RESULTS OF THE MAGNETIC & METEOROLOGICAL OBSERVATIONS

MADE AT THE ABINGER MAGNETIC STATION, SURREY AND THE ROYAL OBSERVATORY, GREENWICH RESPECTIVELY IN THE YEAR

1932

UNDER THE DIRECTION OF

SIR FRANK DYSON, K.B.E., F.R.S.

ASTRONOMER ROYAL

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INDEX.

INDEX.

INTRODUCTION—METEOROLOGICAL SECTION.

INDEX.

ERRATUM.

RESULTS OF MAGNETIC OBSERVATIONS, 1921.

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THE ROYAL OBSERVATORY, GREENWICH

AND

ABINGER MAGNETIC STATION, SURREY.

MAGNETIC AND METEOROLOGICAL OBSERVATIONS, 1932.

Introduction.

During the year 1932 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 :—Miss Clack, F. W. Reece and N. Harrild.

On account of electric railways in the neighbourhood of Greenwich, magnetic observations are made 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 Common. Mr. Stevens, resident observer and assistant-in-charge of the station, 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, 800 feet above sea level. It is approximately 26 miles from the Royal Observatory in a direction a little south of south-west. The nearest railway track approaches to about 2½ miles. The adopted geographical position is Latitude 51° 11′ 5·2″ N., Longitude 0° 23′ 12·1″ W.

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

The Magnetic 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. It has been ascertained by interchange of two coil-magnetometers, simultaneously operated, that as regards horizontal intensity the site difference is negligible.

A second pavilion, 20 feet in length and breadth, suitable for comparative observations and more convenient than the first for standardising magnetic instruments, was completed in 1932. It occupies a position on the north-east of the pavilion for absolute observations corresponding to that of the testing pavilion on the south-east and contains three circular wooden tables built into concrete piers free from contact with the floor, similar to those in the Magnetic 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 is 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.

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.

The temperature of the Magnetograph House 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 broadcasting 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.

INSTRUMENTS.

DECLINATION MAGNET FOR ABSOLUTE DETERMINATIONS.—A hollow cylindrical magnet with scale and collimating lens is used in conjunction with a small telescope mounted independently on the same pier. 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. 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 on the top of a concrete pillar, 10 feet high, erected at the northern extremity of the Observatory grounds at a distance of approximately 300 feet from the observing pier. Determinations of the azimuth of this mark are made at frequent intervals by means of observations of Polaris. During each observation of Polaris, both direct and reflected views are taken. The effect of error of level of the telescope is thus entirely eliminated. Reflection is obtained from the surface of mercury contained in a shallow copper dish. The azimuth mark previously in use was superseded at the beginning of June, 1932.

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, eight 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.

Careful precaution is exercised 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 with regard to 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 results.

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 at the National Physical Laboratory and

are checked from time to time. The dimensions of the coil were re-examined in November 1931. The electrical constants on which the reduction of observations made in 1932 is based were verified in February 1932 and again in December. The factor at present adopted to convert the measure of current from international units 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 value of horizontal force obtained with this instrument is subject to a correction of -1γ for the effect of the field of magnets in instruments placed permanently in the vicinity. The effect is determined experimentally by reversal of the magnets. The correction is applied in the reduction of the observation.

A KEW-PATTERN UNIFILAR MAGNETOMETER by Messrs. C. F. Casella & Co. (No. 181) is also used to determine absolute horizontal force. Deflection observations are made at three distances, namely, 22·5 cms., 30 cms. and 40 cms. 32 observations of the moment of inertia of the collimator magnet were made during the year 1932. The mean observed value of log. K from these determinations was 2·42394. This value has been used in the reductions and is based on the Greenwich Standard Inertia Cylinder. (See Appendix II of the Magnetic Results, 1926).

The mean values of the distribution constants P and Q derived from 119 determinations made during the year are +9·33 and −1347 respectively.

The values used in the reduction of the 1932 observations, however, are the mean values obtained from all the observations made during the years 1924–32. These values are: P = +9·91, Q = −1515. The application of this rule to the reduction of observations made in previous years would necessitate a correction of $+3\gamma$ to observations made in 1929, and -2γ to observations made in 1930.

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

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. (*cf.* p. D 13).

The adopted value of the factor 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 at the centre of the marble cylinder.

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 microscope 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 $2\frac{1}{2}$ 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 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 3·29γ per mm. at the present time.

A base-line mirror, with lens, is mounted rigidly on the pier at the side of the variometer and serves to provide a common base line for both declination and horizontal force records.

THE HORIZONTAL FORCE VARIOMETER.—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 March 24, 1930, by which the needle will be maintained within 20′ of the correct azimuth until the end of 1934.

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. throughout 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 1927.

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, supported in a frame above the mirror, reflects the light from the illuminating lamp on to the mirror and then, after reflection from the mirror, back in a horizontal direction to the recording drum. A single lens, placed between the mirror and the prism, brings the light to a focus on the drum. The prism frame is adjustable in azimuth to enable the trace to be brought to any desired part of the drum. 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 pierced centrally 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 scale value is obtained by electro-magnetic deflections. The radius of the coil used in these experiments is 30·15 cms. The scale value adopted in 1932 from January 1 to May 6 was 1 mm. $= 2{\cdot}34\gamma$. The mean of the scale values adopted during the remainder of the year was $2{\cdot}38\gamma$ per mm. Slight deviations from the mean value occur when the standard temperature of the room is raised or lowered. The value is sensibly uniform over the range allowed by the photographic sheet.

MAGNETIC REDUCTIONS.

The time used is Greenwich Mean Time.

The estimated 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.

Ten observations of declination, eight of horizontal intensity and six of vertical intensity are made, on an average, each week-day. Previous to 1929 the base-line values for vertical force traces were 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. 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.

ARRANGEMENT OF RESULTS.

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). The values in these tables have *not* been adjusted for the effect of non-cyclic change.

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.

On p. D 61 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.

Reduced copies of the magnetograms for certain disturbed days have been printed in each volume since 1882. The days are now those selected at De Bilt for the 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. These dates in 1932 are January 27; March 10–11, 28–29; May 29–30; August 27–28. The traces for October 15–16 and 20–21 have been added as possessing interesting features. 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.

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 marked D, H and V respectively.

At the foot of each plate, scales, in C.G.S. measure, are given for each of the magnetic registers and a datum line is marked for each trace at the side of the diagrams.

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

SPECIAL OBSERVATIONS IN CONNECTION WITH THE INTERNATIONAL POLAR YEAR, 1932–33.

In connection with the second "International Polar Year," the photographic records of the variations in the magnetic elements have been taken on a time-scale of 180 mm. to the hour on the days in each month specified by the International Commission.

The periods covered by these "quick runs" are as follows:

	d	h	d	h		d	h	d	h
August	10	0	to 12	0	November	9	0	to 11	0
	24	0	to 26	0		23	0	to 25	0
September	14	0	to 16	0	December	14	0	to 16	0
	28	0	to 30	0		28	0	to 30	0
October	12	0	to 14	0					
	26	0	to 28	0					

Also August $30^d\ 0^h$ to September $2^d\ 0^h$, which was specified on account of the occurrence of a total eclipse of the sun in North America on August 31.

H. SPENCER JONES.

ROYAL OBSERVATORY, GREENWICH.

1933, *May* 9.

ROYAL OBSERVATORY, GREENWICH.

ABINGER MAGNETIC STATION.

Results of Magnetic Observations

1932

GREENWICH MAGNETIC AND METEOROLOGICAL RESULTS 1932

D2*

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.	11° + Tabular Quantities.																								
	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′
1	65·6	65·3	68·3	68·3	69·0	68·8	69·3	69·0	68·3	68·1	69·9	70·1	70·9	71·2	69·1	68·0	68·1	68·3	66·7	66·7	63·2	62·2	66·1	66·7	
2**	67·3	68·6	66·8	67·3	68·8	69·3	67·4	69·3	69·4	69·1	71·1	69·3	70·7	70·5	70·5	67·8	70·2	59·7	66·5	66·7	65·1	65·1	55·6	62·8	
3	63·2	66·5	67·9	67·7	69·7	69·5	70·5	68·6	67·3	66·9	68·2	69·2	70·9	70·4	69·7	68·9	67·9	67·8	61·2	64·8	67·0	67·0	66·5	65·0	
4	66·1	66·6	67·6	68·1	67·6	67·7	67·9	67·7	67·6	67·4	68·2	69·2	70·0	70·3	69·6	68·9	68·3	67·6	68·2	66·1	65·9	66·4	66·9	67·4	
5	68·1	68·5	68·4	68·3	68·0	68·0	67·8	67·5	66·9	66·9	68·1	69·6	70·2	70·7	69·9	69·1	68·5	67·3	66·6	68·6	67·8	64·8	63·4	65·9	
6	67·3	68·2	68·7	68·8	68·8	68·8	68·8	68·3	67·8	67·5	68·8	69·9	70·4	71·0	70·1	69·0	68·4	68·5	67·9	67·8	67·2	65·5	65·4	66·9	
7	67·6	68·0	68·0	68·0	68·0	68·0	68·0	66·9	66·6	67·1	68·3	69·0	70·4	70·3	69·6	69·2	69·1	68·6	68·5	68·9	65·0	57·3	63·2	67·0	
8	67·7	67·5	68·1	68·6	68·7	69·2	69·7	68·8	68·2	67·1	69·3	70·3	73·0	71·1	71·4	72·7	72·1	71·3	71·1	68·1	66·4	65·3	68·2	64·5	
9	65·0	65·9	68·7	69·9	69·4	68·4	67·3	67·2	67·4	66·8	68·4	67·9	69·6	70·8	69·9	65·7	68·3	67·9	63·2	66·7	65·7	64·8	64·9	61·2	
10	65·3	64·3	67·5	67·5	68·2	68·0	67·7	67·3	67·5	68·1	68·8	70·0	71·3	68·5	69·0	65·0	65·5	68·1	64·5	67·1	66·5	66·5	66·0	66·7	
11	66·9	66·9	66·4	67·9	66·4	66·4	67·5	68·4	68·9	68·7	69·3	69·4	69·8	71·2	69·8	68·0	67·9	67·0	56·9	67·4	59·9	63·5	65·9	61·9	
12	61·4	64·9	66·6	67·7	69·4	67·4	67·4	68·4	69·9	68·7	68·9	69·9	69·8	70·8	68·1	68·5	69·0	63·4	65·4	66·8	66·3	64·9	65·5	65·4	
13	66·0	65·0	65·5	66·5	66·4	67·4	67·1	66·1	65·9	67·1	68·0	68·8	68·9	70·0	69·6	68·8	66·6	67·9	67·7	67·0	66·6	64·5	62·2	64·6	
14	68·3	68·7	65·5	66·7	66·6	67·1	67·0	66·8	66·7	67·4	69·6	70·2	71·7	71·0	71·0	70·4	67·9	67·7	67·2	66·8	66·7	66·2	64·3	60·7	
15	66·7	67·7	67·2	67·6	67·7	67·2	66·7	66·8	70·5	72·8	70·8	69·9	69·7	69·7	68·2	68·0	67·7	68·0	66·5	60·7	63·7	66·6	67·0	67·0	
16	67·0	67·2	67·1	68·2	67·0	67·0	67·1	67·2	67·0	67·7	68·5	69·2	69·4	69·8	69·8	69·3	69·2	68·1	69·5	66·9	65·0	65·6	64·2	64·4	
17	65·1	66·0	65·8	66·3	66·7	66·6	66·5	66·2	65·9	66·3	67·8	68·9	69·1	69·7	68·6	68·3	64·9	64·0	67·1	66·9	66·4	66·4	66·4	66·3	
18*	67·3	67·5	67·5	67·0	67·3	68·0	67·4	67·3	66·5	67·1	69·0	70·1	69·4	69·4	68·5	68·3	67·7	67·1	67·1	66·6	66·1	67·1	66·8	67·0	
19*	66·9	67·2	67·2	67·3	67·3	66·3	66·2	66·1	65·7	65·8	67·2	68·1	69·3	69·4	69·2	68·3	67·9	67·8	67·5	67·1	66·3	66·4	66·4	66·3	
20*	67·0	66·0	66·1	67·4	67·7	67·6	67·2	66·9	66·3	66·5	67·9	69·6	70·5	71·6	71·5	71·5	69·9	69·0	68·0	67·3	67·0	66·7	66·1	66·2	
21*	66·6	67·5	67·6	67·9	67·9	67·3	67·2	66·8	66·1	66·5	67·7	68·7	69·7	70·5	70·2	69·4	68·4	68·0	67·8	67·6	66·7	66·7	66·3	66·0	
22*	66·8	67·8	68·2	68·4	68·7	68·3	67·8	67·1	66·3	66·1	67·2	68·5	69·7	70·7	71·0	70·3	69·0	68·4	68·1	67·7	67·6	66·7	66·4	66·7	
23	67·3	68·9	67·9	68·3	68·4	67·8	67·6	66·7	65·7	65·6	67·2	68·7	70·0	71·0	70·6	69·2	68·6	68·6	68·1	67·6	66·0	64·8	66·6	66·6	
24	67·0	67·9	68·1	68·0	67·9	68·4	68·2	68·0	67·4	66·8	67·4	68·8	—	—	—	—	—	—	—	—	—	—	—	—	
†25**	—	—	—	—	—	—	—	—	—	—	—	—	70·9	71·3	71·8	66·3	69·1	67·0	63·1	61·7	64·0	64·0	65·7	64·9	
26**	65·6	66·8	67·7	68·2	67·7	68·7	70·3	70·8	68·5	66·7	68·6	68·9	70·5	71·6	70·8	70·1	68·2	66·8	62·9	67·4	66·8	61·8	54·3	60·6	
27**	59·3	63·3	69·3	68·6	69·0	68·7	69·5	69·4	67·5	67·7	68·4	68·3	70·6	72·6	70·0	63·2	69·2	64·1	67·1	66·1	61·1	65·1	65·6	60·1	
28**	65·6	64·0	69·0	71·3	69·7	68·7	68·1	68·3	68·2	68·7	68·3	68·8	69·3	71·0	72·1	69·9	69·8	67·7	59·6	65·6	65·2	63·9	62·9	64·6	
29	64·9	68·8	68·9	68·5	68·9	68·3	68·4	67·4	67·4	67·0	67·9	68·7	70·0	69·8	68·6	68·1	67·7	67·7	67·9	67·4	65·3	65·2	64·1	66·3	
30	65·3	66·1	67·1	68·6	68·7	66·7	66·8	67·1	66·6	66·5	67·1	68·9	69·6	70·3	69·3	68·1	67·8	67·0	68·2	67·8	67·3	64·8	63·4	63·6	
31	63·0	65·7	67·1	70·1	67·9	67·0	67·2	67·6	68·1	66·6	67·8	68·9	69·9	70·3	70·4	69·6	65·2	67·9	67·6	67·2	67·0	66·6	65·6	64·1	
Mean	65·9	66·8	67·5	68·1	68·1	67·9	67·9	67·7	67·4	67·4	68·5	69·2	70·1	70·6	69·9	68·6	68·3	67·3	66·3	66·7	65·7	65·1	64·7	64·9	
Mean*	66·9	67·2	67·3	67·6	67·8	67·5	67·2	66·8	66·2	65·4	67·8	69·0	69·7	70·3	70·1	69·6	68·6	68·1	67·7	67·3	66·7	66·7	66·4	66·4	
Mean**	64·5	65·7	68·2	68·9	68·8	68·9	68·8	69·5	68·4	68·1	69·1	68·8	70·3	71·4	70·9	67·8	69·4	64·6	64·0	66·5	64·6	64·0	59·6	62·0	
February.	11° + Tabular Quantities.																								
	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′
1	65·8	67·5	66·2	66·7	67·0	67·0	66·9	66·4	65·7	65·8	66·6	67·6	69·4	71·3	70·8	69·9	68·4	67·9	67·5	67·5	67·1	65·6	64·4	66·1	
2*	67·1	66·1	67·1	67·1	66·7	66·8	66·7	66·9	66·7	66·4	67·5	68·0	68·8	69·7	69·1	68·1	67·1	67·0	66·6	66·3	66·8	66·7	66·3	66·1	
3**	67·0	67·1	66·8	66·4	66·0	65·5	66·2	66·1	66·1	66·1	67·1	70·8	71·5	74·7	74·8	74·1	65·6	69·1	66·8	60·3	60·1	61·6	55·1	59·6	
4**	61·3	68·4	75·3	63·9	65·5	65·4	67·0	67·0	69·0	66·0	67·5	70·0	70·1	71·0	67·6	66·0	63·4	60·8	61·5	61·0	62·6	66·2	65·1	64·6	
5	64·6	67·7	68·0	67·5	69·0	69·3	70·2	68·1	67·4	66·4	67·0	69·3	69·8	70·8	70·5	69·4	65·0	63·0	66·2	67·3	65·0	64·9	64·3	64·5	
6	68·2	67·3	68·0	66·1	66·2	66·3	66·0	65·6	65·5	66·5	67·5	68·4	69·3	72·6	68·1	67·9	68·2	67·3	65·3	65·0	65·6	64·4	63·7	65·5	
7	66·5	66·0	66·0	65·9	67·1	67·4	67·1	66·4	66·6	66·1	67·0	68·0	68·8	70·2	71·0	68·5	68·2	67·7	66·9	61·5	64·7	64·1	65·2	64·7	
8	61·3	65·1	66·3	65·9	66·4	65·9	66·2	66·1	65·6	66·6	66·9	69·0	69·8	71·1	69·5	67·8	64·3	62·4	65·8	62·1	63·2	64·3	66·4	66·4	
9	65·1	66·5	67·2	67·7	67·5	67·2	66·7	66·7	67·0	66·0	67·7	68·7	70·1	70·3	69·9	68·9	67·6	66·6	64·0	63·6	65·3	65·5	63·3	64·6	
10**	65·0	67·6	68·7	67·9	67·5	66·7	65·5	67·8	67·5	68·0	69·5	69·1	70·4	70·2	71·4	66·8	61·9	66·7	59·9	60·7	59·8	61·2	64·3	65·8	
11**	67·8	66·3	68·4	66·7	66·8	67·4	66·7	66·5	66·2	66·4	67·7	69·8	70·5	72·5	71·0	69·3	62·2	60·3	61·8	67·0	63·0	64·0	65·4	61·7	
12	64·4	66·4	70·0	70·9	65·5	64·4	66·1	66·4	66·2	66·5	67·3	68·0	69·8	71·1	70·6	69·9	53·0	63·1	66·9	67·1	67·1	64·7	65·8	59·9	
13	62·1	67·5	66·3	66·5	67·8	66·5	68·2	66·8	66·8	66·8	69·6	69·1	70·4	70·7	72·5	70·0	68·3	64·2	64·6	66·7	66·7	66·9	64·7	65·2	
14	65·7	65·7	63·4	63·7	61·7	63·7	65·7	65·7	65·6	66·3	68·5	70·0	70·0	70·8	70·1	68·8	67·8	67·3	67·7	68·0	64·4	66·5	65·8	66·2	
15	63·5	64·3	65·5	65·6	65·4	65·2	65·6	65·9	65·8	66·3	67·3	67·9	70·0	70·0	70·3	69·3	68·4	68·0	67·4	64·3	66·3	65·6	64·2	64·6	
16*	65·4	67·1	66·5	66·4	66·1	66·1	65·6	65·5	65·0	65·1	66·4	68·1	69·6	70·1	70·2	69·3	68·1	67·5	67·2	66·4	66·8	66·2	65·0	64·7	
17*	65·5	65·8	65·8	66·1	66·2	65·7	65·6	65·3	65·1	65·0	66·5	68·2	70·0	70·4	69·7	68·1	67·2	66·9	66·7	66·7	66·8	66·7	65·2	66·2	
18	66·3	66·8	66·7	66·9	66·8	66·5	66·2	65·7	65·2	65·1	66·2	68·1	69·3	70·1	69·5	68·6	67·8	68·1	67·6	67·2	66·7	62·6	61·6	63·9	
19	64·4	62·8	63·0	64·0	64·5	65·1	63·7	63·5	64·1	64·6	66·6	68·5	70·4	71·1	70·6	69·4	68·5	68·0	67·8	68·5	68·1	67·5	67·1	67·1	
20	66·6	66·9	65·1	65·1	65·4	71·2	67·2	67·2	68·2	72·1	68·7	69·7	70·1	69·8	70·1	71·1	68·3	67·1	61·1	61·7	65·1	65·5	64·8	65·4	
21	66·4	66·8	67·2	67·2	67·3	66·8	66·6	66·5	66·6	67·3	67·9	69·2	70·6	71·6	70·2	68·8	67·2	66·9	66·4	65·6	65·3	65·8	65·6	66·0	
22	67·3	68·3	67·5	67·6	67·8	67·6	68·3	69·1	68·4	68·3	68·2	70·3	72·2	71·9	69·6	68·8	63·4	60·3	65·4	67·8	67·3	66·2	64·2	63·1	
23**	62·0	61·8	63·4	64·5	64·5	65·2	65·1	65·8	65·7	66·1	67·5	69·0	69·5	69·8	69·5	68·5	68·4	69·0	68·1	52·0	52·7	64·0	65·4	66·6	
24	67·1	67·4	65·6	66·3	67·5	67·0	67·5	66·8	65·6	66·8	68·9	70·8	72·9	70·0	68·9	68·7	66·8	65·6	62·7	64·9	64·6	64·1	65·2	65·2	
25	64·8	68·1	66·5	68·5	68·4	69·1	66·0	65·5	65·6	65·6	67·4	69·0	70·0	71·0	69·5	68·2	65·5	65·5	65·7	62·5	65·7	66·0	65·5	65·4	
26	65·3	66·9	68·5	67·2	67·6	66·5	66·3	65·7	65·0	65·4	66·9	69·7	71·4	71·0	70·5	68·5	66·6	67·1	66·8	65·7	66·0	65·5	65·8	65·9	
27*	66·1	66·5	66·6	66·2	66·2	66·2	66·0	65·5	64·5	64·5	65·8	67·8	70·0	70·7	69·9	68·7	67·4	67·1	66·4	67·1	66·8	66·4	66·1	66·0	
28*	65·9	66·0	66·0	66·3	66·3	66·3	66·3	65·8	64·5	63·9	65·2	67·2	69·8	70·2	70·0	69·2	67·9	67·1	67·1	66·6	66·5	66·4	66·3	66·2	
29	66·2	66·5	67·0	67·0	66·4	66·3	65·9	65·5	64·7	64·4	65·7	67·6	69·3	69·8	69·3	68·0	66·7	66·7	66·7	66·7	66·7	66·7	66·6	66·7	
Mean	65·3	66·5	66·8	66·5	66·5	66·6	66·5	66·3	66·1	66·2	67·3	68·9	70·1	70·9	70·2	68·9	66·5	66·0	65·7	64·8	64·9	65·2	64·8	65·0	
Mean*	66·0	66·3	66·4	66·4	66·3	66·2	66·0	65·8	65·2	65·0	66·3	67·9	69·6	70·2	69·8	68·7	67·5	67·1	66·8	66·6	66·7	66·5	65·8	65·8	
Mean**	64·6	66·2	68·5	65·9	66·1	66·0	66·1	66·6	66·9	66·5	67·9	69·7	70·4	71·6	70·9	68·9	64·3	65·2	63·6	60·2	59·6	63·4	65·1	63·7	

* Denotes an International Quiet Day. ** Denotes an International Disturbed Day.
† Jan. 25 has been omitted in computing the means for Disturbed Days.

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.	11° + Tabular Quantities.																								
	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′
1*	66·1	65·9	65·8	65·9	66·1	65·8	65·7	65·7	65·7	65·8	66·1	66·3	68·5	69·0	69·0	68·5	67·7	67·2	66·7	66·5	66·6	66·5	66·1	66·1	
2	66·0	65·8	64·9	65·9	66·1	65·8	65·8	65·8	64·9	64·8	66·0	68·2	70·4	70·9	71·2	69·8	68·6	68·2	68·9	64·9	65·8	63·5	55·9	65·3	
3	65·4	64·9	63·6	64·0	65·9	64·6	64·8	64·6	64·9	64·8	69·8	72·0	71·7	70·8	69·7	67·8	65·7	64·9	62·4	59·6	60·7	62·8	61·2	58·2	
4	62·8	65·6	66·6	69·5	64·9	64·3	67·2	65·9	63·9	64·9	66·9	69·1	73·0	69·4	70·9	69·6	66·8	65·5	58·8	58·7	59·4	61·4	59·3	64·2	
5	63·2	68·5	65·7	64·4	63·8	65·9	65·7	65·1	66·7	67·3	66·2	67·2	68·6	69·3	69·1	68·9	67·0	63·6	65·0	61·3	58·9	56·6	58·4	62·6	
6	61·5	61·4	63·3	65·6	65·7	65·4	66·4	65·9	64·9	66·7	66·7	70·3	71·1	70·9	69·8	68·8	62·8	66·1	65·8	55·8	62·8	64·9	63·1	64·4	
7	64·3	65·3	66·3	66·5	66·1	65·3	64·8	64·8	64·4	65·3	67·8	69·0	70·3	70·1	69·2	66·3	64·8	65·8	63·9	62·4	62·8	60·9	62·1	60·2	
8	58·8	64·1	68·4	66·8	63·7	67·2	65·7	64·0	64·2	64·3	66·9	66·8	68·8	69·7	69·0	68·9	67·8	63·8	63·1	63·4	63·3	61·1	60·2	65·2	
9	66·9	64·4	67·9	67·4	63·5	64·3	65·3	64·1	63·4	64·4	65·9	68·5	69·5	71·9	71·9	70·6	68·6	58·9	61·4	67·1	59·9	56·0	57·9	62·4	
10**	62·8	67·0	64·5	61·8	62·2	63·0	64·3	64·4	64·9	67·5	69·1	71·1	69·4	70·0	71·1	69·7	61·7	60·7	60·7	58·7	58·2	61·7	62·2	58·7	
11	67·9	58·2	60·3	61·6	61·1	63·0	64·8	66·5	66·6	65·6	68·3	69·4	70·5	70·4	69·5	66·3	66·8	64·6	63·5	64·0	63·7	63·8	64·7	65·4	
12	66·9	65·3	65·3	63·8	65·9	66·3	66·0	65·9	66·0	67·1	68·0	68·2	69·8	70·1	69·8	68·5	67·2	66·5	64·7	64·3	64·0	64·2	63·3	62·2	
13	63·4	63·2	64·6	66·6	64·8	64·6	65·3	64·8	64·6	65·4	66·6	68·1	69·0	69·0	69·1	70·1	70·0	69·5	68·1	67·6	65·5	62·0	64·0	64·9	
14	64·4	63·2	63·4	62·9	63·0	64·9	63·9	64·9	65·0	65·6	67·5	68·4	69·0	70·0	70·9	71·1	69·4	68·3	68·0	66·4	66·1	65·0	64·0	63·4	
15*	65·3	66·1	66·4	66·2	66·4	65·6	65·6	64·7	64·3	65·1	67·7	69·6	71·5	71·5	70·4	69·2	68·7	67·6	67·2	66·2	66·2	66·2	65·8	65·7	
16*	65·2	65·4	65·6	65·7	65·4	65·2	65·0	63·8	63·2	63·9	66·2	68·0	70·2	70·2	69·6	67·6	66·5	66·3	66·2	64·2	63·5	65·5	65·7	65·7	
17	65·5	65·7	65·5	65·2	65·2	65·2	63·9	63·2	62·7	63·2	65·5	68·4	70·2	70·9	70·6	68·8	67·1	66·9	66·3	62·3	63·2	65·2	66·0	65·9	
18	65·6	66·3	63·6	62·2	62·5	63·3	64·0	65·3	63·7	66·3	67·3	70·3	71·6	72·3	71·3	70·3	67·3	65·3	46·5	52·3	58·3	65·4	65·1	65·2	
19	65·3	66·7	65·3	68·5	65·8	64·9	64·7	63·4	63·4	64·4	67·4	70·0	71·2	71·2	70·8	68·9	67·4	66·0	64·5	63·3	62·9	65·0	65·8	66·4	
20	65·9	66·2	65·6	65·8	65·5	65·7	65·5	64·5	63·8	64·2	66·2	69·1	71·1	72·6	71·6	69·6	68·6	65·6	62·6	62·6	64·7	65·6	65·7	65·7	
21	64·3	66·5	69·3	63·1	65·1	65·0	65·7	66·2	65·7	64·7	67·2	71·4	73·3	73·6	73·1	71·4	65·8	66·1	65·2	63·4	59·2	55·1	64·3	60·9	
22	64·1	66·5	68·9	70·2	65·9	65·4	65·9	64·5	64·2	65·0	67·4	69·8	73·4	72·8	71·4	68·9	64·2	62·2	62·8	59·3	58·2	63·0	66·7	64·3	
23	67·5	64·3	61·9	64·3	64·3	64·4	63·5	63·2	62·9	64·5	66·9	69·4	72·0	70·5	69·1	68·4	66·9	66·5	66·3	66·0	65·5	65·0	63·0	64·7	
24	63·4	67·0	65·8	64·9	65·6	65·2	64·2	62·5	62·3	62·9	65·0	68·2	71·3	71·5	69·8	68·0	67·0	66·4	65·0	65·4	65·2	64·0	64·2	64·0	
25*	64·7	63·8	66·9	65·4	65·5	65·3	64·5	62·8	61·9	62·7	65·9	69·0	70·9	71·0	69·6	68·0	66·6	66·4	65·4	66·0	65·6	64·8	64·9	65·7	
26*	65·6	65·6	65·6	65·8	65·8	65·8	65·3	63·5	62·0	62·9	65·8	68·8	70·7	70·3	68·9	67·1	65·8	65·8	65·7	65·7	65·8	65·7	65·4	65·2	
27	65·1	65·0	65·3	65·3	65·2	64·8	64·2	62·6	61·7	62·9	65·8	68·8	70·7	70·1	68·9	67·9	67·4	67·4	66·9	65·4	65·9	66·2	65·7	64·9	
28**	63·0	58·0	55·4	61·0	62·6	62·1	63·1	62·9	62·2	64·1	67·5	71·2	72·1	74·4	73·8	72·1	71·6	64·9	64·8	64·0	61·0	59·2	60·1	61·2	
29**	62·2	59·8	57·6	59·3	63·4	63·2	62·8	62·4	63·3	66·9	71·2	71·5	73·4	69·5	70·7	67·0	67·5	66·8	62·2	62·8	57·3	63·0	65·1	65·7	
30**	66·5	67·0	63·8	62·6	63·5	65·0	68·5	66·0	64·8	64·1	65·6	68·0	70·7	72·0	72·6	72·6	69·7	64·4	51·6	60·6	59·2	61·2	63·7	57·2	
31**	59·7	59·3	61·1	65·2	63·0	65·6	63·8	64·6	66·1	68·3	69·9	72·9	73·7	70·9	68·1	67·1	63·3	61·9	59·4	57·6	61·8	63·2	63·6	63·9	
Mean	64·5	64·6	64·7	65·0	64·6	64·9	65·0	64·5	64·1	65·0	67·1	69·3	70·9	70·9	70·3	69·0	67·0	65·5	63·6	62·8	62·6	63·0	63·3	63·7	
Mean*	65·4	65·4	66·1	65·8	65·8	65·5	65·2	64·1	63·4	64·1	66·3	68·3	70·4	70·4	69·5	68·1	67·1	66·7	66·4	65·7	65·5	65·7	65·6	65·7	
Mean**	62·8	62·2	60·5	62·0	62·9	63·8	64·5	64·1	64·3	66·2	68·7	70·9	71·9	71·4	71·3	69·7	66·8	63·7	59·7	60·7	59·5	61·7	62·9	61·3	
April.	11° + Tabular Quantities.																								
	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′
1	64·7	66·0	65·3	66·6	65·1	64·0	63·1	62·4	62·1	65·1	67·1	68·7	70·1	70·1	70·1	70·4	67·1	66·9	65·9	66·9	64·5	55·6	63·9	65·1	
2**	68·4	61·1	58·7	64·3	62·4	62·6	63·3	66·2	67·8	66·7	69·6	72·4	75·5	74·2	70·7	68·6	63·1	66·1	64·6	55·7	64·7	65·6	70·4	65·2	
3	63·4	64·0	63·2	67·5	62·5	64·1	62·6	61·8	62·1	65·3	69·1	72·3	71·2	71·6	71·1	67·8	66·6	65·8	58·6	64·1	61·7	61·1	63·4	67·2	
4	65·7	63·1	66·1	66·1	63·0	62·4	63·5	61·7	62·1	65·6	68·1	70·1	72·1	70·1	68·8	68·1	66·1	65·1	65·4	63·7	61·1	60·6	61·5	66·4	
5	63·1	60·5	61·4	63·4	64·6	64·0	61·6	62·9	61·7	63·4	66·3	70·2	70·7	72·0	69·6	68·7	63·6	63·4	66·1	65·0	64·6	64·6	63·4	64·8	
6	66·8	64·3	67·0	64·5	68·2	63·4	62·2	60·8	62·2	64·4	66·9	69·9	72·8	72·9	71·0	69·2	64·4	62·9	63·9	63·1	64·4	55·9	59·4	63·4	
7**	61·1	60·2	65·3	62·9	60·1	61·5	60·9	63·0	62·1	63·3	68·0	71·1	72·9	73·9	66·9	70·0	68·4	66·9	59·9	60·4	64·0	64·3	67·3	63·2	
8	58·3	59·1	61·8	62·7	65·4	65·8	65·2	62·9	62·3	63·1	65·8	68·6	70·4	71·7	70·1	65·0	66·3	65·9	64·8	60·3	63·5	64·7	64·3	65·8	
9	63·8	64·7	63·9	66·3	63·6	62·3	62·9	62·8	62·3	63·3	67·3	69·5	70·8	69·8	70·1	69·1	67·3	61·5	59·3	57·8	64·1	65·2	64·8	63·8	
10	66·2	64·4	65·9	64·2	65·0	65·1	64·3	62·8	61·8	61·7	64·9	68·4	68·6	69·5	69·3	67·7	66·4	64·9	63·9	63·6	61·8	61·0	62·4	64·2	
11	63·3	64·2	64·2	63·8	63·7	63·8	63·1	61·3	60·9	61·8	64·6	67·1	69·6	70·1	69·7	68·2	66·3	65·8	64·9	63·5	63·8	62·8	62·1	62·6	
12*	60·7	62·3	63·1	64·0	64·3	63·3	62·6	61·3	60·6	61·6	64·6	67·5	68·6	69·5	68·7	68·3	67·4	66·2	65·2	64·7	65·0	64·7	64·6	64·6	
13**	64·6	64·5	64·5	64·5	63·9	63·9	63·5	61·6	60·5	61·2	63·9	67·1	69·5	70·5	70·3	69·8	70·1	67·1	67·4	65·5	58·5	56·5	60·5	60·2	
14	65·5	66·1	65·5	67·4	64·8	62·7	62·5	62·5	62·7	63·9	65·1	66·5	69·5	70·7	70·5	69·5	66·7	66·1	59·9	64·8	65·1	64·7	64·6	64·5	
15	65·2	68·1	64·8	66·3	63·9	63·5	63·4	61·7	60·8	61·7	65·3	67·5	69·5	69·8	68·8	67·5	66·5	65·5	65·5	63·9	61·0	61·6	64·1	64·2	
16	64·5	63·8	65·3	65·2	64·8	63·4	63·0	61·5	61·5	62·1	63·9	66·3	68·4	69·5	70·0	68·9	68·1	66·2	65·4	64·6	64·9	64·7	63·9	64·7	
17	62·6	62·9	66·6	64·6	64·0	63·6	63·2	62·7	63·0	64·6	66·6	66·9	68·6	69·6	69·1	68·5	68·2	67·0	64·6	63·1	63·5	63·0	62·9	61·6	
18	63·0	66·1	61·5	66·9	65·4	65·5	65·1	64·6	63·1	62·8	65·5	68·5	70·5	70·1	70·1	66·6	65·6	62·4	62·1	63·5	63·8	64·1	62·2	58·9	
19*	61·4	62·4	65·5	64·1	63·5	63·3	62·6	62·1	62·0	63·4	65·4	68·0	70·0	71·0	69·8	68·5	67·3	66·5	65·7	65·7	64·3	62·6	62·3	63·5	
20*	64·5	64·5	64·8	64·5	63·6	63·0	62·0	61·0	61·2	62·4	64·2	68·0	70·5	70·5	68·5	66·3	65·0	64·5	64·2	64·1	64·0	64·0	64·4	64·4	
21*	64·8	64·6	64·5	64·1	63·5	63·3	62·5	61·4	60·5	60·8	62·9	65·9	68·5	68·9	67·8	66·5	65·0	63·5	63·1	63·5	64·0	64·2	64·2	64·2	
22	64·6	64·6	64·7	64·6	64·1	63·3	61·6	60·5	61·4	62·6	65·9	67·0	70·5	72·0	73·5	74·6	69·4	67·6	66·6	65·1	63·8	64·2	64·0	62·3	
23**	64·3	64·2	64·4	65·9	64·1	61·5	61·0	61·6	62·1	63·6	67·1	69·0	68·9	70·1	66·1	67·9	67·9	63·3	60·6	64·5	62·3	60·6	59·5	59·3	
24**	56·4	57·2	59·5	61·2	60·2	60·9	62·6	64·7	63·3	64·6	68·4	68·0	67·7	69·7	68·7	69·6	69·7	69·1	63·1	58·2	64·2	64·3	61·0	56·7	
25	58·1	65·2	61·4	61·3	62·1	62·7	61·7	62·2	62·6	63·8	64·0	67·1	67·1	68·4	67·7	68·7	69·4	64·6	61·0	60·9	62·7	66·2	62·2	60·8	
26	66·3	61·0	56·4	63·7	63·7	62·7	63·1	60·9	59·8	62·8	64·3	66·6	67·7	69·8	68·8	66·8	66·9	62·3	61·7	63·8	63·6	63·1	60·9	57·7	
27	57·2	58·3	61·1	61·7	61·9	65·1	62·7	62·9	63·3	63·9	62·7	64·4	66·4	68·9	69·0	68·4	67·4	66·0	61·5	57·2	59·9	63·4	66·7	64·5	
28	61·4	63·6	65·9	65·5	63·4	62·9	63·2	61·8	60·4	60·5	62·4	64·9	67·0	69·1	68·6	67·8	66·5	64·4	64·4	62·0	57·3	58·9	59·6	63·6	
29	63·8	62·2	63·3	62·4	62·1	62·0	61·9	62·2	62·2	62·2	63·0	65·0	67·3	68·3	67·7	67·0	66·4	65·4	62·3	60·9	63·1	63·4	64·9	63·4	
30*	63·5	63·6	63·3	63·4	63·5	61·5	62·6	61·6	62·0	63·9	65·3	67·0	68·1	68·0	67·3	66·7	66·9	66·7	65·7	63·9	64·4	63·7	63·8	64·1	
Mean	63·2	63·2	63·6	64·5	63·7	63·2	62·8	62·3	62·0	63·2	65·6	68·0	69·6	70·3	69·3	68·4	66·9	65·3	63·6	62·8	63·1	62·6	63·3	63·2	
Mean*	63·0	63·5	64·2	64·0	63·7	62·9	62·5	61·5	61·3	62·4	64·5	67·3	69·1	69·6	68·4	67·3	66·3	65·5	64·8	64·4	64·3	63·8	63·9	64·2	
Mean**	63·0	61·4	62·5	63·8	62·1	62·1	62·3	63·4	63·2	63·9	67·4	69·5	70·9	71·7	68·5	69·2	67·8	66·5	63·1	60·9	62·7	62·3	63·7	61·1	

* 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.	11° + Tabular Quantities.																								
	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′
1	63·8	64·9	62·6	61·1	61·3	61·3	61·3	60·8	62·5	62·8	65·1	67·3	68·5	69·4	69·0	67·9	67·4	66·7	66·1	65·7	65·1	64·6	64·8	61·4	
2	54·9	59·0	59·9	59·9	59·4	60·4	60·7	60·4	60·1	62·5	64·5	68·2	70·6	68·9	68·9	67·7	66·2	65·7	64·8	63·3	60·1	57·8	59·0	55·8	
3	58·0	64·2	60·3	58·7	60·7	59·3	59·3	58·7	60·3	63·2	65·6	68·3	68·0	68·6	68·5	67·9	66·5	63·1	63·9	63·9	62·5	60·8	62·0	63·8	
4**	65·7	64·4	62·3	61·7	61·6	61·9	60·3	59·7	60·7	61·9	63·4	66·4	67·9	69·3	68·9	68·3	67·2	66·5	61·3	60·3	61·0	57·7	58·5	55·3	
5**	56·2	59·7	64·7	62·4	61·8	61·0	60·1	59·9	59·4	60·6	64·4	67·2	70·2	72·6	74·2	72·1	69·2	66·1	61·9	64·4	61·5	61·3	58·5	61·5	
6	63·4	64·0	66·0	65·7	66·1	67·4	62·3	59·3	59·5	62·3	65·7	69·3	70·2	70·1	68·4	66·8	65·0	63·5	62·5	59·4	59·5	61·9	63·5	66·5	
7	63·4	63·1	64·4	65·4	64·7	62·0	60·7	59·5	58·9	61·1	64·3	68·3	70·9	70·7	68·9	67·0	65·2	63·9	63·6	63·5	62·7	61·1	61·5	62·1	
8*	64·6	64·0	63·0	62·4	62·4	61·0	60·0	59·6	60·0	61·1	64·0	68·0	69·9	69·4	67·9	66·4	65·5	64·9	64·9	63·4	63·5	62·5	63·9	63·5	
9*	63·4	63·8	63·3	62·9	62·3	61·3	60·5	59·9	60·6	63·1	66·4	69·3	70·4	69·8	69·3	67·0	65·1	63·9	63·9	64·4	64·5	64·3	64·0	63·9	
10	63·6	63·3	62·6	62·2	61·1	60·1	60·0	59·8	61·1	62·7	64·8	67·1	68·8	70·4	69·0	68·1	67·4	66·0	65·7	65·2	63·2	63·9	62·7	60·2	
11	58·3	59·8	60·6	60·5	62·7	59·9	59·4	59·2	58·9	61·7	65·0	66·9	68·8	69·6	70·4	69·4	67·1	66·1	65·3	64·5	62·9	63·8	64·3	63·5	
12	63·0	62·0	61·8	62·6	62·2	61·8	62·2	61·0	61·2	62·5	65·1	67·1	67·7	67·6	66·6	66·6	66·7	66·2	64·8	64·4	64·4	64·8	63·5	63·7	
13	63·9	64·1	64·0	66·2	67·5	64·9	61·9	61·2	60·4	61·7	64·3	67·3	69·0	69·1	68·9	67·6	67·2	66·7	66·1	60·6	64·2	64·1	64·0	64·1	
14	63·9	62·7	64·8	63·0	60·6	60·8	61·4	61·5	62·1	63·7	64·0	65·8	66·7	66·9	66·9	66·3	65·9	65·6	65·1	65·4	65·3	63·2	62·7	62·0	
15	64·5	64·7	66·5	64·2	61·9	60·9	60·2	61·3	61·2	63·3	65·0	67·3	67·7	69·0	67·5	65·7	65·7	64·7	62·4	62·4	64·2	64·8	63·6	63·8	
16	64·5	64·7	63·2	63·5	68·0	67·3	67·0	66·0	62·6	62·6	65·8	68·1	68·5	68·1	66·6	65·5	65·3	65·2	65·0	64·6	64·2	64·6	64·5	62·5	
17	61·4	62·0	62·3	61·9	61·2	60·5	61·9	60·8	62·2	64·9	66·7	67·7	68·6	68·6	67·6	66·1	65·1	64·3	63·6	63·4	63·3	64·0	64·2	64·0	
18*	63·9	63·8	63·6	64·3	63·5	60·6	59·6	59·6	60·4	62·0	64·5	67·1	69·2	69·5	67·4	65·0	64·0	63·0	63·4	63·3	63·5	64·0	64·0	63·9	
19*	64·1	63·6	63·0	62·9	62·1	60·1	59·2	59·4	59·6	61·1	63·6	66·7	68·1	68·2	67·0	65·5	64·1	63·6	63·2	63·0	62·8	62·8	63·1	63·3	
20*	63·8	63·7	63·6	63·6	62·9	61·7	60·1	59·2	59·6	61·6	64·3	66·1	67·1	67·6	67·2	66·7	65·9	65·0	64·1	63·8	63·6	63·6	63·5	63·6	
21	63·5	63·5	62·7	62·5	61·3	60·2	57·2	55·8	56·5	60·3	64·3	67·5	69·3	72·1	70·3	70·2	68·2	65·8	63·2	62·8	63·0	62·7	61·9	61·9	
22	61·5	63·7	62·0	60·6	60·5	59·5	58·5	59·5	61·2	63·5	66·1	67·5	69·1	69·2	69·6	69·1	66·9	65·6	65·6	64·5	63·9	63·6	63·4	63·3	
23	62·7	62·5	62·4	62·0	61·1	59·7	59·2	58·9	58·7	60·6	63·6	67·9	70·9	71·3	69·7	69·0	68·0	67·4	65·8	65·1	61·2	61·5	57·1	61·1	
24	62·1	62·3	62·4	63·8	64·0	59·4	58·4	59·6	59·8	61·1	63·7	68·3	68·7	68·8	68·2	66·3	65·2	65·5	65·6	65·6	64·9	64·4	64·0	63·7	
25**	60·2	56·1	59·5	60·0	58·5	62·7	65·5	61·7	62·8	63·5	64·0	66·0	67·6	68·4	67·5	67·4	65·7	63·8	65·5	65·2	64·7	63·5	62·1	60·7	
26	60·2	59·2	59·6	61·8	61·8	61·0	60·7	60·7	61·6	62·0	63·4	66·6	68·3	68·9	68·5	67·6	67·3	66·7	63·3	62·5	62·3	65·1	64·9	63·9	
27	61·8	61·9	62·1	62·1	63·6	62·9	60·6	61·1	60·0	61·5	64·0	67·8	69·2	69·7	67·9	66·9	65·4	62·4	65·2	65·7	64·9	62·7	61·7	62·2	
28	59·2	59·7	61·7	59·7	62·2	61·2	60·1	59·7	59·7	60·6	62·9	66·0	68·4	68·3	67·6	66·5	66·6	65·1	61·8	61·8	60·8	64·0	64·1	63·5	
29**	61·5	61·9	63·2	61·9	60·5	61·3	60·5	61·4	61·3	63·7	65·1	69·5	74·2	74·5	71·0	69·6	69·0	60·5	58·0	58·0	54·5	54·5	57·0	59·6	
30**	61·1	54·3	48·1	59·1	62·7	60·9	57·1	57·0	55·9	59·5	62·0	66·1	68·7	69·2	69·4	67·6	66·7	65·7	64·4	59·2	62·7	63·9	63·3	62·0	
31	60·3	60·3	57·9	59·9	57·7	58·5	57·3	57·3	58·3	59·4	62·4	65·2	66·9	67·0	66·4	65·4	65·7	65·4	65·1	64·5	64·4	63·4	63·4	62·4	
Mean	62·0	62·2	62·1	62·2	62·2	61·3	60·4	60·0	60·2	62·0	64·5	67·4	69·0	69·4	68·6	67·4	66·3	65·0	64·0	63·4	62·9	62·7	62·5	62·3	
Mean*	64·0	63·8	63·3	63·2	62·6	60·9	59·9	59·5	60·0	61·8	64·6	67·4	68·9	68·9	67·8	66·1	64·9	64·1	63·9	63·6	63·6	63·4	63·7	63·6	
Mean**	60·9	59·3	59·6	61·0	61·0	61·6	60·7	59·9	60·0	61·8	63·8	67·0	69·7	70·8	70·2	69·0	67·6	64·5	62·2	61·4	60·9	60·2	59·9	59·8	
June.	11° + Tabular Quantities.																								
	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′
1	61·4	62·4	62·8	62·4	61·4	59·6	58·4	57·8	59·1	61·4	65·0	67·0	68·5	69·2	68·5	66·0	64·5	63·5	63·5	63·5	63·8	63·3	62·0	63·2	
2	63·6	62·9	62·6	62·0	61·0	59·1	59·3	58·9	60·3	62·3	64·3	66·6	68·7	68·6	67·7	66·4	65·7	65·1	64·3	65·0	63·7	63·7	63·4	63·4	
3*	63·8	63·4	62·2	61·3	59·8	58·4	58·8	58·9	60·3	61·7	64·3	66·7	67·8	67·2	65·8	64·5	63·8	63·8	64·0	64·4	63·4	63·5	63·8	63·8	
4*	63·8	63·4	62·8	62·6	61·7	60·2	59·8	60·8	60·8	62·8	65·4	66·8	67·2	67·8	67·8	67·2	66·4	65·3	64·4	63·8	63·8	63·8	63·8	63·8	
5	63·7	64·5	64·0	62·4	60·6	58·3	59·2	60·2	60·8	63·2	65·3	68·0	69·1	69·3	69·5	69·1	67·2	66·4	65·6	64·9	64·3	63·5	63·5	63·4	
6	62·8	62·8	62·5	62·2	61·1	59·4	58·2	59·2	59·2	61·1	63·3	65·3	66·6	67·1	67·2	66·6	65·8	65·8	65·1	65·1	64·3	63·8	63·5	63·5	
7	63·4	63·6	63·2	62·4	60·2	59·1	58·5	58·4	59·8	62·3	65·3	67·5	68·3	69·7	70·6	68·8	67·2	66·6	65·0	65·1	64·7	64·8	62·3	61·1	
8**	61·2	61·2	64·1	60·7	59·7	60·5	59·8	58·2	57·0	58·6	60·3	63·1	65·7	67·7	68·1	67·1	66·7	67·1	65·7	64·6	56·3	57·2	61·0	60·5	
9**	62·3	59·0	63·8	63·0	60·1	58·6	58·5	58·6	58·4	60·4	62·4	65·0	67·0	67·3	67·0	67·0	66·0	65·8	65·0	64·0	63·0	63·0	62·0	62·7	
10**	63·2	62·5	61·5	62·5	65·2	64·5	62·4	61·0	60·0	61·9	63·0	64·8	66·9	67·2	67·2	67·1	66·4	65·4	63·2	62·0	62·8	62·7	63·1	62·6	
11**	60·5	61·6	63·9	63·7	63·3	59·8	59·1	58·2	58·1	60·3	64·2	65·8	68·3	67·8	67·2	67·2	65·4	63·4	64·4	64·3	64·4	63·3	62·3	61·4	
12	62·5	62·9	64·3	63·0	63·2	60·0	59·7	60·1	61·7	61·8	63·5	65·6	67·6	67·7	67·6	66·8	64·7	64·7	65·7	64·8	64·3	64·0	63·8	63·2	
13	63·3	63·9	62·5	62·9	62·1	60·8	60·1	59·5	59·6	60·4	61·1	63·9	65·7	66·5	67·0	65·7	65·2	64·3	64·2	64·3	63·0	63·7	63·9	63·6	
14	63·6	63·1	62·7	62·0	60·9	59·5	59·6	60·1	60·6	62·6	63·8	66·0	68·0	67·9	67·2	66·0	65·2	64·5	64·1	62·8	62·0	63·2	63·7	64·0	
15*	63·6	63·2	63·1	62·8	61·3	59·8	59·1	59·0	59·0	59·8	62·4	65·5	67·3	68·0	67·5	65·9	65·0	64·5	64·4	64·3	64·2	64·2	64·2	63·8	
16	63·7	63·5	63·0	62·5	61·5	59·8	58·6	58·9	60·3	61·8	63·9	65·7	67·2	68·5	68·3	66·9	65·4	64·6	64·5	63·9	64·2	63·8	63·9	63·6	
17	63·9	63·9	62·9	61·7	59·9	57·9	57·0	58·4	59·9	61·4	64·3	68·5	69·6	70·0	69·8	67·5	65·5	64·4	63·9	63·9	63·9	63·9	63·9	63·4	
18	63·3	62·9	62·3	61·5	60·5	59·9	58·9	59·4	59·8	61·1	63·9	67·4	69·8	69·8	69·1	66·9	65·6	64·9	64·3	63·8	63·7	63·5	62·8	63·2	
19	62·7	63·0	62·7	62·4	61·8	59·8	58·5	57·6	58·1	59·4	62·3	66·4	69·2	70·4	69·1	66·3	64·6	63·9	64·7	64·8	64·8	63·5	60·6	62·2	
20**	62·0	61·6	65·1	62·5	61·0	59·4	59·8	60·1	59·8	59·6	62·0	64·8	68·0	70·4	72·7	72·4	72·3	69·4	64·7	63·8	63·8	63·4	63·9	63·9	
21	62·7	62·9	62·4	61·3	61·3	60·2	59·3	59·5	59·7	60·3	62·6	66·0	68·9	70·2	70·6	69·3	67·1	65·8	64·4	63·2	63·6	63·2	59·8	60·9	
22	59·5	59·1	59·3	59·6	61·5	62·1	63·7	61·3	61·6	62·2	63·0	64·0	64·7	65·5	66·0	66·0	66·5	66·4	65·2	62·1	63·6	64·0	63·4	62·1	
23	64·1	63·1	61·6	61·6	60·8	59·1	60·2	62·0	61·2	62·1	63·4	65·1	66·8	67·0	67·5	66·6	64·9	64·1	64·0	63·6	62·7	62·6	62·5	62·6	
24	62·5	62·1	63·1	61·3	60·3	59·7	59·7	59·2	59·2	60·6	62·1	63·5	65·7	67·4	68·3	67·3	66·8	66·2	65·3	64·7	63·5	63·4	63·0	62·8	
25	62·3	62·5	61·8	62·2	60·8	59·8	58·8	58·1	58·5	59·6	61·9	64·5	66·9	68·4	68·8	68·1	67·5	65·6	63·5	64·0	64·2	63·5	63·0	63·0	
26	63·0	61·7	61·6	60·9	59·6	58·6	58·6	58·6	60·0	61·6	64·6	66·3	68·2	68·5	68·6	67·6	66·1	64·7	64·3	62·3	63·3	63·6	63·1	63·0	
27*	62·1	62·3	61·3	60·4	59·7	59·1	59·1	59·1	60·3	62·7	64·5	65·3	65·7	65·3	65·4	64·2	63·6	63·2	63·4	62·3	63·2	63·5	63·2	62·7	
28*	61·6	61·5	60·9	60·9	60·0	58·9	58·9	58·9	58·5	59·2	61·1	63·9	65·1	65·4	64·4	64·0	64·1	63·9	64·0	64·4	64·0	63·5	63·0	62·6	
29	62·7	62·5	62·1	61·7	60·7	59·7	59·8	60·0	60·2	62·0	64·3	66·2	66·7	66·9	67·2	66·7	66·0	64·6	63·8	63·6	63·2	63·1	62·5	61·0	
30	61·9	62·1	61·7	61·3	60·5	59·4	58·7	59·0	60·2	61·6	64·2	66·8	69·5	71·1	69·6	68·1	65·7	64·2	63·2	63·1	63·0	63·1	62·2	62·2	
Mean	62·7	62·5	62·6	61·9	61·1	59·7	59·3	59·3	59·7	61·2	63·4	65·7	67·5	68·1	68·0	67·0	65·9	65·1	64·4	63·9	63·4	63·3	62·9	62·8	
Mean*	63·0	62·8	62·1	61·6	60·5	59·3	59·1	59·3	59·8	61·2	63·5	65·6	66·6	66·7	66·2	65·2	64·6	64·1	64·0	63·8	63·7	63·7	63·6	63·3	
Mean**	61·8	61·2	63·7	62·5	61·9	60·6	59·9	59·2	58·7	60·2	62·4	64·7	67·2	68·1	68·4	68·2	67·4	66·2	64·6	63·7	62·1	61·9	62·5	62·2	

* 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
July.	11° + Tabular Quantities.																								
	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′
1	62·7	62·6	62·3	61·8	60·8	60·3	61·2	61·0	60·4	61·3	64·3	67·3	68·6	68·0	67·0	65·4	64·1	62·8	62·5	62·4	63·3	63·7	63·3	63·0	
2	62·9	62·9	62·3	61·4	59·9	58·7	57·2	57·6	59·3	61·4	64·3	66·3	68·9	69·3	68·3	66·3	64·7	63·3	62·7	62·8	63·2	63·0	63·3	63·1	
3*	62·9	62·6	62·8	62·5	61·2	59·9	58·8	57·7	57·8	60·2	64·6	68·7	71·3	71·7	70·6	68·2	65·4	63·7	62·1	62·2	62·6	62·7	62·7	63·2	
4	63·1	62·6	62·4	62·1	61·3	59·8	59·5	59·2	59·9	61·4	65·6	68·4	70·9	70·7	70·4	69·4	68·0	66·1	65·6	64·6	63·4	63·1	63·2	63·1	
5**	61·6	61·8	62·8	62·7	60·5	58·8	58·1	58·7	59·9	61·8	65·2	68·0	70·7	72·3	72·2	70·1	67·6	67·7	66·7	64·7	60·4	60·2	62·2	61·3	
6**	60·8	61·9	62·4	62·5	63·8	61·9	66·9	64·1	61·9	63·3	65·3	66·4	66·7	69·3	67·3	64·3	64·3	63·3	63·2	61·8	62·5	63·3	62·8	62·3	
7**	59·3	59·8	61·9	64·6	63·3	60·1	61·8	62·3	63·3	62·7	63·7	66·9	69·3	68·8	67·3	65·3	64·4	64·3	63·1	62·6	63·2	63·1	62·3	61·9	
8**	62·9	63·3	62·4	60·7	59·8	59·8	58·8	58·4	59·5	62·3	64·4	65·2	65·4	67·4	67·4	66·2	64·2	63·2	64·4	64·4	63·8	63·3	62·3	60·2	
9	63·1	64·6	62·4	60·7	59·5	60·4	59·9	60·0	60·4	60·4	61·2	64·7	66·1	67·3	67·4	66·4	65·4	63·7	64·0	63·8	63·5	61·9	58·9	60·0	
10	63·4	64·4	63·4	59·2	58·9	60·3	58·9	57·0	57·0	59·0	61·0	63·4	65·0	65·9	65·0	64·3	63·9	62·1	63·5	63·0	62·5	60·5	61·5	62·1	
11	61·6	61·6	61·2	60·8	61·2	59·6	59·9	59·0	59·6	61·6	64·3	66·0	66·3	66·6	66·1	65·3	63·8	63·2	63·1	63·3	63·1	63·1	63·4	63·1	
12	61·4	61·0	61·1	61·0	61·8	60·8	60·2	58·5	58·8	60·2	61·3	64·6	65·3	66·0	65·4	64·2	62·9	62·7	62·8	61·7	58·8	61·9	62·6	62·4	
13*	62·0	62·0	61·7	62·0	60·2	57·5	57·1	57·1	57·9	59·2	61·5	64·0	66·6	68·1	67·6	65·3	63·3	62·8	62·2	62·5	62·7	62·2	62·1	62·3	
14*	62·2	62·4	62·2	61·8	59·7	58·1	57·7	58·1	59·3	60·8	63·4	66·3	68·2	68·0	67·6	65·6	63·6	63·1	63·0	63·2	63·4	63·6	63·2	63·0	
15	61·9	61·6	61·5	61·0	59·4	57·9	57·3	56·5	57·5	59·2	61·3	63·6	64·6	65·0	65·0	64·0	62·7	61·9	62·5	63·4	63·8	63·0	61·8	62·6	
16**	61·8	61·9	60·9	60·9	59·2	58·1	59·0	59·3	63·1	62·5	61·6	64·3	68·2	72·0	68·8	66·8	66·8	65·6	64·5	63·9	61·4	57·5	60·6	61·2	
17	58·7	61·7	57·5	58·7	58·7	59·2	57·5	58·6	59·6	60·9	61·8	64·2	65·6	65·5	64·1	64·2	64·5	63·8	63·6	63·3	62·8	62·4	61·4	61·3	
18	61·1	60·8	61·6	62·5	60·2	58·6	58·2	58·4	59·8	61·7	64·0	66·2	67·4	67·7	65·9	64·5	64·0	64·5	62·0	62·5	62·5	62·7	62·3	61·9	
19	61·8	61·5	61·7	61·6	60·9	58·6	58·6	58·7	59·7	60·7	61·1	63·1	64·9	66·6	66·7	66·6	65·7	64·9	64·0	63·3	63·2	62·0	60·6	61·6	
20	61·3	60·7	61·6	61·0	59·9	58·7	58·2	57·1	58·0	59·6	61·6	64·2	66·5	67·7	67·7	65·7	64·1	62·7	62·7	62·6	62·3	61·4	60·3	58·7	
21	59·3	60·3	60·0	61·0	60·4	59·7	58·7	57·3	56·7	58·3	60·8	64·2	67·4	68·2	68·4	67·8	65·5	63·7	62·7	62·2	61·5	58·8	60·3	61·2	
22	61·8	61·5	61·8	61·5	59·9	58·9	58·9	57·8	57·6	(59·3)	62·4	65·6	67·5	(68·3)	68·6	67·6	66·0	64·7	63·3	62·0	61·4	61·5	59·4	60·3	
23	60·5	60·9	61·0	61·4	60·5	58·8	57·9	56·5	56·0	56·8	58·9	62·5	65·4	67·1	67·3	66·5	66·6	66·2	64·8	63·5	63·0	62·5	61·5	61·4	
24	61·1	60·8	61·1	61·0	60·3	59·6	59·3	58·3	58·4	59·6	61·1	63·4	66·1	66·7	67·1	66·5	66·1	65·9	64·4	62·1	61·5	62·3	61·9	61·1	
25	59·9	60·4	60·6	60·3	59·6	59·2	58·9	·58·6	58·7	60·3	61·9	64·6	66·0	66·1	66·0	65·0	64·5	64·3	63·7	63·0	62·7	62·4	62·0	61·6	
26	61·2	61·8	63·2	60·7	58·4	58·0	58·1	57·4	58·2	59·9	61·0	63·0	65·2	66·1	66·5	66·0	64·6	63·7	63·6	63·0	62·8	62·6	61·3	61·3	
27	61·1	60·9	60·7	61·1	59·7	58·6	58·7	59·3	60·3	60·4	62·2	65·9	67·1	67·6	68·3	66·7	64·1	62·7	63·0	63·0	62·6	61·6	62·2	61·4	
28*	61·2	61·6	60·7	59·3	57·8	58·1	57·7	57·8	58·2	58·6	60·0	63·2	66·1	65·3	64·2	63·5	62·8	62·8	62·4	62·0	62·3	62·1	61·7	62·1	
29*	61·8	61·5	60·9	60·8	59·5	58·6	58·6	57·8	58·3	60·3	62·0	64·3	65·9	66·7	66·4	65·1	64·1	62·8	61·7	62·4	62·9	62·9	62·9	62·7	
30	61·8	61·8	61·8	61·1	59·6	58·0	58·4	58·7	58·7	60·8	62·5	63·8	64·8	65·1	64·3	63·8	63·4	63·4	63·0	62·8	61·1	61·9	61·8	59·8	
31	61·0	63·2	62·7	60·1	57·8	57·7	58·8	59·3	60·6	61·8	65·0	68·1	68·7	68·2	68·3	67·9	65·1	63·3	61·7	61·8	61·5	61·7	61·7	61·3	
Mean	61·5	61·8	61·6	61·2	60·1	59·1	59·0	58·6	59·2	60·5	62·9	64·5	67·0	67·7	67·2	66·0	64·7	63·8	63·3	62·9	62·4	62·1	61·9	61·7	
Mean*	62·0	62·0	61·7	61·3	59·7	58·4	58·0	57·7	58·3	59·8	62·3	65·3	67·6	68·0	67·3	65·5	63·8	63·0	62·3	62·5	62·8	62·7	62·5	62·7	
Mean**	61·3	61·7	62·1	62·3	61·3	59·7	60·9	60·6	61·5	62·5	64·0	66·2	68·1	70·0	68·6	66·5	65·5	64·8	64·4	63·5	62·3	61·5	62·0	61·4	
August.	11° + Tabular Quantities.																								
	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′
1	60·7	59·6	59·7	59·1	58·7	57·5	57·0	56·9	58·4	60·2	62·6	65·1	66·7	68·4	68·0	67·0	65·4	64·7	62·3	60·8	60·7	58·7	58·7	58·2	
2**	58·7	62·7	61·7	57·2	57·3	57·7	59·3	59·0	58·1	59·4	61·7	65·1	66·7	67·7	67·8	66·6	62·0	64·0	60·0	60·7	61·6	54·7	56·1	60·1	
3**	60·6	62·1	60·2	61·7	61·0	59·3	59·1	61·8	62·3	61·5	63·6	67·8	70·1	67·9	67·1	65·0	61·0	58·2	61·1	62·5	59·9	57·5	58·8	55·6	
4	62·4	62·4	60·9	62·1	63·9	62·5	60·4	59·4	60·4	62·7	62·0	64·4	66·1	67·3	66·5	64·4	62·7	60·8	61·4	61·6	61·7	61·3	61·1	60·8	
5	60·5	60·5	60·3	60·8	61·8	63·2	60·5	57·9	56·8	60·2	63·6	64·5	66·3	67·6	67·1	65·2	63·2	61·6	60·1	60·6	59·6	58·7	58·9	60·2	
6	59·9	59·8	59·4	61·1	60·3	59·1	57·7	56·7	56·8	57·3	59·8	62·4	64·8	66·3	66·4	64·5	63·5	62·5	61·5	61·4	61·2	60·9	59·4	59·2	
7	60·5	60·9	61·0	60·9	60·7	60·0	58·3	56·6	56·1	57·8	60·9	64·7	66·9	68·3	68·1	66·4	65·2	63·5	61·9	61·6	60·7	60·9	61·2	60·6	
8	61·3	61·2	62·6	61·3	61·3	60·4	59·9	59·2	58·4	58·4	60·5	63·0	65·6	66·9	67·4	65·9	63·9	63·0	61·5	60·9	62·1	62·1	61·8	61·3	
9	60·9	60·3	60·8	60·7	62·3	60·6	58·6	58·3	60·6	63·2	62·6	64·6	65·6	65·6	65·1	63·6	62·9	61·9	61·4	61·2	61·4	60·9	61·0	61·7	
10*	61·5	61·6	60·4	59·8	59·1	58·6	57·2	57·1	57·5	59·2	60·8	63·1	64·7	66·0	65·9	64·4	62·9	62·4	62·4	62·4	61·6	61·7	61·2	61·6	
11	61·2	60·7	60·9	60·6	59·9	59·6	59·0	58·6	58·8	60·6	62·6	64·4	66·2	67·0	66·4	64·8	63·5	63·0	63·0	63·2	62·5	61·9	61·7	59·4	
12	54·5	52·4	53·3	61·4	55·5	57·9	56·7	56·4	57·5	58·1	60·6	63·9	67·5	70·3	69·9	68·9	65·1	63·2	62·1	62·1	61·9	61·2	59·4		
13	59·8	58·4	56·8	60·4	57·5	56·8	55·3	55·6	60·1	60·2	61·7	64·9	66·2	67·1	67·3	65·1	63·6	62·2	58·1	61·0	61·6	60·9	61·7	57·6	
14	59·5	60·0	60·2	60·4	59·5	58·3	58·5	57·4	57·1	59·4	61·5	63·9	66·4	67·7	66·4	64·0	62·9	62·0	61·3	61·6	61·7	61·3	61·3	60·9	
15	60·6	60·6	59·6	59·5	58·6	57·7	58·8	58·2	58·7	60·1	61·6	65·5	68·2	69·2	68·2	66·1	63·2	62·5	62·2	61·8	60·7	60·7	60·5	60·6	
16*	58·7	58·6	60·1	60·2	58·9	58·5	58·8	58·7	58·6	60·5	63·1	65·8	67·5	66·8	65·8	64·3	62·9	62·3	61·5	61·3	61·3	61·2	60·8	60·6	
17*	60·4	59·9	59·8	59·4	59·7	58·2	57·1	56·8	56·1	57·4	60·3	63·4	65·7	66·1	64·9	63·1	62·4	62·4	62·0	61·8	61·7	61·7	61·2	60·6	
18*	60·4	60·4	59·8	60·0	59·5	58·1	57·7	56·9	57·6	59·0	61·5	64·4	66·6	67·2	65·0	63·1	61·9	61·3	60·7	61·3	61·7	61·7	61·5	60·1	
19*	59·3	59·4	58·9	58·9	58·5	57·8	57·4	56·8	56·8	58·4	60·7	63·8	66·9	67·9	66·9	65·7	64·4	62·9	62·2	61·7	60·9	60·2	59·9	59·9	
20	60·0	60·0	60·0	60·0	59·3	58·3	57·0	56·0	56·1	58·0	61·0	64·0	66·1	66·7	66·4	65·1	64·1	63·1	61·5	61·5	62·4	62·0	61·4	60·0	
21	59·9	58·7	60·6	59·6	59·5	59·5	61·0	57·2	57·2	58·5	60·7	65·4	67·7	68·8	68·4	67·5	64·5	62·8	61·2	62·5	62·8	61·7	59·7	55·9	
22	56·5	59·0	60·1	59·3	58·9	58·2	57·0	56·3	56·8	59·2	63·2	66·5	67·9	68·4	65·1	64·4	64·8	62·1	56·8	58·4	60·7	61·7	61·7	60·7	
23	60·6	60·6	60·4	59·9	59·6	60·0	59·5	57·5	57·6	59·8	62·6	64·4	65·4	66·4	65·9	63·3	61·9	61·3	61·2	61·2	60·8	60·6	60·5	60·1	
24	58·5	59·1	59·4	59·4	59·0	59·0	58·9	57·7	57·2	58·3	60·4	62·5	64·9	65·9	64·2	62·9	61·2	60·7	59·5	60·9	61·2	61·8	60·3	59·8	
25	59·9	59·2	59·1	60·7	60·7	60·2	58·6	57·9	59·0	59·3	61·7	64·1	65·9	67·7	65·3	63·7	61·6	60·9	61·1	61·4	61·4	59·7	60·7	60·2	
26	60·6	60·0	59·0	59·0	58·6	57·6	57·6	57·2	58·0	59·2	61·5	63·6	64·6	65·6	63·6	62·6	61·6	61·1	60·8	61·3	60·6	60·9	59·6	59·6	
27**	60·1	59·5	59·5	59·5	59·5	59·5	58·6	59·5	60·8	66·4	66·3	64·3	65·8	67·4	67·5	66·9	64·8	58·1	55·3	59·5	60·9	60·0	49·3	51·9	
28**	54·9	64·1	55·8	54·8	57·8	59·8	64·3	63·3	59·1	61·3	63·3	64·8	66·0	68·2	65·8	62·3	61·8	58·8	56·4	61·6	61·8	61·3	59·8	60·3	
29**	57·9	57·0	60·1	59·9	61·4	60·9	58·6	60·2	60·4	61·9	65·1	67·9	68·5	65·2	65·9	64·0	58·8	55·2	56·9	54·3	57·4	60·3	64·0	61·3	
30	60·5	63·0	63·0	61·0	58·0	57·9	57·0	57·1	57·7	59·3	62·0	64·5	64·8	67·0	64·6	59·5	56·0	60·0	56·5	57·9	57·1	56·5	59·5	63·5	
31	61·9	59·1	58·4	60·0	59·1	59·2	58·0	57·5	58·2	59·4	62·1	64·6	66·0	66·0	64·0	62·3	60·4	59·4	59·3	60·4	60·9	60·0	59·5	60·1	
Mean	59·8	60·0	59·7	60·0	59·5	59·1	58·5	57·9	58·2	59·8	62·0	64·6	66·4	67·3	66·4	64·6	62·7	61·6	60·4	61·0	61·1	60·5	60·1	59·7	
Mean*	60·1	60·0	59·8	59·7	59·1	58·2	57·6	57·3	57·3	58·9	61·3	64·1	66·3	66·8	65·7	64·1	62·9	62·3	61·8	61·7	61·4	61·3	60·9	60·6	
Mean**	58·4	61·1	59·5	58·6	59·4	59·4	60·0	60·8	60·1	62·1	64·0	66·0	67·4	67·3	66·8	65·0	61·7	58·9	57·9	59·7	60·3	58·8	57·6	57·8	

* 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
September.	11° + Tabular Quantities.																								
	′	′	′	′	′	′	′	′	′	′	′	′		′	′	′	′	′	′	′	′	′	′	′	′
1	60·2	60·0	62·3	59·7	58·3	58·7	58·9	57·1	56·6	59·2	62·6	64·9		66·5	67·4	65·8	63·2	62·3	58·9	61·5	60·9	60·7	60·0	59·9	58·5
2	56·5	55·2	57·5	58·7	59·3	57·5	58·3	58·2	58·2	60·2	62·7	64·1		66·8	67·2	66·1	64·6	62·2	61·3	61·4	60·7	60·6	57·1	58·0	58·6
3*	59·4	59·7	59·6	59·8	58·7	58·2	57·2	56·7	57·1	58·3	60·8	62·8		64·4	64·9	64·3	62·3	61·0	60·8	61·5	61·2	60·9	58·8	60·2	59·2
4	58·7	58·8	59·7	59·7	58·6	58·7	57·8	57·3	58·1	60·1	63·0	65·5		67·4	67·2	64·9	62·5	60·6	59·9	60·1	60·9	60·2	57·9	59·0	59·3
5	59·5	59·3	59·5	59·4	59·1	58·5	57·7	57·0	57·2	58·9	61·3	65·0		65·6	66·1	66·2	63·5	60·9	62·2	62·5	62·4	61·5	61·0	60·0	57·0
6**	57·7	58·9	59·0	59·3	58·0	55·2	56·6	60·8	60·1	60·2	62·0	66·0		68·1	69·4	69·1	65·9	61·6	63·2	61·1	58·0	56·6	52·2	58·2	59·7
7	59·8	59·6	59·4	59·2	59·2	59·1	59·1	58·1	58·1	59·1	59·9	61·9		63·8	64·7	63·4	62·6	61·3	60·9	60·3	60·3	60·8	56·2	57·8	59·0
8**	59·5	59·4	60·3	63·7	53·3	56·8	56·3	56·8	56·7	58·8	61·3	63·8		65·3	65·8	64·3	62·8	62·9	62·3	58·5	61·3	56·8	59·8	60·1	58·8
9	56·8	56·2	59·9	59·8	57·3	59·8	58·4	57·8	57·7	58·8	61·4	64·6		65·3	65·3	64·1	63·3	61·6	59·9	60·4	59·8	56·4	56·8	58·4	59·3
10*	59·3	59·7	59·3	59·3	58·8	58·3	57·8	56·9	56·6	58·3	61·3	64·3		64·9	64·3	62·8	61·2	60·2	59·8	59·9	60·4	60·4	60·3	59·3	60·3
11*	58·7	57·3	57·4	57·8	57·8	58·8	58·5	58·9	59·4	61·3	63·7	64·8		64·7	63·7	61·9	61·5	61·1	61·3	61·6	61·2	60·7	59·5	60·2	60·2
12	59·7	60·2	59·4	59·1	58·3	57·6	58·0	58·1	58·1	59·8	62·2	63·6		64·0	64·3	63·6	63·1	62·0	61·8	61·6	61·2	60·8	60·0	56·9	60·0
13	60·1	59·8	59·8	59·6	60·7	58·8	58·1	57·6	57·8	59·6	63·0	65·8		66·1	65·0	63·9	62·3	61·5	62·1	62·0	60·9	60·9	60·2	59·9	60·1
14	59·7	60·0	59·6	59·4	58·3	57·8	58·3	57·5	57·4	59·7	63·4	66·1		67·4	66·7	65·1	63·2	61·7	61·2	61·2	60·6	58·6	58·2	59·1	59·6
15	59·6	59·6	59·5	59·5	58·9	57·9	57·0	56·4	56·7	58·7	62·7	65·9		68·1	67·6	64·9	63·2	60·8	60·9	60·9	60·8	60·6	60·3	57·7	60·0
16*	59·2	59·3	59·4	59·2	58·8	58·1	57·2	56·2	56·9	59·8	63·4	66·8		67·4	66·8	64·6	61·8	60·3	60·4	61·1	60·8	60·8	60·7	60·0	60·0
17*	59·9	59·8	59·9	59·4	59·0	58·6	57·9	57·5	57·9	60·1	62·9	64·2		64·9	64·2	62·4	60·9	60·6	61·0	61·8	60·9	60·9	60·5	59·9	60·5
18	58·1	58·2	58·5	58·5	58·9	58·7	56·9	56·8	57·7	59·4	62·4	64·9		67·8	67·3	65·8	64·3	62·8	61·8	61·2	60·4	59·8	58·8	51·9	50·1
19	55·3	59·1	57·5	57·7	57·8	57·7	58·5	60·6	60·6	61·5	62·6	65·0		64·5	64·5	65·9	65·4	60·5	61·7	60·1	59·5	59·6	59·9	55·8	57·0
20	58·0	62·0	62·9	58·5	59·2	59·7	61·7	60·2	60·1	59·2	61·1	63·0		64·0	65·2	65·0	62·9	61·9	61·4	61·4	60·4	59·1	57·7	58·5	56·9
21	59·8	58·1	57·7	56·7	57·7	59·8	59·5	57·9	57·7	58·6	59·9	62·1		63·5	64·4	63·9	62·9	61·5	59·9	59·3	57·4	57·6	58·4	59·0	59·0
22	58·7	59·1	58·3	56·9	59·9	56·9	57·3	57·5	58·2	60·7	65·2	67·9		66·2	65·2	63·6	63·1	58·9	56·1	59·4	58·6	56·6	51·7	56·3	58·1
23**	58·1	57·6	59·1	59·1	57·1	58·1	58·6	58·3	59·3	64·3	65·8	66·3		68·1	67·4	65·1	65·6	58·1	59·6	54·6	50·1	50·7	51·6	55·1	53·5
24**	51·4	58·0	60·5	58·8	58·4	58·6	61·6	58·5	58·2	60·2	62·5	65·9		67·6	68·4	67·0	60·0	61·3	62·9	59·9	52·4	57·3	58·0	58·6	60·0
25**	57·4	59·9	63·4	55·4	58·4	60·4	61·5	62·7	61·1	60·8	62·0	64·8		66·9	68·1	66·2	63·6	60·2	55·3	55·8	57·7	54·0	57·4	54·3	57·4
26	60·3	65·1	58·8	58·3	58·9	61·3	60·7	58·2	57·2	59·0	61·9	63·2		64·1	64·1	63·1	62·1	61·1	60·7	60·2	58·2	54·1	54·0	57·3	57·6
27	60·8	60·9	55·9	58·1	58·0	57·8	58·1	56·8	56·8	59·8	62·8	65·5		64·4	63·7	63·7	60·7	58·4	57·2	58·2	52·6	57·1	59·0	59·6	59·6
28	58·9	58·4	57·5	59·4	58·5	57·5	57·6	58·5	59·4	61·3	63·4	65·5		65·1	63·9	63·5	62·4	61·8	60·6	59·5	59·5	59·9	59·3	59·5	59·5
29	58·5	56·1	57·0	58·0	57·6	57·6	57·5	56·5	56·1	58·5	61·1	63·1		62·2	61·6	61·7	61·6	60·6	60·0	60·5	57·8	55·7	56·0	57·1	54·6
30	57·8	57·7	56·7	56·8	57·6	57·5	57·6	58·2	58·1	59·1	60·7	63·3		63·9	63·3	62·7	61·8	61·3	59·8	58·9	58·8	58·6	55·4	55·7	58·0
Mean	58·6	59·1	59·2	58·8	58·4	58·3	58·3	58·0	58·0	59·8	62·3	64·7		65·6	65·6	64·5	62·8	61·0	60·5	60·2	59·2	58·6	57·9	58·1	58·4
Mean*	59·3	59·2	59·1	59·1	58·6	58·4	57·7	57·2	57·6	59·6	62·4	64·6		65·3	64·8	63·2	61·5	60·6	60·7	61·2	60·9	60·7	60·0	59·9	60·0
Mean**	56·8	58·8	60·5	59·3	57·0	57·8	58·9	59·4	59·1	60·8	62·7	65·4		67·2	67·8	66·3	63·6	60·8	60·7	58·0	55·9	55·1	55·8	57·3	57·9
October.	11° + Tabular Quantities.																								
	′	′	′	′	′	′	′	′	′	′	′	′		′	′	′	′	′	′	′	′	′	′	′	′
1	59·2	61·9	58·5	58·1	58·0	58·0	58·2	57·5	57·4	58·5	60·0	63·5		65·2	64·0	62·8	61·6	60·9	60·0	60·0	59·6	59·4	59·0	58·8	58·9
2	59·2	59·1	59·0	59·2	59·0	59·0	58·6	58·5	58·9	60·6	63·5	66·5		67·5	66·7	64·7	64·7	63·0	62·1	60·0	58·0	59·1	59·4	59·4	60·0
3	59·3	57·1	61·2	58·1	58·4	58·7	59·4	58·8	58·4	59·1	60·4	61·9		64·4	64·2	64·1	63·5	62·3	60·7	60·5	60·0	59·8	59·6	59·5	58·1
4	58·6	58·9	58·2	57·6	58·6	58·8	58·5	57·5	57·0	57·8	59·5	62·0		63·1	63·5	64·1	63·6	63·3	62·4	62·4	61·4	60·4	59·4	56·9	56·4
5	58·0	60·3	58·3	59·3	59·0	59·3	59·1	58·4	58·0	58·0	60·1	62·3		64·4	64·6	63·8	61·8	60·7	60·2	57·7	59·2	59·2	58·3	57·2	58·5
6*	58·2	57·3	57·3	58·7	59·1	59·0	59·0	58·3	57·2	57·4	60·0	62·2		63·7	63·7	62·7	61·5	60·4	60·3	60·2	58·2	58·4	56·7	57·6	58·2
7	58·8	56·3	57·8	58·2	58·5	58·6	58·3	57·3	56·4	56·3	58·4	60·4		62·1	62·4	61·9	61·2	60·6	60·6	60·5	59·7	59·5	59·2	59·0	59·1
8	58·3	57·9	57·9	57·3	57·5	58·1	57·8	57·0	56·3	57·1	59·1	61·5		63·5	63·7	62·8	62·1	61·1	60·8	61·4	57·3	57·3	57·5	58·0	58·0
9	57·9	57·2	58·8	58·2	58·0	58·0	57·9	56·9	56·4	56·9	59·4	62·0		63·9	64·0	65·1	64·9	61·9	61·0	60·5	60·4	59·9	57·7	56·4	56·9
10	56·8	57·8	57·6	56·9	59·6	58·6	58·6	57·4	56·5	57·0	59·4	62·4		65·6	64·6	64·0	59·0	57·5	59·2	60·0	58·9	56·0	57·9	58·5	59·1
11	60·0	60·0	59·0	58·3	58·3	58·5	58·5	57·4	56·1	56·2	59·0	61·1		63·1	63·7	63·1	61·4	59·9	59·7	58·9	58·2	56·6	57·8	58·5	58·2
12	58·8	57·6	57·4	58·3	58·9	58·5	58·2	57·3	56·0	56·2	58·0	60·8		63·1	63·8	63·0	62·5	61·1	60·8	60·3	59·9	58·0	57·3	58·0	59·9
13*	59·4	59·6	59·0	58·9	58·8	58·4	58·4	57·0	55·3	55·7	57·6	60·3		62·6	64·3	63·4	62·3	60·3	59·6	59·5	59·0	58·7	57·7	58·1	58·2
14*	58·3	58·6	59·0	59·0	59·0	58·5	58·4	57·5	56·4	56·5	58·1	61·2		63·6	64·4	63·4	62·0	60·3	60·0	60·0	59·6	59·6	59·6	58·0	57·1
15**	57·8	57·5	57·2	57·4	59·2	58·5	57·6	56·6	55·9	60·9	63·4	65·0		(67·8)	71·8	66·8	62·7	66·3	60·8	58·4	57·7	55·9	55·1	49·8	52·3
16**	51·9	57·5	59·8	61·6	59·8	60·0	63·5	62·4	57·5	57·9	60·8	62·1		63·5	63·0	63·0	59·4	58·1	57·5	59·7	59·0	58·6	58·3	58·0	58·3
17	59·1	58·2	56·1	58·0	58·6	58·1	58·4	58·0	58·0	58·1	58·9	61·2		64·2	64·4	61·6	61·7	58·1	54·5	56·7	56·5	56·8	53·8	55·5	56·1
18	58·3	58·3	59·2	58·4	58·6	58·3	57·8	56·9	56·3	56·6	58·3	60·7		62·3	62·9	62·7	61·3	60·1	57·3	58·2	58·8	58·2	57·4	56·5	56·3
19	58·4	58·5	59·2	59·4	59·4	61·0	61·0	58·6	57·4	57·0	58·7	62·8		64·8	63·9	63·4	62·4	61·6	60·4	59·9	59·5	58·8	58·4	58·1	58·4
20**	59·0	59·6	59·5	59·5	59·9	59·5	59·1	58·1	57·4	58·0	59·7	63·1		65·1	66·2	64·6	64·6	62·2	59·2	56·4	54·1	51·1	42·1	45·4	45·0
21**	48·7	43·2	49·8	52·7	60·8	65·7	65·5	63·2	60·6	59·8	61·5	62·8		63·7	61·7	61·8	60·8	60·0	60·2	59·2	57·4	57·9	57·8	58·5	58·5
22	58·5	58·5	58·9	59·0	59·3	59·0	58·7	57·3	56·1	56·4	58·1	60·7		62·8	62·7	62·7	62·7	61·9	60·7	59·3	55·3	54·3	55·1	57·4	57·5
23**	56·9	59·2	61·0	62·4	60·1	59·5	58·8	58·0	58·4	61·4	62·4	64·5		64·9	64·0	64·3	60·4	60·6	57·0	59·7	53·9	53·9	55·4	57·4	57·1
24	57·7	58·7	59·3	60·3	59·6	59·3	58·8	58·9	57·4	58·2	60·2	61·1		64·4	62·0	61·6	60·5	59·9	57·6	56·8	55·7	54·7	54·5	53·3	56·5
25	57·5	58·9	59·3	59·4	59·0	58·7	59·2	58·7	58·5	57·0	60·5	62·7		64·6	65·2	63·8	59·4	59·5	59·0	58·7	57·9	57·0	57·7	58·0	58·5
26*	59·0	59·3	58·8	58·5	58·7	58·7	57·6	57·0	56·0	56·1	58·3	61·0		62·6	62·3	60·9	60·0	58·7	58·6	58·5	58·3	57·2	58·0	58·1	58·8
27	58·8	58·7	59·1	59·7	58·6	58·4	58·3	58·5	58·5	58·0	61·4	64·0		63·2	65·0	67·0	63·9	60·9	59·7	58·4	57·8	50·3	54·9	56·2	58·1
28*	59·6	59·7	59·2	59·2	59·8	58·7	57·7	56·7	55·6	56·6	57·9	60·1		61·5	62·1	61·0	59·7	58·9	58·6	58·4	58·4	58·2	58·2	58·3	58·8
29	59·0	59·2	59·5	59·3	59·1	58·6	58·4	58·0	56·6	56·6	58·6	61·8		62·9	63·4	62·4	60·9	60·0	59·8	59·6	59·0	59·1	58·7	55·8	51·2
30	54·6	56·1	56·8	58·6	57·6	57·7	60·3	60·9	58·5	56·6	60·4	63·6		62·4	62·1	62·0	60·4	60·0	58·9	58·5	57·3	56·7	56·5	56·4	56·8
31	58·2	58·8	58·9	58·8	58·2	58·2	58·1	57·7	56·6	56·7	58·6	61·1		62·0	61·9	62·0	61·0	59·5	58·5	58·2	57·9	57·4	57·4	57·4	57·4
Mean	57·9	58·1	58·4	58·7	58·9	59·0	59·0	58·1	57·2	57·6	59·7	62·1		63·8	63·9	63·2	61·7	60·6	59·5	59·2	58·2	57·6	57·0	56·9	57·2
Mean*	58·9	58·9	58·7	58·9	59·1	58·7	58·2	57·3	56·1	56·5	58·4	61·0		62·8	63·4	62·3	61·1	59·7	59·4	59·3	58·7	58·4	58·0	58·0	58·2
Mean**	54·9	55·4	57·5	58·7	60·0	60·6	60·9	59·7	58·0	59·6	61·6	63·5		65·0	65·3	64·1	61·6	61·4	58·9	58·7	56·4	55·5	53·7	53·8	54·2

* 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
November.	11° + Tabular Quantities.																								
	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′
1**	57·8	57·8	55·8	56·8	64·3	62·3	61·1	65·3	59·6	59·1	60·6	62·0	62·3	61·3	63·0	62·1	61·1	60·2	59·3	58·9	56·6	56·6	56·6	56·7	
2	57·1	56·1	55·8	56·5	57·7	58·7	57·9	57·2	56·0	55·2	57·3	60·0	61·6	61·3	61·5	60·7	59·5	59·3	57·5	58·2	58·4	57·6	57·6	57·6	
3	57·3	57·7	58·0	58·4	58·4	59·2	58·5	57·7	56·8	56·8	57·8	60·1	60·8	61·6	60·8	60·0	59·5	59·2	58·9	58·5	57·9	57·6	57·1	56·9	
4	57·4	57·4	57·9	57·2	57·6	57·2	57·2	57·3	56·6	56·3	58·0	59·3	60·3	60·5	60·1	59·7	59·6	58·5	59·0	58·4	55·5	52·4	53·4	54·7	
5	56·8	56·7	59·4	56·7	57·2	57·5	57·6	56·6	55·8	56·6	58·9	61·2	63·2	62·6	61·5	59·8	58·6	58·2	60·0	59·1	57·0	56·7	57·6	56·2	
6*	57·7	59·2	58·9	58·8	58·6	57·7	57·7	57·3	57·3	57·7	59·8	61·6	62·0	61·3	60·3	59·3	59·1	59·0	58·9	58·8	57·3	56·7	58·3	58·4	
7	58·8	58·9	58·3	58·2	58·2	58·2	58·2	57·8	57·2	57·9	60·0	62·3	63·4	63·1	62·0	61·2	57·6	54·1	58·9	58·9	58·2	58·0	58·1	58·2	
8	58·1	58·0	57·9	58·2	57·9	57·8	57·6	57·0	56·2	56·7	59·0	61·5	62·8	62·3	61·3	60·4	59·4	59·0	58·7	58·4	57·0	56·7	57·6	57·9	
9*	58·2	59·0	58·8	58·7	59·1	58·5	58·0	57·0	56·1	56·2	59·1	60·7	61·7	61·6	60·5	60·1	59·9	59·6	58·8	58·9	57·5	57·1	58·0	58·5	
10*	58·7	58·9	59·4	59·0	58·8	58·4	58·0	57·3	56·4	56·4	58·8	60·4	62·4	62·4	60·9	59·9	59·3	58·6	58·4	57·9	56·8	57·3	57·4	57·8	
11	58·8	59·2	58·8	58·9	58·7	58·3	57·9	57·0	56·3	56·6	58·6	60·8	62·2	61·6	60·8	59·7	59·4	59·2	58·3	56·9	57·9	57·7	57·9	58·0	
12	58·6	59·0	58·8	58·7	57·9	57·3	57·7	57·8	56·9	56·9	59·7	62·8	63·4	62·3	61·3	60·7	62·7	59·3	58·1	55·3	54·5	56·3	56·5	57·7	
13	58·3	58·2	60·0	60·6	58·3	57·2	56·9	56·8	56·7	57·3	59·2	61·7	63·4	63·0	62·9	61·0	61·3	58·8	57·6	57·1	56·9	52·3	54·5	57·4	
14**	58·2	58·4	58·4	58·4	58·2	58·2	61·2	60·8	59·1	60·1	59·3	60·7	62·9	59·8	61·7	61·3	60·5	56·2	57·4	57·0	57·1	56·2	50·8	50·4	
15**	56·4	57·7	58·1	58·0	58·2	60·4	(58·1)	57·8	57·1	57·3	58·1	59·9	60·9	60·4	59·4	59·4	58·5	56·6	53·8	57·5	57·7	57·1	55·2	56·1	
16**	55·7	56·7	58·5	61·7	58·1	63·9	64·2	60·5	58·0	58·1	59·6	61·1	62·0	62·6	59·7	54·2	57·1	50·6	50·0	56·7	52·1	46·4	48·7	59·1	
17**	57·7	57·5	57·2	57·6	58·6	58·0	58·3	58·7	56·7	57·6	58·1	59·7	60·6	60·6	57·1	59·0	58·5	57·8	57·4	56·4	56·4	55·1	55·7	55·2	
18	57·4	58·5	58·0	58·6	59·0	58·2	57·5	58·0	57·9	57·9	59·5	60·8	61·4	61·2	60·6	57·7	57·0	58·4	56·9	57·4	54·9	54·7	56·9	57·9	
19	57·9	58·8	60·3	58·8	58·7	58·3	58·3	57·8	57·3	57·8	60·0	61·3	62·2	61·6	60·9	59·9	58·3	57·8	56·8	56·7	55·8	55·4	55·9	56·8	
20	55·9	57·3	57·4	58·1	58·2	58·0	58·9	58·4	56·9	57·1	58·0	59·4	60·5	60·2	59·7	57·2	58·4	58·0	58·5	58·0	57·7	57·3	56·5	55·1	
21	56·0	57·1	58·0	58·0	58·6	58·1	58·0	58·0	58·1	58·5	59·4	60·1	60·0	59·8	59·2	58·7	57·9	58·2	58·0	57·9	57·5	56·2	56·2	57·3	
22*	57·7	58·1	58·5	58·0	57·7	57·8	57·5	57·7	57·6	57·0	58·4	59·4	60·4	60·6	60·1	60·0	58·1	57·6	58·0	57·7	57·5	57·5	57·7	57·9	
23	57·9	58·1	58·3	58·1	57·4	56·9	57·1	57·2	56·6	56·6	57·6	59·1	60·8	60·4	59·4	58·9	58·1	58·0	57·6	57·5	57·5	57·6	57·7	57·9	
24*	58·2	58·4	58·6	58·8	58·7	57·9	57·6	57·7	57·3	57·6	58·7	60·3	61·2	60·2	59·2	58·7	58·1	57·9	57·8	57·7	57·6	57·6	57·8	58·0	
25	58·3	58·6	58·9	59·0	59·0	58·8	58·6	58·3	58·3	58·2	58·8	58·9	59·7	59·7	60·4	61·4	61·7	59·9	58·4	58·2	57·5	57·0	56·2	55·3	
26	55·5	57·5	58·2	58·5	58·4	58·0	57·5	58·0	57·5	56·5	58·3	59·1	59·7	60·5	60·3	59·3	58·4	57·8	57·7	57·5	57·2	56·9	57·1	57·5	
27	57·7	58·0	58·1	58·1	59·5	58·8	56·8	56·5	56·4	56·3	57·1	58·5	59·3	59·7	59·3	58·5	58·4	58·0	57·4	56·4	56·4	56·5	56·9	57·8	
28	57·9	58·2	58·4	58·6	58·3	57·7	58·7	58·2	57·6	57·4	58·3	59·7	61·1	62·4	60·9	59·9	59·2	56·7	58·2	57·5	57·2	57·2	57·2	57·9	
29	57·2	58·5	57·7	56·6	57·1	56·9	57·3	58·2	57·1	57·8	58·8	59·0	60·2	61·1	62·1	58·1	58·2	59·1	58·8	57·4	57·2	56·1	56·3	57·6	
30	57·5	56·6	59·4	58·3	58·3	57·3	57·3	57·2	57·3	57·4	59·0	59·2	60·4	60·3	59·6	58·8	58·3	58·3	57·2	57·6	57·5	57·1	56·9	57·2	
Mean	57·6	58·0	58·3	58·3	58·5	58·4	58·2	58·0	57·2	57·3	58·8	60·4	61·4	61·2	60·6	59·5	59·1	58·0	57·7	57·7	56·9	56·2	56·3	57·0	
Mean*	58·1	58·7	58·8	58·7	58·6	58·1	57·8	57·4	56·9	57·0	59·0	60·5	61·5	61·2	60·2	59·6	58·9	58·5	58·4	58·2	57·3	57·2	57·8	58·1	
Mean**	57·2	57·6	57·6	58·5	59·5	60·6	60·6	60·6	58·1	58·4	59·1	60·7	61·7	60·9	60·2	59·2	59·1	56·3	55·6	57·3	56·0	54·3	53·4	55·5	
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	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′
1	57·4	57·8	58·1	58·6	58·3	57·9	57·6	57·3	56·8	56·8	57·9	59·7	59·9	59·7	59·8	59·2	57·9	57·3	55·3	55·9	56·0	56·2	57·2	56·9	
2	56·7	56·8	58·4	58·6	57·8	57·5	57·8	57·8	57·2	57·1	58·5	59·6	60·2	60·5	59·9	59·2	58·9	59·2	59·3	56·7	54·2	56·5	57·4	57·5	
3	57·3	57·1	56·8	58·2	56·9	56·9	57·4	57·4	57·1	57·4	58·4	58·5	59·1	58·7	58·5	58·2	57·6	57·5	57·6	57·8	56·0	55·5	56·1	56·0	
4	56·0	56·3	57·3	57·0	58·1	57·9	57·9	57·6	57·9	57·7	58·5	59·8	60·3	59·9	59·1	58·8	57·7	57·9	57·7	58·2	57·4	57·1	56·4	56·7	
5*	57·0	57·5	57·8	57·6	58·1	58·5	58·2	57·8	57·3	56·7	57·9	58·8	59·5	59·3	58·5	58·1	57·5	57·5	57·0	56·9	57·5	56·7	54·9	55·4	
6	56·4	58·4	57·4	57·4	57·4	57·4	57·4	57·6	57·9	58·4	59·7	60·5	60·5	59·7	58·8	58·2	57·9	57·7	57·5	57·4	57·3	57·2	55·6	51·9	
7*	55·4	56·9	57·4	57·0	57·0	57·2	57·1	57·1	56·7	56·9	58·1	59·7	60·4	59·9	58·8	58·4	58·2	57·8	57·6	57·5	57·4	57·0	57·2	56·8	
8**	56·0	56·3	57·5	55·9	55·7	56·0	54·3	56·0	56·8	57·2	58·4	60·3	60·7	60·7	60·0	58·7	58·7	58·2	58·5	57·8	57·6	56·5	54·3	50·7	
9	53·9	54·6	55·4	57·5	58·4	59·2	61·0	60·0	59·9	59·3	59·3	59·3	58·9	59·2	59·0	56·5	56·8	57·5	56·9	54·5	52·9	53·4	56·0	56·6	
10	57·7	56·3	58·4	57·3	57·1	56·9	57·1	57·1	56·8	57·7	57·6	59·2	59·7	59·1	60·5	59·0	57·6	54·9	53·4	54·0	53·6	54·6	54·6	56·5	
11	57·2	57·8	58·0	58·0	58·1	57·7	57·4	56·9	56·1	55·4	56·2	57·6	58·1	58·4	58·3	57·9	56·9	56·3	56·9	56·8	55·3	52·7	55·0	56·2	
12*	56·7	57·2	57·7	58·6	58·3	56·8	56·8	57·6	57·0	56·8	57·6	57·5	58·7	58·9	58·5	57·8	57·2	56·7	56·6	56·0	56·6	56·6	56·7	57·1	
13	57·5	57·6	58·0	58·5	57·5	57·0	57·4	57·3	56·8	56·6	56·8	57·7	60·3	60·7	62·0	61·7	61·5	55·8	57·9	56·8	55·1	50·8	52·1	56·2	
14**	55·4	57·6	57·0	57·0	57·2	57·9	57·0	57·1	56·5	56·6	58·7	60·7	61·1	61·1	59·7	61·5	57·4	55·2	60·6	53·8	51·9	43·3	45·2	46·8	
15**	45·7	49·0	51·7	56·2	58·3	57·3	57·5	57·2	57·3	58·1	60·1	58·3	59·0	59·7	56·9	59·5	58·7	58·7	58·4	49·8	49·9	46·6	46·8	47·9	
16**	52·9	51·6	54·0	56·3	55·3	56·9	57·8	58·5	57·4	57·2	57·6	57·9	59·2	59·4	58·3	58·8	57·0	53·5	58·3	55·0	52·5	49·1	54·5	55·7	
17**	55·0	58·2	56·1	57·1	57·4	58·7	59·1	59·6	59·2	59·7	59·2	60·1	58·7	60·2	60·6	57·3	55·7	57·4	56·3	47·7	56·6	56·2	55·3	56·3	
18	55·9	57·1	58·2	59·9	57·9	56·4	57·1	56·4	57·3	58·0	58·0	59·3	59·8	59·1	57·9	56·8	56·7	56·7	56·0	56·0	55·7	55·5	55·6	56·0	
19	56·6	57·1	58·0	58·1	57·5	57·4	57·2	57·1	56·6	56·6	57·4	58·7	59·4	59·0	58·2	57·4	54·3	57·6	57·4	56·6	50·2	54·8	55·8	55·8	
20	56·4	58·8	56·4	56·3	56·8	56·2	56·1	56·7	56·8	56·3	56·5	58·0	58·8	59·3	58·6	57·8	57·6	57·3	56·9	56·8	56·8	56·5	56·5	56·7	
21*	56·5	56·9	56·2	57·0	57·3	56·7	56·4	56·5	56·2	56·7	57·3	57·8	58·4	58·2	57·8	57·4	56·9	56·7	56·7	56·7	56·6	56·3	56·3	56·5	
22	56·8	56·9	57·0	57·6	56·8	56·5	56·2	56·0	56·2	56·6	57·3	58·3	58·9	58·9	58·5	58·3	57·9	56·7	56·3	55·7	54·5	55·8	56·4	56·5	
23*	56·8	56·9	57·0	57·3	57·0	56·6	56·5	56·2	56·3	57·0	58·4	59·7	59·4	58·6	57·8	57·1	56·7	56·5	56·6	56·8	56·4	55·8	56·0	56·4	
24	57·3	56·3	57·0	57·2	56·9	56·5	56·6	56·4	56·1	56·4	57·1	57·5	58·1	58·5	58·3	57·3	56·9	56·6	56·1	55·4	55·9	56·2	56·3	56·5	
25	56·8	57·1	57·2	57·0	57·1	57·1	57·1	57·1	57·1	57·1	58·3	59·0	59·3	59·8	59·7	58·1	57·9	58·3	58·2	56·4	52·1	53·6	55·2	55·1	
26	53·5	55·2	55·4	55·5	55·5	55·7	56·1	56·7	56·3	56·2	57·2	59·0	59·9	60·4	60·8	59·0	57·8	57·8	55·5	56·3	56·3	57·0	55·6	55·8	
27	56·6	56·5	53·1	53·9	57·1	56·1	56·2	56·8	56·4	58·1	58·3	59·1	59·4	58·9	58·2	57·9	57·5	57·6	56·9	55·3	55·8	54·9	55·0	54·9	
28	55·7	56·5	56·2	56·7	56·3	56·2	55·9	55·8	55·9	55·5	55·9	56·9	60·0	60·0	60·8	58·4	57·4	58·7	57·1	56·0	55·7	51·3	52·4	53·5	
29	55·8	57·4	57·6	57·2	57·6	57·2	57·1	56·5	56·5	56·4	57·1	58·4	59·2	60·2	59·6	59·3	57·4	57·1	56·8	57·0	55·7	55·2	56·1	56·2	
30	56·3	56·2	56·2	56·7	55·8	56·2	56·5	57·2	57·0	56·2	56·9	57·6	59·2	60·2	61·1	60·2	58·1	58·1	57·9	56·3	55·6	54·7	52·6	53·1	
31	50·6	55·2	55·4	56·8	58·2	57·4	56·7	57·7	57·7	56·5	57·7	57·5	57·6	58·7	58·8	57·8	58·2	59·2	56·6	55·2	52·2	54·0	55·2	55·2	
Mean	55·7	56·5	56·7	57·2	57·3	57·1	57·1	57·2	57·0	57·1	57·9	58·8	59·4	59·5	59·1	58·4	57·6	57·2	57·1	55·8	55·1	54·4	54·9	55·1	
Mean*	56·5	57·1	57·2	57·5	57·5	57·2	57·0	57·0	56·7	56·8	57·9	58·7	59·3	59·0	58·3	57·8	57·3	57·0	56·9	56·9	56·9	56·5	56·2	56·4	
Mean**	53·0	54·5	55·3	56·5	56·8	57·4	57·1	57·7	57·4	57·8	58·8	59·5	59·7	60·2	59·1	59·2	57·5	56·6	58·4	52·8	53·7	50·3	51·2	51·5	

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

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

January. 18000 γ + Tabular Quantities (in γ).

	0h	1h	2h	3h	4h	5h	6h	7h	8h	9h	10h	11h	Noon	13h	14h	15h	16h	17h	18h	19h	20h	21h	22h	23h	24h
1	531	527	532	530	537	538	535	539	531	535	530	524	531	536	513	530	543	542	510	524	538	536	532	535	
2**	541	557	545	533	541	532	537	539	523	513	515	531	533	534	524	511	517	505	528	520	531	528	545	526	
3	520	526	527	532	537	537	540	540	532	529	527	526	526	518	533	536	537	537	547	541	541	540	537	536	
4	534	535	531	532	535	539	546	544	542	539	536	535	537	537	537	539	540	540	537	536	540	540	541	546	
5	543	544	544	544	544	547	549	550	548	542	536	537	540	543	541	543	544	539	535	535	536	528	524	531	
6	535	537	540	543	548	552	556	557	556	549	553	555	551	545	543	546	548	548	547	544	541	542	541	545	
7	545	542	542	543	548	550	553	557	557	550	549	549	549	552	552	547	548	544	551	549	532	531	531	531	
8	536	535	534	536	539	543	552	539	544	536	539	541	538	536	548	541	530	531	524	531	533	528	547	560	
9	527	529	534	538	545	548	537	541	539	537	524	499	531	538	534	531	533	530	538	532	542	549	534	570	
10	543	532	527	529	536	540	542	542	548	543	522	534	530	547	546	522	527	535	544	538	539	542	546	542	
11	536	538	546	545	537	543	547	542	552	535	540	533	542	543	535	546	543	523	522	521	540	527	526	550	
12	551	527	531	533	536	546	543	549	544	541	536	523	523	526	513	508	530	533	543	536	541	554	543	535	
13	532	547	536	535	532	531	541	538	536	535	536	531	537	541	542	531	529	539	540	542	540	536	554	533	
14	531	540	537	535	534	535	539	542	543	540	535	524	528	522	522	528	541	543	543	541	542	542	536	555	
15	535	535	536	541	542	543	549	537	522	538	529	531	535	541	541	543	545	544	535	541	538	537	541	539	
16	535	533	535	535	538	539	541	547	547	545	535	528	535	543	544	546	534	517	524	538	554	561	548	547	
17	541	543	534	532	532	538	540	535	540	538	537	537	537	537	538	536	534	534	537	540	541	541	541	540	
18*	538	537	538	540	541	543	551	547	546	539	542	545	540	542	543	542	541	540	542	542	545	545	543	543	
19*	539	538	538	540	541	546	546	546	549	543	536	536	539	542	546	550	550	549	551	540	536	541	546	545	
20*	543	545	538	541	543	548	550	552	554	547	545	543	542	545	547	543	540	542	549	550	549	547	546	546	
21*	545	545	545	546	549	553	553	553	553	549	547	547	547	548	549	547	548	549	552	550	550	550	550	549	
22*	550	550	549	551	553	554	559	559	558	552	543	539	539	542	547	550	550	547	547	546	547	545	546	547	
23	547	555	553	554	555	556	557	559	558	549	542	540	538	544	547	550	553	553	555	552	546	542	550	547	
24	548	551	555	553	559	560	560	566	568	560	549	546	—	—	—	—	—	—	—	—	—	—	—	—	
†25**	—	—	—	—	—	—	—	—	—	—	—	—	528	539	541	490	506	514	524	553	529	534	533	542	
26**	549	544	548	545	542	545	545	548	547	517	510	515	524	534	537	533	529	528	516	534	537	531	521	524	
27**	524	521	531	536	537	548	545	551	541	527	519	514	522	522	520	508	517	524	529	528	536	527	537	532	
28**	545	525	527	534	538	545	538	532	527	526	520	513	468	482	527	534	533	531	524	528	536	542	569	543	
29	533	534	533	534	536	542	551	547	546	535	522	523	528	527	536	541	543	545	545	543	536	540	532	540	
30	541	535	537	542	547	548	546	548	550	545	534	520	516	528	536	540	538	534	542	545	540	542	540	554	
31	542	536	536	537	545	551	547	549	540	532	504	515	518	522	529	514	506	537	544	542	543	542	537	534	
Mean	539	538	538	539	542	545	547	547	545	539	533	531	532	535	537	534	536	536	538	539	540	540	541	542	
Mean*	543	543	542	544	545	549	552	551	552	546	543	542	541	544	546	546	546	545	548	546	545	546	546	546	
Mean**	540	537	538	537	540	543	541	543	535	521	516	518	512	518	527	522	524	522	524	528	535	532	543	531	

February. 18000 γ + Tabular Quantities (in γ).

	0h	1h	2h	3h	4h	5h	6h	7h	8h	9h	10h	11h	Noon	13h	14h	15h	16h	17h	18h	19h	20h	21h	22h	23h	24h
1	533	543	536	537	538	542	545	545	545	541	533	524	521	527	533	538	541	545	545	541	542	539	534	533	
2*	542	537	536	539	542	542	546	548	547	540	534	535	537	536	537	542	545	545	544	540	545	547	552	550	
3**	550	553	550	544	542	542	562	563	547	528	531	541	529	520	504	517	519	531	516	532	521	523	588	515	
4**	514	520	522	521	526	529	524	524	529	525	489	477	506	516	506	516	507	533	529	524	545	527	524	544	
5	532	529	532	534	529	537	536	537	535	529	527	520	521	525	529	531	517	512	521	529	530	542	530	534	
6	542	537	533	533	531	534	540	540	527	521	515	512	521	522	529	540	533	533	525	527	527	549	546	534	
7	531	529	532	530	532	532	534	540	532	528	527	531	527	529	523	524	536	536	527	540	538	522	534	543	
8	534	533	544	530	534	534	535	543	542	534	527	506	518	517	520	518	527	535	531	543	536	527	530	532	
9	534	533	533	537	538	540	539	537	534	536	531	511	512	529	536	538	537	530	511	520	524	533	553	540	
10**	534	534	530	528	532	540	541	529	545	541	530	523	532	536	534	494	508	532	543	550	527	520	521	535	
11**	533	530	524	532	529	532	536	540	542	532	527	522	529	540	537	542	538	531	524	532	528	538	543	543	
12	524	527	526	532	545	532	529	538	539	535	513	510	512	520	524	529	530	522	527	534	542	529	555	543	
13	534	534	532	532	534	542	532	537	535	527	519	506	521	528	514	522	530	532	527	519	529	532	545	532	
14	534	543	532	533	537	528	529	531	531	531	521	508	516	521	525	531	537	537	542	531	529	537	535	541	
15	551	528	531	533	539	543	543	543	537	533	526	526	533	529	536	536	534	536	541	547	541	538	538	536	
16*	538	536	536	536	537	539	542	541	535	531	530	528	528	531	535	541	543	543	542	541	539	538	538	537	
17*	536	535	536	537	539	540	541	543	541	534	528	530	533	536	540	542	546	546	548	547	546	543	538	540	
18	541	541	542	543	546	550	553	553	546	540	537	534	540	544	549	554	555	555	551	544	543	530	530	533	
19	536	539	535	566	552	553	561	559	555	547	538	532	537	541	547	551	554	551	560	553	556	554	556	554	
20	553	554	559	553	555	556	576	561	539	526	531	537	539	538	537	520	515	518	528	543	529	531	528	536	
21	538	535	538	539	542	542	544	546	548	541	521	532	531	522	527	538	537	537	540	538	539	542	540	539	
22	541	541	541	539	543	549	548	556	541	524	542	541	538	504	498	511	511	528	534	533	537	533	542	535	
23**	531	548	542	535	533	533	535	535	533	530	534	535	543	548	551	548	548	554	543	507	522	510	528	533	
24	533	535	546	536	539	550	554	548	541	535	507	486	507	511	535	540	537	535	542	541	540	550	547	544	
25	538	546	541	544	533	539	543	547	542	529	525	513	522	528	532	528	523	538	533	548	544	543	543	548	
26	543	541	541	546	544	548	552	554	548	543	530	525	524	530	535	534	541	543	546	548	548	543	542	541	
27*	543	543	541	542	542	546	550	551	547	538	533	530	531	536	540	547	546	545	541	551	550	548	548	547	
28*	546	545	546	547	550	550	548	551	555	548	538	533	532	531	537	539	539	543	547	546	546	544	544	543	
29	541	541	543	544	546	548	550	552	549	542	534	527	529	537	543	543	545	548	548	550	549	548	548	548	
Mean	537	538	537	538	539	541	544	545	541	534	527	522	527	529	531	533	534	537	536	538	538	537	541	539	
Mean*	541	539	539	540	542	543	545	547	545	538	533	531	532	534	538	542	544	544	544	545	545	544	544	543	
Mean**	532	537	534	532	532	535	540	538	539	531	522	520	528	532	526	523	524	536	531	529	529	524	541	534	

* Denotes an International Quiet Day. ** Denotes an International Disturbed Day.
† Jan. 25 has been omitted in computing means for Disturbed Days.

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*	546	544	543	545	546	551	555	560	558	555	550	542	537	535	537	541	543	547	549	551	553	553	553	550
2	549	548	545	547	550	554	558	563	566	563	560	559	558	564	570	568	566	565	539	520	529	523	534	537
3	549	539	531	527	522	527	527	523	516	481	484	497	494	502	516	529	530	529	532	546	529	536	535	553
4	531	525	523	534	536	532	516	538	539	537	521	494	511	525	535	530	528	528	541	557	526	519	513	531
5	535	530	532	531	536	519	527	518	526	516	528	532	531	529	527	508	508	527	528	549	559	592	526	524
6	536	532	518	521	524	528	526	536	532	526	520	523	511	517	535	530	532	540	537	551	519	531	554	548
7	533	532	534	535	540	537	535	531	526	513	513	519	530	535	536	526	516	523	524	541	533	535	530	526
8	536	527	535	538	549	536	532	532	528	517	520	517	535	539	537	535	528	526	521	528	546	542	536	537
9	541	541	544	537	539	527	539	535	539	532	531	530	510	533	533	541	532	550	537	534	539	578	535	522
10**	524	534	538	538	556	537	532	521	524	512	516	498	524	534	530	526	502	513	517	532	565	530	533	526
11	524	525	515	526	545	537	512	526	525	512	522	521	522	522	526	526	534	529	531	537	542	555	535	533
12	536	538	531	536	529	539	538	535	533	530	530	530	526	526	520	535	534	538	538	543	544	542	541	541
13	537	538	536	550	551	547	548	545	539	536	534	532	534	534	538	537	529	532	530	532	536	537	530	537
14	547	544	537	535	542	550	548	547	545	538	532	533	531	537	541	531	526	538	536	541	543	537	536	534
15*	536	538	538	542	541	544	543	542	542	536	529	528	532	526	529	533	535	537	543	548	548	550	546	547
16*	546	546	546	546	546	548	552	552	546	539	535	532	533	532	538	541	546	548	550	532	535	542	543	544
17	543	542	542	541	540	541	545	541	537	532	529	527	529	532	534	539	543	550	547	530	538	543	550	552
18	568	558	566	561	561	558	555	547	543	547	530	537	529	526	520	528	520	525	546	523	508	532	542	538
19	537	538	531	532	540	531	542	537	536	529	523	520	522	528	529	530	541	539	539	535	542	538	538	543
20	541	539	540	540	541	543	545	545	541	525	526	526	526	534	529	537	539	537	537	546	550	550	550	552
21	563	563	551	550	534	537	539	531	529	526	525	526	520	521	537	533	537	534	533	539	542	532	564	540
22	540	537	536	526	552	529	533	529	521	519	489	511	513	519	534	531	541	543	535	530	542	542	552	553
23	554	541	543	527	528	532	532	534	526	523	516	524	535	532	547	547	540	543	545	545	540	542	558	552
24	545	539	544	537	540	548	537	531	526	516	516	524	536	540	542	545	542	540	542	547	545	544	571	545
25*	550	537	544	544	542	545	545	542	530	519	518	524	532	537	538	539	540	540	543	545	544	543	545	553
26*	545	544	543	544	546	549	551	548	539	526	521	525	536	542	548	550	547	543	543	544	547	547	546	545
27	545	543	544	547	548	548	549	548	542	529	522	526	536	541	550	551	550	550	541	544	552	552	551	552
28**	565	558	526	530	538	545	541	541	533	527	509	517	535	545	522	542	506	490	502	513	538	504	533	521
29**	542	540	524	520	522	525	526	521	508	494	488	477	491	508	528	503	525	519	528	524	563	530	538	542
30**	535	536	540	533	525	511	530	549	528	507	515	515	518	494	513	513	522	509	554	522	537	529	545	534
31**	526	498	501	508	517	505	515	513	495	502	475	467	480	505	516	505	515	521	537	531	540	527	534	537
Mean	542	539	536	536	540	537	538	537	533	525	520	520	524	529	533	533	532	534	536	537	541	541	542	540
Mean*	545	542	543	544	544	547	549	549	543	535	531	530	534	534	538	541	542	543	546	544	545	547	547	548
Mean**	538	533	526	526	532	525	529	529	518	508	501	495	510	517	522	518	514	510	528	524	549	524	537	532
April.	18000 γ + Tabular Quantities (in γ).																								
1	528	530	530	533	545	532	532	528	511	507	507	511	521	529	540	530	519	533	536	545	544	554	536	550
2**	583	524	519	539	518	531	520	505	510	504	494	492	501	510	528	527	524	530	530	528	531	549	570	537
3	524	524	523	523	531	528	526	520	518	514	504	501	511	528	526	524	535	540	522	540	539	535	530	552
4	539	535	534	536	549	537	530	532	523	515	520	522	524	505	530	531	531	527	539	537	542	540	544	555
5	545	543	546	516	549	522	512	503	517	515	514	506	501	520	520	522	532	533	533	531	542	569	539	541
6	546	532	532	536	524	539	533	519	506	508	515	525	531	530	537	532	524	531	531	549	540	553	546	532
7**	540	535	520	535	540	536	527	517	525	502	463	492	500	509	515	520	526	531	543	547	526	534	540	541
8	567	523	527	532	527	525	521	511	510	502	509	509	519	534	534	533	531	537	538	524	526	531	536	552
9	533	549	529	542	536	532	527	527	523	519	515	502	510	523	531	536	537	552	549	535	525	535	539	543
10	551	536	541	538	531	535	523	516	514	508	503	498	506	524	526	533	542	542	539	538	552	543	533	536
11	536	534	532	532	534	532	538	533	522	516	509	505	511	525	532	538	538	542	542	545	539	537	540	545
12*	540	536	536	534	543	543	543	539	528	521	517	518	518	527	526	540	540	539	543	542	541	541	540	543
13**	542	541	543	544	548	548	550	549	548	542	531	536	538	542	547	557	549	519	542	549	534	526	549	531
14	532	527	526	523	525	531	526	528	510	505	499	502	515	523	526	518	539	531	539	547	544	545	547	545
15	546	558	550	534	531	526	525	521	528	516	507	508	510	523	532	534	530	536	547	547	555	549	542	542
16	542	538	540	536	542	547	545	542	534	518	503	481	501	510	525	534	529	544	539	545	548	549	549	560
17	559	544	539	540	539	543	544	536	509	516	518	526	519	525	528	532	542	538	544	548	548	558	560	549
18	553	575	542	519	534	526	535	514	524	508	480	492	514	523	530	544	526	540	552	531	536	549	542	532
19*	531	528	535	537	540	540	538	536	532	523	518	523	530	538	543	543	540	544	549	544	544	542	548	547
20*	544	543	543	543	541	544	548	539	527	516	515	518	525	532	542	545	545	544	544	544	546	545	547	547
21*	545	544	544	544	542	541	543	540	535	528	522	527	533	537	540	537	537	543	544	546	546	545	546	546
22	546	545	547	548	548	549	554	549	536	540	539	529	544	538	540	539	528	540	544	544	539	545	566	549
23**	543	541	540	538	539	538	541	527	530	509	488	492	492	525	530	533	541	545	557	530	553	570	549	543
24**	537	546	539	518	526	528	522	518	522	505	474	507	540	545	534	553	533	546	550	561	538	545	586	581
25	523	545	530	527	523	534	533	514	506	503	513	520	526	531	526	548	550	541	552	528	528	553	556	537
26	556	549	537	530	541	520	542	549	539	519	509	509	518	523	524	546	549	536	546	537	542	542	553	555
27	545	543	531	535	533	523	530	520	503	501	508	512	508	513	512	522	537	545	549	549	533	535	544	548
28	535	530	530	536	535	530	527	531	529	522	517	518	522	529	516	526	536	551	547	568	568	541	526	531
29	537	530	528	527	536	533	530	519	524	521	521	517	516	517	523	523	539	555	557	549	542	542	552	512
30*	536	536	539	535	539	539	534	537	536	528	522	523	530	534	537	538	547	553	541	545	543	545	545	543
Mean	543	539	535	534	536	534	533	527	523	515	509	511	518	526	530	535	536	540	543	542	541	545	547	544
Mean*	539	537	539	539	541	541	541	538	532	523	519	522	527	534	538	540	542	545	544	544	544	544	545	545
Mean**	549	537	532	535	534	536	532	523	527	512	490	504	514	526	531	538	535	534	544	543	536	545	559	547

* 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	541	553	545	545	538	534	534	534	529	533	529	526	541	546	547	552	552	545	550	551	548	550	553	552	
2	565	542	542	533	540	543	544	542	539	540	542	538	542	526	543	540	544	558	554	554	543	543	555	539	
3	548	549	558	531	538	530	529	516	517	515	496	505	519	529	533	538	538	547	545	546	550	552	542	546	
4**	547	548	538	537	534	534	534	529	522	526	528	523	523	528	533	535	543	585	566	538	567	538	537	561	
5**	552	520	531	535	534	532	524	520	520	520	512	512	520	529	535	543	532	533	546	546	546	550	548	536	
6	535	533	539	542	541	532	528	518	512	509	491	508	515	514	529	539	546	553	553	550	542	536	537	547	
7	542	543	534	537	524	532	528	522	509	510	512	516	519	526	534	542	542	546	551	546	543	549	542	539	
8*	538	543	538	533	535	534	529	521	513	501	500	512	522	530	537	540	547	556	558	553	548	543	543	546	
9*	544	545	544	544	541	539	536	534	524	519	518	521	526	531	541	547	552	552	554	552	551	552	549	549	
10	558	559	558	558	554	553	547	536	530	522	518	526	537	551	540	546	553	555	564	563	561	566	561	546	
11	570	540	545	545	553	559	557	554	544	533	528	522	517	527	528	527	535	560	572	550	551	545	549	548	
12	557	555	542	537	541	541	529	538	531	529	527	529	529	529	535	540	548	553	556	550	550	548	555	551	
13	553	552	548	540	553	550	541	537	527	529	526	525	522	527	535	537	554	565	558	574	559	553	556	557	
14	563	553	551	549	537	537	542	536	529	516	522	531	529	531	537	537	538	554	562	560	555	564	560	550	
15	546	545	543	542	539	537	529	524	507	509	509	510	493	496	522	535	537	552	577	557	548	552	554	551	
16	546	545	544	544	531	541	515	514	527	528	518	518	528	527	519	527	549	557	558	552	550	551	552	555	
17	550	547	541	539	535	534	526	527	519	501	520	531	533	537	539	535	542	547	549	548	545	549	555	547	
18*	544	543	543	546	547	543	536	529	523	525	529	531	527	535	534	541	552	548	553	551	550	549	552	549	
19*	557	547	544	541	539	534	531	526	525	529	528	524	526	528	532	539	540	548	551	551	550	548	548	549	
20*	545	543	542	541	541	537	530	522	517	517	522	531	538	537	533	538	543	548	553	558	557	558	558	556	
21	557	559	559	552	556	558	558	550	521	503	490	494	524	543	524	546	546	542	543	546	551	551	553	552	
22	542	541	547	538	534	531	528	529	526	522	521	515	526	521	540	542	539	554	555	551	547	547	547	549	
23	545	542	542	543	544	539	533	524	523	522	521	523	525	539	533	549	547	554	559	558	544	559	572	540	
24	544	544	549	546	549	538	538	532	531	532	525	518	532	531	536	538	544	554	557	557	554	551	553	560	
25**	571	537	537	538	549	531	544	531	511	511	522	520	516	516	518	545	563	581	564	551	545	544	555	544	
26	532	544	532	533	538	533	531	519	520	523	523	525	518	514	526	536	541	558	551	548	553	549	557	551	
27	552	544	537	538	541	547	527	526	519	519	523	525	525	531	531	544	551	567	571	565	568	570	557	554	
28	555	538	545	544	541	544	541	534	525	520	525	524	528	526	532	531	554	560	580	563	549	542	557	550	
29**	549	546	546	542	538	549	545	530	522	528	529	529	480	486	536	562	572	581	530	507	482	484	436	467	
30**	510	526	577	547	437	441	450	472	482	478	481	476	471	473	487	497	522	541	537	522	524	516	531	528	
31	536	525	515	517	514	518	508	506	502	497	486	489	499	502	507	513	538	541	551	549	528	536	536	538	
Mean	548	544	544	541	537	536	531	527	521	518	517	519	521	525	531	538	545	555	556	551	547	547	547	545	
Mean*	546	544	542	541	541	537	532	526	520	518	519	524	528	532	535	541	547	550	554	553	551	550	550	550	
Mean**	546	535	546	540	518	517	519	516	511	513	514	512	502	506	522	536	546	564	549	533	533	526	521	527	
June.	18000 γ + Tabular Quantities (in γ).																								
1	537	529	531	530	531	525	518	513	509	504	502	505	518	524	531	533	540	541	541	540	542	544	538	538	
2	541	542	544	542	545	535	533	526	520	519	527	520	519	515	525	535	542	548	549	554	551	544	541	540	
3	541	549	545	544	544	538	535	531	523	518	515	524	529	531	537	540	541	547	547	545	544	544	542	541	
4*	544	544	541	545	546	544	536	524	518	520	525	531	533	531	527	525	533	545	557	553	549	549	548	549	
5*	549	547	546	547	547	542	532	527	521	521	527	524	521	533	541	549	559	564	563	563	555	554	552	551	
6	551	551	549	550	550	548	541	537	531	527	528	528	534	533	537	544	550	559	557	557	557	556	554	549	
7	546	548	549	557	558	557	555	549	539	522	522	524	528	536	546	538	553	570	558	555	557	558	551	558	
8**	551	533	546	547	542	541	533	529	519	516	530	528	523	523	544	546	554	566	557	561	552	545	546	559	
9**	562	544	526	545	541	541	537	538	525	515	515	518	520	531	540	546	546	548	544	541	547	555	546	545	
10**	549	557	547	553	529	534	546	532	522	511	503	502	494	508	528	529	538	555	555	567	546	542	545	546	
11**	539	538	534	539	543	538	538	536	531	507	498	516	527	520	538	553	538	559	555	553	552	552	550	551	
12	543	543	535	543	546	542	537	525	519	515	517	520	521	522	543	548	554	547	553	556	549	546	544	543	
13	544	544	544	546	547	534	530	527	527	527	521	505	508	508	528	540	539	550	552	551	554	555	548	548	
14	540	538	540	541	544	543	541	534	530	526	519	511	525	524	529	538	550	556	564	564	557	551	550	550	
15*	549	547	546	547	546	543	540	538	534	532	529	526	525	525	527	539	548	551	552	553	555	553	551	548	
16	548	544	546	545	546	543	538	534	535	530	529	529	533	540	540	543	542	553	566	568	569	562	560	551	
17	553	553	554	549	548	549	545	540	536	532	524	525	532	547	553	549	549	557	561	565	562	560	560	560	
18	559	557	556	553	553	549	545	549	554	544	540	535	533	535	540	543	553	554	558	558	558	563	561	564	
19	556	554	550	547	549	550	546	540	534	527	523	527	541	551	554	554	556	558	566	561	570	561	557	550	
20**	552	553	549	556	553	550	546	544	541	537	519	527	548	545	555	551	573	553	550	542	540	547	550	547	
21	544	541	549	549	547	545	542	535	535	536	528	527	528	529	542	557	552	555	558	555	557	551	557	550	
22	545	546	546	543	545	530	543	542	542	539	545	529	530	527	524	537	561	564	569	558	551	548	548	546	
23	548	549	546	546	544	540	520	519	525	528	530	529	529	532	535	538	548	551	554	551	550	548	545	542	
24	537	537	545	544	550	549	542	538	530	533	527	529	532	532	542	555	563	558	561	563	548	550	546	546	
25	545	545	543	543	543	543	541	539	534	529	527	523	522	522	542	555	576	562	552	558	557	553	553	551	
26	550	545	542	544	550	552	551	542	534	528	543	547	549	544	545	545	548	553	557	561	556	555	553	548	
27*	548	550	547	544	545	542	540	539	532	527	528	530	529	522	527	535	544	555	560	558	555	551	548	544	
28*	540	545	548	550	551	546	536	527	524	524	526	531	542	544	545	549	548	545	553	559	555	558	559	555	
29	555	554	553	551	550	546	545	549	542	538	533	534	538	542	558	561	561	557	561	563	563	562	555	552	
30	548	546	545	545	546	546	545	545	545	542	541	540	536	535	545	566	555	551	551	550	555	558	555	552	
Mean	547	546	545	546	546	543	539	535	531	526	525	525	528	530	539	545	551	554	556	556	554	553	550	549	
Mean*	544	547	545	546	546	543	537	532	526	524	525	528	532	531	533	538	543	549	554	554	552	551	550	547	
Mean**	551	545	540	548	542	541	540	536	528	517	513	518	522	525	541	545	550	556	552	553	547	548	547	550	

* 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	549	549	550	552	549	549	547	544	541	533	523	527	531	540	549	555	554	554	560	565	563	560	557	557
2	555	554	554	557	557	552	543	532	527	528	535	537	539	544	552	554	547	547	552	555	557	557	554	552
3*	551	547	549	550	554	551	545	532	522	518	521	521	530	541	551	549	544	546	549	553	556	557	556	558
4	556	555	555	555	552	548	549	544	537	537	543	545	550	549	568	560	553	561	578	578	568	569	578	569
5**	571	571	573	571	574	566	558	549	539	528	527	530	538	550	557	566	567	593	575	571	566	567	554	558
6**	561	556	561	552	569	543	532	523	501	493	498	502	511	506	479	525	539	541	543	548	550	552	553	565
7**	550	539	541	536	550	543	523	525	506	493	495	502	515	526	536	541	545	550	544	552	557	552	547	545
8**	552	537	544	547	550	541	539	534	522	500	510	508	521	526	520	536	549	567	547	549	552	562	557	545
9	544	544	544	547	546	539	540	537	523	505	508	514	517	527	526	536	540	565	554	555	553	549	552	544
10	546	547	554	546	540	527	520	525	525	506	501	512	520	523	530	546	538	548	562	553	555	570	546	546
11	543	546	546	545	548	547	542	532	523	514	514	525	532	533	538	538	545	546	551	553	554	552	553	557
12	551	543	546	544	548	552	548	539	532	519	524	522	517	521	529	539	546	553	561	565	548	546	545	546
13*	543	542	542	542	544	541	537	537	536	533	528	518	513	522	538	545	545	548	550	555	554	553	550	546
14*	545	545	545	546	547	545	541	539	535	526	519	515	513	525	546	549	554	560	556	556	555	551	553	557
15	551	545	544	545	544	540	539	534	528	524	528	537	538	539	542	545	545	547	556	558	558	556	558	552
16**	552	557	556	560	560	556	548	535	556	543	545	550	524	495	493	543	550	542	547	546	543	547	539	550
17	534	546	537	528	529	532	534	534	529	522	524	528	528	532	547	546	545	546	551	552	550	547	545	546
18	543	541	543	543	543	542	538	532	523	521	524	530	533	532	534	546	551	563	(551)	(552)	550	546	545	545
19	542	543	545	544	543	542	529	522	516	523	526	532	537	545	547	545	546	549	555	550	552	548	561	540
20	543	542	546	548	547	541	535	530	526	521	521	526	531	535	537	539	548	547	552	555	555	552	552	552
21	558	547	543	545	549	550	542	541	534	521	511	508	518	531	539	544	543	550	557	563	563	550	545	544
22	555	547	546	550	552	546	542	539	534	(523)	512	513	520	(531)	542	547	553	558	558	561	558	555	557	549
23	548	546	550	546	548	548	545	541	529	528	522	522	523	533	535	533	544	555	554	557	556	555	554	551
24	548	548	548	549	550	549	547	545	538	527	520	521	524	531	540	542	550	553	562	560	554	548	548	548
25	557	549	548	548	552	547	543	540	537	530	524	524	525	524	527	536	544	553	560	565	569	561	561	558
26	555	555	548	563	555	558	555	549	535	527	522	524	524	529	537	540	532	549	551	559	559	555	555	554
27	550	550	551	551	553	556	558	542	535	535	536	529	532	536	544	545	542	553	556	558	555	557	559	551
28*	548	550	547	547	549	548	547	541	529	523	519	515	523	530	541	548	549	553	553	553	553	551	550	550
29*	549	548	550	548	548	549	549	548	545	546	542	537	532	529	540	543	546	549	552	557	561	561	561	558
30	555	555	555	550	551	550	548	542	537	531	537	545	546	538	538	534	533	551	557	569	564	565	560	552
31	546	553	560	560	560	561	544	537	531	521	517	507	516	518	526	518	514	539	547	557	563	559	557	555
Mean	550	548	549	549	550	547	542	537	530	523	522	523	527	530	536	543	545	553	555	557	557	555	554	552
Mean*	547	546	547	547	548	547	544	539	533	529	526	521	522	529	543	547	548	551	552	555	556	555	554	554
Mean**	557	552	555	553	561	550	540	533	525	511	515	518	522	521	517	542	550	559	551	553	554	556	550	553
August.	18000 γ + Tabular Quantities (in γ).																								
1	553	554	551	546	545	544	541	535	525	522	524	522	529	532	539	538	543	541	541	543	560	563	565	559
2**	556	552	555	544	556	552	533	538	536	530	524	523	524	529	540	556	543	558	546	562	556	585	556	541
3**	560	552	549	543	549	546	532	486	504	511	498	486	498	535	538	538	543	556	550	554	550	571	547	541
4	530	538	536	538	533	542	533	523	499	501	513	513	504	524	536	543	542	551	556	556	550	547	546	546
5	546	546	546	548	549	554	549	538	520	465	482	511	529	524	524	530	536	538	543	549	558	549	543	548
6	558	545	537	533	539	539	538	530	518	512	506	507	516	523	528	539	541	537	545	552	549	547	553	545
7	540	540	542	542	542	540	535	527	524	518	516	516	524	532	525	533	534	541	545	545	551	550	548	542
8	541	539	544	541	549	549	545	537	528	523	518	519	523	(529)	535	541	549	548	545	545	552	548	548	547
9	543	539	542	545	546	554	551	527	520	522	514	508	509	517	523	523	527	537	544	548	546	544	543	543
10*	546	546	543	540	538	538	535	528	521	521	524	529	531	534	533	535	539	542	552	556	556	553	548	549
11	548	548	547	547	547	543	540	536	532	530	535	541	541	543	548	549	550	554	562	564	563	562	557	563
12	550	546	545	558	561	546	544	537	535	535	535	540	538	546	553	548	540	545	549	553	555	553	553	554
13	547	547	540	557	547	547	540	521	513	529	529	527	525	533	533	533	542	539	538	539	546	547	547	547
14	543	543	543	544	546	540	526	520	519	514	516	525	531	534	533	542	547	549	550	552	549	548	550	546
15	543	543	543	543	543	541	537	532	526	526	531	534	530	528	529	535	538	551	553	552	544	550	545	546
16*	546	540	546	548	547	543	538	532	525	524	530	534	535	542	548	549	546	547	547	552	552	549	548	548
17*	551	548	549	548	546	546	540	533	526	520	517	522	536	546	547	550	560	559	558	553	553	547	546	546
18*	544	549	550	546	546	538	535	530	520	514	520	523	533	537	543	549	551	554	559	559	560	556	556	551
19*	551	549	551	549	546	541	538	533	524	515	515	517	530	538	538	539	545	549	558	556	554	553	548	548
20	549	549	548	549	548	547	545	537	528	519	515	514	530	539	550	554	561	562	563	564	571	570	570	564
21	571	560	562	566	562	547	538	525	519	516	510	514	505	513	523	529	535	550	552	553	553	555	551	565
22	546	537	536	540	543	542	538	534	528	528	524	520	522	536	518	542	548	531	545	550	542	540	543	542
23	539	539	539	540	542	534	526	525	526	518	495	516	537	537	532	521	530	539	546	546	546	545	545	548
24	547	538	539	538	539	539	537	533	528	526	521	516	519	526	523	537	538	541	544	546	545	545	547	546
25	545	539	537	539	535	535	532	519	521	522	521	524	529	534	534	539	545	548	552	559	555	560	551	560
26	555	554	550	548	551	543	535	532	525	522	526	530	533	533	527	537	539	542	546	550	550	551	556	552
27**	552	550	545	547	544	551	556	534	502	522	524	527	532	529	516	532	515	539	558	524	545	550	581	534
28**	530	523	558	540	526	512	495	525	491	434	470	493	516	525	511	519	532	498	534	534	537	538	547	584
29**	537	524	524	528	514	524	529	495	493	476	485	498	507	513	524	516	534	537	532	565	524	539	550	542
30	543	542	538	533	535	524	517	512	494	507	505	504	512	535	529	539	537	522	535	526	550	535	534	547
31	542	537	529	528	535	534	526	509	513	506	515	513	521	530	534	537	535	532	533	537	543	551	541	538
Mean	547	544	544	544	544	541	536	527	519	514	515	519	524	532	533	538	541	543	548	550	551	552	550	549
Mean*	548	546	548	546	545	541	537	531	523	519	521	525	533	539	542	544	548	550	555	555	555	552	549	548
Mean**	547	540	546	540	538	537	529	516	505	495	500	505	515	526	526	532	533	538	544	548	542	557	556	548

* 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	538	538	534	539	538	525	521	528	521	509	513	513	521	516	513	530	541	534	542	545	542	539	538	548	
2	555	533	530	532	533	534	533	517	513	515	516	522	523	516	528	526	538	541	539	542	542	544	545	542	
3*	535	537	537	537	538	535	530	525	526	524	521	521	525	526	534	537	537	533	539	550	547	545	547	547	
4	542	541	538	542	542	535	530	520	511	511	511	510	516	525	530	540	542	539	546	545	537	543	548	543	
5	539	543	544	545	545	543	538	530	520	513	507	517	518	530	542	530	535	544	551	553	553	552	553	550	
6**	548	544	552	559	564	562	541	539	535	530	521	510	506	495	484	499	507	503	517	516	533	530	529	525	
7	525	525	526	527	530	527	526	523	515	501	492	496	509	513	514	523	530	535	530	535	540	543	556	534	
8**	538	543	527	529	546	543	543	537	523	516	509	509	517	526	535	541	549	533	521	547	535	536	535	540	
9	567	532	527	526	529	523	534	533	526	521	512	515	521	528	530	532	530	535	540	540	548	544	536	540	
10*	538	534	532	532	532	534	532	527	521	513	512	515	523	530	535	535	535	535	541	545	545	547	547	548	
11*	544	536	537	535	534	532	534	532	528	528	534	539	542	540	536	535	534	539	545	546	544	539	541	542	
12	540	541	540	537	536	535	532	531	530	531	532	533	533	534	533	534	536	542	544	547	547	544	545	541	
13	543	541	542	541	540	536	535	526	522	523	524	530	542	545	552	541	546	548	546	543	545	544	548	552	
14	548	547	546	546	547	540	541	542	532	523	524	529	535	538	541	542	544	544	547	547	547	548	545	547	
15	546	547	545	545	544	541	535	525	514	535	508	516	531	543	548	543	544	549	552	553	552	554	553	544	
16*	548	548	549	549	547	542	535	526	519	514	517	523	527	534	539	541	545	548	550	550	553	553	552	550	
17*	550	550	549	547	544	539	536	533	532	527	525	531	540	545	549	549	552	553	553	552	555	554	552	561	
18	560	549	552	549	553	552	543	531	531	523	519	522	536	530	532	539	513	531	544	554	554	554	575	545	
19	539	563	547	535	540	548	547	541	534	518	514	528	514	525	531	509	512	529	531	531	530	568	549	534	
20	537	537	551	557	555	544	538	518	503	512	516	517	520	522	518	510	528	539	541	540	538	539	546	541	
21	554	542	541	546	536	535	542	523	523	518	515	523	528	533	534	534	536	536	540	536	533	536	549	549	
22	541	539	543	549	559	562	541	536	526	515	487	498	512	523	526	528	517	538	533	538	533	535	540	533	
23**	533	534	538	542	539	546	538	538	517	483	495	491	504	517	513	524	500	492	507	500	549	549	534	536	
24**	520	520	533	527	543	533	514	530	525	515	491	499	516	504	525	484	523	530	523	539	546	538	552	550	
25**	538	534	546	537	532	518	516	510	509	504	505	505	504	478	499	493	506	496	506	521	519	566	527	522	
26	524	530	539	524	526	517	511	510	517	513	505	508	523	525	526	527	529	530	537	534	540	552	544	537	
27	538	537	526	518	529	527	525	517	522	518	501	511	513	522	512	498	522	530	528	535	534	533	539	543	
28	544	538	534	530	534	534	532	530	529	525	529	531	531	530	518	523	521	526	534	533	534	538	538	541	
29	535	564	532	537	539	537	537	537	531	528	512	521	531	534	529	527	531	529	526	532	547	529	533	535	
30	531	539	533	538	534	542	537	524	516	526	529	525	514	517	518	511	511	529	537	537	535	542	545	539	
Mean	541	540	539	539	540	537	533	528	522	518	513	517	523	525	528	526	530	533	536	540	542	545	545	542	
Mean*	543	541	541	540	539	536	533	529	525	521	522	526	531	535	539	539	541	542	546	549	549	548	548	550	
Mean**	535	535	539	539	545	540	530	531	522	510	504	503	509	504	511	508	517	511	515	525	536	544	535	535	
October.	18000 γ + Tabular Quantities (in γ).																								
1	536	544	535	538	539	538	537	537	531	524	521	526	530	526	527	527	530	533	536	537	539	542	550	539	
2	543	547	545	541	543	544	539	532	530	518	500	502	506	503	528	527	533	539	531	531	534	536	537	543	
3	553	538	537	547	539	542	538	528	523	523	514	515	519	507	526	535	534	540	545	543	541	543	539	545	
4	541	544	544	544	540	541	543	543	540	531	525	525	525	531	545	545	540	539	543	549	550	546	545	541	
5	538	551	541	543	544	546	547	542	535	523	512	512	522	532	536	538	541	539	542	545	544	545	551	557	
6*	552	548	541	538	541	544	544	543	539	527	520	523	533	537	539	539	541	541	544	545	545	548	545	541	
7	555	540	534	537	540	543	543	540	533	523	522	523	529	535	542	544	541	540	543	545	546	544	544	550	
8	546	543	543	541	542	545	546	542	535	527	521	521	525	532	537	539	542	540	535	526	525	536	540	543	
9	546	548	542	545	548	545	543	539	531	524	517	515	518	528	543	518	534	547	551	544	545	546	543	567	
10	546	538	535	534	534	539	537	534	533	522	510	508	516	524	529	508	507	534	532	538	555	541	541	543	
11	543	545	541	538	541	544	545	545	534	522	517	521	527	534	536	539	540	541	543	543	545	548	553	547	
12	555	542	538	536	537	540	543	541	536	530	526	526	528	533	533	536	541	539	541	541	537	543	541	546	
13*	546	543	543	542	543	544	547	546	538	530	523	524	523	528	523	532	541	541	543	543	546	546	549	549	
14*	545	543	542	542	543	543	543	542	537	526	516	517	525	532	536	539	538	543	551	551	549	546	552	550	
15**	547	541	538	533	564	564	565	556	520	487	469	480	484	493	480	480	486	468	513	524	526	514	556	557	
16**	529	521	525	509	537	537	509	525	506	513	498	494	510	511	511	520	511	525	528	530	530	529	533	534	
17	556	546	536	529	531	538	538	538	520	504	517	521	525	504	505	519	510	515	506	519	537	542	525	526	
18	549	529	531	527	533	533	532	530	524	517	507	504	515	526	530	528	530	532	533	533	537	536	538	546	
19	538	535	536	540	542	530	543	547	536	523	512	503	499	515	525	526	525	529	532	534	537	535	535	534	
20**	535	537	539	539	541	544	550	546	534	521	505	500	508	498	513	517	505	474	487	492	504	478	514	522	
21**	522	522	516	520	507	525	507	508	507	465	487	487	491	506	511	509	517	521	529	524	529	531	531	530	
22	529	529	529	533	537	538	539	538	531	521	513	512	517	511	516	513	505	509	510	516	560	524	534	537	
23**	540	530	534	530	544	546	544	549	539	508	499	502	511	517	510	494	502	538	530	546	538	525	543	530	
24	530	529	530	533	538	541	546	550	546	515	504	513	513	513	526	519	524	524	533	528	549	527	528	528	
25	529	530	530	528	531	531	540	538	528	510	501	491	496	499	506	510	532	532	531	527	529	532	535	535	
26*	537	535	532	530	529	535	535	534	529	522	516	511	510	515	524	529	528	529	532	532	536	537	535	538	
27	536	538	537	537	544	545	548	544	539	534	518	501	508	521	500	503	525	529	531	527	522	520	525	528	
28*	540	537	532	531	525	536	535	532	525	520	513	520	528	532	535	535	535	535	536	536	536	536	536	537	
29	540	539	539	543	542	546	544	543	539	530	524	521	527	534	537	541	545	546	546	543	542	546	549	540	
30	534	537	535	539	542	541	536	541	530	523	513	499	517	524	520	510	520	531	534	530	536	538	537	533	
31	533	536	533	537	537	538	539	530	531	523	512	508	513	516	522	527	533	536	536	532	534	537	539	539	
Mean	541	538	536	536	539	541	540	539	530	519	511	511	516	520	524	524	527	530	533	534	538	535	540	541	
Mean*	544	541	538	537	536	540	541	539	534	525	518	519	524	529	531	535	537	538	541	541	542	543	543	543	
Mean**	535	530	530	526	539	543	535	537	521	499	492	493	501	505	505	504	504	505	517	523	525	515	535	535	

* 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**	539	547	543	537	548	528	511	513	523	526	527	527	535	524	519	522	530	528	530	533	530	531	528	529	
2	537	538	530	525	525	533	532	533	528	521	509	491	495	519	525	529	532	535	530	533	535	536	536	534	
3	533	534	534	537	540	538	542	537	524	503	516	523	527	529	529	530	538	540	541	536	535	536	537	534	
4	539	534	534	539	544	549	542	542	538	528	522	520	527	532	539	541	543	533	535	529	534	531	536	536	
5	524	527	536	543	537	534	536	535	532	519	513	515	520	526	529	531	524	541	535	538	540	536	535	540	
6*	529	533	536	534	536	542	544	536	531	523	515	515	522	530	533	538	541	542	541	540	540	543	541	541	
7	548	543	541	540	543	544	545	543	535	526	522	521	527	532	536	539	533	536	528	536	537	538	540	539	
8	539	538	536	538	538	542	543	541	533	526	521	519	524	524	532	536	538	538	540	542	544	549	545	544	
9*	546	543	540	540	544	544	545	541	534	527	523	523	526	531	537	541	545	545	539	541	545	544	544	544	
10*	543	543	545	544	549	553	552	548	536	527	520	520	529	534	537	544	544	546	546	545	545	546	549	544	
11	549	548	545	545	548	550	549	547	540	532	528	530	537	540	546	547	546	550	543	540	541	542	544	542	
12	540	546	546	550	550	553	547	546	540	525	520	524	523	524	526	520	523	528	534	531	533	534	536	536	
13	537	537	540	544	549	545	549	547	541	532	525	518	515	522	524	521	529	536	538	537	532	537	534	535	
14**	537	539	542	541	544	546	542	542	515	515	521	527	503	509	511	502	510	524	536	535	535	537	566	531	
15**	526	528	531	536	536	532	(542)	539	533	524	518	515	516	515	532	537	534	533	545	546	541	535	536	537	
16**	544	536	534	547	564	530	541	544	538	527	495	503	516	505	498	511	497	495	521	510	531	538	514	529	
17**	522	524	528	527	529	537	536	532	524	518	501	503	503	502	511	526	519	524	519	536	542	547	533	526	
18	526	527	527	529	534	533	534	534	529	521	524	520	522	519	519	512	524	526	523	523	537	548	527	530	
19	532	533	534	535	539	542	537	537	529	517	515	515	516	512	514	514	522	527	524	522	527	525	528	533	
20	540	529	529	531	536	535	534	536	532	529	524	525	524	524	527	519	531	524	527	534	534	533	536	545	
21	536	533	534	534	534	538	541	541	536	533	531	529	525	524	525	525	529	534	538	537	534	537	536	534	
22*	532	533	534	535	536	540	544	543	536	533	527	521	520	524	523	526	533	534	537	537	539	538	538	538	
23	537	537	541	544	543	547	547	544	541	535	534	531	521	525	534	533	536	540	540	542	540	539	540	542	
24*	541	541	543	546	545	546	549	544	542	537	533	533	533	536	536	538	538	541	542	542	543	544	544	544	
25	541	543	544	544	547	556	559	559	555	552	550	545	545	546	547	541	520	542	550	549	546	541	540	541	
26	536	534	537	539	540	543	543	540	541	536	532	524	525	528	531	537	541	543	544	545	546	544	544	543	
27	543	542	542	543	544	548	544	545	540	537	532	528	525	531	533	534	534	534	534	535	538	537	537	538	
28	543	541	541	544	551	551	551	554	547	541	535	531	518	515	527	531	530	524	539	541	541	542	541	542	
29	537	535	551	544	545	544	548	546	545	535	525	522	529	532	525	502	515	520	523	530	534	538	535	545	
30	538	535	532	538	540	542	539	539	537	533	529	528	534	536	538	539	542	541	537	539	541	539	538	539	
Mean	537	537	538	539	542	542	542	541	535	528	523	522	523	525	528	529	531	534	535	536	538	539	538	538	
Mean*	538	539	540	540	542	545	547	542	536	529	524	522	526	531	533	537	540	542	541	541	542	543	543	542	
Mean**	534	535	536	538	544	535	534	534	527	522	512	515	515	511	514	520	518	521	530	532	536	538	535	530	
December.	18000 γ + Tabular Quantities (in γ).																								
1	535	539	539	540	540	546	548	550	539	532	523	525	532	535	537	539	532	534	525	535	535	538	536	538	
2	531	531	532	538	539	541	544	540	537	531	527	526	532	537	539	543	545	543	540	523	529	532	537	538	
3	537	537	533	542	542	541	545	542	541	537	528	526	533	536	538	542	544	545	544	538	535	530	535	531	
4	534	533	536	527	534	539	543	543	539	535	530	530	532	534	537	537	538	544	545	542	543	543	538	534	
5*	542	536	538	541	541	545	544	544	543	539	534	532	532	536	538	539	542	545	545	544	542	536	537	531	
6	533	541	538	540	543	549	550	547	542	541	537	537	539	544	539	542	546	547	547	545	543	538	544	541	
7*	532	532	538	538	537	539	542	544	539	535	532	533	538	541	544	546	548	548	548	547	547	545	545	541	
8**	542	541	544	550	546	545	554	563	553	551	546	531	533	545	550	551	557	554	554	550	554	540	522	530	
9	533	547	531	528	537	544	535	531	510	516	522	515	513	520	516	515	523	533	531	536	534	525	535	535	
10	548	538	537	537	538	541	541	541	541	538	535	531	525	504	510	519	532	533	537	524	525	525	528	535	
11	535	535	535	536	537	539	542	545	543	541	537	530	525	533	535	536	538	538	539	536	535	535	536	540	
12*	541	538	540	544	549	549	549	547	546	536	539	532	534	532	531	533	535	539	539	537	538	537	538	539	
13	538	541	543	549	551	552	551	556	551	546	537	537	538	532	534	523	522	511	515	527	528	524	519	548	
14**	528	536	539	547	548	549	552	556	556	556	542	529	499	519	527	535	490	453	453	462	488	486	484	506	
15**	521	535	544	540	536	536	526	524	515	510	510	509	518	514	506	514	514	499	493	475	449	459	454	465	
16**	519	522	517	526	527	533	539	536	530	524	517	513	516	524	526	530	502	498	508	507	497	515	511	520	
17**	526	541	534	537	533	537	540	534	525	517	511	502	508	510	500	498	489	506	510	518	526	525	524	539	
18	524	528	531	535	545	534	534	533	525	524	519	513	513	508	515	530	532	533	527	529	530	533	531	531	
19	530	534	535	541	541	544	544	545	536	532	530	528	524	514	506	517	526	535	536	532	532	528	534	536	
20	536	536	535	534	537	539	544	540	539	529	537	529	530	533	536	539	539	540	541	540	541	541	540	537	
21*	536	536	539	537	542	544	546	547	542	536	536	534	531	528	531	536	539	542	544	542	540	540	539	538	
22	536	537	539	539	542	542	546	544	541	539	534	532	536	538	536	533	533	531	536	536	538	542	542	542	
23*	540	540	540	542	543	546	549	549	550	547	541	536	535	537	538	540	542	541	539	538	536	537	539	539	
24	550	543	541	544	547	551	554	553	554	552	546	544	548	546	543	543	544	544	546	546	547	547	543	543	
25	543	545	545	543	547	552	558	563	563	552	546	539	540	546	536	545	542	538	531	537	531	525	535	537	
26	534	535	534	541	545	544	545	548	545	542	539	535	537	538	535	537	539	541	531	535	520	529	535	535	
27	536	542	555	529	532	536	535	535	535	536	526	528	526	532	532	533	534	532	533	543	528	534	535	534	
28	536	533	533	532	532	537	543	543	539	539	538	538	534	514	508	534	545	545	524	534	534	552	526	525	
29	533	535	538	535	539	541	544	544	542	542	541	543	539	537	535	538	539	539	538	538	534	539	536	538	
30	538	542	538	544	545	546	550	542	548	546	541	535	530	530	532	533	539	542	532	520	512	519	532	530	
31	534	531	533	535	542	543	551	537	549	544	539	531	532	536	537	536	541	535	531	541	529	520	525	559	
Mean	535	537	537	538	541	543	545	544	541	537	533	529	529	530	530	533	533	533	531	531	529	530	530	533	
Mean*	538	536	539	540	542	545	546	546	544	539	536	533	534	535	536	539	541	543	543	542	541	539	540	538	
Mean**	527	535	536	540	538	540	542	543	536	532	525	517	515	522	522	526	510	502	504	502	503	505	499	512	

* 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		924	922	924	925	927	928	929	930	931	932	928	928	928	927	935	939	937	935	938	942	939	936	933	931
2**		930	922	914	920	921	921	926	927	929	930	932	933	929	929	933	941	941	948	949	942	943	939	934	928
3		925	927	928	928	927	926	926	929	931	931	931	929	928	931	939	939	936	935	937	934	933	933	934	933
4		933	931	931	932	932	933	934	935	935	936	938	936	931	932	935	936	936	936	936	937	937	937	936	935	935
5		933	932	931	931	931	932	933	934	934	934	934	933	931	933	938	935	935	936	938	939	940	941	945	945
6		941	938	936	935	934	934	934	933	933	929	929	930	932	937	939	941	940	939	938	938	939	940	942	942
7		938	938	936	935	935	935	933	933	933	931	931	928	928	935	938	938	940	938	938	938	940	949	945	942
8		940	940	939	939	938	937	933	932	931	928	933	933	933	934	938	938	943	947	951	950	949	947	942	933
9		933	936	938	933	931	931	933	934	933	931	933	938	938	940	943	948	948	945	948	943	945	937	937	937
10		927	928	929	934	935	935	935	935	935	930	929	933	934	939	941	946	952	947	945	941	940	939	938	935
11		935	935	935	930	932	936	936	935	931	930	934	936	938	942	945	946	947	946	956	953	953	946	946	945
12		936	936	938	939	938	939	938	939	933	932	931	933	935	941	950	952	952	952	950	947	945	942	934	936
13		937	935	932	935	936	938	940	939	939	940	940	939	940	943	945	949	950	948	947	946	945	944	943	940
14		940	930	931	932	935	939	940	940	941	937	938	940	941	944	946	947	946	945	944	944	943	941	941	939
15		934	934	934	934	934	936	936	935	936	936	939	940	939	941	940	940	940	941	942	945	946	943	940	940
16		938	936	936	934	936	937	938	938	937	936	935	936	937	936	937	938	939	945	947	947	944	937	931	930
17		931	929	931	933	936	937	938	938	937	933	936	938	936	936	939	940	942	944	943	943	942	941	940	940
18*		938	937	936	936	936	937	936	936	938	937	941	940	940	940	940	939	939	940	941	941	941	940	940	940
19*		938	937	937	936	936	938	937	938	938	937	935	939	938	939	940	938	938	937	937	939	941	941	940	939
20*		938	935	935	935	935	936	936	937	938	937	936	938	938	939	942	939	939	940	940	939	939	939	938	939
21*		937	936	936	933	932	934	933	933	934	934	934	933	935	935	936	936	937	937	937	936	936	936	936	936
22*		935	932	932	932	932	932	932	931	933	935	936	935	936	939	939	938	938	938	937	937	938	937	938	937
23		937	934	932	932	932	932	932	932	932	931	930	930	925	930	936	936	936	935	935	934	935	937	936	935
24		936	933	932	932	931	931	930	929	928	926	927	930	931	931	937	941	940	940	943	943	939	937	936	938
25**		932	930	931	931	930	930	930	931	932	930	927	935	937	938	942	953	960	958	952	951	942	942	941	939
26**		935	930	929	929	931	933	931	930	931	928	931	932	931	931	937	942	944	946	949	949	942	942	941	933
27**		929	925	925	929	934	936	936	936	934	931	930	931	931	931	943	964	962	959	953	949	947	943	940	930
28**		926	919	926	926	928	933	935	935	934	934	935	934	936	952	948	948	949	947	952	949	945	940	933	926
29		927	924	923	930	932	936	936	936	937	934	935	932	927	932	938	936	936	937	938	937	937	938	936	935
30		930	930	931	930	930	930	931	932	933	932	932	932	932	936	938	939	939	939	939	938	938	938	938	932
31		930	929	929	927	926	929	930	931	932	929	930	933	930	932	937	940	948	944	940	939	937	937	937	937
Mean		934	932	932	932	932	934	934	934	934	933	933	934	934	936	940	942	943	943	943	942	941	940	938	936
Mean*		937	935	935	934	934	935	935	935	936	936	936	937	937	938	939	938	938	938	938	938	939	939	938	938
Mean**		930	925	925	927	929	931	932	932	932	931	931	933	933	936	941	950	951	952	951	948	944	941	938	931
February.	42000 γ + Tabular Quantities (in γ).																								
1		937	933	932	933	933	934	934	934	933	930	927	927	928	931	933	936	937	937	937	937	937	937	938	939
2*		934	932	933	933	933	934	935	934	934	931	930	929	928	927	933	936	936	936	937	937	938	936	936	935
3**		934	932	930	930	930	932	930	928	930	932	936	937	935	941	941	951	957	953	954	954	953	950	932	917
4**		930	929	913	920	931	935	935	938	935	935	931	939	942	947	954	963	961	958	953	948	944	937	940	940
5		934	935	935	935	932	931	930	931	935	937	937	936	938	941	944	947	952	956	953	948	947	942	943	943
6		937	932	931	932	937	939	939	940	940	939	936	939	940	944	952	949	948	946	948	948	947	944	937	935
7		936	936	939	940	939	936	936	936	936	936	936	931	930	932	940	945	945	943	942	945	938	940	941	934
8		933	935	930	933	934	936	936	938	938	935	935	935	938	939	948	951	952	952	946	944	938	937	938	938
9		937	936	937	937	936	937	936	936	936	936	935	933	933	933	938	942	942	944	947	948	945	945	937	933
10**		933	933	930	931	934	938	936	933	933	930	925	926	930	932	937	944	960	953	948	943	939	940	939	934
11**		925	927	932	934	936	936	937	936	935	933	931	929	929	931	931	939	943	949	943	941	943	942	938	933
12		936	937	939	936	935	937	940	942	942	941	938	936	939	942	946	950	953	955	952	949	946	946	942	933
13		932	934	938	941	941	943	942	945	945	944	938	940	945	948	950	952	952	951	952	955	952	949	944	942
14		942	938	931	934	934	936	938	941	943	940	938	939	943	946	951	953	948	946	945	946	950	946	945	941
15		931	933	935	935	936	938	939	939	940	940	940	940	938	937	940	944	947	946	946	946	943	944	944	944
16*		940	937	936	937	938	940	940	940	942	941	938	937	937	938	940	942	942	942	942	942	942	943	943	943
17*		941	939	938	938	938	938	940	941	941	938	936	935	935	937	941	943	943	941	941	940	939	941	942	942
18		941	937	937	936	936	937	937	938	940	940	938	934	933	934	937	938	937	936	936	937	937	941	944	942
19		940	937	937	927	924	928	928	930	934	935	935	930	931	930	933	937	935	935	935	935	935	935	937	936
20		935	934	928	929	929	928	921	926	928	933	934	934	934	934	937	942	945	947	949	944	940	940	940	938
21		938	936	936	936	935	935	934	933	930	930	928	930	930	935	943	944	944	942	940	939	938	937	937	937
22		937	935	934	935	935	934	933	931	931	933	928	923	925	938	952	953	955	958	951	945	942	941	942	939
23**		937	932	930	930	933	935	935	935	935	935	935	935	935	937	937	940	942	940	940	960	957	951	946	943
24		938	938	934	934	935	935	934	932	934	930	928	931	937	942	947	947	947	945	944	942	941	938	937	935
25		934	929	930	931	927	927	932	934	934	934	933	932	936	939	940	945	949	950	947	945	937	938	936	936
26		932	931	931	930	931	933	934	935	935	931	923	923	926	931	933	938	942	942	941	940	938	936	936	935
27*		934	933	933	934	936	936	936	938	936	932	926	922	923	927	933	939	939	939	939	939	937	936	935	934
28*		935	934	934	934	934	934	935	936	935	933	927	922	923	927	931	935	937	937	937	937	936	936	936	935
29		934	934	932	932	932	934	934	935	936	933	930	925	925	926	928	932	934	935	934	936	934	935	935	935
Mean		935	934	933	933	934	935	935	936	936	935	933	932	933	936	940	944	946	945	944	944	942	941	939	937
Mean*		937	935	935	935	936	936	937	938	938	935	931	929	929	931	936	939	939	939	939	939	938	938	938	938
Mean**		932	931	927	929	933	935	935	934	934	933	932	933	934	938	940	947	953	951	948	949	947	944	939	933

* 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*	931	930	930	931	931	932	931	930	930	931	931	928	926	926	928	930	932	933	934	934	933	932	932	932	
2	932	931	929	930	929	929	929	929	928	925	919	917	918	920	922	923	926	932	937	953	957	957	957	947	
3	925	920	923	922	924	928	931	931	926	927	931	931	936	943	942	945	946	946	945	946	942	940	939	928	
4	923	927	928	918	913	923	924	924	926	926	924	925	931	939	941	942	947	948	949	940	936	939	936	937	
5	934	918	921	929	932	932	934	933	937	932	934	929	929	933	937	945	956	955	948	945	943	929	920	927	
6	927	916	922	929	934	934	934	934	934	929	929	929	932	940	944	946	953	947	943	944	941	940	938	928	
7	931	934	935	936	937	937	936	936	935	932	928	925	929	934	941	949	958	958	954	948	946	944	940	924	
8	918	927	928	911	920	921	925	927	928	926	927	928	929	931	934	942	945	952	955	951	944	934	937	937	
9	932	929	925	922	926	932	934	933	933	931	930	928	930	940	941	949	952	959	955	947	945	938	925	932	
10**	934	925	911	919	918	919	925	927	928	922	920	922	933	935	942	951	963	973	965	956	938	932	922	929	
11	906	898	910	919	915	920	922	928	928	926	926	924	926	934	939	947	950	947	948	947	943	937	933	935	
12	929	929	931	933	934	935	935	938	936	932	927	927	928	937	942	947	947	946	945	944	940	938	937	935	
13	934	933	933	932	928	929	929	930	930	928	926	925	925	927	932	938	941	945	947	948	948	947	946	943	
14	941	934	935	936	937	935	932	931	928	922	926	929	932	935	936	940	944	944	944	944	943	943	943	942	
15*	940	937	937	936	936	936	937	938	936	931	928	930	931	937	943	946	947	946	944	943	942	940	940	939	
16*	937	936	935	935	935	937	937	938	935	931	927	925	929	931	936	939	937	939	939	942	946	941	940	939	
17	939	936	935	936	936	937	939	940	939	937	931	928	924	927	931	936	940	940	940	944	948	946	942	940	
18	934	931	925	925	927	929	931	931	931	927	922	920	919	927	930	942	949	955	967	972	952	946	942	940	
19	939	934	934	934	932	935	937	936	934	929	927	923	927	931	935	940	943	941	941	942	943	943	941	940	
20	938	939	938	937	936	936	936	939	935	932	927	923	924	929	935	941	943	943	946	943	939	936	937	939	
21	933	920	915	914	921	925	929	930	929	924	915	913	918	927	936	941	950	951	948	948	946	941	926	929	
22	929	931	930	923	922	926	930	934	936	928	926	931	929	936	937	940	950	951	947	948	944	941	929	924	
23	924	908	917	924	930	935	940	941	939	932	924	924	929	934	940	943	943	943	941	941	939	940	939	931	
24	931	930	927	932	934	936	937	939	934	933	927	924	920	925	930	938	941	941	943	940	939	939	935	929	
25*	931	932	932	933	935	936	939	939	935	928	920	916	920	927	934	937	939	939	936	937	936	936	936	936	
26*	934	934	935	935	936	936	936	937	933	926	920	916	920	923	928	933	935	935	937	936	935	934	934	933	
27	934	934	934	934	934	935	936	937	934	926	922	921	922	924	929	931	934	936	936	942	941	937	936	936	
28**	931	920	920	924	928	932	934	935	931	924	919	920	925	929	930	942	958	987	997	982	962	956	953	944	
29**	934	916	918	924	933	938	941	941	937	933	927	932	940	950	952	964	965	958	965	962	957	939	944	934	
30**	928	917	921	928	933	927	929	929	929	929	930	929	933	940	950	955	959	967	978	964	958	939	929	915	
31**	910	903	919	925	928	922	923	927	927	923	923	934	940	948	956	961	971	977	975	981	950	947	948	943	
Mean	930	926	927	928	930	931	933	934	932	929	926	925	928	933	937	943	947	950	950	949	944	940	937	934	
Mean*	935	934	934	934	935	935	936	936	934	929	925	923	925	929	934	937	938	938	938	938	938	937	936	936	
Mean**	927	916	918	924	928	928	930	932	930	926	924	927	934	940	946	955	963	972	976	969	953	943	939	933	
April.	42000 γ + Tabular Quantities (in γ).																								
1	934	936	934	930	926	932	938	940	937	935	931	927	929	934	941	949	955	952	950	948	947	947	946	943	
2**	915	900	903	905	919	929	929	931	928	926	921	925	932	947	949	953	960	950	950	955	951	945	929	919	
3	925	933	934	929	927	932	933	937	936	930	925	926	937	939	944	951	951	952	963	954	951	946	944	938	
4	924	933	936	934	933	936	940	938	933	927	927	926	934	939	946	948	956	957	956	952	952	951	947	927	
5	923	921	919	923	922	916	927	932	934	931	928	926	930	937	952	959	964	962	956	952	949	938	936	937	
6	930	930	933	935	929	926	935	936	933	928	921	918	923	931	942	947	955	964	961	950	945	945	937	937	
7**	934	927	917	916	925	931	930	934	931	929	925	929	931	939	965	958	955	955	957	955	950	948	944	922	
8	915	916	928	933	935	936	938	941	940	936	927	920	920	927	940	958	957	952	953	954	951	947	944	939	
9	938	938	933	931	934	936	940	939	936	933	928	925	929	937	943	946	950	956	956	952	950	945	944	943	
10	938	933	935	935	935	937	940	940	940	934	925	924	925	931	938	944	948	949	950	949	949	942	942	941	
11	937	937	940	941	943	944	947	948	942	937	935	931	929	934	939	944	948	949	949	949	947	947	944	940	
12*	933	936	937	939	936	940	943	944	943	940	934	928	926	932	936	941	944	946	949	947	947	945	944	943	
13**	942	940	940	940	940	941	943	944	941	933	925	916	916	922	930	939	956	961	956	952	952	947	934	933	
14	934	924	924	925	923	933	936	940	939	936	928	923	922	925	935	944	951	956	961	952	946	945	944	942	
15	941	929	922	921	925	937	941	946	944	938	926	923	920	925	935	940	944	944	944	946	947	940	940	940	
16	941	940	940	937	936	937	942	944	942	938	930	926	927	930	935	944	945	947	945	944	943	942	941	941	
17	930	930	929	930	933	935	937	937	937	937	930	923	921	930	938	941	944	944	947	945	944	943	933	933	
18	932	924	920	923	923	928	933	935	938	932	931	936	935	942	950	964	965	966	957	949	948	943	928	934	
19*	934	937	937	936	938	938	940	940	938	933	928	925	925	931	938	939	938	939	940	940	941	943	942	939	
20*	937	937	938	938	938	938	940	939	934	926	925	921	924	929	935	940	943	942	941	940	939	940	940	940	
21*	938	938	939	938	940	940	940	940	940	935	927	923	923	928	934	937	942	946	946	942	940	939	940	938	
22	938	938	939	938	940	940	939	938	935	925	914	911	913	919	932	944	958	959	952	947	947	945	937	933	
23**	933	935	937	932	929	931	934	933	931	922	922	918	927	936	946	950	948	954	957	952	947	937	927	928	
24**	925	918	910	913	923	929	928	928	923	919	920	918	924	925	929	936	939	948	964	958	950	947	940	920	
25	916	910	914	928	934	935	935	932	931	927	926	922	923	927	933	941	947	963	971	968	961	947	931	928	
26	916	904	909	910	914	920	927	929	929	924	923	927	930	934	936	944	950	959	967	958	952	948	938	934	
27	930	925	920	923	928	924	928	929	931	928	929	926	927	933	937	944	950	951	957	963	955	949	944	931	
28	931	935	927	927	928	933	938	943	941	941	935	928	929	935	942	947	951	957	956	954	944	940	942	940	
29	936	933	933	936	940	941	941	940	936	933	933	929	929	935	942	945	950	954	956	957	949	949	943	938	
30*	941	942	941	939	937	936	939	939	941	933	929	930	930	934	937	939	943	949	949	949	947	946	945	944	
Mean	931	929	929	930	931	934	937	938	936	932	927	924	926	932	940	946	950	953	954	951	948	945	940	936	
Mean*	937	938	938	938	938	938	940	940	939	933	929	925	926	931	936	939	942	944	945	944	943	943	942	941	
Mean**	930	924	921	921	927	932	933	934	931	926	923	921	926	934	944	947	952	954	957	954	950	945	935	924	

*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	944	941	936	935	938	939	942	940	938	932	919	916	919	927	932	938	944	947	947	947	947	948	949	946	
2	943	935	935	938	944	945	947	945	944	944	948	938	932	933	937	937	941	946	945	947	949	950	935	922	
3	906	898	901	907	916	914	920	920	926	922	923	925	934	937	940	945	950	954	955	951	948	942	942	942	
4**	937	927	931	935	939	942	942	937	931	925	924	925	929	928	931	936	945	960	953	954	945	930	938	933	
5**	925	923	925	932	937	939	938	938	935	931	920	918	921	926	938	954	970	969	962	954	948	943	933	934	
6	936	938	935	932	920	920	922	928	929	925	921	922	928	935	941	949	951	952	951	955	949	946	944	940	
7	935	937	936	936	934	937	942	940	935	931	924	921	922	928	936	942	945	945	947	945	945	942	940	937	
8*	937	936	936	941	942	943	945	942	935	924	922	921	922	926	931	938	942	944	945	943	943	943	942	938	
9*	939	940	940	941	943	944	944	941	938	933	925	922	923	926	934	942	947	945	944	941	939	938	938	937	
10	937	937	937	938	941	941	941	938	936	930	927	928	928	931	936	940	940	943	945	944	944	941	939	936	
11	923	922	929	932	935	933	933	929	926	920	919	918	917	925	932	939	945	948	950	948	945	943	942	940	
12	935	932	933	937	939	939	939	938	935	927	920	920	927	934	939	939	941	945	948	946	943	943	941	938	
13	937	937	934	930	927	922	927	927	923	919	914	910	915	927	937	941	945	948	951	952	945	944	941	940	
14	934	932	929	925	930	937	938	940	934	927	922	921	920	925	929	936	944	949	949	946	944	942	937	935	
15	932	927	925	927	932	937	937	934	929	929	927	929	932	938	946	952	951	953	957	951	949	945	945	944	
16	942	939	939	939	933	925	924	927	927	926	926	926	924	928	936	940	945	947	949	951	950	948	947	946	
17	942	938	938	940	943	943	939	939	937	934	925	915	919	926	937	942	946	949	950	950	947	946	943	942	
18*	939	941	941	940	939	939	942	939	936	935	933	931	933	936	933	940	950	952	949	947	943	941	942	943	
19*	938	938	938	940	942	942	940	937	934	931	930	926	926	934	938	942	946	946	943	943	942	941	941	941	
20*	939	939	940	940	942	942	940	942	940	934	930	927	928	930	930	933	937	942	945	945	942	940	939	939	
21	939	939	939	939	937	939	939	936	929	923	921	925	925	931	936	943	950	956	961	956	950	947	945	941	
22	940	938	933	937	941	943	942	935	932	925	921	925	932	939	948	949	949	950	948	947	945	942	942	942	
23	941	942	941	942	946	947	945	940	934	929	923	922	923	930	931	940	945	955	959	960	958	949	934	933	
24	936	940	941	941	938	937	940	938	935	930	923	921	928	935	940	942	945	948	947	944	942	942	942	939	
25**	923	919	928	936	937	935	927	930	935	933	925	925	929	935	941	947	954	961	956	953	949	947	944	937	
26	934	925	928	934	936	936	937	934	930	928	926	921	918	924	928	930	935	942	945	946	946	942	939	926	
27	926	926	929	932	933	931	931	934	931	927	922	921	919	926	935	943	947	951	949	946	945	941	936	934	
28	930	929	928	925	924	926	932	934	929	927	924	924	925	924	932	938	944	948	955	957	952	945	938	932	
29**	935	934	933	930	933	932	931	933	930	925	919	918	921	947	978	998	1008	998	995	983	961	938	912	902	
30**	915	862	831	801	785	818	858	899	927	941	946	947	946	949	951	956	958	960	965	972	968	962	959	953	
31	949	944	944	944	945	946	946	945	947	944	940	938	939	941	946	952	953	951	951	958	956	953	952	951	
Mean	934	934	930	931	931	933	935	935	933	929	926	924	926	932	938	941	949	952	952	951	948	944	941	938	
Mean*	938	939	939	940	942	942	942	940	937	931	928	925	926	930	933	939	944	946	945	944	942	941	940	940	
Mean**	927	913	910	907	906	913	919	927	932	931	927	927	929	937	948	958	967	970	966	963	954	944	937	932	
June.	42000 γ + Tabular Quantities (in γ).																								
1	950	949	950	950	952	951	950	948	947	945	942	942	942	942	948	954	957	955	952	950	950	951	951	950	
2	950	949	948	946	945	943	943	940	936	927	927	926	930	938	943	946	948	950	950	948	949	947	947	946	
3*	946	944	943	944	947	947	949	947	941	933	926	924	928	937	945	951	956	950	950	949	949	947	946	945	
4*	946	945	945	947	947	945	944	939	934	930	919	912	915	920	932	939	945	946	947	945	946	944	944	943	
5	941	943	941	941	945	944	943	940	935	927	923	921	925	930	934	939	942	947	947	946	943	942	941	940	
6	941	941	941	942	944	945	943	937	934	927	923	921	926	928	933	939	942	946	946	945	942	940	940	939	
7	940	940	941	941	941	939	939	939	937	933	929	928	928	931	938	942	949	954	954	949	946	944	942	940	
8**	933	928	933	933	937	940	940	937	932	930	927	921	926	932	940	946	952	951	947	948	949	945	941	928	
9**	913	917	919	921	930	936	939	942	937	932	924	921	922	931	938	945	950	953	953	955	955	944	941	941	
10**	938	931	929	932	928	930	935	934	936	934	929	925	930	937	942	945	953	958	958	956	950	947	942	930	
11**	931	934	935	936	940	941	942	940	938	937	930	928	930	938	944	953	955	956	952	949	946	945	943	941	
12	939	935	934	937	940	942	941	940	940	935	929	933	937	941	945	944	949	947	950	952	951	949	948	946	
13	944	943	938	940	942	943	945	945	941	934	925	929	933	935	943	947	947	950	949	949	949	946	944	942	
14	941	942	942	942	944	946	944	940	938	937	935	935	946	[945]	944	937	941	942	944	946	943	941	940	937	
15*	937	936	937	937	940	940	941	940	935	928	923	919	923	930	938	940	942	944	944	943	942	942	942	942	
16	940	939	940	941	942	944	943	942	936	928	924	924	926	927	934	939	943	945	942	939	941	939	939	939	
17	940	940	939	940	942	941	935	932	930	925	922	915	913	920	929	936	941	944	941	941	940	939	939	939	
18	939	939	939	940	941	938	934	933	928	926	926	927	934	939	941	942	945	947	945	943	941	939	938	938	
19	935	932	934	936	938	940	937	935	930	918	910	912	919	928	934	940	940	937	935	934	936	935	937	938	
20**	938	936	936	933	936	938	938	937	931	921	919	918	918	924	939	955	966	964	970	967	958	951	946	941	
21	940	942	942	943	945	946	944	941	931	924	920	918	920	922	928	934	942	952	950	947	945	942	940	934	
22	932	933	936	935	936	934	930	930	927	922	924	924	931	934	937	942	945	947	951	955	950	945	944	941	
23	938	928	933	933	933	938	938	938	936	933	928	924	925	931	939	945	949	950	951	949	946	944	941	939	
24	939	940	938	940	942	944	940	939	933	928	920	919	922	926	935	939	947	945	946	948	947	944	941	940	
25	938	939	939	940	941	942	944	942	937	930	926	921	919	921	928	934	939	945	948	947	945	941	940	939	
26	938	935	935	937	938	939	938	935	930	922	909	906	917	923	933	935	938	942	944	947	944	942	941	940	
27*	938	936	935	936	938	940	939	938	939	935	928	923	923	930	940	944	946	947	947	945	944	941	940	940	
28*	940	939	939	940	942	942	942	942	940	935	928	926	928	929	937	940	940	940	939	936	938	939	940	939	
29	938	938	938	938	940	940	940	941	940	938	928	924	927	930	939	940	942	944	942	942	941	940	940	940	
30	939	938	938	940	941	941	938	940	936	927	920	916	919	925	932	940	943	942	945	944	942	940	940	939	
Mean	939	938	938	939	941	941	941	939	936	930	925	923	926	931	938	942	947	948	948	947	946	943	942	940	
Mean*	941	940	940	941	943	943	943	941	938	932	925	921	923	929	938	943	946	945	945	944	944	943	942	942	
Mean**	931	929	930	931	934	937	939	938	935	931	926	923	925	932	941	949	955	956	956	955	952	946	943	936	

* 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	938	938	938	939	940	940	940	941	942	938	932	926	920	927	938	942	944	946	942	940	939	939	940	938	
2	938	938	938	938	938	940	938	938	930	921	919	916	920	926	933	940	944	947	944	941	940	939	938	938	
3*	938	937	938	938	940	938	940	944	941	932	925	922	926	927	933	939	944	946	942	939	937	935	935	935	
4	935	935	936	938	940	941	938	938	933	924	916	911	913	924	934	939	941	942	940	935	933	933	933	931	
5**	933	933	933	933	932	932	930	931	928	916	910	907	907	912	920	928	935	943	947	954	952	946	938	936	
6**	935	935	936	936	935	931	933	929	928	934	931	931	932	939	949	962	960	959	953	951	948	943	940	934	
7**	926	929	935	932	933	933	937	940	936	937	935	932	930	932	937	944	950	955	956	954	949	944	941	940	
8**	933	932	932	936	937	940	940	938	932	932	928	921	927	932	939	946	952	956	956	954	950	942	935	932	
9	934	931	931	936	940	942	943	944	942	935	931	930	932	937	937	943	947	954	953	952	949	947	943	939	
10	937	931	926	929	936	938	938	937	933	929	929	931	933	937	940	942	945	950	949	950	948	943	937	938	
11	937	938	938	938	940	936	937	938	938	932	922	910	916	923	931	938	944	945	948	948	947	945	943	939	
12	936	937	938	939	941	940	940	941	941	933	933	923	925	931	936	943	946	945	947	949	948	944	942	941	
13*	941	939	939	939	943	943	941	939	940	939	933	930	925	923	926	934	944	946	946	945	944	943	942	940	
14*	941	940	939	938	943	944	942	941	936	930	927	926	925	927	936	942	946	949	948	945	944	942	943	940	
15	939	939	940	941	945	947	947	945	941	934	927	922	925	930	937	944	947	946	944	942	942	941	940	940	
16**	938	938	940	940	941	939	936	936	936	929	922	918	924	930	938	951	956	956	949	946	946	949	947	943	
17	938	938	942	943	944	943	940	940	942	937	934	931	933	941	941	940	944	947	946	945	945	943	944	944	
18	944	944	944	943	943	945	944	942	942	936	928	926	932	934	939	947	951	955	958	953	946	943	943	941	
19	942	942	942	942	944	941	937	934	930	923	921	923	923	925	931	941	944	947	945	943	942	941	938	937	
20	937	938	939	938	939	941	941	937	932	927	920	916	926	933	940	950	953	952	949	945	942	940	939	938	
21	934	934	934	939	941	942	941	939	939	933	928	920	921	924	930	940	947	949	947	946	942	942	941	940	
22	937	935	937	939	941	943	942	942	941	933	927	(926)	925	929	932	937	942	946	947	949	947	946	937	936	
23	936	936	938	938	941	941	943	944	935	931	926	924	926	930	934	942	946	946	944	944	941	942	938	936	
24	937	937	935	938	939	939	940	940	940	939	932	927	925	932	936	937	938	941	946	951	946	944	943	941	
25	938	938	937	939	942	943	944	945	943	939	930	928	929	927	929	936	937	940	941	941	941	941	940	939	
26	939	938	936	932	936	938	942	939	939	939	937	930	925	925	932	937	942	949	948	948	945	943	942	939	
27	939	939	939	938	940	940	942	940	941	939	938	932	933	935	943	948	952	953	951	949	947	947	942	939	
28*	939	938	937	938	942	941	942	944	939	923	919	919	923	928	938	941	943	944	943	942	940	940	940	939	
29*	938	938	936	938	941	942	943	944	943	936	925	924	922	925	935	939	943	944	945	938	937	936	937	937	
30	937	936	936	937	939	939	940	940	936	928	921	918	923	927	930	934	936	939	939	939	938	937	937	934	
31	936	934	932	930	930	930	932	934	934	937	929	925	927	930	939	948	953	956	955	951	944	943	943	942	
Mean	937	937	937	938	940	940	940	940	937	932	927	923	925	929	935	942	946	948	947	946	944	942	940	938	
Mean*	939	938	938	938	942	942	942	942	940	932	926	924	924	926	934	939	944	946	945	942	940	939	939	938	
Mean**	933	933	935	935	936	935	935	935	932	930	925	922	924	929	937	946	951	954	952	952	949	945	940	937	
August.	42000 γ + Tabular Quantities (in γ).																								
1	942	939	937	938	942	943	944	944	940	937	928	923	920	927	937	944	955	963	968	961	953	946	937	933	
†2**	934	937	923	932	939	939	940	940	942	937	927	—	—	—	—	—	—	—	—	—	—	—	—	—	
†3**	—	—	—	—	—	—	—	—	—	—	—	924	927	937	943	950	958	961	953	949	946	944	937	933	
4	920	927	931	935	932	932	934	937	934	933	928	926	927	938	944	951	953	954	949	944	942	940	941	938	
5	938	938	939	939	940	937	936	937	934	924	927	926	927	933	940	944	948	950	949	949	945	941	937	934	
6	930	927	932	934	939	942	942	944	943	938	928	923	924	930	938	946	948	953	952	948	945	943	940	937	
7	937	937	938	939	941	942	940	944	939	934	930	923	920	923	929	936	937	944	946	944	943	940	941	938	
8	937	938	938	938	941	941	944	943	939	935	932	932	929	933	937	940	940	946	950	950	946	944	941	939	
9	938	938	939	940	943	942	940	938	939	937	937	938	934	934	944	950	948	950	949	948	946	945	944	943	
10*	942	941	940	940	943	945	946	944	944	936	931	926	927	931	935	940	946	945	946	944	943	941	942	941	
11	939	938	938	938	942	942	945	945	940	931	925	923	921	926	937	944	946	946	942	940	941	941	942	938	
12	933	929	927	929	924	932	936	936	932	928	924	919	917	924	936	947	949	949	945	943	944	944	945	945	
13	942	939	939	936	937	941	941	936	937	935	932	928	929	936	943	945	948	953	956	953	949	948	943	941	
14	942	941	940	940	941	940	941	940	933	924	920	923	921	923	932	938	939	939	936	937	938	938	939	937	
15	937	937	936	936	938	937	936	938	937	931	924	920	920	928	936	943	946	945	942	939	937	937	938	939	
16*	937	938	939	937	938	937	936	939	935	930	922	920	930	937	942	945	945	944	942	939	937	935	937	937	
17*	937	936	937	935	937	938	937	935	930	925	919	918	920	925	929	934	941	942	941	940	937	938	938	936	
18*	936	937	935	937	937	938	937	936	934	928	921	917	920	928	938	943	945	942	940	938	937	935	936	933	
19*	935	936	936	937	939	940	938	936	933	929	922	919	921	927	936	941	943	941	941	940	938	938	938	937	
20	937	938	938	937	941	941	941	939	937	932	928	926	927	930	934	938	943	942	942	941	938	935	935	934	
21	932	930	934	932	933	935	933	934	931	926	920	918	919	928	933	939	943	949	951	944	940	939	938	934	
22	928	929	933	937	940	942	942	941	938	931	920	918	923	931	940	945	951	952	954	950	944	940	940	939	
23	938	939	939	939	941	940	941	941	936	930	927	931	932	930	938	947	946	941	941	938	938	939	937	937	
24	936	935	937	936	939	942	941	942	938	933	926	923	920	922	933	939	941	945	947	945	942	942	940	939	
25	936	935	935	937	939	940	942	941	938	931	925	923	917	927	935	941	941	943	938	937	938	937	936	935	
26	932	931	932	934	934	935	936	936	934	931	924	920	922	931	938	941	939	936	935	934	934	935	934	932	
27**	931	930	930	930	931	931	930	926	925	924	920	925	928	931	937	954	956	966	967	956	951	944	925	918	
28**	921	918	874	891	916	919	919	916	919	920	926	926	928	935	945	961	977	974	971	953	946	944	943	931	
29**	919	930	933	933	932	933	936	936	939	939	939	934	934	945	956	963	972	969	965	956	944	946	924	929	
30	932	930	918	920	932	935	938	939	934	932	929	925	935	946	951	965	973	964	965	955	94[illegible]	941	942	938	
31	932	934	940	942	941	942	943	943	940	935	934	934	938	942	950	956	958	956	951	948	945	942	939	940	
Mean	934	934	933	934	937	938	939	938	936	931	927	924	925	931	939	946	949	950	949	945	942	941	938	936	
Mean*	937	938	937	937	939	940	939	938	935	930	923	920	924	930	936	941	944	943	942	940	938	937	938	937	
Mean**	924	926	912	918	926	928	928	926	928	928	928	928	930	937	946	959	968	970	968	955	947	945	931	926	

* Denotes an International Quiet Day. ** Denotes an International Disturbed Day.
† August 2 and 3 have been omitted in computing the means for Disturbed Days.

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	942	943	942	939	942	942	941	940	937	934	930	930	(936)	(942)	948	950	953	953	948	943	943	942	942	941	
2	933	932	936	937	939	939	939	939	940	937	933	932	934	943	952	953	956	952	947	945	944	944	941	940	
3*	941	942	943	944	945	945	946	946	941	935	930	930	935	937	943	948	951	949	946	946	944	943	943	941	
4	942	942	943	944	944	944	947	947	944	939	937	937	942	945	949	952	951	949	946	945	945	944	938	933	
5	938	940	940	941	943	944	946	946	945	940	933	932	932	938	943	952	958	950	946	943	941	941	940	940	
6**	939	940	940	938	936	934	934	937	940	937	934	928	929	941	972	987	998	981	971	969	959	948	945	944	
7	944	945	947	947	949	949	949	950	948	944	939	936	936	937	943	948	950	950	950	952	950	948	941	939	
8**	940	940	940	927	911	927	928	932	933	934	928	930	934	939	940	942	945	950	955	953	950	949	946	945	
9	938	935	933	929	932	938	939	941	939	938	936	933	936	939	941	945	949	951	949	948	949	947	946	945	
10*	943	943	943	943	944	944	944	942	937	934	929	929	931	934	938	942	944	943	942	943	943	942	941	941	
11*	939	941	941	941	941	942	941	942	939	935	931	932	934	936	936	935	935	936	937	938	939	942	942	942	
12	942	941	940	940	940	938	938	940	940	935	931	931	932	934	937	940	940	938	938	938	938	940	941	941	
13	940	940	939	938	938	936	938	936	933	930	926	924	928	933	938	938	938	937	936	937	938	938	939	938	
14	939	940	938	939	939	938	936	935	931	927	921	919	927	933	938	941	941	939	937	939	939	940	939	939	
15	940	940	940	940	940	941	943	943	940	936	929	925	928	936	944	947	948	944	940	938	938	937	941	943	
16*	940	940	940	940	940	941	942	941	936	928	921	919	924	928	936	942	943	940	938	938	938	937	937	938	
17*	938	939	939	939	940	941	943	942	934	928	926	928	931	936	942	944	943	940	940	943	942	942	942	941	
18	937	939	941	941	941	942	942	941	939	934	931	929	929	931	936	944	948	948	946	946	944	944	941	929	
19	934	926	925	932	938	941	940	940	938	937	937	938	937	941	948	956	965	960	956	955	954	950	933	938	
20	940	941	928	924	926	925	929	930	936	935	930	928	932	939	946	951	953	951	948	946	945	944	943	938	
21	936	930	934	933	934	937	937	939	941	938	932	931	929	933	938	943	945	945	946	945	946	944	941	934	
22	934	936	936	936	935	927	930	932	931	927	927	926	931	936	938	944	952	956	950	949	947	944	938	935	
23**	937	938	936	936	936	938	938	938	935	937	935	937	941	944	946	959	976	982	986	977	963	942	940	935	
24**	934	937	936	936	943	936	936	937	936	932	929	932	936	938	948	970	977	961	960	964	948	950	941	922	
25**	927	925	915	913	928	929	933	937	940	939	939	940	944	955	975	985	979	982	977	968	956	947	931	939	
26	940	935	932	939	943	942	940	942	941	935	931	937	939	940	943	946	948	947	947	947	951	945	941	938	
27	933	920	926	935	940	942	944	945	942	935	933	934	939	947	951	958	960	955	952	951	949	947	947	945	
28	943	943	943	943	942	942	940	940	940	939	937	939	940	945	948	949	954	951	949	948	947	947	946	946	
29	946	941	938	941	942	941	941	941	938	933	930	931	937	941	943	944	946	942	947	948	942	944	945	942	
30	936	934	936	936	938	938	940	941	941	936	928	927	931	939	947	952	950	948	947	944	944	946	937	938	
Mean	939	938	937	937	938	939	940	940	939	935	931	931	934	939	945	950	953	951	949	948	946	944	941	939	
Mean*	940	941	941	941	942	943	943	943	937	932	927	928	931	934	939	942	943	942	941	942	941	941	941	941	
Mean**	935	936	933	930	931	933	934	936	937	936	933	933	937	943	956	969	975	971	970	966	955	947	941	937	
October.	42000 + Tabular Quantities (in γ).																								
1	940	938	938	941	943	942	942	941	937	935	932	931	935	941	946	947	948	946	946	946	944	943	939	940	
2	941	940	940	940	941	940	938	937	934	928	923	925	930	936	945	944	946	945	943	946	945	942	941	941	
3	936	932	935	932	935	937	938	937	932	931	934	936	935	937	941	946	949	949	948	945	943	943	944	942	
4	941	937	937	936	938	941	943	942	940	936	931	932	935	938	941	943	946	947	947	947	945	944	944	943	
5	942	939	936	938	939	940	941	942	940	936	932	929	927	931	937	943	945	945	945	944	943	942	940	936	
6*	933	931	933	937	938	940	942	944	944	942	933	925	923	926	932	938	939	939	941	941	941	941	940	939	
7	937	931	936	937	938	939	941	942	942	940	936	930	930	931	936	939	942	940	941	941	942	941	941	939	
8	937	938	937	937	938	938	939	941	941	938	934	932	930	929	932	937	941	942	943	949	950	948	946	943	
9	943	937	938	937	937	937	938	939	939	937	931	928	927	928	935	943	945	940	940	940	942	943	943	941	
10	932	935	936	936	935	935	937	940	943	942	937	931	932	935	942	950	955	952	947	946	944	940	941	941	
11	941	937	937	937	938	938	939	942	945	943	938	935	936	939	943	945	943	941	941	941	943	941	939	936	
12	938	935	936	937	937	939	941	941	944	944	941	937	936	937	937	942	943	943	941	943	945	944	943	943	
13*	941	941	941	939	939	940	939	941	941	939	938	933	933	933	940	943	945	943	943	942	938	942	941	939	
14*	938	939	939	939	938	938	937	938	938	932	924	922	924	926	932	937	938	939	938	936	936	938	937	936	
15**	936	935	935	934	930	929	927	927	928	929	930	934	941	947	960	980	986	994	979	964	957	954	945	931	
16**	927	930	927	932	936	930	929	928	930	930	924	930	937	942	948	957	956	956	949	947	946	945	944	944	
17	938	931	934	938	940	943	943	945	943	942	936	932	934	941	952	952	957	959	957	956	951	942	943	943	
18	934	933	936	941	944	946	947	948	946	941	935	933	937	941	944	948	948	950	950	947	946	946	944	942	
19	940	941	942	945	942	942	942	942	941	940	939	936	940	949	950	953	952	951	952	950	948	947	946	945	
20**	945	944	943	944	945	946	946	947	947	944	940	936	938	943	946	957	971	984	985	979	967	962	941	935	
21**	926	908	907	908	920	928	932	939	942	944	951	948	952	958	959	961	961	959	956	956	956	954	953	951	
22	950	949	948	949	948	949	950	952	951	946	941	941	946	950	953	958	963	965	968	970	955	948	950	944	
23**	940	938	935	938	937	938	941	943	941	938	937	942	943	945	952	965	966	966	957	957	951	950	945	942	
24	943	945	944	944	941	943	943	945	945	946	945	942	945	951	953	956	956	954	954	953	947	946	947	947	
25	947	946	945	944	944	946	945	946	947	946	944	943	949	955	961	965	963	956	954	953	954	953	952	951	
26*	950	947	948	947	946	947	947	949	950	947	946	944	946	949	953	954	952	952	951	950	950	950	951	950	
27	949	948	947	945	945	945	945	945	946	944	940	941	946	951	954	959	957	956	954	953	955	957	956	954	
28*	949	945	946	946	945	945	946	947	946	943	941	940	942	945	948	949	947	946	945	945	944	944	945	945	
29	946	945	945	943	942	941	940	940	939	937	935	935	936	940	944	945	944	942	940	939	940	941	936	939	
30	942*	941	942	940	938	938	937	934	936	935	928	926	931	936	946	953	953	949	947	945	945	942	940	941	
31	943	939	940	941	943	944	942	941	940	939	938	940	946	950	952	952	951	949	947	946	945	944	943	943	
Mean	940	938	938	939	939	940	941	942	941	939	936	935	937	941	946	950	952	952	950	949	947	946	944	942	
Mean*	942	941	941	942	941	942	942	944	944	941	936	933	934	936	941	944	944	944	944	943	942	943	943	942	
Mean**	935	931	929	931	934	934	935	937	938	937	936	938	942	947	953	964	968	972	965	961	955	953	946	941	

* 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**	944	942	941	940	935	928	929	934	935	934	928	928	934	937	943	947	949	950	949	949	949	948	946	946
2	942	938	938	940	943	946	946	948	946	943	941	942	945	948	949	950	951	951	950	950	948	947	946	946
3	946	945	945	946	946	946	946	947	947	943	943	941	941	945	949	951	950	950	949	949	949	948	948	947
4	946	944	945	945	945	942	944	946	948	947	941	939	939	943	947	948	948	951	954	955	958	956	951	946
5	945	947	944	940	942	945	948	949	949	947	945	944	945	948	950	952	952	954	953	952	952	952	951	948
6*	947	946	945	946	946	947	947	948	949	947	945	944	946	948	950	949	948	947	947	947	948	948	947	945
7	944	942	942	943	943	945	945	946	947	944	942	941	945	949	950	949	949	952	951	949	949	949	948	947
8	946	945	945	944	944	945	945	946	947	944	939	938	941	944	946	946	946	945	946	944	944	943	942	942
9*	940	940	941	941	942	944	943	947	946	944	940	938	943	943	945	945	943	943	943	944	944	944	943	943
10*	943	943	941	941	940	942	940	944	944	944	941	939	939	943	946	946	945	945	943	942	943	942	940	941
11	941	940	939	940	939	940	939	940	940	937	933	930	933	939	942	942	942	941	940	941	942	942	942	942
12	943	942	941	941	940	941	940	940	941	939	938	937	940	946	951	952	953	953	952	950	949	948	946	946
13	946	946	945	942	939	940	940	941	940	940	938	940	942	948	951	951	953	951	949	949	947	948	946	944
14**	945	945	944	944	945	945	944	942	942	944	938	937	939	953	955	960	962	961	956	951	950	948	941	934
15**	940	943	945	946	945	946	944	944	943	939	937	941	944	949	951	950	949	950	951	946	944	944	944	943
16**	942	942	940	933	927	927	924	926	928	932	932	937	943	951	959	973	970	971	969	959	957	948	942	934
17**	936	944	945	946	946	947	946	946	947	949	947	949	951	962	966	961	958	957	956	956	950	942	941	943
18	945	944	946	946	946	947	947	947	945	945	944	943	942	947	951	953	958	955	954	955	953	944	943	944
19	945	945	943	943	945	946	947	946	947	945	943	942	946	949	954	956	958	956	955	955	954	952	951	947
20	942	942	943	946	946	946	946	946	946	943	943	946	946	947	949	953	953	952	952	951	950	948	948	943
21	942	943	943	944	944	945	946	944	945	942	942	944	946	947	948	949	951	950	948	948	948	948	947	946
22*	945	944	943	943	944	946	945	945	947	948	947	945	945	948	951	951	950	950	949	948	948	947	946	946
23	945	947	047	945	945	947	945	944	947	947	944	942	942	942	944	946	947	948	947	947	946	946	946	945
24*	944	945	944	942	942	944	943	943	943	942	941	941	942	944	945	944	944	944	944	944	944	944	945	944
25	943	943	942	941	941	941	938	937	938	937	939	939	939	940	942	944	946	946	946	944	944	945	947	947
26	944	944	944	944	943	944	944	944	946	947	946	945	948	949	949	949	949	948	947	946	946	946	946	946
27	947	947	947	946	945	943	943	944	944	944	944	945	948	950	952	952	951	950	949	949	949	947	947	947
28	946	945	946	946	945	945	944	940	940	939	939	938	939	945	950	950	951	954	950	947	945	944	944	943
29	943	944	941	940	941	942	940	940	939	939	941	945	947	947	951	956	959	958	955	954	951	948	946	945
30	944	945	946	945	946	947	946	945	945	942	936	940	942	944	948	949	951	950	949	948	947	946	946	946
Mean	944	944	943	943	943	943	943	943	944	943	941	941	943	947	950	951	951	951	950	949	948	947	946	944
Mean*	944	944	943	943	943	945	944	945	946	945	943	941	943	945	947	947	946	946	945	945	945	945	944	944
Mean**	941	943	943	942	940	939	937	938	939	940	936	938	942	950	955	958	958	958	956	952	950	946	943	940
December.	42000 γ + Tabular Quantities (in γ).																								
1	945	945	946	945	944	946	945	943	944	943	940	941	942	946	947	947	950	952	952	952	949	948	947	946
2	947	946	947	946	946	948	947	946	947	946	943	944	945	947	949	950	950	949	949	950	956	952	948	947
3	947	946	945	945	944	947	948	946	947	945	944	944	945	949	951	951	950	950	949	949	949	950	949	948
4	945	942	941	941	944	946	947	946	947	947	944	944	945	949	948	948	950	950	949	948	948	947	947	947
5*	945	944	943	944	944	945	945	944	945	941	941	941	943	945	945	945	945	946	946	945	945	945	947	945
6	945	942	941	942	941	944	943	942	942	941	939	939	942	943	943	943	943	945	943	943	943	944	944	942
7*	942	941	941	941	941	942	942	942	942	938	938	939	941	944	944	944	943	943	943	942	942	943	943	943
8**	942	942	941	939	938	938	937	935	936	937	937	938	944	943	943	943	942	941	942	941	939	942	945	944
9	941	931	933	936	936	937	936	937	942	944	944	945	947	950	951	955	955	951	949	949	947	946	946	944
10	943	936	937	937	939	940	940	939	941	941	940	941	944	948	952	953	951	949	947	947	948	948	948	946
11	945	944	943	943	943	943	942	942	940	940	939	939	940	943	944	945	945	944	943	943	943	944	943	941
12*	940	940	940	940	939	939	938	937	936	937	938	937	947	946	946	948	947	948	947	948	945	944	943	942
13	942	942	942	942	942	942	942	941	943	943	940	937	937	941	947	948	951	959	960	956	955	954	956	947
14**	944	945	945	945	945	946	944	942	939	940	939	938	945	951	953	956	962	991	997	997	985	962	956	952
15**	934	924	918	914	911	921	930	937	942	945	942	947	950	953	962	961	961	962	967	980	975	978	973	967
16**	961	930	939	941	940	943	943	943	945	947	949	949	950	952	956	958	959	956	968	967	971	965	960	956
17**	954	943	945	946	946	947	946	945	946	945	945	944	950	958	964	971	973	972	967	968	960	956	955	949
18	947	948	948	944	945	945	947	948	947	947	947	949	952	956	963	962	959	957	956	956	955	953	952	950
19	950	950	950	948	949	951	950	950	950	949	947	947	948	952	959	960	961	957	955	954	955	954	952	950
20	947	946	944	946	947	949	949	948	948	946	946	946	946	949	951	952	952	951	951	951	951	950	949	948
21*	948	948	946	946	947	948	948	948	949	947	945	946	944	947	949	950	951	951	951	949	949	949	948	947
22	945	945	945	945	946	947	948	948	948	948	947	946	946	947	948	948	950	951	951	950	951	950	949	949
23*	946	946	946	946	945	946	946	946	945	944	942	943	945	947	949	948	948	948	948	949	950	951	951	949
24	946	943	944	944	944	945	944	944	944	944	943	943	944	946	947	948	947	947	947	948	948	947	947	947
25	946	945	944	944	944	944	943	941	940	939	939	943	945	947	950	950	948	949	950	952	952	955	953	952
26	947	946	943	943	943	942	943	943	944	944	945	946	950	951	951	951	951	950	951	951	954	955	954	953
27	951	948	937	938	942	944	945	945	945	943	943	945	946	950	952	953	953	952	952	950	950	951	951	951
28	952	950	950	950	950	950	947	944	942	945	944	940	943	946	952	957	955	952	952	952	953	949	950	950
29	949	948	948	948	949	948	947	944	942	942	941	941	941	944	946	948	949	949	951	949	948	949	946	947
30	947	947	947	947	946	946	945	944	943	941	941	942	942	944	948	949	953	952	952	956	960	961	959	956
31	954	951	949	949	947	947	946	945	945	944	942	941	942	944	947	951	952	951	954	955	955	955	956	950
Mean	946	943	943	943	943	944	944	943	944	943	942	943	945	948	950	951	952	953	953	953	953	952	951	949
Mean*	944	944	943	943	943	944	944	943	943	941	941	941	944	946	947	947	947	947	947	947	946	946	946	945
Mean**	947	937	938	937	936	939	940	940	942	943	942	943	948	951	956	958	959	966	968	971	966	961	958	954

* 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.	11°+	h m	11°+	11°+	h m		18000γ+	h m	18000γ+	18000γ+	h m	γ	42000γ+	h m	42000γ+	42000γ+	h m	γ
	′		′	′		′												
1	67·8	13 16	71·9	56·2	20 24	15·7	532	20 32	563	493	14 44	70	931	18 57	949	919	0 39	30
2**	67·3	12 19	73·2	50·1	22 24	23·1	530	22 37	579	472	17 23	107	932	17 50	959	913	2 31	46
3	67·6	13 4	72·3	59·7	18 23	12·6	533	18 30	558	509	13 49	49	931	14 54	943	923	0 1	20
4	67·8	13 25	71·1	63·3	19 55	7·8	538	23 26	553	529	2 14	24	935	20 16	942	929	12 58	13
5	67·9	13 27	71·4	61·7	22 0	9·7	540	7 17	553	518	21 51	35	935	22 49	949	930	12 36	19
6	68·3	13 14	71·9	62·9	22 9	9·0	547	8 18	563	530	0 0	33	936	0 9	945	926	9 43	19
7	67·5	12 40	71·3	55·2	21 36	16·1	546	7 56	562	509	21 31	53	936	21 40	955	924	11 56	31
8	69·1	12 15	75·4	62·2	23 14	13·2	539	23 26	580	511	18 10	69	939	18 52	954	924	23 54	30
9	67·1	3 53	73·5	57·4	23 25	16·1	536	23 35	601	490	11 36	111	938	15 30	956	928	0 0	28
10	67·3	12 40	72·5	59·1	15 54	13·4	537	18 34	570	502	15 30	68	937	16 20	956	926	10 17	30
11	66·8	13 31	72·6	50·8	18 20	21·8	538	23 54	580	496	18 13	84	940	18 52	960	926	8 56	34
12	67·3	14 0	72·3	56·4	17 45	15·9	535	21 47	583	489	15 40	94	940	17 51	961	927	10 8	34
13	66·8	14 7	71·5	59·2	22 10	12·3	537	22 30	568	519	15 55	49	941	17 9	952	930	2 4	22
14	67·6	14 10	72·6	54·3	23 2	18·3	537	23 6	579	512	14 30	67	940	15 1	951	927	1 54	24
15	67·7	9 4	74·6	59·1	20 3	15·5	538	19 11	558	514	8 10	44	939	20 15	950	930	7 50	20
16	67·6	12 44	71·4	62·5	22 18	8·9	540	20 45	575	508	17 54	67	938	19 4	950	926	23 32	24
17	66·8	13 14	70·5	61·7	17 4	8·8	538	0 53	556	527	16 22	29	938	17 30	945	926	1 28	19
18*	67·6	11 25	70·9	65·0	20 16	5·9	542	6 30	555	536	9 39	19	939	11 0	945	935	7 35	10
19*	67·2	12 40	70·2	64·7	9 12	5·5	543	18 10	555	532	10 44	23	938	20 47	944	932	10 21	12
20*	68·0	15 26	72·4	65·3	2 14	7·1	546	8 27	558	536	2 37	22	938	14 23	945	932	10 20	13
21*	67·7	13 42	71·2	65·1	23 3	6·1	549	22 59	556	541	1 0	15	935	0 26	940	930	10 50	10
22*	68·1	14 21	71·7	65·2	8 24	6·5	549	7 23	563	536	12 0	27	935	14 8	942	930	7 51	12
23	67·8	13 38	71·8	63·1	20 58	8·7	550	8 8	563	533	12 38	30	933	15 14	939	922	12 55	17
24	—	16 30	72·3	55·7	23 17	16·6	—	—	—	—	—	—	934	19 6	947	924	9 30	23
25**	—	4 27	74·9	51·5	18 59	23·4	—	19 10	579	473	15 50	106	939	16 10	967	925	10 21	42
26**	67·1	7 17	72·6	45·5	22 15	27·1	533	0 51	560	503	10 31	57	936	18 53	954	924	23 57	30
27**	66·8	13 26	74·9	54·6	0 10	20·3	529	20 30	562	472	15 20	90	939	15 30	974	923	2 1	51
28**	67·5	14 4	73·8	53·2	18 21	20·6	529	22 18	589	425	13 0	164	937	18 34	959	914	1 5	45
29	67·6	1 58	73·6	62·3	21 54	11·3	537	21 48	556	514	11 4	42	934	21 9	941	921	2 18	20
30	67·2	13 3	71·5	60·9	23 52	10·6	540	23 7	565	507	12 14	58	934	16 44	943	927	11 19	16
31	67·4	3 32	71·3	61·1	0 18	10·2	533	7 42	556	482	15 51	74	934	16 44	952	926	4 10	26
Mean	67·5	—	72·4	58·9	—	13·5	539	—	567	507	—	59·3	937	—	951	926	—	24·8
Mean*	67·7	—	71·3	65·1	—	6·2	546	—	557	536	—	21·2	937	—	943	932	—	11·4
Mean**	67·2	—	73·9	51·0	—	22·9	530	—	574	469	—	104·8	937	—	963	920	—	42·8
FEB.	11°+	h m	11°+	11°+	h m		18000γ+	h m	18000γ+	18000γ+	h m	γ	42000γ+	h m	42000γ+	42000γ+	h m	γ
	′		′	′		′												
1	67·3	13 20	71·6	63·3	22 28	8·3	538	1 33	550	518	12 20	32	934	23 32	942	926	10 49	16
2*	67·2	13 37	70·1	65·2	19 50	4·9	542	22 49	560	532	10 9	28	934	20 24	940	924	13 21	16
3**	66·4	13 30	79·5	51·2	22 20	28·3	536	22 22	625	488	16 12	137	938	16 47	965	909	23 10	56
4**	66·1	2 10	80·9	52·5	16 51	28·4	520	20 18	596	467	10 59	129	940	16 56	970	906	2 47	64
5	67·3	6 0	72·5	60·5	17 12	12·0	529	21 7	575	501	17 42	74	940	17 30	960	927	7 32	33
6	66·9	13 40	74·0	61·7	22 14	12·3	531	21 33	562	500	18 0	62	941	14 46	956	928	2 4	28
7	66·7	13 45	72·1	58·6	19 11	13·5	531	19 56	566	511	15 10	55	938	19 55	951	928	13 17	23
8	66·0	13 16	73·0	58·1	19 43	14·9	530	2 1	558	482	15 16	76	939	17 0	959	928	2 24	31
9	66·8	12 54	71·6	60·4	18 40	11·2	532	22 47	573	496	18 13	77	938	18 54	952	929	12 39	23
10**	66·2	14 10	73·3	53·1	18 40	20·2	531	18 54	576	475	15 50	101	937	16 41	966	919	10 39	47
11**	66·5	13 34	73·8	51·3	16 55	22·5	534	22 35	564	497	18 23	67	936	17 50	953	921	0 33	32
12	66·7	13 47	72·7	54·9	23 17	17·8	530	22 38	579	499	10 57	80	942	16 37	957	927	23 8	30
13	67·3	14 30	74·3	60·8	0 13	13·5	529	22 20	554	499	11 14	55	945	19 33	958	929	0 27	29
14	66·6	13 32	72·1	60·5	4 40	11·6	531	24 0	561	501	11 34	60	942	15 0	957	930	2 8	27
15	66·5	14 20	71·1	62·8	0 29	8·3	537	19 37	560	520	1 9	40	940	17 47	949	929	1 4	20
16*	66·9	13 16	71·0	63·5	23 0	7·5	537	0 6	548	525	11 20	23	940	23 28	946	935	1 53	11
17*	66·7	13 20	71·1	64·2	9 14	6·9	539	18 30	551	524	10 27	27	940	16 9	946	932	12 2	14
18	66·6	13 43	70·6	59·5	21 58	11·1	544	16 47	559	525	22 40	34	938	22 8	946	932	12 0	14
19	66·6	13 54	71·7	61·4	2 10	10·3	549	3 9	575	529	11 22	46	933	15 45	941	923	4 10	18
20	67·2	9 37	74·4	57·1	18 51	17·3	540	6 33	582	504	16 13	78	935	18 50	952	920	6 50	32
21	67·3	13 32	72·8	63·9	20 46	8·9	537	7 58	554	514	14 14	40	936	14 51	947	928	10 10	19
22	67·4	13 44	73·8	55·9	16 47	17·9	534	7 42	562	479	14 48	83	939	16 50	966	919	11 56	47
23**	65·2	13 1	70·5	39·8	20 3	30·7	536	18 14	566	473	19 9	93	939	19 47	970	928	1 51	42
24	67·0	12 24	74·9	61·2	18 24	13·7	535	5 39	563	476	11 44	87	938	14 14	952	924	10 44	28
25	66·9	4 58	72·9	59·3	19 12	13·6	536	19 24	568	505	11 38	63	936	16 49	955	925	5 27	30
26	67·2	12 32	72·1	64·3	8 51	7·8	541	6 59	559	519	11 22	40	934	16 47	947	921	11 22	26
27*	66·9	13 30	71·3	63·6	9 20	7·7	543	19 10	554	528	11 17	26	934	18 44	943	921	11 21	22
28*	66·8	13 40	70·5	63·3	9 24	7·2	544	8 31	557	528	13 1	29	933	16 52	940	919	12 17	21
29	66·8	13 52	70·2	63·9	9 12	6·3	544	23 53	562	520	11 54	42	933	8 41	940	921	11 57	19
Mean	66·8	—	72·8	59·2	—	13·6	536	—	566	505	—	61·5	938	—	953	924	—	28·2
Mean*	66·9	—	70·8	64·0	—	6·8	541	—	554	527	—	26·6	936	—	943	926	—	16·8
Mean**	66·1	—	75·6	49·6	—	26·0	531	—	585	480	—	105·4	938	—	965	917	—	48·2

* 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.
		G.M.T.			G.M.T.			G.M.T.			G.M.T.			G.M.T.			G.M.T.	
MAR.	11°+	h m	11°+	11°+	h m		18000γ+	h m	18000γ+	18000γ+	h m	γ	42000γ+	h m	42000γ+	42000γ+	h m	γ
	′		′	′		′												
1*	66·6	14 6	69·4	65·1	9 2	4·3	548	7 37	564	532	13 37	32	931	18 27	936	924	12 40	12
2	66·4	13 50	72·9	49·6	22 10	23·3	551	13 50	585	505	19 21	80	932	22 4	970	913	12 0	57
3	65·2	12 20	74·6	53·6	23 22	21·0	523	23 31	579	470	10 8	109	934	16 52	951	918	1 10	33
4	65·4	12 50	74·4	51·8	18 48	22·6	528	18 56	601	485	11 32	116	932	18 55	956	912	4 21	44
5	65·0	14 34	71·2	52·8	22 15	18·4	531	21 0	601	484	15 47	117	935	17 8	960	911	1 50	49
6	65·4	11 54	72·6	53·0	19 21	19·6	530	23 1	585	500	11 57	85	935	16 40	957	914	1 16	43
7	65·4	12 16	72·0	52·4	24 0	19·6	529	19 7	554	495	16 55	59	939	16 17	964	908	23 56	56
8	65·2	2 50	75·2	50·6	0 4	24·6	532	20 53	577	497	16 59	80	932	18 53	960	908	3 20	52
9	65·1	14 39	73·9	45·5	21 10	28·4	537	21 24	627	500	12 37	127	936	17 26	963	920	2 41	43
10**	64·4	11 45	72·9	44·6	20 4	28·3	528	20 16	628	482	18 6	146	934	17 22	976	908	2 20	68
11	65·3	0 34	79·1	53·5	1 24	25·6	528	21 34	576	490	0 40	86	930	15 50	955	882	1 7	73
12	66·2	13 57	71·3	61·2	19 6	10·1	534	20 40	551	514	14 47	37	936	15 53	949	923	10 40	26
13	66·3	15 39	70·8	60·8	21 9	10·0	537	0 54	558	521	19 0	37	935	21 20	951	922	11 20	29
14	66·2	14 28	72·2	61·9	23 7	10·3	539	8 49	552	518	15 51	34	937	18 53	949	920	9 45	29
15*	67·1	13 27	72·5	63·5	8 22	9·0	539	21 10	553	519	13 57	34	938	16 14	951	923	10 21	28
16*	66·0	13 29	70·9	61·2	20 6	9·7	542	7 21	556	525	19 33	31	936	20 28	946	923	10 48	23
17	65·9	13 41	71·6	59·0	19 49	12·6	539	24 0	569	523	11 58	46	937	20 7	953	922	12 35	31
18	64·6	13 39	74·3	38·7	18 49	35·6	540	18 58	607	492	18 10	115	936	18 34	975	912	11 59	63
19	66·4	12 27	72·1	61·2	19 52	10·9	534	23 56	550	514	11 25	36	936	19 54	946	918	12 21	28
20	66·4	13 45	74·0	59·8	18 8	14·2	539	23 56	568	519	17 59	49	936	18 20	950	920	11 46	30
21	66·1	13 30	75·0	51·2	21 24	23·8	538	1 3	591	510	13 14	81	930	17 4	955	909	11 19	46
22	66·0	12 58	75·7	55·3	20 8	20·4	532	22 57	576	479	10 33	97	934	17 10	957	917	5 0	40
23	65·9	0 47	73·7	59·8	2 10	13·9	538	0 42	581	508	10 12	73	933	17 10	949	903	1 27	46
24	65·8	13 30	73·4	60·8	8 2	12·6	539	22 34	581	508	9 57	73	934	17 35	943	915	12 34	28
25*	66·0	13 10	71·6	60·7	8 26	10·9	539	0 38	555	513	10 20	42	933	16 53	941	912	11 20	29
26*	66·0	12 36	71·4	61·3	8 39	10·1	542	7 9	555	516	10 20	39	932	18 18	939	913	11 35	26
27	66·0	12 39	71·3	61·0	8 31	10·3	544	23 58	569	520	10 28	49	933	19 19	946	918	11 27	28
28**	64·7	14 9	76·4	52·4	2 7	24·0	528	20 30	589	454	19 49	135	941	18 32	1002	916	10 23	86
29**	64·8	12 47	75·7	47·3	20 27	28·4	520	20 45	630	465	11 40	165	942	15 52	980	910	1 30	70
30**	65·0	15 22	74·0	48·4	18 2	25·6	526	20 45	609	472	13 20	137	938	18 7	985	910	23 54	75
31**	64·8	12 24	75·5	49·4	19 49	26·1	511	18 36	610	441	11 15	171	940	18 32	990	893	1 3	97
Mean	65·7	—	73·3	55·1	—	18·2	534	—	580	499	—	81·2	935	—	958	914	—	44·8
Mean*	66·4	—	71·2	62·4	—	8·8	542	—	557	521	—	35·6	934	—	943	919	—	23·6
Mean**	64·7	—	74·9	48·4	—	26·5	523	—	613	463	—	150·8	939	—	987	907	—	79·2
APRIL	11°+	h m	11°+	11°+	h m		18000γ+	h m	18000γ+	18000γ+	h m	γ	42000γ+	h m	42000γ+	42000γ+	h m	γ
	′		′	′		′												
1	65·7	14 57	71·6	51·9	21 12	19·7	530	24 0	602	497	16 0	105	939	16 30	962	922	4 26	40
2**	66·2	12 20	77·1	50·2	19 8	26·9	525	0 14	608	475	11 6	133	932	16 30	964	898	0 58	66
3	65·3	11 44	73·5	51·5	18 32	22·0	525	18 40	566	470	18 14	96	939	18 36	973	921	0 15	52
4	65·3	12 47	74·1	59·2	21 3	14·9	532	23 24	576	487	13 18	89	940	17 10	964	918	23 57	46
5	65·0	14 5	73·9	59·2	1 34	14·7	528	21 10	610	485	11 54	125	936	16 51	973	913	5 20	60
6	65·2	12 59	74·0	52·3	21 40	21·7	531	21 50	574	498	8 30	76	937	17 27	967	916	11 57	51
7**	64·9	13 35	76·0	54·9	23 58	21·1	524	24 0	590	446	10 30	144	938	14 30	973	912	3 3	61
8	64·7	13 20	72·7	55·9	1 0	16·8	527	0 7	608	489	11 4	119	937	15 30	965	907	0 44	58
9	64·8	12 32	71·8	55·6	18 51	16·2	531	17 31	564	491	11 50	73	940	18 10	963	922	11 18	41
10	64·9	13 57	70·6	59·1	20 24	11·5	530	20 40	575	490	10 48	85	939	20 30	955	921	10 40	34
11	64·6	13 33	70·7	60·2	22 56	10·5	531	19 55	560	502	11 49	58	942	18 54	953	926	12 1	27
12*	64·7	14 1	70·2	58·9	0 30	11·3	535	0 0	549	514	12 12	35	940	18 12	953	923	12 22	30
13**	64·6	16 19	71·7	44·2	21 1	27·5	542	15 56	588	477	17 7	111	939	17 34	969	911	12 1	58
14	65·5	15 19	71·8	55·6	18 32	16·2	527	18 41	566	484	11 0	82	937	18 40	967	918	12 40	49
15	65·0	1 2	71·0	59·3	20 14	11·7	533	20 31	578	490	10 40	88	936	20 30	956	916	12 22	40
16	65·2	14 16	70·8	60·7	8 21	10·1	533	23 57	583	474	11 4	109	939	17 45	951	923	11 32	28
17	65·0	13 21	70·5	60·5	24 0	10·0	538	0 1	581	498	8 50	83	935	16 11	953	917	12 38	36
18	64·9	12 31	72·2	53·6	17 50	18·6	530	18 2	597	459	11 1	138	939	17 54	977	915	2 4	62
19*	65·0	13 30	72·0	60·5	0 0	11·5	537	18 46	559	515	10 51	44	937	21 40	947	923	11 24	24
20*	64·8	12 59	71·6	60·0	7 40	11·6	539	6 19	551	507	9 55	44	936	16 4	947	918	11 56	29
21*	64·3	12 54	69·5	59·9	8 51	9·6	540	18 15	550	518	10 36	32	937	18 10	951	918	12 14	33
22	65·8	15 10	75·8	59·5	7 40	16·3	544	22 16	584	497	11 14	87	937	16 44	969	905	11 10	64
23**	64·2	14 1	72·1	55·9	21 40	16·2	533	21 42	603	464	11 58	139	936	18 17	963	914	11 55	49
24**	63·7	10 54	73·0	54·0	23 41	19·0	536	23 0	610	460	10 36	150	931	18 53	970	904	2 42	66
25	63·8	16 31	70·3	54·6	0 24	15·7	531	18 7	586	491	8 1	95	935	18 0	979	907	1 38	72
26	63·5	13 5	71·0	54·7	2 10	16·3	536	0 34	582	500	10 36	82	933	18 11	974	900	1 4	74
27	63·5	14 4	70·7	55·4	19 23	15·3	528	18 9	563	484	9 53	79	936	19 30	967	918	2 1	49
28	63·5	13 54	71·0	55·4	20 40	15·6	533	19 30	578	500	14 31	78	939	18 10	961	924	11 56	37
29	63·9	13 38	69·2	58·5	19 0	10·7	531	22 43	570	511	13 42	59	941	19 10	961	925	12 4	36
30*	64·6	13 0	68·7	60·3	5 14	8·4	538	16 47	563	518	9 47	45	940	18 7	954	925	11 53	29
Mean	64·7	—	72·0	56·4	—	15·6	533	—	579	490	—	89·4	937	—	963	916	—	46·7
Mean*	64·7	—	70·4	59·9	—	10·5	538	—	554	514	—	40·0	938	—	950	921	—	29·0
Mean**	64·7	—	74·0	51·8	—	22·1	532	—	600	464	—	135·4	935	—	968	908	—	60·0

* 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	11°+	G.M.T. h m	11°+	11°+	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	64·6	13 42	70·1	55·3	24 0	14·8	543	16 7	565	520	11 6	45	938	23 0	951	912	11 38	39
2	62·5	12 28	72·0	51·3	0 14	20·7	544	0 31	580	514	13 6	66	941	6 34	950	916	24 0	34
3	63·2	11 43	69·4	53·8	0 40	15·6	534	0 12	576	484	10 22	92	930	18 18	959	890	1 34	69
4**	63·0	13 17	70·4	52·0	23 14	18·4	540	17 43	631	512	12 12	119	937	17 39	971	920	9 49	51
5**	63·8	14 24	76·5	54·3	0 52	22·2	532	18 50	569	501	11 33	68	938	16 41	977	915	11 34	62
6	64·5	12 52	71·9	49·3	20 24	22·6	531	23 57	560	475	10 20	85	936	19 30	959	915	5 56	44
7	64·0	13 3	71·7	57·5	8 10	14·2	533	18 30	557	503	8 44	54	937	18 18	949	918	12 20	31
8*	64·0	12 38	70·6	58·8	7 26	11·8	534	17 54	565	493	10 20	72	937	17 53	949	917	11 15	32
9*	64·5	12 47	70·9	59·2	7 20	11·7	540	18 18	560	513	9 58	47	938	16 48	951	919	12 0	32
10	64·1	13 56	71·6	58·0	23 20	13·6	548	19 0	574	511	10 12	63	937	18 46	949	924	11 59	25
11	63·7	13 17	71·3	54·7	0 37	16·6	544	18 40	586	498	15 52	88	933	18 40	955	913	12 18	42
12	64·2	13 3	68·6	59·7	7 42	8·9	542	18 5	566	517	13 52	49	937	18 24	951	915	11 2	36
13	65·0	13 28	70·3	56·8	19 5	13·5	545	19 23	594	514	12 20	80	933	19 22	958	908	11 44	50
14	64·0	14 5	68·2	58·3	4 6	9·9	544	21 51	576	513	9 21	63	934	18 19	953	917	12 24	36
15	64·3	13 22	70·2	58·8	6 23	11·4	534	18 25	596	482	13 0	114	939	18 10	964	919	10 47	45
16	65·3	4 40	71·0	60·3	24 0	10·7	537	17 50	573	480	6 55	93	937	19 18	956	917	6 54	39
17	64·0	13 0	69·5	59·7	7 31	9·8	537	0 44	564	494	9 23	70	939	19 9	954	910	11 33	44
18*	63·9	13 2	70·5	58·9	6 46	11·6	541	18 45	561	517	12 24	44	940	17 3	957	927	11 30	30
19*	63·3	13 2	69·0	58·4	7 54	10·6	539	0 17	565	519	8 20	46	938	17 16	950	922	11 20	28
20*	63·8	13 1	68·2	58·2	8 10	10·0	540	20 11	563	513	9 2	50	938	18 53	949	923	11 34	26
21	63·6	13 33	73·0	54·8	7 59	18·2	541	2 38	568	479	11 11	89	939	18 32	965	916	10 24	49
22	64·1	12 37	71·0	58·1	6 20	12·9	537	14 58	570	507	13 20	63	939	14 54	957	916	10 28	41
23	63·6	13 51	73·6	53·6	22 2	20·0	541	22 9	606	515	10 46	91	940	19 46	964	917	10 57	47
24	64·0	12 38	70·2	57·3	6 47	12·9	542	23 54	585	507	11 53	78	938	18 9	950	918	11 42	32
25**	63·4	13 44	69·3	54·7	1 18	14·6	539	17 25	603	502	8 51	101	938	17 18	966	911	0 59	55
26	63·7	13 10	69·8	57·1	1 45	12·7	536	22 49	576	506	13 3	70	933	20 4	952	916	12 22	36
27	63·9	13 19	70·7	59·3	8 28	11·4	543	21 37	585	512	8 50	73	934	17 30	953	915	11 40	38
28	63·0	12 50	69·6	55·5	20 1	14·1	542	18 27	598	514	13 5	84	934	19 14	961	916	13 3	45
29**	63·0	13 9	78·7	40·9	17 19	37·8	524	17 30	694	414	22 47	280	946	16 48	1030	859	23 4	171
30**	61·9	3 47	76·9	43·9	2 30	33·0	501	2 43	608	356	4 50	252	918	19 30	979	767	4 47	212
31	62·3	13 3	67·9	56·3	4 26	11·6	519	19 16	568	483	10 38	85	947	19 15	961	934	11 40	27
Mean	63·8	—	71·5	55·6	—	15·9	537	—	582	496	—	86·3	937	—	960	910	—	49·9
Mean*	63·9	—	69·8	58·7	—	11·1	539	—	563	511	—	51·8	938	—	951	922	—	29·6
Mean**	63·0	—	74·4	49·2	—	25·2	527	—	621	457	—	164·0	935	—	985	874	—	110·2
JUNE.	11°+	h m	11°+	11°+	h m		18000γ+	h m	18000γ+	18000γ+	h m	γ	42000γ+	h m	42000γ+	42000γ+	h m	γ
	′		′	′		′												
1	63·3	13 53	69·9	56·8	7 20	13·1	528	21 34	551	493	10 21	58	949	16 43	959	937	12 24	22
2	63·7	12 58	68·7	57·8	7 20	10·9	536	19 10	562	507	11 38	55	943	17 7	954	922	11 36	32
3*	63·1	12 48	68·3	57·2	6 36	11·1	537	2 9	554	510	10 25	44	944	16 49	962	920	11 40	42
4*	64·0	13 10	68·4	59·0	5 54	9·4	538	18 50	560	515	8 40	45	938	17 50	950	907	11 53	43
5	64·4	15 2	70·3	57·4	5 43	12·9	543	17 36	569	513	12 4	56	939	18 23	951	917	11 39	34
6	63·4	14 43	68·0	57·2	6 24	10·8	545	17 50	575	523	9 44	52	938	17 53	951	918	11 21	33
7	64·1	15 5	71·5	56·6	7 23	14·9	547	17 47	582	510	9 49	72	940	17 52	959	923	11 21	36
8**	62·2	14 57	69·7	53·4	20 31	16·3	541	15 0	585	504	9 8	81	937	17 3	957	918	11 52	39
9**	62·9	12 55	68·9	55·8	5 28	13·1	538	0 11	580	504	10 20	76	936	19 10	960	905	0 40	55
10**	63·7	14 46	68·2	58·4	8 22	9·8	535	19 48	578	481	10 48	97	939	18 48	963	919	10 59	44
11**	63·2	12 37	69·7	57·0	7 33	12·7	542	15 30	570	492	10 35	78	941	17 14	962	922	11 5	40
12	63·9	13 36	68·9	58·7	7 23	10·2	538	15 1	565	510	9 9	55	942	18 43	955	925	10 41	30
13	63·2	13 58	67·9	57·9	7 52	10·0	537	21 1	560	497	12 52	63	942	17 14	953	922	10 58	31
14	63·5	12 20	68·5	58·7	6 14	9·8	540	4 52	549	522	13 40	27	941	5 33	948	935	24 0	13
15*	63·4	13 9	68·7	57·8	7 52	10·9	542	20 20	557	522	13 0	35	937	7 3	944	916	11 37	28
16	63·7	14 0	69·3	57·7	7 17	11·6	546	19 10	574	524	10 1	50	937	17 52	948	921	11 40	27
17	63·7	14 0	71·0	56·0	6 0	15·0	548	19 44	570	520	10 26	50	934	17 19	947	910	12 18	37
18	63·7	12 39	70·9	58·3	6 40	12·6	551	23 30	573	524	12 50	49	938	17 51	949	921	11 1	28
19	63·3	13 38	71·3	57·0	7 20	14·3	549	20 34	583	517	10 30	66	932	16 4	944	904	10 59	40
20**	64·4	16 40	74·4	58·6	9 8	15·8	547	16 24	588	507	10 53	81	941	18 32	975	912	12 37	63
21	63·6	14 8	71·6	56·5	22 32	15·1	545	18 32	567	520	11 3	47	937	17 31	955	916	12 13	39
22	63·0	16 16	67·4	58·3	3 29	9·1	544	18 42	587	516	5 36	71	937	18 41	958	917	9 17	41
23	63·3	14 18	68·5	58·2	5 22	10·3	539	0 49	558	509	6 59	49	938	17 53	954	919	11 38	35
24	63·2	14 20	68·7	58·6	8 12	10·1	544	18 2	570	522	10 29	48	938	19 33	951	916	11 39	35
25	63·2	14 19	69·7	57·3	7 40	12·4	544	16 40	587	507	13 30	80	937	19 19	952	916	13 23	36
26	63·3	14 47	69·7	57·6	7 5	12·1	548	19 37	566	521	9 16	45	934	19 32	952	900	11 32	52
27*	62·6	14 18	66·5	58·0	7 40	8·5	542	18 40	566	517	12 59	49	938	17 16	951	919	11 51	32
28*	62·2	13 22	66·3	57·8	8 21	8·5	544	19 20	563	519	8 39	44	938	17 52	945	923	11 17	22
29	63·2	14 20	68·2	58·8	7 10	9·4	551	15 22	569	530	11 18	39	938	17 52	949	921	11 54	28
30	63·4	13 24	71·9	57·8	6 14	14·1	548	15 17	573	529	12 57	44	936	18 30	948	915	11 39	33
Mean	63·4	—	69·4	57·5	—	11·9	543	—	570	513	—	56·9	939	—	954	918	—	35·7
Mean*	63·1	—	67·6	58·0	—	9·7	541	—	560	517	—	43·4	939	—	950	917	—	33·4
Mean**	63·3	—	70·2	56·6	—	13·5	541	—	580	498	—	82·6	939	—	963	915	—	48·2

* 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.
		G.M.T.			G.M.T.			G.M.T.			G.M.T.			G.M.T.			G.M.T.	
JULY	11°+	h m	11°+	11°+	h m		18000γ+	h m	18000γ+	18000γ+	h m	γ	42000γ+	h m	42000γ+	42000γ+	h m	γ
	′		′	′		′												
1	63·3	12 34	72·2	59·4	5 32	12·8	548	19 20	573	521	10 20	52	938	17 52	950	917	12 42	33
2	63·0	12 51	70·1	56·4	6 36	13·7	548	15 14	565	521	9 9	44	935	17 6	950	912	11 38	38
3*	63·6	13 7	72·5	56·7	7 51	15·8	544	21 30	560	513	9 20	47	936	17 20	950	918	11 2	32
4	64·3	14 21	72·5	57·5	5 44	15·0	557	14 20	592	525	13 55	67	933	17 54	946	907	12 0	39
5**	64·0	14 0	73·8	57·3	6 24	16·5	559	17 40	617	521	10 24	96	931	19 3	961	903	11 40	58
6**	63·8	14 8	70·6	58·3	8 50	12·3	533	23 40	578	445	14 25	133	940	15 13	967	922	8 44	45
7**	63·6	12 53	70·0	58·3	0 20	11·7	534	0 5	567	481	9 24	86	939	17 57	960	923	0 13	37
8**	62·9	14 20	68·7	57·3	7 50	11·4	538	17 12	599	488	9 25	111	938	17 10	965	918	11 40	47
9	62·7	13 37	68·7	57·6	22 8	11·1	538	17 39	578	492	9 58	86	941	17 33	959	927	10 44	32
10	61·9	13 40	66·7	55·8	8 7	10·9	537	21 14	582	490	10 4	92	938	17 44	957	924	10 8	33
11	62·8	13 41	67·7	58·1	7 40	9·6	541	23 26	564	504	9 57	60	936	17 53	952	905	11 54	47
12	62·0	13 19	66·7	56·7	20 17	10·0	541	19 30	572	509	12 22	63	939	19 3	953	919	11 52	34
13*	62·1	13 55	68·8	56·3	7 34	12·5	540	20 1	558	508	12 31	50	939	17 54	949	919	13 20	30
14*	62·8	12 43	68·9	56·6	5 53	12·3	543	17 56	565	508	12 17	57	939	17 52	952	921	12 20	31
15	61·6	14 23	65·7	55·8	7 28	9·9	544	22 4	566	516	9 24	50	939	6 4	951	920	11 56	31
16**	62·9	13 30	73·3	54·4	21 38	18·9	543	11 35	568	464	14 0	104	940	16 40	963	914	11 55	49
17	61·7	13 17	66·8	56·0	2 45	10·8	538	19 24	557	516	9 50	41	941	17 52	951	926	11 21	25
18	62·5	13 7	68·9	57·5	6 6	11·4	541	17 29	570	513	8 23	57	943	18 30	961	921	11 53	40
19	62·4	13 25	68·9	57·3	5 34	11·6	541	22 19	590	510	8 39	80	937	17 40	950	915	10 16	35
20	61·8	14 2	68·8	56·1	7 23	12·7	541	19 51	565	516	9 54	49	938	16 40	957	910	11 20	47
21	61·9	13 49	69·2	55·7	8 24	13·5	542	19 40	573	502	11 5	71	937	17 14	953	914	11 44	39
22	62·4	12 50	68·7	56·5	8 10	12·2	543	0 40	565	508	10 40	57	938	19 37	954	916	12 15	38
23	62·0	14 1	74·3	55·1	7 7	19·2	543	17 42	565	515	11 38	50	938	17 43	950	919	11 36	31
24	62·3	13 57	67·9	57·5	8 6	10·4	544	18 31	573	515	11 17	58	938	19 35	954	920	12 36	34
25	62·1	18 9	67·1	57·7	7 42	9·4	545	20 53	577	517	11 18	60	938	7 6	950	922	13 49	28
26	62·0	14 18	67·2	56·0	7 22	11·2	545	3 24	570	516	10 34	54	938	17 33	953	920	12 20	33
27	62·5	14 28	68·9	57·6	6 6	11·3	547	22 14	568	519	12 12	49	942	16 42	957	926	12 0	31
28*	61·3	12 37	64·8	56·4	6 7	8·4	542	19 4	558	511	12 0	47	937	17 15	948	915	11 17	33
29*	62·1	13 34	67·2	57·2	8 14	10·0	548	22 24	565	521	13 22	44	937	17 54	949	917	11 19	32
30	61·8	13 29	66·1	57·5	5 10	8·6	548	19 20	578	523	16 15	55	934	19 10	944	914	11 34	30
31	62·8	14 50	69·3	55·9	5 37	13·4	540	21 10	569	499	11 28	70	938	17 52	960	921	11 48	39
Mean	62·5	—	69·1	56·9	—	12·2	543	—	572	506	—	65·8	938	—	954	918	—	36·5
Mean*	62·4	—	68·4	56·6	—	11·8	543	—	561	512	—	49·0	938	—	950	918	—	31·6
Mean**	63·4	—	71·3	57·1	—	14·2	541	—	586	480	—	106·0	938	—	963	916	—	47·2
AUG.	11°+	h m	11°+	11°+	h m		18000γ+	h m	18000γ+	18000γ+	h m	γ	42000γ+	h m	42000γ+	42000γ+	h m	γ
	′		′	′		′												
1	61·5	13 37	69·7	53·7	21 55	16·0	542	22 7	589	512	17 51	77	942	18 8	974	916	12 0	58
†2**	61·1	2 0	70·1	49·5	21 22	20·6	546	21 34	616	502	12 4	114	—	—	—	—	—	—
†3**	61·9	12 43	71·9	50·4	21 3	21·5	535	21 11	596	473	11 47	123	—	—	—	—	—	—
4	62·5	13 30	68·8	58·0	7 12	10·8	533	18 12	566	482	8 45	84	937	16 18	960	916	0 10	44
5	60·8	13 22	68·2	55·1	8 12	13·1	534	20 26	571	431	9 50	140	938	17 14	956	918	9 30	38
6	60·9	14 14	67·1	55·8	8 13	11·3	535	0 30	567	500	10 59	67	939	17 43	956	918	12 15	38
7	61·8	13 49	69·4	55·3	8 31	14·1	536	20 52	558	511	10 37	47	937	18 21	951	918	12 42	33
8	62·1	14 43	68·3	56·9	9 9	11·4	539	16 32	556	513	10 36	43	940	18 30	954	927	12 22	27
9	61·9	13 20	66·2	57·3	7 24	8·9	534	6 7	560	502	11 40	58	942	17 28	953	927	13 20	26
10*	61·4	13 57	67·0	56·0	6 52	11·0	539	18 52	561	515	9 24	46	940	6 24	951	922	11 36	29
11	62·1	13 4	67·8	55·8	24 0	12·0	548	19 2	575	523	9 32	52	938	16 28	952	916	12 22	36
12	60·9	13 47	71·5	51·8	1 50	19·7	547	4 6	585	519	15 50	66	935	17 11	954	911	12 16	43
13	60·8	14 30	68·5	53·1	6 48	15·4	538	3 35	567	496	8 1	71	941	18 40	961	920	11 34	41
14	61·4	13 20	68·9	55·8	8 3	13·1	538	19 10	560	502	10 10	58	935	16 22	944	916	10 9	28
15	61·8	13 55	69·9	56·7	5 15	13·2	539	17 39	563	520	8 48	43	936	17 37	950	916	11 52	34
16*	61·5	12 50	68·6	57·7	8 30	10·9	542	19 10	558	520	9 37	38	937	16 6	949	916	11 11	33
17*	60·9	13 6	67·4	55·2	8 8	12·2	544	16 34	567	510	10 35	57	934	17 31	946	914	11 22	32
18*	61·1	13 20	68·7	56·1	7 23	12·6	543	20 32	570	510	9 20	60	935	16 7	951	913	11 52	38
19*	61·1	13 31	69·0	56·2	8 20	12·8	541	18 20	564	510	10 33	54	935	16 7	947	915	11 54	32
20	61·3	13 45	67·4	54·9	7 50	12·5	548	22 18	577	510	11 37	67	936	16 45	948	923	11 35	25
21	61·8	14 16	70·0	54·8	23 59	15·2	541	0 40	590	494	12 38	96	934	18 26	956	910	11 47	46
22	61·0	13 39	69·6	52·8	18 44	16·8	536	18 54	582	506	11 49	76	938	18 53	963	914	11 37	49
23	61·3	14 28	67·3	56·4	7 41	10·9	534	23 53	555	489	10 36	66	938	15 22	953	923	10 17	30
24	60·5	13 19	66·7	56·6	8 49	10·1	536	19 49	554	511	12 1	43	937	18 32	949	915	12 22	34
25	61·3	12 58	68·4	57·0	7 24	11·4	539	21 24	574	516	7 24	58	935	16 41	946	915	12 23	31
26	60·6	13 37	66·3	56·3	7 10	10·0	541	22 27	565	517	9 1	48	933	15 46	943	917	11 0	26
27**	60·9	13 59	70·8	41·7	22 47	29·1	538	18 10	601	487	14 34	114	936	17 51	979	913	23 30	66
28**	61·1	1 49	74·8	49·3	17 57	25·5	520	23 36	603	416	9 27	187	932	18 5	989	867	2 27	122
29**	61·0	12 5	70·4	42·0	19 6	28·4	521	19 20	622	467	9 56	155	942	16 27	982	913	0 4	69
30	60·2	14 4	67·6	51·8	16 9	15·8	527	16 16	578	480	8 21	98	941	16 16	981	914	3 13	67
31	60·7	12 40	67·2	55·4	8 9	11·8	530	21 53	561	495	9 29	66	943	16 45	960	929	0 21	31
Mean	61·3	—	68·8	54·0	—	14·8	538	—	575	498	—	76·5	937	—	957	915	—	41·6
Mean*	61·2	—	68·1	56·2	—	11·9	542	—	564	513	—	51·0	936	—	949	916	—	32·8
†Mean**	61·2	—	72·0	44·3	—	27·7	532	—	609	457	—	152·0	937	—	984	898	—	85·7

* Denotes an International Quiet Day. ** Denotes an International Disturbed Day.
† August 2 and 3 have been omitted in computing the means for Vertical Force.

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.	11°+	G.M.T. h m	11°+	11°+	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	61·0	13 30	68·1	54·7	23 59	13·4	530	23 54	560	501	13 48	59	942	16 19	957	925	11 32	32
2	60·5	13 20	68·6	53·0	1 11	15·6	531	0 30	565	503	13 49	62	941	16 50	958	926	1 10	32
3*	60·3	13 1	66·3	55·6	7 51	10·7	534	22 44	558	516	11 45	42	942	16 32	954	924	10 56	30
4	60·7	13 18	68·4	55·1	21 34	13·3	533	22 57	560	505	9 6	55	944	15 37	956	930	23 23	26
5	60·9	14 57	67·3	56·1	7 42	11·2	537	19 47	559	502	10 26	57	942	16 1	966	928	10 30	38
6**	60·7	14 10	71·4	49·4	21 32	22·0	527	5 21	570	458	14 24	112	949	16 21	1004	919	11 55	85
7	60·2	13 20	65·4	51·2	21 53	14·2	524	22 6	582	484	9 58	98	945	19 16	955	931	12 23	24
8**	60·2	13 26	66·6	49·7	4 50	16·9	532	3 59	567	502	11 1	65	938	18 44	959	905	4 20	54
9	60·0	11 37	66·9	53·8	1 31	13·1	532	0 15	581	506	2 53	75	941	17 15	955	924	2 50	31
10*	60·2	12 17	66·0	56·0	8 25	10·0	533	23 19	554	507	10 54	47	940	20 40	948	922	10 54	26
11*	60·5	12 34	65·8	56·6	1 24	9·2	537	19 58	550	524	9 17	26	938	21 51	947	927	10 50	20
12	60·6	13 27	65·7	54·3	22 18	11·4	537	22 14	555	527	14 24	28	938	0 28	945	928	11 32	17
13	61·1	11 52	67·1	56·5	8 29	10·6	540	14 38	558	517	8 30	41	936	14 54	943	921	10 54	22
14	60·8	12 58	68·2	56·2	7 52	12·0	541	18 0	567	517	9 35	50	936	15 15	945	915	11 3	30
15	60·8	13 7	69·2	55·1	7 25	14·1	540	22 14	563	502	9 57	61	939	16 36	953	920	11 19	33
16*	60·8	12 22	67·9	55·2	7 41	12·7	540	18 47	557	508	9 57	49	936	16 34	948	916	10 54	32
17*	60·7	11 55	65·9	56·5	7 18	9·4	545	23 27	571	521	9 54	50	938	16 11	945	921	10 54	24
18	60·0	12 24	69·1	47·6	23 2	21·5	541	22 49	596	501	16 26	95	939	17 6	954	922	23 24	32
19	60·4	11 47	67·2	54·0	0 0	13·2	534	21 55	590	482	15 58	108	942	16 40	969	918	1 44	51
20	60·8	1 59	67·2	55·5	21 17	11·7	532	3 19	565	488	8 24	77	938	16 34	957	921	5 30	36
21	59·7	13 48	65·3	55·5	19 46	9·8	535	22 45	570	510	10 40	60	938	18 10	950	926	12 22	24
22	59·6	11 13	69·4	49·0	21 29	20·4	531	4 59	577	479	10 40	98	937	17 34	961	921	11 33	40
23**	59·2	12 29	68·9	42·0	19 47	26·9	522	20 57	592	471	9 27	121	947	18 3	998	929	24 0	69
24**	60·3	13 19	70·3	48·9	19 18	21·4	524	20 0	600	463	15 19	137	943	16 7	990	914	23 37	76
25**	60·2	13 50	70·4	49·2	20 56	21·2	516	21 42	596	457	13 36	139	946	15 23	990	911	3 22	79
26	60·0	1 35	67·4	51·8	20 58	15·6	526	21 7	568	483	10 55	85	941	20 28	956	926	10 54	30
27	59·4	11 40	66·5	51·1	19 18	15·4	524	0 46	560	486	15 54	74	943	16 7	965	917	1 5	48
28	60·4	11 58	66·0	57·1	6 25	8·9	531	0 14	550	513	14 41	37	944	16 36	956	933	8 39	23
29	58·6	11 24	64·5	53·0	23 43	11·5	533	1 22	588	505	10 31	83	941	19 53	953	926	9 57	27
30	59·1	12 20	64·8	53·5	22 24	11·3	529	21 54	583	503	16 25	80	940	21 49	953	922	11 17	31
Mean	60·3	—	67·4	53·1	—	14·3	533	—	570	498	—	72·4	941	—	960	922	—	37·4
Mean*	60·5	—	66·4	56·0	—	10·4	538	—	558	515	—	42·8	939	—	948	922	—	26·4
Mean**	60·1	—	69·5	47·8	—	21·7	524	—	585	470	—	114·8	945	—	988	915	—	72·6
OCT.	11°+	h m	11°+	11°+	h m		18000γ+	h m	18000γ+	18000γ+	h m	γ	42000γ+	h m	42000γ+	42000γ+	h m	γ
	′		′	′		′												
1	60·0	12 20	66·4	56·2	8 29	10·2	534	22 7	566	513	10 8	53	941	16 34	952	927	11 24	25
2	61·1	12 49	68·7	57·1	19 50	11·6	531	23 50	557	485	10 41	72	939	14 38	950	919	10 40	31
3	60·3	12 52	66·2	56·3	1 34	9·9	534	23 29	562	494	13 21	68	939	17 1	952	924	8 34	28
4	60·0	14 25	65·3	55·1	23 13	10·2	540	15 2	559	512	12 47	47	941	15 41	951	927	11 17	24
5	59·8	12 55	66·2	55·3	18 36	10·9	539	23 29	567	505	11 3	62	939	18 49	949	927	12 22	22
6*	59·4	13 5	64·7	55·9	21 53	8·8	540	0 5	556	516	10 16	40	937	8 13	948	920	12 34	28
7	59·2	13 10	63·5	55·4	9 22	8·1	539	0 38	576	516	11 20	60	938	8 3	945	925	11 54	20
8	59·1	12 59	64·8	55·4	20 6	9·4	536	23 1	557	516	20 0	41	939	20 38	953	923	13 41	30
9	59·6	15 19	67·3	52·8	22 55	14·5	539	23 55	575	499	15 48	76	938	16 0	950	922	13 17	28
10	59·1	12 21	67·3	53·9	20 40	13·4	531	20 47	572	479	16 39	93	940	16 9	961	925	11 19	36
11	59·2	13 5	64·6	53·8	20 38	10·8	539	22 11	572	510	10 56	62	940	15 19	948	929	12 1	19
12	59·3	13 32	64·4	55·1	8 25	9·3	538	0 36	563	520	10 57	43	940	8 32	948	930	12 20	18
13*	59·3	13 58	65·4	54·3	8 57	11·1	539	22 42	557	512	10 57	45	940	16 38	949	928	12 25	21
14*	59·5	13 22	65·7	55·4	8 44	10·3	540	22 29	561	511	10 57	50	935	17 49	943	918	11 16	25
15**	59·7	13 21	73·4	44·9	22 8	28·5	519	4 40	573	437	17 24	136	946	17 34	1002	919	8 13	83
16**	59·6	6 40	65·3	50·6	0 0	14·7	520	5 10	557	479	10 59	78	939	15 33	961	919	10 48	42
17	58·4	13 20	66·9	49·0	17 14	17·9	525	0 29	568	486	13 40	82	944	17 36	966	927	11 55	39
18	58·7	13 25	63·8	54·2	0 52	9·6	529	0 9	562	499	10 57	63	943	18 12	953	927	0 50	26
19	60·0	12 33	65·7	56·0	9 23	9·7	530	7 27	554	490	12 53	64	945	15 30	956	932	11 17	24
20**	57·9	12 42	67·6	32·4	21 20	35·2	517	6 35	554	437	21 20	117	951	17 52	992	928	22 51	64
21**	58·8	5 57	67·3	41·4	1 29	25·9	513	1 27	539	446	9 46	93	943	15 38	964	902	1 53	62
22	58·9	12 31	64·5	50·1	20 5	14·4	525	20 12	587	493	19 37	94	952	19 13	975	934	11 17	41
23**	59·6	14 16	66·5	48·5	17 2	18·0	527	19 49	574	478	15 4	96	946	17 7	976	930	10 24	46
24	58·6	12 28	66·4	51·6	22 7	14·8	529	20 10	576	470	13 2	106	947	15 29	962	936	11 54	26
25	59·5	13 23	66·3	55·9	20 19	10·4	523	6 53	545	486	11 57	59	950	15 50	971	937	11 24	34
26*	58·8	13 24	63·6	55·0	8 29	8·6	529	23 39	542	503	11 35	39	949	14 47	957	940	11 56	17
27	59·7	14 21	68·2	53·4	21 1	14·8	528	6 49	551	472	14 48	79	950	15 31	964	935	10 56	29
28*	58·9	13 20	63·2	54·6	8 41	8·6	532	0 18	543	507	10 23	36	945	15 46	952	935	9 37	17
29	59·1	13 19	64·5	49·7	23 27	14·8	539	21 55	565	517	11 34	48	941	14 51	948	929	22 33	19
30	58·7	11 20	65·4	52·3	0 8	13·1	529	20 59	553	489	10 59	64	940	15 53	957	919	11 18	38
31	58·8	13 20	63·0	56·3	0 13	6·7	530	23 40	550	500	11 58	50	944	14 7	955	933	10 2	22
Mean	59·3	—	65·9	52·5	—	13·4	531	—	561	493	—	68·3	943	—	958	927	—	31·7
Mean*	59·2	—	64·5	55·0	—	9·5	536	—	552	510	—	42·0	941	—	950	928	—	21·6
Mean**	59·1	—	68·0	43·6	—	24·4	519	—	559	455	—	104·0	945	—	979	920	—	59·4

* 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.
		G.M.T.			G.M.T.			G.M.T.			G.M.T.			G.M.T.			G.M.T.	
NOV.	11°+	h m	11°+	11°+	h m		18000γ+	h m	18000γ+	18000γ+	h m	γ	42000γ+	h m	42000γ+	42000γ+	h m	γ
	′		′	′		′												
1**	59·9	7 30	67·6	55·4	3 2	12·2	529	4 34	560	484	6 46	76	940	18 54	954	922	6 32	32
2	58·2	12 28	63·0	54·1	2 6	8·9	527	0 30	545	483	11 44	62	946	18 54	955	936	10 22	19
3	58·6	13 44	62·9	55·8	9 50	7·1	532	6 33	551	494	9 46	57	947	17 34	955	937	12 22	18
4	57·6	13 0	61·5	50·1	21 37	11·4	535	5 1	557	515	11 40	42	947	21 8	960	934	11 54	26
5	58·4	12 52	63·9	54·9	8 42	9·0	531	3 6	553	508	10 40	45	948	17 3	958	937	3 24	21
6*	58·8	11 57	62·4	55·8	0 0	6·6	534	21 21	548	509	11 16	39	947	14 33	953	939	11 16	14
7	59·0	12 32	64·1	51·9	17 14	12·2	536	0 34	558	516	10 16	42	946	17 7	955	936	11 24	19
8	58·6	12 27	63·3	55·1	20 59	8·2	536	21 34	558	514	11 44	44	944	14 39	950	934	10 22	16
9*	58·8	12 56	62·6	54·8	9 10	7·8	539	0 14	552	516	11 39	36	943	8 24	950	933	11 18	17
10*	58·7	13 0	63·5	55·3	9 14	8·2	541	5 48	556	514	10 46	42	942	15 11	949	935	6 34	14
11	58·7	12 24	62·8	55·3	19 22	7·5	543	17 30	555	521	10 38	34	939	8 3	945	928	11 57	17
12	58·8	12 23	65·1	52·2	20 16	12·9	535	5 53	559	513	10 19	46	945	17 34	957	932	10 12	25
13	58·6	11 58	64·2	50·8	21 36	13·4	534	6 20	556	510	12 20	46	945	16 4	956	934	11 27	22
14**	58·4	12 21	64·8	47·7	23 23	17·1	530	22 42	575	481	12 57	94	947	17 41	964	928	23 21	36
15**	57·9	5 26	62·3	50·3	18 8	12·0	532	18 40	554	508	13 13	46	945	18 21	955	934	10 52	21
16**	57·3	6 14	68·8	41·8	18 10	27·0	524	4 27	576	475	17 17	101	944	17 35	979	917	6 50	62
17**	57·7	12 34	63·7	54·0	14 30	9·7	524	20 50	568	479	12 40	89	950	14 38	980	929	0 1	51
18	58·2	13 16	62·2	50·7	20 39	11·5	527	20 50	573	497	15 32	76	948	16 13	961	938	21 50	23
19	58·5	12 15	63·2	54·6	21 23	8·6	526	5 7	544	507	13 49	37	949	16 33	961	938	11 16	23
20	58·0	12 40	61·6	54·4	23 20	7·2	531	23 1	562	505	15 20	57	947	16 7	958	938	12 18	20
21	58·1	11 32	61·1	54·6	22 4	6·5	533	7 18	545	518	15 57	27	946	16 23	954	935	9 38	19
22*	58·3	13 41	61·4	56·3	9 12	5·1	534	7 14	549	515	11 57	34	947	18 14	954	940	13 20	14
23	58·0	12 44	61·9	55·9	9 14	6·0	538	6 38	550	510	13 1	40	945	19 38	951	936	11 56	15
24*	58·4	12 46	61·8	56·4	8 41	5·4	541	6 39	552	528	12 23	24	943	0 23	948	935	11 55	13
25	58·7	15 50	63·2	53·6	23 59	9·6	546	6 2	565	504	16 4	61	942	23 20	951	932	8 32	19
26	58·0	13 47	61·6	53·6	0 2	8·0	538	19 10	550	516	11 58	34	946	14 30	952	939	11 16	13
27	57·8	13 24	60·4	55·4	19 51	5·0	537	5 29	553	519	12 21	34	947	14 38	957	938	9 56	19
28	58·5	13 33	63·9	55·9	17 35	8·0	538	7 9	558	504	16 57	54	945	17 35	960	932	9 35	28
29	58·1	14 49	63·3	55·1	21 50	8·2	534	2 21	559	494	14 58	65	946	16 11	963	933	8 34	30
30	58·1	12 16	61·4	55·3	9 31	6·1	537	5 36	546	522	11 26	24	946	16 10	954	931	10 12	23
Mean	58·4	—	63·1	53·6	—	9·5	534	—	556	506	—	50·3	945	—	957	934	—	23·0
Mean*	58·6	—	62·3	55·7	—	6·6	538	—	551	516	—	35·0	944	—	951	936	—	14·4
Mean**	58·3	—	65·4	49·8	—	15·6	528	—	567	485	—	81·2	945	—	966	926	—	40·4
DEC.	11°+	h m	11°+	11°+	h m		18000γ+	h m	18000γ+	18000γ+	h m	γ	42000γ+	h m	42000γ+	42000γ+	h m	γ
	′		′	′		′												
1	57·7	11 48	61·1	52·4	18 54	8·7	536	7 27	555	516	10 36	39	946	18 54	958	936	10 23	22
2	58·1	13 33	61·4	52·9	20 4	8·5	536	17 0	550	509	19 48	41	948	20 18	959	939	11 18	20
3	57·4	11 55	59·7	53·1	21 1	6·6	538	6 11	550	521	11 20	29	948	14 40	958	938	11 18	20
4	57·9	12 11	62·0	54·9	0 7	7·1	537	18 30	550	520	3 40	30	946	16 30	953	939	10 17	14
5*	57·6	12 43	60·3	53·8	22 45	6·5	539	6 8	550	524	23 40	26	944	22 40	950	936	10 12	14
6	57·7	12 20	61·3	49·0	23 6	12·3	542	22 56	560	528	0 9	32	943	0 42	949	935	11 28	14
7*	57·6	12 25	61·2	53·5	0 6	7·7	541	17 35	553	529	0 23	24	942	13 44	948	932	10 22	16
8**	57·2	13 0	62·7	49·4	23 33	13·3	546	7 23	572	505	22 13	67	940	22 39	951	929	8 45	22
9	57·3	6 41	62·6	50·5	0 1	12·1	528	1 8	566	499	8 56	67	944	15 44	959	927	1 30	32
10	56·9	14 30	61·9	51·9	20 5	10·0	532	0 47	560	495	13 45	65	944	15 42	957	933	9 40	24
11	56·9	13 48	59·5	49·8	21 39	9·7	537	21 45	547	516	12 18	31	943	15 12	948	933	12 19	15
12*	57·4	13 0	59·6	55·9	9 48	3·7	539	18 34	542	530	9 31	12	942	19 21	951	930	8 36	21
13	57·5	16 18	63·0	48·7	21 39	14·3	536	7 46	561	494	17 2	67	946	17 42	964	932	11 57	32
14**	56·1	17 54	66·2	39·5	21 21	26·7	518	8 2	565	426	18 2	139	955	17 41	1005	931	9 42	74
15**	54·9	10 29	60·7	41·9	0 49	18·8	507	1 4	560	427	20 35	133	948	19 42	987	911	4 48	76
16**	56·0	12 37	60·4	46·0	1 29	14·4	519	0 58	578	484	1 24	94	952	20 38	977	918	1 20	59
17**	57·4	1 0	64·6	41·0	19 20	23·6	520	23 24	562	477	16 11	85	954	17 2	978	938	11 55	40
18	57·2	3 2	62·7	54·7	18 44	8·0	527	4 24	550	492	13 46	58	951	14 42	966	942	3 40	24
19	56·9	12 33	60·5	46·9	20 28	13·6	532	20 31	548	496	13 55	52	952	16 41	965	943	12 31	22
20	57·1	1 40	60·9	55·4	9 35	5·5	537	6 53	549	522	9 53	27	948	16 14	954	941	9 42	13
21*	56·9	13 6	59·2	55·5	8 44	3·7	539	1 57	548	524	13 37	24	948	16 10	954	941	11 39	13
22	56·9	12 31	60·0	52·4	19 57	7·6	538	6 14	549	525	17 45	24	948	20 16	955	941	12 32	14
23*	57·1	12 4	60·5	55·0	21 48	5·5	541	8 10	554	529	12 24	25	947	21 11	954	939	10 24	15
24	56·8	13 18	59·4	54·5	19 1	4·9	547	6 33	558	536	10 16	22	945	15 46	952	938	11 17	14
25	57·2	12 59	61·0	50·4	20 30	10·6	543	8 31	568	514	20 58	54	946	21 31	959	935	9 20	24
26	56·9	14 13	61·7	51·3	1 0	10·4	537	8 2	555	508	20 16	47	948	20 56	959	938	7 49	21
27	56·7	11 40	60·9	50·1	3 0	10·8	534	2 21	568	519	12 41	49	947	16 7	957	931	2 53	26
28	56·5	14 31	62·5	49·0	21 52	13·5	534	21 4	565	495	14 37	70	949	15 30	960	937	12 3	23
29	57·3	13 51	61·0	54·1	20 54	6·9	539	18 31	548	529	0 41	19	946	17 59	952	935	9 42	17
30	56·9	13 58	61·9	50·9	23 30	11·0	536	8 47	556	505	20 33	51	949	20 43	964	937	9 41	27
31	56·5	13 38	60·2	48·5	0 40	11·7	537	23 22	570	509	21 31	61	949	19 14	961	935	12 16	26
Mean	57·1	—	61·3	50·7	—	10·6	535	—	557	507	—	50·5	947	—	960	934	—	25·6
Mean*	57·3	—	60·2	54·7	—	5·4	540	—	549	527	—	22·2	945	—	952	936	—	15·8
Mean**	56·3	—	62·9	43·6	—	19·4	522	—	567	464	—	103·6	950	—	980	925	—	54·2

* 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, 1932.	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.	−1·59	−0·74	+0·01	+0·58	+0·60	+0·37	+0·33	+0·15	−0·12	−0·14	+0·94	+1·67	+2·62	**+3·03**	+2·41	+1·08	+0·75	−0·24	−1·26	−0·82	−1·83	−2·44	**−2·79**	−2·61
Feb.	−1·43	−0·30	+0·02	−0·28	−0·31	−0·20	−0·31	−0·49	−0·69	−0·54	+0·57	+2·10	+3·37	**+4·09**	+3·40	+2·16	−0·23	−0·75	−1·08	**−2·01**	−1·83	−1·53	−1·99	−1·80
Mar.	−1·17	−1·08	−1·01	−0·71	−1·03	−0·75	−0·63	−1·19	−1·52	−0·64	+1·45	+3·60	**+5·23**	+5·20	+4·68	+3·30	+1·32	−0·17	−2·09	−2·83	**−3·04**	−2·64	−2·33	−1·93
Apr.	−1·50	−1·51	−1·11	−0·29	−1·06	−1·50	−1·96	−2·49	**−2·73**	−1·54	+0·87	+3·24	+4·89	**+5·60**	+4·54	+3·62	+2·13	+0·58	−1·13	−1·94	−1·63	−2·10	−1·43	−1·54
May	−1·74	−1·59	−1·68	−1·54	−1·56	−2·41	−3·32	**−3·77**	−3·52	−1·75	+0·70	+3·60	+5·22	**+5·63**	+4·80	+3·64	+2·59	+1·24	+0·28	−0·40	−0·87	−1·01	−1·21	−1·41
June	−0·71	−0·90	−0·81	−1·48	−2·35	−3·70	−4·06	**−4·10**	−3·67	−2·21	−0·01	+2·33	+4·09	**+4·73**	+4·64	+3·58	+2·50	+1·67	+0·99	+0·48	+0·02	−0·09	−0·50	−0·63
July	−1·02	−0·72	−0·91	−1·32	−2·42	−3·43	−3·54	**−3·95**	−3·36	−2·01	+0·34	+1·99	+4·45	**+5·18**	+4·66	+3·09	+2·18	+1·30	+0·77	+0·36	−0·10	−0·45	−0·68	−0·85
Aug.	−1·52	−1·25	−1·54	−1·33	−1·75	−2·19	−2·78	**−3·35**	−3·06	−1·47	+0·71	+3·28	+5·12	**+5·97**	+5·07	+3·32	+1·43	+0·27	−0·85	−0·30	−0·23	−0·78	−1·15	−1·54
Sept.	−1·67	−1·15	−1·07	−1·42	−1·90	−1·92	−1·91	−2·26	−2·21	−0·48	+2·05	+4·44	**+5·38**	+5·34	+4·24	+2·56	+0·78	+0·25	−0·04	−1·06	−1·64	**−2·36**	−2·14	−1·87
Oct.	−1·45	−1·26	−0·90	−0·66	−0·37	−0·35	−0·35	−1·17	−2·16	−1·72	+0·37	+2·83	+4·51	**+4·63**	+3·93	+2·43	+1·32	+0·23	−0·07	−1·12	−1·76	−2·33	**−2·41**	−2·14
Nov.	−0·80	−0·36	−0·03	−0·03	+0·13	+0·02	−0·12	−0·32	−1·20	−1·06	+0·43	+1·99	**+3·07**	+2·84	+2·19	+1·16	+0·70	−0·36	−0·62	−0·68	−1·48	**−2·20**	−2·02	−1·33
Dec.	−1·38	−0·56	−0·34	+0·18	+0·20	+0·04	+0·06	+0·14	−0·05	+0·02	+0·82	+1·72	+2·36	**+2·46**	+2·09	+1·39	+0·51	+0·18	+0·07	−1·25	−1·98	**−2·61**	−2·20	−1·91
Year	−1·33	−0·95	−0·78	−0·69	−0·99	−1·34	−1·55	−1·90	**−2·02**	−1·13	+0·77	+2·73	+4·19	**+4·56**	+3·89	+2·61	+1·33	+0·35	−0·42	−0·96	−1·36	−1·71	−1·74	−1·63
Winter	−1·30	−0·49	−0·09	+0·11	+0·16	+0·06	−0·01	−0·13	−0·52	−0·43	+0·69	+1·87	+2·86	**+3·11**	+2·52	+1·45	+0·43	−0·29	−0·72	−1·19	−1·78	−2·20	**−2·25**	−1·91
Equinox	−1·45	−1·25	−1·02	−0·77	−1·09	−1·13	−1·21	−1·78	−2·16	−1·10	+1·19	+3·53	+5·00	**+5·19**	+4·35	+2·98	+1·39	+0·22	−0·83	−1·74	−2·02	**−2·36**	−2·08	−1·87
Summer	−1·25	−1·12	−1·24	−1·42	−2·02	−2·93	−3·43	**−3·79**	−3·40	−1·86	+0·44	+2·80	+4·72	**+5·38**	+4·79	+3·41	+2·18	+1·12	+0·30	+0·04	−0·30	−0·58	−0·89	−1·11

INCLINATION.

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

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

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

"All" Days.

NORTH COMPONENT.

Month and Season, 1932.	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.	+ 1·8	+ 0·2	− 0·7	− 0·4	+ 2·2	+ 5·5	+ 7·3	**+ 7·5**	+ 6·0	+ 0·4	− 6·5	− 9·3	**− 9·8**	− 6·8	− 4·4	− 5·6	− 3·6	− 2·5	+ 0·2	+ 0·9	+ 3·3	+ 3·7	+ 5·0	+ 6·4
Feb.	+ 2·9	+ 2·0	+ 1·3	+ 2·4	+ 3·3	+ 5·3	+ 8·0	**+ 9·0**	+ 5·7	− 1·2	− 9·5	**−16·0**	−13·0	−11·6	− 8·8	− 5·4	− 1·8	+ 1·9	+ 1·7	+ 4·2	+ 3·8	+ 2·4	+ 7·6	+ 5·2
Mar.	+ 8·8	+ 5·2	+ 2·9	+ 2·8	+ 6·2	+ 3·8	+ 4·0	+ 4·3	+ 0·2	− 8·8	−15·5	**−17·7**	−15·6	−11·2	− 6·2	− 5·2	− 3·6	− 0·2	+ 4·2	+ 6·1	**+10·0**	+ 8·9	+10·0	+ 7·9
Apr.	+11·6	+ 7·8	+ 3·6	+ 1·3	+ 4·7	+ 3·3	+ 2·8	− 2·5	− 6·8	−15·6	−24·7	**−25·2**	−20·1	−13·1	− 7·7	− 2·2	+ 0·7	+ 6·1	+11·3	+11·7	+10·1	+14·3	**+15·3**	+13·0
May	+12·9	+ 8·2	+ 8·3	+ 5·2	+ 1·4	+ 1·3	− 1·8	− 5·8	−11·9	−16·3	−20·5	**−22·0**	−21·5	−18·3	−11·4	− 3·0	+ 5·2	+15·9	**+18·0**	+13·7	+10·9	+10·5	+11·2	+ 9·8
June	+ 5·3	+ 4·2	+ 3·1	+ 5·3	+ 6·1	+ 4·4	+ 1·3	− 2·8	− 7·5	−13·9	−17·4	**−19·9**	−18·6	−17·1	− 8·7	− 1·9	+ 5·0	+ 9·8	+12·1	**+12·8**	+11·0	+ 9·9	+ 8·3	+ 7·2
July	+ 8·1	+ 6·0	+ 7·0	+ 7·3	+10·0	+ 7·9	+ 3·2	− 1·5	− 9·0	−17·7	−21·1	**−21·4**	−21·1	−18·5	−11·7	− 3·5	− 0·3	+ 8·1	+10·8	**+13·7**	+13·3	+12·4	+11·1	+ 9·4
Aug.	+10·8	+ 7·5	+ 8·1	+ 7·6	+ 7·8	+ 6·0	+ 1·3	− 7·0	−14·9	−21·5	**−23·0**	−22·6	−18·8	−12·6	−10·4	− 3·4	+ 1·6	+ 5·2	+11·0	+12·4	+13·0	**+14·7**	+13·9	+13·4
Sept.	+10·5	+ 8·8	+ 7·6	+ 7·6	+ 9·8	+ 6·9	+ 2·8	− 1·9	− 7·4	−13·9	**−21·2**	−20·2	−15·8	−13·5	− 9·6	− 9·0	− 3·5	+ 0·2	+ 3·8	+ 8·0	+11·0	**+14·5**	+14·3	+11·4
Oct.	+11·1	+ 8·5	+ 5·8	+ 5·2	+ 7·9	+10·0	+ 9·4	+ 8·9	+ 2·3	− 9·9	−19·7	**−23·2**	−19·6	−16·1	−11·1	− 9·5	− 5·4	− 1·2	+ 2·1	+ 4·2	+ 9·0	+ 6·9	+11·0	**+11·7**
Nov.	+ 3·8	+ 2·9	+ 3·6	+ 4·9	+ 7·5	+ 7·9	**+ 8·2**	+ 7·0	+ 2·4	− 4·9	−11·4	−14·6	**−14·6**	−12·1	− 8·3	− 6·4	− 4·1	− 0·2	+ 1·6	+ 2·7	+ 5·5	+ 7·1	+ 6·0	+ 5·1
Dec.	+ 1·8	+ 2·8	+ 2·9	+ 3·5	+ 5·7	+ 7·9	**+ 9·9**	+ 9·1	+ 5·9	+ 2·2	− 2·9	− 7·3	**− 8·0**	− 7·2	− 6·9	− 2·7	− 1·8	− 2·3	− 3·6	− 2·2	− 3·3	− 2·0	− 2·5	+ 1·0
Year	+ 7·5	+ 5·3	+ 4·5	+ 4·4	+ 6·1	+ 5·9	+ 4·7	+ 2·0	− 2·9	−10·1	−16·1	**−18·3**	−16·4	−13·2	− 8·8	− 4·8	− 1·0	+ 3·4	+ 6·1	+ 7·4	+ 8·1	+ 8·6	**+ 9·3**	+ 8·5
Winter	+ 2·6	+ 2·0	+ 1·8	+ 2·6	+ 4·7	+ 6·7	**+ 8·4**	+ 8·2	+ 5·0	− 0·9	− 7·6	**−11·8**	−11·4	− 9·4	− 7·1	− 5·0	− 2·8	− 0·8	− 0·0	+ 1·4	+ 2·3	+ 2·8	+ 4·0	+ 4·4
Equinox	+10·5	+ 7·6	+ 5·0	+ 4·2	+ 7·2	+ 6·0	+ 4·8	+ 2·2	− 2·9	−12·1	−20·3	**−21·6**	−17·8	−13·5	− 8·7	− 6·5	− 3·0	+ 1·2	+ 5·4	+ 7·5	+10·0	+11·2	**+12·7**	+11·0
Summer	+ 9·3	+ 6·5	+ 6·6	+ 6·4	+ 6·3	+ 4·9	+ 1·0	− 4·3	−10·8	−17·4	−20·5	**−21·5**	−20·0	−16·6	−10·6	− 3·0	+ 2·9	+ 9·8	+13·0	**+13·2**	+12·1	+11·9	+11·1	+10·0

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

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

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

International Quiet Days.

DECLINATION WEST.

Month and Season, 1932.	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.	−0·80	−0·52	−0·40	−0·12	+0·06	−0·22	−0·56	−0·88	**−1·54**	−1·32	+0·08	+1·28	+2·00	**+2·60**	+2·36	+1·84	+0·86	+0·34	−0·02	−0·46	−0·98	−1·00	−1·32	−1·28
Feb.	−0·90	−0·60	−0·50	−0·48	−0·60	−0·68	−0·86	−1·10	−1·74	**−1·92**	−0·62	+0·96	+2·74	**+3·32**	+2·88	+1·78	+0·64	+0·22	−0·10	−0·28	−0·16	−0·42	−1·12	−1·06
Mar.	−0·97	−0·99	−0·29	−0·55	−0·51	−0·81	−1·13	−2·25	**−2·93**	−2·27	−0·01	+1·99	+4·01	**+4·05**	+3·15	+1·73	+0·71	+0·31	+0·09	−0·63	−0·81	−0·61	−0·77	−0·67
Apr.	−1·70	−1·20	−0·44	−0·66	−1·00	−1·80	−2·22	−3·20	**−3·42**	−2·26	−0·20	+2·60	+4·46	**+4·90**	+3·74	+2·58	+1·64	+0·80	+0·10	−0·30	−0·34	−0·84	−0·82	−0·52
May	+0·06	−0·12	−0·60	−0·68	−1·26	−2·96	−4·02	**−4·36**	−3·86	−2·12	+0·66	+3·54	**+5·04**	+5·00	+3·86	+2·22	+1·02	+0·18	0·00	−0·32	−0·32	−0·46	−0·20	−0·26
June	−0·08	−0·30	−1·00	−1·46	−2·56	−3·78	**−3·92**	−3·72	−3·28	−1·82	+0·48	+2·58	+3·56	**+3·68**	+3·12	+2·10	+1·52	+1·08	+0·98	+0·78	+0·66	+0·64	+0·54	+0·28
July	−0·37	−0·37	−0·73	−1·11	−2·71	−3·95	−4·41	**−4·69**	−4·09	−2·57	−0·09	+2·91	+5·23	**+5·57**	+4·89	+3·15	+1·45	+0·65	−0·11	+0·07	+0·39	+0·31	+0·13	+0·27
Aug.	−1·16	−1·24	−1·42	−1·56	−2·08	−2·98	−3·58	**−3·96**	−3·90	−2·32	+0·06	+2·88	+5·06	**+5·58**	+4·48	+2·90	+1·68	+1·04	+0·54	+0·48	+0·22	+0·08	−0·30	−0·66
Sept.	−1·18	−1·32	−1·36	−1·38	−1·86	−2·08	−2·76	**−3·24**	−2·90	−0·92	+1·94	+4·10	**+4·78**	+4·30	+2·72	+1·06	+0·16	+0·18	+0·70	+0·42	+0·26	−0·52	−0·56	−0·44
Oct.	−0·26	−0·26	−0·50	−0·30	−0·08	−0·50	−0·94	−1·86	**−3·06**	−2·70	−0·78	+1·80	+3·64	**+4·20**	+3·12	+1·94	+0·56	+0·26	+0·16	−0·46	−0·74	−1·12	−1·14	−0·94
Nov.	−0·51	+0·11	+0·23	+0·05	−0·03	−0·55	−0·85	−1·21	**−1·67**	−1·63	+0·35	+1·87	**+2·93**	+2·61	+1·59	+0·99	+0·29	−0·07	−0·23	−0·41	−1·27	−1·37	−0·77	−0·49
Dec.	−0·84	−0·24	−0·10	+0·18	+0·22	−0·16	−0·32	−0·28	−0·62	−0·50	+0·54	+1·38	**+1·96**	+1·66	+0·96	+0·44	−0·02	−0·28	−0·42	−0·42	−0·42	−0·84	**−1·10**	−0·88
Year	−0·73	−0·59	−0·59	−0·67	−1·03	−1·71	−2·13	−2·56	**−2·75**	−1·86	+0·20	+2·32	+3·78	**+3·96**	+3·07	+1·89	+0·88	+0·39	+0·14	−0·13	−0·29	−0·51	−0·62	−0·55
Winter	−0·76	−0·31	−0·19	−0·09	−0·09	−0·40	−0·65	−0·87	**−1·39**	−1·34	+0·09	+1·37	+2·41	**+2·55**	+1·95	+1·26	+0·44	+0·05	−0·19	−0·39	−0·71	−0·91	−1·08	−0·93
Equinox	−1·03	−0·94	−0·65	−0·72	−0·86	−1·30	−1·76	−2·64	**−3·08**	−2·04	+0·24	+2·62	+4·22	**+4·36**	+3·18	+1·83	+0·77	+0·39	+0·26	−0·24	−0·41	−0·77	−0·82	−0·64
Summer	−0·39	−0·51	−0·94	−1·20	−2·15	−3·42	−3·98	**−4·18**	−3·78	−2·21	+0·28	+2·98	+4·72	**+4·96**	+4·09	+2·59	+1·42	+0·74	+0·35	+0·25	+0·24	+0·14	+0·04	−0·09

INCLINATION.

	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′
Jan.	+0·20	+0·14	+0·23	+0·07	−0·05	−0·25	**−0·47**	−0·44	−0·44	−0·04	+0·20	+0·26	**+0·31**	+0·18	+0·03	−0·01	+0·04	+0·07	−0·12	+0·05	+0·09	+0·06	+0·01	+0·03
Feb.	+0·02	+0·08	+0·10	+0·02	−0·08	−0·15	−0·27	**−0·34**	−0·23	+0·15	+0·43	**+0·45**	+0·39	+0·32	+0·20	0·00	−0·10	−0·15	−0·14	−0·19	−0·22	−0·14	−0·14	−0·11
Mar.	−0·16	0·00	−0·06	−0·15	−0·13	−0·32	**−0·43**	−0·39	−0·08	+0·34	**+0·51**	+0·48	+0·28	+0·36	+0·26	+0·17	+0·11	+0·06	−0·12	−0·01	−0·10	−0·26	−0·24	−0·34
Apr.	−0·13	+0·03	−0·10	−0·05	−0·23	−0·23	−0·16	+0·04	+0·46	+0·86	**+1·01**	+0·71	+0·36	+0·07	−0·05	−0·15	−0·15	−0·27	−0·23	−0·27	−0·28	−0·26	−0·38	**−0·42**
May	−0·44	−0·34	−0·20	−0·08	−0·01	+0·21	+0·56	+0·90	**+1·20**	+1·20	+1·02	+0·65	+0·41	+0·22	+0·09	−0·12	−0·35	−0·56	**−0·81**	−0·79	−0·72	−0·68	−0·69	−0·70
June	−0·19	−0·40	−0·30	−0·31	−0·28	−0·03	+0·34	+0·65	**+0·93**	+0·91	+0·67	+0·29	+0·15	+0·39	+0·52	+0·31	+0·05	−0·35	−0·70	**−0·75**	−0·60	−0·59	−0·51	−0·38
July	−0·21	−0·18	−0·21	−0·20	−0·22	−0·11	+0·09	+0·41	+0·74	+0·80	+0·85	**+1·11**	+1·04	+0·61	−0·11	−0·19	−0·09	−0·29	−0·37	−0·65	**−0·76**	−0·71	−0·67	−0·68
Aug.	−0·35	−0·27	−0·37	−0·27	−0·11	+0·14	+0·39	+0·77	+1·23	**+1·36**	+1·00	+0·66	+0·22	−0·03	−0·01	−0·05	−0·20	−0·38	−0·71	−0·78	**−0·83**	−0·62	−0·44	−0·43
Sept.	−0·31	−0·16	−0·13	−0·07	+0·01	+0·20	+0·43	+0·73	+0·81	**+0·92**	+0·75	+0·48	+0·20	+0·06	−0·04	−0·01	−0·06	−0·18	−0·48	−0·65	−0·67	−0·59	−0·62	**−0·75**
Oct.	**−0·51**	−0·37	−0·13	−0·03	−0·01	−0·28	−0·29	−0·15	+0·24	+0·72	**+1·10**	+0·90	+0·60	+0·33	+0·30	+0·17	+0·05	−0·04	−0·28	−0·31	−0·41	−0·40	−0·45	−0·45
Nov.	−0·05	−0·07	−0·17	−0·19	−0·33	−0·48	**−0·63**	−0·28	+0·18	+0·59	+0·91	**+0·95**	+0·76	+0·48	+0·40	+0·11	−0·11	−0·22	−0·20	−0·20	−0·28	−0·33	−0·37	−0·32
Dec.	+0·10	+0·21	+0·01	−0·08	−0·22	−0·34	−0·44	**−0·47**	−0·32	−0·01	+0·12	+0·33	+0·37	**+0·38**	+0·29	+0·14	−0·03	−0·14	−0·15	−0·06	0·00	+0·10	+0·06	+0·17
Year	−0·17	−0·11	−0·11	−0·11	−0·14	−0·14	−0·07	+0·12	+0·39	+0·65	**+0·71**	+0·61	+0·42	+0·28	+0·16	+0·03	−0·07	−0·20	−0·36	−0·39	**−0·40**	−0·37	−0·37	−0·37
Winter	+0·07	+0·09	+0·04	−0·05	−0·17	−0·31	**−0·45**	−0·38	−0·20	+0·17	+0·42	**+0·50**	+0·46	+0·34	+0·23	+0·06	−0·05	−0·11	−0·15	−0·10	−0·10	−0·08	−0·11	−0·06
Equinox	−0·28	−0·13	−0·11	−0·08	−0·09	−0·16	−0·11	+0·06	+0·36	+0·71	**+0·84**	+0·64	+0·36	+0·21	+0·12	+0·05	−0·01	−0·11	−0·28	−0·31	−0·37	−0·38	−0·42	**−0·49**
Summer	−0·30	−0·30	−0·27	−0·22	−0·16	+0·05	+0·35	+0·68	+1·03	**+1·07**	+0·89	+0·68	+0·46	+0·30	+0·12	−0·01	−0·15	−0·40	−0·65	**−0·74**	−0·73	−0·65	−0·58	−0·55

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

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

International Quiet Days.

NORTH COMPONENT.

Month and Season, 1932.	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.	−1·8	−2·2	−3·7	−2·0	−0·5	+3·2	+6·5	+6·5	**+7·8**	+1·7	−3·2	−5·2	**−6·5**	−4·9	−2·1	−1·5	−1·0	−0·8	+2·4	+0·3	+0·7	+0·9	+1·9	+1·6
Feb.	+1·0	−1·1	−1·4	−0·2	+1·7	+3·1	+5·3	**+6·9**	+5·9	−0·6	−7·5	−10·7	**−11·7**	−10·6	−6·4	−0·8	+2·0	+3·1	+3·4	+4·2	+4·3	+3·4	+4·2	+3·5
Mar.	+3·6	+0·9	+1·1	+2·8	+2·7	+6·2	+8·3	**+9·2**	+4·3	−4·3	−11·1	**−13·8**	−12·3	−12·0	−7·4	−3·1	−0·6	+0·6	+3·4	+2·7	+4·2	+5·6	+5·4	+6·4
Apr.	+3·3	+1·0	+2·1	+1·5	+4·3	+5·5	+5·8	+4·0	−2·2	−11·8	−18·4	**−18·6**	−15·4	−9·6	−4·4	−0·2	+2·1	+5·8	+6·2	+6·6	+6·4	+6·6	**+8·2**	+7·8
May	+6·5	+5·3	+3·9	+2·8	+3·1	+1·9	−1·9	−7·4	−13·8	−17·9	**−19·8**	−18·7	−16·5	−12·2	−7·8	−0·4	+6·6	+11·1	**+14·6**	+14·2	+12·4	+11·4	+11·1	+11·0
June	+3·8	+6·6	+5·8	+6·9	+8·5	+6·2	+1·3	−4·4	−10·4	−14·0	**−16·2**	−14·8	−12·8	−13·9	−11·3	−5·3	+0·5	+6·6	+11·8	**+11·8**	+10·0	+9·5	+8·2	+6·3
July	+4·1	+3·3	+4·0	+4·4	+7·9	+7·8	+5·3	+1·3	−5·2	−11·0	−17·1	−25·0	**−26·6**	−19·9	−5·7	−0·2	+2·5	+6·9	+8·5	+11·1	**+11·7**	+10·6	+10·2	+9·9
Aug.	+7·0	+5·9	+7·5	+6·1	+5·1	+2·8	−0·5	−5·9	−13·8	−19·9	**−20·2**	−19·7	−14·3	−8·6	−5·0	−0·7	+4·4	+7·1	+12·1	+12·6	**+12·7**	+9·5	+7·6	+7·2
Sept.	+6·4	+4·6	+4·5	+3·7	+3·3	+1·0	−1·2	−5·4	−9·1	−15·2	**−17·8**	−16·3	−11·6	−7·6	−2·3	+0·4	+2·6	+3·5	+6·8	+10·1	+10·5	+10·2	+10·4	**+12·0**
Oct.	+8·1	+5·4	+2·5	+0·9	+0·3	+4·9	+5·7	+5·4	+1·1	−7·7	−17·1	**−18·7**	−16·0	−11·8	−8·0	−3·3	−0·0	+1·5	+4·9	+5·8	+7·1	+7·7	**+8·5**	+7·9
Nov.	+1·0	+0·7	+1·5	+1·9	+4·1	+7·7	**+9·8**	+5·9	−0·1	−6·4	−14·3	**−17·2**	−14·8	−9·6	−6·3	−1·5	+2·0	+3·8	+3·4	+3·6	+5·9	+6·6	+6·1	+4·9
Dec.	−0·6	−3·1	−0·7	+0·4	+2·3	+4·9	+6·4	**+6·6**	+4·8	−0·6	−3·9	−7·8	**−7·9**	−6·8	−4·4	−1·5	+1·4	+3·4	+3·6	+2·2	+1·3	+0·2	+1·0	−1·2
Year	+3·5	+2·3	+2·3	+2·4	+3·6	+4·6	+4·2	+1·9	−2·6	−9·0	−13·9	**−15·5**	−13·9	−10·6	−5·9	−1·5	+1·9	+4·4	+6·8	+7·1	**+7·3**	+6·9	+6·9	+6·4
Winter	−0·1	−1·4	−1·1	+0·0	+1·9	+4·7	**+7·0**	+6·5	+4·6	−1·5	−7·2	**−10·2**	**−10·2**	−8·0	−4·8	−1·3	+1·1	+2·4	+3·2	+2·6	+3·1	+2·8	+3·3	+2·2
Equinox	+5·4	+3·0	+2·6	+2·2	+2·7	+4·4	+4·7	+3·3	−1·5	−9·8	−16·1	**−16·9**	−13·8	−10·3	−5·5	−1·6	+1·0	+2·9	+5·3	+6·3	+7·1	+7·5	+8·1	**+8·5**
Summer	+5·4	+5·3	+5·3	+5·1	+6·2	+4·7	+1·1	−4·1	−10·8	−15·7	−18·3	**−19·6**	−17·6	−13·7	−7·5	−1·7	+3·5	+7·9	+11·8	**+12·4**	+11·7	+10·3	+9·3	+8·6

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

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

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

International Disturbed Days.

DECLINATION WEST.

Month and Season, 1932.	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.	−2·73	−1·50	+1·02	+1·67	+1·62	+1·67	+1·65	+2·27	+1·22	+0·87	+1·92	+1·65	+3·10	**+4·25**	+3·67	+0·57	+2·17	−2·60	−3·15	−0·73	−2·63	−3·20	**−7·58**	−5·15
Feb.	−1·46	+0·16	+2·44	−0·20	−0·02	−0·04	+0·02	+0·56	+0·82	+0·44	+1·78	+3·66	+4·32	**+5·56**	+4·78	+2·86	−1·78	−0·90	−2·46	−5·88	**−6·44**	−2·68	−1·02	−2·42
Mar.	−1·89	−2·51	−4·25	−2·75	−1·79	−0·95	−0·23	−0·67	−0·47	+1·45	+3·93	+6·21	**+7·13**	+6·63	+6·53	+4·97	+2·03	−0·99	−4·99	−3·99	**−5·23**	−3·07	−1·79	−3·39
Apr.	−1·76	−3·28	−2·24	−0·96	−2·58	−2·64	−2·46	−1·30	−1·56	−0·84	+2·68	+4·80	+6·18	**+6·96**	+3·82	+4·46	+3·12	+1·78	−1·60	**−3·86**	−1·98	−2·46	−0·98	−3·60
May	−2·10	**−3·76**	−3·48	−2·02	−2·02	−1·48	−2·34	−3·10	−3·02	−1·20	+0·74	+4·00	+6·68	**+7·76**	+7·16	+5·96	+4·52	+1·48	−0·82	−1·62	−2·16	−2·86	−3·16	−3·22
June	−1·44	−2·10	+0·40	−0·80	−1·42	−2·72	−3·36	−4·06	**−4·62**	−3·12	−0·90	+1·42	+3·90	+4·80	**+5·16**	+4·88	+4·08	+2·94	+1·32	+0·46	−1·22	−1·36	−0·82	−1·06
July	−2·16	−1·70	−1·36	−1·16	−2·12	**−3·70**	−2·52	−2·88	−1·90	−0·92	+0·60	+2·72	+4·62	**+6·52**	+5·16	+3·10	+2·02	+1·38	+0·94	+0·04	−1·18	−1·96	−1·40	−2·06
Aug.	−2·76	−0·12	−1·74	−2·58	−1·80	−1·76	−1·22	−0·44	−1·06	+0·90	+2·80	+4·78	**+6·22**	+6·08	+5·62	+3·76	+0·48	−2·34	−3·26	−1·48	−0·88	−2·44	**−3·60**	−3·36
Sept.	−3·30	−1·36	+0·34	−0·86	−3·08	−2·30	−1·20	−0·70	−1·04	+0·72	+2·60	+5·24	+7·08	**+7·70**	+6·22	+3·46	+0·70	+0·54	−2·14	−4·22	**−5·04**	−4·32	−2·86	−2·24
Oct.	−4·26	−3·72	−1·66	−0·40	+0·84	+1·52	+1·78	+0·54	−1·16	+0·48	+2·44	+4·38	+5·88	**+6·22**	+4·98	+2·46	+2·32	−0·18	−0·44	−2·70	−3·64	**−5·38**	−5·30	−4·88
Nov.	−1·09	−0·63	−0·65	+0·25	+1·23	+2·31	+2·33	+2·37	−0·15	+0·19	+0·89	+2·43	**+3·49**	+2·69	+1·93	+0·95	+0·89	−1·97	−2·67	−0·95	−2·27	−3·97	**−4·85**	−2·75
Dec.	−3·32	−1·78	−1·06	+0·18	+0·46	+1·04	+0·82	+1·36	+1·12	+1·44	+2·48	+3·14	+3·42	**+3·90**	+2·78	+2·84	+1·18	+0·28	+2·10	−3·50	−2·62	**−5·98**	−5·10	−4·84
Year	−2·36	−1·86	−1·02	−0·80	−0·89	−0·75	−0·56	−0·50	−0·99	+0·03	+1·83	+3·70	+5·17	**+5·76**	+4·82	+3·36	+1·81	−0·05	−1·43	−2·37	−2·94	**−3·31**	−3·21	−3·25
Winter	−2·15	−0·94	+0·44	+0·48	+0·82	+1·25	+1·21	+1·64	+0·75	+0·74	+1·77	+2·72	+3·58	**+4·10**	+3·29	+1·81	+0·62	−1·30	−1·55	−2·77	−3·49	−3·96	**−4·64**	−3·79
Equinox	−2·80	−2·72	−1·95	−1·24	−1·65	−1·09	−0·53	−0·53	−1·06	+0·45	+2·91	+5·16	+6·57	**+6·88**	+5·39	+3·84	+2·04	+0·29	−2·29	−3·69	**−3·97**	−3·81	−2·73	−3·53
Summer	−2·12	−1·92	−1·55	−1·64	−1·84	−2·42	−2·36	−2·62	**−2·65**	−1·09	+0·81	+3·23	+5·36	**+6·29**	+5·78	+4·43	+2·78	+0·87	−0·46	−0·65	−1·36	−2·16	−2·25	−2·43

INCLINATION.

	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′
Jan.	−0·82	−0·77	−0·85	−0·73	−0·85	**−1·00**	−0·89	−0·96	−0·41	+0·46	+0·81	+0·70	**+1·14**	+0·82	+0·34	+0·97	+0·86	+1·00	+0·83	+0·52	−0·11	+0·02	−0·82	−0·23
Feb.	−0·25	−0·60	−0·47	−0·30	−0·22	−0·34	−0·65	−0·58	**−0·66**	−0·14	+0·43	+0·66	+0·13	−0·05	+0·40	+0·81	**+0·93**	+0·05	+0·31	+0·49	+0·46	+0·71	−0·60	−0·31
Mar.	**−1·41**	−1·38	−0·84	−0·66	−0·93	−0·47	−0·67	−0·64	+0·09	+0·59	+1·05	+1·54	+0·74	+0·40	+0·25	+0·78	+1·29	**+1·80**	+0·74	+0·76	−1·35	+0·02	−0·94	−0·81
Apr.	−1·31	−0·69	−0·41	−0·60	−0·38	−0·37	−0·07	+0·55	+0·21	+1·05	**+2·47**	+1·49	+0·93	+0·35	+0·33	−0·06	+0·30	+0·39	−0·21	−0·18	+0·13	−0·58	**−1·82**	−1·31
May	−1·51	−1·20	**−2·01**	−1·69	−0·26	+0·01	+0·06	+0·50	+0·96	+0·86	+0·61	−0·77	**+1·52**	+1·45	+0·72	+0·05	−0·38	−1·50	−0·54	+0·43	+0·17	+0·30	−0·44	−0·11
June	**−0·92**	−0·58	−0·24	−0·73	−0·20	−0·06	+0·04	+0·30	+0·76	+1·35	**+1·48**	+1·04	+0·83	+0·84	+0·02	−0·01	−0·14	−0·54	−0·28	−0·35	−0·09	−0·29	−0·35	−0·69
July	−1·20	−0·84	−0·99	−0·86	**−1·36**	−0·65	+0·02	+0·47	+0·96	**+1·80**	+1·42	+1·09	+0·92	+1·15	+1·62	+0·20	−0·20	−0·69	−0·23	−0·39	−0·49	−0·78	−0·50	−0·78
Aug.	−1·39	−0·86	−1·67	−1·12	−0·69	−0·60	−0·05	+0·80	+1·55	**+2·26**	+1·90	+1·55	+0·92	+0·40	+0·69	+0·65	+0·83	+0·58	+0·10	−0·54	−0·40	−1·43	**−1·81**	−1·42
Sept.	−1·03	−0·98	−1·34	−1·42	**−1·79**	−1·43	−0·74	−0·70	−0·07	+0·73	+1·01	+1·11	+0·77	+1·32	+1·22	**+1·78**	+1·38	+1·68	+1·37	+0·60	−0·51	−1·24	−0·88	−0·92
Oct.	−1·34	−1·15	−1·22	−0·87	−1·64	**−1·94**	−1·36	−1·43	−0·36	+1·15	+1·61	+1·60	+1·16	+1·02	+1·19	+1·58	+1·68	**+1·73**	+0·71	+0·19	−0·12	+0·49	−1·07	−1·17
Nov.	−0·50	−0·53	−0·59	−0·76	**−1·27**	−0·65	−0·68	−0·62	−0·10	+0·23	+0·78	+0·66	+0·80	**+1·28**	+1·21	+0·93	+1·02	+0·84	+0·16	−0·08	−0·40	−0·64	−0·58	−0·33
Dec.	−0·43	−1·26	−1·28	−1·59	−1·48	−1·54	−1·65	**−1·66**	−1·17	−0·85	−0·44	+0·16	+0·43	+0·02	+0·18	−0·01	+1·06	+1·83	+1·78	**+1·93**	+1·77	+1·47	+1·78	+0·79
Year	**−1·01**	−0·90	−0·99	−0·94	−0·92	−0·75	−0·55	−0·33	+0·15	+0·79	**+1·09**	+1·03	+0·86	+0·75	+0·68	+0·64	+0·72	+0·60	+0·40	+0·28	−0·08	−0·16	−0·67	−0·61
Winter	−0·50	−0·79	−0·80	−0·85	−0·96	−0·88	**−0·97**	−0·96	−0·59	−0·08	+0·40	+0·55	+0·63	+0·52	+0·53	+0·68	**+0·97**	+0·93	+0·77	+0·72	+0·43	+0·39	−0·06	−0·02
Equinox	**−1·27**	−1·05	−0·95	−0·89	−1·19	−1·05	−0·71	−0·56	−0·03	+0·88	**+1·54**	+1·44	+0·90	+0·77	+0·75	+1·02	+1·16	+1·40	+0·65	+0·34	−0·46	−0·33	−1·18	−1·05
Summer	**−1·26**	−0·87	−1·23	−1·10	−0·63	−0·33	+0·02	+0·52	+1·06	**+1·57**	+1·35	+1·11	+1·05	+0·96	+0·76	+0·22	+0·03	−0·54	−0·24	−0·21	−0·20	−0·55	−0·78	−0·75

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.	+ 9·5	+ 6·5	+ 7·5	+ 6·7	+ 9·2	+12·2	+11·0	+12·2	+ 4·2	− 9·5	−14·3	−12·0	**−18·5**	−12·3	− 3·3	− 8·8	− 6·3	− 8·3	− 6·0	− 2·8	+ 4·7	+ 1·7	**+12·7**	+ 1·0
Feb.	+ 1·0	+ 5·6	+ 2·2	+ 0·6	+ 1·0	+ 3·8	+ 8·2	+ 6·8	+ 7·8	− 0·2	− 9·2	**−11·8**	− 3·6	+ 0·6	− 5·0	− 8·0	− 7·4	+ 4·8	− 0·4	− 2·4	− 2·8	− 7·8	**+ 9·4**	+ 2·6
Mar.	+15·8	+10·6	+ 3·2	+ 3·2	+ 9·0	+ 2·0	+ 6·2	+ 6·4	− 5·0	−14·2	−22·0	**−27·8**	−13·0	− 5·4	− 0·8	− 4·8	− 8·6	−12·2	+ 5·0	+ 1·8	**+26·0**	+ 1·4	+14·0	+ 9·4
Apr.	+17·0	+ 5·4	+ 0·2	+ 2·8	+ 2·2	+ 4·2	0·0	− 8·8	− 5·0	−19·6	**−42·0**	−28·2	−17·8	− 5·8	− 1·2	+ 6·0	+ 2·6	+ 2·2	+12·4	+11·0	+ 4·4	+12·8	**+26·8**	+14·6
May	+18·6	+ 8·2	+18·6	+12·6	− 8·8	− 9·8	− 7·8	−10·8	−15·8	−14·6	−12·8	−15·2	**−25·2**	−20·8	− 5·4	+ 9·2	+19·2	**+37·0**	+21·4	+ 5·6	+ 5·6	− 0·8	− 5·8	0·0
June	+10·0	+ 4·4	− 0·2	+ 7·4	+ 1·0	+ 0·2	− 0·6	− 4·8	−13·0	−23·4	**−27·6**	−22·4	−18·2	−15·2	+ 0·4	+ 4·4	+ 9·2	**+15·6**	+11·6	+12·2	+ 6·8	+ 7·6	+ 6·8	+ 9·0
July	+15·8	+10·6	+13·6	+11·8	**+19·2**	+ 8·4	− 1·4	− 8·2	−16·6	**−30·0**	−26·4	−23·0	−19·6	−20·8	**−24·4**	+ 0·8	+ 8·6	+17·2	+ 9·8	+11·8	+12·2	+14·6	+ 8·6	+11·2
Aug.	+15·0	+ 8·2	+14·2	+ 8·4	+ 5·8	+ 5·0	− 3·0	−16·4	−26·8	**−37·4**	−31·8	−26·6	−16·6	− 5·8	− 6·2	+ 0·2	+ 1·4	+ 5·6	+12·0	+15·8	+10·4	**+24·6**	+24·2	+16·4
Sept.	+11·2	+10·8	+15·0	+14·6	**+20·6**	+16·2	+ 6·2	+ 6·6	− 2·4	−14·6	−20·0	**−21·4**	−14·8	−20·2	−13·0	−16·0	− 7·2	−13·4	− 9·4	+ 0·4	+12·2	+19·6	+11·2	+10·4
Oct.	+15·4	+11·0	+11·2	+ 7·0	+19·4	**+24·0**	+15·8	+17·6	+ 2·0	−20·4	**−27·6**	−26·6	−18·4	−14·2	−14·2	−15·2	−15·0	−14·0	− 1·8	+ 4·0	+ 6·2	− 3·8	+16·2	+15·4
Nov.	+ 5·8	+ 7·0	+ 7·8	+ 9·8	**+16·4**	+ 6·8	+ 6·6	+ 6·2	− 1·2	− 5·8	−15·4	−12·8	−13·2	**−16·8**	−13·6	− 8·2	− 9·8	− 7·0	+ 2·4	+ 4·2	+ 8·0	+ 9·8	+ 7·6	+ 2·6
Dec.	+ 5·2	+13·0	+13·6	+18·0	+16·0	+18·0	+20·2	**+20·6**	+13·8	+ 9·6	+ 3·2	− 5·2	− 7·2	+ 0·4	− 0·2	+ 3·6	−11·6	−20·0	−18·4	−19·6	−19·2	−17·0	**−23·0**	−10·0
Year	**+11·7**	+ 8·4	+ 8·9	+ 8·6	+ 9·3	+ 7·6	+ 5·1	+ 2·3	− 4·8	−15·0	**−20·5**	−19·4	−15·5	−11·4	− 7·2	− 3·1	− 2·1	+ 0·6	+ 3·2	+ 3·5	+ 6·2	+ 5·2	+ 9·1	+ 6·9
Winter	+ 5·4	+ 8·0	+ 7·8	+ 8·8	+10·7	+10·2	**+11·5**	+11·5	+ 6·2	− 1·5	− 8·9	−10·5	**−10·6**	− 7·0	− 5·5	− 5·4	− 8·8	− 7·6	− 5·6	− 5·2	− 2·3	− 3·3	+ 1·7	− 1·0
Equinox	+14·9	+ 9·5	+ 7·4	+ 6·9	+12·8	+11·6	+ 7·1	+ 5·5	− 2·6	−17·2	**−27·9**	−26·0	−16·0	−11·4	− 7·3	− 7·5	− 7·1	− 9·4	+ 1·6	+ 4·3	+12·2	+ 7·5	**+17·1**	+12·5
Summer	+14·9	+ 7·9	+11·6	+10·1	+ 4·3	+ 1·0	− 3·2	−10·1	−18·1	**−26·4**	−24·7	−21·8	−19·9	−15·7	− 8·9	+ 3·7	+ 9·6	**+18·9**	+13·7	+11·4	+ 8·8	+11·5	+ 8·5	+ 9·2

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

International Disturbed Days.

NORTH COMPONENT.

Month and Season, 1932.	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.	+12·4	+ 8·0	+ 6·2	+ 4·7	+ 7·2	+10·1	+ 8·9	+ 9·4	+ 2·7	−10·3	−16·1	−13·6	**−21·6**	−16·8	− 7·3	− 9·3	− 8·6	− 5·2	− 2·3	− 1·8	+ 7·6	+ 5·2	**+20·9**	+ 6·8
Feb.	+ 2·6	+ 5·3	− 0·6	+ 0·8	+ 1·0	+ 3·8	+ 8·0	+ 6·0	+ 6·7	− 0·7	−11·0	**−15·6**	− 8·4	− 5·6	−10·2	−11·0	− 5·3	+ 5·7	+ 2·4	+ 4·2	+ 4·5	+ 4·6	**+10·3**	+ 5·3
Mar.	+17·6	+13·2	+ 7·9	+ 6·2	+10·8	+ 3·0	+ 6·3	+ 7·0	− 4·4	−15·5	−25·9	**−34·2**	−20·7	−12·7	− 8·1	−10·3	−10·7	−10·8	+10·5	+ 6·2	**+31·3**	+ 4·8	+15·7	+13·0
Apr.	+18·6	+ 9·0	+ 2·7	+ 3·8	+ 5·0	+ 7·1	+ 2·8	− 7·2	− 3·1	−18·2	**−44·1**	−33·0	−24·3	−13·5	− 5·5	+ 0·9	− 1·0	+ 0·2	+13·9	+15·1	+ 6·5	+15·3	**+27·3**	+18·3
May	+20·5	+12·2	+22·1	+14·6	− 6·4	− 7·9	− 5·0	− 7·1	−12·1	−12·9	−13·4	−19·4	**−32·1**	−29·0	−13·3	+ 2·3	+13·7	**+34·5**	+21·9	+ 7·3	+ 7·9	+ 2·4	− 2·1	+ 3·6
June	+11·4	+ 6·7	− 0·7	+ 8·1	+ 2·6	+ 3·3	+ 3·2	− 0·1	− 7·5	−19·4	**−26·0**	−23·5	−22·2	−20·3	− 5·4	− 1·2	+ 4·4	**+12·0**	+ 9·9	+11·4	+ 8·0	+ 9·0	+ 7·6	+10·0
July	+17·9	+12·3	+14·8	+12·8	**+21·2**	+12·4	+ 1·5	− 4·8	−14·1	−28·3	−26·5	−25·5	−24·4	−27·6	**−29·6**	− 2·7	+ 6·2	+15·3	+ 8·5	+11·5	+13·3	+16·5	+10·0	+13·3
Aug.	+17·8	+ 8·2	+15·8	+11·1	+ 7·7	+ 6·9	− 1·6	−15·6	−25·0	**−37·6**	−34·2	−31·4	−23·2	−12·5	−12·4	− 4·0	+ 0·8	+ 8·1	+15·4	+17·1	+11·2	+26·8	**+27·7**	+19·8
Sept.	+14·7	+12·1	+14·3	+15·2	+23·6	+18·4	+ 7·4	+ 7·2	− 1·2	−15·1	−22·5	−26·8	−22·4	**−28·4**	−19·7	−19·5	− 7·8	−13·7	− 6·8	+ 5·1	+17·6	**+24·0**	+14·2	+12·7
Oct.	+19·8	+14·9	+12·8	+ 7·3	+18·0	+21·8	+13·5	+16·6	+ 3·3	−20·5	−29·7	**−30·9**	−24·6	−20·9	−19·5	−17·6	−17·3	−13·5	− 1·3	+ 6·9	+10·1	+ 2·3	**+21·8**	+20·5
Nov.	+ 6·9	+ 7·6	+ 8·4	+ 9·3	**+14·7**	+ 4·1	+ 3·8	+ 3·4	− 1·0	− 5·9	−16·1	−15·2	−16·8	**−19·4**	−15·5	− 9·1	−10·6	− 4·6	+ 5·3	+ 5·2	+10·4	+14·0	+12·9	+ 5·6
Dec.	+ 8·8	+14·7	+14·5	+17·4	+15·1	+16·4	**+18·8**	+18·6	+12·2	+ 7·8	+ 0·4	− 8·6	−10·9	− 4·0	− 3·3	+ 0·3	−12·7	−19·9	**−20·4**	−15·3	−15·8	− 9·9	−16·8	− 4·4
Year	**+14·1**	+10·4	+ 9·9	+ 9·3	+10·0	+ 8·3	+ 5·6	+ 2·8	− 3·6	−14·7	−22·1	**−23·1**	−21·0	−17·6	−12·5	− 6·8	− 4·1	+ 0·7	+ 4·8	+ 6·1	+ 9·4	+ 8·8	+12·5	+10·4
Winter	+ 7·7	+ 8·9	+ 7·1	+ 8·1	+ 9·5	+ 8·6	**+ 9·9**	+ 9·4	+ 5·2	− 2·3	−10·7	−13·3	**−14·4**	−11·5	− 9·1	− 7·3	− 9·3	− 6·0	− 3·8	− 1·9	+ 1·7	+ 1·2	+ 6·8	+ 3·3
Equinox	+17·7	+12·3	+ 9·4	+ 8·1	+14·4	+12·6	+ 7·5	+ 5·9	− 1·4	−17·3	−30·6	**−31·2**	−23·0	−18·9	−13·2	−11·6	− 9·2	− 9·5	+ 4·1	+ 8·3	+16·4	+11·6	**+19·8**	+16·1
Summer	+16·9	+ 9·9	+13·0	+11·7	+ 6·3	+ 3·7	− 0·5	− 6·9	−14·7	−24·6	−25·0	−25·0	**−25·5**	−22·4	−15·2	− 1·4	+ 6·3	**+17·5**	+13·9	+11·8	+10·1	+13·7	+10·8	+11·7

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

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

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.																								
1932.	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.	+ 4·2	+2·6	−2·7	−3·1	+2·3	−1·7	−0·2	+0·6	− 8·7	+ 2·3	−0·2	+ 5·6	−2·0	−1·3	−0·2	+1·6	−0·1	− 5·3	−2·1	−0·6	+0·6	−0·6	−0·1	−0·3
Feb.	+ 6·6	+2·3	−4·9	−2·9	+3·0	−0·7	−0·3	+0·6	− 8·4	+ 0·2	+3·0	+ 6·4	−1·3	−3·1	−0·4	+2·2	+0·4	− 5·2	−2·9	−0·3	+1·5	−0·2	−0·5	−0·3
Mar.	+10·5	+0·1	−4·0	−1·8	+2·0	−2·0	−0·7	+1·3	−12·7	− 2·3	+5·9	+ 9·4	−0·7	−3·9	+1·3	+0·7	+1·3	− 9·1	−6·2	−1·5	+1·5	−0·4	+0·0	+0·2
Apr.	+14·8	−4·2	−5·5	−0·5	+2·9	−2·3	+0·4	+1·0	− 9·5	− 8·0	+5·2	+10·2	−2·2	−4·0	+1·0	−0·4	+1·8	− 9·2	−7·6	−2·2	+2·4	−0·3	−0·7	+0·4
May	+15·2	−6·1	−6·6	+0·5	+1·7	+2·1	+1·5	+0·1	− 9·1	−13·7	+5·5	+ 9·2	−3·9	−2·2	+1·7	−0·5	+3·8	− 8·9	−6·2	−1·7	+1·8	+0·2	−0·0	+0·7
June	+12·1	−4·0	−7·2	−0·3	+0·9	−0·0	+0·3	−0·5	− 5·2	−15·9	+5·6	+ 8·2	−2·9	−1·2	+0·1	+0·4	+5·6	− 4·2	−6·6	+0·4	+2·0	−0·8	−0·4	+0·2
July	+15·1	−2·6	−7·4	−0·3	+0·1	−1·1	+0·5	−0·1	− 5·4	−14·3	+5·6	+ 8·0	−3·3	−1·8	+0·1	+1·3	+4·7	− 3·7	−6·7	−0·4	+2·2	+0·1	−0·6	−0·1
Aug.	+16·3	−4·4	−5·2	+1·3	−0·2	−2·3	+1·0	+0·0	− 8·3	−11·4	+6·7	+ 8·4	−4·5	−4·6	+0·1	+1·0	+2·7	− 5·6	−7·1	+0·4	+2·8	−0·2	−0·4	−0·3
Sept.	+14·8	−0·4	−3·7	−0·4	+0·1	−2·7	−0·1	+0·4	−11·3	− 6·7	+6·8	+ 7·1	−4·1	−1·5	+2·0	+1·5	+1·3	− 6·2	−5·0	+1·0	+2·3	−0·5	−0·9	+0·2
Oct.	+13·3	+3·2	−5·5	−2·0	+3·3	−2·3	+0·1	+1·8	− 8·9	− 3·5	+1·8	+ 8·4	−2·6	−3·7	+2·6	+2·2	+0·8	− 5·5	−3·9	+0·0	+2·0	−0·4	−0·7	−0·3
Nov.	+ 8·2	+2·9	−4·9	−2·0	+1·5	−1·6	−0·5	+0·3	− 5·8	+ 0·1	+1·1	+ 5·8	−2·1	−1·7	+1·7	+1·8	+0·1	− 3·9	−2·0	+0·8	+1·0	−0·2	−0·7	+0·3
Dec.	+ 2·4	+5·4	−3·3	−0·6	+2·2	−0·1	−0·0	+0·3	− 8·5	+ 1·8	−0·3	+ 5·2	−0·8	+0·0	+1·0	+1·2	+1·0	− 5·3	−1·4	−0·6	+0·6	−0·9	−0·2	+0·0
Year	+11·2	−0·4	−5·1	−1·0	+1·6	−1·2	+0·2	+0·5	− 8·5	− 6·0	+3·9	+ 7·6	−2·5	−2·4	+0·9	+1·1	+1·9	− 6·0	−4·1	−0·2	+1·7	−0·3	−0·4	+0·1
W.	+ 5·4	+3·3	−4·0	−2·1	+2·3	−1·0	−0·2	+0·5	− 7·8	+ 1·1	+0·9	+ 5·8	−1·6	−1·5	+0·5	+1·7	+0·4	− 5·0	−2·1	−0·2	+0·9	−0·5	−0·4	−0·1
Eq.	+13·4	−0·3	−4·7	−1·2	+2·1	−2·4	−0·1	+1·1	−10·6	− 5·1	+4·9	+ 8·8	−2·4	−3·3	+1·7	+1·0	+1·3	− 7·5	−5·7	−0·7	+2·0	−0·4	−0·6	+0·1
S.	+14·7	−4·3	−6·6	+0·3	+0·6	−0·3	+0·8	−0·1	− 7·0	−13·9	+5·8	+ 8·4	−3·7	−2·4	+0·5	+0·5	+4·2	− 5·6	−6·7	−0·3	+2·2	−0·2	−0·4	+0·1
QUIET DAYS.																								
Year	+ 8·4	−0·7	−5·2	−0·3	+1·7	−0·9	+0·0	+0·5	− 4·7	− 7·5	+4·6	+ 6·5	−3·5	−2·3	+1·3	+1·1	+3·2	− 1·7	−3·7	+0·1	+1·9	−0·5	−0·6	+0·1
W.	+ 3·6	+1·4	−4·6	−1·8	+2·3	−0·8	−0·2	+0·3	− 4·3	− 1·7	+1·2	+ 4·9	−1·9	−1·7	+0·9	+1·3	+0·6	− 1·8	−1·0	−0·3	+0·9	−0·5	−0·4	+0·1
Eq.	+ 9·1	−0·3	−4·7	−0·4	+2·5	−1·6	−0·0	+1·1	− 5·4	− 7·0	+4·5	+ 7·1	−4·2	−3·1	+2·2	+1·3	+3·7	− 1·4	−3·9	+0·0	+2·2	−0·7	−0·9	+0·3
S.	+12·6	−3·2	−6·3	+1·1	+0·2	−0·5	+0·4	+0·2	− 4·2	−13·8	+8·1	+ 7·5	−4·5	−2·1	+0·9	+0·7	+5·4	− 1·9	−6·2	+0·6	+2·8	−0·4	−0·4	−0·0
DISTURBED DAYS.																								
Year	+15·6	+0·1	−5·4	−0·6	+2·0	−1·9	0·0	+0·7	−14·6	− 2·9	+3·3	+ 8·9	−1·5	−3·2	+0·5	+1·0	−0·8	−14·5	−7·4	−1·0	+1·7	+0·3	−0·1	−0·1
W.	+ 8·3	+5·7	−3·1	−1·4	+2·1	−1·5	−0·9	+1·0	−13·8	+ 6·5	−0·2	+ 7·7	−1·3	−1·7	−0·2	+2·5	−0·5	−10·8	−4·0	−0·6	+0·7	−0·4	−0·2	−0·2
Eq.	+19·7	+3·2	−5·5	−2·2	+2·3	−5·1	−0·6	+2·4	−18·4	− 2·7	+5·8	+ 8·9	−1·0	−4·9	+1·5	−0·1	−1·6	−17·5	−9·2	−0·9	+1·0	−0·1	+0·3	+0·1
S.	+18·7	−7·1	−7·6	+1·7	+1·8	+0·8	+1·5	−1·4	−11·7	−12·5	+4·1	+10·2	−2·3	−3·0	+0·3	+0·8	−0·3	−15·3	−8·9	−1·6	+2·8	+0·9	−0·2	−0·4

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

Values of c_n, α_n in the series $\Sigma c_n \sin (nT + \alpha_n)$, 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	a_1	c_2	a_2	c_3	a_3	c_4	a_4	c_1	a_1	c_2	a_2	c_3	a_3	c_4	a_4	c_1	a_1	c_2	a_2	c_3	a_3	c_4	a_4
"ALL" DAYS.																								
1932.	γ	°	γ	°	γ	°	γ	°	γ	°	γ	°	γ	°	γ	°	γ	°	γ	°	γ	°	γ	°
Jan.	5·0	59·4	4·1	222·2	2·9	128·3	0·7	342·3	9·0	285·1	5·6	358·4	2·4	238·6	1·6	356·2	5·3	180·9	2·2	254·9	0·8	134·7	0·3	202·1
Feb.	7·0	70·9	5·7	240·0	3·1	103·9	0·7	334·6	8·4	271·8	7·0	26·0	3·4	203·8	2·2	350·7	5·2	175·9	2·9	264·3	1·5	97·5	0·6	241·6
Mar.	10·5	89·9	4·4	246·0	2·8	136·9	1·5	333·7	12·9	260·0	11·1	32·8	4·0	190·8	1·5	64·6	9·2	172·4	6·4	257·0	1·5	106·3	0·2	6·5
Apr.	15·4	106·3	5·5	265·2	3·7	130·2	1·1	23·7	12·4	230·3	11·4	28·0	4·5	209·9	1·1	114·1	9·3	169·3	7·9	254·9	2·4	99·4	0·8	299·0
May	16·4	112·2	6·6	274·8	2·7	41·2	1·5	86·4	16·4	213·8	10·7	31·6	4·5	241·7	1·8	109·5	9·6	157·3	6·4	255·9	1·8	83·7	0·7	358·0
June	12·7	108·6	7·2	268·5	0·9	91·9	0·6	151·2	16·8	198·6	9·9	35·0	3·1	249·0	0·4	11·9	7·0	127·1	6·6	274·3	2·1	114·4	0·5	301·2
July	15·3	100·2	7·4	268·7	1·1	174·6	0·5	99·5	15·3	201·1	9·8	35·5	3·8	243·5	1·3	6·9	6·0	128·3	6·7	267·6	2·2	87·5	0·6	260·4
Aug.	16·9	105·4	5·4	285·0	2·3	186·2	1·0	89·7	14·1	216·6	10·7	39·6	6·4	226·1	1·0	8·5	6·3	154·8	7·1	273·6	2·8	94·9	0·5	237·2
Sept.	14·8	92·1	3·8	264·5	2·7	178·2	0·4	351·6	13·1	240·0	9·8	44·4	4·4	250·9	2·5	55·0	6·3	168·8	5·1	282·0	2·3	103·3	0·9	282·2
Oct.	13·7	76·8	5·8	251·0	4·1	126·5	1·8	4·7	9·6	248·8	8·6	12·6	4·6	216·4	3·4	51·3	5·6	172·2	3·9	271·0	2·0	101·3	0·8	250·1
Nov.	8·7	71·1	5·3	248·4	2·2	138·4	0·6	305·5	5·8	271·7	6·0	11·8	2·7	231·9	2·4	45·3	3·9	178·4	2·1	294·1	1·0	105·4	0·7	292·9
Dec.	5·9	23·8	3·4	260·3	2·2	93·3	0·3	357·3	8·7	282·7	5·2	358·0	0·8	274·2	1·5	41·1	5·4	169·9	1·5	263·2	1·1	149·3	0·2	279·1
Year	11·2	92·6	5·2	259·5	2·1	128·3	0·5	20·6	10·4	235·3	8·6	27·8	3·5	227·4	1·4	42·2	6·3	162·4	4·1	268·2	1·7	102·5	0·4	278·1
W.	6·3	58·6	4·5	242·6	2·5	116·0	0·5	334·9	7·9	278·5	5·8	9·9	2·2	226·8	1·8	19·1	5·0	176·1	2·1	266·4	1·0	119·0	0·4	258·5
Eq.	13·4	91·8	4·8	256·4	3·1	140·1	1·1	359·0	11·8	244·6	10·0	29·9	4·1	217·8	2·0	62·1	7·6	170·6	5·7	264·1	2·1	102·4	0·6	282·4
S.	15·3	106·6	6·6	273·3	0·7	119·9	0·8	98·5	15·5	207·2	10·3	35·5	4·4	237·6	0·7	44·3	7·0	143·5	6·7	268·1	2·2	95·6	0·4	288·1
QUIET DAYS.																								
Year	8·4	95·3	5·2	267·1	1·9	120·7	0·5	5·9	8·8	212·2	8·0	36·2	4·2	237·7	1·7	50·0	3·6	118·3	3·7	272·8	2·0	106·5	0·6	282·6
W.	3·9	68·8	5·0	249·1	2·5	109·6	0·4	145·2	4·6	248·2	5·1	14·7	2·6	229·6	1·6	35·0	1·9	163·8	1·0	255·2	1·1	121·6	0·4	280·7
Eq.	9·1	92·4	4·7	266·4	2·9	124·7	1·1	359·9	8·9	218·1	8·5	33·3	5·2	235·1	2·5	61·3	3·9	111·4	3·9	271·4	2·3	108·3	0·9	290·1
S.	13·0	104·8	6·4	280·4	0·5	156·6	0·5	65·5	14·4	197·5	11·1	48·1	4·9	245·7	1·1	53·0	5·7	109·9	6·2	275·9	2·8	99·9	0·4	268·6
DISTURBED DAYS.																								
Year	15·6	90·0	5·4	264·1	2·8	134·4	0·7	1·5	14·9	259·1	9·5	20·8	3·5	206·5	1·2	28·5	14·5	183·6	7·4	262·9	1·8	81·7	0·1	204·1
W.	10·1	55·8	3·4	246·0	2·5	127·4	1·3	317·7	15·2	295·7	7·7	359·0	2·1	217·4	2·5	356·2	10·8	182·9	4·1	262·2	0·8	119·8	0·3	234·6
Eq.	20·0	81·0	5·9	249·1	5·6	157·4	2·5	348·5	18·6	261·9	10·6	33·9	5·0	192·7	1·5	95·2	17·6	185·7	9·2	265·1	1·0	97·0	0·3	68·6
S.	20·0	111·3	7·8	283·4	2·0	66·1	2·0	135·7	17·2	223·5	11·0	22·6	3·8	218·5	0·8	22·0	15·3	181·6	9·0	260·8	2·9	72·8	0·4	205·7

TABLE X.—RANGE of MEAN DIURNAL INEQUALITIES for the MONTHS, YEAR and SEASONS of 1932.

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	5·82	1·07	15·4	4·14	0·78	10·6	11·83	2·14	31·2	17·3	29·6	11·7	14·3	20·2	5·2	42·5	57·3	26·6
February	6·10	1·43	22·6	5·24	0·79	15·6	12·00	1·59	21·2	25·0	30·3	13·7	18·6	26·8	10·4	25·9	64·1	25·6
March	8·27	1·34	21·9	6·98	0·94	19·0	12·36	3·21	53·8	27·7	41·0	25·0	23·0	35·1	15·4	65·5	60·3	59·8
April	8·33	2·20	38·2	8·32	1·43	26·4	10·82	4·29	68·8	40·5	44·6	29·6	26·8	44·4	19·6	71·4	53·6	35·6
May	9·40	1·87	38·9	9·40	2·01	35·6	11·52	3·53	62·2	40·0	49·2	28·1	34·4	50·6	20·4	66·6	55·9	63·4
June	8·83	1·55	31·4	7·60	1·68	29·6	9·78	2·40	43·2	32·7	47·0	25·3	28·0	38·9	25·0	38·0	54·4	33·8
July	9·13	1·95	35·6	10·26	1·87	34·6	10·22	3·16	49·2	35·1	46·8	24·8	38·3	52·1	21·6	50·8	47·9	32·0
August	9·32	2·27	37·8	9·54	2·19	36·4	9·82	4·07	62·0	37·7	50·3	25·7	32·9	53·5	24·0	65·3	45·2	57·4
September	7·74	1·83	31·5	8·02	1·67	28·4	12·74	3·57	42·0	35·7	40·4	22·4	29·8	42·9	15·8	52·4	60·6	45·0
October	7·04	1·87	30·3	7·26	1·61	26·4	11·60	3·67	51·6	34·9	33·7	17·4	27·2	37·4	11·4	52·7	59·1	42·4
November	5·27	1·34	20·8	4·60	1·58	24·4	8·34	2·55	33·2	22·8	24·4	10·6	27·0	23·4	6·0	34·1	39·7	21·8
December	5·07	1·32	15·8	3·06	0·85	12·8	9·88	3·59	43·6	17·9	26·9	10·7	14·5	15·0	6·4	39·2	55·8	34·6
Year	7·53	1·67	28·4	7·04	1·45	25·0	10·91	3·15	46·9	30·6	38·7	20·4	26·2	36·7	15·1	50·4	54·5	39·8
Winter	5·57	1·29	17·9	4·26	1·00	15·9	10·51	2·47	32·3	20·8	27·8	11·7	18·6	21·4	7·0	35·4	54·2	27·2
Equinox	7·85	1·81	30·5	7·65	1·41	25·1	11·88	3·69	54·1	34·7	39·9	23·6	26·7	40·0	15·6	60·5	58·4	45·7
Summer	9·17	1·91	35·9	8·95	1·94	34·1	10·34	2·29	54·2	36·4	48·3	26·0	33·4	48·8	22·8	55·2	50·9	46·7

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

Month, 1932.	"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	+0·2	+0·4	+0·04	+1·6	−0·4	−1·13	− 5·8	−2·4
February	+0·05	+0·4	−0·1	+0·30	+3·2	−0·4	+0·12	− 3·0	+1·4
March	−0·07	−0·5	+0·2	+0·34	+1·8	+0·2	+0·20	− 4·8	−2·0
April	−0·01	+0·3	+0·2	+1·52	+6·4	+2·8	−2·22	− 4·6	−9·6
May	−0·07	−0·1	+0·2	0·00	+5·2	−0·4	−1·00	−11·4	+3·4
June	+0·02	+0·4	−0·4	+0·06	+2·6	0·0	+0·40	− 2·6	+1·2
July	−0·05	+0·1	+0·1	+0·30	+4·2	−1·2	−0·58	− 7·0	+0·6
August	−0·03	−0·5	+0·2	+0·02	+1·4	−0·8	+0·30	− 6·2	−0·3
September	−0·05	0·0	−0·1	+0·08	+4·6	−0·8	+0·34	− 3·2	+2·0
October	−0·03	+0·0	+0·2	−0·42	+0·4	−2·0	+0·24	− 3·6	+2·4
November	−0·01	−0·1	+0·7	+0·46	+3·6	−0·8	−0·44	− 3·2	−0·2
December	−0·10	+0·3	0·0	+0·56	+0·2	−0·2	−0·76	− 3·2	+0·4
Year 1932	—	—	—	+0·27	+2·9	−0·3	−0·38	− 4·9	−0·3

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

Month, 1932.	Declination (West).	Inclination.	Horizontal Force.	North Force.	West Force.	Vertical Force.	Total Force.
	° ′	° ′					
January	12 7·5	66 38·8	·18539	·18125	·03894	·42937	·46768
February	12 6·8	66 39·0	·18536	·18123	·03890	·42938	·46768
March	12 5·7	66 39·1	·18534	·18122	·03883	·42935	·46764
April	12 4·7	66 39·2	·18533	·18123	·03878	·42937	·46765
May	12 3·8	66 38·9	·18537	·18127	·03874	·42937	·46768
June	12 3·4	66 38·6	·18543	·18134	·03873	·42939	·46771
July	12 2·5	66 38·6	·18543	·18135	·03869	·42938	·46770
August	12 1·3	66 38·9	·18538	·18131	·03861	·42937	·46768
September	12 0·3	66 39·3	·18533	·18128	·03855	·42941	·46770
October	11 59·3	66 39·5	·18531	·18127	·03849	·42943	·46770
November	11 58·4	66 39·4	·18534	·18131	·03845	·42945	·46774
December	11 57·1	66 39·4	·18535	·18133	·03838	·42947	·46776
Year 1932	12 2·6	66 39·1	·18536	·18127	·03867	·42940	·46769

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

1932 Day	January	February	March	April	May	June	July	August	September	October	November	December
	° ′	° ′	° ′	° ′	° ′	° ′	° ′	° ′	° ′	° ′	° ′	° ′
1	12. 0·1	12. 1·1	11. 59·5	12. 1·1	12. 1·9	11. 54·6	11. 56·4	11. 52·7	11. 52·4	11. 51·0	48·7 / 11. 50·6	11. 49·4
2	0·4	1·2	59·4	1·0	2·5	54·8	56·3	52·8	52·5	51·0	50·9 / 49·5	49·2
3	1·0	1·1	59·2	1·1	2·3	54·8	56·1	52·5	53·0	49·7	49·9	49·1
4	1·3	1·0	59·4	1·2	1·9	54·8	56·0	52·3	52·5	49·5	50·1	48·6
5	1·6	1·0	59·5	1·0	1·5	54·7	56·2	52·6	52·0	49·2	50·2	48·5
6	1·9	1·0	12. 0·0	0·8	12. 1·2 / 11. 52·5	54·0	56·3	52·9	52·1	49·2	50·4	48·4
7	2·2	1·1	11. 59·7	1·0	52·2	54·0	56·3	53·3	52·2	49·5	50·0	48·4
8	2·1	0·8	59·8	0·9	51·8	54·2	56·4	53·5	52·3	49·8	49·7	47·9
9	1·5	0·7	12. 0·0	0·6	51·9	54·1	56·3	53·6	52·3	50·1	49·5	48·0
10	1·5	0·4	11. 59·7	1·0	52·1	54·0	56·4	53·6	52·4	49·9	49·4	47·8
11	1·4	0·0	11. 59·3	0·8	52·4	54·4	56·8	53·6	52·2	50·0	49·3	47·2
12	1·4	0·0	59·3	0·7	52·9	54·7	56·9	54·0	51·9	50·3	49·4	47·3 / 46·5
13	1·7	11. 59·6	58·8	0·2	53·0	55·2	57·1	53·6	52·0	50·5	49·4	46·8
14	1·7	59·8	58·9	0·5	53·4	55·7 / 56·3	57·2	55·2	52·5	50·0	49·2	47·3
15	1·7	59·9	59·2	0·6	53·6	55·9	57·0	53·2	52·8	49·7	49·0	47·6
16	1·9	12. 0·2	59·2	0·5	54·3	55·8	56·9	53·3	52·8	50·0	49·1	47·9
17	2·0	0·3	59·1	0·7	54·0	56·0	56·7	53·4	52·9	50·2	49·1	48·2
18	2·1	0·2	59·3	0·6	54·0	55·9	56·0	53·5	53·0	50·3	48·9	48·5
19	2·2	0·0	59·4	0·5	54·1	55·5	55·6	53·9	52·6	50·4	48·7	48·6
20	2·4	0·3	59·6	0·4	54·1	55·4	55·7	54·2	51·7	50·6	49·0	48·9
21	2·8	0·2	59·7	0·6	54·1	55·1	55·9	54·3	51·5	50·9	49·1	48·8
22	2·7	0·3	59·7	0·6	54·6	55·1	11. 55·8 / 12. 5·6	53·9	51·0	51·3	48·8	48·9
23		0·5	12. 0·2	0·6	54·8	55·2	5·4	53·2	51·1	51·6	49·2	48·8
24		0·7	0·0	0·9	54·7	55·3	5·4	52·7	51·4	51·0	49·2	49·0
25	2·3	0·5	0·1	0·7	54·3	55·2	5·7	52·7	51·5	50·9	49·4	49·2
26	2·3	0·4	11. 59·8	0·8	54·0	56·0	5·6	52·6	51·1	51·0	49·6	49·0
27	2·3	0·5	59·7	0·9	53·6	55·8	5·6	52·4	50·5	51·1	49·7	48·8
28	1·6	0·1	12. 0·2	0·9	53·8	56·0	5·6	52·8	50·5	50·5	49·2	49·0
29	1·3	11. 59·7	0·4	1·3	54·0	56·2	11. 52·9	53·0	50·5	49·6	49·1	49·2
30	1·1		0·6	1·7	54·0	56·2	52·8	53·0	50·8	49·3	49·3	49·2
31	1·0		0·9		54·3		52·7	53·0		49·0		49·0

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.

Greenwich Mean Time, 1932.	No. of Obs.	Observed Horizontal Force.	Deduced Value of Base Line.
		γ	γ
Jan. 1. 10 2–10 20	8	18535	18645
2. 11 27–11 46	8	18535	18644
4. 11 8–11 26	8	18534	18644
4. 15 11–15 20	4	18537	18643
5. 10 23–10 44	8	18534	18643
6. 11 9–11 26	8	18556	18645
6. 16 17–16 26	4	18547	18644
7. 11 2–11 20	8	18549	18642
7. 14 39–14 48	4	18552	18644
8. 10 16–10 38	8	18539	18643
8. 14 49–15 0	4	18547	18645
9. 9 25– 9 40	8	18538	18644
11. 10 39–10 55	10	18538	18643
12. 10 12–10 35	8	18536	18642
12. 15 32–15 47	6	18493	18642
13. 10 17–10 34	8	18538	18642
14. 10 56–11 13	8	18526	18642
14. 15 3–15 10	4	18528	18642
15. 10 12–10 35	8	18529	18643
15. 14 43–14 53	4	18541	18642
16. 10 21–10 38	8	18536	18642
18. 11 3–11 18	8	18547	18641
19. 10 17–10 35	8	18536	18641
20. 10 36–10 50	8	18544	18640
20. 15 17–15 24	4	18545	18641
21. 10 49–11 8	8	18548	18644
22. 10 56–11 17	8	18540	18641
23. 10 24–10 36	8	18542	18641
25. 11 29–11 43	8	18508	—
25. 12 39–12 54	8	18529	18641
26. 10 10–10 23	8	18510	18641
27. 10 29–10 41	8	18517	18640
28. 17 13–17 23	6	18540	18642
29. 10 46–11 3	8	18520	18642
29. 14 43–15 3	8	18542	18642
30. 9 29– 9 45	11	18544	18642
30. 12 5–12 15	6	18512	18642
Feb. 1. 10 0–10 19	8	18535	18641
1. 11 20–11 34	8	18523	18641
10. 12 37–12 54	8	18535	18642
10. 15 2–15 20	8	18525	18643
11. 10 37–10 55	8	18526	18641
11. 11 55–12 5	6	18521	18641
12. 11 31–11 51	8	18509	18640
12. 14 56–15 9	6	18534	18642
13. 11 47–12 2	8	18510	18640
15. 10 57–11 15	8	18525	18643
16. 12 18–12 31	8	18530	18643
17. 10 18–10 30	8	18526	18641
17. 14 58–15 9	6	18541	18641
18. 10 10–10 28	8	18536	18641
18. 14 25–14 36	6	18550	18643
19. 9 58–10 14	8	18540	18641
22. 16 36–16 53	8	18522	18644
23. 10 59–11 20	8	18536	18643
24. 10 37–10 55	8	18492	18641
25. 10 5–10 30	8	18526	18642
26. 16 1–16 15	8	18535	18641
27. 9 53–10 13	8	18533	18641
29. 10 31–10 53	8	18532	18642
Mar. 1. 10 31–10 51	8	18549	18642
2. 10 41–10 57	8	18559	18640
Mar. 3. 11 17–11 33	8	18496	18640
4. 10 16–10 37	8	18521	18640
5. 10 26–10 39	8	18530	18640
7. 10 52–11 8	8	18517	18639
8. 9 52–10 19	8	18521	18640
9. 16 20–16 40	8	18536	18633
10. 11 19–11 38	8	18495	18633
11. 12 25–12 35	8	18522	18634
11. 15 18–15 35	8	18517	18632
12. 10 3–10 24	8	18530	18633
14. 10 36–10 53	8	18535	18633
15. 9 59–10 17	8	18532	18634
16. 10 46–11 2	8	18531	18633
17. 10 4–10 23	8	18528	18633
18. 10 26–10 46	8	18527	18633
19. 9 56–10 16	8	18521	18633
21. 15 33–15 49	8	18527	18634
22. 10 0–10 19	8	18489	18634
23. 10 20–10 45	8	18515	18633
24. 10 7–10 24	8	18514	18633
25. 10 59–11 8	6	18519	18632
26. 9 52–10 4	8	18522	18633
28. 11 43–11 58	8	18520	18634
29. 9 58–10 15	8	18492	18633
30. 11 47–12 2	8	18516	18634
31. 9 51–10 7	8	18497	18632
April 1. 10 18–10 43	8	18508	18632
2. 9 58–10 15	8	18506	18632
4. 12 37–12 51	8	18528	18631
5. 10 7–10 25	8	18514	18630
6. 10 27–10 51	8	18519	18632
7. 9 55–10 15	8	18469	18630
8. 10 35–10 51	8	18506	18630
9. 9 33– 9 55	8	18517	18631
10. 11 17–11 33	8	18496	18631
11. 9 26– 9 51	8	18513	18629
12. 10 19–10 58	8	18517	18630
13. 9 49–10 25	8	18536	18631
13. 13 11–13 18	4	18546	18631
14. 10 23–10 41	8	18499	18630
15. 9 47–10 10	8	18516	18630
16. 10 22–10 40	8	18507	18629
18. 15 38–15 58	8	18534	18632
19. 10 29–10 45	8	18519	18630
20. 9 2– 9 18	8	18521	18631
21. 9 24– 9 40	8	18526	18630
22. 9 4– 9 21	8	18539	18631
23. 10 19–10 37	8	18491	18631
25. 9 9– 9 23	8	18505	18631
26. 9 14– 9 34	8	18518	18631
27. 8 50– 9 6	8	18507	18630
28. 9 3–9 23	8	18519	18630
29. 9 24– 9 41	8	18519	18630
30. 9 25– 9 56	8	18524	18630
May 2. 18 0–18 17	8	18560	18654
3. 8 51– 9 12	8	18525	18655
3. 14 2–14 20	8	18532	18655
4. 8 48– 9 12	8	18527	18655
5. 9 38– 9 56	8	18520	18654
6. 11 41–11 58	8	18512	18657
May 6. 15 41–15 55	6	18537	18620
7. 8 58– 9 20	8	18508	18620
9. 15 58–16 9	8	18551	18623
10. 15 37–15 47	8	18546	18623
11. 11 59–12 11	8	18524	18624
12. 13 16–13 27	8	18531	18623
13. 13 27–13 39	7	18528	18624
14. 8 44– 8 57	8	18526	18623
16. 10 49–10 58	6	18515	18623
17. 9 12– 9 33	8	18502	18622
18. 9 22– 9 41	8	18525	18620
19. 8 57– 9 17	8	18527	18620
19. 15 28–15 35	4	18539	18622
20. 8 52– 9 11	8	18515	18620
21. 9 18– 9 33	8	18502	18619
23. 9 19– 9 45	8	18521	18619
23. 11 33–12 2	4	18524	18620
24. 9 2– 9 20	8	18531	18618
24. 13 2–13 31	3	18528	18618
24. 14 6–14 11	3	18534	18618
24. 14 45–15 10	3	18536	18618
25. 8 52– 9 9	8	18506	18618
26. 9 2– 9 23	10	18528	18623
26. 10 35–10 44	6	18522	18619
27. 8 33– 8 46	8	18518	18621
28. 9 4– 9 17	8	18520	18619
30. 10 15–10 29	8	18481	18617
31. 8 37– 8 50	8	18503	18620
June 1. 9 27– 9 42	8	18503	18619
2. 9 2– 9 19	8	18521	18620
3. 9 32– 9 49	8	18516	18618
4. 7 17– 7 33	8	18523	18618
6. 9 40– 9 57	8	18524	18617
7. 9 23– 9 36	8	18526	18621
8. 10 34–10 48	8	18533	18620
9. 10 22–10 36	8	18515	18620
10. 9 40– 9 57	8	18505	18619
10. 14 14–15 25	14	18530	18620
11. 9 1– 9 18	8	18519	18619
13. 15 57–16 13	8	18536	18622
14. 10 47–11 2	8	18516	18622
14. 15 2–15 19	8	18530	18644
15. 13 36–13 48	4	18526	18647
15. 14 55–15 11	2	18536	18647
15. 15 28–15 44	8	18540	18647
16. 9 5– 9 21	8	18532	18647
17. 19 6–19 19	8	18564	18648
18. 9 0– 9 13	8	18548	18648
20. 9 28– 9 43	8	18536	18648
21. 9 10– 9 27	8	18539	18648
22. 13 18–13 56	10	18527	18649
22. 15 32–15 51	2	18536	18649
23. 13 41–14 6	12	18535	18650
24. 9 3– 9 28	8	18534	18649
22. 11 45–11 50	3	18533	18650
24. 14 43–15 6	3	18550	18650
25. 9 0– 9 15	8	18531	18649
27. 9 38– 9 53	8	18527	18649
28. 8 23– 8 36	8	18525	18650
28. 15 48–16 28	3	18547	18650
29. 9 16– 9 38	8	18539	18649
30. 9 22– 9 44	8	18540	18648

May 2. Temperature raised to 16°·0.

June 14. 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, 1932.	No. of Obs.	Observed Horizontal Force.	Deduced Value of Base Line.
		γ	γ
July 1. 9 3– 9 23	8	18535	18648
2. 9 55–10 8	8	18530	18648
4. 8 50– 9 6	8	18536	18648
5. 9 28– 9 44	8	18529	18649
6. 8 55– 9 12	8	18490	18647
7. 9 23– 9 30	4	18487	18648
7. 10 44–10 52	4	18494	18647
7. 16 3–16 10	4	18544	18648
8. 10 6–10 19	8	18510	18648
9. 10 53–11 6	8	18513	18647
11. 9 23– 9 40	8	18513	18646
12. 9 53–10 9	8	18518	18647
13. 8 55– 9 12	8	18533	18646
14. 9 55–10 26	8	18523	18646
15. 9 0– 9 16	8	18521	18645
16. 9 29– 9 46	8	18541	18646
18. 8 59– 9 15	8	18521	18646
19. 10 45–11 4	8	18525	18646
20. 10 29–10 46	8	18520	18646
20. 14 52–14 57	2	18538	18647
21. 8 10– 8 17	4	18536	18646
21. 8 47– 8 55	4	18531	18648
21. 11 17–11 57	5	18507	18586
21. 13 32–13 52	8	18533	18587
21. 15 47–16 6	2	18541	18586
22. 8 41– 9 2	8	18529	18585
22. 10 47–11 1	8	18511	18632
22. 16 7–16 23	8	18552	18675
23. 8 52– 8 59	4	18527	18674
23. 9 38– 9 47	4	18527	11674
25. 11 23–11 49	8	18523	18674
25. 15 42–15 51	4	18537	18675
26. 9 7– 9 23	8	18528	18674
26. 14 22–15 23	4	18539	18675
27. 9 1– 9 18	8	18536	18674
28. 9 50–10 5	8	18519	18674
29. 9 0– 9 3	2	18542	18676
29. 14 8–14 53	6	18536	18641
29. 15 25–15 28	2	18543	18691
29. 17 55–17 58	2	18553	18702
29. 20 0–20 16	6	18560	18677
30. 8 35– 8 45	4	18535	18676
30. 10 11–10 18	4	18534	18677
Aug. 1. 9 37– 9 43	4	18520	18677
2. 8 46– 9 0	8	18535	18677
3. 13 53–14 5	8	18541	18677
4. 10 1–10 7	4	18510	18675
4. 10 24–10 30	4	18513	18676
5. 11 19–11 33	8	18506	18676
6. 11 26–11 37	6	18507	18677
8. 9 15– 9 28	8	18523	18674
9. 14 35–14 54	8	18525	18674
10. 10 12–10 32	8	18523	18672
11. 0 52– 1 11	6	18547	18673
11. 9 49– 9 59	6	15528	18671
11. 19 43–19 57	8	18566	18675
Aug. 12. 11 17–11 28	8	18542	18675
13. 14 38–14 44	4	18528	18674
15. 19 13–19 31	8	18554	18673
16. 20 28–20 41	8	18551	18674
17. 19 7–19 24	8	18555	18673
18. 9 33– 9 51	8	18512	18672
18. 13 37–13 58	8	18537	18671
19. 15 34–15 52	8	18538	18673
20. 15 7–15 22	8	18552	18672
20. 19 17–19 33	8	18563	18673
21. 21 39–21 50	4	18554	18673
22. 8 46– 8 54	4	18524	18672
22. 11 29–11 47	8	18514	18673
23. 9 39– 9 54	8	18512	18671
23. 11 23–11 27	2	18510	18674
23. 13 36–15 56	14	18530	18673
24. 1 18– 1 36	8	18538	18672
25. 1 34– 1 50	8	18539	18671
26. 9 27– 9 42	8	18521	18672
27. 8 56– 9 11	8	18519	18674
29. 10 20–10 36	8	18488	18673
29. 19 4–14 19	8	18510	18671
30. 10 16–10 35	8	18502	18671
31. 1 43– 2 0	8	18533	18670
Sept. 1. 0 54– 1 13	8	18540	18672
2. 11 45–11 51	4	18524	18672
2. 13 37–13 54	8	18511	18673
3. 10 16–10 32	8	18522	18672
5. 15 34–15 50	8	18518	18674
6. 10 12–10 26	8	18523	18674
7. 10 4–10 25	8	18490	18673
8. 9 36– 9 53	8	18515	18674
9. 9 2– 9 22	8	18523	18674
10. 9 38– 9 59	8	18514	18674
12. 15 56–16 16	8	18535	18675
13. 9 18– 9 36	8	18524	18675
14. 2 32– 2 52	4	18546	18674
14. 9 25– 9 41	8	18522	18674
15. 4 27– 4 43	6	18544	18674
15. 9 27– 9 42	8	18507	18673
16. 10 34–10 48	8	18518	18675
17. 9 17– 9 32	8	18527	18674
19. 10 0–10 14	8	18503	18672
20. 13 33–13 49	8	18521	18676
21. 10 57–11 13	8	18517	18676
21. 15 54–16 4	4	18534	18676
22. 8 54– 9 10	8	18524	18676
23. 9 29– 9 57	4	18483	18675
23. 10 51–11 8	8	18490	18676
24. 11 28–11 41	8	18499	18676
26. 13 28–13 42	8	18525	18678
27. 9 11– 9 28	8	18524	18678
28. 1 5– 1 23	8	18537	18677
28. 8 32– 8 46	8	18529	18678
28. 10 44–11 13	8	18529	18677
29. 1 20– 1 39	8	18577	18677
29. 11 11–11 28	8	18521	18677
30. 9 26– 9 51	8	18529	18677
Oct. 1. 10 12–10 27	8	18518	18677
3. 11 16–11 23	4	18514	18652
3. 15 29–15 38	4	18536	18654
Oct. 3. 16 30–16 42	4	18535	18653
4. 10 25–10 49	8	18525	18652
4. 12 36–12 51	6	18517	18652
4. 14 57–15 11	6	18501	18652
5. 10 43–11 1	8	18510	18652
5. 14 49–15 1	6	18535	18652
6. 11 43–12 0	8	18525	18652
7. 10 50–11 8	8	18522	18651
8. 10 11–10 14	2	18522	18650
8. 11 41–11 59	8	18523	18651
10. 11 20–11 38	8	18507	18651
11. 10 25–11 6	8	18519	18650
12. 4 33– 4 47	8	18536	18650
12. 14 48–15 10	8	18535	18649
13. 3 39– 3 54	8	18542	18649
13. 11 42–12 9	8	18521	18649
14. 10 38–11 3	8	18516	18651
15. 10 25–10 40	8	18458	18650
17. 11 29–11 34	4	18523	18649
18. 20 13–20 24	6	18539	18651
19. 10 0–10 13	8	18514	18649
20. 20 21–20 36	8	18504	18653
21. 10 16–10 27	8	18485	18652
22. 12 47–13 0	8	18514	18652
24. 11 57–12 11	8	18515	18649
25. 10 17–10 39	8	18502	18649
26. 15 50–16 8	8	18529	18649
27. 5 48– 6 1	8	18545	18648
27. 16 24–16 35	8	18525	18649
28. 15 43–16 2	8	18534	18649
29. 9 20– 9 32	8	18530	18650
31. 9 8– 9 20	8	18526	18650
Nov. 1. 9 59–10 18	8	18531	18657
1. 10 54–11 3	4	18529	18657
1. 16 10–16 40	6	18529	18658
2. 10 49–11 4	8	18500	18656
2. 12 43–12 56	8	18508	18659
3. 9 41– 9 55	8	18500	18657
3. 12 35–12 43	4	18527	18657
4. 10 35–10 52	8	18518	18658
5. 10 25–10 40	8	18510	18656
7. 10 30–10 51	8	18519	18655
8. 10 38–10 56	8	18520	18657
9. 1 19– 2 29	18	18542	18656
9. 3 19– 3 41	9	18540	18657
9. 10 16–10 40	8	18523	18657
10. 1 2– 1 46	20	18541	18657
10. 2 24– 3 36	22	18543	18657
10. 8 52– 9 9	8	18529	18657
11. 11 41–11 59	8	18530	18658
12. 11 14–11 33	8	18521	18657
14. 20 20–21 3	8	18534	18657
15. 10 34–11 46	12	18516	18659
15. 15 10–15 25	8	18535	18658
16. 10 24–10 39	8	18485	18657
17. 9 56–10 11	8	18505	18658
18. 9 19– 9 26	4	18522	18659
18. 10 26–10 28	2	18526	18659
18. 11 11–11 13	2	18521	18658
18. 12 34–12 42	6	18525	18659
19. 10 46–10 58	8	18515	18659
21. 20 9–20 29	8	18535	18658

Oct. 3. 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, 1932.	No. of Obs.	Observed Horizontal Force.	Deduced Value of Base Line.
		γ	γ
Nov. 22. 10 h 26 m–10 h 38 m	8	18528	18659
23. 2 52–4 37	24	18543	18658
23. 11 35–11 55	8	18531	18658
24. 2 57–3 13	8	18546	18659
24. 8 22–8 33	8	18543	18659
25. 13 8–13 22	8	18547	18660
26. 9 55–10 12	8	18534	18659
28. 10 38–10 54	8	18534	18658
29. 10 33–10 50	8	18523	18659
30. 10 2–10 20	8	18530	18659
Dec. 1. 10 24–10 42	8	18520	18658
2. 9 51–10 14	12	18527	18659
Dec. 11. 11 46–12 4	8	18528	18662
12. 10 33–10 49	8	18539	18663
12. 17 13–17 28	8	18539	18639
13. 10 6–10 24	8	18535	18637
13. 11 37–11 53	8	18536	18638
13. 16 29–16 46	8	18521	18640
14. 16 49–17 3	8	18451	18634
14. 18 52–19 8	8	18456	18635
15. 11 7–11 23	8	18507	18635
15. 15 37–15 51	8	18516	18636
16. 11 48–12 4	8	18513	18633
17. 20 45–20 56	6	18526	18635
19. 12 55–13 12	8	18522	18634
Dec. 20. 20 6–20 21	8	18542	18634
21. 10 39–10 52	8	18536	18634
22. 10 53–11 8	8	18531	18633
23. 10 42–10 59	8	18537	18633
24. 10 42–10 54	8	18545	18634
26. 21 3–21 19	8	18526	18632
27. 15 51–16 9	8	18530	18633
28. 9 44–9 56	8	18537	18633
28. 16 46–16 53	4	18549	18634
29. 10 41–10 54	8	18540	18634
29. 18 43–18 56	6	18540	18628
30. 10 41–10 59	8	18537	18634
31. 11 8–11 37	8	18530	18632

Dec. 12. 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 HUTS at ABINGER, with the DEDUCED VALUES of the BASE-LINE of the HORIZONTAL FORCE MAGNETOGRAMS.

Greenwich Mean Time, 1932.	Observed Horizontal Force.	Deduced Value of Base Line.
	γ	γ
Feb. 3. 14 45–16 0	18511	18638
3. 16 7–17 0	18518	18637
4. 11 9–12 1	18472	18634
4. 14 44–15 41	18509	18636
5. 11 7–12 0	18513	18635
5. 14 20–15 20	18524	18636
6. 11 6–12 7	18511	18640
8. 11 22–12 6	18501	18638
9. 11 8–12 13	18501	18634
9. 14 47–16 1	18533	18636
10. 10 51–11 57	18515	18633
11. 14 42–15 53	18538	18634
		18616
May 26. 9 14–10 26	18520	
26. 14 5–15 19	18523	18614
27. 8 52– 9 44	18511	18611
27. 10 26–11 32	18523	18615
28. 8 45– 9 50	18516	18615
28. 10 56–11 43	18523	18618
30. 13 34–14 31	18482	18619
31. 8 44– 9 38	18501	18621
31. 11 29–12 16	18491	18618
June 1. 10 49–11 52	18505	18619
2. 8 59–9 59	18516	18616
2. 14 28–15 22	18534	18624
3. 11 27–12 16	18527	18619
3. 13 37–15 19	18542	18624
7. 8 59– 9 49	18523	18618
7. 13 53–14 58	18550	18624
8. 8 52– 9 52	18514	18620
8. 10 13–11 0	18530	18618
9. 9 33–10 29	18512	18619
10. 11 15–11 58	18509	18623
11. 11 22–12 8	18528	18623
		18642
15. 8 48– 9 55	18526	
21. 14 48–15 44	18560	18654
22. 8 58–10 4	18541	18653
23. 8 55– 9 57	18526	18647
July 2. 10 50–11 38	18537	18649
4. 14 20–15 14	18580	18655
5. 10 37–11 42	18530	18650

Greenwich Mean Time, 1932.	Observed Horizontal Force.	Deduced Value of Base Line.
	γ	γ
July 6. 13 41–14 39	18489	18657
7. 14 39–15 32	18547	18656
8. 9 16– 9 59	18497	18645
9. 9 5– 9 54	18504	18647
11. 11 13–12 4	18526	18648
11. 13 37–14 44	18535	18647
12. 10 20–11 6	18526	18648
13. 10 34–11 41	18519	18644
14. 11 4–11 54	18517	18648
15. 10 56–12 2	18536	18645
18. 10 42–11 51	18523	18642
19. 14 4–14 57	18551	18651
20. 14 5–15 10	18546	18655
21. 14 9–15 5	18543	18591
25. 13 54–15 7	18529	18676
26. 13 59–15 11	18540	18678
28. 11 28–12 19	18513	18672
29. 11 15–12 14	18536	18676
30. 11 24–12 20	18550	18680
Oct. 4. 16 40–17 39	18541	18655
5. 12 2–13 1	18525	18654
6. 12 18–13 5	18537	18654
7. 11 52–12 49	18533	18655
8. 9 59–11 13	18521	18651
11. 12 1–12 49	18528	18650
12. 11 31–12 30	18526	18649
13. 14 39–15 48	18529	18650
14. 14 39–15 30	18539	18651
15. 11 19–12 5	18481	18654
25. 12 10–13 2	18498	18649
29. 9 53–11 1	18525	18651
31. 11 49–12 54	18520	18658
31. 15 41–16 35	18537	18655
Nov. 1. 10 39–11 31	18529	18662
2. 14 43–15 44	18530	18659
3. 10 10–11 9	18515	18655
4. 11 54–12 50	18531	18663

Greenwich Mean Time, 1932.	Observed Horizontal Force.	Deduced Value of Base Line.
	γ	γ
Nov. 5. 11 38–12 25	18521	18661
8. 11 13–12 5	18520	18657
9. 14 38–16 33*	18545	18662
10. 11 6–11 57	18523	18662
11. 14 52–15 50	18550	18661
12. 10 0–11 0	18522	18660
15. 9 56–10 51	18518	18657
16. 11 7–12 5	18505	18658
17. 11 11–12 6	18499	18658
18. 10 0–11 7	18522	18659
19. 10 6–11 9	18516	18659
21. 16 12–17 16	18534	18661
22. 15 29–16 32	18531	18659
24. 9 47–10 45	18531	18655
25. 15 1–16 23	18534	18661
26. 10 57–11 53	18525	18659
28. 11 13–12 5	18528	18657
29. 11 5–12 0	18521	18658
30. 10 45–12 0	18528	18659
Dec. 1. 11 3–12 1	18527	18660
2. 11 38–12 47	18529	18658
3. 10 35–11 37	18524	18658
5. 10 49–11 44	18531	18658
6. 15 2–16 7	18544	18661
7. 11 38–12 40	18537	18661
7. 14 25–15 30	18546	18663
8. 11 2–11 59	18527	18658
8. 15 0–15 59	18554	18663
9. 11 8–12 3	18514	18660
9. 14 50–15 37	18515	18662
10. 11 28–12 59	18523	18659
13. 14 57–15 58	18525	18641
14. 10 34–11 51	18534	18638
15. 11 37–12 48	18516	18638
16. 14 33–15 39	18529	18634
19. 10 5–11 5	18532	18637
21. 11 6–12 1	18529	18632
21. 15 13–16 20	18538	18635
22. 11 22–12 56	18535	18637
23. 11 10–12 2	18534	18632
28. 10 26–11 22	18540	18637
29. 12 15–13 8	18542	18636

May 2. Temperature raised to 16°·0. June 14. Temperature raised to 21°·0.
October 3. Temperature lowered to 16°·0. December 12. Temperature lowered to 11°·0.
* Nov. 9. The observation was interrupted by the breaking of the suspension thread.
Nov. 15. The magnetometer was removed from the old hut and mounted in the new hut.

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.

1932 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	43213	43209	43218	43221	—	43109	43178	43202	43224	43156	43142	43160
2	210	211	220	223	43255	109	178	200	225	—	142	161
3	—	212	221	—	260	115	—	201	228	134	142	162
4	205	212	221	220	261	114	178	201	—	130	140	—
5	204	214	224	217	263	—	180	202	234	130	140	162
6	205	212	—	219	265 / 103	116	179	201	237	132	—	162
7	202	—	222	218	104	117	180	—	237	130	143	160
8	200	217	223	217	—	116	180	201	239	132	144	162
9	200	215	222	217	107	117	181	198	240	—	146	163
10	—	215	220	—	106	117	—	200	242	133	147	163
11	201	215	221	217	108	117	181	197	—	131	148	—
12	201	205	221	217	109	—	181	206	247	131	148	164 / 137
13	205	211	—	219	108	114	181	206	247	130	—	130
14	201	—	224	220	108	114 / 144	182	—	244	132	151	129
15	200	210	225	219	—	156	184	207	244	135	150	129
16	201	211	222	218	107	161	185	204	246	—	151	129
17	—	211	226	—	107	162	—	205	244	133	151	133
18	199	210	224	219	104	164	189	207	—	132	153	—
19	198	211	223	218	105	—	193	201	246	136	154	129
20	198	—	—	218	102	169	199	204	248	139	—	128
21	200	—	226	220	104	173	196	209	253	136	154	130
22	197	223	224	220	—	175	199	209	255	136	154	126
23	199	220	223	219	103	175	201	210	261	—	155	128
24	—	218	224	—	103	179	—	212	147	132	155	129
25	201	216	224	219	103	178	205	216	—	133	156	—
26	203	216	223	219	104	—	206	218	152	133	156	124
27	201	218	—	219	107	178	206	222	153	132	157	125
28	204	—	224	218	106	176	206	—	151	133	—	126
29	205	218	224	217	—	176	205	220	155	135	159	125
30	208		224	218	108	178	203	222	155	—	160	126
31	—		224		108			221		141		125

May 2. Temperature raised to 16°·0.
June 14. Temperature raised to 21°·0.
Oct. 1. Temperature lowered to 16°·0.
Dec. 12. 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.

1932 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	43230	43230	43242	43239	—	43135	43169*	43201	—	43155	43132	43156
2	232	226	242	239	43281	{43140 43099*	171	202	43223	—	139	151
3	225	226	238	—	285	112	169	—	228	135	138	157
4	234	234	241	247	288	—	178	207	—	125	135	—
5	224	229	—	241	—	—	175	205	226	123	132	157
6	226	227	—	235	278	101	172	—	232	133	—	162
7	225	—	244	237	43129	109	172	—	228	119	140	161
8	225	237	242	234	—	112	173	—	233	132	140*	168
9	234	236	245	234	—	113	171	—	239	121	145	165
10	—	235	247	232	139	118	—	—	237	125	139	166
11	220	235	244	235	(158)	112	167	—	—	123	145	169
12	220	—	246	231	—	—	180	—	244	123	144	—
13	222	223	—	245	135	115	180	—	242	129	146	139
14	218	224	236	233	141	142	179	—	237	124	150	138
15	219	—	247	229	—	162	174	—	246	136	—	129
16	211	—	243	242	—	157	179	—	242	—	139	124
17	217	232	241	—	144	162	182	—	241	—	143	—
18	218	215	241	244	136	167	184	—	—	—	—	—
19	223	—	242	239	132	—	183	—	235	—	153	126
20	217	—	—	238	128	173	188	—	249	—	—	125
21	—	—	244	244	138	171	193	—	257	—	147	119
22	214	—	248	240	132	—	203	206	254	—	—	133
23	217	—	241	237	130	166	200	211	252	—	154	126
24	—	—	245	240	127	—	—	—	146	130	155	—
25	—	—	254	237	136	177	197	—	150	126	149	—
26	220	—	254	245	145	—	197	—	150	—	152	127
27	225	—	243	241	145	177	204	—	148	136	161	—
28	—	—	242	240	134	177	209	—	154	125	156	125
29	219	239	249	242	144	173	205	—	149	135	152	—
30	232		244	249	134	175	205	—	150	128	151	130
31	228		243		141		203	—		138		117

May 2. Temperature raised to 16°·0.
June 14. Temperature raised to 21°·0.
Oct. 3. Temperature lowered to 16°·0.
Dec. 12. Temperature lowered to 11°·0.

* Bearings adjusted.

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	c·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	1929	12 35·8	0·18555	0·42918†	66 37·2†
1926	13 10·4	0·18581	0·42947	66 36·3	1930	12 24·6	0·18542	0·42924†	66 38·2†
1927	12 58·4	0·18575	0·42932	66 36·2	1931	12 13·7	0·18543	0·42923†	66 38·1†
1928	12 47·0	0·18564	0·42941	66 37·3	1932	12 2·6	0·18536	0·42940†	66 39·1†

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 D15).

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 1932.

January.—Considerable activity was shown during the first two days, there being waves of 15′ in Dec. and 100γ in H. Conditions then became relatively quiet, and excepting a few isolated movements—notably one at 7^d 20^h—23^h in Dec. (−12′),—remained nearly undisturbed until the morning of 8th. A state of general disturbance began at $8^d.5^h$ which lasted until the morning of 13th and produced several movements greater than 10′ in Dec. and 50γ in H. Isolated bays and short periods of minor disturbance appeared on the traces between 13th and 17th. Six days of practically quiet conditions then followed, concluded by movements in Dec. at $24^d.20\frac{1}{2}^h$. The unsteadiness increased to moderate disturbance on 25th and this persisted till the end of the month, though diminishing greatly in intensity after 28th. The most noteworthy movements were a wave in Dec. (−20′) $26^d.21\frac{1}{2}^h$—23^h, abrupt movements in all traces at $27^d.15\frac{1}{4}$, and a wave in H (−100γ) $28^d.12^h$—14^h. The traces of part of the disturbance are reproduced in Plate I.

The range in declination during the month was from 11°.45′·5 on 26th to 12°.15′·4 on 8th; in horizontal intensity, from ·18425 on 28th to ·18601 on 9th; in vertical intensity, from ·42913 on 2nd to ·42974 on 27th.

February.—A period of activity commenced about midday on 3rd and extended to the end of 13th. Maximum disturbance was attained a few hours after commencement. Specially prominent waves in Dec. appeared on the trace at $3^d.16^h$—17^h (−18′), $4^d.1^h$ to 3^h (+20′), $11^d.16\frac{1}{2}^h$ to 18^h (−20′); in H.F. at $3^d.21\frac{1}{2}^h$ to $23\frac{1}{4}^h$ (+120γ), $4^d.16^h$ (+80γ), $4^d.20^h$ (+100γ), and in V.F. at $3^d.22^h$ to 24^h (−50γ). Irregular at first, the movements assumed a definitely oscillatory character later in the disturbance. From $16^d.2^h$ to $18^d.18^h$ conditions were practically quiet. Unsteadiness then set in again with waves, at intervals, reaching 10′ in Dec. and 50γ in H. At about $18\frac{3}{4}^h$ on 23rd an isolated wave of unusual amplitude (−30′) occurred in Dec., extending rather more than two hours in time and accompanied by prominent movements in H (−90γ) and V (+40γ). By midnight on 25th conditions had become quiescent and there were no further movements of any significance during the remainder of the month.

The range in declination during the month was from 11°.39′·8 on 23rd to 12°.20′·9 on 4th; in horizontal intensity, from ·18467 on 4th to ·18625 on 3rd; in vertical intensity, from ·42906 on 4th to ·42970 on 4th and 23rd.

March.—Magnetic conditions were in general disturbed throughout the month. Short intermissions occurred on 1st, 15th, 16th, 17th, 25th, 26th, 27th, but on no day, except perhaps 1st and 26th, was the quiet period uninterrupted for the whole twenty-four hours.

Among many prominent movements in the early days of the month may be mentioned a temporary increase in V (40γ) $2^d.18\frac{1}{2}^h$ to $3^d.0\frac{1}{2}^h$; a wave in Dec. (−20′) $2^d.21^h$—23^h; a wave in H (+80γ) $4^d.18\frac{1}{2}^h$—$19\frac{1}{2}^h$; a temporary increase in H (100γ) $5^d.20\frac{1}{2}^h$—22^h; waves in V (−20γ) at $8^d.0$ and $8^d.3^h$; steep waves in Dec. (−20′) and H. (+100γ) at $9^d.21^h$, and a temporary decrease in V (30γ) $10^d.1^h$—3^h. Activity became still more marked on 10th and traces of this part of the disturbance are reproduced in Plate II. There was then a rapid subsidence to the first relatively quiet period of the month. General disturbance began again early on 18th. At $18^d.18^h$ there were large movements in all traces, −27′ in Dec., +120γ in H, −40γ in V, after which the normal position was reached in about an hour. Much unsteadiness prevailed during the next few days and there were several movements exceeding 10′ in Dec. and 50γ in H, especially during the evenings of 21st and 22nd. The second relatively quiet period comprised the interval 25th to 27th. In the early hours of 28th movements appeared in the traces which proved to be the beginning of the most active disturbance of the month. There was a wave in Dec. (−15′) at $28^d.1^h$ to 4^h and a rapid decrease in H (−50γ). The main disturbance began soon after midday and the traces are reproduced in Plate III. The continuation which occurred on the following three days was scarcely less active at times. A few only of the most prominent movements will be mentioned. At $29^d.20\frac{1}{2}^h$, a steep wave in H (+120γ) and in Dec. (−15′); $30^d.12^h$ to $31^d.2^h$, numerous oscillatory movements in H—the chief being a double wave $17\frac{1}{2}^h$ to $18\frac{3}{4}^h$ (±50γ), and a steep wave at $20\frac{3}{4}^h$ (+100γ),—accompanied by related movements in V, including a general decrease of about 70γ; $30^d.17\frac{1}{2}^h$ to 19^h, a wave in Dec. −18′′, succeeded by several irregular movements of at least 10′; $31^d.18\frac{1}{2}^h$ a steep wave in H (+100γ), the largest of several similar movements during the evening.

The range in declination during the month was from 11°.38′·7 on 18th to 12°.19′·1 on 11th; in horizontal intensity, from ·18441 on 31st to ·18630 on 29th; in vertical intensity from ·42882 on 11th to ·43002 on 28th.

April.—The disturbed conditions prevailing at the end of March continued well into this month. On each of the first eight days the range in H was in the neighbourhood of, or considerably exceeded, 100γ. Periods of special activity were $1^d.21^h$ to $2^d.4^h$ and $2^d.15^h$ to 24^h. After 3^d the movements were often oscillatory, with many ripples on the waves. Prominent waves appear at $1^d.21^h$ in Dec. (−15′); at $2^d.0^h$ in H (+80γ); at $3^d.18^h$ in Dec. (−15′) and in H (−80γ); at $5^d.21^h$ in H (+70γ); at $8^d.0^h$ in H (+80γ) with a fluctuation in V. During the 9th, apart from a temporary decrease of 10′ in Dec. between 17^h and $20\frac{1}{2}^h$, activity died away and for the next two days was confined to unimportant isolated waves. Disturbance re-commenced, however, at 16^h on 13th with a prominent wave in H. (−100γ) which was followed at 20^h by an equally prominent wave in Dec. (−25′). Irregular movements then persisted at frequent intervals until the early hours of 19th after which

they subsided almost entirely. The first quiet period of the month lasted from $19^d.4^h$ to $22^d.5\frac{1}{2}^h$, when a small abrupt movement in Dec. and H initiated a further period of disturbance. Activity steadily increased throughout 23rd and 24th and on the latter day there were movements of over 60γ in H. By midnight on 25th activity was definitely decreasing, but there was general unsteadiness in diminishing degree for the remainder of the month.

The range in declination during the month was from 11°.44′·2 on 13th to 12°.17′·1 on 2nd; in horizontal intensity, from ·18446 on 7th to ·18610 on 5th and 24th; in vertical intensity, from ·42898 on 2nd to ·42979 on 25th.

May.—An isolated movement in the traces at $2^d.0^h$ was followed at $2^d.21^h$ by a short series of oscillations lasting till $3^d.5^h$. In V these were accompanied by a general decrease of about 50γ. A somewhat similar disturbance occurred between $4^d.17^h$ and $5^d.3^h$. In this case the movements were more irregular and the range in H. was over 100γ. From $5^d.13^h$ to $16\frac{1}{2}^h$ there was a steady increase in V amounting to 60γ, accompanied by much unsteadiness in the H trace. Unsteadiness remained the prevailing characteristic until the end of 7th. Two days of nearly quiet conditions followed which were ended by an abrupt movement in H and V at $10^d.0^h.4^m$. The movement, however, did not develop into a disturbance, though some irregularity was visible in the traces during the next few days, particularly between $11^d.0^h$ and $11^d.2^h$ in V and between $11^d.13^h$ and $11^d.17^h$ in H. There was a prominent wave in H at $16^d.7^h$ (−60γ), after which conditions tended to become quiet until the morning of 21st. Unsteadiness to a considerable degree was apparent during the second half of 23rd, there being one wave in H, at 22^h with an amplitude of +80γ. Between $24^d.23\frac{3}{4}^h$ and $25^d.3^h$ V was temporarily diminished by 40γ and significant movements took place in the other two traces. From $25^d.14^h$ to 17^h there was an increase of 70γ in H, with a similar but smaller increase in V. The traces then became generally unsteady and so remained until the onset of the disturbance of May 29–30. This disturbance (which, though comparatively short-lived, proved to be the greatest not only of the current year but the greatest since the spring of 1929) had no pronounced commencement. It developed first in H between $29^d.11^h$ and 12^h and declination was not affected to the same extent as the other elements. The traces are reproduced in Plate IV. Irregular movements continued to appear during the remainder of the month at frequent intervals.

The range in declination during the month was from 11°.40′·9 to 12°.18′·7; in horizontal intensity, from ·18356 to ·18694; in vertical intensity, from ·42767 to ·43030. All these ranges occurred during the disturbance of May 29–30.

June.—The conditions were, generally speaking, much quieter than in previous months, though a small measure of disturbance was almost always present. The periods from June $7^d.12^h$ to $12^d.24^h$ and June $19^d.18^h$ to $23^d.12^h$ were most marked in this respect. Between June $8^d.14^h$ and $9^d.3^h$ movements of 50γ in H and 10′ in Dec. took place, and again in H between $20^d.10^h$ and 19^h, while during the latter period a rather prominent increase in V (50γ) occurred. The only completely quiet day in the month was 15th.

The range in declination during the month was from 11°.53′·4 on 8th to 12°.14′·4 on 20th; in horizontal intensity, from ·18481 on 10th to ·18588 on 20th; in vertical intensity, from ·42900 on 26th to ·42975 on 20th.

July.—Conditions were practically quiet for the first three days. At $4^d.14^h$ a sharp movement in the H trace was followed by continuous oscillatory motion till $5^d.4^h$. From $5^d.17^h$ all traces were similarly affected and to a greater degree, though with less regularity. Two or three waves in H reached an amplitude of 50γ, while one at $6^d.14^h$ extended to −80γ. The general unsteadiness gradually declined after 10th, and from 13th to 15th, inclusive, conditions were again practically quiet. There was a prominent bay in the H trace (−80γ) at $16^d.13^h$—15^h and several slow undulations in Dec. during the night of 16^d—17^d. Movements during the succeeding ten days were of small significance and were chiefly confined to isolated bays or short periods of unsteadiness. 28th and 29th were quiet, while slight unsteadiness was again apparent on 30th and 31st.

The range in declination during the month was from 11°.54′·4 on 16th to 12°.14′·3 on 23rd; in horizontal intensity, from ·18445 on 6th to ·18617 on 5th; in vertical intensity, from ·42903 on 5th to ·42967 on 6th.

August.—A period of disturbance began during the evening of 1st and lasted with short intervals of quiescence until the end of 5th. Prominent waves occurred at $2^d.2^h$ in Dec. (+12′) and V (−20γ), at $2^d.21^h$ in H (+70γ), at $3^d.7^h$ in H (−60γ), and at $5^d.9^h$ in H (−80γ). Minor irregularities showed occasionally on the succeeding days, but no important movements took place until the morning of 12th, when between 3^h and 5^h there was a wave in Dec. (+10′) and in H (+50γ). These were followed at intervals by irregular fluctuations of small amplitude, but the general tendency was quiet until the end of 26th. The largest disturbance of the month developed rapidly about noon on 27th. The disturbance had not entirely died away at midnight on 30th though the most active period had passed by midnight of 29th. Part of the disturbance is reproduced on Plate V. Specially prominent waves in the later stages were shown at $20^d.19^h$ in H (+110γ), and in Dec. (−20′); also at $29^d.22^h$ in H (+80γ) and in V (−30γ).

The range in declination during the month was from 11°.41′·7 on 27th to 12°.14′·8 on 28th; in horizontal intensity, from ·18416 on 28th to ·18622 on 29th; in vertical intensity, from ·42867 to ·42989, both on 28th. The trace of V failed for part of August 2 and 3, but it is unlikely that the foregoing range was exceeded during the interval of failure.

September.—A number of irregular movements of no great amplitude took place during the first five days. The movements became more continuous on 6th, on which day some exceeded 50γ in H and 10′ in Dec. while there was a marked increase in V (+80γ) between 12^h and 16^h, which however subsequently declined in about the same interval of time. The unsteadiness persisted in varying degree until the end of 9th. Between 10th and 17th inclusive,

conditions were quiet. A period of fresh disturbance then set in. At first the movements were at irregular intervals, the most prominent being at $18^d.23^h$—waves in Dec. (−10′) and in H (+60γ)—and at $19^d.22^h$—wave in H (+60γ). On 22nd the movements became nearly continuous and also oscillatory in character. By $23^d.14^h$ the condition was one of moderate disturbance, there being a series of waves approaching 15′ in Dec. and exceeding 50γ in H. The V trace showed a general increase of 40γ between $23^d.16^h$ and 18^h followed by an even larger decrease (60γ) in the succeeding three hours. Conditions remained similarly disturbed throughout the 24th and 25th. Activity then gradually subsided to the former state of irregular movement and so remained till the end of the month. There was, however, one wave in H which exceeded 50γ. This occurred at $29^d.1^h$ (+60γ).

The range in declination during the month was from 11°.42′·0 on 23rd to 12°.11·′4 on 6th; in horizontal intensity, from ·18457 on 25th to ·18600 on 24th; in vertical intensity, from ·42905 on 8th to ·43004 on 6th.

October.—Occasional slight disturbance was shown throughout the first week until $7^d.2^h$. There was then a quiet period lasting about forty hours, after which occasional movements again became apparent, though never prominent. The first considerable disturbance of the month occurred on 15th. The true commencement was probably at $14^d.17^h.48^m$ when there was a significant sudden movement in the H trace. The development was delayed, however, till about 8^h on the 15th. The traces of the main part of the disturbance are reproduced in Plate VI. There was a feeble resumption between $17^d.12^h$ and $18^d.2^h$ and then the disturbance died out altogether. A quiet period supervened from $19^d.8^h$ to $20^d.12^h$, to be terminated by a short-lived but thoroughly active disturbance which developed during the evening of 20th. The traces are reproduced in Plate VII. Short-lived activity was noticeable between $22^d.18^h$ and 22^h (a wave in H, +90γ); also between $23^d.14^h$ and 24^h, when two or three movements exceeding 50γ took place in H. From $25^d.0^h$ to the end of the month there were a few isolated bays—two especially to be noted between $27^d.10^h$ and 17^h—but, in general, conditions were relatively quiet.

The range in declination during the month was from 11°.32′·4 on 20th to 12°.13′·4 on 15th; in horizontal intensity, from ·18437 on 15th and 20th to ·18587 on 22nd; in vertical intensity, from ·42902 on 21st to ·43002 on 15th.

November.—During the first half of the month—(after two rather prominent waves in all traces, which occurred between $1^d.3^h$ and 9^h)—the prevailing characteristic was slight general unsteadiness amounting almost to continuous undulation. The movements seldom exceeded 2′ in Dec. or 10γ in H. until 14th, when there was a wave in H, 40γ in amplitude, at 22^h. At $15^d.18^h$ unsteadiness became very marked, and by $16^d.0^h$ had the appearance of a minor disturbance. Activity was greatest between $16^d.14^h$ and $16^d.23^h$. A series of waves exceeding 10′ appeared in Dec., the mean value being temporarily diminished by about that amount, while the fluctuation in H, though not great, was very pronounced. After $17^d.0^h$ there was a gradual return to the conditions prevailing at the beginning of the month, and these persisted without any definite intermission until the end.

The range in declination during the month was from 11°.41′·8 to 12°.8′·8 both on 16th; in horizontal intensity from ·18475 to ·18576 both on 16th; in vertical intensity, from ·42917 on 16th to ·42980 on 17th.

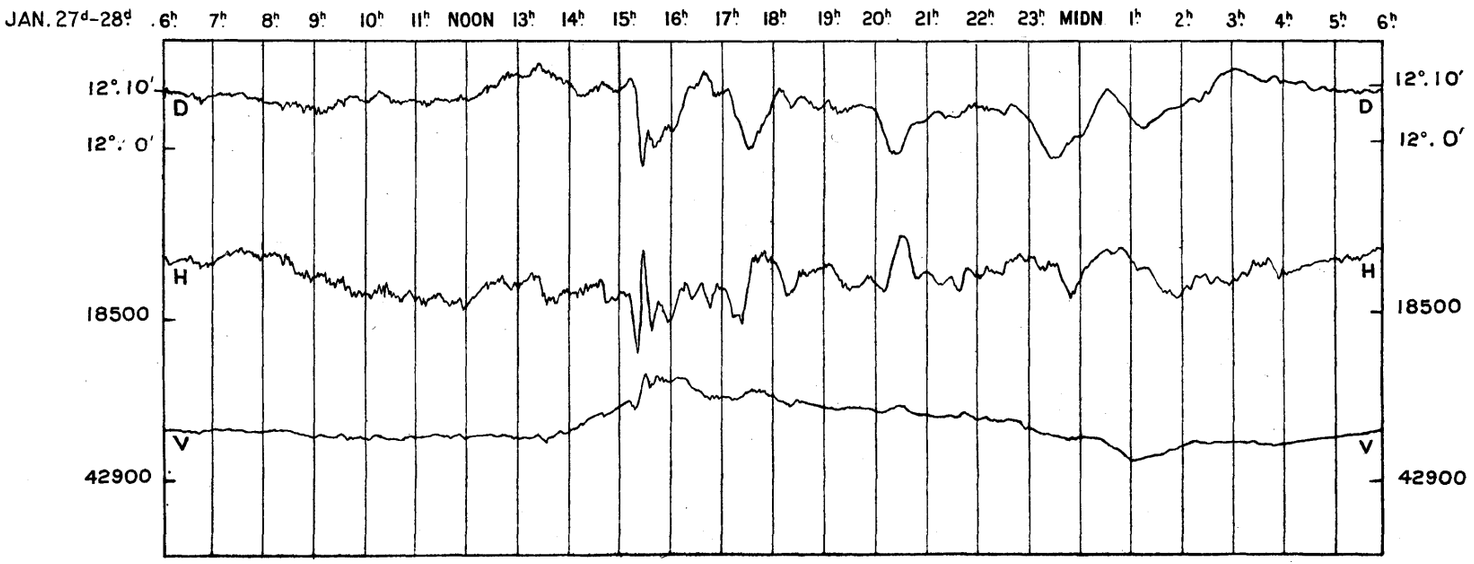
December.—The state of continuous slight undulation in all traces which was a feature during November was maintained also throughout December. A disturbed period began at $13^d.16^h$, but development of full activity was delayed until about noon of the following day, when a wave in H. occurred (−50γ). Between 16^h and 18^h there was a wave in Dec. (−18′) while H decreased generally—with two large oscillations—by over 100γ, and V increased temporarily by 50γ. The further course of the disturbance may be described, in the main, as an oscillatory recovery of H and V to their former values, occupying about eight hours from $14^d.20^h$, during which period Dec. first decreased 15′ and then also recovered. An echo of this disturbance, with many similar features on a smaller scale, took place between $15^d.19^h$ and $16^d.2^h$. It concluded, almost suddenly, with large waves in H (+100γ) and V (−50γ). Conditions remained unsteady, however, until the end of 19th. In particular there was a large wave in Dec. (−18′) at $17^d.19^h$ accompanied by less prominent movements in the other traces. The period from $20^d.10^h$ to $25^d.6^h$ was quiet. Slight unsteadiness then set in which gradually increased till 28th, when one or two movements in H approached 50γ. The 29th was nearly quiet, but unsteadiness again became apparent on the afternoon of 30th and persisted till the end of the month.

The range in declination during the month was from 11°.39′·5 on 15th to 12°.6′·2 on 14th; in horizontal intensity, from ·18426 on 14th to ·18578 on 16th; in vertical intensity, from ·42911 on 15th to ·43005 on 14th.

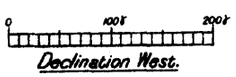
The absolute maximum and minimum values of the elements recorded during the year were:—
Declination: 12°.20′·9 on February 4th; 11°.32′·4 on October 20th.
Horizontal Intensity: ·18694 on May 29th; ·18356 on May 30th.
Vertical Intensity: ·43030 on May 29th; ·42767 on May 30th.

Plate I.

MAGNETIC DISTURBANCES AS RECORDED AT THE ABINGER MAGNETIC STATION IN THE YEAR 1932.

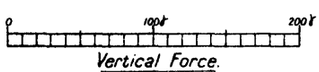


SCALES FOR MAGNETIC ELEMENTS IN C.G.S. UNITS.



Declination West.

Horizontal Force.



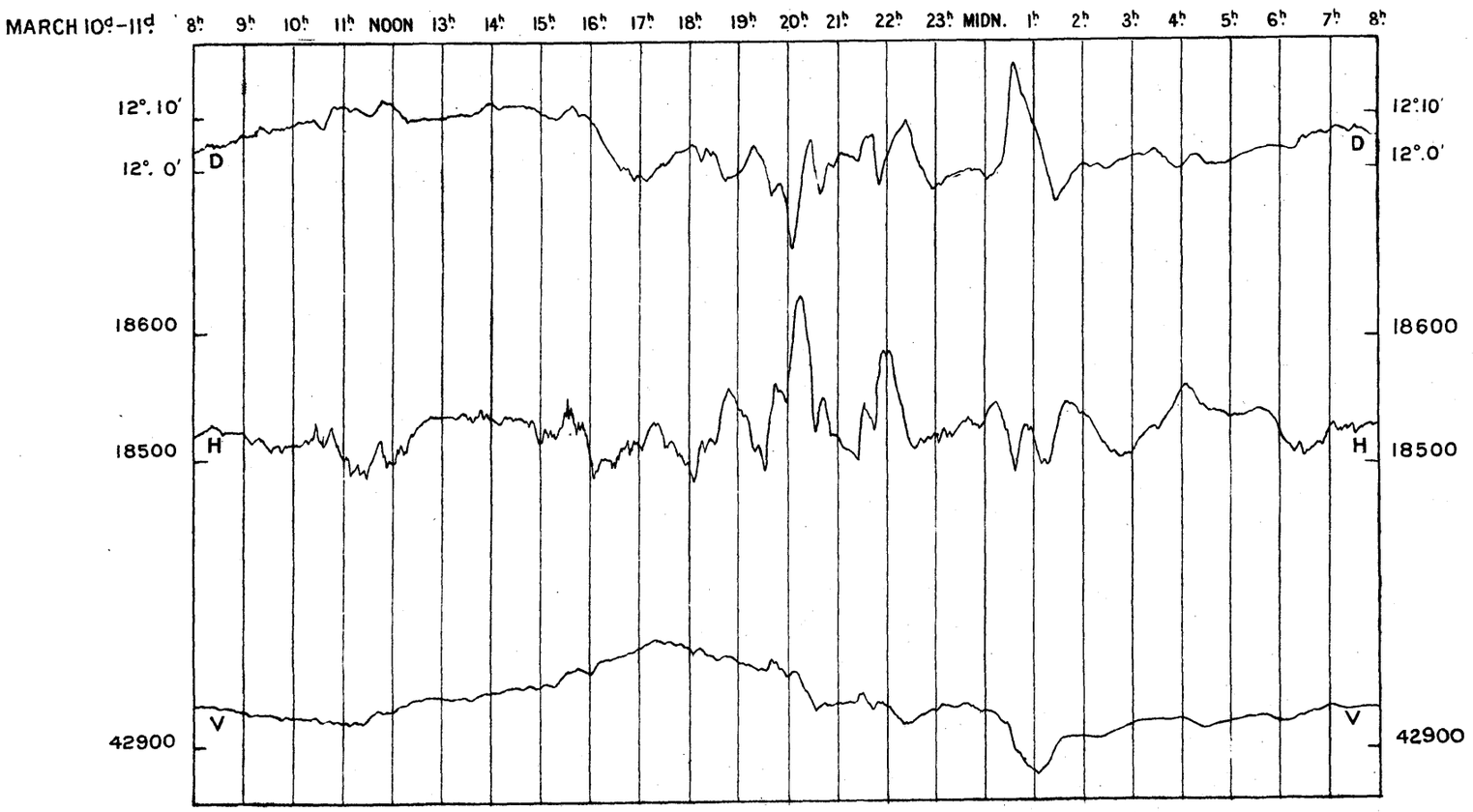
Vertical Force.

398,598(341//139,565,9/33.

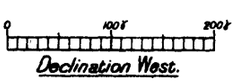
Malby & Sons, Lith.

Plate II.

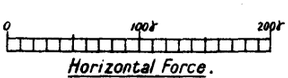
MAGNETIC DISTURBANCES AS RECORDED AT THE ABINGER MAGNETIC STATION IN THE YEAR 1932.



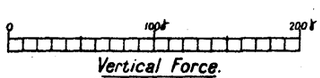
SCALES FOR MAGNETIC ELEMENTS IN C.G.S. UNITS.



Declination West.



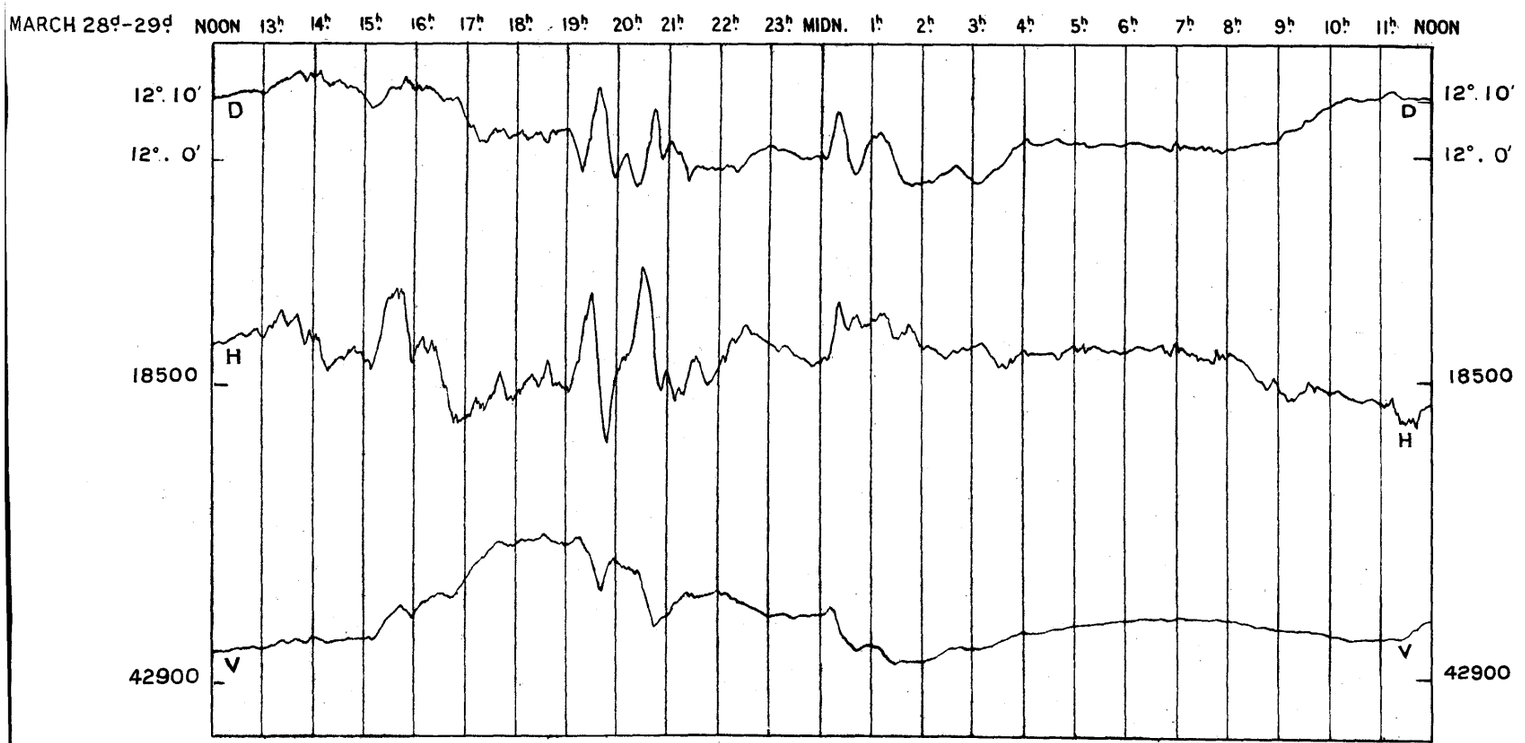
Horizontal Force.



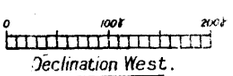
Vertical Force.

Plate III.

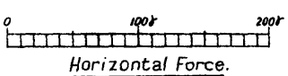
MAGNETIC DISTURBANCES AS RECORDED AT THE ABINGER MAGNETIC STATION IN THE YEAR 1932.



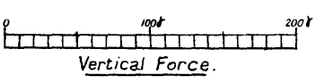
SCALES FOR MAGNETIC ELEMENTS IN C.G.S. UNITS.



Declination West.



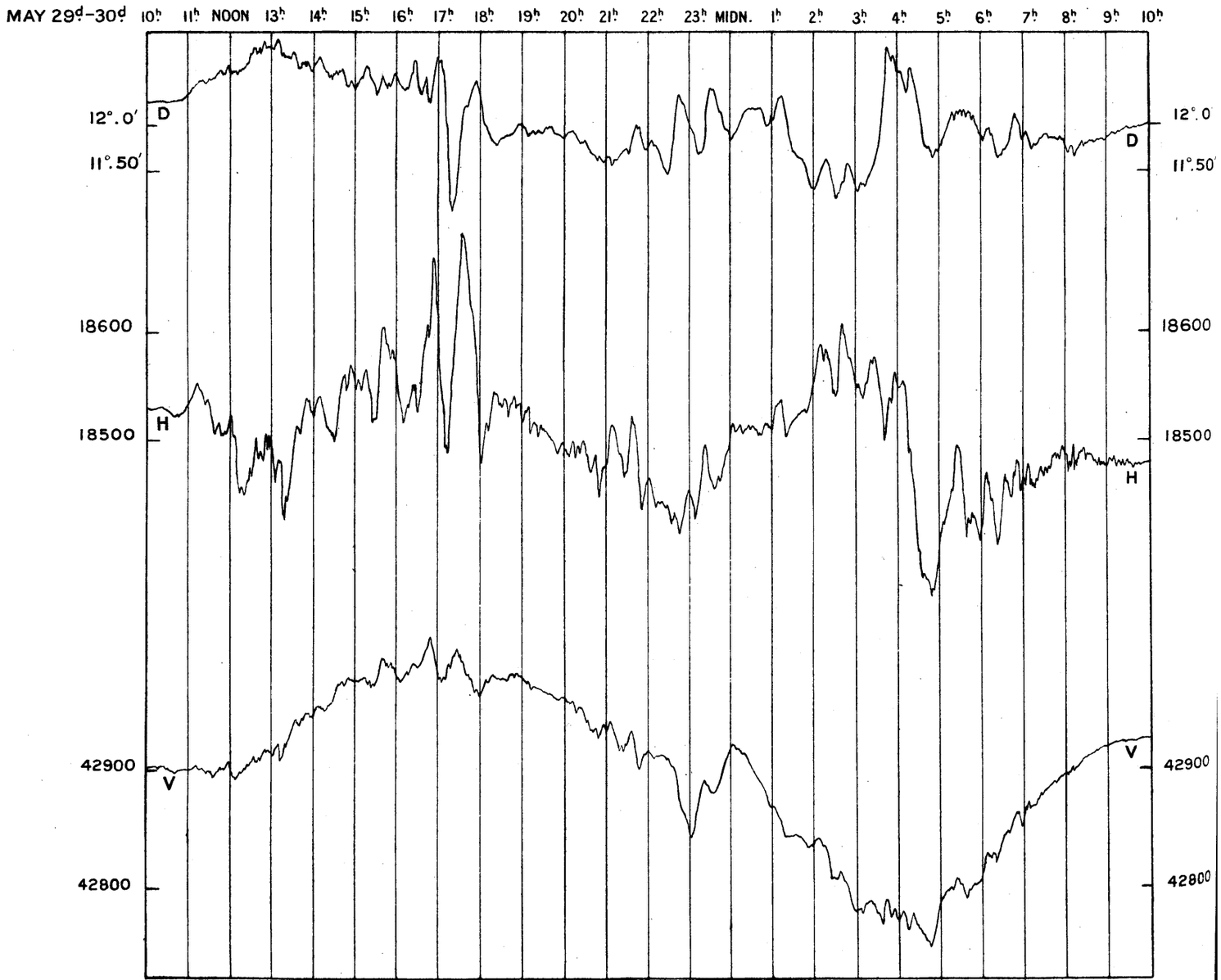
Horizontal Force.



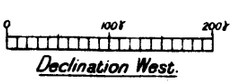
Vertical Force.

Plate IV.

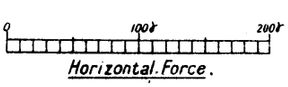
MAGNETIC DISTURBANCES AS RECORDED AT THE ABINGER MAGNETIC STATION IN THE YEAR 1932.



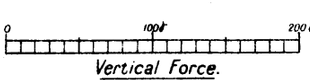
SCALES FOR MAGNETIC ELEMENTS IN C.G.S. UNITS.



Declination West.

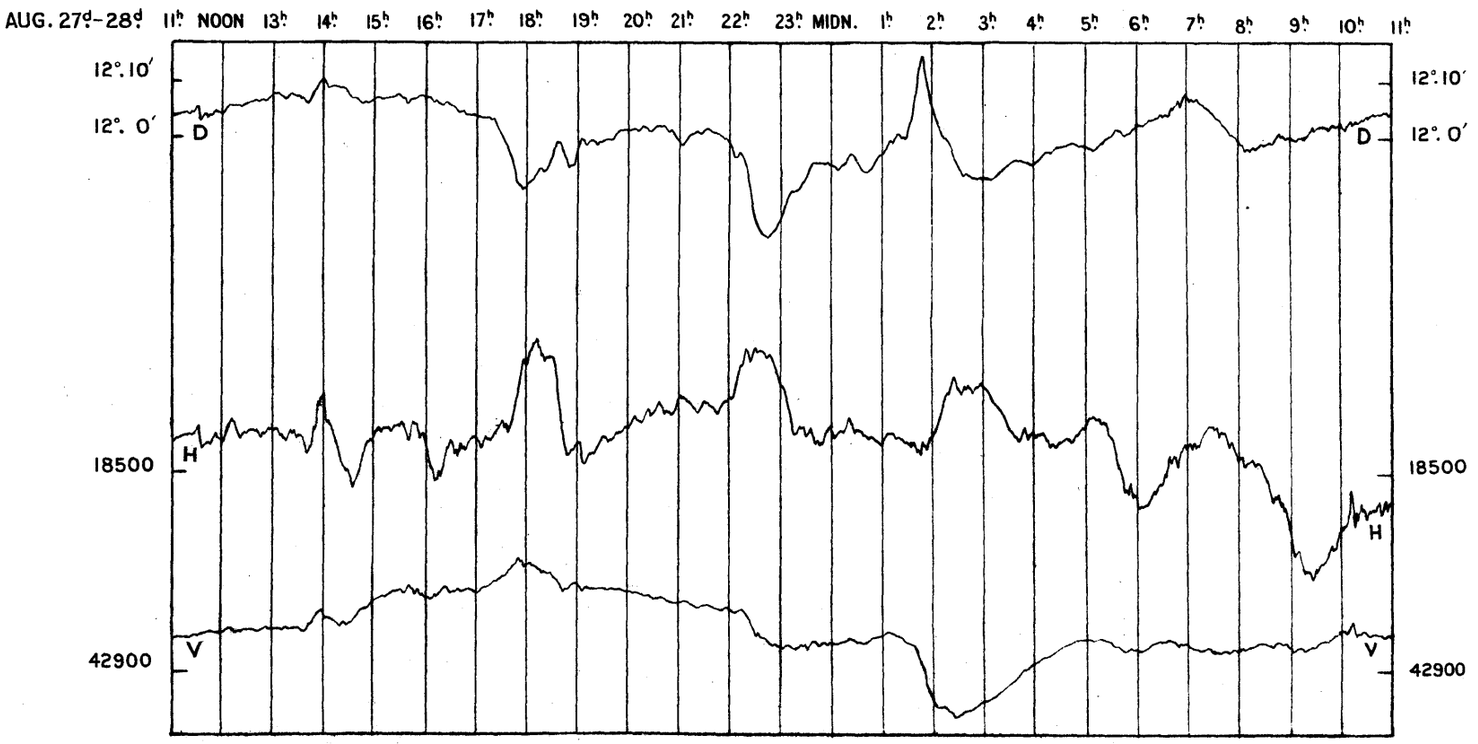


Horizontal Force.

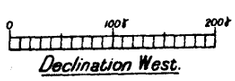


Vertical Force.

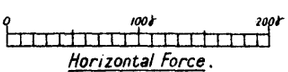
MAGNETIC DISTURBANCES AS RECORDED AT THE ABINGER MAGNETIC STATION IN THE YEAR 1932.



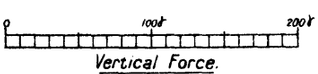
SCALES FOR MAGNETIC ELEMENTS IN C.G.S. UNITS.



Declination West.



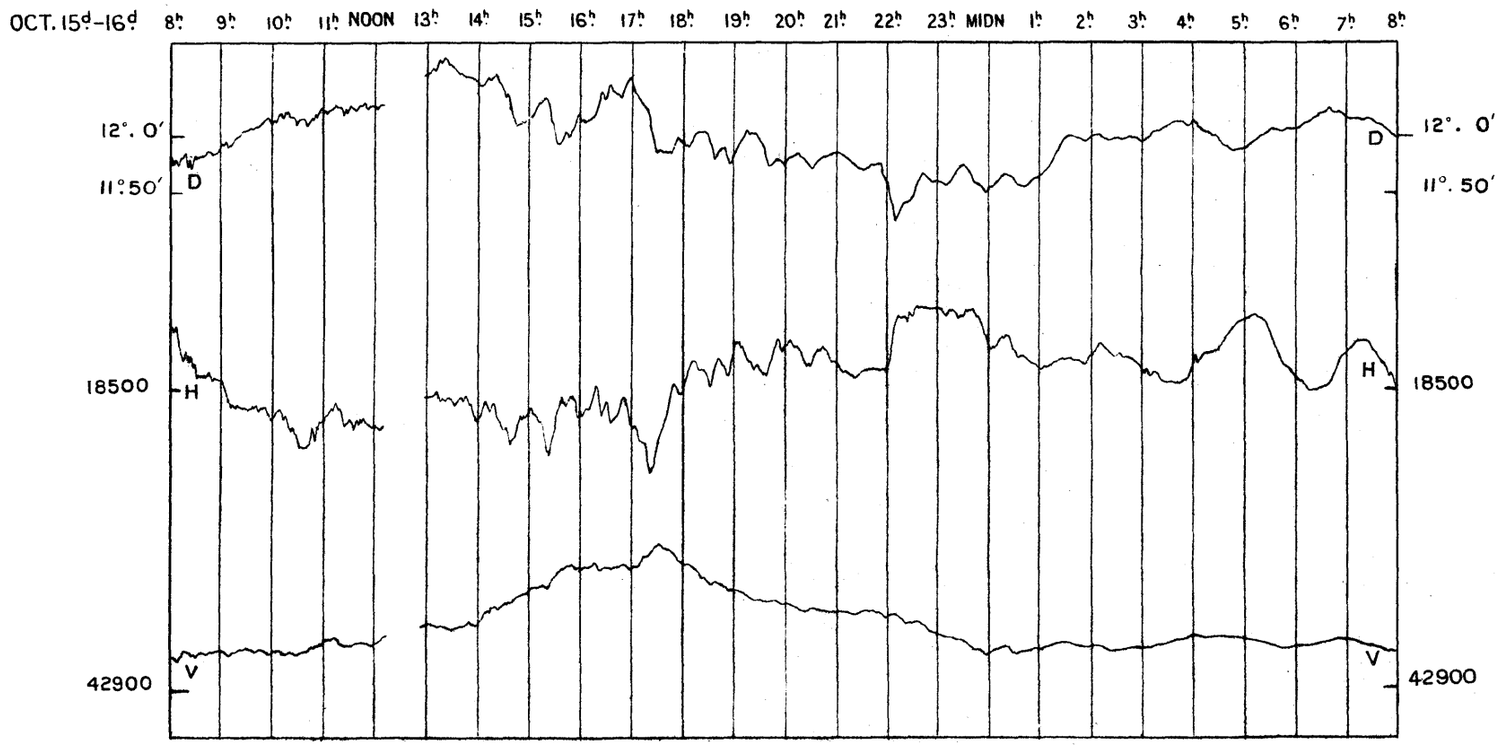
Horizontal Force.



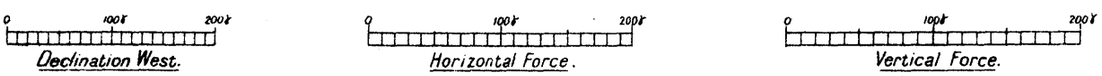
Vertical Force.

Plate VI.

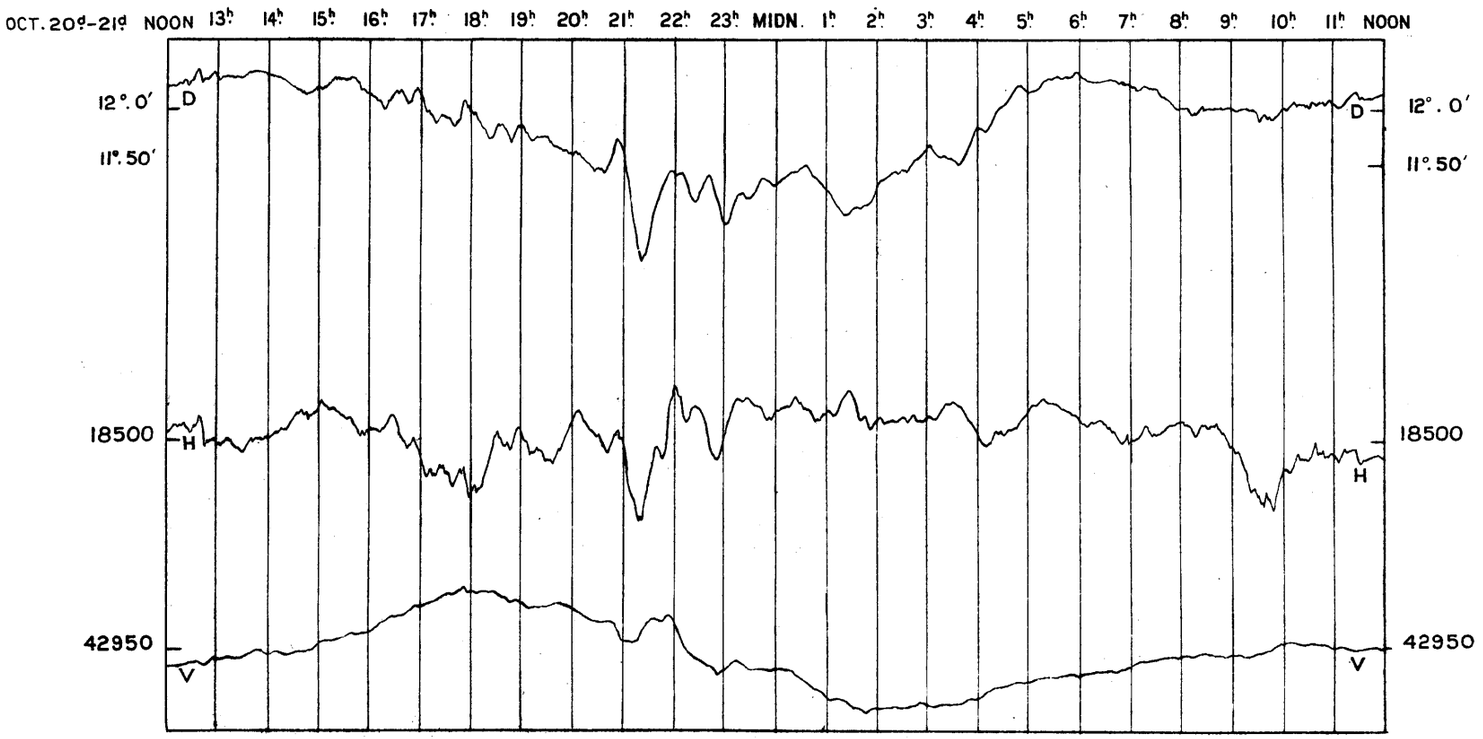
MAGNETIC DISTURBANCES AS RECORDED AT THE ABINGER MAGNETIC STATION IN THE YEAR 1932.



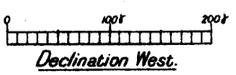
SCALES FOR MAGNETIC ELEMENTS IN C.G.S. UNITS.



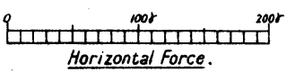
MAGNETIC DISTURBANCES AS RECORDED AT THE ABINGER MAGNETIC STATION IN THE YEAR 1932.



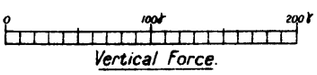
SCALES FOR MAGNETIC ELEMENTS IN C.G.S. UNITS.



Declination West.



Horizontal Force.



Vertical Force.

GREENWICH METEOROLOGICAL OBSERVATIONS, 1932.

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 1932.

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, 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 7).

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 9.)

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 9¼ 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.

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 approximately 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 by the instrumental readings 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 and until 1931, for the sake of continuity and simplicity, the formula $V=3v$ was retained in use, although the greatest hourly measures according to the revised formula were given in a table at the end of the volumes.

In the present volume, however, all measures are calculated from the revised formula.

RAIN GAUGES.—During the year 1932 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 gauges are also read at midnight on the last day of each calendar month.

The erection to the north-west of Gauges 6 and 8 of a building to accommodate a large equatorial telescope made desirable the removal of these gauges to new positions. The removal was carried out on 1932, September 29, the new sites being approximately 42 feet east of the old ones.

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

ELECTROMETER.—It became necessary to remove the Electrometer hut at the end of October 1931, on account of the erection of a new building near the site, and observations were discontinued pending the provision of suitable accommodation for the instrument elsewhere.

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 nine selected sunshine cards taken from the months of February, March and June, 1932, have been made at the Meteorological Office. These showed exact agreement with the 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 minimum 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 "Daily Results of the Meteorological Observations," is found by comparing the numbers contained in column 6 with a table of average daily temperatures found by smoothing the accidental irregularities of the daily means deduced from the observations for the sixty-five years 1841–1905. In this series the mean daily temperature from 1841 to 1847 depends usually on 12 observations daily, in 1848 on 6 observations daily, and from 1849 to 1905 on 24 hourly readings from the photographic record. The smoothed numbers are given in Table VII, *Reduction of the Greenwich Meteorological Observations*, Part IV and also in the introduction for 1910.

The daily register of rain contained in column 16 is that recorded by the gauge No. 6, whose receiving surface is 5 inches above the ground. This gauge is read at 9^h, 15^h, and 21^h Greenwich 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 gauge No 6. 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.

H. SPENCER JONES.

ROYAL OBSERVATORY, GREENWICH.
1933, *May* 8.

ROYAL OBSERVATORY, GREENWICH.

Results of Meteorological Observations

1932

MONTH and DAY, 1932.	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	29·903	50·2	20·7	29·5	38·4	− 0·2	37·1	35·1	3·3	7·5	1·0	88	50·0	11·8	46·5	0·032	0·0	7·9
2	29·810	54·4	50·2	4·2	52·1	+13·7	50·5	48·9	3·2	5·7	1·5	89	57·1	44·7	46·4	0·032	0·0	7·9
3	29·889	55·9	52·1	3·8	54·4	+16·1	51·5	48·7	5·7	7·0	4·5	81	58·0	47·0	46·2	0·000	0·0	7·9
4	30·001	52·1	48·2	3·9	50·4	+12·1	47·4	44·0	6·4	9·1	2·2	79	55·0	40·4	46·1	0·003	0·0	8·0
5	29·815	51·6	45·9	5·7	49·1	+10·9	46·6	43·8	5·3	8·2	2·7	82	61·0	37·2	46·1	0·044	0·0	8·0
6	29·135	55·9	45·8	10·1	52·5	+14·4	50·8	49·1	3·4	7·0	2·2	88	59·7	39·5	46·4	0·555	0·0	8·0
7	29·245	47·4	38·8	8·6	42·9	+ 4·9	40·8	37·8	5·1	6·9	1·4	82	61·0	29·8	46·5	0·017	1·1	8·0
8	29·367	41·1	28·5	12·6	36·1	− 1·8	34·9	32·8	3·3	6·8	0·0	88	49·1	22·3	46·4	0·002*	0·8	8·1
9	29·532	48·5	27·1	21·4	37·5	− 0·4	35·6	32·5	5·0	6·4	0·2	82	70·0	21·3	46·3	0·004	4·0	8·1
10	29·168	49·0	43·9	5·1	45·9	+ 8·0	44·2	42·1	3·8	6·7	1·7	86	56·1	40·5	46·3	0·561	0·0	8·1
11	29·241	50·6	39·6	11·0	44·6	+ 6·7	43·1	41·2	3·4	9·0	1·9	88	76·5	30·6	46·3	0·135	2·7	8·2
12	29·654	48·8	34·9	13·9	42·1	+ 4·2	40·3	37·8	4·3	8·8	1·2	84	64·9	25·9	46·1	0·006*	4·5	8·2
13	29·570	54·5	42·7	11·8	48·9	+10·9	46·4	43·6	5·3	8·8	2·2	81	71·4	35·7	46·0	0·057	2·3	8·2
14	29·956	49·9	35·8	14·1	43·2	+ 5·2	40·3	36·2	7·0	13·2	3·0	76	75·8	27·9	46·0	0·001*	4·9	8·3
15	29·922	52·9	45·4	7·5	48·0	+ 9·9	45·0	41·2	6·8	11·3	2·0	77	75·3	34·7	46·0	0·022	6·3	8·3
16	29·980	52·5	48·8	3·7	50·7	+12·4	48·6	46·3	4·4	7·5	0·5	85	57·0	42·9	46·0	0·000	0·0	8·3
17	29·990	53·0	45·5	7·5	49·1	+10·6	46·1	42·5	6·6	10·7	2·6	78	68·4	33·0	46·0	0·090	1·5	8·4
18	30·269	52·7	49·0	3·7	51·2	+12·6	49·9	48·6	2·6	5·0	1·6	91	55·2	39·9	46·0	0·000	0·0	8·4
19	30·334	53·7	46·7	7·0	50·7	+12·0	49·4	48·1	2·6	4·5	1·3	91	58·9	34·1	46·0	0·000	0·0	8·5
20	30·305	52·0	34·9	17·1	46·2	+ 7·4	45·3	44·2	2·0	5·2	0·2	93	62·0	25·2	46·1	0·000	0·1	8·5
21	30·255	50·5	29·8	20·7	38·9	+ 0·1	38·0	36·6	2·3	8·6	0·0	92	71·3	22·9	46·0	0·000	5·3	8·6
22	30·303	48·3	34·0	14·3	43·6	+ 4·8	42·9	42·3	1·3	3·4	0·7	94	52·8	24·1	46·1	0·011	0·0	8·6
23	30·513	49·2	36·9	12·3	45·8	+ 6·9	44·8	43·6	2·2	4·6	0·7	92	53·1	30·4	46·1	0·001	0·0	8·6
24	30·456	39·3	29·2	10·1	36·4	− 2·5	35·5	33·9	2·5	5·5	0·6	91	47·1	22·8	46·0	0·000	0·3	8·7
25	30·575	42·6	28·1	14·5	34·9	− 4·2	34·3	33·2	1·7	6·0	0·5	94	40·3	21·7	46·0	0·001*	0·0	8·7
26	30·752	47·3	38·1	9·2	41·5	+ 2·2	40·2	38·5	3·0	7·4	0·9	89	69·8	31·0	46·0	0·000	2·2	8·8
27	30·711	40·5	35·8	4·7	38·2	− 1·3	36·2	33·0	5·2	8·0	3·4	81	52·8	31·7	45·8	0·000	0·2	8·9
28	30·530	35·9	31·8	4·1	33·3	− 6·3	32·4	30·8	2·5	5·1	1·2	91	37·3	31·5	45·7	0·000	0·0	8·9
29	30·458	40·5	34·2	6·3	36·8	− 2·9	35·0	31·9	4·9	6·7	2·5	82	45·1	24·5	45·6	0·000	0·0	8·9
30	30·522	46·8	32·8	14·0	39·8	+ 0·1	38·7	37·1	2·7	5·4	1·0	90	52·2	23·1	45·5	0·000	0·0	9·0
31	30·648	47·2	32·8	14·4	39·8	+ 0·1	37·9	35·1	4·7	8·7	0·5	83	65·4	22·1	45·3	0·000	0·7	9·1
Means	30·026	48·9	38·3	10·5	44·0	+ 5·4	42·2	40·0	4·0	7·2	1·5	86·1	59·0	30·7	46·1	Sum 1·574	1·2	8·4
Number of Column for Reference.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18

The results apply to the civil day, except Columns 19 to 22 (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 published by the Meteorological Office, 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 January 8, 12, 14 and 25 are derived from hoar frost.

The mean reading of the *Barometer* for the month was 30·026 in., being 0·225 in. higher than the average for the 65 years, 1841–1905.

TEMPERATURE OF THE AIR.

The highest in the month was 55°·9 on January 3 and 6; the lowest in the month was 20°·7 on January 1; and the range was 35°·2.
The mean of all the highest daily readings in the month was 48°·9, being 5°·8 higher than the average for the 65 years, 1841–1905.
The mean of all the lowest daily readings in the month was 38°·3, being 4°·6 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, 1932.	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	0·0	0·00	0·0	0·00	S : SSW	SSW : SW	2·8	0·39	362	0, ho.-fr, m : 1, ho.-fr	10, m.-r, prh : 10, alt.-s, n : 10, m.-r, w
2	0·0	0·00	0·0	0·00	WSW	WSW	4·2	1·08	481	10, m.-r, slt.-m.-r, w : 10, alt.-s, m, w	10, alt.-s, n, slt.-r, m.-r, w : 10, w
3	4·5	0·32	2·8	0·21	WSW	WSW	6·1	2·07	560	10, slt.-m.-r, w : 10, alt.-s, st.-w	10, alt.-s, fr.-s, st.-w: 10, w : 6
4	6·5	0·47	4·2	0·30	SW : WSW	SW	6·9	1·19	438	3, w : 9	: 10, fr.-s, w 10, s.-cu : 10, oc.-slt.-m.-r, w
5	0·2	0·01	0·0	0·00	SW	SW	7·0	1·50	437	0, d : 9	9, w : 10, slt.-m.-r, sq.-r, w
6	2·9	0·21	0·0	0·00	SW	SW : WSW	25·8	3·66	581	10, sq.-r, w : 8, m.-r, w	: 10, sq.-r, w 10, sq.-r, st.-w : 9, hy.-r, r, st.-w, w
7	5·2	0·38	1·0	0·07	W : SW	SW : WSW	1·7	0·20	284	3 : th.-cl	: 9, ci, ci.-s 8, slt.-m.-r, r, m: 4, m : 8, m
8	11·5	0·84	6·5	0·47	Calm : SW	Calm	0·1	0·00	187	v.-cl, ho.-fr : 9, f	3, m, h : 7, m, tk.-f: 0, f, ho.-fr
9	0·0	0·00	0·0	0·00	Calm : S	SSW	8·6	0·74	342	0, ho.-fr : 0, ho.-fr	: 0, f 7 : 10, slt.-m.-r, w
10	3·0	0·23	0·0	0·00	SSW	S : SSW	18·4	2·85	536	10, slt.-m.-r, st.-w: 10, r, st.-w	: 10, oc.-slt.-r, w 10, r, w : 10, r, m.-r, w
11	6·6	0·50	0·0	0·00	SSW	SSW	2·1	0·23	296	v.-cl, r : v.-cl, oc.-r	9, oc.-r, shs : 10, shs, r : 2
12	0·0	0·00	0·0	0·00	SSW : SW	SSW : S	3·9	0·24	294	0, ho.-fr : 0, f	8, ci, so.-ha : 10, th.-cl : 10, w
13	13·3	1·00	0·0	0·00	S : SSW : SW	SW	9·1	1·95	488	10, r, m.-r, w : 9, fq.-m.-r, st.-w	1, ci : 2, slt.-sh : 0
14	4·0	0·30	2·2	0·16	SW : SSW	SSW	5·2	0·63	379	0, ho.-fr : 0	7, ci, fr.-s, so.-ha: th.-cl, lu.-ha : 9, w
15	5·5	0·41	0·0	0·00	SSW : SW	SW : SSW	9·1	1·10	418	10, r, w : 3	: 1 6, ci, fr.-cu: 0, d : 9, oc.-lu.-ha
16	2·7	0·21	0·7	0·05	SSW	SSW	9·0	1·43	479	9	: 10, fq.-slt.-m.-r, w 10, w : 9, w
17	4·5	0·35	2·9	0·22	SSW : SW : WSW	WSW : SW	13·0	1·36	440	10, sq.-r, w: 4, w	: 8, w 5, s.-cu, h : 9, th.-cl, oc.-lu.-ha
18	1·8	0·14	1·2	0·09	SW	SW : SSW	3·5	0·25	304	10, slt.-m.-r : 10, s.-cu	10, s, n : 5
19	0·6	0·04	0·0	0·00	SW	WSW : Calm	0·5	0·01	197	10, m : 10, s.-cu, m, slt.-m	10, s.-cu, m : 10, s.-cu, 1
20	10·4	0·80	8·6	0·66	Calm	Calm : S	0·0	0·00	167	10, f, m : 10, slt.-m	7, s.-cu, fr.-cu : 0, f, ho.-fr
21	9·0	0·69	6·6	0·51	Calm	SSW . S	0·4	0·02	191	0, ho.-fr : 9, t	: 7, s.-cu, m 0 : 1, m, ho.-fr
22	0·0	0·00	0·0	0·00	SSW : SW	SW : Calm	0·3	0·02	223	th.-cl, lu.-ha, ho.-fr : 10, fq.-slt.-m.-r, m	10, fq.-slt.-m.-r, m: 10, fq.-slt.-m.-r, m
23	2·0	0·16	2·0	0·16	Calm : S	SSE : E	0·1	0·00	181	10, fq.-slt.-m.-r : 10, fq.-slt.-m.-r	10, s : 9 : 0, tk.-f, ho.-fr
24	9·4	0·72	4·2	0·33	E : SSE	SSW : Calm	0·7	0·05	210	10, m, ho.-fr : 8, s.-cu	10, s.-cu : 9 : 0, m, f, ho.-fr
25	1·2	0·09	0·0	0·00	SSW : Calm	Calm : NE	0·2	0·01	189	5, f, ho.-fr : 1, f, tk.-f	2, f : 10, f : 8, m
26	2·7	0·21	1·5	0·11	NE	E	0·8	0·05	238	10, m : 10	: 7, s.-cu, f 8, fr.-s : v.-cl : 9
27	0·0	0·00	0·0	0·00	ENE : E	E : ESE	0·8	0·06	239	10 : 9, s.-cu	9 : 10, slt.-m
28	0·0	0·00	0·0	0·00	Calm	SW : WSW	0·4	0·01	187	10, m : 10, s, m	10, s, m : 10
29	9·9	0·76	7·1	0·54	WSW : NW : SW	SW	0·3	0·02	242	10, s, m : 10, s, m	10, s, m : 1, m, ho.-fr
30	5·7	0·46	4·2	0·33	SW : WSW	N : NNE	0·2	0·00	213	2, ho.-fr : 10, s.-cu, f	10, s, f, m : 10 : 0, ho.-fr
31	5·3	0·43	2·6	0·21	Calm	NE	0·1	0·00	168	4, m, ho.-fr : 10	: 9, s, f, m 8 : 10 : 9
Means	4·1	0·31	1·9	0·14	..	..	..	0·68	321		
Number of Column for Reference.	19	20	21	22	23	24	25	26	27	28	29

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 40°·0, being 4°·9 higher than
The mean *Degree of Humidity* for the month was 86·1, being 0·7 less than
The mean *Elastic Force of Vapour* for the month was 0·248in., being 0·043in. 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 7·3.

The mean proportion of *Sunshine* for the month (constant sunshine being represented by 1) was 0·142. The maximum daily amount of *Sunshine* was 6·3 hours on January 15.

The highest reading of the *Solar Radiation Thermometer* was 76°·5 on January 11; and the lowest reading of the *Terrestrial Radiation Thermometer* was 11°·8 on January 1.

The *Proportions of Wind* referred to the cardinal points were N. 1, E. 3, S. 14, W. 9. Four days were calm.

The *Greatest Pressure of the Wind* in the month was 25·8 lbs. on the square foot on January 6. The mean daily *Horizontal Movement of the Air* for the month was 321 miles; the greatest daily value was 581 miles on January 6, and the least daily value was 167 miles on January 20.

Rain (0·005in. or over) fell on 12 days in the month, amounting to 1·574in., as measured by Gauge No. 6 partly sunk below the ground; being 0·307in. less than the average fall for the 65 years, 1841–1905.

MONTH and DAY 1932.	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	30·539	44·5	27·9	16·6	35·8	− 3·8	35·0	33·5	2·3	6·8	1·4	92	45·0	20·2	45·0	0·000	0·0	9·1
2	30·474	47·9	43·3	4·6	45·1	+ 5·6	42·6	39·2	5·9	9·5	1·4	80	56·8	37·7	45·0	0·003	0·0	9·2
3	30·420	48·1	31·9	16·2	39·8	+ 0·3	37·2	33·0	6·8	17·2	1·3	77	69·9	24·0	44·9	0·000	4·5	9·2
4	30·330	41·0	28·0	13·0	34·1	− 5·4	33·8	33·4	0·7	2·8	0·0	97	40·1	21·9	44·9	0·000	0·0	9·3
5	30·228	45·9	39·9	6·0	42·5	+ 2·9	40·9	38·7	3·8	6·1	1·4	86	66·9	38·8	44·9	0·001	0·1	9·3
6	30·225	48·1	30·3	17·8	40·3	+ 0·7	37·9	34·1	6·2	14·4	0·9	78	89·9	19·0	44·8	0·000	5·0	9·4
7	30·177	37·0	21·8	15·2	30·4	− 9·1	29·3	26·9	3·5	6·4	1·4	86	45·1	15·0	44·6	0·000	0·1	9·4
8	30·066	41·5	26·4	15·1	35·5	− 3·8	33·7	30·4	5·1	8·9	1·3	82	48·0	15·2	44·5	0·000	0·0	9·5
9	29·944	40·1	33·3	6·8	37·5	− 1·6	35·0	30·5	7·0	9·5	3·5	76	48·0	28·1	44·4	0·004	0·0	9·6
10	30·152	33·3	24·6	8·7	28·2	−10·7	26·2	20·7	7·5	15·9	3·0	74	54·8	22·7	44·0	0·069	0·3	9·6
11	30·212	33·8	26·9	6·9	30·4	− 8·4	29·0	26·0	4·4	8·7	1·6	83	62·0	22·0	44·0	0·003	0·7	9·7
12	30·189	35·8	29·2	6·6	31·4	− 7·4	29·5	25·5	5·9	8·9	1·3	79	80·8	21·9	43·9	0·017	3·7	9·7
13	30·129	38·9	29·6	9·3	34·8	− 4·2	33·4	30·9	3·9	9·0	2·9	85	48·8	26·1	43·7	0·000	0·0	9·8
14	30·214	44·9	35·5	9·4	39·4	+ 0·1	37·2	33·7	5·7	15·3	2·8	80	89·4	31·1	43·8	0·016	4·3	9·9
15	30·397	46·2	37·0	9·2	41·3	+ 1·9	38·9	35·3	6·0	10·5	2·4	79	65·3	30·1	43·3	0·019	0·1	9·9
16	30·467	44·6	36·2	8·4	40·5	+ 1·0	38·5	35·5	5·0	9·0	2·4	82	59·1	27·2	43·2	0·007	0·0	10·0
17	30·499	44·7	35·4	9·3	39·1	− 0·5	36·7	32·8	6·3	12·3	1·9	78	55·4	26·0	43·1	0·000	0·0	10·0
18	30·504	46·3	29·7	16·6	36·9	− 2·6	34·4	29·7	7·2	18·2	1·5	75	87·6	21·0	43·2	0·000	6·6	10·1
19	30·463	40·3	31·0	9·3	36·5	− 3·0	34·7	31·6	4·9	10·7	1·8	82	56·1	23·9	43·2	0·000	0·0	10·2
20	30·560	41·4	36·2	5·2	38·9	− 0·6	36·2	31·6	7·3	13·6	2·5	75	52·0	28·0	43·1	0·001	0·0	10·2
21	30·530	42·7	32·2	10·5	37·2	− 2·4	34·1	28·4	8·8	15·2	2·3	70	80·1	23·7	43·1	0·000	2·1	10·3
22	30·334	48·1	39·0	9·1	43·5	+ 3·8	41·0	37·5	6·0	8·2	4·8	79	58·4	31·0	43·5	0·024	0·0	10·4
23	30·173	47·5	43·0	4·5	44·5	+ 4·7	41·2	36·5	8·0	9·9	6·3	73	56·0	36·9	43·2	0·000	0·0	10·5
24	29·887	48·7	39·2	9·5	42·9	+ 2·9	40·5	37·0	5·9	10·3	2·6	79	87·0	36·7	43·2	0·128	1·6	10·5
25	30·129	41·1	38·9	2·2	39·8	− 0·3	37·2	33·0	6·8	11·8	4·5	77	48·0	34·1	43·3	0·000	0·0	10·6
26	30·106	44·3	37·0	7·3	40·5	+ 0·3	37·9	33·8	6·7	12·6	3·2	77	66·8	32·0	43·2	0·000	0·0	10·7
27	30·124	47·0	36·7	10·3	40·4	+ 0·1	36·7	30·5	9·9	18·6	3·5	67	95·4	31·8	43·5	0·000	5·6	10·7
28	30·135	37·2	29·9	7·3	33·9	− 6·4	30·4	23·3	10·6	16·4	8·1	65	84·9	27·7	43·4	0·000	7·7	10·8
29	30·074	35·7	31·3	4·4	33·4	− 6·9	30·4	24·5	8·9	10·0	3·8	69	43·2	26·1	43·2	0·000	0·0	10·9
Means	30·265	42·6	33·1	9·5	37·7	− 1·8	35·5	31·6	6·1	11·3	2·6	78·7	63·5	26·9	43·8	Sum 0·292	1·5	9·9
Number of Column for Reference.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18

The results apply to the civil day, except Columns 19 to 22 (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 published by the Meteorological Office, 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 30·265in., being 0·456in. higher than the average for the 65 years, 1841–1905.

TEMPERATURE OF THE AIR.

The highest in the month was 48°·7 on February 24; the lowest in the month was 21°·8 on February 7; and the range was 26°·9.

The mean of all the highest daily readings in the month was 42°·6, being 2°·6 lower than the average for the 65 years, 1841–1905.

The mean of all the lowest daily readings in the month was 33°·1, being 1°·1 lower than the average for the 65 years, 1841–1905.

The mean of the daily ranges was 9°·5, being 1°·5 less than the average for the 65 years, 1841–1905.

The mean for the month was 37°·7, being 1°·8 lower than the average for the 65 years, 1841–1905.

MONTH and DAY 1932.	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		
Feb. 1	0·0	0·00	0·0	0·00	Calm : WSW	WSW : Calm	0·1	0·00	184	2, ho.-fr : 1, f, ho.-fr: 9, f	5, f : 10, f : 10
2	3·3	0·26	1·3	0·11	NNW : N : NNE	NNE : NNW	0·5	0·09	237	10, slt.-m.-r : 10, m	10, m : 10,m
3	3·8	0·31	0·0	0·00	NNW : Calm : SW	WSW : Calm	0·2	0·00	186	6, slt.-m : 1, slt.-m, ho.-fr: 2, f, h	0, h, f : 0, f, ho.-fr
4	0·0	0·00	0·0	0·00	Calm	Calm	0·0	0·00	139	0, m : tk.-f	0, f : 0, tk.-f : tk.-f
5	0·0	0·00	0·0	0·00	Calm : NNE	NNE : ENE	0·5	0·03	219	tk.-f, m : 10, slt.-m.-r, m : 10, slt.-m.-r, m	10, s.-cu, slt.-m : 10, fq.-slt.-m.-r
6	12·0	1·00	4·5	0·37	E : ENE	E : Calm	0·5	0·03	205	10 : 10 : 5, ci, s.-cu	6, s.-cu : 0, f, ho.-fr
7	3·6	0·30	0·0	0·00	Calm	Calm : NE	0·0	0·00	139	0, f, ho.-fr: 1, f, ho.-fr: 5, f, tk.-f, h	tk.-f, h : 0, m : 0, m, ho.-fr
8	1·2	0·10	0·0	0·00	Calm : W	NNW	1·0	0·04	217	10, ho.-fr : 10, ho.-fr : 9, f	10, f, m : 9, slt.-m
9	3·9	0·33	1·0	0·08	N : NNE	NE	3·0	0·43	364	9, slt.-m : 9, s.-cu, slt.-m	10, alt.-s, n, sh : 10, slt.-sn.-sh : 9, fq.-sn
10	1·0	0·09	0·3	0·03	ENE : NE	NE	9·0	1·60	507	10, sn : v.-cl : 10, sn, w	10, sn, w : 9, sn,w
11	5·5	0·46	4·7	0·39	ENE : NE	NE : NNE	5·0	0·56	365	9, sn, w : 10, n, sn	6, sn, slt.-sn : 6 : v.-cl
12	3·3	0·27	2·4	0·20	NNE : NE	E : NE	4·8	0·31	326	v.-cl, sn : v.-cl, sn	v.-cl, oc.-sn : v.-cl, ho.-fr
13	0·0	0·00	0·0	0·00	NE : N	N : NE	0·3	0·02	203	10 : 10, m	10, slt.-m : 10
14	0·0	0·00	0·0	0·00	N : NE	NE : NNE	1·2	0·10	265	10, slt.-m.-r : 7, alt.-cu, m	8, s.-cu, slt.-m: 10, shs : 10, sh
15	5·3	0·44	2·4	0·20	NNE : N	N	1·5	0·14	274	10 : 10, slt.-r, m: 10, slt.-sh	10, s.-cu, alt.-cu : 8
16	5·4	0·45	3·0	0·25	N : NNE	NNE	0·7	0·06	248	6 : 10, r, m : 10, r	9 : v.-cl, m : v.-cl, lu.-ha, ho.-fr, m
17	6·9	0·58	5·5	0·46	NNE : Calm	NE : ENE	1·1	0·07	248	9, m : 10, s.-cu, f	10, s.-cu : 8, ho.-fr
18	7·0	0·60	5·0	0·43	ENE	ENE	1·0	0·06	237	9 : 0, ho.-fr : 0, f	0 : 0, ho.-fr
19	2·3	0·19	1·0	0·09	NNE	NNE	1·2	0·11	280	8, ho.-fr : 10, ho.-fr, m : 10, s.-cu	10, s.-cu : 10
20	2·0	0·18	0·9	0·08	NNE : NE	NE : NNE	2·5	0·28	333	10, slt.-m.-r : 10, slt.-m.-r	10 : 10
21	1·2	0·11	0·0	0·00	NNE : N	NNW : NW	1·5	0·08	249	10, ho.-fr : 4, ho.-fr, f: 5, f, h	5, s.-cu, h : 10 : 10
22	0·6	0·05	0·5	0·04	NW : NNW	N	1·6	0·15	271	10 : 10, oc.-shs, m	10, alt.-cu, n, oc.-m.-r : 9
23	0·0	0·00	0·0	0·00	NNW : N	N : NW	1·4	0·14	270	10, m : 10, m	10, slt.-sh, m : 10, slt.-sh, m
24	0·0	0·00	0·0	0·00	NW : N : NE	NE : ENE	3·1	0·35	342	10, shs, m.-r, m : 10, fq.-m.-r, m	9, s.-cu, n : 10, slt.-m.-r
25	0·3	0·03	0·0	0·00	NE	NNE	3·0	0·17	294	10 : 10, s, s.-cu	10, s, s.-cu : 10
26	0·0	0·00	0·0	0·00	NNE : NE	ENE : Calm : NE	0·9	0·02	221	10 : 10, s.-cu	10, s.-cu, cu : 10
27	0·0	0·00	0·0	0·00	NNE : NE	ENE : NE	5·6	1·10	417	10 : 9, slt.-m.-r : v.-cl, w	6, w : 6, w : 10, slt.-sn, w
28	0·0	0·00	0·0	0·00	NE : ENE	ENE	9·5	2·63	562	10, slt.-sn, w : 7, w : 4, cu, w	2, fr.-cu, st.-w: 9, st.-w, w: 10, w
29	7·5	0·69	0·0	0·00	ENE	ENE	9·0	1·53	467	10, w : 10, slt.-sn, w	9, s.-cu,w : 0, ho.-fr
Means	2·6	0·22	1·1	0·09	..	..	..	0·35	285		
Number of Column for Reference.	19	20	21	22	23	24	25	26	27	28	29

The mean *Temperature of Evaporation* for the month was 35°·5, being 2°·2 lower than
The mean *Temperature of the Dew Point* for the month was 31°·6, being 3°·4 lower than
The mean *Degree of Humidity* for the month was 78·7, being 4·9 less than
The mean *Elastic Force of Vapour* for the month was 0·177in., being 0·027in. 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 7·4.
The mean proportion of *Sunshine* for the month (constant sunshine being represented by 1) was 0·147. The maximum daily amount of *Sunshine* was 7·7 hours on February 28.

The highest reading of the *Solar Radiation Thermometer* was 95°·4 on February 27; and the lowest reading of the *Terrestrial Radiation Thermometer* was 15°·0 on February 7.

The *Proportions of Wind* referred to the cardinal points were N. 13, E. 9, S, 0, W. 3. Four days were calm.

The *Greatest Pressure of the Wind* in the month was 9·5 lbs. on the square foot on February 28. The mean daily *Horizontal Movement of the Air* for the month was 285 miles; the greatest daily value was 562 miles on February 28, and the least daily value was 139 miles on February 4 and 7.

Rain (0·005in. or over) fell on 7 days in the month, amounting to 0·292in., as measured by gauge No. 6 partly sunk below the ground; being 1·188in. less than the average fall for the 65 years, 1841–1905.

MONTH and DAY, 1932.	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
Mar. 1	29·884	41·9	31·0	10·9	36·4	— 4·0	32·5	24·5	11·9	18·2	4·5	61	87·2	20·0	43·2	0·000	7·7	10·9
2	29·713	48·7	25·0	23·7	35·9	— 4·5	32·5	25·8	10·1	23·8	1·1	66	92·5	12·1	43·1	0·000	7·5	11·0
3	29·748	47·9	23·0	24·9	35·8	— 4·7	32·9	27·3	8·5	19·1	1·0	71	88·6	16·3	43·0	0·000	1·6	11·0
4	29·819	42·1	32·9	9·2	38·5	— 2·2	34·9	28·3	10·2	14·1	4·4	67	55·6	22·0	42·9	0·000	0·0	11·1
5	29·687	46·8	29·3	17·5	39·5	— 1·4	35·0	26·6	12·9	21·2	4·8	60	82·9	16·1	42·9	0·012	1·7	11·2
6	29·514	49·1	33·9	15·2	41·1	+ 0·1	37·6	32·1	9·0	21·5	4·2	69	77·3	24·0	42·8	0·003	5·9	11·2
7	29·669	51·4	32·9	18·5	42·0	+ 1·0	38·5	33·1	8·9	23·7	5·0	70	90·6	22·9	42·9	0·019	5·4	11·3
8	29·628	46·9	37·8	9·1	42·4	+ 1·3	40·5	37·8	4·6	7·5	3·3	84	53·2	35·1	42·9	0·201	0·0	11·3
9	29·759	44·8	30·1	14·7	36·3	— 4·7	34·5	31·3	5·0	15·4	1·0	82	86·7	23·5	42·9	0·000	4·3	11·4
10	29·772	44·9	23·9	21·0	34·1	— 6·8	32·1	28·2	5·9	17·0	0·5	79	86·7	19·5	42·9	0·002	1·3	11·5
11	29·850	45·2	28·8	16·4	35·6	— 5·4	32·7	27·1	8·5	19·0	3·0	71	90·3	23·7	42·9	0·000	4·9	11·6
12	30·070	39·0	25·0	14·0	30·9	—10·2	27·5	19·3	11·6	21·7	5·3	62	91·1	16·0	42·8	0·000	7·7	11·6
13	30·037	48·8	21·0	27·8	33·6	— 7·7	29·8	21·7	11·9	19·6	5·1	61	91·6	14·0	42·8	0·000	6·4	11·7
14	29·977	52·3	24·5	27·8	38·4	— 3·1	34·3	26·4	12·0	20·8	2·1	62	100·7	16·2	42·6	0·000	7·1	11·8
15	30·090	47·6	32·2	15·4	39·8	— 1·9	38·0	35·4	4·4	10·5	1·2	84	93·6	23·3	42·3	0·000	2·2	11·8
16	29·947	51·6	31·5	20·1	38·7	— 3·2	35·7	30·4	8·3	26·4	1·1	72	103·1	22·6	42·2	0·000	6·8	11·9
17	29·890	46·9	30·0	16·9	38·4	— 3·6	35·2	29·5	8·9	14·6	3·1	70	68·3	21·3	42·1	0·000	0·3	12·0
18	30·033	46·7	32·7	14·0	39·2	— 2·8	36·3	31·3	7·9	12·3	3·4	74	68·0	21·2	42·1	0·000	0·5	12·0
19	30·121	53·8	25·7	28·1	40·7	— 1·2	36·2	28·1	12·6	23·2	1·6	61	92·1	15·0	42·1	0·000	4·2	12·1
20	30·135	54·9	36·7	18·2	46·3	+ 4·4	40·9	32·7	13·6	19·1	5·5	59	82·0	26·0	42·1	0·000	2·5	12·1
21	30·110	54·9	37·2	17·7	46·1	+ 4·2	42·0	36·3	9·8	17·6	2·9	68	84·1	25·2	42·2	0·000	0·0	12·2
22	30·013	48·7	40·3	8·4	45·4	+ 3·4	44·5	43·5	1·9	4·5	0·3	93	56·8	29·7	42·2	0·354	0·0	12·3
23	29·936	52·7	33·6	19·1	41·9	— 0·3	39·9	37·0	4·9	12·3	0·1	83	85·3	26·1	42·4	0·001*	2·9	12·3
24	29·918	52·5	34·7	17·8	41·7	— 0·7	38·7	33·9	7·8	19·5	0·7	74	97·1	22·2	42·8	0·000	8·3	12·4
25	29·708	52·3	31·4	20·9	41·5	— 1·2	35·7	24·6	16·9	29·3	4·0	51	107·9	17·9	42·9	0·000	10·0	12·5
26	29·515	50·3	35·8	14·5	43·3	+ 0·3	39·4	33·4	9·9	16·7	1·6	68	97·2	27·9	42·9	0·054	2·6	12·6
27	29·499	52·9	42·2	10·7	46·9	+ 3·6	45·5	43·8	3·1	11·2	1·5	89	77·7	41·1	42·9	0·177	0·0	12·6
28	29·342	54·9	41·0	13·9	46·7	+ 3·0	43·9	40·5	6·2	12·9	2·9	78	100·2	33·1	43·0	0·199	4·5	12·7
29	29·405	53·4	41·9	11·5	47·4	+ 3·3	45·1	42·4	5·0	17·0	2·5	82	91·2	32·1	43·0	0·102	3·3	12·7
30	29·196	56·8	43·5	13·3	49·5	+ 5·0	46·5	42·9	6·6	14·5	3·7	79	107·5	35·1	43·1	0·225	5·0	12·8
31	29·306	58·6	41·1	17·5	48·5	+ 3·6	45·6	42·1	6·4	13·6	2·0	78	112·0	34·9	43·4	0·100	2·9	12·9
Means	29·784	49·7	32·6	17·1	40·7	— 1·2	37·6	32·2	8·6	17·3	2·7	71·9	87·1	23·7	42·7	Sum 1·449	3·8	11·9
Number of Column for Reference.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18

The results apply to the civil day, except Columns 19 to 22 (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 rom 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 published by the Meteorological Office, 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 March 23 is derived from frost.

The mean reading of the *Barometer* for the month was 29·784in., being 0·031in. higher than the average for the 65 years, 1841–1905.

TEMPERATURE OF THE AIR.

The highest in the month was 58°·6 on March 31; the lowest in the month was 21°·0 on March 13; and the range was 37°·6.

The mean of all the highest daily readings in the month was 49°·7, being 0°·1 lower than the average for the 65 years, 1841–1905.

The mean of all the lowest daily readings in the month was 32°·6, being 2°·5 lower than the average for the 65 years, 1841–1905.

The mean of the daily ranges was 17°·1, being 2°·4 greater than the average for the 65 years, 1841–1905.

The mean for the month was 40°·7, being 1°·2 lower than the average for the 65 years, 1841–1905.

MONTH and DAY, 1932.	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		
Mar. 1	10·7	1·00	1·4	0·13	ENE	ENE : NE	7·4	0·80	372	3, ho.-fr : 5, ho.-fr : 2, cu, w	2, fr.-cu, w : 0, ho.-fr
2	10·7	1·00	6·2	0·58	NE : Calm : ENE	E	0·3	0·03	218	0, ho.-fr : 0, ho.-fr : 0, f	0 : 0, ho.-fr, m
3	6·6	0·61	6·0	0·56	NE	NE : NNE	0·4	0·03	234	0, ho.-fr : 4, alt.-cu, m	2, alt.-cu : 0, ho.-fr, slt.-m
4	0·8	0·08	0·5	0·05	N	N : NNE	0·9	0·10	256	9, slt.-m, ho.-fr : 10, s, s.-cu, slt.-m	10, s.-cu, slt.-m : 10
5	2·7	0·26	2·1	0·20	NE : Calm : SW	SW	1·2	0·08	254	10, ho.-fr : 7, m : 9, m, h	9 : 9 : 10, r, slt.-r
6	5·7	0·55	4·6	0·45	SW : WSW : W	WNW : WSW	3·2	0·25	342	5, ho.-fr, m : 0, ho.-fr, m : 1, m, h	9, cu, n, hl, shs: 5 : v.-cl, slt.-r
7	1·8	0·17	0·2	0·02	WSW : WNW	WSW	4·0	0·54	402	6, ho.-fr, h: 0, ho.-fr, h: 1, h	9, alt.-s, s.-cu, r, w : 8, w
8	4·9	0·47	0·0	0·00	WSW : NNW : NW	Var : WSW	3·6	0·47	330	10, w : 10, r, m.-r, m	10, m.-r, m : 10, m.-r, m
9	6·3	0·61	2·5	0·25	Calm : NNE	NE : Calm	0·7	0·03	209	0, ho.-fr, m : 2, h	8, alt.-cu, s.-cu : 1, m, ho.-fr
10	1·4	0·14	0·0	0·00	Calm : WSW	NW : W	1·7	0·04	219	3, m, ho.-fr : 0, f, ho.-fr : 8, alt.-cu, s.-cu, f, m	9, sn.-shs, sh, glm : 10
11	7·5	0·73	6·1	0·59	NNW : N	N : NE	1·9	0·12	260	4, ho.-fr : 5, alt.-cu, cu	4, sn.-sh : 10, oc.-slt.-su : v.-cl, ho.-fr
12	7·1	0·73	3·4	0·35	NE	NE : Calm	1·0	0·07	243	5, ho.-fr : 1	th.-cl : 0, m, f, ho.-fr
13	9·7	1·00	7·4	0·76	SW : Calm	Calm : SSE	0·1	0·00	169	1, m, ho.-fr : 6, m, f, h	0, h : 0, ho.-fr
14	7·0	0·72	4·8	0·51	Calm : E	ESE : E	0·6	0·04	189	0, f, ho.-fr : 0, f	0 : 0 : 7
15	6·3	0·65	4·2	0·43	ENE : E	E : ENE	1·5	0·15	274	1, ho.-fr : 10, f, ho.-fr: 10	8, s.-cu : 0 : 1, ho.-fr
16	6·7	0·69	6·6	0·68	NE	ENE : E	1·2	0·10	279	7, f : 10, slt.-m.-r, f : 8	0 : 0, ho.-fr
17	5·0	0·51	4·8	0·50	NE	NE	1·8	0·23	317	6, m, ho.-fr : 10, m, ho.-fr : 10, s.-cu	9, s.-cu : v.-cl
18	9·7	1·00	8·7	0·89	N	N	0·9	0·09	247	v.-cl, ho.-fr: 2, ho.-fr : 10, s.-cu	10, s.-cu, s : 0, ho.-fr
19	0·0	00·0	0·0	0·00	SW : W	W : NNW	0·5	0·03	220	0, f, ho.-fr: 0, f, ho.-fr: 2, f	7, alt.-cu, ci, h, so.-ha: 10 : 10
20	1·7	0·17	0·0	0·00	WSW : W	W : WSW	0·3	0·01	208	10, ho.-fr : 1, m, h	6, alt.-cu, h : 9, alt.-cu, h, m
21	0·0	0·00	0·0	0·00	WSW	WSW : SSW	0·3	0·02	233	9 : 10, s.-cu	10, s.-cu : 10
22	7·4	0·78	6·9	0·73	Calm : S	S : SW : NNW	0·8	0·04	204	10, f : 10, s.-cu, n, r	10, c.-r : 5, f, ho.-fr
23	3·0	0·32	0·0	0·00	NW : W : NNW	Var : Calm	0·6	0·02	189	0, ho.-fr : 1, m	10, slt.-shs, m : 8, m : 1, m, f
24	9·5	1·00	9·5	1·00	Calm : ESE	ESE : SSE	0·2	0·02	194	10, f : 10, f : 0, h	0, h : 0, ho.-fr
25	9·4	0·99	6·6	0·70	SSE : SE	SE : ESE	2·1	0·19	264	0, ho.-fr : 0	2, p.-so.-ha : 0
26	0·0	0·00	0·0	0·00	ESE : E	ESE : Calm	1·7	0·10	250	7 : 9, ci, so.-ha	10, m.-r : 10, slt.-m.-r, m
27	2·6	0·29	2·5	0·27	SSW	SSW : SW	7·3	0·67	353	10 : 10, s.-cu, alt.-s	10, oc.-slt.-shs, m.-r : 10, r, w
28	8·1	0·90	7·3	0·81	SW	SW : SSW	14·2	1·12	424	7, r : 8, r : 9, n, sh	8, ci, n, shs, hl : 1
29	0·2	0·02	0·0	0·00	SSW : WSW	SW	4·8	0·59	396	v.-cl : v.-cl, cu, fr.-s	10, alt.-s, n, fq.-r : 10, sh, w
30	5·6	0·62	5·4	0·60	SSW : SW	SW : SSW	13·8	1·82	464	10, r, w, st.-w : 9, s.-cu, w	v.-cl, shs, w : v.-cl, d
31	0·0	0·00	0·0	0·00	SSW : SW	SW : Calm : NNE	1·4	0·15	291	9, slt.-m.-r : 9, cu, ci, cu.-n	9, ci, cu, hy.-sh, hl, oc.-so.-ha: 10, m.-r
Means	5·1	0·52	3·5	0·36	..	..	..	0·26	274		
Number of Column for Reference.	19	20	21	22	23	24	25	26	27	28	29

The mean *Temperature of Evaporation* for the month was 37°·6, being 1°·8 lower than
The mean *Temperature of the Dew Point* for the month was 32°·2, being 3°·4 lower than
The mean *Degree of Humidity* for the month was 71·9, being 6·2 less than
The mean *Elastic Force of Vapour* for the month was 0·182in., being 0·027in. 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 5·8.

The mean proportion of *Sunshine* for the month (constant sunshine being represented by 1) was 0·319. The maximum daily amount of *Sunshine* was 10·0 hours on March 25.

The highest reading of the *Solar Radiation Thermometer* was 112°·0 on March 31; and the lowest reading of the *Terrestrial Radiation Thermometer* was 12°·1 on March 2.

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

The *Greatest Pressure of the Wind* in the month was 14·2 lbs. on the square foot on March 28. The mean daily *Horizontal Movement of the Air* for the month was 274 miles; the greatest daily value was 464 miles on March 30, and the least daily value was 169 miles on March 13.

Rain (0·005in. or over) fell on 10 days in the month, amounting to 1·449in., as measured by gauge No. 6 partly sunk below the ground: being 0·071in. less than the average fall for the 65 years, 1841–1905.

MONTH and DAY, 1932.	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	29·372	50·9	38·2	12·7	42·3	− 3·0	39·2	34·4	7·9	13·5	3·3	74	95·0	34·8	43·6	0·066	1·1	12·9
2	28·978	55·3	37·4	17·9	44·1	− 1·6	41·2	37·2	6·9	20·0	1·2	76	109·1	29·8	43·9	0·084	4·2	13·0
3	29·010	52·6	36·9	15·7	44·4	− 1·6	43·3	42·0	2·4	6·7	0·6	91	81·7	29·1	44·0	0·256	0·3	13·1
4	29·258	55·4	39·1	16·3	45·3	− 0·9	42·0	37·4	7·9	17·4	1·0	74	96·2	29·7	44·1	0·016	2·6	13·1
5	29·590	53·8	39·2	14·6	44·8	− 1·5	40·2	33·3	11·5	20·1	3·1	64	109·0	34·0	44·3	0·000	5·7	13·2
6	29·540	54·7	41·5	13·2	47·8	+ 1·5	44·1	39·3	8·5	14·4	4·0	72	76·6	34·1	44·5	0·007	0·0	13·3
7	29·293	53·6	40·0	13·6	45·9	− 0·4	41·7	35·7	10·2	21·0	3·6	67	110·2	33·4	44·5	0·329	7·9	13·3
8	29·720	53·5	37·7	15·8	43·7	− 2·4	39·0	31·3	12·4	20·2	7·3	62	104·6	28·1	44·7	0·068	5·3	13·4
9	29·785	58·9	33·9	25·0	46·3	+ 0·3	43·8	40·7	5·6	11·2	2·5	81	103·2	25·3	44·8	0·021	1·0	13·4
10	29·330	52·1	39·7	12·4	47·1	+ 1·2	44·7	41·9	5·2	8·7	3·0	82	75·1	33·0	44·7	0·251	0·0	13·5
11	29·475	46·6	36·2	10·4	40·2	− 5·6	37·7	33·7	6·5	11·6	1·8	78	80·9	29·2	44·7	0·064	1·5	13·6
12	30·000	50·2	34·9	15·3	40·7	− 5·2	35·8	26·7	14·0	22·4	3·4	58	101·2	28·0	44·8	0·017	8·3	13·7
13	30·241	53·7	31·5	22·2	42·6	− 3·5	38·0	30·3	12·3	21·6	3·6	62	103·2	23·8	44·9	0·013	8·0	13·7
14	29·781	51·3	37·6	13·7	43·6	− 2·8	42·0	39·9	3·7	9·3	1·0	87	97·2	30·3	44·9	0·450	1·1	13·8
15	29·593	52·7	36·0	16·7	43·1	− 3·7	39·5	34·1	9·0	21·7	0·4	70	109·0	28·1	44·7	0·000	3·1	13·8
16	29·628	43·0	38·3	4·7	40·8	− 6·4	39·7	38·3	2·5	5·6	1·3	90	51·0	32·3	44·7	0·220	0·0	13·9
17	29·709	42·7	38·4	4·3	41·4	− 6·2	40·3	38·9	2·5	6·6	1·6	90	46·0	36·2	44·7	0·042	0·0	14·0
18	29·819	50·2	35·4	14·8	42·2	− 5·8	38·1	31·5	10·7	15·1	4·3	66	94·6	29·2	44·8	0·000	5·4	14·0
19	29·784	49·1	38·3	10·8	43·9	− 4·4	38·7	30·1	13·8	16·5	5·1	58	79·9	31·6	44·8	0·000	0·6	14·1
20	29·504	54·7	39·6	15·1	46·1	− 2·4	43·0	39·0	7·1	12·7	2·5	76	95·1	31·6	44·8	0·159	1·7	14·2
21	29·476	57·7	38·0	19·7	45·4	− 3·3	42·5	38·6	6·8	17·7	1·7	77	119·8	29·7	44·8	0·079	8·7	14·2
22	29·620	60·4	33·6	26·8	46·1	− 2·6	41·4	34·5	11·6	23·0	2·0	64	116·8	26·0	44·9	0·000	9·8	14·3
23	29·615	58·7	40·2	18·5	47·5	− 1·1	42·6	35·7	11·8	21·7	4·7	64	117·2	29·2	44·9	0·111	5·8	14·4
24	29·741	55·3	40·0	15·3	47·6	− 1·0	42·5	35·2	12·4	17·8	4·9	62	101·5	29·0	44·9	0·000	5·4	14·4
25	29·837	57·4	38·2	19·2	46·5	− 2·1	41·4	33·8	12·7	22·2	6·8	61	104·5	26·9	45·0	0·000	4·1	14·5
26	29·691	61·6	39·4	22·2	49·1	+ 0·5	45·2	40·4	8·7	21·3	3·0	72	113·9	30·1	45·1	0·035	6·3	14·5
27	29·633	57·9	43·4	14·5	49·0	+ 0·3	46·6	43·9	5·1	14·4	1·8	83	101·3	41·1	45·1	0·033	2·2	14·6
28	29·422	62·6	46·6	16·0	51·2	+ 2·4	49·1	46·9	4·3	9·8	1·2	85	116·6	38·4	45·3	0·053	2·0	14·7
29	29·446	64·6	42·0	22·6	50·7	+ 1·7	47·7	44·4	6·3	15·8	1·5	79	117·7	31·3	45·7	0·012	2·2	14·7
30	29·509	66·2	43·0	23·2	53·8	+ 4·7	48·9	43·5	10·3	24·1	1·7	68	122·5	31·0	45·9	0·055	7·0	14·8
Means	29·580	54·6	38·5	16·1	45·4	− 1·8	42·0	37·1	8·4	16·1	2·8	73·1	98·4	30·8	44·7	Sum 2·441	3·7	13·9
Number of Column for Reference.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18

The results apply to the civil day, except Columns 19 to 22 (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 published by the Meteorological Office, 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 29·580in., being 0·175in. lower than the average for the 65 years, 1841–1905.

TEMPERATURE OF THE AIR.

The highest in the month was 66°·2 on April 30; the lowest in the month was 31°·5 on April 13; and the range was 34°·7.

The mean of all the highest daily readings in the month was 54°·6, being 2°·6 lower than the average for the 65 years, 1841–1905.

The mean of all the lowest daily readings in the month was 38°·5, being 0°·5 lower than the average for the 65 years, 1841–1905.

The mean of the daily ranges was 16°·1, being 2°·1 less than the average for the 65 years, 1841–1905.

The mean for the month was 45°·4, being 1°·8 lower than the average for the 65 years, 1841–1905.

MONTH and DAY, 1932.	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.		
April 1	1·2	0·13	0·6	0·07	NNE : E	SW : SSW	3·2	0·10	271	10 : 9, s.-cu, alt.-cu, m.-r	9 : 10, sh, slt.-m.-r, r
2	2·7	0·32	0·5	0·06	SW : W	SW : Calm	2·6	0·37	319	9, r, sh : 9 : 7, cu, cu.-n, ci	10, alt.-s, cu, r : 10, r, m.-r : 6
3	2·6	0·31	1·8	0·21	Calm : S	SSW : Calm	0·9	0·01	167	10, slt.-m.-r: 10, r : 10, m.-r	10, r, m.-r : 10, sh, m.-r: 8
4	2·1	0·25	0·5	0·06	ENE : SE : SW	WSW : NW : N	1·0	0·06	242	10, r, m.-r : 10	7 : v.-cl : 8
5	3·1	0·36	0·5	0·06	N	N : NW : WNW	1·6	0·26	326	10 : 10 : 8, s.-cu, cu	4, s,-cu, cu: 6 : 10
6	0·0	0·00	0·0	0·00	WSW	WSW	8·1	1·11	481	5 : 10, slt.-shs, w	10, alt.-s, fr.-s, st.-w: 10, slt.-sh, w : 10, r, w
7	6·5	0·77	5·9	0·69	WSW :W	WSW : W	14·3	2·72	627	10, c.-r, oc.-hy.-r, w: 10, r, oc.-hy.-r, w: 8, s.-cu,st.-w	v.-cl, fr.-cu, st.-w: v.-cl, hy.-r, hy.-sh, st.-w: v.-cl, sh,w
8	8·4	0·99	8·3	0·97	W : NW	NW	8·6	1·12	450	v.-cl, w : 9, shs, w : 9, n, fr.-s, sh,w	v.-cl, sh, r, hl, w : 0
9	3·1	0·38	2·3	0·28	SW : SSW	SW	7·8	1·28	425	1 : 10, r : 10, m.-r, w	9, oc.-slt.-m.-r, w: v,-cl, d, w
10	3·5	0·43	2·6	0·33	SW	SW	9·2	2·05	516	10, oc.-r, st.-w : 10, hy.-sh, fq.-r, st.-w, w	10, alt.-s, n, fq.-slt.-m.-r, w: 10, r, hy,-r
11	6·7	0·84	6·2	0·77	WSW : SW	NW : WNW	5·5	0·37	341	9 : 9, alt.-s, n, sh	10, shs, hl, r : 1
12	7·2	0·90	6·5	0·82	NW : NNW	N : NW	3·6	0·38	351	9 : 7 : 7, cu, fr.-cu, slt.-hl	8, s.-cu : 10, r : 3, h
13	0·0	0·00	0·0	0·00	WSW : NW	WNW : SW	1·4	0·05	238	0, h, ho.-fr : 1, h	3, s.-cu, h : 10 : 10, r, m,-r
14	7·1	0·88	6·6	0·83	SSW	Var : SSW	4·6	0·39	304	10, r, m.-r : 10, fq.-r, m.-r	10, oc.-r, so.-ha: 10, r, hy.-r, hl, t, l: 1
15	7·2	0·90	5·1	0·63	S : ESE	E : ENE	5·4	0·57	327	7 : 10 : 10, slt.-m.-r	th.-cl, so.-ha, prh : th.-cl, lu.-ha
16	0·0	0·00	0·0	0·00	NE	NE	3·0	0·38	364	7 : 10, r, m.-r : 10, r, fq.-m.-r	10, oc.-m.-r : 10, oc.-m.-r, r, slt.-m
17	2·7	0·36	0·3	0·04	NE	NE	3·0	0·38	380	10, r, m.-r, slt.-m : 10, m.-r, oc.-slt.-m.-r	10, oc.-slt.-m.-r : 10
18	1·7	0·22	1·0	0·13	NE	NE : NNE	2·4	0·27	341	8 : 1 : 7	10, alt.-cu, s.-cu : 9
19	0·0	0·00	0·0	0·00	N : NNW	WNW : SW	0·6	0·06	243	10 : 10, alt.-cu	10, s.-cu : 10, s.-cu
20	6·1	0·81	6·1	0·81	SSW : SW	SW	3·7	0·37	344	10 : 9, s.-cu, shs	9, shs : v.-cl : 5, r
21	7·5	1·00	7·5	1·00	SSW : SW	SW	5·9	0·57	364	0 : 0 : 8, slt.-shs, w	v.-cl, shs, w: v.-cl, hy.-shs, hl: 0
22	7·0	0·93	6·9	0·92	SW : WSW	WSW : SW	0·7	0·10	268	0, ho.-fr : 0, ho.-fr : 5, s.-cu	8, s.-cu, alt.-cu: 3 : 2
23	5·1	0·72	4·9	0·70	SW : WSW	WNW : NW : W	2·8	0·29	349	0, ho.-fr : 10, slt.-sh : 9, r	4, fr.-cu, cu.-n : 1, ho.-fr
24	4·7	0·66	3·7	0·52	W : NNW	NNW : NW	1·6	0·10	261	th.-cl : 4 : 7, s.-cu, alt.-cu	10, alt.-cu : 10 : 4, h
25	1·1	0·15	0·6	0·09	NW : W	WNW : WSW	0·9	0·05	238	2, h, ho.-fr : 2, h : 5, h	10, s.-cu : 10, r
26	0·0	0·00	0·0	0·00	WSW : SW	WSW : SW	1·7	0·20	296	8, d : 6, fr.-cu, alt.-cu	8, alt.-cu, s.-cu : 10, r
27	0·0	0·00	0·0	0·00	SW : Calm : Var	SSW : SSE	0·6	0·05	216	10, r, m.-r : 10, s, alt.-s, slt.-m	8, s.-cu : 10, sh
28	1·4	0·20	0·9	0·13	SSE : S	SSW	2·1	0·16	276	10, m.-r, r : 10, m.-r, fq.-slt.-m.-r	8, ci, s.-cu : 8, d
29	5·2	0·74	5·0	0·72	S	S : SSE	1·2	0·06	234	6, d : 10	9, cu, alt.-cu : 10, sh : 0, d
30	2·5	0·38	1·4	0·21	S : SSE	SSE : ESE	4·2	0·51	314	8, d : 8, ci	8 : 8, hy.-r, r, l
Means	3·5	0·45	2·9	0·37	..	..	..	0·48	329		
Number of Column for Reference.	19	20	21	22	23	24	25	26	27	28	29

The mean *Temperature of Evaporation* for the month was 42°·0, being 1°·9 lower than
The mean *Temperature of the Dew Point* for the month was 37°·1, being 2°·5 lower than
The mean *Degree of Humidity* for the month was 73·1, being 1·4 less than
The mean *Elastic Force of Vapour* for the month was 0·221in., being 0·023in. 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 0·267. The maximum daily amount of *Sunshine* was 9·8 hours on April 22.

The highest reading of the *Solar Radiation Thermometer* was 122°·5 on April 30; and the lowest reading of the *Terrestrial Radiation Thermometer* was 23°·8 on April 13.

The *Proportions of Wind* referred to the cardinal points were N. 6, E. 3, S. 8, W. 11. Two days were calm.

The *Greatest Pressure of the Wind* in the month was 14·3 lbs. on the square foot on April 7. The mean daily *Horizontal Movement of the Air* for the month was 329 miles; the greatest daily value was 627 miles on April 7, and the least daily value was 167 miles on April 3.

Rain (0·005in. or over) fell on 23 days in the month, amounting to 2·441in., as measured by gauge No. 6 partly sunk below the ground; being 0·875in. greater than the average fall for the 65 years, 1841–1905.

MONTH and DAY 1932.	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	29·491	63·9	45·7	18·2	53·9	+ 4·6	51·2	48·6	5·3	15·4	0·8	82	128·3	35·1	46·2	0·178	3·2	14·8
2	29·514	58·0	49·0	9·0	51·0	+ 1·5	49·3	47·5	3·5	8·0	1·0	88	96·7	48·2	46·2	0·186	0·2	14·9
3	29·698	49·5	43·4	6·1	47·8	− 2·0	46·7	45·4	2·4	3·4	0·8	91	60·0	42·1	46·5	0·209	0·0	14·9
4	29·800	48·6	39·2	9·4	44·1	− 5·9	40·9	36·3	7·8	9·9	3·8	74	72·7	33·9	46·7	0·000	0·1	15·0
5	29·676	49·9	36·6	13·3	41·6	− 8·7	38·7	34·1	7·5	11·1	2·8	75	108·3	29·0	46·7	0·068	2·8	15·1
6	29·564	52·4	35·3	17·1	42·1	− 8·4	39·0	34·2	7·9	12·2	3·3	74	102·4	28·2	46·8	0·002	1·8	15·1
7	29·513	55·4	36·0	19·4	43·7	− 7·0	39·2	32·0	11·7	26·0	1·8	64	107·9	27·9	46·8	0·003	3·8	15·2
8	29·531	58·1	35·1	23·0	44·6	− 6·4	40·2	33·6	11·0	20·8	2·6	65	123·0	26·2	46·9	0·000	7·4	15·2
9	29·420	47·1	36·1	11·0	41·8	− 9·4	40·3	38·3	3·5	4·4	0·5	87	51·0	24·0	46·7	1·116	0·0	15·3
10	29·756	59·4	35·4	24·0	47·0	− 4·5	42·2	35·4	11·6	20·8	1·0	64	114·8	26·2	46·8	0·018	7·3	15·3
11	29·736	61·9	42·7	19·2	50·8	− 1·0	47·6	44·0	6·8	10·0	1·0	77	108·0	30·0	46·8	0·081	0·4	15·4
12	29·736	64·0	50·6	13·4	56·9	+ 4·8	53·1	49·5	7·4	12·0	1·7	76	116·9	46·2	46·9	0·000	3·0	15·5
13	29·682	65·5	51·3	14·2	56·2	+ 3·8	53·4	50·9	5·3	11·9	2·9	82	106·1	45·1	46·9	0·029	0·2	15·5
14	29·827	67·8	50·2	17·6	56·4	+ 3·8	52·9	49·6	6·8	15·7	2·4	78	134·9	44·2	47·1	0·000	4·7	15·6
15	29·621	71·1	50·3	20·8	58·9	+ 6·1	56·9	55·3	3·6	9·8	0·7	88	132·3	50·0	47·3	0·240	1·5	15·6
16	29·648	65·9	54·5	11·4	58·7	+ 5·7	56·8	55·3	3·4	6·7	0·5	89	98·2	49·7	47·8	0·141	0·3	15·7
17	29·934	72·9	47·3	25·6	59·0	+ 5·9	53·7	48·7	10·3	22·0	1·5	69	142·0	35·4	48·2	0·000	13·2	15·7
18	29·980	70·9	43·1	27·8	58·1	+ 4·8	52·4	46·8	11·3	21·0	3·3	66	128·6	32·8	48·6	0·000	4·6	15·7
19	29·913	74·9	56·8	18·1	63·9	+10·4	58·2	53·6	10·3	21·1	3·8	69	132·9	47·7	49·0	0·000	10·5	15·8
20	29·756	75·3	51·4	23·9	63·3	+ 9·5	58·9	55·6	7·7	16·9	2·6	76	133·7	42·2	49·1	0·010	2·3	15·8
21	29·511	75·7	54·2	21·5	60·9	+ 6·7	58·8	57·3	3·6	16·2	0·6	87	130·2	52·9	49·7	0·146	4·2	15·9
22	29·574	67·0	51·9	15·1	56·7	+ 2·1	53·4	50·4	6·3	16·6	1·1	79	119·9	46·9	49·9	0·794	4·3	15·9
23	29·563	63·0	50·2	12·8	54·6	− 0·3	51·7	48·9	5·7	12·6	1·6	81	121·6	43·7	50·1	0·060	2·0	16·0
24	29·593	55·3	43·3	12·0	49·8	− 5·5	45·5	40·3	9·5	16·3	1·2	69	102·1	34·3	50·2	0·000	1·9	16·0
25	29·685	54·1	39·9	14·2	46·7	− 8·8	42·8	37·7	9·0	13·1	3·8	70	102·1	31·3	50·6	0·005	2·1	16·1
26	29·689	58·3	35·7	22·6	48·6	− 7·2	44·2	38·5	10·1	15·3	1·5	68	113·5	26·4	50·8	0·000	5·3	16·1
27	29·700	50·7	44·4	6·3	47·7	− 8·3	46·6	45·3	2·4	4·7	0·8	91	61·9	31·1	50·6	0·468	0·0	16·2
28	29·702	57·9	47·2	10·7	50·9	− 5·3	50·0	49·1	1·8	5·7	0·8	93	84·6	43·1	50·6	0·238	0·0	16·2
29	29·732	62·9	46·2	16·7	52·6	− 3·8	50·2	47·8	4·8	12·8	1·4	83	120·1	39·0	50·7	0·024	5·2	16·2
30	29·819	69·2	45·1	24·1	53·2	− 3·5	50·9	48·7	4·5	14·8	1·2	84	134·0	35·7	50·7	0·033	4·4	16·2
31	29·747	72·9	42·6	30·3	57·6	+ 0·5	53·3	49·3	8·3	20·9	0·8	74	137·2	31·1	50·9	0·000	10·5	16·3
Means	29·681	61·9	44·9	17·1	52·2	− 0·8	49·0	45·4	6·8	13·8	1·7	77·8	110·5	37·4	48·3	Sum 4·049	3·5	15·6
Number of Column for Reference.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18

The results apply to the civil day, except Columns 19 to 22 (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 published by the Meterological Office, 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 29·681in., being 0·120in. lower than the average for the 65 years, 1841–1905.

TEMPERATURE OF THE AIR.

The highest in the month was 75°·7 on May 21; the lowest in the month was 35°·1 on May 8; and the range was 40°·6.
The mean of all the highest daily readings in the month was 61°·9, being 2°·0 lower than average for the 65 years, 1841–1905.
The mean of all the lowest daily readings in the month was 44°·9, being 1°·2 higher than the average for the 65 years, 1841–1905.
The mean of the daily ranges was 17°·1, being 3°·1 less than the average for the 65 years, 1841–1905.
The mean for the month was 52°·2, being 0°·8 lower than the average for the 65 years, 1841–1905.

MONTH and DAY, 1932.	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		
May 1	0·0	0·00	0·0	0·00	Calm : ENE	ESE : Calm	0·7	0·04	209	8 : 10, alt.-s, m	9 : 10, r, m.-r
2	0·0	0·00	0·0	0·00	Calm : SW : WSW	WSW	2·7	0·32	329	10, c.-r : 10, alt.-s, n	10, s.-cu : 10, oc.-m.-r
3	0·0	0·00	0·0	0·00	W : NW : N	NNE	5·8	0·49	341	10, oc.-slt.-m.-r : 10, oc.-slt.-m.-r, m.-r, r	10, r, m.-r, slt.-m.-r : 10, slt.-m.-r, w
4	3·7	0·58	3·0	0·46	NNE	NNE : N	5·9	0·81	394	10, w : 10, s.-cu	10, s.-cu : 9, oc.-slt.-m.-r : v.-cl
5	5·6	0·86	5·1	0·78	N	N : NNW	3·1	0·20	284	4 : 7 : 10, shs	10, shs, hl : 7, slt.-shs : 3, ho.-fr
6	0·0	0·00	0·0	0·00	NNW	N : Calm	0·9	0·05	223	5, ho.-fr : 9 : 10, alt.-s, s.-cu	9, sh : 10
7	3·9	0·64	1·8	0·30	Calm : N	Var : SW	2·8	0·03	190	10 : 10, oc.-slt.-r : 8, s.-cu, alt.-cu, h	8, alt.-cu, h : 10, sh, h : th.-cl, ho.-fr
8	4·1	0·68	3·5	0·58	SSW : SW : WSW	SW : SSW	0·8	0·03	220	5, ho.-fr : 3, ho.-fr : 4, cu, slt.-h	8, s.-cu, alt.-cu, cu, slt.-h : th.-cl, ho.-fr
9	6·0	1·00	4·1	0·68	ENE : NE : N	NNW : W	4·1	0·18	292	9, shs, r : 10, c.-r	10, c.-r : 3, th.-cl, h
10	2·5	0·41	2·5	0·41	WSW : NW	W : WSW	3·1	0·10	274	1, h, ho.-fr : 1, h, ho.-fr : 6, sh, h	8, s.-cu, n : 8, p.-so.-ha : 1
11	0·0	0·00	0·0	0·00	SW : Calm	WNW : SW	1·1	0·07	247	10, r, m.-r : 10, m.-r, sh	10, shs : 10, shs
12	0·0	0·00	0·0	0·00	SW	SW	4·5	0·89	395	10 : 9, alt.-s, alt.-cu, w	9, ci, ci.-cu, w : 5, w : 9
13	0·4	0·06	0·3	0·05	SW : SSW	SW	4·8	0·47	328	10, slt.-shs : 10, ci, ci.-cu, r	10, alt.-s, n, r, slt.-shs : 9
14	0·0	0·00	0·0	0·00	WSW : Calm	Calm : E	1·1	0·05	198	10 : 10 : 9, alt.-s, ci, s.-cu	v.- cl : 9
15	0·0	0·00	0·0	0·00	ENE : Calm	ENE : Calm	0·4	0·03	184	10 : 10, slt.-r : 10, r, m.-r, slt.-m.r	8, alt.-cu, sh : 10, hy.-r, r, slt.-r, t, l : 10, slt.-m
16	0·4	0·07	0·4	0·07	Calm : SW	SW : WSW	1·0	0·06	221	10, slt.-r : 10, r, fq.-slt.-m.-r	10, oc.-slt.-m.-r : 10, r, slt.-r
17	5·5	1·00	5·1	0·92	WSW	WSW : SSW	1·0	0·10	253	9 : 4, cu	4, fr.-cu : 0, d
18	0·0	0·00	0·0	0·00	Calm : S	SSW : S	2·0	0·15	239	2, d : th.-cl : 9, ci, ci.-cu, alt.-cu	10, alt.-s, n, slt.-r : 10
19	4·3	0·78	4·1	0·76	Calm : SSW	SSW : S	2·0	0·14	249	10 : 10 : th.-cl	5, ci, alt.-cu : 3 : 4, l, d
20	0·0	0·00	0·0	0·00	Calm : SSW	SSW : Calm	2·0	0·09	217	3, d : 10, sh : 10, alt.-s, n, sh	5 : 9, slt.-sh : 10, oc.-slt.-r, t, l
21	0·0	0·00	0·0	0·00	NE : ENE : SSW	SW : Calm	1·2	0·10	231	9 : 9 : 6, ci, alt.-cu	10, m.-r : 10, m.-r, r
22	1·7	0·33	1·6	0·32	WSW : W : WNW	NW : WSW	4·0	0·58	361	10, m.-r, r, hy.-r : 8	8, alt.-cu, cu, n, shs, hy.-r, t, l : 9
23	0·0	0·00	0·0	0·00	SW : WSW	SW : Calm : NNE	0·7	0·10	227	9, sh, r : 9, alt.-cu, n, shs	8, s.-cu, alt.-cu, ci : 10, oc.-slt.-r
24	5·0	1·00	5·0	1·00	NNE	NNE : N	2·2	0·44	330	10 : 9, s.-cu, alt.-cu, n	9, s.-cu : 6 : 1, d
25	3·2	0·65	2·7	0·54	NNW	NNW	2·2	0·13	237	2 : 6 : 9, s.-cu	10, s.-cu, sh : 10
26	2·4	0·47	2·3	0·46	Calm : NE	NNE	0·6	0·04	177	th.-cl, ho.-fr : 1, ho.-fr : 7	9, ci.-s, cu, p.-so.-ha : 4
27	0·0	0·00	0·0	0·00	Calm : NW : W	NW : SW	0·9	0·05	211	10 : 10, m.-r, tk.-m.-r	10, c.-tk.-m.-r : 10, c.-m.-r
28	0·8	0·16	0·0	0·00	SW : Calm	SSW : SW	1·6	0·04	192	10, c.-m.-r, tk.-m.-r : 10, oc.-slt.-r	10, oc.-r, m.-r : 10, oc.-r, slt.-m
29	1·2	0·24	0·7	0·13	SSW : S	SSW : S : SSE	2·0	0·18	263	10 : 10, oc.-r	8, alt.-cu, fr.-s, ci : 8, d
30	5·0	1·00	5·0	1·00	Calm	SSW : Calm	0·4	0·02	161	9, d, m.-r, sh : 9, cu, alt.-cu	8, slt.-r, r, h : 0, h, d
31	0·8	0·16	0·2	0·04	SW : Calm	Registration failed	0·3	0·02	185	4, d : 4, cu	4, cu, alt.-cu : 6 : 9
Means	1·8	0·33	1·5	0·27	..	..	..	0·19	254		
Number of Column for Reference.	19	20	21	22	23	24	25	26	27	28	29

The mean *Temperature of Evaporation* for the month was 49°·0, being equal to
The mean *Temperature of the Dew Point* for the month was 45°·4, being 0°·6 higher than
The mean *Degree of Humidity* for the month was 77·8, being 3·9 greater than
The mean *Elastic Force of Vapour* for the month was 0·305in., being 0·007in. 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 0·221. The maximum daily amount of *Sunshine* was 13·2 hours on May 17.

The highest reading of the *Solar Radiation Thermometer* was 142°·0 on May 17; and the lowest reading of the *Terrestrial Radiation Thermometer* was 24°·0 on May 9.

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

The *Greatest Pressure of the Wind* in the month was 5·9 lbs. on the square foot on May 4. The mean daily *Horizontal Movement of the Air* for the month was 254 miles; the greatest daily value was 395 miles on May 12, and the least daily value was 161 miles on May 30.

Rain (0·005in. or over) fell on 19 days in the month, amounting to 4·049in., as measured by gauge No. 6 partly sunk below the ground; being 2·134in. greater than the average fall for the 65 years, 1841–1905.

MONTH and DAY, 1932.	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
June 1	29·680	64·9	50·8	14·1	55·1	− 2·3	52·7	50·5	4·6	11·7	0·4	85	129·4	44·3	50·9	0·017	2·8	16·3
2	29·695	70·4	50·1	20·3	59·2	+ 1·4	55·3	52·0	7·2	15·6	0·4	77	131·1	46·6	51·0	0·000	9·6	16·4
3	29·720	64·9	45·3	19·6	52·3	− 5·8	50·0	47·7	4·6	12·6	0·9	84	126·3	45·0	51·1	0·000	2·0	16·4
4	29·779	55·3	45·9	9·4	49·1	− 9·2	45·2	40·4	8·7	12·8	2·9	72	94·0	43·8	51·3	0·032	0·0	16·4
5	29·849	53·3	44·0	9·3	48·0	−10·4	45·8	43·3	4·7	9·1	1·3	83	81·0	37·4	51·2	0·185	0·1	16·4
6	29·993	58·0	42·1	15·9	49·4	− 8·9	44·7	38·8	10·6	16·0	0·9	67	107·0	34·8	51·2	0·000	4·7	16·5
7	30·063	64·8	43·6	21·2	53·6	− 4·6	47·5	40·2	13·4	20·8	2·1	60	123·1	36·0	51·5	0·000	7·6	16·5
8	30·079	64·3	50·6	13·7	56·8	− 1·3	50·6	44·0	12·8	17·8	5·9	62	109·0	41·0	51·4	0·000	0·1	16·5
9	30·060	71·6	45·8	25·8	58·9	+ 0·9	52·9	47·2	11·7	21·8	3·1	64	128·4	33·5	51·7	0·000	6·6	16·5
10	29·918	74·1	41·1	33·0	58·9	+ 0·8	52·5	46·2	12·7	22·5	1·1	62	128·9	28·7	51·9	0·000	12·8	16·6
11	29·742	77·2	50·6	26·6	62·1	+ 3·9	57·9	54·6	7·5	15·2	1·4	76	127·0	42·7	52·0	0·000	3·4	16·6
12	29·811	78·0	51·9	26·1	64·8	+ 6·4	59·0	54·5	10·3	19·5	2·7	69	129·3	43·0	52·0	0·000	8·0	16·6
13	29·935	67·3	50·2	17·1	60·8	+ 2·3	57·1	54·1	6·7	11·1	2·4	79	121·7	46·2	52·2	0·000	7·3	16·6
14	30·037	72·6	47·3	25·3	59·4	+ 0·7	50·9	41·5	17·9	34·1	2·4	52	128·2	41·8	52·6	0·000	13·1	16·6
15	30·055	69·4	46·7	22·7	56·7	− 2·1	52·4	48·3	8·4	17·9	2·1	73	128·2	39·2	52·8	0·000	7·6	16·6
16	30·045	77·9	52·1	25·8	63·9	+ 5·0	57·7	52·6	11·3	24·5	2·1	67	135·3	45·1	53·0	0·000	10·9	16·6
17	30·019	75·2	50·1	25·1	62·6	+ 3·6	54·9	47·8	14·8	26·2	4·5	58	134·1	38·1	53·2	0·000	14·4	16·6
18	29·962	70·7	45·6	25·1	57·7	− 1·5	52·6	47·7	10·0	21·3	1·4	69	130·5	32·2	53·3	0·000	13·8	16·6
19	29·883	61·4	46·1	15·3	54·1	− 5·4	49·9	45·5	8·6	16·8	3·9	73	114·2	33·0	53·4	0·000	3·1	16·6
20	29·848	62·3	50·8	11·5	54·6	− 5·3	50·6	46·6	8·0	13·6	4·3	74	103·2	43·7	53·2	0·000	0·4	16·6
21	29·910	59·4	48·7	10·7	54·2	− 6·1	50·3	46·3	7·9	12·6	3·4	75	90·2	36·8	53·2	0·000	0·0	16·6
22	30·041	69·9	47·2	22·7	55·9	− 4·7	51·1	46·2	9·7	20·8	1·2	70	130·3	36·5	53·4	0·000	4·6	16·6
23	30·094	73·8	43·9	29·9	57·4	− 3·5	53·2	49·3	8·1	20·5	0·9	75	133·7	31·9	53·6	0·000	10·5	16·6
24	29·987	70·1	51·0	19·1	61·7	+ 0·5	56·2	51·4	10·3	15·8	2·3	69	114·1	41·0	53·5	0·000	1·2	16·6
25	29·843	75·2	56·1	19·1	63·6	+ 2·2	57·5	52·5	11·1	23·0	4·3	67	133·9	46·2	53·6	0·000	3·7	16·6
26	29·805	77·9	55·7	22·2	65·2	+ 3·7	59·6	55·3	9·9	20·8	1·8	71	132·0	45·6	53·8	0·000	5·9	16·6
27	29·733	84·6	50·3	34·3	67·0	+ 5·4	60·1	54·9	12·1	24·3	1·2	65	139·7	39·6	54·0	0·000	13·6	16·6
28	29·615	77·9	58·2	19·7	67·0	+ 5·4	61·5	57·6	9·4	15·5	1·6	72	132·7	49·8	54·1	0·005	9·4	16·6
29	29·780	80·0	54·7	25·3	65·1	+ 3·5	58·5	53·2	11·9	25·3	2·3	66	141·5	46·7	54·3	0·000	8·2	16·6
30	29·633	69·1	54·2	14·9	62·4	+ 0·9	60·0	58·3	4·1	7·9	2·2	86	105·9	45·6	54·5	0·034	0·0	16·6
																Sum		
Means	29·887	69·7	49·0	20·7	58·6	− 0·8	53·6	48·9	9·6	18·2	2·2	70·7	122·1	40·5	52·6	0·273	6·2	16·5
Number of Column for Reference.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18

The results apply to the civil day, except Columns 19 to 22 (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 published by the Meteorological Office, 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 29·887in., being 0·065in. higher than the average for the 65 years, 1841–1905.

TEMPERATURE OF THE AIR.

The highest in the month was 84°·6 on June 27; the lowest in the month was 41°·1 on June 10; and the range was 43°·5.
The mean of all the highest daily readings in the month was 69°·7, being 1°·0 lower than the average for the 65 years, 1841–1905.
The mean of all the lowest daily readings in the month was 49°·0, being 0°·9 lower than the average for the 65 years, 1841–1905.
The mean of the daily ranges was 20°·7 being 0°·1 less than the average for the 65 years, 1841–1905.
The mean for the month was 58°·6, being 0°·8 lower than the average for the 65 years, 1841–1905.

MONTH and DAY, 1932.	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.		(Registration		lbs.	lbs.	miles.		
June 1	0·0	0·00	0·0	0·00	failed)	NNE : NE	0·8	0·05	211	10 : 10, oc.-slt.-r, r	9, alt.-cu : 10, oc.-slt.-m.-r
2	0·8	0·16	0·5	0·11	ENE	ENE : E	1·2	0·17	256	10 : 10, slt.-m.-r: 5, cu	3, cu, fr.-cu : 1, d : 5, d
3	0·0	0·00	0·0	0·00	NNE : NE	E : ENE	1·2	0·18	278	10, m : 10, s	9, s.-cu : 9
4	0·0	0·00	0·0	0·00	NE	ENE : NE	1·3	0·17	265	10 : 10, s.-cu, fr.-s	10 : 10 : 10, m.-r. r
5	4·3	0·96	4·2	0·95	NNE	ENE : NNE	1·2	0·10	233	10, c.-r, m.-r : 10, r, m.-r	10, r, m.-r : 3, alt.-cu
6	0·3	0·06	0·0	0·00	N	NNW : Calm : SSE	1·7	0·16	241	v.-cl : v.-cl : 9, cu, s.-cu	9, s.-cu : 5 : 10
7	0·4	0·08	0·2	0·05	SSW : Calm : NW	NW : W	1·6	0·10	237	10 : 10 : 7, fr.-cu, s.-cu	6, s.-cu : 6
8	0·0	0·00	0·0	0·00	NW : WSW : W	NW : WSW	1·1	0·12	260	10, slt.-sh : 10, alt.-cu, s.-cu	10, s.-cu : 10
9	4·5	1·00	4·5	1·00	WSW : SW	SW : SSW	0·7	0·05	217	10 : 3, alt.-cu, cu	6, s.-cu, cu, alt.-cu: 6 : 1, d
10	4·3	0·96	3·7	0·82	SSW : Calm : SE	SE : S : E	0·4	0·08	206	1, d 1, ho.-fr : 4, cu	6, cu : 5 : 1
11	0·3	0·06	0·2	0·05	Calm : SE	SW	1·1	0·09	224	1, d : 9, oc.-slt.-r	9, s.-cu, alt.-cu : 9, slt.-r, r
12	3·0	0·67	2·6	0·59	WSW : Calm	Calm : E	0·2	0·01	174	5, d : 2, ci, ci.-cu	9, ci, fq.-so.-ha : 9, ci : 3, d
13	3·5	0·77	3·3	0·73	NE	ENE	2·3	0·28	312	7 : 5 : 9, s.-cu	8, s.-cu : 0 : 0
14	4·5	1·00	4·5	1·00	ENE	ENE : NE	2·4	0·49	347	9 : 0	0 : 0
15	0·2	0·04	0·0	0·00	NE	NE : NNE	1·6	0·27	310	1 : 10 : 6, fr.-cu, ci	2, fr.-cu : v.-cl, h : 10
16	4·5	1·00	4·5	1·00	NNE : NE	E : ENE	1·9	0·17	272	10 : 10 : 3, fr.-cu	4, cu : 0 : 0
17	4·5	1·00	4·5	1·00	NNE : NE	ESE : E	1·8	0·10	234	1 : 0	2 : 0, d
18	4·1	0·92	4·0	0·89	Calm : N	NNE : NE	1·5	0·15	236	0, d : 1	2, cu, ci.-cu : 3
19	0·0	0·00	0·0	0·00	N	N : NNE	0·7	0·10	227	4 : 6, fr.-cu, ci	10, s.-cu : 10
20	1·4	0·31	1·3	0·30	NNE : N : NNW	NNW	0·7	0·08	217	10 : 10, fr.-s, s.-cu	10, s.-cu : 9
21	4·2	0·94	4·1	0·92	Calm : NNW	N : NNE	0·9	0·09	223	9 : 10, s.-cu	10 : 9 : 3, d
22	4·3	0·95	4·1	0·92	N : NNE	N : NE : SE	1·0	0·05	201	3, d : 8, s.-cu, cu, ci	7, s.-cu, cu, alt.-cu, ci : 1, d
23	1·2	0·27	0·7	0·15	SW : Calm : ENE	Calm : ESE	0·5	0·04	194	1, d : 1, d, slt.-m: 0, slt.-h	3, cu, fr.-cu : 8 : 4, d
24	1·7	0·37	1·1	0·24	Calm : WSW : NW	NW : NNW	1·6	0·10	233	10, d : 9, alt.-cu, oc.-slt.-r, h	10, s.-cu, alt.-cu, h: 10
25	1·1	0·25	1·0	0·22	WSW : W : NW	NW : W	2·3	0·19	276	7 : 9, s.-cu, alt.-cu	7, s.-cu, cu, ci : 9 : 4
26	4·4	0·97	4·3	0·95	WSW	WSW : SW	1·3	0·16	260	7 : 3 : 8, alt.-cu	9, s.- cu, cu.-n : 8 : 1
27	0·8	0·17	0·7	0·15	SW : Calm : SSW	SSW : S	1·7	0·08	213	1 : 1, fr.-cu	3, fr.-cu : 1 : 9
28	3·5	0·77	3·4	0·76	SSW : SW	SW : W	2·9	0·45	327	10, sh : 5 : 9, fr.-s, ci	7, s.-cu, cu, alt.-cu: 6, sh : 8
29	3·3	0·74	2·6	0·57	WSW : SW	SW : SSW	1·9	0·15	255	8 : 1 : 9, s.-cu, cu.-n	5, ci, fr.-cu : 3 : th.-cl
30	0·0	0·00	0·0	0·00	S : SSW	SSW : S	2·5	0·29	295	5 : 10, alt.-s, n, oc.-r	10, oc.-m.-r : 10, r, oc.-slt.-m.-r
Means	2·2	0·48	2·0	0·45	..	..	..	0·15	248		
Number of Column for Reference.	19	20	21	22	23	24	25	26	27	28	29

The mean *Temperature of Evaporation* for the month was 53°·6, being 1°·3 lower than
The mean *Temperature of the Dew Point* for the month was 48 ·9, being 1°·9 lower than
The mean *Degree of Humidity* for the month was 70·7, being 2·5 less than
The mean *Elastic Force of Vapour* for the month was 0·348in., being 0·027in. 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 6·5.

The mean proportion of *Sunshine* for the month (constant sunshine being represented by 1) was 0·373. The maximum daily amount of *Sunshine* was 14·4 hours on June 17.

The highest reading of the *Solar Radiation Thermometer* was 141°·5 on June 29; and the lowest reading of the *Terrestrial Radiation Thermometer* was 28°·7 on June 10.

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

The *Greatest Pressure of the Wind* in the month was 2·9 lbs. on the square foot on June 28. The mean daily *Horizontal Movement of the Air* for the month was 248 miles; the greatest daily value was 347 miles on June 14, and the least daily value was 174 miles on June 12.

Rain (0·005in. or over) fell on 5 days in the month, amounting to 0·273in., as measured by gauge No. 6 partly sunk below the ground; being 1·765in. less than the average fall for the 65 years, 1841–1905.

MONTH and DAY, 1932.	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	29·362	76·1	56·0	20·1	64·9	+ 3·4	60·4	57·1	7·8	19·8	1·2	76	137·1	49·5	54·7	0·430	7·1	16·6
2	29·675	73·3	52·4	20·9	61·9	+ 0·3	55·6	49·9	12·0	25·8	2·9	65	142·5	41·0	54·8	0·001	4·4	16·6
3	29·904	72·2	47·4	24·8	60·3	− 1·5	54·7	49·7	10·6	18·8	1·8	68	133·3	35·7	54·9	0·000	6·8	16·5
4	29·805	80·9	52·5	28·4	66·2	+ 4·1	58·8	52·8	13·4	25·1	5·8	62	138·7	45·1	55·0	0·000	12·9	16·5
5	29·704	68·4	56·0	12·4	61·2	− 1·1	59·2	57·8	3·4	9·0	1·2	88	92·7	46·1	55·0	0·170	0·0	16·5
6	29·718	75·8	54·0	21·8	61·6	− 0·8	56·6	52·4	9·2	20·1	1·7	72	139·2	44·1	55·2	0·000	8·5	16·4
7	29·851	74·8	51·7	23·1	59·8	− 2·6	57·3	55·2	4·6	18·0	1·4	85	135·8	43·2	55·1	0·137	6·2	16·4
8	29·981	81·8	53·0	28·8	66·7	+ 4·3	60·6	56·0	10·7	21·2	0·7	69	136·9	44·1	55·3	0·000	10·2	16·4
9	30·044	84·3	58·1	26·2	70·2	+ 7·8	63·8	59·5	10·7	21·3	1·5	69	138·8	49·4	55·5	0·000	8·4	16·4
10	29·944	88·1	59·3	28·8	72·1	+ 9·6	65·7	61·7	10·4	21·0	0·8	70	145·6	50·6	55·9	0·000	11 7	16 3
11	29·738	81·5	57·9	23·6	68·0	+ 5·3	64·6	62·5	5·5	19·6	1·2	82	131·7	49·0	56·0	0·558	5·6	16·3
12	29·731	77·9	61·3	16·6	69·6	+ 6·7	66·3	64·4	5·2	10·0	0·1	83	114·9	54·1	56·2	0·000	0·8	16·3
13	29·580	76·8	56·6	20·2	64·8	+ 1·7	62·6	61·1	3·7	10·5	0·5	88	131·3	48·2	56·4	0·000	1·0	16·3
14	29·610	78·8	52·9	25·9	64·9	+ 1·6	59·3	54·9	10·0	19·8	1·4	70	142·0	41·0	56·7	0·002	8·6	16·2
15	29·575	62·4	56·8	5·6	59·0	− 4·4	56·2	53·9	5·1	7·2	3·4	83	84·9	52·7	56·6	0·000	0·0	16·2
16	29·458	76·7	53·0	23·7	63·7	+ 0·3	57·6	52·6	11·1	28·1	1·3	67	146·6	44·6	56·8	0·000	3·4	16·2
17	29·669	65·8	50·4	15·4	57·0	− 6·4	52·4	48·0	9·0	17·1	4·7	71	122·9	41·6	56·7	0·025	0·4	16·1
18	29·876	59·3	48·6	10·7	53·3	−10·0	50·3	47·2	6·1	8·1	2·1	80	84·0	39·3	56·6	0·114	0·1	16·1
19	29·986	74·1	46·3	27·8	59·6	− 3·6	54·1	49·1	10·5	21·2	1·8	68	131·6	34·1	56·7	0·000	8·3	16·0
20	29·849	77·5	52·0	25·5	64·7	+ 1·5	59·9	56·3	8·4	15·3	1·0	74	128·4	42·3	56·7	0·004	2·7	16·0
21	29·775	71·5	54·3	17·2	62·0	− 1·2	55·5	49·6	12·4	18·9	4·2	65	127·2	42·1	56·4	0·000	4·9	16·0
22	29·677	71·9	52·7	19·2	59·3	− 3·8	54·3	49·7	9·6	21·2	1·1	71	118·8	48·4	56·5	0·340	0·2	15·9
23	29·707	67·5	49·6	17·9	57·2	− 5·8	53·3	49·6	7·6	14·5	0·8	76	126·1	41·8	56·5	0·000	2·5	15·9
24	29·696	66·1	50·0	16·1	58·6	− 4·3	56·8	55·3	3·3	9·1	0·7	89	84·7	41·7	56·5	0·119	0·0	15·8
25	29·468	63·7	53·4	10·3	60·1	− 2·6	59·6	59·2	0·9	4·8	0·3	97	73·8	47·0	56·3	1·011	0·0	15·8
26	29·454	69·8	51·6	18·2	57·7	− 4·8	54·9	52·5	5·2	12·3	1·5	83	124·4	44·1	56·4	0·224	6·2	15·8
27	29·525	70·8	54·1	16·7	59·4	− 3·0	56·4	53·9	5·5	15·9	2·6	82	127·4	49·7	56·6	0·137	5·5	15·7
28	29·645	66·8	53·8	13·0	59·8	− 2·5	57·9	56·5	3·3	8·3	1·0	89	84·9	47·1	56·5	0·056	0·1	15·6
29	29·752	73·8	60·2	13·6	64·2	+ 1·9	61·4	59·4	4·8	10·1	1·5	85	118·5	57·1	56·7	0·006	0·6	15·6
30	29·750	78·7	55·5	23·2	65·6	+ 3·3	61·7	59·0	6·6	13·7	2·1	79	131·1	50·5	56·9	0·000	5·4	15·5
31	29·659	72·8	54·0	18·8	61·8	− 0·4	58·9	56·7	5·1	10·6	2·2	83	116·3	48·8	56·9	0·028	2·8	15·5
Means	29·715	73·5	53·7	19·8	62·4	− 0·2	58·3	55·0	7·5	16·0	1·8	77·1	122·3	45·6	56·1	Sum 3·362	4·4	16·1
Number of Column for Reference.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18

The results apply to the civil day, except Columns 19 to 22 (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 published by the Meteorological Office, 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 29·715in., being 0·091in. lower than the average for the 65 years, 1841–1905

TEMPERATURE OF THE AIR.

The highest in the month was 88°·1 on July 10; the lowest in the month was 46°·3 on July 19, and the range was 41°·8.
The mean of all the highest daily readings in the month was 73°·5, 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 53°·7, being 0°·4 higher than the average for the 65 years, 1841–1905.
The mean of the daily ranges was 19°·8, being 1°·1 less than the average for the 65 years, 1841–1905.
The mean for the month was 62°·4, being 0°·2 lower than the average for the 65 years, 1841-1905.

MONTH and DAY, 1932.	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.		
July 1	3·9	0·86	3·7	0·83	S : SW : WSW	SW	6·2	0·99	381	10, c.-r : 8, alt.-s, cu	3, fr.-cu : v.-cl,sh : 6
2	4·7	1·00	4·7	1·00	WSW : W	W : WSW : SW	2·0	0·35	320	3 : 9, shs : 9,alt.-cu,cu.-n	8, alt.-cu, cu : 8 : 2
3	3·1	0·65	3·0	0·64	SW	SSW : S	2·0	0·17	263	0, d : 2, th.-cl: 9, alt.-cu, ci.-cu,alt.-s	8 : 9
4	1·5	0·33	1·5	0·33	SSE : SSW	SSW	3·4	0·53	306	5 : 2, ci	3, ci : 4, ci : 8
5	0·0	0·00	0·0	0·00	Calm	Calm : W : SW	0·2	0·02	173	9 : 10, slt.-shs, m.-r, r	10, m.-r : 10, r, m.-r
6	3·6	0·77	2·6	0·56	WSW	WSW	1·6	0·13	268	9 : 3 : 5, fr.-cu	8, alt.-cu, s.-cu : 2, d
7	4·3	0·90	3·9	0·81	Calm : SW	Calm : SW	1·2	0·04	200	4, d : 3 : 7, fr.-s, ci,slt.-r	9, r, m.-r : 7
8	4·3	0·90	4·1	0·86	WSW	WSW : W	1·0	0·07	223	0 : 4 : 2,ci,fr.-cu	3, fr.-cu : 9 : 5
9	5·3	1·00	5·3	1·00	WSW : SW	WSW:NNW:Calm	0·6	0·05	188	1, d : 1, h, d : 5, h	5, fr.-s, h : 6
10	5·3	1·00	5·3	1·00	Calm	SSE : Calm	0·5	0·04	174	0 : 0 : 4, cu, ci	4, cu, ci : 1, ci, d
11	0·7	0·14	0·0	0·00	Calm : ENE	E : Calm	1·5	0·06	173	0, h, d : 0, h, d : 2, h	10, t.-sm : 10, slt.-m, h: 10, slt.-m, h
12	0·0	0·00	0·0	0·00	Calm	WNW : Calm	0·3	0·03	158	10, slt.-m, h : 10, slt.m, h : 7, h	7, h : 10 : 10, d
13	5·1	0·98	5·1	0·98	Calm	SE : SSW	1·3	0·09	210	10, d : 10, s.-cu, alt.-s	10, s.-cu : 9 : 2, d
14	0·0	0·00	0·0	0·00	SSW : WSW	SW : NNE	0·8	0·05	205	2, d : 2, ci, fr.-cu	9, ci, s.-cu, cu.-n, cu : 9, slt.-r
15	0·8	0·15	0·0	0·00	N : NNW	N : Calm	0·4	0·06	192	10 : 10, s, alt.-s	10, s, s.-cu, slt.-sh : 10
16	0·2	0·05	0·0	0·00	Calm : N	N	1·0	0·07	189	9 : 8, h	6,alt-cu,ci.-cu,h: 9 : 10
17	4·8	0·92	4·6	0·88	N	N : NNW	4·2	0·47	315	10 : 10, alt.-cu, s.-cu	10, slt.-m.-r : 10, slt.-m.-r, sh : 3
18	4·8	0·92	4·3	0·81	NNW : N	N	3·7	0·44	306	3 : 10, r : 10	10, m.-r : 10, slt.-sh : 8
19	4·1	0·77	3·3	0·63	NW : WSW : W	W : NW	1·0	0·06	228	2, d : 7 : 8, alt.-cu, ci, h	3, ci, ci.-cu, alt.-cu, h : 2, h, d
20	0·4	0·08	0·3	0·06	Calm : WSW	WSW : NW	2·4	0·11	228	3, h, d : 3, h, d : 10, alt.-cu,h	10, alt.-cu, s.-cu : 5 : 10, m.-r
21	0·3	0·05	0·2	0·04	NNW : W : NW	NW : NNW	1·0	0·10	229	6 : 3 : 9, cu, fr.-cu, alt.-cu	9, s.-cu, alt.-cu : 9
22	3·6	0·69	3·2	0·60	Calm : WSW	WSW:Calm:NNW	1·3	0·08	207	10 : 9, alt.-cu, cu	10, t.-sm, fq.-r : 9
23	3·4	0·60	2·8	0·48	NNW	NNW : Calm : S	1·0	0·13	235	8 : 9, fr.-s, cu	10, alt.-cu, cu : 9, d
24	0·0	0·00	0·0	0·00	S : SSW	SSW	2·6	0·24	282	4 : 10, m.-r, oc.-slt.-m.-r	10, oc.slt.-m.-r : 10, oc.-slt.-m.-r, r
25	4·5	0·78	3·9	0·68	SSW	SSW : SW	1·8	0·13	247	10, r : 10, m.-r, c.-r, oc.-hy.-r	10, c.-r, oc.-hy.-r : 10, slt.-r : v.-cl
26	1·7	0·30	1·1	0·20	SW	SW	3·1	0·45	327	v.-cl, shs : 9, shs : 9, shs, hy.-sh	8, shs, t, l : 8, r, t, l
27	2·8	0·49	2·7	0·46	SW : WSW	SW : WSW	5·4	0·62	371	9, slt.shs : 8, cu, alt.-cu, cu.-n, sh	v.-cl, shs, t: 9, shs : 9
28	0·2	0·03	0·2	0·03	WSW : SW	SW : WSW	2·8	0·37	336	8 : 10 : 10, fq.-m.-r	10, fq.-m.-r : 10, slt.-m.-r
29	0·0	0·00	0·0	0·00	SW : WSW	WSW : SW	3·4	0·81	371	10 : 10	10, alt.-s, n, shs : 10
30	5·3	0·85	4·9	0·79	SW	SSW : SW	1·8	0·17	268	10 : 8, ci, cu, s.-cu	10, s.-cu, ci.-s : 9 : 2
31	5·8	0·93	5·7	0·91	SSW : SW	WSW : SW	3·2	0·22	285	4 : 10 : 10, alt.-s, n, m.-r.	9, s.-cu, alt.-cu, slt.-sh: 7 : 3, d
Means	2·7	0·52	2·5	0·47	..	..	..	0·23	253		
Number of Column for Reference.	19	20	21	22	23	24	25	26	27	28	29

The mean *Temperature of Evaporation* for the month was 58°·3, being 0°·4 higher, than
The mean *Temperature of the Dew Point* for the month was 55°·0, being 0°·9 higher than
The mean *Degree of Humidity* for the month was 77·1, being 3·9 greater than
The mean *Elastic Force of Vapour* for the month was 0·436in., being 0·015in. 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 0·271. The maximum daily amount of *Sunshine* was 12·9 hours on July 4.

The highest reading of the *Solar Radiation Thermometer* was 146°·6 on July 16; and the lowest reading of the *Terrestrial Radiation Thermometer* was 34°·1 on July 19.

The *Proportions of Wind* referred to the cardinal points were N. 5, E. 0, S. 9, W. 11. Six days were calm.
The *Greatest Pressure of the Wind* in the month was 6·2 lbs. on the square foot on July 1. The mean daily *Horizontal Movement of the Air* for the month was 253 miles; the greatest daily value was 381 miles on July 1, and the least daily value was 158 miles on July 12.

Rain (0·005in. or over) fell on 14 days in the month, amounting to 3·362in., as measured by gauge No. 6 partly sunk below the ground; being 0·963in. greater than the average fall for the 65 years, 1841–1905.

MONTH and DAY, 1932.	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	29·718	75·1	54·2	20·9	60·3	— 1·9	57·6	55·4	4·9	13·9	0·6	84	129·3	47·1	57·0	1·018	2·9	15·4
2	29·840	69·7	55·1	14·6	60·3	— 1·8	57·4	55·0	5·3	10·9	0·7	83	115·0	51·3	57·0	0·118	0·6	15·4
3	29·804	71·2	54·3	16·9	60·2	— 1·9	56·3	53·0	7·2	16·4	2·5	77	123·8	47·6	57·1	0·013	4·5	15·3
4	29·842	72·1	54·7	17·4	62·8	+ 0·7	58·5	55·2	7·6	12·2	2·4	76	122·1	46·8	57·1	0·000	3·8	15·3
5	29·942	78·0	56·0	22·0	66·6	+ 4·5	62·0	58·8	7·8	18·2	1·0	76	134·3	46·6	57·2	0·000	4·8	15·2
6	30·053	82·2	59·6	22·6	69·0	+ 6·8	64·5	61·6	7·4	16·0	0·7	77	139·1	51·4	57·4	0·000	9·0	15·2
7	30·078	81·5	57·5	24·0	66·9	+ 4·7	61·3	57·2	9·7	19·5	0·6	71	136·5	48·7	57·6	0·000	8·7	15·1
8	30·036	79·7	54·8	24·9	67·0	+ 4·7	62·3	59·1	7·9	15·1	0·3	76	135·9	46·3	57·9	0·000	12·2	15·0
9	29·995	78·5	56·0	22·5	66·3	+ 4·0	62·3	59·6	6·7	15·7	1·0	79	123·0	46·3	58·0	0·000	5·0	15·0
10	29·931	83·3	56·0	27·3	68·6	+ 6·3	62·9	59·1	9·5	22·8	0·3	72	135·2	46·1	58·1	0,000	13·2	14·9
11	29·741	87·8	55·2	32·6	71·8	+ 9·4	65·1	60·8	11·0	27·0	0·5	68	142·2	44·6	58·5	0·000	12·6	14·9
12	29·681	81·5	60·2	21·3	69·7	+ 7·2	65·6	63·0	6·7	15·8	1·3	79	129·2	53·4	58·5	0·153	5·4	14·8
13	29·780	77·9	52·6	25·3	64·1	+ 1·6	59·3	55·6	8·5	19·2	1·3	74	137·1	43·4	58·6	0·000	12·6	14·8
14	29·767	74·0	52·3	21·7	62·9	+ 0·4	60·4	58·7	4·2	10·9	1·3	86	119·7	42·6	58·7	0·000	1·7	14·7
15	29·914	74·5	59·8	14·7	65·5	+ 3·1	63·3	61·9	3·6	8·8	1·9	88	119·0	58·7	58·8	0·000	1·6	14·7
16	30·028	77·1	59·8	17·3	66·3	+ 4·0	63·5	61·7	4·6	11·3	1·0	85	122·6	52·1	58·9	0·000	4·9	14·6
17	30·070	88·3	56·9	31·4	71·0	+ 8·9	66·0	62·9	8·1	19·2	0·0	75	138·0	48·7	59·0	0·000	10·9	14·5
18	30·072	91·7	60·2	31·5	74·3	+12·4	68·0	64·3	10·0	23·7	0·9	71	138·8	53·0	59·0	0·000	9·7	14·5
19	29·925	98·9	64·2	34·7	79·3	+17·6	70·4	65·5	13·8	29·3	1·2	63	145·1	57·0	59·4	0·000	10·7	14·4
20	29·739	93·0	65·2	27·8	74·9	+13·4	69·7	66·8	8·1	22·1	2·7	76	140·0	56·0	59·4	0·216	7·3	14·3
21	29·738	79·0	62·8	16·2	68·3	+ 7·0	65·2	63·0	5·3	13·4	0·7	84	134·3	59·5	59·6	0·000	3·1	14·3
22	29·967	67·6	56·2	11·4	61·1	— 0·0	58·8	57·1	4·0	9·3	0·9	87	105·9	53·2	59·3	0·118	0·1	14·2
23	30·162	68·1	54·1	14·0	60·2	— 0·7	55·6	51·6	8·6	15·7	3·6	73	125·2	49·6	59·7	0·000	3·7	14·2
24	30·173	66·4	54·3	12·1	59·9	— 0·9	54·1	48·8	11·1	17·7	5·7	67	124·2	49·9	59·7	0·000	2·0	14·1
25	30·054	70·9	56·6	14·3	62·0	+ 1·3	57·4	53·7	8·3	17·7	2·0	74	128·0	51·1	59·6	0·000	8·3	14·0
26	29·902	76·0	54·6	21·4	62·8	+ 2·1	60·5	58·9	3·9	18·3	0·0	87	126·0	46·3	59·8	0·038	2·9	14·0
27	29·921	77·2	51·0	26·2	62·2	+ 1·6	58·5	55·7	6·5	17·3	0·0	79	124·4	42·6	59·5	0·000	7·7	13·9
28	29·906	75·0	55·6	19·4	64·5	+ 4·1	60·7	57·9	6·6	14·4	0·0	79	119·6	47·7	59·6	0·000	4·8	13·8
29	29·777	80·3	57·1	23·2	66·2	+ 5·9	62·4	59·8	6·4	18·2	0·2	80	130·1	48·4	59·6	0·490	4·6	13·8
30	29·669	74·6	55·9	18·7	64·2	+ 4·1	61·0	58·7	5·5	13·1	0·0	82	132·2	47·8	59·6	0·057	3·8	13·7
31	29·864	70·3	50·8	19·5	59·7	— 0·2	55·4	51·6	8·1	16·8	1·5	74	121·1	40·2	59·6	0·001	6·5	13·7
Means	29·906	78·1	56·6	21·5	65·8	+ 4·1	61·5	58·5	7·3	16·8	1·2	77·5	128·9	49·2	58·7	Sum 2·222	6·1	14·6
Number of Column for Reference.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18

The results apply to the civil day, except Columns 19 to 22 (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 published by the Meteorological Office, 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 29·906in., being 0·116in. higher than the average for the 65 years, 1841–1905.

TEMPERATURE OF THE AIR.

The highest in the month was 98°·9 on August 19; the lowest in the month was 50°·8 on August 31; and the range was 48°·1.
The mean of all the highest daily readings in the month was 78°·1, being 5°·4 higher than the average for the 65 years, 1841–1905.
The mean of all the lowest daily readings in the month was 56°·6, being 3°·6 higher than the average for the 65 years, 1841–1905.
The mean of the daily ranges was 21°·5, being 1°·8 greater than the average for the 65 years, 1841–1905.
The mean for the month was 65°·8, being 4°·1 higher than the average for the 65 years, 1841–1905.

MONTH and DAY, 1932.	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.	P.M.
	hours		hours				lbs.	lbs.	miles		
Aug. 1	0·5	0·08	0·4	0·06	WSW : SW	SW : Calm : NE	1·1	0·09	228	3 : 10 : 9, alt.-s, cu	9,shs,hy.-t.-sn.: 7, t, l : 10, t.-sm
2	0·0	0·00	0·0	0·00	NE : Calm	Calm : WSW	1·1	0·03	177	10 : 10, alt.-cu, s.-cu	10, alt.-cu, s.-cu : 10, hy.-sh
3	3·0	0·47	2·1	0·34	WSW	NW : WNW	1·1	0·08	230	9 : 10 : 10, slt.-m.-r, m.-r	7, s.-cu, cu: 3 : 8
4	4·0	0·64	3·6	0·58	W : WSW	WSW	2·1	0·14	273	8, d : 9, alt.-s, cu	9, alt.-cu : v.-cl : 1, d
5	6·1	0·98	5·9	0·95	SW : WSW	W : WSW	1·0	0·12	269	2, d : 10 : 9, alt.-cu	9, ci.-cu, s.-cu : v.-cl : 2
6	2·1	0·32	1·1	0·16	SW : WSW	WSW : SW	3·0	0·33	322	0, d : 10 : 7, fr.-s, s.-cu	7 : 7 : 2, d
7	6·6	0·98	6·3	0·94	WSW : NNW	Calm : SE : S	1·2	0·05	197	8, d : 8, fr.-cu, ci	8 : 7 : 1, d
8	6·7	1·00	6·7	1·00	S : SW	WSW : Calm	0·5	0·05	205	5, d : 4, cu, fr.-cu	2, fr.-cu : 1, d
9	3·9	0·58	2·0	0·30	WSW : NW	Calm : SW	0·2	0·01	180	1, d : 7, s.-cu, h	6, cu, h : 5, h : 6, h, d
10	6·5	0·96	6·4	0·95	Calm : S	SSW : Calm	0·5	0·05	189	1, h, d : 0	0 : 0 : 1, d
11	5·2	0·77	4·6	0·69	Calm : SE	SSE : Calm	1·3	0·08	184	2, m, d : 1	1 : 1, d
12	6·5	0·96	6·4	0·95	Calm : SW	SW	1·5	0·11	224	7, l : 9, t.-sm, m: 9, alt.-s, alt.-cu	8, alt.-cu, ci, sh: 7 : 1, l, d
13	5·4	0·75	4·5	0·62	SW : WSW	SW : SSW	1·0	0·10	241	0 : 0, d : 4, fr.-s, ci	7 : p.-cl, th.-cl: 3, d
14	0·0	0·00	0·0	0·00	Calm : NE : E	E : ENE	2·7	0·15	230	6 : 10 : 7, alt.-cu, ci	10, s.-cu : 10
15	0·0	0·00	0·0	0·00	NE : NNE	NNE : NE	2·3	0·24	285	10 : 10, s.-cu	9, s.-cu : 10
16	6·7	0·92	0·0	0·00	NNE	Calm	0·2	0·02	181	10 : 10, alt.-s	5, ci, h, so.-ha : 2, h, d
17	7·3	1·00	0·0	0·00	Calm : W	WSW : SW	0·9	0·06	206	4, h, d : 0, h	2, cu, h : 1, h, d
18	..	..	..	..	SW : Calm	Calm : E	0·8	0·03	177	1, h, d : 1, h	5, ci, h, so.-ha : 1, h : 2
19	7·3	1·00	7·3	1·00	Calm : S	SSW	0·6	0·03	182	1, d : 6 : 7, ci, oc.-so.-ha	2, ci : 0,d
20	0·0	0·00	0·0	0·00	NE : ENE	WSW : NNE	1·7	0·07	218	0, d : 3, ci, so.-ha	9, ci.-s, so.-ha : 10, slt.-r, t : 10, r, hy.-r, t, l
21	1·1	0·14	0·7	0·09	Calm : WSW	SW	1·8	0·14	235	10, l, t : 10 : 9, s.-cu, alt.-cu	9, cu, fr.-cu, ci.-s: 9
22	1·5	0·19	0·9	0·11	Calm : NNE	NNE : NE	1·5	0·13	245	10, hy.-r : 10, s	10, s.-cu : 10
23	1·8	0·23	0·6	0·08	NNE : NE	NE : E	0·9	0·10	233	10 : 7, fr.-cu, s.-cu	9, s.-cu : 9
24	0·9	0·11	0·8	0·10	NE : ENE	ENE	1·1	0·15	252	9 : 9, alt.-cu	9, s.-cu, cu : 9
25	2·1	0·27	1·5	0·19	ENE : NE	ENE : NE	3·5	0·56	332	10 : 9, s.-cu, cu	3, fr.-cu : 1 : 7
26	7·1	0·92	4·8	0·62	NE : ENE	ESE : Calm	1·2	0·10	222	10 : 10 : 6,s.-cu,ci,alt.-s,h	9, r, m.-r : 10 : 1, d
27	5·3	0·65	0·0	0·00	Calm	Var : Calm : SSE	0·2	0·03	172	0, m, d : 0, m, h	3, cu, h : 3, h : 1, h, d
28	1·1	0·14	0·0	0·00	Calm	Calm : ESE	0·9	0·05	186	0, h, d : 0, h, d : 2, h	9, s.-cu, fr.-s, alt.-cu, h : 10
29	0·0	0·00	0·0	0·00	Calm : SE	SSE	0·7	0·03	172	7 10 : 3, alt.-cu	10, alt.-s : 10 : 10, hy.-r, r
30	6·7	0·81	5·3	0·64	Calm : SW	WSW : W	2·9	0·21	278	10 : 10, m.-r, hy.-sh	8,alt.-cu,cu,n,hy.-sh: 8 : 3
31	7·6	0·92	7·5	0·91	SW : W	NNW : SW	2·3	0·16	247	5 : 8, sh : 9, cu, cu-n.	5 s.-cu, fr.-cu, alt.-cu : 1, d
Means	3·8	0·53	2·6	0·38	..	..	..	0·11	225		
Number of Column for Reference.	19	20	21	22	23	24	25	26	27	28	29

The mean *Temperature of Evaporation* for the month was 61°·5, being 4°·0 higher than
The mean *Temperature of the Dew Point* for the month was 58°·5, being 4°·2 higher than
The mean *Degree of Humidity* for the month was 77·5, being 0·7 greater than
The mean *Elastic Force of Vapour* for the month was 0·495in., being 0·071in. 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 6·4.

The mean proportion of *Sunshine* for the month (constant sunshine being represented by 1) was 0·420. The maximum daily amount of *Sunshine* was 13·2 hours on August 10.

The highest reading of the *Solar Radiation Thermometer* was 145°·1 on August 19; and the lowest reading of the *Terrestrial Radiation Thermometer* was 40°·2 on August 31.

The *Proportions of Wind* referred to the cardinal points were N. 4, E. 6, S. 5, W. 8. Eight days were calm.

The *Greatest Pressure of the Wind* in the month was 3·5 lbs. on the square foot on August 25. The mean daily *Horizontal Movement of the Air* for the month was 225 miles; the greatest daily value was 332 miles on August 6, and the least daily value was 172 miles on August 27 and 29.

Rain (0·005in. or over) fell on 9 days in the month, amounting to 2·222in. as measured by gauge No. 6 partly sunk below the ground; being 0·122in. less than the average fall for the 65 years, 1841–1905.

MONTH and DAY, 1932	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	29·998	71·6	47·7	23·9	59·5	− 0·3	56·1	53·3	6·2	14·9	1·9	80	121·8	37·8	59·6	0·023	3·9	13·6
2	29·813	78·1	63·9	14·2	68·2	+ 8·5	64·8	62·7	5·5	10·4	3·4	82	109·1	59·2	59·5	0·000	0·9	13·5
3	29·570	65·9	53·4	12·5	62·3	+ 2·7	59·7	57·9	4·4	11·6	1·5	85	79·3	44·3	59·4	0·654	0·0	13·5
4	29·807	66·5	47·3	19·2	56·5	− 3·0	51·2	45·8	10·7	18·6	2·7	67	117·8	36·3	59·1	0·000	7·2	13·4
5	29·814	66·2	45·3	20·9	56·2	− 3·2	53·3	50·7	5·5	13·3	1·0	82	94·4	36·1	59·1	0·037	0·0	13·3
6	29·544	72·1	57·9	14·2	62·8	+ 3·6	61·0	59·7	3·1	11·6	0·7	90	119·8	52·5	59·1	0·036	0·7	13·3
7	29·554	70·1	51·6	18·5	57·1	− 1·9	54·8	52·9	4·2	17·4	1·4	85	132·1	42·0	59·0	0·157	6·9	13·2
8	29·425	68·2	53·4	14·8	59·0	+ 0·2	56·8	55·1	3·9	9·8	1·7	87	110·0	42·2	59·0	0·028	0·2	13·1
9	29·561	74·8	53·2	21·6	61·7	+ 3·1	58·3	55·7	6·0	14·9	0·5	81	134·5	45·5	59·0	0·000	8·3	13·1
10	29·562	65·9	53·6	12·3	57·9	− 0·5	55·8	54·0	3·9	9·3	0·7	87	101·2	44·6	58·9	0·027	0·4	13·0
11	29·494	68·8	53·2	15·6	59·0	+ 0·9	54·2	49·8	9·2	20·6	3·3	72	121·7	44·8	58·8	0·006	3·9	12·9
12	29·787	67·7	50·8	16·9	58·1	+ 0·1	54·5	51·3	6·8	17·1	1·3	78	128·1	42·0	58·9	0·000	4·7	12·9
13	29·897	72·0	51·9	20·1	61·3	+ 3·5	59·4	58·1	3·2	5·9	1·4	89	88·9	45·0	58·7	0·028	0·1	12·8
14	30·056	76·9	57·6	19·3	66·4	+ 8·7	62·6	60·1	6·3	14·6	0·9	80	124·2	48·7	58·8	0·000	6·6	12·8
15	30·236	75·8	54·8	21·0	65·0	+ 7·4	60·8	57·7	7·3	14·3	0·5	77	114·0	46·7	58·8	0·000	4·3	12·7
16	30·108	73·0	55·8	17·2	63·2	+ 5·7	60·5	58·6	4·6	14·6	0·3	85	123·2	48·7	58·7	0·001*	6·3	12·6
17	29·886	77·3	53·1	24·2	63·2	+ 6·0	60·3	58·2	5·0	14·3	0·2	84	125·1	45·3	58·8	0·001*	6·2	12·6
18	29·581	67·1	51·9	15·2	61·2	+ 4·3	59·1	57·6	3·6	8·2	0·9	87	103·1	51·0	58·7	0·498	0·7	12·5
19	29·655	58·9	49·8	9·1	53·3	− 3·2	50·0	46·6	6·7	12·4	1·9	78	104·0	46·7	58·6	0·000	0·8	12·4
20	29·892	56·7	46·2	10·5	51·7	− 4·5	49·4	46·9	4·8	7·8	1·4	84	69·9	37·1	58·4	0·088	0·0	12·4
21	30·013	60·2	43·7	16·5	50·7	− 5·2	45·9	40·0	10·7	20·8	2·9	67	120·1	35·2	58·3	0·000	9·4	12·3
22	29·650	57·4	43·6	13·8	50·7	− 4·9	47·9	44·9	5·8	17·9	0·8	80	94·6	37·7	58·1	0·140	0·9	12·2
23	29·363	54·8	50·0	4·8	52·0	− 3·4	51·3	50·7	1·3	2·7	0·2	95	66·0	48·0	58·0	0·209	0·0	12·2
24	29·406	59·9	45·6	14·3	51·9	− 3·4	49·8	47·7	4·2	11·3	0·4	85	77·9	36·0	57·8	0·000	0·5	12·1
25	29·387	65·8	51·5	14·3	56·7	+ 1·5	53·6	50·8	5·9	13·4	2·8	81	117·3	44·1	57·8	0·109	3·4	12·0
26	29·479	63·4	43·1	20·3	52·1	− 3·1	48·0	43·4	8·7	19·5	1·6	72	120·5	31·3	57·6	0·000	9·7	12·0
27	29·850	57·3	42·6	14·7	49·2	− 5·9	45·8	41·7	7·5	12·8	2·0	75	88·8	30·8	57·4	0·000	1·4	11·9
28	30·160	59·9	42·3	17·6	50·9	− 4·0	47·4	43·3	7·6	13·9	2·6	75	111·6	34·2	57·2	0·000	5·2	11·8
29	29·889	62·5	49·0	13·5	56·1	+ 1·4	53·8	51·9	4·2	9·4	1·2	85	101·7	43·1	57·0	0·039	0·9	11·8
30	29·706	64·6	46·7	17·9	55·7	+ 1·3	53·6	51·8	3·9	13·8	0·7	86	112·8	39·0	57·0	0·019	6·7	11·7
																Sum		
Means	29·738	66·6	50·3	16·3	57·7	+ 0·4	54·7	52·0	5·7	13·2	1·4	81·4	107·8	42·5	58·5	2·100	3·3	12·7
Number of Column for Reference.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18

The results apply to the civil day, except Columns 19 to 22 (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 published by the Meteorological Office, 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 September 16 and 17 are derived from dew and wet fog..

The mean reading of the *Barometer* for the month was 29·738in., being 0·080in. lower than the average for the 65 years, 1841–1905.

TEMPERATURE OF THE AIR.

The highest in the month was 78°·1 on September 2 ; the lowest in the month was 42°·3 on September 28 ; and the range was 35°·8.

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 50°·3, being 1°·2 higher than the average for the 65 years, 1841–1905.

The mean of the daily ranges was 16°·3, being 1°·9 less than the average for the 65 years, 1841–1905.

The mean for the month was 57°·7, being 0°·4 higher than the average for the 65 years, 1841–1905.

MONTH and DAY, 1932.	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	0·0	0·00	0·0	0·00	SW	SW	1·4	0·17	277	0, d : th.-cl, so.-ha	10, m.-r, oc.-slt.-m.-r : 10, oc.-slt.-m.-r
2	1·5	0·19	1·3	0·16	WSW	WSW : SW	5·3	0·91	407	10 : 10, s.-cu	10, oc.-slt.-m.-r, sh: 8
3	7·5	0·89	7·4	0·87	SW	WSW : SW	4·5	1·16	413	10 : 10, m.-r, c.-r	10, r : 9 : 1, d
4	6·0	0·70	5·4	0·63	W : WSW	W : WSW	2·0	0·29	288	0, hy.-d : 2, fr.-cu	9, s.-cu, cu: 8 : 3, d
5	0·3	0·03	0·2	0·02	SW	SSW	1·8	0·13	232	1, d : 7 : 10, alt.-cu	10, alt.-s, cu, n, oc.-r : 10, oc.-r
6	5·0	0·59	4·4	0·51	SSW	SSW : WSW	4·2	0·64	326	10 : 10, s.-cu, fr.-s	10, r, oc.-slt.-r : 10, oc.-slt.-r, r : 8
7	4·3	0·50	3·6	0·43	SW : WSW	SW : SSW	2·0	0·17	272	1 : 6, ci, so.-ha	9, hy.-r : 0, d
8	2·3	0·27	1·6	0·19	SSW	SSW : S	4·8	0·65	329	9 : 10, oc.-slt.-r: 10, n, alt.-s	10, oc.-m.-r : 10, oc.-m.-r
9	7·2	0·85	6·8	0·80	SSW: Calm :WSW	SSW	0·6	0·05	205	5 : 8, s.-cu, cu	3, cu, ci : 0, d
10	4·8	0·53	4·5	0·50	SSW : SW	SW	3·4	0·47	304	8 : 9 : 10, alt.-s, n, sh	10, oc.-r, m.-r : 5 : 1
11	8·5	0·95	6·7	0·75	SW	WNW : WSW	9·8	1·69	444	9 : 10, m.-r	9 : 4 : 6
12	1·6	0·18	0·2	0·03	WSW : W	WSW	2·5	0·44	333	2 : 0, d : 6, ci, alt.-cu	9, s.-cu, alt.-cu, alt.-s : 10, slt.-m.-r
13	1·1	0·12	0·6	0·06	Calm	WSW	0·7	0·07	208	9 : 10, slt.-m.-r, m.-r	10, s, s.-cu : 9, ci.-cu, alt.-cu, s.-cu
14	8·2	0·91	8·1	0·90	WSW : NNW	NNW Calm	1·2	0·10	240	10 : 6, fr.-cu, s.-cu	7, s.-cu, fr.-cu : 4 : 0, d
15	7·1	0·78	6·6	0·74	Calm	ESE	0·2	0·01	155	0, hy.-d : 8, d, m : 2	7 : 0 : 0, d
16	8·5	0·95	6·4	0·71	E	E : Calm	1·0	0·09	213	1, f, d : 10, f, d : 5	0 : 0, d
17	5·7	0·59	4·1	0·42	Calm	WSW	0·3	0·03	179	0, tk.-f, d : 9, tk.-f : 5, f	1, h : th.-cl, lu.-ha, d
18	0·0	0·00	0·0	0·00	WSW	SW : NNW	1·1	0·13	255	9, sh : 9, s.-cu, alt.-cu	10, r, hy.-r : 10, c.-r
19	6·5	0·67	6·5	0·67	NNW : Calm : N	NNW : Calm	0·1	0·01	175	8 : 9, alt.-cu	10, alt.-s, s.-cu : 10
20	3·9	0·40	3·8	0·39	NNE : Calm	NE	2·0	0·13	231	th.-cl, oc.-lu.-ha : 10, f, oc.-m.-r	10, m.-r : 10
21	8·5	0·87	7·7	0·79	NE : NNE	ENE : E	2·0	0·21	265	1 : 2, fr.-cu	2, fr.-cu : 1, d
22	0·0	0·00	0·0	0·00	ENE : ESE	E : Calm	2·6	0·24	233	8, d : 9, alt.-cu, alt.-s	10, m.-r, r : 10, oc.-m.-r, m
23	2·5	0·36	2·9	0·30	Calm : NNE	NNE	1·0	0·06	201	10, oc.-m.-r, m : 10, r, m, f : 10, oc.- m.-r, m	10, m.-r, r, m : 10, r, m : 10, m
24	..	..	..	..	NNE	NNW : SW	1·2	0·13	236	7, m : 10, slt.-m : 10, s.-cu, s.	10 : 3 : v.-cl
25	5·0	0·49	4·7	0·46	SSW : SW	SSW : SW	2·8	0·53	323	v.-cl : 9, n, cu, m.-r	9, cu, fr.-cu, n, shs: 8, sh
26	7·6	0·74	6·9	0·68	WSW	W	1·3	0·10	264	6 : 0, d : 2, cu	2, fr.-cu : 0, d
27	10·2	1·00	10·2	1·00	NNW : NNE	NNE	4·4	0·63	331	8, d : 9, alt.-cu, s.-cu	8, s.-cu, slt.-sh: 3 : 1, d
28	5·6	0·55	3·7	0·36	NNE : NE	E : ENE	3·0	0·45	312	0, d : 0, d : 6, alt.-cu, fr.-cu, n	8, sh : 4 : 7
29	2·7	0·26	2·6	0·25	NE : ENE : E	E : SE	7·0	0·61	316	7 : 9, alt.-cu, s.-cu, fr.-cu	10, s.-cu, s : 10, m.-r
30	0·4	0·04	0·3	0·03	S : SSE	SSW	2·0	0·15	245	6 : 1 : 2, ci, fr.-s	9, cu.-n, alt.-s, slt.-shs : 10, m.-r
Means	4·6	0·50	4·0	0·44	..	..	..	0·35	274		
Number of Column for Reference.	19	20	21	22	23	24	25	26	27	28	29

The mean *Temperature of Evaporation* for the month was 54°·7, being 0°·6 higher than
The mean *Temperature of the Dew Point* for the month was 52°·0, being 0°·9 higher than
The mean *Degree of Humidity* for the month was 81·4, being 1·5 greater than
The mean *Elastic Force of Vapour* for the month was 0·390in., 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 7·3.

The mean proportion of *Sunshine* for the month (constant sunshine being represented by 1) was 0·264. The maximum daily amount of *Sunshine* was 9·7 hours on September 26.

The highest reading of the *Solar Radiation Thermometer* was 134°·5 on September 9; and the lowest reading of the *Terrestrial Radiation Thermometer* was 30°·8 on September 27.

The *Proportions of Wind* referred to the cardinal points were N. 4, E. 4, S. 9, W. 9. Four days were calm.

The *Greatest Pressure of the Wind* in the month was 9·8 lbs. on the square foot on September 11. The mean daily *Horizontal Movement of the Air* for the month was 274 miles; the greatest daily value was 444 miles on September 11, and the least daily value was 155 miles on September 15.

Rain (0·005in. or over) fell on 16 days in the month, amounting to 2·100in., as measured by gauge No. 6 partly sunk below the ground; being 0·048in. less than the average fall for the 65 years, 1841–1905.

MONTH and DAY, 1932.	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	29·650	66·1	43·4	22·7	53·8	− 0·3	51·5	49·3	4·5	12·9	2·2	84	116·9	34·6	56·9	0·054	2·9	11·6
2	29·745	57·1	36·8	20·3	46·8	− 6·9	43·8	40·1	6·7	12·7	0·4	77	107·1	28·1	56·7	0·009	6·3	11·6
3	29·817	53·2	39·0	14·2	46·1	− 7·2	43·7	40·7	5·4	9·2	1·5	81	76·5	30·1	56·2	0·003	0·6	11·5
4	29·967	53·9	38·3	15·6	44·7	− 8·3	41·6	37·2	7·5	17·0	1·3	75	99·7	29·0	56·1	0·000	7·6	11·4
5	29·909	57·6	38·6	19·0	47·3	− 5·5	43·9	39·6	7·7	16·4	2·5	74	96·0	31·6	56·0	0·000	5·7	11·4
6	29·849	59·7	37·0	22·7	47·8	− 4·7	44·6	40·6	7·2	16·2	1·2	76	101·4	27·9	55·9	0·000	6·9	11·3
7	29·653	63·6	47·0	16·6	53·9	+ 1·6	51·0	48·1	5·8	12·4	4·0	80	107·7	43·9	55·6	0·014	2·4	11·3
8	29·097	55·3	43·9	11·4	49·6	− 2·4	48·1	46·4	3·2	6·0	0·2	89	70·9	38·2	55·1	0·186	0·3	11·2
9	28·972	53·6	43·2	10·4	47·9	− 3·7	46·7	45·3	2·6	6·6	0·2	91	67·3	35·6	55·2	0·217	0·0	11·1
10	29·167	60·1	36·3	23·8	47·6	− 3·7	44·7	41·1	6·5	14·4	0·1	78	109·8	28·7	55·1	0·022	9·2	11·1
11	29·295	58·0	45·4	12·6	49·3	− 1·6	48·0	46·6	2·7	7·2	1·2	90	90·4	39·2	55·0	0·355	0·4	11·0
12	29·582	59·0	46·1	12·9	52·1	+ 1·5	50·2	48·3	3·8	10·3	1·2	87	95·1	38·1	54·9	0·082	5·7	10·9
13	29·394	57·9	42·1	15·8	50·5	+ 0·2	47·6	44·4	6·1	14·3	2·0	80	96·8	33·6	54·7	0·241	3·5	10·9
14	29·294	52·9	41·7	11·2	46·2	− 3·9	43·3	39·6	6·6	12·9	1·4	78	89·1	33·1	54·5	0·314	2·3	10·8
15	29·598	54·0	46·8	7·2	50·7	+ 0·8	46·5	41·6	9·1	14·0	2·6	70	89·5	42·0	54·5	0·023	2·7	10·7
16	29·650	57·4	46·0	11·4	51·9	+ 2·1	49·2	46·3	5·6	11·6	1·4	81	89·3	43·1	54·1	0·091	1·5	10·7
17	29·787	58·4	49·2	9·2	54·4	+ 4·8	50·2	45·9	8·5	13·3	2·6	73	87·8	40·0	54·1	0·002	1·8	10·6
18	29·775	57·8	44·8	13·0	52·9	+ 3·6	48·2	42·9	10·0	15·7	4·1	69	96·2	34·8	54·0	0·006	6·4	10·6
19	29·963	54·9	38·8	16·1	47·1	− 2·0	44·3	40·9	6·2	15·2	1·5	79	93·2	29·2	54·0	0·128	4·9	10·5
20	29·460	60·9	48·2	12·7	55·1	+ 6·3	54·0	53·1	2·0	5·4	0·4	93	74·0	45·1	54·0	0·583	0·0	10·4
21	29·356	64·8	55·9	8·9	59·1	+10·5	57·3	55·9	3·2	10·0	0·4	89	98·3	54·9	54·0	0·358	3·5	10·4
22	29·511	62·9	43·9	19·0	55·5	+ 7·2	52·9	50·6	4·9	8·1	3·2	84	87·1	37·8	53·9	0·038	0·6	10·3
23	29·608	55·7	44·1	11·6	48·9	+ 0·8	48·0	47·1	1·8	4·9	0·4	93	62·5	37·9	53·9	1·235	1·0	10·2
24	29·517	52·3	44·1	8·2	47·6	− 0·3	46·3	44·8	2·8	6·1	0·9	90	64·1	34·6	54·0	0·038	0·0	10·2
25	29·675	55·2	38·3	16·9	47·6	− 0·1	45·8	43·7	3·9	8·1	0·5	86	77·0	29·5	53·9	0·117	2·4	10·1
26	29·309	58·2	46·7	11·5	53·8	+ 6·2	51·5	49·3	4·5	11·7	0·9	84	84·0	38·1	53·6	0·200	2·6	10·0
27	29·315	52·2	41·0	11·2	45·6	− 1·9	43·9	41·7	3·9	11·1	0·9	86	74·5	31·4	53·5	0·516	1·8	10·0
28	29·368	43·4	36·5	6·9	41·1	− 6·3	39·4	37·0	4·1	7·8	1·4	85	47·0	30·3	53·2	0·230	0·0	9·9
29	29·517	47·9	31·8	16·1	39·9	− 7·4	38·4	36·3	3·6	8·3	1·6	86	58·4	25·1	53·0	0·271	0·9	9·9
30	29·136	50·3	42·9	7·4	46·6	− 0·6	43·8	40·3	6·3	11·4	2·4	78	61·0	35·0	52·8	0·025	0·0	9·8
31	29·575	51·1	40·0	11·1	45·3	− 1·8	42·4	38·5	6·8	9·8	2·0	77	78·8	31·0	52·4	0·008	1·1	9·7
Means	29·533	56·3	42·5	13·8	49·2	− 0·7	46·8	44·0	5·3	11·0	1·5	82·0	85·4	35·2	54·5	Sum 5·366	2·7	10·7
Number of Column for Reference	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18

The results apply to the civil day, except Columns 19 to 22 (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 published by the Meteorological Office, 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 29·533in., being 0·195in. lower than the average for the 65 years, 1841–1905.

Temperature of the Air.

The highest in the month was 66°·1 on October 1; the lowest in the month was 31°·8 on October 29; and the range was 34°·3.

The mean of all the highest daily readings in the month was 56°·3, being 1°·2 lower than the average for the 65 years, 1841–1905.

The mean of all the lowest daily readings in the month was 42°·5, being 0°·7 lower than the average for the 65 years, 1841–1905.

The mean of the daily ranges was 13°·8, being 0°·5 less than the average for the 65 years, 1841–1905.

The mean for the month was 49°·2 being 0°·7 lower than the average for the 65 years, 1841–1905.

MONTH and DAY, 1932.	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	10·6	0·99	10·6	0·99	SSW : SW	NNW	3·5	0·48	317	8, slt.-sh : 5, alt.-cu, ci	10, n, fr.-cu, slt.-r : 0
2	8·6	0·80	8·3	0·77	NNW : SW : SW	WSW	6·1	0·60	341	0, ho.-fr : 1, ci	8, alt.-s, fr.-cu, sh: 0, d
3	10·3	0·96	10·2	0·95	WSW : SW	NW : NNW	1·0	0·09	238	2 : 1, m : 10, s.-cu, alt.-s	10, s.-cu, alt.-cu, sbs: 9 : 1
4	2·1	0·19	0·5	0·05	NNW	NNW : SSW	0·7	0·08	208	1, ho.-fr : 1, m	2 : v.-cl, f : 8, f, d
5	7·2	0·67	6·9	0·64	Calm : SW	WSW : SSW	0·9	0·03	213	9, d : 9 : 1, h	9, alt.-cu, cu : 9, m, d
6	4·1	0·38	4·0	0·37	SSW	S	2·0	0·14	243	0, ho.-fr : 2	7, cu, ci, alt.-cu: 1, prh : 3
7	6·2	0·58	5·1	0·48	S	S : SSE	2·6	0·35	306	10 : 9, s.-cu	8, sh : 8
8	4·0	0·36	3·4	0·31	SSE : S	SW : S	4·0	0·47	277	4 : 10, m.-r : 10, m.-r	10, m.-r : 3 : 8, d
9	7·1	0·64	6·9	0·63	Calm : N	NW : WSW	1·4	0·05	198	10, r : 10, f : 10, alt.-s, m	10, oc.-m.-r, hy.-sh, hl : 10, m : 7, m
10	3·0	0·27	2·7	0·24	Calm : WSW	SW : SSW	0·5	0·06	225	0, m, ho.-fr : 0, m	2, cu, ci : v.-cl, lu.-ha, r
11	2·0	0·18	0·2	0·02	SW : WSW	WSW : W	1·0	0·11	267	10, r : 10 : 10, r	9, r, hy.-r, t.-s m, m.-r : 10, m
12	0·3	0·03	0·1	0·01	W : WSW	SW : SSW	1·5	0·09	245	9, m : 10, m : 4, s.-cu, m	1, cu : 10, hy.-sh
13	6·3	0·58	6·2	0·57	SW : WSW	WSW	5·0	0·96	417	9, slt.-r, r, hy.-r, w : 9, shs, w	5, ci.-s, cu.-n, slt.-sh, w: 1, w : 1
14	2·0	0·18	1·7	0·15	SSW : Calm : NW	WNW : WSW	3·0	0·27	305	10, slt.-r : 10, r, m	9, n, s.-cu : 5 : 10, slt.-r
15	0·0	0·00	0·0	0·00	W : NW	NW : W	3·9	0·66	365	9, slt.-r : 8, alt.-cu	10, s.-cu : 10, r
16	5·3	0·46	4·1	0·35	SW : NW	NW : WSW	2·6	0·25	311	10, r, slt.-r : 9, s.-cu	6, s.-cu, cu : 7, ci, ci.-cu, s.-cu
17	4·2	0·37	3·3	0·29	W : WNW : NW	NW : SW	3·6	0·70	371	8, d : 9, s.-cu	9, ci, alt.-cu : v.-cl : 9, sh
18	11·3	0·99	10·8	0·94	SW : W : WNW	NW : WNW : W	11·2	2·21	499	10, sh, w : 4, st.-w : 8, cu, st.-w	1, fr.-s, w : 1, slt.-m, d
19	0·5	0·04	0·0	0·00	W : WSW	SW : SSW	1·7	0·16	265	0, d : 0, f	7, alt.-s : 10, m.-r : 10, m.-r, r
20	0·0	0·00	0·0	0·00	SW	SW : Calm	4·9	0·58	293	10, m.-r, w : 10, oc.-m.-r	10, alt.-s, s.-cu, m.-r, m : 10, c.-r, m
21	5·2	0·45	4·1	0·36	SW	SW	6·0	1·35	408	10, r, m.-r : 10, m.-r : th.-cl, w	10, alt.-s, n, m.-r, c.-r : 10, fq.-slt.-m.-r, w
22	8·3	0·69	8·2	0·68	SW : SSW	SSW : WSW	7·0	1·43	408	7, w : 6, w : 10, fr.-s, fr.-n, w	10, m.-r, hy.-sh, w: v.-cl : 3
23	3·3	0·28	2·0	0·17	SSW	SW : N : W	4·2	0·33	278	3 : 10, r : 9, r, m.-r	10, r, m.-r : 10, hy.-r, m.-r : 3
24	8·6	0·72	3·4	0·28	WSW : Calm	Calm : NNW : WNW	0·5	0·04	183	9 : 10, s, alt.-s, sh, r	10, slt.-m.-r, glm: 10, m.-r : 4, d, slt.-m
25	0·0	0·00	0·0	0·00	WSW	SW	3·1	0·37	296	0, m, d : 1, slt.-ho.-fr, m: th.-cl, so.-ha	10, ci.-s, alt.-s : 10, alt.-s : 10, m.-r, r
26	10·9	0·91	10·7	0·89	WSW	W : WSW	6·3	1·11	422	10, r, w : 8, hy.-sh, sh, w	7, shs, w : v.-cl : 0, d
27	0·0	0·00	0·0	0·00	WSW : W	WSW : S : E	1·6	0·15	268	0 : 1 : 10, sh, r	7, alt.-s, fr.-cu, ci: 10, c.-r
28	10·9	0·91	10·8	0·90	NNE : NNW	NNW	5·9	1·27	395	10, r : 10, fr.-s, alt.-s, n	10, r, slt.-r : 0, ho.-fr
29	3·2	0·25	3·0	0·24	NW : WSW	SSW : WSW	12·8	0·55	312	0, ho.-fr : 0 : th.-cl, so.-ha, f	10, alt.-s, r, m.-r : 10, r, m.-r
30	0·9	0·08	0·6	0·05	WSW	W	5·2	1·38	468	8, sh : 6 : 10, fr.-s, n, w	10, r, m.-r, sh, w : 10, w
31	9·7	0·78	7·6	0·61	WNW : NNW	NNW	4·0	0·87	349	8, w : 9, slt.-r	7, fr.-s, alt.-cu : v.-cl, sh : v.-cl, th.-cl
Means	5·0	0·44	4·4	0·38	..	..	..	0·55	313		
Number of Column for Reference.	19	20	21	22	23	24	25	26	27	28	29

The mean *Temperature of Evaporation* for the month was 46°·8, being 1°·1 lower than
The mean *Temperature of the Dew Point* for the month was 44°·0, being 1°·6 lower than
The mean *Degree of Humidity* for the month was 82·0, being 2·9 less than
The mean *Elastic Force of Vapour* for the month was 0·289in., 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 7·1.

The mean proportion of *Sunshine* for the month (constant sunshine being represented by 1) was 0·257. The maximum daily amount of *Sunshine* was 9·2 hours on October 10.

The highest reading of the *Solar Radiation Thermometer* was 116°·9 on October 1; and the lowest reading of the *Terrestrial Radiation Thermometer* was 25°·1 on October 29.

The *Proportions of Wind* referred to the cardinal points were N. 4, E. 1, S. 10, W. 14. Two days were calm.

The *Greatest Pressure of the Wind* in the month was 12·8 lbs. on the square foot on October 29. The mean daily *Horizontal Movement of the Air* for the month was 313 miles; the greatest daily value was 499 miles on October 18 and the least daily value was 183 miles on October 24.

Rain (0·005in. or over) fell on 26 days in the month, amounting to 5·366in., as measured by gauge No. 6 partly sunk below the ground; being 2·584in. greater than the average fall for the 65 years, 1841–1905.

MONTH and DAY, 1932.	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.			
	Means of 24 Hourly Values (corrected and reduced to 32° Fahrenheit).	Highest.	Lowest.	Daily Range.	Mean of 24 Hourly Values.	Excess above Average of 65 Years.	Mean of 24 Hourly Values.	Deduced Mean Daily Value.	Mean.	Greatest.	Least.		Highest in Sun's Rays.	Lowest on the Grass.				
	in.	°	°	°	°	°	°	°	°	°	°		°	°	°	in.	hours	hours
Nov. 1	29·847	52·2	32·0	20·2	43·7	− 3·3	42·8	41·7	2·0	5·9	0·0	92	62·1	26·0	52·1	0·016	0·1	9·7
2	29·913	58·4	46·9	11·5	53·0	+ 6·2	51·3	49·7	3·3	6·8	1·7	88	75·8	39·1	52·0	0·009	0·1	9·6
3	29·973	57·7	50·1	7·6	54·0	+ 7·4	51·8	49·7	4·3	8·4	2·0	85	68·1	43·0	52·0	0·000	0·3	9·6
4	29·808	59·8	46·4	13·4	53·4	+ 7·0	51·2	49·1	4·3	8·9	2·2	85	85·2	43·1	52·0	0·046	1·0	9·5
5	30·140	53·0	41·9	11·1	47·8	+ 1·7	45·0	41·6	6·2	11·0	2·4	79	87·1	33·9	51·9	0·000	2·4	9·5
6	30·199	49·9	40·6	9·3	45·1	− 0·7	41·8	37·1	8·0	11·0	4·9	74	58·2	32·8	51·9	0·000	0·0	9·4
7	29·993	48·3	41·1	7·2	45·2	− 0·2	42·5	38·8	6·4	11·1	1·8	79	87·4	32·5	51·9	0·000	2·8	9·3
8	29·875	48·0	38·0	10·0	43·8	− 1·2	41·3	37·9	5·9	8·4	3·0	79	69·3	27·7	51·9	0·000	0·4	9·3
9	29·818	46·8	33·2	13·6	42·4	− 2·2	40·6	38·1	4·3	9·4	1·3	84	55·9	25·3	51·7	0·000	0·0	9·2
10	30·006	49·6	33·0	16·6	42·3	− 2·0	39·9	36·3	6·0	10·0	0·2	79	64·2	25·1	51·4	0·000	0·0	9·2
11	30·066	49·2	43·0	6·2	46·1	+ 2·1	44·0	41·4	4·7	8·5	1·6	84	54·0	37·7	51·3	0·012	0·0	9·1
12	30·189	48·8	44·0	4·8	45·9	+ 2·2	45·2	44·3	1·6	3·8	0·6	95	48·0	42·6	51·0	0·038	0·0	9·1
13	30·311	48·2	42·7	5·5	44·9	+ 1·4	42·4	39·0	5·9	8·0	3·6	80	48·2	40·0	50·9	0·001	0·0	9·0
14	30·145	43·3	41·1	2·2	42·3	− 1·0	41·4	40·2	2·1	6·9	1·3	92	43·3	38·6	50·9	0·075	0·0	8·9
15	29·993	46·9	37·3	9·6	43·0	− 0·1	41·7	39·9	3·1	4·8	0·4	89	63·9	30·5	50·7	0·009	1·8	8·9
16	30·007	49·0	42·6	6·4	45·6	+ 2·8	43·3	40·3	5·3	8·9	1·9	82	76·6	36·5	50·5	0·000	0·4	8·8
17	29·953	45·2	35·5	9·7	41·2	− 1·4	39·4	36·9	4·3	8·7	1·4	84	49·8	34·8	50·2	0·002	0·0	8·8
18	29·801	39·0	35·3	3·7	37·4	− 5·0	37·1	36·7	0·7	2·0	0·4	97	41·3	34·7	50·1	0·004	0·0	8·7
19	29·722	43·3	38·0	5·3	40·8	− 1·5	40·5	40·0	0·8	1·5	0·5	97	42·9	36·6	50·0	0·106	0·0	8·7
20	20·659	45·4	41·2	4·2	43·3	+ 1·1	42·7	41·9	1·4	3·4	0·5	95	48·8	38·0	50·0	0·033	0·0	8·6
21	29·712	46·1	36·1	10·0	42·0	− 0·1	40·2	37·7	4·3	10·6	0·9	84	63·2	29·7	49·9	0·063	1·8	8·6
22	29·532	52·3	32·9	19·4	44·2	+ 2·1	42·8	41·1	3·1	7·0	1·7	88	55·6	27·3	49·9	0·282	0·0	8·5
23	29·449	50·0	41·3	8·7	45·5	+ 3·5	42·9	39·5	6·0	10·3	4·0	80	59·6	34·8	49·8	0·037	1·3	8·5
24	29·642	49·6	39·7	9·9	44·7	+ 2·7	41·7	37·5	7·2	11·4	1·8	76	79·5	33·9	49·6	0·023	1·6	8·4
25	29·798	55·2	46·9	8·3	52·9	+11·0	50·8	48·8	4·1	5·7	1·0	86	63·7	44·3	49·5	0·063	0·1	8·4
26	29·631	56·4	44·6	11·8	51·8	+10·0	48·8	45·6	6·2	9·2	3·5	79	64·2	39·5	49·4	0·014	0·1	8·4
27	29·646	47·2	39·6	7·6	43·2	+ 1·5	39·9	35·1	8·1	14·2	3·3	73	73·3	33·9	49·1	0·086	3·8	8·4
28	30·191	43·4	35·2	8·2	39·1	− 2·4	36·2	31·2	7·9	11·6	1·5	74	53·2	28·4	49·1	0·000	0·1	8·3
29	30·156	48·3	32·8	15·5	42·4	+ 1·2	41·1	39·3	3·1	6·7	1·1	89	52·0	28·0	49·1	0·002*	0·0	8·3
30	29·725	48·6	44·8	3·8	46·6	+ 5·6	44·4	41·7	4·9	8·2	3·6	83	56·0	41·9	49·0	0·051	0·0	8·2
Means	29·897	49·3	39·9	9·4	45·1	+ 1·6	43·2	40·6	4·5	8·1	1·8	84·4	61·7	34·7	50·6	Sum 0·972	0·6	8·9
Number of Column for Reference.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18

The results apply to the civil day, except Columns 19 to 22 (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 published by the Meteorological Office, 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 November 29 is derived from frost.

The mean reading of the *Barometer* for the month was 29·897in., being 0·132in. higher than the average for the 65 years, 1841–1905.

TEMPERATURE OF THE AIR.

The highest in the month was 59°·8 on November 4; the lowest in the month was 32°·0 on November 1; and the range was 27°·8.

The mean of all the highest daily readings in the month was 49°·3, being 0°·3 higher than the average for the 65 years, 1841–1905.

The mean of all the lowest daily readings in the month was 39°·9, being 2°·0 higher than the average for the 65 years, 1841–1905.

The mean of the daily ranges was 9°·4, being 1°·7 less than the average for the 65 years, 1841–1905.

The mean for the month was 45°·1, being 1°·6 higher than the average for the 65 years, 1841–1905.

MONTH and DAY, 1932.	Record of the Night Sky. Polaris. Duration.	Polaris. Fraction of Total Exposure.	δ Ursæ Minoris. Duration.	δ Ursæ Minoris. Fraction of Total Exposure.	Wind as Deduced from Self-registering Anemometers. Osler's. General Direction. A.M.	P.M.	Pressure on the Square Foot. Greatest.	Mean of 24 Hourly Measures.	Robinson's. Horizontal Movement of the Air.	Clouds and Weather. A.M.	P.M.
	hours.		hours.				lbs.	lbs.	miles.		
Nov. 1	1·6	0·13	0·2	0·01	Calm : S	SW	1·2	0·10	231	v.-cl, m, ho.-fr : v.-cl, m, sh	10,n,alt.-s,alt.-cu,slt.-m.-r,m : 9, m
2	0·0	0·00	0·0	0·00	SW	SW	3·3	0·52	332	9, sh, m : 9, sh, m	10, alt.-s, fr.-s, n, sh : 10
3	3·5	0·28	2·1	0·17	SW	SW : SSW	2·7	0·55	332	10 : 10, s.-cu	9, s.-cu, ci, fr.-s : 8, d
4	0·6	0·05	0·1	0·01	SSW	SSW : N	4·1	0·61	335	9 : 9, ci, fr.-s, alt.-cu	9, ci.-cu, alt.-cu, slt.-sh : 10, slt.-m.-r, r, m.-r
5	9·4	0·74	7·2	0·56	N : NNE	NE : ENE	1·7	0·28	277	10 : 9, s.-cu	9, s.-cu : 10 : 0, slt.-h, slt.-m, d
6	3·9	0·31	2·8	0·22	ENE	ESE	2·0	0·19	243	4, slt.-m, d : 10, slt.-m, d : 10, slt.-m	10 : 10
7	2·9	0·23	2·2	0·17	E : ENE	ENE	3·7	0·44	285	9 : 8, s.-cu	8, s.-cu, cu : 10
8	0·0	0·00	0·0	0·00	Calm	NNE : Calm	0·2	0·03	169	8 : 10, m	8, s.-cu, cu.-n, alt.-cu : 10
9	8·0	0·63	5·5	0·43	Calm	Calm	0·1	0·00	157	10 : 10, t	10, s, t : 8, m : 0, m, ho.-fr
10	1·6	0·13	0·3	0·02	Calm	ENE : NE	1·0	0·07	182	6, ho.-fr, f: 10, f : 10, s, f	10, alt.-cu, f, m : 9
11	0·9	0·07	0·9	0·07	NE : E	E : ENE	3·2	0·31	272	10 : 10, ci, alt.-cu	7, alt.-s, fr.-s : 10, slt.-m.-r, m
12	0·0	0·00	0·0	0·00	E : Calm	E	0·9	0·09	212	10, slt.-m.-r, m : 10, fq.-slt.-m.-r,m	10, fq.-slt.-m.-r, m: 10, fq.-slt.-m.-r
13	0·0	0·00	0·0	0·00	E	ENE : NE	5·1	0·89	347	10 : 10, s.-cu, s	10, s.-cu, fr.-s, fq.-slt.-m-r : 10, fq.-slt.-m.-r
14	1·4	0·11	1·1	0·08	NE	NE : ENE	0·5	0·05	212	10, m.-r, slt.-m.-r : 10, slt.-m.-r, m.-r, f, glm	10, slt.-m.-r, m, glm : 10, m
15	1·9	0·14	1·7	0·13	E : Calm	Calm : E	1·1	0·09	201	10 : 5, d : 1, f, m, h	6,alt.-cu,s.-cu,h: 4, h : 10, m.-r
16	0·3	0·02	0·3	0·02	E : ENE	ENE : NE	2·3	0·32	275	9 : 10, s, fr.-s	8, s.-cu : 10
17	0·0	0·00	0·0	0·00	Calm : ENE	ESE : SE	1·8	0·15	221	10, slt.-m.-r : 10, s.-cu, fr.-s	10, s.-cu, fr.-s : 10, slt.m.-r
18	0·0	0·00	0·0	0·00	Calm : ESE	ESE	0·3	0·05	195	10, slt.-m.-r : 10, slt.-m.-r, m	10, s : 10, s
19	0·0	0·00	0·0	0·00	ENE : Calm	NNE : Calm	0·2	0·00	193	10, m.-r : 10, s, slt.-m.-r, f	10, n, slt.-m.-r, f : 10, oc.-slt.:m.-r, f
20	1·3	0·09	0·7	0·05	Calm : WSW	WSW : SSW	0·7	0·02	215	10, t : 10, s, slt.-m.-r, f	10, s.-cu, f, m : 10, r, m.-r, slt.-m
21	13·0	0·96	9·9	0·73	SSW : NW : WNW	WNW : SW	1·0	0·08	243	10, r, m.-r, m : 1, f	2, fr.-s, cu : 1, m
22	3·9	0·29	3·7	0·28	SW : SSW	SSW : WSW	7·1	0·83	364	1, ho.-fr : th.-cl, lu.-ha : 10,alt.-s,oc.-slt.-r	10, c.-r, w : 9
23	11·7	0·87	11·3	0·84	W : WSW	W : WSW	5·0	0·67	386	4 : 8 : 8, alt.-cu, fr.-s	v.-cl, alt.-cu, n, r : 0, d
24	0·7	0·05	0·7	0·05	WSW	W ; WSW	5·0	0·60	378	4, d : 6, ci.-s, so.-ha, d, m	10, ci.-cu, alt.-cu, sh : 10, slt-.r
25	2·8	0·21	1·5	0·11	WSW : W	WSW	4·3	0·88	423	10, c.-slt.-r, w : 9, s.-cu, ci, w	10, s.-cu, fr.-s : 9
26	13·3	0·97	13·1	0·95	SW	WSW	7·2	1·39	465	8 : 9, oc.-slt.-shs, w	8, s.-cu, w: 1, w : 1, w
27	9·8	0·72	8·4	0·61	WSW	WSW : NNW	6·7	1·63	488	0, d, w : 0, w	9, slt.-r, w: 10, r, w : 2
28	12·0	0·87	11·1	0·81	NNW : NW	WSW : SW	2·7	0·31	258	0, ho.-fr : 0 : 1, f	9, s.-cu, alt.-cu, f: 0, f, ho.-fr
29	1·7	0·13	1·5	0·11	SW : SSW	SSW	3·2	0·25	284	2, ho.-fr : 10, m	9, s.-cu : 9
30	0·0	0·00	0·0	0·00	SSW	SSW	5·9	1·75	465	10 : 10, s.-cu, w	10, slt.-sh, m.-r, w: 10, m.-r, w
Means	3·5	0·27	2·9	0·21	..	..	..	0·44	288		
Number of Column for Reference.	19	20	21	22	23	24	25	26	27	28	29

The mean *Temperature of Evaporation* for the month was 43°·2, being 1°·3 higher than
The mean *Temperature of the Dew Point* for the month was 40°·6, being 0°·9 higher than
The mean *Degree of Humidity* for the month was 84·4, being 2·2 less than
The mean *Elastic Force of Vapour* for the month was 0·254in., being 0·008in. 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 8·4.

The mean proportion of *Sunshine* for the month (constant sunshine being represented by 1) was 0·068. The maximum daily amount of *Sunshine* was 3·8 hours on November 27.

The highest reading of the *Solar Radiation Thermometer* was 87°·4 on November 7; and the lowest reading of the *Terrestrial Radiation Thermometer* was 25°·1 on November 10.

The *Proportions of Wind* referred to the cardinal points were N. 4, E. 8, S. 7, W. 7. Four days were calm.

The *Greatest Pressure of the Wind* in the month was 7·2 lbs. on the square foot on November 26. The mean daily *Horizontal Movement of the Air* for the month was 288 miles; the greatest daily value was 488 miles on November 27, and the least daily value was 157 miles on November 9.

Rain (0·005in. or over) fell on 17 days in the month, amounting to 0·972in., as measured by gauge No. 6 partly sunk below the ground; being 1·248in. less than the average fall for the 65 years, 1841–1905.

MONTH and DAY, 1932.	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.	°	°	°	°	°	°	°	°	°	°		°	°	°	ins.	hours	hours
Dec. 1	29·614	48·1	36·2	11·9	44·2	+ 3·3	42·5	40·3	3·9	6·9	1·1	86	51·2	28·7	48·9	0·067	0·0	8·2
2	29·522	50·5	30·1	20·4	41·8	+ 0·9	40·8	39·5	2·3	7·3	0·9	91	49·1	26·9	48·8	0·158	0·0	8·2
3	29·297	50·5	37·5	13·0	43·2	+ 2·1	40·6	36·9	6·3	11·2	2·8	79	53·0	30·8	48·7	0·000	1·4	8·1
4	29·569	44·1	32·5	11·6	38·6	− 2·7	36·8	34·0	4·6	8·1	1·9	83	53·6	26·1	48·5	0·000	1·5	8·1
5	29·750	42·0	29·0	13·0	36·9	− 4·6	35·5	33·3	3·6	9·4	0·8	86	44·9	23·6	48·3	0·002*	0·0	8·1
6	29·881	43·0	31·3	11·7	36·9	− 4·6	35·8	33·9	3·0	6·0	0·5	89	57·3	24·1	48·1	0·003*	1·3	8·0
7	30·082	41·8	32·2	9·6	36·6	− 4·7	34·3	30·1	6·5	10·0	1·3	77	58·8	24·1	47·9	0·002*	5·2	8·0
8	30·101	42·2	36·5	5·7	38·2	− 2·8	34·8	28·7	9·5	14·8	3·1	68	64·7	31·1	47·7	0·000	1·3	8·0
9	30·124	38·4	35·8	2·6	36·9	− 3·7	32·8	24·5	12·4	13·0	10·0	61	44·9	31·9	47·3	0·000	0·0	7·9
10	30·026	37·6	35·3	2·3	36·2	− 4·2	32·8	26·3	9·9	11·6	8·3	66	40·0	30·1	47·0	0·000	0·0	7·9
11	29·848	37·7	33·5	4·2	35·3	− 4·9	33·3	29·7	5·6	8·3	2·2	80	37·0	28·1	46·8	0·032	0·0	7·9
12	29·776	41·7	32·6	9·1	36·8	− 3·5	35·5	33·4	3·4	6·1	0·9	87	53·8	28·6	46·6	0·000	3·6	7·9
13	29·740	49·8	35·5	14·3	41·4	+ 0·9	40·8	40·0	1·4	2·6	0·5	95	61·0	30·0	46·3	0·002	0·4	7·9
14	29·913	50·7	39·5	11·2	46·0	+ 5·3	44·7	43·1	2·9	9·2	0·5	90	65·1	33·6	46·1	0·005*	3·0	7·9
15	30·097	50·2	42·8	7·4	46·2	+ 5·4	44·8	43·1	3·1	7·0	1·1	89	57·0	35·8	46·1	0·010*	0·0	7·9
16	30·147	49·1	39·2	9·9	44·8	+ 4·1	43·5	41·9	2·9	4·9	0·9	89	51·1	30·0	46·1	0·000	0·0	7·9
17	29·971	53·0	44·5	8·5	49·8	+ 9·4	47·7	45·4	4·4	6·4	3·4	85	62·9	40·4	46·1	0·000	2·4	7·9
18	29·888	54·8	49·8	5·0	51·8	+11·8	49·4	46·9	4·9	7·2	3·9	83	62·9	44·9	46·5	0·000	2·4	7·8
19	29·837	55·1	47·0	8·1	50·5	+11·0	48·2	45·7	4·8	7·8	3·7	84	62·9	42·0	46·6	0·000	1·2	7·8
20	29·878	54·8	41·9	12·9	47·0	+ 8·0	45·8	44·4	2·6	6·6	1·0	91	60·7	36·9	46·7	0·003*	0·1	7·8
21	29·902	51·0	40·0	11·0	47·2	+ 8·5	45·4	43·3	3·9	8·9	1·1	86	68·8	35·8	46·8	0·002*	3·4	7·8
22	29·975	50·9	43·1	7·8	46·8	+ 8·4	44·8	42·4	4·4	11·1	1·4	84	63·4	39·0	46·8	0·055	5·0	7·8
23	29·940	52·1	45·8	6·3	48·2	+10·0	45·7	42·9	5·3	11·0	1·9	81	71·0	41·1	46·8	0·086	2·4	7·8
24	30·265	47·6	41·3	6·3	45·1	+ 6·9	43·1	40·5	4·6	8·7	1·4	84	55·0	35·0	46·7	0·000	3·6	7·8
25	30·577	42·2	38·7	3·5	40·7	+ 2·3	40·5	40·2	0·5	1·2	0·3	98	43·0	32·7	46·8	0·003*	0·0	7·8
26	30·358	39·9	36·7	3·2	38·3	− 0·3	37·8	37·1	1·2	1·5	0·2	95	41·0	35·8	46·7	0·000	0·0	7·9
27	30·150	45·0	34·9	10·1	40·3	+ 1·5	39·5	38·2	2·1	4·9	0·7	93	47·5	33·9	46·5	0·000	0·0	7·9
28	30·006	45·3	38·9	6·4	43·1	+ 4·2	41·4	39·0	4·1	6·9	2·6	86	62·1	35·1	46·4	0·002	3·0	7·9
29	29·812	45·4	40·9	4·5	42·5	+ 3·5	41·8	40·9	1·6	3·9	0·7	94	49·8	37·4	46·3	0·024	0·0	7·9
30	29·608	47·4	37·9	9·5	44·6	+ 5·7	43·4	42·0	2·6	5·3	0·7	90	50·2	32·3	46·3	0·086	0·0	7·9
31	29·625	48·9	33·4	15·5	42·2	+ 3·5	40·6	38·4	3·8	6·0	0·2	86	56·9	28·7	46·4	0·012	0·6	7·9
																Sum		
Means	29·912	46·8	37·9	8·9	42·5	+ 2·6	40·8	38·3	4·3	7·5	1·9	85·0	54·9	32·7	47·0	0·554	1·3	7·9
Number of Column for Reference.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18

The results apply to the civil day, except Columns 19 to 22 (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 published by the Meteorological Office, 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 5, 6, 7, 14, 15, 20, 21 and 25 are wholly or partly derived from frost, dew or wet fog.

The mean reading of the *Barometer* for the month was 29·912in., being 0·120in. higher than the average for the 65 years, 1841–1905.

TEMPERATURE OF THE AIR.

The highest in the month was 55°·1 on December 19 ; the lowest in the month was 29°·0 on December 5 ; and the range was 26°·1.

The mean of all the highest daily readings in the month was 46°·8, being 2°·6 higher than the average for the 65 years, 1841–1905.

The mean of all the lowest daily readings in the month was 37°·9, being 2°·9 higher than the average for the 65 years, 1841–1905.

The mean of the daily ranges was 8°·9, being 0°·3 less than the average for the 65 years, 1841–1905.

The mean for the month was 42°·5, being 2°·6 higher than the average for the 65 years, 1841–1905.

MONTH and DAY, 1932.	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.		
Dec. 1	13·7	1·00	11·9	0·86	SSW : S : W	NNW : NW : WSW	4·0	0·38	294	10, c.-m.-r : 10, m.-r, oc.-slt.-m.-r	5, n, ci, fr.-cu : 0, m, ho.-fr
2	4·5	0·33	4·0	0·29	SW : WSW	SW	4·0	0·71	353	0, ho.-fr : 0, ho.-fr : 9, alt.-cu, alt.-s	10, r, m.-r, w : 10, slt.-m.-r
3	12·3	0·89	11·9	0·86	WSW	WSW : SW	2·0	0·32	326	4 : 10, m	1, h : 0, d
4	11·5	0·84	6·8	0·49	WSW : NW	NW : SW	1·1	0·16	274	0, ho.-fr : 5, m : 0, m, f	8, m : 0, m : 0,m,ho.-fr
5	7·9	0·57	7·1	0·52	SW	WSW : NNE	0·4	0·02	197	0, ho.-fr : 9 : 10, f	9, cu, alt.-cu, f : 9
6	13·7	1·00	13·7	1·00	NNE : NE	NE	0·9	0·05	217	1, ho.-fr : 0, ho.-fr : 7, f, m	4,s.-cu,alt.-cu,m : 0, m : 0, m, ho.-fr
7	6·4	0·47	5·3	0·39	NE	NE	2·3	0·29	285	0, ho.-fr : 0, ho.-fr, m	0 : 3, ho.-fr
8	1·7	0·12	0·5	0·03	ENE	E : ENE	4·3	0·67	334	9 : 9 : 4,alt.-cu,s.-cu,m	9, s.-cu : 9
9	0·0	0·00	0·0	0·00	ENE	ENE	5·9	0·99	369	10 : 9, s.-cu	10, s.-cu : 10
10	11·6	0·84	10·1	0·74	ENE : E	ENE	6·9	1·79	459	10 : 10, s.-cu, w	10, s.-cu, w : 9, w : th.-cl,lu.-ha,w
11	3·6	0·26	2·5	0·18	ENE	ENE : E	6·0	1·22	390	1, lu.-ha, w : 10, s.-cu, alt.-s, n, r	10, alt.-s, s : 10
12	4·7	0·34	3·1	0·22	E : ENE	ENE	1·2	0·12	226	7, ho.-fr : 2, alt.- cu, ci.-cu, f	1, ci.-cu : 9, m
13	6·9	0·51	6·4	0·47	Calm	Calm : SSE	0·3	0·01	164	10 : 10, m.-r, tk.-f, f	9, s.-cu, alt.-cu, slt.-m : 1, slt.-m, hy.-d
14	10·5	0·76	9·6	0·70	S : SSW	SSW	1·1	0·07	239	10, m.-r, sh : 8, m	0, slt.-m : 1, m, hy.-d
15	9·2	0·67	8·4	0·61	SSW	SW	3·2	0·65	330	0, hy.-d : 10 :10, sh	10, s, alt.-s, n, oc.-slt.-m.-r : v.-cl, hy.-d
16	7·5	0·54	4·5	0·32	SW	SW	3·0	0·58	317	3 : 10 : 10, s.-cu, fr.-s	10, s.-cu : 9, d
17	7·0	0·50	5·6	0·40	SSW : SW	SSW : SW	5·5	0·88	369	9, lu.-ha, d : 9, th.-cl	th.-cl : 5 : 7, d
18	14·0	1·00	14·0	1·00	SW	SSW	4·5	1·32	416	10 : 9, fr.-s, n	1 : 0, d
19	14·0	1·00	13·9	0·99	SSW : S	S	3·1	0·85	367	0, d : 1, d : 9, ci, alt.-s	4 : 0 : 0, d
20	8·4	0·60	6·8	0·49	S	S : SE	0·9	0·05	227	2, d : 1, d : 9, ci, ci.-cu	8 : 2, d : 3, hy.-d
21	2·2	0·16	2·0	0·14	S : SSW	SSW : S : SSE	2·0	0·27	266	5 : 9 : 7, slt.-m.-r	2, cu, fr.-cu : 9, d
22	4·4	0·32	2·1	0·15	S : SW	SW : SSW	2·8	0·29	301	9 : 9, r : 1, ci.-cu	1, cu : 9
23	4·9	0·35	4·7	0·33	SSW	SSW : SW	6·0	1·03	378	8 : 9, ci.-s, ci.-cu	9,ci,ci.-s,so.-ha : 7 : 10, slt.-r, c.-r
24	6·7	0·48	5·4	0·39	SW : WSW	WNW : WSW	1·0	0·19	283	0, d : 0, f, m	3, m : 10, m : 5, m
25	0·0	0·00	0·0	0·00	WSW	W : Calm	0·1	0·00	193	0 : 10, m, tk.-f : tk.-f	tk.-f : 10, f
26	0·0	0·00	0·0	0·00	Calm	Calm	0·0	0·00	130	10, f, m : 10, tk.-f	tk.-f : 10, f
27	0·5	0·04	0·3	0·02	WSW: Calm : SSW	SSW	1·0	0·09	230	10 : 10, m, f	10, s.-cu, fq.-slt.-m.-r : 10, s.-cu, n
28	1·9	0·14	1·2	0·08	SSW : S	SSW	0·8	0·12	225	10, m.-r : 3	9, s.-cu : 10, slt.-sh
29	0·0	0·00	0·0	0·00	S	S : SSW	2·0	0·21	250	9 : 10 : 10, s	10, s, m.-r, r : 10 : 10, slt.-m.-r
30	10·7	0·76	10·3	0·73	SSW : S	SSW : SW : WSW	2·2	0·37	303	10, slt.-m.-r : 10, oc.-slt.-m.-r	10, n, m.-r, r : 10, r, m.-r : 0, d
31	8·1	0·59	6·8	0·49	SW : S	SSE : S	2·4	0·39	292	0, ho.-fr : 5 : 9, th.-cl, so.-ha	9, s : th.-cl : 8, m.-r
Means	6·7	0·49	5·8	0·42	..	..	..	0·45	290		
Number of Column for Reference	19	20	21	22	23	24	25	26	27	28	29

The mean *Temperature of Evaporation* for the month was 40°·8, being 2°·3 higher than
The mean *Temperature of the Dew Point* for the month was 38°·3, being 1°·9 higher than
The mean *Degree of Humidity* for the month was 85·0, being 2·5 less, than
The mean *Elastic Force of Vapour* for the month was 0·232in., being 0·016in. 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 6·8.

The mean proportion of *Sunshine* for the month (constant sunshine being represented by 1) was 0·170. The maximum daily amount of *Sunshine* was 5·2 hours on December 7.

The highest reading of the *Solar Radiation Thermometer* was 71°·0 on December 23; and the lowest reading of the *Terrestrial Radiation Thermometer* was 23°·6 on December 5.

The *Proportions of Wind* referred to the cardinal points were N. 3, E. 5, S. 13, W. 7. Three days were calm.

The *Greatest Pressure of the Wind* in the month was 6·9 lbs. on the square foot on December 10. The mean daily *Horizontal Movement of the Air* for the month was 290 miles; the greatest daily value was 459 miles on December 10, and the least daily value was 130 miles on December 26.

Rain (0·005in. or over) fell on 10 days in the month, amounting to 0·554in, as measured by gauge No. 6 partly sunk below the ground; being 1·273in. 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.		MINIMA.		MAXIMA.		MINIMA.		MAXIMA.		MINIMA.	
Greenwich Mean Time, 1932.	Reading	Greenwich Mean Time, 1932.	Reading.	Greenwich Mean Time, 1932.	Reading.	Greenwich Mean Time, 1932.	Reading.	Greenwich Mean Time, 1932.	Reading	Greenwich Mean Time, 1932.	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. 21. 40	29·790			2. 3. 0	29·412	1. 7. 0	30·040	3. 14. 40	29·511
4. 10. 35	30·058	6. 18. 45	28·860	4. 8. 0	29·824	9. 10. 30	29·305	5. 0. 10	29·899	6. 17. 5	29·446
7. 9. 0	29·342	8. 0. 0	29·193	10. 22. 0	29·824	13. 8. 35	29·624	7. 10. 30	29·580	8. 16. 10	29·368
9. 10. 40	29·610	10. 19. 15	29·033	14. 9. 30	29·880	16. 1. 50	29·508	9. 21. 0	29·658	11. 10. 20	29·313
12. 17. 10	29·734	13. 7. 0	29·438	18. 0. 0	30·015	22. 1. 25	29·448	15. 9. 0	30·267	18. 18. 40	29·477
14. 10. 40	30·048	15. 2. 55	29·713	22. 21. 10	29·662	23. 18. 35	29·503	21. 9. 45	30·056	23. 6. 0	29·335
15. 21. 0	30·082	17. 2. 45	29·743	30. 21. 0	29·838			28. 12. 5	30·202		
19. 9. 0	30·369	21. 16. 0	30·216								
23. 21. 25	30·558	24. 13. 40	30·408								
26. 10. 45	30·782	29. 4. 0	30·439								
31. 10. 30	30·688							October.		October.	
										1. 11. 0	29·558
February.		February.		June.		June.		2. 1. 40	29·848	2. 15. 15	29·635
								4. 9. 10	30·009	9. 5. 35	28·896
		9. 5. 0	29·870			1. 3. 25	29·656	12. 11. 0	29·651	14. 8. 45	29·169
11. 9. 0	30·238	12. 3. 0	30·154	9. 8. 0	30·088	11. 11. 5	29·699	15. 20. 40	29·746	16. 6. 10	29·605
12. 22. 30	30·233	13. 16. 0	30·067	15. 8. 0	30·077	20. 4. 20	29·828	17. 18. 20	29·906	18. 4. 30	29·547
18. 10. 0	30·534	19. 16. 0	30·435	23. 22. 10	30·113	28. 3. 0	29·571	19. 8. 10	30·064	21. 2. 55	29·232
21. 1. 0	30·626	24. 8. 30	29·809	29. 10. 0	29·806			23. 1. 20	29·770	23. 18. 40	29·427
25. 10. 5	30·168	26. 5. 0	30·080					24. 1. 5	29·550	24. 12. 15	29·441
28. 11. 0	30·168							25. 8. 35	29·809	26. 5. 25	29·186
								26. 23. 0	29·468	27. 23. 55	29·109
								29. 7. 20	29·708	30. 3. 10	29·064
March.		March.		July.		July.					
								November.		November.	
		2. 15. 0	29·678			1. 6. 30	29·267				
4. 12. 0	29·840	6. 2. 0	29·470	3. 11. 20	29·927	5. 17. 0	29·678				
7. 11. 55	29·738	8. 4. 30	29·553	9. 7. 40	30·078	13. 15. 55	29·489	3. 8. 25	30·023	4. 15. 35	29·749
9. 22. 0	29·826	10. 16. 20	29·715	14. 22. 0	29·655	16. 15. 30	29·426	6. 0. 5	30·287	9. 5. 15	29·773
12. 9. 25	30·104	14. 15. 15	29·933	19. 0. 0	30·022	22. 19. 15	29·607	13. 9. 40	30·361	21. 3. 0	29·620
15. 11. 0	30·135	17. 16. 0	29·862	23. 22. 0	29·789	25. 19. 0	29·403	21. 20. 45	29·824	22. 17. 20	29·277
20. 22. 15	30·155	26. 5. 20	29·460	28. 8. 15	29·682	28. 15. 25	29·588	25. 20. 45	29·885	27. 0. 50	29·557
27. 7. 30	29·619	27. 22. 50	29·254	29. 22. 0	29·817	31. 13. 0	29·627	28. 21. 20	30·293		
29. 11. 10	29·463	30. 5. 35	29·122								
								December.		December.	
April.		April.		August.		August.				1. 7. 20	29·498
1. 8. 0	29·489	3. 4. 45	28·944					1. 21. 30	29·798	3. 0. 15	29·267
5. 23. 0	29·667	7. 5. 50	29·223	2. 8. 0	29·872	3. 3. 45	29·785	9. 11. 0	30·140	13. 14. 35	29·710
9. 0. 0	30·012	10. 19. 0	29·248	7. 10. 0	30·100	12. 5. 10	29·604	16. 1. 0	30·200	19. 13. 40	29·797
13. 8. 15	30·305	15. 3. 45	29·550	13. 9. 5	29·808	14. 15. 10	29·736	20. 21. 20	29·935	22. 4. 0	29·856
18. 23. 0	29·855	12. 16. 25	29·416	18. 9. 0	30·104	20. 22. 50	29·658	22. 20. 10	30·084	23. 15. 25	29·838
25. 7. 0	29·863	28. 13. 0	29·368	24. 0. 10	30·198	26. 12. 0	29·861	25. 11. 15	30·615	30. 16. 0	29·532
30. 9. 30	29·541			27. 22. 0	29·949	30. 12. 0	29·642	31. 6. 0	29·711	31. 23. 0	29·494

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 1932.

	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.....	30·782	30·626	30·155	30·305	30·015	30·113	30·078	30·198	30·267	30·064	30·361	30·615
Lowest.....	28·860	29·809	29·122	28·944	29·305	29·571	29·267	29·604	29·313	28·896	29·277	29·267
Range.....	1·922	0·817	1·033	1·361	0·710	0·542	0·811	0·594	0·954	1·168	1·084	1·348

The highest reading in the year was 30·782in. on Jan. 26. The lowest reading in the year was 28·860in. on Jan. 6. The range of reading in the year was 1·922in.

MONTHLY RESULTS OF METEOROLOGICAL ELEMENTS for the YEAR 1932.

MONTH, 1932.	Mean Reading of the Barometer.	TEMPERATURE OF THE AIR. Highest.	Lowest.	Range in the Month.	Mean of all the Highest.	Mean of all the Lowest.	Mean of the Daily Ranges.	Monthly Mean.	Excess of Mean above the Average of 65 years.	Mean Temperature of Evaporation.	Mean Temperature of the Dew Point.	Mean Degree of Humidity. (Saturation = 100.)
	in.	°	°	°	°	°	°	°	°	°	°	
January	30·026	55·9	20·7	35·2	48·9	38·3	10·5	44·0	+5·4	42·2	40·0	86·1
February	30·265	48·7	21·8	26·9	42·6	33·1	9·5	37·7	−1·8	35·5	31·6	78·7
March	29·784	58·6	21·0	37·6	49·7	32·6	17·1	40·7	−1·2	37·6	32·2	71·9
April	29·580	66·2	31·5	34·7	54·6	38·5	16·1	45·4	−1·8	42·0	37·1	73·1
May	29·681	75·7	35·1	40·6	61·9	44·9	17·1	52·2	−0·8	49·0	45·4	77·8
June	29·887	84·6	41·1	43·5	69·7	49·0	20·7	58·6	−0·8	53·6	48·9	70·7
July	29·715	88·1	46·3	41·8	73·5	53·7	19·8	62·4	−0·2	58·3	55·0	77·1
August	29·906	98·9	50·8	48·1	78·1	56·6	21·5	65·8	+4·1	61·5	58·5	77·5
September	29·738	78·1	42·3	35·8	66·6	50·3	16·3	57·7	+0·4	54·7	52·0	81·4
October	29·533	66·1	31·8	34·3	56·3	42·5	13·8	49·2	−0·7	46·8	44·0	82·0
November	29·897	59·8	32·0	27·8	49·3	39·9	9·4	45·1	+1·6	43·2	40·6	84·4
December	29·912	55·1	29·0	26·1	46·8	37·9	8·9	42·5	+2·6	40·8	38·3	85·0
		Highest	Lowest	Annual Range								
Means	29·827	98·9	20·7	78·2	58·2	43·1	15·1	50·1	+0·6	47·1	43·6	78·8

MONTH, 1932.	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. Number of Rainy Days (0·005 in. or over).	Amount collected in Gauge No. 6, whose receiving Surface is 5 inches above the Ground.	WIND. From Osler's Anemometer. Number of Hours of Prevalence of each Wind referred to different Points of Azimuth. N.	N.E.	E.	S.E.	S.	S.W.	W.	N.W.	Number of Calm or nearly Calm Hours.	Mean Daily Pressure on the Square Foot.	From Robinson's Anemometer. Mean Daily Horizontal Movement of the Air.
	in.	°			in.	h	h	h	h	h	h	h	h	h	lbs.	miles.
January	0·248	46·1	7·3	12	1·574	4	36	40	12	144	344	53	5	106	0·68	321
February	0·177	43·8	7·4	7	0·292	173	272	77	0	2	15	13	43	101	0·35	285
March	0·182	42·7	5·8	10	1·449	67	124	92	44	44	166	67	36	104	0·26	274
April	0·221	44·7	7·8	23	2·441	54	84	23	23	83	220	113	71	49	0·48	329
May	0·305	48·3	8·2	19	4·049	104	56	28	12	69	217	62	40	151*	0·19	254
June	0·348	52·6	6·5	5	0·273	114	150	75	22	45	104	42	64	98*	0·15	248
July	0·436	56·1	7·7	14	3·362	87	10	3	12	72	258	96	53	153	0·23	253
August	0·495	58·7	6·4	9	2·222	29	111	70	21	34	168	89	19	203	0·11	225
September	0·390	58·5	7·3	16	2·100	55	75	60	14	67	241	91	19	98	0·35	274
October	0·289	54·5	7·1	26	5·366	57	3	1	12	85	298	148	87	53	0·55	313
November	0·254	50·6	8·4	17	0·972	23	114	123	21	52	190	77	21	99	0·44	288
December	0·232	47·0	6·8	10	0·554	6	89	74	12	197	241	40	21	64	0·45	290
Sums	..	..	..	168	24·654	773	1124	666	205	894	2462	891	479	1279	..	..
Means	0·298	50·3	7·2	..	..	..	..	..	..	..	..	..	..	..	0·35	279

The greatest recorded pressure of the wind on the square foot in the year was 25·8 lbs. on January 6.

The greatest recorded daily horizontal movement of the air in the year was 627 miles on April 7.

The least recorded daily horizontal movement of the air in the year was 130 miles on December 26.

* Registration failed for five hours on May 31st and for six hours on June 1st.

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

1932.

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	30·009	30·279	29·797	29·587	29·688	29·899	29·725	29·910	29·755	29·536	29·909	29·919	29·834
1h	30·006	30·274	29·794	29·584	29·683	29·895	29·721	29·908	29·752	29·531	29·905	29·916	29·831
2	30·006	30·270	29·791	29·578	29·677	29·890	29·718	29·903	29·749	29·523	29·904	29·915	29·827
3	30·008	30·265	29·784	29·574	29·671	29·885	29·714	29·900	29·745	29·514	29·901	29·912	29·823
4	30·010	30·260	29·781	29·569	29·669	29·885	29·713	29·898	29·740	29·510	29·899	29·908	29·820
5	30·011	30·261	29·782	29·570	29·670	29·887	29·714	29·899	29·739	29·510	29·899	29·904	29·821
6	30·016	30·263	29·786	29·574	29·674	29·891	29·717	29·906	29·742	29·513	29·899	29·906	29·824
7	30·024	30·267	29·795	29·579	29·679	29·895	29·720	29·911	29·745	29·520	29·904	29·911	29·829
8	30·035	30·274	29·802	29·583	29·680	29·898	29·722	29·913	29·747	29·528	29·910	29·917	29·834
9	30·050	30·279	29·805	29·588	29·681	29·896	29·721	29·916	29·749	29·532	29·914	29·926	29·838
10	30·054	30·281	29·803	29·588	29·681	29·894	29·720	29·916	29·746	29·534	29·913	29·931	29·838
11	30·053	30·281	29·799	29·584	29·681	29·891	29·719	29·912	29·740	29·535	29·906	29·927	29·836
Noon	30·042	30·273	29·793	29·579	29·681	29·888	29·716	29·908	29·734	29·531	29·896	29·914	29·830
13h	30·030	30·264	29·780	29·577	29·679	29·885	29·710	29·905	29·730	29·529	29·885	29·904	29·823
14	30·024	30·256	29·770	29·575	29·678	29·879	29·705	29·900	29·725	29·528	29·881	29·897	29·818
15	30·025	30·252	29·762	29·568	29·675	29·875	29·700	29·895	29·720	29·532	29·877	29·898	29·815
16	30·026	30·249	29·758	29·567	29·674	29·872	29·698	29·891	29·717	29·534	29·877	29·901	29·814
17	30·026	30·251	29·760	29·570	29·675	29·870	29·698	29·891	29·717	29·541	29·880	29·904	29·815
18	30·026	30·256	29·767	29·574	29·679	29·872	29·701	29·892	29·721	29·549	29·886	29·908	29·819
19	30·028	30·260	29·773	29·580	29·684	29·876	29·706	29·899	29·730	29·551	29·890	29·911	29·824
20	30·027	30·262	29·778	29·591	29·690	29·884	29·715	29·912	29·738	29·553	29·894	29·914	29·830
21	30·029	30·261	29·783	29·594	29·697	29·893	29·726	29·919	29·744	29·553	29·899	29·917	29·835
22	30·029	30·260	29·783	29·592	29·697	29·895	29·731	29·923	29·744	29·551	29·901	29·917	29·835
23	30·030	30·259	29·781	29·593	29·698	29·895	29·734	29·922	29·744	29·546	29·900	29·918	29·835
24	30·028	30·259	29·778	29·590	29·693	29·890	29·734	29·921	29·743	29·543	29·899	29·917	29·833
Means 0h.–23h.	30·026	30·265	29·784	29·580	29·681	29·887	29·715	29·906	29·738	29·533	29·897	29·912	29·827
Means 1h.–24h.	30·027	30·264	29·783	29·580	29·681	29·886	29·715	29·907	29·738	29·533	29·897	29·912	29·827
No. of Days Employed	31	29	31	30	31	30	31	31	30	31	30	31	..

MONTHLY MEAN TEMPERATURE OF THE AIR AT EVERY HOUR OF THE DAY, AS DEDUCED FROM THE PHOTOGRAPHIC RECORDS.

1932.

Hour, Greenwich Mean Time.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Yearly Means.
	°	°	°	°	°	°	°	°	°	°	°	°	°
Midnight	42·3	37·0	37·5	41·8	48·2	52·7	57·6	60·2	54·6	47·5	43·9	41·7	47·1
1h	42·1	36·9	36·9	41·3	47·4	51·8	56·9	59·4	53·9	47·1	43·6	41·3	46·5
2	41·8	36·4	36·3	40·9	46·9	51·0	56·2	58·8	53·3	46·9	43·3	40·9	46·1
3	41·6	36·0	35·7	40·7	46·5	50·4	55·7	58·3	52·8	46·5	43·0	40·5	45·6
4	41·7	35·6	35·2	40·3	46·3	49·9	55·3	57·9	52·2	46·6	42·9	40·3	45·4
5	41·8	35·1	35·4	40·4	46·8	50·6	55·9	58·0	52·5	46·7	42·6	40·6	45·5
6	41·9	35·0	35·3	41·2	48·0	52·6	57·8	59·0	52·7	46·5	42·6	40·9	46·1
7	42·1	35·0	35·6	42·9	49·8	55·1	60·0	61·0	53·9	46·5	43·1	41·2	47·2
8	42·5	35·3	37·4	44·8	51·8	57·7	62·1	63·9	56·2	48·1	43·6	41·4	48·7
9	43·1	36·1	40·4	46·6	53·8	60·5	64·6	66·9	58·8	50·1	44·8	42·0	50·6
10	44·3	37·4	43·1	48·0	55·3	62·6	66·3	69·6	60·8	51·7	46·2	43·0	52·4
11	45·7	38·8	45·4	49·4	56·6	64·4	67·7	71·6	62·4	52·6	47·3	44·1	53·8
Noon	46·6	40·3	46·5	50·5	57·0	65·5	68·0	73·3	63·6	53·4	47·8	45·1	54·8
13h	47·2	40·7	47·5	51·1	57·8	65·9	68·8	73·9	63·7	53·6	47·8	45·3	55·3
14	47·3	41·0	47·7	51·3	58·4	66·6	69·1	74·8	63·7	53·5	48·0	45·4	55·6
15	46·9	40·9	47·4	51·1	58·2	66·6	69·0	74·3	62·8	53·0	47·5	44·7	55·2
16	46·1	40·6	46·8	50·2	57·5	65·9	68·4	73·8	62·0	52·2	47·1	44·0	54·5
17	45·6	39·6	45·2	49·1	56·7	65·0	67·2	72·4	61·0	50·9	46·5	43·3	53·5
18	45·1	39·1	43·6	47·8	55·1	63·3	65·9	70·5	59·7	49·8	46·1	42·9	52·4
19	44·6	38·6	41·6	46·2	53·7	61·2	64·6	68·1	58·3	48·8	45·8	42·7	51·2
20	44·2	38·2	40·3	45·0	52·0	59·0	62·6	65·8	57·4	48·0	45·5	42·5	50·0
21	43·8	37·8	39·5	44·1	50·6	57·1	60·8	63·9	56·5	47·5	45·0	42·4	49·1
22	43·4	37·5	38·7	43·4	49·8	55·7	59·5	62·3	56·1	47·3	44·8	42·2	48·4
23	43·1	37·1	38·4	42·7	49·1	54·2	58·5	61·1	55·3	47·1	44·5	41·9	47·7
24	42·8	36·9	37·7	42·0	48·3	53·2	57·4	60·0	54·7	47·0	44·1	41·8	47·2
Means 0h.–23h.	44·0	37·7	40·7	45·4	52·2	58·6	62·4	65·8	57·7	49·2	45·1	42·5	50·1
Means 1h.–24h.	44·0	37·7	40·7	45·5	52·2	58·6	62·4	65·8	57·7	49·2	45·1	42·5	50·1
No. of Days Employed	31	29	31	30	31	30	31	31	30	31	30	31	..

MONTHLY MEAN TEMPERATURE OF EVAPORATION AT EVERY HOUR OF THE DAY, AS DEDUCED FROM THE PHOTOGRAPHIC RECORDS.

1932.

Hour, Greenwich Mean Time.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Yearly Means.
	°	°	°	°	°	°	°	°	°	°	°	°	°
Midnight	41·0	35·3	35·5	39·6	46·5	50·3	55·8	58·7	52·9	46·0	42·2	40·4	45·3
1h	40·6	35·2	35·0	39·4	45·9	49·9	55·1	58·2	52·3	45·6	42·0	40·0	44·9
2	40·4	34·7	34·5	39·1	45·6	49·2	54·7	57·7	51·9	45·4	41·8	39·5	44·5
3	40·3	34·3	34·0	39·0	45·3	48·7	54·2	57·3	51·4	45·0	41·7	39·2	44·2
4	40·3	33·8	33·7	38·6	44·9	48·4	53·9	56·7	50·9	45·1	41·5	38·8	43·9
5	40·5	33·6	33·8	38·7	45·5	49·0	54·4	56·8	51·2	45·3	41·1	39·1	44·3
6	40·5	33·5	33·8	39·4	46·5	50·4	55·8	57·6	51·5	45·0	41·2	39·4	44·5
7	40·8	33·5	34·1	40·8	47·8	51·9	57·2	59·0	52·4	45·0	41·6	39·8	45·3
8	41·1	33·9	35·5	42·1	49·1	53·5	58·3	60·9	53·9	46·2	42·1	40·1	46·4
9	41·7	34·5	37·6	43·1	50·2	55·2	59·5	62·6	55·6	47·6	43·1	40·5	47·6
10	42·6	35·3	39·2	43·9	51·0	56·0	60·1	63·8	56·4	48·5	44·0	41·3	48·5
11	43·7	36·2	40·6	44·5	51·6	56·9	60·7	64·6	57·2	48·9	44·5	41·9	49·3
Noon	44·4	37·0	41·1	45·2	52·0	57·3	61·1	65·2	58·0	49·1	45·0	42·6	49·8
13h	44·6	37·1	41·5	45·3	52·5	57·6	61·3	65·4	57·9	49·3	44·9	42·6	50·0
14	44·7	37·4	41·6	45·4	52·5	57·9	61·6	65·7	57·8	49·2	45·0	42·6	50·1
15	44·4	37·5	41·5	45·3	52·5	57·9	61·7	65·5	57·6	48·9	44·8	42·1	50·0
16	43·9	37·4	41·3	44·7	52·1	57·5	61·4	65·2	57·4	48·4	44·6	41·8	49·6
17	43·5	37·0	40·6	43·9	51·6	56·9	61·0	64·6	56·9	47·8	44·4	41·5	49·1
18	43·3	36·6	39·9	43·2	50·8	55·9	60·4	64·0	56·3	47·2	44·1	41·3	48·6
19	42·8	36·3	38·8	42·4	50·1	55·0	59·8	63·2	55·3	46·5	43·8	41·2	47·9
20	42·5	36·0	37·9	41·9	49·1	54·2	58·9	62·2	55·0	46·0	43·6	40·9	47·3
21	42·3	35·8	37·2	41·5	48·3	53·2	57·9	61·0	54·4	45·8	43·2	40·9	46·8
22	42·0	35·6	36·6	40·9	47·7	52·5	57·1	60·2	54·0	45·7	43·1	40·8	46·3
23	41·7	35·3	36·3	40·4	47·2	51·6	56·2	59·4	53·6	45·5	42·7	40·6	45·9
24	41·4	35·1	35·7	39·8	46·7	50·7	55·5	58·6	53·0	45·5	42·3	40·5	45·4
Means 0h.–23h.	42·2	35·5	37·6	42·0	49·0	53·6	58·3	61·5	54·7	46·8	43·2	40·8	47·1
Means 1h.–24h.	42·2	35·5	37·6	42·0	49·0	53·6	58·3	61·5	54·7	46·7	43·2	40·8	47·1
No. of Days Employed	31	29	31	30	31	30	31	31	30	31	30	31	..

MONTHLY MEAN TEMPERATURE OF THE DEW POINT AT EVERY HOUR OF THE DAY, AS DEDUCED FROM THE CORRESPONDING AIR AND EVAPORATION TEMPERATURES.

1932.

Hour, Greenwich Mean Time.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Yearly Means.
	°	°	°	°	°	°	°	°	°	°	°	°	°
Midnight	39·3	32·5	32·1	36·4	44·6	47·9	54·3	57·6	51·3	44·3	40·0	38·7	43·3
1h	38·5	32·4	31·7	36·7	44·2	48·0	53·5	57·3	50·8	43·8	39·9	38·3	42·9
2	38·5	31·8	31·3	36·5	44·1	47·3	53·4	56·7	50·6	43·6	39·8	37·6	42·6
3	38·6	31·3	30·9	36·6	43·8	46·9	52·9	56·5	50·0	43·2	39·9	37·4	42·3
4	38·4	30·5	30·9	36·2	43·2	46·7	52·7	55·7	49·6	43·3	39·6	36·8	42·8
5	38·8	30·8	30·9	36·3	43·9	47·3	53·1	55·8	49·9	43·6	39·0	37·1	42·2
6	38·6	30·7	31·1	36·9	44·8	48·3	54·1	56·5	50·4	43·2	39·3	37·4	42·6
7	39·1	30·7	31·5	37·8	45·6	48·8	54·9	57·6	51·0	43·2	39·5	37·9	43·1
8	39·2	31·0	32·3	38·4	46·2	49·6	55·3	58·8	52·0	44·1	40·1	38·4	43·8
9	39·8	31·7	33·1	38·6	46·6	50·5	55·6	59·7	52·9	44·9	40·9	38·5	44·4
10	40·4	31·7	33·2	38·5	46·7	50·2	55·4	60·0	52·7	45·1	41·3	38·9	44·5
11	41·2	31·8	33·4	38·3	46·6	50·5	55·5	60·0	52·8	45·0	41·1	39·0	44·6
Noon	41·7	31·6	33·0	38·4	47·1	50·3	56·0	59·9	53·5	44·5	41·6	39·2	44·7
13h	41·5	31·3	32·5	37·8	47·3	50·5	55·8	59·9	53·2	44·7	41·3	39·0	44·6
14	41·6	31·6	32·5	37·8	46·8	50·6	56·1	59·8	53·0	44·6	41·2	38·8	44·5
15	41·4	32·1	32·7	37·8	46·9	50·6	56·4	59·8	53·3	44·5	41·6	38·5	44·6
16	41·2	32·2	33·2	37·4	46·7	50·3	56·3	59·6	53·7	44·3	41·6	38·9	44·6
17	40·8	32·7	33·8	37·1	46·5	49·8	56·4	59·4	53·6	44·4	41·9	39·0	44·6
18	40·9	32·5	34·3	37·0	46·5	49·3	56·2	59·6	53·5	44·3	41·6	39·1	44·6
19	40·5	32·5	34·4	37·3	46·5	49·4	56·2	59·8	53·1	43·9	41·3	39·1	44·5
20	40·3	32·3	34·1	37·5	46·0	49·8	56·1	59·8	53·0	43·7	41·2	38·7	44·4
21	40·4	32·5	33·5	38·0	45·8	49·5	55·6	59·0	52·7	43·8	40·8	38·8	44·2
22	39·9	32·5	33·3	37·3	45·4	49·5	55·2	58·7	52·3	43·8	40·9	38·9	44·0
23	39·8	32·3	32·9	37·0	45·1	49·1	54·3	58·2	52·1	43·6	40·4	38·9	43·6
24	39·5	32·1	32·4	36·6	44·9	48·2	53·9	57·6	51·4	43·7	40·0	38·8	43·3
Means 0h.–23h.	40·0	31·8	32·6	37·4	45·7	49·2	55·1	58·6	52·1	44·1	40·7	38·5	43·8
Means 1h.–24h.	40·0	31·8	32·6	37·4	45·7	49·2	55·0	58·6	52·1	44·0	40·7	38·5	43·8

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.	1932.												Yearly Means.
	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	
Midnight	89	83	81	81	87	83	89	91	89	88	86	89	86
1h	87	83	81	83	88	87	88	93	89	88	87	89	87
2	88	83	82	84	90	87	90	93	91	88	87	87	87
3	89	83	83	85	91	88	90	94	90	88	89	88	88
4	88	82	85	85	89	89	91	92	91	88	88	87	88
5	89	85	84	85	90	88	90	92	91	89	87	87	88
6	88	85	85	84	89	85	88	91	91	88	88	87	87
7	89	85	85	82	86	80	83	88	90	88	87	88	86
8	88	86	82	78	81	75	78	83	85	86	87	89	83
9	88	84	75	73	76	70	73	78	80	82	86	87	79
10	86	80	68	69	73	64	68	72	74	78	83	85	75
11	84	76	62	65	69	61	65	67	71	75	79	82	71
Noon	83	70	59	64	69	58	65	63	70	72	79	80	69
13h	80	68	55	61	68	57	63	61	69	72	78	79	68
14	80	69	55	60	65	56	63	60	68	72	77	78	67
15	81	70	56	61	66	56	64	60	71	73	79	79	68
16	83	72	58	62	67	57	65	61	74	74	81	82	70
17	83	77	64	63	69	58	69	64	76	78	84	85	73
18	86	77	70	66	73	60	71	69	80	81	84	86	75
19	85	78	76	70	76	65	74	75	83	83	84	87	78
20	86	79	78	75	80	71	79	81	85	85	85	86	81
21	87	81	79	79	84	76	83	84	87	87	85	87	83
22	88	82	80	79	85	80	86	88	87	88	86	88	85
23	88	83	80	80	86	83	86	90	89	88	85	89	86
24	88	82	81	81	88	83	88	92	89	88	85	89	86
Means 0h.–23h.	86	79	73	74	79	72	77	79	82	82	84	85	79
Means 1h.–24h.	86	79	73	74	79	72	77	79	82	82	84	85	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 1932.

Month, 1932.	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	3·9	7·3	7·3	8·1	5·5	3·1	0·5	—	—	—	—	36·9	260·1	0·142	18
February ..	—	—	—	—	2·1	3·7	5·2	7·5	7·1	6·7	6·4	3·4	0·3	—	—	—	42·4	288·5	0·147	26
March	—	—	0·8	6·5	10·8	15·2	15·6	14·5	14·4	13·5	11·8	10·7	3·6	0·1	—	—	117·5	368·5	0·319	37
April	—	3·2	8·2	9·2	10·1	10·1	10·5	10·0	11·8	10·1	9·1	8·2	7·0	3·8	—	—	111·3	416·1	0·267	48
May	0·1	3·9	6·9	7·6	8·7	8·5	9·5	8·1	9·3	8·9	7·3	8·2	8·2	6·1	5·4	0·5	107·2	484·2	0·221	57
June	2·2	8·7	11·4	13·7	13·8	13·6	15·1	13·9	13·7	13·7	15·1	12·9	15·2	12·9	8·4	1·1	185·4	496·5	0·373	62
July	1·4	7·2	10·6	11·0	12·9	12·0	9·9	10·1	11·4	10·4	9·5	8·8	7·7	6·2	6·0	0·2	135·3	499·4	0·271	60
August	—	2·7	6·5	10·9	15·4	17·0	18·7	18·8	16·2	17·4	15·7	16·1	16·9	13·7	3·6	—	189·6	451·7	0·420	52
September	—	0·1	4·6	8·7	9·8	11·5	11·3	10·8	7·7	8·2	8·7	8·9	7·0	2·9	—	—	100·2	379·6	0·264	41
October....	—	—	—	5·3	11·1	13·2	10·6	10·4	8·3	9·4	7·2	7·6	1·9	—	—	—	85·0	331·1	0·257	30
November..	—	—	—	—	0·9	3·3	3·7	5·0	2·3	1·5	1·3	0·1	—	—	—	—	18·1	266·9	0·068	20
December ..	—	—	—	—	0·0	4·1	6·1	8·4	8·1	9·7	5·4	—	—	—	—	—	41·8	245·6	0·170	16
For the Year	3·7	25·8	49·0	72·9	96·8	116·1	123·5	124·8	118·4	115·0	100·6	85·4	67·8	45·7	23·4	1·8	1170·7	4488·2	0·261	..

The hours are reckoned from " apparent " midnight.

READINGS OF THERMOMETERS ON THE ORDINARY STAND IN THE MAGNETIC PAVILION ENCLOSURE IN THE YEAR 1932.

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

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

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

READINGS OF THERMOMETERS ON THE ORDINARY STAND IN THE MAGNETIC PAVILION ENCLOSURE—*continued.*

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

MAY.

Days of the Month.	Dry-Bulb Thermometers, 4 ft. above the Ground.						Wet-Bulb Thermometers, 4 ft. above the Ground.			
	Maximum.	Minimum.	9h	Noon.	15h	21h	9h	Noon.	15h	21h
d	°	°	°	°	°	°	°	°	°	°
1	63·9	45·7	52·9	61·0	61·7	52·6	51·8	56·2	54·8	51·8
2	58·0	49·3	50·2	51·3	52·7	50·0	48·1	48·0	49·3	48·9
3	50·3	44·8	48·5	48·7	49·2	44·8	47·0	47·9	47·8	43·8
4	48·6	42·2	44·6	46·5	46·5	42·3	41·4	42·6	42·4	39·2
5	49·9	36·6	43·5	43·5	46·7	38·6	39·8	40·8	41·8	37·1
6	52·4	35·3	41·8	45·8	47·7	43·2	39·2	41·3	42·0	40·4
7	55·4	36·0	44·3	48·9	51·6	41·3	39·6	40·6	43·0	38·7
8	58·1	35·1	48·6	52·2	53·6	42·6	42·6	44·2	46·8	38·6
9	47·1	36·1	43·6	42·6	41·5	43·4	42·6	41·6	40·7	41·4
10	59·4	35·4	50·5	51·6	55·6	46·1	43·8	47·9	46·1	40·9
11	61·9	42·7	47·3	57·4	58·5	52·8	46·5	53·0	52·9	51·5
12	64·0	50·6	57·8	61·7	61·1	55·8	53·3	56·5	55·8	52·2
13	65·5	52·1	62·0	61·3	59·3	52·1	56·9	57·3	56·0	50·8
14	67·8	50·2	53·8	60·8	65·7	53·6	51·5	55·2	58·1	51·8
15	71·1	50·3	55·1	66·6	69·4	59·0	54·8	61·8	62·8	58·8
16	65·9	55·0	58·6	59·3	63·4	55·4	57·1	57·8	58·7	54·4
17	72·9	50·2	60·1	65·7	71·2	53·8	55·6	57·3	59·3	50·2
18	70·9	43·1	65·7	67·0	67·4	59·8	56·9	57·6	57·9	55·0
19	74·9	56·8	65·3	71·3	72·0	60·0	60·1	61·9	61·9	54·8
20	75·3	51·4	67·5	65·5	73·9	61·3	62·5	61·9	66·0	58·8
21	75·7	55·5	66·6	70·9	63·6	55·6	60·8	65·1	60·5	55·5
22	67·0	51·9	55·6	62·5	63·2	54·0	51·8	54·9	55·8	53·3
23	63·0	50·2	55·2	57·7	57·7	53·3	51·0	53·2	53·8	50·7
24	55·3	45·5	52·8	52·5	52·7	46·3	48·2	45·9	46·7	42·7
25	54·1	39·9	47·1	50·3	51·5	47·4	42·8	44·7	45·2	44·1
26	58·3	35·7	52·6	54·6	55·6	49·6	47·8	47·0	48·6	45·3
27	50·7	44·4	49·4	49·0	48·8	47·5	47·8	47·9	48·5	46·9
28	57·9	47·0	54·6	53·4	55·4	50·8	52·2	51·7	53·6	50·1
29	62·9	46·8	53·2	57·8	60·9	49·4	51·5	54·7	55·3	48·0
30	69·2	45·1	57·6	60·8	56·7	49·8	53·7	55·8	53·1	49·6
31	72·9	42·6	61·5	68·8	69·6	56·6	56·4	59·8	60·8	52·3
Means	61·9	45·3	53·8	57·0	58·2	50·6	50·2	52·0	52·5	48·3

JUNE.

Days of the Month.	Dry-Bulb Thermometers, 4 ft. above the Ground.						Wet-Bulb Thermometers, 4 ft. above the Ground.			
	Maximum.	Minimum.	9h	Noon.	15h	21h	9h	Noon.	15h	21h
d	°	°	°	°	°	°	°	°	°	°
1	64·9	50·8	54·5	56·1	61·6	55·3	51·7	53·3	55·5	53·9
2	70·4	50·1	61·9	66·6	70·4	55·7	57·7	57·7	61·8	52·8
3	64·9	45·3	48·7	58·7	61·8	51·2	47·3	54·0	57·2	48·6
4	55·3	46·3	50·4	51·6	52·7	48·6	45·5	46·3	47·6	45·4
5	53·3	44·0	50·0	51·7	50·4	48·4	47·4	47·9	48·4	45·7
6	58·0	42·1	50·2	53·6	55·6	48·7	45·5	45·8	47·5	45·8
7	64·8	43·6	57·5	60·5	60·4	53·6	50·7	51·6	49·8	47·3
8	64·3	50·6	58·6	59·9	60·9	58·3	51·8	51·4	52·7	51·7
9	71·6	50·0	62·8	68·7	67·3	53·7	55·0	58·7	57·0	49·5
10	74·1	41·1	65·8	68·5	71·4	58·5	58·2	58·7	60·1	54·0
11	77·2	50·6	69·4	72·5	69·4	59·4	62·8	64·7	62·6	56·8
12	78·0	51·9	67·6	72·6	75·6	62·6	59·8	62·8	65·1	58·8
13	67·3	55·8	62·8	64·4	66·3	57·5	59·3	60·1	60·4	53·4
14	72·6	47·3	61·8	69·6	71·7	57·5	53·7	55·8	54·9	47·9
15	69·4	46·7	55·2	66·1	69·0	54·4	51·5	57·7	59·9	52·5
16	77·9	52·1	64·6	75·2	76·6	63·1	60·3	66·0	65·6	56·0
17	75·2	50·6	67·0	73·2	74·1	57·3	58·0	59·8	63·2	53·8
18	70·7	45·6	61·6	66·1	69·6	54·9	55·8	58·3	59·8	50·8
19	61·4	46·1	55·6	58·6	58·3	54·9	49·5	52·4	53·4	52·5
20	62·3	50·8	54·7	56·5	58·6	54·6	50·9	51·5	52·0	50·0
21	59·4	49·1	56·4	56·8	56·9	53·5	51·4	51·6	51·4	50·5
22	69·9	47·9	54·7	63·6	65·5	52·8	51·5	54·5	55·6	50·0
23	73·8	43·9	60·8	68·9	68·0	55·1	56·8	59·7	58·7	52·8
24	70·1	50·4	63·7	67·6	68·3	64·9	58·7	58·9	58·9	59·4
25	75·2	56·1	63·7	69·7	70·3	61·6	58·5	60·7	58·8	57·9
26	77·9	56·8	69·6	70·6	70·6	62·3	62·0	61·7	61·8	58·3
27	84·6	50·3	68·0	79·4	82·5	64·2	60·4	67·1	68·2	60·1
28	77·9	58·2	65·8	74·3	74·9	66·5	60·0	63·9	65·0	61·7
29	80·0	54·7	69·0	76·5	72·7	59·8	62·0	62·8	60·1	56·6
30	69·1	54·2	63·5	66·3	65·5	63·8	61·0	62·8	62·9	61·9
Means	69·7	49·4	60·5	65·5	66·6	57·1	55·2	57·3	57·9	53·2

JULY.

Days of the Month.	Dry-Bulb Thermometers, 4 ft. above the Ground.						Wet-Bulb Thermometers, 4 ft. above the Ground.			
	Maximum.	Minimum.	9h	Noon.	15h	21h	9h	Noon.	15h	21h
d	°	°	°	°	°	°	°	°	°	°
1	76·1	58·2	61·8	71·4	72·2	58·7	59·6	62·1	61·0	56·0
2	73·3	55·1	61·5	70·1	68·8	58·3	57·3	58·9	57·2	53·8
3	72·2	47·4	63·6	66·6	68·8	59·6	56·8	58·8	59·7	54·8
4	80·9	52·5	72·3	77·7	76·1	61·6	62·3	64·0	63·5	57·4
5	68·4	56·0	66·6	63·8	64·1	60·0	61·6	63·1	62·0	59·4
6	75·8	54·3	64·4	67·1	68·8	56·3	57·0	58·8	60·4	53·7
7	74·8	51·7	67·2	60·6	67·5	58·8	59·7	58·4	61·6	57·7
8	81·8	53·0	68·5	76·6	76·5	69·4	62·2	65·7	63·8	63·3
9	84·3	58·1	70·5	79·2	81·6	71·4	64·9	67·0	67·0	66·0
10	88·1	59·3	79·3	81·2	81·6	67·6	70·0	70·1	69·7	64·1
11	81·5	57·9	73·7	77·1	69·2	67·8	67·8	67·6	68·2	66·4
12	77·9	61·3	70·9	76·5	76·7	67·7	67·3	69·5	69·9	66·7
13	76·8	59·3	64·2	67·6	73·5	60·1	62·7	64·8	66·8	57·6
14	78·8	52·9	66·4	75·8	74·5	62·8	60·4	64·7	63·7	60·3
15	63·2	57·2	59·2	59·6	60·4	57·9	56·6	56·6	56·8	56·0
16	76·7	53·0	64·8	70·5	73·9	61·8	59·9	60·8	60·4	57·8
17	65·8	52·2	60·2	62·1	58·7	52·6	54·9	54·1	52·5	49·0
18	59·3	48·6	51·6	55·6	56·8	55·2	50·2	52·8	53·5	51·2
19	74·1	46·3	59·4	66·7	71·7	61·6	52·8	56·8	59·4	58·0
20	77·5	52·0	67·5	72·6	76·8	64·0	62·1	64·8	66·7	59·4
21	71·5	54·3	65·6	65·6	65·7	60·1	57·8	57·5	57·8	53·8
22	71·9	53·7	63·2	66·8	62·7	54·5	56·0	56·8	55·7	52·7
23	67·5	49·6	56·8	66·5	62·7	55·8	53·2	57·6	55·5	53·8
24	66·1	50·0	61·4	60·6	63·7	60·6	57·0	58·6	61·4	60·0
25	63·7	58·1	61·2	62·3	62·7	59·4	60·9	61·6	62·0	57·5
26	69·8	51·6	59·2	61·5	61·4	55·6	56·1	57·6	57·6	54·5
27	70·8	53·7	63·1	63·7	62·5	58·4	56·8	58·2	60·2	55·8
28	66·8	53·8	60·3	58·1	65·8	62·7	56·6	56·8	63·1	61·8
29	73·8	60·2	66·0	67·5	68·8	62·5	62·4	62·8	64·0	60·5
30	78·7	59·2	67·2	71·8	75·7	61·7	61·9	65·8	68·9	58·9
31	72·8	54·0	63·6	65·6	69·3	60·7	60·9	62·1	62·7	59·0
Means	73·6	54·3	64·6	68·0	69·0	60·8	59·5	61·1	61·7	58·0

AUGUST.

Days of the Month.	Dry-Bulb Thermometers, 4 ft. above the Ground.						Wet-Bulb Thermometers, 4 ft. above the Ground.			
	Maximum.	Minimum.	9h	Noon.	15h	21h	9h	Noon.	15h	21h
d	°	°	°	°	°	°	°	°	°	°
1	75·1	54·2	65·5	69·5	57·6	58·3	60·2	62·0	56·9	57·8
2	69·7	55·1	59·7	63·7	67·2	58·1	56·7	58·9	61·2	56·9
3	71·2	54·3	58·2	63·6	68·4	59·8	57·0	59·9	59·6	55·2
4	72·1	54·7	63·5	69·2	67·6	62·0	58·6	62·9	61·4	59·1
5	78·0	56·0	67·0	74·8	75·3	68·5	63·0	65·8	64·9	65·1
6	82·2	59·6	67·6	76·8	77·5	68·4	64·4	67·9	67·6	64·5
7	81·5	59·8	67·3	72·6	74·2	62·1	60·9	62·0	64·2	60·9
8	79·7	54·8	68·4	75·7	77·6	66·2	63·6	67·8	68·3	62·3
9	78·5	56·0	65·7	73·5	76·2	66·4	60·7	65·3	67·8	63·4
10	83·3	56·0	73·8	78·9	82·7	62·1	66·1	68·3	68·7	59·5
11	87·8	55·2	75·3	85·6	86·6	70·2	68·6	71·3	70·2	67·3
12	81·5	63·1	72·7	77·6	80·2	64·5	69·5	69·8	71·1	60·7
13	77·9	56·3	66·6	72·3	73·8	57·5	60·4	61·8	64·2	55·9
14	74·0	52·3	65·9	69·7	71·1	64·8	61·0	64·5	67·7	63·6
15	74·5	59·8	63·4	70·1	72·6	65·5	61·8	66·1	68·5	64·0
16	77·1	60·2	61·4	69·0	76·5	65·6	59·8	64·8	68·8	64·7
17	88·3	56·9	73·8	82·1	85·0	69·5	68·3	70·3	73·4	67·8
18	91·7	60·2	77·2	85·9	89·9	72·6	70·4	72·4	75·5	66·8
19	98·9	64·2	83·8	94·8	94·5	71·6	75·4	77·8	76·9	66·6
20	93·0	65·2	76·2	83·6	84·6	73·2	70·6	74·5	73·8	70·3
21	79·0	62·8	69·3	76·6	72·5	64·8	66·1	68·8	65·9	62·8
22	67·6	57·5	58·7	62·7	64·7	59·2	57·7	59·9	59·7	56·4
23	68·1	54·1	61·9	65·7	66·7	58·7	56·8	57·9	58·7	54·9
24	66·4	54·3	61·7	65·6	64·8	59·8	54·8	56·6	56·0	54·8
25	70·9	56·6	62·8	67·0	69·8	59·4	59·0	60·5	60·7	57·1
26	76·0	57·1	65·9	74·6	65·1	57·5	63·0	64·0	62·4	56·8
27	77·2	51·0	60·2	68·7	74·6	62·8	58·7	62·9	64·6	61·2
28	75·0	55·6	65·4	72·8	71·9	63·3	61·7	66·2	63·5	61·5
29	80·3	57·1	66·8	73·7	74·6	66·2	63·0	66·2	66·0	62·8
30	74·6	58·6	64·3	71·6	70·7	63·1	62·7	64·3	63·7	58·9
31	70·3	53·7	63·5	63·5	67·6	58·1	59·6	58·7	57·8	52·9
Means	78·1	57·2	66·9	73·3	74·3	63·9	62·6	65·2	65·5	61·0

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	71·6	47·7	62·7	69·5	63·7	63·3	58·0	60·8	60·8	62·0
2	78·1	63·0	68·2	74·3	73·4	67·1	65·2	69·0	68·6	63·8
3	67·1	57·4	64·0	63·4	62·6	57·8	63·6	62·6	58·3	53·9
4	66·5	47·3	58·2	63·6	62·6	54·6	52·8	53·4	53·3	51·9
5	66·2	45·3	60·5	63·7	61·7	56·2	54·9	57·7	56·0	55·8
6	72·1	56·1	64·1	67·7	64·7	62·3	62·6	64·0	62·7	60·0
7	70·1	51·6	61·2	64·6	59·9	54·3	55·4	55·9	56·8	53·4
8	68·2	52·9	61·6	64·7	60·8	59·5	57·8	59·9	58·9	58·5
9	74·8	53·2	61·7	67·6	72·9	57·5	59·1	60·9	63·8	56·5
10	65·9	53·6	62·5	61·6	60·3	56·5	59·0	57·9	57·7	54·7
11	68·8	53·2	59·5	63·8	66·2	56·8	56·7	61·0	55·3	51·2
12	67·7	50·8	60·6	65·6	60·4	59·3	53·7	58·2	57·2	58·1
13	72·0	51·9	56·7	62·4	69·7	65·6	56·5	61·6	66·7	63·0
14	76·9	61·1	67·7	73·3	73·6	61·2	63·5	64·8	65·7	60·5
15	75·8	54·8	68·8	73·6	75·5	62·6	64·7	65·0	65·9	59·8
16	73·0	55·8	61·8	71·2	72·6	60·3	60·6	64·6	64·8	59·7
17	77·3	53·1	60·7	73·6	74·9	59·7	60·5	66·7	65·9	59·2
18	67·1	53·9	64·3	64·6	64·5	54·3	60·6	60·6	62·9	53·9
19	58·9	49·8	55·1	57·7	53·5	52·8	51·3	51·7	48·6	48·9
20	56·7	46·2	51·4	55·7	54·4	52·7	49·9	53·9	52·5	49·5
21	60·2	43·7	50·7	57·6	59·1	47·8	45·9	49·9	49·3	44·4
22	57·4	43·6	54·8	56·7	51·8	53·2	49·1	48·9	49·8	53·0
23	54·8	50·0	51·6	53·9	53·6	51·5	50·9	52·7	52·6	50·0
24	59·9	45·6	51·0	56·8	58·6	50·6	49·2	54·5	55·2	48·0
25	65·8	50·6	54·6	64·2	60·1	53·0	53·9	58·8	56·0	49·8
26	63·4	44·2	51·8	58·6	60·4	48·6	48·8	51·0	51·4	45·8
27	57·3	42·6	50·6	55·2	54·3	48·4	47·1	49·5	47·1	45·8
28	59·9	42·3	51·2	56·5	59·7	51·5	47·7	50·7	52·7	48·3
29	62·5	49·0	58·7	62·4	58·7	58·2	54·7	57·3	56·1	57·3
30	64·6	46·7	57·8	62·6	58·6	56·7	55·6	56·8	55·1	54·9
Means	66·7	50·6	58·8	63·6	62·8	56·5	55·6	58·0	57·6	54·4
OCTOBER.										
d	°	°	°	°	°	°	°	°	°	°
1	66·1	45·9	59·3	62·6	49·8	46·2	55·9	56·5	48·8	44·4
2	57·1	36·8	47·3	53·3	56·6	46·6	43·9	47·9	50·8	44·6
3	53·2	39·0	47·9	49·6	52·4	45·2	45·0	46·5	47·4	43·8
4	53·9	38·3	45·0	52·4	50·8	40·4	42·6	45·8	43·9	39·3
5	57·6	38·6	49·6	54·7	54·6	45·1	45·8	47·4	48·3	43·6
6	59·7	37·0	51·9	55·6	56·8	44·8	48·0	49·6	49·9	43·5
7	63·6	42·9	55·7	61·5	58·4	51·8	53·7	55·6	53·7	48·8
8	55·3	43·9	54·4	53·3	49·5	45·4	51·9	52·0	48·7	45·0
9	53·6	43·2	48·6	51·2	52·9	47·2	47·6	49·2	49·4	45·9
10	60·1	36·3	47·6	55·7	57·6	45·3	45·4	49·9	50·6	44·0
11	58·0	45·0	48·1	52·8	51·2	49·8	47·6	50·2	48·5	48·8
12	59·0	46·1	49·6	53·6	58·0	54·8	48·2	50·9	52·8	53·8
13	57·9	43·9	47·9	50·2	52·8	44·1	46·0	45·8	46·8	41·5
14	52·9	41·7	42·6	49·4	51·6	47·0	42·3	44·4	46·0	44·1
15	54·0	46·9	51·2	52·5	53·1	48·7	46·7	46·8	47·3	45·8
16	57·4	46·0	54·1	55·5	56·6	51·6	52·7	50·1	50·4	49·6
17	58·4	49·2	56·0	57·1	55·9	49·8	50·6	50·8	50·0	47·1
18	57·8	47·4	53·1	56·7	55·7	47·4	47·6	49·8	48·8	43·6
19	54·9	38·8	44·7	53·3	52·6	48·3	42·9	47·6	46·1	47·3
20	60·9	48·0	57·1	59·8	58·6	53·4	56·2	56·8	56·7	53·1
21	64·8	52·2	60·7	62·7	57·0	59·6	57·6	57·7	56·6	57·6
22	62·9	47·5	59·6	61·6	58·6	47·7	56·1	57·7	57·6	45·6
23	55·7	43·9	51·7	51·3	53·7	47·0	49·9	50·5	52·7	46·6
24	52·3	44·7	49·6	50·6	49·0	46·9	47·9	47·8	48·6	45·7
25	53·6	38·3	44·6	51·8	52·1	52·5	43·1	48·3	49·5	51·2
26	58·2	47·8	55·2	55·7	53·7	48·2	52·8	50·3	49·9	46·2
27	52·2	41·0	48·2	47·8	51·0	42·6	46·4	45·4	46·1	42·4
28	43·8	39·2	41·5	42·7	39·8	39·6	38·9	39·7	38·9	37·7
29	46·9	31·8	35·4	42·5	43·4	46·7	34·1	39·8	40·6	46·0
30	50·3	42·9	47·5	49·6	48·6	45·9	45·3	45·8	44·8	41·7
31	51·1	41·4	46·6	49·6	49·6	43·7	44·0	45·8	45·6	41·9
Means	56·2	42·8	50·1	53·4	53·0	47·5	47·6	49·1	48·9	45·8

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

AMOUNT OF RAIN COLLECTED IN EACH MONTH OF THE YEAR 1932.

Gauges partly sunk in the Ground in the Magnetic Pavilion Enclosure.	Number of Gauge.	Monthly Amount of Rain collected in each Gauge. January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Sums.	Height of Receiving Surface. Above the Ground.	Above Mean Sea Level.
		in.	in.	in.	in.	in.	in.	in.	in.	in.	in.	in.	in.	in.	ft. in	ft. in.
	6	1·574	0·292	1·449	2·441	4·049	0·273	3·362	2·222	2·100	5·366	0·972	0·554	24·654	0 5	149 6
	8	1·625	0·239	1·391	2·372	3·981	0·270	3·300	2·229	2·085	5·208	0·907	0·535	24·142	1 0	150 1
Number of Rainy Days (0·005in. or over).	..	12	7	10	23	19	5	14	9	16	26	17	10	168	..	..

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	1932. 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	13·8	10·5	10·9	12·2	9·6	9·3	9·5	8·5	10·1	12·8	11·0	11·3	10·8
2	13·7	10·4	10·5	12·3	9·2	9·2	9·3	8·4	10·1	13·0	11·1	11·6	10·7
3	13·5	11·3	10·4	12·3	9·3	9·0	8·9	8·1	10·0	12·8	10·8	11·3	10·6
4	13·4	11·4	10·5	12·6	9·5	9·1	9·2	8·3	10·0	12·9	11·0	11·3	10·8
5	13·0	11·2	11·0	12·7	9·5	9·0	9·5	8·5	10·1	13·0	11·3	11·8	10·9
6	12·9	11·4	10·8	12·2	9·5	9·2	9·4	8·2	10·2	12·7	11·0	11·5	10·7
7	12·7	10·8	10·2	12·7	9·5	9·5	9·6	8·3	10·1	12·4	11·6	11·9	10·8
8	12·8	11·0	10·2	13·3	10·1	9·8	9·8	8·4	10·7	12·5	11·6	12·1	11·0
9	13·0	11·5	10·6	14·0	10·5	9·6	10·3	8·7	11·0	12·2	11·5	11·9	11·2
10	13·1	11·6	11·8	14·2	11·2	10·0	11·0	8·8	12·3	13·3	12·0	11·9	11·8
11	13·4	12·4	12·3	14·3	11·4	11·0	11·5	9·7	12·1	14·0	12·6	12·4	12·3
Noon	13·6	12·6	12·4	15·1	11·7	11·5	12·1	10·1	12·9	14·7	13·2	13·3	12·8
13h	13·9	13·3	13·1	15·7	12·3	11·8	12·4	10·0	13·2	14·5	12·8	13·3	13·0
14	13·9	14·0	12·7	15·3	12·0	11·6	12·5	10·3	13·3	14·4	13·3	13·5	13·1
15	13·1	13·9	12·8	15·3	11·8	11·5	12·0	10·7	13·4	13·8	13·1	13·0	12·9
16	12·7	13·0	12·9	15·9	12·3	11·7	12·1	11·2	12·8	13·5	13·5	12·4	12·8
17	12·7	12·8	12·5	15·9	11·8	11·6	12·1	11·0	13·0	13·3	12·8	12·5	12·7
18	12·7	12·2	12·1	14·7	12·2	11·4	11·5	10·5	12·2	12·5	12·0	11·9	12·2
19	13·5	12·1	11·5	14·2	11·3	11·2	11·1	10·2	11·3	12·3	12·4	11·8	11·9
20	14·1	12·0	11·3	13·0	10·5	10·8	10·4	9·7	11·4	12·3	12·5	12·3	11·7
21	14·2	11·6	10·9	12·4	9·8	10·1	9·8	9·7	11·1	12·6	12·1	12·3	11·4
22	13·5	11·2	10·5	12·6	9·4	9·8	9·9	9·4	10·7	12·3	11·5	11·4	11·0
23	13·8	11·5	11·4	12·8	9·8	9·9	9·7	9·5	10·6	12·6	11·6	12·0	11·3
Midnight	13·9	11·3	11·1	13·2	9·2	10·2	9·9	9·0	11·0	12·1	11·6	11·6	11·2
Means	13·4	11·9	11·4	13·7	10·6	10·3	10·6	9·4	11·4	13·0	12·0	12·1	11·7
Greatest Hourly Measures	32	29	28	32	22	18	21	19	25	30	25	23	..

* The measures are derived from the motion of the cups by the formula $V = 2v + 4$; where v is the hourly motion of the cups in miles. *See* Introduction, p. E 6.

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