	0·4392	67 52·5					
1871	19 41·9	0·1786	0·4389	67 50·3	1914	15 6·3	0·1853	0·4333	66 50·8
1872	19 36·8	0·1789	0·4383	67 47·8	1915	14 56·5	0·1851	0·4331	66 51·6
1873	19 33·4	0·1793	0·4386	67 45·8	1916	14 46·9	0·1848	0·4326	66 52·2
1874	19 28·9	0·1797	0·4387	67 43·6	1917	14 37·1	0·1848	0·4330*	66 53·0
1875	19 21·2	0·1797	0·4383	67 42·4	1918	14 27·8	0·1846	0·4325	66 52·8
1876	19 8·3	0·1799	0·4383	67 41·0	1919	14 18·2	0·1845	0·4324	66 53·3
1877	18 57·2	0·1800	0·4381	67 39·7	1920	14 8·6	0·1845	0·4325	66 53·6
1878	18 49·3	0·1802	0·4382	67 38·2	1921	13 57·6	0·1845	0·4322	66 53·0
1879	18 40·5	0·1805	0·4382	67 37·0	1922	13 46·7	0·1844	0·4318	66 52·3
1880	18 32·6	0·1805	0·4380	67 35·7	1923	13 35·1	0·1843	0·4314	66 51·9
1881	18 27·1	0·1807	0·4379	67 34·7	1924	13 22·8	0·1843	0·4311	66 51·6
1882	18 22·3	0·1806	0·4375	67 34·2	1925	13 9·9	0·1841	0·4308	66 51·4

MAGNETIC ELEMENTS OBSERVED AT THE ABINGER MAGNETIC STATION.

1925	13 22·7	0·18597	0·42946	66 35·1	1928	12 47·0	0·18564	0·42941	66 37·3
1926	13 10·4	0·18581	0·42947	66 36·3	1929	12 35·8	0·18555	0·42918†	66 37·2†
1927	12 58·4	0·18575	0·42932	66 36·2	1930	12 24·6	0·18542	0·42924†	66 38·2†

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

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

* Mean of ten months, March to December.

† These values are based upon observations with the Vertical Force Coil-magnetometer (see Introduction, page D14).

MAGNETIC DISTURBANCES.

The following notes briefly summarise, month by month, the magnetic conditions exhibited by the traces of Declination, Horizontal Intensity and Vertical Intensity recorded at the Abinger Magnetic Station in the year 1930.

January.—Moderate disturbance of irregular character was general throughout the earlier part of the month and quiet conditions were not reached until 10th. The period of greatest disturbance was from 3rd to 7th and culminated with a wave +150γ in H at 4^d 19^h, which was accompanied by a rapid decline in V(50γ). Three days of nearly unbroken quiet ensued to be followed on 13th by a resumption of continuous irregularity in the traces. A second quiet period of short duration occurred on 26th and 27th terminating soon after midday on 28th.

The range in declination during the month was from 12°.11′·4 on 4th to 12°.44′·8 on 6th; in horizontal intensity, from ·18436 on 5th to ·18607 on 13th; in vertical intensity, from ·42910 on 13th to ·42994 on 6th.

February.—Unsteadiness in all traces prevailed until 5th, after which isolated bays appeared once or twice a day until the beginning of 12th. Unsteadiness then rapidly increased, and by $21\frac{1}{2}^h$ the most considerable disturbance of the month was in progress. The major part of this disturbance is reproduced in Plate I. It subsided in the early hours of 14th, though a marked recrudescence took place between 18^h and 19^h, during which a wave of +110γ in H occurred. Considerable unsteadiness persisted throughout the following two days. Several waves of 10′ in Dec. and 50γ in H were recorded, and there was a rise and fall of 60γ in V between 13^h and 19^h on 15th. Prominent waves in H and Dec. traces appeared between 18^h and 19^h on six consecutive days, 13th to 18th. The wave in Dec. on the 18th measured —20′. The unsteady character of the traces persisted generally throughout the remainder of the month, no day being really quiet, though the movements on 21st and 22nd were of minor and accidental nature, while comparatively large movements occurred during the evening of 25th, namely an irregular double wave in H with a range of 100γ between 17^h and 19^h, accompanied by a wave in Dec. (—10′), and later, between 21^h and 24^h, a second wave in Dec. (—20′).

The range in declination during the month was from 11°.53′·3 on 12th to 12°.44′·2 on 13th; in horizontal intensity, from ·18418 on 12th to ·18607 on 14th; in vertical intensity, from ·42861 on 12th to ·42990 on 15th.

March.—Traces were considerably agitated during the first three days, a marked characteristic of the disturbance being rapid oscillation. At times on 1st, upwards of twenty oscillations occurred within an hour, some of which had a range of 40γ in H and 5′ in Dec. Prominent waves in H (—100γ) and in Dec. (—15′) were recorded on 2nd at 16^h with similar movements at 18^h and 21^h, accompanied by a slow surge in V (+50γ). From about noon on 4th quiet conditions were established, which lasted until $11^d.14\frac{2}{3}^h$, when a rather abrupt movement in all traces signified the imminence of a new disturbance. Between $19\frac{1}{2}^h$ and 21^h a further movement in H (—100γ) took place, and V increased 40γ. Disturbance then became general and quiet conditions were not again established during the remainder of the month. A portion of the early stages is reproduced in Plate II. The traces were still very active on 13th, a series of waves in H and D between 19^h and 24^h accompanied by oscillatory decrease in V (60γ) being a marked feature. Among many considerable movements on succeeding days may be mentioned a rapid rise in V (80γ) at $14^d.13^h$ to 15^h, followed by a temporary decrease in Dec. (20′) at $14^d.18^h$ to 21^h, and later, at 22^h, by a similar increase in H (80γ); $16^d.18^h$ to 21^h a surge in H (+80γ); $18^d.18^h$ to 19^h a strong surge in H (+120γ) with a temporary decrease in Dec. (20′); $24^d.7\frac{1}{2}^h$ to $8\frac{1}{2}^h$, a rapid decline in H (120γ), not fully recovered for twelve hours; 26th, a repetition of the rapid oscillation noted at the beginning of the month, which lasted to some extent through four days.

The range in declination during the month was from 12°.6′·4 to 12°.42′·4 both on 12th; in horizontal intensity, from ·18397 on 12th to ·18633 on 18th; in vertical intensity, from ·42869 to ·42991 both on 12th.

April.—With the exception of two days (4th and 5th) conditions were disturbed throughout the month. On many days the range in the value of the several elements was much above normal. On 14 days the range in declination exceeded 20′; on 17 days the range in horizontal intensity exceeded 100γ, and on 9 days the range in vertical intensity exceeded 75γ. Periods of special activity were: $7^d.18^h$ to $8^d.4^h$ (180γ in H); $8^d.11^h$ to 24^h (240γ in H, 120γ in V); $10^d.10^h$ to $11^d.3^h$ (160γ in H, 90γ in V); $11^d.18^h$ to $11^d.22^h$ (series of regular oscillations in H); $20^d.5^h$ to $21^d.0^h$ (waves of 25′ in Dec. and 120γ in H); $22^d.16^h$ to $23^d.0^h$ (180γ in H); $30^d.16^h$ to 19^h (rapid oscillation of traces of H and V).

The extreme range in declination during the month was from 12°.5′·7 on 8th to 12°.46′·1 on 20th; in horizontal intensity, from ·18392 on 8th to ·18656 on 22nd; in vertical intensity, from ·42848 on 8th to ·42983 on 20th.

May.—The month opened with three days of comparatively quiet conditions, but in the early hours of 4th disturbance was resumed and soon reached considerable dimensions. As in the previous month there now occurred a succession of disturbances which merged one into the next so that great difficulty in distinguishing their limits arises. The series lasted until 25^d, after which a second short period of quiet intervened before further activity commenced during the afternoon of 29d. The chief periods of disturbance are reproduced in Plates III and IV. Activity was also notable at $6^d.4^h$ (a temporary decrease in V, 60γ); between $6^d.12^h$ and $8^d.0^h$ (several

movements of about 100γ and a range of 200γ in H, together with a range of 30′ in Dec. and 120γ in V) ; $16^d.12^h$ to $17^d.0^h$ (three large waves in H +100γ, 150γ, 90γ, with a surge of +120γ in V, culminating at 19^h, and a similar decline in Dec., 25′) ; $17^d.6^h$ to $18^d.0^h$ (range of 220γ in H). On 11 days in the month the range in declination exceeded 20′ ; on 19 days the range in horizontal intensity exceeded 100γ ; and on 7 days the range in vertical intensity exceeded 75γ.

The extreme range in declination during the month was from 12°.3′·9 on 16th to 12°.41′·7 on 9th ; in horizontal intensity from ·18398 on 5th to ·18683 on 31st ; in vertical intensity, from ·42805 on 31st to ·43016 on 16th.

June.—Activity of all traces was still prevalent during the first half of the month with characteristics similar to those mentioned in the two previous months. The most prominent movements occurred between $2^d.15^h$ and $3^d.15^h$ (range of 220γ in H) ; $7^d.0^h$ to 9^h (waves in Dec. +15′, and in V,—40γ) ; $7^d.23^h$ to $8^d.3^h$ (temporary decrease in Dec. 20′, and in V, 50γ) ; $12^d.12^h$ to 24^h (many oscillatory movements in H, several exceeding 100γ and one—at $15\frac{1}{2}^h$—approaching 150γ, accompanied by a temporary increase in V, of 70γ during which similar though much smaller oscillations occurred. About 24 hours of quiet ($14^d.12^h$ to $15^d.12^h$) intervened before signs of renewed disturbance on a considerable scale appeared. The main part of this disturbance is reproduced in Plate V, but effects persisted for at least two days longer in the form of continuous rapid oscillation in the traces of Dec. and H. A period of comparatively small disturbance followed, extending from 20^d to 23^d ; 24^d and 25^d were almost quiet. Moderate continuous irregular disturbance was again resumed on 27^d, persisting till the end of the month.

The range in declination during the month was from 12°.12′·1 on 8th to 12°.45′·5 on 16th ; in horizontal intensity, from ·18372 on 16th to ·18665 on 2nd ; in vertical intensity, from ·42876 on 1st to ·42976 on 12th and 18th.

July.—During this month a distinct tendency towards quieter conditions was apparent after the first few days. There were, however, two periods of rather active disturbance, namely 9th to 14th and 24th to 26th. A range of 100γ in H was recorded between $2^d.14^h$ and $2^d.19h$, and between $5^d.18^h$ and $5^d.20^h$, while unsteadiness in all traces was apparent throughout 3rd, 4th and 5th. The first active period began with a typical sudden commencement at $9^d.14^h.55^m$. The earlier part of this disturbance is reproduced in Plate VI, but several large movements occurred subsequently, of which the chief were between $11^d.1^h$ and $11^d.6^h$ (ranges of 20′ in Dec., 120γ in H), between $12^d.5^h$ and $12^d.8^h$ (wave of —100γ in H) and between $13^d.16^h$ and $13^d.18^h$ (wave of —16 in Dec., range of 140γ in H).

On 16th there was unsteadiness of an oscillatory character in all traces, which lasted into the early hours of 17th. A period of comparative quiet then set in, during which the movements were occasional and unimportant. This period terminated abruptly at $24^d.21^h$ with the rapid development of disturbance in the H trace, followed by activity in all traces, the general character of which was undulatory with many short-period oscillations superposed on the larger movements. Ranges of 120γ in H and 20′ in Dec. were recorded. The disturbance subsided during the evening of 26th, but unsteadiness persisted in all traces for the remainder of the month.

The range in declination during the month was from 12°.5′·9 to 12°.36′·9 both on 25th ; in horizontal intensity, from ·18459 on 29th to ·18665 on 10th ; in vertical intensity, from ·42829 on 11th to ·42991 on 13th.

August.—Conditions were again disturbed, generally, throughout the month, and there were few days on which considerable movement of the traces was absent. The first four days were comparatively quiet. Disturbance increased in the afternoon of 5th, a number of oscillations occurring which measured 50γ in H, and 15′ in Dec. By noon on 6th the amplitude had further increased almost twofold, while between $6^d.13^h$ and $6^d.15\frac{1}{2}^h$ a rise of 100γ in V took place, which persisted for about four hours and then declined. After midnight of 6^d–7^d the disturbance partially subsided. The range in H on 7th, however, was greater than 200γ ; and again on 8th, though on the latter day an isolated movement at 19^h materially affected the magnitude. Much unsteadiness continued during succeeding days. Noteworthy movements took place at $10^d.17^h$ (100γ in H, —15′ in Dec.), $11^d.20^h$, $12^d.19^h$ (+115γ in H), $13^d.0^h$ to 4^h (temporary diminution of V, 50γ), $14^d.20^h$ (wave in H, +130γ, and Dec., —25′), $19^d.7^h$ to 10^h (decline in H 100γ), 21^d to 25^d (many rapid oscillations, superposed on larger irregularities), $30^d.22^h$ to $31^d.7^h$ (fluctuation in Dec. 15′, with corresponding changes in H).

The range in declination during the month was from 11°.59′·6 on 14th to 12°.38′·3 on 6th ; in horizontal intensity, from ·18412 on 7th to ·18666 on 12th ; in vertical intensity, from ·42867 to ·42992, both on 6th.

September.—Abnormally disturbed conditions still prevailed, but there were periods in the middle and towards the end of the month during which disturbance nearly ceased. The most active periods were $3^d.12^h$ to 24^h ; $18^d.9^h$ to 24^h (see Plate VII) ; $29^d.12^h$ to $30^d.9h$. On fourteen days the range in H exceeded 100γ. Among prominent movements the following may be noted : $1^d.13^h$ to 17^d (increase in V, 80γ) ; $3^d.13^h$ to 22^h (large fluctuations in H., 100γ, and in Dec., 20′, accompanied by a surge in V, +110γ) ; $5^d.18^h$ (range in H., 100γ) ; $6^d.9^h$ to 10^h (range in H., 90γ) ; $9^d.14^h$ to 17^h (diminution in Dec., 20′) ; $20^d.7^h$ to $9\frac{1}{2}^h$ (rapid decline in H., 100γ). The disturbance on 29^d—30^d was, if anything, rather more active than that of 18^d (reproduced in Plate VII). It developed gradually, the earliest movements, perhaps, being on 28^d soon after 18^h. A marked decline in H between $29^d.7^h$ and $29^d.9^h$ (110γ) was a more definite sign of the commencement of the disturbance. The chief characteristics were much fluctuation in Dec. followed, between $30^d.2^h$ and $30^d.9^h$, by a rise and fall of 35′ ; pronounced oscillation in H, concluding with a general decline of 160γ ; an irregular decline in V (140γ) between

$29^d.18^h$ and $30^d.5^h$, followed during the next four hours by a rapid recovery (100γ). The disturbance ceased abruptly at about $30^d.10^h$.

The range in declination during the month was from 12°.0′·8 on 3rd to 12°.48′·9 on 18th; in horizontal intensity, from ·18404 on 18th to ·18624 on 3rd; in vertical intensity, from ·42823 on 30th to ·43013 on 18th.

October.—Traces for the first ten days all showed disturbance in greater or less degree. A wave of —20′ in Dec. occurred between $2^d.21^h$ and $2^d.23^h$; one of —100γ in H between $3^d.10^h$ and $3^d.12^h$, all traces being specially active during the evening of 3rd. Three days of quiet conditions followed, terminated abruptly by a short period of considerable activity at $14^d.4^h.22^m$. The chief feature of this disturbance was the rapid decline in H (120γ) between $18\frac{1}{2}^h$ and $20\frac{1}{2}^h$ and a similar diminution in Dec. (25′) between $19\frac{3}{4}^h$ and 21^h. These had nearly recovered by midnight, shortly after which the disturbance died out altogether. The next disturbance developed gradually during the morning of 17th. It is reproduced in Plate VIII. Unsteadiness persisted until the morning of 21st, a large wave in H (—110γ) between $20^d.8^h$ and $20^d.11^h$ being the chief movement. After four days of nearly quiet conditions, a further period of disturbance began with a simultaneous movement in all traces at $25^d.16^h.10^m$, and was maintained through the remainder of the month. Many bays exceeding 15′ in Dec., and approaching 100γ in H occurred. The largest of the waves in H were the final movements at $30^d.18^h$ and $30^d.20^h$ (+140γ), while the periods of greatest general agitation were $26^d.12^h$ to $27^d.1^h$ and $27^d.14^h$ to 23^h. During the earlier of these there was a range of 120γ in V.

The range in declination during the month was from 11°.43′·6 on 17th to 12°.36′·5 on 26th; in horizontal intensity, from ·18391 on 17th to ·18641 on 30th; in vertical intensity, from ·42873 on 26th to ·43118 on 17th.

November.—Apart from isolated movements, one or two of which occurred nearly every day, the traces were steady until $13^d.19\frac{1}{2}^h$, when a movement of " sudden commencement " type took place. This was not, however, followed by really disturbed conditions until $14^d.17^h$, and then the activity was short-lived, though it comprised rapid changes of 25′ in Dec. and 150γ in H, and there was a surge of over 80γ in V. Quiet conditions supervened in general, from $15^d.12^h$, interrupted by occasional small waves. The period of quiescence ended about $23^d.18^h$ from which time oscillation developed in all traces until by $24^d.15^h$ disturbance was considerable. A range of 180γ in H was recorded between $24^d.18\frac{1}{2}^h$ and $22\frac{1}{2}^h$, and of 30′ in Dec. between $25^d.2^h$ and 5^h. That part of the disturbance subsequent to $25^d.3^h$ is reproduced in Plate IX. Activity decreased during 26th but persisted in some degree for the remainder of the month.

The range in declination during the month was from 12°.4′·4 on 25th to 12°.38′·9 on 14th; in horizontal intensity, from ·18436 on 25th to ·18625 on 24th; in vertical intensity, from ·42883 on 26th to ·43021 on 14th.

December.—The first disturbance of importance was preceded by an abrupt movement in all traces at $3^d.1^h.7^m$, not of great amplitude and not immediately followed by activity. The active part of this disturbance is reproduced in Plate X. Conditions became quiet soon after noon on 4th, and remained quiet, except for isolated waves, averaging one per diem, until $12^d.20^h$. Unsteadiness of rapid oscillatory character then appeared, lasting for about 48 hours. A somewhat similar period of unsteadiness extended from $19^d.12^h$ to $28^d\ 0^h$, in which there were, in addition, considerable movements at $20^d.16^h$ to 21^h (—30′ in Dec., 110γ in H, +50γ in V.'), and at $23^d.16^h$ (—15′ in Dec., —70γ in H). Excepting a short period of minor disturbance on the evening of 29th, the month ended with quiet conditions.

The range in declination during the month was from 11°.55′·1 on 20th to 12°.44′·5 on 3rd.; in horizontal intensity, from ·18383 to ·18610 both on 3rd; in vertical intensity, from ·42880 on 4th to ·43150 on 3rd.

EXPLANATION OF THE PLATES.

The magnetic changes figured on the Plates are those for days of disturbance selected by the International Committee :—February $12^d\ 21^h$ to $13^d\ 21^h$; March $12^d\ 0^h$ to 24^h; May $5^d\ 0^h$ to 24^h; May $31^d\ 0^h$ to 24^h; June $16^d\ 3^h$ to $17^d\ 3^h$; July $9^d\ 12^h$ to $10^d\ 12^h$; September $18^d\ 8^h$ to $19^d\ 8^h$; October $17^d\ 3^h$ to $18^d\ 3^h$; November $25^d\ 3^h$ to $26^d\ 3^h$; December $3^d\ 12^h$ to $4^d\ 12^h$.

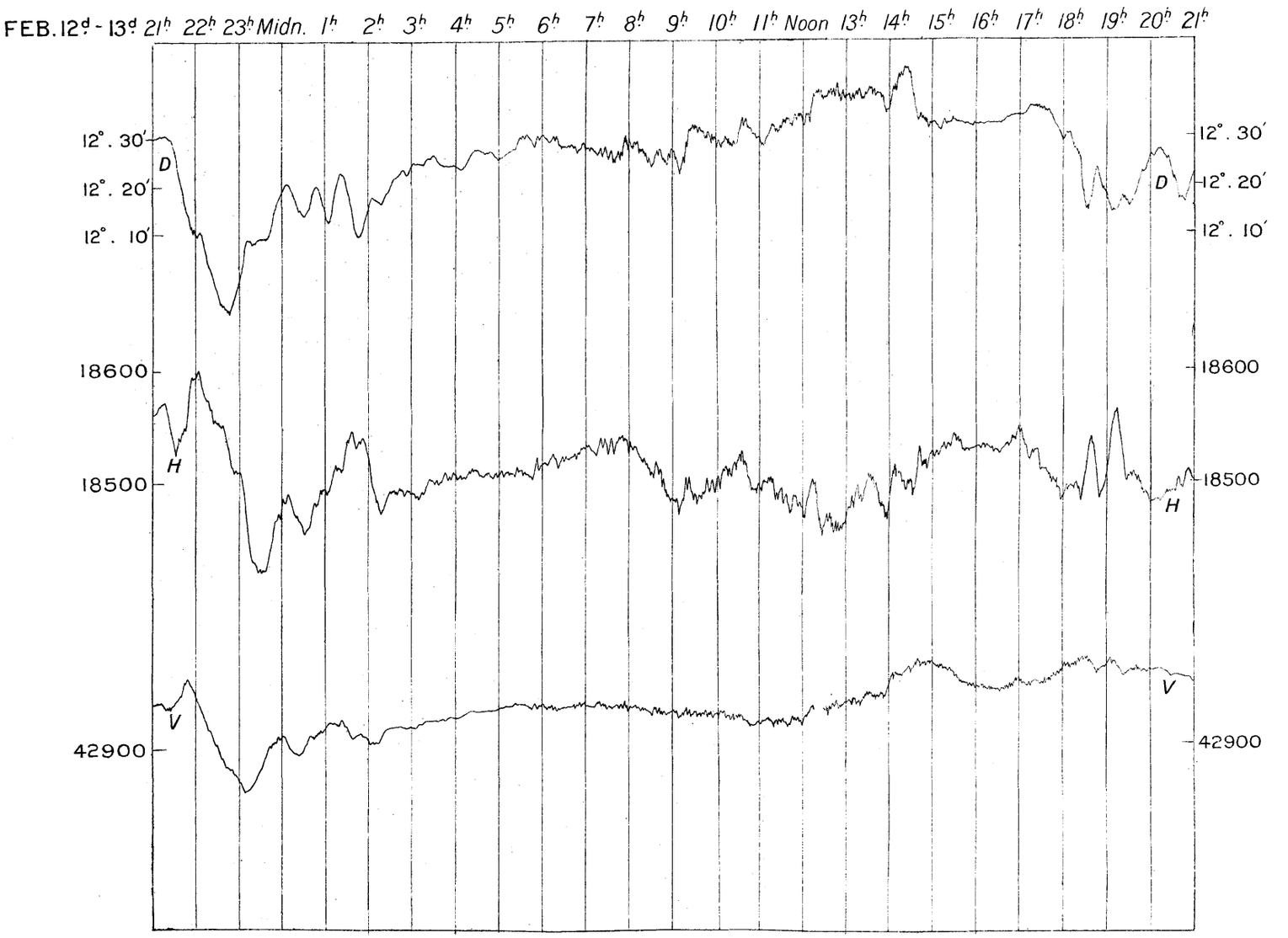
The time is Greenwich Mean Time.

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

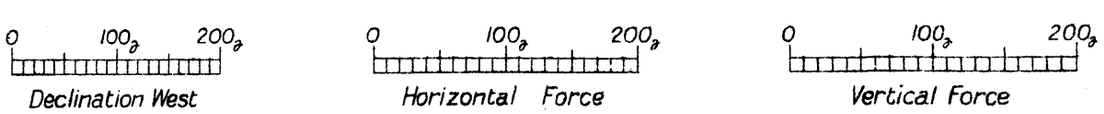
Scales for reading the traces in units of γ (·00001 C.G.S.) are given at the foot of each page, and a datum line is marked for each trace at the sides of the diagram. Declination may be read *in arc* by the scale at the side of the diagram.

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

MAGNETIC DISTURBANCES AS RECORDED AT THE ABINGER MAGNETIC STATION IN THE YEAR 1930.



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



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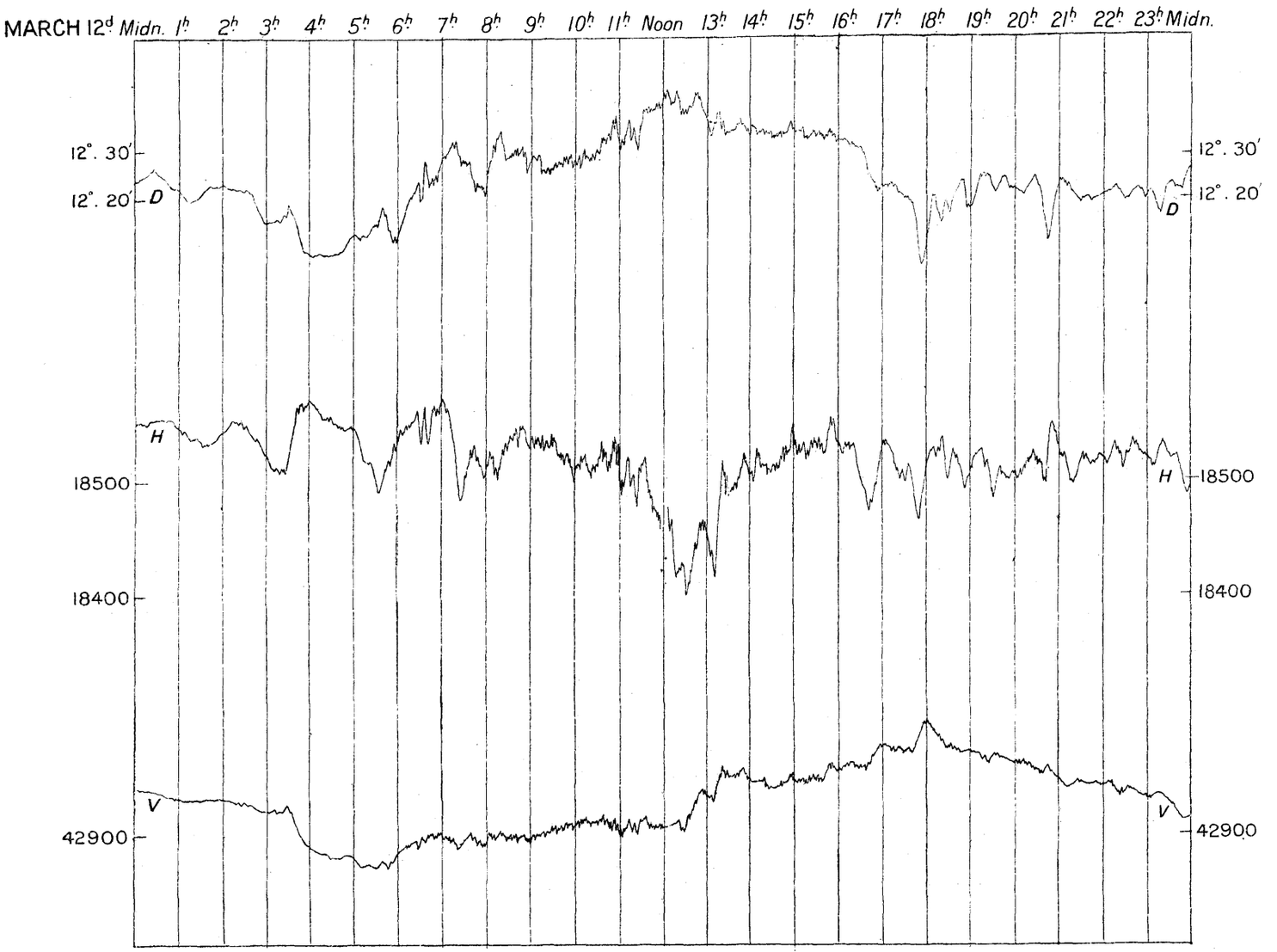
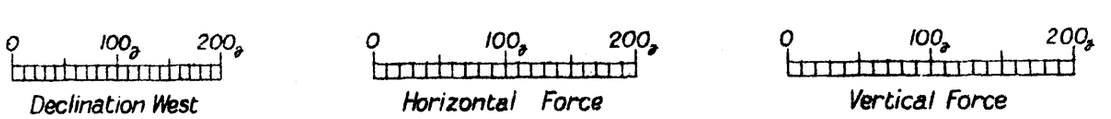
Malby & Sons, Lith.

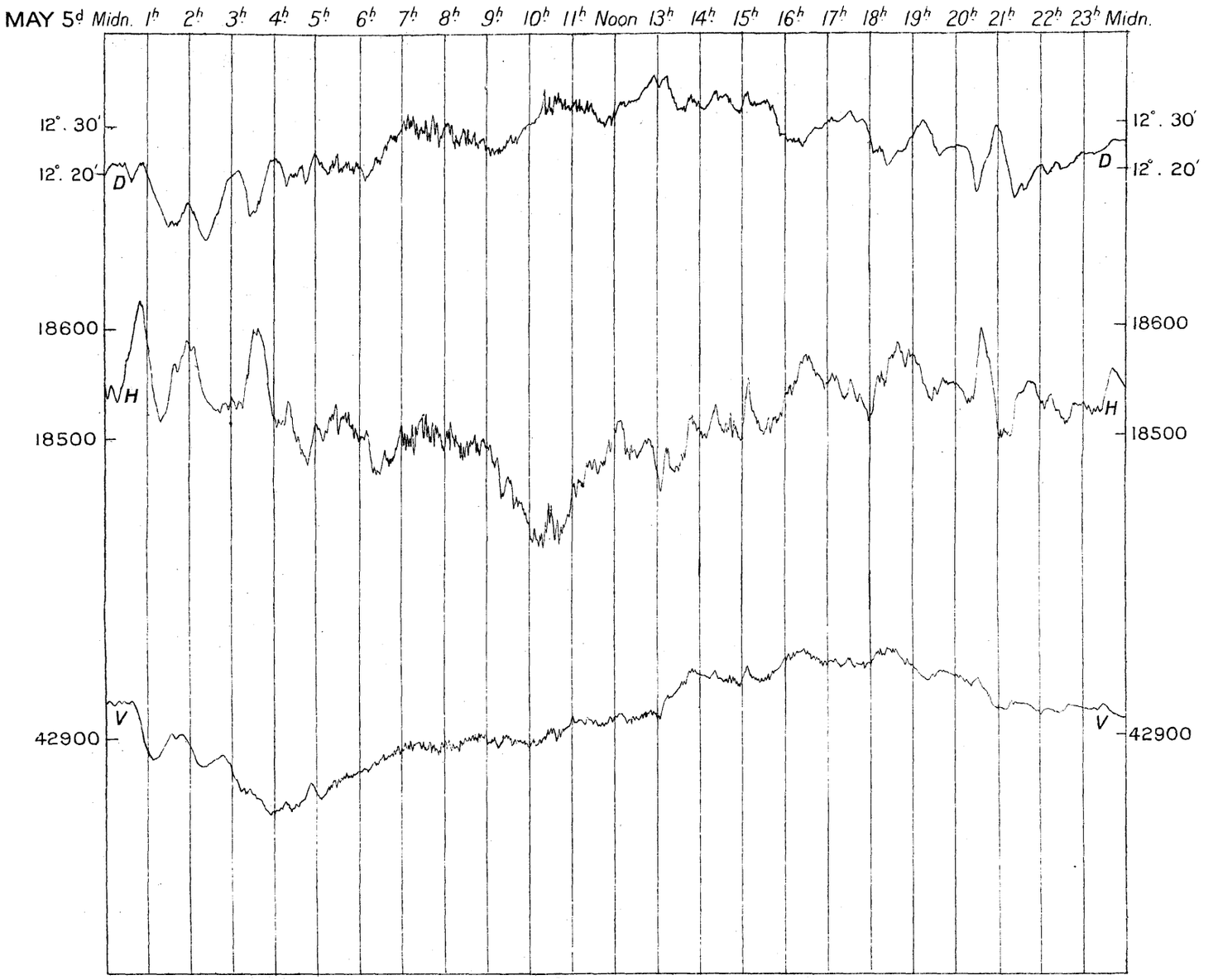
MAGNETIC DISTURBANCES AS RECORDED AT THE ABINGER MAGNETIC STATION IN THE YEAR 1930.



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



MAGNETIC DISTURBANCES AS RECORDED AT THE ABINGER MAGNETIC STATION IN THE YEAR 1930.



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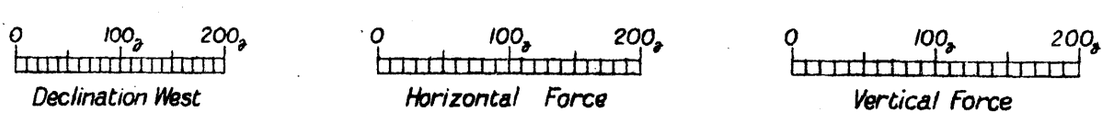
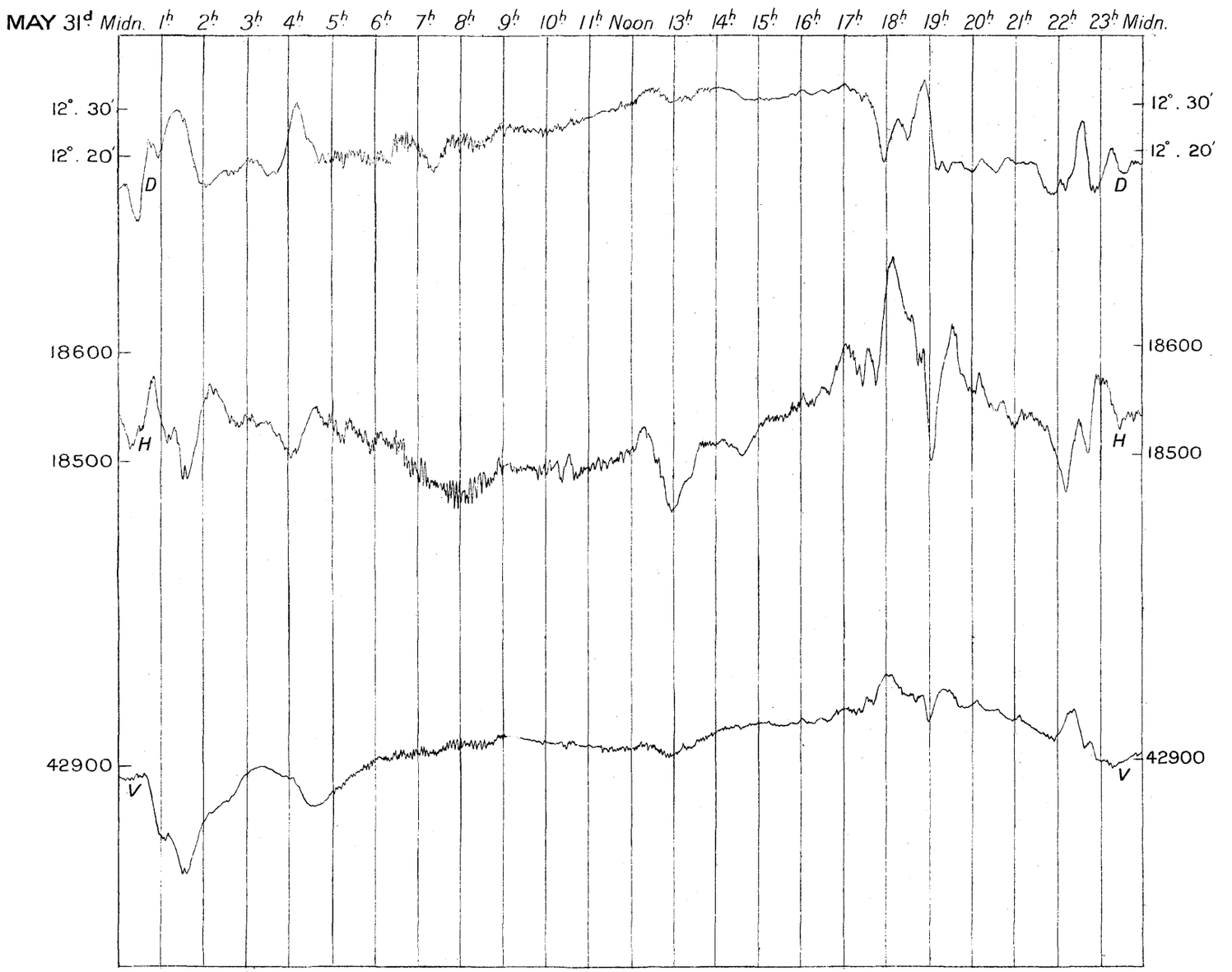


MAGNETIC DISTURBANCES AS RECORDED AT THE ABINGER MAGNETIC STATION IN THE YEAR 1930.



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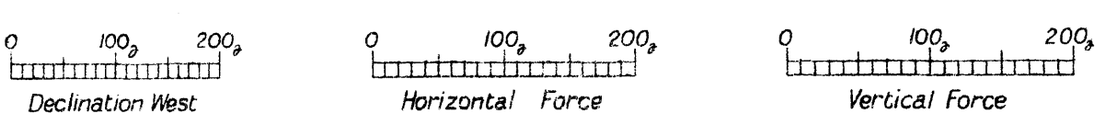
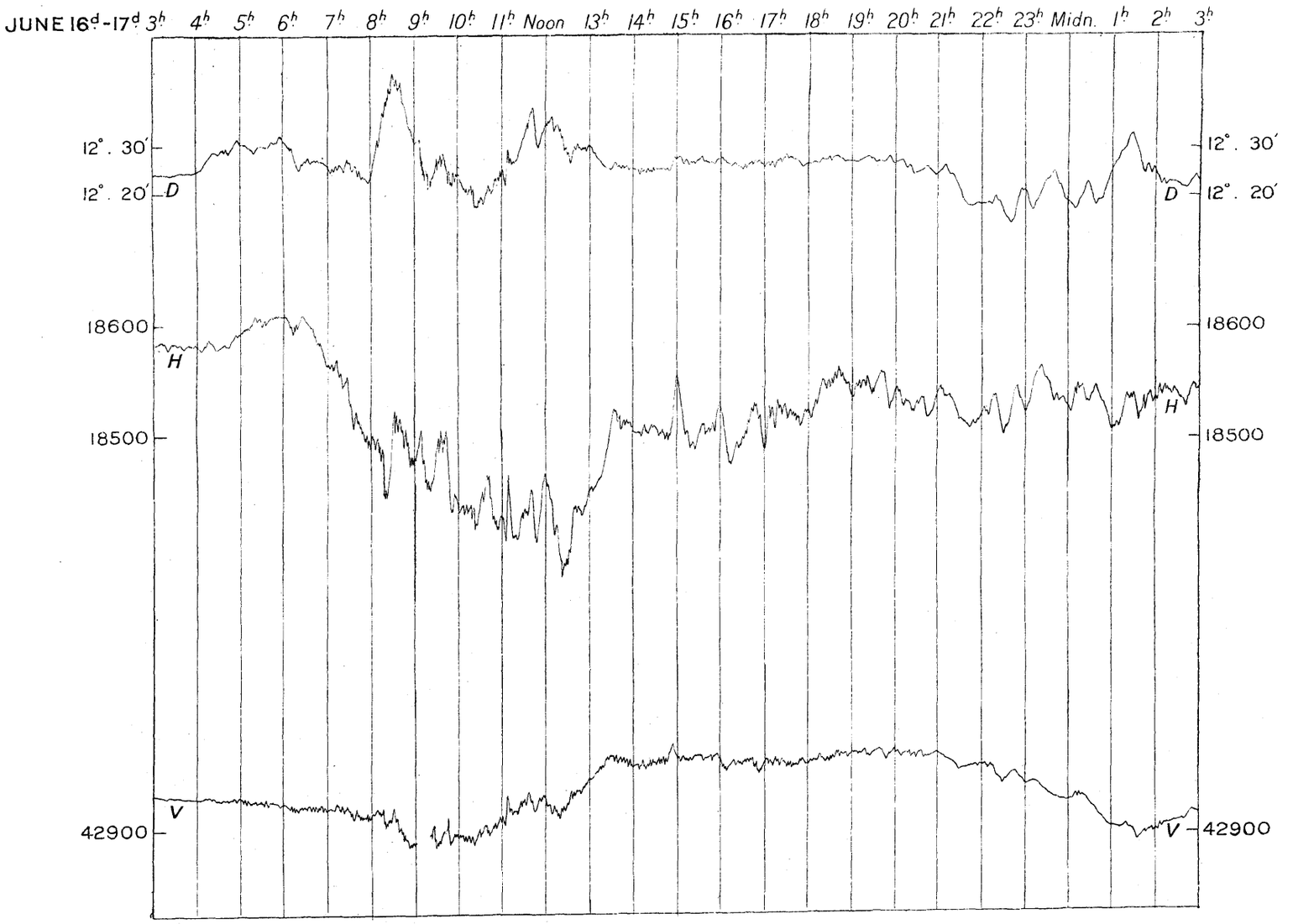


MAGNETIC DISTURBANCES AS RECORDED AT THE ABINGER MAGNETIC STATION IN THE YEAR 1930.



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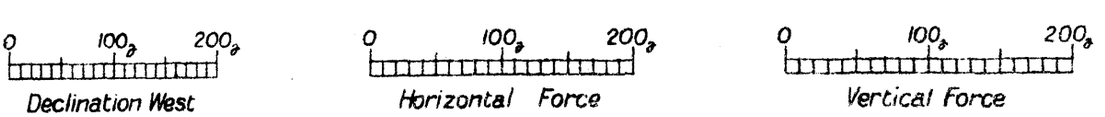

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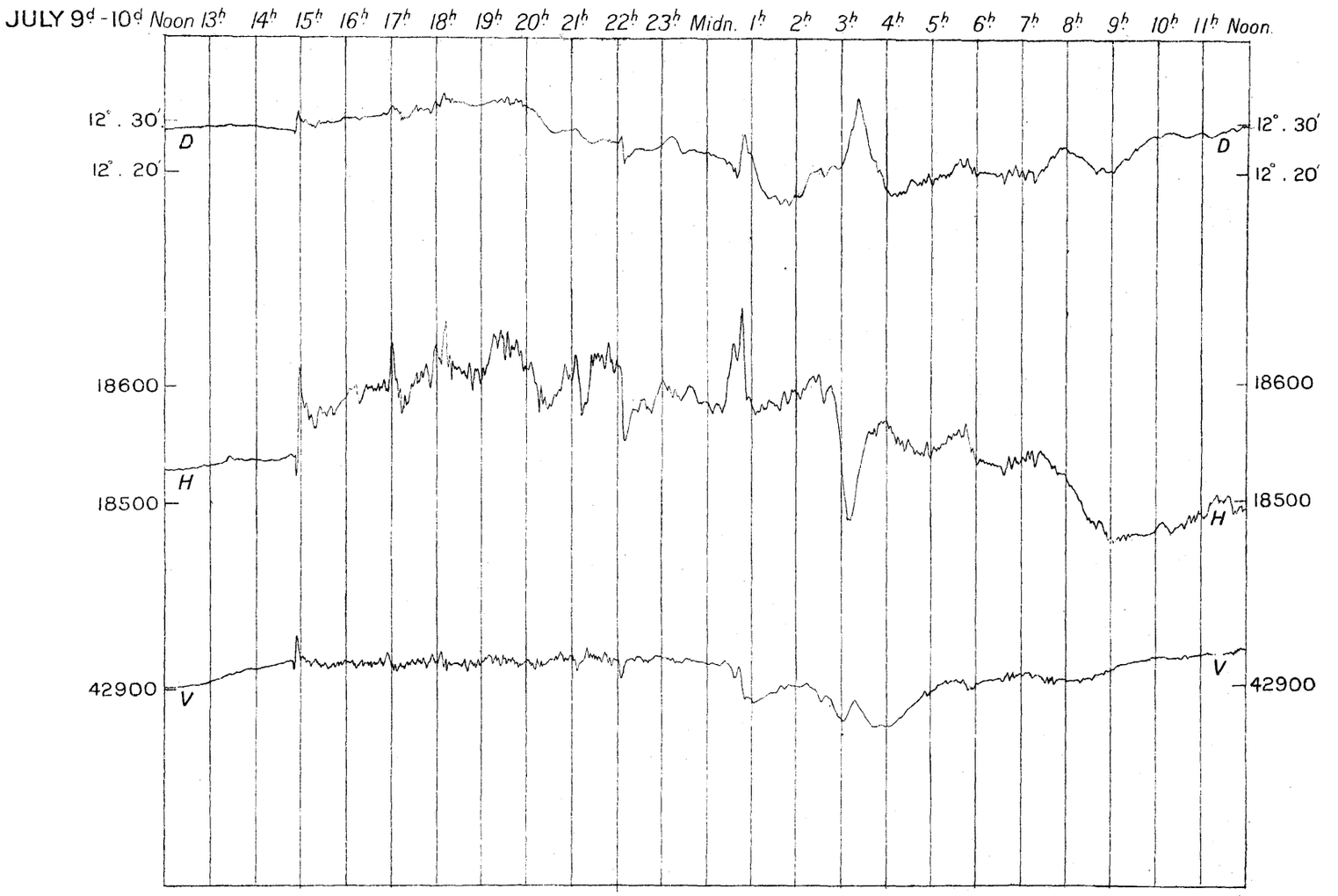
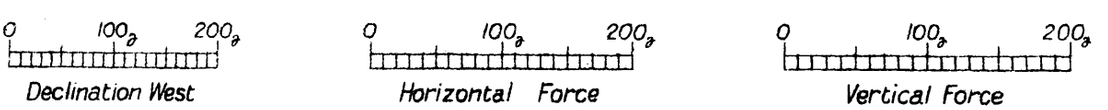
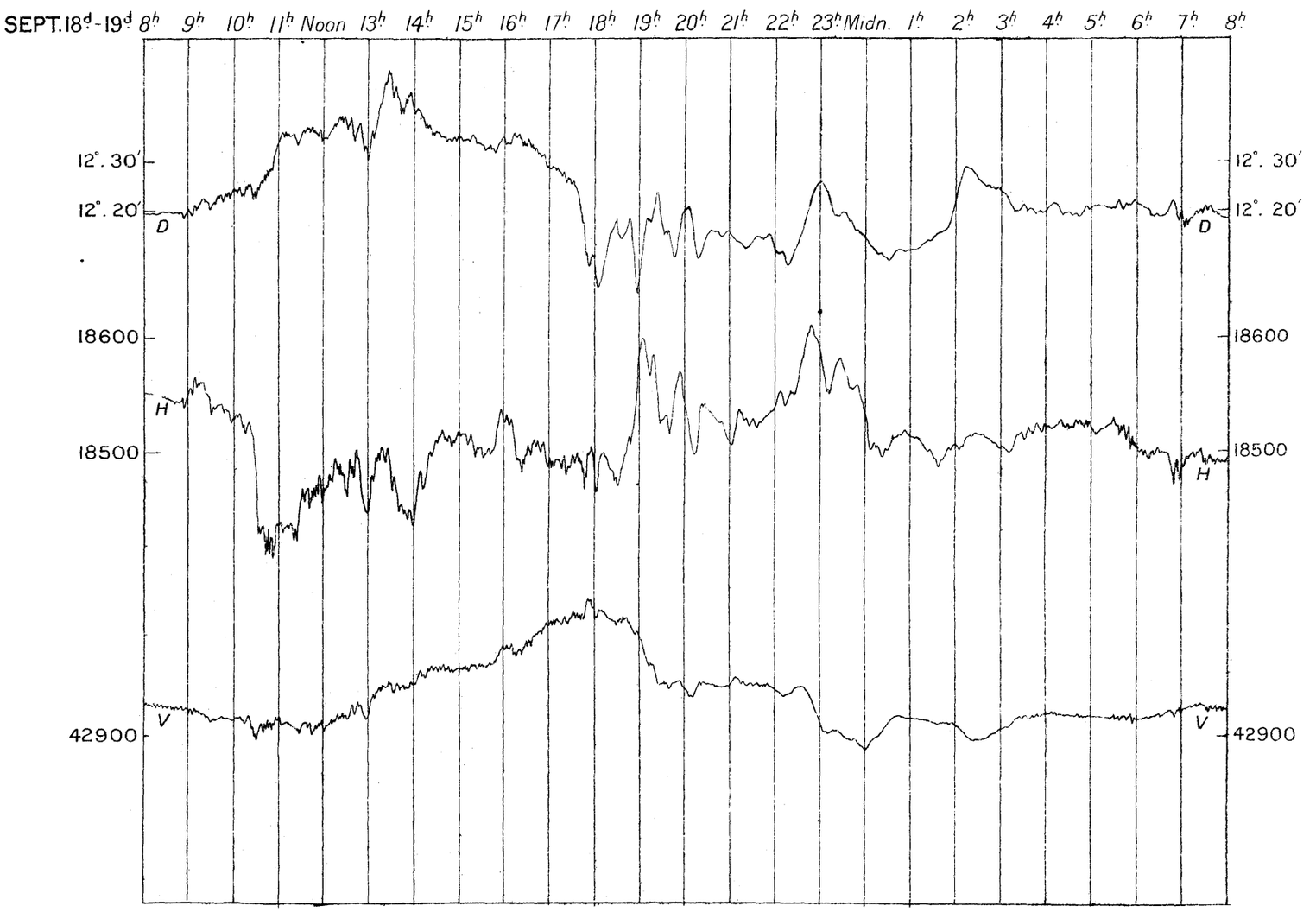


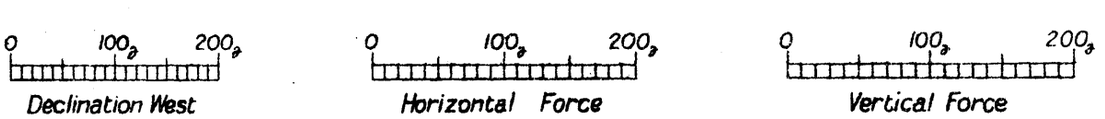
SCALES FOR MAGNETIC ELEMENTS IN C. G. S. UNITS.



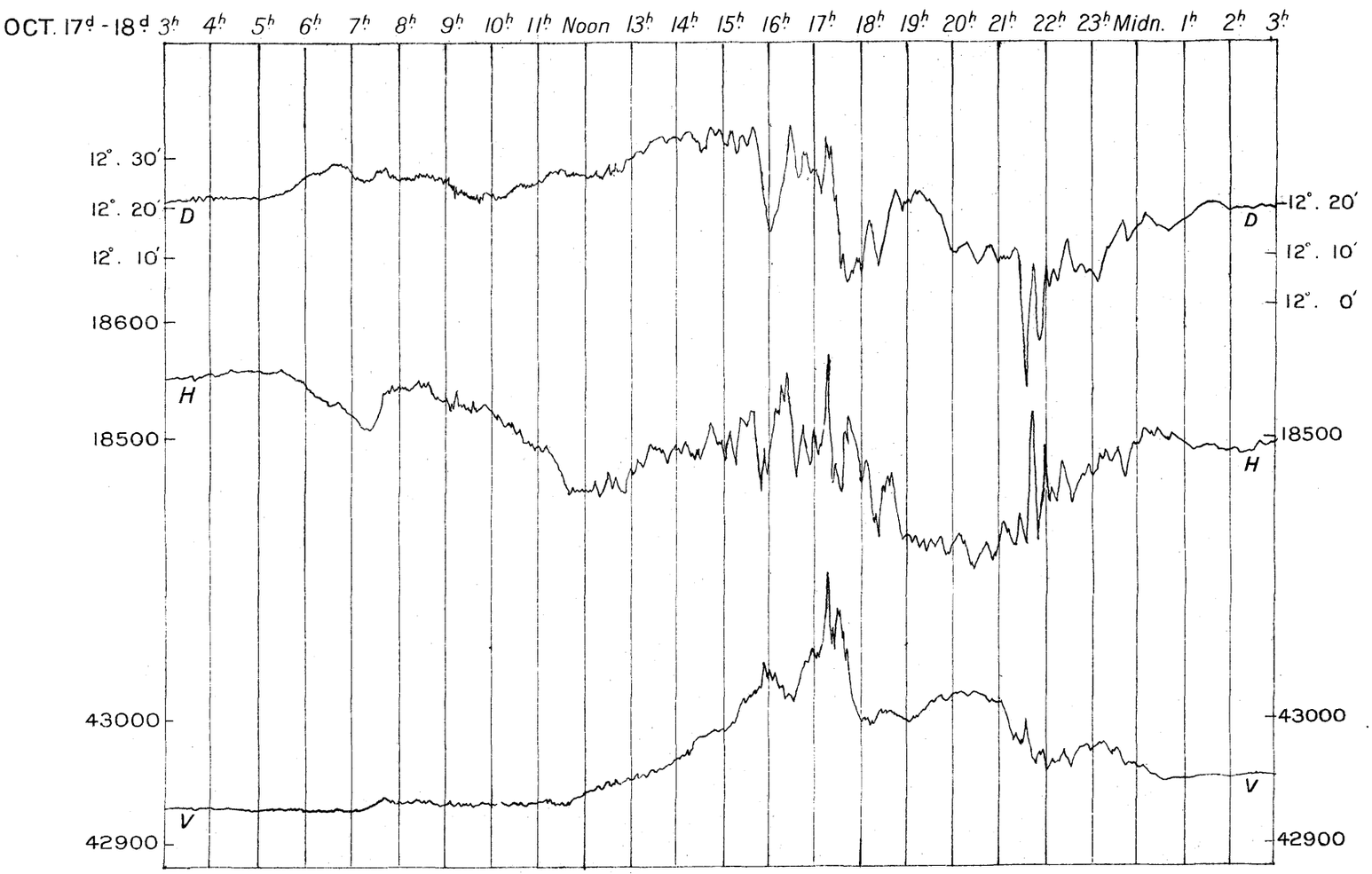
MAGNETIC DISTURBANCES AS RECORDED AT THE ABINGER MAGNETIC STATION IN THE YEAR 1930.



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



MAGNETIC DISTURBANCES AS RECORDED AT THE ABINGER MAGNETIC STATION IN THE YEAR 1930.



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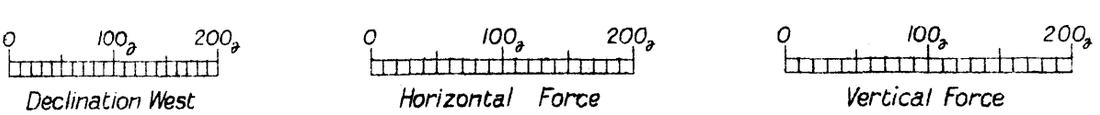
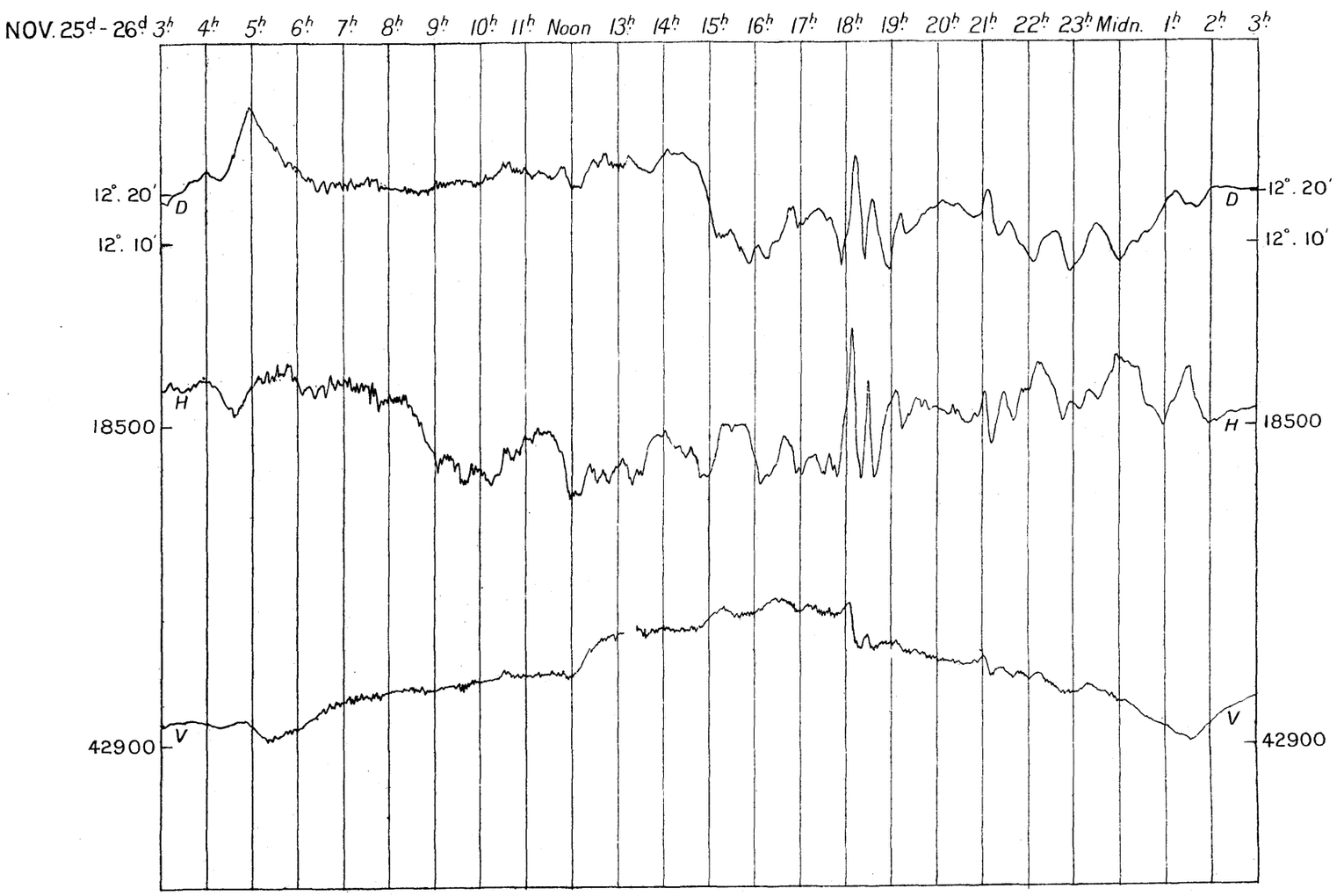


MAGNETIC DISTURBANCES AS RECORDED AT THE ABINGER MAGNETIC STATION IN THE YEAR 1930.



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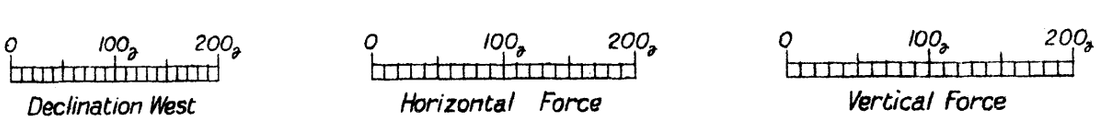

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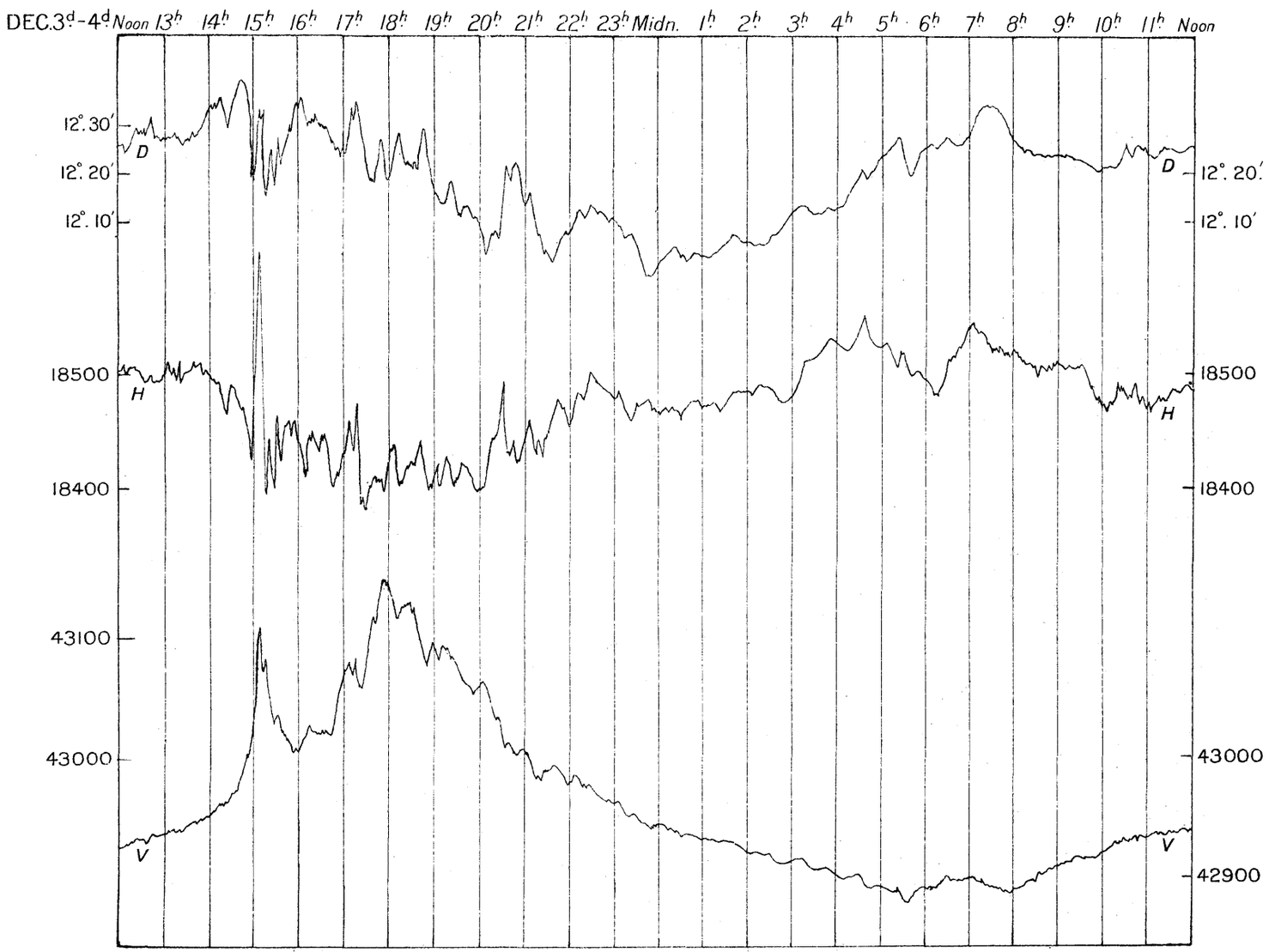
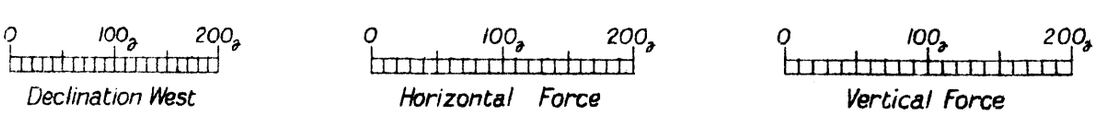
MAGNETIC DISTURBANCES AS RECORDED AT THE ABINGER MAGNETIC STATION IN THE YEAR 1930.



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



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GREENWICH METEOROLOGICAL OBSERVATIONS, 1930.

INTRODUCTION.

Meteorological Instruments.

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

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

Subjects of Observation in the year 1930.

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

Greenwich mean time, reckoning from midnight to midnight, and counting from 0 to 24 hours, has been employed throughout the meteorological section, except in regard to the sunshine registers (see p. E 8).

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. (See also p. E 10.)

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

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

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

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

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

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

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

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

The corrections to be applied to the thermometers in ordinary use are determined 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 every day. Readings of the maximum and minimum thermometers are taken at 9^h, 15^h, and 21^h every day. Those of the dry- and wet-bulb thermometers are employed to correct the indications of the photographic dry- and wet-bulb thermometers.

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

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

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

OSLER'S ANEMOMETER.—This self-registering anemometer, devised by Mr. A. F.

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

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

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

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

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

The values of wind velocity V given in the tables are three times the actual velocity v of the cups. From tests made by Mr. W. H. Dines at 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 $V=3\,v$ is retained in use. In this volume, however, the greatest hourly measures (p. E 46) are given according to both formulæ, and the least hourly measures are omitted.

RAIN GAUGES.—During the year 1930 three rain gauges were employed, placed at different elevations above the ground.

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

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

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

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

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

ELECTROMETER.—The electric potential of the atmosphere is measured by means of a Thomson self-recording quadrant-electrometer. The site, in the Magnetic Enclosure, is freely exposed on all sides except the north up to a fence of shrubs about 10 feet high running from east to west, distant 75 feet. The apparatus is erected in a small hut constructed specially for the purpose and has the usual arrangements for photographic registration.

Instrumental details.—The needle of the electrometer is supported on a light metal shaft which carries the mirror and is itself suspended by means of a T-piece upon two small V-hooks, part of a brass fitting which hangs in bifilar suspension on threads of tungsten wire 0·02 mm. diameter and 1 mm. separation. These threads are attached to an insulated torsion head. The potential of a helical radio-active collector is communicated to the torsion head by a wire leading from the metal rod which holds out the collector. This rod passes, without touching, horizontally through a hole in the wall of the hut, being insulated by the sulphur supports upon which it is fixed at its inner end. The height of the collector above a cement floor is 2·05 metres. Its distance from the exterior of the hut is 1·1 metres.

Equal and opposite potential is maintained on the two pairs of quadrants by means of a battery of dry cells of the type used in broadcast receiving apparatus, the middle point in the series of cells being connected to earth. The potential difference applied during 1930 was approximately 100 volts. This relatively large potential difference was necessary on account of the weighting of the needle shaft. It was found that electrostatic attraction between the charged needle and the uncharged quadrants caused a variable deflection of the needle due to its bifilar suspension, but that this attraction could be reduced to a negligible amount by attaching weights to the shaft (about 55 gms.), while at the same time great constancy of the zero position was attained. Oscillation of the needle is damped by a glass vane which dips about 3 mm. into glycerine contained in a glass jar. Sulphuric acid is the desiccating agent employed.

The time scale of the photographic record is 14 mm. to the hour, the hourly break in the trace being made by the driving clock itself. The value of the ordinates is determined in two stages. (*a*) The value expressed as absolute potential of the needle is found by charging the needle to known potentials indicated by electrostatic voltmeter. (The scale is not quite linear, but can be represented accurately by an expression of the third degree). (*b*) The potential gradient in the open air is obtained by using the same voltmeter to measure potential at heights of one and two metres (approximately) above the ground. These measurements are made over short level grass at

a point distant about 40 feet from any building or tree. The collector (which is a second radio-active spiral or occasionally a smoke-fuse) is supported upon the middle point of a cord 30 feet long stretched horizontally between insulated hooks attached to the tops of two metal rods adjustable to the required height.

The voltmeter is connected to the collector by a long fine wire so that the observer may be stationed at a considerable distance.

Comparison of observed potential gradient with potential simultaneously recorded by the electrometer enables a " reduction factor " to be determined by simple proportion. The values obtained are substantially constant. It has been assumed that the ranges are observational and a mean value has been adopted for the year, namely, 0·846. Using this factor the mean scale value of the photographic trace becomes approximately 1 mm. for a gradient of 18 volts per metre. Sensitivity gradually diminished towards the end of the year owing to deterioration of the dry cells.

SUNSHINE RECORDER.—The hourly results relate to *apparent* time. The instrument in use is of the Campbell-Stokes pattern, with 4-inch glass globe. It was examined at the Meteorological Office on September 13, 1926, and was found to be in satisfactory condition. It now bears the serial number M.O. 113. The recorded durations are those of *bright* sunshine, no register being obtained when the sun shines faintly through fog or cloud, or is very near the horizon. Conformity with Meteorological Office standards of measurement is maintained as far as possible, and with this in view independent measures of selected sunshine cards taken three from each of the months of January, July and September, 1930, have been made at the Meteorological Office. These show an excess of about 2 per cent. on the part of Greenwich estimations.

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

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

The lens is of 18·8 inches focal length and 0·8 inch aperture. The actual camera is enclosed in a larger box about twice its length, extending nine inches beyond the lens. The lens itself is further surrounded by a hood. Adequate protection from dew is thus obtained, and also from rain, except when driven hard from the north.

The photographic plates used are ordinary quarter-plate ($3\frac{1}{4}$ inches by $4\frac{1}{4}$). Exposure is intended to be made during the period that the sun remains more than 10° below the horizon. The period thus centres approximately to apparent midnight, but in practice the mean times of commencing and ending the exposure are not varied at intervals of less than seven days.

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

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

Meteorological Reductions.

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

All results in regard to atmospheric pressure, temperature of the air and of evaporation, with deductions therefrom, are derived from the photographic records, excepting that the maximum and minimum values of air temperature are those given by eye-observation of the ordinary maximum and minumum thermometers at 9^h, 15^h, and 21^h, reference being made, however, to the photographic register when necessary to obtain the values corresponding to the civil day from midnight to

midnight. The hourly readings for the elements mentioned are measured direct from the photographic curves, and reduced so as to be based fundamentally, both as regards scale and zero, on the readings of the standard barometer and dry- and wet-bulb thermometers.

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

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

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

The excess of the mean temperature of the air on each day above the average of sixty-five years, given in the "Daiiy 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 Mean Time. The continuous record of Osler's self-registering gauge shows whether the amounts measured at 9^h are to be placed to the same, or to the preceding civil day; and in cases in which rain fell both before and after midnight, also gives the means of ascertaining the proper proportion of the 9^h amount which should be placed to each civil day. The number of days of

rain given in the footnotes, and in the abstract tables, pages E 39 and E 46, is formed from the records of this gauge. In this numeration only those days are counted on which the fall amounted to or exceeded $0^{in.}\cdot005$.

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

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

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

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

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

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.

F. W. DYSON.

ROYAL OBSERVATORY, GREENWICH.
1931, *June* 20.

ROYAL OBSERVATORY, GREENWICH.

Results of Meteorological Observations

1930

GREENWICH MAGNETIC AND METEOROLOGICAL RESULTS 1930.

MONTH and DAY, 1930.	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.	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
Jan. 1	29·817	51·0	32·0	19·0	42·1	+ 3·5	40·7	38·7	3·4	4·5	1·3	88	47·5	22·0	45·1	0·071	0·0	7·9
2	29·704	53·3	44·2	9·1	47·3	+ 8·9	43·5	38·5	8·8	14·7	2·6	71	62·3	34·7	45·1	0·000	1·5	7·9
3	29·661	52·1	47·5	4·6	50·4	+12·1	48·3	45·9	4·5	6·8	2·5	85	59·6	40·5	45·1	0·003	0·0	7·9
4	29·429	51·2	45·1	6·1	48·1	+ 9·8	45·7	43·1	5·0	8·5	2·0	82	70·9	37·1	45·1	0·244	3·2	7·9
5	29·174	48·6	39·9	8·7	44·9	+ 6·7	42·9	40·2	4·7	7·8	1·5	84	62·4	31·0	45·5	0·142	0·9	8·0
6	29·769	44·6	35·7	8·9	40·1	+ 2·0	38·4	35·9	4·2	7·6	1·6	85	57·4	23·7	45·3	0·002*	5·7	8·0
7	29·916	48·7	41·7	7·0	46·3	+ 8·3	44·4	42·0	4·3	6·2	3·1	85	55·0	32·2	45·5	0·000	0·0	8·0
8	29·648	45·2	35·7	9·5	42·3	+ 4·4	41·2	39·7	2·6	7·1	0·8	91	52·0	24·5	45·4	0·104	0·0	8·0
9	29·589	47·3	31·6	15·7	41·4	+ 3·5	39·9	37·7	3·7	7·2	0·3	87	69·0	20·0	45·3	0·058	3·1	8·1
10	29·425	46·7	38·9	7·8	43·0	+ 5·1	41·1	38·3	4·7	11·1	1·6	84	72·0	29·6	45·2	0·138	4·8	8·1
11	28·996	47·2	33·2	14·0	40·0	+ 2·1	38·2	35·5	4·5	13·0	0·9	84	71·9	26·5	45·1	0·532	1·9	8·1
12	29·077	51·9	33·0	18·9	40·1	+ 2·2	37·6	33·7	6·4	14·6	0·9	78	48·1	25·5	45·1	0·121	0·0	8·2
13	29·561	52·2	40·0	12·2	46·4	+ 8·4	43·4	39·5	6·9	10·8	1·8	77	60·1	32·0	45·0	0·025	1·6	8·2
14	29·580	55·4	50·8	4·6	52·2	+14·2	50·0	47·7	4·5	6·8	3·2	85	72·0	42·7	45·0	0·001	3·0	8·2
15	29·635	53·5	40·6	12·9	46·3	+ 8·2	44·8	43·1	3·2	5·5	0·8	88	58·4	30·0	45·0	0·150	0·2	8·3
16	30·059	45·2	38·9	6·3	41·9	+ 3·6	41·6	41·3	0·6	3·1	0·0	97	55·1	30·9	45·0	0·000	0·0	8·3
17	30·102	49·0	40·1	8·9	44·2	+ 5·7	41·9	38·7	5·5	10·9	2·3	81	58·2	28·1	45·0	0·000	0·0	8·4
18	30·059	53·5	40·9	12·6	47·8	+ 9·2	46·0	43·9	3·9	5·3	1·9	86	63·0	29·9	45·0	0·000	0·0	8·4
19	29·827	58·6	46·5	12·1	51·5	+12·8	46·7	41·1	10·4	17·1	3·1	67	80·5	35·0	45·0	0·000	6·2	8·4
20	29·858	48·0	34·3	13·7	44·9	+ 6·1	42·1	38·1	6·8	12·3	0·8	77	54·3	21·7	45·1	0·000	0·0	8·5
21	29·949	46·0	28·4	17·6	37·6	— 1·2	36·6	34·9	2·7	5·5	0·0	91	63·9	17·9	45·0	0·002	3·7	8·5
22	29·829	49·5	37·0	12·5	44·1	+ 5·3	43·0	41·7	2·4	4·4	0·8	91	65·6	27·4	45·0	0·000	0·1	8·6
23	29·732	49·2	46·2	3·0	47·9	+ 9·0	46·8	45·5	2·4	4·1	1·1	91	54·8	41·4	45·0	0·072	0·0	8·6
24	29·439	49·9	45·5	4·4	47·7	+ 8·8	45·9	43·9	3·8	5·5	2·5	86	63·2	37·9	45·0	0·039	1·3	8·7
25	29·359	47·1	33·1	14·0	41·5	+ 2·4	40·6	39·4	2·1	4·3	1·1	92	52·7	23·2	45·0	0·285	0·0	8·7
26	29·340	44·1	31·0	13·1	39·0	— 0·3	38·3	37·1	1·9	4·7	0·0	93	54·4	20·0	45·0	0·141	0·0	8·8
27	29·390	50·6	42·0	8·6	44·7	+ 5·2	43·8	42·9	1·8	4·6	1·2	93	63·6	38·0	45·0	0·000	0·0	8·8
28	29·627	42·6	39·6	3·0	41·1	+ 1·5	39·4	36·9	4·2	6·1	2·4	85	46·5	37·1	45·0	0·002	0·0	8·9
29	29·524	48·1	35·3	12·8	42·1	+ 2·4	41·0	39·5	2·6	4·6	0·0	91	68·3	27·0	45·0	0·008	0·0	8·9
30	29·362	45·6	30·8	14·8	38·3	— 1·4	37·1	35·2	3·1	7·1	0·0	89	70·8	23·0	45·0	0·150	3·1	9·0
31	29·031	41·6	32·5	9·1	38·3	— 1·4	37·0	35·0	3·3	6·9	0·3	88	51·2	22·4	45·0	0·174	1·0	9·0
Means	29·596	49·0	38·5	10·5	44·0	+ 5·4	42·2	39·8	4·2	7·7	1·4	85·5	60·8	29·4	45·1	Sum 2·464	1·3	8·4
Number of Column for Reference.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	18	19

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

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

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

*Rainfall (Column 16). The amount entered on January 6 is derived from frost.

The mean reading of the *Barometer* for the month was 29·596in., being 0·205in. lower than the average for the 65 years, 1841–1905.

TEMPERATURE OF THE AIR.

The highest in the month was 58°·6 on January 19; the lowest in the month was 28°·4 on January 21; and the range was 30°·2.
The mean of all the highest daily readings in the month was 49°·0, being 5°·9 higher than the average for the 65 years, 1841–1905.
The mean of all the lowest daily readings in the month was 38°·5, being 4°·8 higher than the average for the 65 years, 1841–1905.
The mean of the daily ranges was 10°·5, being 1°·1 greater than the average for the 65 years, 1841–1905.
The mean for the month was 44°·0, being 5°·4 higher than the average for the 65 years, 1841–1905.

MONTH and DAY, 1930.	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.	General Direction. P.M.	Pressure on the Square Foot. Greatest.	Pressure on the Square Foot. Mean of 24 Hourly Measures.	Robinson's Horizontal Movement of the Air.	Clouds and Weather. A.M.	Clouds and Weather. P.M.
	hours		hours.				lbs.	lbs.	miles.		
Jan. 1	3·6	0·25	2·9	0·21	WSW : SW	SW : WSW	6·0	0·80	460	0, ho.-fr : 7 : 10,s,n,roc.-m.-r,w	10,n,oc.-m-r,w : 10, slt.-sh, w : 10,n,oc.-m.-r,st.w
2	0·9	0·06	0·5	0·03	WSW : W	W : WSW	12·2	1·47	607	10, st.-w : 1, st.-w : 1, ci, w	7, th.-cl,alt.-cu,w : 10 : 10
3	8·0	0·57	4·0	0·28	WSW	SW : WSW	10·0	1·65	557	10, w : 10, w : 10,fr.-s,n,oc.-m.-r,w	10,n,oc.-m.-r,w : 10, w : 7
4	0·0	0·00	0·0	0·00	SW	SW : SSW	8·0	1·07	484	10, m.-r : 9 : 5, ci, fr.-s	6,fr.-s,n,alt.-cu,m.-r : 10,n,sq.-r,w : 10, n, m.-r, w
5	12·1	0·88	8·1	0·59	SSW : SW	SW	10·0	0·86	399	10, m.-r, w : 10, r, w : v.-cl,m.-r,so.-ha,prh	9, alt.-cu, ci.-s : 2 : th.-cl
6	9·1	0·66	7·7	0·56	SW : WSW	WSW : SW	1·0	0·07	255	1, ho.-fr : 0,ho.-fr,m : 0, m	0 : 1, m : 1,ci,ho.-fr
7	1·3	0·09	0·7	0·05	SW	SW	4·9	0·62	432	4 : 10 : 10, s, s.-cu	10, s.-cu : 10, w
8	12·4	0·90	9·5	0·69	SW	WSW	4·9	0·38	277	10, w : 10, m.-r, w : 10,n,alt.-s,m.-r,m	10, m : 8, slt.-f : 0, slt.-f, ho.-fr
9	2·8	0·20	2·3	0·17	WSW : SW	SSW	6·9	0·96	478	0, ho.-fr, slt.-f : p.-cl, s.-cu, alt.-cu, ci, w	9, ci, alt.-s, w : 10, w : 10, r, w
10	2·4	0·18	2·1	0·15	SW : WSW	SW : SSW	14·0	0·80	413	10, r, m.-r : p.-cl : 0	th.-cl, ci, s, alt.-s : 10,th.-cl,oc.-lu.-ha,w,st.-w,g
11	11·6	0·88	10·3	0·78	SSW : SW	SW : WSW	16·7	1·42	496	10, slt.-r, sq.-r, st.-w, g : 8, ci.-s, alt.-s, so.-ha	9, r : 10, n, sn, sl : 1, lu.-ha
12	9·5	0·71	7·8	0·59	WSW : SW : SSW	S : SW : WSW	38·0	2·83	671	0 : 10, ci.-s, alt.-s, so.-ha	10, n, sq.-m.-r, st.-w : 9, st.-g
13	3·2	0·24	1·9	0·14	WSW : SW	SSW : SW	12·6	1·85	569	1, g, w : 0, w : 5, alt.-s, ci	10,n,s.-cu,slt.-sh : 10, oc.-m.-r : 10, shs, lu.-ha
14	2·1	0·16	1·6	0·12	SW	SW : SSW	6·3	0·91	454	10 : 10 : 5, alt.-cu, fr.-s	8,alt.-cu,ci,n,slt.-sh : 9 : 9, slt.-sh
15	0·0	0·00	0·0	0·00	SW: WNW : WSW	W : Calm	2·8	0·26	229	10, sh, c.-r : 9, ci.-s, alt.-s, n, slt.-sh	8,ci,cu.-n,fr.-s : 9, d, slt.-f : 9, slt.-f
16	9·0	0·67	5·9	0·44	Calm : ESE	SE : SSE	1·1	0·05	160	10, f, tk.-f : 10, s, f, slt.-f, m	10, s, m, f : 5 : 8, hy.-d
17	11·5	0·87	9·3	0·70	SSE	S	1·4	0·17	248	9, d : 3 : 9 alt.-s, alt.-cu	9,s.-cu,alt.-cu,alt.-s : 3 : 6,th.-cl,d,ho.-fr
18	11·5	0·89	9·9	0·76	SSW : SW	SW : SSW	1·7	0·11	260	9 : 9, s.-cu, fr.-s	9, s.-cu : 9, th.-cl : 5,th-cl, lu.-ha
19	7·9	0·61	6·9	0·53	SSW : SW	SW : SSW	3·5	0·69	420	7, th.-cl : 7, th.-cl : th.-cl, ci	2, th.-cl : 2, th.-cl : 2
20	13·0	1·00	13·0	1·00	SW : W	W : WSW : Calm	1·0	0·07	205	9 : 10 : 10, s, m	10, s.-cu, alt.-s : 0, slt.-f, ho.-fr
21	3·6	0·28	2·7	0·21	Calm	Calm	0·1	0·00	100	0, ho.-fr : 0, ho.-fr : 1, tk.-f, f	6,alt.-cu,s.-cu,slt.-m : 10, slt.-sh : 10
22	0·0	0·00	0·0	0·00	S	SSW	1·2	0·08	223	8, ho.-fr : v.-cl : 9, s.-cu, s	9,th.-cl,so.-ha : 9 : 10, slt.-d
23	0·0	0·00	0·0	0·00	SSW : SW	SW : SSW	3·0	0·38	352	10, slt.-r : 10, slt.-sh : 10,s,n,oc.-slt.-r	10, n, oc.-slt.-r : 10, fq.-m.-r
24	1·9	0·15	0·7	0·05	SSW	SSW : W	2·3	0·37	348	10 : 10, r, slt.-r : 9, s.-cu	6,th.-cl,ci,alt.-cu : 9 : 10, r
25	11·8	0·91	11·0	0·84	SW : Calm	SW : SSW	1·1	0·03	172	10, c.-r : 10, c.-r : 10, s, m	8 : 0, m, ho.- fr
26	0·4	0·03	0·0	0·00	Calm : ENE : E	E : ESE	6·2	1·00	393	2, ho.-fr, m : 10 : 10, n, fr.-s, m	10, n, s, slt.-r, w : 10, w, r, sh
27	0·0	0·00	0·0	0·00	E : Calm	Calm : NNE	1·5	0·10	206	10 : 10, s.-cu, alt.-s, f	9, alt.-s, f : 10, slt.-f : 10
28	0·0	0·00	0·0	0·00	NNE : NE	Calm	1·1	0·08	164	10 : 10, s, fr.-s	10, s, fr.-s, m : 10, m : 10,m.-r,slt.-f
29	8·1	0·62	5·6	0·43	Calm : SSW	S : SSW	0·3	0·02	151	10, sh : 10, oc.-m.-r	9, alt.-s, n : v.-cl, m, f, ho.-fr
30	10·5	0·81	9·5	0·73	Calm : SW	WSW : SW : SSE	0·3	0·00	132	tk.-f,ho.-fr : 10, tk.-f, r : 8, tk.-f, f	4, ci, fr.-cu : 1 : v.-cl,slt.-m.-r,ho.-fr
31	4·9	0·38	3·5	0·27	S : SSE	SSE	6·2	0·57	344	0, ho.-fr : v.-cl, oc.-shs : 9	10, fr.-s : 10, n, r, w
Means	5·6	0·42	4·4	0·33	..	..	..	0·63	344		
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 42°·2, being 5°·0 higher than
The mean *Temperature of the Dew Point* for the month was 39°·8, being 4°·7 higher than
The mean *Degree of Humidity* for the month was 85·5, being 1·3 less than
The mean *Elastic Force of Vapour* for the month was 0·246in., being 0·041in. 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 7·7.

The mean proportion of *Sunshine* for the month (constant sunshine being represented by 1) was 0·159. The maximum daily amount of *Sunshine* was 6·2 hours on January 19.

The highest reading of the *Solar Radiation Thermometer* was 80°·5 on January 19; and the lowest reading of the *Terrestrial Radiation Thermometer* was 17°·9 on January 21.

The *Proportions of Wind* referred to the cardinal points were N. 1, E. 2, S. 13, W. 11. Four days were calm.

The *Greatest Pressure of the Wind* in the month was 38·0 lbs. on the square foot on January 12. The mean daily *Horizontal Movement of the Air* for the month was 344 miles; the greatest daily value was 671 miles on January 12, and the least daily value was 100 miles on January 21.

Rain (0·005in. or over) fell on 17 days in the month, amounting to 2·464in., as measured by Gauge No. 6 partly sunk below the ground; being 0·583in. greater than the average fall for the 65 years, 1841–1905.

MONTH and DAY 1930.	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.	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
Feb. 1	28·661	44·6	36·0	8·6	41·4	+ 1·8	40·9	40·2	1·2	3·3	0·0	96	55·5	26·1	44·9	0·432	0·2	9·1
2	28·919	42·7	40·6	2·1	42·1	+ 2·6	41·4	40·6	1·5	2·6	0·9	94	50·3	36·1	44·8	0·203	0·0	9·1
3	29·160	46·0	38·8	7·2	41·3	+ 1·8	40·4	39·2	2·1	5·7	1·1	92	65·9	36·1	44·6	0·083	0·2	9·2
4	29·089	43·9	37·0	6·9	40·8	+ 1·3	40·1	39·0	1·8	4·5	0·5	94	54·0	30·1	44·5	0·008	0·0	9·3
5	29·364	44·2	35·4	8·8	40·1	+ 0·5	38·3	35·6	4·5	10·2	1·3	84	73·8	28·5	44·5	0·001	0·7	9·3
6	29·724	41·2	34·0	7·2	37·1	— 2·5	35·1	31·8	5·3	11·5	3·3	81	56·0	28·0	44·5	0·000	0·4	9·4
7	30·048	38·0	31·8	6·2	34·4	— 5·1	32·2	28·0	6·4	10·4	3·4	78	74·8	26·0	44·3	0·000	1·3	9·4
8	30·327	39·2	33·0	6·2	35·5	— 3·8	32·2	25·0	10·5	17·0	3·7	67	86·7	27·7	44·3	0·002	1·2	9·5
9	30·445	39·5	31·1	8·4	34·8	— 4·3	31·6	25·3	9·5	18·8	1·6	69	85·7	24·1	44·1	0·000	7·8	9·6
10	30·418	40·7	32·0	8·7	36·3	— 2·6	34·0	30·0	6·3	11·6	1·8	77	59·2	25·0	44·0	0·002	0·2	9·6
11	30·325	44·5	34·9	9·6	39·2	+ 0·4	36·6	32·3	6·9	11·3	2·1	76	79·0	26·9	43·9	0·000	0·7	9·7
12	30·223	45·6	36·1	9·5	39·1	+ 0·3	37·3	34·6	4·5	11·7	1·9	84	93·5	29·0	43·9	0·001	2·7	9·7
13	30·120	37·1	31·9	5·2	34·5	— 4·5	33·6	32·1	2·4	3·6	0·5	91	62·6	27·4	43·6	0·000	0·1	9·8
14	29·950	47·3	32·4	14·9	38·2	— 1·1	37·3	35·8	2·4	6·7	0·2	92	62·0	27·1	43·6	0·005	0·5	9·8
15	29·805	43·3	34·1	9·2	39·1	— 0·3	36·8	33·0	6·1	13·9	1·1	79	61·1	28·2	43·5	0·178	2·3	9·9
16	30·079	40·2	30·8	9·4	34·6	— 4·9	31·6	25·6	9·0	12·6	3·0	71	74·0	23·9	43·2	0·000	5·8	10·0
17	30·210	41·0	31·1	9·9	35·1	— 4·5	32·9	29·2	5·9	13·9	1·2	79	76·0	26·1	43·5	0·000	3·5	10·0
18	30·270	37·6	32·6	5·0	35·0	— 4·5	32·1	26·9	8·1	13·9	3·6	70	59·0	25·8	43·3	0·000	0·3	10·1
19	30·132	38·4	34·0	4·4	35·9	— 3·6	33·5	29·4	6·5	8·8	4·7	76	57·2	31·7	43·1	0·000	0·0	10·2
20	30·108	43·8	31·8	12·0	36·7	— 2·8	34·3	30·1	6·6	11·7	2·0	76	87·4	22·3	43·0	0·000	5·2	10·2
21	30·073	37·9	33·3	4·6	36·0	— 3·6	34·2	31·2	4·8	8·1	1·1	82	45·0	26·1	43·0	0·000	0·0	10·3
22	30·101	42·0	35·4	6·6	37·5	— 2·2	34·5	29·5	8·0	11·3	5·9	72	69·0	28·7	43·0	0·000	1·0	10·4
23	30·142	39·2	33·1	6·1	36·5	— 3·3	34·0	29·7	6·8	9·3	2·3	75	49·9	25·0	42·9	0·000	0·0	10·4
24	30·072	42·7	31·3	11·4	36·0	— 4·0	33·7	29·7	6·3	10·4	2·5	77	89·6	21·1	42·8	0·001	1·6	10·5
25	29·837	43·0	31·4	11·6	37·0	— 3·1	35·1	31·9	5·1	10·1	0·8	81	58·2	21·4	42·8	0·000	0·0	10·6
26	29·658	46·9	38·9	8·0	42·9	+ 2·7	41·1	38·4	4·5	5·7	2·3	84	60·8	31·4	42·7	0·000	0·0	10·6
27	29·837	51·9	40·7	11·2	44·1	+ 3·8	42·6	40·8	3·3	9·4	1·5	88	95·9	33·5	42·7	0·000	3·4	10·7
28	30·211	49·0	34·9	14·1	40·2	— 0·1	39·2	37·6	2·6	8·0	0·5	91	85·9	27·6	42·8	0·000	0·9	10·7
Means	29·904	42·5	34·2	8·3	37·9	— 1·6	36·0	32·6	5·3	9·9	2·0	81·3	68·9	27·5	43·6	Sum 0·916	1·4	9·9
Number of Column for Reference.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	18	19

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

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

The values given in Columns 2, 3, 4, 13, and 14 are derived from eye-readings of self-registering thermometers.
The mean reading of the *Barometer* for the month was 29·904in., being 0·095in. higher than the average for the 65 years, 1841–1905.

TEMPERATURE OF THE AIR.

The highest in the month was 51°·9 on February 27; the lowest in the month was 30°·8 on February 16; and the range was 21°·1.

The mean of all the highest daily readings in the month was 42°·5, being 2°·7 lower, than the average for the 65 years, 1841–1905.

The mean of all the lowest daily readings in the month was 34°·2, being equal to the average for the 65 years, 1841–1905.

The mean of the daily ranges was 8°·3, being 2°·7 less than the average for the 65 years, 1841–1905.

The mean for the month was 37°·9, being 1°·6 lower than the average for the 65 years, 1841–1905.

MONTH and DAY, 1930.	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		
Feb. 1	0·9	0·07	0·3	0·03	S : SE : ESE	ESE	1·5	0·10	239	8 : 1, ho.-fr : 9, r	10, oc.-r : 10, c.-r, oc.-hy.-r
2	0·0	0·00	0·0	0·00	ESE : E	E : NE	1·0	0·05	186	10, fq.-r, m : 10, fq.-r, m	10, slt.-r, m : 10, slt.-r
3	1·9	0·15	1·5	0·12	Calm	Calm : SE	0·4	0·01	114	10, m : 10, m	10, s.-cu, fr.-s : 10, m.-r, r
4	0·8	0·07	0·0	0·00	Calm	Calm : WSW	0·1	0·00	109	7 : 10, f : 10, s, f	10, f, gt.-glm, r : 10, m : 10, m
5	4·9	0·39	3·8	0·30	Calm : NE	NNE	1·7	0·15	257	10 : 10	8, s.-cu, alt.-cu : 8 : 10, s.-cu, d
6	11·3	0·90	10·1	0·81	NNE	NE	2·9	0·34	363	10 : 10, s-c.u, ci	9, s.-cu, fr.-s : 8, th.-cl, lu.-ha : 8, ho.-fr
7	4·4	0·35	3·6	0·29	NE	NE	5·9	1·33	567	2, ho.-fr : v.-cl : 8, oc.-slt.-sn, w	10, oc.-slt.-sn, w : v.-cl, ho.-fr, w
8	7·2	0·57	6·0	0·48	NE : ENE	ENE	4·8	0·90	501	10, w : 10, m.-r, w	9, s.-cu : 9
9	10·1	0·81	8·9	0·71	ENE : E	E : ENE	8·0	1·00	448	9 : 2, fr.-s, w	2, fr.-s, w : 5
10	4·7	0·38	2·9	0·23	ENE : NE	ENE	5·2	0·45	402	5, ho.-fr : 10, sn.-sh : 10, fr.-s	9, s.-cu : 8, s.-cu
11	8·0	0·64	6·4	0·51	ENE	ENE : NE	1·8	0·20	326	9 : 9, s.-cu	9, s.-cu : 9 : v.-cl
12	6·1	0·48	4·5	0·36	NE	E	4·8	0·41	345	8 : 10, oc.-slt.-m.-r	9, s.-cu : 9, s.-cu
13	0·0	0·00	0·0	0·00	SE : Calm	ESE : Calm	0·6	0·01	153	9 : 10, s	10, s, m : 10, s, m
14	3·4	0·27	2·9	0·23	Calm	Calm : SW	0·2	0·00	103	10, tk.-f, m.-r : 10, tk.-f	9, f : 1 : 9
15	9·7	0·81	9·7	0·81 *	WSW : NW	NNW : N	7·0	0·45	418	10 : 10, r : 9, slt.-sh	9, sl.-sh : 10, sl : th.-cl
16	9·4	0·78	8·3	0·69	N	N : NNE	2·4	0·20	308	0, ho.-fr : 1	6, fr.-s : 7 : 5, ho.-fr
17	5·3	0·44	5·2	0·43	NNE	NE	1·9	0·21	332	9 : v.-cl, f	7, slt.-sh : 1, slt.-sl.-sh : 2, ho.-fr
18	0·0	0·00	0·0	0·00	NE	NE	4·2	0·57	471	10 : 9, s.-cu	10, oc.-slt.-sn : 10
19	1·8	0·15	1·0	0·09	NE : ENE	E : ENE : NE	3·5	0·41	368	10 : 10, s.-cu	10, s.-cu : 10, s.-cu
20	8·7	0·72	5·8	0·49	Calm : NE : ENE	E : ENE	1·0	0·05	210	9, ho.-fr : 9, s.-cu	2, fr.-cu, h : 0, h : 0, ho.-fr
21	0·0	0·00	0·0	0·00	NE	NE	1·0	0·10	290	1, ho.-fr : 10, m : 10, s, fr.-s, m	10, s : 10, s, fr.-s
22	4·6	0·40	2·9	0·25	NE	NE	1·2	0·13	299	10 : 10, s.-cu	7, s.-cu : 3 : 10, s.-cu
23	0·0	0·00	0·0	0·00	NE	ENE : E : NE	1·7	0·13	295	9 : 10, s, fr.-s	10, s, fr.-s : 10
24	3·5	0·30	1·2	0·10	NE : E	ESE : Calm	1·4	0·17	279	10 : 9, oc.-slt.-sn	7, s.-cu : v.-cl, ho.-fr
25	3·4	0·30	1·9	0·16	Calm : S	S : SSE : SE	0·4	0·03	154	10, slt.-sn : 10	10 : 10 : th.-cl
26	1·1	0·09	0·4	0·03	SE : Calm	Calm : SE	0·3	0·01	145	10 : 10, oc.-slt.-m.-r	10, s, s.-cu : 9, s.-cu
27	7·9	0·69	6·6	0·58	Calm : E	E	0·6	0·05	207	10, m : 10, m	3, ci : 3 : 9, s.-cu
28	9·1	0·79	7·0	0·61	ENE : NE	NE : ENE	0·8	0·02	214	2, ho.-fr : 10, s, f, m	9, s.-cu : 0, m, d
Means	4·6	0·38	3·6	0·30	..	..	..	0·27	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 36°·0, being 1°·7 lower than
The mean *Temperature of the Dew Point* for the month was 32°·6, being 2°·4 lower than
The mean *Degree of Humidity* for the month was 81·3, being 2·3 less than
The mean *Elastic Force of Vapour* for the month was 0·185in., being 0·019in. 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 8·1.
The mean proportion of *Sunshine* for the month (constant sunshine being represented by 1) was 0·144. The maximum daily amount of *Sunshine* was 7·8 hours on February 9.

The highest reading of the *Solar Radiation Thermometer* was 95·9° on February 27; and the lowest reading of the *Terrestrial Radiation Thermometer* was 21°·1 on February 24.

The *Proportions of Wind* referred to the cardinal points were N. 8, E. 13, S, 2, W. 1. Four days were calm.

The *Greatest Pressure of the Wind* in the month was 8·0 lbs. on the square foot on February 9. The mean daily *Horizontal Movement of the Air* for the month was 289 miles; the greatest daily value was 567 miles on February 7, and the least daily value was 103 miles on February 14.

Rain (0·005in. or over) fell on 6 days in the month, amounting to 0·916in., as measured by gauge No. 6 partly sunk below the ground; being 0·564in. less than the average fall for the 65 years, 1841–1905.

* Columns 20 to 23. Duration on February 15 partly estimated. Commencement of exposure of plate 2h. 35m. late.

MONTH and DAY 1930.	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.	Daily Duration of Sunshine.	Sun above Horizon.
	in.	°	°	°	°	°	°	°	°	°	°		°	°	°	in.	hours	hours
Mar. 1	30·270	48·3	32·9	15·4	38·8	— 1·6	36·2	31·9	6·9	15·7	1·3	76	87·6	27·0	42·9	0·000	5·6	10·8
2	30·091	46·8	33·2	13·6	39·1	— 1·3	37·4	34·9	4·2	9·5	1·7	85	93·3	26·1	42·9	0·000	0·6	10·9
3	30·081	58·9	38·2	20·7	46·8	+ 6·3	44·1	40·9	5·9	15·3	1·9	79	91·2	30·7	43·0	0·000	1·0	11·0
4	30·271	54·8	40·0	14·8	46·4	+ 5·7	43·9	40·9	5·5	12·9	1·0	81	97·0	27·1	43·0	0·000	1·6	11·0
5	30·284	55·5	42·9	12·6	48·0	+ 7·1	45·6	42·9	5·1	11·8	0·5	82	78·6	37·0	43·1	0·000	0·0	11·1
6	30·019	52·8	41·9	10·9	46·6	+ 5·6	44·1	41·1	5·5	14·4	2·3	81	71·5	31·0	43·1	0·013	0·0	11·1
7	29·787	48·2	40·9	7·3	45·2	+ 4·2	43·8	42·0	3·2	7·2	1·3	89	54·2	31·6	43·2	0·108	0·0	11·2
8	29·863	55·5	35·4	20·1	43·0	+ 1·9	40·8	37·5	5·5	14·7	0·8	81	104·1	26·0	43·4	0·000	6·6	11·3
9	29·518	53·6	39·1	14·5	45·5	+ 4·5	42·6	38·6	6·9	13·2	2·4	77	99·2	32·9	43·5	0·017	5·6	11·3
10	29·357	47·0	34·5	12·5	41·1	+ 0·2	39·3	36·6	4·5	11·5	1·3	84	54·5	26·8	43·5	0·136	0·0	11·4
11	29·398	42·3	32·4	9·9	37·4	— 3·6	35·3	31·8	5·6	10·9	1·6	80	61·3	25·3	43·5	0·061	0·1	11·5
12	29·364	48·0	29·0	19·0	38·1	— 3·0	35·6	31·4	6·7	18·4	0·5	76	89·5	21·1	43·5	0·000	2·3	11·6
13	29·326	46·2	35·3	10·9	40·9	— 0·4	38·1	33·6	7·3	14·6	1·7	75	78·6	27·8	43·6	0·068	3·5	11·6
14	29·116	44·0	37·6	6·4	40·2	— 1·3	38·4	35·7	4·5	10·1	1·1	84	79·1	31·4	43·5	0·017	0·7	11·7
15	29·068	49·3	37·1	12·2	41·9	+ 0·2	40·8	39·3	2·6	8·6	1·1	90	87·8	34·7	43·5	0·439	0·3	11·7
16	29·050	50·5	35·6	14·9	42·0	+ 0·1	39·4	35·4	6·6	11·3	0·0	78	91·7	28·3	43·5	0·294	1·7	11·8
17	29·246	50·9	30·3	20·6	38·9	— 3·1	34·9	27·8	11·1	20·8	3·8	64	96·1	20·0	43·5	0·066	2·4	11·9
18	29·152	49·4	31·9	17·5	39·4	— 2·6	36·0	30·4	9·0	18·0	2·0	69	107·9	23·9	43·5	0·075	6·5	11·9
19	29·255	42·8	29·1	13·7	34·6	— 7·3	32·6	29·3	5·3	11·5	1·0	79	92·1	18·0	43·5	0·000	2·7	12·0
20	29·506	44·7	25·4	19·3	35·8	— 6·1	32·0	24·9	10·9	20·6	2·7	62	89·6	17·2	43·4	0·000	3·7	12·1
21	29·568	51·0	37·6	13·4	43·0	+ 1·1	37·9	29·5	13·5	26·4	5·0	58	110·8	27·0	43·4	0·002	8·5	12·1
22	29·788	50·9	36·3	14·6	42·7	+ 0·7	38·2	31·0	11·7	22·9	3·4	63	99·8	26·3	43·2	0·015	7·0	12·2
23	29·732	50·1	34·1	16·0	40·9	— 1·3	37·5	32·1	8·8	16·9	4·0	70	109·1	24·0	43·2	0·000	0·9	12·3
24	29·985	51·2	34·6	16·6	41·9	— 0·5	37·2	29·4	12·5	14·6	3·6	60	111·0	22·4	43·2	0·000	9·4	12·3
25	30·119	53·9	28·0	25·9	41·6	— 1·1	37·9	32·1	9·5	25·9	1·2	68	108·0	15·4	43·2	0·000	3·7	12·4
26	30·063	56·5	41·0	15·5	48·8	+ 5·8	44·3	38·4	10·4	18·1	2·9	67	102·1	31·8	43·3	0·000	5·3	12·4
27	30·026	57·0	39·0	18·0	48·1	+ 4·8	44·9	40·9	7·2	12·3	2·4	76	88·2	29·8	43·3	0·000	0·0	12·5
28	29·650	62·5	45·1	17·4	51·6	+ 7·9	47·3	42·3	9·3	17·2	2·0	70	123·1	32·2	43·7	0·000	7·9	12·6
29	29·495	56·5	42·6	13·9	48·7	+ 4·6	44·7	39·6	9·1	19·5	3·5	71	110·0	34·4	43·8	0·107	6·2	12·7
30	29·836	57·8	39·1	18·7	46·6	+ 2·1	42·7	37·4	9·2	19·1	2·4	70	115·9	29·1	44·0	0·001*	7·5	12·7
31	29·645	59·1	41·7	17·4	48·9	+ 4·0	45·2	40·7	8·2	20·3	4·0	73	108·2	31·3	44·0	0·018	1·7	12·8
Means	29·675	51·5	36·2	15·3	43·0	+ 1·1	40·0	35·5	7·5	15·6	2·1	74·8	93·3	27·3	43·4	Sum 1·437	3·3	11·8
Number of Column for Reference	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	18	19

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

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

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

*Rainfall (Column 16). The amounts entered on March 30 is derived from dew.

The mean reading of the *Barometer* for the month was 29·675in., being 0·078in. lower than the average for the 65 years, 1841–1905.

TEMPERATURE OF THE AIR.

The highest in the month was 62°·5 on March 28; the lowest in the month was 25°·4 on March 20; and the range was 37°·1.
The mean of all the highest daily readings in the month was 51°·5, being 1°·7 higher than the average for the 65 years, 1841–1905.
The mean of all the lowest daily readings in the month was 36°·2, being 1°·1 higher than the average for the 65 years, 1841–1905.
The mean of the daily ranges was 15°·3, being 0°·6 greater than the average for the 65 years, 1841–1905.
The mean for the month was 43°·0, being 1°·1 higher than the average for the 65 years, 1841–1905.

MONTH and DAY, 1930.	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.	Pressure on the Square Foot. 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	8·5	0·79	8·4	0·78	NE : ENE	E : ENE	3·6	0·42	387	3, ho.-fr : 10 : 8, s.-cu	1, fr.-cu, h : 0
2	0·3	0·03	0·0	0·00	ENE : E	ESE : E	3·6	0·47	329	5, ho.-fr : 10, s : 10, fr.-s	9, alt.-cu : 10 : 10, s
3	4·8	0·45	2·1	0·19	E : Calm	SW : SSW	0·6	0·01	169	10 : 10, m	10, s.-cu : 9, th.-cl, d : 7
4	0·5	0·04	0·0	0·00	SW : WSW	WSW	1·1	0·05	246	1, ho.-fr : 10, slt-m : 10, s.-cu	10, s.-cu : 8
5	4·6	0·43	3·7	0·34	WSW : Calm	SW : SE	0·2	0·00	140	10 : 10, m	10, alt.-s : 10, th.-cl
6	0·0	0·00	0·0	0·00	SSE : SE	SE : Calm	0·7	0·04	161	th.-cl : 10 : 10	10, alt.-s : 10, alt.-s : 10, n, r
7	8·7	0·81	7·0	0·65	NW : W : WNW	N : NW	1·1	0·06	218	10, hy-r, r : 10, r, m : 10, m.-r, m	10, m : 9, th-cl, hy.-d
8	3·2	0·31	1·7	0·17	SW	WSW : SW	0·9	0·05	237	0, ho.-fr : 0, m : 9, ci, m	9, th.-cl, so.-ha : 10, th.-cl, lu.-ha, d
9	0·4	0·04	0·0	0·00	SW : SSW	SSW : Calm	0·9	0·08	214	10 : 10 : 6, fr.-s, h	3, fr.-s, h : 10 : 10, m.-r
10	5·5	0·53	3·9	0·38	SSW : N	NNW : NW : WSW	3·5	0·27	322	10, m.-r : 10, m.-r	10, m.-r, sh : 2 : 8, lu.-ha
11	3·6	0·35	0·7	0·06	SSW : W : NW	NNW : N : Calm	2·5	0·20	280	10, sl.-sh, sh : 9, alt.-s	9, fr.-s, slt.-sh : 10, th.-cl, lu.-ha, ho.-fr, f
12	3·3	0·33	1·9	0·19	Calm : WSW	NW : WNW	0·7	0·06	199	10, f, ho.-fr : 10, f	6, h : 10, h : 9, h
13	1·9	0·19	1·3	0·12	NW	SW : SSW	1·2	0·11	266	10, h : 5, h	10, s.-cu : 10, r, m.-r : 9, m.-r
14	0·0	0·00	0·0	0·00	WSW : NW : N	NE : E : ESE	1·0	0·08	261	10 : 10, s.-cu	10, s.-cu : 10, m.-r
15	2·2	0·23	2·0	0·20	ESE	SE : ESE : S	1·3	0·07	214	10, r, m.-r : 10, m.-r, sh	10, m.-r : 10, m.-r, r
16	7·0	0·72	7·0	0·72	SW : Calm	NW : W	2·1	0·13	267	9, r, hy.-r : 8, fr.-s, m.-r	10, s.-cu : 10 : 5
17	1·6	0·16	0·7	0·07	WSW	Calm : NE	0·8	0·05	219	0, ho.-fr : 1 : 5	10, alt.-s, so.-ha : 10, alt.-s : 10, slt.-m.-r, r
18	6·6	0·67	4·3	0·44	NE : NW : WSW	WSW : NNW	4·8	0·37	343	9, r, slt.-m.-r : 1, ho.-fr : 4, fr.-s, w	9, shs, w : 9, sh : 0, ho.-fr
19	2·2	0·23	2·1	0·21	Calm : E : NE	NNE : N	4·1	0·18	238	4, ho.-fr, f : 10, f : 9, m	9, fr.-s : 10, oc.-slt.-sn
20	2·3	0·24	1·6	0·16	N : NNW : W	WSW : SW	4·6	0·51	439	7 : 0, ho.-fr : 3, m	9, s.-cu, w : 10, w
21	5·7	0·58	5·3	0·54	SW	SW	5·0	0·40	392	10 : 10, slt.-r : 5, alt.-cu, w	0 : 1
22	4·0	0·43	0·0	0·00	WSW : NW	NW : Calm	3·2	0·16	246	10, m.-r : 4 : 1, fr.-s, h	1, fr.-cu, h : 9, so.-ha : 4, ho.-fr
23	3·9	0·43	2·9	0·31	Calm : ESE	E : NE	2·8	0·28	314	9, ho.-fr : 10, alt.-s	10, s.-cu : 10, s : 3
24	9·3	1·00	9·3	1·00	NE	NE : ENE	3·6	0·34	392	7 : 9 : 1, fr.-s	1, fr.-cu : 0
25	4·7	0·48	3·7	0·40	Calm : SW	SW : WSW : W	1·2	0·09	257	0, ho.-fr : 6, m : 6, alt.-s, slt.-h, so.-ha	6, s.-cu : 9 : 7
26	6·7	0·73	4·6	0·50	W : NNW : N	Calm : WSW	1·1	0·03	187	9 : 3, h : 3, ci, h	2, h : 3, slt.-f
27	0·6	0·07	0·4	0·04	WSW	WSW	0·0	0·00	191	th.-cl : 10, m	10, oc.-slt.-r : 10, oc.-slt.-r
28	2·8	0·31	2·2	0·24	SW	SW : SSW	2·3	0·10	264	10, oc-slt.-r : 10 : 3, fr.-s	3, ci : 4 : 7
29	8·5	0·97	6·9	0·79	WSW : W	WSW : SW	7·4	0·61	455	10, sh : v.-cl : v.-cl, cu, s.-cu, w	v.-cl, shs, w : v.-cl, shs : 1
30	7·3	0·84	2·4	0·28	SW	SW : SSW : S	1·4	0·08	274	0, d : 4 : 7	8, s.-cu : th.-cl : 3, th.-cl, d
31	4·0	0·46	3·6	0·42	SSE : S	SSW : SW	5·3	0·47	340	1, d : 10, th.-cl : 10, w	10, r, oc.-slt.-m.-r : 10
Means	4·0	0·41	2·9	0·30	..	..	..	0·19	273		
Number of Column for Reference	20	21	22	23	24	25	26	27	28	29	30

The mean *Temperature of Evaporation* for the month was 40°·0, being 0°·6 higher than
The mean *Temperature of the Dew Point* for the month was 35°·5, being 0°·1 lower than
The mean *Degree of Humidity* for the month was 74·8, being 3·3 less than
The mean *Elastic Force of Vapour* for the month was 0·208in., being 0·001in. 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 7·3.

The mean proportion of *Sunshine* for the month (constant sunshine being represented by 1) was 0·282. The maximum daily amount of *Sunshine* was 9·4 hours on March 24.

The highest reading of the *Solar Radiation Thermometer* was 123°·1 on March 28; and the lowest reading of the *Terrestrial Radiation Thermometer* was 15°·4 on March 25.

The *Proportions of Wind* referred to the cardinal points were N. 5, E. 5, S. 7, W. 10. Four days were calm.

The *Greatest Pressure of the Wind* in the month was 7·4 lbs. on the square foot on March 29. The mean daily *Horizontal Movement of the Air* for the month was 273 miles; the greatest daily value was 455 miles on March 29, and the least daily value was 140 miles on March 5.

Rain (0·005in. or over) fell on 14 days in the month, amounting to 1·437in., as measured by gauge No. 6 partly sunk below the ground; being 0·083in. less than the average fall for the 65 years, 1841–1905.

MONTH and DAY 1930.	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.	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
April 1	29·586	65·4	43·6	21·8	55·2	+ 9·9	50·0	44·5	10·7	19·9	1·5	67	127·5	35·9	44·2	0·001	4·3	12·9
2	29·528	62·1	43·5	18·6	53·6	+ 7·9	49·3	44·7	8·9	17·5	2·2	72	119·2	30·3	44·4	0·123	4·5	12·9
3	29·363	51·9	42·7	9·2	47·2	+ 1·2	45·6	43·8	3·4	11·0	0·5	88	63·7	29·1	44·6	0·396	0·0	13·0
4	29·309	52·0	42·0	10·0	44·8	— 1·4	44·3	43·8	1·0	2·5	0·6	96	81·5	38·2	44·9	0·133	0·0	13·1
5	29·555	46·2	40·9	5·3	43·0	— 3·3	41·5	39·3	3·7	6·8	0·6	87	61·9	40·1	44·9	0·000	0·0	13·1
6	29·675	48·6	40·8	7·8	44·1	— 2·2	40·9	36·2	7·9	12·6	3·4	74	79·0	39·9	45·0	0·000	0·0	13·2
7	29·941	46·6	42·0	4·6	44·4	— 1·9	42·5	40·0	4·4	7·9	2·0	85	54·0	41·1	45·0	0·000	0·0	13·3
8	30·050	55·1	41·7	13·4	47·4	+ 1·3	43·5	38·3	9·1	15·9	4·2	71	89·0	39·1	45·0	0·013	1·4	13·3
9	29·808	60·7	38·1	22·6	48·7	+ 2·7	45·1	40·7	8·0	19·3	1·9	73	105·9	24·1	45·0	0·014	0·5	13·4
10	29·678	60·9	35·6	25·3	47·8	+ 1·9	43·9	38·7	9·1	23·0	0·0	71	118·1	21·7	45·1	0·000	10·3	13·4
11	29·718	62·2	36·9	25·3	49·2	+ 3·4	44·0	37·0	12·2	22·1	1·9	63	116·0	22·7	45·2	0·000	10·0	13·5
12	29·530	54·0	40·6	13·4	47·1	+ 1·2	43·4	38·6	8·5	16·9	3·1	72	88·9	28·4	45·1	0·087	0·4	13·6
13	29·334	54·9	36·9	18·0	43·6	— 2·5	41·6	38·8	4·8	17·5	1·3	84	114·7	26·2	45·3	0·135	3·2	13·6
14	29·357	53·1	38·8	14·3	44·2	— 2·2	40·7	35·5	8·7	14·2	2·3	72	115·0	32·1	45·6	0·029	2·8	13·7
15	29·742	53·2	39·2	14·0	44·0	— 2·8	41·1	36·9	7·1	15·7	2·6	76	108·6	32·3	45·7	0·021	3·2	13·8
16	29·808	48·9	40·6	8·3	44·7	— 2·5	40·7	34·7	10·0	14·0	4·5	68	68·1	34·8	45·6	0·001	0·0	13·8
17	29·682	52·4	39·8	12·6	45·2	— 2·4	41·0	34·7	10·5	21·9	2·1	67	113·0	33·0	45·7	0·072	5·1	13·9
18	29·699	52·7	38·1	14·6	43·9	— 4·1	40·8	36·3	7·6	18·1	1·4	74	106·2	30·0	45·3	0·035	2·0	14·0
19	29·395	47·1	36·1	11·0	40·3	— 8·0	37·7	33·5	6·8	11·0	2·1	77	112·1	30·0	45·2	0·219	2·1	14·0
20	29·593	48·0	36·6	11·4	40·8	— 7·7	38·9	36·1	4·7	8·1	1·6	83	95·0	29·1	45·3	0·041	0·9	14·1
21	29·669	50·3	30·1	20·2	41·0	— 7·7	38·2	33·8	7·2	15·5	0·8	75	87·6	20·2	45·7	0·000	1·5	14·1
22	29·700	60·7	33·3	27·4	47·0	— 1·7	41·9	34·5	12·5	21·1	0·8	62	128·8	22·6	45·3	0·000	11·4	14·2
23	29·377	58·2	39·1	19·1	49·6	+ 1·0	47·8	45·7	3·9	8·6	0·0	87	87·9	28·1	45·3	0·053	0·0	14·3
24	29·333	64·1	50·6	13·5	55·3	+ 6·7	52·9	50·7	4·6	11·6	1·0	85	131·3	37·6	45·6	0·010	1·4	14·3
25	29·486	71·9	45·6	26·3	59·0	+10·4	53·2	47·6	11·4	23·2	0·0	66	144·1	32·0	45·9	0·000	6·4	14·4
26	29·808	60·5	46·9	13·6	54·2	+ 5·6	51·2	48·2	6·0	12·0	2·0	80	83·1	37·1	46·0	0·000	0·0	14·5
27	29·874	67·9	43·2	24·7	55·0	+ 6·3	49·5	43·5	11·5	28·4	1·2	65	138·1	31·0	46·1	0·000	10·1	14·5
28	29·612	56·1	45·2	10·9	51·1	+ 2·3	49·2	47·1	4·0	5·6	1·6	87	70·9	37·1	46·5	0·000	0·0	14·6
29	29·476	67·2	44·5	22·7	54·5	+ 5·5	48·0	40·3	14·2	28·7	2·4	59	134·9	36·6	46·8	0·000	12·2	14·6
30	29·728	58·1	41·7	16·4	49·5	+ 0·4	43·3	34·6	14·9	31·0	3·9	57	128·1	33·3	46·9	0·000	13·3	14·7
Means	29·614	56·4	40·5	15·9	47·8	+ 0·6	44·4	39·9	7·9	16·1	1·8	74·8	102·4	31·8	45·4	Sum 1·383	3·6	13·8
Number of Column for Reference.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	18	19

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

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

The values given in Columns 2, 3, 4, 13, and 14 are derived from eye-readings of self-registering thermometers.
The mean reading of the *Barometer* for the month was 29·614in., being 0·141in. less than the average for the 65 years, 1841–1905.

TEMPERATURE OF THE AIR.

The highest in the month was 71°·9 on April 25; the lowest in the month was 30°·1 on April 21; and the range was 41°·8.

The mean of all the highest daily readings in the month was 56°·4, being 0°·8 lower than the average for the 65 years, 1841–1905.

The mean of all the lowest daily readings in the month was 40°·5, being 1°·5 higher than the average for the 65 years, 1841–1905.

The mean of the daily ranges was 15°·9, being 2°·3 less than the average for the 65 years, 1841–1905.

The mean for the month was 47°·8, being 0°·6 higher than the average for the 65 years, 1841–1905.

MONTH and DAY, 1930.	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	Pressure on the Square Foot. Mean of 24 Hourly Measures	Robinson's. Horizontal Movement of the Air.	Clouds and Weather. A.M.	P.M.
	hours.		hours.				lbs.	lbs.	miles.		
April 1	3·9	0·44	1·4	0·16	SSW : S	S : SSE	3·0	0·26	317	v.-cl : 9, alt.-s, so.-ha	8, alt.-s, ci : 7, th.-cl
2	6·5	0·74	6·1	0·69	S : SSW : SW	SW : SSW	3·3	0·34	357	10, fq.-r : 8, fq.-r, m.-r	8, fr.-s : 0, d
3	5·2	0·59	4·1	0·47	Calm : ESE	ESE	5·2	0·36	286	5, d, m : 9, r, m.-r	10, r, m : 10,m : 5, f
4	0·0	0·00	0·0	0·00	E : ESE	ESE : E	1·6	0·16	277	6, slt. f : 10, r, m.-r, m	10, fq.-m.-r : 10, oc.-slt.-m.-r
5	0·0	0·00	0·0	0·00	E	E : NE	1·1	0·08	242	10, s : 10, s	10, s : 10, s
6	0·0	0·00	0·0	0·00	NNE : N	N : NNW	1·3	0·08	240	10 : 10, s	10, s : 10
7	0·3	0·03	0·1	00·1	NNW : N	NNE : NE	1·9	0·13	261	10, oc.-slt.-m.-r : 10, g	10, s : 10, s.-cu
8	0·0	0·00	0·0	0·00	Calm : WSW	SW	0·9	0·03	169	10 : 10, alt.-cu	10, alt.-cu : 10, m.-r
9	8·1	0·99	7·7	0·93	SSW	SSW	0·9	0·04	215	10, m.-r : 10, s.-cu	10,alt.-s,so.-ha : 8 : 0, d
10	8·3	1·00	8·3	1·00	Calm : E	ESE	0·9	0·05	156	2, th.-cl, m : 0, slt.-h	0, slt.-h : 0, slt.-h, d
11	4·3	0·52	4·1	0·50	Calm	Calm : S : SSW	0·2	0·01	137	0, ho.-fr, slt.-h : 0, h	0 h : 1, th.-cl, h, d
12	7·5	0·93	7·3	0·91	WSW : SW	WSW : NW : W	2·4	0·18	283	10 : 10, r	10, m, r : v.-cl : 1, d, slt.-m
13	3·4	0·43	2·9	0·36	. WSW	WSW : NNE	2·0	0·10	264	5 : 9, shs	10, slt.-r, r : 10, r
14	6·2	0·78	5·9	0·73	N : NNE	NE : NNE	3·9	0·28	297	9 : 9, s.-cu	9, shs : 0, d
15	3·1	0·39	2·3	0·29	NNE	NNE	6·3	0·64	371	9 : 9, shs	9, sh : 9, sh
16	0·5	0·06	0·1	0·01	N	N : NNE	3·5	0·40	336	10, slt.-r : 10, oc.-slt.-r	10, alt.-s : 10, s.-cu
17	0·0	0·00	0·0	0·00	NNE	N	4·2	0·53	361	10 : 10, cu.-n	9, s, shs : 6, sh : 10, r, m.-r
18	6·6	0·82	5·9	0·74	NNE	NNE : N	6·8	1·14	455	10, m.-r : 10, m.-r, w	9, slt.-sh,w : 8, slt.-sh, w : 0
19	5·3	0·71	4·5	0·60	NW : NNW	E : ENE	5·5	0·73	422	6, w : 10, fq.-r, w	10, r : 9, r, hy.-hl, t, sh : 9, r
20	6·2	0·83	5·5	0·74	E : NE	NE : ENE	2·3	0·19	270	0, d : 9, slt.-m.-r	9, slt.-m.-r : 9, n, m.-r : 8
21	0·8	0·11	0·6	0·08	Calm	W : NW : N	0·4	0·04	136	0, m, ho.-fr : 9, s.-cu, m	10, s.-cu, m : 10
22	7·4	0·98	7·4	0·98	Calm	SW : SE : ESE	0·6	0·03	123	10 : 1, ho.-fr	3, fr.-cu : 5 : 0, ho.-fr
23	0·0	0·00	0·0	0·00	ESE : SE	SSE	1·7	0·13	200	0, ho.-fr : 10, m.-r	10, m.-r : 10, n, m.-r : 10, m.-r
24	5·1	0·68	4·6	0·61	Calm : SW	SSE	0·6	0·04	150	10, oc.-m.-r : 10, oc.-m.-r	10, slt.-r : 8,alt.-s,p.-so.-ha : 6, sh
25	3·1	0·41	2·2	0·30	Calm : SSW	SSW : SSE	0·1	0·01	162	2, d : 1, d, m	7, alt.-cu : 9, alt.-cu, cu.-n, slt.-sh : 10, slt.-m.-r
26	4·7	0·67	4·5	0·65	Calm : WSW	W : WSW	0·0	0·00	198	7 : 10, m	10, m : 10, s : 8, s
27	3·9	0·56	3·5	0·51	Calm	Calm : SE : ENE	..	..	139	5, d : 9	3, fr.-s, h : 2, cu : 3
28	4·9	0·69	4·0	0·57	NE	NE	3·7	..	398	9, m : 10, slt.-m.-r	10 : 9, s, fr.-s
29	7·0	1·00	7·0	1·00	NE	ENE : NE	7·0	0·98	518	4, d : 3, w	4, fr.-s, w : 0, w, d
30	7·0	1·00	7·0	1·00	NE : ENE	E : ENE : NE	5·0	0·73	429	0, d : 1, ci, w	0, w : 0
Means	4·0	0·51	3·6	0·46	..	..	..	0·27	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 44°·4, being 0°·5 higher than
The mean *Temperature of the Dew Point* for the month was 39°·9, being 0°·3 higher than
The mean *Degree of Humidity* for the month was 74·8, being 0·3 greater than
The mean *Elastic Force of Vapour* for the month was 0·247in., being 0·003in. 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 7·4.

The mean proportion of *Sunshine* for the month (constant sunshine being represented by 1) was 0·259. The maximum daily amount of *Sunshine* was 13·3 hours on April 30.

The highest reading of the *Solar Radiation Thermometer* was 144°·1 on April 25; and the lowest reading of the *Terrestrial Radiation Thermometer* was 20°·2 on April 21.

The *Proportions of Wind* referred to the cardinal points were N. 9, E. 8, S. 5, W. 3. Five days were calm.

The *Greatest Pressure of the Wind* in the month was 7·0 lbs. on the square foot on April 29. The mean daily *Horizontal Movement of the Air* for the month was 272 miles; the greatest daily value was 518 miles on April 29, and the least daily value was 123 miles on April 22.

Rain (0·005in. or over) fell on 15 days in the month, amounting to 1·383in., as measured by gauge No. 6 partly sunk below the ground; being 0·183in. less than the average fall for the 65 years, 1841–1905.

MONTH and DAY 1930.	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.	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	29·911	61·6	39·1	22·5	50·3	+ 1·0	43·4	33·5	16·8	37·4	4·7	53	133·1	31·0	47·1	0·000	10·6	14·8
2	29·871	60·0	41·6	18·4	49·3	— 0·2	46·2	42·5	6·8	11·3	1·2	78	124·1	31·5	47·2	0·012	3·7	14·8
3	29·951	58·9	42·5	16·4	49·2	— 0·6	47·6	45·7	3·5	11·0	0·5	88	118·2	29·6	47·3	0·176	0·9	14·9
4	29·911	65·0	43·1	21·9	52·2	+ 2·2	48·5	44·5	7·7	19·9	0·2	75	123·1	31·5	47·3	0·000	4·5	14·9
5	29·718	68·7	39·6	29·1	54·0	+ 3·7	48·7	42·9	11·1	27·9	1·0	65	133·1	26·7	47·6	0·196	7·8	15·0
6	29·564	61·9	46·2	15·7	52·1	+ 1·6	48·9	45·4	6·7	14·4	1·2	78	126·8	45·6	47·6	0·030	2·3	15·0
7	29·689	53·2	43·8	9·4	47·8	— 2·9	44·3	39·8	8·0	14·6	2·3	72	92·2	40·6	47·8	0·015	1·3	15·1
8	29·751	53·8	38·7	15·1	44·9	— 6·1	39·5	31·2	13·7	26·6	4·7	58	115·0	31·0	47·9	0·000	8·5	15·1
9	29·617	61·2	39·0	22·2	47·8	— 3·4	43·8	38·5	9·3	20·0	1·9	70	124·0	27·1	48·0	0·141	4·4	15·2
10	29·518	58·6	40·1	18·5	47·7	— 3·8	44·2	39·7	8·0	20·2	1·0	73	100·9	39·5	48·0	0·298	4·5	15·2
11	29·349	54·9	47·5	7·4	50·4	— 1·4	47·6	44·5	5·9	12·7	1·4	80	89·1	42·0	48·0	0·069	0·5	15·3
12	29·636	58·3	45·2	13·1	51·2	— 0·9	47·2	42·6	8·6	16·0	1·9	73	109·9	43·2	48·2	0·146	4·2	15·4
13	29·637	61·7	48·2	13·5	53·7	+ 1·3	51·8	49·9	3·8	7·3	1·4	87	79·0	43·3	48·2	0·090	0·0	15·4
14	29·733	67·1	52·1	15·0	58·1	+ 5·5	52·1	46·1	12·0	22·8	1·1	64	137·2	41·1	48·5	0·010	9·5	15·5
15	29·867	66·2	44·0	22·2	55·4	+ 2·6	51·8	48·3	7·1	20·2	1·2	77	126·0	30·9	48·6	0·000	2·6	15·5
16	29·994	69·2	46·3	22·9	57·3	+ 4·3	52·0	46·6	10·7	21·6	1·3	68	129·3	37·2	48·8	0·000	7·2	15·6
17	29·957	67·8	50·6	17·2	57·6	+ 4·5	52·2	46·7	10·9	19·3	4·8	68	130·3	41·1	49·0	0·000	1·8	15·6
18	29·809	62·9	45·4	17·5	53·1	— 0·2	48·0	42·1	11·0	25·1	4·4	67	141·1	35·6	49·2	0·079	10·1	15·7
19	29·989	61·6	42·1	19·5	51·4	— 2·1	46·9	41·6	9·8	17·9	1·3	69	108·0	31·9	49·1	0·000	4·1	15·7
20	29·936	60·1	50·8	9·3	54·4	+ 0·6	51·2	48·0	6·4	14·4	1·4	79	96·0	48·0	49·3	0·025	0·0	15·7
21	29·993	63·0	44·7	18·3	52·7	— 1·5	48·7	44·4	8·3	22·1	2·6	73	135·2	33·1	49·5	0·003	4·0	15·8
22	29·933	53·3	43·9	9·4	48·6	— 6·0	45·4	41·4	7·2	10·7	3·5	76	90·9	32·1	49·7	0·131	0·6	15·8
23	29·907	66·4	46·2	20·2	55·7	+ 0·8	50·6	45·2	10·5	21·2	1·8	68	132·7	43·5	49·9	0·061	9·4	15·9
24	29·847	65·0	47·1	17·9	53·4	— 1·9	50·4	47·2	6·2	11·4	2·2	80	114·1	44·2	49·9	0·084	1·1	15·9
25	29·700	55·8	49·9	5·9	53·0	— 2·5	51·9	50·8	2·2	4·0	0·8	92	64·0	49·1	49·9	0·186	0·0	16·0
26	29·567	69·2	47·9	21·3	54·5	— 1·3	53·0	51·6	2·9	12·1	0·2	90	143·1	38·6	50·0	0·422	2·1	16·0
27	29·534	71·2	44·0	27·2	56·5	+ 0·5	51·8	47·1	9·4	22·0	0·0	71	138·5	32·7	50·2	0·001	5·7	16·0
28	29·713	73·2	48·8	24·4	60·5	+ 4·3	54·1	48·1	12·4	19·5	2·7	63	140·3	36·1	50·5	0·000	12·8	16·1
29	29·920	74·3	50·0	24·3	60·0	+ 3·6	55·1	50·6	9·4	23·0	1·6	71	146·1	38·0	50·7	0·000	10·0	16·1
30	29·865	67·7	52·5	15·2	57·9	+ 1·2	55·3	53·1	4·8	17·4	1·2	84	119·4	38·9	50·8	0·458	0·8	16·2
31	29·801	68·5	52·3	16·2	58·2	+ 1·1	55·7	53·6	4·6	15·3	1·0	85	138·4	50·3	51·0	0·212	1·4	16·2
Means	29·780	63·2	45·6	17·6	53·2	+ 0·1	49·3	44·9	8·2	18·0	1·8	74·0	119·3	37·6	48·9	Sum 2·845	4·4	15·5
Number of Column for Reference	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	18	19

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

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

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

The mean reading of the *Barometer* for the month was 29·780in., being 0·021in. less than the average for the 65 years, 1841–1905.

Temperature of the Air.

The highest in the month was 74°·3 on May 29; the lowest in the month was 38°·7 on May 8; and the range was 35°·6.
The mean of all the highest daily readings in the month was 63°·2, being 0°·7 lower than the average for the 65 years, 1841–1905.
The mean of all the lowest daily readings in the month was 45°·6, being 1°·9 higher than the average for the 65 years, 1841–1905.
The mean of the daily ranges was 17°·6, being 2°·6 less than the average for the 65 years, 1841–1905.
The mean for the month was 53°·2, being 0°·1 higher than the average for the 65 years, 1841–1905.

MONTH and DAY, 1930.	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.	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	5·2	0·74	4·7	0·67	NE	ENE : NE	4·7	0·44	331	0, d : 0 : 4, fr.-s	5, ci, so.-ha, prh : 5, ci, so.-ha, prh : th.-cl
2	3·0	0·42	2·2	0·32	NE : NNE	Calm	0·3	0·04	139	th.-cl : 10 : 10, s	7, alt.-cu, h, sh : 7, alt.-cu, h : 4, m
3	2·2	0·33	0·0	0·00	Calm	NE : Calm	0·5	0·01	95	10, m, sh : 10, s.-cu, f, oc.-shs	10, m.-r, r : 10 m
4	5·1	0·78	4·7	0·72	Calm	WSW : SW	0·5	0·03	140	10, m : 10, f : 8, s, h	7, s.-cu, h : 7, s.-cu, h : 6, s.-cu, h, d
5	0·0	0·00	0·0	0·00	SW : Calm	SSW : Calm	1·1	0·04	159	0, ho.-fr, h : th.-cl, so.-ha	10, alt.-s, so.-ha : 10, shs, m.-r : 10, r
6	0·0	0·00	0·0	0·00	Calm : W	NNW : NNE	2·2	0·13	229	10, r, slt.-m.-r : 10 : 10, n, s.-cu, h	10, s.-cu, cu.-n, t : 10, s.-cu, cu.-n : 10, r
7	2·2	0·33	1·9	0·28	NNE : N	NNE : Calm	3·2	0·35	321	10, slt.-m.-r, r : 10 : 10, alt.-s, s.-cu	10, slt.-sh : 7 : 10, r
8	3·4	0·53	2·8	0·43	N	NNW : NW : WSW	2·1	0·34	329	10, slt.-m.-r : 6, fr.-s, ci.-cu	7, cu, s.-cu: 6, h : 9
9	0·0	0·00	0·0	0·00	WSW	WSW : SW	3·6	0·40	360	10 : 5 : 10, n	v.-cl, s.-cu, n, slt.-sh : 10, c.-r
10	0·0	0·00	0·0	0·00	Calm : NNE : N	SW : SSW	2·5	0·10	231	10, c.-r : 8 : 4, fr.-s, h	10, s, fr.-s : 10, r : 10, r, m.-r
11	0·0	0·00	0·0	0·00	SSW : WSW	WNW : W	4·1	0·58	453	10, slt.-m.-r, r : 10, r : 10, n, m.-r	10, m.-r : 10, s : 9
12	0·0	0·00	0·0	0·00	W : NW	Var : WSW	3·9	0·14	283	10, r, m.-r : 8 : 8, fr.-s, sh	9, fr.-s, n, r : 10, n, hy.-sh : 10
13	0·0	0·00	0·0	0·00	SW : SSW	WSW	2·3	0·15	287	10, slt.-m.-r : 10, m.-r, slt.-m.-r	10, n, s : 10, s : 10, n, r
14	4·4	0·74	4·1	0·69	WSW : W : WNW	NW : W	2·3	0·25	349	10, r : 7, fr.-s : 7, fr.-s	6, fr.-s : 5 : 7
15	5·4	0·90	5·2	0·86	Calm : SW	SW	0·7	0·08	224	0, d : 6 : 10, slt.-r	10, alt.-s, fr.-s : 9 : 5
16	3·5	0·58	1·6	0·26	WSW	W : WSW	0·6	0·07	223	1, d : 1, h : 7, ci, h, oc.-so.-ha	9, fr.-s, h : 8, so.-ha, h : th.-cl, h
17	0·8	0·14	0·6	0·11	WSW : SW	SW : SSW	2·0	0·13	236	th.-cl, d : 10, h : 10, alt.-cu	10, alt.-s, slt.-sh : 10
18	5·5	1·00	5·5	1·00	WSW : W	W : WNW	5·2	0·75	455	10, sh : 5 : 8, fr.-s	9, cu.-n, r : 4, sh, t : 0
19	0·0	0·00	0·0	0·00	WSW : W	WSW	1·9	0·21	333	0, d : 2 : 10, s.-cu	10, s.-cu : 10, s.-cu
20	0·0	0·00	0·0	0·00	WSW : NNW	NNW : N	1·4	0·11	199	10, sh : 10 : 10, n, slt.-sh, r, glm	10, alt.-cu : 10
21	2·0	0·37	1·8	0·32	Calm : NE	NNE : E : NE	2·0	0·13	193	10 : 10, slt.-m.-r	8, fr.-s : 5 : 7
22	0·0	0·00	0·0	0·00	NNE	NE : NNE	1·7	0·21	255	9 : 10 : 10, alt.-s, n, r, m.-r	10, n, r, m.-r : 9 : 10, r
23	0·0	0·00	0·0	0·00	NNE : NE	NE : N	4·3	0·72	402	10, r : 10, sh : 7, w	6, fr.-s, w : 4, fr.-s, ci : 8
24	0·0	0·00	0·0	0·00	N	N : NNE	2·2	0·20	235	10 : 10, n, oc.-m.-r : 10, s, n	9, s.-cu, fr.-s : 9, r, m.-r : 10, r
25	0·0	0·00	0·0	0·00	NNE : N	N : Calm : NNE	0·9	0·16	204	10, r : 10, s	10, slt.-r, r : 10, slt.-r, r
26	4·5	0·90	4·5	0·90	NNE : Calm	S : Calm	0·5	0·02	111	10, hy.-r : 10, s, f : 10, s	9, r, hy.-r, t, l : 8, r : p.-cl
27	5·0	1·00	5·0	1·00	Calm	SSW : SW	0·3	0·03	127	1, d : 10 : 6, alt.-cu	9, fr.-s, h : 6, h : 1, h, d
28	4·3	0·85	4·0	0·80	SW : WSW	WSW : SW	1·8	0·22	263	0, d : 1	5, fr.-s : 7 : 3
29	3·2	0·63	2·7	0·54	SSW : WSW	Calm	0·6	0·04	139	2, d : 0 : 3, fr.-s	6, fr.-s : 6, fr.-s, ci : th.-cl, d
30	0·0	0·00	0·0	0·00	ENE : E	E	5·0	0·42	321	10 : 10, n, oc.-slt.-r	10, alt.-s, n, r, hy.-r : 10, r
31	0·0	0·00	0·0	0·00	ENE	SE : E	1·8	0·17	242	10 : 10, s	10, fr.-s, slt.-sh : 10, r : 10, r, hy.-r
Means	1·9	0·33	1·7	0·29	..	..	..	0·22	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 49°·3, being 0°·3 higher than
The mean *Temperature of the Dew Point* for the month was 44°·9, being 0°·1 higher than
The mean *Degree of Humidity* was 74·0, being 0·1 greater than
The mean *Elastic Force of Vapour* for the month was 0·299in., being 0·001in. 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 8·1.

The mean proportion of *Sunshine* for the month (constant sunshine being represented by 1) was 0·283. The maximum daily amount of *Sunshine* was 12·8 hours on May 28.

The highest reading of the *Solar Radiation Thermometer* was 146°·1 on May 29; and the lowest reading of the *Terrestrial Radiation Thermometer* was 26°·7 on May 5.

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

The *Greatest Pressure of the Wind* in the month was 5·2 lbs. on the square foot on May 18. The mean daily *Horizontal Movement of the Air* for the month was 254 miles; the greatest daily value was 455 miles on May 18, and the least daily value was 95 miles on May 3.

Rain (0·005in. or over) fell on 20 days in the month, amounting to 2·845in., as measured by gauge No. 6 partly sunk below the ground; being 0·930in. greater than the average fall for the 65 years, 1841–1905.

MONTH and DAY, 1930.	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.	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	29·728	63·3	53·4	9·9	57·0	— 0·4	55·6	54·5	2·5	7·7	0·8	91	98·2	52·0	51·0	0·210	0·0	16·2
2	29·717	68·1	51·8	16·3	58·2	+ 0·4	56·0	54·2	4·0	13·3	1·3	86	119·4	46·6	51·1	0·339	1·0	16·3
3	29·825	62·0	47·8	14·2	54·7	— 3·4	52·0	49·5	5·2	10·4	2·0	82	105·2	47·6	51·3	0·000	0·4	16·3
4	30·028	72·6	51·3	21·3	59·4	+ 1·1	56·4	54·0	5·4	12·8	1·7	82	129·0	38·9	51·7	0·000	4·4	16·3
5	30·053	73·4	50·1	23·3	62·9	+ 4·5	57·0	52·1	10·8	24·0	0·2	68	141·4	36·0	52·0	0·000	14·6	16·4
6	29·855	76·3	49·7	26·6	63·9	+ 5·6	56·6	50·3	13·6	29·4	1·6	61	143·6	36·6	52·0	0·000	14·8	16·4
7	29·896	69·1	47·7	21·4	58·7	+ 0·5	53·1	47·7	11·0	20·8	1·2	67	140·2	37·0	52·1	0·000	10·0	16·4
8	30·061	67·0	43·5	23·5	54·8	— 3·3	49·3	43·3	11·5	22·4	1·8	65	141·1	30·4	52·3	0·000	14·5	16·4
9	29·922	74·1	40·5	33·6	57·6	— 0·4	50·2	42·0	15·6	32·5	0·2	56	151·0	27·2	52·7	0·000	14·0	16·4
10	29·726	63·0	49·9	13·1	56·7	— 1·4	53·9	51·4	5·3	8·4	2·9	82	89·7	38·0	52·7	0·000	0·0	16·5
11	29·767	65·1	51·5	13·6	58·8	+ 0·6	56·0	53·8	5·0	9·3	1·2	83	115·0	38·8	52·8	0·000	1·2	16·5
12	29·862	76·2	48·8	27·4	62·1	+ 3·7	58·0	54·8	7·3	17·0	0·6	77	143·2	35·6	53·0	0·000	8·3	16·5
13	29·944	75·6	53·8	21·8	63·5	+ 5·0	58·5	54·5	9·0	18·6	1·4	73	145·7	42·9	53·1	0·000	10·4	16·5
14	30·066	72·2	52·8	19·4	61·4	+ 2·7	57·1	53·7	7·7	17·0	3·2	75	137·4	46·8	53·2	0·000	10·0	16·5
15	30·085	74·5	52·0	22·5	62·9	+ 4·1	56·4	50·7	12·2	24·3	3·0	65	144·9	45·6	53·5	0·000	12·8	16·5
16	30·014	68·0	50·2	17·8	59·7	+ 0·8	57·1	54·9	4·8	9·2	2·3	85	104·9	44·9	53·2	0·024	0·9	16·5
17	29·873	81·1	54·6	26·5	65·7	+ 6·7	61·5	58·5	7·2	16·3	1·4	78	145·1	47·6	53·9	0·000	5·4	16·5
18	29·780	82·9	60·0	22·9	67·0	+ 7·8	63·7	61·6	5·4	15·8	0·7	83	150·7	50·1	54·0	2·830	4·0	16·6
19	29·812	76·9	55·4	21·5	65·1	+ 5·6	58·5	53·3	11·8	21·3	3·8	66	147·9	46·0	54·2	0·000	12·6	16·6
20	29·856	68·7	55·1	13·6	61·5	+ 1·6	58·6	56·3	5·2	8·0	3·2	83	113·1	46·3	54·6	0·000	0·4	16·6
21	29·895	75·7	59·5	16·2	66·1	+ 5·8	61·8	58·8	7·3	15·4	2·7	78	134·4	50·1	54·9	0·000	4·5	16·6
22	29·847	76·2	55·3	20·9	64·5	+ 3·9	60·3	57·2	7·3	16·2	1·8	77	134·2	44·8	55·0	0·014	3·2	16·6
23	29·671	71·2	52·8	18·4	60·1	— 0·8	54·3	49·1	11·0	20·5	2·7	67	142·1	40·2	55·0	0·030	10·5	16·6
24	29·585	71·2	51·6	19·6	58·9	— 2·3	54·0	49·5	9·4	18·3	1·2	71	146·2	42·9	55·2	0·306	7·6	16·6
25	29·669	72·0	49·0	23·0	59·0	— 2·4	52·3	45·5	13·5	19·0	3·7	61	144·8	35·9	55·4	0·000	11·6	16·5
26	29·578	72·2	45·2	27·0	58·6	— 2·9	53·4	48·5	10·1	22·8	1·2	69	143·1	33·4	55·5	0·000	5·5	16·5
27	29·512	76·1	55·5	20·6	64·4	+ 2·8	57·6	52·0	12·4	27·4	2·2	64	138·4	50·1	55·6	0·000	5·9	16·5
28	29·789	73·1	51·9	21·2	62·2	+ 0·6	53·4	44·5	17·7	28·5	5·3	52	143·1	39·5	55·6	0·000	14·0	16·5
29	29·880	74·9	46·6	28·3	61·5	— 0·1	53·2	44·9	16·6	30·4	3·3	54	143·1	32·3	55·7	0·000	15·3	16·5
30	29·697	83·0	52·1	30·9	68·9	+ 7·4	61·1	55·3	13·6	23·8	5·0	61	154·7	40·0	55·9	0·000	9·6	16·5
Means	29·830	72·5	51·3	21·2	61·2	+ 1·8	56·2	51·9	9·3	18·7	2·1	72·1	134·4	41·5	53·6	Sum 3·753	7·6	16·5
Number of Column for Reference.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	18	19

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

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

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

The mean reading of the *Barometer* for the month was 29·830in., being 0·008in. greater than the average for the 65 years, 1841–1905.

TEMPERATURE OF THE AIR.

The highest in the month was 83°·0 on June 30; the lowest in the month was 40°·5 on June 9; and the range was 42°·5.
The mean of all the highest daily readings in the month was 72°·5, 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 51°·3, being 1°·4 higher than the average for the 65 years, 1841–1905.
The mean of the daily ranges was 21°·2, being 0°·4 greater than the average for the 65 years, 1841–1905.
The mean for the month was 61°·2, being 1°·8 higher than the average for the 65 years, 1841–1905.

MONTH and DAY, 1930.	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.		
June 1	0·0	0·00	0·0	0·00	N : NW : W	W : WSW : Calm	0·8	0·13	212	10, c.-r : 10, s	10 : 10, slt.-m.-r
2	0·1	0·02	0·0	0·00	Calm	ESE : E : NE	1·1	0·06	144	10 : 10, s.-cu	10, n, s.-cu, r : 10, hy.-r, r : 10
3	0·0	0·00	0·0	0·00	NE : NNE	NE : NNE	1·3	0·20	255	10, slt.-sh : 10, s.-cu	10, s.-cu : 6, alt.-cu
4	4·5	1·00	4·5	1·00	NNE	NE : ESE : Calm	1·1	0·12	197	10, s : 10, s	8, s, s.-cu : 0 : 0, d
5	4·5	1·00	4·5	1·00	E : ENE	E	2·6	0·26	252	0, d : 0, slt.-h	0 : 0, d
6	4·5	1·00	4·5	1·00	Calm : E	ESE : Calm	1·7	0·10	161	0, d : 0, slt.-h	0 : 0, d
7	4·5	1·00	4·5	1·00	Calm : NNE	NNE : NE	4·4	0·74	363	1, d : 8, fr.-s, h	8, fr.-s, ci : 2, w : th.-cl, d, lu.-ha, prs
8	4·5	1·00	4·5	1·00	NE	NE : ESE : Calm	2·2	0·25	255	th.-cl, d : th.-cl	6, fr.-s : 1 : 0, d
9	4·5	1·00	4·5	1·00	Calm	SW	1·8	0·14	172	0, ho.-fr : 1	4, ci : 2, ci, d
10	0·3	0·06	0·2	0·05	SW	SW : WSW	3·2	0·39	341	1 : 10, oc.-m.-r : 10, slt.-m.-r	10, s, fr.-s : 10
11	4·2	0·94	4·0	0·89	WSW:SW	SW	3·2	0·23	265	10 : 10, s.-cu	10, s.-cu : 1, h, d
12	4·0	0·87	3·9	0·86	Calm	ESE	0·3	0·04	142	th.-cl, d : th.-cl, h, so.-ha	2, h : 0, h, d
13	1·9	0·42	1·8	0·41	Calm : E	ESE : SE : E	1·0	0·11	187	1, h, d : 0, h : 8, alt.-cu, h	1, fr.-s, h : 1, h, d
14	4·0	0·89	3·9	0·87	ENE : NE	E : ESE : NE	1·7	0·15	226	9 : 10 : 6, cl.-cu, alt.-cu, h	0 : 2 : 1
15	4·1	0·92	4·0	0·90	ENE	ENE : NE	2·4	0·45	349	7 : 8 : 0	0 : 0, d
16	2·6	0·57	1·9	0·42	NE	NNE : N	0·9	0·13	216	7 : 10, s.-cu : 10, fq.-r	10, fq.-r : 8 : 9
17	2·0	0·45	1·7	0·37	N : Calm	Calm : SE	0·3	0·02	112	10 : 10, m : 7, h	7, h : 7, h, t : 5, h, d
18	1·6	0·36	1·5	0·33	Calm	Var : SW	15·0	0·06	131	10, t.-sm : 10, s.-cu : 9, sh, oc.-t	10, hy.-t.-sm, hl : 9, hy.-t.-sm : 10
19	2·1	0·48	2·0	0·44	SW : WSW	WSW : SW	1·7	0·17	273	5, d : 4 : 3, alt.-cu	5, fr.-s, cl.-cu : 2 : 8
20	0·3	0·06	0·1	0·03	SW	SW	1·9	0·27	305	10, slt.-sh : 10, s	10 : 10
21	3·6	0·80	3·4	0·75	SW	SW : SSW	3·4	0·25	252	10 : 9, s.-cu, fr.-s	9, fr.-s : 3, ci, d
22	4·2	0·93	4·1	0·90	SSW : SW	SW : WSW	1·1	0·16	230	7 : 8 : 10, s.-cu, slt.-shs	9, fr.-s, alt.-cu, r : 5
23	0·0	0·00	0·0	0·00	WSW : SW	SW : SSW	4·3	0·62	343	2, d : 5 : 5, alt.-cu, fr.-s	5, fr.-s, fr.-cu : 6, fr.-s, slt.-sh : 10, r
24	4·5	1·00	4·5	1·00	Calm : SW	WSW : SW	3·3	0·30	272	10, c.-r : 9, fr.-s, slt.-sh	6, fr.-s, ci, t : 4
25	4·5	1·00	4·5	1·00	SW : WSW	WSW : Calm	1·6	0·20	251	2, d : 2 : 6, fr.-s	8, cu, cu.-n : 9 : 2, ci, d
26	0·0	0·00	0·0	0·00	SSW : Calm	ESE : Calm	1·0	0·06	129	th.-cl, d : th.-cl, so.-ha	8, s.-cu, fr.-s : 10
27	3·6	0·80	3·2	0·72	Calm	W : WSW	1·1	0·15	223	10 : 10, alt.-cu, ci, so.-ha	9, ci.-s, fr.-s : 3 : 7
28	4·5	1·00	4·5	1·00	WNW : WSW	W : WNW	2·9	0·26	275	4 : 0 : 3, fr.-s, ci	5, fr.-s : 5
29	4·4	0·97	4·3	0·95	Calm : WSW	SW : SSW	1·8	0·08	186	0 : 1	0 : 1, d
30	3·7	0·83	3·6	0·81	SE	SSE : SE	1·9	0·19	200	1, d : 5, alt.-cu : 1	5, alt.-cu, fr.-s : 5, alt.-cu, s.-cu : 9, l
Means	2·9	0·65	2·8	0·62	..	..	..	0·21	231		
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 higher than
The mean *Temperature of the Dew Point* for the month was 51°·9, being 1°·1 higher than
The mean *Degree of Humidity* for the month was 72·1, being 1·1 greater than
The mean *Elastic Force of Vapour* for the month was 0·389in., being 0·014in. 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 6·0.

The mean proportion of *Sunshine* for the month (constant sunshine being represented by 1) was 0·460. The maximum daily amount of *Sunshine* was 15·3 hours on June 29.

The highest reading of the *Solar Radiation Thermometer* was 154°·7 on June 30 ; and the lowest reading of the *Terrestrial Radiation Thermometer* was 27°·2 on June 9.

The *Proportions of Wind* referred to the cardinal points were N. 3, E. 7, S. 6, W. 8. Six days were calm.

The *Greatest Pressure of the Wind* in the month was 15·0 lbs. on the square foot on June 18. The mean daily *Horizontal Movement of the Air* for the month was 231 miles ; the greatest daily value was 363 miles on June 7, and the least daily value was 112 miles on June 17.

Rain (0·005in. or over) fell on 7 days in the month, amounting to 3·753in., as measured by gauge No. 6 partly sunk below the ground ; being 1·715in. greater than the average fall for the 65 years, 1841–1905.

MONTH and DAY, 1930.	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.	Daily Duration of Sunshine.	Sun above Horizon.
	in.	°	°	°	°	°	°	°	°	°	°		°	°	°	in.	hours	hours
July 1	29·553	81·1	58·8	22·3	68·4	+ 6·9	62·8	58·9	9·5	18·6	2·3	72	149·7	46·2	55·8	0·000	5·8	16·5
2	29·645	79·4	59·1	20·3	67·7	+ 6·1	59·8	53·7	14·0	24·7	4·8	60	149·8	48·9	56·0	0·012	9·8	16·5
3	29·759	74·5	56·0	18·5	63·7	+ 1·9	57·5	52·4	11·3	22·1	2·0	67	148·0	47·3	56·0	0·004	11·7	16·5
4	29·828	75·2	53·9	21·3	64·2	+ 2·1	58·4	53·8	10·4	18·8	1·9	69	125·2	45·1	56·1	0·000	2·5	16·4
5	29·806	80·0	51·2	28·8	66·7	+ 4·4	59·0	52·8	13·9	23·8	1·2	61	133·2	37·5	56·3	0·000	9·4	16·4
6	29·802	83·9	53·7	30·2	68·6	+ 6·2	59·9	53·1	15·5	29·9	2·0	58	145·2	40·1	56·7	0·000	13·6	16·4
7	30·024	75·8	54·3	21·5	65·4	+ 3·0	55·3	45·6	19·8	27·4	9·9	49	140·2	44·2	56·8	0·000	14·0	16·4
8	30·026	73·0	54·8	18·2	64·2	+ 1·8	58·0	53·0	11·2	17·8	7·0	67	120·3	44·3	56·8	0·000	0·8	16·3
9	30·024	79·0	58·0	21·0	67·7	+ 5·3	61·1	56·3	11·4	18·7	2·3	67	137·2	47·4	56·9	0·000	5·9	16·3
10	29·994	75·3	54·3	21·0	63·1	+ 0·6	54·9	47·1	16·0	29·4	4·8	56	130·5	42·6	57·0	0·000	7·7	16·3
11	29·803	71·9	53·0	18·9	60·3	— 2·4	52·2	43·9	16·4	30·0	7·0	55	129·3	42·5	57·0	0·002	8·1	16·3
12	29·726	65·9	51·1	14·8	58·5	— 4·4	51·8	44·9	13·6	18·4	6·2	61	102·4	40·1	57·0	0·000	0·2	16·2
13	29·755	76·5	53·1	23·4	62·6	— 0·5	56·6	51·4	11·2	24·5	3·6	67	139·3	45·1	57·1	0·014	4·9	16·2
14	29·528	71·0	56·4	14·6	59·6	— 3·7	57·4	55·6	4·0	11·6	2·2	87	127·0	52·1	57·0	0·578	3·8	16·2
15	29·517	67·6	55·5	12·1	59·3	— 4·1	56·2	53·7	5·6	12·3	1·8	81	113·7	53·6	57·0	0·034	0·2	16·1
16	29·304	71·3	54·7	16·6	61·0	— 2·4	57·1	54·0	7·0	16·1	1·0	77	131·5	49·9	57·0	0·111	2·6	16·1
17	29·269	70·9	51·9	19·0	60·1	— 3·3	54·8	50·0	10·1	21·0	4·2	70	134·3	41·9	57·0	0·000	5·9	16·0
18	29·232	74·3	47·5	26·8	59·6	— 3·7	54·1	49·1	10·5	25·3	0·8	68	141·1	35·6	57·0	0·000	8·7	16·0
19	29·492	70·1	52·9	17·2	60·3	— 2·9	54·4	49·1	11·2	20·3	4·8	66	122·4	43·7	57·0	0·000	2·2	16·0
20	29·559	68·7	50·9	17·8	59·1	— 4·1	55·8	53·1	6·0	16·8	1·3	80	110·0	42·1	57·0	0·431	3·8	15·9
21	29·426	61·1	52·8	8·3	56·8	— 6·4	54·6	52·8	4·0	11·1	1·0	86	75·1	48·3	56·9	0·141	0·0	15·9
22	29·668	61·8	47·6	14·2	54·6	— 8·5	49·5	44·0	10·6	15·3	4·5	67	107·1	40·1	56·9	0·007	0·4	15·9
23	29·581	61·0	51·2	9·8	55·2	— 7·8	52·7	50·4	4·8	9·6	0·8	84	79·1	49·1	56·8	0·046	0·0	15·8
24	29·631	63·2	53·7	9·5	57·2	— 5·7	54·6	52·4	4·8	10·2	2·2	83	94·8	52·0	56·8	0·045	0·1	15·8
25	29·843	67·6	51·8	15·8	59·7	— 3·0	55·7	52·3	7·4	14·9	2·0	77	114·8	43·2	56·8	0·000	3·2	15·7
26	29·784	66·9	50·4	16·5	59·6	— 2·9	57·0	54·8	4·8	12·3	1·5	85	107·3	40·7	56·7	0·000	0·8	15·7
27	29·737	75·4	54·0	21·4	62·3	— 0·1	57·4	53·4	8·9	19·1	1·4	73	137·5	47·2	56·7	0·000	8·6	15·6
28	29·622	70·4	52·0	18·4	60·7	— 1·6	57·2	54·4	6·3	16·7	0·8	80	119·1	41·1	56·6	0·145	5·9	15·6
29	29·591	70·7	55·7	15·0	60·6	— 1·7	57·1	54·3	6·3	14·5	3·5	80	126·0	49·6	56·6	0·167	7·4	15·5
30	29·679	69·8	56·6	13·2	59·7	— 2·6	56·3	53·5	6·2	14·6	2·5	80	125·1	52·9	56·7	0·067	2·3	15·5
31	29·840	74·0	51·7	22·3	62·0	— 0·2	56·4	51·5	10·5	21·4	0·4	69	137·1	45·2	56·9	0·000	7·4	15·4
Means	29·679	71·8	53·5	18·3	61·6	— 1·1	56·3	51·8	9·8	18·9	3·0	71·0	124·3	45·1	56·8	Sum 1·804	5·1	16·0
Number of Column for Reference	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	18	19

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

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

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

The mean reading of the *Barometer* for the month was 29·679in., being 0·127in. less than the average for the 65 years, 1841–1905

TEMPERATURE OF THE AIR.

The highest in the month was 83°·9 on July 6; the lowest in the month was 47°·5 on July 18, and the range was 36°·4.
The mean of all the highest daily readings in the month was 71°·8, 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 53°·5, being 0°·2 higher than the average for the 65 years, 1841–1905.
The mean of the daily ranges was 18°·3, being 2°·6 less than the average for the 65 years, 1841–1905.
The mean for the month was 61°·6, being 1°·1 lower than the average for the 65 years, 1841-1905.

MONTH and DAY, 1930.	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.	Pressure on the Square Foot. Mean of 24 Hourly Measures.	Robinson's. Horizontal Movement of the Air.	Clouds and Weather. A.M.	P.M.
	hours.		hours.				lbs.	lbs.	miles.		
July 1	2·3	0·51	2·1	0·47	SE : Calm : S	SW	1·4	0·08	174	2 : 2 : 10,alt.-s,alt.-cu	9, alt.-s : th.-cl,p.-so.-ha : th.-cl, ci, d
2	1·8	0·40	1·4	0·30	SW : Calm	SW : SSW	1·4	0·13	193	7, slt.-sh : 8 : 7, fr.-s	4, fr.-s : 1 : 8, sh
3	3·5	0·78	3·5	0·78	SSW : SW	SW	3·2	0·30	275	8 : 6, slt.-r : 6, s, ci	7, ci, fr.-s, so.-ha : th.-cl
4	4·5	1·00	4·4	0·99	SW	Calm : SSE	0·9	0·04	140	4, d : 8, fr.-s, ci, so.-ha	10,alt.-s,so.-ha : 9 : 4, h
5	4·8	1·00	4·8	1·00	SW : Calm	Calm : SSW	0·5	0·03	116	0, h, d : 0, h : 4, h	9, s.-cu, h : 4, h : 0, h, d
6	0·1	0·02	0·1	0·01	SW : Calm	WSW : NW	2·0	0·19	247	0, h, d : 0, h, d	1 : 9, s.-cu
7	4·0	0·84	3·7	0·79	N : NW	NW : NNW	1·7	0·23	244	7, d : 1 : 6, fr.-s	4, fr.-s : 2 : 0
8	4·1	0·85	3·9	0·83	Calm : SW	WSW	1·0	0·08	191	9 : 9, s, s.-cu	9, s, s.-cu : 8 : 1, alt.-cu
9	2·8	0·58	2·3	0·48	SW : W : NW	NNW : N	1·0	0·12	208	0 : 8 : 9, fr.-s, s.-cu	9, fr.-s, s.-cu : 7, s.-cu : 3
10	0·0	0·00	0·0	0·00	NNW	NW : NNW	4·0	0·35	271	7 : 6, alt.-cu, ci.-cu	8, ci, oc.-so.-ha : 10
11	3·8	0·80	3·2	0·68	NW : NNW	NNW : NNE	2·0	0·35	283	10 : 9, fr.-s, ci.-cu	8, slt.-shs : 3
12	1·3	0·26	1·2	0·23	NNW : W : NW	NW : N : NNE	2·5	0·30	302	7 : 9 : 10, alt.-s	9, alt.-s : 10
13	1·4	0·27	0·8	0·16	N : Calm	SW : SSW	2·4	0·16	187	10 : 6 : 3, ci	9, s.-cu : 10, r
14	0·0	0·00	0·0	0·00	SSW : SW	SW : WSW	5·9	0·35	322	7 : 8, shs, hy.-shs, t	9, n, cu.-n, shs : 10, r
15	0·0	0·00	0·0	0·00	W : WSW	WSW : SW : SSW	1·6	0·22	306	10, slt.-sh : 10, n	10, s.-cu : 10, so.-ha : 10, fq.-r
16	2·0	0·38	1·7	0·33	S : SSW	SW	6·3	0·64	380	10, fq.-r : 10, alt.-s, n, fq.-m.-r	9, n, fr.-s, w : 9
17	5·3	1·00	5·2	0·99	SW	SSW : SW	2·0	0·22	266	8 : 8, alt.-cu, s.-cu	9, slt.-shs : 5
18	0·7	0·14	0·6	0·12	SW	SW : WSW	4·1	0·28	299	1 : 1 : 5, fr.-s	9, alt.-s, n, shs : 10
19	5·8	1·00	5·8	1·00	WSW	W : WSW	3·6	0·59	454	10 : 10, alt.-s, fr.-s	10, fr.-s, s.-cu, w : 0
20	0·0	0·00	0·0	0·00	SW	SSW	2·2	0·33	300	0 : 1 : 10, alt.-cu	10, n, fq.-slt.-shs, shs : 10, n, r, m.-r
21	3·6	0·63	3·6	0·63	SSW : WSW	WNW : NW	6·9	0·95	462	10, r, m.-r : 10, r, m.-r : 10, w	10, n, m.-r, w : 9
22	0·0	0·00	0·0	0·00	WSW : W	WNW : W	6·7	1·04	489	0 : 9 : 10, fr.-s, w	10, oc.-slt.-shs, w : 10, r
23	0·0	0·00	0·0	0·00	W : NW	NW : NNW	2·7	0·44	352	10, r : 10, m.-r : 10, alt.-s	10, alt.-s, fr.-s : 10, s.-cu
24	0·8	0·14	0·7	0·12	NNW	NNW : N	4·0	0·66	345	10 : 10, slt.-shs	10, s.-cu, n, oc.-r : 10, sh
25	2·7	0·47	2·4	0·41	NNW : Calm	Calm : SW	1·2	0·07	149	10, slt.-r : 10 : 8, fr.-s	10, s.-cu : 7, s.-cu, d
26	6·2	0·99	6·1	0·98	SSW	SW	2·5	0·28	268	9 : 8 : 10, alt.-s	10,alt.-s,slt.-m.-r : 10 : 2, d
27	3·2	0·50	3·1	0·49	SW : WSW	SW	2·2	0·33	309	0, d : 7, fr.-s	9, alt.-s, n, oc.-so.-ha : 10, slt.-m.-r
28	2·5	0·40	2·2	0·36	SW : SSW	SW	3·2	0·27	282	1 : 8, s.-cu	10, sh, hy.-sh, hl : v.-cl, slt.-sh
29	1·8	0·29	1·3	0·21	SW	SW : WSW	9·0	0·74	413	9 : 9, shs	9, n, cu.-n, shs, hy.-shs, t : 9
30	2·1	0·33	1·7	0·27	WSW : W	W : N : Calm	3·0	0·27	294	9, slt.-sh : 10, oc.-slt.-shs	9, sh, r, t, l : 9
31	0·6	0·10	0·2	0·03	Calm : W : WSW	WNW : SW	1·0	0·06	172	9 : 8, cu, fr.-s, ci	7, cu, alt.-cu : 9
Means	2·3	0·44	2·1	0·41	..	..	..	0·33	280		
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°·3, being 1°·6 lower, than
The mean *Temperature of the Dew Point* for the month was 51°·8, being 2°·3 lower than
The mean *Degree of Humidity* for the month was 71·0, being 2·2 less than
The mean *Elastic Force of Vapour* for the month was 0·387in., being 0·034in. 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 0·317. The maximum daily amount of *Sunshine* was 14·0 hours on July 7.

The highest reading of the *Solar Radiation Thermometer* was 149°·8 on July 2; and the lowest reading of the *Terrestrial Radiation Thermometer* was 35°·6 on July 18.

The *Proportions of Wind* referred to the cardinal points were N. 6, E. 0, S. 8, W. 13. Four days were calm.
The *Greatest Pressure of the Wind* in the month was 9·0 lbs. on the square foot on July 29. The mean daily *Horizontal Movement of the Air* for the month was 280 miles; the greatest daily value was 489 miles on July 22, and the least daily value was 116 miles on July 5.

Rain (0·005in. or over) fell on 13 days in the month, amounting to 1·804in., as measured by gauge No. 6 partly sunk below the ground; being 0·595in. less than the average fall for the 65 years, 1841–1905.

MONTH and DAY, 1930.	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.	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	29·715	74·5	54·4	20·1	63·6	+ 1·4	58·1	53·7	9·9	23·1	2·6	70	133·0	48·1	56·9	0·000	7·7	15·4
2	29·345	73·2	53·2	20·0	63·6	+ 1·5	59·0	55·5	8·1	15·9	2·5	75	135·1	44·7	57·0	0·014	8·5	15·3
3	29·323	71·5	49·0	22·5	59·7	— 2·4	55·1	50·9	8·8	22·0	2·6	73	137·3	38·9	57·0	0·027	5·6	15·3
4	29·289	69·1	52·6	16·5	59·4	— 2·7	55·7	52·6	6·8	24·5	0·9	78	124·6	46·0	57·0	0·455	7·1	15·2
5	29·393	65·8	50·8	15·0	56·6	— 5·5	54·0	51·7	4·9	15·0	1·7	84	121·5	43·4	57·2	0·192	6·8	15·2
6	29·480	69·6	50·6	19·0	59·0	— 3·2	55·1	51·7	7·3	15·3	2·0	77	129·6	42·2	57·2	0·035	8·2	15·1
7	29·661	69·7	51·3	18·4	58·0	— 4·2	54·3	50·9	7·1	14·6	3·0	77	142·2	44·6	57·2	0·078	7·3	15·1
8	29·888	70·9	50·1	20·8	60·1	— 2·2	55·4	51·1	9·0	17·8	1·7	73	128·3	41·6	57·1	0·000	7·7	15·0
9	29·951	69·8	52·1	17·7	59·8	— 2·5	56·9	54·5	5·3	9·6	1·5	82	112·1	43·2	57·1	0·000	1·9	14·9
10	29·811	72·1	56·1	16·0	63·5	+ 1·2	61·1	59·3	4·2	7·4	1·0	87	107·1	49·1	57·2	0·000	0·3	14·9
11	29·665	77·6	56·4	21·2	65·8	+ 3·4	60·8	57·1	8·7	20·7	0·7	74	134·6	51·2	57·3	0·100	6·2	14·8
12	29·633	71·0	54·8	16·2	61·1	— 1·4	55·9	51·4	9·7	18·7	2·8	71	133·7	50·1	57·4	0·052	9·6	14·8
13	29·621	64·2	54·2	10·0	57·9	— 4·6	54·3	50·9	7·0	13·1	2·6	78	103·1	48·7	57·4	0·057	0·8	14·7
14	29·434	68·4	54·1	14·3	60·3	— 2·2	53·8	47·6	12·7	21·4	0·6	63	115·2	46·6	57·6	0·220	8·9	14·7
15	29·697	66·2	51·8	14·4	57·8	— 4·6	52·0	46·1	11·7	14·3	5·4	65	111·0	43·1	57·6	0·006	2·5	14·6
16	29·920	71·8	48·7	23·1	60·2	— 2·1	52·8	45·2	15·0	24·5	3·6	58	132·8	39·6	57·6	0·000	13·3	14·6
17	29·908	76·1	47·9	28·2	60·5	— 1·6	55·2	50·5	10·0	22·8	1·0	70	135·2	35·0	57·6	0·000	8·3	14·5
18	29·623	75·9	53·2	22·7	63·8	+ 1·9	58·9	55·0	8·8	15·6	1·8	73	131·1	42·7	57·7	0·000	7·9	14·4
19	29·802	70·1	50·6	19·5	57·1	— 4·6	51·5	45·7	11·4	24·3	3·0	66	133·5	41·8	57·6	0·028	10·7	14·4
20	29·854	71·0	47·7	23·3	59·5	— 2·0	54·4	49·7	9·8	20·1	0·9	70	133·5	38·0	57·6	0·000	6·8	14·3
21	29·428	69·4	54·0	15·4	60·7	— 0·6	57·5	54·9	5·8	11·3	2·1	81	122·5	47·7	57·6	0·522	3·4	14·2
22	29·842	69·1	50·6	18·5	58·6	— 2·5	53·2	48·0	10·6	19·7	1·7	68	129·1	42·2	57·7	0·000	10·8	14·2
23	29·690	71·3	52·0	19·3	60·1	— 0·8	56·4	53·3	6·8	18·3	1·7	79	119·8	43·2	57·6	0·086	3·6	14·1
24	29·975	71·6	51·1	20·5	59·1	— 1·7	54·2	49·7	9·4	18·3	2·4	71	123·1	41·6	57·6	0·000	8·1	14·1
25	30·084	73·1	47·7	25·4	60·6	— 0·1	56·2	52·5	8·1	17·7	0·5	74	133·0	36·6	57·6	0·000	7·9	14·0
26	29·964	87·7	56·0	31·7	71·6	+10·9	65·7	62·0	9·6	19·3	1·2	71	138·8	47·1	57·8	0·000	11·9	13·9
27	29·914	89·5	62·3	27·2	75·7	+15·1	69·5	66·1	9·6	22·4	1·0	72	145·3	52·1	57·9	0·000	12·5	13·9
28	29·910	92·2	61·8	30·4	75·9	+15·5	69·5	65·9	10·0	26·2	0·4	71	141·1	52·7	58·0	0·000	11·0	13·8
29	29·899	92·2	61·1	31·1	76·0	+15·7	69·5	65·9	10·1	24·2	0·3	71	143·1	49·2	58·1	0·540	12·1	13·8
30	29·947	80·5	62·6	17·9	71·1	+11·0	67·3	65·0	6·1	19·7	0·5	81	129·0	53·2	58·3	0·348	8·0	13·7
31	30·034	74·5	57·4	17·1	64·6	+ 4·7	61·6	59·4	5·2	12·9	0·3	83	128·5	52·8	58·7	0·000	1·9	13·6
Means	29·732	73·9	53·4	20·4	62·6	+ 1·0	57·9	54·0	8·6	18·4	1·7	73·7	128·6	45·1	57·5	Sum 2·760	7·3	14·5
Number of Column for Reference.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	18	19

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

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

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

The mean reading of the *Barometer* for the month was 29·732in., being 0·058in. less than the average for the 65 years, 1841–1905.

TEMPERATURE OF THE AIR.

The highest in the month was 92°·2 on August 28 and 29; the lowest in the month was 47°·7 on August 20 and 25; and the range was 44°·5.
The mean of all the highest daily readings in the month was 73°·9, being 1°·2 higher than the average for the 65 years, 1841–1905.
The mean of all the lowest daily readings in the month was 53°·4, being 0°·4 higher than the average for the 65 years, 1841–1905.
The mean of the daily ranges was 20°·4, being 0°·7 greater than the average for the 65 years, 1841–1905.
The mean for the month was 62°·6, being 1°·0 higher than the average for the 65 years, 1841–1905.

MONTH and DAY, 1930.	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.	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		
Aug. 1	2·0	0·32	1·5	0·24	Calm : SSW : S	S : SE : ESE	1·6	0·13	185	9 : 9, ci, th.-cl	9, fr.-s, ci : 7, th.-cl : 9
2	6·4	0·98	6·4	0·98	SE : S : SSW	SSW : SW	6·4	0·80	350	10, sh, slt.-r : v.-cl : 8, n, fr.-s, sh, w	8, fr.-s : 8, fr.-s, n, ci : 1
3	0·0	0·00	0·0	0·00	SSW : SSE	W : SW	2·0	0·21	243	1 : 10, shs : 9 m.-r	9, n, fr.-s : 10
4	3·3	0·51	2·6	0·40	E : N : WSW	WSW : SW	6·3	0·74	369	10, c.-r : 9, n, m.-r, shs, w	7, s.-cu, shs : 5 : v.-cl, sh
5	4·7	0·72	4·3	0·66	SW	SSW : SW	1·5	0·09	183	8 : 3 : 7, sh	9, r, oc.-t, l, p.-so.-ha : 3
6	5·3	0·82	5·2	0·80	SW : WSW	SW	3·0	0·44	335	8, slt.-sh : 9 : 8, shs	7, n, cu.-n, sh, t: 8, t : 3, alt.-cu, d
7	2·0	0·30	1·7	0·27	SW : WSW	SW : WSW	3·5	0·29	292	6 : 8 : 9, ci, p.-so.-ha, slt.-shs	9, n, cu.-n, slt.-shs, shs, oc.-t, l : 8
8	4·3	0·67	4·0	0·62	WSW : W	W : WSW	2·0	0·18	259	10 : 3, fr.-cu : 5, fr.-s	8, fr.-s, alt.-cu : 3, th.-cl
9	2·9	0·42	2·5	0·36	SW	SW : SSW	1·2	0·16	216	10, slt.-sh : 10, n, alt.-s	9, fr.-s, s.-cu, slt.-m.-r : 7 : 4, d
10	0·5	0·06	0·4	0·05	SW	SSW : SW	1·2	0·14	213	10 : 10, s, fr.-s	10, alt.-s, s : 9
11	2·4	0·34	1·9	0·27	SW : WSW	W : WSW	3·3	0·59	403	10, r, slt.-r : 9, n	5, ci.-cu, alt.-cu : 9
12	2·3	0·33	1·6	0·23	WSW : W	W : WSW	4·8	0·50	408	9 : 9, fr.-s, s.-cu	8, s.-cu, cu.-n, hy.-sh : 9, slt.-sh, sh
13	0·0	0·00	0·0	0·00	W : WSW : NW	W : SW	3·6	0·42	384	8, r : 10, n, r, slt.-r	10, n, alt.-s, slt.-sh : 10, oc.-slt.-r
14	6·2	0·88	6·1	0·87	SW : W : NW	NW : WNW : W	10·0	2·02	607	10, c.-r : 7, fr.-s, w, st.-w	9, fr.-s, n, st.-w : 6, w : 2
15	7·0	1·00	7·0	1·00	W	W : NW	4·0	0·90	487	1 : 10, alt.-s, alt.-cu	10, alt.-s : 8, sh : 0
16	7·5	1·00	7·5	1·00	WNW : NW	WNW : WSW	2·1	0·39	339	0, d : 1	1, ci : 1, d
17	3·3	0·44	2·8	0·37	SW : Calm	SW : Var : Calm	1·1	0·08	167	0, d : 3, ci	9, ci, alt.-cu, alt.-s, sh : 7, d
18	5·6	0·75	4·9	0·65	SE ; S : SW	SW	3·8	0·40	324	7 : 4, ci, alt.-cu	8, fr.-s, ci.-cu : 10, slt.-m.-r.-shs : v.-cl
19	7·5	1·00	7·5	1·00	SW	SW : SSW	11·0	0·87	412	v.-cl : v.-cl : 6, w	v.-cl, n, shs: 3 : 0, d
20	0·0	0·00	0·0	0·00	SSW	SSW : S : SE	2·3	0·25	253	0, d : 6, alt.- cu, ci, so.-ha	9, ci, fr.-s, oc.-so.-ha : 9
21	7·5	1·00	7·4	0·98	SSE : S	SW : WSW	5·9	0·93	420	10, r, m.-r : 10, r, slt.-m.-r	9, n, r, hy.-r, sh, w : 1, d
22	2·0	0·27	1·8	0·24	SW	SW : SSW : S	3·3	0·36	296	0, d : 5, alt.-cu,, ci.-cu	8, s.-cu, alt.-cu, sh : 2, d
23	4·9	0·62	3·9	0·49	SSE : S : SW	SW : WSW	10·0	0·80	404	10, r, m.-r : 10, n, r, m.-r, slt.-m.-r	9, alt.-s, w: 8, st.-w, w : 10
24	7·9	0·99	7·6	0·95	WSW	W : SW	2·0	0·28	299	1, d : 9, ci.-s, ci.-cu, so.-ha	9, s.-cu, cu, so.-ha : 8, th.-cl, so.-ha : 1, d
25	7·9	0·99	7·6	0·95	Calm : SSW	S : SE : Calm	1·0	0·07	140	1, d : 9 : 5, ci, alt.-cu	7, alt.-cu, alt.-s : 0 : 1
26	6·9	0·87	6·2	0·78	Calm : S	SSW : Calm	1·0	0·04	140	3, d : 0, slt.-h	1, slt.-h : 7, d
27	8·0	1·00	8·0	1·00	Calm : SE	SSE : Calm	1·2	0·06	134	1, d : 2, ci	4, ci : 1, d
28	8·0	1·00	8·0	1·00	Calm	SSW : Calm	0·4	0·01	76	2, ci, d, h : 1, alt.-cu, h	0, h : 0, h, d
29	..	..	..	..	Calm	S : Calm	4·0	0·04	119	0, h, d : 0, h	0 : 2 : 10, t.-sm, hy.-r
30	4·8	0·56	4·5	0·53	Calm : WSW	NNW : Calm	0·6	0·05	131	10, t.-sm , hy.-r : 7, m : 2, fr.-s, h	3, h : 1, h, w
31	2·8	0·33	2·3	0·27	Calm : N	N : NE	1·9	0·14	199	9, h, d : 9, h : 9, alt.-cu,h	10, alt.-cu, fr.-s : 9
Means	4·5	0·61	4·2	0·57	..	..	..	0·40	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 57°·9, being 0°·4 higher than
The mean *Temperature of the Dew Point* for the month was 54°·0, being 0°·3 lower than
The mean *Degree of Humidity* for the month was 73·7, being 3·1 less than
The mean *Elastic Force of Vapour* for the month was 0·420in., being 0·004in. 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 0·504. The maximum daily amount of *Sunshine* was 13·3 hours on August 16.

The highest reading of the *Solar Radiation Thermometer* was 145°·3 on August 27; and the lowest reading of the *Terrestrial Radiation Thermometer* was 35°·0 on August 17.

The *Proportions of Wind* referred to the cardinal points were N. 2, E. 1, S. 11, W. 12. Five days were calm.

The *Greatest Pressure of the Wind* in the month was 11·0 lbs. on the square foot on August 19. The mean daily *Horizontal Movement of the Air* for the month was 283 miles; the greatest daily value was 607 miles on August 14, and the least daily value was 76 miles on August 28.

Rain (0·005in. or over) fell on 16 days in the month, amounting to 2·760 in. as measured by gauge No. 6 partly sunk below the ground; being 0·416in. greater than the average fall for the 65 years, 1841–1905.

MONTH and DAY 1930.	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.	Daily Duration of Sunshine.	Sun above Horizon.
	in.	°	°	°	°	°	°	°	°	°	°		°	°	°	in.	hours	hours
Sept. 1	30·155	69·8	48·2	21·6	58·8	— 1·0	54·2	50·0	8·8	19·1	1·7	72	131·3	36·7	58·8	0·000	10·6	13·5
2	30·177	73·8	44·0	29·8	58·5	— 1·2	53·4	48·6	9·9	21·3	0·7	70	126·8	33·0	58·8	0·000	10·1	13·5
3	30·177	69·2	47·2	22·0	57·8	— 1·8	54·3	51·1	6·7	14·3	0·2	78	125·2	35·9	58·8	0·000	10·1	13·4
4	30·033	71·1	49·1	22·0	59·5	— 0·0	55·5	52·1	7·4	15·8	0·3	77	131·4	36·2	58·7	0·000	10·3	13·4
5	29·785	81·5	55·0	26·5	66·6	+ 7·2	61·5	57·9	8·7	22·0	1·6	74	132·2	45·3	58·8	0·008	8·7	13·3
6	29·778	73·7	55·1	18·6	61·8	+ 2·6	58·7	56·3	5·5	15·5	0·9	82	121·1	44·0	58·7	0·494	2·5	13·2
7	29·708	69·3	53·1	16·2	59·8	+ 0·8	55·7	52·2	7·6	16·3	1·2	76	111·1	47·9	58·7	0·009	5·2	13·2
8	29·726	71·4	50·7	20·7	58·9	+ 0·1	55·4	52·4	6·5	14·8	0·7	79	122·3	43·0	58·7	0·001*	6·6	13·1
9	29·641	67·7	50·8	16·9	58·9	+ 0·3	57·3	56·1	2·8	9·7	0·6	90	94·9	40·9	58·5	0·104	0·1	13·0
10	29·676	73·3	57·7	15·6	62·4	+ 4·0	60·1	58·5	3·9	12·4	0·5	87	126·9	53·1	58·5	0·195	2·5	13·0
11	29·667	71·0	57·5	13·5	62·3	+ 4·2	59·1	56·7	5·6	16·7	0·5	82	116·0	50·7	58·5	0·000	3·9	12·9
12	29·657	62·3	56·7	5·6	58·8	+ 0·8	56·9	55·4	3·4	6·5	1·0	89	78·0	49·9	58·3	0·011	0·0	12·9
13	29·522	65·0	52·9	12·1	58·1	+ 0·3	56·4	55·0	3·1	7·0	1·1	89	95·1	47·4	58·3	0·295	0·7	12·8
14	29·603	60·6	52·9	7·7	56·2	— 1·5	53·6	51·3	4·9	8·3	0·7	84	80·9	44·9	58·3	0·017	0·1	12·7
15	29·951	66·0	47·8	18·2	56·7	— 0·9	52·1	47·7	9·0	18·0	1·2	71	118·9	36·2	58·4	0·000	8·0	12·7
16	29·871	62·7	44·7	18·0	54·6	— 2·9	52·8	51·1	3·5	10·8	0·3	88	89·8	32·9	58·3	0·068	0·0	12·6
17	29·667	66·0	54·0	12·0	59·2	+ 2·0	57·0	55·1	4·1	9·5	0·7	87	95·4	48·8	58·1	0·196	0·6	12·5
18	29·513	66·4	51·5	14·9	59·3	+ 2·4	55·2	51·6	7·7	16·2	1·6	76	115·9	42·6	58·0	0·019	7·9	12·5
19	29·262	66·0	50·6	15·4	57·5	+ 1·0	54·5	51·9	5·6	14·1	0·7	82	119·4	42·9	57·9	0·261	3·5	12·4
20	29·045	65·1	53·3	11·8	57·8	+ 1·6	54·3	51·1	6·7	14·4	2·4	78	112·4	49·1	57·8	0·338	3·2	12·3
21	29·505	66·4	53·2	13·2	57·6	+ 1·7	54·4	51·5	6·1	13·0	1·5	80	116·1	47·3	57·9	0·211	3·7	12·3
22	29·850	63·3	51·9	11·4	57·9	+ 2·3	56·7	55·7	2·2	5·1	1·2	92	74·3	46·0	57·8	0·013	0·0	12·2
23	29·889	67·9	59·0	8·9	63·4	+ 8·0	61·0	59·3	4·1	7·8	1·4	87	83·3	51·9	57·8	0·000	0·0	12·1
24	29·816	70·3	52·4	17·9	61·7	+ 6·4	57·3	53·8	7·9	18·8	2·6	75	123·1	45·6	57·8	0·020	7·4	12·1
25	29·767	64·2	49·4	14·8	55·6	+ 0·4	51·3	47·0	8·6	14·4	1·8	73	110·1	42·2	57·7	0·002	6·4	12·0
26	29·680	54·0	47·2	6·8	49·8	— 5·4	47·3	44·6	5·2	10·9	1·2	82	72·7	40·6	57·7	0·289	0·0	11·9
27	29·746	59·9	48·6	11·3	54·0	— 1·1	51·3	48·7	5·3	11·1	1·6	82	115·5	42·3	57·6	0·045	3·8	11·9
28	30·009	59·0	47·7	11·3	52·9	— 2·0	51·1	49·4	3·5	8·7	1·0	87	92·4	40·7	57·6	0·054	0·3	11·8
29	29·914	58·6	48·7	9·9	52·9	— 1·8	51·8	50·8	2·1	5·0	1·2	92	85·2	46·8	57·1	0·434	0·1	11·7
30	29·964	63·8	51·3	12·5	55·4	+ 1·0	53·3	51·4	4·0	10·7	0·9	86	115·8	42·7	57·0	0·000	3·1	11·7
																Sum		
Means	29·758	66·6	51·4	15·2	58·2	+ 0·9	55·1	52·5	5·7	12·9	1·1	81·6	107·8	43·6	58·2	3·084	4·0	12·6
Number of Column for Reference.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	18	19

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

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

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

*Rainfall (Column 16). The amount entered on September 8 is derived from dew.

The mean reading of the *Barometer* for the month was 29·758in., being 0·060in less than the average for the 65 years, 1841–1905.

TEMPERATURE OF THE AIR.

The highest in the month was 81°·5 on September 5; the lowest in the month was 44°·0 on September 2; and the range was 37°·5.

The mean of all the highest daily readings in the month was 66°·6, being 0°·7 lower than the average for the 65 years, 1841–1905.

The mean of all the lowest daily readings in the month was 51°·4, being 2°·3 higher than the average for the 65 years, 1841–1905.

The mean of the daily ranges was 15°·2, being 3°·0 less than the average for the 65 years, 1841–1905.

The mean for the month was 58°·2, being 0°·9 higher than the average for the 65 years, 1841–1905.

MONTH and DAY, 1930.	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.	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	8·5	1·00	8·5	1·00	NE	E : SE : Calm	2·0	0·08	181	8 : 1, d : 6, fr.-s	5 : 0, d
2	8·5	1·00	8·5	1·00	Calm	Calm	0·2	0·00	81	0, d : 0, slt.-h	0, h : 0, h, d
3	7·4	0·87	6·9	0·81	Calm : ENE	ESE : E	1·9	0·16	183	0, h, d : 2, h	4, fr.-s, ci, h : 3, h, d
4	5·8	0·68	5·6	0·66	Calm : ESE	ESE : E	2·6	0·20	192	2, h, d : 1, ci	6,ci.-cu,alt.-cu : 4 : 4, t, l
5	7·3	0·85	6·7	0·78	Calm : SE : S	SW : W	1·4	0·13	218	10, r, slt.-r, t, l : 8, alt.-cu	3,alt.-cu,ci.-cu,h : 7 : 6,d,oc.-lu.-ha
6	4·5	0·50	4·3	0·48	WSW : Calm : SW	SW	1·9	0·14	227	1, d : 9 : 10, s.-cu	10, m.-r.-shs : 10, r, hy.-r, t, l
7	7·6	0·84	7·4	0·82	WSW	W : WSW	3·6	0·66	436	1, d : v.-cl : 8, s.-cu	9, s.-cu, n : 7, shs : 1
8	6·6	0·74	5·8	0·64	WSW : SW	WSW : SW	1·0	0·09	215	1, d : 4, fr.-s	9,s.-cu,alt.-cu : 9 : th.-cl, d, lu.-ha
9	0·7	0·08	0·6	0·07	Calm	Calm	0·3	0·03	113	10, m, d : 10, alt.-cu, m	10, alt.-s, n, oc.-m.-r, r : 10, r
10	0·2	0·02	0·1	0·01	Calm	Calm	0·2	0·02	127	10, m : 9, alt.-s, m, h	9, s.-cu, fr.-s, h : 10, r, hy.-r, t, l, m
11	2·1	0·23	1·0	0·11	Calm	Calm : NE	0·6	0·03	95	10 : 6, ci.-cu	10, ci, ci.-cu, h : 10, d
12	0·0	0·00	0·0	0·00	N : NNE	N : NNW	1·2	0·20	247	10 : 10, fr.-s, n	10, alt.-s, n, m.-r : 10, m.-r
13	2·8	0·29	2·6	0·28	W : WSW : SSW	S : SW	2·1	0·14	226	9 : 10, alt.-s, n, r	10, c.-r, slt.-m.-r : 9
14	6·7	0·71	6·5	0·68	SW : NW	NW : WNW	3·1	0·37	345	9, slt.-r : 10, fr.-s, n	10, n, oc.-slt.-r : 9, oc.-slt.-r
15	9·4	0·99	8·9	0·94	NW : W : NNW	NNW : WNW : WSW	1·7	0·14	243	1, d : 7, slt.-h	5, fr.-s, alt.-cu, slt.-h : 1, d
16	0·8	0·09	0·5	0·05	SW : Calm	SSW : Calm : SW	0·8	0·05	158	0, d : 9 : 10,alt.-s,so.-ha,oc.-slt.-r	10, n, oc.-m.-r, m.-r : 10, m
17	0·3	0·03	0·2	0·02	WSW	SW : S : SSE	3·2	0·13	229	10 : 7, d : 10,alt.-cu,alt.-s	10, alt.-s : 10, c.-r : 10, c.-r
18	6·1	0·64	5·3	0·56	S : SW : WSW	WSW : SW : SSW	7·5	1·06	445	10, c.-r, w : v.-cl, w : v.-cl, w	9, fr.-s, w : 8 : 1, d
19	4·2	0·44	3·7	0·39	S : SE	S : SW : SSW	9·8	0·93	378	8 : 9 : 10, n, c.-r	5, slt.-sh : 2, w : 4, w
20	0·0	0·00	0·0	0·00	SSW : SW	WSW : SW	18·0	2·46	654	10, fq.-r, w : 10, n, fq.-r, w, st.-w	10, n, alt.-s, shs, st.-w,w : 10, c.-r, w
21	6·6	0·66	4·4	0·44	WSW : W	WNW : W	6·1	1·00	480	10, r, w : 9, sh, w : 8, alt.-cu, w	8, sh : 6
22	0·0	0·00	0·0	0·00	WSW : SW	SW : WSW	1·2	0·16	232	9 : 10, fq.-m.-r : 10,s,n,fq.-m.-r	10, n, m.-r : 10, slt.-sh
23	1·5	0·15	1·3	0·13	WSW : SW	SW : SSW	2·7	0·24	254	10 : 10, s.-cu, s	10 : 9 : 6, d
24	9·7	0·97	9·4	0·94	SSW : WSW	W : WSW	1·7	0·29	295	10 : 10,slt.-m.-r, : 7, n, ci	3, fr.-s : 9 : 1, d
25	1·9	0·19	1·8	0·18	WSW	W : WNW	3·2	0·54	387	0, d : 6, alt.-cu	8,cu.-n,alt.-cu,sh : 5 : 9
26	0·3	0·03	0·1	0·01	WNW : NW	WNW : NNW	5·2	0·65	414	9 : 10, n, slt.-r, fq.-m.-r	10, n, m.-r : 10,m.-r,slt.-r,r 10
27	5·2	0·48	3·0	0·28	N : NE : E	E : NE	4·7	0·65	362	10, m.-r : 9, s.-cu, n	6, cu.-n, alt.-cu : 9, r
28	0·0	0·00	0·0	0·00	NE : NNE	NE	2·1	0·17	240	v.-cl : 10, r : 10, alt.-s	10,alt.-s,n,slt.-r : 10,m.-r,oc.-slt.-r : 10
29	0·0	0·00	0·0	0·00	NE : NNE	NNE : NE	1·5	0·25	266	10, c.-r : 10, n, c.-r	10, n, r, shs : 10, r
30	4·9	0·46	4·3	0·40	Calm : NNE	Calm : NE	1·0	0·05	146	10, slt.-m : 10, slt.-m	7, alt.-cu, fr.-s : 10
Means	4·0	0·43	3·6	0·39	..	..	..	0·37	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 55°·1, being 1°·0 higher than
The mean *Temperature of the Dew Point* for the month was 52°·5, being 1°·4 higher than
The mean *Degree of Humidity* for the month was 81·6, being 1·7 greater than
The mean *Elastic Force of Vapour* for the month was 0·397in., being 0·018in. 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 7·4.

The mean proportion of *Sunshine* for the month (constant sunshine being represented by 1) was 0·315. The maximum daily amount of *Sunshine* was 10·6 hours on September 1.

The highest reading of the *Solar Radiation Thermometer* was 132°·2 on September 5; and the lowest reading of the *Terrestrial Radiation Thermometer* was 32°·9 on September 16.

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

The *Greatest Pressure of the Wind* in the month was 18·0 lbs. on the square foot on September 20. The mean daily *Horizontal Movement of the Air* for the month was 269 miles; the greatest daily value was 654 miles on September 20, and the least daily value was 81 miles on September 2.

Rain (0·005in. or over) fell on 20 days in the month, amounting to 3·084in., as measured by gauge No. 6 partly sunk below the ground; being 0·936in. greater than the average fall for the 65 years, 1841–1905.

MONTH and DAY 1930.	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	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	30·132	55·1	45·7	9·4	51·6	— 2·5	49·3	46·9	4·7	7·0	2·0	84	71·9	38·5	57·0	0·000	0·0	11·6
2	30·122	62·9	44·9	18·0	54·1	+ 0·4	50·5	46·9	7·2	12·7	2·3	76	107·6	32·3	57·0	0·000	3·9	11·5
3	30·163	66·9	44·8	22·1	55·2	+ 1·9	51·9	48·7	6·5	14·1	1·2	79	122·6	32·1	56·9	0·017	6·1	11·5
4	29·742	64·2	55·1	9·1	59·3	+ 6·3	57·5	56·1	3·2	7·6	1·1	89	90·6	48·5	56·8	0·089	0·6	11·4
5	29·397	59·0	48·5	10·5	54·8	+ 2·0	51·1	47·4	7·4	15·1	3·2	76	77·1	43·2	56·7	0·024	0·2	11·4
6	29·365	60·2	45·0	15·2	50·6	— 1·9	46·9	42·6	8·0	16·1	3·4	74	107·1	36·9	56·6	0·012	7·9	11·3
7	29·473	58·6	44·0	14·6	50·7	— 1·6	47·4	43·7	7·0	15·1	2·4	77	96·1	36·2	56·4	0·002	4·0	11·2
8	29·180	62·6	52·3	10·3	56·8	+ 4·8	53·2	49·8	7·0	15·2	1·2	77	105·9	47·2	56·3	0·163	1·2	11·2
9	29·567	58·2	37·6	20·6	49·3	— 2·3	45·6	41·1	8·2	19·8	1·7	73	108·0	27·0	56·1	0·027	5·3	11·1
10	29·900	58·9	36·1	22·8	46·4	— 4·9	43·2	39·1	7·3	15·4	1·2	75	110·8	25·2	56·0	0·000	5·9	11·0
11	29·644	61·6	41·8	19·8	49·5	— 1·4	46·8	43·7	5·8	15·1	2·1	80	117·1	34·3	55·9	0·000	3·5	11·0
12	29·633	61·4	41·3	20·1	50·9	+ 0·3	47·1	42·7	8·2	17·9	2·4	73	115·3	31·8	55·7	0·000	6·1	10·9
13	29·889	61·9	37·2	24·7	49·6	— 0·7	46·9	43·8	5·8	13·0	0·9	80	104·0	27·5	55·3	0·000	4·6	10·8
14	29·821	67·8	46·1	21·7	56·7	+ 6·6	53·2	49·9	6·8	14·6	1·2	78	122·3	36·1	55·4	0·001*	2·5	10·8
15	29·639	69·9	56·5	13·4	61·9	+12·0	58·0	54·9	7·0	10·8	4·6	77	117·1	51·3	55·0	0·000	1·9	10·7
16	29·692	69·8	53·4	16·4	61·0	+11·2	58·1	55·8	5·2	12·8	0·9	83	122·1	42·7	55·0	0·056	6·5	10·6
17	29·629	69·9	53·7	16·2	60·7	+11·1	58·4	56·6	4·1	9·7	1·1	87	114·7	43·0	55·2	0·184	4·1	10·6
18	29·717	63·6	49·5	14·1	55·6	+ 6·3	51·2	46·8	8·8	18·3	3·7	72	118·7	40·4	55·0	0·000	8·0	10·5
19	29·687	63·1	43·9	19·2	51·9	+ 2·8	49·5	47·0	4·9	15·2	0·4	83	114·9	31·2	55·1	0·001*	5·8	10·5
20	29·501	59·3	41·7	17·6	50·3	+ 1·5	47·4	44·1	6·2	17·1	1·5	80	111·0	30·9	55·2	0·089	5·6	10·4
21	29·530	56·8	40·0	16·8	46·6	— 2·0	43·8	40·3	6·3	13·1	0·9	78	108·1	27·2	55·0	0·000	7·8	10·3
22	29·625	57·1	43·4	13·7	49·1	+ 0·8	46·0	42·3	6·8	13·7	1·7	78	91·2	34·1	54·8	0·000	3·2	10·3
23	29·507	56·2	44·0	12·2	50·4	+ 2·3	58·8	47·1	3·3	8·8	1·0	88	66·7	32·6	54·7	0·223	0·0	10·2
24	29·411	55·3	39·6	15·7	47·1	— 0·8	43·6	39·2	7·9	17·9	3·2	73	99·2	30·5	54·5	0·000	7·0	10·1
25	29·446	51·8	39·5	12·3	45·1	— 2·6	41·8	37·1	8·0	9·7	3·6	74	86·2	31·1	54·2	0·081	2·6	10·1
26	29·772	50·9	36·2	14·7	43·6	— 4·0	40·2	35·2	8·4	15·6	2·5	72	94·9	26·5	54·0	0·000	6·0	10·0
27	29·911	48·8	30·2	18·6	41·8	— 5·7	40·5	38·8	3·0	10·0	0·3	89	65·9	19·9	53·9	0·006	0·6	9·9
28	29·752	60·8	47·6	13·2	52·8	+ 5·4	51·2	49·6	3·2	7·4	0·8	89	96·6	46·6	53·6	0·009	1·7	9·9
29	29·737	61·8	51·9	9·9	56·0	+ 8·7	53·7	51·7	4·3	8·3	1·3	85	96·7	46·8	53·2	0·002	0·7	9·8
30	29·696	63·7	53·4	10·3	57·7	+10·5	54·3	51·2	6·5	12·0	3·5	79	93·7	44·6	53·1	0·000	2·4	9·8
31	29·840	58·0	47·5	10·5	51·2	+ 4·1	47·8	44·0	7·2	14·6	1·7	77	101·2	40·3	53·1	0·000	1·0	9·7
Means	29·685	60·5	44·9	15·6	52·2	+ 2·2	49·2	45·9	6·3	13·3	1·9	79·2	101·8	36·0	55·2	Sum 0·986	3·8	10·6
Number of Column for Reference.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	18	19

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

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

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

*Rainfall (Column 16). The amounts entered on October 14 and 19 are derived from dew.

The mean reading of the *Barometer* for the month was 29·685in., being 0·043in. less than the average for the 65 years, 1841–1905.

TEMPERATURE OF THE AIR.

The highest in the month was 69°·9 on October 15 and 17; the lowest in the month was 30°·2 on October 27; and the range was 39°·7.

The mean of all the highest daily readings in the month was 60°·5, being 3°·0 higher than the average for the 65 years, 1841–1905.

The mean of all the lowest daily readings in the month was 44°·9, being 1°·7 higher than the average for the 65 years, 1841-1905.

The mean of the daily ranges was 15°·6, being 1°·3 greater than the average for the 65 years, 1841–1905.

The mean for the month was 52°·2 being 2°·2 higher than the average for the 65 years, 1841–1905.

MONTH and DAY, 1930.	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.	General Direction. P.M.	Pressure on the Square Foot. Greatest.	Pressure on the Square Foot. Mean of 24 Hourly Measures.	Robinson's. Horizontal Movement of the Air.	Clouds and Weather. A.M.	Clouds and Weather. P.M.
	hours.		hours.				lbs.	lbs.	miles.		
Oct. 1	0·0	0·00	0·0	0·00	NE : ENE	NE	1·1	0·11	207	5, d : 10, s.-cu, s	10, s.-cu : 10, s.-cu
2	6·5	0·61	5·4	0·50	NE : ENE	E : Calm	1·3	0·14	204	10 : 9, s.-cu	8, s.-cu, ci.-s, so.-ha : 4, d, slt.-m
3	0·0	0·00	0·0	0·00	Calm : SE	Calm : SE	0·5	0·04	116	9,d,slt.-m : 7, slt.-m : 3, ci, so.-ha	7, alt.-cu, ci : 10, shs
4	0·0	0·00	0·0	0·00	SSE:SSW:WSW	WSW : SW	4·5	0·33	317	9 : 10, n, m.-r	9, so.-ha : 10, slt.-r
5	7·0	0·64	6·2	0·56	SW : WSW	WSW : SW	9·1	1·04	496	10, slt.-m.-r, w : 10, ci, ci.-cu, oc.-so.-ha, prh	10, alt.-s : 9, sh : 6, m.-r
6	9·5	0·86	9·1	0·83	WSW	WSW	8·3	0·94	518	1, d : 1 : 5, s.-cu, w	v.-cl, ci, cu.-n, slt.-sh, w : 6, shs, w : v.-cl
7	0·0	0·00	0·0	0·00	WSW	WSW : SSW : S	3·6	0·46	365	v.-cl, d : 0, d, w : 9, ci, so.-ha, w	10, alt.-s, alt.-cu, w : 10, slt.-m.-r
8	3·8	0·35	3·1	0·29	S : SSW : SW	SW : WSW	16·5	2·57	638	10,slt.-r,oc.-hy.-r : 10,slt.-r,oc.-hy.-r,w : 10,alt.-s,n,w	10, alt.-s, slt.-shs, st.-w : 10, n, w
9	11·0	1·00	9·7	0·88	WSW : NW : WNW	NW : SW	3·3	0·39	305	9, r, w : 9, fr.-s, s.-cu	2, fr.-s : 0, f, ho.-fr
10	2·6	0·24	1·2	0·11	SW	WSW : SSW : S	1·6	0·11	215	0, ho.-fr : 0, ho.-f : 6	7, fr.-s, s.-cu : 4 : 9, lu.-ha
11	8·1	0·70	8·0	0·69	S : Calm	S : SSW	0·7	0·07	194	10, d : 10 : 7	8, cu, fr.-s : 2, d, lu.-ha
12	11·5	1·00	11·5	1·00	SSW : SW : WSW	WSW : SW	2·4	0·25	295	7, sh, d : 9 : 7, alt.-cu, ci, oc.-so.-ha	5, ci : 0, d
13	9·6	0·84	8·7	0·76	SSW	SSW : S	1·7	0·17	270	1, ho.-fr : 6, ci	8, ci.-cu, alt.-cu : 0, d
14	1·2	0·11	0·9	0·08	S	S	2·2	0·28	312	7, d : 7 : 8, alt.-cu, s.-cu	9, alt.-cu, alt.-s, ci, slt.-sh : 9, s.-cu
15	0·3	0·02	0·1	0·01	S : SSE	S	2·2	0·22	254	9 : 9, alt.-cu, alt.-s	9, ci.-cu, alt.-s, so.-ha : 9, alt.-s
16	11·5	1·00	11·5	1·00	SSW : SW	SSW : S	2·2	0·23	273	10, shs, r : 4, fr.-s	5, fr.-s : 0, d
17	5·0	0·43	4·1	0·36	S : SSE	SSE : S : SSW	3·7	0·27	284	0, d : 0, hy.-d : 9, s.-cu	7, slt.-sh : 8, r, hy.-r
18	9·7	0·81	9·0	0·75	SW	SW : SSW	4·8	0·56	358	6 : 1 : 1, ci.-cu	6, ci : 6 : 3, d
19	6·6	0·55	6·2	0·52	SSW : S : SSE	SSE : S	1·2	0·09	198	1, d : 6, ci, p.-so.-ha	7 : 9 : 3
20	7·6	0·64	7·6	0·64	S : SW	SW : SSW	3·0	0·25	291	9, r : 8 : 2	7, ci, alt.-cu, n, slt.-sh, prh : 8, m.-r : 4, d
21	10·3	0·86	9·8	0·82	SSW : SW	SW	3·0	0·21	288	0, ho.-fr : 0, ho.-fr : th.-ci, so.-ha	4, ci, ci.-cu : 0, d
22	4·1	0·34	2·7	0·22	WSW : W : WNW	WNW : WSW	3·0	0·26	321	4, d : 7, alt.-cu	8, s.-cu, n, shs : 2, d, m
23	3·7	0·31	2·1	0·18	SSW : WSW	NW : SW	1·4	0·10	227	10, r, m : 10, r : 10, s.-cu, n, m, m.-r, glm	10, m : 9, f
24	8·6	0·72	7·6	0·64	WSW : W	W : WNW : WSW	3·8	0·39	421	8 : 3, fr.-s	6, alt.-cu, slt.-sh, w : 4 : 1, d
25	11·6	0·97	11·5	0·96	WSW : WNW	NW : WNW	5·7	0·95	533	2 : 10, c.-r : 9, slt.-r, w	7, shs, w : 2, w : 0, d, w
26	12·0	1·00	9·3	0·77	W : NW	NW : W	2·0	0·33	329	0, ho.-fr : 5 : 3, alt.-cu	3, cu, fr.-s : 0, m : 0, m, ho.-fr
27	0·0	0·00	0·0	0·00	WSW : SW	SW : Calm : WSW	0·5	0·02	161	0, m, ho.-fr : 5, ci, alt.-cu, m : 9, s.-cu, m	10, slt.-m.-r, m : 10, slt.-m.-r, m
28	0·2	0·01	0·0	0·00	Calm : WSW : SW	SW : WSW	1·0	0·09	230	10, m.-r, f, m : 9, s.-cu, m	10, alt.-s, n, fq.slt.-m.-r : 10
29	0·0	0·00	0·0	0·00	WSW : SW	SW	4·1	0·29	343	9, slt. m.-r, m : 10, s.-cu, s, m	10, alt.-cu : 10, oc.-m.-r, w
30	2·5	0·21	1·7	0·14	SW	WSW : SW	10·6	1·04	526	10, slt.-m.-r, w : 10, fr.-n, w	8, alt-cu, st.-w, w : 7 : 10, slt.-sh
31	0·0	0·00	0·0	0·00	WSW : N : NE	Calm : SE	1·7	0·08	186	6 : 9, s.-cu	10, s.-cu : 10
Means	5·3	0·46	4·7	0·41	..	..	..	0·40	312		
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 49°·2, being 1·°3 higher than
The mean *Temperature of the Dew Point* for the month was 45°·9, being 0°·3 higher than
The mean *Degree of Humidity* for the month was 79·2, being 5·7 less than
The mean *Elastic Force of Vapour* for the month was 0·311in., being 0·003in. 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 7·0.

The mean proportion of *Sunshine* for the month (constant sunshine being represented by 1) was 0·354. The maximum daily amount of *Sunshine* was 8·0 hours on October 18.

The highest reading of the *Solar Radiation Thermometer* was 122°·6 on October 3; and the lowest reading of the *Terrestrial Radiation Thermometer* was 19°·9 on October 27.

The *Proportions of Wind* referred to the cardinal points were N. 1, E. 3, S. 13, W. 12. Two days were calm.

The *Greatest Pressure of the Wind* in the month was 16·5 lbs. on the square foot on October 8. The mean daily *Horizontal Movement of the Air* for the month was 312 miles; the greatest daily value was 638 miles on October 8 and the least daily value was 116 miles on October 3.

Rain (0·005in. or over) fell on 13 days in the month, amounting to 0·986in., as measured by gauge No. 6 partly sunk below the ground; being 1·796in. less than the average fall for the 65 years, 1841–1905.

MONTH and DAY, 1930.	BAROMETER. Means 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.	Daily Duration of Sunshine.	Sun above Horizon.
	in.	°	°	°	°	°	°	°	°	°	°		°	°	°	in.	hours	hours
Nov. 1	29·560	53·1	46·1	7·0	49·8	+ 2·8	48·7	47·6	2·2	6·9	1·2	92	61·1	39·4	53·1	0·121	0·0	9·6
2	28·895	54·8	45·8	9·0	49·1	+ 2·3	47·1	44·9	4·2	11·9	1·8	86	77·2	39·0	53·1	0·572	1·1	9·6
3	28·992	50·7	41·7	9·0	46·9	+ 0·3	43·6	39·5	7·4	11·2	4·8	75	67·2	32·1	53·2	0·005	0·2	9·5
4	29·494	44·3	29·4	14·9	40·1	— 6·3	36·6	30·8	9·3	17·4	2·5	69	77·6	19·8	53·0	0·043	6·2	9·5
5	29·537	43·6	26·3	17·3	36·1	—10·0	33·2	27·6	8·5	18·0	1·0	71	57·6	16·0	52·9	0·002*	1·9	9·4
6	29·554	49·0	36·3	12·7	41·8	— 4·0	37·8	31·3	10·5	20·1	4·9	66	89·0	26·9	52·7	0·000	7·4	9·3
7	29·846	51·3	30·3	21·0	42·3	— 3·1	39·8	36·1	6·2	11·2	1·5	79	74·9	19·0	52·3	0·125	4·7	9·3
8	29·909	57·1	40·5	16·6	50·1	+ 5·1	48·0	45·7	4·4	11·9	0·4	85	87·5	28·4	52·0	0·302	0·8	9·2
9	30·131	56·2	45·4	10·8	50·7	+ 6·1	49·6	48·4	2·3	4·4	1·0	92	67·9	33·6	51·8	0·008	0·2	9·2
10	30·198	54·2	41·5	12·7	50·0	+ 5·7	46·4	42·1	7·9	14·3	1·9	74	82·8	31·7	51·6	0·005	4·2	9·1
11	30·357	48·3	37·5	10·8	42·9	— 1·1	40·0	35·8	7·1	15·1	3·1	75	74·1	28·3	51·3	0·000	5·0	9·1
12	30·518	49·0	30·0	19·0	40·4	— 3·3	38·3	35·1	5·3	11·0	0·8	81	72·8	19·2	51·1	0·000	2·4	9·0
13	30·383	51·2	41·3	9·9	46·3	+ 2·8	42·8	38·2	8·1	11·6	2·9	73	63·3	34·0	51·1	0·000	2·0	9·0
14	30·119	57·7	40·6	17·1	48·0	+ 4·7	44·7	40·5	7·5	20·1	0·9	75	88·0	31·2	51·0	0·000	6·8	8·9
15	29·794	58·0	41·8	16·2	51·8	+ 8·7	49·5	47·1	4·7	9·5	0·9	84	72·3	37·2	50·9	0·177	0·0	8·9
16	30·010	41·8	31·0	10·8	37·9	— 4·9	34·9	29·7	8·2	10·7	3·3	72	50·1	20·5	50·7	0·000	0·0	8·8
17	30·185	37·2	23·0	14·2	30·7	—11·9	28·4	23·2	7·5	10·3	0·6	74	38·0	12·1	50·3	0·000	0·0	8·8
18	29·968	44·2	30·0	14·2	37·6	— 4·8	35·5	31·9	5·7	11·1	1·2	80	66·0	23·1	50·3	0·095	0·0	8·7
19	29·477	53·6	46·2	7·4	50·7	+ 8·4	48·2	45·5	5·2	7·1	1·1	82	58·9	42·5	50·2	0·007	0·0	8·7
20	29·392	58·8	44·6	14·2	51·1	+ 8·9	49·5	47·9	3·2	6·0	1·4	89	81·8	39·8	50·0	0·828	0·7	8·6
21	29·161	57·6	51·0	6·6	53·5	+11·4	51·6	49·8	3·7	6·6	1·0	87	55·7	44·5	49·8	0·352	0·0	8·6
22	29·014	57·0	39·2	17·8	51·4	+ 9·3	48·4	45·2	6·2	11·5	3·1	79	65·8	34·8	49·8	0·159	0·5	8·5
23	29·806	45·1	33·8	11·3	40·2	— 1·8	36·9	31·5	8·7	13·4	3·3	70	59·0	23·9	49·9	0·000	2·6	8·5
24	29·428	55·9	34·8	21·1	46·6	+ 4·6	44·7	42·4	4·2	8·4	1·4	85	65·0	25·3	49·8	0·234	0·2	8·4
25	29·196	52·8	45·8	7·0	49·8	+ 7·9	47·4	44·8	5·0	8·5	2·3	83	72·1	35·6	49·8	0·059	...	...
26	29·116	49·1	40·3	8·8	45·1	+ 3·3	43·5	41·4	3·7	8·1	1·4	87	65·0	29·8	49·7	0·207	1·5	8·3
27	29·468	47·8	33·6	14·2	41·0	— 0·7	39·5	37·5	3·5	4·6	0·7	87	58·3	21·9	49·7	0·000	0·0	8·3
28	29·451	47·9	41·1	6·8	44·0	+ 2·5	43·5	42·9	1·1	4·6	0·4	96	46·0	35·7	49·2	0·777	0·0	8·3
29	29·524	53·0	43·9	9·1	47·6	+ 6·4	46·7	45·7	1·9	5·2	0·1	93	72·7	34·7	49·1	0·318	0·2	8·2
30	30·035	47·6	45·3	2·3	46·7	+ 5·7	45·9	44·9	1·8	2·6	1·1	94	49·5	43·3	49·0	0·001	0·0	8·2
Means	29·684	50·9	38·6	12·3	45·3	+ 1·8	43·0	39·8	5·5	10·4	1·7	81·2	67·2	30·1	50·9	Sum 4·407	1·7	8·9
Number of Column for Reference.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	18	19

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

The mean reading of the Barometer (Column 1) and the mean 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 Hygrometrical Tables supplied by the Air Ministry. The mean difference between the Air and Dew Point Temperatures (Column 9) is the difference between the numbers in Columns 5 and 8, and the Greatest and Least Differences (Columns 10 and 11) are deduced from the 24 hourly photographic measures of the Dry-bulb and Wet-bulbThermometers. The readings in Column 15 are taken daily at noon.

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

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

The mean reading of the *Barometer* for the month was 29·684in., being 0·081in. less than the average for the 65 years, 1841–1905.

TEMPERATURE OF THE AIR.

The highest in the month was 58°·8 on November 20; the lowest in the month was 23°·0 on November 17; and the range was 35°·8.

The mean of all the highest daily readings in the month was 50°·9, being 1°·9 higher than the average for the 65 years, 1841–1905.

The mean of all the lowest daily readings in the month was 38°·6, being 0°·7 higher than the average for the 65 years, 1841–1905.

The mean of the daily ranges was 12°·3, being 1°·2 greater than the average for the 65 years, 1841–1905.

The mean for the month was 45°·3, being 1°·8 higher than the average for the 65 years, 1841–1905.

MONTH and DAY, 1930.	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	5·0	0·40	3·8	0·31	Calm	Calm : SW	1·6	0·06	155	10, m.-r, f	10, n, m.-r, f, m : 10, n, m.-r : 10, slt.-shs,m : 8, fr.-s
2	5·5	0·44	4·6	0·37	SW : SSW	SW : W : WNW	12·5	1·08	492	8, r	7, n, s.-cu : 10, r
3	4·1	0·33	3·3	0·27	WNW	W : NNW	6·6	1·20	513	9, r, w	10, s.-cu : v.-cl : 9
4	12·5	1·00	11·3	0·90	NNW	NW : W : SW	2·7	0·31	315	10, r, slt.-r : 2, ho.-fr : 0	0, m : 0, f, ho.-fr
5	9·6	0·77	9·4	0·75	SSW : ESE : E	ESE : E	2·2	0·20	258	0, ho.-fr : th.-cl : th.-cl	9, alt.-cu : 9, alt.-cu : 1
6	12·3	0·98	12·0	0·96	E : ENE	ENE : NE : N	5·3	0·70	396	1, ho.-fr : 1	0 : 1, ho.-fr
7	0·0	0·00	0·0	00·0	N : Calm : WSW	WSW : SW	5·0	0·30	320	1, ho.-fr : 2, ci, m	4, ci, m : 10, r, w
8	7·7	0·59	6·5	0·50	SW : WSW : NW	NW : Calm : SW	8·5	0·64	339	10, r, slt.-r, w : 10, s, s.-cu, slt.-f	9, s.-cu, alt.-cu, m : 1, f, m, d
9	1·3	0·10	1·3	0·10	SW	SW : WSW	3·4	0·43	420	10, slt.-m-r, lu.-ha : 10, s, s.-cu	10, s, s.-cu : 6 : 10, slt.-m.-r
10	12·0	0·92	11·5	0·89	WSW : WNW : W	WNW : W	2·4	0·25	357	10, slt.-m.-r : 2, h	8, fr.-s, s.-cu : 1
11	13·0	1·00	12·3	0·95	W : WNW	NW	4·9	0·53	410	0, ho.-fr : 1, h	1, h, w : 0, ho.-fr
12	3·1	0·23	1·8	0·14	NW : SW	SW : WSW	1·0	0·07	244	0, ho.-fr : 0, ho.-fr, f : 5, ci, f, h	5, ci, ci.-cu, h : 5, m, h
13	6·7	0·52	5·4	0·41	WSW	WSW : SW	4·2	0·37	395	5 : 9, s.-cu	5, s.-cu, w : 9 : 8
14	1·3	0·10	0·9	0·07	SW	SW	2·0	0·19	296	2 : 9, slt.-m.-r : 0, f	1, ci : 9
15	5·0	0·25	2·3	0·17	SW	SW : NNW	4·3	0·85	478	10 : 10, s.-cu, w	10, s, n, slt.-r, w : 10, oc.-slt.-r, w : 7, slt.-m.-r
16	13·0	1·00	11·0	0·85	NW : NNW	N	1·3	0·11	214	2 : 10, m : 10, alt.-s, m	9, th.-cl, slt.-m : 0, slt.-m : 0, m, ho.-fr
17	3·3	0·26	0·6	0·05	Calm	Calm : NE	0·2	0·01	110	1, ho.-fr : 1, f, tk.-f	9, alt.-cu, f, m : 9, m, ho.-fr
18	0·0	0·00	0·0	0·00	Calm	SSE	1·9	0·12	165	10, ho.-fr, m : 10, alt.-cu, m	10, alt.-s : 10, r : 10, slt.-m.-r
19	0·0	0·00	0·0	0·00	S: SW : WSW	W : NW	10·3	1·48	543	10, w : 10, n, slt.-m.-r, st.-w	10, alt.-s, n, oc.-slt.-m.-r, w : 10
20	2·4	0·19	1·5	0·11	Calm : SE : SW	SW	4·6	0·46	319	10 : 10, n, c.-r	9, n, ci, w : 9, m.-r
21	7·0	0·54	6·5	0·50	SW	SE : SW	10·9	0·93	445	7 : 10, alt.-s, n, m.-r, r	10, n, r, m.-r : 10, w : 4, w
22	7·8	0·58	6·8	0·51	SW : SSW	SW : WNW : NW	15·0	2·35	652	1, w : 10, n, r, oc.-r, w	8, alt.-cu, s.-cu, st.-w, w : 9, r, shs, w, g
23	4·9	0·36	0·3	0·03	NW : WSW : W	W : SW : SSW	14·0	1·01	436	3, g, w, ho.-fr : 3, m	9, s.-cu, m : 9 : 3, m, ho.-fr
24	6·6	0·49	5·7	0·42	SSE	S : SW	5·5	0·75	417	7, ho.-fr : 10, n, r, m.-r	8, m.-r : v.-cl : v.-cl, slt.-r, w
25	9·5	0·71	8·7	0·65	SW	SSW : SW	5·7	0·91	470	v.-cl, w, d : 8, w : 2, ci.-cu	10, n, alt.-s, r : 10, r, m.-r, w : 0, d
26	8·8	0·65	8·0	0·60	SSW : S	SSW : Var.	3·4	0·19	277	4 : 9, hy.-sh : 9, sh, r	6, n, sh, r, p.-so,.-ha, prh : 9, r, slt.-r
27	2·4	0·18	0·0	0·00	SW : Calm	Calm : NE	0·9	0·02	142	0, ho.-fr : 1 : 10, m, f, so.-ha	10, alt.-s, so.-ha, m, f : 10, f
28	0·0	0·00	0·0	0·00	NE	NE : Calm	3·2	0·23	293	10, c.-r : 10, c.-r, f, glm, m	10, fq.-r, m, glm, f : 10, f, tk.-f
29	0·0	0·00	0·0	0·00	Calm : NE	NNE : N	2·9	0·28	295	10, c.-r, tk.-f, f, m : 10, c.-r, m	10, s.-cu, m : 10, r, m.-r, m
30	0·0	0·00	0·0	0·00	NNW	N : Calm	1·9	0·12	174	10, m : 10, slt.-m.-r, m, f	10, n, slt.-m.-r, f : 10, slt.-m.-r, m
Means	5·5	0·42	4·5	0·35	..	..	..	0·54	345		
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°·0, being 1°·1 higher than
The mean *Temperature of the Dew Point* for the month was 39°·8, being 0°·1 higher than
The mean *Degree of Humidity* for the month was 81·2, being 5·4 less than
The mean *Elastic Force of Vapour* for the month was 0·246in., 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 7·1.

The mean proportion of *Sunshine* for the month (constant sunshine being represented by 1) was 0·189. The maximum daily amount of *Sunshine* was 7·4 hours on November 6.

The highest reading of the *Solar Radiation Thermometer* was 89°·0 on November 6; and the lowest reading of the *Terrestrial Radiation Thermometer* was 12°·1 on November 17.

The *Proportions of Wind* referred to the cardinal points were N. 5, E. 2, S. 9, W. 11. Three days were calm.

The *Greatest Pressure of the Wind* in the month was 15·0 lbs. on the square foot on November 22. The mean daily *Horizontal Movement of the Air* for the month was 345 miles; the greatest daily value was 652 miles on November 22, and the least daily value was 110 miles on November 17.

Rain (0·005in. or over) fell on 20 days in the month, amounting to 4·407in., as measured by gauge No. 6 partly sunk below the ground; being 2·187in. greater than the average fall for the 65 years, 1841–1905.

MONTH and DAY 1930.	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.	Daily Duration of Sunshine.	Sun above Horizon.
		Of the Air.					Of Evaporation	Of the Dew Point.					Of Radiation.					
	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.	Of the Earth 4 ft. below the Surface of the Soil.			
	in.	°	°	°	°	°	°	°	°	°	°		°	°	°	ins.	hours	hours
Dec. 1	30·126	48·6	43·6	5·0	45·9	+ 5·0	45·0	43·9	2·0	4·2	0·8	93	55·9	39·8	49·1	0·005	0·0	8·1
2	29·995	48·7	42·2	6·5	45·5	+ 4·6	44·4	43·1	2·4	3·9	1·3	91	62·8	36·0	49·1	0·000	0·2	8·1
3	30·196	45·6	42·1	3·5	44·3	+ 3·2	42·6	40·4	3·9	5·6	2·9	86	47·8	39·1	49·1	0·000	0·0	8·1
4	30·171	42·1	36·1	6·0	39·4	— 1·9	39·2	39·0	0·4	1·7	0·0	98	47·0	32·6	49·0	0·000	0·0	8·0
5	30·007	36·7	32·3	4·4	34·4	— 7·1	34·1	33·5	0·9	2·2	0·2	97	36·0	30·9	49·0	0·000	0·0	8·0
6	29·811	36·9	27·8	9·1	32·5	— 9·0	32·0	30·9	1·6	3·6	1·0	95	38·8	28·9	48·8	0·000	0·0	8·0
7	29·580	43·2	36·9	6·3	39·7	— 1·6	38·4	36·5	3·2	5·2	1·0	88	42·2	34·2	48·7	0·065	0·0	8·0
8	29·528	48·8	31·0	17·8	40·4	— 0·6	39·0	37·1	3·3	8·7	1·0	87	59·8	21·7	48·6	0·114	2·6	7·9
9	29·487	37·6	29·8	7·8	34·9	— 5·7	34·2	33·0	1·9	3·8	0·6	93	45·6	19·0	48·2	0·001	0·0	7·9
10	29·765	36·4	30·2	6·2	32·4	— 8·0	32·0	31·1	1·3	1·9	0·0	96	39·1	24·0	48·1	0·000	0·0	7·9
11	29·287	45·2	36·4	8·8	40·3	+ 0·1	39·0	37·2	3·1	8·2	0·4	88	41·6	33·0	48·0	0·358	0·0	7·9
12	29·397	50·1	40·0	10·1	44·3	+ 4·0	42·4	39·9	4·4	9·3	1·7	85	61·0	30·0	47·9	0·000	0·7	7·8
13	29·169	49·8	39·7	10·1	46·0	+ 5·5	44·0	41·5	4·5	8·3	1·0	84	60·3	32·3	47·7	0·151	2·0	7·8
14	29·304	43·0	35·5	7·5	38·8	— 1·9	37·6	35·8	3·0	7·0	1·6	89	49·1	27·2	47·4	0·003	3·2	7·8
15	29·603	37·5	29·0	8·5	34·1	— 6·7	33·6	32·8	1·3	3·3	0·3	95	41·6	28·8	47·4	0·000	0·0	7·8
16	29·591	42·8	30·4	12·4	37·6	— 3·1	36·1	33·8	3·8	6·5	0·5	86	50·7	30·2	47·3	0·001*	0·0	7·8
17	30·044	41·6	30·5	11·1	36·7	— 3·7	35·7	33·9	2·8	7·8	0·0	90	47·8	21·9	47·1	0·000	0·0	7·8
18	30·316	50·4	30·1	20·3	41·6	+ 1·6	40·9	40·0	1·6	4·7	0·8	94	56·6	21·4	47·0	0·023	0·0	7·8
19	30·384	50·0	46·5	3·5	48·3	+ 8·8	47·5	46·7	1·6	3·4	0·4	94	53·3	40·3	46·9	0·000	0·0	7·8
20	30·345	48·6	44·5	4·1	46·2	+ 7·2	44·9	43·3	2·9	5·8	0·7	90	47·2	42·0	46·9	0·000	0·0	7·8
21	30·346	47·6	36·0	11·6	41·4	+ 2·7	39·8	37·6	3·8	5·1	1·5	86	51·0	25·8	46·8	0·000	1·0	7·8
22	30·339	39·8	28·3	11·5	32·5	— 5·9	32·2	31·6	0·9	2·0	0·0	97	42·0	21·8	46·8	0·004*	0·0	7·8
23	30·042	40·4	34·3	6·1	38·3	+ 0·1	37·6	36·5	1·8	3·8	0·2	93	42·2	28·9	46·7	0·012	0·0	7·8
24	29·596	43·9	39·1	4·8	42·3	+ 4·1	41·6	40·7	1·6	2·2	0·8	94	48·4	30·4	46·6	0·010	0·0	7·8
25	29·374	45·8	30·0	15·8	40·7	+ 2·3	39·8	38·6	2·1	5·6	0·2	92	60·0	18·8	46·5	0·196	0·3	7·8
26	29·316	45·7	30·0	15·7	38·3	— 0·3	37·2	35·5	2·8	4·4	0·6	90	49·1	18·8	46·4	0·278	0·0	7·8
27	29·448	52·8	39·1	13·7	45·4	+ 6·6	43·9	42·0	3·4	7·2	1·6	88	57·5	31·0	46·3	0·096	0·0	7·8
28	29·648	49·8	38·1	11·7	45·6	+ 6·7	42·6	38·6	7·0	9·7	2·5	77	60·0	27·3	46·1	0·000	3·7	7·8
29	29·156	49·1	39·2	9·9	45·4	+ 6·4	42·9	39·6	5·8	8·5	2·9	80	65·8	30·8	46·3	0·090	0·7	7·8
30	29·113	49·8	36·0	13·8	41·4	+ 2·5	40·0	38·1	3·3	6·8	1·2	88	48·7	28·2	46·1	0·092	0·0	7·8
31	28·813	47·1	35·6	11·5	44·0	+ 5·3	42·6	40·9	3·1	5·2	2·3	88	57·6	27·8	46·1	0·043	0·0	7·8
Means	29·719	45·0	35·5	9·5	40·6	+ 0·7	39·4	37·8	2·8	5·3	1·0	90·1	50·5	29·1	47·5	Sum 1·542	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	18	19

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

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

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

*Rainfall (Column 16). The amounts entered on December 16 and 22 are derived from frost.

The mean reading of the *Barometer* for the month was 29·719in., being 0·073in. less than the average for the 65 years, 1841–1905.

TEMPERATURE OF THE AIR.

The highest in the month was 52°·8 on December 27; the lowest in the month was 27°·8 on December 6; and the range was 25°·0.

The mean of all the highest daily readings in the month was 45°·0, being 0°·8 higher than the average for the 65 years, 1841–1905.

The mean of all the lowest daily readings in the month was 35°·5, being 0°·5 higher than the average for the 65 years, 1841–1905.

The mean of the daily ranges was 9°·5, being 0°·3 greater than the average for the 65 years, 1841–1905.

The mean for the month was 40°·6, being 0°·7 higher than the average for the 65 years, 1841–1905.

MONTH and DAY, 1930.	Record of the Night Sky. Polaris. Duration.	Polaris. Fraction of Total Exposure.	Ursæ Minoris. Duration.	Ursæ 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.		
Dec. 1	..	..	..	..	Calm : E	E : ESE	2·0	0·09	161	10, slt.-m.-r, f : 10, f, m	9, m : 10
2	0·0	0·00	0·0	0·00	E : ENE	ENE	3·2	0·37	341	10, d, m : 10, s, fr.-s, slt.-m	8, ci, fr.-s, slt.-m: 10, slt.-m
3	0·3	0·02	0·2	0·01	ENE : NE	NE	1·6	0·17	266	10, slt.-m : 10, s	10, s : 10
4	0·0	0·00	0·0	0·00	NE : ENE	Calm	0·3	0·02	109	10, slt.-m.-r, f : 10, f	10, s, f : 10, tk.-f
5	0·0	0·00	0·0	0·00	Calm	Calm	0·1	0·00	43	10, tk.-f : 10, tk.-f	10, tk.-f, f : 10, f
6	0·0	0·00	0·0	0·00	Calm	Calm	0·2	0·00	51	10, f, m : 10, m, tk.-f, f	10, s, f : 10, slt.-m.-r, f
7	2·9	0·21	2·7	0·20	S	SSE : SW : WNW	1·1	0·10	213	10, slt.-m : 10, s.-cu, slt.-m	10, m.-r, r, slt.-m : 10, oc.-m.-r, f
8	6·6	0·48	4·8	0·35	W : SW : S	SSW : SW	4·6	0·23	293	9, slt.-m.-r : 1, ho.-fr : 5, ci, n, oc.-sbs	9,oc.-shs,r: 5 : 10, lu.-ha
9	0·0	0·00	0·0	0·00	Calm	W : NW	1·7	0·05	169	9 : th.-cl, ho.-fr : tk.-f	10, f, m : 10,oc.-slt.-m.-r,m;10, ho.-fr, m
10	0·0	0·00	0·0	0·00	Calm	Calm	0·2	0·01	98	10, ho.-fr : 10, ho.-fr : 10, tk.-f	10, tk.-f, f : 10, f
11	3·4	0·25	3·0	0·22	SSE	SSE : Calm : W	7·0	0·71	332	10 : 10, m.-r, w : 10, m.-r, r, w	10, slt.-m.-r : 10 :10, slt.-m.-r, f
12	5·3	0·38	2·8	0·21	W : WSW	WSW : SW : SSW	1·8	0·16	307	7 : 1 : 8, alt.-cu, m	8, alt.-cu, m : 0, m, d : 4, d
13	11·9	0·85	8·4	0·60	S : SW	SW : WSW	6·0	0·35	378	10, slt.-r : 9, r, slt.-r : 4, s.-cu	8 : 8, slt.-sh : 1, m
14	1·0	0·07	0·4	0·03	WSW	WSW : Calm	1·0	0·11	265	1, m, ho.-fr : 1, m, ho.-fr : 0, f	3, ci.-cu, alt.-cu, f : 10, slt.-r, slt.-m.-r
15	0·0	0·00	0·0	0·00	NNW : Calm	W : Calm	0·5	0·02	116	8, slt.-m.-r : 7 : 10, f	10, f : 10, f, m
16	0·0	0·00	0·0	0·00	Calm : SE	SE : E	0·7	0·04	146	10, m, ho.-fr : 10, alt.-s, m	10, alt.-s, s.-cu : 10
17	5·6	0·40	0·0	0·00	Calm	Calm : S	0·2	0·00	84	10, ho.-fr : 10 : 10, s.-cu, f	10, s.-cu : 10, f : 4, f
18	0·0	0·00	0·0	0·00	SSW	SSW : SW	1·1	0·16	285	th.-cl, f, m, ho.-fr : 10, f, m	10, alt.-s, n, oc.slt.-m.-r, f, m: 10, slt.-m .-r, m
19	0·0	0·00	0·0	0·00	WSW : W	Calm : WSW	0·7	0·05	188	10 : 10, s, f	10, s, m, f : 10, m : 10, slt.-m.-r, m
20	1·9	0·14	0·4	0·03	WSW:NW:NNW	Calm : N	0·3	0·02	141	10, slt.-m.-r, m : 10, oc.-slt.-m.-r, m, glm	10, n, slt.-m.-r, m: 10, slt.-m
21	12·9	0·92	0·0	0·00	N	N	0·6	0·05	180	7, ho.-fr : 1, ho.-fr : 1, m	1, m : 0, m, ho.-fr
22	0·0	0·00	0·0	0·00	Calm	Calm	0·1	0·00	59	0, m, ho.-fr : tk.-f : 10, f	0, f, tk.-f : tk.-f
23	0·8	0·06	0·0	0·00	Calm	SSW	1·9	0·04	140	10, tk.-f : 10, tk.-f, m.-r	10, tk.-f, m : 10, m, slt.-m.-r
24	0·0	0·00	0·0	0·00	SW : WSW	Calm	0·9	0·05	165	10, r, slt.-m.-r, m: 10, m : 10, f	10, oc.-slt.-shs, f : 9, f, m
25	7·5	0·53	5·2	0·37	Calm : S	SSE : Calm	0·6	0·03	127	10, r, m.-r, m : 10, m.-r, m	8, n, alt.-cu : 3, ho.-fr
26	7·0	0·50	0·0	0·00	Calm : SSE : S	S : WSW	2·0	0·18	280	1, ho.-fr : 7 : 10, r	5, n, fr.-s, r, m : 1, m, d
27	14·0	1·00	13·0	0·93	SW : S	SW	6·4	0·43	342	6 : 7 : 10, slt.-m.-r	9, r : 0 : 0
28	2·1	0·15	0·3	0·02	SW : SSW	SSW	16·0	1·28	491	0, ho.-fr : 1	5, ci.-s, so.-ha : 10, w : 8, lu.-ha, st.-w
29	6·5	0·46	6·1	0·44	SSW	SW : WSW	11·0	1·80	595	8, st.-w : 9, r, st.-w : 9, n, r	10, sh, w : 6, w : 7, slt.-sh, w
30	4·1	0·30	2·9	0·21	SW : S : SSE	SSE : S : SSW	2·5	0·26	305	4, ho.-fr : 10 : 10, alt.-s, n, m.-r	10, m.-r, oc.-r : 10, oc.-m.-r, lu.-ha: v.-cl
31	7·8	0·56	4·0	0·28	SSW : S	SW : NW : W	5·0	0·45	327	v.-cl : 9, oc.-r : 9, alt.-s, slt.-r	10, slt.-r, m, f, w : 10, slt.-r : 4, ho.-fr
Means	3·4	0·24	1·8	0·13	..	..	..	0·23	226		
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°·4, being 0°·9 higher than
The mean *Temperature of the Dew Point* for the month was 37°·8, being 1°·4 higher than
The mean *Degree of Humidity* for the month was 90·1, being 2·6 greater, than
The mean *Elastic Force of Vapour* for the month was 0·227in., being 0·011in. 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 8·2.

The mean proportion of *Sunshine* for the month (constant sunshine being represented by 1) was 0·059. The maximum daily amount of *Sunshine* was 3·7 hours on December 28.

The highest reading of the *Solar Radiation Thermometer* was 65°·8 on December 29; and the lowest reading of the *Terrestrial Radiation Thermometer* was 18°·8 on December 25 and 26.

The *Proportions of Wind* referred to the cardinal points were N. 3, E. 3, S. 9, W. 6. Ten days were calm.

The *Greatest Pressure of the Wind* in the month was 16·0 lbs. on the square foot on December 28. The mean daily *Horizontal Movement of the Air* for the month was 226 miles; the greatest daily value was 595 miles on December 29, and the least daily value was 43 miles on December 5.

Rain (0·005in. or over) fell on 14 days in the month, amounting to 1·542in., as measured by gauge No. 6 partly sunk below the ground; being 0·285in. less 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. Greenwich Mean Time, 1930.	Reading	MINIMA. Greenwich Mean Time, 1930.	Reading.	MAXIMA. Greenwich Mean Time, 1930.	Reading.	MINIMA. Greenwich Mean Time, 1930.	Reading.	MAXIMA. Greenwich Mean Time, 1930.	Reading	MINIMA. Greenwich Mean Time, 1930.	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. 0. 50	30·017	2. 2. 5	29·481	1. 10. 10	29·943	2. 16. 0	29·842	2. 9. 0	30·208	5. 15. 0	29·726
2. 18. 10	29·859	5. 5. 50	29·038	3. 11. 0	29·970	6. 15. 30	29·531	6. 10. 0	29·807	9. 17. 0	29·617
6. 22. 30	29·995	10. 3. 15	29·421	8. 12. 20	29·779	10. 1. 55	29·427	10. 10. 0	29·698	13. 17. 45	29·376
10. 10. 25	29·532	11. 3. 50	28·940	10. 14. 0	29·575	11. 4. 30	29·230	15. 20. 55	29·981	18. 2. 25	29·344
11. 10. 0	29·031	11. 15. 50	28·924	12. 22. 10	29·690	13. 14. 40	29·602	18. 21. 0	29·618	20. 5. 15	28·889
12. 10. 0	29·295	12. 18. 45	28·692	16. 23. 0	30·057	18. 3. 0	29·736	23. 9. 40	29·921	27. 1. 20	29·524
13. 11. 10	29·676	15. 3. 50	29·407	19. 8. 45	30·024	20. 3. 0	29·912	28. 20. 40	30·049	29. 14. 50	29·850
17. 2. 0	30·134	19. 21. 50	29·761	21. 10. 20	30·026	27. 5. 0	29·515	**October.**		**October.**	
21. 8. 55	29·996	24. 22. 50	29·293	29. 10. 15	29·957			2. 22. 30	30·254	5. 2. 55	29·355
25. 21. 20	29·433	27. 3. 0	29·256					5. 10. 20	29·487	5. 23. 20	29·267
28. 11. 55	29·663			**June.**		**June.**		7. 14. 50	29·540	8. 14. 20	29·104
								10. 11. 10	29·953	12. 4. 35	29·515
February.		**February.**				2. 15. 0	29·686	13. 20. 10	29·925	15. 22. 5	29·525
				4. 22. 15	30·115	6. 19. 0	29·779	16. 19. 0	29·780	17. 20. 40	29·482
		1. 0. 30	28·640	8. 7. 35	30·103	10. 17. 0	29·699	19. 0. 50	29·864	20. 3. 5	29·379
3. 9. 10	29·210	4. 6. 0	29·054	15. 6. 40	30·114	18. 13. 55	29·753	22. 18. 20	29·698	24. 18. 5	29·334
9. 11. 0	30·483	15. 6. 0	29·741	21. 8. 45	29·930	24. 13. 45	29·547	27. 7. 40	29·976	30. 3. 10	29·664
18. 9. 15	30·301	21. 5. 40	30·055	25. 8. 0	29·682	27 4 50	29·454	31. 10. 40	29·900		
23. 19. 30	30·171	26. 15. 40	29·637	29. 7. 15	29·923			**November.**		**November.**	
28. 23. 55	30·328									2. 21. 50	28·538
				July.		**July.**		4. 23. 0	29·688	5. 21. 0	29·453
March.		**March.**						7. 15. 45	29·914	8. 3. 25	29·643
						1. 12. 50	29·524	12. 10. 15	30·557	15. 15. 55	29·665
		3. 3. 58	30·017	4. 7. 30	29·866	6. 14. 20	29·778	17. 21. 0	30·220	19. 6. 0	29·322
5. 10. 50	30·321	7. 3. 15	29·667	7. 23. 20	30·079	8. 18. 0	29·973	19. 23. 15	29·705	20. 19. 50	29·193
8. 8. 50	29·924	10. 5. 5	29·176	9. 23. 45	30·060	12. 16. 35	29·670	21. 4. 20	29·272	21. 15. 0	29·002
10. 22. 0	29·532	14. 3. 50	29·046	13. 6. 55	29·800	14. 17. 40	29·449	22. 0. 35	29·126	22. 20. 35	28·871
14. 19. 0	29·151	16. 8. 0	28·965	15. 12. 10	29·554	18. 4. 0	29·193	23. 19. 20	29·970	24. 22. 0	29·176
17. 7. 0	29·340	18. 1. 50	29·049	19. 23. 35	29·633	21. 5. 20	29·294	25. 10. 0	29·303	26. 21. 0	29·099
22. 19. 50	29·930	23. 15. 38	29·620	22. 10. 0	29·684	24. 4. 0	29·569	27. 23. 20	29·574	28. 16. 30	29·351
24 23 40	30·218	25 22 40	29·980	25. 23. 30	29·876	29. 16. 40	29·563	30. 23. 40	30·196		
26. 13. 0	30·102	29. 3. 18	29·304	31. 9. 20	29·867			**December.**		**December.**	
30. 12. 30	29·880	31. 11. 30	29·549							2. 10. 45	29·960
31. 23. 50	29·662							3. 20. 15	30·267	7. 19. 15	29·487
				August.		**August.**		8. 6. 50	29·596	9. 12. 0	29·439
April.		**April.**						10. 12. 0	29·808	11. 14. 25	29·067
						2. 17. 0	29·278	12. 17. 0	29·458	13. 5. 20	29·097
		2. 2. 20	29·393	3. 0. 45	29·356	3. 9. 0	29·265	15. 19. 0	29·727	16. 11. 0	29·509
2. 19. 0	29·631	4. 3. 20	29·224	3. 20. 25	29·379	4. 5. 45	29·076	19. 21. 0	30·414	20. 17. 50	30·297
8. 8. 0	30·092	10. 4. 25	29·653	5. 0. 30	29·439	5. 16. 50	29·345	21. 10. 25	30·385	25. 6. 15	29·299
11. 8. 0	29·770	13. 22. 0	29·142	9. 0. 0	29·983	14. 4. 25	29·260	25. 23. 0	29·505	26. 13. 55	29·062
16 0 20	29·836	17. 15. 10	29·620	17. 8. 5	29·968	18. 12. 25	29·576	27. 3. 25	29·499	27. 13. 30	29·343
18. 12. 0	29·769	19. 13. 0	29·263	20. 7. 20	29·940	21. 13. 0	29·309	28. 10. 0	29·733	29. 12. 45	28·971
22. 4. 0	29·762	23. 18. 10	29·280	22. 19. 45	29·902	23. 11. 30	29·459	30. 2. 20	29·368	31. 12. 15	28·679
27. 7. 20	29·924	29. 7. 45	29·441	25. 7. 25	30·128	29. 17. 35	29·872				

The readings in the above table are accurate, but the times are occasionally liable to uncertainty, as the barometer will sometimes remain at its extreme reading without sensible change for a considerable interval of time. In such cases the time given is the middle of the stationary period.
The time is Greenwich Mean Time.
The height of the barometer cistern above mean sea level is 152 feet; no correction has been applied to the readings to reduce to sea level.

HIGHEST and LOWEST READINGS of the BAROMETER in each MONTH for the YEAR 1930.

	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.....	30·134	30·483	30·321	30·092	30·057	30·115	30·079	30·128	30·208	30·254	30·557	30·414
Lowest	28·692	28·640	28·965	29·142	29·230	29·454	29·193	29·076	28·889	29·104	28·538	28·679
Range	1·442	1·843	1·356	0·950	0·827	0·661	0·886	1·052	1·319	1·150	2·019	1·735

The highest reading in the year was 30·557in. on Nov. 12. The lowest reading in the year was 28·538in. on Nov. 2. The range of reading in the year was 2·019in.

MONTHLY RESULTS OF METEOROLOGICAL ELEMENTS for the YEAR 1930.

MONTH, 1930.	Mean Reading of the Barometer.	TEMPERATURE OF THE AIR.								Mean Temperature of Evaporation.	Mean Temperature of the Dew Point.	Mean Degree of Humidity. (Saturation = 100.)
		Highest.	Lowest.	Range in the Month.	Mean of all the Highest.	Mean of all the Lowest.	Mean of the Daily Ranges.	Monthly Mean.	Excess of Mean above the Average of 65 years.			
	in.	°	°	°	°	°	°	°	°	°	°	
January	29·596	58·6	28·4	30·2	49·0	38·5	10·5	44·0	+5·4	42·2	39·8	85·5
February	29·904	51·9	30·8	21·1	42·5	34·2	8·3	37·9	−1·6	36·0	32·6	81·3
March	29·675	62·5	25·4	37·1	51·5	36·2	15·3	43·0	+1·1	40·0	35·5	74·8
April	29·614	71·9	30·1	41·8	56·4	40·5	15·9	47·8	+0·6	44·4	39·9	74·8
May	29·780	74·3	38·7	35·6	63·2	45·6	17·6	53·2	+0·1	49·3	44·9	74·0
June	29·830	83·0	40·5	42·5	72·5	51·3	21·2	61·2	+1·8	56·2	51·9	72·1
July	29·679	83·9	47·5	36·4	71·8	53·5	18·3	61·6	−1·1	56·3	51·8	71·0
August	29·732	92·2	47·7	44·5	73·9	53·4	20·4	62·6	+1·0	57·9	54·0	73·7
September	29·758	81·5	44·0	37·5	66·6	51·4	15·2	58·2	+0·9	55·1	52·5	81·6
October	29·685	69·9	30·2	39·7	60·5	44·9	15·6	52·2	+2·2	49·2	45·9	79·2
November	29·684	58·8	23·0	35·8	50·9	38·6	12·3	45·3	+1·8	43·0	39·8	81·2
December	29·719	52·8	27·8	25·0	45·0	35·5	9·5	40·6	+0·7	39·4	37·8	90·1
		Highest	Lowest	Annual Range								
Means	29·721	92·2	23·0	69·2	58·6	43·6	15·0	50·6	+1·1	47·4	43·9	78·3

MONTH, 1930.	Mean Elastic Force of Vapour.	Mean Temperature of the Earth 4 feet below the surface of the soil.	Mean Amount of Cloud (0-10).	RAIN.		WIND.										
				Number of Rainy Days (0·005 in. or over).	Amount collected in Gauge No. 6, whose receiving Surface is 5 inches above the Ground.	From Osler's Anemometer. Number of Hours of Prevalence of each Wind referred to different Points of Azimuth.								Number of Calm or nearly Calm Hours	Mean Daily Pressure on the Square Foot.	From Robinson's Anemometer. Mean Daily Horizontal Movement of the Air.
						N.	N.E.	E.	S.E.	S.	S.W.	W.	N.W.			
	in.	°			in.	h	h	h	h	h	h	h	h	h	lbs.	miles.
January	0·246	45·1	7·7	17	2·464	9	12	26	27	149	346	84	4	87	0·63	344
February	0·185	43·6	8·1	6	0·916	60	271	153	52	14	18	6	7	91	0·27	289
March	0·208	43·4	7·3	14	1·437	53	60	64	34	47	224	99	67	96	0·19	273
April	0·247	45·4	7·4	15	1·383	130	133	91	38	67	87	35	24	115	0·27	272
May	0·299	48·9	8·1	20	2·845	112	95	46	9	26	164	123	39	130	0·22	254
June	0·389	53·6	6·0	7	3·753	35	108	74	56	22	204	72	11	138	0·21	231
July	0·387	56·8	7·8	13	1·804	81	6	0	6	54	293	124	98	82	0·33	280
August	0·420	57·5	6·1	16	2·760	13	10	7	49	89	290	133	35	118	0·40	283
September	0·397	58·2	7·4	20	3·084	40	64	42	28	52	179	115	52	148	0·37	269
October	0·311	55·2	7·0	13	0·986	3	29	17	29	149	301	113	57	46	0·40	312
November	0·246	50·9	7·1	20	4·407	54	53	28	30	38	276	84	78	79	0·54	345
December	0·227	47·5	8·2	14	1·542	33	36	40	36	114	147	81	18	239	0·23	226
Sums	..	..	..	175	27·381	623	877	588	394	821	2529	1069	490	1369	..	..
Means	0·297	50·5	7·3	..	..	..	..	..	..	..	..	..	..	..	0·34	282

The greatest recorded pressure of the wind on the square foot in the year was 38·0 lbs. on January 12.

The greatest recorded daily horizontal movement of the air in the year was 671 miles on January 12.

The least recorded daily horizontal movement of the air in the year was 43 miles on December 25.

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

1930.

Hour, Greenwich Mean Time.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Yearly Means.
	in.	in.	in.	in.	in.	in.	in.	in.	in.	in.	in.	in.	in.
Midnight	29·604	29·881	29·689	29·624	29·783	29·845	29·688	29·749	29·758	29·677	29·686	29·757	29·728
1h	29·601	29·880	29·685	29·619	29·777	29·841	29·685	29·740	29·754	29·675	29·689	29·751	29·725
2	29·602	29·880	29·675	29·614	29·772	29·835	29·679	29·730	29·749	29·669	29·693	29·749	29·721
3	29·600	29·876	29·668	29·608	29·768	29·829	29·674	29·721	29·746	29·663	29·694	29·745	29·716
4	29·599	29·874	29·666	29·605	29·769	29·824	29·673	29·715	29·743	29·664	29·695	29·737	29·714
5	29·599	29·876	29·666	29·607	29·773	29·829	29·674	29·714	29·745	29·671	29·694	29·730	29·715
6	29·604	29·879	29·670	29·612	29·780	29·834	29·677	29·718	29·751	29·674	29·693	29·726	29·718
7	29·612	29·888	29·678	29·616	29·787	29·839	29·682	29·722	29·758	29·686	29·698	29·726	29·724
8	29·622	29·899	29·685	29·617	29·791	29·843	29·683	29·725	29·764	29·697	29·704	29·726	29·730
9	29·635	29·907	29·691	29·620	29·792	29·841	29·683	29·729	29·768	29·706	29·702	29·727	29·733
10	29·639	29·912	29·692	29·620	29·792	29·841	29·682	29·729	29·769	29·709	29·701	29·728	29·735
11	29·634	29·915	29·692	29·617	29·790	29·839	29·680	29·730	29·766	29·709	29·697	29·718	29·732
Noon	29·616	29·911	29·686	29·613	29·785	29·834	29·677	29·727	29·764	29·700	29·681	29·701	29·725
13h	29·602	29·904	29·677	29·609	29·784	29·827	29·674	29·724	29·761	29·692	29·669	29·689	29·718
14	29·593	29·900	29·669	29·605	29·779	29·820	29·672	29·728	29·760	29·687	29·662	29·681	29·713
15	29·589	29·900	29·662	29·599	29·774	29·815	29·669	29·727	29·754	29·683	29·660	29·685	29·710
16	29·582	29·902	29·659	29·598	29·772	29·809	29·667	29·727	29·753	29·682	29·663	29·691	29·709
17	29·577	29·908	29·659	29·599	29·768	29·809	29·667	29·728	29·755	29·685	29·666	29·696	29·710
18	29·573	29·919	29·664	29·605	29·772	29·810	29·670	29·730	29·757	29·688	29·672	29·703	29·714
19	29·568	29·927	29·668	29·613	29·777	29·816	29·676	29·739	29·763	29·687	29·674	29·710	29·718
20	29·566	29·933	29·672	29·622	29·785	29·823	29·682	29·749	29·766	29·687	29·674	29·716	29·723
21	29·562	29·937	29·675	29·628	29·788	29·834	29·692	29·755	29·769	29·685	29·677	29·719	29·727
22	29·559	29·941	29·673	29·632	29·786	29·838	29·696	29·759	29·766	29·679	29·681	29·723	29·728
23	29·563	29·942	29·671	29·632	29·783	29·840	29·697	29·758	29·763	29·675	29·690	29·725	29·728
24	29·560	29·941	29·668	29·631	29·779	29·839	29·696	29·758	29·757	29·668	29·699	29·721	29·726
Means 0h.–23h.	29·596	29·904	29·675	29·614	29·780	29·830	29·679	29·732	29·758	29·685	29·684	29·719	29·721
Means 1h.–24h.	29·594	29·906	29·674	29·614	29·780	29·829	29·679	29·732	29·758	29·685	29·685	29·717	29·721
No. 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.

1930.

Hour, Greenwich Mean Time.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Yearly Means.
	°	°	°	°	°	°	°	°	°	°	°	°	°
Midnight	42·9	36·6	40·0	44·0	48·8	54·7	57·1	57·1	54·9	49·4	43·3	40·1	47·4
1h	42·8	36·5	39·6	43·5	48·1	53·9	56·4	56·5	54·3	48·9	43·0	40·2	47·0
2	42·6	36·1	39·2	43·1	47·8	53·3	55·7	56·2	54·0	48·7	42·7	40·1	46·6
3	42·4	36·0	38·6	42·9	47·2	53·0	55·1	55·8	53·6	48·6	42·4	39·9	46·3
4	42·0	35·7	38·4	42·7	46·8	52·6	54·8	55·3	53·4	48·2	42·4	39·3	46·0
5	42·0	35·8	38·0	42·7	47·0	53·5	55·3	55·1	53·3	48·2	42·6	39·3	46·1
6	41·9	35·8	38·0	43·3	48·2	55·5	57·0	56·4	53·6	48·2	42·8	39·1	46·7
7	42·2	35·9	38·5	45·1	50·4	58·3	59·4	59·3	54·9	48·8	42·8	39·0	47·9
8	42·3	36·3	40·3	47·2	52·5	61·0	61·6	62·0	57·2	50·8	43·3	38·9	49·5
9	42·9	37·3	42·8	49·0	54·3	63·5	63·6	64·6	59·3	53·4	44·8	39·5	51·3
10	44·0	38·4	44·7	50·6	56·0	65·5	65·4	67·2	61·4	55·2	46·7	40·5	53·0
11	45·3	39·6	46·4	51·9	57·5	67·1	66·4	68·6	62·8	56·8	48·0	41·7	54·3
Noon	46·5	40·5	47·8	53·0	58·8	68·3	67·0	69·5	63·7	57·7	48·9	42·6	55·4
13h	47·1	41·1	49·0	53·5	59·1	69·1	67·7	70·0	64·3	58·2	49·6	43·0	56·0
14	47·1	41·4	49·4	53·7	59·4	69·4	67·4	70·2	63·8	57·9	49·7	43·1	56·0
15	46·8	41·2	48·8	53·5	59·5	69·1	67·4	70·3	63·4	57·2	49·2	42·4	55·7
16	45·8	40·9	48·1	53·0	58·8	68·7	67·2	70·0	62·6	56·0	48·2	41·8	55·1
17	45·0	39·8	46·8	52·2	57·7	67·3	66·5	68·7	61·1	54·5	47·3	41·5	54·0
18	44·6	38·7	45·2	50·6	56·4	66·0	65·0	66·9	59·7	53·1	46·5	41·0	52·8
19	44·2	38·1	44·2	48·9	54·7	63·8	63·4	64·4	58·6	52·1	45·7	40·9	51·6
20	44·1	37·6	43·4	47·4	53·3	61·5	61·7	62·1	57·5	51·2	45·4	40·6	50·5
21	44·0	37·3	42·3	46·2	52·2	59·3	60·3	60·3	56·8	50·6	44·9	40·3	49·5
22	43·9	37·0	41·5	45·3	51·3	57·7	59·0	59·0	56·2	50·1	44·0	40·0	48·7
23	43·5	36·7	41·0	44·5	50·3	56·3	57·8	58·0	55·4	49·5	43·7	39·9	48·1
24	43·1	36·4	40·3	43·8	49·3	55·0	56·9	57·1	54·7	49·3	43·2	39·8	47·4
Means 0h.–23h.	44·0	37·9	43·0	47·8	53·2	61·2	61·6	62·6	58·2	52·2	45·3	40·6	50·6
Means 1h.–24h.	44·0	37·9	43·0	47·8	53·2	61·2	61·6	62·6	58·1	52·2	45·3	40·6	50·6
No. 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.

1930.

Hour, Greenwich Mean Time.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Yearly Means.
	°	°	°	°	°	°	°	°	°	°	°	°	°
Midnight	41·5	35·0	38·2	42·1	47·0	52·7	54·4	55·0	53·3	47·6	41·5	39·2	45·6
1h	41·4	35·0	37·9	41·8	46·6	52·1	53·8	54·7	53·0	47·3	41·2	39·1	45·3
2	41·1	34·7	37·8	41·6	46·4	51·8	53·4	54·4	52·7	47·0	40·9	38·9	45·1
3	40·7	34·6	37·3	41·3	46·0	51·5	53·1	54·2	52·5	46·9	40·7	38·7	44·8
4	40·4	34·3	37·0	41·1	45·6	51·1	52·9	53·9	52·3	46·7	40·6	38·3	44·5
5	40·3	34·5	36·6	41·2	45·6	51·8	53·3	53·8	52·3	46·8	40·7	38·2	44·6
6	40·4	34·6	36·8	41·8	46·2	53·3	54·4	54·9	52·5	46·8	40·9	38·0	45·1
7	40·7	34·7	37·1	43·2	47·6	55·2	55·6	56·5	53·4	47·2	41·0	37·9	45·8
8	40·8	35·0	38·3	44·6	48·9	56·7	56·5	57·9	54·9	48·6	41·6	37·9	46·8
9	41·4	35·7	40·0	45·9	49·9	58·0	57·5	59·4	56·0	50·3	42·8	38·5	48·0
10	42·2	36·3	41·0	46·6	50·6	58·9	58·1	60·6	57·0	51·2	44·2	39·4	48·8
11	43·1	37·0	42·1	46·9	51·3	59·6	58·4	61·2	57·4	52·0	45·0	40·4	49·5
Noon	44·0	37·6	42·8	47·3	52·1	60·0	58·7	61·5	57·7	52·2	45·6	41·1	50·0
13h	44·4	37·9	43·5	47·5	51·9	60·2	59·0	61·5	58·0	52·4	46·1	41·3	50·3
14	44·5	38·1	43·6	47·4	52·2	60·3	58·9	61·6	57·7	52·0	46·1	41·4	50·3
15	44·2	38·0	43·4	47·5	52·5	60·0	59·0	61·3	57·6	51·8	45·5	41·0	50·1
16	43·8	37·7	42·9	47·1	52·1	59·8	59·0	61·0	57·4	51·1	45·0	40·5	49·8
17	43·3	37·2	42·3	46·7	51·9	59·3	58·4	60·4	56·7	50·4	44·5	40·4	49·3
18	43·1	36·6	41·4	46·0	51·3	58·8	57·8	60·0	56·2	49·8	44·0	40·0	48·8
19	42·7	36·2	40·8	45·0	50·7	58·0	57·3	59·1	55·8	49·2	43·7	39·8	48·2
20	42·4	35·9	40·4	44·2	49·8	56·7	56·4	58·1	55·3	48·7	43·4	39·6	47·6
21	42·3	35·7	39·7	43·4	49·3	55·6	55·7	56·9	55·0	48·5	43·1	39·2	47·0
22	42·1	35·4	39·3	42·9	48·9	54·7	55·2	56·1	55·4	48·1	42·4	38·9	46·6
23	41·8	35·1	39·0	42·3	48·2	53·7	54·7	55·6	53·8	47·7	42·0	38·8	46·1
24	41·7	34·8	38·6	41·9	47·5	52·9	54·2	55·0	53·1	47·4	41·5	38·9	45·6
Means 0h.–23h.	42·2	36·0	40·0	44·4	49·3	56·2	56·3	57·9	55·1	49·2	43·0	39·4	47·4
Means 1h.–24h.	42·2	36·0	40·0	44·4	49·3	56·2	56·3	57·9	55·1	49·2	43·0	39·4	47·4
No. 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 FROM THE CORRESPONDING AIR AND EVAPORATION TEMPERATURES.

1930.

Hour, Greenwich Mean Time.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Yearly Means.
	°	°	°	°	°	°	°	°	°	°	°	°	°
Midnight	39·5	32·3	35·5	39·6	44·9	50·7	52·1	53·3	51·9	45·6	39·0	37·9	43·5
1h	39·4	32·5	35·4	39·5	44·8	50·3	51·5	53·3	51·9	45·5	38·6	37·5	43·3
2	38·9	32·3	35·7	39·5	44·7	50·3	51·3	52·9	51·5	45·1	38·4	37·2	43·1
3	38·2	32·2	35·3	39·0	44·5	50·0	51·1	52·8	51·5	45·0	38·3	37·0	42·9
4	38·1	31·9	34·9	38·8	44·1	49·6	51·0	52·7	51·3	45·0	38·1	36·8	42·7
5	37·8	32·2	34·5	39·0	43·9	50·1	51·5	52·7	51·4	45·2	38·0	36·5	42·7
6	38·2	32·5	34·9	39·7	43·9	51·3	52·2	53·5	51·5	45·2	38·2	36·3	43·1
7	38·5	32·5	35·0	40·7	44·4	52·6	52·4	54·2	52·1	45·4	38·5	36·2	43·5
8	38·6	32·7	35·3	41·5	45·0	53·2	52·2	54·7	53·0	46·2	39·3	36·3	44·0
9	39·2	33·1	35·8	42·1	45·3	53·6	52·5	55·4	53·3	47·1	40·1	37·0	44·5
10	39·9	32·8	35·5	41·8	44·9	53·8	52·1	55·7	53·5	47·3	41·2	37·9	44·7
11	40·2	32·7	36·1	41·1	44·9	53·7	51·9	55·7	52·9	47·3	41·2	38·7	44·7
Noon	41·0	32·8	35·7	40·5	45·2	53·6	52·0	55·6	52·8	46·7	41·5	39·0	44·7
13h	41·2	32·7	36·0	40·3	44·4	53·3	52·0	55·2	52·9	46·7	41·9	38·9	44·6
14	41·4	32·8	35·6	39·8	44·7	53·2	52·1	55·2	52·7	46·1	41·8	39·0	44·5
15	41·1	32·8	36·0	40·3	45·4	52·9	52·3	54·5	52·8	46·3	41·0	39·1	44·5
16	41·3	32·5	35·6	39·9	45·2	52·8	52·4	54·2	53·1	46·1	41·0	38·8	44·4
17	41·1	32·9	36·1	39·9	46·0	53·0	51·7	54·0	53·1	46·2	41·1	39·0	44·5
18	41·2	33·1	35·9	40·5	46·0	53·0	51·7	54·7	53·3	46·3	40·9	38·8	44·6
19	40·9	33·1	35·8	40·1	46·6	53·4	52·3	54·9	53·5	46·1	41·2	38·4	44·7
20	40·2	33·1	36·1	40·2	46·1	52·7	51·9	54·9	53·5	46·0	40·8	38·3	44·5
21	40·1	33·1	35·7	39·8	46·1	52·5	51·7	54·1	53·5	46·2	40·7	37·6	44·3
22	39·7	32·7	36·0	39·7	46·3	52·1	52·0	53·8	52·9	45·9	40·4	37·3	44·1
23	39·5	32·4	36·0	39·3	45·8	51·4	52·0	53·6	52·4	45·7	39·8	37·2	43·8
24	39·7	32·1	36·1	39·3	45·4	50·8	51·9	53·3	51·6	45·3	39·2	37·5	43·5
Means 0h.–23h.	39·8	32·7	35·6	40·1	45·1	52·2	51·9	54·2	52·6	46·0	40·0	37·8	44·0
Means 1h.–24h.	39·8	32·6	35·6	40·1	45·1	52·2	51·9	54·2	52·6	46·0	40·0	37·8	44·0

MONTHLY MEAN DEGREE OF HUMIDITY (Saturation = 100) AT EVERY HOUR OF THE DAY, AS DEDUCED FROM THE CORRESPONDING AIR AND EVAPORATION TEMPERATURES.

Hour, Greenwich Mean Time.	1930.												Yearly Means.
	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	
Midnight	88	84	84	85	86	87	83	87	89	87	85	92	86
1h	88	85	85	86	89	88	84	88	91	88	85	90	87
2	87	86	87	87	89	90	85	88	91	88	84	89	88
3	85	86	88	86	91	90	87	90	92	87	85	89	88
4	86	86	87	86	91	90	87	91	92	89	84	91	88
5	85	87	87	87	89	88	87	91	93	89	84	90	88
6	87	88	89	87	85	86	84	91	92	89	84	90	88
7	87	88	87	85	80	81	78	83	90	88	84	90	85
8	87	87	82	80	75	75	71	77	85	84	86	91	82
9	87	85	76	77	71	70	67	72	80	79	84	91	78
10	85	80	70	72	66	66	62	67	75	75	81	90	74
11	83	77	67	66	63	62	59	63	70	70	77	89	71
Noon	81	74	63	63	61	60	59	61	68	67	76	87	68
13h	79	72	61	61	59	57	57	59	67	65	75	85	66
14	80	71	60	59	59	56	58	59	67	64	74	86	66
15	80	72	61	61	60	56	58	57	69	67	73	88	67
16	84	72	62	61	61	57	59	57	71	69	76	89	68
17	86	77	66	63	65	60	59	60	75	74	79	90	71
18	88	80	70	68	69	63	63	65	79	78	81	91	75
19	88	82	72	72	74	69	67	72	83	80	84	90	78
20	86	84	75	76	77	73	70	77	86	82	84	91	80
21	86	85	78	78	80	78	73	80	88	85	85	90	82
22	85	85	81	81	83	82	77	83	88	86	87	90	84
23	86	84	83	82	85	84	81	85	90	87	86	90	85
24	88	84	85	84	87	86	83	87	89	86	86	92	86
Means 0h.–23h.	85	82	76	75	75	74	71	75	82	80	82	90	79
Means 1h.–24h.	85	82	76	75	75	74	71	75	82	80	82	90	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 1930.

Month, 1930.	Registered duration of Sunshine in the Hour ending :—																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.
	5h	6h	7h	8h	9h	10h	11h	Noon.	13h	14h	15h	16h	17h	18h	19h	20h				
	h	h	h	h	h	h	h	h	h	h	h	h	h	h	h	h	h	h		°
January ..	—	—	—	—	1·2	7·3	7·8	7·6	7·7	5·1	3·7	0·9	—	—	—	—	41·3	259·3	0·159	18
February ..	—	—	—	0·1	1·8	3·9	4·6	7·2	5·9	6·8	5·1	4·3	0·3	—	—	—	40·0	277·1	0·144	26
March	—	—	1·0	6·1	10·2	12·6	12·5	13·0	14·9	13·2	9·1	6·2	3·6	0·6	—	—	103·0	365·9	0·282	37
April	—	1·8	6·7	7·3	8·5	9·7	10·3	9·5	10·1	9·9	9·9	8·5	7·7	5·2	1·9	—	107·0	413·8	0·259	48
May	0·3	5·9	9·4	11·2	11·3	11·9	12·7	12·7	12·0	11·4	10·8	8·3	7·9	7·7	2·7	0·2	136·4	481·4	0·283	57
June	4·5	9·0	11·6	14·3	14·2	16·2	16·7	18·9	17·8	17·9	17·4	16·6	16·3	17·2	14·5	4·3	227·4	494·3	0·460	62
July	2·9	9·6	9·8	10·5	13·6	14·7	13·8	12·8	12·0	9·6	10·5	8·8	10·2	9·2	7·8	1·9	157·7	497·4	0·317	60
August	0·1	8·5	14·4	16·0	17·9	20·3	19·9	19·7	17·8	17·4	18·7	18·0	18·2	14·5	5·8	—	227·2	450·5	0·504	52
September	—	—	3·7	8·9	10·7	13·7	13·6	14·1	12·3	12·0	9·9	11·0	7·8	1·7	—	—	119·4	378·6	0·315	41
October....	—	—	0·2	7·1	11·3	12·5	15·4	15·4	15·4	16·1	11·8	8·5	3·0	—	—	—	116·7	330·1	0·354	30
November..	—	—	—	0·1	2·9	6·8	7·3	6·5	7·7	8·6	6·1	2·6	—	—	—	—	48·6	257·5	0·189	20
December ..	—	—	—	—	0·3	2·9	3·4	2·3	3·2	1·8	0·5	—	—	—	—	—	14·4	243·9	0·059	16
For the Year	7·8	34·8	56·8	81·6	103·9	132·5	138·0	139·7	136·8	129·8	113·5	93·7	75·0	56·1	32·7	6·4	1339·1	4449·8	0·301	..

The hours are reckoned from " apparent " midnight.

READINGS OF THERMOMETERS ON THE ORDINARY STAND IN THE MAGNETIC PAVILION ENCLOSURE IN THE YEAR 1930.

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

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

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

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	65·4	43·6	53·6	62·4	63·9	56·8	50·0	53·7	54·6	51·8
2	62·1	46·5	51·4	59·7	56·7	46·5	49·6	51·5	49·9	44·8
3	51·9	42·7	51·6	49·0	47·4	47·5	47·2	47·4	46·7	47·0
4	52·0	42·1	47·3	48·7	46·1	42·6	46·8	48·3	45·5	42·3
5	46·2	40·9	42·4	44·2	44·8	42·6	41·5	42·4	42·5	39·9
6	48·6	40·8	43·2	46·4	45·8	45·4	41·2	41·9	41·2	41·4
7	46·6	42·0	43·6	45·6	45·7	44·7	42·7	43·6	43·6	42·9
8	55·1	41·7	48·6	51·3	52·8	46·6	44·3	44·5	46·5	44·5
9	60·7	42·0	51·4	56·4	56·2	42·1	47·9	49·9	48·0	40·8
10	60·9	35·6	49·4	59·7	60·0	44·5	46·8	50·7	50·4	43·0
11	62·2	36·9	51·4	59·6	61·4	48·3	46·7	49·8	51·2	44·7
12	54·0	44·1	45·6	48·5	51·2	45·1	43·7	44·9	48·8	40·0
13	54·9	36·9	47·4	49·7	46·0	41·0	43·7	48·4	43·4	40·4
14	53·1	38·8	45·2	50·4	48·6	42·5	42·0	44·8	43·8	38·8
15	53·2	39·0	43·6	49·1	47·4	44·1	41·0	43·0	44·3	41·1
16	48·9	40·6	45·1	46·6	47·1	46·0	41·1	42·0	41·7	42·4
17	52·4	39·8	47·6	46·6	52·1	41·3	41·7	39·8	43·7	39·9
18	52·7	39·0	43·8	45·1	47·6	39·7	42·8	40·9	41·3	36·8
19	47·1	36·1	38·7	39·7	46·7	41·6	37·1	38·7	42·1	39·8
20	48·0	36·9	45·6	45·4	41·7	40·5	42·8	41·9	39·9	37·8
21	50·3	30·1	42·2	45·7	49·5	42·2	39·2	40·8	43·3	40·1
22	60·7	33·3	49·0	54·5	59·0	44·3	43·5	46·0	49·8	39·8
23	58·2	39·1	50·9	55·7	57·0	52·5	49·7	52·8	52·4	51·8
24	64·1	51·0	54·6	62·5	59·9	51·6	52·5	56·9	55·8	50·6
25	71·9	45·6	65·1	67·6	69·5	57·7	57·6	56·8	58·0	52·3
26	60·5	48·1	53·4	56·7	58·6	54·9	52·5	52·3	52·8	51·2
27	67·9	43·2	57·3	65·5	63·5	52·6	53·8	53·0	52·4	45·8
28	56·1	47·1	50·6	54·3	55·7	48·5	49·8	51·8	52·9	46·8
29	67·2	45·0	58·1	66·5	65·4	48·3	52·2	54·2	51·8	44·3
30	58·1	43·0	53·1	57·0	56·6	44·7	46·7	44·8	45·8	40·1
Means	56·4	41·0	49·0	53·0	53·5	46·2	45·9	47·3	47·5	43·4

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

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
MAY.										
d	°	°	°	°	°	°	°	°	°	°
1	61·6	39·1	52·6	58·8	59·6	50·1	46·0	48·4	48·1	43·0
2	60·0	41·6	44·3	55·3	57·6	50·5	42·7	49·8	52·8	48·3
3	58·9	42·5	49·6	54·8	55·8	48·5	48·8	50·9	51·0	47·6
4	65·0	43·1	50·8	60·5	62·5	51·4	49·4	54·0	53·7	46·8
5	68·7	39·6	60·2	65·6	65·7	49·7	52·7	54·0	55·1	48·8
6	61·9	47·7	54·7	56·6	58·7	48·6	50·7	51·6	51·1	46·8
7	53·2	43·8	47·9	51·7	49·6	47·0	43·9	46·7	45·8	43·4
8	53·8	38·7	43·9	48·5	51·6	43·1	38·4	39·8	41·9	39·6
9	61·2	39·0	53·3	51·6	57·5	48·6	46·5	45·6	48·9	45·8
10	58·6	40·1	49·4	54·6	52·8	45·2	44·4	46·8	45·4	44·2
11	54·9	45·1	52·7	51·6	52·1	50·1	48·9	50·0	47·8	45·5
12	58·3	45·2	54·3	55·1	56·1	51·6	47·6	48·2	50·3	46·9
13	61·7	48·2	50·8	54·7	60·7	56·6	49·9	52·8	57·0	54·6
14	67·1	52·2	57·8	63·4	63·6	56·0	52·1	53·3	52·9	50·6
15	66·2	44·0	60·3	61·4	61·6	55·8	52·7	54·3	57·4	54·4
16	69·2	46·3	59·6	65·1	65·2	56·5	53·2	56·2	55·1	52·4
17	67·8	50·6	59·6	65·8	63·1	55·7	53·5	56·1	55·3	51·9
18	62·9	47·0	56·5	60·5	53·5	49·8	48·6	49·3	47·8	45·8
19	61·6	42·1	52·6	56·6	55·7	53·1	47·2	48·2	49·4	48·9
20	60·1	50·8	53·9	55·8	58·6	54·4	51·4	53·7	51·8	50·8
21	63·0	46·7	51·8	53·7	62·5	47·3	49·0	49·0	51·8	45·4
22	53·3	43·9	49·8	51·5	51·3	50·0	45·4	48·8	47·8	46·4
23	66·4	46·2	58·5	63·7	64·5	51·6	53·1	54·3	55·0	46·6
24	65·0	47·1	50·6	54·5	60·6	54·6	48·8	51·0	54·8	53·0
25	55·8	49·9	53·2	54·6	55·2	54·2	51·7	52·7	53·4	53·6
26	69·2	49·2	54·0	62·3	57·5	51·5	52·4	57·7	55·8	50·9
27	71·2	44·0	58·9	66·6	61·8	56·6	52·1	56·7	56·0	53·6
28	73·2	48·8	64·7	70·1	70·0	58·7	56·7	58·8	58·8	56·0
29	74·3	50·0	59·0	68·8	71·5	58·4	55·6	59·7	59·1	55·9
30	67·7	53·0	60·0	66·1	61·7	55·5	56·8	58·4	57·7	53·3
31	68·5	52·3	58·0	64·0	66·3	56·8	56·3	59·8	58·6	56·1
Means	63·2	45·7	54·3	58·8	59·5	52·2	49·9	52·1	52·5	49·3
JUNE.										
d	°	°	°	°	°	°	°	°	°	°
1	63·3	53·4	54·1	59·6	62·1	56·7	53·3	56·7	58·7	55·8
2	68·1	52·6	60·4	64·4	64·1	55·8	57·3	59·8	60·0	54·8
3	62·0	47·8	55·5	58·5	58·2	55·6	52·7	54·5	54·6	53·4
4	72·6	51·3	56·6	62·7	72·5	56·2	55·2	59·9	64·7	55·4
5	73·4	50·1	68·9	71·6	72·5	61·4	61·8	61·8	59·7	56·6
6	76·3	49·7	69·0	74·7	75·0	58·5	62·3	60·1	60·6	54·5
7	69·1	51·0	63·8	61·7	66·9	53·5	58·8	55·9	56·6	47·0
8	67·0	44·0	59·5	64·5	63·4	50·6	52·0	54·2	53·9	47·8
9	74·1	40·5	63·3	68·7	72·4	55·6	52·4	53·9	55·8	51·1
10	63·0	49·9	57·6	59·4	61·4	58·0	54·8	55·9	57·5	55·0
11	65·1	55·5	61·7	59·8	61·7	55·8	57·0	56·7	57·8	54·7
12	76·2	48·8	65·3	70·6	74·1	60·4	60·4	63·0	64·5	56·7
13	75·6	53·8	66·7	71·3	73·7	59·0	61·3	64·3	63·0	55·7
14	72·2	52·8	60·2	68·3	71·6	60·3	56·2	60·6	62·6	56·6
15	74·5	52·0	65·4	71·7	74·5	60·3	58·4	60·9	62·7	55·8
16	68·0	50·2	59·4	63·6	63·2	63·0	56·9	59·9	60·4	60·7
17	81·1	54·6	62·7	74·7	79·6	66·0	59·9	66·7	69·0	61·8
18	82·9	59·9	71·2	78·3	62·5	65·4	67·5	69·0	60·4	63·6
19	76·9	58·0	68·5	73·7	73·6	58·7	62·4	63·8	62·8	52·1
20	68·7	55·1	62·7	65·1	64·8	63·0	59·6	61·1	61·5	60·8
21	75·7	60·2	67·1	72·0	72·4	61·7	62·6	64·6	64·8	59·9
22	76·2	58·9	67·6	72·4	70·1	59·7	61·9	64·0	62·5	57·0
23	71·2	52·8	62·5	68·5	65·7	58·0	54·9	57·1	55·8	54·5
24	71·2	51·6	56·5	67·0	67·3	58·0	53·8	58·0	56·5	51·6
25	72·0	49·0	63·8	66·6	69·4	55·4	55·8	56·3	57·9	51·8
26	72·2	45·2	63·8	67·6	66·1	59·8	55·2	57·6	57·3	55·9
27	76·1	55·5	67·1	69·4	73·2	63·2	58·8	59·4	59·5	57·8
28	73·1	51·9	64·8	70·7	70·0	59·8	55·4	57·5	55·8	51·5
29	74·9	46·6	65·9	71·5	73·5	59·3	55·7	58·6	58·0	52·8
30	83·0	52·1	73·6	81·5	78·6	69·6	64·6	67·8	66·1	64·5
Means	72·5	51·8	63·5	68·3	69·1	59·3	58·0	60·0	60·0	55·6

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
JULY.										
d	°	°	°	°	°	°	°	°	°	°
1	81·1	58·8	71·7	70·7	75·8	66·3	66·4	65·9	66·0	60·8
2	79·4	60·3	70·6	73·7	77·6	64·6	61·8	62·7	63·3	57·3
3	74·5	56·6	67·2	69·9	70·4	60·0	60·4	58·9	59·0	55·1
4	75·2	53·9	68·5	73·6	72·5	62·0	60·1	62·6	61·8	58·7
5	80·0	51·2	72·6	74·8	78·1	66·7	62·4	61·9	64·0	60·4
6	83·9	53·7	72·6	77·7	80·6	67·6	63·6	63·0	62·8	60·8
7	75·8	54·3	65·6	71·8	73·5	63·4	54·7	58·7	57·9	54·0
8	73·0	54·8	66·5	66·9	70·4	66·0	56·7	59·8	63·3	60·8
9	79·0	58·0	72·2	72·7	73·6	66·6	64·5	64·2	63·8	57·6
10	75·3	54·3	62·2	71·6	72·6	60·1	55·6	58·8	57·8	52·5
11	71·9	55·1	62·5	68·1	65·7	57·4	54·2	54·2	54·9	48·9
12	65·9	51·1	57·4	63·9	63·2	60·2	51·0	54·9	55·0	52·9
13	76·5	53·1	64·0	73·7	68·6	60·2	56·8	60·5	59·9	56·5
14	71·0	56·5	63·6	59·3	61·5	56·9	61·4	57·3	58·8	55·8
15	67·6	55·6	58·0	61·6	63·8	58·4	55·8	57·5	58·3	54·9
16	71·3	54·7	60·1	67·6	66·3	57·9	56·8	60·8	58·7	54·4
17	70·9	54·0	66·2	64·6	66·8	57·5	58·2	56·6	57·3	53·0
18	74·3	47·5	64·4	70·5	67·5	60·6	56·8	57·9	58·1	56·3
19	70·1	57·0	60·1	61·7	67·4	57·7	55·0	55·5	56·9	51·0
20	68·7	50·9	63·4	63·3	62·6	59·9	55·8	57·8	59·6	59·5
21	61·1	53·4	57·6	55·2	53·7	54·6	55·6	53·2	52·2	49·7
22	61·8	47·6	54·9	58·5	59·1	55·5	49·4	51·3	51·6	50·6
23	61·0	51·2	54·4	58·3	57·7	55·5	52·1	55·1	53·9	53·0
24	63·2	53·7	56·3	60·8	62·7	56·6	53·8	55·9	57·4	55·5
25	67·6	54·2	62·9	65·6	62·6	58·2	57·7	57·9	57·7	53·6
26	66·9	50·4	65·0	62·4	62·6	60·4	59·7	59·0	60·3	59·0
27	75·4	54·0	63·5	71·6	69·3	59·6	58·6	60·8	60·6	56·7
28	70·4	52·0	62·9	65·3	67·4	60·4	57·9	58·1	61·1	56·9
29	70·7	55·7	64·6	66·4	63·6	58·6	58·3	59·4	59·6	56·7
30	69·8	56·6	58·6	66·7	59·7	58·3	55·8	59·9	57·0	55·3
31	74·0	51·7	60·2	68·6	73·5	61·7	56·6	59·2	61·8	57·6
Means	71·8	53·6	63·6	67·0	67·4	60·3	57·5	58·7	59·0	55·7
AUGUST.										
d	°	°	°	°	°	°	°	°	°	°
1	74·5	54·4	66·8	69·6	73·6	61·0	59·7	60·8	61·4	58·2
2	73·2	58·0	67·4	69·7	68·7	58·5	61·5	62·6	62·0	53·9
3	71·5	49·0	55·9	63·5	69·4	60·0	54·4	59·4	58·6	57·6
4	69·1	53·9	56·0	64·4	66·6	55·7	54·7	57·7	58·5	53·9
5	65·8	50·8	61·5	62·0	59·6	53·6	55·8	56·8	56·8	52·8
6	69·6	50·6	62·3	61·2	67·0	57·0	57·2	58·0	58·8	53·5
7	69·7	51·3	62·2	65·5	61·6	56·5	56·0	59·6	56·9	53·0
8	70·9	50·1	62·4	64·8	66·4	59·2	57·0	57·9	58·8	54·7
9	69·8	52·1	60·6	63·8	67·2	58·6	57·5	59·8	62·2	57·2
10	72·1	56·1	63·5	68·7	68·3	64·9	60·3	64·7	64·7	63·6
11	77·6	60·2	66·2	72·6	74·2	60·6	63·4	62·9	62·8	54·1
12	71·0	54·8	62·6	67·5	66·4	59·5	55·9	57·7	56·9	55·6
13	64·2	54·2	58·4	60·6	60·7	56·6	55·6	55·8	55·8	52·9
14	68·4	54·1	62·0	65·2	64·6	58·0	54·0	54·6	54·4	51·6
15	66·2	51·8	57·8	59·7	62·9	57·7	52·8	52·5	54·9	52·0
16	71·8	48·7	59·8	66·4	70·8	60·5	52·7	55·3	58·0	55·0
17	76·1	47·9	63·6	71·7	69·6	57·8	56·9	59·2	58·8	54·9
18	75·9	53·2	70·1	73·2	70·6	60·6	62·4	64·7	62·9	56·9
19	70·1	50·8	59·7	66·5	58·8	54·0	52·4	54·8	50·0	51·1
20	71·0	47·7	62·3	69·3	65·8	59·8	57·3	58·7	55·8	55·6
21	69·4	57·0	61·4	60·9	68·2	57·4	60·1	60·6	62·1	53·7
22	69·1	50·6	61·4	67·3	67·0	53·6	55·0	56·5	57·9	52·0
23	71·3	51·2	58·4	66·1	68·8	59·8	57·5	62·2	62·4	53·5
24	71·6	51·1	60·7	65·4	67·7	56·6	55·7	56·2	57·9	52·4
25	73·1	47·7	63·2	68·2	72·4	61·3	58·6	60·8	62·6	57·7
26	87·7	56·0	75·2	83·5	86·5	70·8	66·8	72·8	73·2	68·7
27	89·5	62·3	80·5	87·7	87·3	72·0	72·0	74·5	74·3	68·8
28	92·2	61·8	78·4	88·7	90·7	70·7	71·8	75·1	74·1	69·0
29	92·2	61·1	79·4	89·6	90·8	71·5	71·8	75·5	75·0	69·2
30	80·5	64·2	72·2	78·7	80·0	65·0	69·8	72·6	70·6	64·2
31	74·5	59·5	69·8	72·3	67·7	59·8	65·1	65·1	62·4	56·9
Means	73·9	53·9	64·6	69·5	70·3	60·3	59·4	61·5	61·3	56·9

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.)

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
SEPTEMBER.										
d	°	°	°	°	°	°	°	°	°	°
1	69·8	51·3	60·8	66·5	66·6	53·5	55·6	56·9	56·8	50·8
2	73·8	44·0	62·1	71·1	71·5	57·5	55·9	59·6	59·8	54·5
3	69·2	47·2	61·6	67·6	66·6	54·8	58·5	60·3	58·9	53·0
4	71·1	49·1	64·4	69·9	67·8	58·2	57·6	60·4	60·5	56·5
5	81·5	55·0	70·6	78·3	79·6	63·2	64·2	65·5	69·8	60·6
6	73·7	55·1	65·4	68·9	65·2	60·5	60·6	62·1	61·1	59·9
7	69·3	53·1	62·3	67·5	66·3	56·9	57·7	58·1	57·9	55·2
8	71·4	50·7	59·6	65·6	68·5	56·5	56·6	58·2	60·1	55·1
9	67·7	50·8	60·8	64·7	63·6	60·5	59·3	59·8	60·3	60·3
10	73·3	57·7	61·6	68·7	66·5	60·0	59·8	62·1	60·4	59·8
11	71·0	57·5	63·9	68·5	68·7	59·9	60·1	59·5	60·4	59·0
12	62·3	56·7	60·2	61·7	60·8	57·2	57·9	58·3	57·3	56·0
13	65·0	52·9	58·0	63·5	58·6	57·3	55·5	59·7	57·8	54·9
14	60·6	52·9	55·8	57·3	59·9	56·7	53·8	54·0	54·8	53·1
15	66·0	47·8	58·1	63·5	65·2	53·6	53·4	55·4	54·9	50·5
16	62·7	44·7	57·0	59·1	57·6	59·3	52·8	55·1	56·3	58·9
17	66·0	54·0	59·6	64·6	62·7	58·2	56·8	58·8	58·8	57·8
18	66·4	55·0	57·1	62·1	62·6	55·6	52·3	54·6	56·4	54·1
19	66·0	50·6	58·4	62·1	65·1	56·2	57·6	61·2	57·2	52·6
20	65·1	54·2	57·8	59·9	60·9	54·5	54·8	54·6	55·2	53·3
21	66·4	53·2	59·8	63·8	60·5	56·5	55·8	57·4	56·0	53·0
22	63·3	51·9	56·6	57·3	62·6	63·0	54·8	56·5	61·5	61·9
23	67·9	59·0	66·6	65·9	65·6	59·5	63·6	62·4	60·8	58·3
24	70·3	55·0	62·5	67·8	65·7	55·4	58·8	57·9	56·5	53·9
25	64·2	49·4	57·6	64·1	61·9	53·2	53·7	57·4	54·5	49·0
26	54·0	47·2	48·7	51·5	49·6	52·1	45·8	47·3	47·9	50·8
27	59·9	51·0	54·6	57·9	56·0	51·9	51·8	52·6	51·0	50·4
28	59·0	47·7	53·3	57·5	57·7	51·9	51·9	54·5	53·8	50·9
29	58·6	48·7	51·5	56·3	56·8	54·1	50·2	55·3	55·0	53·5
30	63·8	51·3	53·7	57·7	61·6	55·8	52·7	54·6	55·8	53·8
Means	66·6	51·8	59·3	63·7	63·4	56·8	56·0	57·7	57·6	55·0
OCTOBER.										
d	°	°	°	°	°	°	°	°	°	°
1	57·9	45·7	51·6	54·9	54·5	52·4	49·0	51·8	51·4	49·6
2	62·9	49·6	54·1	61·6	59·9	50·6	50·5	55·8	55·5	48·6
3	66·9	44·8	56·2	65·7	63·3	54·4	53·7	58·1	56·8	52·6
4	64·2	53·7	60·4	59·6	63·4	56·7	59·2	58·4	59·8	55·7
5	59·0	49·6	56·7	56·4	54·5	49·8	52·8	49·6	48·9	47·8
6	60·2	45·0	51·9	54·9	55·7	48·6	47·2	48·8	49·9	46·3
7	58·6	44·0	51·3	56·1	56·3	50·7	47·7	49·6	48·9	49·9
8	62·6	50·6	57·4	59·9	58·6	55·2	52·5	54·0	53·0	51·1
9	58·2	39·2	50·6	52·9	55·6	39·3	47·8	46·2	47·8	38·7
10	58·9	36·1	49·1	55·8	56·5	46·4	44·8	49·8	49·8	43·9
11	61·6	41·8	51·0	59·6	55·1	47·6	48·1	52·9	50·6	46·2
12	61·4	45·5	51·3	55·6	59·7	46·5	48·2	49·3	52·2	44·0
13	61·9	37·2	54·5	59·5	59·5	49·3	50·8	52·9	53·8	48·5
14	67·8	46·1	56·3	66·8	61·3	60·6	54·8	59·3	56·0	55·8
15	69·9	56·5	61·1	64·8	65·8	63·5	57·3	59·1	60·5	59·7
16	69·8	53·9	61·9	67·6	64·5	54·2	58·9	60·7	58·7	53·8
17	69·9	53·4	60·7	64·6	69·4	62·6	59·3	62·3	63·5	59·8
18	63·6	49·6	56·5	60·8	61·3	50·8	51·5	53·1	52·9	48·9
19	63·1	43·9	58·7	59·8	58·0	48·8	54·6	53·1	52·9	48·2
20	59·3	45·6	51·5	56·3	54·0	46·5	47·7	48·6	49·4	45·1
21	56·8	40·0	49·5	54·6	52·6	45·6	45·7	48·6	46·9	43·9
22	57·1	43·4	50·4	54·4	54·0	47·3	47·4	48·6	48·7	45·8
23	56·2	44·6	54·9	54·5	53·7	44·6	54·0	53·4	50·3	44·0
24	55·3	43·3	48·0	54·2	52·6	44·6	44·2	47·2	45·3	41·4
25	51·8	39·5	46·9	49·9	49·2	44·0	43·6	45·7	46·1	40·7
26	50·9	38·2	44·6	48·1	49·4	42·5	41·4	42·6	43·0	40·0
27	48·8	30·2	42·2	48·5	47·7	47·8	40·2	43·8	44·8	47·4
28	60·8	47·1	51·1	57·8	57·0	55·1	50·0	53·8	54·3	53·8
29	61·8	51·9	53·5	58·5	58·7	57·5	52·3	54·7	54·9	55·7
30	63·7	54·3	58·6	60·7	58·9	55·0	56·7	56·8	52·6	51·6
31	58·0	47·5	51·5	54·6	52·6	48·6	47·2	48·1	47·7	44·8
Means	60·6	45·5	53·4	57·7	57·2	50·6	50·3	52·2	51·8	48·5

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

AMOUNT OF RAIN COLLECTED IN EACH MONTH OF THE YEAR 1930.

Gauges partly sunk in the Ground in the Magnetic Pavilion Enclosure.	Number of Gauge.	Monthly Amount of Rain collected in each Gauge.												Height of Receiving Surface.	
		January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Sums.	Above the Ground.	Above Mean Sea Level.
		in.	in.	in.	in.	in.	in.	in.	in.	in.	in.	in.	in.	in.	ft. in	ft. in.
	6	2·464	0·916	1·437	1·383	2·845	3·753	1·804	2·760	3·084	0·986	4·407	1·542	27·381	0 5	149 6
	8	2·436	0·879	1·441	1·286	2·720	3·769	1·758	2·692	3·017	1·000	4·217	1·576	26·791	1 0	150 1
Number of Rainy Days (0·005in. or over).	..	17	6	14	15	20	7	13	16	20	13	20	14	175	..	..

MEAN HOURLY MEASURES OF THE HORIZONTAL MOVEMENT OF THE AIR IN EACH MONTH, AND GREATEST HOURLY MEASURES, AS DERIVED FROM THE RECORDS OF ROBINSON'S ANEMOMETER.

Hour Ending	1930.												
	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	15·2	10·2	9·8	9·1	9·5	8·0	10·3	9·4	11·1	12·5	13·5	9·3	10·7
2	15·1	10·4	9·7	9·4	9·5	7·7	10·2	8·7	11·0	12·5	13·5	9·3	10·6
3	14·8	10·5	9·8	9·5	9·5	7·7	10·1	9·1	10·8	12·7	13·8	9·6	10·7
4	14·4	10·1	9·9	9·6	8·8	8·0	9·6	9·0	10·0	13·1	13·6	9·9	10·5
5	14·5	10·9	10·1	10·0	8·9	7·9	8·9	9·1	10·3	12·5	13·6	9·5	10·5
6	13·4	10·3	10·0	9·5	8·8	7·5	8·9	9·7	9·9	11·2	13·8	9·0	10·2
7	13·1	11·1	10·5	10·1	9·7	7·5	10·3	10·3	9·7	11·3	14·4	8·7	10·6
8	12·4	11·0	10·3	10·8	9·8	7·9	10·7	11·5	9·6	11·9	14·5	8·5	10·7
9	12·0	11·4	11·7	11·9	10·3	8·4	11·0	11·8	10·6	12·3	14·3	8·5	11·2
10	12·8	12·7	12·1	12·4	11·2	9·2	11·7	12·5	11·3	13·1	14·7	8·3	11·8
11	13·1	13·7	13·1	13·0	11·2	10·4	12·2	12·8	12·3	14·0	15·0	8·6	12·5
Noon	14·0	15·0	14·3	13·5	11·5	10·1	12·4	13·7	12·4	14·9	16·3	10·0	13·2
13h	14·2	14·8	13·1	14·7	13·5	12·8	14·8	14·5	13·6	15·5	16·4	9·3	13·9
14	14·6	14·0	13·4	14·0	12·3	12·5	14·7	14·6	13·0	16·1	16·3	10·1	13·8
15	14·2	12·9	12·9	13·6	12·1	12·9	13·8	15·2	12·9	15·5	17·0	10·2	13·6
16	14·1	13·1	12·9	13·3	12·6	12·7	13·9	15·3	12·6	14·8	15·5	10·0	13·4
17	14·2	13·2	13·3	13·2	13·0	12·6	13·9	15·0	12·7	13·6	14·6	9·6	13·2
18	13·3	13·2	12·4	12·5	12·2	11·9	13·5	14·1	12·2	12·3	13·6	9·7	12·6
19	14·1	12·6	11·8	11·4	11·2	11·3	13·2	13·1	11·0	12·1	13·5	9·7	12·1
20	15·4	12·3	11·1	11·2	9·9	10·1	12·4	11·7	10·4	12·1	12·9	9·6	11·6
21	16·2	12·1	10·5	10·1	9·7	9·3	11·9	11·5	10·3	11·7	13·5	9·9	11·4
22	16·6	11·4	10·4	10·0	9·4	8·1	11·1	10·7	10·3	12·1	13·4	9·5	11·1
23	16·6	11·5	10·5	10·1	9·4	8·4	10·7	10·2	10·4	12·0	13·3	9·5	11·1
Midnight	15·6	11·0	9·5	9·4	9·7	7·6	10·4	9·9	10·6	12·0	13·7	9·4	10·7
Means	14·3	12·1	11·4	11·3	10·6	9·6	11·7	11·8	11·2	13·0	14·4	9·4	11·7
Greatest Hourly Measures (1)	62	30	30	29	29	24	32	35	37	35	42	38	..
Greatest Hourly Measures (2)	45	24	24	23	23	20	25	27	29	27	32	29	..

(1) Deduced by 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.

DAYS ON WHICH NEGATIVE POTENTIAL WAS RECORDED DURING THE YEAR 1930, AND AGGREGATE TIME OF DURATION.

Date.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Date.
	hrs.	hrs.	hrs.	hrs.	hrs.	hrs.	hrs.	hrs.	hrs.	hrs.	hrs.	hrs.	
1	0·1	e 4·8	i 0·1	0·1	* ..	1·7	0·1	i ..	* ..	* ..	— —	..	1
2	..	8·0	* ..	e 2·1	* 0·1	e 2·3	0·3	i ..	* ..	* ..	— —	* ..	2
3	0·1	4·0	* ..	e 3·2	e 4·4	..	0·2	1·5	* ..	0·6	— —	* ..	3
4	e 6·9	* ..	* ..	2·7	0·5	* ..	..	e 4·6	* ..	0·8	i —	..	4
5	6·9	* ..	* ..	* ..	3·8	* ..	..	e 3·8	e 2·0	0·6	* ..	..	5
6	* ..	* ..	0·8	* ..	2·7	i ..	* ..	e 1·1	e 0·9	e 0·7	* ..	..	6
7	* ..	* ..	e 1·2	..	* ..	* ..	* ..	e 2·5	0·3	..	i —	2·3	7
8	2·9	e 0·3	* ..	* ..	* 0·1	* ..	* ..	* ..	* ..	1·1	i —	2·0	8
9	1·3	* ..	1·1	* ..	2·1	* ..	..	* ..	1·1	0·6	i —	i ..	9
10	1·8	..	4·2	* ..	4·0	..	* ..	i ..	e 1·4	* ..	i —	* ..	10
11	e 6·5	..	1·2	..	1·1	i ..	..	..	* ..	* ..	i ..	5·9	11
12	1·9	0·2	..	2·1	e 2·5	i ..	* ..	e 1·3	i 0·1	* ..	i } * ..	* ..	12
13	i —	..	2·1	e 3·2	* ..	i ..	0·3	0·4	1·8	..	i } ..	1·6	13
14	i —	..	0·1	e 0·7	* ..	* ..	e 2·7	e 0·9	i ..	i ..	i ..	1·0	14
15	1·3	e 2·2	e 8·0	e 0·7	i ..	i ..	0·8	..	* ..	i ..	* ..	* ..	15
16	* 0·1	* ..	e 2·5	0·2	i ..	i ..	0·6	* ..	0·1	i ..	* ..	* ..	16
17	* ..	e 0·6	1·6	e 4·2	i ..	0·4	0·5	* ..	i ..	0·6	* ..	* ..	17
18	* ..	* ..	e 1·3	1·3	1·3	e 5·3	0·7	0·3	i ..	* ..	0·8	..	18
19	* ..	..	..	e 5·3	i ..	..	* ..	e 1·7	4·2	* ..	* ..	* ..	19
20	* ..	..	* ..	4·6	i ..	i ..	e 2·1	i ..	e 3·6	0·4	3·3	* ..	20
21	0·2	..	..	* ..	* ..	i ..	2·3	e 2·6	1·8	..	i —	* ..	21
22	* ..	..	e, i [2·0]	* ..	4·2	..	..	* ..	i ..	<0·1	i —	..	22
23	1·2	* ..	* ..	5·5	0·1	1·7	i ..	i 0·9	* ..	* ..	* ..	..	23
24	e, i [3·6]	* ..	..	0·3	1·1	3·9	e 1·9	* ..	* ..	* ..	0·9	i ..	24
25	6·1	1·0	..	* ..	e 2·3	* ..	* ..	* ..	0·3	1·5	2·3	7·9	25
26	5·4	1·1	..	* ..	e 2·4	* ..	* ..	* ..	1·9	* ..	e 1·9	3·0	26
27	0·7	* ..	* ..	..	* ..	* ..	* ..	* ..	e 1·1	i —	* ..	0·5	27
28	* ..	i ..	* ..	* ..	* ..	..	0·1	i —	2·5	— —	e 6·3	i ..	28
29	* 0·1		e 1·9	..	* ..	* ..	e 1·4	i —	0·7	— —	2·0	5·6	29
30	2·8		* ..	..	e 3·3	..	e 0·9	i —	* ..	— —	* ..	2·9	30
31	5·5		0·5		e 2·2		* ..	* ..		— —		1·7	31
Total	55·4	22·2	28·6	36·2	38·2	15·3	14·9	21·6	23·8	6·9	17·5	34·4	Total
No. of Days	29	28	31	30	31	30	31	28	30	26	20	31	No. of Days

Days selected for derivation of monthly mean values are marked by an asterisk (*).
The sign .. is placed to days on which atmospheric potential was *positive* throughout the whole 24 hours.
e—signifies that the aggregate total duration is in part estimated, frequent reversal in sign and the resulting indistinctness of the trace having made accurate measurement impossible.
i—signifies that the record is incomplete or unsatisfactory from some cause, generally faulty insulation.

MEAN POTENTIAL GRADIENT OF THE ATMOSPHERE, IN VOLTS PER METRE ABOVE THE LEVEL GROUND, FOR THE MONTHS AND SEASONS OF THE YEAR 1930; AND THE CORRESPONDING DIURNAL INEQUALITY OF MEAN HOURLY VALUES. [SELECTED DAYS.]

		DIURNAL INEQUALITY																						
		Greenwich Mean Time. Hour commencing—																						
1930	Mean Potential Gradient	0h	1h	2h	3h	4h	5h	6h	7h	8h	9h	10h	11h	12h	13h	14h	15h	16h	17h	18h	19h	20h	21h	22h	23h
	v/m.	v/m.	v/m.	v/m.	v/m.	v/m.	v/m.	v/m.	v/m.	v/m.	v/m.	v/m.	v/m.	v/m.	v/m.	v/m.	v/m.	v/m.	v/m.	v/m.	v/m.	v/m.	v/m.	v/m.	v/m.
January	300	— 50	— 42	— 41	— 44	— 47	— 91	—100	— 49	— 23	+ 9	+ 48	+ 36	+ 55	+ 47	+ 46	+ 34	+ 42	+ 65	+ 70	+ 37	+ 26	+ 19	— 2	— 39
February	379	— 56	— 77	— 93	—111	—122	— 71	— 40	— 5	+ 43	+ 49	+ 68	+ 40	+ 18	+ 14	+ 30	+ 34	+ 33	+ 52	+ 55	+ 74	+ 50	+ 18	+ 18	— 13
March	335	0	— 41	— 29	— 42	— 43	— 55	— 10	+ 15	+ 33	+ 15	+ 32	+ 11	+ 5	+ 12	+ 4	+ 10	— 10	+ 13	+ 33	+ 39	+ 30	+ 10	— 3	— 29
April	289	+ 10	+ 3	— 22	— 30	— 24	— 37	— 36	0	+ 13	+ 10	+ 18	— 9	— 30	— 34	— 31	— 30	— 9	+ 26	+ 20	+ 36	+ 55	+ 43	+ 21	+ 29
May	290	— 79	— 77	— 89	— 78	— 36	— 26	+ 32	+ 60	+100	+ 59	+ 55	+ 23	+ 16	— 9	+ 5	— 10	+ 27	+ 12	+ 12	+ 31	+ 36	— 8	— 24	— 37
June	209	+ 4	— 14	— 36	— 34	— 25	+ 23	+ 26	+ 66	+ 88	+ 55	+ 23	— 14	— 15	— 14	— 14	— 32	— 51	— 39	— 25	— 17	— 2	+ 18	+ 22	+ 3
July	250	— 38	— 47	— 60	— 56	— 37	— 10	+ 20	+ 56	+103	+ 70	+ 68	+ 29	— 9	— 14	— 34	— 21	— 28	— 11	— 27	— 3	— 2	+ 20	+ 32	+ 6
August	227	+ 3	— 10	— 41	— 39	— 28	— 31	+ 4	+ 71	+ 83	+ 58	+ 41	+ 9	— 10	— 20	— 24	— 28	— 46	— 40	— 6	+ 16	— 5	+ 9	+ 34	— 11
September	236	— 14	— 25	— 37	— 42	— 30	— 40	— 8	+ 45	+ 94	+ 72	+ 51	+ 30	+ 3	— 1	+ 18	— 2	— 5	— 15	— 10	0	— 19	— 24	— 16	— 18
October	310	— 5	— 25	— 46	— 67	— 89	— 59	— 60	— 26	+ 35	+ 44	+ 26	— 10	— 39	— 16	— 5	— 8	+ 7	+ 52	+ 56	+ 42	+ 44	+ 46	+ 54	+ 38
November	408	— 24	— 55	— 80	— 90	— 97	—100	—129	—105	— 51	+ 6	— 9	+ 22	+ 73	+ 43	+ 32	+ 38	+ 99	+ 90	+ 76	+ 28	+ 34	+ 15	+ 65	+117
December	406	— 52	— 71	— 74	— 73	— 77	— 63	— 36	— 11	+ 22	+ 40	+ 77	+ 73	+ 61	+ 40	+ 29	+ 19	+ 20	+ 28	+ 48	+ 29	+ 10	— 30	+ 2	— 19
Year	303	— 25	— 40	— 54	— 59	— 55	— 47	— 28	+ 10	+ 45	+ 41	+ 42	+ 20	+ 11	+ 4	+ 5	+ 0	+ 7	+ 19	+ 25	+ 26	+ 21	+ 11	+ 17	+ 2
Winter	373	— 46	— 61	— 72	— 80	— 86	— 81	— 76	— 43	— 2	+ 26	+ 46	+ 43	+ 52	+ 36	+ 34	+ 31	+ 49	+ 59	+ 62	+ 42	+ 30	+ 6	+ 21	+ 12
Equinox	293	— 2	— 22	— 34	— 45	— 47	— 48	— 29	+ 9	+ 44	+ 35	+ 32	+ 6	— 15	— 10	— 4	— 8	— 4	+ 19	+ 25	+ 29	+ 28	+ 19	+ 14	+ 5
Summer	244	— 28	— 37	— 57	— 52	— 32	— 11	+ 21	+ 63	+ 94	+ 61	+ 47	+ 12	— 5	— 14	— 17	— 23	— 25	— 20	— 12	+ 7	+ 7	+ 10	+ 16	— 10

NOTE: The above quantities are derived from the photographic traces for ten selected days in each month.

On a "selected day" there is in general no negative potential recorded, and no excessive departure from average conditions is apparent throughout the twenty-four hours; but the range in the *mean values* for the days selected in any month generally exceeded 150 volts and occasionally exceeded 250 volts.

The selection of ten days in November was rendered difficult by reason of faulty insulation during part of the month, and remains unsatisfactory owing to the inclusion of two foggy days of exceptionally high potential. The extreme range between the mean daily values on the selected days for this month was 516 volts.

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