RESULTS OF THE MAGNETIC & METEOROLOGICAL OBSERVATIONS

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

1939

UNDER THE DIRECTION OF

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ASTRONOMER ROYAL

Published by Order of the Board of Admiralty
in Obedience to Her Majesty's Command

LONDON: HER MAJESTY'S STATIONERY OFFICE
1952

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The Royal Observatory, Greenwich

and

Abinger Magnetic Station, Surrey

Abinger Magnetic Observations, 1939.

During the year 1939 the staff employed in the Magnetic and Meteorological Department of the Royal Observatory consisted of W. M. Witchell, Superintendent, W. Stevens, E. A. Chamberlain, G. F. Wells, P. L. Rickerby, B. R. Leaton, and two ladies engaged in computational duties.

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, was assisted by Mr. Rickerby. Mr. Stevens retired on July 17 and was succeeded by Mr. Chamberlain.

GENERAL DESCRIPTION OF THE BUILDINGS AND INSTRUMENTS OF THE MAGNETIC OBSERVATORY

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″ N., Longitude 0° 23′ 12″ W.

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.

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 unifilar magnetometer, mounted until August 1928 in the Magnetic Pavilion, is now used in this 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 low-temperature non-magnetic metallic resistances distributed along the base of the walls. 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. A public mains supply of three-phase current became available in 1937, however, and the current used at the station is now drawn from the mains.

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 operates a relay, which switches the electric current into or out of the heating circuits. The temperature is read daily from a thermometer attached to one of the variometers. The departure from a mean temperature is not more than $0^{\circ}\cdot2$ C.

At the beginning of March 1938 the apparatus which had been in use since 1925 to record declination and horizontal intensity was superseded by a magnetograph of the La Cour or Copenhagen type. In this instrument the traces of three elements are recorded on one sheet, each element being restricted to a particular strip of the sheet. If the recording light-ray moves to one edge of this strip a secondary ray appears at the other edge, derived from the original source of light by prism reflection. Several such rays are available in succession on each side of the primary, so that a very much larger departure from the mean position can be recorded than was possible before.

The variometers are set up at the south end of the recording chamber in a line running geographically east to west. They occupy the eastern half of a massive slate slab measuring 8 feet by 2 feet by 1¼ inch which is cemented centrally upon the concrete pier formerly carrying the superseded recording mechanism. The new recording mechanism is mounted on a heavy wooden table 8 feet by 3 feet, the legs of which pass freely through the floor of the chamber and are cemented into the concrete base of the whole building. Occupying the western halves of the slate slab and wooden table is a "quick-run" magnetograph consisting of a closely similar set of instruments adapted by La Cour's method to record on a time-scale of 3 mm. to one minute i.e. twelve times as great as the normal scale. This recorder has been in regular use since 1938 November.

A quartz-fibre vertical intensity variometer is mounted on a pier in the south-west corner of the chamber, its recorder being at the north-west corner.

The time-marks are photographically printed on the sheets by the automatic illumination of electric lamps. In the case of the ordinary La Cour magnetograph the marks take the form of small dots which appear close to the traces, while in the case of the vertical intensity instrument and the "quick-run" recorder they are narrow lines extending across the paper. The time signals are

derived from a relay connected to a mean solar clock in the computing room. For a period of one second at every tenth minute of Universal Time a current passes from the clock to the relay so that the time lamps are illuminated. Additional signals at the first and fifty-ninth minute of each hour serve to distinguish the actual hourly signals. The error of the clock is observed daily by comparison with a time signal radiated 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.

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 have been made at 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 HORIZONTAL INTENSITY 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 measurement of horizontal intensity 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 intensity:-

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; the 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.

ABINGER MAGNETIC OBSERVATIONS, 1939.

Situated outside the observing pavilion, about 40 feet to the south, 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 value 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 precise angle can be found at which the resultant of the two fields 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 bar of similar dimensions 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 that 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 horizontal component of 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 field; 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 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.

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 3·59570 (1 − ·0000043 t), t being temperature Centigrade.

The observed value of horizontal intensity obtained from 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.

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 1939 is based were verified in February 1939. The factor at present adopted to convert the measure of current from international units to C.G.S. units is 0·99988.

A KEW-PATTERN UNIFILAR MAGNETOMETER (Casella No. 181) is also used to determine absolute horizontal intensity. Deflection observations are made at three distances, namely, 22·5 cms., 30 cms. and 40 cms. 24 observations of the moment of inertia of the collimator magnet were made during the year 1939. The mean observed value of log. K from these determinations was 2·42362. 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 83 normal determinations made during the year are +9·81 and −1690 respectively.

The values used in the reduction of the 1939 observations, however, are the mean values obtained from a series of 235 special observations made during the year 1936. These values are: P = +9·17, Q = −1409.

The method employed in reducing the special series was as follows:-

A deflection observation gives H through the equation $H \sin \alpha = \frac{2m}{r^3}\left(1 + \frac{P}{r^2} + \frac{Q}{r^4} + ..\right)$

If deflections, α, are made at several distances, r, and the values of H and m are known from some other source, a direct solution of the equations for P and Q is possible by "least squares". The value of m was determined from the period of vibration and the moment of inertia of the deflecting magnet, in combination with the value of H as observed by a coil-magnetometer at the time of the vibration experiment. The values of r were 22·5, 25, 30, 35, 40, 45, 50 cms.

In 1939 the deflection at 22·5 cms. has not been used in computing observed values of horizontal intensity.

VERTICAL INTENSITY COIL MAGNETOMETER. – This instrument, designed by the late Dr. D. W. Dye, F.R.S., for direct measurement of vertical intensity, 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, and was adopted as the standard for measurement of vertical intensity from 1929 January 1.

A full description of the instrument is published in *Proceedings of the Royal Society*, Ser. A, 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. vii). The current is taken from the battery that supplies the *Schuster-Smith* instrument.

The adopted value of the factor is $F = 3{\cdot}59643(1 - {\cdot}0000079\ t)$, t being temperature Centigrade.

The constants of the potentiometer in use during the year for the measurement of the current were verified at the National Physical Laboratory in February, 1939.

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 vanishes only 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 a small mirror on the test coil 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 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 intensity.

DECLINATION AND HORIZONTAL INTENSITY VARIOMETERS. - A complete description of the *La Cour*

variometer for horizontal intensity is to be found in *Publikationer fra det Danske Meteorologiske Institut* No. 11 (Copenhagen 1930). Some details are given here for general information. The magnet, of cobalt steel, is 8 millimetres long and weighs about 25 milligrammes, the magnetic moment being 3·2 c.g.s. units. It is suspended at right angles to the earth's horizontal field by means of a quartz fibre thickened at each end to form a small cone. Each cone fits into a conical brass socket having a fine slit in its side through which the fibre has passed. The cones are held firmly in the sockets by a little wax and the fibre is thus attached to its connections with sufficient rigidity. The focal length of the lens which projects the ray from the mirror attached to the magnet is 160 cms. Compensation for the effect of temperature on the moment of the magnet and the torsional constant of the quartz fibre is attained by optical means in which compensatory deflection of the emergent ray is produced by the proportional curving (under temperature changes) of a bi-metallic lamina which supports a prism controlling the ultimate direction of the ray. The method of extending the range covered by the variometer has already been mentioned (p. iv).

A small Helmholtz-Gaugain coil enveloping the variometer and having a field of 7·43 γ per milliampere is used both to orient the magnet correctly with respect to the earth's field and to determine the scale value of the record. The adopted scale value was 4·40 γ per millimetre to February 17, and 4·50 γ per millimetre from February 17. Owing to the fact that the optical ray does not meet the recording cylinder perpendicularly the scale is not quite uniform.

The general features of the declination variometer correspond closely to those of the vario-ometer just described. The scale value is 0′·90 per millimetre. Expressed as magnetic intensity the scale value would be 4·85 γ per millimetre at the present time.

The *La Cour* vertical intensity variometer is fully described in *Publikationer fra det Danske Meteorologiske Institut* No. 8. The recording magnet (which, including knife-edges and mirror, is fashioned from a single piece of cobalt steel and therefore has no possibility of relative movement among its parts) is oriented approximately at right angles to the magnetic meridian. Compensation for temperature is secured optically as in the horizontal intensity variometer. The scale value adopted is 4·00 γ per millimetre. It is determined with the small Helmholtz-Gaugain coil already mentioned.

THE QUARTZ-THREAD VERTICAL INTENSITY VARIOMETER. – This instrument has been fully described in previous volumes of Results from 1925 onwards and a detailed account is to be found in *Philosophical Magazine* vol. vii sixth series (1904) p. 393. Records were made throughout the year, but in view of the excellence of the results obtained with the La Cour instrument and the great steadiness of base-line values observed, the detailed measurement of the traces was discontinued at the end of 1938.

REDUCTION AND ARRANGEMENT OF RESULTS

The time used is *Universal Time* (U.T.).

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.

ABINGER MAGNETIC OBSERVATIONS, 1939.

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 intensity 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 intensity 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 base-line 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.

Tables I to III contain the hourly results for declination, horizontal intensity and vertical intensity 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 obtained from "all days", and from 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 derived from months 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 intensity and vertical intensity, corresponding inequalities in the north and west components and in 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 extremes of any inequality are indicated by heavy type.

The inequalities in the north, west and vertical components (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 are given the mean diurnal ranges in declination, horizontal intensity and vertical intensity for each month, for the year and for the seasons. The corresponding results for International 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 are 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 value on the day following.

Table XII contains the mean monthly and annual values of the components collected together. In

this table corrections have been applied, when necessary, to the values of H and Z 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 intensity.

Table XVI gives mean annual values of magnetic elements determined at the Royal Observatory, Greenwich, over the whole period of observation. Included in the table are results of early observations of declination made from 1818 to 1820. The table contains also the values 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. These dates in 1939 are February 24; March 28; April 17, 24; May 6; July 5; August 12, 22; October 3, 13. 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 intensity, and vertical intensity marked D, H and Z 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 decrease of west declination and increase of intensity in all cases.

GREENWICH METEOROLOGICAL OBSERVATIONS, 1939.

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 (which will be referred to as "The Christie Enclosure") there are the barometer, the thermometers used for ordinary eye observations, the recording wet-bulb and dry-bulb thermometers, thermometers for solar and terrestrial radiation, two earth thermometers, and two rain gauges; also the instrument for automatically recording pollution of the air.

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).

The observations comprise eye observations of the ordinary meteorological instruments, including the barometer, dry-bulb and wet-bulb thermometers, radiation and earth thermometers; continuous autographic record of the variations of the barometer, dry-bulb and wet-bulb thermometers; 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 celestial Pole; the general record of ordinary atmospheric changes of weather, including numerical estimation of the amount of cloud and estimations of "visibility"; daily measurement of the amount of sulphur dioxide polluting the air and registration and measurement of the pollution of the air by solid matter.

Universal Time (U.T.) – which at the Royal Observatory coincides with local Mean Solar Time – has been employed throughout the meteorological section, except in regard to the sunshine registers (See p. xvi).

STANDARD BAROMETER – The standard barometer is Newman No. 64. Its tube is 0·565 inch in diameter, and the depression of the mercury due to capillary action is 0·002 inch, but no correction is applied on this account. The cistern is of glass, and the graduated scale and attached rod 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 0·05 inch,

subdivided by vernier to 0·002 inch. 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. On 1917 April 3, it was transferred to the new magnetograph house in the Christie Enclosure, where the height above mean sea level is 152 feet (See also p. xvii).

The barometer is read at 9h, 12h (noon), 15h., every day and also at some convenient time during the evening. 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 pivot to the pin, and is set at right angles to the first lever. Both levers are approximately horizontal in their mean position. Just above the pivots of, and attached to the short lever is mounted horizontally, in a suitable frame, the moving mirror of the instrument. 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 in mounted in a vertical plane in front of the prism and brings the beam of light from the straight-filament electric 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 inches on the sheet for 1 inch change of height of the mercury column of the standard barometer. (Near the surface of the mercury, both arms of the siphon tube are 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 standard 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 9½ inches wide, a range of over 3 inches barometric motion can be included, and re-adjustment of position of the trace is unnecessary.

DRY-BULB AND WET-BULB THERMOMETERS – On 1937 December 31 the standard dry-bulb and wet-bulb thermometers and maximum and minimum self-registering thermometers, both dry-bulb and wet-bulb were transferred from the revolving open screen on which hitherto they had been mounted to a Stevenson screen of large dimensions which had been set up a few yards to the westward. On 1938 April 30 the old screen was erected in a new position on the north side of the Christie Enclosure, and daily readings, at 9h., of maximum and minimum temperature in the open screen were resumed.

The corrections to be applied to the thermometers in ordinary use are determined by comparison with the Kew Standard thermometer No.515.

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-bulb and wet-bulb thermometers are read at 9h., 12h. (noon), 15h., every day and also once during the evening. Readings of the maximum and minimum thermometers are taken at 9h., 15h., and near 21h., every day. The readings are employed to correct the indications of the recording dry-bulb and wet-bulb thermometers.

DRY-BULB AND WET-BULB RECORDING THERMOMETERS – The photographic apparatus which had been in use since 1887 was superseded on 1938 January 1 by a distant-recording thermograph. The action of this instrument depends on the pressure of mercury in a long flexible capillary tube of steel. The pressure alters the curvature of a Bourdon coil which in turn controls the position of a recording pen.

The thermometers exerting the pressure are mounted in the Stevenson screen which contains also the standard thermometers. The recording mechanism is set up in the basement of the building, about 40 feet distant, constructed for the Yapp equatorial telescope, and the steel tube transmitting the pressure is laid in earthenware pipes buried about eighteen inches beneath the surface of the ground. The traces (in ink) showing the variations in temperature are directly visible through a window. The scale-value is approximately 20°F per inch.

RADIATION THERMOMETERS – These thermometers are placed in an open position in the Christie Enclosure. 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.C.G.10221 until June 29, after which date it was replaced by No.C.G.10220. The thermometer for radiation to the sky is a spirit minimum thermometer Negretti and Zambra No.D.11197. The thermometers are laid on short grass, freely exposed to the sky.

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 ANEMOMETER – This self-registering instrument devised for continuous registration of the direction and pressure of the wind together with 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 shaft and pinion with a rack-work carrying a pencil; the latter marks on a flat sheet of paper moving horizontally. 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 near 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 strong winds. The scale is determined experimentally in pounds per square foot from time to time. The most recent determination was made on 1934 November 20. The recording sheet is changed daily at noon. The time scale is approximately 15 millimetres to the hour. The instrument was brought into use in 1840.

ROBINSON ANEMOMETER – This instrument, for registration of the horizontal movement of the air, is mounted above the roof of the Octagon Room and was brought into use in 1866. The four hemispherical cups are 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 also changed daily at noon.

The velocity recorded by the instrument is three times the actual velocity v of the cups. From test made by W. H. Dines at Hersham in 1889, on his 'whirling machine', it appeared that the relation between the velocity of the wind, V, and the velocity of the cups, v, is approximately represented by the expression $V = 4.0 + 2{\cdot}0\ v$ 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 $V = 3v$ would thus be too high when V exceeds 12. Since the two formulae 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. 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. From 1932 January all measures have been calculated from the revised formula.

RAIN GAUGES – During the year 1939 three rain gauges were employed. 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 volums previous to 1914.

Gauge No.6 is an 8 inch circular gauge placed with the receiving surface 5 inches above the ground. 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 on 1908 January 1, being fixed SW by W from No.6 with clear space of 6 feet between the rims.

The erection in the Christie Enclosure of a building to the north-west of gauges 6 and 8, 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 position of gauge No.8 is 4 feet north of the Standard gauge, No.6, which is read at 9h, 15h and in the evening. No.8 is read as a check on the readings of No.6 and is normally read at 9h only. The gauges are also read at midnight on the last day of each calendar month.

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 Christie Enclosure in 1899 January. The monthly amounts of rain collected in gauges Nos. 6 and 8 are given on page D 76 of the Meteorological Results.

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 1926 September 13 and was found to be in satisfactory condition. It 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 four selected sunshine cards taken from each of the months February and August 1939 have been made at the Meteorological Office. There showed very good 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 court yard, 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 hard driven from the north. The photographic plates used are ordinary quarter–plate (3¼ by 4¼ inches). Exposure is intended to be made during the period that the sun remains more than 10° below the horizon. The period is thus centred approximately on 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 selected for measurement are those of Polaris and δ Ursae Minoris. 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.

ARRANGEMENT OF RESULTS – The results given in the Meteorological Section refer to the day commencing at 0h. U.T., except in the case of the Night–Sky Record, 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 continuous records, excepting that the maximum and minimum values of air temperature are those given by eye observation of the ordinary maximum and

minimum thermometers, reference being made, however, to the autographic register when necessary to obtain the values corresponding to the limits "midnight to midnight". The hourly readings for the elements mentioned are measured direct from the traces and reduced so as to be based fundamentally, both as regards scale and zero, on the readings of the standard barometer, dry-bulb 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 1917 April before deducing the deviation from the mean of sixty-five years 1841-1905 (pp. D 44-66). 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 D 71 and D 72) have been calculated from the corresponding mean hourly values of air and evaporation temperatures (pages D 70 and D 71

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 5 with a table of average daily temperatures obtained by smoothing the accidental irregularities of the daily means derived 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 to *Results* for 1910.

In the case of maximum and minimum temperature the average of sixty-five years has been corrected for the presumed effect of the change of thermometer screen which took place on 1938 January 1. The corrections are given below. They were derived from comparisons between readings on the revolving stand and in a closely adjacent Stevenson screen, recorded daily during the period 1900 April to 1913 December.

	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
Maximum Temp.	° 0·0	° -0·3	° -0·6	° -1·1	° -1·7	° -1·8	° -2·1	° -1·9	° -1·1	° -0·5	° -0·1	° 0·0
Minimum Temp.	+0·5	+0·5	+0·5	+0·5	+0·5	+0·5	+0·5	+0·6	+0·6	+0·6	+0·5	+0·5

The daily register of rain contained in column 16 is that recorded by the gauge No.6, whose receiving surface is 5 inches above the ground (See p. xv). The continuous record of the Osler self-registering gauge shows whether the amounts measured at 9h., are to be placed to the same, or to the preceding day; and also gives, in cases in which rain fell both before and after midnight, the means of ascertaining the proper porportion of the 9h. amount which should be placed to each day. The number of days of rain given in the footnotes, and in the abstract tables, pages D 69 and D 76, 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 0·005 inch.

THE WIND - 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.

With regard to "Proportions of wind referred to the cardinal points" in the monthly summary on pp. D 44–67, formerly the figures were such that the whole month was represented by the number of days in the month. In the "Results" for 1933 a change was made, and the whole month is now represented by 100, so that the figures are the equivalent of "percentages".

The mean amount of cloud given in the footnotes on the right-hand pages D 45 to D 67, and in the abstract table, page D 69, is the mean found from observations made at 9h., 12h. (noon), 15h. and 21h. each day.

As regards the notation for clouds and weather, several changes were made in the 1934 volume in order to bring the symbols into general accordance with those in use at the British Meteorological Office.

The following are the symbols which have been adopted. Where a change from the symbol previously in use has been made, an asterisk (*) is placed after the word or words for which the symbol stands.

BEAUFORT WEATHER NOTATION

(modified in conformity with the usage of the British Meteorological Office)

b,	blue sky (less than one quarter covered with cloud)
bc,	sky partially cloudy (less than three-quarters covered)
c,	sky generally cloudy, but not completely overcast
d,	drizzle
e,	wet air without falling rain
f,	fog, with objects invisible distant more than 1100 yards
F,	fog, with objects invisible distant more than 220 yards
g,	gloom (*)
h,	hail (*)
i,	imtermittent
k,	storm (in combination with other symbols) (*)
l,	lightning
m,	mist, with limit of visibility between 1100 and 2200 yards
o,	sky overcast with unbroken cloud
p,	passing showers (*)
q,	squall (*)
r,	rain
s,	snow (*)
rs,	sleet (*)
t,	thunder
u,	threatening sky
v,	exceptional visibility; i.e. abnormal transparency of air
w,	dew (*)
x,	hoar frost (*)
y,	dry air; i.e. relative humidity less than 60 per cent
z,	haze (*)

A capital letter indicates "intense"
The suffix $_{o}$ indicates "slight"
A letter repeated indicates "continuous"

CLOUD FORMS (*)

Acu,	Alto-cumulus	*Cu,*	Cumulus
Ast,	Alto-stratus	*Cunb,*	Cumulo-nimbus
Ci,	Cirrus	*Nbst,*	Nimbo-stratus
Cicu,	Cirro-cumulus	*St,*	Stratus
Cist,	Cirro-stratus	*Stcu,*	Strato-cumulus

Fr, Fracto-

ADDITIONAL SYMBOLS

lu-ha,	lunar halo	*so-ha,*	solar halo
prhn,	parhelion		

ROYAL OBSERVATORY, GREENWICH.
ABINGER MAGNETIC STATION.

Results of Magnetic Observations

1939

TABLE I. - HOURLY MEANS OF MAGNETIC DECLINATION AT ABINGER

U.T.	0h	1h	2h	3h	4h	5h	6h	7h	8h	9h	10h	11h	12h	13h	14h	15h	16h	17h	18h	19h	20h	21h	22h	23h	24h
January																									
	10° + Tabular Quantities																								
	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′
1 *	55·4	56·4	56·9	57·0	56·9	56·7	56·4	55·8	54·8	55·5	56·5	57·3	58·5	57·3	56·2	56·0	57·1	57·6	57·5	56·9	56·7	56·2	55·9	56·3	
2	56·9	57·3	57·2	57·3	57·2	56·3	56·3	55·7	56·3	57·3	57·8	59·2	60·3	61·1	59·5	59·3	58·3	58·0	57·3	56·7	56·3	56·3	56·6	56·3	
3 *	56·9	57·9	57·3	57·3	56·3	56·2	55·4	55·4	56·2	56·5	57·7	58·3	59·7	59·3	57·8	58·0	58·2	58·0	57·3	56·9	56·3	56·3	56·4	56·3	
4	56·8	57·3	57·3	57·3	57·3	56·5	56·0	54·9	54·7	54·9	56·5	58·3	59·3	58·8	58·3	58·3	58·8	58·6	58·3	57·3	56·5	56·3	57·3	56·7	
5 **	57·2	57·7	57·9	58·1	57·3	56·0	55·7	55·3	55·6	56·7	58·0	58·3	60·1	60·4	59·1	60·0	60·8	59·5	59·3	57·7	55·5	54·3	54·2	54·5	
6	55·3	55·4	55·6	56·2	56·1	56·2	56·1	55·2	54·6	55·4	57·3	59·0	60·5	61·1	59·1	59·3	60·6	59·3	59·9	57·1	55·3	52·3	54·4	54·5	
7	55·4	54·7	56·2	56·3	55·3	55·7	55·6	55·4	56·2	56·1	56·4	59·3	59·9	58·9	57·3	58·3	59·1	58·0	57·3	56·8	53·7	53·5	54·0	53·3	
8	53·2	54·5	53·9	54·6	55·7	56·0	55·2	54·8	55·3	55·7	56·6	58·3	58·9	57·9	58·3	58·9	59·8	59·3	57·7	57·2	52·9	55·2	54·7	53·4	
9 **	52·3	51·5	51·7	53·4	53·6	54·8	57·1	57·3	57·4	57·4	58·1	57·3	57·3	56·7	55·9	57·0	58·3	58·8	58·8	57·3	58·4	54·9	54·3	54·3	
10	54·6	54·8	54·8	55·4	55·8	55·7	55·6	55·7	56·1	56·8	57·8	60·3	60·3	59·0	58·3	57·8	57·5	57·5	57·3	56·5	53·8	53·6	55·3	54·1	
11	54·4	54·9	54·0	55·0	54·8	55·0	55·4	55·4	55·7	56·6	57·6	58·6	59·4	58·6	57·9	57·9	57·5	60·0	58·5	58·3	56·4	55·4	55·5	54·5	
12	53·4	54·4	55·8	55·2	56·1	56·1	56·0	55·4	55·8	56·8	57·4	58·4	60·0	58·7	57·4	57·2	58·0	58·0	57·4	56·7	56·4	56·0	55·8	56·4	
13	55·5	54·8	55·0	55·0	55·7	55·5	55·4	55·4	56·4	57·3	58·2	59·9	59·8	58·6	57·4	58·4	58·4	58·4	57·4	56·8	56·9	56·4	55·9	54·0	
14	55·3	53·4	53·6	54·6	54·4	55·8	55·9	55·6	56·4	57·8	59·1	59·9	61·4	60·4	59·1	58·6	58·5	57·2	56·5	56·4	56·4	51·4	50·4	55·0	
15	56·4	56·6	56·4	57·6	58·0	56·8	56·6	56·6	57·2	56·6	57·4	59·0	60·6	61·0	60·0	58·4	57·6	56·9	56·7	56·0	56·0	56·3	56·4	56·4	
16	56·2	56·2	56·1	56·2	56·5	56·0	55·8	55·5	56·0	56·5	57·5	59·0	59·8	58·5	57·1	57·9	58·6	58·6	57·7	57·5	53·5	56·0	55·8	55·6	
17 **	54·0	53·5	51·0	54·5	55·9	57·5	56·9	56·5	55·5	55·0	56·0	57·5	59·9	58·6	59·0	57·5	57·3	57·5	56·5	56·0	54·9	51·9	55·5	55·2	
18	53·1	52·8	54·9	55·7	56·7	58·5	61·5	58·2	55·9	55·5	55·9	56·5	58·2	58·7	58·1	58·4	58·4	58·3	57·2	56·7	56·5	56·1	53·1	55·5	
19	56·0	56·4	56·2	56·6	56·7	56·6	56·0	55·5	55·5	55·3	56·5	56·9	57·9	58·4	58·4	58·4	58·3	58·1	57·5	56·5	55·5	54·5	53·9	52·5	
20	53·8	54·5	52·7	54·5	54·5	57·5	57·5	56·5	56·6	55·6	56·4	56·5	57·7	58·5	57·9	59·1	58·0	57·8	57·5	57·5	56·3	55·5	56·3	55·5	
21 **	53·8	53·7	56·2	56·5	57·1	56·5	56·5	56·5	56·9	58·5	58·5	58·5	60·5	59·5	60·5	60·1	60·5	58·1	50·5	56·7	56·9	55·8	56·0	56·2	
22 **	56·7	56·1	56·8	57·4	57·7	57·0	57·2	56·7	57·7	56·9	57·3	57·0	58·5	59·0	58·4	58·3	57·6	57·5	53·5	52·5	55·8	54·5	49·3	53·8	
23	52·4	55·0	54·8	56·4	56·5	57·5	56·7	56·5	56·8	56·9	58·9	59·4	59·5	59·5	57·5	57·0	58·0	57·4	56·5	55·9	54·9	54·5	55·7	56·0	
24	56·1	56·4	56·1	56·5	57·0	56·6	56·5	55·5	55·5	54·5	55·0	56·5	59·1	58·9	58·0	57·4	57·1	57·5	56·8	56·3	55·7	55·5	54·1	54·7	
25	57·5	56·4	55·8	56·0	56·4	56·2	56·2	55·6	55·8	56·1	56·4	58·5	58·3	58·4	58·0	57·3	57·3	57·1	56·9	56·1	55·9	55·5	55·9	55·6	
26 *	55·9	56·1	56·1	56·3	56·5	56·2	56·0	55·8	56·0	56·0	56·9	58·0	59·0	58·6	57·9	57·7	58·0	58·0	57·5	56·9	56·4	56·0	55·7	55·5	
27 *	55·5	55·6	55·9	56·0	56·4	56·3	56·0	55·5	55·1	55·5	56·5	58·5	59·7	59·5	58·9	58·2	58·0	58·0	57·7	57·1	56·5	56·0	55·7	55·5	
28	55·6	56·0	56·2	56·5	56·6	56·5	56·0	55·9	56·3	56·5	56·9	57·5	58·6	59·9	59·5	59·4	59·1	58·4	58·6	57·6	56·6	56·0	55·3	50·5	
29	48·6	51·5	54·0	55·1	56·5	56·9	56·6	55·6	56·0	56·0	57·0		58·2	58·5	57·9	57·5	57·5	57·6	57·6	57·0	56·8	56·3	54·5	54·4	
30 *	54·4	55·3	56·4	56·4	55·9	55·8	56·0	55·5	54·8	55·1	55·8	57·5	59·4	60·5	59·5	58·5	58·4	58·5	57·5	56·9	56·5	56·3	56·5	56·5	
31	56·5	56·3	56·3	57·0	55·8	55·8	55·8	55·1	55·1	55·5	56·5	56·8	59·2	59·1	59·0	58·5	58·1	58·1	57·4	56·7	56·6	56·5	56·5	55·6	
Mean	55·0	55·3	55·5	56·1	56·2	56·4	56·3	55·8	55·9	56·2	57·1	58·2	59·3	59·1	58·3	58·2	58·4	58·1	57·2	56·7	55·9	55·2	55·1	55·0	
Mean *	55·6	56·3	56·5	56·6	56·4	56·2	56·0	55·6	55·4	55·7	56·7	57·9	59·3	59·0	58·1	57·7	57·9	58·0	57·5	56·9	56·5	56·2	56·0	56·0	
Mean **	54·8	54·5	54·7	56·0	56·3	56·4	56·7	56·5	56·6	56·9	57·6	57·7	59·3	58·8	58·6	58·6	58·9	58·3	55·7	56·0	56·3	54·3	53·9	54·8	
February																									
	10° + Tabular Quantities																								
	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′
1 **	55·5	54·7	54·5	54·8	55·1	55·3	55·4	55·2	55·8	56·5	57·1	58·3	61·0	61·2	61·9	61·7	60·7	59·7	60·0	60·1	57·7	53·5	49·1	47·5	
2	54·1	52·5	48·5	52·1	53·8	53·7	54·0	55·5	55·5	56·5	58·1	58·5	58·3	59·4	58·5	57·7	58·5	60·7	52·5	58·1	56·6	54·3	49·5	53·0	
3	53·6	52·7	52·2	50·5	49·5	51·5	52·7	54·0	55·3	56·0	57·2	58·2	60·6	60·9	60·0	60·4	61·0	60·5	60·3	59·3	59·1	53·0	55·0	54·6	
4	53·1	53·3	53·5	54·4	55·5	54·5	54·5	55·5	55·0	55·3	57·1	56·9	58·3	58·1	58·8	58·1	57·9	57·6	56·9	55·6	55·3	55·3	54·9	54·1	
5	53·4	54·0	53·0	54·0	54·1	54·0	53·9	54·4	55·1	56·5	57·2	58·5	57·3	58·2	58·7	59·0	59·2	57·5	58·4	57·8	56·9	55·9	53·7	54·9	
6 **	53·7	52·9	53·5	55·3	53·6	54·7	60·0	55·0	55·0	55·9	58·3	58·9	58·8	61·9	58·5	57·6	54·6	55·5	58·5	55·5	51·9	50·0	48·6	46·3	
7 **	43·3	42·0	39·9	43·9	49·0	52·0	54·5	55·9	58·0	59·0	58·3	58·8	60·5	61·1	61·4	59·2	58·5	61·1	54·4	54·5	56·5	54·2	53·3	52·9	
8	51·5	51·5	52·6	54·2	54·9	54·8	55·4	55·6	55·9	55·5	55·2	55·0	56·1	57·9	58·2	58·0	58·0	58·1	57·9	56·9	58·0	54·7	50·7	51·4	
9	52·8	52·8	52·5	53·0	54·4	54·5	55·0	55·6	56·0	56·4	58·5	60·0	60·1	61·1	58·9	58·4	58·8	58·0	54·3	58·4	57·5	52·5	53·8	50·7	
10	50·0	52·5	51·9	51·1	52·5	53·6	55·1	55·3	54·9	55·0	55·8	57·4	60·8	61·0	61·9	60·5	59·9	56·7	56·5	56·3	55·5	55·9	55·2	53·5	
11	52·2	52·9	57·4	54·5	53·4	54·8	56·1	56·1	56·5	57·0	58·2	58·5	60·1	60·8	60·8	58·5	56·9	56·3	54·9	54·9	55·1	55·1	55·0	55·0	
12 *	55·3	55·5	55·2	54·5	54·6	54·9	55·0	55·1	55·5	55·7	56·0	56·9	58·3	58·5	58·4	58·1	58·0	57·5	57·0	56·5	56·0	55·5	55·5	55·5	
13 *	55·4	55·1	55·4	55·4	55·4	55·3	55·3	55·4	55·1	54·5	55·3	57·0	58·1	58·6	58·5	58·1	58·0	57·5	57·8	57·0	56·5	53·2	53·1	55·6	
14	56·0	55·6	55·9	55·5	55·5	55·1	54·6	55·9	55·0	54·4	55·2	56·7	57·1	57·5	57·3	56·9	56·4	56·5	56·5	54·7	55·8	56·0	56·0	56·1	
15	55·5	55·0	50·1	53·7	56·0	54·5	54·7	55·5	55·2	54·9	56·1	58·0	59·0	60·0	60·0	58·6	57·9	58·1	56·7	55·6	54·9	55·1	54·6	54·6	
16	55·1	55·4	55·8	56·2	56·5	55·0	55·6	56·2	55·5	55·0	55·5	58·0	59·4	59·5	58·1	60·5	58·5	55·0	55·8	55·5	54·8	51·0	54·0	55·5	
† 17	55·5	55·5	54·8	55·2	56·5	55·9	55·3	56·1	57·8	57·1	55·5	–	–	–	–	–	–	–	55·6	54·6	48·6	53·0	53·6	55·3	
18	55·4	54·8	54·2	54·6	54·3	54·6	55·6	55·6	57·6	56·0	55·2	57·0:	58·9	57·2	57·0	57·5	56·4	55·8	55·8	55·8	55·0	53·8	50·8	49·0	
19	51·8	53·0	54·6	54·8	55·5	56·8	56·2	56·1	54·8	54·5	55·4	57·8	59·8	58·9	58·2	57·0	55·9	55·9	55·8	54·9	49·1	53·6	54·4	54·7	
20	54·8	55·1	56·2	57·2	54·8	54·2	54·3	53·8	52·8	51·8	53·3	56·2	58·4	59·4	58·2	55·3	54·5:	56·4	55·5	54·5	54·5	53·7	53·8	54·5	
21 *	55·1	55·7	56·2	56·4	56·5	55·2	54·5	54·5	53·9	53·1	54·7	57·1	58·4	58·2	57·6	57·0	56·7	56·2	55·7	55·6	55·3	55·2	55·5	55·1	
22 *	55·4	55·5	55·5	55·5	55·5	54·8	54·5	54·1	53·6	54·5	56·6	58·5	60·0	59·6	58·7	57·5:	57·6	58·1	57·5	57·3	56·5	55·5	54·6	54·5	
† 23	54·4	51·5	50·2	51·7	53·0	52·9	53·9	54·1	53·9	54·1	56·0	57·5	–	–	–	–	–	–	–	–	–	53·0:	53·5	53·5	
24 **	51·5	51·1	50·5	49·4	52·7	54·0	54·1	53·5	53·0	54·0	57·0	59·8	61·7	61·6	63·1	63·2	63·5	64·9	68·5	69·5	57·5	30·0	36·8	40·1	
25 **	33·5	25·4	44·2	49·5	52·3	58·5	58·1	70·9	59·8	57·9	59·5	58·5	60·4	60·5	55·4	53·5	56·7	59·0	52·5	53·9	51·1	51·5	51·8	52·4	
26	53·0	53·5	53·1	53·1	53·5	53·5	53·4	52·9	52·5	53·1	55·3	57·8	58·5	58·4	57·1	56·3	55·9	56·4	55·5	55·2	54·7	54·9	52·2	53·4	
27 *	53·5	53·6	53·6	53·6	53·8	53·5	53·9	53·9	52·9	52·6	53·6	55·5	57·5	59·5	57·5	56·8	56·0	56·2	56·0	55·5	55·2	55·0	54·5	53·9	
28	54·1	53·9	54·1	54·1	54·1	53·6	53·5	53·1	52·1	51·5	52·8	56·5	57·5	59·5	60·1	60·8	58·5	57·2	56·2	55·7	55·0	51·5	50·1	51·5	
† Mean (26 days)	52·6	52·3	52·9	53·5	54·1	54·5	55·0	55·6	55·1	55·1	56·3	57·7	59·0	59·6	59·0	58·3	57·9	57·8	56·8	56·7	55·5	53·1	52·6	52·7	
Mean *	54·9	55·1	55·2	55·1	55·2	54·7	54·6	54·6	54·2	54·1	55·2	57·0	58·5	58·9	58·1	57·5	57·3	57·1	56·8	56·4	55·9	54·9	54·6	54·9	
Mean **	47·5	45·2	48·5	50·6	52·5	54·9	56·4	58·1	56·3	56·7	58·0	58·9	60·5	61·3	60·1	59·0	58·8	60·0	58·8	58·7	54·9	47·8	47·9	47·8	

* International Quiet Day. ** International Disturbed Day. † February 17 and 23 omitted. : Low Weight.

TABLE I. - HOURLY MEANS OF MAGNETIC DECLINATION AT ABINGER

U.T.	0h	1h	2h	3h	4h	5h	6h	7h	8h	9h	10h	11h	12h	13h	14h	15h	16h	17h	18h	19h	20h	21h	22h	23h	24h
March	10° + Tabular Quantities																								
	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′
1	52·6	56·1	53·4	52·3	52·6	51·5		53·6	52·7	52·3	53·6	55·1	57·6	60·1	63·2	62·6	62·5	63·1	61·1	61·3	60·2	58·6	54·6	49·6	45·6
2	51·6	51·8	46·5	45·0	48·2	53·5		53·5	52·6	52·0	52·5	54·6	59·1	60·2	61·6	59·6	58·6	56·9	55·8	55·6	55·6	54·7	54·6	54·4	54·6
3	55·2	54·8	53·8	53·6	53·8	53·8		53·6	53·6	53·6	52·6	55·1	58·1	60·6	63·9	63·6	61·2	56·5	54·6	55·0	52·7	52·1	52·5	51·3	48·6
4	48·1	47·0	52·9	42·6	45·4	49·3		52·5	52·2	51·1	54·6	57·4	59·6	60·4	61·1	59·2	57·6	58·3	56·6	53·8	51·6	52·8	53·1	50·1	49·3
5	49·1	50·5	52·1	51·7	52·1	52·2		52·9	52·9	53·6	54·3	57·4	60·0	61·6	61·6	59·7	59·7	58·9	57·8	55·8	52·6	53·6	54·6	49·6	50·4
6	52·4	54·3	53·4	53·6	53·9	52·4		53·2	52·4	53·4	56·6	57·4	59·4	61·7	62·1	61·4	59·9	56·3	54·4	55·4	53·4	51·1	50·4	51·3	53·4
7 *	52·8	51·7	51·3	51·8	53·8	52·2		52·8	52·3	52·3	52·8	55·5	57·3	60·3	60·1	59·3	57·5	56·1	55·3	55·3	55·4	55·3	54·3	54·3	54·3
8	51·8	48·5	49·8	48·9	51·5	51·9		51·8	51·9	50·8	51·3	53·9	57·3	59·4	60·3	60·3	58·9	57·8	58·3	57·7	54·9	56·3	54·9	54·7	54·7
9	54·2	53·2	53·3	54·8	54·2	52·8		53·9	54·4	56·8	56·2	57·1	58·7	59·3	60·3	58·4	57·4	56·2	55·9	55·0	52·3	52·7	54·1	54·2	53·9
10	53·8	52·3	51·4	54·2	54·0	53·8		54·4	52·9	52·6	52·7	53·9	56·3	59·9	60·4	60·4	58·3	56·8	56·3	55·3	55·3	54·7	49·6	52·8	53·8
11	53·9	53·8	54·0	54·3	54·5	54·5		54·8	54·3	53·6	54·4	55·4	56·4	58·7	63·4	59·7	58·9	52·3	55·1	56·0	55·4	55·0	53·9	51·5	51·0
12	49·2	51·3	53·1	54·9	55·8	54·8		54·4	53·6	52·1	52·5	53·5	56·1	58·7	59·9	59·9	58·9	57·7	57·1	55·7	49·7	51·7	54·5	52·1	49·1
13 *	51·9	53·9	53·5	53·5	53·7	54·0		54·4	53·6	54·0	55·9	57·7	57·5	59·5	60·2	58·9	58·0	57·2	57·0	56·4	55·8	56·1	55·7	55·5	54·4
14	53·9	53·7	53·5	53·5	53·6	53·5		54·1	53·7	53·5	53·5	55·6	59·2	60·5	59·1	58·5	58·1	57·4	56·5	56·0	56·0	55·1	54·0	54·1	54·9
15	54·7	54·5	53·8	53·4	53·0	53·5		53·5	52·2	52·3	53·2	56·5	58·8	60·0	59·8	58·5	57·3	54·5	52·9	55·5	54·9	53·9	54·5	55·3	54·0
16	51·6	54·2	57·3	56·6	51·1	52·1		52·8	53·6	55·1	56·0	58·5	57·6	61·0	59·0	57·7	56·7	52·5	53·2	54·7	55·1	51·2	52·1	52·6	57·1
17	54·1	53·6	52·4	52·8	54·8	55·0		55·1	53·8	50·8	50·8	53·2	55·8	58·3	59·8	60·5	58·9	56·9	55·9	54·6	50·9	52·5	54·5	54·9	53·9
18 *	54·0	54·0	54·1	54·0	53·9	53·6		53·6	52·4	51·6	52·0	53·8	56·5	58·0	59·4	59·0	58·0	56·4	55·5	55·2	55·0	55·0	54·7	55·0	55·0
19 *	55·0	55·0	55·0	54·9	54·5	54·4		53·9	52·4	51·3	52·5	54·8	57·6	59·9	60·5	59·8	58·1	56·6	56·0	56·0	55·1	55·4	54·6	52·6	53·9
20	54·9	54·9	58·7	53·2	52·9	53·1		52·9	51·7	50·4	50·8	54·2	58·7	61·2	61·4	60·0	58·5	57·3	55·9	55·6	55·0	55·0	54·9	54·8	54·7
21	54·3	54·1	54·0	54·0	54·0	54·1		55·7	55·5	53·3	53·9	55·4	59·2	60·9	61·3	60·9	59·9	57·4	56·9	56·0	50·5	53·9	54·2	55·0	54·9
22 **	53·8	53·9	54·6	56·3	52·3	49·6		51·8	51·3	49·8	51·7	55·2	57·8	62·8	63·4	61·7	62·6	54·9	54·8	49·1	51·1	50·8	51·2	50·6	51·2
23	53·2	53·3	57·8	54·5	52·3	53·4		53·3	51·9	50·9	51·9	52·9	56·4	59·3	62·5	63·8	60·9	59·1	57·8	56·3	55·3	51·8	46·9	48·7	51·4
24	52·7	53·9	53·7	54·6	55·0	54·7		53·6	51·4	50·1	50·3	51·3	55·7	59·7	62·3	60·4	59·1	58·3	56·7	55·1	54·2	53·7	52·7	53·7	53·7
25 *	53·1	52·9	53·5	53·1	52·9	52·9		52·5	50·6	49·5	51·0	53·8	56·8	58·6	60·0	59·0	57·9	57·1	56·1	55·3	55·1	54·8	54·2	53·3	49·5
26	49·2	51·0	52·2	51·9	51·6	51·8		52·5	50·6	48·8	50·8	53·2	56·9	60·9	62·6	63·7	62·7	60·8	58·1	50·6	53·6	49·6	48·2	51·7	50·3
27 **	50·5	54·6	54·6	47·4	47·0	50·2		51·0	51·3	51·2	51·5	53·5	56·6	59·6	61·0	61·1	60·6	59·7	58·7	60·6	46·6	54·8	50·3	44·7	48·1
28 **	49·0	52·9	51·7	51·5	49·7	51·1		52·6	48·9	48·9	51·9	55·6	57·6	62·3	66·6	66·7	67·6	65·6	57·6	54·6	47·6	45·6	40·1	44·6	39·6
29 **	40·2	37·4	44·8	49·6	54·0	49·8		56·6	55·1	55·6	54·4	54·2	57·6	57·6	58·6	58·4	55·6	49·3	50·6	50·6	53·0	46·3	45·8	50·1	49·9
30 **	46·5	46·6	52·8	51·6	50·0	51·6		52·6	52·4	51·5	53·0	54·2	55·6	58·6	60·6	59·2	59·2	57·3	51·3	53·9	52·7	51·6	46·0	48·1	49·6
31	55·6	51·6	49·6	52·6	50·6	50·5		49·7	48·6	49·0	51·6	53·3	56·2	58·3	59·6	60·6	58·5	56·8	55·9	54·3	50·6	52·0	50·8	49·0	47·1
Mean	52·0	52·3	53·0	52·5	52·5	52·6		53·3	52·5	52·1	53·0	54·9	57·6	59·9	61·1	60·4	59·3	57·2	56·0	55·2	53·5	53·2	52·2	51·9	51·7
Mean *	53·4	53·5	53·5	53·5	53·8	53·4		53·4	52·3	51·7	52·8	55·1	57·1	59·3	60·0	59·2	57·9	56·7	56·0	55·6	55·3	55·3	54·7	54·1	53·4
Mean **	48·0	49·1	51·7	51·3	50·6	50·5		52·9	51·8	51·4	52·5	54·5	57·0	60·2	62·0	61·4	61·1	57·4	54·6	53·8	50·2	49·8	46·7	47·6	47·7
April	10° + Tabular Quantities																								
	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′
1	45·6	45·6	46·9	50·6	51·8	54·0		54·7	54·4	54·6	55·6	56·1	58·6	58·6	60·0	61·6	57·8	58·2	53·4	52·6	47·1	50·6	49·0	50·5	51·1
2	50·1	47·8	48·4	51·8	54·3	52·6		50·6	48·6	48·1	50·6	53·8	57·2	59·6	61·0	60·2	59·6	59·0	53·9	51·6	52·6	51·6	51·6	49·6	47·6
3	50·8	51·7	51·8	49·8	49·3	51·2		50·6	49·2	51·9	53·6	53·7	57·5	61·0	62·7	61·8	61·7	59·1	57·3	51·5	51·0	52·6	50·2	48·4	47·8
4	46·5	49·3	50·8	54·2	49·1	50·4		51·0	49·8	50·7	52·2	54·2	56·3	58·6	60·6	59·7	58·3	57·2	57·2	57·5	52·7	52·0	46·7	49·7	51·3
5	52·7	53·2	51·7	56·7	55·2	52·4		51·5	50·0	48·7	49·2	53·4	58·1	60·7	64·6	61·7	59·7	57·3	55·8	54·8	54·4	54·3	53·7	54·0	53·7
6 *	53·7	53·5	53·7	53·7	54·3	54·8		53·8	51·5	49·7	49·2	50·5	54·2	58·7	60·3	59·8	58·0	56·2	55·3	54·9	54·7	54·5	54·6	54·5	54·0
7 *	53·6	53·7	53·7	52·8	53·1	53·7		53·2	49·9	48·5	48·7	50·7	54·3	59·1	61·7	61·3	60·7	58·2	56·7	55·3	55·1	53·9	53·7	54·3	54·2
8	53·6	53·6	53·7	53·5	53·5	54·2		52·9	51·3	50·1	50·8	52·2	56·7	60·9	61·8	61·2	58·7	56·7	55·7	53·5	54·9	54·7	51·8	55·3	52·8
9	53·4	53·6	54·6	51·6	51·6	51·9		51·1	51·2	49·4	50·6	52·7	55·6	59·9	60·6	59·6	57·8	56·6	55·6	47·7	53·6	54·2	52·0	52·2	51·6
10	55·7	49·9	49·6	51·4	54·5	55·2		53·1	50·4	50·9	55·0	55·1	56·6	60·3	58·8	59·4	56·2	53·6	53·5	53·6	45·3	51·5	53·5	54·4	58·6
11	53·0	51·0	52·1	53·1	54·6	52·2		50·6	50·3	51·9	53·7	55·6	56·4	59·0	60·9	58·6	56·1	54·0	49·1	45·6	50·4	48·1	50·9	50·2	51·1
12	53·7	57·1	55·5	57·6	54·6	54·6		52·7	52·4	51·6	53·1	54·3	56·1	57·8	56·6	55·7	54·6	54·4	54·2	54·5	54·6	54·0	52·6	52·3	52·1
13 *	54·3	55·2	52·2	51·5	51·5	51·7		51·7	51·6	50·4	51·0	52·6	55·1	59·6	61·1	61·0	59·1	57·7	55·7	53·2	52·5	53·6	53·6	54·1	54·6
14	54·2	55·1	55·4	54·4	51·8	51·1		51·1	50·2	49·3	50·2	54·1	58·5	61·6	62·7	61·6	59·3	56·6	55·1	54·6	53·9	52·9	52·0	52·0	51·7
15 *	54·1	54·4	54~1	53·3	52·5	51·6		51·2	49·7	48·7	49·9	52·6	56·2	59·0	60·4	59·3	57·1	55·7	54·2	53·6	53·5	52·6	53·6	54·5	54·6
16 *	54·7	54·2	53·7	53·4	52·8	51·8		50·8	49·7	48·6	48·1	51·9	55·7	59·7	61·6	60·7	58·7	56·9	55·7	55·1	54·8	54·6	55·7	55·8	54·0
17 **	53·9	52·5	49·8	53·0	43·6	37·8		38·6	46·3	44·8	48·3	52·9	60·8	64·4	68·7	71·8	69·3	67·8	60·8	56·1	55·1	57·2	52·8	50·8	52·3
18 **	52·8	52·8	52·4	51·9	50·8	49·8		47·8	45·3	49·0	51·8	54·4	57·3	59·8	61·4	62·8	58·8	57·7	52·4	53·1	49·0	50·1	51·4	50·1	44·7
19	48·8	47·8	49·8	50·7	52·1	52·0		51·9	49·7	48·4	50·4	53·9	58·8	64·3	65·2	63·8	61·6	60·8	53·8	54·8	51·6	51·8	49·2	51·0	48·8
20	50·2	51·4	52·8	47·5	50·1	49·3		48·8	47·5	48·8	52·8	55·4	61·3	61·8	60·8	61·4	58·8	55·8	55·4	53·8	51·2	49·2	49·3	49·5	47·8
21	47·8	50·7	53·3	50·7	50·4	52·2		53·4	49·6	47·4	48·8	52·0	56·4	59·4	61·8	59·8	57·0	56·4	52·1	51·9	53·1	51·0	51·6	52·4	49·3
22	49·7	50·0	47·6	49·4	51·6	50·6		49·4	48·4	48·0	49·8	52·4	57·0	62·8	64·4	64·0	62·4	60·0	58·4	50·0	52·9	52·3	52·4	49·8	48·9
23 **	49·3	48·5	48·5	50·5	51·5	57·5		59·0	41·7	42·5	49·5	50·9	56·7	62·5	64·1	66·5	64·0	57·5	58·2	53·5	50·5	55·0	54·5	54·5	54·1
24 **	54·2	52·5	52·2	51·5	50·6	50·8		49·1	47·5	46·2	47·5	50·1	54·8	58·5	60·5	59·5	58·5	57·5	57·0	52·5	55·5	38·0	38·1	43·2	35·2
25 **	32·0	49·0	58·5	47·7	45·5	44·8		45·5	47·5	52·5	53·0	53·5:	55·9:	57·1	58·5	60·5	55·0	52·9	53·7	50·7	49·5	50·8	51·8	50·5	48·1
26	54·5	53·5	53·7	52·9	51·2	49·5		48·5	47·5	47·5	49·5	52·5	56·7	60·1	61·5	60·9	59·0	57·1	54·7	53·0	53·0	53·1	52·9	53·2	52·7
27	52·5	52·4	52·3	51·8	51·4	50·2		48·7	47·2	46·5	48·4	52·0	56·0	60·4	61·0	59·4	58·1	55·7	53·6	53·4	53·4	53·6	55·0	47·2	45·4
28	44·8	50·0	49·3	46·3	46·3	48·2		48·8	47·8	47·3	49·9	53·3	56·9	59·7	61·8	59·3	56·0	55·4	54·2	52·8	51·3	49·8	50·1	49·6	52·3
29	51·8	51·7	51·3	53·3	49·8	47·3		46·7	44·9	45·8	48·9	52·3	57·0	58·6	58·8	57·1	56·3	55·3	54·3	52·1	50·7	51·2	52·5	53·3	53·3
30	51·7	52·3	52·3	51·3	50·3	49·2		48·3	48·3	48·3	49·8	53·1	56·3	58·6	59·4	59·3	57·3	56·7	56·5	52·1	52·5	53·1	53·6	53·4	53·3
Mean	51·1	51·8	52·1	51·9	51·3	51·1		50·5	49·0	48·9	50·7	53·1	56·8	60·1	61·4	61·0	58·9	57·1	55·1	53·0	52·4	52·1	51·7	51·7	50·8
Mean *	54·1	54·2	53·5	52·9	52·8	52·7		52·1	50·5	49·2	49·4	51·7	55·1	59·2	61·0	60·4	58·7	56·9	55·5	54·4	54·1	53·8	54·2	54·6	54·3
Mean **	48·4	51·1	52·3	50·9	48·4	48·1		48·0	45·7	47·0	50·0	52·4	57·1	60·5	62·6	64·2	61·1	58·7	56·4	53·2	51·9	50·2	49·7	49·8	46·9

* International Quiet Day. ** International Disturbed Day. : Low Weight.

TABLE I. - HOURLY MEANS OF MAGNETIC DECLINATION AT ABINGER

U.T.	0h	1h	2h	3h	4h	5h	6h	7h	8h	9h	10h	11h	12h	13h	14h	15h	16h	17h	18h	19h	20h	21h	22h	23h	24h
May																									
	10° + Tabular Quantities																								
	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′
1 **	53·4	53·5	54·4	52·7	51·0	49·0	46·4	45·8	47·5	51·0	56·2	62·7	68·4	69·9	65·6	62·9	63·4	58·0	56·4	53·2	49·4	46·4	48·7	50·3	
2 **	50·4	44·4	44·4	49·7	48·1	51·9	49·5	56·1	54·4	50·4	54·4	56·4	60·6	58·8	57·6	58·4	54·9	52·9	52·7	50·6	48·6	50·4	49·9	50·4	
3	51·1	54·0	49·6	48·4	49·7	47·7	48·2	47·9	49·4	52·4	54·0	55·6	58·7	59·0	58·4	55·4	53·4	52·8	52·5	51·4	49·7	52·2	53·9	54·4	
4	50·3	51·6	51·2	50·6	48·8	48·1	47·2	45·7	45·9	47·3	49·3	55·8	58·3	59·3	58·3	56·6	55·3	54·3	54·3	52·8	53·2	54·2	53·7	53·3	
5	52·8	53·2	53·2	53·2	52·5	53·2	52·9	49·8	47·7	49·2	51·7	54·8	58·6	61·2	61·0	59·6	57·3	56·2	56·2	55·3	55·7	56·5	57·1	53·6	
6 **	54·3	51·3	51·1	50·2	48·4	46·2	45·2	47·0	47·0	49·2	51·7	56·6	51·5	54·3	52·1	53·3	58·2	57·2	54·2	52·8	49·7	50·2	47·2	47·2	
7 **	48·1	51·9	45·3	45·3	55·8	54·8	48·3	52·3	52·3	53·1	53·9	58·3	59·4	59·4	57·7	54·6	54·9	55·4	55·4	54·2	53·0	53·2	52·9	50·5	
8 **	57·8	54·6	49·6	50·0	48·5	49·5	51·7	54·5	54·5	51·5	53·7	54·5	56·6	58·6	56·6	55·6	56·7	56·3	53·2	52·1	52·8	50·5	51·5	51·6	
9	48·6	49·8	49·7	54·6	48·4	49·1	49·5	50·5	50·5	53·0	53·6	54·8	56·6	58·3	57·1	56·0	54·1	51·6	54·0	54·5	54·0	53·6	53·4	52·2	
10	52·2	53·8	53·0	52·6	51·6	50·5	49·5	48·6	49·2	50·5	53·1	55·4	56·5	57·6	57·2	57·2	56·6	53·6	53·5	54·4	54·5	54·2	53·6	52·7	
11 *	52·6	51·6	50·6	50·2	49·6	49·6	49·0	48·9	50·1	51·1	53·2	55·6	55·4	55·6	54·6	54·3	54·0	53·8	53·5	53·7	53·6	54·0	53·9	53·6	
12 *	52·7	52·1	51·6	51·2	50·9	49·6	48·4	48·6	48·8	50·6	52·6	55·5	57·5	58·2	57·8	57·0	56·0	54·6	53·3	54·2	54·6	54·4	54·4	53·4	
13 *	53·0	52·4	52·1	51·4	50·2	49·6	49·2	50·5	53·1	52·7	54·1	56·6	59·1	57·6	57·6	56·6	56·2	55·3	54·2	53·8	53·1	51·8	52·4	53·4	
14 *	53·1	52·9	52·8	52·1	51·1	49·6	50·1	50·3	50·6	52·1	54·6	57·6	59·3	59·3	58·6	57·9	57·4	55·6	54·6	54·6	54·6	54·4	54·4	53·1	
15	52·6	52·1	51·6	50·6	49·6	49·2	48·4	46·6	47·6	50·4	53·6	57·6	60·2	62·2	60·5	59·0	56·6	55·1	54·4	54·0	53·5	53·0	52·9	54·6	
16	52·6	50·9	47·9	53·0	50·3	47·8	47·1	45·6	52·6	55·0	54·4	56·7	59·6	58·1	56·6	54·6	53·7	52·9	52·6	52·6	53·1	53·2	52·2	52·2	
17	51·6	51·8	51·3	51·0	48·6	46·6	45·6	46·4	47·2	49·2	52·2	56·4	59·6	60·3	59·8	57·9	55·6	53·4	50·4	48·2	51·9	53·1	51·6	52·6	
18	51·5	48·5	48·9	47·5	45·0	44·9	45·5	45·5	47·5	50·5	55·5	59·5	64·0	64·1	62·3	59·5	56·5	53·3	52·6	52·7	53·0	52·8	50·5	49·4	
19	47·1	46·2	46·6	48·0	48·1	48·5	50·4	48·1	49·4	51·4	54·0	58·4	61·1	61·5	60·8	58·7	57·4	55·5	51·9	51·9	52·5	51·9	47·5	49·0	
20	48·1	47·3	47·3	50·3	54·3	53·7	48·5	47·8	46·7	48·7	53·0	58·5	61·4	63·0	62·8	61·4	57·3	54·7	53·9	52·9	51·6	52·5	53·4	51·5	
21	47·5	48·8	49·3	47·9	47·1	47·1	46·5	45·7	45·9	46·7	50·3	55·5	60·6	64·4	65·0	62·5	61·0	57·5	53·4	51·0	51·1	52·7	48·2	50·5	
22	50·2	47·0	47·5	50·6	49·7	50·8	48·2	46·5	46·9	52·4	54·9	57·1	61·8	62·5	62·9	60·5	57·8	56·5	54·6	54·2	54·3	54·5	51·6	44·5	
23	47·9	49·1	49·0	46·5	47·5	46·9	47·5	46·7	47·7	49·5	52·5	54·6	57·9	58·5	58·0	58·5	57·0	55·0	51·1	51·2	51·2	50·6	51·4	47·7	
24	49·0	48·5	51·8	46·9	49·6	47·1	50·1	49·0	49·1	50·5	52·5	54·0	56·8	58·0	60·7	59·2	57·5	55·9	55·6	50·8	49·6	47·0	49·0	51·3	
25	54·0	48·4	48·3	50·4	47·3	46·9	47·5	47·3	48·0	49·9	53·6	55·5	57·1	57·9	60·0	56·5	54·5	54·5	54·5	54·5	51·0	49·9	52·0	50·3	
26	51·0	52·5	46·6	46·5	48·8	50·0	49·2	51·0	52·1	53·5	55·0	56·7	58·1	59·5	59·0	55·8	54·0	54·0	53·5	51·2	52·0	52·8	51·7	49·8	
27	50·5	51·2	52·0	49·5	48·6	49·8	47·4	47·0	47·5	48·5	51·1	54·3	57·3	58·8	58·1	56·6	53·5	52·3	51·5	52·0	53·0	53·5	56·0	48·1	
28	46·6	49·0	45·9	44·0	42·7	42·6	42·2	43·4	50·0	51·5	55·5	59·6	60·2	60·0	58·9	57·2	55·5	54·1	53·7	53·8	53·7	53·6	52·6	51·5	
29	46·5	43·6	42·2	37·7	42·5	42·4	42·6	43·1	51·6	55·6	56·4	59·1	61·6	59·0	58·1	57·1	57·2	56·6	53·1	52·8	52·5	51·3	54·5	53·4	
30	53·1	52·7	52·9	51·2	50·4	48·6	49·2	50·1	50·8	52·8	54·1	58·1	59·6	60·6	58·6	56·6	54·6	54·2	53·2	53·4	53·2	53·6	53·5	53·4	
31 *	52·5	52·5	51·7	51·7	50·4	46·6	45·2	45·4	47·0	48·0	50·7	55·5	59·1	60·6	60·2	58·5	56·5	54·5	53·1	53·0	53·0	51·9	49·7	51·5	
Mean	51·1	50·6	49·7	49·5	49·2	48·6	47·9	48·1	49·3	50·9	53·4	56·7	59·1	59·9	59·1	57·6	56·3	54·8	53·6	52·8	52·5	52·5	52·1	51·3	
Mean *	52·8	52·3	51·8	51·3	50·4	49·0	48·4	48·7	49·9	50·9	53·0	56·2	58·1	58·3	57·8	56·9	56·0	54·8	53·7	53·9	53·8	53·3	53·0	53·0	
Mean **	52·8	51·1	49·0	49·6	50·4	50·3	48·2	51·1	51·1	51·0	54·0	57·7	59·3	60·2	57·9	57·0	57·6	56·0	54·4	52·6	50·7	50·1	50·0	50·0	
June																									
	10° + Tabular Quantities																								
	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′
1	52·8	53·4	51·4	50·2	49·5	47·1	44·4	43·6	44·1	46·2	50·3	54·1	57·5	59·0	60·4	60·3	58·9	59·1	57·5	56·4	54·5	53·0	53·1	53·3	
2	53·7	49·4	52·4	52·4	52·4	48·8	45·4	44·1	46·1	48·3	50·9	55·2	58·4	59·3	59·8	58·8	58·0	55·4	55·3	54·0	53·7	54·4	52·4	53·0	
3	52·6	52·4	51·9	50·2	50·1	48·9	46·9	47·0	48·5	48·8	52·4	55·4	57·2	58·4	58·3	56·9	54·8	52·3	52·0	51·9	52·4	51·4	52·9	53·2	
4	54·9	55·9	53·1	52·1	52·9	51·6	46·6	46·9	46·4	46·5	49·5	52·8	57·9	60·3	60·4	58·6	54·8	53·9	52·7	52·3	52·9	53·0	53·1	53·6	
5	53·9	53·4	53·8	54·5	51·4	49·7	46·4	45·0	47·2	49·2	52·5	56·4	60·3	61·4	62·1	59·4	57·4	54·4	53·4	53·4	53·4	53·4	52·7	52·4	
6	50·6	51·8	52·9	53·4	53·9	51·4	47·9	45·4	44·4	46·4	49·4	53·9	56·5	58·7	59·4	58·4	56·3	54·1	52·6	52·9	53·4	53·5	52·9	53·3	
7 *	54·2	53·3	51·9	50·7	49·4	47·8	46·4	45·0	45·1	47·4	50·5	55·0	57·2	57·4	56·6	56·4	54·9	54·0	53·4	53·4	54·3	53·7	53·4	53·3	
8 *	52·4	53·0	53·4	50·9	49·9	47·9	45·9	46·7	48·9	50·5	53·3	55·4	57·5	58·5	58·9	58·5	57·6	56·0	54·1	53·3	53·3	53·4	53·4	53·3	
9 *	52·8	52·4	51·7	51·2	50·6	49·7	48·1	45·5	45·6	47·3	50·3	53·1	55·3	56·6	57·3	57·3	56·3	54·8	53·6	53·3	53·4	53·7	54·2	54·2	
10	52·2	52·1	51·2	51·9	49·3	46·3	45·4	44·4	45·4	47·7	50·5	54·3	56·8	58·3	58·7	58·3	57·2	56·4	55·5	55·3	55·9	55·5	55·0	54·2	
11 *	52·9	52·8	51·9	52·1	50·5	49·2	47·4	46·3	46·3	48·2	50·1	52·8	55·2	56·7	57·7	57·2	55·9	53·4	53·1	53·3	53·6	52·6	53·0	53·3	
12	52·0	52·3	53·2	51·3	48·2	46·3	45·4	45·7	47·2	49·3	52·8	57·3	59·3	59·3	58·5	57·4	55·9	55·2	54·3	54·2	54·4	54·4	54·2	52·9	
13	53·4	53·6	49·5	46·7	46·3	47·3	45·2	46·9	48·4	49·4	52·8	55·9	58·3	59·6	60·9	59·3	56·5	57·8	59·3	59·5	58·1	56·3	53·3	51·2	
14 **	46·3	39·8	38·9	41·1	42·6	46·3	45·3	45·3	51·7	55·3	60·7	62·3	61·9	61·3	60·2	59·3	55·9	53·9	53·8	54·3	52·6	52·3	53·5	52·8	
15	49·2	47·7	47·2	47·2	49·2	47·1	45·2	46·8	48·4	51·4	54·4	57·2	56·2	55·7	57·5	55·2	55·2	53·7	52·2	54·2	51·7	51·8	50·7	52·8	
16 **	50·6	48·3	50·1	51·5	53·6	51·3	50·5	48·4	49·7	51·2	52·8	56·0	60·2	60·0	60·1	59·3	55·2	54·5	53·7	53·8	53·2	53·2	53·0	52·7	
17	52·4	51·2	50·3	50·1	48·8	46·6	45·8	46·2	47·5	49·4	51·7	54·2	56·4	57·1	56·7	55·8	55·3	55·2	54·3	54·6	53·8	52·9	51·6	51·7	
18	51·2	50·4	47·3	44·1	44·8	46·0	46·2	46·0	47·7	49·6	53·2	56·2	60·3	63·2	61·4	60·8	59·7	57·7	54·2	51·2	53·2	53·1	53·0	54·3	
19 **	50·0	47·3	47·0	47·4	49·4	47·8	46·5	44·5	42·3	44·6	48·8	54·6	60·0	61·7	62·4	60·9	57·7	55·3	52·7	52·4	51·3	52·3	51·5	46·2	
20	46·3	50·0	51·5	51·9	52·7	50·6	48·7	48·7	48·1	47·4	49·4	52·9	55·8	56·8	59·2	58·3	57·2	55·6	53·4	52·4	52·3	51·8	51·4	51·3	
21	50·5	51·7	54·8	51·7	52·0	48·5	47·5	44·5	47·1	47·2	49·4	52·6	55·8	57·9	58·5	54·2	54·8	54·5	54·4	52·4	48·4	50·6	50·7	51·8	
22	51·0	50·7	48·9	47·9	50·9	48·6	46·6	47·9	47·9	49·6	51·1	53·7	54·6	54·6	55·2	55·4	54·9	53·6	53·1	53·0	53·7	52·3	51·5	50·2	
23	50·7	52·9	48·9	47·1	46·7	46·6	45·8	45·6	47·0	47·5	49·1	52·6	58·7	59·3	59·1	58·6	57·6	55·3	53·4	51·1	51·9	51·7	51·5	51·3	
24	50·4	50·5	54·3	51·9	48·1	47·1	45·6	45·7	46·8	48·7	50·8	54·1	57·1	58·0	58·6	57·9	56·7	55·1	53·7	52·8	52·7	52·6	49·6	51·6	
25 *	49·7	49·9	50·0	50·6	49·4	48·7	48·6	47·7	47·1	46·8	48·0	51·7	56·6	58·4	58·9	57·8	56·6	54·6	53·6	52·9	52·6	50·6	50·1	51·6	
26	51·6	50·8	50·6	49·6	46·6	44·6	44·6	44·6	45·1	48·4	49·6	52·6	55·6	58·5	59·1	57·6	57·6	55·6	54·6	53·2	55·6	53·1	53·2	52·6	
27 **	49·6	50·6	51·6	51·2	52·6	49·6	48·6	48·2	47·2	48·1	53·1	56·6	58·6	60·0	59·6	58·6	56·4	53·1	52·2	52·4	53·0	54·0	53·5	52·5	
28	51·9	51·4	50·6	50·3	49·7	48·6	47·2	47·3	47·3	49·2	52·2	55·3	57·6	58·1	58·1	58·6	56·6	56·6	53·6	54·2	53·7	51·9	49·3	50·7	
29 **	51·8	49·7	51·8	57·6	51·6	51·4	47·6	49·2	49·6	51·6	53·6	56·4	58·5	58·2	59·4	56·6	52·1	52·8	52·3	52·6	52·6	53·1	53·4	53·1	
30	54·9	55·2	51·6	49·2	48·2	49·5	48·7	47·6	48·4	52·2	56·2	57·6	60·6	59·6	58·1	56·8	56·5	54·8	53·6	53·4	53·8	53·2	51·8	50·6	
Mean	51·6	51·1	50·8	50·3	49·7	48·4	46·7	46·2	47·1	48·8	51·6	55·0	57·7	58·7	59·0	58·0	56·4	55·0	53·9	53·4	53·3	53·0	52·4	52·3	
Mean *	52·4	52·3	51·8	51·1	50·0	48·7	47·3	46·2	46·6	48·0	50·4	53·6	56·4	57·5	57·9	57·4	56·3	54·6	53·6	53·2	53·4	52·8	52·8	53·1	
Mean **	49·7	47·1	47·9	49·8	50·0	49·3	47·7	47·1	48·1	50·2	53·8	57·2	59·8	60·2	60·3	58·9	55·5	53·9	52·9	53·1	52·5	53·0	53·0	51·5	

* International Quiet Day. ** International Disturbed Day.

TABLE I. - HOURLY MEANS OF MAGNETIC DECLINATION AT ABINGER

U.T.	0h	1h	2h	3h	4h	5h	6h	7h	8h	9h	10h	11h	12h	13h	14h	15h	16h	17h	18h	19h	20h	21h	22h	23h	24h
July																									
	10° + Tabular Quantities																								
	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′
1	51·9	51·5	50·6	51·0	49·6	48·5	48·1	49·0	47·5	49·6	52·5	55·5	58·2	58·9	58·6	56·2	54·1	53·3	53·2	53·0	52·7	52·5	53·4	53·4
2	51·9	52·6	49·9	49·1	50·0	50·6	49·3	45·7	45·5	47·5	50·4	53·8	55·6	56·9	58·6	57·2	55·8	54·1	52·6	52·1	53·2	52·7	52·6	52·6
3 **	53·2	51·8	50·1	55·2	46·6	47·6	47·6	47·7	50·7	51·8	54·2	57·1	59·6	62·6	67·2	70·2	64·1	60·6	52·9	56·2	55·6	55·1	53·7	55·1
4 **	55·1	49·8	48·5	47·5	47·1	47·1	45·5	45·0	45·6	46·6	48·6	52·2	54·8	57·6	60·6	61·8	60·5	57·3	57·5	53·6	51·3	50·6	48·6	49·6
5 **	49·6	48·6	51·2	48·3	48·5	55·5	60·7	57·4	54·0	51·0	52·3	56·3	63·0	62·6	67·8	65·6	59·6	61·2	59·6	56·6	56·1	49·6	49·0	49·0
6	46·1	45·6	51·6	51·3	47·6	47·6	46·9	44·4	42·5	42·6	44·6	49·8	53·4	56·1	56·6	56·2	54·6	53·6	52·2	51·6	51·6	51·9	52·4	52·0
7 *	51·3	50·4	50·7	49·6	48·7	47·8	46·3	45·6	46·5	48·6	51·5	55·5	56·8	57·1	57·7	56·8	55·6	54·2	52·9	52·6	52·2	52·3	51·8	52·1
8	51·5	51·5	50·5	49·5	48·4	46·8	46·0	45·5	45·5	47·1	50·0	53·0	54·5	55·5	57·0	56·5	55·3	54·5	53·7	53·5	53·5	53·5	53·5	53·4
9 *	51·1	52·5	50·5	48·0	47·4	46·0	45·5	45·2	47·5	50·5	53·7	57·6	60·9	61·2	60·1	57·6	55·5	54·3	54·2	54·0	53·9	53·5	52·4	51·8
10 *	52·1	52·5	51·8	49·5	47·3	46·0	45·3	45·5	46·9	49·7	51·3	53·2	55·2	54·8	54·4	54·3	54·4	54·5	54·8	54·5	54·0	53·3	52·3	51·5
11	50·9	50·4	50·0	48·9	47·2	45·0	43·7	43·1	43·4	45·6	49·8	54·7	58·4	61·4	58·4	55·8	54·4	55·4	55·9	53·4	53·5	53·0	52·0	51·3
12	50·9	50·4	50·0	49·0	47·5	46·0	46·4	48·0	48·7	50·9	53·4	55·3	58·0	59·3	58·4	57·5	57·4	55·9	52·8	54·1	54·2	53·4	52·3	50·6
13 *	50·7	50·6	50·0	49·9	48·2	46·4	46·1	46·8	48·3	50·8	53·3	56·0	57·4	58·6	58·3	56·3	54·5	53·1	52·1	52·0	53·0	53·8	53·5	52·3
14	52·1	52·3	51·9	50·2	50·0	50·7	50·8	54·9	53·3	50·7	52·2	57·8	57·5	58·7	57·7	58·2	55·4	53·2	52·9	52·4	52·5	47·6	44·6	45·2
15	51·1	50·0	49·1	48·0	46·9	45·4	42·9	43·2	45·1	46·9	49·6	53·5	56·3	57·1	57·9	56·2	55·5	55·2	54·8	53·3	52·3	52·6	53·2	49·9
16	50·1	49·5	50·3	51·1	46·1	43·0	43·1	44·1	45·7	49·4	53·1	56·2	58·5	59·3	59·1	58·6	56·0	57·4	55·4	50·8	44·5	46·1	50·0	50·9
17	47·9	43·9	44·1	47·8	45·3	45·0	47·0	49·1	47·1	48·8	52·4	57·8	58·9	59·4	57·2	54·6	52·5	53·3	52·6	51·6	51·2	50·2	50·0	47·7
18	49·1	50·1	47·1	45·7	46·9	46·1	45·2	44·0	43·7	46·1	50·1	54·5	58·2	58·6	58·6	59·0	57·9	55·2	52·1	51·7	51·1	50·9	50·1	50·0
19	50·0	51·3	50·5	49·6	48·6	47·6	47·5	46·6	46·2	48·1	51·1	55·1	58·4	60·5	61·5	60·6	58·1	55·1	54·1	52·6	52·5	52·0	48·8	46·6
20 **	47·5	43·2	42·7	42·3	42·2	49·9	50·8	47·9	46·6	49·6	52·6	55·9	60·2	62·1	62·3	60·0	60·8	58·9	54·7	52·1	48·2	49·9	51·0	51·3
21 **	50·5	50·0	50·7	50·7	48·8	46·9	45·8	45·5	46·3	47·6	51·0	54·5	59·5	64·0	62·4	62·0	57·4	51·8	51·2	52·9	53·6	53·9	52·9	51·8
22	50·9	52·0	52·4	51·0	51·1	49·2	49·8	49·0	47·4	49·0	52·3	56·2	57·8	56·2	55·0	54·6	54·4	53·7	53·1	53·1	52·4	52·0	50·5	51·8
23	52·2	47·9	47·8	47·9	45·9	44·8	44·9	46·4	47·5	49·6	50·0	51·8	53·7	55·6	55·8	54·7	53·0	52·5	51·9	52·0	51·8	51·6	51·4	51·0
24	50·5	50·0	48·9	48·0	47·1	45·6	45·6	46·4	48·4	50·8	52·9	56·9	60·4	58·8	56·8	55·9	53·9	52·6	52·5	52·9	52·9	52·4	52·1	51·1
25	50·5	50·5	47·9	48·8	48·3	49·4	50·4	51·4	51·2	49·4	50·5	52·9	55·9	55·5	54·9	53·4	51·9	50·9	51·4	51·9	52·1	51·9	51·9	51·4
26	50·9	50·3	49·8	48·9	48·9	54·4	55·1	53·4	54·9	60·7	57·0	57·9	61·3	60·3	59·9	56·9	55·4	52·7	52·3	51·9	51·4	50·9	51·9	50·6
27	50·1	51·6	50·7	50·8	49·6	46·8	46·2	46·8	48·5	48·8	51·7	54·2	55·4	55·8	54·4	53·2	51·6	50·4	51·3	51·6	51·2	50·3	44·8	47·8
28	48·5	49·3	48·8	48·4	47·8	47·3	50·2	50·8	49·4	50·8	53·0	56·1	57·4	57·6	56·8	54·5	52·1	51·5	51·2	51·8	51·8	52·4	51·0	49·1
29	49·5	49·0	49·0	49·3	49·7	47·7	45·2	44·0	44·7	46·8	49·8	53·6	56·1	57·5	55·7	54·2	52·8	52·2	51·2	49·6	50·8	51·7	51·5	51·3
30 *	51·5	51·8	50·9	50·0	51·0	48·4	46·4	45·9	48·0	51·1	53·7	56·2	58·2	59·2	57·9	55·9	53·8	50·8	51·2	51·7	51·6	51·6	51·4	50·7
31	50·7	49·8	50·1	49·7	48·9	47·8	46·7	47·3	47·7	48·6	50·3	54·3	57·7	58·6	57·7	55·4	53·2	51·5	51·5	51·7	50·7	50·7	50·2	49·8
Mean	50·6	50·0	49·6	49·2	48·0	47·6	47·5	47·3	47·6	49·2	51·6	55·0	57·7	58·6	58·6	57·4	55·6	54·2	53·2	52·7	52·2	51·7	51·1	50·7
Mean *	51·3	51·6	50·8	49·4	48·5	46·9	45·9	45·8	47·4	50·1	52·7	55·7	57·7	58·2	57·7	56·2	54·8	53·4	53·0	53·0	52·9	52·9	52·3	51·7
Mean **	51·2	48·7	48·6	48·8	46·6	49·4	50·1	48·7	48·6	49·3	51·7	55·2	59·4	61·8	64·1	63·9	60·5	58·0	55·2	54·3	53·0	51·8	51·0	51·4
August																									
	10° + Tabular Quantities																								
	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′
1	50·1	48·7	48·3	49·2	49·1	48·3	47·4	46·6	47·7	50·0	52·6	56·3	59·2	60·1	58·7	56·0	53·2	50·7	49·9	51·1	51·1	51·2	50·7	50·7
2 *	50·8	50·4	50·3	49·7	48·3	46·1	45·9	46·2	47·3	49·2	51·8	54·3	57·3	58·8	58·9	56·8	54·2	51·8	50·8	51·2	51·3	51·4	51·0	50·6
3 *	50·4	50·2	49·8	49·3	48·5	46·9	46·3	46·0	46·5	48·8	51·8	55·2	56·6	57·2	56·3	54·1	52·2	50·8	51·5	52·3	51·9	51·8	52·0	51·8
4	52·0	51·6	51·2	50·8	48·3	46·8	45·9	46·0	46·5	48·4	50·0	53·8	56·5	57·9	57·7	55·4	52·7	51·8	51·1	52·0	52·4	52·0	50·5	50·3
5 *	50·5	50·0	49·1	48·7	47·8	46·1	45·4	45·1	45·6	47·4	49·5	52·7	56·2	58·1	58·0	56·1	54·5	53·1	52·4	52·2	52·4	52·1	50·3	50·1
6 *	49·6	49·1	49·5	49·8	48·8	47·0	45·3	43·8	44·3	47·1	50·2	54·8	58·3	60·3	59·7	57·8	56·1	53·9	53·1	53·0	52·6	51·8	50·7	50·3
7 *	50·0	49·2	48·7	48·5	48·5	47·1	45·9	46·4	47·2	47·6	50·0	53·6	57·2	59·5	60·7	59·2	57·3	55·2	53·1	52·2	51·7	51·2	50·7	50·2
8	50·2	49·9	50·6	49·9	48·3	46·9	45·9	45·2	45·8	47·8	50·2	54·2	58·0	59·2	58·1	56·7	55·6	53·2	52·5	52·6	52·2	52·6	51·3	50·7
9	50·4	50·2	49·8	49·4	48·5	47·3	46·0	46·0	47·3	50·0	52·5	54·9	56·9	56·9	56·6	55·4	53·7	52·6	52·5	52·9	52·2	52·3	51·9	51·4
10	50·7	50·3	49·5	48·7	47·3	46·4	46·0	45·7	47·1	48·5	53·8	56·6	58·0	59·2	59·4	58·3	56·5	54·1	53·3	52·9	50·6	51·8	52·5	52·5
11	51·7	50·4	49·6	47·8	46·6	45·3	43·8	43·2	45·0	48·2	51·0	53·9	56·9	57·8	56·8	55·8	56·6	56·8	56·1	55·1	54·4	53·0	52·9	49·5
12 **	49·6	49·4	46·0	38·2	41·5	44·4	43·4	50·0	46·4	55·0	57·4	57·3	59·0	58·9	56·8	52·2	49·2	47·4	47·6	46·0	44·5	42·0	44·4	50·9
13 **	51·8	49·9	44·8	47·3	44·5	43·6	41·7	42·1	43·6	46·3	50·4	53·9	56·5	58·8	57·7	56·1	51·5	51·7	51·1	49·4	49·1	49·9	51·4	53·1
14	51·7	52·8	53·7	50·3	48·1	49·4	46·0	43·9	44·7	46·9	50·5	53·6	56·4	57·1	56·1	54·4	52·9	51·4	50·1	50·1	50·3	50·4	50·5	50·5
15	50·4	50·0	49·4	48·8	47·9	46·4	45·4	45·2	47·4	51·2	54·4	57·8	61·1	61·3	58·7	55·4	53·7	51·8	51·1	51·0	50·2	51·1	51·0	49·7
16 **	49·1	48·9	48·8	48·3	47·4	47·4	46·1	46·5	46·2	48·8	53·3	58·3	60·7	64·9	63·7	60·7	56·1	52·7	51·8	52·3	53·8	53·2	52·9	55·8
17	45·1	43·5	37·2	41·9	47·1	44·2	42·6	43·5	46·4	50·5	54·8	58·7	60·5	59·1	58·0	55·0	52·1	50·1	50·1	51·1	50·7	50·9	50·6	50·2
18	49·2	48·7	48·5	49·0	48·0	46·8	44·8	44·1	44·8	47·9	53·0	58·7	62·2	63·0	60·3	56·7	52·1	48·7	50·2	50·4	50·1	51·1	51·5	50·7
19	50·1	50·2	49·6	48·3	46·8	45·3	44·0	43·2	44·1	46·9	51·5	57·5	61·1	62·6	62·8	61·3	56·9	52·6	51·7	51·4	51·2	50·5	50·2	49·5
20	48·8	48·5	48·4	47·9	47·3	45·7	44·6	45·0	46·8	49·6	53·4	56·3	57·3	56·8	55·8	54·3	52·7	51·4	51·1	51·0	51·6	51·6	51·0	50·5
21	49·9	49·2	48·9	48·6	47·5	45·9	44·3	44·0	45·3	49·7	54·3	56·8	57·2	57·4	55·5	53·9	53·2	52·2	52·0	51·1	51·3	51·6	49·9	50·1
22 **	47·8	51·5	51·6	33·5	38·4	40·4	40·6	40·9	44·3	49·1	50·7	56·2	55·3	59·2	61·9	61·1	59·3	48·2	46·1	39·6	43·5	41·5	46·5	38·2
23 **	44·7	35·9	38·4	43·5	40·7	56·1	52·3	53·9	49·6	49·9	51·8	54·6	56·2	55·9	54·9	52·6	51·9	48·5	44·3	42·6	45·8	47·0	46·6	49·0
24	50·0	50·3	47·0	47·0	45·7	45·2	44·2	44·8	45·5	48·8	51·4	51·8	55·4	56·8	54·7	53·4	51·3	49·2	49·3	49·8	49·9	50·2	50·1	49·3
25	50·2	47·4	47·8	50·7	47·3	46·0	45·7	46·2	47·6	49·7	52·4	55·1	57·7	56·6	54·7	52·8	50·7	49·0	48·7	48·7	50·1	50·7	49·2	48·3
26	48·0	47·6	47·6	47·6	47·0	46·0	44·6	44·7	46·5	49·1	52·0	54·6	55·4	54·0	52·4	50·7	49·9	49·6	49·6	49·3	50·6	50·1	49·1	47·6
27	47·6	46·6	47·4	46·0	46·5	45·6	43·6	43·6	45·2	49·0	53·1	55·9	56·1	57·7	55·6	53·1	51·3	49·8	49·7	49·7	48·4	49·2	50·1	49·3
28	48·4	48·7	48·3	47·6	47·3	45·6	43·6	43·7	46·1	49·1	52·8	55·4	57·7	57·1	55·8	53·7	51·9	50·4	49·6	50·1	50·5	50·0	50·1	50·2
29	51·4	49·6	46·7	46·6	46·8	46·0	44·6	44·6	46·4	49·1	50·9	54·0	55·5	54·6	53·3	52·2	50·5	49·4	49·0	49·1	49·4	50·1	50·5	50·5
30	50·3	50·1	49·7	49·9	49·1	48·5	47·1	46·6	46·7	47·7	50·6	54·3	57·7	58·2	57·4	54·9	51·9	49·6	49·1	49·6	48·9	49·8	49·6	49·8
31	49·3	48·8	48·9	48·4	47·8	46·8	45·5	44·5	44·9	47·5	50·9	54·3	57·0	57·5	56·9	54·5	52·5	51·1	50·9	50·7	50·9	49·9	50·0	49·2
Mean	49·7	49·0	48·2	47·5	46·9	46·4	45·1	45·2	46·1	48·9	52·0	55·3	57·7	58·5	57·6	55·5	53·4	51·3	50·6	50·3	50·4	50·4	50·3	50·0
Mean *	50·3	49·8	49·5	49·2	48·4	46·6	45·8	45·5	46·2	48·0	50·7	54·1	57·1	58·8	58·7	56·8	54·9	53·0	52·2	52·2	52·0	51·7	50·9	50·6
Mean **	48·6	47·1	45·9	42·2	42·5	46·4	44·8	46·7	46·0	49·8	52·7	56·1	57·5	59·5	59·0	56·5	53·6	49·7	48·2	46·0	47·3	46·7	48·4	49·4

* International Quiet Day. ** International Disturbed Day.

TABLE I. - HOURLY MEANS OF MAGNETIC DECLINATION AT ABINGER

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

* International Quiet Day. ** International Disturbed Day.

TABLE I. - HOURLY MEANS OF MAGNETIC DECLINATION AT ABINGER

U.T.	0h	1h	2h	3h	4h	5h	6h	7h	8h	9h	10h	11h	12h	13h	14h	15h	16h	17h	18h	19h	20h	21h	22h	23h	24h
November													10° + Tabular Quantities												
	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′
1	48·8	49·4	48·1	47·0	47·0	47·4	47·7	47·6	47·1	47·7	51·2	53·6	54·9	54·9	53·6	51·4	49·8	49·7	48·6	46·0	47·7	48·0	47·4	47·0	
2	47·4	47·5	47·7	48·3	49·6	49·0	48·6	47·5	46·2	46·0	47·1	49·8	50·9	52·7	51·6	51·0	50·2	49·4	49·1	49·0	48·0	48·4	48·3	48·1	
3	47·3	48·8	48·5	47·8	48·2	48·5	48·7	48·1	46·3	45·4	48·1	50·7	52·5	53·4	53·7	52·5	53·0	52·2	51·6	49·7	48·5	47·6	44·6	43·8	
4	45·0	46·2	46·3	47·7	47·9	47·7	47·6	48·3	47·4	47·0	49·0	49·4	51·7	51·7	51·0	50·4	49·5	49·6	49·5	48·8	48·4	48·4	47·6	46·6	
5	46·4	46·7	47·0	47·3	47·5	47·4	47·2	47·0	46·3	46·6	48·6	49·3	51·3	51·8	51·8	51·2	49·8	49·8	50·6	49·0	48·6	48·3	48·0	48·0	
6	48·1	47·4	47·4	47·4	47·4	47·4	46·6	46·7	47·4	47·0	47·1	47·9	49·4	50·4	51·3	50·7	50·8	51·4	50·8	51·6	50·7	48·9	46·5	47·4	46·0
7	44·3	44·8	45·5	47·0	47·2	47·3	46·8	47·0	46·6	47·0	49·0	50·7	51·7	52·1	51·8	51·8	49·4	49·6	49·4	48·9	47·0	47·8	47·8	47·5	
8 *	48·1	48·5	48·5	48·2	47·9	48·1	47·6	47·5	46·6	47·0	48·4	51·0	52·2	51·7	51·1	50·1	50·0	49·4	49·1	49·0	48·1	48·2	48·1	48·1	
9	48·1	48·1	48·1	48·3	47·5	46·2	46·7	46·1	45·7	45·9	48·2	50·5	51·8	52·1	51·9	51·4	51·7	50·7	50·5	49·1	48·5	47·7	47·4	47·8	
10 *	47·8	47·6	47·7	47·2	47·3	47·3	47·5	47·0	46·6	47·1	49·3	51·2	52·1	52·1	51·8	51·0	50·5	49·8	49·7	48·9	48·2	47·6	48·0	47·5	
11	48·1	48·1	48·9	50·2	48·6	48·3	47·8	47·3	46·1	46·1	48·1	50·5	52·5	52·7	52·1	51·4	51·1	50·7	48·6	48·4	48·7	47·1	44·9	43·9	
12 **	40·2	43·9	46·4	48·0	48·7	48·6	47·9	47·3	46·6	47·7	50·6	53·8	53·3	53·5	54·6	52·3	52·1	51·5	50·6	50·1	48·8	46·6	46·8	46·0	
13 **	44·7	43·1	43·2	50·4	47·1	49·7	50·1	51·0	51·6	50·1	50·5	54·6	53·1	52·6	51·3	50·0	50·4	45·3	46·4	43·8	38·1	40·4	46·0	45·7	
14 **	47·4	52·1	46·6	46·6	48·2	49·1	49·5	46·9	45·1	45·9	46·7	49·5	51·4	52·2	50·9	47·0	45·5	45·1	47·7	47·5	44·0	43·6	40·6	41·1	
15	44·0	44·3	45·7	48·4	49·7	49·3	48·6	48·7	47·7	46·7	47·0	49·6	51·2	51·8	52·0	49·3	49·3	50·3	50·0	47·0	46·7	47·0	46·4	46·4	
16	47·8	48·6	48·7	48·9	48·7	48·7	48·0	47·6	47·0	46·0	47·3	49·7	50·1	50·6	50·2	50·6	50·2	47·6	49·3	48·5	47·2	47·0	47·9	48·0	
17	48·0	48·1	48·5	48·6	48·5	48·5	48·3	48·0	47·4	47·7	49·0	50·8	51·5	51·7	51·6	51·4	51·2	51·0	51·1	48·5	47·9	47·7	47·5	47·4	
18 *	48·3	48·5	48·6	48·9	48·3	48·2	47·6	46·9	46·2	46·0	48·4	50·7	52·0	52·3	51·3	50·9	50·9	50·6	50·3	49·9	49·6	48·9	48·6	48·2	
19	48·3	48·2	48·2	48·4	48·4	48·3	48·1	47·4	46·5	46·5	47·2	49·2	50·4	51·8	51·5	52·2	51·8	51·2	50·1	51·8	49·0	47·8	47·8	46·8	
20	46·0	45·8	46·1	47·2	47·2	47·1	47·4	47·3	46·7	46·3	47·8	49·3	50·2	50·3	50·2	50·3	50·0	49·6	49·6	49·9	48·3	47·8	46·5	46·6	
21	47·0	46·8	46·7	46·7	47·2	47·4	47·6	47·9	47·1	46·4	47·8	50·2	51·1	51·0	50·4	50·1	49·4	48·8	48·7	48·3	48·0	47·8	47·5	47·5	
22 *	47·6	47·9	48·0	48·0	48·1	48·1	47·9	47·5	47·3	47·2	48·3	50·4	51·7	51·4	50·5	50·0	49·0	48·4	48·1	48·1	48·1	47·6	47·0	46·9	
23 *	47·1	47·7	48·1	48·0	47·9	47·6	47·2	46·7	46·1	46·5	49·1	51·1	51·9	51·2	49·8	49·2	49·1	49·1	49·2	48·9	48·6	48·2	47·9	47·7	
24	48·0	48·4	48·7	48·1	47·7	47·9	47·5	47·0	46·8	47·7	49·7	51·7	52·8	53·1	50·9	51·2	51·6	50·4	51·3	50·7	49·3	43·7	38·4	41·2	
25 **	42·7	42·5	46·8	47·6	46·9	51·6	48·4	46·7	46·5	47·8	49·7	52·5	55·8	56·8	56·6	54·4	52·7	49·8	48·3	48·0	47·3	39·3	36·8	43·3	
26 **	46·3	48·1	47·6	48·1	48·5	49·9	49·8	48·8	47·7	46·8	48·7	49·0	51·3	52·1	51·3	49·3	49·3	48·3	47·7	46·8	40·8	45·7	46·3	46·9	
27	47·0	48·1	48·3	49·3	51·8	48·0	47·2	46·5	45·3	45·8	46·3	48·6	50·6	51·4	50·4	49·4	49·2	48·8	47·3	48·0	47·8	46·9	46·7	47·3	
28	47·7	47·9	48·3	48·2	48·9	48·7	47·3	46·9	46·3	46·1	47·7	49·9	51·6	51·4	51·3	50·9	49·9	49·4	48·6	46·7	46·3	46·4	46·7	46·8	
29	47·0	47·4	47·0	47·4	47·1	46·9	46·9	46·9	46·8	46·7	49·1	51·4	52·7	52·4	52·0	50·9	50·4	48·9	48·3	47·9	46·9	44·3	45·4	47·5	
30	47·8	48·3	48·6	49·5	48·0	47·4	47·3	48·1	47·8	47·1	47·5	49·3	50·7	51·5	51·4	50·4	49·8	49·1	•48·8	48·1	46·9	45·2	44·8	45·2	
Mean	46·7	47·3	47·5	48·1	48·1	48·2	47·9	47·5	46·8	46·8	48·4	50·6	51·9	52·2	51·6	50·8	50·3	49·5	49·3	48·5	47·3	46·6	46·2	46·4	
Mean *	47·8	48·0	48·2	48·1	47·9	47·9	47·6	47·1	46·6	46·8	48·7	50·9	52·0	51·7	50·9	50·2	49·9	49·5	49·3	49·0	48·5	48·1	47·9	47·7	
Mean **	44·3	45·9	46·1	48·1	47·9	49·8	49·1	48·1	47·5	47·7	49·2	51·9	53·0	53·4	52·9	50·6	50·0	48·0	48·1	47·2	43·8	43·1	43·3	44·6	
December													10° + Tabular Quantities												
	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′
1	46·2	46·6	47·8	49·0	47·8	46·8	47·7	46·8	46·6	47·1	47·9	50·4	51·0	51·7	50·8	50·4	49·8	49·0	49·0	47·8	46·7	46·7	46·9	46·1	
2	46·0	46·4	47·3	47·0	47·3	47·7	46·7	47·4	47·5	47·2	48·1	50·0	51·6	51·6	51·4	50·7	49·8	49·7	49·2	48·9	46·8	44·3	46·9	46·2	
3	46·5	47·0	46·9	47·5	47·1	47·5	47·1	47·5	47·2	47·8	48·9	50·0	50·5	51·2	50·6	50·5	50·1	50·0	49·9	49·1	48·8	48·0	43·5	43·8	
4	43·5	41·4	43·1	45·1	46·0	46·6	47·1	47·7	47·1	47·2	48·5	49·4	50·0	50·0	49·1	48·9	48·7	48·5	48·5	48·2	47·8	47·5	46·7	46·9	
5	47·0	46·4	47·7	47·7	48·0	48·0	47·9	48·0	47·4	46·9	47·2	49·4	50·2	51·4	52·6	52·5	53·1	54·7	56·1	51·4	47·4	44·8	42·9	38·7	
6 **	43·0	44·9	46·3	46·8	47·7	47·3	47·6	47·3	46·8	46·8	47·9	50·2	51·8	52·2	50·8	50·3	49·3	49·7	50·7	51·3	42·6	30·0	31·8	39·8	
7 **	44·3	42·8	43·4	52·8	46·6	45·4	47·5	46·7	48·3	49·4	48·9	49·7	51·0	51·8	46·3	47·3	51·0	51·3	43·7	40·9	40·8	40·9	35·1	43·1	
8 **	46·4	47·7	49·7	48·0	50·4	52·3	56·0	52·8	49·3	50·7	51·6	52·5	52·6	52·4	50·0	44·6	37·5	48·3	44·4	40·9	41·7	44·7	44·0	46·3	
9	47·5	45·7	47·8	49·6	49·9	48·3	47·3	47·2	47·1	49·7	50·4	50·7	51·0	50·7	50·3	49·1	46·2	47·2	39·2	46·3	46·4	44·9	46·1	47·3	
10	47·8	48·0	47·9	48·3	48·3	47·7	47·2	48·1	47·7	46·9	48·7	49·3	49·8	50·1	48·8	46·3	47·3	47·1	47·3	46·9	43·8	42·7	45·4	46·8	
11	47·3	47·6	49·6	48·3	47·8	47·3	47·3	47·2	47·3	47·3	48·7	48·8	50·8	50·6	49·7	49·4	48·8	48·2	46·8	47·3	46·7	45·3	45·5	46·9	
12	47·7	47·9	49·8	48·3	48·3	47·7	47·2	46·8	46·3	46·3	49·2	50·3	51·0	50·7	49·8	49·0	48·8	47·7	47·9	47·9	46·7	45·6	39·1	42·8	
13	44·6	47·1	48·3	48·2	49·8	48·1	48·2	47·5	47·0	46·8	47·1	48·3	49·8	50·8	50·6	49·3	48·7	48·3	48·3	47·3	47·3	46·7	46·4	46·3	
14 *	46·7	48·4	48·3	47·8	47·9	48·0	47·7	47·7	47·3	47·0	48·3	49·4	50·4	50·7	50·2	50·0	49·7	49·2	48·3	48·0	47·7	47·3	47·0	46·8	
15	44·8	44·8	46·7	46·3	46·7	47·7	47·6	46·9	46·9	47·0	47·5	49·3	50·4	51·4	52·3	52·3	51·3	50·3	50·3	48·3	47·6	46·8	46·3	46·3	
16	47·0	47·3	47·2	47·7	48·1	47·5	47·7	47·7	47·3	47·0	48·2	48·8	49·8	50·3	51·2	51·2	49·9	50·3	48·6	48·3	47·8	46·3	43·3	37·4	
17	42·6	44·6	47·2	47·8	48·1	47·7	47·5	47·4	47·2	47·5	46·8	47·9	49·9	50·7	50·2	49·4	49·7	49·0	48·6	48·2	47·9	46·6	46·6	47·1	
18 *	46·5	46·6	45·5	46·1	46·5	46·8	47·1	47·1	47·5	47·5	47·6	48·0	48·1	49·0	48·5	48·5	48·1	48·0	47·8	47·5	47·2	47·1	47·1	46·7	
19 *	46·7	46·9	47·1	47·1	47·1	46·5	46·7	46·8	47·1	47·7	48·1	49·0	50·5	50·1	49·7	49·6	49·1	48·6	48·2	47·6	47·4	47·2	47·3	47·2	
20 *	47·1	47·1	47·2	47·4	47·5	47·2	47·1	47·1	47·1	47·1	48·0	48·7	49·7	49·8	49·2	49·6	49·6	49·3	49·3	49·0	48·7	47·1	45·1	45·0	
21 **	46·0	46·1	45·6	45·1	45·2	45·1	45·5	47·6	47·5	49·2	50·5	52·1	51·7	51·3	54·1	55·8	53·7	49·6	49·7	47·4	45·9	45·8	46·0	45·1	
22 **	40·8	45·6	46·6	46·7	47·1	48·1	48·9	49·0	48·8	48·5	50·4	51·3	52·4	53·1	53·8	50·8	44·3	49·8	47·8	46·7	45·0	41·0	46·1	47·6	
23	48·1	47·7	47·8	48·1	48·8	47·1	48·1	47·2	47·6	47·4	47·5	49·5	52·1	51·2	50·1	49·2	48·6	48·1	47·5	47·4	47·0	46·9	44·1	45·6	
24	47·5	48·1	48·1	45·6	46·6	45·7	46·5	46·3	47·1	47·1	47·6	48·8	49·8	49·8	50·3	49·6	48·2	45·7	45·2	45·8	43·2	45·4	45·7	47·1	
25	47·6	47·5	46·5	46·2	47·6	47·4	47·5	48·2	48·5	48·7	49·7	49·4	50·6	50·9	50·0	49·5	48·5	48·0	47·6	47·8	47·1	43·9	44·7	45·7	
26	47·3	48·8	49·0	49·0	49·1	51·3	49·2	47·6	48·0	47·7	48·2	48·2	49·5	49·7	49·6	48·6	48·4	48·1	47·5	47·1	46·9	47·1	46·7	45·1	
27	47·0	47·6	48·4	48·6	48·3	47·4	47·6	47·3	46·4	49·2	49·6	50·0	50·3	49·6	50·8	51·6	52·8	50·8	49·5	44·7	45·3	47·0	47·0	47·0	
28	47·5	46·9	47·0	46·9	47·4	46·6	47·0	47·2	47·4	48·0	49·1	50·0	50·0	48·6	47·7	48·1	49·0	49·6	48·1	49·9	48·1	47·3	46·4	44·7	
29	46·9	45·3	45·4	45·0	45·1	45·5	46·6	46·8	46·9	48·3	48·7	49·9	49·2	49·5	48·3	49·8	47·8	48·6	48·5	46·8	45·4	46·3	46·8	46·3	
30	43·7	45·4	47·2	47·3	47·5	46·7	47·7	47·1	46·7	47·7	47·8	49·2	50·1	49·6	48·7	49·2	48·8	47·7	47·8	47·1	46·7	46·4	46·3	46·8	
31 *	47·2	47·7	47·0	46·8	47·7	46·7	46·7	46·7	47·4	48·5	48·9	49·1	49·4	48·9	48·1	47·8	47·7	47·3	47·1	46·8	46·7	46·4	46·5	46·6	
Mean	46·1	46·5	47·2	47·5	47·7	47·4	47·7	47·5	47·4	47·8	48·6	49·6	50·5	50·6	50·1	49·6	48·9	49·0	48·0	47·4	46·3	45·3	44·8	45·3	
Mean *	46·8	47·3	47·0	47·0	47·3	47·0	47·1	47·1	47·3	47·6	48·2	48·8	49·6	49·7	49·1	49·1	48·8	48·5	48·1	47·8	47·5	47·0	46·6	46·4	
Mean **	44·1	45·4	46·3	47·9	47·4	47·6	49·1	48·7	48·1	48·9	49·9	51·2	51·9	52·2	51·0	49·8	47·2	49·7	47·3	45·4	43·2	40·5	40·6	44·4	

* International Quiet Day. ** International Disturbed Day.

TABLE II. - HOURLY MEANS OF HORIZONTAL COMPONENT OF MAGNETIC INTENSITY AT ABINGER

U.T.	0h	1h	2h	3h	4h	5h	6h	7h	8h	9h	10h	11h	12h	13h	14h	15h	16h	17h	18h	19h	20h	21h	22h	23h	24h
January	18000 γ + Tabular Quantities (in γ)																								
1 *	538	541	544	547	548	549	551	552	548	538	533	529	538	538	536	531	535	538	538	538	538	535	538	540	
2	540	540	542	542	546	555	556	551	547	546	535	536	534	537	542	537	538	543	546	547	551	549	546	540	
3 *	538	542	546	546	547	549	549	544	538	536	538	535	536	538	538	534	534	538	542	542	542	543	543	543	
4	546	542	542	546	546	549	551	547	538	533	532	531	532	535	534	533	538	542	543	546	551	552	553	546	
5 **	546	551	555	560	549	546	551	553	552	551	547	546	549	546	546	542	538	544	533	533	540	555	553	530	
6	530	533	542	538	538	539	541	538	531	524	520	513	523	531	533	538	526	528	528	529	536	543	537	534	
7	532	538	535	535	538	539	542	540	537	529	527	529	535	536	537	535	534	538	540	527	541	529	527	529	
8	522	530	531	541	534	538	538	533	529	520	516	516	529	535	531	529	521	521	524	538	538	524	525	537	
9 **	525	525	531	528	547	546	534	530	516	511	511	507	518	522	522	529	529	531	529	535	531	538	533	519	
10	524	529	529	539	560	544	542	542	533	524	520	524	511	521	526	525	527	537	539	533	529	531	529	524	
11	522	524	529	539	542	538	535	533	533	529	518	518	522	533	535:	524:	524	524	529	532	536	535	530	528	
12	524	530	532	534	536	534	534	537	535	532	531	533	543	539	531	533	534	540	542	543	540	538	535	535	
13	535	530	528	532	535	539	539	534	541	533	535	541	541	543	541	542	535	539	541	543	545	543	539	540	
14	541	534	537	538	538	541	549	546	538	535	537	538	538	534	520	517	528	539	543	543	539	531	524	524	
15	532	535	537	538	546	549	541	537	529	517	520	520	522	519	521	528	537	539	536	536	535	536	536	533	
16	538	535	536	538	539	542	545	545	541	530	528	535	537	539	536	533	535	537	541	532	544	511	515	521	
17 **	520	535	537	532	539	535	528	524	521	519	520	504	502	520	517	515	519	528	532	529	527	525	521	530	
18	530	525	533	536	544	547	541	535	531	525	518	512	527	533	528	525	525	530	533	536	535	533	540	532	
19	536	536	534	536	538	542	542	535	532	533	529	523	525	531	531	529	531	537	539	538	533	540	532	534	
20	534	542	547	538	544	542	551	551	547	538	525	529	528	533	533	536	533	536	536	529	523	533	538	532	
21 **	532	528	533	535	542	545	550	547	547	535	532	526	536	519	520	518	520	503	501	533	526	527	528	530	
22 **	531	530	530	537	539	542	542	537	536	530	523	520	526	529	535	539	540	540	516	524	536	529	524	550	
23	532	530	532	533	538	537	540	540	538	517	522	527	533	534	511	514	518	529	532	531	529	539	540	538	
24	538	539	539	543	548	562	552	546	532	524	517	513	518	521	526	534	532	535	535	535	534	532	546	531	
25	537	537	539	543	547	546	546	543	538	532	522	520	520	533	534	532	534	537	539	539	538	539	536	536	
26 *	536	537	539	543	546	550	550	548	543	532	528	525	527	528	535	537	538	542	544	545	545	543	543	543	
27 *	542	541	544	546	548	550	550	546	537	529	523	520	524	532	539	544	543	546	549	550	550	550	549	548	
28	547	547	548	550	552	557	561	563	563	556	544	535	531	536	543	546	543	541	536	535	547	545	544	539	
29	528	521	532	537	543	546	545	545	539	534	528	524	531	536	538	537	538	541	546	546	546	541	536	535	
30 *	535	538	542	546	547	551	549	550	546	533	523	516	519	528	537	537	537	537	542	549	546	546	546	547	
31	546	546	546	550	550	554	553	550	546	528	525	515	521	524	528	528	533	537	542	546	547	546	543	546	
Mean	534	535	538	541	544	545	545	543	538	531	527	525	528	532	532	532	532	535	536	538	539	538	536	535	
Mean *	538	540	543	546	547	550	550	548	542	534	529	525	529	533	537	537	537	540	543	545	544	543	544	544	
Mean **	531	534	537	540	543	543	541	538	534	529	527	521	526	527	528	529	529	529	522	531	532	535	532	532	
February	18000 γ + Tabular Quantities (in γ)																								
1 **	543	542	539	538	539	540	543	547	550	546	545	543	539	528	529	539	544	544	528	504	473	493	488	484	
2	493	501	506	516	508	510	517	516	521	524	524	521	524	524	515	515	517	522	507	495	497	515	513	519	
3	515	518	516	525	533	525	524	521	519	519	519	513	514	524	523	528	524	528	528	528	524	528	520	523	
4	524	526	528	525	527	528	526	528	528	526	517	497	513	523	524	517	519	525	528	531	528	530	532	533	
5	530	532	532	530	530	535	532	532	535	541	526	525	527	536	532	525	522	526	533	541	528	526	529	526	
6 **	532	531	536	534	537	544	542	539	541	541	497	480	473	477	481	477	449	475	475	449	447	448	455	476	
7 **	469	484	481	488	492	488	491	495	501	497	489	497	492	487	499	499	491	491	499	505	499	496	506	510	
8	511	510	511	513	515	517	521	523	521	520	517	510	508	509	512	521	523	526	528	517	512	513	500	510	
9	514	513	515	517	520	530	535	537	538	538	536	519	519	529	528	528	526	530	504	511	494	505	506	520	
10	513	520	522	528	522	520	521	526	524	518	517	517	520	517	530	519	521	488	502	524	535	539	538	546	
11	547	528	543	548	531	537	537	532	536	531	515	505	513	519	517	517	521	526	528	532	533	532	533	532	
12 *	535	533	535	535	536	537	538	541	544	540	534	531	532	528	527	526	532	532	537	542	543	545	544	543	
13 *	539	538	536	537	538	540	543	550	551	545	538	534	533	535	537	538	538	542	545	547	538	529	533	540	
14	542	544	545	542	547	547	552	550	549	543	536	525	520	525	527	531	533	527	529	525	537	546	547	549	
15	547	561	547	536	549	556	564	554	551	545	535	531	531	535	529	520	525	531	536	540	544	545	545	547	
16	542	540	542	542	538	533	540	542	535	542	534	529	520	520	509	518	503	519	529	527	529	530	531	538	
† 17	538	537	536	536	539	546	546	533	534	528	527	–	–	–	–	–	–	–	531	529	525	539	531	538	
18	543	538	534	534	536	538	544	534	541	536	531	529:	535	529	532	532	520	536	535	534	534	543	554	536	
19	529	536	534	534	538	548	552	543	534	530	518	520	516	520	523	526	531	534	537	536	534	536	534	537	
20	535	538	543	543	541	542	542	538	529	522	521	521	526	528	527	520	518	519	527	532	534	543	547	537	
21 *	538	537	535	537	537	543	544	545	545	543	536	532	531	533	534	536	541	541	542	542	543	543	541	543	
22 *	544	543	545	545	547	549	547	545	539	537	536	535	539	545	545	541:	543	542	539	545	538	541	538	541	
† 23	522	541	531	531	536	538	540	541	538	534	529	527	–	–	–	–	–	–	–	–	–	536:	548	545	
24 **	541	533	539	541	543	543	543	541	539	540	541	543	540	524	527	516	509	499	466	475	412	401	356	354	
25 **	336	349	397	415	428	429	441	401	438	423	437	444	428	440	438	473	462	451	469	476	464	505	496	487	
26	488	488	488	491	496	498	497	491	483	478	476	479	482	491	496	497	502	505	509	509	509	509	528	520	
27 *	512	514	514	514	516	520	524	524	521	516	514	514	514	510	509	516	514	519	523	525	525	525	526	525	
28	524	523	522	524	526	526	531	529	529	524	519	515	511	524	526	527	499	495	504	505	497	497	496	508	
† Mean (26 days)	519	520	523	524	526	528	530	528	529	526	520	516	515	518	518	519	516	518	519	519	514	518	517	519	
Mean *	534	533	533	534	535	538	539	541	540	536	532	529	530	530	530	531	534	535	537	540	537	537	536	538	
Mean **	484	488	498	503	508	509	510	505	514	509	502	501	494	491	495	501	491	492	487	482	459	469	460	462	

* International Quiet Day. ** International Disturbed Day. † February 17 and 23 omitted. : Low weight.

TABLE II. - HOURLY MEANS OF HORIZONTAL COMPONENT OF MAGNETIC INTENSITY AT ABINGER

U.T.	0h	1h	2h	3h	4h	5h	6h	7h	8h	9h	10h	11h	12h	13h	14h	15h	16h	17h	18h	19h	20h	21h	22h	23h	24h
March	18000 γ + Tabular Quantities (in γ)																								
1	513	517	515	517	517	526	526	528	515	504	513	513	514	522	517	531	507	513	520	508	504	518	492	501	
2	513	519	552	484	492	495	510	499	499	493	499	493	490	490	501	508	508	513	516	518	519	525	520	522	
3	526	524	515	509	517	526	532	536	537	524	522	517	518	513	513	510	499	497	508	507	504	495	495	544	
4	508	497	499	426	517	508	501	499	490	504	496	499	499	507	496	506	511	502	519	517	506	515	511	501	
5	504	510	508	517	517	519	524	521	513	501	497	504	513	521	526	524	514	516	515	531	518	523	532	515	
6	517	519	521	525	526	533	526	529	515	497	491	494	504	500	518	515	508	520	532	529	524	524	520	523	
7 *	521	541	517	519	526	525	526	524	519	515	511	504	514	525	531	531	525	525	531	532	529	531	532	540	
8	543	534	532	536	548	562	534	523	522	519	514	515	520	529	532	529	534	539	523	529	535	536	541	541	
9	538	534	538	551	545	548	556	543	518	532	538	532	518	509	505	516	514	518	516	545	545	530	532	531	
10	531	538	526	530	530	534	534	532	535	532	527	523	513	511	521	523	527	526	536	541	538	538	529	534	
11	534	533	533	535	537	543	545	533	542	521	511	515	521	524	525	534	514	527	532	541:	541	532	525	520	
12	548	524	527	532	535	537	542	532	527	515	505	501	505	509	523	510	514	524	524	526	532	532	529	544	
13 *	526	526	529	532	533	537	539	538	533	515	513	512	526	524	516	522	525	532	539	541	542	542	544	542	
14	542	542	546	548	547	549	550	547	546	542	539	542	526	534	533	524	521	534	537	537	537	537	543	540	
15	539	543	539	541	542	546	551	548	537	538	539	517	522	533	533	534	492	508	542	540	546	545	544	542	
16	539	537	543	553	534	542	542	542	535	510	513	519	522	512	528	526	526	537	539	539	551	542	537	558	
17	559	546	530	520	519	528	523	528	526	526	519	513	516	521	521	524	531	536	532	542	551	542	544	546	
18 *	558	538	533	535	538	540	543	542	537	524	519	513	512	516	524	526	531	526	541	543	543	542	543	543	
19 *	541	541	538	540	541	540	539	539	536	527	521	523	528	525	530	534	539	540	543	552	547	548	550	550	
20	546	548	548	553	545	552	552	543	536	526	521	524	534	541	546	548	543	530	543	544	544	543	543	548	
21	549	548	548	550	549	555	563	561	537	527	484	486	504	511	515	519	525	539	523	507	528	533	537	536	
22 **	539	539	543	550	543	534	541	541	530	509	495	487	494	480	494	512	534	508	548	531	533	531	552	523	
23	527	530	526	534	522	525	530	531	529	501	507	514	516	519	525	500	516	525	537	540	525	563	522	525	
24	534	535	530	532	531	534	536	534	528	518	509	505	511	517	516	531	535	532	530	524	535	558	539	539	
25 *	534	531	543	543	534	545	544	539	532	527	525	527	529	532	528	534	536	534	538	543	543	542	536	540	
26	543	532	528	541	535	539	538	542	530	514	509	505	509	516	531	534	536	537	546	543	534	536	534	548	
27 **	536	558	563	556	543	551	560	550	542	521	505	503	511	518	530	539	545	543	527	527	514	537	559	516	
28 **	513	525	528	528	536	518	531	527	507	498	482	498	500	503	528	530	523	507	500	471	426	415	394	460	
29 **	482	467	474	458	498	500	497	456	469	454	487	444	456	476	509	493	521	512	507	562	521	491	493	519	
30 **	507	487	499	498	493	498	514	512	503	503	494	505	511	504	518	529	529	552	525	516	512	543	494	509	
31	516	513	507	493	511	508	507	501	502	496	485	496	509	512	514	503	512	528	532	544	530	534	557	534	
Mean	530	528	528	525	529	532	534	530	524	514	509	508	512	515	521	523	522	526	529	531	528	530	527	530	
Mean *	536	535	532	534	534	537	538	536	531	522	518	516	522	524	526	529	531	533	538	542	541	541	541	543	
Mean **	515	515	521	518	523	520	529	517	510	497	493	487	494	496	516	521	530	524	521	519	501	503	498	505	
April	18000 γ + Tabular Quantities (in γ)																								
1	519	523	510	504	512	543	539	530	500	502	503	496	487	498	502	504	518	532	530	530	523	516	520	552	
2	532	521	529	515	522	534	521	514	505	498	489	485	501	507	518	523	528	534	548	534	546	534	539	570	
3	530	527	530	523	521	521	521	517	494	498	502	503	507	505	517	530	525	536	528	530	530	527	520	514	
4	521	521	520	534	539	533	532	521	507	505	502	500	513	525	523	531	534	545	561	522	512	507	523	531	
5	527	530	523	528	532	536	539	534	519	519	496	496	500	522	509	525	532	539	539	537	537	534	534	534	
6 *	534	535	536	537	540	541	531	540	529	518	509	512	514	517	527	534	541	546	543	543	543	545	546	548	
7 *	545	543	546	545	548	550	551	548	538	522	514	503	507	518	532	551	540	535	539	540	540	542	545	548	
8	544	541	539	539	537	547	544	539	535	525	518	517	519	526	534	538	539	543	549	534	561	543	552	549	
9	548	545	552	542	543	552	556	550	545	533	523	518	521	521	530	537	545	547	553	558	548	552	542	555	
10	561	516	531	535	543	545	557	543	502	505	509	512	505	487	516	518	539	534	532	551	541	534	549	578	
11	521	525	530	534	530	537	537	534	518	498	489	494	509	511	512	513	538	563	579	536	533	561	534	527	
12	524	529	534	530	516	525	517	503	494	505	495	496	496	516	517	522	532	544	545	545	545	544	548	541	
13 *	551	541	532	531	532	539	532	509	520	521	512	503	512	507	519	528	534	543	549	541	546	554	545	543	
14	540	543	537	545	544	542	544	537	533	521	505	511	523	520	525	535	530	539	548	548	554	545	543	545	
15 *	540	539	540	540	543	543	543	539	539	529	514	516	521	527	528	531	540	539	543	548	546	547	547	546	
16 *	545	542	539	539	541	543	541	537	528	520	514	512	516	522	526	531	532	540	543	548	552	570	581	577	
17 **	583	573	607	532	471	464	474	444	507	482	485	476	477	500	566	548	491	451	494	507	557	453	476	479	
18 **	478	474	476	473	475	476	474	444	444	483	469	469	469	493	505	562	540	541	530	502	498	504	493	513	
19	512	507	496	499	500	510	525	524	510	501	491	494	518	512	507	509	508	597	523	509	494	507	505	516	
20	507	516	524	507	507	516	512	485	451	446	447	456	467	489	499	489	534	528	513	519	516	512	512	516	
21	521	516	530	516	521	537	525	505	489	476	483	478	471	489	507	527	534	541	525	526	526	528	516	519	
22	521	507	520	516	510	507	501	494	485	477	473	485	516	525	536	543	528	523	543	525	518	519	517	507	
23 **	530	539	534	535	559	505	422	441	467	445	467	473	476	486	515	564	489	501	515	543	516	512	508	521	
24 **	514	501	501	506	503	503	503	498	485	469	460	459	467	484	501	511	525	586	727	656	430	390	428	380	
25 **	377	358	413	446	461	446	440	424	435	439	419:	401:	440	446	471	503	530	534	532	539	503	509	514	482	
26	481	494	496	497	496	498	498	494	486	480	470	469	476	486	501	516	522	516	528	523	520	523	530	519	
27	516	516	516	514	517	517	518	516	507	494	487	490	498	507	512	535	535	532	530	530	530	561	561	512	
28	512	518	525	521	516	516	516	508	503	494	491	487	497	512	510	527	553	550	545	543	548	530	530	534	
29	523	518	517	518	518	512	512	503	500	495	493	505	504	511	522	539	534	561	552	539	537	530	531	536	
30	533	528	521	521	521	519	514	513	506	507	508	511	525	525	535	528	548	557	541	539	527	529	527	529	
Mean	523	520	524	521	521	522	518	510	503	497	491	491	498	507	517	528	531	539	544	538	529	525	527	527	
Mean *	543	540	539	538	541	543	540	535	531	522	513	509	514	518	526	535	537	541	543	544	545	552	553	552	
Mean **	496	489	506	498	494	479	463	450	468	464	460	456	466	482	512	538	515	523	560	549	501	474	484	475	

* International Quiet Day. ** International Disturbed Day. : Low Weight.

TABLE II. - HOURLY MEANS OF HORIZONTAL COMPONENT OF MAGNETIC INTENSITY AT ABINGER

U.T.	0h	1h	2h	3h	4h	6h	6h	7h	8h	9h	10h	11h	12h	13h	14h	15h	16h	17h	18h	19h	20h	21h	22h	23h	24h
May	18000 γ + Tabular Quantities (in γ)																								
1 **	530	523	527	521	523	523	520	514	514	508	504	537	539	548	557	532	541	525	530	485	500	485	481	471	
2 **	491	461	460	494	491	477	461	481	483	477	473	471	493	475	502	515	507	522	527	520	512	529	529	515	
3	513	516	524	521	521	508	491	488	486	470	457	475	484	475	490	489	513	530	538	542	526	528	529	533	
4	524	524	524	515	515	519	513	502	496	493	491	502	511	520	529	543	547	547	539	542	540	538	538	535	
5	354	536	535	533	529	522	520	515	505	489	493	504	514	521	531	554	547	547	554	545	574	625	592	585	
6 **	583	576	572	568	560	560	553	547	531	515	502	502	542	533	489	558	592	569	525	527	529	495	488	484	
7 **	493	511	494	511	506	522	483	492	493	474	451	442	479	497	485	513	514	515	533	537	542	547	547	544	
8 **	541	535	520	516	519	521	497	497	502	496	482	478	493	502	490	520	530	538	548	561	541	545	540	538	
9	529	530	537	524	524	522	510	503	502	484	493	491	511	511	510	509	547	558	547	547	543	547	538	537	
10	529	524	524	522	529	529	524	519	515	511	508	506	512	521	524	549	569	551	549	542	539	538	536	536	
11 *	536	532	533	531	538	538	538	533	526	517	515	509	517	529	523	529	536	547	549	546	547	544	542	542	
12 *	544	537	537	537	541	541	534	526	527	526	519	515	510	519	530	541	548	551	550	556	551	551	551	547	
13 *	544	545	541	541	541	546	539	539	539	539	541	537	534	514	531	539	550	548	552	556	554	543	541	542	
14 *	544	541	541	539	537	536	536	536	532	537	541	542	540	530	528	541	550	550	551	555	558	558	562	559	
15	555	557	560	548	541	550	563	550	533	532	528	532	523	520	520	524	532	549	555	549	547	546	549	557	
16	551	559	553	537	528	547	537	501	505	505	519	523	510	496	503	514	530	544	556	551	550	546	547	554	
17	533	531	528	530	531	527	522	522	524	520	519	527	521	531	544	539	552	556	554	558	543	543	545	531	
18	550	560	556	549	533	529	509	500	496	504	518	515	534	526	528	536	551	555	545	540	540	544	540	527	
19	531	529	545	529	545	529	524	509	507	507	507	513	524	531	536	545	554	554	558	541	545	544	536	530	
20	531	532	517	527	532	518	511	503	482	497	511	515	522	527	531	534	534	543	549	545	535	539	540	538	
21	545	538	542	542	542	542	542	540	531	520	509	514	513	522	529	558	538	560	549	542	539	540	527	509	
22	545	529	524	518	513	526	527	513	478	453	467	493	497	499	511	522	522	545	545	546	549	554	538	515	
23	523	533	537	522	518	522	522	501	492	506	495	481	483	486	504	529	540	554	576	563	549	542	541	557	
24	534	523	537	547	540	503	509	506	497	489	491	495	492	500	527	521	545	556	583	568	556	527	515	534	
25	533	527	540	527	525	526	511	507	501	504	505	512	507	520	540	576	558	546	542	551	539	542	527	517	
26	521	535	536	542	549	536	509	500	490	495	506	518	508	523	531	557	549	555	572	581	554	540	533	529	
27	531	524	531	533	529	515	517	509	512	523	518	510	504	507	512	523	537	547	549	547	551	571	567	545	
28	549	546	536	531	543	531	522	513	520	520	518	509	519	522	522	529	533	543	554	561	567	572	572	546	
29	535	535	532	550	529	519	505	496	502	518	513	518	491	495	526	519	528	558	534	561	551	542	538	533	
30	531	531	536	535	535	530	520	511	507	509	513	531	535	532	523	527	536	542	549	558	557	554	551	549	
31 *	545	547	540	538	540	536	539	537	522	513	504	500	504	510	521	532	541	550	558	565	561	563	554	550	
Mean	535	533	533	532	531	527	520	513	508	505	504	507	512	514	520	533	541	547	549	548	545	545	540	535	
Mean *	543	540	538	537	539	539	537	534	529	526	524	521	521	520	527	536	545	549	552	556	554	552	550	548	
Mean **	528	521	515	522	520	521	503	506	505	494	482	486	509	511	505	528	537	534	533	526	525	520	517	510	
June	18000 γ + Tabular Quantities (in γ)																								
1	555	556	551	555	558	553	541	528	528	523	519	524	529	537	561	577	528	550	559	577	565	570	574	575	
2	577	561	559	545	552	559	555	544	520	514	517	514	528	519	543	541	559	582	569	559	560	564	564	555	
3	553	543	550	550	552	541	532	517	507	512	514	489	501	510	530	541	549	550	561	562	559	550	550	550	
4	555	557	546	540	538	532	537	528	518	514	503	501	509	523	539	552	574	560	564	555	557	555	557	557	
5	554	550	546	546	555	551	537	528	514	510	495	503	510	513	551	533	544	559	554	550	550	547	548	548	
6	539	538	541	532	539	541	541	530	514	506	503	499	497	517	531	545	548	556	555	557	558	559	553	552	
7 *	554	550	547	546	553	548	537	524	523	517	515	511	505	516	534	554	561	565	562	562	557	557	553	550	
8 *	551	555	553	552	553	550	544	535	522	517	515	512	518	530	544	551	560	563	568	562	562	562	560	557	
9 *	555	555	552	553	556	559	554	544	533	528	526	528	532	530	546	557	560	564	566	562	560	562	566	563	
10	557	566	566	568	568	574	569	559	544	539	538	535	543	547	555	567	564	570	583	582	575	571	565	563	
11 *	558	562	559	561	562	559	558	557	549	535	522	522	517	522	539	548	552	556	562	571	570	573	571	562	
12	557	556	561	564	561	560	550	537	530	526	527	535	538	523	530	542	552	561	564	566	568	569	568	559	
13	555	559	557	544	545	549	544	544	540	539	532	538	545	540	562	557	571	589	595	598	589	586	580	569	
14 **	583	594	537	529	528	532	526	486	413	390	431	472	508	502	512	529	532	533	526	528	524	521	535	522	
15	525	521	515	510	507	499	490	485	490	503	508	504	504	517	539	530	537	548	548	552	539	533	537	536	
16 **	528	535	552	548	535	507	475	444	438	447	503	509	517	509	526	515	519	526	535	540	535	536	535	535	
17	534	530	526	528	530	524	514	507	501	499	503	508	513	512	521	530	539	550	561	562	562	558	541	539	
18	543	561	563	539	532	529	527	508	507	496	476	487	503	512	494	520	517	552	540	559	566	562	561	588	
19 **	566	552	544	538	524	529	517	511	494	476	485	490	501	508	535	530	542	557	551	556	553	553	558	546	
20	525	530	517	527	525	538	516	503	484	491	488	483	489	490	530	527	540	556	561	551	549	547	543	552	
21	541	540	537	546	547	524	519	492	506	506	505	506	537	537	551	560	541	551	569	560	553	542	541	542	
22	537	536	537	531	544	542	533	520	533	519	509	511	508	510	517	524	540	555	555	557	555	561	560	554	
23	544	537	544	537	537	533	537	536	524	516	517	513	514	506	535	550	563	561	564	569	555	547	544	553	
24	541	542	537	546	541	542	528	525	528	524	521	510	509	503	530	536	533	541	549	553	548	553	546	552	
25 *	537	536	537	539	545	541	535	524	523	519	512	506	510	512	528	544	549	553	560	555	560	551	547	544	
26	542	546	546	551	554	560	560	553	547	534	528	524	526	533	542	551	566	566	566	569	607	566	569	579	
27 **	571	557	562	566	564	562	546	542	539	531	509	533	533	525	524	533	526	540	560	560	560	560	557	553	
28	549	546	546	547	546	543	537	533	528	515	506	508	515	510	533	564	542	569	564	571	574	585	580	558	
29 **	562	560	561	553	549	557	545	534	535	542	519	508	521	524	522	542	540	545	553	560	557	560	556	551	
30	551	548	533	533	542	537	535	531	518	497	519	530	538	533	524	532	551	550	557	553	558	560	556	556	
Mean	550	549	546	544	545	543	535	524	515	510	509	510	517	519	534	543	547	556	559	561	560	557	556	554	
Mean *	551	552	550	550	554	551	546	537	530	523	518	516	516	522	538	551	556	560	564	562	562	561	559	555	
Mean **	562	560	551	547	540	537	522	503	484	477	489	502	516	514	524	530	532	540	545	549	546	546	548	541	

* International Quiet Day. ** International Disturbed Day.

TABLE II. - HOURLY MEANS OF HORIZONTAL COMPONENT OF MAGNETIC INTENSITY AT ABINGER

U.T.	0h	1h	2h	3h	4h	5h	6h	7h	8h	9h	10h	11h	12h	13h	14h	15h	16h	17h	18h	19h	20h	21h	22h	23h	24h
July													18000 γ + Tabular Quantities (in γ)												
1	548	541	540	538	537	535	534	515	519	516	498	524	538	539	546	550	555	554	560	566	554	553	553	553	
2	553	555	546	545	552	537	538	528	527	521	519	519	515	533	549	534	546	561	562	562	561	558	555	550	
3 **	555	562	564	575	569	565	555	534	519	493	497	508	490	505	533	560	561	565	593	528	520	542	533	553	
4 **	546	529	533	525	528	524	515	513	510	499	485	493	511	522	553	582	598	618	584	573	546	533	535	546	
5 **	537	551	551	550	538	537	497	470	443	425	407	418	436	455	517	539	609	584	582	553	516	520	500	497	
6	496	488	511	506	506	508	497	474	461	456	474	483	487	493	505	509	515	522	528	533	537	531	533	529	
7 *	524	521	522	524	525	528	528	521	508	497	489	491	502	506	515	528	534	538	541	542	546	542	537	538	
8	536	533	532	532	536	536	532	527	522	519	513	511	521	534	545	549	554	559	568	558	546	552	551	548	
9 *	539	541	541	536	541	539	532	527	519	518	512	516	518	523	536	540	545	544	550	554	555	551	549	545	
10 *	545	544	550	546	546	546	540	530	523	527	534	541	545	546	545	552	554	555	564	568	568	563	558	555	
11	554	554	555	554	553	547	539	538	538	543	549	550	571	585	553	543	559	576	585	558	561	558	556	557	
12	554	552	552	549	546	540	537	533	530	536	544	551	564	566	565	571	585	583	545	542	543	540	539	536	
13 *	536	535	536	536	540	535	531	524	513	506	503	504	507	507	512	522	539	549	562	558	562	567	564	558	
14	557	557	549	553	575	567	554	545	564	549	508	514	488	499	525	546	522	518	540	540	549	544	540	505	
15	517	529	521	517	519	520	517	510	506	509	509	504	513	526	530	529	549	553	559	566	553	545	558	544	
16	542	544	543	554	549	542	532	531	512	495	500	522	535	536	530	548	561	595	575	595	594	550	535	544	
17	549	543	520	540	540	517	499	492	482	495	504	506	503	522	532	531	532	563	563	560	550	568	554	553	
18	537	553	545	543	542	533	522	517	515	508	506	510	514	519	528	546	549	542	559	553	549	547	544	542	
19	544	544	544	544	541	539	522	521	519	513	511	509	522	526	536	545	558	569	571	558	554	572	587	568	
20 **	592	542	542	542	541	528	546	519	510	483	458	474	487	492	489	517	535	521	531	527	533	544	535	537	
21 **	539	534	539	537	531	524	521	516	512	495	494	454	485	485	454	499	506	529	517	529	535	535	536	535	
22	532	534	540	531	508	534	534	520	507	506	498	488	484	489	512	530	543	540	541	552	557	552	543	550	
23	549	537	524	534	538	534	526	520	519	506	494	493	503	519	517	526	532	540	539	545	543	536	535	532	
24	536	539	543	548	548	545	534	525	520	523	522	527	526	507	521	541	539	538	538	550	559	565	563	555	
25	552	559	548	550	553	534	518	532	521	517	516	503	499	502	515	525	532	543	553	552	550	546	545	547	
26	546	550	554	557	548	560	550	518	486	531	529	528	507	481	491	542	530	548	556	550	548	548	531	534	
27	530	532	529	517	523	529	517	510	516	521	515	514	516	516	522	529	527	556	563	555	550	548	552	539	
28	528	527	530	531	535	539	524	525	528	523	509	500	511	521	520	531	547	557	552	558	549	548	548	552	
29	539	536	538	537	534	535	525	512	503	502	513	522	530	539	538	539	539	552	547	552	548	543	542	542	
30 *	544	548	548	545	534	541	538	530	523	522	526	532	536	537	538	536	540	548	552	551	552	548	548	543	
31	545	543	548	545	550	554	539	532	532	523	512	504	509	519	528	533	543	543	552	555	559	557	557	554	
Mean	542	541	540	540	540	537	529	520	513	509	505	507	512	518	526	538	546	554	556	553	550	549	546	543	
Mean *	538	538	539	537	537	538	534	526	517	514	513	517	522	524	529	536	542	547	554	555	557	554	551	548	
Mean **	554	544	546	546	541	536	527	510	499	479	468	469	482	492	509	539	562	563	561	542	530	535	528	534	
August													18000 γ + Tabular Quantities (in γ)												
1	554	541	534	536	543	539	537	524	516	508	514	522	525	525	533	547	557	557	557	559	561	558	556	550	
2 *	549	548	548	544	545	539	534	527	523	523	519	518	523	524	531	536	543	550	556	557	554	551	549	548	
3 *	548	548	548	550	550	550	544	530	518	512	512	516	522	532	545	548	549	548	552	557	559	558	559	556	
4	553	552	552	554	552	552	548	541	534	525	516	524	535	540	548	546	558	570	565	564	559	560	560	558	
5 *	559	557	556	557	558	557	552	543	530	524	526	532	530	534	544	554	557	562	567	575	575	575	571	563	
6 *	566	559	557	561	558	554	548	539	530	526	522	526	529	535	541	550	564	566	566	569	570	566	562	555	
7 *	552	552	556	552	552	552	548	540	534	528	523	521	532	535	543	546	552	556	563	565	566	563	561	558	
8	558	557	555	557	555	552	552	548	544	540	534	529	532	536	548	555	566	560	568	584	570	557	561	557	
9	555	554	555	555	555	553	545	539	533	526	518	523	536	540	541	548	557	561	567	571	567	564	563	561	
10	558	557	557	552	551	549	549	540	530	509	508	512	554	551	552	550	567	579	580	557	546	552	558	557	
11	550	553	546	542	543	540	528	515	512	511	510	513	529	525	519	529	560	556	574	579	577	578	574	542	
12 **	552	567	584	526	481	475	442	448	408	392	424	463	480	484	480	511	524	520	530	530	518	520	491	515	
13 **	516	502	487	485	482	492	487	475	465	462	462	483	479	493	499	526	560	536	528	541	542	530	524	524	
14	523	522	517	512	511	485	495	501	489	483	480	481	487	491	498	509	520	519	525	525	526	527	527	527	
15	528	525	524	524	524	521	515	503	501	505	502	508	518	522	525	535	542	533	534	548	547	548	547	540	
16 **	542	537	537	539	550	536	515	515	519	515	504	504	508	527	555	607	459	483	503	525	527	521	520	521	
17	524	540	515	494	509	513	502	481	459	462	470	479	485	494	512	502	498	518	531	544	543	531	528	526	
18	527	527	526	529	529	524	513	499	485	475	473	482	493	503	512	522	533	547	547	548	545	543	547	534	
19	532	532	531	532	540	538	538	527	503	496	494	510	526	542	551	562	531	522	546	545	542	538	536	535	
20	534	535	538	534	537	534	524	514	502	502	512	526	537	543	545	532	535	543	547	556	562	558	556	553	
21	548	547	545	542	542	542	538	529	516	515	518	529	543	547	540	542	546	542	554	553	555	567	568	577	
22 **	574	568	531	487	485	506	509	509	509	494	489	475	473	461	458	521	535	531	482	472	489	440	434	432	
23 **	430	465	467	466	499	438	403	416	373	368	366	427	430	470	467	486	506	503	511	512	513	515	522	506	
24	518	507	504	511	514	514	512	487	490	483	475	484	493	476	482	498	502	511	526	529	529	526	527	526	
25	535	515	515	517	524	522	528	521	515	503	501	508	505	494	490	502	515	524	524	531	532	536	533	527	
26	521	521	524	523	523	517	514	510	505	503	512	523	522	524	517	509	514	518	525	531	537	538	536	539	
27	533	528	522	519	523	522	520	511	501	500	497	508	522	523	514	510	514	527	528	537	538	542	540	542	
28	536	534	531	527	527	529	523	511	502	497	501	512	523	517	512	511	523	523	531	535	541	541	543	541	
29	542	548	537	532	533	533	531	524	515	506	503	509	512	514	518	521	528	537	543	546	550	543	541	541	
30	541	541	541	540	539	538	541	532	516	503	498	509	514	519	522	526	519	533	546	550	550	547	543	540	
31	538	538	540	540	538	539	535	528	518	510	508	520	526	529	537	537	540	550	555	559	557	553	550	550	
Mean	539	538	535	530	531	528	522	514	503	497	497	506	514	518	522	532	535	538	543	547	547	544	542	539	
Mean *	555	553	553	553	553	550	545	536	527	523	520	523	527	532	541	547	553	556	561	565	565	563	560	556	
Mean **	523	528	521	501	499	489	471	473	455	446	449	470	474	487	492	530	517	515	511	516	518	505	498	500	

* International Quiet Day. ** International Disturbed Day.

TABLE II. - HOURLY MEANS OF HORIZONTAL COMPONENT OF MAGNETIC INTENSITY AT ABINGER

U.T.	0h	1h	2h	3h	4h	5h	6h	7h	8h	9h	10h	11h	12h	13h	14h	15h	16h	17h	18h	19h	20h	21h	22h	23h	24h
September	18000 γ + Tabular Quantities (in γ)																								
1 *	546	546	546	546	544	540	532	521	507	505	503	512	531	543	547	542	529	537	549	551	548	547	543	543	
2	543	542	546	547	546	548	541	533	528	520	520	524	535	550	556	566	560	550	549	552	557	569	565	552	
3 **	547	555	584	561	555	519	504	481	475	499	482	480	500	513	524	526	517	531	537	549	541	522	535	536	
4	537	538	532	529	529	521	515	505	497	489	480	487	501	521	532	530	532	532	534	537	541	539	541	537	
5 *	535	536	537	538	539	539	537	532	526	514	498	498	511	523	531	537	543	544	548	547	544	543	543	556	
6	541	537	543	542	544	544	536	527	524	522	516	519	525	528	528	528	534	541	553	555	560	550	548	559	
7	548	546	541	537	539	541	541	532	523	511	503	504	517	516	515	530	533	542	546	550	548	551	552	552	
8	546	546	544	546	546	547	546	541	534	519	505	502	513	524	532	535	541	540	549	555	562	561	561	565	
9 **	563	557	549	555	563	548	528	542	524	505	500	493	502	495	504	514	520	531	536	540	531	537	542	542	
10	543	541	536	543	540	527	531	526	518	505	504	509	520	522	513	513	518	531	533	531	540	536	537	533	
11	534	537	534	531	530	528	521	515	503	491	488	492	504	515	522	529	524	528	533	538	536	538	539	540	
12	538	540	533	537	531	531	527	517	498	502	500	504	517	518	520	531	529	532	540	538	545	547	535	538	
13	543	536	533	536	534	528	521	511	500	495	504	515	523	535	540	540	535	537	542	543	545	551	554	554	
14	534	542	540	551	529	527	523	509	500	495	493	513	521	527	535	532	524	531	536	539	544	536	544	537	
15	542	549	540	540	538	531	527	515	507	501	501	505	514	523	531	535	545	549	549	547	548	553	551	549	
16	535	544	544	544	544	536	531	524	514	507	508	520	523	527	524	537	545	551	553	562	557	558	554	549	
17 **	552	557	549	550	552	518	531	528	522	510	501	504	500	488	494	513	532	508	461	477	457	461	470	481	
18	505	497	493	496	501	505	505	502	491	473	464	469	479	486	489	493	509	512	522	525	524	525	527	527	
19 **	526	527	530	536	536	535	546	520	502	478	449	459	474	475	490	498	492	482	498	515	526	523	505	504	
20 **	492	535	511	508	528	536	500	503	495	453	467	467	478	474	491	488	500	511	542	536	526	531	536	541	
21	527	522	516	524	524	525	520	511	504	502	488	494	506	504	515	520	526	523	536	542	552	541	539	535	
22	532	532	528	528	530	526	530	521	504	509	498	494	509	506	514	518	507	528	528	534	537	564	551	537	
23	528	528	528	529	530	533	535	530	525	517	511	508	507	510	514	517	525	530	538	541	539	546	535	535	
24 *	535	537	536	539	537	537	550	543	524	505	496	501	506	510	515	518	523	529	537	541	535	539	539	541	
25	542	539	539	540	541	539	539	534	529	519	517	510	522	533	542	544	539	534	527	534	539	546	544	532	
26	539	548	526	528	521	503	503	501	499	494	499	506	513	521	514	510	522	533	531	544	530	535	544	545	
27	529	529	529	529	527	526	528	524	514	502	496	501	507	518	525	530	539	536	535	537	551	540	536	538	
28 *	541	544	535	532	532	532	530	523	519	515	513	517	523	528	530	531	535	541	544	540	543	543	542	543	
29 *	540	539	540	539	541	539	536	533	526	521	513	517	529	539	548	547	548	547	548	550	550	551	547	545	
30	539	539	543	545	546	546	546	539	526	518	510	507	517	530	539	530	530	534	530	508	514	517	521	517	
Mean	537	539	536	537	537	532	529	521	512	503	498	501	511	517	523	526	529	532	536	539	539	540	539	539	
Mean *	539	540	539	539	539	537	537	530	520	512	505	509	520	529	534	535	536	540	545	546	544	545	543	546	
Mean **	536	546	545	542	546	531	522	515	504	489	480	481	491	489	501	508	512	513	515	523	516	515	518	521	
October	18000 γ + Tabular Quantities (in γ)																								
1	518	533	535	531	527	531	530	522	512	508	506	512	525	535	536	539	542	551	550	546	548	542	544	539	
2	539	540	539	540	537	541	541	534	526	513	505	510	519	528	541	544	548	551	556	557	557	557	561	558	
3 **	557	551	550	553	553	548	545	532	506	485	474	483	493	497	458	477	509	496	472	469	469	464	465	492	
4 **	501	487	440	478	487	476	487	481	456	447	446	454	463	467	494	502	506	510	505	517	508	515	509	509	
5	521	515	508	510	512	510	508	500	495	472	448	460	476	485	495	508	517	516	517	534	526	521	526	525	
6	534	519	537	565	539	494	499	510	490	473	484	483	490	493	509	512	512	518	521	518	503	512	523	526	
7	523	518	519	519	521	524	525	517	509	502	505	514	522	518	515	526	511	494	501	524	508	500	530	520	
8	516	517	517	515	514	519	521	514	512	505	506	507	508	514	518	521	526	540	546	538	544	537	528	521	
9	526	543	521	532	522	521	507	440	519	505	496	499	501	458	467	502	502	503	506	504	512	521	524	523	
10	520	520	519	520	522	524	527	520	506	493	481	482	495	493	507	511	521	527	529	533	532	535	547	536	
11	538	536	532	541	543	547	549	539	524	513	498	500	506	518	520	529	537	535	540	544	545	549	534	525	
12 *	527	533	529	528	528	532	532	525	514	504	495	494	499	509	521	529	531	536	538	538	542	543	543	542	
13 **	545	547	566	561	565	528	529	526	522	498	505	502	502	503	527	530	547	510	481	481	386	383	357	444	
14 **	444	446	459	496	479	484	436	466	431	408	406	442	422	452	465	473	481	517	495	480	530	516	505	515	
15 **	491	497	545	545	449	484	475	472	468	453	431	436	459	484	485	475	495	507	520	485	490	493	494	502	
16	502	513	520	511	513	525	507	502	481	455	446	445	469	466	491	495	491	522	488	502	492	498	513	504	
17	507	505	511	516	516	520	511	520	508	490	463	444	472	495	505	484	494	499	520	489	486	520	517	525	
18	516	523	542	529	529	525	512	515	513	489	455	461	466	484	481	475	490	493	470	499	534	524	517	538	
19	548	513	520	514	517	525	513	504	484	462	444	462	478	489	493	487	475	489	502	508	496	504	516	520	
20 *	520	525	522	519	527	529	525	523	513	493	475	478	489	498	506	512	518	525	529	531	531	532	534	534	
21	533	531	529	529	529	534	541	549	533	511	494	493	504	502	496	511	521	529	528	498	525	538	529	551	
22	527	523	525	523	526	531	532	531	527	513	502	499	503	515	523	528	527	533	535	531	526	529	530	537	
23	533	538	533	531	535	542	541	538	520	500	495	494	487	480	498	488	498	519	513	521	520	527	523	517	
24	535	525	522	519	518	516	522	519	507	495	492	497	498	505	515	519	527	534	536	534	538	536	536	536	
25 *	537	534	529	531	533	535	539	533	527	514	504	494	491	498	508	522	529	531	534	534	538	539	539	539	
26	538	535	536	538	538	541	543	538	524	507	500	503	511	519	526	532	535	537	541	543	538	533	538	542	
27 *	540	538	537	540	542	543	543	540	529	520	511	512	519	525	530	535	543	545	544	545	547	547	546	547	
28	547	547	548	547	548	544	538	543	543	530	522	514	501	516	527	531	533	534	535	541	528	523	528	538	
29	529	533	542	555	538	538	538	533	518	507	502	500	505	513	512	520	523	529	525	524	531	528	534	536	
30	543	553	536	527	527	531	532	527	516	502	497	504	501	507	511	512	518	522	519	534	535	536	538	545	
31 *	531	546	541	537	536	536	542	535	522	507	498	498	504	509	513	518	525	524	525	531	532	534	536	537	
Mean	525	525	526	529	525	525	522	518	508	493	484	486	493	499	506	511	517	522	520	520	519	521	522	527	
Mean *	531	535	532	531	533	535	536	531	521	508	497	495	500	508	516	523	529	532	534	536	538	539	540	540	
Mean **	508	506	512	527	507	504	494	495	477	458	452	463	468	481	486	491	506	508	495	486	477	474	466	492	

* International Quiet Day. ** International Disturbed Day.

TABLE II. - HOURLY MEANS OF HORIZONTAL COMPONENT OF MAGNETIC INTENSITY AT ABINGER

U.T.	0h	1h	2h	3h	4h	5h	6h	7h	8h	9h	10h	11h	12h	13h	14h	15h	16h	17h	18h	19h	20h	21h	22h	23h	24h
November													18000 γ + Tabular Quantities (in γ)												
1	536	534	540	538	545	545	543	538	529	516	514	498	498	506	514	519	523	523	520	525	534	535	534	532	
2	533	534	536	539	548	552	547	543	534	519	509	507	506	514	516	525	531	538	540	539	543	539	539	539	
3	538	540	547	539	540	540	544	548	543	529	522	515	510	522	524	528	533	535	538	542	545	541	549	543	
4	534	534	534	535	537	540	539	546	549	540	532	523	527	527	530	536	541	545	544	544	544	543	540	537	
5	533	536	533	533	535	536	540	544	541	528	512	520	530	527	529	533	532	542	539	541	538	542	541	539	
6	540	539	537	543	543	543	541	544	536	535	533	531	531	533	537	537	542	537	534	533	533	533	541	557	
7	539	533	528	528	534	538	541	540	536	530	525	519	520	524	528	531	512	520	530	538	539	545	542	543	
8 *	537	537	536	536	540	539	542	540	536	524	522	524	525	524	537	536	538	541	544	547	544	544	544	542	
9	542	539	539	537	540	542	542	538	533	521	521	519	521	529	537	541	545	541	543	542	545	546	543	543	
10 *	539	539	537	537	545	543	540	538	531	526	528	528	529	535	540	540	541	535	533	529	531	537	541	541	
11	540	539	541	546	544	546	547	546	541	532	530	529	533	535	535	538	544	544	537	542	548	537	527	524	
12 **	527	519	531	537	542	546	548	546	540	533	525	511	510	524	525	509	519	528	534	534	533	530	534	535	
13 **	527	519	533	550	575	550	532	508	512	515	497	464	473	479	476	503	488	483	488	509	511	524	510	515	
14 **	519	542	533	533	542	519	517	523	517	510	491	499	505	510	505	500	509	502	501	501	510	512	522	515	
15	520	521	521	521	524	532	536	533	528	524	515	511	506	504	511	509	528	527	529	529	537	531	527	527	
16	526	529	533	534	537	539	538	540	537	528	519	515	510	517	521	524	528	528	524	524	526	533	537	537	
17	535	535	535	537	540	544	542	541	540	533	528	526	526	533	537	541	545	550	546	540	535	537	537	530	
18 *	533	534	537	541	544	548	546	544	533	521	517	515	518	526	532	538	546	550	550	549	548	550	547	546	
19	543	542	544	546	548	551	552	550	544	540	531	529	531	534	524	519	542	517	516	516	529	539	539	533	
20	526	532	529	529	531	542	538	536	532	522	519	518	519	524	527	530	533	537	542	537	533	529	530	531	
21	531	531	536	535	534	537	541	540	534	528	525	520	524	525	530	533	537	542	542	544	546	544	542	542	
22 *	541	540	540	540	542	548	546	544	539	531	524	523	526	536	539	546	551	551	552	552	551	543	542	541	
23 *	541	541	544	546	551	556	557	553	546	535	533	534	539	541	546	549	550	551	551	549	550	550	550	548	
24	544	546	545	547	546	546	550	547	543	539	533	534	539	542	541	548	551	553	555	539	521	523	509	510	
25 **	518	519	520	528	530	546	548	535	527	510	496	491	500	509	514	511	515	522	532	531	503	450	467	492	
26 **	509	533	524	527	527	530	528	536	526	509	508	498	509	508	505	514	518	521	521	518	525	529	527	528	
27	527	529	531	531	541	536	538	536	529	520	516	506	520	527	530	532	534	535	518	528	533	532	534	536	
28	536	533	534	540	543	548	543	544	538	527	513	506	514	511	516	521	530	529	529	520	525	534	534	534	
29	532	532	536	539	540	538	539	543	538	518	513	518	520	519	518	515	524	534	538	536	534	539	539	534	
30	535	537	539	544	545	546	549	543	544	533	526	520	527	528	527	532	537	541	533	526	524	522	522	530	
Mean	533	534	535	537	541	542	542	540	535	526	519	515	518	522	525	528	532	533	533	534	534	533	533	534	
Mean *	538	538	539	540	544	546	546	544	537	527	525	525	527	532	539	542	545	546	546	545	545	545	545	544	
Mean **	520	526	528	535	543	538	535	530	524	515	503	493	499	506	505	507	510	511	515	519	516	509	512	517	
December													18000 γ + Tabular Quantities (in γ)												
1	537	535	539	538	537	537	557	552	548	538	521	510	524	533	537	542	546	546	546	536	528	532	537	535	
2	530	533	535	538	537	542	542	543	547	548	540	537	535	539	538	542	541	547	546	542	529	528	531	535	
3	533	534	533	534	537	542	549	549	546	539	536	535	537	539	543	548	551	552	552	549	544	536	519	524	
4	523	519	526	526	528	533	537	543	542	536	532	530	535	537	539	542	545	548	546	546	546	544	543	540	
5	539	535	537	537	542	545	546	548	548	542	535	534	531	526	525	528	516	515	508	501	492	517	521	510	
6 **	519	524	523	524	525	530	537	543	540	533	526	526	533	538	542	546	546	551	544	539	521	489	468	476	
7 **	503	490	507	542	522	530	530	517	512	507	512	504	497	499	458	488	499	484	471	473	489	497	530	526	
8 **	515	517	527	539	536	533	523	531	504	512	502	493	491	506	511	484	501	499	506	501	512	515	519	532	
9	541	528	532	526	536	532	533	526	517	525	517	506	498	483	511	514	512	514	528	528	529	530	528	532	
10	531	532	532	532	534	534	536	535	532	526	520	518	516	514	514	524	529	536	536	535	527	532	531	532	
11	530	531	534	536	541	537	545	542	530	525	521	516	521	521	527	529	534	532	536	538	536	541	538	538	
12	538	534	532	536	539	541	544	539	539	526	533	529	532	534	538	532	541	527	532	540	539	532	540	529	
13	526	530	531	535	538	546	549	542	537	531	524	524	524	522	513	526	537	540	540	538	538	539	538	537	
14 *	535	540	543	542	544	546	546	544	544	536	532	526	531	540	546	546	552	554	553	553	553	548	545	542	
15	538	534	533	535	537	543	547	546	541	535	530	528	532	537	538	526	516	536	532	537	537	537	533	533	
16	537	535	533	535	540	546	550	550	550	545	546	549	549	549	549	553	555	546	549	550	546	528	526	520	
17	520	524	524	526	531	537	540	542	539	540	540	535	532	532	530	529	533	540	539	538	536	535	532	532	
18 *	530	531	535	538	540	541	542	541	542	541	537	533	532	534	535	535	540	546	548	546	546	544	540	539	
19 *	535	535	537	538	543	544	544	544	544	542	540	540	540	538	541	542	544	550	551	549	549	546	544	543	
20 *	542	542	542	544	546	548	549	547	548	546	543	541	550	550	553	556	557	558	558	550	551	540	540	539	
21 **	541	540	538	539	544	541	544	552	555	544	529	541	536	528	522	504	504	524	522	512	505	517	526	518	
22 **	520	518	526	535	539	535	551	543	532	533	524	523	526	497	490	495	515	512	518	519	512	526	522	528	
23	529	530	531	535	544	543	544	542	533	519	513	517	526	526	531	531	535	532	535	537	533	528	546	524	
24	528	531	529	535	531	543	536	539	541	525	521	523	519	516	518	518	529	525	530	520	515	516	525	529	
25	531	534	550	541	538	539	539	539	539	530	525	519	525	521	520	533	534	534	528	530	526	521	522	529	
26	534	541	546	546	548	550	561	557	552	546	537	525	528	529	530	531	534	539	539	541	539	539	539	545	
27	546	549	550	554	563	552	551	549	543	539	549	550	548	545	544	532	536	537	543	521	540	534	537	539	
28	539	537	538	536	543	543	542	541	543	541	534	535	539	540	539	540	543	537	527	525	530	531	525	523	
29	523	529	533	539	539	541	536	537	539	536	533	537	539	536	538	534	530	543	538	525	526	533	535	536	
30	544	530	534	535	537	541	542	541	541	539	534	537	538	541	545	544	539	538	543	543	541	540	539	539	
31 *	539	542	540	540	541	540	539	538	536	536	532	535	539	541	542	542	545	545	545	545	543	540	539	539	
Mean	532	531	534	537	539	541	543	542	539	535	530	528	529	529	529	530	534	535	535	533	531	530	531	530	
Mean *	536	538	539	540	543	544	544	543	543	540	537	535	538	541	543	544	548	551	551	549	548	544	542	540	
Mean **	520	518	524	536	533	534	537	537	529	526	519	517	517	514	505	503	513	514	512	509	508	509	513	516	

* International Quiet Day. ** International Disturbed Day.

TABLE III. - HOURLY MEANS OF VERTICAL COMPONENT OF MAGNETIC INTENSITY AT ABINGER

U.T.	0h	1h	2h	3h	4h	5h	6h	7h	8h	9h	10h	11h	12h	13h	14h	15h	16h	17h	18h	19h	20h	21h	22h	23h	24h
January	43000 γ + Tabular Quantities (in γ)																								
1 *	59	55	54	53	53	53	55	57	59	57	55	55	54	59	59	59	59	57	59	59	60	61	60	59	
2	56	55	55	55	55	55	55	55	51	51	55	53	53	55	55	55	59	59	59	59	57	56	56	55	
3 *	57	55	53	52	52	55	55	55	53	54	55	56	59	63	62	59	59	57	59	57	58	59	57	56	
4	56	55	55	53	52	53	55	54	53	54	55	53	55	58	59	56	56	55	57	56	55	56	54	55	
5 **	54	53	52	49	49	51	51	51	49	47	47	51	51	55	54	53	55	57	59	59	60	56	47	50	
6	56	56	55	55	55	55	55	55	53	51	52	55	59	60	61	59	63	67	67	67	65	64	61	59	
7	59	59	57	57	58	59	56	55	53	52	53	51	55	62	62	59	60	61	63	63	61	59	59	60	
8	60	60	59	56	57	57	56	55	57	56	57	55	55	56	56	57	59	63	66	67	59	60	61	60	
9 **	59	61	62	60	59	58	58	55	54	59	58	59	60	65	64	60	63	65	67	67	66	67	60	62	
10	63	63	60	59	52	53	56	56	55	56	54	60	60	62	63	66	68	68	68	66	67	68	64	64	
11	62	62	62	60	58	59	59	59	58	58	56	54	56	60	60:	61:	67	66	67	67	67	63	61	61	
12	61	61	59	57	57	59	59	59	57	57	55	49	49	53	55	55	59	61	61	60	59	60	59	57	
13	57	55	55	55	55	57	57	57	56	57	59	57	59	59	57	59	59	61	63	61	59	59	59	59	
14	55	55	55	55	55	57	59	57	57	55	55	53	59	59	60	64	64	63	63	61	60	61	62	62	
15	59	57	57	55	52	50	51	55	55	57	56	52	51	55	60	63	63	63	62	63	60	59	60	59	
16	57	56	55	56	54	57	58	59	59	63	59	53	53	53	55	56	58	59	59	61	61	61	67	65	
17 **	65	63	44	43	41	45	51	55	59	63	65	63	60	63	59	63	66	64	64	63	65	67	67	63	
18	63	63	62	60	57	55	52	51	51	61	63	61	56	57	57	59	60	61	61	60	63	61	59	57	
19	59	59	57	57	57	59	57	59	60	63	63	65	63	59	59	59	61	63	61	59	60	60	57	56	
20	56	49	47	51	51	52	47	47	49	54	55	55	55	59	59	57	59	59	62	61	63	63	59	59	
21 **	59	58	56	55	55	57	57	58	57	60	57	56	59	63	72	69	69	75	83	79	70	67	65	62	
22 **	60	60	60	60	59	58	58	57	55	58	58	56	56	57	57	55	59	60	63	69	62	60	61	55	
23	47	49	51	55	54	55	55	56	54	55	56	53	55	56	61	68	67	67	67	65	65	63	59	56	
24	55	55	55	55	56	53	51	52	53	56	55	53	51	54	54	53	57	59	61	60	59	59	55	53	
25	55	53	54	55	55	57	57	57	56	57	56	57	61	63	63	61	61	61	61	59	57	58	55	55	
26 *	55	55	55	55	55	57	57	55	55	57	55	55	56	61	62	59	57	59	59	58	57	57	55	55	
27 *	53	53	53	53	53	55	55	57	58	59	55	49	51	54	53	52	53	53	57	56	57	56	54	53	
28	51	50	51	51	51	52	53	51	49	51	55	53	49	47	49	51	51	53	58	61	61	59	59	57	
29	57	58	55	55	55	55	55	55	55	51	51	49	47	48	49	50	51	52	57	57	59	59	59	58	
30 *	55	54	53	52	50	52	52	54	54	52	51	48	46	49	53	52	54	54	58	55	55	55	54	52	
31	50	50	50	50	48	50	50	51	52	51	51	51	54	54	58	56	56	55	56	56	56	55	56	55	
Mean	57	56	55	55	54	55	55	55	55	56	56	55	55	57	58	58	60	61	62	62	61	60	59	58	
Mean *	56	54	54	53	53	54	55	56	56	56	54	53	53	57	58	56	56	56	58	57	57	58	56	55	
Mean **	59	59	55	53	53	54	55	55	55	57	57	57	57	61	61	60	62	64	67	67	65	63	60	58	
February	43000 γ + Tabular Quantities (in γ)																								
1 **	53	51	50	51	49	50	50	49	49	51	53	53	49	51	52	49	49	53	58	67	84	90	88	89	
2	80	61	59	57	58	59	60	60	57	58	55	55	55	56	63	62	61	65	75	73	79	80	77	69	
3	67	67	65	61	53	49	52	53	53	57	59	60	63	63	63	64	64	65	65	67	67	69	69	68	
4	69	66	64	63	61	61	59	57	57	55	55	57	59	57	59	59	63	63	62	62	62	63	61	58	
5	59	59	59	59	59	56	53	50	50	49	53	57	57	55	57	59	60	61	63	62	65	73	69	68	
6 **	63	62	58	57	57	57	49	45	45	49	53	61	73	85	111	109	117	125	111	97	103	98	89	80	
7 **	66	63	53	55	54	58	63	64	65	65	67	69	69	75	79	84	87	88	91	89	85	83	81	77	
8	73	71	71	69	69	69	69	65	65	63	61	60	59	57	59	63	63	65	69	72	75	78	79	78	
9	74	71	69	68	67	67	64	61	57	53	51	53	53	57	61	63	67	69	77	84	87	89	84	79	
10	76	70	67	62	62	64	65	68	67	66	66	62	62	60	60	63	72	82	90	84	78	72	68	64	
11	54	54	55	38	46	54	57	58	60	60	56	60	62	60	64	66	69	70	70	70	69	68	65	63	
12 *	63	61	61	61	61	60	59	57	59	55	55	55	54	53	54	59	63	63	64	65	64	63	62	61	
13 *	59	59	57	57	57	59	59	57	57	55	49	47	50	53	55	57	56	57	59	59	61	65	65	61	
14	59	57	55	55	55	55	55	55	57	57	57	57	57	57	56	57	59	60	62	63	65	63	61	58	
15	58	55	48	50	49	49	49	51	53	55	55	51	49	49	55	57	59	60	61	63	63	62	60	59	
16	57	57	56	51	43	47	52	51	53	52	47	46	49	53	64	67	71	73	71	67	67	66	63	61	
† 17	61	59	59	59	58	57	55	54	54	53	56	–	–	–	–	–	–	–	68	65	68	67	64	62	
18	56	56	58	58	58	58	57	54	54	53	52	52:	47	48	53	63	65	67	66	65	65	65	54	51	
19	54	56	56	57	56	52	49	48	51	51	51	51	51	53	57	61	65	65	63	63	65	62	59	59	
20	59	59	59	55	55	57	57	58	59	57	51	48	45	54	60	65	73	71	69	67	65	63	58	57	
21 *	57	58	59	58	61	60	60	58	58	55	48	39	41	48	53	57	59	59	60	58	60	59	57	57	
22 *	57	57	56	57	57	59	57	53	52	48	45	43	45	45	49	55	65	66	68	67	69	68	67	67	
† 23	65	58	59	61	63	64	63	63	65	63	56	53	–	–	–	–	–	–	–	–	–	56	60	58	
24 **	56	56	55	54	54	56	54	52	48	44	39	38	41	43	53	63	84	126	179	283	233	127	47	63	
25 **	73	17	72	101	99	91	75	69	75	78	95	107	113	116	131	140	136	128	121	109	107	96	77	79	
26	79	80	81	80	79	79	79	79	75	67	62	63	63	63	63	68	75	76	79	79	79	81	79	71	
27 *	71	71	72	71	71	72	70	70	69	64	59	55	57	63	71	71	69	71	73	72	72	73	71	71	
28	67	66	66	65	65	65	65	67	67	63	57	51	56	59	63	73	83	92	91	88	91	92	88	83	
Mean † (26 Days)	64	60	61	60	60	60	59	58	58	57	56	56	57	59	64	68	71	75	78	80	80	76	69	67	
Mean *	61	61	61	61	61	62	61	59	59	55	51	48	49	52	56	60	62	63	65	64	65	66	64	63	
Mean **	62	50	58	64	63	62	58	56	56	57	61	66	69	74	85	89	95	104	112	125	122	99	76	78	

* International Quiet Day. ** International Disturbed Day. † February 17 and 23 omitted. : Low Weight.

TABLE III. - HOURLY MEANS OF VERTICAL COMPONENT OF MAGNETIC INTENSITY AT ABINGER

U.T.	0h	1h	2h	3h	4h	5h	6h	7h	8h	9h	10h	11h	12h	13h	14h	15h	16h	17h	18h	19h	20h	21h	22h	23h	24h
March	43000 γ + Tabular Quantities (in γ)																								
1	79	73	64	65	67	69	69	70	69	68	61	55	52	59	66	81	87	87	89	92	99	101	99	95	
2	83	75	53	31	47	60	59	64	67	72	67	59	65	67	73	77	78	77	77	76	79	79	76	75	
3	71	67	67	68	69	67	61	67	68	67	64	63	66	73	81	86	93	91	87	85	87	88	85	84	
4	60	59	51	47	45	51	57	61	63	61	55	55	58	64	77	93	98	97	95	87	85	82	67	73	
5	75	75	75	75	71	71	68	63	63	61	58	59	61	65	68	75	81	83	89	85	82	81	79	75	
6	76	74	74	72	70	69	67	70	65	62	62	60	62	64	71	82	84	87	82	78	77	76	73	72	
7 *	74	68	66	70	69	69	69	69	66	59	54	54	59	62	63	66	70	74	72	70	72	74	72	67	
8	62	62	62	62	60	46	44	50	51	51	52	49	51	56	62	64	66	70	73	78	76	76	74	70	
9	68	67	66	62	56	58	59	60	61	56	52	43	46	54	63	74	78	82	82	78	70	70	68	66	
10	66	63	60	63	64	66	67	68	65	58	52	51	50	56	64	66	72	72	72	71	70	70	66	64	
11	64	64	64	64	64	66	65	68	66	58	54	50	54	57	61	70	82	84	78	76	74	72	70	66	
12	60	58	62	62	60	60	62	64	66	64	62	58	59	58	62	74	77	76	78	79	77	72	70	62	
13 *	59	63	64	65	66	66	67	68	65	60	54	48	53	58	63	67	68	69	70	69	68	67	66	66	
14	66	64	62	62	61	61	61	62	62	58	47	46	47	52	59	66	70	68	70	70	70	70	66	65	
15	63	62	62	62	62	62	59	58	57	54	50	52	60	64	66	72	78	86	78	74	72	68	67	68	
16	62	64	62	46	50	56	58	60	60	58	57	56	60	64	68	70	76	74	70	70	68	66	62	54	
17	42	39	48	54	56	57	52	54	50	44	39	40	46	52	58	66	68	70	70	70	66	64	62	60	
18 *	56	56	59	60	60	60	62	64	62	58	56	48	48	54	61	66	66	65	64	64	64	63	62	60	
19 *	61	61	60	60	58	58	60	62	62	58	54	52	53	56	62	66	66	62	62	62	61	61	60	58	
20	58	58	56	46	51	54	56	58	58	50	40	40	45	51	56	62	64	61	62	60	60	60	60	58	
21	59	59	59	59	59	60	57	57	53	51	49	55	59	63	65	72	75	74	79	86	81	75	69	67	
22 *	67	65	65	55	45	49	51	52	55	53	51	48	57	63	73	85	101	93	93	73	72	67	57	55	
23	60	57	48	42	46	56	60	62	58	52	56	52	52	58	70	82	90	84	76	71	74	69	62	64	
24	64	62	64	64	64	64	64	64	58	54	50	44	46	52	68	74	76	79	84	81	77	70	62	63	
25 *	63	62	64	58	60	62	61	61	53	44	40	37	41	44	49	60	66	70	72	71	70	68	68	66	
26	58	60	60	60	60	61	64	66	67	64	56	49	45	46	54	64	70	76	82	80	79	78	72	66	
27 **	62	62	42	32	39	48	52	55	56	56	56	54	50	50	58	66	76	82	94	108	98	94	66	61	
28 **	65	64	57	62	62	62	62	60	58	54	52	53	53	58	84	118	157	177	156	118	110	106	78	86	
29 **	69	52	54	45	52	62	66	69	70	76	86	82	96	98	108	121	124	110	112	96	77	76	79	68	
30 **	66	67	64	62	64	65	68	72	75	72	71	71	69	68	78	86	98	108	102	100	90	80	74	75	
31	66	52	54	52	62	70	74	76	70	66	59	60	60	60	66	76	78	78	82	82	80	80	70	62	
Mean	65	62	60	58	59	61	61	63	62	59	55	53	56	60	67	76	82	83	82	79	77	75	70	68	
Mean *	63	62	63	63	63	63	64	65	62	56	52	48	51	55	60	65	67	68	68	67	67	67	66	63	
Mean **	66	62	56	51	52	57	60	62	63	62	63	62	65	67	80	95	111	114	111	99	89	85	71	69	
April	43000 γ + Tabular Quantities (in γ)																								
1	58	53	50	54	59	53	56	62	60	57	57	58	60	64	72	84	94	98	95	94	85	84	82	72	
2	58	56	56	54	58	61	66	69	66	62	58	56	58	61	72	78	86	88	90	83	79	74	73	61	
3	56	63	65	62	62	67	70	70	68	68	64	58	58	62	68	78	83	86	91	88	85	82	78	75	
4	72	73	73	68	61	63	65	63	59	56	57	53	55	61	65	71	73	73	77	85	97	92	77	71	
5	73	71	69	64	63	67	72	73	72	65	55	49	49	56	61	69	75	77	76	74	73	73	71	69	
6 *	69	71	71	70	69	69	71	72	67	61	57	49	47	51	60	66	73	71	71	71	69	70	69	66	
7 *	66	67	67	65	65	65	67	67	64	59	53	41	43	47	55	66	72	72	73	72	71	69	67	63	
8	63	62	62	63	64	66	68	68	66	57	51	45	44	48	58	68	74	79	85	82	76	76	70	67	
9	65	64	58	57	60	63	66	66	62	58	54	44	46	50	60	68	72	74	80	74	70	66	63	60	
10	48	40	54	60	58	56	60	60	52	52	56	52	52	66	78	84	88	86	84	85	74	72	68	54	
11	32	52	60	62	62	66	68	68	67	63	60	60	59	62	71	78	84	89	92	84	78	68	55	60	
12	62	60	58	51	56	58	62	66	66	66	62	59	56	58	62	66	70	70	70	71	72	72	68	65	
13 *	63	58	59	62	63	66	66	66	64	57	47	40	40	44	52	62	65	68	75	78	75	71	66	66	
14	66	63	60	56	56	60	61	60	60	52	46	40	42	46	54	64	66	70	72	74	74	72	70	68	
15 *	66	64	64	62	62	64	66	68	64	57	53	49	48	54	64	72	76	74	73	72	72	70	66	65	
16 *	65	64	64	64	63	63	64	68	67	52	46	40	33	34	47	55	59	62	62	64	64	64	61	60	
17 **	56	55	50	34	- 14	17	20	3	28	34	43	54	74	94	174	254	202	202	150	108	79	44	84	88	
18 **	89	90	88	88	89	90	90	82	86	76	66	62	62	82	99	129	134	136	126	109	94	87	75	58	
19	62	62	66	70	76	76	78	76	75	71	58	51	54	67	98	124	138	153	120	118	106	98	84	79	
20	70	66	52	58	57	54	64	70	72	74	67	64	70	75	85	93	108	114	107	102	98	90	82	70	
21	67	66	58	62	69	70	72	76	73	67	61	60	60	70	90	104	112	126	113	103	99	88	84	81	
22	81	75	78	76	82	82	84	86	81	72	62	55	56	66	86	102	118	128	126	99	92	87	81	78	
23 **	71	60	64	62	52	38	0	2	15	20	30	46	71	90	120	172	170	157	154	134	102	94	89	81	
24 **	69	74	77	81	82	85	85	87	83	76	71	68	67	67	69	70	76	89	101	105	35	53	101	49	
25 **	41	18	- 3	51	81	87	87	86	89	89	94	95	101	99	107	123	135	131	130	121	102	95	85	75	
26	58	63	70	73	77	85	89	90	89	83	75	67	65	69	77	82	86	87	94	91	88	85	83	79	
27	79	81	80	81	83	82	83	81	79	70	61	52	47	55	65	77	84	93	91	87	85	81	65	29	
28	31	54	59	63	73	74	73	73	73	68	63	56	55	65	80	85	89	91	93	95	93	85	79	69	
29	72	75	77	73	67	73	73	70	69	59	51	53	53	60	71	79	80	90	95	91	89	85	81	73	
30	71	70	71	73	75	74	70	69	69	62	55	45	48	58	71	76	82	90	95	93	88	85	82	79	
Mean	63	63	63	64	64	67	67	67	67	62	58	54	54	63	76	90	94	97	95	90	82	78	75	68	
Mean *	66	65	65	65	64	65	67	68	65	57	51	44	42	46	56	64	69	69	71	71	70	69	66	64	
Mean **	65	59	55	63	58	63	56	52	60	59	61	65	75	86	114	150	143	143	132	115	82	75	87	70	

* International Quiet Day. ** International Disturbed Day.

TABLE III. - HOURLY MEANS OF VERTICAL COMPONENT OF MAGNETIC INTENSITY AT ABINGER

U.T.	0h	1h	2h	3h	4h	5h	6h	7h	8h	9h	10h	11h	12h	13h	14h	15h	16h	17h	18h	19h	20h	21h	22h	23h	24h
May	43000 γ + Tabular Quantities (in γ)																								
1 **	77	75	73	72	73	73	73	67	65	58	54	53	59	93	141	149	165	169	172	150	124	93	83	62	
2 **	41	39	49	61	61	53	45	41	54	60	61	71	80	87	97	114	127	125	111	112	110	97	81	77	
3	75	57	57	55	63	67	76	72	71	66	65	63	69	79	89	93	101	101	97	95	94	90	84	81	
4	75	79	77	79	82	86	84	81	76	67	50	55	61	66	75	84	87	92	87	86	83	79	77	77	
5	77	78	77	77	74	75	71	69	67	61	55	55	59	65	73	79	83	85	85	84	85	77	71	75	
6 **	71	73	75	77	78	77	77	73	68	61	56	53	55	71	87	105	133	135	119	113	103	82	65	48	
7 **	57	33	15	25	31	35	48	65	69	69	57	61	71	81	93	111	111	109	105	101	93	87	84	75	
8 **	53	29	37	57	73	81	79	77	76	77	75	70	69	80	97	101	93	94	96	98	88	81	65	66	
9	67	61	55	39	37	61	65	70	67	65	65	62	65	73	75	81	93	97	93	87	85	81	77	76	
10	75	73	74	75	78	79	74	69	67	62	53	45	49	57	65	73	79	85	89	85	81	79	77	77	
11 *	75	73	75	75	77	73	69	70	67	65	61	59	61	71	75	79	83	85	83	82	81	79	77	77	
12 *	77	75	75	77	79	79	77	69	62	55	55	51	49	61	71	75	77	81	85	84	81	79	77	75	
13 *	75	75	74	74	77	78	77	74	71	67	57	50	54	62	74	80	85	85	86	85	85	83	80	77	
14 *	76	74	73	73	77	76	73	69	68	62	52	44	44	49	57	63	66	72	76	76	76	75	73	72	
15	72	72	72	71	72	68	65	60	62	54	52	46	50	61	74	83	84	84	84	80	80	78	76	74	
16	70	69	68	64	54	50	48	43	46	41	43	48	54	65	76	83	84	83	83	83	82	80	74	74	
17	74	75	75	75	76	75	71	64	61	54	51	49	51	61	73	85	95	103	103	99	87	80	77	75	
18	65	57	50	46	48	51	58	57	49	38	35	36	47	57	71	84	93	101	96	89	85	80	77	72	
19	65	63	59	56	59	55	56	53	57	53	47	45	47	57	65	72	77	80	88	88	86	81	75	68	
20	61	57	55	58	57	58	66	67	65	63	58	54	54	61	72	80	88	97	98	94	88	83	79	76	
21	74	68	65	63	63	60	56	55	54	48	44	34	30	42	62	85	98	116	120	113	100	87	75	74	
22	61	52	50	60	65	66	64	68	60	54	48	44	46	62	78	96	98	98	92	86	82	78	75	72	
23	69	65	59	57	61	63	66	61	55	53	51	52	57	59	65	79	95	110	115	103	87	81	73	57	
24	41	57	53	37	39	44	53	55	53	47	41	39	46	55	72	83	89	97	101	101	89	79	74	67	
25	61	47	49	43	57	67	72	70	67	60	54	48	49	60	77	95	93	89	81	81	84	80	68	55	
26	51	43	41	45	45	43	47	57	56	51	47	48	52	63	77	95	95	95	96	91	83	77	73	70	
27	65	65	61	57	61	63	61	61	55	52	51	45	46	55	64	73	79	81	81	80	80	75	62	57	
28	50	41	26	36	57	63	64	63	63	57	51	49	56	63	71	75	77	81	80	80	77	75	72	75	
29	74	68	58	49	49	31	31	33	32	22	22	33	43	69	79	85	88	93	95	102	93	83	79	75	
30	75	77	77	77	77	75	77	73	69	62	55	42	43	57	68	74	77	81	81	81	81	77	75	74	
31 *	75	76	75	74	74	73	70	70	68	57	51	45	47	58	68	74	74	75	78	78	77	75	74	74	
Mean	67	63	61	61	64	65	65	64	62	57	52	50	54	65	77	87	92	96	95	93	87	81	75	71	
Mean *	76	75	74	75	77	76	73	70	67	61	55	50	51	60	69	74	77	80	82	81	80	78	76	75	
Mean **	60	50	50	58	63	64	64	65	66	65	61	62	67	82	103	116	126	126	121	115	104	88	76	66	
June	43000 γ + Tabular Quantities (in γ)																								
1	73	71	72	74	75	74	73	69	67	59	49	45	51	59	73	84	85	90	91	89	84	81	77	75	
2	74	64	70	68	60	64	68	68	64	62	58	53	57	61	73	82	94	104	104	102	94	84	76	74	
3	74	73	76	76	80	83	84	76	66	60	46	42	50	57	72	80	88	95	94	90	86	81	78	75	
4	75	68	60	65	70	71	74	72	71	65	57	51	56	62	74	87	98	95	98	95	89	82	78	75	
5	73	73	74	73	76	80	80	80	76	66	57	53	54	62	77	83	87	89	84	80	77	75	71	69	
6	69	71	72	71	75	75	75	73	71	64	61	49	50	55	63	73	79	80	82	79	78	75	72	71	
7 *	69	66	68	73	79	83	83	79	76	64	55	53	57	61	67	73	73	76	79	79	77	75	73	71	
8 *	73	73	69	71	75	76	72	67	61	55	49	44	47	51	61	65	71	73	77	77	75	72	69	69	
9 *	71	71	71	73	75	73	72	71	71	65	57	51	55	59	66	67	70	74	71	71	71	73	69	67	
10	70	68	67	68	69	67	64	59	55	47	48	47	49	53	58	61	67	72	79	77	75	71	69	69	
11 *	68	68	68	70	69	69	70	69	66	59	51	46	49	53	61	67	67	67	71	71	71	71	68	67	
12	64	64	63	63	65	67	63	61	59	53	48	45	45	51	61	65	71	75	73	73	73	71	71	69	
13	67	67	59	59	65	67	69	71	65	56	53	51	51	55	64	67	75	77	75	75	79	71	63	63	
14 **	55	31	31	45	51	52	57	59	51	43	57	67	87	101	115	127	130	127	115	101	93	83	76	62	
15	67	67	67	72	71	71	72	64	63	59	59	59	64	73	83	85	86	88	90	93	91	86	83	73	
16 **	71	71	55	47	41	43	45	51	60	66	75	70	67	73	88	98	106	100	93	85	83	81	79	79	
17	77	77	79	82	83	83	81	78	75	71	59	51	57	65	75	78	79	83	83	86	84	79	78	78	
18	79	75	61	61	62	61	58	58	55	49	48	54	59	73	83	91	95	103	106	103	91	83	79	70	
19 **	53	54	51	52	57	59	63	67	64	60	61	51	51	58	77	88	91	91	87	83	80	77	65	57	
20	56	56	55	58	61	56	55	54	58	63	63	51	51	61	77	79	82	88	91	87	82	79	76	72	
21	67	67	63	57	57	58	60	55	55	51	43	39	48	63	79	90	87	87	83	86	90	82	75	71	
22	64	62	65	70	72	64	60	60	57	45	44	43	44	49	63	70	76	84	87	88	84	78	72	64	
23	59	52	52	56	64	69	71	69	69	63	60	64	59	56	71	78	82	90	96	96	89	83	78	72	
24	66	64	62	53	60	68	65	66	69	70	62	59	58	60	64	75	78	81	82	80	80	76	75	72	
25 *	66	68	68	68	69	69	71	72	71	68	64	56	54	60	68	76	76	80	80	80	79	77	78	72	
26	72	72	70	70	72	74	68	68	66	58	50	42	47	51	54	60	68	72	74	76	76	72	73	72	
27 **	61	63	66	67	67	68	67	60	58	49	51	55	59	71	81	87	92	96	91	89	85	79	76	75	
28	73	73	74	75	76	79	77	71	63	61	55	47	50	53	63	75	80	87	89	93	88	77	68	65	
29 **	66	66	66	66	52	54	56	58	60	62	64	56	69	83	90	103	107	99	94	88	85	78	74	72	
30	72	60	62	68	74	72	74	70	63	62	59	54	55	63	74	82	87	88	85	80	79	74	72	70	
Mean	68	66	65	66	67	68	68	67	64	59	55	52	55	62	73	80	84	87	87	85	82	78	74	70	
Mean *	69	69	69	71	73	74	74	72	69	62	55	50	52	57	65	70	71	74	76	76	75	74	71	69	
Mean **	61	57	54	55	54	55	58	59	59	56	62	60	67	77	90	101	105	103	96	89	85	80	74	69	

* International Quiet Day. ** International Disturbed Day.

TABLE III. - HOURLY MEANS OF VERTICAL COMPONENT OF MAGNETIC INTENSITY AT ABINGER

U.T.	0h	1h	2h	3h	4h	5h	6h	7h	8h	9h	10h	11h	12h	13h	14h	15h	16h	17h	18h	19h	20h	21h	22h	23h	24h
July	43000 γ + Tabular Quantities (in γ)																								
1	63	65	68	70	72	72	68	62	62	58	54	54	56	66	76	82	88	88	82	82	80	75	74	74	
2	70	68	66	70	74	73	70	70	69	62	56	51	59	66	72	71	75	82	86	86	78	72	70	67	
3 **	68	66	68	63	52	58	61	60	58	52	48	52	63	95	130	134	130	120	118	90	87	84	82	78	
4 **	68	70	74	76	78	81	84	82	78	73	66	64	68	72	81	86	92	112	120	122	112	85	52	82	
5 **	82	80	74	54	45	22	2	10	12	36	52	72	94	122	144	166	198	172	160	134	114	100	88	82	
6	73	67	54	40	50	64	66	68	68	62	62	58	62	70	80	84	86	88	90	90	87	85	82	78	
7 *	78	79	79	78	82	84	82	78	75	70	64	65	64	70	78	78	75	78	81	82	82	80	78	78	
8	77	75	75	78	82	84	86	86	82	78	66	57	58	64	78	86	88	94	102	98	91	86	82	79	
9 *	78	75	68	73	76	81	78	75	74	66	63	58	54	58	66	70	73	80	82	82	80	77	76	75	
10 *	74	74	71	72	77	80	78	78	73	70	58	53	56	63	73	77	77	78	78	75	74	72	72	72	
11	70	70	70	71	74	76	76	68	56	46	40	38	26	36	56	67	68	68	70	72	74	72	70	70	
12	68	66	66	66	69	68	66	64	64	60	54	43	42	52	66	74	86	94	93	82	78	74	74	74	
13 *	74	72	71	71	70	66	62	62	62	57	54	50	46	50	63	70	78	83	85	82	79	77	74	73	
14	72	70	68	72	75	75	74	68	64	59	54	62	63	78	86	100	110	114	108	98	90	87	76	70	
15	64	67	72	76	76	75	76	72	69	60	54	44	47	60	68	74	80	82	81	81	79	79	74	70	
16	74	74	74	67	66	66	66	66	60	47	43	45	50	58	66	66	73	86	93	99	85	68	69	66	
17	54	50	55	60	62	66	70	62	48	42	42	38	40	52	65	74	80	85	86	86	82	75	64	62	
18	58	55	54	58	66	66	66	68	65	59	54	54	55	58	70	80	82	85	91	88	84	78	74	72	
19	72	70	68	70	74	74	74	72	70	68	63	54	50	51	62	72	80	86	86	82	78	74	62	59	
20 **	34	36	48	59	68	64	46	47	54	48	46	50	50	66	91	114	125	126	119	107	100	83	74	75	
21 **	74	76	78	77	78	82	84	85	82	74	64	54	70	82	86	95	106	117	106	97	90	87	84	82	
22	79	78	64	63	61	66	60	58	60	62	58	54	54	66	75	82	85	84	86	88	88	85	84	78	
23	62	63	69	74	77	76	73	71	69	66	66	66	66	67	72	78	80	82	82	82	82	80	78	76	
24	75	73	72	74	74	74	74	74	70	63	56	54	60	65	70	78	80	80	80	79	78	78	76	75	
25	74	70	70	71	76	78	75	75	68	69	72	66	62	66	78	86	89	89	85	82	81	79	78	78	
26	70	76	74	72	72	58	42	37	44	46	55	54	63	76	86	93	98	106	106	106	99	88	84	80	
27	80	80	74	70	72	72	72	66	64	60	58	56	57	70	84	92	93	94	90	86	85	82	78	72	
28	70	72	74	76	80	82	79	74	67	60	51	51	58	63	71	81	89	94	91	89	85	81	79	74	
29	71	74	74	76	77	78	80	79	74	64	58	52	54	68	77	83	82	81	78	82	79	76	76	76	
30 *	76	75	72	72	73	71	67	67	67	65	63	57	59	65	75	81	85	87	85	81	77	75	75	75	
31	76	76	77	77	81	79	77	75	73	71	65	55	53	61	71	77	81	81	79	77	78	76	73	73	
Mean	71	70	69	69	71	71	69	67	65	60	57	54	57	66	78	86	91	93	93	89	85	80	75	74	
Mean *	76	75	72	73	76	76	73	72	70	66	60	57	56	61	71	75	78	81	82	80	78	76	75	75	
Mean **	65	66	68	66	64	61	55	57	57	57	55	58	69	87	106	119	130	129	125	110	101	88	76	80	
August	43000 γ + Tabular Quantities (in γ)																								
1	69	67	70	73	77	78	78	75	73	69	66	59	55	59	69	79	81	79	77	75	75	73	73	72	
2 *	73	73	74	75	79	79	75	75	75	69	59	49	47	52	61	71	75	79	79	76	73	73	73	73	
3 *	71	72	73	73	77	79	78	75	69	62	61	62	63	66	73	79	80	78	73	74	75	72	72	71	
4	70	71	71	72	75	76	73	71	69	66	63	58	65	67	71	71	76	81	79	78	76	73	71	68	
5 *	67	67	67	69	73	75	75	71	69	66	63	54	49	54	59	67	72	75	72	71	70	67	66	66	
6 *	65	63	65	65	67	69	71	67	64	59	53	44	42	44	55	65	71	73	73	70	69	67	67	67	
7 *	66	66	65	65	68	69	69	69	70	64	59	50	46	45	54	63	66	67	67	68	70	67	66	68	
8	66	65	65	64	66	69	68	64	59	52	46	40	35	37	47	59	63	64	67	71	72	71	69	67	
9	66	65	65	66	69	73	75	73	68	59	55	53	55	59	63	67	69	71	71	73	73	71	68	67	
10	65	65	65	65	69	68	67	60	55	55	55	51	51	51	59	67	78	93	103	105	100	90	83	77	
11	73	71	67	69	74	78	77	73	67	60	55	49	50	58	63	65	70	66	69	73	72	71	73	72	
12 **	62	59	37	- 4	- 15	11	34	55	64	79	84	92	113	110	115	130	127	122	113	109	99	84	71	57	
13 **	53	39	39	41	59	73	79	82	80	77	71	67	60	73	87	102	115	108	99	95	87	81	81	76	
14	76	75	73	74	77	79	79	75	70	67	65	68	68	72	81	87	84	82	85	83	82	80	79	80	
15	79	80	81	81	82	81	79	79	75	71	65	58	55	63	70	79	83	81	82	82	79	78	76	76	
16 **	77	76	77	76	75	74	72	70	64	59	53	55	65	89	130	187	169	136	113	107	95	89	89	55	
17	61	45	35	47	59	63	75	76	67	63	62	64	69	75	90	103	103	99	93	88	85	83	84	83	
18	82	83	84	85	87	89	87	87	83	77	69	64	65	74	85	94	98	103	95	91	87	83	75	75	
19	77	78	79	81	84	87	85	83	78	69	56	51	55	63	77	97	105	103	99	91	87	82	80	80	
20	79	78	79	79	82	81	79	78	76	67	61	63	64	67	73	74	77	82	83	84	80	77	76	75	
21	74	74	74	76	79	81	79	77	69	55	47	47	44	48	60	69	74	76	81	81	79	78	74	62	
22 **	56	42	- 23	- 51	30	60	73	78	75	71	67	58	74	101	135	201	242	237	195	164	81	78	15	19	
23 **	- 27	1	0	- 18	- 13	- 7	23	36	49	68	90	102	108	115	126	135	129	127	129	120	106	99	87	79	
24	68	69	82	88	90	95	99	96	90	81	74	69	70	77	88	95	102	102	97	95	94	91	91	90	
25	83	81	83	80	80	83	83	82	80	77	74	75	75	77	83	91	97	99	97	96	94	92	90	87	
26	85	86	86	86	87	88	90	88	85	80	77	73	75	80	88	95	95	93	93	93	91	87	84	83	
27	83	79	75	77	82	86	86	84	74	67	64	65	73	86	96	100	101	98	94	93	90	87	87	86	
28	83	83	83	83	85	88	90	87	82	76	75	75	74	77	85	91	95	92	90	91	88	87	86	83	
29	83	75	76	78	81	83	86	83	77	70	67	69	69	73	77	82	85	86	87	87	85	83	82	83	
30	82	82	81	82	83	83	84	79	75	75	73	69	67	73	77	85	91	94	89	87	87	83	82	81	
31	80	81	81	81	82	82	83	83	79	73	68	65	63	63	68	72	76	77	75	74	75	75	76	75	
Mean	69	68	66	64	69	73	76	75	72	68	64	62	63	69	80	91	95	94	91	89	83	80	76	73	
Mean *	68	68	69	69	73	74	74	71	69	64	59	52	49	52	60	69	73	74	73	72	71	69	69	69	
Mean **	44	43	26	9	27	42	56	64	66	71	73	75	84	98	119	151	156	146	130	119	94	86	69	57	

* International Quiet Day. ** International Disturbed Day.

TABLE III. - HOURLY MEANS OF VERTICAL COMPONENT OF MAGNETIC INTENSITY AT ABINGER

U.T.	0h	1h	2h	3h	4h	5h	6h	7h	8h	9h	10h	11h	12h	13h	14h	15h	16h	17h	18h	19h	20h	21h	22h	23h	24h
September	43000 γ + Tabular Quantities (in γ)																								
1 *	76	77	77	77	78	80	83	80	79	73	65	62	59	62	70	82	83	81	79	77	77	77	76	77	
2	77	77	77	77	79	81	79	75	69	64	59	57	59	65	73	82	84	87	83	79	78	79	74	74	
3 **	77	75	66	38	45	61	71	75	72	64	50	59	60	63	69	80	84	87	84	86	88	91	89	83	
4	81	77	75	77	81	83	81	81	78	68	55	51	55	60	69	76	83	83	80	81	83	81	81	80	
5 *	80	80	80	80	81	83	84	84	81	78	68	60	66	72	78	80	82	82	84	88	88	86	84	79	
6	74	76	76	78	80	84	84	84	82	75	66	59	60	68	80	87	90	89	88	88	88	85	82	80	
7	73	74	74	77	80	82	82	80	74	64	57	54	56	61	68	80	88	88	88	88	88	86	83	80	
8	78	78	77	76	78	80	80	77	74	68	62	53	54	61	70	78	83	82	80	82	82	81	79	80	
9 **	77	74	73	73	72	72	75	73	71	78	70	66	70	82	94	102	100	96	92	92	98	90	88	84	
10	80	78	72	63	62	68	74	74	73	70	68	66	69	76	88	90	90	88	92	94	93	90	88	86	
11	87	85	81	79	79	83	83	84	79	73	71	69	69	75	81	85	83	79	79	81	81	81	81	83	
12	83	80	77	71	75	77	79	79	77	71	69	71	73	75	79	81	83	82	80	83	81	79	81	81	
13	79	77	79	80	80	79	81	80	73	69	65	63	65	75	81	85	82	79	77	78	78	77	79	73	
14	75	77	79	69	68	75	79	77	72	66	59	61	67	75	83	86	88	85	83	83	81	80	79	78	
15	79	75	76	77	78	77	78	73	67	63	58	56	57	62	70	77	77	75	72	73	73	73	75	73	
16	73	75	76	77	77	79	79	76	71	65	53	51	55	64	74	79	81	81	80	79	75	74	74	74	
17 **	73	72	70	72	63	59	64	69	69	65	57	54	60	72	82	103	147	187	178	148	108	114	120	113	
18	104	94	96	98	98	100	100	98	92	85	79	73	73	73	79	87	90	93	94	93	91	90	89	88	
19 **	85	85	84	80	79	82	78	79	76	74	72	82	86	87	96	132	144	146	144	136	120	105	88	72	
20 **	66	59	49	51	47	65	67	74	71	77	81	81	81	86	93	100	111	118	111	95	91	91	87	83	
21	79	82	83	82	82	84	85	85	83	75	73	72	70	75	83	85	87	89	91	90	89	85	83	81	
22	78	76	77	78	80	80	82	80	78	70	62	62	63	66	76	89	93	94	94	91	89	84	72	72	
23	74	76	78	79	80	81	82	80	74	69	62	58	60	62	68	75	80	82	82	82	82	81	79	80	
24 *	78	78	76	74	72	74	76	72	70	64	58	58	65	70	76	83	86	85	84	84	84	84	82	82	
25	79	79	78	78	78	78	80	76	69	62	53	50	52	54	62	72	82	90	92	92	88	87	86	86	
26	85	76	69	67	61	71	78	76	73	73	73	68	65	69	76	81	83	85	87	91	83	83	81	73	
27	76	79	81	80	81	81	81	80	77	71	63	59	58	63	67	73	79	83	83	83	80	78	77	77	
28 *	79	76	75	77	79	79	79	81	77	70	62	59	60	63	68	73	74	77	77	79	79	78	78	78	
29 *	79	79	79	79	79	79	79	76	72	67	62	56	52	53	56	61	68	72	73	75	76	75	76	78	
30	79	80	80	79	78	78	79	79	73	65	58	55	58	66	72	79	84	89	95	105	109	103	97	93	
Mean	79	78	76	75	75	78	79	79	75	70	64	62	63	69	76	84	89	91	90	89	87	85	83	81	
Mean *	78	78	77	77	78	79	80	79	76	70	63	59	60	64	70	76	79	79	79	81	81	80	79	79	
Mean **	76	73	68	63	61	68	71	74	72	72	66	68	71	78	87	103	117	127	122	111	101	98	94	87	
October	43000 γ + Tabular Quantities (in γ)																								
1	90	87	78	78	78	79	80	80	74	65	59	56	57	58	62	69	76	80	82	82	80	81	80	80	
2	79	79	78	78	78	80	83	84	80	74	68	60	56	55	60	67	72	74	74	76	75	74	72	72	
3 **	72	73	74	74	74	76	80	82	80	73	69	72	76	90	94	98	114	134	148	154	150	127	82	81	
4 **	63	+41	- 7	-26	+12	63	88	98	99	96	92	90	95	109	116	113	108	106	104	103	100	94	94	93	
5	90	82	83	86	88	90	92	94	90	86	82	82	84	89	94	100	100	102	101	103	91	90	88	86	
6	74	57	52	34	24	28	46	65	73	78	77	82	89	93	100	106	108	110	102	100	104	102	96	91	
7	90	88	87	87	88	89	92	90	88	85	79	74	76	79	80	90	102	111	117	100	92	97	92	82	
8	86	85	80	77	83	87	90	94	94	92	91	87	85	85	85	85	87	86	87	87	87	90	93	94	
9	97	85	82	83	83	85	85	89	81	78	76	76	81	95	105	108	109	110	111	112	107	99	94	94	
10	92	90	89	89	89	89	89	91	89	85	81	76	77	80	81	85	87	89	88	89	88	89	84	82	
11	81	79	81	81	80	79	80	82	80	77	72	71	73	74	76	81	84	85	85	84	83	83	87	91	
12 *	86	86	84	84	84	83	84	86	84	80	76	74	75	77	79	84	83	81	82	81	81	80	80	80	
13 **	81	84	80	67	61	55	64	68	70	73	76	82	84	88	93	95	102	129	148	148	180	119	88	48	
14 **	98	104	95	64	42	47	52	55	61	68	82	93	102	118	120	124	139	136	113	111	106	83	84	80	
15 **	53	31	+ 9	- 9	-11	+25	55	81	91	95	99	99	97	97	105	117	123	121	107	103	103	99	94	89	
16	80	76	80	84	86	88	94	100	98	94	88	89	92	101	118	147	150	136	129	127	101	102	86	74	
17	83	88	87	83	86	89	93	99	104	102	96	93	93	91	102	119	135	134	129	123	124	113	98	91	
18	89	91	80	74	80	82	85	93	95	91	90	92	96	106	115	138	137	131	138	132	119	98	97	95	
19	75	71	71	72	74	77	83	95	99	101	97	102	103	106	111	119	127	129	123	118	112	108	104	99	
20 *	95	92	88	91	95	97	99	101	99	95	90	83	81	86	93	97	96	95	95	95	95	93	91	92	
21	91	90	89	89	90	89	91	91	89	83	75	73	76	87	93	95	95	95	99	105	105	98	95	90	
22	86	87	89	89	90	89	89	93	93	87	81	77	76	75	83	90	90	92	92	95	97	96	95	92	
23	90	89	89	87	88	88	89	95	93	88	82	86	88	101	113	115	120	112	107	105	102	99	98	95	
24	89	83	85	86	89	91	93	95	91	82	77	77	75	79	85	91	89	89	91	91	91	91	91	91	
25 *	88	88	88	88	88	89	88	91	94	91	88	88	90	90	91	94	90	90	90	90	90	88	87	87	
26	86	86	86	85	85	84	85	85	85	83	76	74	76	78	84	86	88	87	86	87	90	88	88	86	
27 *	86	86	86	85	85	86	84	84	84	78	74	71	70	75	81	86	85	86	86	84	84	84	83	84	
28	83	82	82	82	82	81	82	85	82	77	69	70	74	78	84	87	90	90	90	90	93	94	95	93	
29	90	88	86	78	76	78	78	82	85	83	77	76	80	86	89	92	90	92	91	93	90	86	84	86	
30	84	76	74	77	80	82	86	88	86	80	76	81	86	91	96	99	99	100	98	96	93	90	88	86	
31 *	82	82	77	82	86	86	87	88	86	83	82	82	82	84	87	93	96	96	95	94	93	89	86	85	
Mean	84	81	77	74	75	78	83	87	87	84	81	80	82	87	93	99	102	104	103	102	100	94	90	86	
Mean *	87	87	85	86	88	88	88	90	89	85	82	80	80	82	86	91	90	90	90	89	89	87	85	86	
Mean **	73	67	50	34	36	53	68	77	80	81	84	87	91	100	106	109	117	125	124	124	128	104	88	78	

* International Quiet Day. ** International Disturbed Day.

TABLE III. - HOURLY MEANS OF VERTICAL COMPONENT OF MAGNETIC INTENSITY AT ABINGER

U.T.	0h	1h	2h	3h	4h	5h	6h	7h	8h	9h	10h	11h	12h	13h	14h	15h	16h	17h	18h	19h	20h	21h	22h	23h	24h
November														43000 γ + Tabular Quantities (in γ)											
1	84	84	82	83	84	84	85	86	83	79	77	80	82	84	89	94	94	95	96	97	94	90	88	86	
2	85	85	84	85	84	81	82	82	81	80	81	80	78	78	83	88	86	87	88	88	87	87	85	83	
3	82	82	78	78	82	83	84	84	86	81	76	74	74	76	80	87	89	90	90	90	89	89	86	82	
4	80	81	81	81	83	83	82	82	84	82	78	76	74	75	80	84	84	84	84	85	86	84	82	83	
5	82	82	82	81	81	81	81	82	86	85	83	83	84	83	86	89	88	88	88	89	90	87	85	84	
6	83	82	81	80	81	81	80	82	85	84	82	78	80	80	80	82	82	84	88	90	92	92	90	83	
7	77	78	80	81	82	82	82	82	82	81	78	76	75	77	81	84	88	90	89	88	86	86	84	82	
8 *	81	81	81	81	82	80	80	82	83	84	83	80	80	82	84	84	83	85	83	83	83	83	83	83	
9	82	82	82	81	80	81	82	82	83	80	75	76	78	81	85	87	87	86	85	86	85	84	82	83	
10 *	83	82	82	82	82	81	81	84	84	80	78	82	82	84	88	87	86	87	86	88	88	87	84	85	
11	84	84	83	81	81	82	81	81	81	79	76	74	77	80	82	84	82	82	84	87	84	82	84	83	
12 **	82	87	86	84	83	82	80	82	81	76	76	80	82	84	85	89	94	94	92	92	90	90	88	83	
13 **	78	77	75	73	60	67	73	82	89	88	85	97	107	117	135	127	120	119	123	116	103	91	89	90	
14 **	89	69	65	69	70	73	80	87	91	89	86	89	91	95	101	107	107	105	104	105	102	98	82	73	
15	75	76	77	81	85	87	89	89	89	88	85	84	84	91	97	99	101	97	95	97	93	90	89	87	
16	85	85	85	85	87	89	90	90	91	90	87	84	84	87	89	91	91	95	97	99	97	93	89	87	
17	85	85	85	85	86	86	86	87	88	84	79	79	79	82	85	87	87	89	88	89	91	91	87	87	
18 *	85	84	84	83	85	85	87	88	87	87	83	81	83	87	89	87	88	88	87	87	87	85	82	83	
19	81	81	81	81	81	80	79	81	85	81	81	77	80	85	89	88	91	92	101	101	100	95	89	85	
20	86	83	81	81	83	84	84	85	88	86	84	84	87	90	94	94	94	92	90	90	90	91	92	90	
21	89	88	86	84	84	85	86	88	90	88	87	87	91	90	90	91	94	92	90	90	88	87	85	84	
22 *	85	85	84	83	83	83	84	84	88	89	87	86	87	87	87	87	85	83	83	83	83	82	83	83	
23 *	83	81	80	79	79	79	79	79	83	79	77	80	84	87	86	85	85	84	84	83	84	83	83	81	
24	81	79	79	78	78	79	79	79	81	80	80	80	83	87	87	85	84	83	83	85	91	96	95	94	
25 **	91	87	87	85	83	76	66	68	75	78	82	87	90	95	99	97	101	99	97	94	95	109	107	104	
26 **	94	84	74	80	82	81	78	77	80	80	83	89	92	96	98	99	100	96	96	95	96	90	86	85	
27	86	87	86	86	80	78	80	82	86	82	82	82	87	89	89	92	95	92	94	96	91	89	88	84	
28	83	84	84	85	85	82	80	82	84	82	80	81	86	88	94	93	94	91	92	92	93	90	88	84	
29	84	86	84	84	82	82	84	84	86	82	82	82	86	92	94	96	97	96	94	93	91	88	84	82	
30	83	85	85	83	81	82	83	83	85	81	81	79	81	83	89	91	93	91	92	94	94	93	89	84	
Mean	84	83	82	81	81	81	82	83	85	83	81	82	84	86	90	91	92	91	91	92	91	89	87	85	
Mean *	83	83	82	82	82	82	82	83	85	84	82	82	83	85	87	86	85	85	85	85	85	84	83	83	
Mean **	87	81	77	78	76	76	75	79	83	82	82	88	92	97	104	104	104	103	102	100	97	96	90	87	
December														43000 γ + Tabular Quantities (in γ)											
1	78	77	77	78	81	83	81	80	81	78	74	73	78	81	85	87	89	89	89	89	92	91	88	84	
2	85	85	84	83	83	84	83	83	80	78	76	76	76	78	83	85	88	89	90	91	94	93	91	87	
3	85	84	84	84	84	83	81	81	81	80	77	78	81	79	80	82	85	85	85	85	87	87	89	89	
4	87	87	85	85	84	85	86	85	85	85	87	85	81	83	85	85	87	85	85	85	85	83	83	81	
5	83	80	81	81	81	81	82	84	86	86	86	84	82	86	90	94	98	106	110	113	116	112	104	100	
6 **	96	89	86	84	86	86	88	88	88	86	83	86	89	90	90	90	90	90	91	97	106	102	90	104	
7 **	102	96	86	61	54	70	79	86	90	90	84	87	93	96	102	119	116	122	138	140	126	114	100	83	
8 **	86	90	87	74	76	75	74	80	86	91	95	98	104	110	116	116	126	118	116	113	110	104	101	96	
9	77	79	83	83	84	84	86	88	90	86	86	88	97	104	106	105	106	105	106	100	98	96	93	92	
10	90	91	90	90	89	88	87	87	88	89	88	90	90	97	101	104	102	96	96	93	92	91	88	88	
11	88	90	88	86	86	88	88	87	88	85	84	85	89	92	96	96	98	97	96	96	94	91	89	88	
12	87	88	88	87	88	88	90	88	86	81	80	84	87	90	92	94	97	96	100	95	92	91	88	86	
13	86	85	86	85	86	82	83	84	86	84	82	83	84	87	90	95	98	96	94	93	91	89	88	86	
14 *	86	86	82	84	84	84	85	86	84	83	86	86	83	84	88	89	91	90	90	89	88	86	85	85	
15	84	85	85	85	85	84	83	84	86	85	84	84	82	83	86	91	98	98	98	98	96	94	92	89	
16	86	86	86	86	86	86	84	86	84	81	78	78	79	79	80	82	86	86	89	90	88	89	89	80	
17	82	82	84	86	87	86	86	85	83	78	78	79	79	82	86	90	94	92	94	92	92	91	90	89	
18 *	88	88	87	86	86	86	86	88	86	85	86	87	86	86	86	90	92	90	90	90	90	88	88	86	
19 *	83	84	84	84	84	83	84	86	85	84	82	81	79	82	86	86	88	87	86	86	85	84	82	80	
20 *	81	82	82	82	82	82	82	83	82	81	81	84	85	83	83	83	83	83	84	84	86	89	90	90	
21 **	86	84	82	82	82	81	83	82	80	77	81	80	82	86	92	95	102	102	101	102	105	103	96	91	
22 **	79	84	85	83	79	80	82	81	84	85	84	88	91	93	99	107	116	107	106	105	103	102	96	93	
23	90	89	89	86	84	81	83	83	84	85	86	90	90	90	93	93	93	93	93	91	91	92	88	85	
24	84	81	81	81	82	81	81	83	82	81	85	88	87	89	91	92	95	94	95	93	95	97	93	92	
25	91	89	82	79	81	81	82	83	83	84	83	84	86	89	95	95	95	91	91	91	91	89	90	89	
26	87	85	82	81	81	79	76	76	79	82	84	85	85	91	91	91	90	88	88	85	85	83	84	83	
27	85	83	82	81	79	79	79	78	76	76	79	83	82	83	87	89	93	91	93	95	95	89	85	85	
28	84	84	84	84	84	82	81	82	81	80	82	84	85	86	88	90	92	91	94	96	96	94	92	92	
29	92	92	92	88	87	86	86	85	84	82	86	86	86	88	92	95	96	94	94	94	94	92	88	87	
30	82	84	85	85	85	85	84	83	83	83	87	89	91	94	95	93	93	95	93	91	91	89	87	85	
31 *	85	85	85	86	87	87	87	86	85	87	87	87	86	87	89	90	91	91	91	90	89	87	85	84	
Mean	86	86	85	83	83	83	83	84	84	83	83	85	86	88	91	93	96	95	96	95	95	93	90	88	
Mean *	85	85	84	84	85	84	85	86	84	84	84	85	84	84	86	88	89	88	88	88	88	87	86	85	
Mean **	90	89	85	77	75	78	81	83	86	86	85	88	92	95	100	105	110	108	110	111	110	105	97	93	

* International Quiet Day. ** International Disturbed Day.

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

Date	DECLINATION WEST						HORIZONTAL INTENSITY						VERTICAL INTENSITY					
	Mean Daily Value	Maximum		Minimum		Range	Mean Daily Value	Maximum		Minimum		Range	Mean Daily Value	Maximum		Minimum		Range
January	10°+ ′	U.T. h m	10°+ ′	10°+ ′	U.T. h m	′	18000 γ +	U.T. h m	18000 γ +	18000 γ +	U.T. h m	γ	43000 γ +	U.T. h m	43000 γ +	43000 γ +	U.T. h m	γ
1 *	56·6	12 20	59·1	54·6	8 10	4·5	540	7 59	554	526	11 40	28	57	21 34	63	51	11 58	12
2	57·5	13 29	61·2	55·0	7 57	6·2	544	7 1	558	528	10 43	30	55	16 17	63	51	12 39	12
3 *	57·2	12 51	60·1	55·2	7 33	4·9	541	6 40	552	530	15 52	22	57	13 42	64	51	2 30	13
4	57·2	13 2	59·6	54·2	9 5	5·4	542	22 9	556	527	12 19	29	55	13 36	60	51	10 58	9
5 **	57·5	12 59	62·5	51·2	21 47	11·3	547	21 53	586	526	18 50	60	53	20 33	63	44	22 56	19
6	56·9	18 3	62·2	50·9	21 32	11·3	532	21 40	552	512	11 32	40	59	17 21	68	50	9 13	18
7	56·4	12 2	61·1	51·9	20 49	9·2	535	20 32	557	519	21 18	38	58	20 15	67	47	11 0	20
8	56·2	16 28	60·5	50·7	20 28	9·8	529	19 50	568	514	11 28	54	59	19 40	71	51	12 0	20
9 **	56·0	17 29	59·4	50·6	21 44	8·8	527	21 53	561	501	11 30	60	61	18 23	70	51	7 55	19
10	56·4	12 27	61·9	52·6	21 26	9·3	531	4 43	565	500	12 52	65	61	17 16	71	52	4 51	19
11	56·6	17 28	61·5	51·6	20 47	9·9	530	3 44	546	514	10 48	32	61	15 51	72	52	11 4	20
12	56·6	12 40	60·3	52·8	0 40	7·5	535	12 21	549	528	10 35	21	57	18 21	65	47	12 2	18
13	56·8	12 3	61·2	53·3	23 52	7·9	538	13 38	550	528	8 30	22	58	18 23	64	54	7 53	10
14	56·4	12 48	62·6	46·4	21 56	16·2	536	0 13	554	510	15 40	44	59	15 27	67	51	10 52	16
15	57·4	13 57	61·2	55·4	19 28	5·8	532	5 13	554	514	9 52	40	57	19 26	64	48	11 58	16
16	56·8	12 0	60·3	51·4	20 54	8·9	535	20 32	565	498	21 52	67	58	22 30	68	50	11 58	18
17 **	56·0	1 58	61 9	47·9	2 22	14·0	524	2 0	565	491	11 34	74	59	21 41	69	39	2 18	30
18	56·7	6 33	62·2	51·3	1 18	10·9	531	5 42	551	510	11 16	41	59	11 18	65	48	7 52	17
19	56·4	13 58	59·0	51·4	23 50	7·6	534	21 48	547	519	11 28	28	60	11 19	67	55	23 54	12
20	56·4	6 1	59·5	52·0	2 40	7·5	537	6 34	563	518	20 12	45	55	20 40	67	45	2 38	22
21 **	57·1	12 58	62·9	45·2	18 28	17·7	530	6 40	552	476	18 10	76	63	18 41	90	52	10 59	38
22 **	56·4	13 19	60·0	43·6	22 37	16·4	533	23 28	562	496	18 52	66	59	19 22	74	47	24 0	27
23	56·7	13 31	60·2	49·6	0 32	10·6	531	7 41	545	501	14 29	44	58	15 18	71	46	0 11	25
24	56·4	12 41	60·0	53·2	22 36	6·8	535	5 19	564	510	11 20	54	55	18 22	63	48	6 2	15
25	56·6	11 54	59·4	54·8	0 0	4·6	536	6 40	550	515	10 46	35	58	13 43	67	51	0 59	16
26 *	56·8	12 42	59·4	55·3	22 16	4·1	539	5 43	553	523	11 28	30	57	14 17	64	52	11 53	12
27 *	56·8	12 31	60·1	54·8	8 15	5·3	542	21 6	554	517	11 18	37	54	20 19	60	46	11 55	14
28	56·9	13 12	60·2	48·8	24 0	11·4	546	8 25	565	524	12 33	41	53	20 19	63	47	12 56	16
29	55·9	13 19	59·0	47·8	0 31	11·2	537	19 40	549	515	0 59	34	54	22 36	61	47	12 58	14
30 *	56·8	12 42	61·1	54·0	0 52	7·1	539	5 41	554	513	11 54	41	53	18 22	59	44	11 56	15
31	56·8	12 46	60·4	54·8	8 42	5·6	540	6 6	557	514	11 37	43	53	22 17	59	47	4 18	12
Mean	56·7	-	60·6	51·7	-	9·0	536	-	557	513	-	43·3	57	-	66	49	-	17·6
Mean *	56·8	-	60·0	54·8	-	5·2	540	-	553	522	-	31·6	56	-	62	49	-	13·2
Mean **	56·6	-	61·3	47·7	-	13·6	532	-	565	498	-	67·2	59	-	73	47	-	26·6
February	10°6 ′	U.T. h m	10°+ ′	10°+ ′	U.T. h m	′	18000 γ +	U.T. h m	18000 γ +	18000 γ +	U.T. h m	γ	43000 γ +	U.T. h m	43000 γ +	43000 γ +	U.T. h m	γ
1 **	56·8	19 56	62·9	45·9	22 18	17·0	530	18 1	554	458	20 2	96	58	21 36	93	45	16 51	48
2	55·4	17 48	62·3	46·9	2 37 / 22 30	15·4	513	18 48	535	465	18 6	70	64	0 0	88	53	11 54	35
3	56·2	13 10	62·0	48·7	4 15	13·3	522	21 16	544	510	11 42	34	62	21 14	73	48	5 59	25
4	55·8	14 48	59·7	51·5	1 15	8·2	524	22 50	539	484	11 23	55	61	0 34	69	52	10 57	17
5	56·1	14 12	60·1	50·8	21 52	9·3	530	19 53	577	505	21 44	72	59	21 28	75	48	9 20	27
6 **	55·2	13 42	63·9	42·0	23 36	21·9	497	6 30	554	418	19 26	136	77	17 6	136	42	8 20	94
7 **	54·3	13 50	62·7	38·1	2 53	24·6	494	18 57	525	441	0 0	84	72	18 47	96	52	2 51	44
8	55·3	20 52	59·4	49·5	22 38	9·9	515	18 30	533	494	22 32	39	68	22 40	80	56	13 55	24
9	56·0	13 28	62·0	46·8	23 55	15·2	521	9 2	542	488	22 1	54	68	21 11	93	50	10 58	43
10	55·8	14 54	63·7	47·7	0 0	16·0	522	23 59	567	473	17 29	94	69	18 23	94	58	15 0	36
11	56·3	2 57	62·7	50·3	3 54	12·4	529	3 12	571	502	10 59	69	60	18 54	73	32	3 33	41
12 *	56·2	12 58	59·3	54·5	4 55	4·8	536	21 18	547	521	14 57	26	60	19 32	66	52	11 58	14
13 *	56·1	13 58	59·1	50·8	21 41	8·3	539	8 18	554	523	21 39	31	57	22 23	67	47	10 57	20
14	55·9	14 3	58·6	53·2	19 28	5·4	538	7 58	557	514	12 51	43	58	20 36	67	54	6 59	13
15	56·0	13 48	62·6	49·3	2 48	13·3	542	1 41	576	513	15 54	63	55	19 49	65	47	1 54	18
16	56·1	15 47	61·8	47·9	21 31	13·9	531	7 23	552	498	16 35	54	58	17 22	75	39	4 52	36
17	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
18	55·3	12 53	60·1	47·4	23 48	12·7	536	21 57	574	507	16 39	67	56	-	-	-	-	-
19	55·4	12 28	60·6	47·0	20 27	13·6	533	6 52	556	505	12 57	51	56	17 10	67	45	7 11	22
20	55·1	13 26	60·1	51·5	9 6	8·6	532	21 58	553	500	15 37	53	59	16 19	76	45	12 32	31
21 *	55·8	12 52	59·0	52·7	9 32	6·3	539	21 3	546	527	12 18	19	56	18 23	63	37	11 58	26
22 *	56·3	13 40	60·6	53·3	8 40	7·3	542	13 41	552	531	11 45	21	57	20 37	70	41	10 53	29
23	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
24 **	55·0	19 29	82·6	17·7	21 47	64·9	503	11 12	551	292	24 0	259	80	19 36	319	34	10 58	285
25 **	53·6	7 30	72·7	22·5	1 18	50·2	438	21 42	577	284	0 2	293	96	15 9	151	-11	1 40	162
26	54·7	12 57	59·0	49·8	22 47	9·2	496	22 35	546	473	10 21	73	74	21 38	83	60	10 26	23
27 *	54·9	13 50	60·3	51·9	9 8	8·4	518	23 1	531	499	14 27	32	69	21 28	75	54	11 58	21
28	54·9	15 8	62·1	48·2	22 15	13·9	516	6 42	535	472	16 41	63	72	17 18	96	49	11 4	47
Mean	55·6	-	62·3	46·7	-	15·6	521	-	552	477	-	75·0	65	-	92	45	-	47·2
Mean *	55·9	-	59·7	52·6	-	7·0	535	-	546	520	-	25·8	60	-	68	46	-	22·0
Mean **	55·0	-	69·0	33·2	-	35·7	492	-	552	379	-	173·6	77	-	159	32	-	126·6

* International Quiet Day. ** International Disturbed Day.

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

Date	DECLINATION WEST						HORIZONTAL INTENSITY						VERTICAL INTENSITY					
	Mean Daily Value	Maximum		Minimum		Range	Mean Daily Value	Maximum		Minimum		Range	Mean Daily Value	Maximum		Minimum		Range
March	10°+ ′	U.T. h m	10°+ ′	10°+ ′	U.T. h m	′	18000 γ+	U.T. h m	18000 γ+	18000 γ+	U.T. h m	γ	43000 γ+	U.T. h m	43000 γ+	43000 γ+	U.T. h m	γ
1	56·1	13 31	66·4	39·1	23 0	27·3	515	13 17	540	468	22 47	72	76	23 8	104	50	12 48	54
2	54·3	13 14	63·9	42·0	2 38	21·9	507	2 39	571	468	3 37	103	68	0 0	91	26	3 28	65
3	55·2	14 2	65·2	42·9	23 40	22·3	516	23 48	612	477	22 28	135	75	16 42	99	59	6 39	40
4	53·2	13 50	62·5	40·7	3 41	21·8	501	0 0	563	480	0 19	83	68	16 22	99	41	4 18	58
5	54·8	13 31	62·8	47·6	22 40	15·2	516	19 6	553	486	10 28	67	72	18 43	92	55	10 28	37
6	55·1	13 12	63·8	49·0	20 54	14·8	517	5 45	540	485	16 52	55	72	17 27	92	58	11 52	34
7 *	54·8	12 42	61·7	50·1	2 11	11·6	525	1 32	556	499	11 16	57	67	21 29	75	51	10 59	24
8	54·5	13 2	61·6	47·4	1 27	14·2	532	5 2	577	504	10 1	73	61	19 27	79	42	6 30	37
9	55·6	13 3	62·7	48·2	19 3	14·5	531	6 27	568	497	14 19	71	64	17 27	84	39	11 55	45
10	54·8	14 21	61·8	46·9	21 22	14·9	530	21 23	553	500	12 57	53	64	16 34	74	49	11 55	25
11	55·1	13 27	61·2	47·0	16 32	14·2	530	6 11	554	500	16 27	54	66	17 17	89	50	11 12	39
12	54·4	13 10	60·9	45·0	19 48	15·9	525	23 11	566	498	11 44	68	66	20 5	82	54	13 20	28
13 *	55·8	13 52	60·9	50·1	0 8	10·8	530	22 41	547	499	11 8	48	64	18 25	71	46	11 18	25
14	55·5	12 13	61·9	52·2	22 16	9·7	539	8 38	556	516	15 59	40	62	18 43	74	42	12 1	32
15	55·0	13 30	61·6	50·1	17 8	11·5	536	23 44	556	477	16 47	79	65	17 23	89	47	10 58	42
16	55·0	12 41	63·6	47·1	20 20	16·5	534	20 33	569	491	9 59	78	62	16 29	79	42	3 54	37
17	54·7	14 3	61·5	47·7	19 44	13·8	531	0 41	580	510	11 18	70	55	18 23	74	35	10 57	39
18 *	55·0	13 50	60·2	51·2	8 34	9·0	534	0 31	577	506	11 47	71	60	7 36	68	44	11 54	24
19 *	55·4	13 30	60·9	50·8	22 46	10·1	538	19 7	564	517	10 32	47	60	16 3	68	51	11 55	17
20	55·5	2 42	63·8	49·5	8 48	14·3	542	3 15	562	512	10 33	50	55	16 18	67	37	11 3	30
21	55·8	13 2	62·3	48·4	19 10	13·9	531	6 20	575	462	10 29	113	64	19 22	90	47	10 0	43
22 **	54·3	13 2	66·1	45·9	22 13	20·2	525	22 22	584	470	13 44	114	64	16 23	108	44	11 10	64
23	54·8	14 19	64·1	41·3	21 40	22·8	525	21 9	591	484	9 48	107	63	16 18	94	40	2 53	54
24	54·9	13 39	63·4	49·0	21 28	14·4	529	21 38	586	498	11 11	88	65	18 23	85	43	11 57	42
25 *	54·3	13 43	60·9	44·1	23 43	16·8	536	23 53	570	522	11 9	48	59	18 28	72	35	10 59	37
26	53·9	14 18	64·4	45·3	21 20	19·1	532	23 27	561	499	11 27	62	64	18 37	86	44	12 27	42
27 **	53·6	18 28	64·1	40·4	22 37	23·7	536	22 14	586	480	19 2	106	63	19 12	115	31	3 32	84
28 **	53·3	16 17	70·7	30·2	23 1	40·5	498	14 34	554	377	22 49	177	84	17 20	196	50	13 0	146
29 **	51·5	19 31	62·4	35·1	1 44	27·3	489	19 23	598	405	12 1	193	81	16 18	142	40	3 38	102
30 **	52·8	13 10	62·1	32·8	21 0	29·3	511	21 10	596	464	20 42	132	77	17 18	117	58	3 7	59
31	53·0	14 10	61·7	45·9	21 53	15·8	514	22 21	578	476	10 18	102	68	19 25	86	47	0 58	39
Mean	54·6	-	62·9	45·3	-	17·7	524	-	569	485	-	84·4	66	-	92	45	-	46·5
Mean *	55·1	-	60·9	49·3	-	11·6	533	-	563	509	-	54·2	62	-	71	45	-	25·4
Mean **	53·1	-	65·1	36·9	-	28·2	512	-	584	439	-	144·4	74	-	136	45	-	91·0
April	10°+ ′	U.T. h m	10°+ ′	10°+ ′	U.T. h m	′	18000 γ+	U.T. h m	18000 γ+	18000 γ+	U.T. h m	γ	43000 γ+	U.T. h m	43000 γ+	43000 γ+	U.T. h m	γ
1	53·3	14 49	62·6	42·0	19 8	20·6	516	23 30	578	480	12 8	98	69	19 17	111	48	2 48	63
2	53·0	13 56	61·8	42·7	23 6	19·1	523	23 17	587	476	11 32	121	58	18 8	92	52	11 20	40
3	53·6	13 10	64·0	46·6	22 58	17·4	519	17 3	544	486	8 32	58	71	18 45	96	55	11 58	41
4	53·2	13 49	61·8	45·0	21 42	16·8	523	18 25	566	475	21 2	91	69	20 47	103	51	12 2	52
5	54·9	13 15	65·6	47·7	8 42	17·9	526	6 23	548	488	10 55	60	67	18 10	78	45	11 59	33
6 *	54·5	13 52	60·6	48·6	9 18	12·0	534	17 43	553	503	11 19	50	66	7 38	75	45	13 1	30
7 *	54·6	13 49	62·4	47·6	8 41	14·8	537	15 27	562	498	11 53	64	63	19 42	75	40	12 3	35
8	54·8	13 20	62·6	48·3	21 12	14·3	538	20 18	578	512	12 16	66	65	18 32	90	43	12 49	47
9	53·7	13 31	63·2	43·4	18 48	19·8	542	19 2	586	510	13 8	76	63	18 28	86	42	12 0	44
10	54·0	23 48	65·6	35·8	19 37	29·8	531	23 32	611	461	13 7	150	64	16 16	95	22	0 58	73
11	52·9	13 33	62·6	41·9	17 42	20·7	528	17 51	622	465	11 10	157	67	17 52	102	24	0 12	78
12	54·5	12 7	59·4	50·0	21 50	9·4	523	22 42	566	480	10 49	86	63	21 6	74	48	3 55	26
13 *	54·4	14 8	61·5	49·0	9 9	12·5	531	21 19	566	498	11 38	68	61	19 6	79	37	12 8	42
14	54·6	12 59	63·9	48·5	8 56	15·4	536	20 50	561	496	10 45	65	61	20 28	77	37	11 58	40
15 *	54·0	12 58	60·9	48·1	8 20	12·8	537	19 54	552	511	10 9	41	64	16 32	78	45	11 59	33
16 *	54·5	13 19	61·9	47·8	9 13	14·1	539	21 32	597	510	10 55	87	58	21 31	71	29	12 44	42
17 **	54·6	14 42	79·8	27·0	6 18	52·8	504	1 59	680	330	7 52	350	81	15 33	287	-22	4 33	309
18 **	52·8	14 7	64·5	42·0	23 40	22·5	491	17 31	591	400	7 57	191	91	17 28	153	50	23 38	103
19	53·8	13 40	67·2	42·0	0 1	25·2	511	17 38	705	462	20 44	243	86	17 25	185	47	12 50	138
20	53·0	12 2	62·8	46·3	7 21	16·5	499	17 20	557	441	10 37	116	78	17 21	119	50	5 15	69
21	52·9	13 28	62·5	46·5	8 20	16·0	513	17 25	556	470	9 17	86	80	17 22	133	52	2 40	81
22	53·3	14 49	65·5	42·7	18 21	22·8	512	18 33	593	470	10 11	123	85	18 33	138	52	11 58	86
23 **	54·2	6 12	73·9	36·5	8 3	37·4	503	15 43	620	327	6 43	293	79	15 43	190	-15	6 48	205
24 **	50·9	17 39	67·0	21·4	20 40	45·6	499	18 16	861	344	23 42	517	76	18 13	131	-23	20 25	154
25 **	51·0	14 19	67·0	25·8	0 48	41·2	461	14 17	583	304	1 28	279	88	16 52	146	-23	1 57	169
26	53·7	13 28	62·1	46·8	8 6	15·3	501	18 50	534	467	11 33	67	79	18 42	97	54	0 58	43
27	52·7	13 25	61·6	39·0	23 53	22·6	519	21 23	576	485	10 36	91	74	17 22	97	9	23 48	88
28	51·7	13 44	62·9	42·6	0 0	20·3	520	16 22	561	475	11 28	86	73	19 17	97	19	0 0	78
29	52·3	13 8	59·7	40·4	7 50	19·3	521	17 46	572	483	9 51	89	73	18 17	99	49	10 1	50
30	53·2	13 2	60·3	47·9	8 35	12·4	526	17 11	569	503	8 18	66	73	18 45	104	43	12 20	61
Mean	53·5	-	63·9	42·7	-	21·2	519	-	591	460	-	131·2	72	-	112	34	-	78·4
Mean *	54·4	-	61·5	48·2	-	13·2	536	-	566	504	-	62·0	63	-	76	39	-	36·4
Mean **	52·7	-	70·4	30·5	-	39·9	492	-	667	341	-	326·0	83	-	181	-7	-	188·0

* International Quiet Day. ** International Disturbed Day.

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

Date	DECLINATION WEST						HORIZONTAL INTENSITY						VERTICAL INTENSITY					
	Mean Daily Value	Maximum		Minimum		Range	Mean Daily Value	Maximum		Minimum		Range	Mean Daily Value	Maximum		Minimum		Range
May	10°+ ′	U.T. h m	10°+ ′	10°+ ′	U.T. h m	′	18000 γ +	U.T. h m	18000 γ +	18000 γ +	U.T. h m	γ	43000 γ +	U.T. h m	43000 γ +	43000 γ +	U.T. h m	γ
1 **	54·8	13 54	73·3	40·7	20 7	32·6	518	13 53	602	448	21 11	154	95	18 23	176	23	24 0	153
2 **	52·3	12 38	62·8	37·7	2 1	25·1	494	21 55	549	431	1 23	118	77	16 40	137	22	0 1	115
3	52·5	12 50	60·1	45·5	5 45	14·6	506	19 21	559	448	10 4	111	78	16 44	105	44	1 44	61
4	52·3	13 29	59·5	45·1	8 22	14·4	523	16 55	560	479	10 8	81	77	17 22	95	47	10 50	48
5	54·8	21 31	62·5	46·2	8 17	16·3	538	20 44	709	484	9 44	225	73	20 43	118	53	11 13	65
6 **	51·1	15 38	66·2	40·7	6 22	25·5	538	16 50	619	461	14 9	158	81	16 49	143	30	23 7	113
7 **	53·3	4 25	59·9	40·2	3 19	19·7	505	21 10	560	425	11 10	135	70	15 50	117	2	1 43	115
8 **	53·4	1 2	64·6	46·6	21 50	18·0	519	19 2	577	454	11 17	123	76	15 15	109	17	1 38	92
9	52·8	3 29	61·2	46·8	5 0	14·4	523	17 42	569	471	9 38	98	71	17 15	105	25	4 3	80
10	53·4	13 28	58·4	48·3	7 55	10·1	529	16 50	600	497	10 53	103	72	18 20	93	43	11 20	50
11 *	52·6	11 40	56·3	48·2	6 50	8·1	533	20 20	551	494	11 51	57	74	17 23	86	56	11 51	30
12 *	53·3	13 56	58·7	47·8	6 55	10·9	537	17 18	562	498	12 32	64	72	19 35	86	46	12 33	40
13 *	53·6	12 43	59·8	47·6	6 37	12·2	542	18 57	560	506	13 16	54	74	18 35	88	48	11 46	40
14 *	54·2	12 37	60·0	49·0	5 51	11·0	544	22 41	569	524	14 13	45	67	20 35	79	41	12 0	38
15	53·6	13 46	63·7	45·0	7 53	18·7	543	23 42	571	517	14 26	54	70	17 57	87	44	11 50	43
16	52·7	12 10	60·6	43·7	7 41	16·9	532	2 13	568	478	7 41	90	65	17 13	86	35	10 2	51
17	52·2	13 42	60·5	44·0	6 22	16·5	535	19 23	580	513	10 18	67	75	18 34	108	46	11 54	62
18	52·5	12 57	64·9	42·8	5 38	22·1	533	17 28	574	495	8 29	79	64	17 22	107	33	11 10	74
19	52·3	13 57	62·2	44·8	1 22	17·4	532	18 22	571	501	7 42	70	65	18 27	91	43	12 0	48
20	53·4	13 24	64·1	45·1	2 3	19·0	526	19 12	555	472	8 28	83	70	18 10	100	50	11 31	50
21	52·3	14 10	67·1	44·6	9 29	22·5	535	17 50	595	498	23 8	97	70	17 46	128	26	12 1	102
22	53·2	12 52	63·8	37·5	23 22	26·3	518	20 58	564	443	9 5	121	69	17 17	101	39	11 56	62
23	51·4	15 8	59·5	43·0	23 13	16·5	524	18 30	613	470	11 22	143	71	18 28	127	49	11 12	78
24	52·1	14 24	62·1	44·8	3 6	17·3	525	18 30	603	485	12 28	118	63	19 8	104	28	2 58	76
25	52·1	15 12	60·6	42·9	5 43	17·7	528	15 53	625	495	10 14	130	67	15 53	106	40	3 35	66
26	52·7	14 17	60·1	45·5	3 34	14·6	532	19 2	607	488	8 38	119	64	15 43	100	39	5 41	61
27	52·0	13 32	59·8	46·4	6 56	13·4	530	21 50	605	499	12 52	106	64	20 53	86	42	12 10	44
28	51·6	11 51	60·9	39·0	6 2	21·9	537	22 19	590	497	7 58	93	63	18 8	83	15	2 41	68
29	51·3	12 34	62·7	36·0	7 36	26·7	526	17 40	591	459	12 48	132	62	19 50	108	16	10 21	92
30	53·7	13 28	60·7	48·1	5 51	12·6	533	20 2	561	503	8 31	58	71	18 43	88	37	11 59	51
31 *	52·5	13 26	61·0	44·8	7 4	16·2	536	19 52	572	498	11 31	74	69	18 37	81	45	11 52	36
Mean	52·8	-	61·9	44·1	-	17·7	528	-	583	482	-	101·9	71	-	104	36	-	67·9
Mean *	53·2	-	59·2	47·5	-	11·7	538	-	563	504	-	58·8	71	-	84	47	-	36·8
Mean **	53·0	-	65·4	41·2	-	24·2	515	-	581	444	-	137·6	80	-	136	19	-	117·6
June	10°+ ′	U.T. h m	10°+ ′	10°+ ′	U.T. h m	′	18000 γ +	U.T. h m	18000 γ +	18000 γ +	U.T. h m	γ	43000 γ +	U.T. h m	43000 γ +	43000 γ +	U.T. h m	γ
1	52·9	14 51	62·4	43·0	7 27	19·4	550	15 9	610	515	10 43	95	73	18 8	96	43	11 32	53
2	53·0	14 42	61·3	41·9	7 13	19·4	548	17 31	605	498	9 27	107	74	18 51	110	52	11 56	58
3	52·4	13 52	59·4	45·5	7 7	13·9	536	20 22	574	480	11 46	94	74	17 33	100	40	11 36	60
4	53·0	14 19	63·5	43·7	7 12	19·8	540	16 37	602	487	12 4	115	75	16 36	106	47	11 26	59
5	53·6	14 10	63·0	42·7	7 28	20·3	537	14 32	573	483	10 38	90	74	17 20	92	50	12 24	42
6	52·6	14 12	59·9	44·0	8 52	15·9	535	17 15	570	490	12 18	80	70	18 21	86	46	11 54	40
7 *	52·3	12 54	58·2	44·2	8 6	14·0	542	17 51	574	499	12 12	75	71	6 34	86	51	12 6	35
8 *	53·2	14 50	59·4	45·6	7 0	13·8	546	18 23	577	508	11 38	69	66	18 26	79	43	11 21	36
9 *	52·4	14 49	57·8	45·0	7 50	12·8	550	22 43	575	523	9 54	52	68	17 21	77	50	11 40	27
10	52·8	14 28	59·3	43·3	7 12	16·0	561	18 56	589	530	11 38	59	64	18 35	81	44	9 30	37
11 *	52·3	14 21	58·4	45·6	8 33	12·8	552	22 0	580	507	12 45	73	65	19 14	74	43	11 7	31
12	53·0	12 58	60·7	44·7	6 33	16·0	550	21 28	574	519	13 40	55	63	17 26	79	43	12 6	36
13	53·6	14 30	61·7	44·0	6 38	17·7	559	19 0	620	526	10 16	94	65	20 17	83	47	11 59	36
14 **	52·0	11 33	64·1	32·2	2 1	31·9	512	1 27	629	358	9 47	271	76	16 26	136	15	1 58	121
15	51·5	14 21	58·3	44·7	6 18	13·6	520	17 11	557	475	7 26	81	74	19 43	95	55	10 57	40
16 **	53·5	13 18	61·2	46·1	2 58	15·1	515	2 24	565	408	9 8	157	72	16 39	111	36	5 1	75
17	52·1	13 28	57·2	45·2	7 7	12·0	529	20 58	576	497	8 49	79	76	19 17	89	48	11 13	41
18	52·8	13 33	63·7	43·4	3 23	20·3	531	23 35	606	471	10 29	135	73	18 40	111	47	9 58	64
19 **	51·4	14 22	63·2	41·3	9 0	21·9	530	22 29	572	466	9 19	106	67	17 11	95	48	12 39	47
20	52·2	14 42	59·9	43·6	0 0	16·3	523	18 22	566	467	13 10	99	67	18 20	93	48	11 58	45
21	51·7	14 27	60·7	43·9	7 45	16·8	536	18 58	588	483	7 22	105	67	15 17	95	38	11 36	57
22	51·5	14 52	56·1	44·9	6 12	11·2	535	18 58	572	500	10 21	72	65	19 17	95	39	10 22	56
23	51·7	13 55	60·3	44·9	7 44	15·4	539	19 21	593	490	13 0	103	71	19 20	103	48	1 20	55
24	52·1	14 42	59·1	44·6	7 28	14·5	535	23 22	562	497	13 22	65	69	18 32	87	50	3 42	37
25 *	51·8	14 19	60·7	46·1	8 51	14·6	536	18 41	567	502	11 48	65	70	18 42	82	52	12 0	30
26	51·9	14 11	59·7	43·5	7 40	16·2	554	20 22	658	515	11 11	143	66	20 21	94	40	11 40	54
27 **	53·0	13 20	60·6	45·5	9 25	15·1	546	0 0	589	495	10 22	94	71	17 10	101	41	9 59	60
28	52·5	15 30	60·6	42·0	22 1	18·6	545	22 12	600	498	12 2	102	71	19 3	97	44	12 0	53
29 **	53·2	3 53	61·1	44·9	6 48	16·2	544	0 43	573	496	12 43	77	74	16 16	113	49	4 35	64
30	53·4	12 50	61·9	46·7	8 4	15·2	539	23 45	572	487	9 11	85	71	17 22	93	50	11 59	43
Mean	52·5	-	60·4	43·9	-	16·6	539	-	586	489	-	96·6	70	-	95	45	-	49·7
Mean *	52·4	-	58·9	45·3	-	13·6	545	-	575	508	-	66·8	68	-	80	48	-	31·8
Mean **	52·6	-	62·0	42·0	-	20·0	529	-	586	445	-	141·0	72	-	111	38	-	73·4

* International Quiet Day. ** International Disturbed Day.

TABLE IV. - HOURLY MEAN AND EXTREME VALUES OF MAGNETIC ELEMENTS AS RECORDED BY THE MAGNETOGRAPHS

Date	DECLINATION WEST						HORIZONTAL INTENSITY						VERTICAL INTENSITY					
	Mean Daily Value	Maximum		Minimum		Range	Mean Daily Value	Maximum		Minimum		Range	Mean Daily Value	Maximum		Minimum		Range
July	10°+ ′	U.T. h m	10°+ ′	10°+ ′	U.T. h m	′	18000 γ +	U.T. h m	18000 γ +	18000 γ +	U.T. h m	γ	43000 γ +	U.T. h m	43000 γ +	43000 γ +	U.T. h m	γ
1	52·6	12 56	60·3	46·3	8 21	14·0	540	19 10	572	487	10 41	85	70	16 40	91	50	10 12	41
2	52·1	14 42	59·4	44·9	8 40	14·5	543	20 54	574	513	12 40	61	70	18 30	89	47	10 56	42
3 **	55·3	15 38	74·1	42·9	18 24	31·2	541	18 30	662	449	12 41	213	80	14 44	152	40	10 50	112
4 **	51·8	16 3	63·9	43·8	7 34	20·1	538	17 19	654	482	21 56	172	82	18 11	130	33	22 15	97
5 **	55·6	14 28	70·3	42·2	1 58	28·1	510	16 20	637	379	10 39	258	88	16 33	207	- 3	6 46	210
6	50·1	14 30	57·1	41·8	9 23	15·3	503	22 40	538	447	9 19	91	71	18 35	91	34	3 45	57
7 *	51·9	14 20	58·2	45·4	7 30	12·8	523	20 3	551	485	11 10	66	77	5 20	87	61	11 55	26
8	51·7	14 7	57·4	44·6	8 10	12·8	538	18 58	573	507	11 15	66	81	18 27	103	55	11 0	48
9 *	52·7	13 0	61·7	45·2	7 10	16·5	536	20 2	559	510	10 25	49	72	19 40	84	52	12 55	32
10 *	51·6	12 10	55·4	44·5	6 11	10·9	548	19 58	572	526	8 50	46	72	5 20	82	52	11 0	30
11	51·5	14 4	63·2	42·6	8 10	20·6	556	14 3	620	516	14 58	104	63	5 20	78	24	12 40	54
12	52·5	14 57	61·2	45·4	6 4	15·8	550	14 59	626	526	8 33	100	68	17 30	96	39	12 5	57
13 *	52·2	13 30	59·0	45·3	6 20	13·7	534	21 45	570	501	11 15	69	68	18 20	87	43	12 50	44
14	52·6	13 28	60·0	43·6	23 32	16·4	538	8 3	582	437	12 29	145	79	17 25	122	53	10 5	69
15	51·1	14 3	58·7	42·0	6 14	16·7	529	18 55	572	499	11 49	73	70	17 15	82	41	11 50	41
16	51·3	13 18	60·4	40·2	6 30	20·2	544	17 50	651	490	9 45	161	68	19 25	102	38	11 2	64
17	50·6	13 24	60·4	40·6	2 5	19·8	530	21 41	584	438	7 53	146	63	18 25	87	35	11 20	52
18	50·9	15 24	59·5	43·0	8 30	16·5	534	18 21	571	500	10 50	71	68	18 18	95	51	1 54	44
19	52·2	13 58	61·6	43·0	22 45	18·6	542	22 5	631	506	11 16	125	70	17 24	90	48	12 57	42
20 **	51·8	14 14	66·7	40·7	4 27	26·0	522	0 40	606	429	14 32	177	72	17 18	133	26	0 59	107
21 **	52·6	13 32	72·7	45·2	7 10	27·5	514	13 31	633	386	13 54	247	84	17 20	123	47	11 15	76
22	52·3	12 10	59·2	46·8	8 45	12·4	526	23 48	571	467	13 10	104	72	19 36	91	51	11 30	40
23	50·5	13 30	56·7	43·8	5 30	12·9	527	17 15	557	489	11 35	68	73	20 8	84	59	0 58	25
24	51·8	12 45	60·7	44·5	6 12	16·2	538	21 8	579	499	13 24	80	72	20 10	82	51	10 55	31
25	51·4	12 50	56·4	46·8	5 12	9·6	534	1 29	570	491	13 10	79	76	17 5	92	60	13 0	32
26	54·1	12 28	62·3	44·5	4 24	17·8	534	15 49	595	449	8 30	146	75	18 1	110	29	7 20	81
27	50·6	13 35	56·1	43·0	22 13	13·1	530	17 50	571	507	13 40	64	75	17 45	95	53	11 50	42
28	51·6	13 10	57·9	45·6	5 24	12·3	533	17 52	566	497	10 55	69	75	17 50	97	45	10 55	52
29	50·5	13 40	58·3	43·7	7 30	14·6	534	17 50	560	494	9 10	66	74	15 30	86	50	11 35	36
30 *	52·0	13 50	59·4	45·2	6 45	14·2	540	17 52	560	518	9 10	42	73	17 43	88	55	12 5	33
31	51·3	13 30	58·7	46·2	6 36	12·5	539	20 20	568	500	11 30	68	74	16 45	83	51	12 10	32
Mean	52·0	-	60·9	44·0	-	16·9	534	-	588	481	-	106·8	73	-	101	44	-	56·4
Mean *	52·1	-	58·7	45·1	-	13·6	536	-	562	508	-	54·4	72	-	86	53	-	33·0
Mean **	53·4	-	69·5	43·0	-	26·6	525	-	638	425	-	213·4	81	-	149	29	-	120·4
August	10°+ ′	U.T. h m	10°+ ′	10°+ ′	U.T. h m	′	18000 γ +	U.T. h m	18000 γ +	18000 γ +	U.T. h m	γ	43000 γ +	U.T. h m	43000 γ +	43000 γ +	U.T. h m	γ
1	51·5	13 3	60·7	46·3	7 40	14·4	540	18 30	566	504	9 32	62	72	16 35	83	54	12 25	29
2 *	51·4	14 0	59·5	45·4	7 45	14·1	539	18 50	560	515	11 12	45	70	18 20	80	46	12 0	34
3 *	51·2	13 24	57·4	45·7	7 5	11·7	542	22 20	562	507	10 20	55	72	16 30	82	59	9 55	23
4	51·3	13 48	58·2	45·6	6 36	12·6	549	17 30	572	512	10 30	60	71	17 20	81	55	10 55	26
5 *	51·0	13 55	58·8	44·0	7 10	14·8	552	21 0	580	518	10 50	62	67	17 30	75	48	12 25	27
6 *	51·5	13 20	60·4	43·1	7 40	17·3	551	20 10	571	517	10 48	54	63	17 45	74	40	12 10	34
7 *	51·7	14 12	61·2	45·2	6 35	16·0	548	19 30	567	515	11 15	52	64	8 25 / 20 35	71	42	13 10	29
8	51·6	13 10	59·4	45·1	7 43	14·3	553	19 25	592	528	11 40	64	60	20 40	74	33	12 50	41
9	51·6	12 50	57·8	45·2	6 50	12·6	549	19 45	575	512	10 40	63	66	6 40 / 18 35	75	49	11 5	26
10	52·1	15 6	60·5	44·6	7 50	15·9	549	16 50 / 18 34	590	490	9 50	100	71	18 35	107	44	12 58	63
11	51·6	13 25	58·4	42·6	7 10	15·8	542	22 6	625	508	9 15	117	67	22 10	79	47	11 55	32
12 **	49·1	13 45	60·0	32·0	3 36	28·0	494	1 39	640	336	9 25	304	75	15 5	134	-30	4 46	164
13 **	49·8	13 53	59·8	39·1	6 55	20·7	503	16 38	571	445	8 30	126	76	16 40	119	24	1 16	95
14	50·9	13 50	57·4	42·7	7 30	14·7	508	21 12	532	474	11 27	58	77	15 35	90	64	10 0	26
15	51·7	13 20	62·1	45·0	6 50	17·1	526	20 0	554	497	8 20	57	76	17 20	86	52	12 0	34
16 **	52·8	15 47	68·5	45·5	6 5	23·0	524	15 36	740	394	16 35	346	90	15 34	216	47	23 16	169
17	49·7	12 10	61·3	34·3	2 35	27·0	507	1 41	560	451	8 56	109	74	16 20	107	31	2 35	76
18	51·3	13 15	63·6	44·1	7 50	19·5	519	22 3	565	467	10 17	98	83	17 20	106	63	11 55	43
19	51·6	15 5	63·8	42·4	7 25	21·4	531	15 7	588	487	10 25	101	80	16 20	113	50	11 30	63
20	50·7	12 20	57·7	42·8	7 5	14·9	536	19 40	577	493	8 59	84	76	19 40	88	57	11 5	31
21	50·8	12 55	58·4	43·6	6 55	14·8	544	21 26	602	511	8 55	91	69	21 25	88	44	12 10	44
22 **	47·7	16 15	68·5	21·3	3 33	47·2	494	0 41	627	363	23 30	264	87	17 23	271	-88	3 22	359
23 **	48·6	5 28	62·8	29·8	1 21	33·0	461	19 50	537	327	10 0	210	69	14 43	147	-52	0 42	199
24	49·6	12 55	58·3	43·8	6 20	14·5	505	24 0	538	466	13 53	72	87	16 46	108	63	0 38	45
25	50·1	12 50	58·9	44·7	6 30	14·2	517	0 12	550	487	14 25	63	85	18 10	101	72	10 50	29
26	49·3	12 35	56·3	43·7	6 45	12·6	521	21 45	542	496	9 8	46	86	16 10	97	69	11 50	28
27	49·7	12 35	58·8	42·8	6 45	16·0	522	21 20	552	492	10 30	60	84	15 50	104	60	11 0	44
28	50·2	12 30	58·5	43·0	6 50	15·5	524	22 40	546	492	9 50	54	85	16 30	99	71	12 55	28
29	49·6	0 54	55·9	43·9	6 50	12·0	529	1 17	555	498	10 35	57	79	19 20	88	66	10 55	22
30	50·7	13 30	58·8	46·2	7 20	12·6	531	20 0	559	496	10 32	63	81	17 25	96	66	12 10	30
31	50·4	13 15	58·0	44·3	8 5	13·7	537	19 5	564	504	10 40	60	75	7 40	124	62	12 50	62
Mean	50·7	-	60·0	42·2	-	17·8	527	-	576	477	-	98·6	75	-	105	42	-	63·1
Mean *	51·4	-	59·4	44·7	-	14·8	547	-	568	514	-	53·6	67	-	76	47	-	29·4
Mean **	49·6	-	63·9	33·5	-	30·4	495	-	623	373	-	250·0	79	-	177	-20	-	197·2

* International Quiet Day. ** International Disturbed Day.

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

Date	DECLINATION WEST						HORIZONTAL INTENSITY						VERTICAL INTENSITY					
	Mean Daily Value	Maximum		Minimum		Range	Mean Daily Value	Maximum		Minimum		Range	Mean Daily Value	Maximum		Minimum		Range
September	10°+ ′	U.T. h m	10°+ ′	10°+ ′	U.T. h m	′	18000 γ+	U.T. h m	18000 γ+	18000 γ+	U.T. h m	γ	43000 γ+	U.T. h m	43000 γ+	43000 γ+	U.T. h m	γ
1 *	50·5	14 5	59·8	43·8	8 25	16·0	536	19 10	556	502	10 40	54	75	15 45	87	57	12 40	30
2	50·8	13 30	61·0	42·7	7 40	18·3	546	21 45	630	517	9 50	113	75	21 45	95	54	11 2	41
3 **	47·5	14 5	59·0	32·7	3 35	26·3	524	2 54	613	441	11 4	172	72	21 45	95	29	3 20	66
4	49·6	13 55	57·9	40·6	2 31	17·3	522	20 23	546	474	11 10	72	75	17 0	86	48	11 2	38
5 *	50·2	12 50	57·0	44·3	24 0	12·7	533	23 10	568	492	10 50	76	80	19 40	90	58	11 25	32
6	50·2	12 30	58·8	43·1	0 20	15·7	538	23 45	573	512	11 10	61	79	16 30	90	56	12 0	34
7	50·4	12 40	59·9	42·3	7 40	17·6	534	0 0	564	499	10 35	65	76	17 0	89	53	10 55	36
8	51·1	13 5	58·9	43·7	7 10	15·2	540	23 30	574	482	11 44	92	75	17 25	86	47	11 45	39
9 **	50·2	12 55	62·2	39·0	6 10	23·2	530	1 15	579	485	11 30	94	82	15 20	105	63	11 0	42
10	50·4	13 40	60·6	41·9	19 50	18·7	527	20 10	553	491	9 26	62	79	20 8	97	60	3 40	37
11	49·9	12 55	59·4	44·1	6 10	15·3	523	1 51	548	483	10 35	65	80	0 32	88	68	12 10	20
12	49·7	12 33	59·5	42·8	7 40	16·7	527	21 20	560	487	8 18	73	78	0 50	84	67	11 10	17
13	49·6	12 10	59·0	43·7	7 50	15·3	531	22 45	575	492	9 32	83	76	15 40	86	61	11 10	25
14	50·2	13 12	61·8	40·8	7 40	21·0	528	3 26	557	488	10 5	69	76	16 45	89	57	10 40	32
15	49·7	12 20	57·2	40·9	23 36	16·3	533	17 45	559	499	11 29	60	71	0 33	80	56	11 20	24
16	49·7	13 25	59·0	44·4	8 15	14·6	537	19 20	567	504	10 10	63	73	16 45	82	50	11 10	32
17 **	49·7	16 18	66·5	27·9	19 22	38·6	509	16 5	566	430	19 20	136	92	18 0	198	53	10 55	145
18	48·7	13 40	55·7	43·1	7 28	12·6	501	23 35	529	462	10 10	67	90	0 1	113	69	12 55	44
19 **	50·7	14 20	60·0	34·7	23 50	25·3	505	6 10	554	434	10 31	120	96	17 10	152	68	10 5	84
20 **	48·7	12 55	56·6	33·1	1 44	23·5	506	1 50	590	446	9 40	144	81	17 23	126	38	4 12	88
21	49·9	12 40	59·0	44·7	20 10	14·3	521	20 25	562	479	10 22	83	82	20 20	93	68	12 50	25
22	50·1	12 40	58·1	43·7	23 1	14·4	524	21 45	577	483	11 18	94	79	17 55	98	60	12 5	38
23	48·9	14 0	54·5	44·2	8 20	10·3	527	21 9	557	499	12 0	58	75	6 45	85	55	11 45	30
24 *	49·3	12 35	59·0	42·6	3 41	16·4	528	6 42	556	491	11 5	65	76	16 0	86	55	11 5	31
25	49·8	12 52	57·5	42·6	8 50	14·9	534	21 40	558	498	11 45	60	75	18 3	95	46	11 5	49
26	48·1	13 40	58·8	32·1	3 10	26·7	521	19 35	583	481	9 39	102	76	19 20	99	57	4 12	42
27	48·9	13 25	56·4	42·6	7 45	13·8	526	20 17	571	493	10 30	78	75	17 40	87	56	12 10	31
28 *	49·4	12 45	55·4	43·2	6 45	12·2	532	0 55	550	511	10 38	39	74	7 50	82	56	10 55	26
29 *	49·8	13 50	57·9	42·4	8 0	15·5	539	16 30	558	507	10 25	51	71	6 40	81	52	12 5	29
30	49·1	13 10	60·5	40·4	23 35	20·1	529	6 5	552	499	19 33	53	81	20 20	111	53	11 45	58
Mean	49·7	-	58·9	40·9	-	18·6	527	-	566	485	-	80·8	78	-	98	56	-	42·2
Mean *	49·8	-	57·8	43·3	-	14·6	534	-	558	501	-	57·0	75	-	85	56	-	29·6
Mean **	49·4	-	60·9	33·5	-	27·4	515	-	580	447	-	133·2	85	-	135	50	-	85·0
October	10°+ ′	U.T. h m	10°+ ′	10°+ ′	U.T. h m	′	18000 γ+	U.T. h m	18000 γ+	18000 γ+	U.T. h m	γ	43000 γ+	U.T. h m	43000 γ+	43000 γ+	U.T. h m	γ
1	48·5	14 32	56·4	41·7	2 25	14·7	532	17 55	566	505	10 12	61	75	0 5	95	55	11 10	40
2	49·5	14 30	56·1	42·2	8 3	13·9	539	21 55	566	499	10 52	67	73	7 45	84	54	13 45	30
3 **	49·8	13 39	65·6	36·8	19 28	28·8	504	1 45	562	426	22 4	136	94	19 35	162	48	22 12	114
4 **	46·5	14 50	56·6	28·2	3 8	28·4	485	1 3	520	401	2 42	119	81	14 20	118	-38	3 7	156
5	48·9	12 50	57·6	31·8	19 32	25·8	504	19 54	575	441	10 20	134	91	19 50	109	78	11 0	31
6	47·8	5 28	58·1	36·9	1 15	21·2	511	3 42	574	463	5 21	111	79	17 25	113	19	5 0	94
7	48·0	12 35	57·8	34·6	19 55	23·2	515	22 37	567	482	18 26	85	90	19 0	123	71	11 0	52
8	49·3	13 45	54·7	43·7	8 20	11·0	521	18 34	567	503	9 50	64	87	7 40	98	74	3 12	24
9	49·5	14 0	62·4	38·0	2 25	24·4	506	1 27	555	382	7 38	173	93	19 40	114	73	11 5	41
10	48·9	12 49	56·7	43·7	8 20	13·0	517	22 50	561	476	10 42	85	86	7 45	93	74	11 5	19
11	48·7	13 34	58·3	41·2	23 12	17·1	531	19 47	588	489	10 42	99	80	19 48	94	70	11 0	24
12 *	49·1	13 0	55·4	42·6	8 35	12·8	526	23 33	548	490	11 35	58	81	7 30	89	72	11 5	17
13 **	45·2	16 40	62·6	10·4	23 26	52·2	502	2 24	597	305	22 40	292	91	20 35	217	- 6	22 52	223
14 **	47·0	12 31	60·1	25·6	17 4	34·5	469	20 41	591	375	9 37	216	91	17 1	161	38	3 54	123
15 **	46·2	4 44	61·1	27·8	17 42	33·3	485	2 45	620	399	4 30	221	78	15 40	128	-30	4 5	158
16	49·0	15 1	59·3	34·1	16 58	25·2	494	17 5	597	432	11 15	165	101	17 3	167	68	23 12	99
17	48·9	3 12	57·7	34·1	18 37	23·6	501	18 2	569	435	11 10	134	102	18 4	158	79	3 49	79
18	50·1	13 40	57·9	38·4	20 27	19·5	503	20 30	588	447	15 18	141	102	15 40	147	73	3 30	74
19	49·1	14 40	59·1	40·6	19 20	18·5	498	0 2	574	429	10 10	145	99	16 55	131	68	1 10	63
20 *	49·1	12 55	54·2	44·5	7 15	9·7	516	22 12	538	468	10 50	70	93	7 25	104	80	12 50	24
21	49·0	12 50	58·1	39·0	23 5	19·1	522	23 15	565	485	10 52	80	91	19 50	110	71	10 50	39
22	48·0	14 0	54·5	41·4	20 25	13·1	524	21 0	542	496	11 15	46	88	20 50	102	74	13 5	28
23	48·9	12 50	56·1	41·9	16 26	14·2	516	7 8	547	461	13 20	86	97	16 35	127	81	10 25	46
24	47·9	13 50	53·0	42·3	8 55	10·7	520	0 31	552	489	9 50	63	87	0 10	95	74	12 40	21
25 *	48·8	13 32	57·1	43·5	9 0	13·6	526	0 4	545	484	11 50	61	89	15 20	97	86	10 45	11
26	48·9	12 50	55·6	43·4	8 25	12·2	531	20 50	551	495	10 56	56	84	20 45	94	71	11 20	23
27 *	49·2	13 34	55·3	44·4	8 55	10·9	536	17 25	555	506	10 58	49	82	15 40	88	69	12 0	19
28	49·4	12 0	56·7	43·7	23 45	13·0	534	23 32	564	491	12 12	73	84	23 15	97	66	10 40	31
29	47·9	13 22	54·9	41·0	20 35	13·9	526	3 10	565	494	11 20	71	85	19 30	96	74	10 50	22
30	48·7	14 40	55·6	44·5	8 55	11·1	524	1 2	572	493	10 32	79	87	17 40	102	75	10 45	27
31 *	49·1	12 35	55·8	45·4	0 36	10·4	526	1 40	565	494	11 0	71	87	16 35	98	76	2 10	22
Mean	48·6	-	57·4	38·3	-	19·1	514	-	566	459	-	106·8	88	-	116	59	-	57·2
Mean *	49·1	-	55·6	44·1	-	11·5	526	-	550	488	-	61·6	87	-	95	77	-	18·6
Mean **	46·9	-	61·2	25·8	-	35·4	489	-	578	381	-	196·8	87	-	157	2	-	154·8

* International Quiet Day. ** International Disturbed Day.

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

Date	DECLINATION WEST						HORIZONTAL INTENSITY						VERTICAL INTENSITY					
	Mean Daily Value	Maximum		Minimum		Range	Mean Daily Value	Maximum		Minimum		Range	Mean Daily Value	Maximum		Minimum		Range
November	10°+ ′	U.T. h m	10°+ ′	10°+ ′	U.T. h m	′	18000 γ +	U.T. h m	18000 γ +	18000 γ +	U.T. h m	γ	43000 γ +	U.T. h m	43000 γ +	43000 γ +	U.T. h m	γ
1	49·2	12 58	56·2	44·7	19 20	11·5	527	5 20	549	489	11 58	60	87	19 30	100	75	10 30	25
2	48·8	13 25	53·3	45·0	9 2	8·3	532	5 14	559	501	11 57	58	84	15 40	90	77	12 55	13
3	49·1	13 9	55·1	43·0	23 5	12·1	536	22 15	557	500	12 15	57	83	18 30	93	71	12 0	22
4	48·4	12 50	52·8	43·0	0 1	9·8	538	8 5	554	519	11 20	35	82	19 30	87	70	13 0	17
5	48·6	12 50	53·4	45·7	9 15	7·7	534	17 40	546	510	10 20	36	85	19 30	91	80	11 25	11
6	48·6	13 48	52·4	43·7	21 40	8·7	538	23 45	563	523	20 45	40	83	21 20	95	77	11 30	18
7	48·3	13 55	53·6	43·4	0 20	10·2	532	21 45	550	506	16 20	44	82	17 40	93	74	12 50	19
8 *	48·9	13 0	53·1	45·8	8 40	7·3	537	19 20	554	515	13 20	39	82	13 55	87	78	11 40	9
9	48·8	13 30	52·5	44·8	9 7	7·7	537	21 55	549	519	11 30	30	82	15 35	90	72	10 50	18
10 *	48·8	12 48	52·8	45·8	8 35	7·0	536	4 50	551	524	9 40	27	84	20 20	90	77	10 25	13
11	48·8	13 5	53·2	42·9	23 50	10·3	539	20 20	551	519	22 8	32	82	19 25	90	73	11 5	17
12 **	49·0	14 13	56·1	38·5	0 35	17·6	530	6 55	551	501	15 35	50	85	17 0	95	74	10 0	21
13 **	47·9	11 40	56·4	29·8	20 46	26·6	510	4 5	607	454	14 0	153	95	14 30	144	57	4 30	87
14 **	47·1	1 15	57·8	37·4	22 31	20·4	514	1 15	565	479	10 45	86	89	16 10	112	58	1 50	54
15	48·2	13 35	52·8	42·5	0 53	10·3	523	20 10	546	497	13 8	49	89	16 20	105	74	0 45	31
16	48·5	13 25	51·3	45·6	17 45	5·7	529	21 55	541	507	12 25	34	89	19 40	100	84	10 55	16
17	49·2	13 50	52·7	46·1	19 40	6·6	537	17 40	555	520	12 17	35	86	19 50	95	77	11 10	18
18 *	49·2	13 30	52·7	45·2	9 35	7·5	538	17 15	554	512	11 30	42	86	7 10	94	79	10 55	15
19	49·0	17 2	54·3	45·0	23 59	9·3	536	6 33	554	497	17 32	57	86	18 30	106	77	11 10	29
20	48·1	12 40	50·9	44·3	1 33	6·6	530	5 45	551	517	10 40	34	88	15 20	98	80	10 50	18
21	48·2	12 45	53·1	45·9	2 20	7·2	535	18 0	549	514	11 40	35	88	16 20	95	83	3 50	12
22 *	48·5	12 50	52·4	46·0	22 45	6·4	541	18 35	555	521	11 40	34	85	9 0	90	82	17 5	8
23 *	48·5	12 30	52·9	45·6	8 40	7·3	546	17 10	558	531	10 0	27	82	14 30	89	77	10 0	12
24	48·5	13 55	55·5	36·6	22 21	18·9	540	18 10	563	499	22 55	64	84	21 35	99	77	10 10	22
25 **	48·3	13 50	57·9	34·5	21 47 22 25	23·4	513	5 20	558	429	21 30	129	90	21 45	119	64	6 55	55
26 **	48·1	13 0	53·4	35·8	20 19	17·6	520	1 48	554	488	10 52	66	88	15 15	101	70	2 14	31
27	48·2	4 15	53·9	44·2	8 53	9·7	529	4 30	545	500	11 20	45	87	16 30	97	76	4 42	21
28	48·3	12 55	52·7	45·3	8 55	7·4	529	5 20	554	504	11 25	50	87	14 15 20 30	95	79	11 20	16
29	48·3	12 35	53·7	40·9	21 40	12·8	531	21 55	555	506	15 10	49	87	15 25	99	79	11 35	20
30	48·3	13 50	52·4	43·6	23 10	8·8	534	6 20	551	516	11 15	35	86	20 30	96	77	10 35	19
Mean	48·5	-	53·7	42·7	-	11·0	532	-	555	504	-	51·1	86	-	98	75	-	22·9
Mean *	48·8	-	52·8	45·7	-	7·1	540	-	554	521	-	33·8	84	-	90	79	-	11·4
Mean **	48·1	-	56·3	35·2	-	21·1	517	-	567	470	-	96·8	89	-	114	65	-	49·6
December	10°+ ′	U.T. h m	10°+ ′	10°+ ′	U.T. h m	′	18000 γ +	U.T. h m	18000 γ +	18000 γ +	U.T. h m	γ	43000 γ +	U.T. h m	43000 γ +	43000 γ +	U.T. h m	γ
1	48·2	13 5	52·4	45·1	1 7	7·3	537	6 25	567	503	11 40	64	83	20 20	93	72	11 40	21
2	48·2	13 40	52·2	43·0	21 39	9·2	539	19 7	554	520	20 55	34	84	20 40	95	73	11 5	22
3	48·2	13 20	52·0	39·5	22 20	12·5	540	6 50	555	512	22 20	43	83	22 48	94	73	11 0	21
4	47·2	13 30	50·9	40·8	1 5	10·1	537	20 20	551	514	1 20	37	85	16 35	90	80	12 35	10
5	48·6	16 47	58·8	37·6	23 48	21·2	528	8 10	551	483	19 42	68	92	20 55	118	80	1 25	38
6 **	46·4	12 42	54·1	27·3	20 52	26·8	527	20 9	573	456	22 50	117	91	20 52	116	83	11 5	33
7 **	46·2	3 42	59·9	33·1	22 38	26·8	504	22 56	575	434	14 35	141	97	18 59	152	41	4 8	111
8 **	48·1	6 50	57·7	31·7	16 5	26·0	513	23 58	566	455	15 50	111	98	16 25	132	68	3 42	64
9	47·7	0 9	54·3	34·9	18 22	19·4	522	18 48	554	464	13 25	90	93	13 45	111	68	0 27	43
10	47·4	12 12	51·8	41·3	21 35	10·5	529	21 50	552	507	14 10	45	92	15 50	105	86	11 5	19
11	47·9	12 45	51·9	44·4	21 15	7·5	532	6 40	549	510	11 40	39	90	16 20	102	81	10 0	21
12	47·6	2 36	51·4	35·5	22 16	15·9	536	22 20	551	517	17 58	34	89	18 20	101	79	10 50	22
13	48·0	14 5	51·6	43·5	0 38	8·1	534	6 50	553	508	14 40	45	88	16 30	100	80	5 37	20
14 *	48·3	12 55	51·4	45·8	0 30	5·6	543	19 55	558	522	11 40	36	86	16 20	94	82	12 50	12
15	48·2	14 30	52·4	43·4	0 50	9·0	535	7 0	552	508	16 40	44	88	19 20	100	82	11 35	18
16	47·7	14 15	52·1	32·9	23 15	19·2	543	16 38	566	505	22 10	61	84	22 35	94	73	23 2	21
17	47·8	13 35	51·4	41·9	0 0	9·5	534	7 15	544	517	0 0	27	86	16 30	96	77	11 10	19
18 *	47·4	13 24	49·6	44·7	2 37	4·9	539	18 2	549	527	0 20	22	88	16 30	95	83	9 55	12
19 *	47·9	12 32	51·2	46·0	5 12	5·2	543	18 33	553	537	13 40	16	84	16 40	89	76	12 35	13
20 *	47·9	13 0	50·3	44·4	23 45	5·9	548	17 40	562	531	22 45	31	84	23 10	92	80	10 10	12
21 **	48·4	14 52	57·9	43·3	6 25	14·6	530	8 40	566	495	15 6	71	89	20 20	107	75	9 15	32
22 **	47·9	14 32	55·5	37·0	0 36	18·5	522	0 14	571	467	15 55	104	92	16 25	120	69	0 35	51
23	48·0	12 50	53·0	43·1	22 15	9·9	532	22 23	569	503	10 40	66	88	17 15	95	80	5 5	15
24	47·1	14 50	51·8	42·4	20 40	9·4	527	8 10	548	505	21 15	43	88	21 25	98	79	1 50	19
25	47·9	12 50	52·3	41·5	21 55	10·8	531	2 20	556	512	14 5	44	87	14 25	97	77	3 20	20
26	48·2	5 25	52·3	44·0	23 45	8·3	541	6 35	564	521	11 30	43	84	15 45	95	73	7 10	22
27	48·5	16 53	56·3	40·2	19 57	16·1	544	4 50	570	506	19 20	64	84	19 55	100	75	9 55	25
28	47·8	19 16	51·3	44·1	23 40	7·2	536	4 30	548	516	23 45	32	87	19 0	98	78	9 40	20
29	47·2	11 32	51·2	43·8	3 20	7·4	535	24 0	566	512	16 10	54	89	16 20	99	80	9 40	19
30	47·5	12 50	51·0	41·3	0 35	9·7	539	0 4	569	527	0 55	42	88	14 35	97	79	0 30	18
31 *	47·5	12 30	50·1	46·1	7 0	4·0	540	20 10	548	528	10 30	20	87	16 30	95	82	23 25	13
Mean	47·8	-	52·6	40·8	-	12·1	533	-	558	504	-	54·5	88	-	102	76	-	26·0
Mean *	47·8	-	50·5	45·4	-	5·1	543	-	554	529	-	25·0	86	-	93	81	-	12·4
Mean **	47·4	-	57·0	34·5	-	22·5	519	-	570	461	-	108·8	93	-	125	67	-	58·2

* International Quiet Day. ** International Disturbed Day.

TABLE V. - MEAN DIURNAL INEQUALITIES OF THE MAGNETIC ELEMENTS - DECLINATION, INCLINATION AND HORIZONTAL INTENSITY

"All" Days.

DECLINATION WEST (unit 0′·01)

Month and Season, 1939.	Universal Time. Hour commencing - 0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
Jan.	-168	-141	-123	-062	-045	-033	-036	-086	-076	-047	+040	+148	***+266***	+241	+162	+153	+167	+144	+055	+005	-078	-148	-162	***-169***
Feb.	-292	***-325***	-270	-205	-145	-106	-056	000	-047	-044	+069	+214	+347	***+400***	+339	+276	+231	+222	+126	+116	-010	-249	-300	-286
March	-254	-227	-162	-210	-210	-194	-123	-209	-251	-158	+037	+298	+536	***+648***	+583	+471	+259	+142	+067	-111	-142	-242	-263	***-290***
April	-236	-168	-142	-155	-216	-239	-298	-450	***-461***	-282	-041	+335	+659	***+796***	+750	+537	+365	+164	-050	-113	-142	-180	-180	-264
May	-172	-222	-311	-324	-357	-413	***-483***	-465	-346	-186	+063	+392	+634	***+710***	+634	+483	+356	+199	+081	+006	-030	-032	-066	-145
June	-096	-138	-172	-224	-280	-415	-583	***-629***	-543	-373	-090	+250	+522	+622	***+653***	+544	+384	+245	+134	+086	+080	+045	-008	-021
July	-131	-193	-233	-276	-398	-431	-450	***-467***	-439	-275	-037	+306	+570	***+668***	+661	+547	+365	+227	+127	+072	+022	-021	-083	-122
Aug.	-101	-173	-245	-322	-382	-424	***-557***	-548	-459	-182	+135	+466	+703	***+779***	+687	+482	+268	+057	-005	-034	-024	-029	-037	-066
Sept.	-199	-200	-263	-261	-292	-317	-431	***-497***	-473	-276	+064	+475	+744	***+793***	+678	+473	+296	+160	+085	-014	-069	-118	-136	-217
Oct.	-181	-177	-127	-154	-160	-107	-200	-299	***-423***	-262	+024	+349	+593	***+639***	+599	+416	+270	+130	+037	-060	-231	-172	-234	-265
Nov.	-177	-122	-105	-042	-041	-035	-066	-101	-170	-171	-007	+207	+334	***+368***	+313	+225	+176	+099	+081	+002	-117	-193	***+234***	-215
Dec.	-169	-127	-057	-029	-013	-037	-012	-027	-042	000	+079	+182	+270	***+285***	+234	+186	+107	+118	+023	-041	+149	-249	***-296***	-246
Year	-181	-184	-184	-189	-211	-229	-275	***-315***	-311	-188	+028	+302	+515	***+579***	+524	+399	+270	+159	+063	-007	-074	-132	-167	-192
Winter	-202	-179	-139	-085	-061	-053	-043	-054	-084	-066	+045	+188	+304	***+324***	+262	+210	+170	+146	+071	+021	-089	-210	***-248***	-229
Equinox	-218	-193	-174	-195	-220	-214	-263	-364	***-402***	-245	+021	+364	+633	***+719***	+653	+474	+298	+149	+035	-075	-146	-178	-203	-259
Summer	-125	-182	-240	-287	-354	-421	-518	***-527***	-447	-254	+018	+354	+607	***+695***	+659	+514	+342	+182	+084	+033	+012	-009	-049	-089

INCLINATION (unit 0′·01)

Jan.	+011	+001	-020	-040	-064	***-072***	-070	-052	-021	+030	+057	***+067***	+044	+028	+030	+031	+031	+012	+012	+001	-010	-003	-001	+004
Feb.	+010	-009	-023	-037	-048	-061	***-079***	-067	-071	-056	-081	+008	+013	+004	+014	+017	+048	+046	+050	+055	***+092***	+052	+039	+022
March	-043	-038	-044	-032	-054	-069	***-080***	-046	-008	+047	+068	***+073***	+053	+046	+025	+039	+058	+040	+014	-007	+009	-012	-005	-037
April	-053	-030	-059	-036	-034	-036	-008	+049	+094	+119	***+146***	+137	+087	+057	+022	-012	-015	-063	***-103***	-078	-040	-027	-047	-070
May	-057	-057	-062	-052	-037	-013	+040	+079	+108	***+116***	+111	+082	+060	+075	+070	+014	-025	-054	-070	-072	-064	***-082***	-067	-044
June	-078	-080	-062	-045	-045	-027	+026	+095	+146	***+169***	+163	+141	+104	+112	+040	+005	-011	-063	-087	-100	***-101***	-100	***-101***	-099
July	-063	-055	-053	-054	-044	-029	+021	+078	+114	+130	***+147***	+126	+099	+088	+067	+008	-035	-075	***-092***	-084	-074	-082	-075	-062
Aug.	-094	-093	-079	-054	-045	-008	+039	+090	+153	***+182***	+175	+106	+057	+047	+048	+017	+008	-018	-060	-094	***-109***	-097	-095	-085
Sept.	-063	***-081***	-067	-077	-073	-033	-007	+039	+093	+136	***+156***	+127	+065	+041	+024	+023	+022	+006	-022	-046	-056	-067	-069	-071
Oct.	-086	-094	-111	***-141***	-110	-101	-069	-025	+038	+133	***+185***	+166	+128	+099	+069	+053	+024	-005	+005	-001	+001	-024	-044	-087
Nov.	-013	-024	-036	-050	-076	***-083***	-081	-066	-027	+030	+070	***+100***	+084	+064	+056	+041	+014	+004	+005	+005	000	+001	-005	-015
Dec.	+007	+009	-013	-036	-050	-062	***-077***	-069	-047	-021	+012	+030	+023	+032	+037	***+038***	+022	+008	+011	+028	+037	+037	+023	+021
Year	-044	-046	-052	-055	***-057***	-050	-029	+009	+048	+085	***+106***	+097	+068	+058	+042	+023	+012	-014	-028	-033	-026	-034	-037	-044
Winter	+004	-006	-023	-041	-060	-070	***-077***	-064	-042	-004	+030	***+051***	+041	+032	+034	+032	+029	+018	+020	+022	+030	+022	+014	+008
Equinox	-061	-061	-070	***-072***	-068	-060	-041	+004	+054	+109	***+139***	+126	+083	+061	+035	+026	+022	-006	-027	-033	-022	-033	-041	-066
Summer	-073	-071	-064	-051	-043	-019	+032	+086	+130	***+149***	+149	+114	+080	+081	+056	+011	-016	-053	-077	-088	-087	***-090***	-085	-073

HORIZONTAL INTENSITY (unit 0·1γ)

Jan.	- 16	- 05	+ 21	+ 48	+ 80	+ ***96***	+ 94	+ 69	+ 21	- 50	- 90	***-112***	- 74	- 40	- 40	- 41	- 35	- 03	+ 03	+ 18	+ 30	+ 18	+ 07	- 04
Feb.	- 20	- 07	+ 18	+ 37	+ 51	+ 71	+ ***93***	+ 71	+ 78	+ 49	- 12	- 50	- 53	- 30	- 24	- 14	- 43	- 25	- 20	- 16	- ***72***	- 29	- 39	- 21
March	+ 56	+ 40	+ 40	+ 11	+ 48	+ 79	+ ***98***	+ 54	- 08	-103	-149	***-165***	-125	- 97	- 34	- 18	- 19	+ 12	+ 48	+ 67	+ 33	+ 55	+ 22	+ 59
April	+ 42	+ 07	+ 47	+ 19	+ 18	+ 31	- 08	- 92	-161	-219	-276	***-279***	-204	-123	- 14	+ 96	+118	+204	***+254***	+194	+104	+ 66	+ 84	+ 86
May	+ 67	+ 50	+ 48	+ 34	+ 24	- 07	- 85	-149	-200	-233	***-245***	-211	-163	-138	- 79	+ 47	+129	+188	***+209***	+199	+167	+165	+117	+ 67
June	+108	+101	+ 69	+ 49	+ 55	+ 33	- 46	-156	-242	-297	***-304***	-288	-219	-202	- 49	+ 35	+ 78	+167	+202	***+214***	+203	+181	+166	+148
July	+ 81	+ 67	+ 61	+ 62	+ 57	+ 34	- 50	-142	-207	-248	***-290***	-269	-218	-160	- 80	+ 40	+126	+198	***+221***	+192	+161	+148	+119	+ 95
Aug.	+113	+107	+ 75	+ 30	+ 41	+ 03	- 57	-135	-242	-303	***-308***	-216	-137	- 96	- 54	+ 42	+ 73	+109	+156	***+196***	+194	+162	+142	+114
Sept.	+ 97	+118	+ 92	+ 99	+ 95	+ 48	+ 17	- 56	-151	-238	***-294***	-260	-161	-103	- 45	- 09	+ 15	+ 48	+ 85	+116	+120	***+130***	+123	+118
Oct.	+111	+108	+118	***+147***	+105	+108	+ 80	+ 34	- 61	-216	***-308***	-280	-215	-151	- 81	- 31	+ 26	+ 75	+ 57	+ 61	+ 50	+ 62	+ 72	+122
Nov.	+ 11	+ 23	+ 35	+ 56	+ 95	***+106***	+102	+ 86	+ 37	- 57	-124	***-166***	-134	- 92	- 66	- 37	+ 06	+ 18	+ 18	+ 19	+ 23	+ 15	+ 14	+ 19
Dec.	- 20	- 24	+ 04	+ 31	+ 52	+ 70	+ ***94***	+ 85	+ 53	+ 10	- 39	- ***59***	- 44	- 48	- 42	- 33	00	+ 16	+ 16	- 10	- 25	- 34	- 26	- 31
Year	+ 53	+ 49	+ 52	+ 52	+ 60	+ 56	+ 28	- 28	- 90	-159	***-203***	-196	-146	-107	- 51	+ 06	+ 40	+ 84	+104	***+104***	+ 82	+ 78	+ 67	+ 64
Winter	- 11	- 03	+ 20	+ 43	+ 70	+ 86	+ ***96***	+ 78	+ 47	- 12	- 66	- ***97***	- 76	- 53	- 43	- 31	- 18	+ 02	+ 04	+ 03	- 11	- 08	- 11	- 09
Equinox	+ 77	+ 68	+ 74	+ 69	+ 67	+ 67	+ 47	- 15	- 95	-194	***-257***	-246	-176	-119	- 44	+ 10	+ 35	+ 85	***+111***	+110	+ 77	+ 78	+ 75	+ 96
Summer	+ 92	+ 81	+ 63	+ 44	+ 44	+ 16	- 60	-146	-223	-270	***-287***	-246	-184	-149	- 66	+ 41	+102	+166	+197	***+200***	+181	+164	+136	+106

TABLE V. - MEAN DIURNAL INEQUALITIES OF GEOGRAPHICAL COMPONENTS OF MAGNETIC INTENSITY

"All" Days

NORTH COMPONENT (unit 0·1γ)

Month and Season, 1939.	Universal Time. Hour commencing - 0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
Jan.	+ 01	+ 09	+ 33	+ 53	+ 83	+ **98**	+ 96	+ 76	+ 28	- 45	- 93	-125	- 99	- 64	- 56	- 56	- 51	- 17	- 03	+ 17	+ 37	+ 33	+ 23	+ 13
Feb.	+ 10	+ 26	+ 45	+ 57	+ 65	+ 81	+ **97**	+ 70	+ 81	+ 53	- 19	- 71	- **87**	- 70	- 58	- 42	- 66	- 47	- 32	- 27	- 70	- 04	- 08	+ 08
March	+ 81	+ 62	+ 56	+ 32	+ 68	+ 97	+**109**	+ 74	+ 17	- 85	-150	-**192**	-177	-161	+ 92	- 65	- 45	- 03	+ 41	+ 77	+ 47	+ 78	+ 48	+ 87
April	+ 65	+ 24	+ 61	+ 34	+ 39	+ 55	+ 22	- 45	-112	-187	-267	-**308**	-267	-201	- 89	+ 40	+ 79	+184	+**255**	+202	+117	+ 83	+101	+111
May	+ 83	+ 72	+ 79	+ 66	+ 60	+ 35	- 35	-100	-162	-210	-**247**	-247	-224	-207	-141	- 02	+ 92	+165	+**197**	+195	+167	+165	+122	+ 81
June	+116	+113	+ 85	+ 71	+ 82	+ 74	+ 13	- 90	-183	-255	-290	-**308**	-268	-261	-114	- 20	+ 38	+140	+185	+**202**	+192	+173	+164	+148
July	+ 93	+ 85	+ 83	+ 89	+ 96	+ 77	- 04	- 93	-159	-216	-281	-**295**	-272	-224	-145	- 16	+ 87	+172	+**204**	+182	+156	+148	+125	+106
Aug.	+121	+123	+ 98	+ 62	+ 79	+ 46	00	- 78	-192	-280	-**316**	-259	-205	-173	-122	- 07	+ 45	+101	+154	+**196**	+193	+162	+143	+119
Sept.	+115	+136	+117	+124	+123	+ 79	+ 60	- 05	-101	-206	-295	-**303**	-233	-181	-112	- 56	- 15	+ 31	+ 75	+115	+125	+**140**	+135	+138
Oct.	+127	+124	+129	+**160**	+119	+117	+ 99	+ 63	- 18	-186	-305	-**310**	-271	-213	-140	- 72	- 02	+ 61	+ 52	+ 66	+ 72	+ 78	+ 94	+147
Nov.	+ 29	+ 35	+ 45	+ 59	+ 98	+**108**	+107	+ 95	+ 54	- 39	-121	-**184**	-165	-127	- 96	- 59	- 12	+ 08	+ 10	+ 19	+ 34	+ 34	+ 37	+ 40
Dec.	- 03	- 11	+ 10	+ 33	+ 52	+ 73	+ **94**	+ 86	+ 56	+ 10	- 46	- **76**	- 70	- 76	- 65	- 51	- 11	+ 04	+ 13	- 06	- 10	- 08	+ 04	- 06
Year	+ 70	+ 67	+ 70	+ 70	+ 80	+ 78	+ 55	+ 04	- 58	-137	-203	-**223**	-195	-163	-103	- 34	+ 12	+ 67	+ 96	+**103**	+ 88	+ 90	+ 82	+ 83
Winter	+ 09	+ 15	+ 33	+ 51	+ 75	+ 90	+ **99**	+ 82	+ 55	- 05	- 70	-**114**	-105	- 84	- 69	- 52	- 35	- 13	- 03	+ 01	- 02	+ 14	+ 14	+ 14
Equinox	+ 97	+ 87	+ 91	+ 88	+ 87	+ 87	+ 73	+ 22	- 54	-166	-254	-**278**	-237	-189	-108	- 38	+ 04	+ 68	+106	+115	+ 90	+ 95	+ 95	+**121**
Summer	+104	+ 98	+ 86	+ 72	+ 79	+ 58	- 07	- 90	-174	-240	-**284**	-277	-242	-216	-131	- 11	+ 66	+145	+185	+**194**	+177	+162	+139	+114

WEST COMPONENT (unit 0·1γ)

Jan.	- **92**	- 76	- 61	- 24	- 09	+ 01	- 02	- 33	- 36	- 34	+ 04	+ 58	+**127**	+120	+ 78	+ 73	+ 82	+ 76	+ 30	+ 06	- 36	- 75	- 85	- 90
Feb.	-158	-**173**	-140	-102	- 67	- 43	- 12	+ 13	- 10	- 14	+ 34	+104	+174	+**206**	+175	+144	+114	+113	+ 63	+ 58	- 19	-137	-166	-155
March	-124	-113	- 78	-109	-102	- 88	- 47	-101	-134	-103	- 08	+127	+260	+**325**	+302	+246	+134	+ 77	+ 45	- 46	- 69	-118	-135	-**143**
April	-117	- 88	- 66	- 79	-111	-121	-159	-255	-**274**	-190	- 73	+125	+311	+**398**	+395	+302	+215	+125	+ 21	- 24	- 56	- 83	- 80	-124
May	- 79	-108	-156	-165	-185	-220	-272	-**274**	-221	-142	- 12	+168	+305	+**350**	+321	+265	+210	+141	+ 82	+ 40	+ 15	+ 14	- 13	- 64
June	- 31	- 54	- 78	-109	-138	-214	-317	-**362**	-333	-253	-104	+ 79	+235	+292	+**337**	+295	+218	+161	+109	+ 86	+ 80	+ 58	+ 27	+ 17
July	- 54	- 90	-112	-135	-200	-222	-248	-**274**	-271	-192	- 74	+112	+261	+324	+**335**	+297	+217	+157	+109	+ 74	+ 42	+ 17	- 22	- 47
Aug.	- 32	- 72	-116	-165	-195	-224	-306	-**315**	-288	-153	+ 14	+206	+347	+**394**	+354	+263	+156	+ 51	+ 27	+ 19	+ 24	+ 15	+ 07	- 14
Sept.	- 87	- 84	-122	-120	-137	-159	-225	-274	-**279**	-191	- 21	+203	+364	+**401**	+351	+249	+160	+ 94	+ 61	+ 14	- 14	- 38	- 49	- 93
Oct.	- 75	- 74	- 45	- 54	- 65	- 36	- 91	-152	-**235**	-179	- 45	+132	+274	+**310**	+302	+214	+148	+ 83	+ 30	- 20	-113	- 79	-110	-118
Nov.	- 92	- 60	- 49	- 12	- 04	+ 01	- 16	- 37	- 83	-101	- 27	+ 79	+152	+**178**	+153	+112	+ 94	+ 56	+ 46	+ 05	- 58	- 99	-**121**	-110
Dec.	- 93	- 72	- 30	- 10	+ 03	- 07	+ 11	+ 02	- 12	+ 02	+ 35	+ 85	+135	+**142**	+116	+ 92	+ 57	+ 66	+ 15	- 24	- 84	-138	-**162**	-136
Year	- 86	- 89	- 88	- 90	-101	-111	-140	-172	-**181**	-129	- 23	+123	+245	+**287**	+268	+213	+150	+100	+ 53	+ 16	- 24	- 55	- 76	- 90
Winter	-109	- 95	- 70	- 37	- 19	- 12	- 05	- 14	- 35	- 37	+ 12	+ 82	+147	+**162**	+131	+105	+ 87	+ 78	+ 39	+ 11	- 49	-112	-**134**	-123
Equinox	-101	- 90	- 78	- 91	-104	-101	-131	-196	-**231**	-166	- 37	+147	+302	+**359**	+338	+253	+164	+ 95	+ 39	- 19	- 63	- 80	- 94	-120
Summer	- 49	- 81	-116	-144	-180	-220	-286	-**306**	-278	-185	- 44	+141	+287	+**340**	+337	+280	+200	+128	+ 82	+ 55	+ 40	+ 26	- 00	- 27

VERTICAL COMPONENT (unit 0·1γ)

Jan.	- 01	- 08	- 21	- 26	- **33**	- 24	- 23	- 21	- 25	- 13	- 15	- 27	- 21	+ 02	+ 11	+ 10	+ 25	+ 33	+ **50**	+ 44	+ 35	+ 31	+ 15	+ 05
Feb.	- 09	- 47	- 39	- 43	- 49	- 46	- 55	- 67	- 65	- 78	- 89	- **89**	- 79	- 57	- 07	+ 28	+ 66	+100	+129	+151	+**153**	+110	+ 45	+ 26
March	- 17	- 39	- 60	- 87	- 76	- 55	- 50	- 33	- 44	- 76	-109	-**133**	-107	- 67	+ 07	+ 94	+154	+**165**	+160	+131	+106	+ 86	+ 34	+ 12
April	- 85	- 88	- 92	- 78	- 75	- 53	- 46	- 46	- 50	- 97	-140	-**178**	-174	- 91	+ 46	+182	+223	+**256**	+236	+184	+103	+ 59	+ 36	- 41
May	- 40	- 81	-103	-101	- 72	- 64	- 60	- 72	- 90	-141	-187	-**209**	-173	- 64	+ 59	+158	+216	+**252**	+245	+216	+165	+101	+ 42	+ 02
June	- 19	- 42	- 55	- 43	- 26	- 17	- 18	- 35	- 58	-108	-146	-**184**	-150	- 83	+ 25	+ 99	+142	+**170**	+168	+151	+123	+ 75	+ 37	+ 03
July	- 28	- 36	- 42	- 41	- 20	- 20	- 45	- 62	- 88	-129	-166	-**191**	-166	- 70	+ 46	+122	+174	+**201**	+196	+157	+117	+ 64	+ 19	+ 07
Aug.	- 61	- 73	- 99	-116	- 60	- 21	+ 04	- 02	- 35	- 76	-110	-**135**	-120	- 61	+ 41	+156	+**197**	+189	+155	+131	+ 77	+ 43	+ 03	- 27
Sept.	+ 07	- 06	- 18	- 34	- 31	- 03	+ 13	+ 05	- 32	- 82	-144	-**166**	-149	- 96	- 21	+ 60	+109	+**130**	+121	+111	+ 86	+ 68	+ 48	+ 26
Oct.	- 38	- 72	-112	-**145**	-134	- 96	- 52	- 08	- 10	- 40	- 75	- 77	- 59	- 09	+ 47	+110	+143	+**155**	+148	+139	+122	+ 63	+ 15	- 19
Nov.	- 20	- 31	- 41	- 42	- 43	- 43	- 40	- 27	- 08	- 28	- **45**	- 40	- 20	+ 08	+ 42	+ 56	+ 61	+ 56	+ 58	+ **61**	+ 52	+ 38	+ 13	- 07
Dec.	- 20	- 24	- 34	- 51	- **52**	- 51	- 47	- 41	- 39	- 48	- 47	- 35	- 24	00	+ 31	+ 53	+ **77**	+ 67	+ 77	+ 72	+ 69	+ 50	+ 21	00
Year	- 28	- 46	- 60	- 67	- 56	- 41	- 35	- 34	- 45	- 76	-106	-**122**	-104	- 49	+ 27	+ 94	+132	+**148**	+145	+129	+101	+ 66	+ 27	- 01
Winter	- 13	- 28	- 34	- 41	- 44	- 41	- 41	- 39	- 34	- 42	- **49**	- 48	- 36	- 12	+ 19	+ 37	+ 57	+ 64	+ 79	+ **82**	+ 77	+ 57	+ 24	+ 06
Equinox	- 33	- 51	- 71	- 86	- 79	- 52	- 34	- 21	- 34	- 74	-117	-**139**	-122	- 66	+ 20	+112	+157	+**177**	+166	+141	+104	+ 69	+ 33	- 06
Summer	- 37	- 58	- 75	- 75	- 45	- 31	- 30	- 43	- 68	-114	-152	-**180**	-152	- 70	+ 43	+134	+182	+**203**	+191	+164	+121	+ 71	+ 25	- 04

TABLE VI. - MEAN DIURNAL INEQUALITIES OF THE MAGNETIC ELEMENTS - DECLINATION, INCLINATION AND HORIZONTAL INTENSITY

International Quiet Days

DECLINATION WEST (unit 0′·01)

Month and Season, 1939.	Universal Time. Hour commencing - 0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
Jan.	-122	-058	-032	-024	-044	-060	-088	-124	**-146**	-112	-016	+108	**+242**	+220	+122	+084	+110	+118	+066	+010	-036	-068	-080	-082
Feb.	-093	-079	-069	-079	-071	-113	-123	-127	-167	**-179**	-063	+113	+259	**+301**	+227	+163	+139	+123	+093	+051	+003	-099	-123	-095
March	-169	-155	-157	-159	-129	-163	-161	-279	**-331**	-221	+007	+209	+421	**+499**	+415	+285	+163	+093	+059	+023	+027	-035	-091	-163
April	-032	-020	-092	-146	-156	-168	-226	-392	**-522**	-502	-274	+070	+482	**+662**	+602	+432	+254	+112	+002	-028	-056	-016	+024	-012
May	-043	-091	-145	-189	-277	-421	**-483**	-447	-329	-231	-017	+295	+487	**+505**	+455	+365	+281	+155	+053	+065	+057	+009	-025	-021
June	+001	-011	-061	-129	-243	-373	-511	**-615**	-579	-435	-195	+121	+397	+513	**+549**	+505	+387	+217	+117	+085	+105	+041	+043	+075
July	-074	-052	-130	-268	-356	-516	-616	**-628**	-464	-194	+062	+362	+562	**+610**	+560	+410	+268	+130	+096	+088	+086	+082	+020	-040
August	-111	-159	-189	-217	-299	-473	-561	**-587**	-519	-335	-071	+275	+575	**+741**	+735	+543	+349	+159	+081	+081	+061	+029	-043	-077
Sept.	-130	-132	-218	-262	-288	-306	-382	**-468**	-462	-302	-002	+348	+626	**+702**	+616	+398	+214	+102	+090	+038	+008	-006	-036	-156
Oct.	-156	+004	-046	-088	-136	-152	-230	-326	**-434**	-356	-070	+262	+480	**+520**	+402	+244	+156	+100	+060	+004	-040	-060	-058	-078
Nov.	-097	-071	-057	-069	-085	-089	-119	-163	**-219**	-199	-005	+213	**+323**	+299	+215	+149	+115	+071	+053	+021	-023	-065	-063	-107
Dec.	-095	-045	-077	-075	-045	-075	-073	-071	-051	-023	+039	+105	+183	**+193**	+135	+131	+105	+069	+035	-001	-025	-077	-119	**-137**
Year	-093	-072	-106	-142	-177	-242	-298	**-352**	-352	-257	-050	+207	+420	**+480**	+419	+309	+212	+121	+067	+036	+014	-022	-048	-074
Winter	-102	-063	-059	-062	-061	-084	-101	-121	**-146**	-128	-011	+135	+252	**+253**	+175	+132	+117	+095	+062	+020	-020	-077	-101	-105
Equinox	-122	-076	-128	-164	-177	-197	-250	-366	**-437**	-345	-085	+222	+502	**+596**	+509	+340	+197	+102	+053	+009	-015	-029	-040	-102
Summer	-057	-078	-131	-201	-294	-446	-543	**-569**	-473	-299	-055	+263	+505	**+592**	+575	+456	+321	+165	+087	+080	+077	+040	-001	-016

INCLINATION (unit 0′·01)

Jan.	+018	000	-023	-043	-054	**-067**	-066	-052	-013	+046	+072	**+095**	+071	+055	+029	+027	+023	+002	-010	-026	-021	-015	-023	-027
Feb.	+014	+017	+017	+012	+006	-012	-024	**-042**	-036	-020	-002	+005	+005	+011	+021	**+024**	+017	+009	000	-022	000	+006	+005	-012
March	-021	-019	+006	-006	-010	-029	-033	-018	+007	+056	+070	**+072**	+041	+036	+039	+031	+024	+013	-021	-051	-040	-043	-046	**-066**
April	-040	-023	-013	-013	-030	-043	-015	+023	+040	+077	+122	**+124**	+086	+069	+042	+009	+007	-016	-028	-031	-044	-090	-105	**-109**
May	-017	-004	+008	+017	+009	+006	+012	+025	+049	+051	+049	+057	+057	**+088**	+072	+021	-029	-049	-062	**-088**	-082	-071	-065	-054
June	-036	-040	-028	-026	-043	-025	+013	+067	+104	+131	+145	+145	**+148**	+123	+037	-034	-066	-084	**-103**	-095	-094	-090	-087	-064
July	000	-003	-022	-006	+003	+001	+018	+064	+121	**+130**	+123	+085	+050	+051	+042	+011	-027	-046	-090	-102	**-120**	-111	-094	-072
Aug.	-053	-039	-039	-036	-025	-006	+027	+084	+137	**+152**	**+152**	+116	+079	+055	+018	+003	-028	-046	-080	-109	**-111**	-102	-089	-059
Sept.	-028	-037	-027	-027	-025	-014	-007	+032	+092	+132	**+161**	+119	+050	+002	-019	-007	-003	-028	-065	-065	-053	-059	-049	**-069**
Oct.	-033	-062	-045	-037	-047	-057	-065	-026	+040	+119	+184	**+186**	+151	+109	+068	+029	-013	-034	-046	-061	-076	-088	-096	**-097**
Nov.	+008	+006	+001	-010	-036	**-052**	-048	-029	+021	+082	+094	**+095**	+081	+053	+014	-008	-033	-035	-040	-035	-031	-034	-037	-029
Dec.	+039	+028	+016	+010	-005	-013	-013	-002	-006	+010	+034	**+048**	+023	+009	-004	-006	-024	-048	**-050**	-035	-035	-004	+007	+012
Year	-012	-015	-012	-014	-021	-026	-017	+011	+046	+081	**+100**	+096	+070	+055	+030	+008	-013	-030	-050	**-060**	-059	-058	-057	-054
Winter	+020	+013	+003	-008	-022	-036	**-038**	- 031	- 009	+ 030	+050	**+061**	+045	+031	+015	+009	-004	-018	-025	-030	-022	-012	-012	-014
Equinox	-031	-035	-020	-021	-028	-036	-030	+003	+045	+096	**+134**	+125	+082	+054	+033	+016	+004	-016	-040	-052	-053	-070	-074	**-085**
Summer	-027	-022	-020	-013	-014	-006	+018	+060	+103	+116	**+117**	+101	+084	+079	+042	+000	-038	-056	-084	-099	**-102**	-094	-084	-062

HORIZONTAL INTENSITY (unit 0·1γ)

Jan.	- 25	- 05	+ 27	+ 53	+ 69	**+ 95**	**+ 95**	+ 77	+ 21	- 67	-113	**-153**	-115	- 75	- 33	- 37	- 29	- 01	+ 27	+ 45	+ 39	+ 31	+ 35	+ 39
Feb.	- 14	- 20	- 20	- 14	- 02	+ 28	+ 42	**+ 60**	+ 50	+ 12	- 34	**- 58**	- 52	- 48	- 46	- 36	- 14	+ 02	+ 22	+ 52	+ 24	+ 16	+ 14	+ 34
March	+ 34	+ 28	- 06	+ 12	+ 18	+ 48	+ 56	+ 38	- 12	-110	-148	**-168**	-108	- 82	- 68	- 32	- 14	+ 08	+ 58	+ 98	+ 82	+ 84	+ 84	**+104**
April	+ 74	+ 44	+ 30	+ 28	+ 52	+ 76	+ 40	- 10	- 48	-136	-230	**-264**	-216	-174	- 92	- 06	+ 18	+ 50	+ 78	+ 84	+ 98	+160	**+172**	+168
May	+ 43	+ 21	+ 01	- 11	+ 11	+ 11	- 11	- 41	- 91	-119	-143	-177	-173	**-179**	-117	- 19	+ 67	+109	+137	**+173**	+159	+135	+117	+ 97
June	+ 58	+ 64	+ 44	+ 50	+ 86	+ 62	+ 04	- 84	-152	-220	-272	**-294**	-288	-232	- 70	+ 56	+112	+150	**+184**	+172	+166	+158	+142	+100
July	+ 15	+ 17	+ 33	+ 13	+ 11	+ 17	- 23	- 97	-189	-221	**-233**	-193	-145	-123	- 69	- 05	+ 63	+107	+177	+185	**+205**	+181	+151	+117
Aug.	+ 83	+ 63	+ 65	+ 63	+ 61	+ 39	- 13	-107	-195	-239	**-261**	-239	-193	-145	- 57	+ 03	+ 65	+ 99	+143	+181	**+183**	+161	+139	+ 95
Sept.	+ 57	+ 67	+ 51	+ 51	+ 49	+ 37	+ 33	- 33	-133	-217	**-291**	-247	-137	- 51	+ 05	+ 13	+ 19	+ 59	+115	**+121**	+103	+109	+ 91	+119
Oct.	+ 52	+ 94	+ 58	+ 52	+ 74	+ 92	+104	+ 54	- 48	-182	-292	**-306**	-254	-180	-102	- 26	+ 34	+ 64	+ 82	+100	+122	+132	+138	**+140**
Nov.	- 14	- 14	- 08	+ 06	+ 48	**+ 68**	+ 66	+ 42	- 26	-122	**-148**	**-148**	-122	- 72	- 08	+ 22	+ 56	+ 60	+ 64	+ 56	+ 52	+ 52	+ 52	+ 40
Dec.	- 63	- 45	- 31	- 21	+ 03	+ 13	+ 15	+ 03	+ 03	- 23	- 57	**- 75**	- 41	- 19	+ 09	+ 17	+ 51	+ 81	**+ 85**	+ 61	+ 59	+ 11	- 09	- 21
Year	+ 25	+ 26	+ 20	+ 24	+ 40	+ 49	+ 34	- 08	- 68	-137	-185	**-194**	-154	-115	- 54	- 04	+ 36	+ 66	+ 98	**+111**	+108	+103	+ 94	+ 86
Winter	- 29	- 21	- 08	+ 06	+ 30	+ 51	**+ 55**	+ 46	+ 12	- 50	- 88	**-109**	- 83	- 54	- 20	- 09	+ 16	+ 36	+ 50	+ 54	+ 44	+ 28	+ 23	+ 23
Equinox	+ 54	+ 58	+ 33	+ 36	+ 48	+ 63	+ 58	+ 12	- 60	-161	-240	**-246**	-179	-122	- 64	- 13	+ 14	+ 45	+ 83	+101	+101	+121	+121	**+133**
Simmer	+ 50	+ 41	+ 36	+ 29	+ 42	+ 32	- 11	- 82	-157	-200	**-227**	-226	-200	-170	- 78	+ 09	+ 77	+116	+160	+178	**+178**	+159	+137	+102

TABLE VI. - MEAN DIURNAL INEQUALITIES OF GEOGRAPHICAL COMPONENTS OF MAGNETIC INTENSITY

· International Quiet Days

NORTH COMPONENT (unit 0·1γ)

Month and Season, 1939.	Universal Time. Hour commencing - 0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
Jan.	- 11	+ 01	+ 30	+ 55	+ 72	+ 99	***+102***	+ 88	+ 35	- 55	-109	***-161***	-137	- 96	- 45	- 45	- 40	- 13	+ 20	+ 43	+ 42	+ 37	+ 42	+ 47
Feb.	- 05	- 12	- 13	- 06	+ 05	+ 39	+ 54	***+ 72***	+ 66	+ 30	- 27	- 68	- 77	***- 78***	- 68	- 52	- 28	- 10	+ 12	+ 46	+ 23	+ 26	+ 26	+ 43
March	+ 50	+ 43	+ 10	+ 28	+ 31	+ 64	+ 71	+ 65	+ 22	- 86	-146	***-186***	-149	-131	-109	- 60	- 30	- 01	+ 51	+ 94	+ 78	+ 86	+ 92	***+119***
April	+ 76	+ 45	+ 39	+ 42	+ 67	+ 92	+ 62	+ 30	+ 05	- 83	-199	***-267***	-261	-238	-151	- 49	- 08	+ 38	+ 77	+ 85	+102	+159	***+167***	+166
May	+ 47	+ 30	+ 16	+ 08	+ 39	+ 53	+ 38	+ 05	- 56	- 94	-139	-204	-219	***-227***	-161	- 55	+ 38	+ 92	+129	***+164***	+151	+132	+118	+ 98
June	+ 57	+ 64	+ 49	+ 62	+109	+ 98	+ 55	- 21	- 91	-173	-248	-301	***-323***	-280	-124	+ 04	+ 71	+126	***+169***	+161	+153	+151	+135	+ 91
July	+ 22	+ 22	+ 46	+ 40	+ 47	+ 69	+ 39	- 32	-139	-198	***-235***	-226	-199	-182	-124	- 46	+ 35	+ 92	+164	+173	***+193***	+170	+146	+119
Aug.	+ 93	+ 78	+ 83	+ 84	+ 90	+ 86	+ 44	- 46	-140	-201	-250	***-263***	- 248	-217	-130	- 52	+ 29	+ 81	+133	+170	***+174***	+155	+141	+101
Sept.	+ 69	+ 79	+ 72	+ 76	+ 77	+ 67	+ 71	+ 15	- 84	-183	***-286***	-278	-198	-121	- 57	- 27	- 03	+ 48	+104	+115	+100	+108	+ 93	***+133***
Oct.	+ 67	+ 92	+ 62	+ 60	+ 86	+106	+125	+ 86	- 04	-143	-280	***-327***	-298	-229	-141	- 50	+ 18	+ 53	+ 75	+ 98	+124	+136	+142	***+145***
Nov.	- 04	- 07	- 02	+ 13	+ 56	+ 76	***+ 77***	+ 58	- 04	-100	-145	***-167***	-152	-101	- 30	+ 07	+ 43	+ 52	+ 58	+ 53	+ 53	+ 58	+ 59	+ 50
Dec.	- 52	- 40	- 23	- 13	+ 07	+ 20	+ 22	+ 10	+ 08	- 20	- 60	***- 84***	- 59	- 36	- 05	+ 04	+ 40	+ 73	***+ 80***	+ 60	+ 61	+ 19	+ 03	- 07
Year	+ 34	+ 33	+ 31	+ 37	+ 57	+ 72	+ 63	+ 28	- 32	-109	-177	***-211***	-193	-162	- 95	- 35	+ 14	+ 53	+ 89	***+105***	+105	+103	+ 97	+ 92
Winter	- 18	- 15	- 02	+ 12	+ 35	+ 59	***+ 64***	+ 57	+ 26	- 36	- 85	***-120***	-106	- 78	- 37	- 22	+ 04	+ 26	+ 43	+ 51	+ 45	+ 35	+ 33	+ 33
Equinox	+ 66	+ 65	+ 46	+ 52	+ 65	+ 82	+ 82	+ 49	- 15	-124	-228	***-265***	-227	-180	-115	- 46	- 06	+ 35	+ 77	+ 98	+101	+122	+124	***+141***
Summer	+ 55	+ 49	+ 49	+ 49	+ 71	+ 77	+ 44	- 24	-107	-167	-218	***-249***	-247	-227	-135	- 37	+ 43	+ 98	+149	+167	***+168***	+152	+135	+102

WEST COMPONENT (unit 0·1γ)

Jan.	- 69	- 32	- 12	- 03	- 10	- 14	- 29	- 51	***- 73***	- 72	- 30	+ 29	***+107***	+103	+ 58	+ 38	+ 53	+ 62	+ 40	+ 14	- 12	- 30	- 36	- 36
Feb.	- 52	- 46	- 40	- 44	- 38	- 55	- 57	- 56	- 79	***- 93***	- 40	+ 49	+127	***+150***	+112	+ 80	+ 71	+ 66	+ 53	+ 37	+ 06	- 49	- 63	- 44
March	- 83	- 77	- 84	- 82	- 65	- 77	- 75	-141	***-177***	-138	- 24	+ 79	+203	***+249***	+207	+145	+ 84	+ 51	+ 42	+ 31	+ 30	- 03	- 33	- 67
April	- 03	- 02	- 43	- 72	- 73	- 75	-112	-209	-285	***-291***	-188	- 12	+215	***+318***	+302	+228	+138	+ 69	+ 16	+ 01	- 11	+ 21	+ 45	+ 25
May	- 15	- 44	- 77	-102	-145	-221	***-258***	-244	-191	-145	- 36	+123	+225	***+234***	+219	+190	+161	+103	+ 54	+ 67	+ 60	+ 30	+ 09	+ 07
June	+ 11	+ 06	- 24	- 59	-113	-186	-270	***-341***	-335	-271	-154	+ 09	+156	+228	+278	***+278***	+226	+143	+ 96	+ 77	+ 87	+ 51	+ 49	+ 58
July	- 36	- 24	- 63	-140	-186	-270	-330	***-351***	-281	-144	- 11	+156	+270	***+300***	+284	+216	+154	+ 89	+ 84	+ 81	+ 84	+ 77	+ 39	+ 01
Aug.	- 43	- 72	- 88	-103	-147	-243	-299	***-331***	-311	-222	- 86	+101	+268	+365	***+378***	+288	+197	+103	+ 70	+ 77	+ 67	+ 46	+ 03	- 23
Sept.	- 58	- 57	-106	-129	-143	-155	-196	-254	***-270***	-201	- 65	+138	+306	***+362***	+327	+213	+117	+ 65	+ 69	+ 43	+ 24	+ 17	- 02	- 60
Oct.	- 73	+ 20	- 14	- 37	- 58	- 63	-102	-163	***-239***	-223	- 92	+ 82	+207	***+242***	+193	+124	+ 89	+ 65	+ 47	+ 21	+ 02	- 07	- 05	- 15
Nov.	- 54	- 40	- 32	- 35	- 36	- 34	- 51	- 78	-121	***-128***	- 30	+ 85	***+148***	+145	+112	+ 83	+ 71	+ 49	+ 40	+ 22	- 03	- 25	- 34	- 49
Dec.	- 62	- 32	- 47	- 44	- 23	- 37	- 36	- 37	- 26	- 17	+ 10	+ 42	+ 89	***+ 99***	+ 73	+ 73	+ 65	+ 52	+ 34	+ 11	- 02	- 39	- 65	***- 76***
Year	- 45	- 33	- 53	- 71	- 86	-119	-151	-188	***-200***	-162	- 62	+ 73	+193	***+233***	+212	+163	+119	+ 76	+ 54	+ 40	+ 28	+ 07	- 08	- 23
Winter	- 59	- 38	- 33	- 32	- 27	- 35	- 43	- 56	- 75	***- 78***	- 23	+ 51	+118	***+124***	+ 89	+ 69	+ 65	+ 57	+ 42	+ 21	- 03	- 36	- 50	- 51
Equinox	- 54	- 29	- 62	- 80	- 85	- 93	-121	-192	***-243***	-213	- 92	+ 72	+233	***+293***	+257	+178	+107	+ 63	+ 44	+ 24	+ 11	+ 07	+ 01	- 29
Summer	- 21	- 34	- 63	-101	-148	-230	-289	***-317***	-280	-196	- 72	+ 97	+230	+282	***+290***	+243	+185	+110	+ 76	+ 76	+ 75	+ 51	+ 25	+ 11

VERTICAL COMPONENT (unit 0·1γ)

Jan.	+ 03	- 11	- 19	- 25	***- 29***	- 11	- 07	+ 01	+ 03	+ 03	- 13	***- 29***	- 23	+ 17	+ 23	+ 07	+ 09	+ 05	***+ 29***	+ 15	+ 19	+ 21	+ 05	- 05
Feb.	+ 17	+ 15	+ 13	+ 11	+ 17	+ 23	+ 13	- 07	- 07	- 43	- 85	***-119***	-103	- 73	- 33	+ 01	+ 27	+ 35	+ 51	+ 45	+ 55	***+ 59***	+ 47	+ 37
March	+ 07	+ 01	+ 07	+ 07	+ 07	+ 11	+ 19	+ 29	- 03	- 61	-103	***-141***	-111	- 67	- 23	+ 31	+ 53	***+ 61***	***+ 61***	+ 53	+ 51	+ 47	+ 37	+ 15
April	+ 33	+ 23	+ 25	+ 21	+ 19	+ 29	+ 43	+ 57	+ 27	- 53	-113	-187	***-203***	-165	- 69	+ 17	+ 65	+ 69	+ 83	***+ 89***	+ 77	+ 63	+ 37	+ 15
May	+ 43	+ 33	+ 31	+ 33	+ 55	+ 45	+ 19	- 09	- 41	-101	-161	***-215***	-203	-111	- 23	+ 29	+ 57	+ 83	***+103***	+ 97	+ 87	+ 69	+ 49	+ 37
June	+ 12	+ 10	+ 06	+ 28	+ 52	+ 58	+ 54	+ 34	+ 08	- 60	-130	***-182***	-158	-114	- 36	+ 14	+ 32	+ 58	***+ 74***	***+ 74***	+ 64	+ 54	+ 32	+ 10
July	+ 37	+ 27	- 01	+ 09	+ 33	+ 41	+ 11	- 03	- 21	- 67	-119	-157	***-165***	-111	- 13	+ 29	+ 53	+ 89	***+ 99***	+ 81	+ 61	+ 39	+ 27	+ 23
Aug.	+ 12	+ 10	+ 16	+ 22	+ 56	+ 70	+ 64	+ 42	+ 22	- 32	- 82	-154	***-178***	-150	- 68	+ 18	+ 56	***+ 72***	+ 56	+ 46	+ 42	+ 20	+ 16	+ 18
Sept.	+ 33	+ 29	+ 23	+ 23	+ 27	+ 39	+ 51	+ 35	+ 07	- 47	-121	***-161***	-147	-111	- 55	+ 07	+ 35	+ 43	+ 43	+ 55	***+ 57***	+ 49	+ 41	+ 37
Oct.	+ 08	+ 02	- 20	- 06	+ 10	+ 16	+ 18	+ 34	+ 28	- 12	- 46	***- 70***	***- 70***	- 42	- 04	***+ 42***	+ 34	+ 30	+ 30	+ 22	+ 20	+ 02	- 12	- 10
Nov.	- 03	- 11	- 15	***- 21***	- 15	***- 21***	- 15	- 03	+ 13	+ 01	***- 21***	- 19	- 05	+ 17	***+ 31***	+ 23	+ 17	+ 17	+ 09	+ 11	+ 13	+ 03	- 07	- 07
Dec.	- 11	- 07	- 17	- 13	- 11	- 13	- 09	+ 01	- 13	- 17	- 13	- 07	***- 19***	- 13	+ 07	+ 19	***+ 33***	+ 25	+ 25	+ 21	+ 19	+ 11	+ 03	- 07
Year	+ 16	+ 10	+ 04	+ 08	+ 18	+ 24	+ 22	+ 18	+ 02	- 41	- 84	***-120***	-115	- 77	- 22	+ 20	+ 39	+ 49	***+ 55***	+ 51	+ 47	+ 36	+ 23	+ 14
Winter	+ 02	- 03	- 10	- 12	- 10	- 06	- 05	- 02	- 01	- 14	- 33	***- 44***	- 38	- 13	+ 07	+ 13	+ 22	+ 21	***+ 29***	+ 23	+ 27	+ 24	+ 12	+ 06
Equinox	+ 20	+ 14	+ 09	+ 11	+ 16	+ 24	+ 33	+ 39	+ 15	- 43	- 96	***-140***	-133	- 96	- 38	+ 24	+ 47	+ 51	+ 54	***+ 55***	+ 51	+ 40	+ 26	+ 14
Summer	+ 26	+ 20	+ 13	+ 23	+ 49	+ 54	+ 37	+ 16	- 08	- 65	-123	***-177***	-176	-122	- 35	+ 23	+ 50	+ 76	***+ 83***	+ 75	+ 64	+ 46	+ 31	+ 22

TABLE VII. - MEAN DIURNAL INEQUALITIES OF THE MAGNETIC ELEMENTS - DECLINATION, INCLINATION AND HORIZONTAL INTENSITY

International Disturbed Days

DECLINATION WEST (unit 0′·01)

Month and Season, 1939.	Universal Time. Hour commencing 0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
Jan.	-179	-209	-187	-061	-027	-023	+009	-013	+003	+031	+099	+113	**+267**	+225	+199	+199	+231	+169	-087	-055	-029	-231	**-273**	-179
Feb.	-747	**-975**	-645	-439	-243	-007	+145	+313	+135	+169	+307	+389	+551	**+629**	+509	+407	+383	+507	+381	+373	-003	-713	-705	-713
March	-508	-400	-138	-180	-248	-262	-016	-128	-168	-058	+146	+396	+710	**+896**	+834	+804	+428	+152	+068	-288	-326	**-640**	-546	-540
April	-426	-164	-042	-178	-430	-456	-470	**-704**	-570	-268	-034	+440	+776	+994	**+1152**	+842	+598	+372	+048	-078	-248	-298	-288	-582
May	-021	-187	-405	-343	-265	-273	**-479**	-187	-187	-197	+097	+469	+629	**+719**	+491	+395	+461	+295	+137	-043	-231	-287	-297	-301
June	-294	-546	-472	-284	-264	-332	-490	**-548**	-450	-244	+120	+458	+724	+764	**+774**	+634	+286	+132	+034	+050	-006	+038	+038	-114
July	-221	-471	-475	-459	**-675**	-399	-331	-469	-475	-407	-165	+181	+603	+839	**+1067**	+1053	+709	+457	+179	+089	-043	-157	-235	-203
Aug.	-101	-249	-369	**-745**	-711	-323	-479	-293	-359	+021	+311	+645	+793	**+993**	+939	+693	+399	+009	-143	-363	-227	-289	-125	-021
Sept.	-259	-309	**-489**	-363	-275	-267	-365	-407	-361	-207	+177	+621	+845	**+903**	+817	+609	+511	+275	+033	-285	-283	-345	-293	-287
Oct.	-233	-107	+055	-119	-301	-169	-273	-251	-417	-003	+089	+419	+769	+865	**+919**	+683	+505	-039	-175	+041	-595	-353	**-679**	-621
Nov.	-382	-214	-196	+006	-020	+170	+106	+006	-058	-042	+116	+380	+490	**+536**	+486	+252	+192	-008	+006	-084	-428	**-496**	-478	-348
Dec.	-330	-198	-108	+048	000	+024	+170	+128	+074	+152	+246	+376	+450	**+476**	+360	+236	-024	+234	-014	-196	-420	**-692**	-680	-302
Year	-308	-336	-289	-260	-289	-193	-206	-213	-236	-088	+126	+407	+634	**+737**	+712	+567	+390	+213	+039	-070	-237	-372	**-380**	-351
Winter	-410	-399	-284	-112	-073	+041	+108	+109	+039	+078	+192	+315	+440	**+467**	+389	+274	+196	+226	+072	+010	-220	-533	**-534**	-386
Equinox	-357	-245	-154	-210	-314	-289	-281	-373	-379	-134	+095	+469	+775	+915	**+931**	+735	+511	+190	-007	-153	-363	-409	-452	**-508**
Summer	-159	-363	-430	-458	**-479**	-332	-445	-374	-368	-207	+091	+438	+687	**+829**	+818	+694	+464	+223	+052	-067	-127	-174	-155	-160

INCLINATION (unit 0′·01)

Jan.	+010	-011	-046	-072	**-093**	-087	-072	-052	-027	+015	+031	+071	+035	+038	+034	+027	+030	+035	**+091**	+033	+017	-005	+005	000
Feb.	+013	-048	-096	-111	-145	-152	-172	-143	**-204**	-171	-108	-093	-036	-001	+008	-021	+061	+081	+135	+211	**+356**	+224	+215	+206
March	-049	-059	-118	-110	-137	-107	**-156**	-074	-023	+064	+096	**+126**	+089	+084	-011	+001	-019	+029	+041	+020	+114	+086	+079	+027
April	-083	-051	-178	-103	-087	+030	+118	**+190**	+096	+119	+149	**+190**	+151	+076	-046	-117	+018	-035	**-316**	-295	-063	+097	+063	+075
May	**-144**	-130	-086	-110	-082	-085	+036	+014	+030	+097	**+163**	+141	000	+034	+136	+019	-015	+007	-002	+026	+002	-012	-027	-011
June	**-250**	-246	-199	-164	-124	-102	+010	+138	+269	**+305**	+240	+147	+075	+122	+091	+080	+081	+016	-035	-081	-071	-089	-121	-089
July	**-242**	-172	-178	-186	-161	-131	-088	+026	+104	+237	+306	**+307**	+253	+240	+178	+011	-108	-121	-121	-033	+021	-048	-035	-067
Aug.	-287	-323	**-328**	-240	-179	-068	+095	+109	+235	**+305**	+294	+155	+156	+109	+137	-028	+078	+062	+042	-025	-110	-047	-051	-093
Sept.	-168	-244	-247	-245	**-279**	-158	-085	-029	+039	+137	+183	**+184**	+124	+155	+103	+103	+113	+137	+109	+021	+039	+041	+011	-033
Oct.	-166	-172	-262	**-407**	-268	-199	-093	-073	+063	+189	**+235**	+172	+152	+094	+074	+048	-026	-018	+068	+123	+200	+149	+157	-049
Nov.	-024	-086	-107	-150	**-214**	-179	-156	-111	-065	-008	+074	**+164**	+130	+100	+124	+109	+095	+080	+053	+024	+030	+075	+039	-004
Dec.	-013	-005	-057	**-160**	-146	-141	-155	-150	-085	-066	-019	-004	+013	+043	+117	**+141**	+090	+077	+096	+123	+125	+104	+052	+023
Year	-117	-129	-159	**-172**	-160	-215	-060	-013	+036	+102	**+137**	+130	+095	+091	+079	+031	+033	+029	+013	+012	+055	+048	+032	-001
Winter	-004	-038	-077	-123	**-150**	-140	-139	-114	-095	-058	-006	+035	+036	+045	+071	+064	+069	+068	+094	+098	**+132**	+100	+078	+056
Equinox	-117	-132	-201	**-216**	-193	-109	-054	+004	+044	+127	+166	**+168**	+129	+102	+030	+009	+022	+028	-025	-033	+073	+093	+078	+005
Summer	**-231**	-218	-198	-175	-137	-097	+013	+072	+160	+236	**+251**	+188	+121	+126	+136	+021	+009	-009	-029	-028	-040	-049	-059	-065

HORIZONTAL INTENSITY (unit 0·1γ)

Jan.	- 13	+ 17	+ 51	+ 83	**+111**	+107	+ 89	+ 61	+ 23	- 29	- 55	**-115**	- 59	- 49	- 41	- 35	- 29	- 29	- 99	- 13	- 01	+ 27	- 03	- 03
Feb.	- 81	- 45	+ 61	+109	+155	+165	+177	+123	**+215**	+171	+ 95	+ 91	+ 21	- 11	+ 25	+ 85	- 13	- 03	- 49	-105	**-333**	-237	-321	-301
March	+ 39	+ 37	+ 99	+ 65	+111	+ 87	+171	+ 57	- 13	-145	-189	**-241**	-171	-153	+ 43	+ 91	**+189**	+129	+ 99	+ 79	-103	- 81	-131	- 61
April	+ 48	- 26	+146	+ 68	+ 22	-128	-290	**-414**	-240	-280	-316	-360	-258	- 98	+200	+460	+234	+310	**+680**	+578	+ 92	-180	- 78	-166
May	+128	+ 64	- 02	+ 72	+ 50	+ 58	-120	- 86	-102	-208	**-324**	-288	- 56	- 38	-102	+128	**+220**	+190	+178	+112	+100	+ 54	+ 22	- 44
June	**+326**	+302	+218	+174	+106	+ 80	- 76	-260	-456	**-522**	-400	-270	-134	-158	- 56	+ 04	+ 24	+108	+156	+194	+164	+166	+188	+120
July	+290	+188	+210	+210	+166	+108	+ 20	-144	-260	-458	**-566**	-554	-430	-330	-156	+146	+370	**+386**	+366	+172	+ 52	+100	+ 30	+ 92
Aug.	+275	+325	+259	+ 53	+ 41	- 59	-241	-227	-405	**-491**	-463	-249	-213	- 83	- 35	**+349**	+215	+193	+155	+207	+225	+ 99	+ 29	+ 43
Sept.	+211	+313	+297	+271	**+315**	+163	+ 69	- 01	-113	-259	**-351**	-343	-241	-259	-143	- 71	- 27	- 23	- 01	+ 85	+ 13	- 01	+ 27	+ 59
Oct.	+188	+168	+232	**+378**	+178	+152	+ 56	+ 66	-122	-306	**-364**	-254	-210	- 82	- 30	+ 26	+170	+192	+ 58	- 24	-122	-146	-228	+ 36
Nov.	+ 26	+ 90	+108	+176	**+258**	+208	+172	+122	+ 70	- 20	-140	**-248**	-180	-114	-124	-100	- 76	- 62	- 22	+ 12	- 10	- 84	- 54	- 04
Dec.	+ 04	- 14	+ 50	+166	+140	+146	+178	**+180**	+ 94	+ 66	- 06	- 18	- 26	- 56	-146	**-158**	- 62	- 52	- 70	-104	-114	-104	- 62	- 32
Year	+120	+118	+144	**+152**	+138	+ 91	+ 17	- 44	-109	-207	**-256**	-237	-163	-119	- 47	+ 77	+101	+112	+121	+ 99	- 03	- 32	- 48	- 22
Winter	- 16	+ 12	+ 68	+134	**+166**	+157	+154	+122	+101	+ 47	- 27	- 73	- 61	- 58	- 72	- 52	- 45	- 37	- 60	- 53	**-115**	-100	-110	- 85
Equinox	+122	+123	+194	+196	+157	+ 68	+ 02	- 73	-122	-248	**-305**	-300	-220	-148	+ 18	+127	+142	+152	**+209**	+180	- 30	-102	-103	- 33
Summer	**+255**	+220	+ 171	+127	+ 91	+ 47	-104	-179	-306	-420	**-438**	-340	-208	-152	- 87	+157	+207	+219	+214	+171	+135	+105	+ 67	+ 53

TABLE VII. - MEAN DIURNAL INEQUALITIES OF GEOGRAPHICAL COMPONENTS OF MAGNETIC INTENSITY

International Disturbed Days

NORTH COMPONENT (unit 0·1γ)

Month and Season, 1939.	Universal Time. Hour commencing - 0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
Jan.	+ 05	+ 38	+ 69	+ 88	**+112**	+108	+ 87	+ 61	+ 22	- 32	- 64	**-124**	- 85	- 71	- 60	- 54	- 52	- 46	- 89	- 07	+ 02	+ 50	+ 25	+ 15
Feb.	- 05	+ 54	+125	+151	+177	+163	+159	+ 89	**+198**	+151	+ 63	+ 50	- 35	- 74	- 27	+ 43	- 51	- 54	- 87	-141	**-327**	-161	-245	-224
March	+ 89	+ 77	+111	+ 82	+134	+112	**+170**	+ 69	+ 04	-137	-201	**-277**	-240	-240	- 42	+ 09	+143	+112	+ 91	+107	- 68	- 15	- 74	- 06
April	+ 90	- 09	+148	+ 85	+ 65	- 80	-238	-336	-179	-248	-307	**-398**	-332	-196	+ 81	+368	+170	+267	**+664**	+576	+115	-147	- 48	-105
May	+128	+ 82	+ 39	+105	+ 76	+ 84	- 70	- 66	- 82	-185	-328	**-330**	-118	-110	-150	+ 86	**+170**	+157	+161	+114	+122	+ 82	+ 51	- 13
June	+350	**+352**	+262	+200	+131	+112	- 26	-201	-403	**-489**	-405	-311	-205	-232	-133	- 60	- 05	+ 93	+150	+186	+162	+159	+181	+130
July	+307	+232	+254	+253	+231	+146	+ 53	- 95	-208	-409	-540	**-563**	-483	-409	-261	+ 38	+292	+334	**+342**	+160	+ 55	+114	+ 53	+111
Aug.	+281	**+345**	+292	+127	+112	- 26	-189	-194	-362	-485	-486	-310	-289	-181	-129	+274	+171	+189	+167	+240	+244	+126	+ 41	+ 44
Sept.	+233	+339	**+341**	+303	+337	+187	+105	+ 40	- 75	-234	-363	**-400**	-322	-345	-223	-131	- 78	- 50	- 04	+112	+ 41	+ 34	+ 56	+ 87
Oct.	+208	+176	+223	**+384**	+205	+166	+ 82	+ 90	- 78	-301	**-367**	-292	-284	-168	-122	- 43	+116	+193	+ 75	- 28	- 60	-108	-156	+ 98
Nov.	+ 64	+110	+126	+172	**+256**	+187	+158	+119	+ 75	- 16	-149	**-282**	-226	-166	-171	-124	- 94	- 60	- 22	+ 20	+ 33	- 33	- 05	+ 31
Dec.	+ 37	+ 06	+ 60	+158	+138	+141	+158	**+164**	+ 85	+ 50	- 31	- 56	- 71	-103	**-180**	-179	- 59	- 75	- 67	- 83	- 70	- 33	+ 07	- 01
Year	+149	+150	+171	**+176**	+165	+108	+ 37	- 22	- 84	-195	-265	**-274**	-224	-191	-118	+ 19	+ 60	+ 88	+115	+105	+ 21	+ 06	- 10	+ 14
Winter	+ 25	+ 52	+ 95	+142	**+171**	+150	+141	+108	+ 95	+ 38	- 45	-103	-104	-104	**-110**	- 79	- 64	- 59	- 66	- 53	- 91	- 44	- 55	- 45
Equinox	+155	+146	+206	**+214**	+185	+ 96	+ 30	- 34	- 82	-230	-310	**-342**	-295	-237	- 77	+ 51	+ 88	+131	+207	+192	+ 07	- 59	- 56	+ 19
Summer	**+267**	+253	+212	+171	+138	+ 79	- 58	-139	-264	-392	**-440**	-379	-274	-233	-168	+ 85	+157	+193	+205	+175	+146	+120	+ 82	+ 68

WEST COMPONENT (unit 0·1γ)

Jan.	- 97	-107	- 90	- 17	+ 07	+ 08	+ 21	+ 05	+ 06	+ 11	+ 42	+ 38	**+130**	+110	+ 98	+ 99	+117	+ 84	- 65	- 32	- 16	-117	**-145**	- 95
Feb.	-411	**-525**	-330	-212	-100	+ 27	+110	+189	+112	+122	+180	+223	+296	**+331**	+274	+231	+200	+268	+193	+178	- 64	-422	-433	-434
March	-262	-205	- 55	- 83	-111	-122	+ 24	- 57	- 91	- 58	+ 42	+165	+344	+446	**+450**	+443	+262	+105	+ 55	-138	-192	**-354**	-314	-297
April	-217	- 82	+ 05	- 82	-224	-265	-303	**-450**	-347	-194	- 77	+166	+363	+508	**+647**	+532	+360	+255	+153	+ 67	-114	-192	-167	-339
May	+ 13	- 87	-215	-168	-131	-134	**-276**	-115	-118	-143	- 09	+194	+323	**+374**	+241	+233	+285	+192	+106	- 02	-104	-142	-153	-168
June	- 95	-233	-209	-118	-121	-161	-274	**-339**	-324	-227	- 11	+192	+358	+375	**+399**	+336	+156	+ 90	+ 47	+ 63	+ 28	+ 51	+ 55	- 38
July	- 63	-214	-212	-204	**-326**	-191	-172	-275	-300	-301	-193	- 08	+238	+383	+536	**+585**	+445	+314	+163	+ 79	- 13	- 64	-119	- 90
Aug.	- 02	- 71	-147	**-385**	-369	-182	-299	-198	-266	- 81	+ 78	+294	+380	**+510**	+491	+432	+251	+ 41	- 47	-154	- 78	-135	- 61	- 03
Sept.	- 98	-105	-203	-142	- 87	-111	-180	**-216**	-212	-158	+ 28	+265	+402	**+429**	+406	+309	+266	+141	+ 17	-135	-147	-183	-150	-141
Oct.	- 88	- 25	+ 73	+ 08	-126	- 61	-134	-121	-244	- 59	- 21	+174	+368	+443	**+481**	+367	+299	+ 15	- 82	+ 17	-338	-214	**-402**	-322
Nov.	-197	- 97	- 84	+ 36	+ 38	+129	+ 88	+ 26	- 18	- 26	+ 35	+155	+226	**+263**	+234	+115	+ 87	- 16	- 01	- 42	-229	**-278**	-263	-185
Dec.	-174	-107	- 48	+ 56	+ 26	+ 40	+123	+102	+ 57	+ 93	+129	+196	+233	**+242**	+163	+ 95	- 24	+114	- 21	-123	-244	**-386**	-372	-166
Year	-141	-155	-126	-109	-127	- 85	-106	-121	-145	- 85	+ 19	+171	+305	+368	**+368**	+315	+225	+134	+ 43	- 19	-126	-203	**-210**	-190
Winter	-220	-209	-138	- 34	- 07	+ 51	+ 86	+ 81	+ 39	+ 50	+ 97	+153	+221	**+237**	+192	+135	+ 95	+113	+ 27	- 05	-138	-301	**-303**	-220
Equinox	-166	-104	- 45	- 75	-137	-140	-148	-211	-224	-117	- 07	+193	+369	+457	**+497**	+413	+297	+129	+ 36	- 47	-198	-236	-258	**-275**
Summer	- 37	-151	-196	-219	-237	-167	**-255**	-232	-252	-188	- 34	+168	+325	+411	**+417**	+397	+284	+159	+ 67	- 04	- 42	- 73	- 70	- 75

VERTICAL COMPONENT (unit 0·1γ)

Jan.	+ 04	00	- 42	- 56	**- 64**	- 52	- 40	- 38	- 42	- 16	- 20	- 20	- 18	+ 16	+ 22	+ 10	+ 34	+ 52	+ 82	**+ 84**	+ 56	+ 44	+ 10	- 06
Feb.	-145	**-269**	-191	-131	-141	-143	-185	-209	-203	-193	-153	-111	- 77	- 27	+ 85	+123	+179	+273	+353	**+483**	+457	+221	- 03	+ 09
March	- 81	-119	-175	**-227**	-215	-167	-141	-123	-111	-117	-107	-123	- 89	- 65	+ 63	+213	+373	**+401**	+375	+251	+155	+107	- 31	- 49
April	-177	-235	-277	-197	-249	-195	-265	**-309**	-227	-239	-221	-179	- 79	+ 35	+309	**+667**	+605	+601	+493	+325	- 05	- 83	+ 39	-127
May	-200	**-300**	**-300**	-214	-166	-160	-154	-152	-134	-148	-192	-182	-130	+ 26	+232	+362	+460	**+466**	+408	+350	+238	+ 82	- 42	-142
June	-106	-148	-180	-164	**-182**	-166	-142	-128	-132	-158	-102	-120	- 52	+ 54	+184	+288	**+334**	+308	+242	+174	+134	+ 78	+ 22	- 28
July	-161	-157	-129	-155	-171	-199	**-259**	-245	-245	-247	-261	-229	-123	+ 61	+251	+377	**+489**	+481	+433	+287	+193	+ 65	- 53	- 15
Aug.	-352	-360	-534	**-706**	-522	-372	-232	-152	-130	- 86	- 64	- 46	+ 46	+182	+392	+716	**+770**	+666	+504	+396	+142	+ 68	-108	-222
Sept.	- 89	-115	-161	-219	**-233**	-167	-135	-105	-127	-129	-185	-161	-131	- 65	+ 23	+189	+327	**+423**	+373	+269	+165	+137	+ 99	+ 25
Oct.	-135	-203	-367	**-529**	-513	-337	-191	-101	- 67	- 59	- 33	+ 03	+ 39	+135	+187	+225	+303	+383	+371	+369	**+409**	+175	+ 15	- 87
Nov.	- 25	- 85	-119	-111	-137	-135	**-139**	-101	- 61	- 71	- 69	- 09	+ 31	+ 81	+143	+145	**+151**	+133	+131	+111	+ 79	+ 63	+ 11	- 23
Dec.	- 35	- 47	- 81	-165	**-179**	-149	-121	- 99	- 77	- 75	- 79	- 55	- 15	+ 17	+ 65	+121	+167	+145	+171	**+181**	+167	+117	+ 33	+ 01
Year	-125	-170	-213	**-240**	-231	-187	-167	-147	-130	-128	-124	-103	- 50	+ 38	+163	+286	+349	**+361**	+328	+273	+183	+ 90	- 01	- 55
Winter	- 50	-100	-108	-116	**-130**	-120	-121	-112	- 96	- 89	- 80	- 49	- 20	+ 22	+ 79	+100	+133	+151	+184	**+215**	+190	+111	+ 13	- 05
Equinox	-121	-168	-245	-293	**-303**	-217	-183	-160	-133	-136	-137	-115	- 65	+ 10	+146	+324	+402	**+452**	+403	+304	+181	+ 84	+ 31	- 60
Summer	-205	-241	-286	**-310**	-260	-224	-197	-169	-160	-160	-155	-144	- 65	+ 81	+265	+436	**+513**	+480	+397	+302	+177	+ 73	- 45	-102

TABLE VIII. - HARMONIC COMPONENTS OF THE DIURNAL INEQUALITY OF MAGNETIC INTENSITY

Values of a_n, b_n, in the Series $\Sigma (a_n \cos nt + b_n \sin nt)$, t being reckoned in hours from 0^h U.T. and converted into arc at the rate of 15° to each hour.

Month and Season.	NORTH COMPONENT								WEST COMPONENT								VERTICAL COMPONENT							
	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												
1939.	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.	+ 5·4	+ 3·8	− 4·8	−0·9	+0·4	−2·3	−0·5	+1·0	− 6·8	− 3·4	− 1·5	+ 3·6	−1·9	−0·9	+1·6	+0·3	+0·8	− 3·2	− 0·7	−0·7	+0·1	+0·2	−0·1	+0·3
Feb.	+ 2·4	+ 6·6	− 2·6	−0·9	+1·7	+0·0	−0·8	+0·0	−14·1	− 6·9	− 2·8	+ 3·1	−1·7	−1·4	+1·4	+2·3	+4·8	− 8·8	− 3·9	−2·3	−0·7	−0·1	−0·6	+0·1
March	+10·8	+ 2·7	− 6·0	−1·9	+2·5	−1·4	+0·4	+1·7	−14·5	−10·1	+ 2·3	+ 9·8	−1·7	−4·0	+1·2	+2·6	+3·5	−10·4	− 6·1	−1·3	+2·8	+0·7	−0·4	−0·1
April	+15·5	− 7·9	−11·5	+0·8	+2·7	+0·7	+1·2	+0·4	−12·9	−16·4	+ 5·0	+15·0	−3·5	−5·5	+0·8	+1·1	+2·6	−13·8	−10·9	−0·1	+3·7	+1·2	−1·1	−1·2
May	+17·1	− 8·3	− 8·8	+0·8	−0·4	+1·1	+0·7	−0·9	−12·0	−20·6	+ 7·6	+ 8·4	−3·0	−3·2	+0·9	+0·1	+5·0	−15·9	−10·3	−0·2	+3·1	−0·3	−0·7	+0·0
June	+21·0	− 7·2	− 9·2	+0·7	+0·6	−0·9	+1·1	−0·2	− 5·4	−23·7	+ 6·9	+11·7	−3·8	−3·8	+0·3	−0·5	+5·3	− 9·8	− 8·1	−1·1	+2·4	−0·3	−0·8	−0·1
July	+18·9	− 7·0	−10·4	+1·4	+0·5	+0·6	+1·0	−1·1	− 9·1	−21·9	+ 6·0	+10·0	−2·5	−3·4	+0·6	+1·3	+5·5	−11·4	− 9·1	+1·6	+2·4	+0·2	−0·7	−0·3
Aug.	+19·4	− 7·4	− 7·4	+2·1	+1·6	−0·9	+0·1	+0·8	−11·4	−20·1	+12·3	+ 9·7	−4·3	−4·5	+0·9	+0·5	+0·8	−10·3	− 8·8	−0·4	+4·0	−0·3	−0·1	−0·5
Sept.	+19·0	− 0·9	− 7·1	+1·6	+1·3	−2·5	−0·5	+1·4	−12·8	−18·0	+ 8·2	+11·6	−5·6	−4·8	+2·3	+1·3	+6·0	− 6·4	− 7·0	−0·7	+3·3	−0·1	−0·4	+0·3
Oct.	+18·3	− 2·5	− 8·9	+1·8	+3·8	−1·3	−0·0	+1·4	−11·0	−10·6	+ 3·2	+12·7	−3·5	−4·5	+2·8	+1·5	−0·6	−11·4	− 4·7	−2·8	+3·0	+0·3	−0·5	+1·2
Nov.	+ 7·9	+ 4·3	− 6·7	−1·3	+2·5	−1·2	−0·6	+0·4	− 8·1	− 4·6	− 1·1	+ 6·9	−2·6	−2·0	+1·8	+1·7	+0·1	− 5·3	− 1·7	−0·3	+0·8	−0·4	−0·9	+0·3
Dec.	+ 2·4	+ 4·0	− 4·4	−1·5	+1·4	−0·4	+0·4	+0·1	−10·0	− 1·1	− 1·4	+ 5·1	−1·7	+0·4	+1·0	+1·4	+0·9	− 6·4	− 1·7	−0·3	+0·4	−0·1	−0·5	+0·2
Year	+13·2	− 1·3	− 7·3	+0·2	+1·4	−0·8	+0·3	+0·5	−10·6	−13·1	+ 3·7	+ 9·0	−3·0	−3·1	+1·3	+1·1	+2·9	− 9·4	− 6·1	−0·7	+2·1	+0·1	−0·6	+0·0
Winter	+ 4·5	+ 4·7	− 4·6	−1·2	+1·5	−1·0	−0·4	+0·4	− 9·8	− 4·0	− 1·7	+ 4·7	−2·0	−1·0	+1·5	+1·4	+1·6	− 5·9	− 2·0	−0·9	+0·2	−0·1	−0·5	+0·2
Equinox	+15·9	− 0·9	− 8·3	+0·6	+2·6	−1·2	+0·3	+1·2	−12·8	−13·8	+ 4·7	+12·3	−3·6	−4·7	+1·8	+1·6	+2·9	−10·5	− 7·2	−1·2	+3·2	+0·5	−0·6	+0·1
Summer	+19·1	− 7·5	− 8·9	+1·2	+0·1	−0·3	+1·0	−0·2	− 9·2	−21·6	+ 8·2	+10·0	−3·4	−3·7	+0·7	+0·4	+4·1	−11·9	− 9·1	+0·2	+3·0	−0·2	−0·6	−0·2
												INTERNATIONAL QUIET DAYS												
Year	+11·7	0·0	− 7·2	−1·1	+1·8	−1·0	−0·0	+0·5	− 5·0	−12·6	+ 4·3	+ 7·9	−3·1	−3·1	+1·0	+1·3	+4·6	− 2·0	− 4·6	−0·6	+2·0	−0·2	−0·8	+0·0
Winter	+ 4·4	+ 1·7	− 5·2	−1·1	+1·5	−0·9	−0·3	+0·7	− 4·5	− 4·7	+ 0·3	+ 4·1	−2·1	−1·0	+1·3	+1·2	+1·3	− 1·9	− 1·4	−0·5	+0·8	−0·3	−0·5	+0·2
Equinox	+14·6	+ 1·5	− 7·4	−1·0	+3·3	−1·7	−0·2	+1·2	− 5·6	−12·6	+ 4·8	+10·0	−3·6	−5·5	+1·9	+2·3	+5·3	− 1·9	− 5·3	−0·9	+2·7	−0·2	−1·1	+0·1
Summer	+16·2	− 3·3	− 9·1	−1·0	+0·7	−0·5	+0·4	−0·4	− 4·9	−20·3	+ 7·9	+ 9·7	−3·6	−2·7	−0·3	+0·4	+7·2	− 2·2	− 7·0	−0·2	+2·5	−0·2	−0·9	−0·2
												INTERNATIONAL DISTURBED DAYS												
Year	+15·5	− 3·8	− 9·8	+4·6	+1·3	+0·8	+0·1	+0·2	−19·4	−13·3	+ 1·7	+12·1	−1·4	−2·9	+1·7	+1·7	−3·6	−25·3	− 8·7	+0·1	+3·1	+1·3	−0·1	+0·1
Winter	+ 3·9	+ 9·3	− 5·2	+0·2	+0·7	−0·1	−0·8	−0·6	−20·2	− 0·2	− 5·2	+ 5·8	−2·3	−0·3	+2·9	+2·4	+0·6	−14·9	− 3·4	−1·8	−1·2	+0·0	−0·7	+1·2
Equinox	+17·2	− 5·9	−13·4	+6·4	+2·0	+2·9	−0·2	+1·3	−22·2	−16·4	+ 3·5	+18·8	−2·3	−2·6	−0·1	+2·3	−3·6	−29·0	−10·1	−0·7	+5·0	+3·0	+1·2	−0·1
Summer	+25·4	−14·7	−10·7	+7·1	+1·4	−0·2	+1·4	−0·1	−15·9	−23·5	+ 6·9	+11·6	+0·4	−5·8	+2·5	+0·4	−7·7	−32·0	−12·8	+2·9	+5·4	+0·9	−0·7	−0·9

TABLE IX. - HARMONIC COMPONENTS OF THE DIURNAL INEQUALITY OF MAGNETIC INTENSITY

Values of c_n, α_n, in tne 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 COMPONENT								WEST COMPONENT								VERTICAL COMPONENT							
	c_1	α_1	c_2	α_2	c_3	α_3	c_4	α_4	c_1	α_1	c_2	α_2	c_3	α_3	c_4	α_4	c_1	α_1	c_2	α_2	c_3	α_3	c_4	α_4
												"All" Days												
1939	γ	°	γ	°	γ	°	γ	°	γ	°	γ	°	γ	°	γ	°	γ	°	γ	°	γ	°	γ	°
Jan.	6·6	55	4·9	260	2·3	172	1·1	337	7·6	244	3·9	339	2·1	246	1·6	81	3·3	166	1·0	228	0·2	44	0·3	348
Feb.	7·1	21	2·7	251	1·7	90	0·8	273	15·6	244	4·2	318	2·2	233	2·6	33	10·0	152	4·5	240	0·7	262	0·6	284
March	11·1	77	6·2	254	2·9	121	1·7	15	17·7	235	10·0	14	4·4	205	2·9	27	10·9	162	6·2	259	2·9	78	0·4	252
April	17·4	118	11·5	275	2·8	78	1·3	73	20·9	219	15·8	19	6·5	213	1·4	38	14·0	170	10·9	270	3·9	74	1·6	226
May	19·1	116	8·8	276	1·1	343	1·1	146	23·8	211	11·4	43	4·4	224	0·9	88	16·6	163	10·3	270	3·2	96	0·7	273
June	22·2	109	9·2	275	1·1	148	1·1	103	24·3	193	13·6	31	5·4	226	0·6	147	11·1	152	8·2	263	2·4	99	0·8	268
July	20·2	111	10·5	279	0·8	42	1·5	138	23·7	203	11·6	32	4·2	218	1·4	28	12·7	155	9·2	281	2·4	87	0·7	252
Aug.	20·8	111	7·7	286	1·8	121	0·8	9	23·1	210	15·7	52	6·2	225	1·0	62	10·3	176	8·8	269	4·1	96	0·1	187
Sept.	19·0	93	7·3	284	2·8	154	1·5	342	22·0	216	14·2	36	7·4	230	2·7	62	8·8	137	7·0	265	3·3	92	0·5	311
Oct.	18·5	83	9·1	282	4·0	111	1·4	1	15·3	227	13·1	15	5·7	219	3·2	64	11·4	183	5·5	240	3·0	86	1·4	339
Nov.	9·0	62	6·8	260	2·8	117	0·7	305	9·3	241	7·0	352	3·3	234	2·5	48	5·3	180	1·7	259	0·9	117	1·0	282
Dec.	4·6	31	4·6	252	1·4	106	0·4	72	10·0	264	5·3	346	1·7	284	1·7	38	6·5	173	1·7	260	0·4	105	0·5	293
Year	13·2	96	7·3	273	1·6	120	0·6	36	16·9	219	9·7	23	4·3	225	1·7	50	9·8	163	6·1	265	2·1	89	0·6	274
Winter	6·5	45	4·8	257	1·8	124	0·5	318	10·6	248	5·0	301	2·2	246	2·0	47	6·1	165	2·2	246	0·2	125	0·6	296
Equinox	15·9	94	8·4	275	2·8	116	1·2	15	18·8	223	13·2	22	5·9	218	2·4	49	10·9	165	7·3	261	3·2	82	0·6	276
Summer	20·5	112	9·0	279	0·3	166	1·0	104	23·5	204	12·9	40	5·0	224	0·8	65	12·6	161	9·1	272	3·0	95	0·6	253
												INTERNATIONAL QUIET DAYS												
Year	11·7	90	7·3	262	2·1	121	0·5	357	13·5	202	9·0	30	4·4	226	1·6	39	5·0	114	4·6	264	2·0	98	0·8	274
Winter	4·8	69	5·3	259	1·7	124	0·8	339	6·5	224	4·1	5	2·4	246	1·8	48	2·3	146	1·4	253	0·9	112	0·5	289
Equinox	14·7	83	7·4	263	3·7	119	1·2	352	13·8	204	11·0	27	6·5	214	2·9	41	5·6	110	5·4	261	2·7	95	1·1	278
Summer	16·5	102	9·2	265	0·8	125	0·6	137	20·9	194	12·5	40	4·5	234	0·4	326	7·5	107	7·0	269	2·5	95	0·9	257
												INTERNATIONAL DISTURBED DAYS												
Year	15·9	104	10·8	296	1·5	60	0·2	38	23·6	236	12·2	9	3·2	207	2·4	48	25·6	188	8·7	272	3·3	68	0·1	307
Winter	10·1	23	5·2	273	0·7	100	1·0	234	20·2	270	7·8	319	2·3	264	3·8	53	14·9	178	3·9	243	1·2	272	1·4	330
Equinox	18·1	109	14·9	296	3·5	36	1·3	353	27·6	234	19·1	11	3·4	223	2·3	358	29·2	188	10·1	267	5·8	61	1·2	94
Summer	29·3	120	12·8	304	1·4	99	1·4	96	28·3	215	13·5	31	5·8	177	2·5	82	33·0	194	13·1	284	5·5	82	1·1	217

TABLE X. - RANGE OF MEAN DIURNAL INEQUALITIES FOR THE MONTHS, YEAR AND SEASONS OF 1939.

Month and Season	'All' Days			Quiet Days			Disturbed Days			'All' Days			Quiet Days			Disturbed Days		
	D	I	H	D	I	H	D	I	H	X	Y	Z	X	Y	Z	X	Y	Z
	′	′	γ	′	′	γ	′	′	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
January	4·35	1·39	20·8	3·88	1·62	24·8	5·40	1·84	22·6	22·3	21·9	8·3	26·3	18·0	5·8	23·6	27·5	14·8
February	7·25	1·71	16·5	4·80	0·66	11·8	16·04	5·60	54·8	18·4	37·9	24·2	15·0	24·3	17·8	52·5	65·6	75·2
March	9·38	1·53	28·3	8·30	1·38	27·2	15·36	2·82	43·0	30·1	46·8	29·8	30·5	42·6	20·2	44·7	80·4	62·8
April	12·57	2·49	53·3	11·84	2·33	43·6	18·56	5·06	109·4	56·3	67·2	43·4	43·4	60·9	29·2	106·2	109·7	97·6
May	11·93	1·98	45·4	9·88	1·76	35·2	11·98	3·07	54·4	44·4	62·4	46·1	39·1	49·2	31·8	50·0	65·0	76·6
June	12·82	2·70	51·8	11·64	2·51	47·8	13·22	5·55	84·8	51·0	69·9	35·4	49·2	61·9	25·6	84·1	73·8	51·6
July	11·35	2·39	51·1	12·38	2·50	43·8	17·42	5·49	95·2	49·9	60·9	39·2	42·8	65·1	26·4	90·5	91·1	74·8
August	13·36	2·91	50·4	13·28	2·63	44·4	17·38	6·33	84·0	51·2	70·9	33·2	43·7	70·9	25·0	83·1	89·5	147·6
September	12·90	2·37	42·4	11·70	2·30	41·2	13·92	4·63	66·6	44·3	68·0	29·6	41·9	63·2	21·8	74·1	64·5	65·6
October	10·62	3·26	45·5	9·54	2·83	44·6	15·98	6·42	74·2	47·0	54·5	30·0	47·2	48·1	11·2	75·1	88·3	93·8
November	6·02	1·83	27·2	5·42	1·47	21·6	10·32	3·78	50·6	29·2	29·9	10·6	24·4	27·6	5·2	53·8	54·1	29·0
December	5·81	1·15	15·3	3·30	0·98	16·0	11·68	3·01	33·8	17·0	30·4	12·9	16·4	17·5	5·2	34·4	62·8	36·0
Year	9·86	2·14	37·2	8·83	1·91	33·5	13·94	4·47	64·5	38·4	51·7	28·6	35·0	45·8	18·8	64·3	74·4	68·8
Winter	5·85	1·52	20·0	4·35	1·18	18·6	10·86	3·56	40·5	21·7	30·0	14·0	20·5	21·9	8·5	41·1	57·5	38·8
Equinox	11·37	2·41	41·9	10·35	2·21	39·2	15·96	4·73	73·3	44·4	59·1	33·2	40·8	53·7	20·6	75·0	85·7	80·0
Summer	12·37	2·50	49·7	11·80	2·35	42·8	15·00	5·11	79·6	49·1	66·0	38·5	43·7	61·8	27·2	76·9	79·9	87·7

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

Month, 1939.	'All' Days			Quiet Days			Disturbed Days		
	Declination West	Horizontal Intensity	Vertical Intensity	Declination West	Horizontal Intensity	Vertical Intensity	Declination West	Horizontal Intensity	Vertical Intensity
	′	γ	γ	′	γ	γ	′	γ	γ
January	+0·01	+0·2	-0·1	+0·64	+6·0	-1·8	-0·54	- 1·4	- 1·8
February	-0·13	-1·1	+1·0	+0·16	+5·0	+0·8	-1·34	-25·8	+12·4
March	-0·18	+0·5	-0·7	+0·02	+5·6	-1·0	0·00	- 8·4	- 0·4
April	+0·23	+0·1	+0·6	+0·50	+9·0	-2·6	-0·80	-20·8	- 1·2
May	-0·39	+0·7	-0·1	-0·12	+5·4	-1·0	-1·30	-13·2	- 1·6
June	-0·03	-0·0	-0·2	-0·12	+0·8	-0·2	+0·20	-24·6	+ 4·0
July	-0·12	+0·1	+0·1	-0·04	+8·8	-1·8	-0·20	-20·4	+ 8·8
August	-0·03	-0·2	+0·2	+0·18	+0·8	-0·6	+0·88	-21·0	+ 1·0
September	-0·20	-1·0	+0·5	-0·72	+3·4	+0·2	-0·08	-17·0	+ 7·6
October	+0·18	+0·6	-0·2	+1·34	+7·8	-3·4	-0·30	-17·0	+ 4·8
November	-0·09	-0·1	-0·1	+0·20	+3·8	-1·0	+1·10	+ 1·2	- 3·2
December	+0·04	+0·2	+0·1	-0·44	+2·8	-0·6	+1·68	+ 2·2	- 1·4
Year 1939	...	..	..	+0·14	+4·9	-1·1	-0·06	-13·9	+ 2·4

TABLE XII. - MEAN MONTHLY AND ANNUAL VALUES OF TERRESTRIAL MAGNETIC ELEMENTS AT THE ABINGER MAGNETIC STATION.

Month, 1939.	Declination West	Inclination	Intensity				
			Horizontal	North	West	Vertical	Total
	° ′	° ′					
January	10 56·7	66 42·5	·18536	·18199	·03519	·43057	·46878
February	10 55·6	66 43·8	·18521	·18184	·03511	·43065	·46879
March	10 54·6	66 43·6	·18524	·18189	·03506	·43066	·46882
April	10 53·5	66 44·1	·18516	·18185	·03499	·43072	·46885
May	10 52·8	66 43·4	·18528	·18195	·03497	·43071	·46886
June	10 52·5	66 42·7	·18539	·18206	·03498	·43070	·46892
July	10 52·0	66 43·1	·18534	·18202	·03494	·43073	·46892
August	10 50·7	66 43·6	·18527	·18196	·03486	·43075	·46890
September	10 49·7	66 43·7	·18527	·18197	·03481	·43078	·46893
October	10 48·6	66 44·9	·18514	·18185	·03472	·43088	·46898
November	10 48·5	66 43·6	·18532	·18203	·03475	·43086	·46902
December	10 47·8	66 43·5	·18534	·18206	·03472	·43088	·46905
Year 1939	10 51·9	66 43·5	·18528	·18196	·03492	·43074	·46890

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

Day	January	February	March	April	May	June	July	August	September	October	November	December
	° ′	° ′	° ′	° ′	° ′	° ′	° ′	° ′	° ′	° ′	° ′	° ′
1	10 39·4	10 39·5	10 36·6	10 36·9	10 36·6	10 36·4	10 36·4	10 35·8	10 35·5	10 36·2	10 35·9	10 36·4
2	39·2	39·5	36·6	36·8	36·4	36·4	36·6	35·7	35·3	36·1	36·1	36·5
3	39·3	39·4	36·4	36·7	36·5	36·4	36·8	35·7	35·3	36·1	36·1	36·5
4	39·3	39·4	36·7	36·6	36·2	36·2	36·5	36·1	35·4	36·1	36·0	36·5
5	39·3	39·5	36·8	36·7	36·2	36·2	36·7	36·1	35·2	36·0	36·0	36·3
6	39·4	39·6	36·3	36·7	36·2	36·4	36·6	36·2	35·3	36·0	36·1	36·3
7	39·2	39·7	36·3	36·7	36·3	36·5	36·6	36·3	35·5	35·9	36·1	36·4
8	39·4	39·3	36·3	36·7	36·7	36·4	36·2	36·2	35·3	36·0	36·0	36·3
9	39·3	39·5	36·3	36·6	36·8	36·3	-	36·2	35·4	36·0	36·1	36·3
10	39·3	39·6	36·3	36·6	36·7	36·2	36·4	36·2	35·3	35·9	36·1	36·3
11	39·3	39·5	36·3 / 37·2	36·7	36·6	36·4	36·4	36·3	35·4	36·0	36·0	36·3
12	39·5	39·6	37·5	36·6	36·5	36·3	36·4	36·3	35·4	36·0	36·1	36·3
13	39·4	39·5	37·5	36·4	36·5	36·2	36·3	36·3	35·4	35·9	36·1	36·3
14	39·4	39·4	37·6	36·5	36·6	36·6	36·0	36·4	35·4	36·1	36·1	36·3
15	39·6	39·4	37·4	36·6	36·6	36·2	36·0	36·4	35·4	36·1	36·1	36·3
16	39·4	39·5	37·7	36·8	36·6	36·2	36·1	36·3	35·5	36·1	36·0	36·3
17	39·7	39·5	38·1	36·9	36·6	36·1	36·1	36·1	35·4	36·1	36·0	36·2
18	39·6	37·6	38·1 / 37·0	36·8	36·5	36·2	36·1	35·9	35·5	36·2	35·7	36·0
19	39·5	38·1	37·0	36·8	36·5	36·2	36·1	35·8	35·5	36·2	35·9	36·0
20	39·4	37·7 / 36·6	36·9	36·9	36·5	36·5	36·0	35·8	35·5	36·0	35·8	36·1
21	39·7	36·5	36·9	36·8 / 36·2	36·4	36·6	36·1	35·9	35·3	36·0	35·8	36·1
22	39·5	36·6	36·7	36·3	36·5	36·6	36·0	36·1	35·4	36·0	36·0	36·1
23	39·6	36·4	36·8	36·6	36·6	36·4	35·9	36·1	35·3	36·0	36·5	36·1
24	39·4	36·6	36·7	36·5	36·5	36·7	35·9	35·8	35·3	36·0	36·3	36·1
25	39·3	36·6	36·6	36·5	36·6	36·7	35·8	35·4	35·4	36·0	36·3	36·1
26	39·5	36·4	36·6	36·4	36·7	36·6	36·1	35·6	35·5	36·0	36·4	36·1
27	39·5	36·6	36·5	36·4	36·5	36·7	35·9	35·6	35·4	36·0	36·4	36·0
28	39·5	36·5	36·6	36·3	36·8	36·6	35·9	35·7	35·3	36·0	36·3	36·0
29	39·3	-	36·6	36·2	36·8	36·6	35·6	35·6	35·4	36·0	36·4	35·9
30	39·5	-	36·7	36·2	36·6	36·6	35·7	35·5	36·0	36·0	36·4	35·6
31	39·5	-	36·6	-	36·5	-	35·7	35·5	-	36·0	-	35·7

June 5. Control temperature raised from 16°·0 to 21°·0 C.

TABLE XIV. - RESULTS OF THE DETERMINATIONS OF THE ABSOLUTE VALUE OF HORIZONTAL INTENSITY 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 INTENSITY MAGNETOGRAMS.

Universal Time				No. of Obs.	Observed Horizontal Intensity	Deduced Value of Base Line
	h m	h m			γ	γ
Jan. 2	18 34	18 43		8	18546	18432
3	10 4	10 17		8	18537	18432
4	11 52	12 4		8	18533	18433
5	14 58	15 12		8	18546	18431
6	10 35	10 49		8	18519	18432
7	11 33	11 45		8	18530	18432
9	16 21	16 34		8	18527	18432
10	16 4	16 14		8	18525	18432
11	9 54	10 9		8	18525	18431
11	16 17	16 29		8	18524	18463
12	9 49	10 1		8	18532	18462
13	11 25	11 44		8	18539	18461
14	9 57	10 12		8	18536	18463
16	10 11	10 25		8	18524	18462
17	10 8	10 23		8	18523	18462
18	10 20	10 32		8	18515	18463
19	12 36	12 46		8	18522	18463
20	9 42	9 56		8	18537	18463
21	11 19	11 31		8	18524	18463
23	11 26	11 36		8	18525	18463
24	10 7	10 18		8	18518	18462
25	10 5	10 17		8	18527	18462
26	10 4	10 15		8	18527	18462
27	9 53	10 5		8	18525	18462
28	9 56	10 11		8	18550	18462
30	16 47	16 57		8	18540	18463
31	9 57	10 11		8	18525	18462
Feb. 1	9 59	10 14		8	18545	18462
2	9 59	10 12		8	18525	18462
3	10 7	10 18		8	18517	18462
4	9 52	10 5		8	18523	18462
6	11 27	11 40		8	18482	18462
7	10 38	10 49		8	18491	18462
8	9 54	10 8		8	18521	18462
9	9 50	10 1		8	18539	18463
10	14 47	15 1		8	18527	18461
11	9 54	10 6		8	18524	18462
13	16 32	16 41		8	18539	18461
14	9 55	10 8		8	18537	18461
15	9 59	10 11		8	18538	18462
16	9 53	10 7		8	18544	18461
17	9 55	10 9		8	18526	18461
18	9 59	10 10		8	18523	18377
20	10 55	11 5		8	18521	18376
20	16 25	16 33		8	18520	18371
21	9 53	10 4		8	18538	18373
22	9 58	10 9		8	18539	18374
23	9 52	10 4		8	18532	18374
24	9 53	10 5		8	18541	18374
25	9 58	10 10		8	18430	18374
27	10 4	10 9		4	18516	18374
	16 51	16 56		4	18511	18374
28	9 55	10 6		8	17521	18372
Mar. 1	10 24	10 33		8	18513	18375
2	10 16	10 28		8	18503	18374
3	10 47	10 58		8	18526	18372
4	9 53	10 4		8	18507	18372
6	16 31	16 41		8	18512	18373
Mar. 7	9 45	9 57		8	18514	18374
8	10 8	10 18		8	18508	18372
9	9 51	10 4		8	18537	18374
10	9 58	10 8		8	18529	18374
11	9 48	10 0		8	18513	18374
13	15 56	16 7		8	18524	18376
14	10 26	10 35		8	18543	18374
15	10 4	10 14		8	18539	18375
16	9 57	10 9		8	18500	18374
17	10 0	10 11		8	18520	18374
18	9 57	10 11		8	18517	18375
20	12 48	12 59		8	18540	18371
21	9 51	10 4		8	18508	18373
22	9 51	10 3		8	18498	18373
23	9 53	10 4		8	18491	18372
24	10 4	10 16		8	18511	18373
25	9 52	10 3		8	18526	18374
27	15 22	15 35		8	18536	18372
28	9 59	10 12		8	18489	18373
29	14 35	14 47		8	18511	18373
30	9 56	10 6		8	18489	18371
31	9 57	10 7		8	18483	18373
April 1	9 53	10 4		8	18500	18370
3	19 47	19 57		8	18529	18370
4	10 3	10 14		8	18502	18371
5	9 53	10 3		8	18522	18372
6	10 5	10 15		8	18510	18372
8	10 9	10 17		6	18516	18372
10	10 3	10 13		8	18507	18371
11	15 41	15 52		8	18525	18370
12	9 58	10 9		8	18500	18373
13	12 36	12 47		8	18507	18372
14	9 57	10 7		8	18511	18370
15	9 58	10 8		8	18515	18372
17	14 43	14 54		8	18596	18370
18	9 0	9 12		8	18491	18371
19	8 57	9 8		8	18503	18372
20	9 24	9 40		8	18447	18373
21	9 4	9 13		8	18473	18372
22	8 44	8 48		4	18484	18372
	10 27	10 32		4	18471	18372
24	14 36	14 46		8	18501	18369
25	9 2	9 13		8	18449	18372
26	9 3	9 13		8	18484	18374
27	9 49	10 0		8	18491	18373
28	10 13	10 24		8	18487	18370
29	8 52	9 4		8	18501	18372
May 1	15 0	15 14		8	18524	18371
2	9 7	9 17		8	18475	18373
3	8 58	9 3		4	18478	18371
	11 35	11 40		4	18478	18372
	14 44	14 49		4	18504	18371
4	9 1	9 11		8	18495	18371
5	13 46	13 59		8	18520	18369
6	9 5	9 15		8	18518	18371
8	14 58	15 8		8	18500	18369
9	9 5	9 16		8	18485	18372
10	9 12	9 22		8	18509	18371
11	9 9	9 21		8	18519	18372
12	9 7	9 18		8	18530	18371
13	9 3	9 14		8	18535	18369
May 15	10 3	10 14		8	18530	18370
16	9 15	9 27		8	18508	18370
17	9 39	9 50		8	18521	18368
18	9 8	9 19		8	18500	18369
19	10 17	10 28		8	18505	18369
20	9 5	9 16		8	18486	18370
22	13 46	13 58		8	18512	18369
23	9 5	9 18		8	18503	18369
24	9 10	9 21		8	18492	18372
25	9 21	9 39		8	18502	18369
26	9 13	9 23		8	18490	18369
27	9 22	10 0		8	18524	18369
30	14 19	14 30		8	18523	18368
31	9 11	9 22		8	18514	18370
June 1	9 13	9 24		8	18523	18371
2	9 3	9 15		8	18514	18372
3	9 8	9 19		8	18505	18372
5	14 34	14 36		8	18558	18368
6	9 12	9 22		8	18509	18370
7	9 58	10 9		8	18515	18367
8	8 57	9 9		8	18517	18367
9	9 19	9 28		8	18528	18369
10	9 13	9 24		8	18537	18369
12	13 40	13 54		8	18521	18367
13	9 2	9 13		8	18539	18368
14	13 49	13 59		8	18494	18368
15	9 17	9 28		8	18500	18367
16	9 11	9 22		8	18463	18367
17	9 15	9 27		8	18499	18366
19	18 42	18 50		8	18545	18369
20	9 23	9 43		8	18492	18367
21	14 54	15 4		8	18566	18367
22	10 37	11 23		8	18510	18365
23	10 19	10 33		8	18520	18365
24	10 28	10 35		8	18520	18366
26	15 31	15 59		8	18552	18365
27	9 6	9 17		8	18540	18367
28	9 11	9 22		8	18520	18367
29	9 4	9 17		8	18552	18365
30	9 3	9 15		8	18495	18368
July 1	9 18	9 30		8	18519	18366
3	9 58	10 20		8	18497	18366
	15 31	15 36		4	18568	18364
4	9 16	9 25		8	18499	18364
5	10 37	10 50		8	18395	18367
6	9 5	9 27		8	18453	18367
7	10 20	10 45		8	18486	18365
8	9 25	9 38		8	18521	18367
10	11 33	11 44		8	18539	18363
11	9 11	9 22		8	18542	18364
12	9 1	9 11		8	18534	18363
13	9 0	9 12		8	18510	18364
14	9 24	9 34		8	18554	18365
15	9 12	9 22		8	18509	18365
17	18 19	18 50		8	18559	18362
18	9 37	9 47		8	18505	18364
19	9 38	10 0		8	18513	18363
20	8 48	8 59		8	18505	18365
21	9 42	10 13		8	18495	18363
22	8 49	9 1		8	18506	18363

June 5. Temperature raised to 21·0°.

TABLE XIV. - RESULTS OF THE DETERMINATIONS OF THE ABSOLUTE VALUE OF HORIZONTAL INTENSITY 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 INTENSITY MAGNETOGRAMS.

Universal Time				No. of Obs.	Observed Horizontal Intensity	Deduced Value of Base Line
	h m	h m			γ	γ
July 24	15 34	15 43		8	18543	18363
25	9 20	9 31		8	18517	18364
26	9 46	10 7		8	18530	18364
27	9 18	9 30		8	18521	18363
28	9 13	9 33		8	18525	18364
29	8 54	9 5		8	18501	18365
31	18 3	18 22		8	18551	18364
	19 4	19 22		8	18553	18363
Aug. 1	15 1	15 26		8	18542	18363
2	9 20	9 36		8	18524	18363
3	9 9	9 22		8	18513	18365
4	10 3	10 21		8	18517	18363
5	9 34	9 45		8	18525	18363
8	20 43	20 53		5	18565	18362
9	9 9	9 23		8	18528	18363
10	9 7	9 21		8	18518	18364
11	8 57	9 14		8	18514	18364
14	19 5	19 20		8	18526	18362
15	10 9	10 24		8	18503	18364
16	8 41	8 55		8	18518	18361
17	9 50	10 3		8	18465	18362
18	9 19	9 35		8	18475	18362
19	9 5	9 22		8	18495	18361
21	18 22	18 40		8	18556	18362
22	10 3	10 25		8	18486	18361
23	10 50	10 56		4	18410	18362
24	9 2	9 23		8	18483	18361
25	9 54	10 7		8	18504	18361
26	10 8	10 23		8	18511	18362
28	19 18	19 28		8	18535	18362
29	9 31	9 42		8	18506	18361
30	9 15	9 26		8	18504	18362
31	9 26	9 37		8	18508	18361
Sept. 1	9 57	10 7		8	18503	18360
2	9 19	9 36		8	18519	18360
4	16 36	16 48		8	18534	18360
5	9 39	9 50		8	18509	18361
6	9 45	9 59		8	18519	18361
7	9 18	9 29		8	18514	18360
8	9 3	9 14		8	18528	18362
9	10 7	10 19		8	18510	18359
11	15 27	15 39		8	18530	18361
12	9 56	10 8		8	18500	18360
13	9 49	10 0		8	18495	18359
Sept. 14	9 56	10 8		8	18492	18360
15	9 21	9 31		8	18501	18361
16	9 27	9 38		8	18506	18361
18	15 54	16 4		8	18504	18359
19	10 7	10 16		8	18452	18360
20	9 47	9 57		8	18455	18360
21	9 28	9 38		8	18501	18361
22	9 52	10 2		8	18508	18360
23	9 18	9 29		8	18519	18360
25	15 57	16 7		8	18543	18360
26	15 5	15 15		8	18510	18361
27	9 51	10 5		8	18500	18361
28	10 15	10 25		8	18514	18359
29	11 40	11 53		8	18519	18360
30	9 47	9 58		8	18516	18361
Oct. 2	18 23	18 32		8	18555	18358
3	9 27	9 38		8	18483	18358
4	9 36	9 52		8	18446	18359
5	9 39	9 49		8	18468	18358
6	8 23	8 37		8	18493	18358
7	8 26	8 44		8	18507	18359
9	16 7	16 17		8	18501	18359
10	9 23	9 34		8	18495	18358
11	8 42	9 0		8	18520	18358
12	9 26	9 38		8	18503	18358
13	12 11	12 30		8	18500	18358
14	9 44	9 59		8	18399	18360
16	16 7	16 17		8	18491	18358
17	11 13	11 28		8	18448	18358
18	11 40	11 49		8	18459	18358
19	9 14	9 23		8	18465	18358
20	8 33	8 50		8	18509	18358
21	9 33	9 44		8	18506	18358
23	15 50	16 1		8	18485	18358
24	9 27	9 40		8	18495	18358
25	10 16	10 25		8	18505	18357
26	9 43	9 52		8	18504	18359
27	9 8	9 18		8	18522	18358
28	9 56	10 7		8	18527	18358
30	16 25	16 35		8	18516	18358
31	10 3	10 14		8	18497	18358
Nov. 1	9 50	10 0		8	18511	18358
2	9 34	9 45		8	18514	18358
3	10 3	10 11		8	18523	18357
Nov. 4	9 56	10 6		8	18535	18357
6	7 46	8 2		8	18541	18357
7	9 41	9 52		8	18527	18357
8	9 30	9 40		8	18524	18357
9	9 49	10 0		8	18522	18357
10	9 43	9 55		8	18524	18357
11	10 11	10 21		8	18530	18357
13	15 38	15 47		8	18503	18356
14	11 25	11 35		8	18498	18356
15	9 21	9 31		8	18526	18358
16	9 37	9 48		8	18525	18357
17	9 47	10 5		8	18530	18357
18	9 41	9 53		8	18518	18357
20	17 28	17 37		8	18540	18357
21	12 7	12 19		8	18519	18358
22	10 41	10 50		8	18524	18357
23	12 54	12 59		4	18538	18352
	16 22	16 28		4	18550	18351
24	11 36	11 46		8	18531	18354
25	11 36	11 46		8	18491	18355
27	16 35	16 47		8	18535	18357
28	11 25	11 34		8	18505	18357
29	10 54	11 12		8	18518	18357
30	10 44	10 54		8	18523	18356
Dec. 1	10 36	10 45		8	18517	18358
2	10 34	10 44		8	18538	18357
4	14 39	14 50		8	18540	18357
5	12 10	12 20		8	18532	18358
6	10 48	10 58		8	18525	18357
7	10 37	10 46		8	18509	18358
8	12 31	12 39		8	18489	18356
9	10 44	10 53		8	18514	18355
11	14 46	14 55		8	18529	18355
12	10 49	10 59		8	18530	18357
13	11 51	12 2		8	18525	18356
14	12 20	12 28		8	18532	18355
15	10 45	10 53		8	18528	18355
16	11 3	11 17		8	18549	18356
18	14 58	15 6		8	18533	18355
19	10 50	10 58		8	18540	18356
20	10 32	10 41		8	18544	18355
21	10 41	10 58		8	18532	18354
22	10 34	10 48		8	18518	18354
27	10 24	10 41		8	18546	18354
28	10 51	11 4		8	18534	18354
29	11 11	11 19		8	18541	18355
30	16 39	16 53		8	18532	18356

Nov. 23. Temperature out of control. Interruption of Electricity Supply.

Breaks in the columns, other than those occuring at the end of each month, signify changes of Base-line values.

TABLE XIV (A). - RESULTS OF THE DETERMINATIONS OF THE ABSOLUTE VALUE OF HORIZONTAL INTENSITY FROM OBSERVATIONS MADE WITH THE UNIFILAR MAGNETOMETER CASELLA 181 AT ABINGER, WITH THE DEDUCED VALUES OF THE BASE-LINE OF THE HORIZONTAL INTENSITY MAGNETOGRAMS

Universal Time				Observed Horizontal Intensity	Deduced Value of Base Line
	h m	h m		Y	Y
Jan. 17	11 39	- 12 42		18497	18458
20	10 4	- 10 53		18513	18451
Feb. 21	11 53	- 12 54		18527	18370
22	11 42	- 12 43		18533	18370
23	11 35	- 12 36		18529	18374
24	15 38	- 16 36		18503	18368
25	11 50	- 12 44		18428	18374
28	14 44	- 16 0		18531	18373
Mar. 1	11 37	- 12 56		18514	18370
2	15 13	- 15 59		18514	18379
3	11 32	- 12 52		18516	18372
7	11 40	- 12 44		18514	18374
8	11 30	- 12 47		18517	18373
9	11 43	- 12 47		18521	18377
10	11 34	- 12 49		18517	18373
11	11 27	- 12 29		18522	18378
14	10 50	- 11 57		18541	18378
15	11 48	- 12 57		18521	18375
16	11 28	- 12 53		18518	18369
17	11 42	- 12 46		18514	18374
18	11 41	- 12 42		18508	18371
21	11 45	- 12 46		18500	18369
22	11 35	- 12 51		18484	18367
23	11 56	- 12 56		18515	18371
24	11 37	- 12 58		18499	18362
25	12 2	- 12 54		18528	18372
30	11 37	- 12 55		18509	18372
31	11 42	- 12 42		18502	18371
April 1	11 34	- 12 32		18484	18366
5	11 35	- 12 45		18497	18373
6	11 35	- 12 51		18515	18372
12	11 34	- 12 54		18495	18371
13	15 26	- 16 19		18530	18371
14	11 7	- 12 2		18512	18372
15	11 31	- 12 31		18512	18367
18	9 59	- 10 51		18469	18371
19	10 3	- 10 52		18490	18373
21	9 48	- 10 36		18495	18385
22	11 15	- 12 12		18498	18383
24	9 4	- 10 3		18463	18368
	10 13	- 11 11		18460	18372
26	10 4	- 10 52		18468	18369
28	14 12	- 15 5		18508	18370
29	10 17	- 11 31		18499	18373
May 2	10 14	- 11 2		18476	18372
4	10 10	- 10 58		18486	18367
5	10 10	- 10 58		18492	18370
6	10 1	- 10 49		18504	18373
9	10 0	- 10 47		18490	18370
11	13 40	- 14 32		18528	18374
12	10 16	- 11 0		18512	18364
13	10 6	- 10 50		18539	18369
17	9 9	- 10 32		18523	18372
18	10 9	- 10 57		18519	18369
19	13 47	- 14 41		18538	18370
20	10 8	- 10 54		18510	18367
23	10 12	- 10 57		18501	18375
31	10 12	- 11 1		18505	18370
June 2	10 8	- 10 56		18514	18367
6	10 11	- 11 0		18506	18371
7	10 16	- 11 9		18516	18370
9	10 15	- 11 1		18525	18367
10	10 12	- 10 58		18540	18369
13	10 9	- 10 56		18534	18370
15	14 54	- 15 52		18530	18368
17	10 10	- 10 57		18498	18363
22	9 37	- 10 53		18511	18367
27	13 41	- 14 58		18532	18371
28	13 47	- 14 46		18529	18367
July 1	10 11	- 11 0		18495	18364
3	14 0	- 16 20		18549	18369
4	10 9	- 11 54		18490	18369
5	9 0	- 10 36		18418	18369
10	13 49	- 14 59		18548	18368
14	13 58	- 14 48		18518	18360
18	13 52	- 14 42		18524	18362
19	9 51	- 10 42		18510	18362
25	14 4	- 15 19		18521	18368
27	14 15	- 15 13		18534	18370
Aug. 4	14 15	- 16 4		18545	18361
30	9 36	- 10 56		18500	18362
Sept. 20	13 57	- 14 59		18486	18356
29	9 59	- 11 10		18515	18362
Nov. 17	9 50	- 11 17		18528	18357

June 5. Temperature raised to 21·0°.

TABLE XV. - RESULTS OF THE DETERMINATIONS OF THE ABSOLUTE VALUE OF VERTICAL INTENSITY FROM OBSERVATIONS MADE WITH THE DYE COIL MAGNETOMETER IN THE MAGNETIC PAVILION AT ABINGER, WITH THE DEDUCED VALUES OF THE BASE-LINE OF THE VERTICAL INTENSITY MAGNETOGRAMS

Universal Time					No. of Obs.	Observed Vertical Intensity	Deduced Value of Base Line
	h m		h m			γ	γ
Jan. 2	18 55	-	19 11		8	43057	42958
3	10 33	-	10 52		8	43054	42957
4	15 4	-	15 32		8	43059	42961
5	15 44	-	16 6		8	43054	42961
6	11 34	-	12 1		8	43053	42956
7	11 59	-	12 30		8	43054	42959
9	16 50	-	17 14		8	43064	42960
10	10 48	-	11 0		4	43058	42978
	12 46	-	12 58		4	43060	42976
	16 28	-	16 55		8	43068	42974
11	10 27	-	10 53		8	43055	42974
11	16 46	-	17 7		8	43068	42985
12	10 16	-	10 50		8	43054	42983
13	11 57	-	12 32		8	43058	42983
14	10 26	-	10 49		8	43052	42981
16	10 39	-	10 56		8	43057	42983
21	10 12	-	10 55		8	43061	42988
23	10 28	-	10 48		8	43055	42982
24	10 36	-	11 41		8	43050	42979
25	10 28	-	10 52		8	43057	42985
26	10 28	-	10 48		8	43054	42981
27	10 18	-	10 52		8	43053	42982
28	10 24	-	10 54		8	43054	42982
30	17 9	-	17 37		8	43056	42983
31	10 27	-	10 53		8	43049	42980
Feb. 1	10 32	-	10 55		8	43054	42981
2	10 38	-	10 59		8	43054	42981
3	10 44	-	11 42		8	43059	42980
4	10 19	-	11 33		8	43054	42980
6	15 30	-	15 53		8	43110	42981
7	10 4	-	10 30		8	43066	42980
8	10 27	-	10 49		8	43060	42980
9	10 17	-	10 48		8	43053	42982
10	15 30	-	16 17		8	43068	42983
11	10 44	-	10 53		4	43057	42983
	12 28	-	12 36		4	43062	42981
12	11 43	-	11 56		4	43055	42984
13	16 50	-	17 12		8	43055	42983
14	10 36	-	11 5		8	43056	42983
15	10 25	-	10 46		8	43056	42983
16	10 39	-	11 9		8	43045	42981
17	10 21	-	10 53		8	43054	42981
18	10 20	-	10 44		8	43052	42980
18	12 29	-	12 52		8	43045	42938
20	11 17	-	11 37		8	43048	42941
	16 43	-	16 58		8	43074	42943
21	10 50	-	11 36		8	43039	42938
22	10 24	-	10 56		8	43045	42942
23	10 17	-	10 43		8	43050	42935
24	10 31	-	10 54		8	43039	42932
24	12 44	-	13 2		8	43040	42926
25	10 22	-	10 53		8	43101	42927
27	10 26	-	10 37		4	43058	42927
	17 6	-	17 19		4	43071	42931
28	10 41	-	11 0		8	43057	42930
Mar. 1	9 59	-	10 18		8	43062	42924
2	9 52	-	10 13		8	43071	42926
Mar. 3	10 21	-	10 39		8	43065	42927
4	12 39	-	12 57		8	43059	42927
6	16 49	-	17 6		8	43083	42925
7	10 24	-	10 50		8	43053	42925
8	10 37	-	10 56		8	43054	42928
9	10 53	-	11 30		4	43046	42927
10	10 21	-	10 44		8	43054	42927
11	10 13	-	10 37		8	43055	42926
13	16 18	-	16 35		8	43067	42924
14	9 59	-	10 21		8	43052	42925
15	10 31	-	10 53		8	43048	42924
16	10 37	-	10 54		8	43054	42924
17	10 27	-	10 53		8	43043	42930
18	10 24	-	10 51		8	43055	42926
20	15 55	-	16 20		8	43066	42927
21	10 20	-	10 44		6	43048	42925
22	10 19	-	10 50		8	43056	42932
23	10 41	-	10 50		4	43055	42928
	11 28	-	11 49		4	43055	42930
24	10 31	-	10 52		8	43050	42929
25	10 20	-	10 43		8	43040	42928
27	16 9	-	16 40		8	43072	42925
28	10 27	-	10 53		8	43052	42927
	16 15	-	16 37		8	43158	42928
29	15 16	-	15 42		8	43128	42932
30	10 20	-	10 48		8	43070	42927
31	10 18	-	10 42		8	43059	42928
April 1	10 15	-	10 40		8	43057	42928
3	20 6	-	20 20		8	43086	42929
4	10 23	-	11 15		8	43055	42926
5	10 38	-	10 53		8	43057	42929
6	10 27	-	10 45		8	43056	42927
8	10 29	-	10 42		6	43049	42925
10	10 23	-	10 49		8	43059	42929
11	16 10	-	16 33		8	43086	42928
12	10 37	-	10 53		8	43059	42925
13	14 49	-	15 7		8	43056	42924
14	10 35	-	10 50		8	43043	42925
15	10 21	-	10 44		8	43054	42927
18	9 24	-	9 48		8	43076	42929
19	9 22	-	9 55		8	43073	42930
20	8 58	-	9 18		8	43074	42925
21	9 19	-	9 42		8	43068	42927
22	10 36	-	10 57		8	43059	42926
24	15 6	-	15 28		8	43069	42923
25	9 24	-	9 54		8	43085	42923
26	9 35	-	9 52		8	43084	42927
27	14 19	-	14 44		8	43068	42926
28	11 32	-	11 52		8	43055	42925
29	9 50	-	10 10		8	43050	42924
May 1	15 25	-	15 43		8	43148	42924
2	9 39	-	9 58		8	43059	42925
3	14 13	-	14 32		8	43087	42925
4	9 40	-	9 55		8	43069	42928
5	11 40	-	11 55		8	43054	42924
6	9 25	-	9 47		8	43062	42926
9	9 26	-	9 47		8	43065	42925
10	9 39	-	9 59		8	43059	42925
11	9 40	-	9 58		8	43064	42925
12	9 57	-	10 12		8	43051	42921
13	9 40	-	9 57		8	43065	42925
May 15	13 53	-	14 15		8	43065	42921
16	9 44	-	10 3		8	43039	42923
17	9 1	-	9 31		10	43056	42924
	14 35	-	15 0		8	43072	42919
18	9 41	-	10 1		8	43032	42921
19	10 39	-	10 58		8	43047	42923
20	9 43	-	10 1		8	43063	42925
22	14 33	-	15 6		8	43086	42922
23	9 44	-	10 3		8	43053	42921
24	9 46	-	10 8		8	43046	42923
25	9 52	-	10 14		8	43054	42918
26	9 52	-	10 11		8	43048	42922
27	10 20	-	10 41		7	43048	42918
30	15 3	-	15 25		8	43072	42921
31	9 44	-	10 0		8	43056	42924
June 1	9 50	-	10 8		8	43053	42922
2	9 46	-	10 2		8	43061	42924
3	9 43	-	10 2		8	43057	42924
5	9 24	-	9 54		8	43064	42926
	11 32	-	11 52		8	43051	42926
	15 13	-	15 29		8	43085	42930
6	9 48	-	10 3		8	43062	42926
7	9 16	-	9 48		8	43063	42927
8	9 30	-	9 51		8	43053	42925
9	9 47	-	10 5		8	43061	42926
10	9 45	-	10 4		8	43044	42926
12	14 27	-	14 45		8	43059	42925
13	9 28	-	10 1		8	43057	42930
14	9 23	-	9 53		8	43037	42926
	14 32	-	14 51		8	43118	42928
15	9 54	-	10 18		8	43058	42925
16	9 46	-	10 17		8	43072	42925
17	9 47	-	10 4		8	43067	42927
19	19 3	-	19 23		8	43082	42926
20	9 52	-	10 8		8	43064	42926
21	15 14	-	15 43		8	43090	42927
22	13 44	-	14 9		8	43055	42928
23	10 42	-	10 50		4	43062	42930
	11 33	-	11 44		4	43067	42930
24	10 44	-	10 58		8	43061	42929
26	18 26	-	18 46		8	43073	42928
27	14 40	-	15 3		8	43081	42925
28	10 17	-	10 39		8	43058	42928
29	10 38	-	10 56		8	43062	42926
30	10 57	-	11 23		8	43056	42926
July 1	9 44	-	10 0		8	43054	42926
3	10 38	-	10 52		3	43045	42928
	11 43	-	11 55		4	43057	42926
	15 44	-	15 53		4	43131	42926
4	10 30	-	10 47		8	43066	42926
6	9 44	-	10 25		8	43062	42926
7	14 6	-	14 44		10	43076	42926
8	9 51	-	10 17		8	43071	42925
10	10 36	-	10 54		8	43054	42926
11	10 10	-	10 29		8	43043	42928
12	9 32	-	9 53		8	43059	42927
13	10 17	-	10 43		8	43055	42926
14	9 51	-	10 14		8	43054	42926
15	10 8	-	10 33		8	43054	42925
17	16 11	-	16 33		8	43079	42925

June 5. Temperature raised to 21°·0.

TABLE XV. - RESULTS OF THE DETERMINATIONS OF THE ABSOLUTE VALUE OF VERTICAL INTENSITY FROM OBSERVATIONS MADE WITH THE DYE COIL MAGNETOMETER IN THE MAGNETIC PAVILION AT ABINGER, WITH THE DEDUCED VALUES OF THE BASE-LINE OF THE VERTICAL INTENSITY MAGNETOGRAMS

Universal Time				No. of Obs.	Observed Vertical Intensity	Deduced Value of Base Line
	h m		h m		Y	Y
July 18	10 18	-	11 17	8	43053	42926
19	10 31	-	11 37	8	43055	42924
20	9 20	-	10 19	8	43046	42925
21	10 30	-	10 58	8	43061	42927
22	9 17	-	9 43	8	43062	42925
24	15 50	-	16 12	8	43078	42927
25	9 43	-	10 12	8	43069	42925
26	11 6	-	11 46	8	43054	42925
27	10 5	-	10 23	8	43055	42923
28	9 50	-	10 25	8	43057	42928
29	9 24	-	9 51	8	43064	42928
31	19 55	-	20 35	8	43078	42927
Aug. 1	9 37	-	9 58	4	43072	42930
	10 39	-	10 47	4	43064	42927
2	9 59	-	10 29	8	43063	42928
3	10 0	-	10 21	8	43060	42927
4	10 33	-	11 44	8	43061	42927
5	10 5	-	10 22	8	43064	42928
8	15 53	-	16 15	8	43063	42929
9	10 8	-	10 37	8	43059	42930
10	10 11	-	10 49	8	43057	42928
11	10 4	-	10 27	8	43057	42928
14	19 53	-	20 14	6	43083	42928
15	10 35	-	11 11	8	43064	42927
16	9 47	-	10 19	8	43054	42926
17	10 21	-	10 41	8	43059	42924
18	9 49	-	10 11	8	43068	42923
19	9 35	-	10 18	8	43060	42926
21	18 56	-	20 2	8	43080	42926
22	14 37	-	15 12	10	32161	42929
23	9 44	-	10 22	8	43069	42926
24	10 5	-	10 36	8	43072	42924
25	10 39	-	11 25	8	43074	42926
26	15 16	-	15 59	8	43097	42928
28	19 39	-	19 56	8	43088	42924
29	9 55	-	10 25	8	43067	42927
30	9 50	-	10 18	8	43076	42927
31	9 51	-	10 14	8	43070	42927
Sept. 1	10 18	-	10 51	8	43065	42927
2	9 51	-	10 22	8	43063	42928
4	16 59	-	17 19	8	43085	42928
5	10 9	-	10 30	8	43072	42929
6	10 16	-	10 52	8	43066	42929
7	10 28	-	10 53	8	43054	42926
8	10 3	-	10 25	8	43064	42927
9	10 32	-	10 53	8	43067	42928
Sept. 11	16 1	-	16 22	8	43078	42925
12	10 19	-	10 53	8	43070	42930
13	10 20	-	10 48	8	43063	42928
14	10 36	-	10 59	8	43058	42929
15	9 46	-	10 14	8	43060	42930
16	10 11	-	10 34	8	43055	42930
18	16 17	-	16 39	8	43090	42927
19	10 25	-	10 47	8	43073	42927
20	10 10	-	10 33	8	43081	42926
21	9 50	-	10 20	8	43074	42928
22	10 15	-	10 40	8	43060	42925
23	9 44	-	10 7	8	43064	42924
25	16 17	-	16 39	8	43083	42926
26	15 28	-	15 48	8	43082	42927
27	11 29	-	11 51	8	43059	42927
28	10 37	-	10 59	8	43059	42927
29	10 13	-	10 53	8	43064	42930
30	10 8	-	10 29	8	43062	42930
Oct. 2	18 39	-	18 58	8	43076	42931
3	9 50	-	10 20	8	43069	42931
4	10 11	-	10 58	8	43091	42930
5	10 2	-	10 27	8	43080	42928
6	8 50	-	9 40	8	43079	42931
7	8 58	-	9 27	8	43087	42930
9	16 30	-	16 45	8	43111	42930
10	9 45	-	10 9	8	43082	42929
11	9 20	-	9 59	8	43078	42931
12	10 1	-	10 33	8	43075	42927
13	10 5	-	10 43	8	43073	42927
14	10 7	-	10 28	8	43079	42928
16	16 30	-	16 57	8	43149	42930
17	14 15	-	14 42	8	43103	42931
18	15 39	-	15 56	8	43146	42933
19	9 32	-	9 52	8	43102	42933
20	8 57	-	9 25	8	43096	42931
21	10 2	-	10 33	8	43077	42931
23	16 11	-	16 26	8	43119	42931
24	8 55	-	9 19	8	43083	42928
25	9 33	-	10 9	8	43091	42931
26	13 40	-	14 15	8	43081	42929
27	9 25	-	10 10	8	43079	42931
28	9 22	-	9 47	8	43077	42929
30	16 44	-	17 20	8	43098	42929
31	9 37	-	9 56	8	43086	42933
Nov. 1	9 17	-	9 42	8	43079	42929
2	9 52	-	10 18	8	43082	42931
Nov. 3	9 32	-	9 56	8	43077	42928
4	9 3	-	9 48	8	43085	42932
6	8 19	-8	8 59	8	43086	42931
7	10 0	-	10 25	8	43076	42927
8	9 50	-	10 19	8	43086	42930
9	10 10	-	10 33	8	43077	42931
10	10 5	-	10 24	8	43079	42930
11	10 29	-	10 45	8	43077	42931
13	16 2	-	16 19	8	43122	42929
14	10 20	-	10 45	8	43085	42929
15	9 38	-	9 54	8	43088	42929
16	9 57	-	10 16	8	43090	42929
17	10 16	-	10 56	8	43076	42928
18	10 9	-	10 27	8	43083	42928
20	17 46	-	18 14	8	43090	42930
21	10 24	-	10 43	8	43091	42933
22	10 14	-	10 33	8	43087	42931
23	12 29	-	12 47	8	43085	42927
	16 35	-	16 57	8	43085	42925
24	10 25	-	10 47	8	43080	42931
25	10 43	-	10 58	6	43083	42929
27	16 57	-	17 30	8	43095	42929
28	10 25	-	10 49	8	43081	42931
29	10 30	-	10 49	8	43079	42951
30	10 21	-	10 36	8	43080	42955
Dec. 1	10 13	-	10 29	8	43075	42955
2	10 11	-	10 27	8	43077	42956
4	15 5	-	15 19	8	43085	42955
5	10 22	-	10 41	8	43087	42958
6	11 45	-	12 13	8	43087	42956
7	11 54	-	12 16	8	43090	42956
8	10 48	-	11 15	8	43098	42956
9	10 19	-	10 38	8	43079	42950
11	15 6	-	15 20	8	43093	42954
12	10 22	-	10 38	8	43081	42955
13	10 30	-	10 53	8	43085	42957
14	12 33	-	12 46	8	43083	42957
15	10 16	-	10 39	8	43085	42956
16	10 35	-	10 51	7	43079	42957
18	15 19	-	15 40	8	43090	42956
19	10 24	-	10 45	8	43082	42956
20	10 12	-	10 28	8	43084	42958
21	9 59	-	10 26	8	43079	42956
22	10 0	-	10 21	8	43081	42954
24	10 36	-	10 55	8	43086	42955
27	9 38	-	10 10	8	43075	42954
28	10 26	-	10 44	8	43084	42956
29	11 30	-	11 49	8	43085	42954
30	15 58	-	16 30	8	43092	42952

Nov. 23. Temperature out of Control. Interruption of Electricity Supply.

Breaks in the columns, other than those occurring at the end of each month, signify changes of Base-line values.

TABLE XV(A). - DAILY VALUE OF THE BASE-LINE OF THE VERTICAL INTENSITY MAGNETOGRAMS AT THE ABINGER MAGNETIC STATION, DEDUCED FROM OBSERVATIONS OF MAGNETIC DIP MADE WITH THE EARTH INDUCTOR

Day	January	February	March	April	May	June	July	August	September	October	November	December
	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
1	-	42990	42932	42932	42938	42930	42938	42932	42930	-	42935	42952
2	42957	985	918	-	928	925	-	927	924	42936	939	957
3	-	990	938	929	-	923	-	929	-	931	932	-
4	959	988	934	936	933	-	929	933	928	-	931	957
5	959	-	-	934	942	936	924	937	926	923	-	952
6	954	984	928	928	936	932	-	-	932	926	937	957
7	957	987	930	-	-	936	939	-	928	938	930	957
8	-	986	934	941	931	926	937	940	929	-	930	959
9	956	987	929	-	932	931	-	934	925	933	927	956
10	972	985	935	932	938	923	937	932	-	932	928	-
11	972	983	933	940	924	-	929	933	925	930	932	962
12	984	-	-	933	929	936	936	-	926	934	-	956
13	982	988	932	929	930	925	926	-	934	933	938	952
14	987	983	927	929	-	934	931	935	929	934	936	957
15	-	992	937	936	927	939	923	925	932	-	930	948
16	982	987	935	-	926	935	-	934	924	931	927	967
17	987	-	940	934	926	934	930	925	-	932	934	-
18	995	958	945	935	930	-	928	934	927	934	935	-
19	990	-	-	922	925	934	934	927	925	931	-	954
20	998	940	935	934	927	937	930	-	929	934	929	955
21	982	941	935	942	-	944	931	940	922	932	929	961
22	-	952	929	929	926	926	937	925	925	-	932	960
23	984	939	936	-	924	932	-	932	926	936	-	-
24	988	920	930	932	924	934	931	927	-	933	934	-
25	989	937	929	930	920	-	932	934	930	932	931	-
26	987	-	-	930	931	923	-	926	927	928	-	-
27	986	-	927	938	925	929	941	-	932	933	-	952
28	989	936	927	927	-	924	930	931	931	930	928	956
29	-		935	935	-	936	930	932	933	-	955	959
30	986		931	-	924	932	-	926	935	933	957	953
31	987		930		923		935	928		931		-

June 5. Temperature raised to 21·0°.

An adjustment of the bearings of the axis of the rotating coil was made on February 18, March 27, July 31 and November 7.

TABLE XVI(A). - MEAN ANNUAL VALUES OF MAGNETIC ELEMENTS DETERMINED AT THE ROYAL OBSERVATORY, GREENWICH, BETWEEN THE YEARS 1818-1925

Year	Declination West	Horizontal Intensity	Vertical Intensity	Dip	Year	Declination West	Horizontal Intensity	Vertical Intensity	Dip
	° ′	C.G.S. Unit	C.G.S. Unit	° ′		° ′	C.G.S. Unit	C.G.S. Unit	° ′
1818	24 19 †	..	..	..	1882	18 22·3	0·1806	0·4375	67 34·2
1819	24 21	..	..	..	1883	18 15·0	0·1812	0·4381	67 31·7
1820	24 21	..	..	..	1884	18 7·6	0·1814	0·4379	67 29·7
1841	23 16·2	..	..	..	1885	18 1·7	0·1817	0·4380	67 28·0
1842	23 14·6	..	..	..	1886	17 54·5	0·1818	0·4377	67 27·1
1843	23 11·7	..	..	69 0·6	1887	17 49·1	0·1819	0·4380	67 26·6
1844	23 15·3	..	..	69 0·3	1888	17 40·4	0·1822	0·4383	67 25·6
1845	22 56·7	..	..	68 57·5	1889	17 34·9	0·1823	0·4380	67 24·3
1846	22 49·6	0·1731	..	68 58·1	1890	17 28·6	0·1825	0·4381	67 23·0
1847	22 51·3	0·1736	..	68 59·0	1891	17 23·4	0·1827	0·4380	67 21·5
1848	22 51·8	0·1731	..	68 54·7	1892	17 17·4	0·1829	0·4379	67 20·0
1849	22 37·8	0·1733	..	68 51·3	1893	17 11·4	0·1831	0·4373	67 17·9
1850	22 23·5	0·1738	..	68 46·9	1894	17 4·6	0·1831	0·4374	67 17·4
1851	22 18·3	0·1744	..	68 40·4	1895	16 57·4	0·1834	0·4378	67 16·1
1852	22 17·9	0·1745	..	68 42·7	1896	16 51·7	0·1835	0·4382	67 15·1
1853	22 10·1	0·1748	..	68 44·6	1897	16 45·8	0·1838	0·4377	67 13·5
1854	22 0·8	0·1749	..	68 47·7	1898	16 39·2	0·1840	0·4377	67 12·1
1855	21 48·4	0·1756	..	68 44·6	1899	16 34·2	0·1843	0·4380	67 10·5
1856	21 43·5	0·1759	..	68 43·5	1900	16 29·0	0·1846	0·4380	67 8·8
1857	21 35·4	0·1769	..	68 31·1	1901	16 26·0	0·1850	0·4381	67 6·4
1858	21 30·3	0·1762	..	68 28·3	1902	16 22·8	0·1852	0·4377	67 3·8
1859	21 23·5	0·1761	..	68 26·9	1903	16 19·1	0·1852	0·4368	67 1·2
1860	21 14·3	..	..	68 30·1	1904	16 15·0	0·1854	0·4359	66 57·6
1861	21 5·5	0·1773	..	68 24·6	1905	16 9·9	0·1854	0·4355	66 56·3
					1906	16 3·6	0·1854	0·4353	66 55·6
1861		0·1759		68 15·8	1907	15 59·8	0·1855	0·4357	66 56·2
1862	20 52·6	0·1763	0·4403	68 9·6	1908	15 53·5	0·1854	0·4356	66 56·3
1863	20 45·9	0·1764	0·4396	68 7·0	1909	15 47·6	0·1854	0·4348	66 54·1
1864	..	0·1767	0·4393	68 4·1	1910	15 41·2	0·1855	0·4345	66 52·8
1865	20 33·9	0·1767	0·4388	68 2·7	1911	15 33·0	0·1855	0·4342	66 52·1
1866	20 28·0	0·1773	0·4397	68 1·3	1912	15 24·3	0·1855	0·4340	66 51·8
1867	20 20·5	0·1777	0·4392	67 57·2	1913	15 15·2	0·1853	0·4333	66 50·5
1868	20 13·1	0·1779	0·4395	67 56·5					
1869	20 4·1	0·1782	0·4396	67 54·8	1914	15 6·3	0·1853	0·4333	66 50·8
1870	19 53·0	0·1784	0·4392	67 52·5	1915	14 56·5	0·1851	0·4331	66 51·6
1871	19 41·9	0·1786	0·4389	67 50·3	1916	14 46·9	0·1848	0·4326	66 52·2
1872	19 36·8	0·1789	0·4383	67 47·8	1917	14 37·1	0·1848	0·4330*	66 53·0
1873	19 33·4	0·1793	0·4386	67 45·8	1918	14 27·8	0·1846	0·4325	66 52·8
1874	19 28·9	0·1797	0·4387	67 43·6	1919	14 18·2	0·1845	0·4324	66 53·3
1875	19 21·2	0·1797	0·4383	67 42·4	1920	14 8·6	0·1845	0·4325	66 53·6
1876	19 8·3	0·1799	0·4383	67 41·0	1921	13 57·6	0·1845	0·4322	66 53·0
1877	18 57·2	0·1800	0·4381	67 39·7	1922	13 46·7	0·1844	0·4318	66 52·3
1878	18 49·3	0·1802	0·4382	67 38·2	1923	13 35·1	0·1843	0·4314	66 51·9
1879	18 40·5	0·1805	0·4382	67 37·0	1924	13 22·8	0·1843	0·4311	66 51·6
1880	18 32·6	0·1805	0·4380	67 35·7	1925	13 9·9	0·1841	0·4308	66 51·4
1881	18 27·1	0·1807	0·4379	67 34·7					

In 1818, 1819 and 1820 numerous observations of Declination were made with a Dolland needle.

In 1861 new Unifilar Apparatus for absolute Horizontal Intensity 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 complete suspension of Declination Observations. From 1914 the Dip was determined with an Inductor.

N.B. - In the above table the values of Vertical Intensity for the years 1862-1913 inclusive were computed from the corresponding values of Horizontal Intensity 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 Intensity.

† Mean of seven months June to December. * Mean of ten months, March to December.

TABLE XVI(B). - MEAN ANNUAL VALUES OF MAGNETIC ELEMENTS DETERMINED AT THE ABINGER MAGNETIC STATION, FOR THE YEARS 1925-1939

Year	Declination West	Horizontal Intensity	Vertical Intensity	Inclination
	° ′	C.G.S. Unit	C.G.S. Unit	° ′
1925	13 22·7	0·18597	0·42946	66 35·1
1926	13 10·4	0·18581	0·42947	66 36·3
1927	12 58·4	0·18575	0·42932	66 36·2
1928	12 47·0	0·18564	0·42941	66 37·3
1929	12 35·8	0·18555	0·42918	66 37·2
1930	12 24·6	0·18542	0·42924	66 38·2
1931	12 13·7	0·18543	0·42923	66 38·1
1932	12 2·6	0·18536	0·42940	66 39·1
1933	11 51·7	0·18532	0·42942	66 39·4
1934	11 41·1	0·18533	0·42955	66 39·7
1935	11 30·3	0·18527	0·42981	66 40·9
1936	11 20·0	0·18524	0·43007	66 41·8
1937	11 10·4	0·18522	0·43031	66 42·7
1938	11 1·4	0·18522	0·43050	66 43·2
1939	10 51·9	0·18528	0·43074	66 43·5

The values of Inclination are computed from the corresponding values of horizontal and vertical Intensity.

Commencing with the years 1927 and 1929 respectively, the values of horizontal and vertical intensity are based upon observations with Coil-magnetometers.

ROYAL OBSERVATORY, GREENWICH.

Results of Meteorological Observations

1939

TABLE XVII. - DAILY RESULTS OF THE METEOROLOGICAL OBSERVATIONS

MONTH and DAY 1939	BAROMETER	TEMPERATURE							Difference between the Air Temperature and Dew Point Temperature			Degree of Humidity (Saturation = 100)	TEMPERATURE			Rain collected in Osage 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	29·416	49·3	38·1	11·2	44·3	+ 5·7	42·7	40·7	3·6	8·5	0·7	87	56·7	34·8	45·2	0·178	0·7	7·9
2	29·147	41·3	35·4	5·9	38·8	+ 0·4	37·1	34·5	4·3	6·6	2·7	84	42·0	29·6	45·1	0·032	0·0	7·9
3	29·576	37·8	30·0	7·8	34·9	- 3·4	32·9	29·5	5·4	7·9	2·2	79	42·7	24·9	45·0	0·000	0·0	7·9
4	29·307	45·4	30·2	15·2	37·7	- 0·6	37·1	36·2	1·5	3·3	0·6	94	51·7	25·1	45·0	0·206	0·0	8·0
5	29·649	36·6	28·9	7·7	33·8	- 4·4	32·1	29·1	4·7	9·1	0·9	82	40·9	24·4	44·7	0·000	0·8	8·0
6	29·970	33·8	24·5	9·3	29·1	- 9·0	28·4	27·2	1·9	3·1	0·0	92	30·3	19·0	44·7	0·016	0·0	8·0
7	29·861	52·0	33·8	18·2	43·5	+ 5·5	42·2	40·5	3·0	5·7	1·0	89	50·6	31·4	44·6	0·359	0·0	8·0
8	29·821	54·2	49·3	4·9	51·4	+13·5	48·8	46·0	5·4	8·4	3·1	82	67·3	45·0	44·4	0·000	0·4	8·1
9	29·631	51·6	47·0	4·6	49·2	+11·3	46·5	43·4	5·8	8·1	3·2	80	57·6	42·0	44·4	0·012	0·0	8·1
10	29·644	47·0	40·4	6·6	43·8	+ 5·9	41·3	37·9	5·9	13·2	0·7	79	54·5	38·2	44·3	0·073	0·0	8·1
11	29·272	47·8	38·4	9·4	44·6	+ 6·7	42·4	39·5	5·1	10·8	0·0	82	59·1	31·3	44·7	0·081	0·4	8·2
12	29·265	42·3	34·1	8·2	37·5	- 0·4	35·5	32·1	5·4	10·5	2·6	81	56·5	27·1	44·7	0·000	4·7	8·2
13	29·416	45·3	30·0	15·3	37·0	- 1·0	34·8	31·0	6·0	10·1	0·7	79	58·6	23·2	44·8	0·000	5·8	8·2
14	29·391	52·7	28·7	24·0	37·2	- 0·8	36·4	35·1	2·1	3·3	0·0	92	50·3	22·0	44·7	0·252	0·0	8·3
15	29·088	54·8	49·0	5·8	52·4	+14·3	49·9	47·3	5·1	10·4	1·4	83	66·1	45·3	44·6	0·678	1·4	8·3
16	28·983	51·9	44·2	7·7	48·5	+10·2	46·0	43·2	5·3	11·8	1·6	81	64·6	40·1	44·6	0·362	1·7	8·3
17	29·063	53·3	46·5	6·8	49·8	+11·3	48·1	46·2	3·6	6·6	1·4	87	55·9	42·1	44·7	0·157	0·0	8·4
18	29·016	50·9	48·0	2·9	49·6	+11·0	48·2	46·7	2·9	4·4	1·0	90	62·3	44·0	44·9	0·220	0·3	8·4
19	29·482	49·7	45·2	4·5	47·6	+ 8·9	46·5	45·2	2·4	5·0	0·5	91	51·3	41·1	45·0	0·094	0·0	8·5
20	29·360	51·4	43·5	7·9	47·7	+ 8·9	46·7	45·5	2·2	4·4	0·9	92	61·8	36·5	45·2	0·301	0·3	8·5
21	29·183	51·6	45·9	5·7	47·3	+ 8·5	46·8	46·2	1·1	3·2	0·4	96	56·6	33·5	45·4	0·115	0·0	8·5
22	29·341	48·4	44·1	4·3	46·3	+ 7·5	44·2	41·6	4·7	8·2	2·0	84	55·4	38·8	45·7	0·059	0·6	8·6
23	29·220	48·0	41·7	6·3	45·4	+ 6·5	43·3	40·6	4·8	8·7	2·2	83	51·4	35·8	45·7	0·082	0·0	8·7
24	29·847	42·4	32·5	9·9	39·1	+ 0·2	36·1	30·9	8·2	11·4	1·6	73	57·6	27·7	45·7	0·000	3·8	8·7
25	29·175	36·6	32·1	4·5	33·4	- 5·7	33·1	32·6	0·8	3·2	0·0	97	34·2	28·3	45·6	0·922	0·0	8·8
26	29·044	37·2	34·4	2·8	36·0	- 3·3	35·4	34·3	1·7	3·8	0·7	94	42·9	31·0	45·3	0·000	0·0	8·8
27	29·368	39·4	34·5	4·9	36·9	- 2·6	34·9	31·5	5·4	8·3	1·7	80	51·9	28·2	45·0	0·007	0·1	8·9
28	29·754	40·1	33·9	6·2	36·8	- 2·8	35·2	32·6	4·2	9·1	0·8	84	68·1	29·8	44·9	0·027	3·4	8·9
29	29·806	39·7	37·2	2·5	38·6	- 1·1	35·4	30·0	8·6	12·2	2·3	70	44·8	35·2	44·6	0·000	0·0	9·0
30	29·867	39·0	36·5	2·5	37·6	- 2·1	34·8	30·0	7·6	8·1	5·7	74	45·7	33·6	44·6	0·000	0·0	9·0
31	29·917	38·1	35·4	2·7	36·8	- 2·9	34·3	29·9	6·9	8·0	4·4	75	71·3	33·4	44·2	0·000	1·8	9·1
Means	29·445	45·5	37·9	7·6	41·7	+ 3·1	39·9	37·3	4·4	7·6	1·5	84·4	53·6	33·0	44·9	Sum 4·233	0·8	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) and deduced from the autographic 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 autographic 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 29·445 in., being 0·356 in. lower that the average for the 65 years, 1841-1905.

TEMPERATURE OF THE AIR.

The highest in the month was 54°·8 on January 15; the lowest in the month was 24°·5 on January 6; and the range was 30°·3.

The mean of all the highest daily readings in the month was 45°·5, being 2°·4 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 3°·7 higher than the average for the 65 years, 1841-1905. †

The mean of the daily ranges was 7°·6, being 1°·3 less than the average for the 65 years, 1841-1905. †

The mean for the month was 41°·7, being 3°·1 higher than the average for the 65 years, 1841-1905.

† The average has been corrected for the presumed effect of the change of thermometer screen on 1938 January 1. (See Introduction p. xvii).

TABLE XVII. - DAILY RESULTS OF THE METEOROLOGICAL OBSERVATIONS

MONTH and DAY 1939	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.	OSLER'S General Direction P.M.	OSLER'S Pressure on the Square Foot Greatest	OSLER'S Pressure on the Square Foot Mean of 24 hourly Measures	Robinson's Horizontal Movement of the Air	CLOUDS AND WEATHER 0h to 6h	6h to 12h	12h to 18h	18h to 24h
	hours		hours				lbs.	lbs.	miles				
Jan. 1	4·1	0·30	4·1	0·30	SSW:WSW	SW:SSW	3·4	0·28	371	d_o d_o r_o	r_o d *Nbst* c *Stcu*	c *Stcu* b	b c b
2	9·0	0·65	9·0	0·65	WSW:WNW	NW	2·4	0·25	405	b c ir	c *Ast* m *Nbst* d_o	c *Nbst* d m	c b c
3	0·0	0·00	0·0	0·00	W:WNW	NW:SW	1·1	0·08	306	c b x c	c s_om b *Ast Frst* c *Stcu*	c *Stcu* m_o	bc c
4	3·5	0·25	3·5	0·25	SE:SSW	W:NNW	1·2	0·05	278	c s r	rr ir m *Nbst*	c ir c m	c ir
5	7·7	0·56	0·0	0·00	NNW	NW:WSW	1·7	0·13	298	c b x m	b *Frst* x m	b c *Frst* x m	b m f *Cist lu-ha*
6	0·0	0·00	0·0	0·00	SW:Calm	Calm:SSE	0·0	0·00	196	b x f	ffx	ff	c m d_o
7	0·0	0·00	0·0	0·00	S:SSW	SW	2·3	0·25	370	c d rr_o	c *Nbst* r_o	r_o c	c
8	1·3	0·10	1·3	0·10	SW	SW	5·3	0·92	536	c d_o	c *Stcu Cicu Frst*	c p_o c	c d_o c
9	4·8	0·35	4·8	0·35	SW	SW:WSW	4·7	0·91	502	c b	c *Stcu Nbst* d_o	c ir_o c *Stcu*	c
10	0·0	0·00	0·0	0·00	WSW:Calm	NE:E	1·3	0·07	249	c b c	c m *Stcu Ast*	c m_o *Ast*	c m_o d_o ir
11	6·4	0·47	6·0	0·44	SSE:SSW:SW	SW:SSW	5·0	0·60	392	c r c	c *Stcu Frst*	c *Ci Ast* b	b c
12	12·4	0·90	11·5	0·83	WSW	WSW:SW	0·5	0·06	280	c	c m *Stcu* b	b *Cist* m_o	b x
13	10·9	0·79	10·3	0·75	SW:SSW	WSW:SSW	1·3	0·09	280	b bc x	b m_o *Cicu*	b m_o *Frcu*	b f x
14	0·0	0·00	0·0	0·00	Calm	Calm:SE:SSW	2·5	0·11	224	b x f Fe Fe	Fe Fe c f *Ast*	c f m *St* id_o r	r c ir
15	2·4	0·18	1·3	0·10	SW	SW:SSW	8·6	1·50	551	c ir_o q ir	ir *Nbst* c *Frcu*	c	c rr_o q rR
16	6·0	0·45	4·8	0·36	SW	SW	11·0	1·37	534	c bc c	c r *Nbst* bc qp bc *Acu*	c *Stcu Frst* q	c rRc b
17	5·6	0·42	5·3	0·40	SW:SSW	S:SSW	4·8	0·56	391	bc p_o	bc c d_o *Nbst*	c $d_o$$d_o$ *St* r	rc b
18	0·0	0·00	0·0	0·00	SSW:S	S:SSW	3·8	0·29	366	b c r_o P	c ir id	c id c	c ir
19	0·4	0·03	0·2	0·02	SSW:NW:WNW	WSW:SW:SSW	1·0	0·07	285	c ir c	c m	c m	c m_o rr
20	2·5	0·19	2·1	0·16	S:SSW	S:SW	2·1	0·11	288	rr c	c m_o *Stcu Cicu Nbst* r	r c rr	rr c
21	1·7	0·13	0·7	0·06	Calm:S	SW:N:NW	1·4	0·05	257	c	c rr *Nbst*	c r c	c f p
22	3·2	0·24	2·7	0·21	NW:W:SW	SSW:SW	5·6	0·39	396	c	c *Ci* c *Ast*	c d c r	c r c
23	11·5	0·88	11·3	0·87	SW:W:NW	NW	5·1	0·93	501	c r c	c *Nbst* r	r ir *Nbst* c *Stcu*	c b c b
24	1·4	0·11	0·1	0·01	NW	NW:SSW	4·0	0·22	309	b x m_o	b bc $m_o$$z_o$	bc c *Ci Frst* m_o	cf c m
25	1·5	0·12	0·9	0·07	SE:ESE	E:ENE	3·0	0·18	309	c	c r ss	ss	rsrs c
26	0·0	0·00	0·0	0·00	ENE:NE	NE:NNE	1·1	0·21	358	c	c *Stcu*	c	c r_o s_o
27	2·9	0·22	2·3	0·17	NNE:NE	NE:NNE	0·7	0·12	296	c id_o	id_o r_o *Nbst*	c bc b	b c x m_o
28	0·0	0·00	0·0	0·00	NNE:NE	NE:ENE	0·7	0·09	274	c s c	c bc *Acu Cist Frst*	bc c	c d_o
29	0·0	0·00	0·0	0·00	E	ENE:E	5·5	1·03	473	d_o c	c	c	c
30	0·1	0·01	0·0	0·00	E	E	3·5	0·63	432	c	c *Stcu* m_o	c *Stcu*	c
31	2·2	0·18	0·6	0·05	E	E	3·4	0·33	373	c	c *Stcu*	c *Stcu* b c	c
Means	3·3	0·24	2·7	0·20	...	...	...	0·38	357				
Number of Column for Reference	19	20	21	22	23	24	25	26	27	28	29	30	31

The mean *Temperature of Evaporation* for the month was 39°·9, being 2°·7 higher than
The mean *Temperature of the Dew Point* for the month was 37°·3, being 2°·2 higher than
The mean *Degree of Humidity* for the month was 84·4, being 2·4 less than
The mean *Elastic Force of Vapour* for the month was 0·223 in., being 0·018 in. greater than
} the average for the 65 years, 1841-1905.

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

The mean proportion of *Sunshine for the month* (constant sunshine being represented by 1) was 0·101. The maximum daily amount of *Sunshine* was 5·8 hours on January 13.

The highest reading of the *Solar Radiation Thermometer* was 71°·3 on January 31; and the lowest reading of the *Terrestrial Radiation Thermometer* was 19°·0 on January 6.

The *Proportions of Wind* referred to the cardinal points were N.12, E.20, S.33, W.30. Calm or nearly calm conditions 5, the whole month being represented by 100.

The *Greatest Pressure of the Wind* in the month was 11·0 lbs. on the square foot on January 16. The mean daily *Horizontal Movement of the Air* for the month was 357 miles; the greatest daily value was 551 miles on January 15, and the least daily value was 196 miles on January 6.

Rain (0·005 in. or over) fell on 21 days in the month, amounting to 4·233 in., as measured by gauge No.6 partly sunk below the ground; being 2·352 in. greater than the average fall for the 65 years, 1841-1905.

TABLE XVII. - DAILY RESULTS OF THE METEOROLOGICAL OBSERVATIONS

MONTH and DAY 1939	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	29·900	39·4	33·9	5·5	36·3	- 3·3	34·4	31·1	5·2	8·0	2·2	81	66·7	29·3	44·0	0·000	1·1	9·1
2	29·979	38·5	33·3	5·2	35·1	- 4·4	33·6	30·9	4·2	8·1	2·2	85	67·4	28·4	44·0	0·000	3·3	9·2
3	30·093	34·8	29·0	5·8	31·6	- 7·9	31·4	30·8	0·8	6·4	0·0	98	43·0	21·6	43·8	0·000	0·0	9·3
4	30·175	45·8	32·6	13·2	40·7	+ 1·2	39·3	37·4	3·3	7·7	0·3	87	53·9	32·0	43·8	0·000	0·0	9·3
5	30·152	49·7	33·8	15·9	40·9	+ 1·3	39·8	38·4	2·5	7·5	0·6	90	62·5	26·1	43·8	0·000	2·7	9·3
6	60·133	52·7	34·7	18·0	40·9	+ 1·3	39·1	36·5	4·4	12·3	1·4	84	84·0	24·7	43·7	0·003*	7·8	9·4
7	30·078	54·5	34·4	20·1	43·8	+ 4·3	40·2	34·9	8·9	20·1	2·3	71	95·4	24·0	43·7	0·043	6·9	9·5
8	30·064	49·9	46·0	3·9	48·0	+ 8·7	46·5	44·8	3·2	9·1	1·4	89	60·6	41·9	43·6	0·111	0·0	9·5
9	29·942	53·0	47·9	5·1	50·2	+11·1	47·1	43·5	6·7	14·2	2·2	78	81·6	44·1	43·7	0·071	2·4	9·6
10	30·223	55·8	51·5	4·3	53·6	+14·7	50·7	47·8	5·8	8·3	3·7	80	65·8	46·1	43·9	0·000	0·0	9·6
11	30·251	57·8	48·0	9·8	51·8	+13·0	49·3	46·6	5·2	10·8	3·1	82	93·7	45·0	44·1	0·000	3·7	9·7
12	29·955	54·3	41·3	13·0	48·6	+ 9·8	44·7	39·8	8·8	20·2	3·1	72	93·2	34·7	44·2	0·000	2·7	9·8
13	29·968	45·3	38·1	7·2	42·4	+ 3·4	38·9	33·6	8·8	12·6	5·2	70	59·3	31·8	44·6	0·002	0·5	9·8
14	30·325	46·8	35·8	11·0	42·0	+ 2·7	38·9	34·0	8·0	14·0	3·0	73	60·0	27·0	44·7	0·000	1·2	9·9
15	30·182	55·8	39·0	16·8	45·9	+ 6·5	43·3	40·0	5·9	11·4	1·8	80	89·5	32·6	44·7	0·000	5·5	10·0
16	30·052	50·1	38·3	11·8	45·3	+ 5·8	41·0	34·7	10·6	18·6	2·4	66	83·0	29·0	44·7	0·000	4·9	10·0
17	29·806	45·8	32·6	13·2	40·1	+ 0·5	38·1	35·1	5·0	11·1	0·8	82	83·0	26·0	44·6	0·042	1·0	10·1
18	29·808	46·8	37·9	8·9	43·1	+ 3·6	39·9	35·3	7·8	13·9	0·8	74	87·0	31·0	44·7	0·000	5·6	10·1
19	29·919	51·7	39·8	11·9	46·0	+ 6·5	42·9	38·8	7·2	13·0	3·4	76	90·6	33·8	44·7	0·000	3·4	10·2
20	30·133	48·0	31·8	16·2	39·3	- 0·2	37·2	33·9	5·4	9·7	1·6	81	76·5	24·9	44·6	0·000	1·4	10·3
21	29·932	52·0	30·3	21·7	39·9	+ 0·3	37·4	33·4	6·5	15·2	0·8	77	100·2	22·9	44·6	0·000	7·2	10·3
22	29·345	43·2	39·5	3·7	41·0	+ 1·3	39·2	36·7	4·3	8·6	1·5	84	58·8	34·3	44·3	0·148	0·0	10·4
23	29·025	50·4	36·2	14·2	42·8	+ 3·0	38·3	31·0	11·8	21·4	2·3	63	103·0	26·6	44·4	0·000	8·6	10·5
24	29·491	46·3	29·0	17·3	40·1	+ 0·1	36·9	31·6	8·5	14·7	1·5	71	72·0	21·8	44·2	0·005	3·6	10·5
25	29·605	46·8	37·6	9·2	42·5	+ 2·4	40·9	38·7	3·8	8·4	2·0	86	50·4	30·2	44·3	0·400	0·0	10·6
26	29·640	49·7	36·1	13·6	42·6	+ 2·4	39·3	34·3	8·3	16·8	2·6	72	97·3	29·9	44·1	0·000	7·0	10·7
27	29·750	50·0	34·9	15·1	41·8	+ 1·5	38·5	33·4	8·4	17·6	3·5	72	93·0	29·1	44·2	0·000	6·8	10·7
28	29·208	50·2	38·0	12·2	42·6	+ 2·3	40·7	38·0	4·6	9·2	3·3	84	78·0	32·4	44·0	0·247	0·7	10·8
Means	29·898	48·8	37·2	11·6	42·8	+ 3·3	40·3	36·6	6·2	12·5	2·1	78·9	76·8	30·8	44·2	Sum 1·072	3·1	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 autographic 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 be 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 autographic 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 20·898 in., being 0·089 in. higher than the average for the 65 years, 1841-1905.

TEMPERATURE OF THE AIR.

The highest in the month was 57°·8 on February 11; the lowest in the month was 29°·0 on February 3, 24; and the range was 28°·8.

The mean of all the highest daily readings in the month was 48°·8, being 3°·9 higher than the average for the 65 years, 1841-1905. †

The mean of all the lowest daily readings in the month was 37°·2, being 2°·5 higher than the average for the 65 years, 1841-1905. †

The mean of the daily ranges was 11°·6, being 1°·4 greater than the average for the 65 years, 1841-1905. †

The mean for the month was 42°·8, being 3°·3 higher than the average for the 65 years, 1841-1905.

† The average has been corrected for the presumed effect of the change of thermometer screen on 1938 January 1. (See Introduction p. xvii).

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

TABLE XVII. - DAILY RESULTS OF THE METEOROLOGICAL OBSERVATIONS

MONTH and DAY 1939	RECORD OF THE NIGHT SKY: POLARIS Duration	POLARIS Fraction of Total Exposure	δ URSAE MINORIS Duration	δ URSAE MINORIS Fraction of Total Exposure	WIND AS DEDUCED FROM SELF-REGISTERING ANEMOMETERS: OSLER'S General Direction A.M.	OSLER'S General Direction P.M.	OSLER'S Pressure on the Square Foot Greatest	OSLER'S Pressure on the Square Foot Mean of 24 Hourly Measures	Robinson's Horizontal Movement of the Air	CLOUDS AND WEATHER 0h to 6h	6h to 12h	12h to 18h	18h to 24h
	hours		hours				lbs.	lbs.	miles				
Feb. 1	0·6	0·05	0·0	0·00	E	ENE:NE	1·0	0·13	317	c	c *Stcu*	c *Stcu*	c m_o
2	5·1	0·41	4·0	0·32	E	E	1·0	0·13	297	c m_o	c bc *Ast* m_o	bc *Cist* c m_o	c m_o
3	0·0	0·00	0·0	0·00	Calm	Calm	0·0	0·00	158	c b cfx Fe	FeFe	FeFe	FeFe f
4	9·5	0·76	9·0	0·72	SW	SW:SSW	1·1	0·10	293	f c m	c *Stcu*	c bc	bc c bc b
5	12·5	1·00	12·5	1·00	SSW	SSW	0·3	0·03	251	b x	b bc c	c b	b x
6	12·5	1·00	12·5	1·00	SSW	SW:SSW	0·4	0·02	272	b x	b	b	b x
7	0·0	0·00	0·0	0·00	SSW	SSW:SW	1·7	0·18	334	b x	b *Ci*	b bc *Acu*	c ir
8	0·9	0·08	0·8	0·06	SSW:SW	SSW	2·0	0·20	336	c ir	ir c *St*	c *Stcu* p_o c	c
9	0·0	0·00	0·0	0·00	SW:WSW	WSW:SW	3·7	0·90	498	c	c bc p c *Frst*	c *Acu Stcu Frcu* $r_o r_o$	$r_o r_o$ c
10	0·8	0·06	0·5	0·04	WSW	WSW	4·5	0·46	415	c	c *Stcu*	c b	b c
11	4·7	0·39	4·2	0·35	WSW	SW	4·5	0·41	405	c	c *Stcu*	c b *Frcu* c	c b c
12	..	..	..	..	SW:WSW	W	12·5	1·00	500	c	c bc q c *Stcu*	c p_o q c	c b
13	5·5	0·45	4·4	0·36	W:NW	NNW:N	3·4	0·31	369	b	b c *Stcu Frcu Cu*	c r_o c	c
14	3·4	0·29	3·0	0·25	N:Calm	W:WSW	0·3	0·03	220	c f x	c b f x *Ci*	b f *Ci* c *Stcu Frcu* m_o	c mf
15	4·9	0·41	4·3	0·36	WSW	WSW	1·4	0·11	324	c b c	c bc *Frcu*	b *Frcu Ci*	b w c
16	11·0	0·91	10·1	0·85	WSW:NNW	NW:W	1·5	0·10	300	c	c *Frcu Cist* y	c y	b
17	5·0	0·42	4·9	0·41	WSW:SWS	SW	1·8	0·10	292	bx	b c x m *Ast*	c *Ast Acu*	c $r_o r_o$
18	3·2	0·28	2·3	0·20	NNW	NW:WSW	2·1	0·13	302	c b	b m_o *Ci* c *Stcu*	c z_o	c m
19	9·0	0·78	8·0	0·70	WSW:NW	NNW	1·4	0·13	303	c	c d m *Nbst* b *Frcu*	b c	c
20	10·7	0·93	9·5	0·83	NNW:Calm	Calm:SSW	0·2	0·00	189	c b x	b f c *Acu Stcu Frcu*	c *Stcu* m f	c f b x
21	3·5	0·31	1·4	0·12	SSW	SSW:SSE	1·5	0·13	282	b c	c b *Frcu* bc *Stcu Cu*	bc *Frst* y b	b c
22	6·4	0·56	6·3	0·54	S	SSE	4·6	0·46	353	c	c ir_o *Nbst*	c ir_o *Nbst* c	c r_o ir b
23	10·4	0·91	8·7	0·76	SSW:SW	SW	4·0	0·51	402	b c b	b *Acu Frcu Ci* y	b c *Frcu* y	c b c x
24	1·2	0·10	0·9	0·08	Calm:N	NNE:NE	1·4	0·07	243	c b bc x	bc *Cist* m *Frcu*	c *so-ha Ast* c	c $r_o r_o$ bc
25	5·6	0·51	5·0	0·45	NW:SW	SW	3·3	0·29	342	bc c rr c	c *Ast Stcu Nbst* r	c r d	c r_o id
26	9·9	0·90	9·8	0·89	WSW	WSW	2·7	0·21	372	c bc b	b bc *Frcu*	bc c y c p_o bc	bc c b
27	1·0	0·09	0·9	0·08	WSW	SW:SSW	1·7	0·25	367	b x	b x bc *Cist Frcu*	bc y *so-ha Cist* c b	b c
28	6·0	0·59	5·2	0·48	SSW:S	SW:WSW	3·7	0·54	394	c d_o c	c r $r_o r_o$ *Nbst* ir	c p rRrr *Nbst*	c bc
Means	5·3	0·45	4·7	0·40	...	...	...	0·25	326				
Number of Column for Reference	19	20	21	22	23	24	25	26	27	28	29	30	31

The mean *Temperature of Evaporation* for the month was 40°·3, being 2°·6 higher than
The mean *Temperature of the Dew Point* for the month was 36°·6, being 1°·6 higher than
The mean *Degree of Humidity* for the month was 78·9, being 4·7 less than
The mean *Elastic Force of Vapour* for the month was 0·217 in., being 0·013 in. 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 6·5.

The mean proportion of *Sunshine* for the month (constant sunshine being represented by 1) was 0·316. The maximum daily amount of *Sunshine* was 8·6 hours on February 23.

The highest reading of the *Solar Radiation Thermometer* was 103°·0 on February 23; and the lowest reading of the *Terrestrial Radiation Thermometer* was 21°·6 on February 3.

The *Proportions of Wind* referred to the cardinal points were N.10, E.8, S.35, W.41, calm or nearly calm conditions 6, the whole month being represented by 100.

The *Greatest Pressure of the Wind* in the month was 12·5 lbs. on the square foot on February 12. The mean daily *Horizontal Movement of the Air* for the month was 326 miles; the greatest daily value was 500 miles on February 12, and the least daily value was 158 miles on February 3.

Rain (0·005 in. or over) fell on 8 days in the month, amounting to 1·072 in., as measured by gauge No.6 partly sunk below the ground; being 0·408 in. less than the average fall for the 65 years, 1841-1905.

TABLE XVII. - DAILY RESULTS OF THE METEOROLOGICAL OBSERVATIONS

MONTH and DAY 1939	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	29·477	47·9	38·2	9·7	43·9	+ 3·5	39·9	33·8	10·1	19·2	3·8	68	71·6	32·6	44·1	0·022	1·8	10·9
2	29·735	54·3	44·3	10·0	48·7	+ 8·3	46·0	42·9	5·8	15·1	2·2	80	73·7	36·1	44·0	0·000	0·0	10·9
3	29·758	60·3	41·0	19·3	49·9	+ 9·4	46·1	41·6	8·3	14·6	3·3	73	109·7	29·8	44·2	0·000	6·4	11·0
4	29·693	56·3	44·7	11·6	49·5	+ 8·8	47·0	44·3	5·2	11·0	2·9	82	95·8	36·9	44·4	0·060	2·0	11·1
5	29·645	56·3	45·4	10·9	49·9	+ 9·0	46·0	41·3	8·6	22·3	1·4	72	110·2	41·4	44·4	0·062	5·3	11·1
6	29·839	54·8	44·6	10·2	49·2	+ 8·2	45·7	41·5	7·7	16·3	1·8	74	107·7	39·7	44·8	0·000	3·2	11·2
7	29·958	49·7	40·3	9·4	45·2	+ 4·2	40·1	32·3	12·9	21·9	4·8	60	93·3	33·1	44·8	0·000	5·1	11·3
8	29·898	51·6	38·3	13·3	44·6	+ 3·5	40·7	34·9	9·7	18·3	3·6	69	89·3	35·1	44·9	0·082	0·2	11·3
9	29·957	50·3	38·3	12·0	43·4	+ 2·4	39·8	34·4	9·0	15·5	3·4	70	90·7	28·8	44·9	0·000	5·4	11·4
10	30·163	49·0	34·6	14·4	41·3	+ 0·4	38·3	33·5	7·8	13·7	3·2	74	89·0	25·3	45·0	0·000	5·5	11·4
11	30·083	44·3	29·2	15·1	39·1	- 1·9	38·1	36·5	2·6	7·0	0·0	91	61·4	23·3	44·9	0·278	0·3	11·5
12	30·238	44·9	33·7	11·2	41·4	+ 0·3	39·0	35·4	6·0	11·4	1·3	79	83·0	25·6	44·7	0·029	1·3	11·6
13	30·427	47·7	31·1	16·6	40·3	- 1·0	37·9	34·1	6·2	14·2	0·5	78	70·3	23·0	44·8	0·000	0·7	11·6
14	30·212	51·5	46·2	5·3	48·5	+ 7·0	45·6	42·1	6·4	11·3	2·6	78	62·1	40·1	44·7	0·000	0·0	11·7
15	30·184	47·1	40·9	6·2	43·9	+ 2·2	39·9	33·8	10·1	15·1	3·5	68	95·8	37·7	44·7	0·010	1·7	11·8
16	30·010	50·6	39·0	11·6	44·1	+ 2·2	41·2	37·2	6·9	13·2	2·9	76	69·7	37·9	44·8	0·065	0·0	11·8
17	29·871	45·1	32·6	12·5	39·7	- 2·3	37·0	32·5	7·2	12·1	3·0	76	88·8	27·2	44·8	0·042	0·8	11·9
18	30·089	39·3	31·6	7·7	35·6	- 6·4	32·5	27·0	8·6	15·0	4·3	69	86·1	27·8	44·8	0·000	1·1	12·0
19	29·918	43·1	35·0	8·1	39·5	- 2·4	37·5	34·4	5·1	11·4	0·0	82	74·5	34·6	44·7	0·026	0·0	12·0
20	29·848	47·8	37·0	10·8	41·4	- 0·5	37·8	32·1	9·3	14·4	4·0	69	65·2	35·2	44·7	0·000	0·1	12·1
21	29·768	48·7	39·6	9·1	43·8	+ 1·9	39·1	31·5	12·3	15·2	7·2	62	87·4	32·5	44·7	0·000	2·4	12·2
22	29·407	51·3	36·4	14·9	43·5	+ 1·5	39·8	34·2	9·3	22·9	1·4	70	108·6	30·8	44·7	0·268	5·9	12·2
23	29·322	48·4	35·2	13·2	41·3	- 0·9	37·7	32·0	9·3	17·1	2·5	69	94·2	29·7	44·6	0·042	3·3	12·3
24	29·384	49·4	30·2	19·2	38·8	- 3·6	35·5	29·9	8·9	18·6	1·0	69	96·1	24·5	44·6	0·076	5·6	12·4
25	29·587	43·3	32·4	10·9	37·6	- 5·1	35·1	30·7	6·9	17·0	0·0	76	95·6	26·9	44·6	0·010	2·9	12·4
26	29·894	42·3	36·1	6·2	39·3	- 3·7	36·6	32·1	7·2	12·3	1·8	75	56·7	34·7	44·4	0·000	0·0	12·5
27	29·691	40·3	34·3	6·0	37·3	- 6·0	35·8	33·5	3·8	7·7	2·6	86	54·5	32·6	44·4	0·061	0·0	12·6
28	29·501	41·7	36·1	5·6	39·1	- 4·6	37·8	35·9	3·2	6·2	1·8	88	58·4	32·9	44·2	0·072	0·0	12·6
29	29·581	50·3	33·6	16·7	41·3	- 2·8	38·9	35·3	6·0	11·6	0·3	79	106·6	27·0	44·3	0·000	2·8	12·7
30	29·685	50·7	37·4	13·3	43·6	- 0·9	40·4	35·8	7·8	18·9	0·4	74	97·1	28·2	44·3	0·000	3·9	12·7
31	29·705	56·2	38·6	17·6	46·4	+ 1·5	43·3	39·3	7·1	16·9	1·0	76	106·4	33·1	44·3	0·000	7·3	12·8
Means	29·824	48·9	37·3	11·6	42·9	+ 1·0	39·9	35·3	7·6	14·8	2·3	74·6	85·5	31·7	44·6	Sum 1·205	2·4	11·8
Number of Column for Reference	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18

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 autographic 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 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 autographic 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 29·842 in., being 0·071 in. higher than the average for the 65 years, 1841-1905.

TEMPERATURE OF THE AIR.

The highest in the month was 60°·3 on March 3; the lowest in the month was 29°·2 on March 11; and the range was 31°·1.

The mean of all the highest daily readings in the month was 48°·9, being 0°·3 lower than the average for the 65 years, 1841-1905. †

The mean of all the lowest daily readings in the month was 37°·3, being 1°·7 higher than the average for the 65 years, 1841-1905. †

The mean of the daily ranges was 11°·6, being 2°·0 less than the average for the 65 years, 1841-1905. †

The mean for the month was 42°·9, being 1°·0 higher than the average for the 65 years, 1841-1905.

† The average has been corrected for the presumed effect of the change of thermometer screen on 1938 January 1. (See Introduction p. xvii).

TABLE XVII. - DAILY RESULTS OF THE METEOROLOGICAL OBSERVATIONS

MONTH and DAY 1939	RECORD OF THE NIGHT SKY: POLARIS Duration	POLARIS Fraction of Total Exposure	δ URSAE MINORIS Duration	δ URSAE MINORIS Fraction of Total Exposure	WIND AS DEDUCED FROM SELF-REGISTERING ANEMOMETERS: OSLER'S General Direction A.M.	OSLER'S General Direction P.M.	OSLER'S Pressure on the Square Foot Greatest	OSLER'S Pressure on the Square Foot Mean of 24 Hourly Measures	Robinson's Horizontal Movement of the Air	CLOUDS AND WEATHER 0h to 6h	6h to 12h	12h to 18h	18h to 24h
	hours		hours				lbs.	lbs.	miles				
Mar. 1	0·3	0·02	0·2	0·01	WSW:W	SW:SSW	10·4	0·71	462	bc p q	bc *Frst* c *Ast Frcu*	c *Ast so-ha Acu*	c r c
2	10·1	0·92	10·0	0·91	SSW	SSW:S:SSE	3·0	0·40	374	c	c *Ast St*	c *Stcu*	c bc b w
3	10·2	0·93	9·4	0·85	SSE:S	S	1·2	0·14	286	b w	b *Ci Cist*	b c *Cist Acu*	c b
4	3·1	0·29	3·1	0·29	S:SSW	SSW	2·0	0·24	315	bc c	c *Ast so-ha Stcu Frcu*	c v c	bc c
5	2·4	0·23	1·2	0·11	SSW:WSW	WSW:SW	6·7	0·76	411	c dd c	c b bc y	bc c y	c r_o id_o
6	0·8	0·08	0·5	0·05	SW:WSW	WSW	3·2	0·43	372	c	c *Acu Stcu*	c *Acu Ast*	c d_o c
7	8·7	0·83	7·9	0·75	WNW	NW:W:WSW	5·2	0·53	396	c	c b y *Frst Cist* c *Stcu*	c y	b *lu-ha* c
8	2·9	0·28	2·8	0·27	WSW	WSW:NW	10·7	1·74	556	bc c *lu-ha*	c *Ast so-ha prhn* q	c *Ast Frcu so-ha* q	c rr c
9	9·8	0·93	8·6	0·82	NW:NNW	NNW	1·3	0·15	272	c	c b *Frst Ci*	c *Acu Stcu Ci*	bc m b
10	9·6	0·91	8·9	0·85	NNW:N	N:Calm	0·8	0·04	212	bx	b c *Cist Frcu* m_o	c *Stcu Frcu* y b m	b m x
11	0·0	0·00	0·0	0·00	Calm	Calm:SW	0·4	0·00	177	b bc x c	c *Acu* m	c *St Nbst* d r m	c rr m
12	7·4	0·74	7·4	0·74	NNE.NE	NNE:ENE	0·9	0·13	280	r r_o r_o m	c *Stcu* m m_o	c *Stcu*	c b x
13	0·0	0·00	0·0	0·00	Calm	NNW:NW	0·6	0·05	213	b c x	c b f c *Stcu Acu*	c *Acu*	c m c
14	1·4	0·14	1·3	0·13	NNW	NNW	1·3	0·22	315	c d	c *Stcu*	c *Stcu* y	c b c r_o
15	0·0	0·00	0·0	0·00	NNW:N	N	3·7	0·44	358	c r c	c *Frcu*	c *Stcu* y	c
16	0·8	0·08	0·3	0·03	NNW:SW	NW:NNW	2·0	0·13	267	c	c r_o $d_o$fc *Stcu*	c *Nbst* d_o rr	r c r c
17	4·3	0·43	3·0	0·30	NNW:N	NE:NNE	5·5	0·65	429	c	c ir_o p *Nbst* bc	c ih *Nbst* c *Cicu Cu*	c b c
18	0·0	0·00	0·0	0·00	NNE	N:NNW:SSW	1·7	0·14	311	c bc x c	c *Acu Stcu* y	c y	c
19	0·4	0·04	0·0	0·00	WSW:N	N	3·0	0·32	349	c ir	c *Frst Stcu* r_o c *Acu*	c *Acu Stcu*	c d c
20	5·4	0·56	4·1	0·42	NNW:NW	NW:WSW	8·5	0·48	366	c	c m_o *Stcu*	c *Stcu* r_o c	c
21	4·7	0·48	3·8	0·39	NW	NW:WSW	5·7	0·90	435	c b	b c *Frst Stcu*	c *Stcu* y	c b
22	6·1	0·63	5·8	0·60	SW:WNW	W:WSW	9·9	0·70	421	b c rr	rr c bc *Acu Frcu*	bc *Cu Frcu* y c r	r b
23	7·1	0·73	7·0	0·72	WSW:NW	NW	4·3	0·39	376	b c r c	c *Nbst Stcu Acu*	c p_o c *Stcu Cicu*	c b c b
24	2·9	0·30	2·7	0·28	WSW:NW	NW:Calm	2·6	0·05	229	b x	b *Cu Stcu Frcu*	c y r	rc bc b c x
25	0·0	0·00	0·0	0·00	NNE	N:NNE	2·7	0·26	327	c f	f c *Stcu* y	c y is_o	c rs c
26	0·0	0·00	0·0	0·00	NNE	NNE	5·0	1·17	496	c	c *Stcu*	c	c
27	0·0	0·00	0·0	0·00	NNE:N	N	2·2	0·26	346	c	c *Nbst* d_o r_o	rr_o *Nbst* c	c r r_o d
28	1·9	0·21	1·6	0·17	Calm:NNW	NNW	0·2	0·01	205	c m_o	c *Stcu* m_o d_o	c d_o m_o rr	c d c
29	..	..	..	..	Calm:SW	Calm:SE	0·1	0·00	190	c bc b x c	c *Cu Frcu Stcu* m_o	c *Acu Stcu* b	b x c
30	9·0	1·00	9·0	1·00	E	E	3·6	0·40	353	b bc x	b *Cist Cicu* c *Ast*	c *Cist so-ha prhn Frst*	c b
31	5·8	0·64	5·8	0·64	ENE:E	ESE:E	0·9	0·11	276	b w	b *Frst*	b y c	c b
Means	3·8	0·38	3·5	0·34	...	...	..	0·39	335				
Number of Column for Reference	19	20	21	22	23	24	25	26	27	28	29	30	31

The mean *Temperature of Evaporation* for the month was 39°·9, being 0°·5 higher than
The mean *Temperature of the Dew Point* for the month was 35°·3, being 0°·3 lower than
The mean *Degree of Humidity* for the month was 74·6, being 3·5 less than
The mean *Elastic Force of Vapour* for the month was 0·206 in., being 0·003 in. 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 7·5.

The mean proportion of *Sunshine* for the month (constant sunshine being represented by 1) was 0·204. The maximum daily amount of *Sunshine* was 7·3 hours on March 31.

The highest reading of the *Solar Radiation Thermometer* was 110°·2 on March 5; and the lowest reading of the *Terrestrial Radiation Thermometer* was 22°·3 on March 11.

The *Proportions of Wind* referred to the cardinal points were N.35, E.12, S.17, W.29, calm or nearly calm conditions, 7, the whole month being represented by 100.

The *Greatest Pressure of the Wind* in the month was 10·7 lbs. on the square foot on March 8. The mean daily *Horizontal Movement of the Air* for the month was 335 miles; the greatest daily value was 556 miles on March 8., and the least daily value was 177 miles on March 11.

Rain (0·005 in. or over) fell on 16 days in the month, amounting to 1·205 in., as measured by gauge No.6 partly sunk below the ground; being 0·315 in. less than the average fall for the 65 years, 1841-1905.

TABLE XVII. - DAILY RESULTS OF THE METEOROLOGICAL OBSERVATIONS

MONTH and DAY 1939	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
Apr. 1	29·655	56·2	38·4	17·8	47·6	+ 2·3	45·4	42·9	4·7	9·9	0·0	83	84·4	29·0	44·6	0·033	0·0	12·9
2	29·438	53·7	39·4	14·3	47·9	+ 2·2	46·1	44·1	3·8	12·5	0·6	86	88·4	30·7	45·0	0·162	0·1	12·9
3	29·242	48·6	34·6	14·0	43·6	- 2·4	42·6	41·3	2·3	8·7	0·2	92	72·8	26·7	44·7	0·057	0·1	13·0
4	28·977	54·2	45·3	8·9	48·8	+ 2·6	47·0	45·0	3·8	9·0	0·6	86	97·5	39·3	44·8	0·343	1·5	13·1
5	29·225	57·7	43·5	14·2	50·0	+ 3·7	48·0	45·8	4·2	9·1	0·8	86	107·5	38·2	45·0	0·068	1·5	13·2
6	29·577	48·3	39·8	8·5	43·1	- 3·2	41·2	38·5	4·6	10·3	0·9	84	54·5	35·0	45·1	0·069	0·0	13·2
7	29·880	48·4	36·1	12·3	42·7	- 3·6	39·6	35·0	7·7	13·5	1·5	74	91·4	30·2	45·4	0·000	2·9	13·3
8	29·893	56·6	29·8	26·8	44·1	- 2·0	40·4	34·9	9·2	18·6	0·3	70	103·3	23·2	45·7	0·000	8·0	13·3
9	29·859	64·8	36·0	28·8	50·8	+ 4·8	45·5	38·7	12·1	24·0	0·9	64	117·9	29·8	45·8	0·000	11·3	13·4
10	29·789	63·8	39·8	24·0	51·0	+ 5·1	46·7	41·7	9·3	20·6	1·3	70	119·0	30·0	45·8	0·000	8·9	13·5
11	29·736	69·5	43·1	26·4	55·5	+ 9·7	51·1	46·7	8·8	17·4	2·0	72	119·5	36·7	46·0	0·000	10·8	13·5
12	29·820	75·0	48·1	26·9	61·0	+15·1	53·6	46·3	14·7	26·8	1·6	59	134·7	38·2	46·2	0·000	9·7	13·6
13	29·771	65·1	47·8	17·3	55·2	+ 9·1	51·2	47·3	7·9	15·7	1·6	75	122·9	40·0	46·3	0·037	3·0	13·7
14	29·585	59·2	47·3	11·9	51·9	+ 5·5	49·2	46·3	5·6	12·7	2·0	81	103·7	41·2	46·7	0·080	1·6	13·7
15	29·760	59·3	44·0	15·3	51·9	+ 5·1	47·6	42·7	9·2	19·3	2·4	70	121·2	38·3	47·3	0·000	5·2	13·8
16	28·864	61·1	45·7	15·4	55·2	+ 8·0	51·2	47·3	7·9	16·5	3·3	75	99·0	39·5	47·2	0·005	1·6	13·9
17	29·905	58·4	42·2	16·2	49·7	+ 2·1	44·5	37·8	11·9	21·4	2·7	64	104·5	38·9	47·5	0·033	4·6	13·9
18	30·334	53·9	38·6	15·3	46·7	- 1·3	41·8	34·6	12·1	19·5	3·5	63	115·8	28·6	47·6	0·000	11·0	14·0
19	30·418	62·7	34·1	28·6	48·7	+ 0·4	44·2	38·4	10·3	18·6	0·5	68	99·3	26·7	47·9	0·000	8·5	14·1
20	30·265	70·8	38·7	32·1	55·6	+ 7·1	48·4	40·0	15·6	24·4	1·5	56	120·6	31·1	48·0	0·000	12·2	14·1
21	30·060	69·8	38·7	31·1	56·1	+ 7·4	47·0	35·1	21·0	33·4	2·1	45	125·7	28·5	48·0	0·000	10·5	14·2
22	29·745	56·0	44·7	11·3	49·1	+ 0·4	42·6	33·3	15·8	25·2	6·4	54	117·6	37·8	48·0	0·000	7·8	14·2
23	29·644	51·9	42·0	9·9	47·0	- 1·6	44·3	41·1	5·9	12·1	3·2	79	90·3	36·2	48·0	0·081	1·0	14·3
24	29·284	55·8	40·6	15·2	48·2	- 0·4	45·0	41·0	7·2	19·2	1·9	76	125·6	31·7	48·2	0·227	5·7	14·4
25	29·424	52·3	34·7	17·6	43·1	- 5·5	39·9	35·3	7·8	16·1	0·2	74	102·6	28·1	48·3	0·002	5·5	14·4
26	29·746	49·5	33·9	15·6	41·7	- 6·9	38·4	33·3	8·4	15·9	1·1	71	115·1	26·0	48·2	0·072	4·5	14·5
27	30·033	47·7	35·1	12·6	40·1	- 8·6	37·8	34·2	5·9	13·5	1·4	79	116·2	28·9	48·1	0·196	7·3	14·6
28	30·077	49·7	34·1	15·6	42·3	- 6·5	38·6	32·9	9·4	16·7	1·2	69	108·2	28·1	48·1	0·300	4·9	14·6
29	29·989	49·9	36·3	13·6	42·3	- 6·7	40·3	37·4	4·9	13·3	0·0	83	106·4	29·7	48·0	0·100	2·3	14·7
30	29·792	44·2	40·9	3·3	43·0	- 6·1	42·5	41·8	1·2	4·5	0·0	96	50·2	40·0	47·9	0·623	0·0	14·7
Means	29·759	57·1	39·8	17·4	48·5	+ 1·2	44·7	40·0	8·4	16·6	1·5	73·5	104·5	32·9	46·8	Sum 2·488	5·1	13·8
Number of Column for Reference	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18

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 autographic 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 autographic measures of the Dry-bulb Thermometers. The readings in Column 16 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 29·759 in., being 0·004 in. higher than the average for the 65 years, 1841-1905.

TEMPERATURE OF THE AIR.

The highest in the month was 75°·0 on April 12; the lowest in the month was 29°·8 on April 8; and the range was 45°·2.

The mean of all the highest daily readings in the month was 57°·1, being 1°·0 higher than the average for the 65 years, 1841-1905. †

The mean of all the lowest daily readings in the month was 39°·8, being 0°·3 higher than the average for the 65 years, 1841-1905. †

The mean of the daily ranges was 17°·4, being 0°·8 greater than the average for the 65 years, 1841-1905. †

The mean for the month was 48°·5, being 1°·2 higher than the average for the 65 years, 1841-1905.

† The average has been corrected for the presumed effect of the change of thermometer screen on 1938 January 1. (See Introduction p. xvii).

TABLE XVII. - DAILY RESULTS OF THE METEOROLOGICAL OBSERVATIONS

MONTH and DAY 1939	RECORD OF THE NIGHT SKY: POLARIS Duration	POLARIS Fraction of Total Exposure	δ URSAE MINORIS Duration	δ URSAE MINORIS Fraction of Total Exposure	WIND AS DEDUCED FROM SELF-REGISTERING ANEMOMETERS: OSLER'S General Direction A.M.	OSLER'S General Direction P.M.	OSLER'S Pressure on the Square Foot Greatest	OSLER'S Pressure on the Square Foot Mean of 24 Hourly Measures	Robinson's Horizontal Movement of the Air	CLOUDS AND WEATHER 0h to 6h	6h to 12h	12h to 18h	18h to 24h
	hours		hours				lbs.	lbs.	miles				
Apr. 1	0·0	0·00	0·0	0·00	Calm:E	Calm:E	0·7	0·04	208	b f	b f m c *so-ha*	c r_o c	c r_o r r_o
2	7·7	0·91	7·1	0·84	E:Calm:S	WSW:SW	1·1	0·07	246	c rr c	c r m_o r_o c	c r_o c m_o	c m_o b
3	0·1	0·01	0·1	0·01	SSW:S	S:Calm	1·6	0·07	242	b x c	c *Nbst* d_o	c *Nbst* p_o c dd	d c r
4	5·1	0·60	4·8	0·57	SW	SW	4·8	0·18	319	rr c rc	c b c *Nbst* ir	R ir c *Stcu*	c bc c r
5	0·0	0·00	0·0	0·00	SW	SW:Calm:NE	1·5	0·09	269	c b c	c *Frcu* p *Stcu Cunb*	c P r_o c	c rd
6	5·0	0·59	4·4	0·51	ENE:NE	ENE:NE	1·4	0·18	333	c r_o c $r_o d_o$	c *Nbst* r_o ir *Nbst*	c *Nbst*	c
7	7·7	0·90	7·6	0·89	NE:ENE	E:Calm	0·5	0·07	242	c b	b c *Acu Frst Stcu* y	c *Stcu*	c b
8	7·9	0·99	7·2	0·90	Calm	W:SW	0·2	0·01	177	b x f	c f b *Acu Cu* bc *Ast*	c bc b	b
9	8·0	1·00	8·0	1·00	Calm	Calm:ESE	0·3	0·03	184	b x bc	bc b y	b y	b
10	8·0	1·00	8·0	1·00	Calm:E	ESE:E	1·8	0·15	259	b w	b *Cist* bc *so-ha*	bc y	bc b
11	6·8	0·85	6·4	0·80	E	ESE:Calm	0·3	0·03	209	b w	b m_o *Ci*	b *Ci* y	b
12	7·4	0·93	7·4	0·93	Calm:SW	SW	1·9	0·20	281	b bc w	bc *Acu* y b	b *Ci* c y	c b
13	4·2	0·52	3·9	0·48	SW	SW	5·0	0·54	368	b bc	c *Ast Stcu*	c bc *Cu Acu* c	c r c b bc
14	6·9	0·86	6·7	0·84	SSW:SW	SW:WSW	1·3	0·15	315	b c	c *Stcu Nbst* d	r d_o p c	c P c b
15	0·4	0·05	0·3	0·04	WSW	WSW	3·8	0·68	426	b c b	b c bc *Nbst* c *Ast* y	c y	c
16	3·5	0·47	3·3	0·44	WSW	W:WSW	4·0	0·65	429	c	c d_o *Nbst* ir_o	c	c b c
17	0·5	0·07	0·5	0·07	WSW:WNW	NW:NNW:N	5·6	0·93	442	c r c	c *Frst Stcu* y	c p_o c h c y	c r c
18	7·4	0·99	7·4	0·99	N:NNE	NE:SSE	1·7	0·24	301	c b	bc c *Frcu* y	bc *Frcu Cicu* b y	b c b
19	7·5	1·00	7·5	1·00	Calm	Calm:SSW	0·1	0·01	167	b x	b x z z_o y	b z_o y	b
20	7·5	1·00	7·5	1·00	SW:Calm	W:NW	0·7	0·04	217	b z_o w	b z_o y	b y	b
21	7·2	0·96	6·1	0·81	Calm:SW	WSW:SW	1·4	0·10	246	b w	b *Cist* y *so-ha*	b *Cist* c y	c b y
22	6·6	0·94	6·1	0·87	WSW:W:WNW	NW:WNW	8·7	1·77	524	b c	c *Stcu* bc c y	bc p_o y	b
23	0·4	0·06	0·3	0·04	WNW:W	W:WSW	2·0	0·30	386	b	b c *Stcu Nbst* r_or	rr c	c ir_o
24	6·2	0·88	5·9	0·85	WSW	NW:WSW	5·6	0·24	343	c ir	c *Nbst* ir rc ph	c irh c y	c b
25	6·8	0·97	6·8	0·97	WSW:Calm:NW	N:NE	3·6	0·09	250	b bc x b	b c *Frcu Nbst*	r_o *Nbst Stcu* c r r_o	r_o c b
26	6·5	0·93	6·5	0·93	NNE	NE:N	2·0	0·08	249	b x	b c *Stcu* y	c p c ir	ir c b
27	7·0	1·00	7·0	1·00	N:NNE	NE:NNE	5·5	0·16	282	b	b c *Stcu Nbst* h	c Nbst r H ir c	c b
28	5·3	0·75	5·2	0·74	N:NNE	NE:Var.	1·5	0·07	219	b x	c *Frst* y	c y c ir_o	r_oR r c b
29	0·0	0·00	0·0	0·00	NE	NE:NNE	2·5	0·22	317	b bc p_o	b c *Acu Stcu Nbst* r_o	c r	c r c
30	0·0	0·00	0·0	0·00	NNE:NE	NE	0·9	0·15	301	c r_od r	c *Nbst* rr m	c *Nbst* dd	c dd
Means	4·9	0·64	4·7	0·62	...	...	...	0·24	292				
Number of Column for Reference	19	20	21	22	23	24	25	26	27	28	29	30	31

The mean *Temperature of Evaporation* for the month was 44°·7, being 0°·8 higher than
The mean *Temperature of the Dew Point* for the month was 40°·0, being 0°·4 higher than
The mean *Degree of Humidity* for the month was 73 ·5, being 1·0 less than
The mean *Elastic Force of Vapour* for the month was 0·248 in., being 0·004 in. 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 0·367. The maximum daily amount of *Sunshine* was 12·2 hours on April 20.

The highest reading of the *Solar Radiation Thermometer* was 134°·7 on April 12; and the lowest reading of the *Terrestrial Radiation Thermometer* was 23°·2 on April 8.

The *Proportions of Wind* referred to the cardinal points were N.19, E.20, S.18, W.30, calm or nearly calm conditions, 13, the whole month being represented by 100.

The *Greatest Pressure of the Wind* in the month was 8·7 lbs. on the square foot on April 22. The mean daily *Horizontal Movement of the Air* for the month was 292 miles; the greatest daily value was 524 miles on April 22, and the least daily value was 167 miles on April 19.

Rain (0·005 in. or over) fell on 17 days in the month, amounting to 2·488 in., as measured by gauge No.6 partly sunk below the ground; being 0·922 in. greater than the average fall for the 65 years, 1841-1905.

TABLE XVII. - DAILY RESULTS OF THE METEOROLOGICAL OBSERVATIONS

MONTH and DAY 1939	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	29·794	45·9	42·2	3·7	44·3	- 5·0	43·7	43·1	1·2	4·9	0·9	95	53·4	40·9	47·8	0·516	0·0	14·8
2	29·787	50·8	42·1	8·7	45·2	- 4·3	43·3	40·8	4·4	12·8	2·4	85	98·0	40·7	47·8	0·014	0·2	14·8
3	29·804	52·8	38·6	14·2	46·6	- 3·2	43·2	38·8	7·8	16·9	1·9	74	110·7	28·8	47·7	0·000	6·2	14·9
4	29·689	58·2	37·4	20·8	47·2	- 2·8	43·9	39·8	7·4	16·1	0·4	75	121·0	29·8	47·7	0·000	3·9	14·9
5	29·356	57·6	38·7	18·9	48·9	- 1·4	46·3	43·3	5·6	15·5	0·0	80	94·1	29·8	47·8	0·004	1·9	15·0
6	29·359	61·8	40·8	21·0	50·7	+ 0·2	47·0	42·7	8·0	17·7	0·2	74	120·4	31·9	47·9	0·000	5·0	15·1
7	29·631	63·0	38·6	24·4	51·5	+ 0·8	47·7	43·4	8·1	15·2	0·0	74	124·1	30·7	48·0	0·000	9·8	15·1
8	29·886	69·3	40·5	28·8	53·9	+ 2·9	49·8	45·5	8·4	20·1	0·3	73	127·0	31·9	48·2	0·000	8·8	15·2
9	30·045	69·7	43·4	26·3	56·6	+ 5·4	51·3	45·9	10·7	18·0	1·2	67	130·0	34·1	48·6	0·000	9·5	15·2
10	30·093	68·3	46·1	22·2	57·3	+ 5·8	52·5	47·9	9·4	17·3	1·2	71	106·3	37·1	48·7	0·000	2·2	15·3
11	30·078	61·7	44·9	16·8	53·2	+ 1·4	48·6	43·5	9·7	20·0	2·6	70	127·7	38·5	49·0	0·000	4·5	15·4
12	29·954	53·4	44·2	9·2	48·4	- 3·7	44·4	39·3	9·1	14·2	5·4	70	94·0	38·4	49·0	0·010	0·8	15·4
13	29·944	63·4	45·7	17·7	54·3	+ 1·9	47·5	39·3	15·0	28·7	2·7	56	124·1	35·0	49·3	0·000	13·7	15·5
14	29·810	62·1	40·6	21·5	50·2	- 2·4	46·6	42·3	7·9	19·7	0·9	74	119·6	30·6	49·6	0·055	3·2	15·5
15	29·522	49·6	44·4	5·2	47·6	- 5·2	46·1	44·4	3·2	7·1	1·9	88	63·8	40·9	49·3	0·154	0·0	15·6
16	29·524	58·2	45·5	12·7	49·9	- 3·1	47·2	44·2	5·7	16·8	0·6	80	115·7	44·3	49·7	0·689	1·9	15·6
17	29·472	55·8	42·6	13·2	49·3	- 3·8	47·2	44·9	4·4	9·6	0·4	85	112·6	33·3	49·7	0·132	0·7	15·7
18	29·567	54·4	42·1	12·3	48·3	- 5·0	46·7	44·9	3·4	9·6	0·0	88	73·8	33·1	49·7	0·068	0·0	15·7
19	29·665	55·5	42·0	13·5	48·4	- 5·1	43·5	36·9	11·5	18·6	3·2	64	111·8	33·8	49·5	0·000	5·3	15·8
20	29·734	63·1	39·9	23·2	51·2	- 2·6	46·4	40·6	10·6	19·9	0·4	67	120·8	31·0	49·9	0·000	7·1	15·8
21	29·811	62·8	41·1	21·7	53·5	- 0·7	48·9	43·9	9·6	19·5	0·7	70	121·1	37·0	49·8	0·000	4·9	15·9
22	29·995	67·9	42·5	25·4	56·7	+ 2·1	52·7	48·8	7·9	16·7	0·0	75	133·3	32·1	50·1	0·000	5·4	15·9
23	30·190	74·2	46·3	27·9	60·7	+ 5·8	55·3	50·5	10·2	18·4	0·2	69	137·8	36·6	50·2	0·000	10·5	16·0
24	30·213	74·9	46·6	28·3	61·3	+ 6·0	54·7	48·6	12·7	25·6	0·4	63	132·8	33·1	50·7	0·000	13·3	16·0
25	30·200	67·0	51·1	15·9	58·6	+ 3·1	53·9	49·6	9·0	18·7	3·1	72	118·3	42·0	50·8	0·000	5·9	16·0
26	30·209	66·3	46·8	19·5	56·3	+ 0·5	50·7	44·9	11·4	20·6	2·8	65	126·9	38·0	51·0	0·000	12·6	16·1
27	30·118	70·2	49·3	20·9	60·1	+ 4·1	55·5	51·4	8·7	16·3	2·6	73	134·1	38·0	51·3	0·000	4·3	16·1
28	30·237	64·8	45·9	18·9	56·5	+ 0·3	51·1	45·5	11·0	19·1	3·2	67	134·0	37·5	51·7	0·000	9·9	16·1
29	30·271	64·3	44·3	20·0	53·6	- 2·8	49·0	44·0	9·6	19·3	3·4	70	130·3	38·1	51·8	0·000	11·7	16·2
30	30·200	65·0	47·9	17·1	56·1	- 0·6	51·2	46·2	9·9	16·4	2·4	70	128·8	41·2	52·1	0·000	10·8	16·2
31	30·115	69·9	47·5	22·4	57·9	+ 0·8	53·0	48·4	9·5	19·3	3·0	70	134·9	43·2	52·2	0·000	10·3	16·3
Means	29·880	62·0	43·5	18·5	52·7	- 0·3	48·7	44·3	8·4	17·1	1·6	73·4	115·5	35·9	49·6	Sum 1·642	5·9	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 autographic 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 autographic 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 29·880 in., being 0·079 in. higher than the average for the 65 years, 1841-1905.

TEMPERATURE OF THE AIR.

The highest in the month was 74°·9 on May 24; the lowest in the month was 37°·4 on May 4; and the range was 37°·5.

The mean of all the highest daily readings in the month was 62°·0, being 0°·2 lower than the average for the 65 years, 1841-1905. †

The mean of all the lowest daily readings in the month was 43°·5, being 0°·7 lower than the average for the 65 years, 1841-1905. †

The mean of the daily ranges was 18°·5, being 0°·5 greater than the average for the 65 years, 1841-1905. †

The mean for the month was 52°·7, being 0°·3 lower than the average for the 65 years, 1841-1905.

† The average has been corrected for the presumed effect of the change of thermometer screen on 1938 January 1. (See Introduction p. xvii).

TABLE XVII. - DAILY RESULTS OF THE METEOROLOGICAL OBSERVATIONS

MONTH and DAY 1939	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.	OSLER'S General Direction P.M.	OSLER'S Pressure on the Square Foot: Greatest	OSLER'S Pressure on the Square Foot: Mean of 24 Hourly Measures	Robinson's Horizontal Movement of the Air	CLOUDS AND WEATHER: 0h to 6h	6h to 12h	12h to 18h	18h to 24h
	hours		hours						miles				
May 1	0·0	0·00	0·0	0·00	NE	NNE	0·7	0·12	284	c r c d	dd *Nbst* r$_o$	rr$_o$ rr *Nbst*	rr r$_o$ c
2	0·0	0·00	0·0	0·00	NNE:N	NNE:NE	2·4	0·30	352	c	c *Stcu*	c	c r d$_o$ c
3	4·0	0·62	3·9	0·59	NE	NE:ESE:Calm	0·6	0·07	249	c	c b *Frcu* c *Stcu* y	c	c b x
4	3·6	0·55	3·5	0·54	SSE:Calm	SSW:SSE	0·2	0·04	198	b c	c *Stcu Frcu*	d *Stcu Frcu* y	c b
5	4·3	0·65	4·2	0·64	SSE:S	SSE:SSW	2·2	0·13	253	b c	c *Ast Nbst* r$_o$	c *Nbst* r$_o$ *Ast* c	b
6	6·0	1·00	6·0	1·00	Calm:E	ESE:Calm	0·6	0·05	210	b c w	c *Cist Acu so-ha*	bc y	bc b w
7	5·8	0·97	4·9	0·81	Calm:NE	E:ESE	0·3	0·03	172	b w	b *Cu Cist*	b y c	c b
8	4·5	0·75	3·5	0·59	Calm:SW	SW:E:Calm	0·2	0·01	177	b w	b z bc y	bc y	bc c bc w
9	5·3	0·87	5·1	0·85	Calm	Calm	0·1	0·00	159	bc b w bc	bc c *Cist Frcu* y	c *Frcu Cist* y	c bc b
10	5·2	0·86	4·6	0·77	Calm	Calm:NW	0·3	0·02	162	b c w	c *Acu Ast* z$_o$ y	y *Frcu Stcu* y	c d c b
11	2·2	0·37	2·1	0·36	NNW:NNE	N	3·0	0·41	333	b c	c b *Acu Cu* c	c *Stcu*	c b c
12	0·0	0·00	0·0	0·00	NNW:N	N:NNE	3·2	0·63	392	c	c *Stcu* p	c d$_o$ *Nbst* c	c
13	5·5	1·00	5·5	1·00	NNE	NE:NNE	3·8	0·78	396	c b	b *Ast* y bc	bc y *Ci* b *so-ha*	b
14	0·0	0·00	0·0	0·00	NNW:Calm	NW:W	0·5	0·06	221	b bc w	bc *Ci* b z$_o$ *so-ha Ast* y	c ir$_o$r	c r c
15	0·0	0·00	0·0	0·00	NW:NNW	Calm:NNE	0·4	0·03	189	c	c r id *St Nb*	c id c *Nbst*	c r d c
16	0·0	0·00	0·0	0·00	N:NNE	NNE:N:NNW	4·5	0·75	404	rr c	c ir ir$_o$ *Nbst*	c *Stcu Acu Ast* y	c r c
17	2·8	0·52	2·8	0·52	NW:NNE:Calm	ESE:Calm	0·4	0·03	204	c rr c	c *Nbst* rr r$_o$ c *Ast*	c *Stcu*	c bc c bc
18	0·5	0·08	0·4	0·07	Calm:NNE	Calm:NNE	0·2	0·02	195	bc c m$_o$	c	c *Nbst* rr c	c
19	4·7	0·85	2·1	0·38	NNE	NE:Calm	0·6	0·04	213	c	bc c *Stcu* y	c bc *Stcu* c y	bc b w
20	2·1	0·43	1·3	0·26	Calm:SW	SSW:SW	0·2	0·02	196	b c b w	b c *Frcu* y	c *Stcu* y	c
21	4·9	0·98	4·9	0·98	SSW:SW	W:WSW	0·4	0·02	210	c	c b *Cu Cist* bc *Frcu* y	c y	c b
22	5·0	1·00	5·0	1·00	Calm:WSW	Calm:SW	0·1	0·00	192	b w	c w b *Cicu Acu* c *Stcu* y	c p$_o$ c	c bc b w
23	5·0	1·00	5·0	1·00	Calm	SE:Calm	0·1	0·01	173	b	b *Frcu Cu Ci* bc y	bc *Frcu* y b	b w
24	1·8	0·36	1·7	0·34	Calm	ESE:Calm	0·3	0·02	150	b m f w	b z$_o$ y	b *Frcu* y	b bc
25	0·0	0·00	0·0	0·00	Calm:NNE	N:NNE	1·4	0·16	273	c z$_o$	c b z$_o$ c y	c *Acu Stcu* y	c
26	3·7	0·73	3·4	0·69	NNE	NNE:Calm	0·7	0·06	227	c	c b y	b y	b
27	0·7	0·14	0·7	0·14	WSW	NNW:NE	1·0	0·10	249	b c	c *Ci Cicu Acu*	c	c b c
28	3·8	0·81	3·7	0·78	NNE	NNE	1·8	0·20	299	c bc b	b c bc y	b y	b
29	2·7	0·56	2·7	0·56	N:NNE	NE:ESE:E	0·9	0·11	274	b c	c b *Cu* y	b y	b
30	2·2	0·47	1·6	0·34	ENE	NE:E	1·8	0·18	289	b c	c *Stcu* b *Ci Frcu* y	b *Frcu* y	b c w
31	4·7	1·00	4·7	1·00	NE:ENE	ENE:NE	1·5	0·16	294	c	c b *Frst* z$_o$	b	b
Means	2·9	0·53	2·7	0·49	...	...	...	0·15	245				
Number of Column for Reference	19	20	21	22	23	24	25	26	27	28	29	30	31

The mean *Temperature of Evaporation* for the month was 48°·7, being 0°·3 lower than
The mean *Temperature of the Dew Point* for the month was 44°·4, being 0°·5 lower than
The mean *Degree of Humidity* for the month was 73·4, being 0·5 less than
The mean *Elastic Force of Vapour* for the month was 0·293 in., being 0·005 in. less than
} the average for the 65 years, 1841-1905.

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

The mean proportion of *Sunshine* for the month (constant sunshine being represented by 1) was 0·381. The maximum daily amount of *Sunshine* was 13·7 hours on May 13.

The highest reading of the *Solar Radiation Thermometer* was 137°·8 on May 23; and the lowest reading of the *Terrestrial Radiation Thermometer* was 28°·8 on May 3.

The *Proportions of Wind* referred to the cardinal points were N.32, E.22, S.12, W.9, calm or nearly calm conditions, 25, the whole month being represented by 100.

The *Greatest Pressure of the Wind* in the month was 4·5 lbs. on the square foot on May 16. The mean daily *Horizontal Movement of the Air* for the month was 245 miles; the greatest daily value was 404 miles on May 16, and the least daily value was 150 miles on May 24.

Rain (0·005 in. or over) fell on 8 days in the month, amounting to 1·642 in., as measured by gauge No.6 partly sunk below the ground; being 0·273 in. less than the average fall for the 65 years, 1841-1905.

TABLE XVII. - DAILY RESULTS OF THE METEOROLOGICAL OBSERVATIONS

MONTH and DAY 1939	BAROMETER	TEMPERATURE							Difference between the Air Temperature and Dew Point Temperature			Degree of Humidity (Saturation = 100)	TEMPERATURE			Rain collected in Gauge No. 6, whose receiving Surface is 5 inches above the Ground	Daily Duration of Sunshine	Sun above Horizon
		Of the Air					Of Evaporation	Of the Dew Point					Of Radiation		Of the Earth 4 ft. below the Surface of the Soil			
	Mean of 24 Hourly Values (corrected and reduced to 32° Fahrenheit)	Highest	Lowest	Daily Range	Mean of 24 Hourly Values	Excess above Average of 65 Years	Mean of 24 Hourly Values	Deduced Mean Daily Value	Mean	Greatest	Least		Highest in Sun's Rays	Lowest on the Grass				
	in.															in.	hours	hours
June 1	30·109	65·7	47·1	18·6	54·5	- 2·9	49·6	44·4	10·1	25·1	2·2	69	125·4	41·0	52·3	0·000	7·5	16·3
2	30·096	73·7	50·1	23·6	61·3	+ 3·5	53·9	46·7	14·6	32·8	3·9	59	133·8	44·6	52·8	0·000	12·1	16·3
3	30·106	71·4	47·8	23·6	60·2	+ 2·1	50·2	38·5	21·7	36·1	5·3	44	131·8	37·3	52·9	0·000	14·3	16·4
4	30·081	73·5	45·1	28·4	61·2	+ 2·9	51·3	40·3	20·9	29·3	4·5	46	133·1	30·1	53·1	0·000	15·1	16·4
5	30·081	75·9	48·0	27·9	63·7	+ 5·3	53·8	43·8	19·9	33·3	5·0	48	137·6	34·6	53·3	0·000	13·7	16·4
6	30·000	82·6	56·2	26·4	69·0	+10·7	62·2	57·4	11·6	22·5	2·3	67	140·1	49·1	53·6	0·000	13·5	16·4
7	29·978	85·2	57·1	28·1	70·8	+12·6	63·1	57·8	13·0	22·4	1·5	63	139·0	46·6	53·8	0·000	12·9	16·5
8	30·046	73·7	51·4	22·3	62·8	+ 4·7	56·2	50·4	12·4	18·4	3·6	64	133·0	43·5	54·1	0·000	10·5	16·5
9	30·125	65·6	46·6	19·0	56·5	- 1·5	49·9	42·7	13·8	20·3	4·1	59	132·4	33·6	54·2	0·000	12·0	16·5
10	29·830	78·8	45·0	33·8	62·7	+ 4·6	54·2	45·9	16·8	25·4	3·9	54	135·6	33·1	54·6	0·000	13·7	16·5
11	29·563	63·0	48·0	15·0	56·7	- 1·5	52·5	48·5	8·2	18·5	0·9	74	125·3	44·7	54·6	0·407	3·0	16·5
12	29·694	61·0	44·8	16·2	51·2	- 7·2	46·3	40·3	10·9	22·3	1·2	67	123·8	37·1	54·8	0·109	8·3	16·6
13	29·820	59·7	42·9	16·8	50·7	- 7·8	45·3	38·4	12·3	19·8	3·4	63	123·0	33·8	54·7	0·000	5·3	16·6
14	29·753	65·6	47·6	18·0	55·7	- 3·0	52·5	49·5	6·2	15·8	2·9	80	133·6	43·2	54·8	0·000	2·0	16·6
15	29·664	64·1	54·6	9·5	59·5	+ 0·7	56·0	53·1	6·4	12·1	3·2	79	109·2	51·0	54·8	0·002	0·2	16·6
16	29·616	62·3	52·4	9·9	58·0	- 0·9	55·8	53·9	4·1	11·1	1·3	86	91·5	44·5	54·8	0·136	0·8	16·6
17	29·805	66·9	46·1	20·8	57·7	- 1·3	52·7	47·9	9·8	17·9	1·9	70	131·4	38·1	54·8	0·000	8·4	16·6
18	29·784	66·2	51·9	14·3	58·9	- 0·3	55·5	52·6	6·3	14·4	2·0	79	116·1	45·9	54·8	0·089	4·9	16·6
19	29·862	67·2	49·9	17·3	58·0	- 1·5	52·2	46·5	11·5	22·6	3·9	65	120·1	39·4	54·8	0·000	3·5	16·6
20	29·888	63·7	48·8	14·9	54·9	- 5·0	51·0	47·1	7·8	11·7	2·6	75	126·3	36·1	54·8	0·064	1·3	16·6
21	29·877	69·0	52·2	16·8	58·9	- 1·4	55·8	53·2	5·7	17·1	1·5	81	134·8	44·2	54·9	0·072	2·3	16·6
22	29·798	62·3	52·9	9·4	57·2	- 3·4	55·9	54·9	2·3	7·6	0·9	91	87·3	52·1	54·9	0·000	0·3	16·6
23	29·670	61·0	52·8	8·2	55·5	- 5·4	53·9	52·5	3·0	6·2	1·4	90	80·4	52·0	54·9	0·018	0·0	16·6
24	29·497	59·1	50·6	8·5	54·0	- 7·2	51·1	48·3	5·7	9·9	2·4	81	89·2	49·8	55·0	0·000	0·0	16·6
25	29·563	60·2	47·8	12·4	53·5	- 7·9	48·8	43·7	9·8	15·4	4·8	69	108·9	44·8	54·9	0·000	0·8	16·6
26	29·818	64·9	48·0	16·9	55·6	- 5·9	51·1	46·6	9·0	19·8	1·5	71	120·1	39·9	55·0	0·043	4·8	16·6
27	30·025	71·9	45·2	26·7	59·5	- 2·1	52·9	46·5	13·0	24·2	1·1	62	137·5	33·6	55·1	0·000	12·0	16·6
28	29·765	66·1	56·8	9·3	61·4	- 0·2	57·4	54·2	7·2	14·8	3·5	77	110·7	52·7	55·0	0·012	0·9	16·6
29	29·736	74·0	54·3	19·7	62·9	+ 1·3	56·4	50·8	12·1	34·0	3·6	65	138·8	44·6	55·1	0·013	7·1	16·6
30	29·709	66·6	49·8	16·8	57·6	- 3·9	53·8	50·3	7·3	16·1	1·6	77	129·2	38·2	55·3	0·417	4·8	16·6
Means	29·845	68·0	49·7	18·3	58·7	- 0·7	53·3	48·2	10·4	19·9	2·7	69·2	122·6	42·0	54·4	Sum 1·382	6·5	16·5
Number of Column for Reference	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18

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 autographic 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 autographic 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 29·845 in., being 0·023 in. higher than the average for the 65 years, 1841-1905.

TEMPERATURE OF THE AIR.

The highest in the month was 85°·2 on June 7; the lowest in the month was 42°·9 on June 13; and the range was 42°·3.

The mean of all the highest daily readings in the month was 68°·0, being 0°·9 lower than the average for the 65 years, 1841-1905. †

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

The mean of the daily ranges was 18°·3, being 0°·2 less than the average for the 65 years, 1841-1905. †

The mean for the month was 58°·7, being 0°·7 lower than the average for the 65 years, 1841-1905.

† The average has been corrected for the presumed effect of the change of thermometer screen on 1938 January 1. (See Introduction p. xvii).

TABLE XVII. - DAILY RESULTS OF THE METEOROLOGICAL OBSERVATIONS

MONTH and DAY 1939	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.	OSLER'S General Direction P.M.	OSLER'S Pressure on the Square Foot Greatest	OSLER'S Pressure on the Square Foot Mean of 24 Hourly Measures	Robinson's Horizontal Movement of the Air	CLOUDS AND WEATHER 0h to 6h	6h to 12h	12h to 18h	18h to 24h
	hours		hours				lbs.	lbs.	miles				
June 1	1·1	0·24	0·4	0·08	NNE	NNE	3·0	0·50	381	b c	c *Stcu*	c b y	b c
2	4·7	1·00	4·7	1·00	NNE:NE	NE	2·8	0·48	377	c	c b *Frcu Cu Ci* y	b y	b
3	4·5	1·00	4·5	1·00	NE:ENE	ENE:NE	2·7	0·42	341	b	b bc *Ci* y *so-ha*	b y v	b y
4	4·5	1·00	4·5	1·00	ENE	E	2·3	0·26	299	b	b y	b y	b y
5	2·1	0·47	1·9	0·43	ENE:E	E	1·7	0·17	290	b	b *Cist* y	b *Ci* y	bc
6	4·5	1·00	4·5	1·00	ENE	E	1·1	0·07	240	bc b	b *Ci* y	b *Cist* y	b
7	3·9	0·87	3·9	0·87	Calm:NE	E:ESE	0·6	0·05	205	b m z_o	b z_o y	b z_o y	b c b
8	4·5	1·00	4·5	1·00	NE:N	NE:ENE	2·0	0·14	267	b	b *Cist* z_o	b c y	c b
9	4·5	1·00	4·5	1·00	NE:ENE	ESE:Calm	1·2	0·07	234	b	b c *Acu Ast Cist so-ha* y	b y	b
10	0·2	0·05	0·2	0·05	Calm:SW	SW	1·7	0·11	254	b c	c y bc *Ci* b	b *Ci* y	bc c
11	0·7	0·15	0·6	0·14	Calm:N	NNW:N	2·5	0·12	239	c r_o rr R	rrc ir_o	c r c	c rtl
12	3·3	0·73	3·1	0·69	N	NW:NNE	2·1	0·23	294	rtl c bc	bc *Frcu* c y	c ir_o y	c b
13	0·0	0·00	0·0	0·00	NNW	NW:SSE	1·1	0·06	237	b c	c y	c *Stcu* r_o c y	c r_o c
14	0·1	0·03	0·1	0·03	Calm:SSW	SSW	0·9	0·10	255	c	c *Acu* bc c *Stcu* y	c ir_o	c
15	0·1	0·02	0·1	0·02	SSW	SW:SSW	2·0	0·34	344	c r_o c	c id_o *Nbst* r_o	c *Nbst* p_o c	c
16	4·1	0·91	3·8	0·85	SSW	S:WSW	1·1	0·14	262	c r c	c *Nbst* rr	rr $r_o r_o$ c	c b
17	2·3	0·50	1·9	0·43	WSW:SW	SW:SSW	1·0	0·11	273	b	b bc *Frst Ci Stcu Frcu* y	c y	c bc
18	2·3	0·51	2·1	0·47	S:SSW	SW	4·0	0·31	324	bc	b c *Acu Frst*	c p c	c p c bc
19	2·2	0·50	2·2	0·50	W:WNW	WNW:NNW	2·8	0·22	315	bc b c	c *Stcu Frcu* y	c *Stcu Frst*	c b
20	2·2	0·49	1·9	0·43	WSW:Calm	Var:ENE	0·6	0·04	202	b c	c r	rRt c ir	c b
21	0·0	0·00	0·0	0·00	NE:NNE	NE	4·3	0·51	398	b c	c *Nbst* ir c *Stcu Ast*	c *Frst*	c
22	0·0	0·00	0·0	0·00	NE:NNE	NNE	2·5	0·23	332	c	o *St* m_o r_o	oc *St*	c
23	0·0	0·00	0·0	0·00	NNE	NNW	1·2	0·06	252	c r_o r c	c m_o	c	c
24	0·0	0·00	0·0	0·00	NNW:NNE	NNE	1·2	0·12	266	c	c	c	c
25	0·0	0·00	0·0	0·00	N	N:NNE	0·6	0·06	230	c	c *Stcu*	c	c
26	4·5	1·00	4·5	1·00	Calm	Calm:SSW	0·6	0·01	173	c	b c *Nbst Frcu Cunb* y	c *Cunb Frcu* r c	c bc b
27	0·0	0·00	0·0	0·00	SW	SSW:S	0·8	0·08	250	b	b bc *Cu Acu Frcu* y	c b *Frcu* c y	c
28	1·1	0·24	1·1	0·24	S:SSW	SSW:SW	2·5	0·35	346	c p c	c ir_o	c *Nbst*	c
29	4·5	1·00	4·5	1·00	SW:WSW	WSW:SW	3·0	0·31	348	bc c	c *Nbst* r c *Frcu*	c *Acu* y	c b
30	4·5	1·00	4·5	1·00	SSW:SW	SSW:WSW	1·9	0·08	263	b bc c	c *Stcu*	c iR	c b
Means	2·2	0·49	2·1	0·47	...	...	...	0·19	283				
Number of Column for Reference	19	20	21	22	23	24	25	26	27	28	29	30	31

The mean *Temperature of Evaporation* for the month was 53°·3, being 1°·6 lower than
The mean *Temperature of the Dew Point* for the month was 48°·2, being 2°·6 lower than
The mean *Degree of Humidity* for the month was 69·2, being 4·0 less than
The mean *Elastic Force of Vapour* for the month was 0·339 in., being 0·036 in. 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 6·2.

The mean proportion of *Sunshine* for the month (constant sunshine being represented by 1) was 0·393. The maximum daily amount of *Sunshine* was 15·1 hours June 4.

The highest reading of the *Solar Radiation Thermometer* was 140°·1 on June 6; and the lowest reading of the *Terrestrial Radiation Thermometer* was 30°·1 on June 4.

The *Proportions of Wind* referred to the cardinal points were N.29, E.22, S.21, W.19, calm or nearly calm conditions, 9, the whole month being represented by 100.

The *Greatest Pressure of the Wind* in the month was 4·3 lbs. on the square foot on June 21. The mean daily *Horizontal Movement of the Air* for the month was 283 miles; the greatest daily value was 398 miles on June 21, and the least daily value was 202 miles on June 20.

Rain (0·005 in. or over) fell on 11 days in the month, amounting to 1·382 in., as measured by gauge No.6 partly sunk below the ground; being 0·656 in. less than the average fall for the 65 years, 1841–1905.

TABLE XVII. - DAILY RESULTS OF THE METEOROLOGICAL OBSERVATIONS

MONTH and DAY 1939	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
July 1	29·720	66·4	48·0	18·4	56·4	- 5·1	51·7	47·1	9·3	19·7	0·8	71	125·0	34·9	55·2	0·009	6·8	16·6
2	29·909	66·0	44·4	21·6	56·3	- 5·3	51·8	47·4	8·9	19·5	2·5	72	118·3	31·6	55·5	0·023	6·4	16·6
3	29·956	71·2	52·8	18·4	61·1	- 0·7	55·0	49·5	11·6	20·9	2·3	66	137·9	43·7	55·4	0·000	6·6	16·5
4	29·749	80·4	55·5	24·9	67·8	+ 5·7	59·3	52·5	15·3	28·0	5·3	58	137·0	47·2	55·7	0·080	5·0	16·5
5	29·606	71·7	55·4	16·3	63·9	+ 1·6	58·0	53·2	10·7	19·7	4·7	68	130·6	48·6	55·7	0·020	4·4	16·5
6	29·816	65·7	52·2	13·5	58·5	- 3·9	54·9	51·8	6·7	16·3	1·9	78	128·1	48·4	55·8	0·178	3·1	16·5
7	29·756	73·3	56·9	16·4	63·0	+ 0·6	58·7	55·4	7·6	18·2	3·5	76	133·1	52·1	55·9	0·030	7·2	16·5
8	29·715	67·4	58·6	8·8	62·5	+ 0·1	59·8	57·9	4·6	10·8	1·7	85	92·8	52·8	56·1	0·015	0·3	16·4
9	29·742	70·5	55·7	14·8	63·1	+ 0·7	56·6	51·0	12·1	23·0	3·2	65	135·2	51·2	56·3	0·000	10·3	16·4
10	29·983	68·7	51·8	16·9	60·1	- 2·4	54·2	48·8	11·3	18·5	2·0	66	125·8	44·6	56·2	0·000	8·3	16·4
11	30·028	69·4	49·8	19·6	59·7	- 3·0	52·7	45·7	14·0	21·0	4·4	60	131·0	36·1	56·6	0·000	8·1	16·3
12	29·923	69·2	53·3	15·9	60·8	- 2·1	53·5	46·3	14·5	20·1	4·2	59	129·5	45·6	56·7	0·000	5·0	16·3
13	29·716	72·1	50·1	22·0	61·5	- 1·6	55·2	49·5	12·0	24·1	1·7	65	131·6	37·0	56·7	0·000	8·0	16·3
14	29·455	69·9	50·0	19·9	60·1	- 3·2	55·9	52·3	7·8	18·1	0·9	75	131·1	36·4	56·7	0·010	5·5	16·3
15	29·434	72·0	54·0	18·0	63·2	- 0·2	57·8	53·4	9·8	18·9	0·9	71	137·2	44·2	56·8	0·000	7·3	16·2
16	29·373	73·2	56·1	17·1	62·8	- 0·6	58·1	54·4	8·4	19·7	1·3	74	134·7	49·3	56·8	0·012	8·2	16·2
17	29·466	72·2	54·8	17·4	61·1	- 2·3	57·4	54·4	6·7	16·0	1·8	79	131·9	48·4	57·0	0·087	2·8	16·1
18	29·595	71·1	54·0	17·1	61·9	- 1·4	58·4	55·7	6·2	15·6	1·3	80	121·6	48·0	57·1	0·066	3·9	16·1
19	29·496	69·2	54·5	14·7	62·0	- 1·2	58·7	56·2	5·8	13·5	0·7	81	122·1	43·8	57·1	0·040	5·9	16·1
20	29·646	68·7	53·8	14·9	60·0	- 3·2	57·3	55·1	4·9	15·4	0·8	84	132·4	45·0	57·2	0·430	1·3	16·0
21	29·738	69·2	56·1	13·1	60·1	- 3·1	58·7	57·7	2·4	10·3	0·9	92	119·1	49·8	57·2	0·825	1·6	16·0
22	29·677	67·0	56·1	10·9	60·7	- 2·4	58·7	57·3	3·4	12·9	0·0	88	111·5	49·8	57·3	0·004	0·4	16·0
23	29·592	66·3	49·2	17·1	59·6	- 3·4	54·2	49·3	10·3	19·9	1·1	69	124·9	40·0	57·5	0·000	3·7	15·9
24	29·455	62·3	47·7	14·6	53·4	- 9·5	50·3	47·1	6·3	14·6	1·2	79	116·9	37·8	57·2	0·178	2·7	15·9
25	29·759	72·1	48·2	23·9	60·6	- 2·1	54·1	48·0	12·6	22·4	2·2	63	124·3	41·1	57·6	0·000	11·5	15·8
26	29·837	66·0	53·7	12·3	58·5	- 4·0	55·6	53·2	5·3	11·1	1·3	82	93·1	42·0	57·4	0·017	0·9	15·8
27	29·932	74·8	50·0	24·8	63·1	+ 0·7	57·9	53·7	9·4	21·0	0·8	72	134·2	38·1	57·1	0·000	7·7	15·7
28	29·843	71·8	59·3	12·5	65·1	+ 2·8	61·0	58·0	7·1	13·7	2·3	78	121·5	51·8	57·6	0·001	3·0	15·7
29	29·654	71·3	59·6	11·7	65·3	+ 3·0	62·1	59·9	5·4	10·1	3·4	83	118·6	52·3	57·6	0·000	1·3	15·6
30	29·544	75·5	57·2	18·3	65·6	+ 3·3	60·8	57·4	8·2	20·8	1·4	75	138·1	50·0	57·7	0·001	5·1	15·6
31	29·706	68·1	54·6	13·5	60·5	- 1·7	56·9	53·9	6·6	16·4	1·5	79	120·7	47·3	57·8	0·333	7·3	15·5
Means	29·704	70·1	53·3	16·8	61·2	- 1·4	56·6	52·7	8·6	17·7	2·0	74·0	125·5	44·8	56·7	Sum 2·359	5·1	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 autographic 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 autographic 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 29·704 in., being 0·102 in. lower than the average for the 65 years, 1841-1905.

TEMPERATURE OF THE AIR.

The highest in the month was 80°·4 on July 4; the lowest in the month was 44°·4 on July 2; and the range was 36°·0.

The mean of all the highest daily readings in the month was 70°·1, being 2°·0 lower than the average for the 65 years, 1841-1905. †

The mean of all the lowest daily readings in the month was 53°·3, being 0°·5 lower than the average for the 65 years, 1841-1905. †

The mean of the daily ranges was 16°·8, being 1°·5 less than the average for the 65 years, 1841-1905. †

The mean for the month was 61°·2, being 1°·4 lower than the average for the 65 years, 1841-1905.

† The average has been corrected for the presumed affect of the change of thermometer screen on 1938 January 1. (See Introduction p. xvii).

TABLE XVII. - DAILY RESULTS OF THE METEOROLOGICAL OBSERVATIONS

MONTH and DAY 1939	RECORD OF THE NIGHT SKY				WIND AS DEDUCED FROM SELF-REGISTERING ANEMOMETERS					CLOUDS AND WEATHER *			
	POLARIS		δ URSÆ MINORIS		OSLER'S				Robinson's				
	Duration	Fraction of Total Exposure	Duration	Fraction of Total Exposure	General Direction		Pressure on the Square Foot		Horizontal Movement of the Air				
					A.M.	P.M.	Greatest	Mean of 24 Hourly Measures		0^h to 6^h	6^h to 12^h	12^h to 18^h	18^h to 24^h
	hours		hours				lbs.	lbs.	miles				
July 1	4·3	0·95	4·3	0·95	Calm:NNW	NNW:N	1·8	0·12	253	b c	c b c y	c y	c p b
2	3·3	0·75	3·3	0·75	SW:WSW	SW	2·0	0·17	303	b	bc c *Frst Nbst* y	c p c	c b
3	1·6	0·35	1·4	0·32	SW	SSW:SE	1·2	0·08	259	bc c	c bc *Stcu* c y	c bc y	b c
4	3·7	0·83	3·5	0·79	SE:SSE	SSE	2·3	0·15	261	c	c *Nbst* r y	c y	c y bc b
5	3·6	0·80	3·6	0·80	SE:SSW	SW:SSW	2·4	0·28	334	b c r c	c *Nbst* ir c *Frcu Cist* y	c y b *Cist Acu* bc c	c bc
6	0·0	0·00	0·0	0·00	SW	SW:SSW	5·2	0·77	395	bc c rr c	c r c *Frcu Nbst* y	c ir *Nbst Frst* c	c ir_o
7	1·1	0·25	0·9	0·20	SSW:SW	SW	3·6	0·58	417	c r c	c *Nbst* r d_o ir_o *Stcu*	bc b *Acu* y	b c
8	0·7	0·15	0·6	0·13	SSW:SW	SW	7·0	0·69	402	c r c	c *St*	c r c	c
9	4·6	0·93	4·6	0·93	WSW:W	W:WSW	2·4	0·40	379	c	c bc y	bc y r_o bc	bc b
10	..	..	..	..	W:NW	NW:N	1·4	0·10	277	b c	c *Stcu Frst* y	c *Frcu* y	c
11	0·0	0·00	0·0	0·00	NW:WNW	NW:NNW	0·7	0·06	247	c b	b bc *Frst* y	bc c y	c
12	5·0	1·00	5·0	1·00	NNW:NW	Calm:WSW:SW	0·3	0·04	220	c	c bc *Frcu* y	c y *Frcu*	bc b bc b w
13	4·0	0·80	3·1	0·61	WSW:SW	SW:S	1·8	0·08	250	b	b bc *Frcu* c *Stcu* y	c y	c b
14	2·5	0·49	2·3	0·47	S:SSW	SSW	2·5	0·24	296	b c ir	c *Nbst* idd $_o$ *Ast*	c bc *Cu Nbst* y	bc b c
15	1·8	0·35	1·6	0·30	S:SSW	S:SSE	1·3	0·13	273	c	c *Frcu Nbst Stcu*	c p v y	c bc
16	1·9	0·35	1·7	0·32	S:SSW	SSW	1·6	0·11	265	bc c ir c	c *Acu Cu* y	c y	c b c r_o
17	3·1	0·60	3·0	0·57	SW:WSW	SW:SSW	2·4	0·14	285	c	c *Acu Frcu* bc y	c tlr *Cunb Acu*	bc b bc
18	1·6	0·30	1·5	0·29	SSW	SSE:S	1·3	0·08	245	bc c	c bc *Frcu Acu Nbst* id	c rd ir	cp bc c bc
19	4·9	0·92	4·9	0·92	S:SSW	S:SSW	1·8	0·14	271	bc c b	b c *Nbst* d_o ir	c bc *Acu Frcu*	bc b
20	0·0	0·00	0·0	0·00	SSW	SSW	1·4	0·10	270	b bc p	bc c *Nbst* p_o c	c ir	c ir rr R
21	1·5	0·29	1·5	0·29	SSW	SW:SSW	1·3	0·03	222	rrRc	c ir t *Nbst* c rr	c ir tt p	ctc b c
22	0·0	0·00	0·0	0·00	SSW:WSW	SW	0·7	0·07	252	c	c	c r_o	c id_o
23	4·5	0·78	4·0	0·70	NW:W:WSW	WSW:SW	1·0	0·10	286	c r_o c	c y	c y r_o	c b
24	5·7	0·98	5·6	0·97	SSW:WSW	NW:NNW	2·6	0·06	237	b c rR	rRc *Cunb Nbst Acu*	c ir_o it ir	c r c bc p b
25	0·5	0·08	0·3	0·04	NW:NNW	NW:WSW	0·8	0·09	253	b c b	b bc *Frcu Cu* y	bc *Frcu Cu* y	bc c d_o
26	5·7	1·00	5·7	1·00	Calm	Calm:SW	0·2	0·00	165	c	c ir	c *Ast Stcu*	bc b w m_o
27	0·0	0·00	0·0	0·00	WSW	SW	0·8	0·08	256	b w m_o	b *Ci Cu* z_o y	b c *Stcu* v y	c d_o c
28	3·7	0·64	3·6	0·63	SW	SW:SSW	1·5	0·14	296	c r c	c *Stcu*	c *Stcu*	c b w
29	3·2	0·51	3·0	0·48	SSW	SW :SSW	1·7	0·20	311	b c	c *Acu Nbst*	c *Frcu*	d_o c bc
30	5·1	0·81	5·0	0·79	S:SW	WSW:SW	1·5	0·14	287	bc c r_o	c d_o *Stcu* bc c y	c b y v c	c b
31	4·4	0·71	4·3	0·68	SW	SW	3·8	0·19	346	b	b c *Stcu Frcu Nbst* r	c ir Rtl *Nbst* c	bc b c b
Means	2·7	0·52	2·6	0·50	...	...	...	0·18	284				
Number of Column for Reference	19	20	21	22	23	24	25	26	27	28	29	30	31

The mean *Temperature of Evaporation* for the month was 56°·6, being 1°·3 lower than
The mean *Temperature of the Dew Point* for the month was 52°·7, being 1°·4 lower than
The mean *Degree of Humidity* for the month was 74·0, being 0·8 greater than
The mean *Elastic Force of Vapour* for the month was 0·401 in., being 0·020 in. less than
} the average for the 65 years, 1841-1905.

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

The mean proportion of *Sunshine* for the month (constant sunshine being represented by 1) was 0·319. The maximum daily amount of *Sunshine* was 11·5 hours on July 25.

The highest reading of the *Solar Radiation Thermometer* was 138°·1 on July 30; and the lowest reading of the *Terrestrial Radiation Thermometer* was 31°·6 on July 2.

The *Proportions of Wind* referred to the cardinal points were N.8, E.2, S.46, W.38, calm or nearly calm conditions 6, the whole month being represented by 100.

The *Greatest Pressure of the Wind* in the month was 7·0 lbs. on the square foot on July 8. The mean daily *Horizontal Movement of the Air* for the month was 284 miles; the greatest daily value was 417 miles on July 7, and the least daily value was 165 miles on July 26.

Rain (0·005 in. or over) fell on 17 days in the month, amounting to 2·359 in., as measured by gauge No.6 partly sunk below the ground; being 0·040 in. less than the average fall for the 65 years, 1841-1905.

TABLE XVII. - DAILY RESULTS OF THE METEOROLOGICAL OBSERVATIONS

MONTH and DAY 1939	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	29·899	71·8	53·6	18·2	61·2	- 1·0	57·2	53·9	7·3	17·0	2·1	77	129·2	48·1	58·0	0·240	4·3	15·5
2	29·895	69·0	52·2	16·8	59·7	- 2·4	56·0	52·9	6·8	17·0	0·2	78	122·1	47·0	58·1	0·020	1·9	15·4
3	29·627	58·0	54·0	4·0	55·9	- 6·2	55·2	54·6	1·3	4·6	1·1	95	80·5	51·6	58·0	0·888	0·5	15·4
4	29·686	64·0	54·8	9·2	58·6	- 3·5	57·2	56·1	2·5	10·1	0·4	91	113·7	53·2	58·1	0·546	0·7	15·3
5	29·665	64·3	52·4	11·9	58·8	- 3·3	57·2	55·9	2·9	9·0	0·9	90	117·3	44·6	58·2	0·556	2·9	15·3
6	29·695	71·8	52·3	19·5	60·8	- 1·4	57·2	54·3	6·5	17·1	0·2	79	131·4	44·0	58·2	0·000	4·5	15·2
7	29·636	65·0	52·2	12·8	57·9	- 4·3	56·0	54·4	3·5	8·8	0·2	88	93·8	43·3	58·2	0·015	0·7	15·1
8	29·607	70·7	53·1	17·6	60·2	- 2·1	57·4	55·1	5·1	12·8	0·6	83	131·7	45·0	58·3	0·116	3·5	15·1
9	29·723	68·7	51·7	17·0	59·9	- 2·4	57·4	55·3	4·6	15·6	0·8	85	127·7	45·6	58·3	0·002	1·7	15·0
10	29·721	67·6	57·6	10·0	62·5	+ 0·2	60·6	59·3	3·2	7·0	0·8	89	108·6	54·0	58·3	0·079	0·1	15·0
11	29·883	70·0	53·9	16·1	60·9	- 1·5	56·0	51·8	9·1	20·6	0·4	72	124·2	43·0	58·3	0·000	9·7	14·9
12	30·024	69·9	50·0	19·9	60·4	- 2·1	55·2	50·6	9·8	17·9	1·4	70	130·1	40·0	58·4	0·000	9·2	14·9
13	30·093	69·2	51·1	18·1	60·8	- 1·7	55·8	51·5	9·3	20·2	2·9	71	128·1	38·6	58·5	0·000	7·1	14·8
14	30·150	70·8	47·3	23·5	59·6	- 2·9	54·9	50·7	8·9	17·1	0·6	72	120·5	36·2	58·6	0·000	8·9	14·7
15	30·184	73·4	48·0	25·4	60·8	- 1·6	55·6	51·1	9·7	21·3	0·4	70	126·6	36·0	58·5	0·000	11·9	14·7
16	30·116	76·3	51·1	25·2	63·5	+ 1·2	58·9	55·4	8·1	16·6	0·2	75	122·8	39·6	58·6	0·000	5·7	14·6
17	30·042	73·8	54·3	19·5	63·7	+ 1·6	58·5	54·3	9·4	17·8	0·5	72	128·1	43·8	58·7	0·000	11·9	14·6
18	29·942	74·6	58·1	16·5	65·5	+ 3·6	61·2	58·2	7·3	15·5	1·1	77	129·0	52·2	58·7	0·000	8·0	14·5
19	29·826	78·7	58·4	20·3	67·7	+ 6·0	63·3	60·4	7·3	17·6	1·1	78	124·2	53·0	58·7	0·000	7·8	14·4
20	29·671	79·6	62·1	17·5	69·4	+ 7·9	64·3	61·0	8·4	18·5	1·2	75	125·3	58·7	58·9	0·000	8·8	14·4
21	29·601	82·3	60·5	21·8	67·7	+ 6·4	63·9	61·5	6·2	17·7	0·8	80	132·7	51·0	59·0	0·432	5·4	14·3
22	29·752	75·6	57·1	18·5	65·6	+ 4·5	62·0	59·5	6·1	14·7	0·0	81	127·4	44·5	59·3	0·000	5·3	14·3
23	29·939	73·8	52·0	21·8	62·6	+ 1·7	58·8	55·9	6·7	13·9	1·0	78	115·7	40·8	59·3	0·000	3·6	14·2
24	29·897	68·7	59·3	9·4	62·9	+ 2·1	60·6	59·0	3·9	10·1	0·5	87	105·4	52·6	59·3	0·043	0·4	14·1
25	29·785	68·3	60·1	8·2	63·3	+ 2·6	61·9	60·9	2·4	6·5	0·5	92	88·6	54·0	59·3	0·070	0·0	14·1
26	29·795	76·2	55·7	20·5	65·1	+ 4·4	61·7	59·4	5·7	15·6	0·0	82	133·0	45·6	59·4	0·090	8·2	14·0
27	29·884	76·8	59·4	17·4	66·3	+ 5·7	62·4	59·8	6·5	15·2	1·7	79	135·8	49·1	59·6	0·000	4·6	14·0
28	29·918	77·4	55·0	22·4	66·0	+ 5·6	61·9	59·1	6·9	14·2	0·0	79	132·6	44·1	59·6	0·000	4·9	13·9
29	29·856	77·2	57·3	19·9	66·4	+ 6·1	61·3	57·7	8·7	19·7	0·9	74	133·7	46·2	59·8	0·000	10·5	13·8
30	29·783	70·5	57·8	12·7	63·4	+ 3·3	60·0	57·5	5·9	11·9	1·4	81	120·1	46·6	59·6	0·000	4·3	13·8
31	29·769	70·0	56·1	13·9	62·4	+ 2·5	60·8	59·7	2·7	6·7	0·0	91	97·8	46·4	59·7	0·000	0·3	13·7
Means	29·841	71·7	54·8	17·0	62·6	+ 0·9	59·0	56·3	6·2	14·5	0·8	80·4	120·6	46·4	58·8	Sum 3·097	5·1	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 autographic 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 autographic 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 29·841 in., being 0·051 in. higher than the average for the 65 years, 1841-1905.

TEMPERATURE OF THE AIR.

The highest in the month was 82°·3 on August 21; the lowest in the month was 47°·3 on August 14; and the range was 35°·0.

The mean of all the highest daily readings in the month was 71°·7, being 0°·9 higher than the average for the 65 years, 1841-1905. †

The mean of all the lowest daily readings in the month was 54°·8, being 1°·2 higher than the average for the 65 years, 1841-1905. †

The mean of the daily ranges was 17°·0, being 0°·2 less than the average for the 65 years, 1841-1905. †

The mean for the month was 62°·6, being 0°·9 higher than the average for the 65 years, 1841-1905.

† The average has been corrected for the presumed effect of the change of thermometer screen on 1938 January 1. (See Introduction p. xvii).

TABLE XVII. - DAILY RESULTS OF THE METEOROLOGICAL OBSERVATIONS

MONTH and DAY 1939	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.	OSLER'S General Direction P.M.	OSLER'S Pressure on the Square Foot Greatest	OSLER'S Pressure on the Square Foot Mean of 24 Hourly Measures	Robinson's Horizontal Movement of the Air	CLOUDS AND WEATHER 0h to 6h	6h to 12h	12h to 16h	18h to 24h
	hours		hours				lbs.	lbs.	miles				
Aug. 1	5·3	0·85	5·3	0·85	WSW	WSW:SW:WSW	1·7	0·08	308	b c	c id$_o$ *Acu Cu* bc y	bc y c *Ci Cist Cu* t	c irtl R bc
2	0·0	0·00	0·0	0·00	WSW	WSW:SW	1·3	0·06	284	bc	bc c *Frcu Acu* y	c	c r$_o$ c rr$_o$
3	0·0	0·00	0·0	0·00	SSW:Calm	NNW	0·4	0·00	206	rr	rr	rr c	c ir
4	1·3	0·21	0·9	0·15	N:NNE	NNE:N	3·0	0·08	270	c	c *Nbst Frcu* R t	c irRtl	cir b c
5	2·1	0·30	1·5	0·23	N:NNE	NNE:N:Calm	2·3	0·10	275	c rr	rr c *Nbst*	c bc	bc b c
6	6·5	0·97	6·4	0·95	Calm:W	W:SW	0·5	0·03	220	c	c	c	c b
7	4·2	0·62	3·7	0·55	SSW	SSW	0·8	0·05	247	b c	c r$_o$r$_o$ *Nb Stcu*	c r$_o$ c	c b bc
8	5·1	0·76	3·4	0·50	WSW	SW:WSW	0·7	0·03	227	bc c ir$_o$	c b c d$_o$ *Acu*	c rRt ir$_o$	c
9	0·0	0·00	0·0	0·00	WSW:SW	SSW:SW	1·2	0·10	285	c	c *Acu* bc c *Stcu*	c *Stcu Nbst* r$_o$	r$_o$ c
10	3·2	0·47	3·0	0·44	SSW:SW	SW	2·8	0·29	332	c id	c *Nbst* rr$_o$	r$_o$ c rr$_o$ *Nbst*	r$_o$ c
11	6·3	0·94	5·9	0·87	WSW	W:WSW	1·4	0·10	272	c	c *Frcu Stcu* y	c y	c b w
12	3·5	0·48	3·3	0·45	SW:WSW	NNW	0·3	0·02	216	b	b bc *Frst Frcu Acu* y	c y	c
13	7·3	1·00	7·3	1·00	Calm:NNE	Calm:NE	0·2	0·00	184	c b w	b c *Stcu* y	c y	c b w
14	7·3	1·00	7·3	1·00	Calm	E:Calm	0·0	0·00	156	b w	b z$_o$ c *Stcu* y	c bc *Ci Stcu* b y	b
15	4·4	0·61	4·4	0·61	Calm	E:Calm	0·2	0·01	166	b z$_o$ w	b z$_o$ y	b *Cu* y	b c b
16	7·3	1·00	7·3	1·00	Calm	Calm	0·0	0·00	157	b c w b	b z$_o$ y	c z$_o$ y	bc b z
17	3·4	0·47	3·1	0·43	Calm:ENE	E	0·5	0·06	213	b z w f	b z$_o$ *Frcu Cu* y	b y	b c w
18	6·9	0·96	6·9	0·96	ENE:NE	E:ENE	0·8	0·09	248	c m	c *Stcu Frst*	c *Frcu Stcu* b	b c b
19	3·7	0·48	3·4	0·43	NE	E:NE	1·2	0·11	270	b c f	c m w bc c *Stcu*	c bc y b	b w c
20	3·9	0·51	3·5	0·45	NE	E	1·1	0·12	284	c	c b *Frcu*	b y	b c l
21	2·0	0·26	1·9	0·24	NE:Calm	Calm	0·3	0·01	170	c b c	c bc z b y	bc c tl *Nbst Cumb* Rhr c	bc b c m l
22	7·6	0·98	7·5	0·97	Calm:SW	SW	0·6	0·05	214	c m	c m$_o$ *Ast*	c bc *Cu Frcu Ci* y	bc b
23	2·3	0·30	1·2	0·15	Calm	Calm	0·1	0·00	153	b c w	c z$_o$ *Ast*	c *Ast Stcu*	c b c
24	0·0	0·00	0·0	0·00	ENE:E	ENE:NE	0·3	0·03	229	c r$_o$	r$_o$r c *Nbst Stcu*	c *Stcu*	c r$_o$ c
25	2·1	0·26	0·4	0·05	NE:N	N:Calm	0·1	0·00	178	c	c m$_o$ *Ast*	c Rtc	ctl c r$_o$
26	3·4	0·42	3·1	0·39	Calm:SW	SSW	0·8	0·06	218	c P bc b	b bc *Ci Frst Acu*	bc c	c b c
27	8·0	1·00	8·0	1·00	SSW:SW	SW	0·6	0·05	220	c	c *Cist Acu Frcu*	c	c b w
28	5·3	0·66	4·7	0·58	Calm	Calm	0·1	0·01	159	b w	b f m$_o$ *Ci Cu* c	c *Acu*	c b
29	3·1	0·38	3·1	0·38	Calm:E	E	0·7	0·08	211	b w m c	c b m$_o$ *Ci*	b *Ci* y	b bc w c
30	5·0	0·63	4·1	0·51	ENE:NE	ENE:Calm	1·0	0·11	241	c m	c *Frst Ast*	c *Stcu* b	b w c
31	7·1	0·89	6·6	0·83	ENE	Calm:SW	0·4	0·02	198	c m F	F m *Ast*	c r$_o$ *Stcu* c	c bc w
Means	4·1	0·56	3·8	0·52	...	...	...	0·06	226				
Number of Column for Reference	19	20	21	22	23	24	25	26	27	28	29	30	31

The mean *Temperature of Evaporation* for the month was 59°·0, being 1°·5 higher than
The mean *Temperature of the Dew Point* for the month was 56°·3, being 2°·0 higher than
The mean *Degree of Humidity* for the month was 80·4, being 3·6 greater than
The mean *Elastic Force of Vapour* for the month was 0·457 in., being 0·033 in. greater than
} the average for the 65 years, 1841-1905.

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

The mean proportion fo *Sunshine* for the month (constant sunshine being represented by 1) was 0·347. The maximum daily amount of *Sunshine* was 11·9 hours on August 15 and 17.

The highest reading of the *Solar Radiation Thermometer* was 135°·8 on August 27; and the lowest reading of the *Terrestrial Radiation Thermometer* was 36°·0 on August 15

The *Proportions of Wind* referred to the cardinal points were N.14, E.21, S.18, W.21, calm or nearly calm conditions 26, the whole month being represented by 100.

The *Greatest Pressure of the Wind* in the month was 3·0 lbs. on the square foot on August 4. The mean daily *Horizontal Movement of the Air* for the month was 226 miles; the greatest daily value was 332 miles on August 10, and the least daily value was 153 miles on August 23.

Rain (0·005 in. or over) fell on 12 days in the month, amounting to 3·097 in., as measured by gauge No.6 partly sunk below the ground; being 0·753 in. greater than the average fall for the 65 years, 1841-1905.

TABLE XVII. - DAILY RESULTS OF THE METEOROLOGICAL OBSERVATIONS

MONTH and DAY 1939	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
Sept. 1	29·839	74·8	56·0	18·8	65·3	+ 5·5	62·4	60·4	4·9	11·1	0·0	84	128·5	46·7	59·8	0·064	1·5	13·6
2	29·793	76·1	62·4	13·7	68·5	+ 8·8	65·1	63·0	5·5	10·6	0·0	82	124·4	60·1	59·9	0·427	1·0	13·6
3	29·651	73·7	57·3	16·4	66·2	+ 6·6	62·9	60·7	5·5	17·1	0·0	83	132·2	49·6	59·9	0·030	10·0	13·5
4	29·812	75·8	55·7	20·1	63·7	+ 4·2	59·5	56·4	7·3	17·4	0·0	77	129·8	44·5	60·0	0·000	6·4	13·5
5	29·938	78·0	53·5	24·5	63·5	+ 4·1	58·1	53·7	9·8	21·3	0·0	71	127·6	41·8	60·1	0·000	10·5	13·4
6	30·046	76·2	47·8	28·4	61·7	+ 2·5	56·8	52·7	9·0	16·5	0·0	72	134·9	34·8	60·2	0·000	9·0	13·3
7	30·070	79·5	49·9	29·6	64·3	+ 5·3	58·8	54·5	9·8	21·4	0·0	71	134·4	37·4	60·3	0·000	11·7	13·3
8	29·973	81·7	58·0	23·7	68·5	+ 9·7	63·8	60·7	7·8	16·1	0·0	77	130·8	45·3	60·2	0·000	10·5	13·2
9	29·917	80·7	56·2	24·5	67·1	+ 8·5	62·9	60·1	7·0	16·1	0·0	79	126·4	44·1	60·1	0·000	8·0	13·1
10	29·842	73·2	58·0	15·2	64·6	+ 6·2	60·7	57·9	6·7	15·4	0·0	79	124·8	44·8	60·1	0·010	5·9	13·0
11	29·713	66·6	54·5	12·1	61·1	+ 3·0	56·0	51·6	9·5	17·2	0·0	71	118·9	49·7	60·0	0·041	6·6	13·0
12	29·796	61·1	52·7	8·4	57·0	- 1·0	53·7	50·7	6·3	9·5	2·5	79	76·7	46·7	59·9	0·000	0·1	12·9
13	29·660	63·1	53·2	9·9	57·7	- 0·1	54·3	51·2	6·5	12·3	1·6	79	96·2	46·6	59·9	0·016	0·3	12·9
14	29·638	62·1	50·9	11·2	56·0	- 1·7	52·9	50·0	6·0	11·9	0·7	81	108·0	44·1	59·8	0·018	2·5	12·8
15	29·743	57·9	52·1	5·8	54·7	- 2·9	52·5	50·4	4·3	9·6	1·7	85	87·1	45·8	59·7	0·357	0·5	12·7
16	29·974	68·0	52·5	15·5	59·3	+ 1·8	57·1	55·4	3·9	13·2	1·0	87	122·1	45·2	59·7	0·108	4·1	12·7
17	30·100	68·7	56·3	12·4	61·0	+ 3·8	57·0	53·7	7·3	18·6	1·8	77	126·4	52·8	59·5	0·000	8·3	12·6
18	30·152	68·2	54·6	13·6	60·3	+ 3·4	55·9	52·1	8·2	17·1	3·3	74	122·9	49·6	59·3	0·000	9·2	12·5
19	30·147	67·9	55·6	12·3	60·5	+ 4·0	56·6	53·4	7·1	15·7	2·3	77	123·9	49·6	59·3	0·000	4·0	12·5
20	30·077	64·2	54·2	10·0	59·0	+ 2·8	55·7	53·0	6·0	14·5	2·5	80	108·6	49·0	59·2	0·000	2·1	12·4
21	30·003	65·9	53·1	12·8	58·8	+ 2·9	55·3	52·3	6·5	15·0	2·8	79	117·9	46·1	59·2	0·018	4·3	12·3
22	30·002	61·6	54·3	7·3	57·4	+ 1·8	54·3	51·5	5·9	15·6	0·7	81	107·5	49·9	59·1	0·069	0·7	12·3
23	30·005	61·2	53·1	8·1	55·9	+ 0·5	52·6	49·5	6·4	14·2	2·0	79	102·2	47·3	59·0	0·000	0·6	12·2
24	30·152	60·0	49·4	10·6	54·6	- 0·7	51·1	47·7	6·9	13·6	4·1	77	97·2	43·0	58·8	0·000	3·0	12·2
25	30·195	59·2	48·2	11·0	53·9	- 1·3	49·7	45·3	8·6	17·1	2·4	73	99·2	36·7	58·8	0·000	2·9	12·1
26	30·058	60·8	43·9	16·9	52·5	- 2·7	48·3	43·6	8·9	18·1	0·4	71	110·8	30·6	58·7	0·000	5·1	12·0
27	30·146	56·0	46·1	9·9	49·9	- 5·2	46·6	42·7	7·2	15·4	2·8	76	114·2	37·0	58·5	0·038	4·1	11·9
28	30·079	58·0	41·9	16·1	50·8	- 4·1	46·0	40·1	10·7	21·0	2·7	67	117·7	28·6	58·2	0·000	6·4	11·9
29	29·829	60·7	48·9	11·8	53·6	- 1·1	48·9	43·8	9·8	21·0	3·4	69	121·5	37·8	58·1	0·000	5·7	11·8
30	29·626	61·3	43·5	17·8	52·0	- 2·4	47·9	43·3	8·7	18·3	1·9	72	119·5	27·5	58·0	0·000	8·1	11·8
Means	29·933	67·4	52·5	14·9	59·3	+ 2·1	55·4	52·0	7·3	15·7	1·4	77·0	116·4	43·8	59·4	1·196	5·1	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 autographic 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 autographic 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 29·933 in., being 0·115 in. higher than the average for the 65 years, 1841-1905.

TEMPERATURE OF THE AIR.

The highest in the month was 81°·7 on September 8; the lowest in the month was 41°·9 on September 28; and the range was 39°·8.

The mean of all the highest daily readings in the month was 67°·4, being 1°·2 higher than the average for the 65 years, 1841-1905. †

The mean of all the lowest daily readings in the month was 52°·5, being 2°·8 higher than the average for the 65 years, 1841-1905. †

The mean of the daily ranges was 14°·9, being 1°·6 less than the average for the 65 years, 1841-1905. †

The mean for the month was 59°·3, being 2°·1 higher than the average for the 65 years, 1841-1905.

† The average has been corrected for the presumed effect of the change of thermometer screen on 1938 January 1. (See Introduction p. xvii).

TABLE XVII. - DAILY RESULTS OF THE METEOROLOGICAL OBSERVATIONS

MONTH and DAY 1939	RECORD OF THE NIGHT SKY				WIND AS DEDUCED FROM SELF-REGISTERING ANEMOMETERS					CLOUDS AND WEATHER			
	POLARIS		δ URSÆ MINORIS		OSLER'S				Robinson's				
	Duration	Fraction of Total Exposure	Duration	Fraction of Total Exposure	General Direction		Pressure on the Square Foot		Horizontal Movement of the Air				
					A.M.	P.M.	Greatest	Mean of 24 Hourly Measures		0h to 6h	6h to 12h	12h to 18h	18h to 24h
	hours		hours				lbs.	lbs.	miles				
Sept. 1	0·0	0·00	0·0	0·00	SSW:SW	SSW:S	0·4	0·04	207	b c w	c *Ast Stcu*	c *Ast Nbst* r_o	r_o rr c r
2	2·7	0·31	2·0	0·23	Calm:SE	SE:ESE	0·7	0·05	193	cir	c *Frcu Nbst*	c	c rr TL
3	6·3	0·72	5·9	0·67	Calm:SSE:SSW	SW	2·3	0·31	284	r c b c	c y	c b	b
4	8·7	0·99	8·7	0·99	WSW	W:Calm	0·2	0·02	189	b c w	c bc *Ci Cu* y	c y *Stcu* r_o	c tlc b w
5	8·7	1·00	8·6	0·98	WSW:Calm	WSW	0·4	0·01	193	b w m	b m_o *Frcu* y	b *Cu Frcu* y	b *lu-ha*
6	6·3	0·71	6·3	0·71	WSW:Calm	SW:Calm	0·6	0·02	186	b w *lu-ha*	b *Cist*	b bc c *Frcu Cist*	c b
7	8·7	1·00	8·7	1·00	Calm	S	0·3	0·02	179	b w	b c *Frst Acu Cist* y	bc b *Cist* y	b w
8	8·7	1·00	8·7	1·00	S:SSW	SSW:SW	0·2	0·02	207	b w m	b *Ci* y	b *Frcu* y	b
9	4·9	0·53	3·9	0·42	SW:Calm	W:Calm	0·2	0·01	160	b w m	b m_o bc *Frst*	bc *Frcu* y	bc c
10	0·3	0·04	0·2	0·02	Calm:WSW	WSW:SW	1·8	0·14	256	c b w m_o	b bc m_o	c *Cist so-ha* c	c r bc c
11	2·0	0·21	1·9	0·20	WSW:NW	NW:NNW	2·0	0·30	338	c r c b	c bc *Stcu Frcu* y	bc c y	c r_o c b c
12	0·7	0·08	0·5	0·05	NNW	NNW	4·0	0·63	382	c	c *Nbst*	c *Stcu Nbst*	c
13	4·9	0·53	4·7	0·51	NNW:NW:W	W:NW	1·4	0·07	257	c m_o	c m_o *Ast*	c *Acu* r c	c d_o d_o c bc b
14	0·8	0·09	0·4	0·05	NW:NNW	N:NNW	1·8	0·09	256	b c	c *Frcu Acu Cunb*	c r_o c	c r c
15	5·4	0·59	5·0	0·54	NW:NNW	NNW:NNE	2·6	0·16	277	c	c *Nbst* r c	r R tl r c	bc b
16	3·2	0·33	2·2	0·23	NNE	NNE	2·8	0·11	259	b c	c bc *Frcu Frst*	c ir c	c b c
17	5·0	0·51	3·5	0·36	NNE	NNE	2·8	0·28	329	c	c bc c *Frst* y	bc y	bc b
18	0·8	0·08	0·7	0·07	NNE	NNE	3·3	0·51	372	b c	c bc *Ast Frcu*	bc y b	b c
19	4·8	0·49	4·4	0·45	NNE	NE:NNE	2·6	0·22	329	c	c *Frcu*	c *Nbst Frcu* r_o	c b c
20	2·6	0·27	1·8	0·18	NNE	NE:NNE	1·4	0·15	292	c b c	c *Frcu Acu Nbst*	c d_o c	c bc
21	2·7	0·27	2·1	0·22	NNE	NE:NNE	1·5	0·16	299	b c b c	c *Stcu*	c *Cunb Acu* ir	c b c
22	2·9	0·30	2·0	0·21	NNE	NNE	1·4	0·13	286	c dd c id	c *Stcu*	c *Stcu Acu* y	c d c
23	4·0	0·39	3·7	0·36	NNE	NNE	2·7	0·26	337	c b c d c	c *Stcu*	c *St Nbst* r_o c	c
24	3·2	0·32	2·4	0·24	NNE:N	NNE	2·2	0·25	309	c b c	c *Frcu Stcu* d c	c	c
25	2·1	0·20	1·6	0·15	NNE:NE	NE:Calm	0·2	0·01	201	c b c	c *Stcu* y	c *Acu Stcu* y	c *Stcu*
26	8·3	0·81	8·0	0·78	Calm:N	NNE	1·5	0·10	221	c	c b *Cist* m_o bc y	c *Acu Stcu* y	c b c *lu-ha*
27	7·9	0·77	6·6	0·65	NNE:NE	ENE:NE	3·6	0·19	293	c b w	c ir_o *Nbst Acu*	bc p *Cunb* y	bc c
28	3·3	0·32	2·2	0·22	ENE	E:NE	2·6	0·20	276	c b m x	c bc *Frcu* y	bc y c	c d_o c
29	7·9	0·77	7·1	0·69	NE:ENE	E	1·5	0·11	260	b c d_o c	c *Acu Frcu* y	bc *Frcu* c y	c bc b c
30	5·7	0·53	4·9	0·45	Calm:E	E:NE	2·8	0·19	264	c b m x	b m_o c *Frcu* y	c y	c
Means	4·4	0·47	3·9	0·42	...	...	...	0·16	263				
Number of Column for Reference	19	20	21	22	23	24	25	26	27	28	29	30	31

The mean ***Temperature of Evaporation*** for the month was 55°·4, being 1°·3 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 77·0, being 2·9 less than
The mean ***Elastic Force of Vapour*** for the month was 0·390 in., being 0·011 in. 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 6·6.

The mean proportion of ***Sunshine*** for the month (constant sunshine being represented by 1) was 0·402. the maximum daily amount of ***Sunshine*** was 11·7 hours on September 7.

The highest reading of the ***Solar Radiation Thermometer*** was 134°·9 on September 6; and the lowest reading of the ***Terrestrial Radiation Thermometer*** was 27°·5 on September 30.

The ***Proportions of Wind*** referred to the cardinal points were N.39, E.20, S.12, W.15, calm or nearly calm conditions 14, the whole month being represented by 100.

The ***Greatest Pressure of the Wind*** in the month was 4·0 lbs. on the square foot on September 12. The mean daily ***Horizontal Movement of the Air*** for the month was 263 miles; the greatest daily value was 382 miles on September 12 and the least daily value was 160 miles on September 9.

Rain (0·005 in. or over) fell on 12 days in the month, amounting to 1·196 in., as measured by gauge No.6 partly sunk below the ground; being 0·952 in. less than the average fall for the 65 years, 1841-1905.

TABLE XVII. - DAILY RESULTS OF THE METEOROLOGICAL OBSERVATIONS

MONTH and DAY 1939	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	29·445	58·7	47·5	11·2	57·7	- 1·4	48·5	43·9	8·8	15·6	2·5	72	87·3	39·1	57·7	0·000	0·2	11·7
2	29·638	58·9	47·7	11·2	52·0	- 1·7	48·0	43·5	8·5	10·9	2·2	73	110·1	41·2	57·5	0·000	6·0	11·6
3	29·820	57·3	46·7	10·6	51·5	- 1·8	47·2	42·3	9·2	9·9	3·9	70	115·6	42·0	57·4	0·000	5·0	11·6
4	29·672	53·7	47·0	6·7	50·1	- 2·9	46·3	41·8	8·3	9·2	0·4	73	88·6	40·0	57·2	0·273	2·0	11·5
5	29·378	64·7	49·2	15·5	55·4	+ 2·6	53·6	52·0	3·4	7·7	0·0	88	100·4	42·2	57·0	0·275	0·8	11·4
6	29·504	63·9	47·9	16·0	54·2	+ 1·7	51·2	48·3	5·9	11·9	0·0	80	115·7	42·8	56·9	0·056	3·5	11·4
7	29·753	60·9	44·0	16·9	51·5	- 0·8	49·8	48·1	3·4	6·1	0·0	88	90·9	32·1	56·8	0·062	2·7	11·3
8	29·824	57·0	48·8	8·2	51·5	- 0·5	49·4	47·2	4·3	8·0	0·0	85	95·6	44·8	56·7	0·005	2·1	11·3
9	29·501	56·1	45·9	10·2	51·3	- 0·3	50·6	49·9	1·4	2·0	0·0	95	57·5	37·8	56·3	0·889	0·0	11·2
10	29·650	61·3	41·1	20·2	51·2	- 0·1	48·9	46·5	4·7	9·2	0·0	84	112·5	30·0	56·3	0·009	6·9	11·1
11	29·586	63·3	46·0	17·3	53·0	+ 2·1	51·0	49·1	3·9	11·0	0·0	86	113·5	36·1	56·3	0·324	4·3	11·0
12	29·462	59·3	45·9	13·4	51·6	+ 1·0	49·7	47·8	3·8	8·2	0·0	87	102·8	34·9	56·2	0·000	2·7	11·0
13	29·371	59·5	42·1	17·4	50·8	+ 0·5	49·0	47·0	3·8	7·7	0·0	87	82·1	31·7	56·1	0·547	1·8	10·9
14	29·055	53·5	47·1	6·4	50·1	- 0·0	48·9	47·7	2·4	5·1	0·0	91	65·8	46·4	55·9	1·168	0·0	10·9
15	29·203	50·4	46·3	4·1	48·7	- 1·2	48·3	47·9	0·8	2·0	0·0	97	52·5	43·3	55·5	1·365	0·0	10·8
16	29·761	57·8	40·6	17·2	47·7	- 2·1	45·8	43·6	4·1	8·5	0·0	85	95·1	32·8	55·4	0·000	6·2	10·7
17	29·861	57·7	43·5	14·2	50·4	+ 0·8	49·0	47·5	2·9	7·7	0·0	90	81·4	34·7	55·2	0·028	0·5	10·7
18	29·796	56·2	47·0	9·2	51·1	+ 1·8	48·4	45·5	5·6	13·8	0·0	81	86·5	42·0	55·0	0·000	3·6	10·6
19	29·844	48·2	42·6	5·6	46·6	- 2·5	45·2	43·5	3·1	5·9	1·6	89	51·7	37·0	54·9	0·577	0·0	10·5
20	30·065	51·1	40·5	10·6	44·8	- 4·0	41·4	36·5	8·3	11·9	3·5	73	93·0	29·5	54·8	0·000	3·1	10·5
21	30·134	53·4	34·4	19·0	45·3	- 3·3	43·3	40·7	4·6	8·5	0·9	84	78·2	26·4	54·7	0·056	2·6	10·4
22	30·145	52·5	34·0	18·5	42·4	- 5·9	41·2	39·6	2·8	12·8	0·2	90	90·7	26·1	54·3	0·000	4·3	10·3
23	30·034	55·5	31·9	23·6	46·1	- 2·0	44·3	42·1	4·0	12·4	3·2	86	82·5	25·6	54·0	0·000	1·1	10·3
24	29·826	54·0	45·1	8·9	49·8	+ 1·9	47·4	44·8	5·0	14·6	4·4	83	68·4	40·3	53·8	0·174	1·7	10·2
25	29·759	47·4	38·4	9·0	43·6	- 4·1	39·9	34·3	9·3	18·0	6·0	70	83·9	30·1	53·6	0·000	6·7	10·1
26	29·554	43·1	31·1	12·0	38·0	- 9·6	36·0	32·7	5·3	14·6	0·0	81	80·5	24·0	53·3	0·091	0·9	10·1
27	29·709	44·9	35·6	9·3	39·0	- 8·5	37·6	35·6	3·4	11·6	0·0	87	83·5	30·8	53·2	0·055	4·3	10·0
28	29·694	45·5	35·3	10·2	41·2	- 6·2	39·5	37·1	4·1	10·8	2·1	85	51·7	30·0	52·9	0·061	0·0	10·0
29	29·592	45·5	36·0	9·5	41·6	- 5·7	39·5	36·4	5·2	15·3	1·4	81	59·9	31·0	52·5	0·140	1·0	9·9
30	29·830	49·0	33·6	15·4	41·2	- 6·0	39·6	37·4	3·8	12·5	0·0	86	83·3	26·1	52·3	0·000	5·2	9·8
31	29·722	46·8	43·8	3·0	45·4	- 1·7	43·1	40·1	5·3	13·1	3·0	81	64·8	39·2	52·1	0·000	0·2	9·8
Means	29·683	54·4	42·1	12·3	48·1	- 1·9	45·9	43·2	4·8	10·2	1·1	83·5	84·7	35·2	55·2	Sum 6·155	2·6	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 autographic 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 autographic 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 29·683 in., being 0·045 in. lower than the average for the 65 years, 1841-1905.

TEMPERATURE OF THE AIR.

The highest in the month was 64°·7 on October 5; the lowest in the month was 31°·1 on October 26; and the range was 33°·6.

The mean of all the highest daily readings in the month was 54°·4, 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 42°·1, being 1°·7 lower than the average for the 65 years, 1841-1905. †

The mean of the daily ranges was 12°·3, being 0°·9 less than the average for the 65 years, 1841-1905. †

The mean for the month was 48°·1, being 1°·9 lower than the average for the 65 years, 1841-1905.

† The average has been corrected for the presumed effect of the change of thermometer screen on 1938 January 1. (See Introduction p. xvii).

TABLE XVII. - DAILY RESULTS OF THE METEOROLOGICAL OBSERVATIONS

MONTH and DAY 1939	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.	OSLER'S General Direction P.M.	OSLER'S Pressure on the Square Foot Greatest	OSLER'S Pressure on the Square Foot Mean of 24 Hourly Measures	Robinson's Horizontal Movement of the Air	CLOUDS AND WEATHER 0h to 6h	6h to 12h	12h to 18h	18h to 24h
	hours		hours				lbs.	lbs.	miles				
Oct. 1	..	..	..	..	NE:ENE	NE:NNE	4·5	0·37	342	c *lu-ha* m$_o$	c *Ast*	c y	c b
2	2·6	0·25	2·4	0·22	NNE:N	NNE:NE	2·1	0·34	354	c r$_o$ b c	c b c *Stcu*	c bc *Stcu Acu* y	bc b c ir$_o$
3	8·1	0·76	7·9	0·74	NE	ENE:ESE	3·3	0·43	362	c	c bc b *Ci* c *Nbst* p$_o$	c *Acu Nbst* p$_o$ c	c b
4	0·0	0·00	0·0	0·00	ESE	E:ESE	5·8	1·08	406	b	bc c *Frcu Acu Stcu*	c *St*	c Rtl°ir$_o$ r R
5	8·7	0·81	8·1	0·75	ESE:SSW	SSW:SSE	3·5	0·11	269	R ir$_o$	r$_o$ r c *Frst Ast Cu*	c *Nbst Frst* b	c b c r b
6	3·8	0·36	2·4	0·22	SSE:SW	SSW:S	1·1	0·08	250	b c ir$_o$	c *Ast Frst Stcu*	c y	c bc w
7	0·7	0·07	0·5	0·05	Calm	NNE	1·0	0·02	182	bc w	bc m c *Cist*	c *Cunb* tlR m	c b m c
8	1·5	0·14	0·3	0·03	NNE:NE	ESE	1·3	0·09	243	c d$_o$d$_o$	d$_o$d$_o$m$_o$ bc *Acu* c *Frcu*	c b c	c bc c
9	8·9	0·79	8·3	0·73	ESE:SE	SE:WSW	2·0	0·26	310	c rr R	c *Nbst* rr d$_o$	c rr dd *Nbst*	c b
10	7·0	0·63	6·3	0·56	WSW:SW	SSW:S	0·5	0·03	236	b c	c p bc *Nbst Ci Acu*	bc *Acu Stcu* c	c bc
11	0·5	0·05	0·0	0·00	SSW:SW	S:SE:NW	0·8	0·04	240	bc p b c	c b *Ci Acu* r$_o$ bc	bc c t ir	c ir r iR ir
12	8·9	0·79	8·4	0·75	W:WSW	W:WSW	0·4	0·05	246	c	c m *Stcu Acu Frcu*	c b	b c
13	0·0	0·00	0·0	0·00	WSW:Calm	Calm:ESE:E	3·0	0·03	186	c bc b c w	c m bc c *Ci* m	c *Cist so-ha*	rr
14	0·2	0·01	0·0	0·00	ENE:NE:N	NNW:NNE	3·7	0·35	310	rr	r r$_o$ r	c	c rr
15	3·5	0·31	3·0	0·26	NNE:NE	NNE:N	4·0	0·20	310	rr c r	rr	rr	rr c
16	3·4	0·29	2·5	0·21	NW:Calm	Calm	0·1	0·00	154	c b	b f m$_o$ bc	bc m$_o$	b m
17	4·3	0·38	0·9	0·08	Calm:E	E	0·9	0·04	218	bc c r m	c mf m$_o$ *Stcu*	c bc m$_o$	bc c bc m$_o$
18	2·5	0·22	2·1	0·18	ENE:NE	NE:NNE	2·7	0·24	327	c	b c *Frcu Acu Nbst*	c *Stcu* y	c
19	4·3	0·38	3·2	0·28	NNE:N	N	3·3	0·55	395	c d r c	c *Nbst* r r$_o$	c rr$_o$ r r$_o$	rr$_o$ c b
20	6·2	0·54	6·2	0·54	NNW:N	N:NW	1·2	0·13	285	b c	c m$_o$ b c *Nbst Stcu*	c	c b m c
21	7·1	0·59	4·4	0·37	Calm	N:NNE	0·6	0·05	208	c bc m x	bc f b x m	c f	c r b
22	9·1	0·76	1·7	0·14	Calm	N:Calm	0·4	0·02	178	b fe	fe F c *Stcu*	c b	b f x
23	3·4	0·29	2·0	0·17	WSW	WSW	0·6	0·04	249	b x c	c f	c m	c b c
24	3·2	0·27	2·9	0·24	WSW:WNW	NW:WSW:W	2·5	0·15	292	c r$_o$ rr r$_o$	c bc m$_o$ c *Stcu*	c *Nbst* ir r$_o$	c b c
25	9·5	0·79	9·4	0·78	NW:NNW	NNW	1·6	0·20	315	bc	bc b bc *Acu* y	bc *Stcu* b y	b c b
26	3·7	0·31	2·1	0·17	WSW:NNW	N	3·8	0·45	339	b x c	c f r$_o$ tlr b	b c r$_o$ *Nbst Frcu*	c b c ir$_o$
27	8·5	0·71	6·6	0·55	N	N	3·0	0·38	342	c ir l ph b	b bc *Acu Cunb* p	bc p c *Nbst* b	b c b
28	0·0	0·00	0·0	0·00	N	N	5·8	0·95	412	b c	c ir r$_o$ *Nbst*	dd c	c *lu-ha*
29	9·3	0·74	8·5	0·68	N:NNE	ENE	3·4	0·27	317	c ir$_o$	c rr m *Nbst Frst*	c m$_o$ bc b	b c ir bc b
30	4·5	0·36	2·3	0·18	NE:E	ENE	2·8	0·17	298	b m$_o$ x	b c m$_o$ bc *Frst*	bc	bc
31	0·7	0·05	0·3	0·03	ENE:E	E	4·7	0·37	328	c	c *Ast Nbst* r$_o$ c	c m$_o$	c m$_o$
Means	4·5	0·39	3·4	0·30	...	...	...	0·24	287				
Number of Column for Reference	19	20	21	22	23	24	25	26	27	28	29	30	31

The mean *Temperature of Evaporation* for the month was 45°·9, being 2°·0 lower than
The mean *Temperature of the Dew Point* for the month was 43°·2, being 2°·4 lower than
The mean *Degree of Humidity* for the month was 83·5, being 1·4 less than
The mean *Elastic Force of Vapour* for the month was 0·281 in., being 0·027 in. less than
} the average for the 65 years, 1841-1905.

The mean amount of *Cloud* for the month (a clear sky being represented by 0 and an overcast sky by 10) was 7·3.

The mean proportion of *Sunshine* for the month (constant sunshine being represented by 1) was 0·239. The maximum daily amount of *Sunshine* was 6·9 hours on October 10.

The highest reading of the *Solar Radiation Thermometer* was 115°·7 on October 6; and the lowest reading of the *Terrestrial Radiation Thermometer* was 24°·0 on October 26.

The *Proportions of Wind* referred to the cardinal points were N.34, E.26, S.14, W.15, calm or nearly calm conditions, 11, the whole month being represented by 100.

The *Greatest Pressure of Wind* in the month was 5·8 lbs. on the square foot on October 4, 28. The mean daily *Horizontal Movement of the Air* for the month was 287 miles; the greatest daily value was 412 miles on October 28, and the least daily value was 154 miles on October 16.

Rain (0·005 in., or over) fell on 19 days in the month, amounting to 6·155 in., as measured by gauge No.6 partly sunk below the ground; being 3·373 in. greater than the average fall for the 65 years, 1841-1905.

TABLE XVII. - DAILY RESULTS OF THE METEOROLOGICAL OBSERVATIONS

MONTH and DAY 1939	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
Nov. 1	29·560	48·3	44·1	4·2	45·9	- 1·1	44·7	43·2	2·7	5·0	1·2	91	63·8	41·0	52·0	0·002	0·1	9·7
2	29·553	52·0	43·0	9·0	47·3	+ 0·5	46·4	45·3	2·0	4·2	1·1	93	59·5	40·2	51·8	0·015	0·0	9·7
3	29·525	56·4	44·9	11·5	49·2	+ 2·6	48·2	47·2	2·0	4·9	0·6	93	70·8	37·1	51·8	0·018	0·6	9·6
4	29·146	56·1	47·0	9·1	50·5	+ 4·1	50·0	49·5	1·0	5·9	0·2	97	76·6	43·7	51·8	0·219	1·1	9·5
5	29·185	54·5	45·0	9·5	49·9	+ 3·8	46·6	42·7	7·2	14·2	1·3	76	94·9	43·0	51·8	0·148	2·5	9·5
6	29·403	54·7	45·5	9·2	49·8	+ 4·0	46·8	43·3	6·5	9·4	2·2	79	69·8	39·0	51·8	0·200	2·7	9·4
7	29·459	58·0	49·1	8·9	53·8	+ 8·4	52·1	50·5	3·3	6·6	2·0	88	66·1	43·6	51·8	0·036	0·0	9·4
8	29·379	58·2	52·3	5·9	55·8	+10·8	52·2	48·7	7·1	10·2	2·3	77	81·5	48·8	51·9	0·208	2·1	9·3
9	29·515	55·3	45·6	9·7	51·7	+ 7·1	49·9	48·1	3·6	5·8	1·6	87	78·7	34·8	51·8	0·165	1·9	9·3
10	29·746	55·7	43·7	12·0	48·2	+ 3·9	47·2	46·1	2·1	6·5	0·4	92	67·5	30·9	51·9	0·002	1·6	9·2
11	29·657	51·2	43·0	8·2	48·2	+ 4·2	47·3	46·3	1·9	3·0	0·2	93	60·4	31·1	51·8	0·005	0·0	9·2
12	29·792	51·2	47·1	4·1	50·0	+ 6·3	49·0	48·0	2·0	3·5	0·8	93	57·5	36·5	51·8	0·000	0·0	9·1
13	29·880	51·5	46·2	5·3	49·3	+ 5·8	47·7	45·9	3·4	7·0	0·4	88	60·0	33·8	51·8	0·000	0·0	9·0
14	29·758	56·2	48·0	8·2	53·9	+10·6	52·3	50·8	3·1	6·0	1·0	89	68·5	43·5	51·8	0·050	0·4	9·0
15	29·498	54·5	45·6	8·9	49·6	+ 6·5	47·4	45·0	4·6	9·3	1·6	84	64·5	39·6	51·7	0·332	3·3	8·9
16	29·552	56·9	43·0	13·9	48·1	+ 5·3	46·5	44·7	3·4	5·6	1·3	88	56·3	38·4	51·6	0·454	0·0	8·9
17	29·865	54·7	43·6	11·1	48·5	+ 5·9	47·7	46·9	1·6	3·9	0·2	94	56·8	38·0	51·5	0·085	0·0	8·8
18	29·959	54·6	47·7	6·9	52·5	+10·1	51·5	50·6	1·9	4·7	0·2	93	63·9	41·8	51·6	0·225	0·3	8·8
19	29·764	54·1	46·5	7·6	50·0	+ 7·7	46·4	42·1	7·9	10·7	1·7	74	62·0	42·0	51·6	0·074	3·6	8·7
20	30·250	47·7	37·7	10·0	43·4	+ 1·2	41·7	39·4	4·0	5·8	1·3	86	55·8	29·8	51·3	0·000	0·3	8·7
21	30·396	45·0	35·4	9·6	41·3	- 0·8	40·6	39·7	1·6	5·4	0·3	94	44·7	27·3	51·3	0·000	0·0	8·6
22	30·260	49·8	31·8	18·0	41·6	- 0·5	39·5	36·4	5·2	10·1	0·0	82	71·1	25·0	51·2	0·000	3·7	8·6
23	29·856	48·7	45·8	2·9	47·4	+ 5·4	46·1	44·6	2·8	6·9	1·3	90	51·8	42·9	51·0	0·351	0·0	8·5
24	29·829	48·1	37·7	10·4	42·2	+ 0·2	40·5	38·1	4·1	6·3	0·9	85	48·3	30·3	50·7	0·288	0·0	8·5
25	29·877	50·6	32·2	18·4	40·6	- 1·3	39·0	36·8	3·8	5·9	1·1	86	49·3	26·0	50·6	0·475	0·0	8·4
26	29·244	58·0	45·6	12·4	52·4	+10·6	49·6	46·7	5·7	8·8	1·7	81	61·5	40·0	50·5	0·032	0·0	8·4
27	29·199	55·7	42·2	13·5	47·9	+ 6·2	45·7	43·2	4·7	7·4	1·3	83	59·3	36·3	50·3	0·423	0·0	8·4
28	29·745	49·0	38·8	10·2	44·6	+ 3·1	41·9	38·2	6·4	10·9	2·4	78	61·4	32·1	50·2	0·065	4·2	8·3
29	29·778	57·9	45·0	12·9	54·4	+13·2	52·6	50·9	3·5	6·5	1·1	88	62·7	43·3	50·3	0·005	0·0	8·3
30	29·921	57·1	55·0	2·1	56·0	+15·0	55·3	54·7	1·3	3·1	0·9	95	62·5	52·1	50·2	0·255	0·0	8·3
Means	29·685	53·4	43·9	9·5	48·8	+ 5·3	47·1	45·1	3·7	6·8	1·1	87·2	63·6	37·7	51·4	Sum 4·132	0·9	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 autographic 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 autographic 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 29·685 in., being 0·080 in. lower than the average for the 65 years, 1841-1905.

TEMPERATURE OF THE AIR.

The highest in the month was 58°·2 on November 8; the lowest in the month was 31°·8 on November 22; and the range was 26°·4.

The mean of all the highest daily readings in the month was 53°·4, being 4°·5 higher than the average for the 65 years, 1841-1905. †

The mean of all the lowest daily readings in the month was 43°·9, being 5°·5 higher than the average for the 65 years, 1841-1905. †

The mean of the daily ranges was 9°·5, being 1°·0 less than the average for the 65 years, 1841-1905. †

The mean for the month was 48°·8, being 5°·3 higher than the average for the 65 years, 1841-1905.

† The average has been corrected for the presumed effect of the change of thermometer screen on 1938 January 1. (See Introduction p. xvii).

TABLE XVII. - DAILY RESULTS OF THE METEOROLOGICAL OBSERVATIONS

MONTH and DAY 1939	RECORD OF THE NIGHT SKY				WIND AS DEDUCED FROM SELF-REGISTERING ANEMOMETERS					CLOUDS AND WEATHER			
	POLARIS		δ URSÆ MINORIS		OSLER'S				Robinson's				
					General Direction		Pressure on the Square Foot						
	Duration	Fraction of Total Exposure	Duration	Fraction of Total Exposure	A.M.	P.M.	Greatest	Mean of 24 Hourly Measures	Horizontal Movement of the Air	0^h to 6^h	6^h to 12^h	12^h to 18^h	18^h to 24^h
	hours		hours				lbs.	lbs.	miles				
Nov. 1	0·0	0·00	0·0	0·00	E	E:ENE	1·7	0·11	268	c m_o	c id_o *Ast*	c m_o	c id
2	0·0	0·00	0·0	0·00	ENE:E	E	0·8	0·04	229	c	c *St* f m	c m_o	c d_od
3	0·0	0·00	0·0	0·00	Calm:SE	SSE:E	0·5	0·03	210	c d_o	c f r_o m	c *Ci Cist*	c $r_o r_o$ r
4	2·1	0·16	0·9	0·07	SE:S	S	0·8	0·06	242	rr c r_o	c id_o m_o *Nbst* r	c *Stcu Nbst* r_o	c r_o c
5	7·5	0·59	6·8	0·54	SW:WSW	SSW:WSW	6·5	1·04	474	c r_o	r_o c *St* m_o b *Acu*	b c r_o	rrc b
6	7·9	0·62	7·4	0·58	WSW:SW	SW:SSW	9·3	0·85	432	b	b *Cist Frcu* c*Cu* l r_o r *Nbst*	c rq *Nbst Acu Ci* b	b c p b
7	3·1	0·24	0·7	0·05	SSW:S	S	2·6	0·28	328	b c	c *Nbst* r ir_o	c ir_o *Nbst*	c ir_o bc
8	4·4	0·34	3·0	0·23	SSW	SSW:SW	8·0	1·65	503	c	c bc r_o c	c b	c ir bc
9	11·5	0·90	11·3	0·89	SW	SW	5·0	0·64	378	bc c r	ir *Nbst* c *Ast Frst*	bc r_o b	b c
10	8·4	0·66	7·1	0·56	SW:SSW	SSW	0·2	0·00	221	c w b c d b	c *Ci* m *Acu Nbst* d_o	c *Cist Acu* b	b m W
11	0·0	0·00	0·0	0·00	Calm:E	E:Calm	0·2	0·00	167	b m W f	c m	c r_o c	c
12	4·7	0·36	4·1	0·32	WSW	Calm:SSW	0·1	0·00	195	c f b	bfc m	c m	c f c
13	3·7	0·29	3·0	0·23	SSW	SSW	0·6	0·03	246	c b c	c *Nbst* d_o *Stcu*	c	b c r_o bc
14	0·0	0·00	0·0	0·00	SSW:SW	SSW	5·0	0·51	379	c id_oc	c *Frcu Stcu*	c *Nbst* d	c $d_o d_o$ r
15	5·9	0·45	5·3	0·40	SW:SSW	SW:WSW	8·2	0·31	359	rr	c b c *Nbst*	c bc c r_o c b	bc c b
16	4·1	0·32	3·3	0·25	WSW:SSE	WSW:NW:W	4·3	0·41	352	b c	c *Nbst* rr	rr c	c bc
17	3·7	0·28	3·1	0·24	WSW:Calm	Calm:WSW	0·3	0·02	206	b c	c *Nbst* rr c m	c d_o m f	c f c
18	0·5	0·04	0·3	0·03	WSW:SW	SW	3·3	0·17	306	c b W	b c W bc c *Cist Acu St*	c d_o rr d	rrd c rr
19	10·6	0·78	10·1	0·75	NW	NW:NNW	17·0	1·69	512	r b c q	c q bc c *Frst*	c	c b
20	3·4	0·25	1·3	0·10	NW:Calm	Calm	0·3	0·00	180	b x c	c b *St* f	b *Ci* m c	c m
21	4·7	0·35	4·3	0·32	Calm	Calm	0·0	0·00	139	o	o *St* f	o *Stcu* f c m f	c f b x
22	0·7	0·05	0·2	0·02	Calm:S	SSW	0·8	0·07	271	c f b x m	c *Acu Ci* m	c *Stcu*	c r
23	0·0	0·00	0·0	0·00	SSW	SSW	2·9	0·70	417	c id_o	c rr_o	r_o rr	rrr$_o$
24	13·5	1·00	12·4	0·92	N	NNW	0·9	0·05	247	rr	rr m c m_o	c bc *Frcu Ci* m_o b	b m_o w
25	0·0	0·00	0·0	0·00	WSW	SW	5·5	0·49	367	b x m_o m	b bc *so-ha* m c *Ast*	c d	rr
26	7·0	0·52	4·9	0·37	SW:WSW	W:WSW	16·6	2·70	621	rr d q c	c q	c q bc	bc
27	12·7	0·94	12·7	0·94	SW	W	10·0	1·03	462	bc c rr	rrq R r *Nbst*	r c bc *Frcu Acu*	bc b
28	0·0	0·00	0·0	0·00	W	WSW:SW	2·6	0·30	363	b w	b *Ast* m m_o	bc c *Acu*	c r dd
29	0·0	0·00	0·0	0·00	SSW:WSW	W:SW	4·0	0·75	439	dd id_o c	c *Nbst Stcu*	c *Nbst Stcu*	c id$_o$
30	0·0	0·00	0·0	0·00	WSW:W	WSW	4·7	0·59	400	$d_o r_o r_o$	r_o d rr *Nbst* r_o	r_o dd	d c d_o c
Means	4·0	0·30	3·4	0·26	...	...	...	0·48	330				
Number of Column for Reference	19	20	21	22	23	24	25	26	27	28	29	30	31

The mean *Temperature of Evaporation* for the month was 47°·1, being 5°·2 higher than
The mean *Temperature of the Dew Point* for the month was 45°·1, being 5°·4 higher than
The mean *Degree of Humidity* for the month was 87·2, being 0·6 greater than
The mean *Elastic Force of Vapour* for the month was 0·301 in., being 0·055 in. greater than
} the average for the 65 years, 1841-1905.

The mean amount of *Cloud* for the month (a clear sky being represented by 0 and an overcast sky by 10) was 8·1.

The mean proportion of *Sunshine* for the month (constant sunshine being represented by 1) was 0·106. The maximum daily amount of *Sunshine* was 4·2 hours on November 28.

The highest reading of the *Solar Radiation Thermometer* was 94°·9 on November 5, and the lowest reading of the *Terrestrial Radiation Thermometer* was 25°·0 on November 22.

The *Proportions of Wind* referred to the cardinal points were N.6, E.8, S.38, W.36, calm or nearly calm conditions, 12, the whole month being represented by 100.

The *Greatest Pressure of the Wind* in the month was 17·0 lbs. on the square foot on November 19. The mean daily *Horizontal Movement of the Air* for the month was 330 miles; the greatest daily value was 621 miles on November 26 and the least daily value was 139 miles on November 21.

Rain (0·005 in. or over) fell on 23 days in the month, amounting to 4·132 in., as measured by gauge No.6 partly sunk below the ground; being 1·912 in. in. greater than the average fall for the 65 years, 1841-1905.

TABLE XVII. - DAILY RESULTS OF THE METEOROLOGICAL OBSERVATIONS

MONTH and DAY 1939	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
Dec. 1	29·847	55·7	51·7	4·0	54·3	+13·4	51·7	49·3	5·0	7·8	3·7	83	65·8	46·8	50·2	0·000	1·0	8·2
2	29·740	55·4	39·2	16·2	48·6	+ 7·7	45·0	40·5	8·1	12·5	1·9	93	60·0	33·2	50·2	0·000	4·6	8·2
3	29·665	49·2	35·8	13·4	41·8	+ 0·7	39·8	36·9	4·9	9·5	2·4	83	60·9	29·3	50·2	0·365	2·3	8·2
4	29·109	44·0	36·1	7·9	40·5	- 0·8	38·2	34·7	5·8	10·6	2·8	79	52·5	31·0	50·3	0·024	3·3	8·1
5	28·994	42·8	36·0	6·8	39·6	- 1·9	37·8	35·1	4·5	7·0	1·7	84	46·3	31·1	50·0	0·060	0·0	8·1
6	29·643	44·8	33·8	11·0	41·4	- 0·1	39·9	37·9	3·5	6·4	1·7	87	52·7	24·3	49·8	0·048	0·2	8·1
7	29·952	43·4	29·1	14·3	35·9	- 5·4	35·5	34·8	1·1	2·3	0·3	96	45·5	23·7	49·4	0·009	0·2	8·0
8	29·619	53·1	43·4	9·7	48·8	+ 7·8	48·0	47·2	1·6	5·7	1·3	94	53·1	39·4	49·3	0·341	0·0	8·0
9	29·720	53·6	40·0	13·6	47·5	+ 6·9	46·6	45·5	2·0	4·4	0·6	93	57·7	31·6	49·2	0·010	1·8	8·0
10	29·571	53·7	38·0	15·7	47·3	+ 6·9	46·1	44·7	2·6	8·1	0·7	91	58·7	29·3	49·1	0·100	5·0	8·0
11	29·860	46·7	36·8	9·9	42·0	+ 1·8	41·7	41·4	0·6	3·1	0·4	97	53·5	28·1	49·0	0·006	0·0	7·9
12	30·077	39·0	37·1	1·9	38·0	- 2·3	35·8	32·1	5·9	7·0	3·1	79	41·7	36·0	49·0	0·000	0·0	7·9
13	30·002	39·1	35·4	3·7	38·0	- 2·5	36·2	33·4	4·6	7·0	2·8	83	40·0	35·5	48·8	0·000	0·0	7·9
14	29·764	38·2	34·7	3·5	36·4	- 4·3	35·5	33·9	2·5	4·4	0·2	91	41·9	34·4	48·6	0·016	0·0	7·9
15	29·798	36·6	34·3	2·3	35·5	- 5·3	34·7	33·3	2·2	4·0	0·8	92	37·0	33·8	48·5	0·019	0·0	7·9
16	29·959	37·5	33·0	4·5	35·2	- 5·5	33·5	30·5	4·7	6·8	0·2	83	41·7	32·2	48·3	0·006	0·0	7·8
17	30·073	36·0	32·2	3·8	34·2	- 6·2	32·5	29·6	4·6	6·9	2·5	82	39·8	31·4	48·1	0·000	0·0	7·8
18	30·000	37·4	33·9	3·5	35·9	- 4·1	34·3	31·5	4·4	4·8	2·8	84	37·5	33·1	47·8	0·000	0·0	7·8
19	29·893	38·0	36·0	2·0	37·2	- 2·3	36·2	34·5	2·7	4·1	2·1	91	38·4	35·7	47·5	0·005	0·0	7·8
20	30·088	41·5	34·2	7·3	38·7	- 0·3	37·8	36·4	2·3	4·4	0·7	92	45·0	29·6	47·6	0·075	0·0	7·8
21	30·170	37·9	27·8	10·1	34·8	- 3·9	32·9	29·7	5·1	4·4	1·4	80	44·1	17·5	47·3	0·000	3·9	7·8
22	30·099	34·0	21·3	12·7	27·1	-11·3	26·5	25·3	1·8	6·0	0·0	93	34·9	15·0	47·0	0·000	1·1	7·8
23	30·079	31·8	23·1	8·7	27·8	-10·4	27·7	27·5	0·3	1·3	0·0	98	31·4	16·7	46·8	0·000	0·0	7·8
24	30·029	33·8	29·1	4·7	31·8	- 6·4	31·8	31·8	0·0	1·5	0·0	100	36·7	23·8	46·5	0·000	0·0	7·8
25	29·879	37·1	31·4	5·7	34·4	- 4·0	33·9	33·1	1·3	3·0	0·0	95	37·7	28·0	46·2	0·004	0·0	7·8
26	29·801	43·7	33·8	9·9	39·0	+ 0·4	38·7	38·3	0·7	2·7	0·0	97	43·9	34·0	45·9	0·038	0·0	7·8
27	29·950	37·1	30·3	6·8	33·2	- 5·6	31·8	29·9	3·3	7·2	1·7	84	42·8	24·2	45·8	0·000	2·4	7·9
28	29·894	31·3	23·8	7·5	29·1	- 9·8	28·6	27·7	1·4	5·6	0·0	94	32·7	17·6	45·6	0·049	0·0	7·9
29	29·887	33·9	21·4	12·5	28·4	-10·6	27·5	26·1	2·3	5·1	0·7	89	37·4	17·7	45·6	0·000	0·5	7·9
30	29·820	34·7	19·4	15·3	28·5	-10·4	27·5	25·9	2·6	4·2	0·0	87	40·5	15·7	45·1	0·005	0·0	7·9
31	29·806	35·0	28·0	7·0	32·3	- 6·4	32·1	31·7	0·6	4·1	0·0	98	41·8	21·0	45·0	0·000	0·0	7·9
Means	29·832	41·2	32·9	8·3	37·5	- 2·4	36·3	34·5	3·0	5·5	1·2	88·8	45·0	28·4	48·0	Sum 1·180	0·9	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 autographic 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 autographic 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 29·832 in., being 0·040 in. higher than the average for the 65 years, 1841-1905.

TEMPERATURE OF THE AIR.

The highest in the month was 55°·7 on December 1; the lowest in the month was 19°·4 on December 30; and the range was 36°·3.

The mean of all the highest daily readings on the month was 41°·2, being 3°·0 lower than the average for the 65 years, 1841-1905. †

The mean of all the lowest daily readings in the month was 32°·9, being 2°·6 lower than the average for the 65 years, 1841-1905. †

The mean of the daily ranges was 8°·3, being 0°·4 less than the average for the 65 years, 1841-1905. †

The mean for the month was 37°·5, being 2°·4 lower than the average for the 65 years, 1841-1905.

† The average has been corrected for the presumed change of thermometer screen on 1938 January 1. (See Introduction p. xvii).

TABLE XVII. - DAILY RESULTS OF THE METEOROLOGICAL OBSERVATIONS

MONTH and DAY 1939	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.	OSLER'S General Direction P.M.	OSLER'S Pressure on the Square Foot Greatest	OSLER'S Pressure on the Square Foot Mean of 24 Hourly Measures	Robinson's Horizontal Movement of the Air	CLOUDS AND WEATHER 0h to 6h	6h to 12h	12h to 18h	18h to 24h
	hours		hours				lbs.	lbs.	miles				
Dec. 1	2·6	0·19	2·3	0·17	WSW	SW	6·3	1·32	515	c	c *Cist Frcu Nbst* d_o	c	c q d_o c
2	11·6	0·84	11·6	0·84	W:WNW	W	6·3	0·89	449	c q	c bc *Frcu* b *Cu*	b c *Ast Cu*	c r_o c b
3	5·9	0·43	2·6	0·19	WSW	SW:W	6·9	0·43	366	b bc	bc m c bc *Cicu Frst*	bc c	c rR b
4	6·5	0·48	5·2	0·38	WSW	WSW:SW	4·4	0·52	414	b x c b	b *Ci* c *Nbst* r	r c b *Ci Cicu* bc	bc p bc
5	1·9	0·14	1·3	0·10	WSW:WNW:W	NW:NNW	4·0	0·47	387	bc c ir	c bc m *Acu* c *Stcu*	c *Stcu Nbst* r b m	b c ird m
6	9·7	0·71	6·3	0·46	NNE	NNE:N	4·6	0·36	321	rr c m	c m_o ir	c p b m_o m	b m x
7	0·4	0·03	0·3	0·02	Calm	S:SSW	0·7	0·02	199	b x m f Fe	FeFe f b *Ci Acu* Fe	b c f m_o c	c d $r_o r_o$
8	8·8	0·64	7·5	0·54	SSW	SSW:W:WNW	4·4	0·58	403	c ird	ird rr *Nbst*	r c rr $d_o d_o$	c d_o c b
9	0·0	0·00	0·0	0·00	WSW:SW	S	1·3	0·10	297	b w m	b c *Ci* m	c d_o c $d_o d_o$	$d_o d_o$
10	8·0	0·58	7·9	0·57	SSW:SW	SW:S	3·4	0·09	294	$d_o d_o$ ir id_o	id_o c bc *St Ci* b *Cu*	b bc c b	b w
11	0·0	0·00	0·0	0·00	S:Calm	Calm:ENE	2·0	0·04	185	b w bc c	c f *Stcu*	c r b c	f $d_o d_o$ c
12	0·0	0·00	0·0	0·00	ENE:NE	NE	1·4	0·15	317	o	o *Nbst* id_o	o id_o	o id_o
13	0·0	0·00	0·0	0·00	NNE:NE	NE:Calm	1·7	0·07	253	o id_o	o id_o *Nbst*	o *St*	o
14	0·0	0·00	0·0	0·00	Calm:ESE	Calm	0·3	0·01	180	o d o d_o	o *St* m	o m_o	o d
15	0·0	0·00	0·0	0·00	Calm	E:Calm	0·0	0·00	164	d m c	o m	o m	o $d_o d_o$
16	0·0	0·00	0·0	0·00	Calm:NE	NE	3·0	0·29	361	d_o c m	c *Stcu* m m_o	c m_o	c m_o
17	0·0	0·00	0·0	0·00	NE	NE:E	2·2	0·28	376	c m_o	c *Stcu* m_o	c m_o	c o
18	0·0	0·00	0·0	0·00	E:NE	ENE	1·3	0·15	300	o m_o m	o *St* m	o *St* m	o m
19	1·8	0·13	11·3	0·10	NE:ENE	NE	2·2	0·18	336	o $r_o s_o$ m	o m	o *St* m d	dd c $r_o s_o$
20	0·0	0·00	0·0	0·00	NE	NE:E	0·7	0·07	255	c b m	b c m	c m dd	dd c ddm m_o
21	14·0	1·00	14·0	1·00	Calm:ESE	E:Calm	0·1	0·00	191	c	c *Ci Acu* b x m_o	bc *Ci* b f	fx
22	8·4	0·60	1·7	0·12	Calm	Calm:WSW	0·0	0·00	131	f x	fFx f *Ast*	fx	fx
23	0·0	0·00	0·0	0·00	WSW:Calm	WSW:Calm	0·0	0·00	187	fFx	FeFex	FeFex	FeFex
24	2·7	0·20	0·0	0·00	WSW:Calm	WSW:Calm	0·0	0·00	189	FeFex	FeFex	Fefex	fefex
25	0·0	0·00	0·0	0·0	WSW:Calm	Calm	0·0	0·00	188	F f c f	c fe Fe	Fe ff	FeFe
26	7·1	0·50	6·7	0·47	Calm:WSW	NNE:N	0·4	0·03	221	c fefe	c fefe d	c fe r r_o c m r_o	c m
27	13·3	0·95	10·9	0·77	N	N:NNW	0·6	0·09	266	c m x	c b m x	b c m x b	b m x
28	6·1	0·44	5·9	0·42	Calm:WSW	Calm:NNE	0·5	0·01	190	b c m x	c f x *Nbst* s_o	s s_o f	s_o c m f
29	12·0	0·86	9·0	0·64	N	NNW:WSW	0·6	0·03	230	c b m f c	b m f *Ast*	bc *Ast* f	b mf
30	6·3	0·45	3·2	0·24	WSW	WSW	0·3	0·05	261	b x	bc *Ci so-ha* c f *Ast*	c f s_o c	c
31	6·7	0·49	2·9	0·21	WSW	Calm	0·0	0·00	167	b x c	c ff	c ff	c ff
Means	4·3	0·31	3·2	0·23	...	...	...	0·20	277				
Number of Column for Reference	19	20	21	22	23	24	25	26	27	28	29	30	31

The mean ***Temperature of Evaporation*** for the month was 36°·3, being 2°·2 lower than
The mean ***Temperature of the Dew Point*** for the month was 34°·5, being 1°·9 lower than
The mean ***Degree of Humidity*** for the month was 88·8, being 1·3 greater than
The mean ***Elastic Force of Vapour*** for the month was 0·200 in., being 0·016 in. 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 overcast sky by 10) was 7·7.

The mean proportion of ***Sunshine*** for the month (constant sunshine being represented by 1) was 0·107. The maximum daily amount of *Sunshine* was 5·0 hours on December 10.

The highest reading of the ***Solar Radiation Thermometer*** was 65°·8 on December 1; and the lowest reading of the ***Terrestrial Radiation Thermometer*** was 15°·0 on December 22.

The ***Proportions of Wind*** referred to the cardinal points were N.20, E.18, S.16, W.27, calm or nearly calm conditions 19, the whole month being represented by 100.

The ***Greatest Pressure of the Wind*** in the month was 6·9 lbs. on the square foot on December 3. The mean daily ***Horizontal Movement of the Air*** for the month was 277 miles; the greatest daily value was 515 miles on December 1, and the least daily value was 131 miles on December 22.

Rain (0·005 in. or over) fell on 17 days in the month, amounting to 1·180 in., as measured by gauge No. 6 partly sunk below the ground; being 0·647 in. less than the average fall for the 65 years, 1841-1905.

TABLE XVIII(A). - HIGHEST AND LOWEST READINGS OF THE BAROMETER, REDUCED TO 32° FAHRENHEIT, AS EXTRACTED FROM THE PHOTOGRAPHIC RECORDS

MAXIMA		MINIMA		MAXIMA		MINIMA		MAXIMA		MINIMA	
U.T., 1939.	Reading	U.T., 1939.	Reading	U.T., 1939.	Reading	U.T., 1939.	Reading	U.T., 1939.	Reading	U.T., 1939.	Reading
d. h. m.	in.	d. h. m.	in.	d. h. m.	in.	d. h. m.	in.	d. h. m.	in.	d. h. m.	in.
January		January		May		May		October		October	
		2. 0. 50	28·997			1. 4. 5	29·738				
3. 21. 5	29·666	4. 13. 50	29·179	1. 23. 30	29·849	2. 17. 35	29·746			1. 15. 15	29·400
6. 19. 50	30·050	9. 13. 35	29·556	3. 20. 15	29·835	5. 17. 45	29·285	3. 23. 0	29·855	5. 8. 0	29·342
10. 10. 20	29·718	12. 5. 40	29·192	10. 8. 40	30·122	16. 3. 0	29·442	8. 7. 50	29·868	9. 14. 45	29·377
14. 8. 5	29·498	15. 5. 30	29·036	16. 17. 20	29·574	17. 4. 0	29·435	10. 9. 25	29·686	14. 6. 5	29·865
15. 11. 25	29·207	15. 23. 35	28·844	24. 1. 35	30·248	24. 18. 10	30·168	17. 0. 10	29·907	18. 15. 30	29·759
16. 16. 30	29·064	16. 20. 10	28·950	26. 4. 40	30·253	27. 16. 15	30·083	22. 8. 35	30·180	25. 3. 0	29·705
17. 7. 25	29·159	18. 6. 0	28·962	29. 8. 0	30·304	31. 17. 5	30·059	25. 20. 0	29·790	26. 13. 15	29·437
19. 16. 55	29·644	21. 13. 35	29·027					28. 1. 0	29·758	29. 7. 15	29·521
22. 8. 45	29·545	23. 2. 25	28·861	June		June		30. 12. 0	29·890		
24. 10. 50	29·929	25. 23. 25	28·747								
				1. 9. 15	30·142	7. 17. 15	29·955				
				9. 0. 20	30·175	11. 17. 20	29·524				
				13. 8. 10	29·848	16. 13. 30	29·585				
February		February		17. 23. 15	29·850	18. 17. 25	29·734				
				21. 0. 15	29·933	24. 11. 40	29·465	November		November	
4. 11. 10	30·212	7. 14. 40	30·044	27. 9. 5	30·073	29. 3. 10	29·674				
8. 10. 0	30·120	9. 5. 45	29·804	29. 23. 25	29·805						
11. 1. 10	30·335	13. 6. 10	29·846							4. 17. 15	29·088
14. 10. 0	30·384	17. 23. 5	29·606	July		July		5. 12. 15	29·342	5. 22. 0	29·001
20. 11. 20	30·176	23. 3. 10	28·860					6. 23. 55	29·592	8. 2. 5	29·277
24. 22. 15	29·662	25. 22. 55	29·542			1. 2. 45	29·621	10. 10. 45	29·785	11. 15. 55	29·595
27. 10. 40	29·834	28. 16. 5	29·023	3. 8. 55	29·996	5. 7. 5	29·542	13. 9. 10	29·898	15. 13. 20	29·422
				6. 14. 25	29·865	7. 7. 30	29·724	16. 4. 15	29·711	16. 14. 10	29·307
				7. 23. 5	29·805	8. 19. 5	29·630	18. 7. 0	30·092	19. 1. 15	29·382
March		March		10. 23. 40	30·085	16. 16. 55	29·335	21. 10. 55	29·428	23. 22. 5	29·681
				18. 0. 30	29·639	19. 17. 10	29·455	25. 5. 0	30·036	26. 12. 25	29·163
2. 19. 35	29·791	5. 6. 20	29·432	21. 10. 50	29·757	24. 10. 25	29·374	27. 1. 35	29·300	27. 9. 25	29·038
7. 20. 45	30·053	8. 19. 10	29·729	27. 9. 55	29·948	30. 5. 10	29·493	28. 18. 0	29·864	29. 3. 40	29·669
10. 23. 50	30·200	11. 22. 15	29·951					30. 19. 50	29·974		
13. 1. 0	30·478	15. 2. 45	30·115	August		August					
15. 12. 0	30·222	17. 9. 15	29·754								
18. 10. 5	30·164	23. 3. 0	29·279	2. 8. 30	29·945	3. 11. 10	29·571				
16. 10. 0	29·931	28. 15. 55	29·463	4. 20. 50	29·728	5. 4. 45	29·648				
31. 20. 40	29·727			6. 21. 15	29·727	8. 3. 10	29·558				
				15. 8. 10	30·222	21. 15. 0	29·568	December		December	
				23. 10. 0	29·968	25. 17. 5	29·755				
				28. 8. 50	29·939	31. 16. 35	29·744				
April		April								2. 2. 10	29·573
				September		September		3. 3. 20	29·892	5. 3. 5	29·803
		4. 3. 45	28·923					7. 10. 0	30·018	8. 17. 10	29·453
9. 23. 25	29·949	11. 16. 5	29·718	1. 23. 0	29·890	3. 3. 55	29·567	9. 10. 0	29·814	10. 3. 10	29·492
12. 21. 5	29·872	14. 16. 45	29·503	7. 7. 5	30·105	11. 4. 40	29·647	12. 10. 10	30·097	14. 13. 50	29·722
16. 22. 40	29·933	17. 9. 25	29·832	12. 11. 5	29·817	14. 4. 25	29·580	17. 10. 25	30·100	19. 7. 50	29·859
19. 7. 15	30·469	22. 6. 55	29·684	18. 23. 10	30·195	23. 4. 45	29·971	21. 10. 30	30·213	26. 13. 10	29·753
22. 19. 55	29·783	24. 15. 10	29·200	25. 7. 5	30·239	26. 15. 50	30·021	27. 23. 10	29·975	29. 4. 0	29·825
27. 21. 5	30·122			27. 20. 0	30·196			29. 21. 15	29·946	31. 0. 40	29·760

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 Universal 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.

TABLE XVIII(B). - HIGHEST AND LOWEST READINGS OF THE BAROMETER IN EACH MONTH FOR THE YEAR 1939

	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	30·050	30·384	30·478	30·469	30·304	30·175	30·085	30·222	30·239	30·180	30·092	30·213
LOWEST	28·747	28·860	29·279	28·923	29·285	29·465	29·335	29·558	29·567	29·342	29·001	29·453
RANGE	1·303	1·524	1·199	1·546	1·019	0·710	0·750	0·664	0·672	0·838	1·091	0·760

The highest reading in the year was 30·478 in. on Mar. 13. The lowest reading in the year was 28·747 in. on Jan. 25. The range of reading in the year was 1·731 in.

TABLE XIX. - MONTHLY RESULTS OF METEOROLOGICAL ELEMENTS FOR THE YEAR 1939.

MONTH 1939	Mean Reading of the Barometer	TEMPERATURE OF THE AIR								Mean Temperature of Evaporation	Mean Temperature of the Dew Point	Mean Degree of Humidity (Saturation = 100)
		Highest	Lowest	Range in the Month	Mean of all the Highest	Mean of all the Lowest	Mean of the Daily Ranges	Monthly Mean	Excess of Mean above the Average of 65 Years			
	in.	°	°	°	°	°	°	°	°	°	°	
January	29·445	54·8	24·5	30·3	45·5	37·9	7·6	41·7	+3·1	39·9	37·3	84·4
February	29·898	57·8	29·0	28·8	48·8	37·2	11·6	42·8	+3·3	40·3	36·6	78·9
March	29·824	60·3	29·2	31·1	48·9	37·3	11·6	42·9	+1·0	39·9	35·3	74·6
April	29·759	75·0	29·8	45·2	57·1	39·8	17·4	48·5	+1·2	44·7	40·0	73·5
May	29·880	74·9	37·4	37·5	62·0	43·5	18·5	52·7	-0·3	48·7	44·3	73·4
June	29·845	85·2	42·9	42·3	68·0	49·7	18·3	58·7	-0·7	53·3	48·2	69·2
July	29·704	80·4	44·4	36·0	70·1	53·3	16·8	61·2	-1·4	56·6	52·7	74·0
August	29·841	82·3	47·3	35·0	71·7	54·8	17·0	62·6	+0·9	59·0	56·3	80·4
September	29·933	81·7	41·9	39·8	67·4	52·5	14·9	59·3	+2·1	55·4	52·0	77·0
October	29·683	64·7	31·1	33·6	54·4	42·1	12·3	48·1	-1·9	45·9	43·2	83·5
November	29·685	58·2	31·8	26·4	53·4	43·9	9·5	48·8	+5·3	47·1	45·1	87·2
December	29·832	55·7	19·4	36·3	41·2	32·9	8·3	37·5	-2·4	36·3	34·5	88·8
		Highest	Lowest	Annual Range								
Means	29·777	85·2	19·4	65·8	57·4	43·7	13·7	50·4	+0·8	47·3	43·8	78·7

MONTH 1939	Mean Elastic Force of Vapour	Mean Temperature of the Earth 4 feet below the Surface of the soil	Mean Amount of Cloud (0-10)	RAIN		WIND										
				Number of Rainy Days (0·005 in. or over)	Amount collected in Gauge No.6, whose receiving Surface is 5 inches above the Ground	From Osler's Anemometer								Number of Calm or Nearly Calm Hours	Mean Daily Pressure on the Square Foot	From Robinson's Anemometer
						Number of Hours of Prevalence of each Wind referred to different Points of Azimuth										Mean Daily Horizontal Movement of the Air
						N.	N.E.	E.	S.E.	S.	S.W.	W.	N.W.			
	in.	°			in.	h	h	h	h	h	h	h	h	h	lbs.	miles
January	0·223	44·9	8·0	21	4·233	22	58	102	27	109	244	61	86	35	0·38	357
February	0·217	44·2	6·5	8	1·072	42	15	42	5	100	265	130	34	39	0·25	326
March	0·206	44·6	7·5	16	1·205	152	76	43	17	68	98	90	149	51	0·39	335
April	0·248	46·8	6·4	17	2·488	55	117	78	18	33	180	109	38	92	0·24	292
May	0·293	49·6	6·0	8	1·642	144	174	51	43	35	66	15	33	183	0·15	245
June	0·339	54·4	6·2	11	1·382	101	175	74	8	66	157	35	40	64	0·19	283
July	0·401	56·7	7·2	17	2·359	28	0	1	27	154	350	76	61	47	0·18	284
August	0·457	58·8	6·3	12	3·097	47	106	100	10	29	194	55	12	191	0·06	226
September	0·390	59·4	6·6	12	1·196	175	163	58	20	33	76	40	56	99	0·16	263
October	0·281	55·2	7·3	19	6·155	175	122	112	42	43	72	52	44	82	0·24	287
November	0·301	51·4	8·1	23	4·132	22	7	45	26	137	257	106	35	85	0·48	330
December	0·200	48·0	7·7	17	1·180	63	143	56	9	49	130	125	30	139	0·20	277
Sums	..	..	..	181	30·141	1026	1156	762	252	856	2089	894	618	1107	..	. ..
Means	0·296	51·2	6·9	..	..	..	..	..	..	..	..	..	..	..	0·24	292

The greatest recorded pressure of the wind on the square foot in the year was 17·0 lbs. on November 19.

The greatest recorded daily horizontal movement of the air in the year was 621 miles on November 26.

The least recorded daily horizontal movement of the air in the year was 131 miles on December 22.

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

Hour, Universal 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.
0^h	29·438	29·912	29·815	29·768	29·882	29·865	29·713	29·849	29·942	29·690	29·675	29·831	29·782
1	29·438	29·908	29·814	29·763	29·879	29·861	29·708	29·846	29·938	29·688	29·671	29·827	29·778
2	29·439	29·905	29·809	29·758	29·874	29·855	29·702	29·842	29·933	29·681	29·673	29·827	29·775
3	29·437	29·900	29·803	29·754	29·870	29·849	29·696	29·838	29·928	29·676	29·673	29·825	29·771
4	29·431	29·895	29·799	29·752	29·869	29·847	29·694	29·836	29·925	29·671	29·673	29·824	29·768
5	29·425	29·896	29·802	29·754	29·873	29·848	29·695	29·839	29·927	29·672	29·674	29·824	29·767
6	29·425	29·897	29·806	29·760	29·879	29·852	29·698	29·845	29·933	29·672	29·681	29·827	29·773
7	29·433	29·899	29·813	29·766	29·885	29·855	29·700	29·849	29·938	29·677	29·686	29·834	29·778
8	29·443	29·908	29·825	29·767	29·888	29·856	29·702	29·853	29·943	29·683	29·694	29·842	29·784
9	29·453	29·915	29·831	29·768	29·889	29·854	29·703	29·854	29·948	29·687	29·697	29·852	29·788
10	29·456	29·915	29·837	29·768	29·888	29·850	29·704	29·852	29·946	29·690	29·701	29·857	29·789
11	29·460	29·916	29·839	29·765	29·886	29·849	29·705	29·848	29·942	29·689	29·700	29·853	29·788
12	29·455	29·908	29·839	29·758	29·881	29·845	29·704	29·843	29·936	29·685	29·691	29·843	29·782
13	29·447	29·897	29·833	29·756	29·878	29·841	29·704	29·839	29·929	29·679	29·684	29·831	29·777
14	29·443	29·888	29·826	29·751	29·875	29·835	29·703	29·833	29·922	29·676	29·679	29·825	29·771
15	29·447	29·884	29·822	29·744	29·869	29·829	29·700	29·827	29·917	29·673	29·679	29·824	29·768
16	29·448	29·883	29·820	29·742	29·867	29·825	29·696	29·825	29·915	29·675	29·681	29·824	29·767
17	29·449	29·885	29·821	29·742	29·867	29·823	29·693	29·823	29·916	29·679	29·685	29·825	29·767
18	29·453	29·889	29·828	29·747	29·870	29·825	29·696	29·824	29·920	29·685	29·688	29·824	29·771
19	29·456	29·891	29·834	29·755	29·875	29·831	29·704	29·834	29·929	29·689	29·692	28·826	29·776
20	29·455	29·891	29·838	29·765	29·885	29·838	29·710	29·840	29·935	29·695	29·690	29·827	29·781
21	29·454	29·888	29·838	29·770	29·892	29·849	29·720	29·844	29·940	29·698	29·691	29·829	29·784
22	29·453	29·888	29·838	29·769	29·896	29·852	29·722	29·848	29·940	29·698	29·688	29·832	29·785
23	29·453	29·885	29·835	29·770	29·896	29·852	29·722	29·849	29·939	29·697	29·687	29·833	29·785
24	29·452	29·885	29·834	29·769	29·894	29·850	29·720	29·848	29·933	29·694	29·686	29·829	29·783
Means 0^h–23^h	29·445	29·898	29·824	29·759	29·880	29·845	29·704	29·841	29·933	29·683	29·685	29·832	29·777
Means 1^h–24^h	29·446	29·896	29·824	29·759	29·880	29·845	29·704	29·841	29·932	29·684	29·685	29·832	29·777
No. of Days Employed	31	28	31	30	31	30	31	31	30	31	30	31	..

TABLE XXI. - MONTHLY MEAN TEMPERATURE OF THE AIR, AT EVERY HOUR OF THE DAY AS DEDUCED FROM THE AUTOGRAPHIC RECORDS

Hour, Universal Time.	January	February	March	April	May	June	July	August	September	October	November	December	Yearly Means
	°	°	°	°	°	°	°	°	°	°	°	°	°
0^h	40·9	41·3	40·6	44·5	47·2	53·4	56·6	58·3	55·9	45·7	47·7	37·1	47·4
1	40·7	41·1	40·1	43·7	46·5	52·6	56·0	57·6	55·1	45·6	47·5	36·6	46·9
2	40·7	40·6	39·8	43·1	45·9	52·0	55·4	57·1	54·4	45·3	47·1	36·3	46·5
3	40·6	40·2	39·6	42·4	45·4	51·5	54·9	56·5	54·0	44·9	46·8	36·1	46·1
4	40·5	39·6	39·2	41·8	44·8	51·0	54·7	56·1	53·7	44·6	46·6	35·9	45·7
5	40·7	39·2	39·3	41·2	45·1	51·6	55·1	56·1	53·8	44·2	46·3	36·0	45·7
6	40·8	39·5	39·6	41·7	46·8	53·6	56·8	56·7	54·1	44·5	46·4	36·1	46·4
7	41·1	39·6	40·1	44·1	49·5	56·1	58·9	58·5	55·4	45·1	46·5	36·3	47·6
8	41·2	40·0	41·1	47·2	52·2	58·6	61·0	60·7	58·0	46·4	47·3	36·3	49·2
9	41·5	41·5	42·9	50·0	55·1	61·1	63·1	63·1	60·3	48·1	48·2	36·7	51·0
10	41·6	43·1	44·6	52·0	57·3	62·8	64·3	65·5	62·1	49·6	49·4	37·5	52·5
11	42·6	44·6	46·1	53·2	58·7	63·9	65·5	67·4	63·9	51·2	50·3	38·4	53·8
12	43·0	46·2	47·2	53·9	59·3	65·0	66·6	68·5	65·3	52·6	50·9	39·1	54·8
13	43·4	47·6	47·5	54·5	60·0	65·5	66·7	69·3	65·5	53·4	51·6	39·7	55·4
14	43·6	47·8	47·5	55·1	59·7	65·8	67·2	70·1	66·2	53·2	51·8	39·8	55·7
15	43·4	47·5	47·1	55·3	59·4	65·8	67·5	69·6	65·7	52·7	51·4	39·5	55·4
16	43·2	46·6	46·5	55·0	59·0	65·1	67·2	68·8	64·9	51·3	50·9	39·0	54·8
17	42·7	45·2	45·6	53·9	58·3	62·9	66·6	67·9	63·6	50·3	50·3	38·6	53·9
18	42·4	44·3	44·4	52·3	56·9	62·4	65·2	66·7	61·9	49·3	50·0	38·3	52·8
19	41·8	43·5	43·6	50·2	55·1	60·6	63·1	64·5	60·2	48·2	49·6	38·0	51·5
20	41·6	42·8	42·5	48·9	53·2	58·7	61·2	62·6	58·6	47·6	49·2	37·8	50·4
21	41·2	42·4	41·9	47·5	51·3	56·7	59·5	61·0	57·5	46·9	49·0	37·6	49·4
22	40·9	42·1	41·4	46·4	49·7	55·5	58·4	59·9	56·8	46·6	48·6	37·2	48·6
23	40·8	41·7	41·0	45·4	48·4	54·4	57·5	59·0	56·1	46·1	48·3	36·8	48·0
24	40·8	41·4	40·8	44·4	47·4	53·3	56·8	58·4	55·5	45·6	48·1	36·3	47·4
Means 0^h–23^h	41·7	42·8	42·9	48·5	52·7	58·7	61·2	62·6	59·3	48·1	48·8	37·5	50·4
Means 1^h–24^h	41·7	42·8	42·9	48·5	52·7	58·7	61·2	62·6	59·3	48·1	48·8	37·5	50·4
No. of Days Employed	31	28	31	30	31	30	31	31	30	31	30	31	..

TABLE XXII. - MONTHLY MEAN TEMPERATURE OF EVAPORATION AT EVERY HOUR OF THE DAY, AS DEDUCED FROM THE AUTOGRAPHIC RECORDS

Hour, Universal Time.	January	February	March	April	May	June	July	August	September	October	November	December	Yearly Means
	°	°	°	°	°	°	°	°	°	°	°	°	°
0^h	39·5	39·6	38·7	42·5	45·6	50·8	54·6	57·0	54·2	44·4	46·3	36·1	45·8
1	39·3	39·4	38·4	41·9	45·1	50·3	54·2	56·5	53·7	44·3	46·0	35·7	45·4
2	39·4	39·0	38·3	41·6	44·8	49·9	53·8	56·1	53·3	44·0	45·7	35·4	45·1
3	39·2	38·7	38·2	41·2	44·5	49·8	53·5	55·8	53·0	43·8	45·5	35·2	44·9
4	39·1	38·2	38·0	40·8	44·0	49·5	53·4	55·5	53·0	43·5	45·3	34·9	44·6
5	39·2	37·7	37·8	40·4	43·9	49·6	53·5	55·2	52·7	43·2	45·1	34·9	44·4
6	39·4	37·9	38·0	40·5	45·1	50·8	54·7	56·0	52·7	43·3	45·2	34·9	44·9
7	39·6	37·9	38·1	42·1	46·8	52·3	55·8	57·3	53·7	43·6	45·3	35·0	45·7
8	39·6	38·2	38·8	44·1	48·2	53·4	57·0	58·7	55·3	44·7	45·9	35·2	46·6
9	39·8	39·5	39·9	45·8	49·6	54·7	57·9	59·5	56·3	46·1	46·7	35·5	47·6
10	39·7	40·5	40·9	46·8	50·7	55·6	58·1	60·7	56·8	47·1	47·6	36·2	48·4
11	40·3	41·4	41·6	47·4	51·3	56·1	58·5	61·0	57·4	47·9	48·1	36·8	49·0
12	40·5	42·2	42·1	47·7	52·0	56·6	58·8	61·4	57·9	48·6	48·6	37·4	49·5
13	40·9	43·0	42·2	48·3	52·6	56·8	58·7	61·8	57·9	49·0	49·1	37·9	49·9
14	41·1	43·1	42·0	48·4	52·7	56·9	59·1	62·4	58·1	48·9	49·2	38·1	50·0
15	41·0	43·0	41·8	48·5	52·7	56·9	59·2	62·3	58·1	48·6	48·9	37·8	49·9
16	40·9	42·4	41·6	48·2	52·6	56·3	59·1	62·1	57·7	48·1	48·4	37·4	49·6
17	40·7	41·7	41·3	47·8	52·1	55·9	58·8	61·8	57·2	47·5	48·2	37·2	49·2
18	40·4	41·2	40·9	46·9	51·4	55·0	58·4	61·3	56·6	46·9	48·0	37·0	48·7
19	40·2	40·7	40·6	45·8	50·7	54·1	57·5	60·4	55·9	46·2	47·8	36·9	48·1
20	40·0	40·5	39·9	45·2	49·6	53·3	56·8	59·5	55·3	45·9	47·5	36·8	47·5
21	39·7	40·3	39·6	44·6	48·5	52·4	56·0	58·8	55·0	45·5	47·5	36·6	47·0
22	39·6	40·2	39·3	43·8	47·4	51·8	55·5	58·0	54·7	45·1	47·3	36·3	46·6
23	39·5	39·9	39·0	43·1	46·5	51·4	55·1	57·6	54·3	44·6	46·9	35·9	46·1
24	39·4	39·7	38·9	42·5	45·8	50·8	54·7	57·1	53·8	44·3	46·6	35·3	45·7
Means 0^h–23^h	39·9	40·3	39·9	44·7	48·7	53·3	56·6	59·0	55·4	45·9	47·1	36·3	47·3
Means 1^h–24^h	39·9	40·3	39·9	44·7	48·7	53·3	56·6	59·0	55·4	45·9	47·1	36·3	47·3
No. of Days Employed	31	28	31	30	31	30	31	31	30	31	30	31	..

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

Hour, Universal Time.	January	February	March	April	May	June	July	August	September	October	November	December	Yearly Means
	°	°	°	°	°	°	°	°	°	°	°	°	°
0^h	37·6	37·2	36·0	39·9	43·7	48·3	53·0	55·9	52·7	42·8	44·7	34·4	43·9
1	37·4	37·0	36·0	39·5	43·4	48·0	52·7	55·6	52·5	42·7	44·3	34·1	43·6
2	37·7	36·8	36·2	39·5	43·4	47·8	52·4	55·3	52·4	42·4	44·1	33·8	43·5
3	37·3	36·7	36·2	39·6	43·5	48·1	52·3	55·2	52·2	42·5	43·9	33·5	43·4
4	37·2	36·2	36·2	39·5	43·1	48·0	52·3	55·0	52·3	42·2	43·7	33·1	43·2
5	37·2	35·6	35·7	39·3	42·5	47·6	52·1	54·4	51·7	42·0	43·6	32·9	42·9
6	37·5	35·6	35·7	38·9	43·1	48·0	53·0	55·5	51·4	41·8	43·7	32·8	43·1
7	37·6	35·4	35·1	39·5	43·7	48·6	53·2	56·3	52·2	41·6	43·8	32·8	43·3
8	37·4	35·6	35·3	40·3	43·7	48·5	53·7	57·3	53·0	42·6	44·3	33·3	43·7
9	37·4	36·6	35·6	40·8	43·6	48·9	53·7	56·8	52·9	43·8	45·0	33·5	44·1
10	37·0	36·7	35·4	40·6	43·6	49·2	53·1	57·3	52·3	44·4	45·6	34·1	44·1
11	36·9	36·9	35·1	40·5	43·4	49·2	52·8	56·3	52·0	44·3	45·7	34·4	44·0
12	36·8	36·7	34·7	40·3	44·4	49·1	52·5	56·2	51·7	44·3	46·2	34·9	44·0
13	37·3	36·8	34·6	41·2	45·1	49·1	52·2	56·4	51·5	44·3	46·4	35·3	44·2
14	37·6	36·7	34·1	40·6	45·7	49·1	52·6	56·9	51·4	44·3	46·4	35·7	44·3
15	37·6	37·0	34·1	40·6	46·1	49·1	52·6	57·1	51·8	44·3	46·2	35·3	44·3
16	37·6	36·7	34·4	40·3	46·3	48·4	52·6	57·3	51·6	44·6	45·7	35·1	44·2
17	37·8	36·7	35·1	40·6	45·9	48·8	52·5	57·5	51·9	44·4	45·9	35·1	44·3
18	37·5	36·8	35·8	40·4	45·7	48·2	52·9	57·4	52·1	44·3	45·8	35·0	44·3
19	38·0	36·8	36·4	40·5	36·2	48·0	52·9	57·4	52·2	43·9	45·8	35·1	44·4
20	37·8	37·1	36·0	40·6	45·9	48·1	53·2	57·1	52·5	43·9	45·6	35·1	44·4
21	37·7	37·3	36·2	41·1	45·5	48·3	53·1	57·1	52·9	43·8	45·8	34·9	44·5
22	37·9	37·5	36·2	40·6	44·9	48·2	53·0	56·6	53·0	43·3	45·9	34·8	44·3
23	37·8	37·4	36·1	40·1	44·4	48·5	53·1	56·5	52·8	42·8	45·3	34·3	44·1
24	37·5	37·3	36·2	40·0	43·9	48·4	53·0	56·0	52·4	42·8	44·9	33·5	44·0
Means 0^h–23^h	37·5	36·7	35·5	40·2	44·5	48·5	52·8	56·4	52·2	43·4	45·1	34·3	43·9
Means 1^h–24^h	37·5	36·7	35·5	40·2	44·5	48·5	52·8	56·4	52·2	43·4	45·1	34·3	43·9

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

Hour, Universal Time.	January	February	March	April	May	June	July	August	September	October	November	December	Yearly Means
0^h	87	85	83	84	88	83	87	92	89	90	89	91	87
1	87	85	85	85	89	84	88	93	91	90	88	91	88
2	88	86	86	87	91	85	90	94	93	90	89	91	89
3	87	87	87	90	93	88	91	95	93	91	90	91	90
4	87	87	89	91	93	89	91	96	95	91	90	90	91
5	87	86	86	93	91	86	90	95	92	92	91	89	90
6	87	86	86	90	87	81	87	95	91	90	91	88	88
7	87	85	82	84	80	76	81	92	89	88	91	87	85
8	86	84	79	76	73	69	77	88	83	87	89	89	82
9	85	83	74	70	65	64	72	80	77	85	89	86	78
10	83	79	70	65	60	61	67	75	71	82	87	87	74
11	80	74	66	62	57	59	64	68	65	77	84	85	70
12	79	69	62	60	58	57	60	65	62	73	84	85	68
13	79	66	61	60	58	55	59	63	61	71	82	84	67
14	79	65	59	58	60	54	59	63	59	71	82	85	66
15	80	67	60	57	61	54	59	64	61	73	82	85	67
16	81	68	63	57	63	55	59	67	63	78	82	86	69
17	83	72	66	60	63	58	60	69	66	80	85	87	71
18	83	75	72	64	66	59	65	72	70	83	86	88	74
19	86	77	75	69	72	63	70	78	75	85	87	90	78
20	86	80	78	73	76	68	75	83	80	87	87	91	80
21	87	82	80	78	81	73	79	87	84	89	89	91	83
22	88	84	81	80	83	76	83	89	87	88	90	91	85
23	88	84	83	81	86	80	85	91	88	88	89	91	86
24	87	85	83	85	88	83	87	92	89	90	89	90	87
Means 0^h–23^h	85	79	75	74	75	70	75	81	79	84	87	88	79
Means 1^h–24^h	85	79	75	74	75	70	75	81	79	84	87	88	79

TABLE XXV. - 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 1939

Month, 1939.	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
	5^h	6^h	7^h	8^h	9^h	10^h	11^h	Noon	13^h	14^h	15^h	16^h	17^h	18^h	19^h	20^h				
	h	h	h	h	h	h	h	h	h	h	h	h	h	h	h	h	h	h		°
January	–	–	–	–	0·5	3·3	5·1	5·7	5·7	4·3	2·5	0·1	–	–	–	–	26·2	260·3	·101	18
February	–	–	–	2·5	7·6	10·7	12·6	12·9	14·2	12·3	10·0	5·0	0·2	–	–	–	88·0	278·2	·316	26
March	–	–	–	4·0	7·8	12·1	12·9	11·4	9·1	6·5	5·5	5·1	0·6	–	–	–	75·0	367·0	·204	36
April	–	1·6	12·3	14·8	13·5	14·2	14·7	14·1	12·5	13·2	13·2	11·7	10·0	5·7	0·5	–	152·0	414·7	·367	48
May	0·3	4·9	11·4	14·7	16·0	19·1	17·7	15·0	13·9	14·1	13·0	13·5	12·5	10·3	6·6	1·3	184·3	483·1	·381	57
June	1·1	11·3	15·0	15·5	15·2	13·8	13·4	14·0	14·3	14·4	14·2	13·7	13·6	12·8	10·7	3·0	196·0	496·1	·393	62
July	1·5	8·1	9·4	13·1	13·8	12·7	10·4	10·8	12·4	10·5	12·4	13·2	10·2	10·1	8·4	2·6	159·6	500·3	·319	60
August	–	1·7	7·7	8·5	9·9	14·9	18·3	15·1	14·8	14·6	12·2	12·7	11·1	12·0	3·8	–	157·3	453·0	·347	52
September	–	–	3·2	10·2	16·7	17·5	18·6	16·0	15·3	14·1	13·7	12·3	9·8	5·4	0·3	–	153·1	381·0	·402	42
October	–	–	–	1·3	7·0	11·6	8·8	11·0	10·2	11·0	9·9	7·1	1·5	–	–	–	79·4	332·6	·239	30
November	–	–	–	–	2·1	4·9	4·7	3·6	4·1	4·4	3·6	1·0	–	–	–	–	28·4	268·0	·106	20
December	–	–	–	–	1·0	4·6	4·6	5·2	5·2	3·7	1·9	0·1	–	–	–	–	26·3	245·7	·107	16
For the Year	2·9	27·6	59·0	84·6	111·1	138·4	141·8	134·8	131·7	123·1	112·1	95·5	69·5	56·3	30·3	6·9	1325·6	4480·0	·296	..

The hours are reckoned from "Apparent" midnight.

TABLE XXVI. - READINGS OF THE THERMOMETERS IN THE STEVENSON SCREEN IN THE CHRISTIE ENCLOSURE

(The readings of the maximum and minimum thermometers apply to the 24 hours ending 21^h)

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

Day of the Month	Dry-Bulb Thermometers, 4 ft. above the Ground.						Wet-Bulb Thermometers, 4 ft. above the Ground.			
	Maximum	Minimum	9^h	12^h	15^h	21^h	9^h	12^h	15^h	21^h
MARCH										
d	°	°	°	°	°	°	°	°	°	°
1	47·9	38·0	42·6	47·2	47·1	45·8	38·5	40·5	40·6	43·8
2	54·3	45·2	48·8	52·5	53·4	45·2	46·8	47·6	47·7	43·0
3	60·3	41·0	50·5	58·2	56·0	51·0	46·4	51·4	50·6	47·4
4	56·3	46·2	50·9	56·0	48·5	46·8	46·9	50·9	47·6	45·5
5	56·3	44·7	50·9	54·5	54·0	49·1	46·0	46·2	45·5	46·9
6	54·8	44·6	48·2	54·2	53·1	48·2	45·3	47·2	46·9	45·5
7	49·7	40·6	43·6	47·0	48·9	42·6	39·1	40·8	40·5	38·1
8	51·6	38·3	44·9	51·5	50·1	39·7	41·6	44·5	43·9	37·7
9	50·3	38·6	43·5	47·5	49·2	43·6	40·1	41·7	42·8	41·1
10	49·0	35·3	41·3	46·7	48·3	40·7	38·3	41·7	42·3	38·6
11	44·3	29·2	40·1	44·3	44·1	41·7	38·5	42·1	42·9	41·2
12	44·9	38·2	40·7	43·6	43·4	38·2	39·1	40·4	40·2	35·5
13	47·7	31·1	36·8	46·4	47·2	44·4	35·8	42·0	42·0	41·6
14	51·5	44·4	48·2	49·6	51·5	47·9	45·2	46·2	46·3	45·2
15	47·9	41·6	42·5	45·4	43·7	41·6	38·2	38·9	38·9	37·4
16	50·6	39·0	40·5	48·4	49·5	46·7	39·6	44·3	44·4	44·2
17	46·7	33·0	41·0	44·1	40·0	33·0	37·9	41·6	36·9	30·9
18	39·3	31·6	35·5	38·3	38·1	36·6	32·2	32·3	33·4	34·3
19	43·1	35·0	41·5	42·4	41·7	38·6	39·1	39·0	38·0	36·8
20	47·8	37·0	39·9	42·5	43·7	44·3	35·9	38·6	39·7	39·2
21	48·7	39·9	44·1	46·5	46·4	42·9	39·3	40·6	41·0	39·2
22	51·3	38·4	45·0	49·0	50·2	38·4	42·0	42·1	40·9	36·6
23	48·4	35·5	40·5	45·7	45·1	41·1	38·4	40·1	39·7	36·6
24	49·4	30·2	39·6	45·8	48·9	34·5	35·6	39·5	40·5	34·2
25	43·3	32·4	38·8	43·2	41·3	36·6	36·6	36·4	35·8	35·6
26	42·3	36·6	40·0	42·0	40·6	37·1	37·5	37·9	36·8	34·8
27	40·3	34·3	37·3	40·2	39·0	37·4	35·8	38·2	37·8	36·3
28	41·7	36·1	39·6	40·4	41·3	39·0	37·8	38·7	39·5	37·7
29	50·3	33·6	41·4	45·3	50·3	38·4	38·9	41·5	44·5	37·2
30	50·7	36·8	46·4	49·9	49·2	41·3	42·4	43·4	42·1	39·8
31	56·2	38·6	45·6	54·3	55·3	46·4	43·0	48·3	47·4	44·3
Means	48·9	37·6	42·9	47·2	47·1	41·9	39·9	42·1	41·8	39·6
APRIL										
d	°	°	°	°	°	°	°	°	°	°
1	56·2	38·4	45·6	52·9	55·9	47·6	44·3	48·3	51·7	46·0
2	53·7	44·5	49·5	48·7	53·4	44·5	48·7	47·9	48·6	42·5
3	48·6	34·6	46·5	48·4	46·0	47·3	44·1	45·2	44·9	46·8
4	54·2	46·0	51·6	47·6	51·6	47·0	48·8	46·7	48·8	45·0
5	57·7	43·5	50·6	56·3	54·1	50·7	48·6	51·7	50·1	48·7
6	50·9	39·8	40·6	42·6	44·2	43·2	39·4	40·9	41·8	40·2
7	48·4	37·0	44·0	47·0	48·4	41·3	40·0	41·5	43·3	39·3
8	56·6	29·8	44·6	52·8	56·0	46·1	41·8	45·9	48·1	43·6
9	64·8	36·0	52·7	62·4	64·3	49·4	47·6	53·1	53·3	45·1
10	63·8	39·8	53·2	62·7	60·8	50·3	48·4	54·2	52·0	47·1
11	69·5	43·1	55·6	66·3	69·0	53·3	50·1	56·5	59·4	52·0
12	75·0	48·1	66·5	72·6	73·7	57·3	58·0	58·1	58·9	51·3
13	65·1	47·8	54·3	62·6	63·3	51·7	51·3	56·0	55·2	49·4
14	59·2	47·3	53·0	53·7	58·5	50·5	49·8	51·6	52·5	49·0
15	59·3	44·0	53·5	57·6	57·4	53·6	48·0	48·9	49·4	50·6
16	61·1	51·0	56·4	56·7	60·2	51·0	52·6	54·2	54·2	46·7
17	58·4	44·7	49·9	53·3	58·4	47·7	45·4	45·5	48·9	42·6
18	53·9	40·2	46·6	50·4	52·8	45·4	40·7	43·5	44·4	42·6
19	62·7	34·1	51·8	59·6	61·6	46·7	46·1	49·8	51·3	44·5
20	70·8	38·7	57·2	67·0	70·8	55·6	49·7	54·8	56·4	50·2
21	69·8	38·7	58·6	65·8	69·8	55·1	50·1	51·0	52·1	46·0
22	56·0	45·0	49·0	53·0	53·4	46·5	42·4	42·9	45·4	42·0
23	51·9	42·0	47·8	45·9	51·6	49·1	44·6	44·6	47·6	47·0
24	55·8	44·3	46·2	50·8	53·6	44·3	45·1	46·7	45·5	40·8
25	52·3	34·7	48·3	50·9	46·7	41·7	42·8	44·5	42·1	38·7
26	49·5	33·9	46·5	46·1	42·9	42·3	41·1	40·0	40·4	40·0
27	47·7	35·1	43·9	42·9	42·1	40·8	39·4	39·7	40·2	37·0
28	49·7	34·1	45·6	49·0	49·2	40·0	40·2	41·0	42·4	39·3
29	49·9	36·3	45·4	48·5	45·8	41·6	42·0	43·4	43·6	39·9
30	44·2	39·9	43·6	43·7	43·8	43·9	43·0	43·5	43·6	43·5
Means	57·2	40·4	50·0	53·9	55·3	47·5	45·8	47·7	48·5	44·6

TABLE XXVI. - READINGS OF THE THERMOMETERS IN THE STEVENSON SCREEN IN THE CHRISTIE ENCLOSURE

(The readings of the maximum and minimum thermometers apply to the 24 hours ending 21^h)

Day of the Month	Dry-Bulb Thermometers, 4 ft. above the Ground.						Wet-Bulb thermometers, 4 ft. above the Ground.			
	Maxi-mum	Mini-mum	9^h	12^h	15^h	21^h	9^h	12^h	15^h	21^h
MAY										
d	°	°	°	°	°	°	°	°	°	°
1	45·9	42·7	44·4	45·3	45·7	43·6	44·0	44·9	45·1	43·3
2	50·8	42·1	45·9	49·6	47·7	45·1	43·5	45·6	45·1	43·7
3	52·8	39·7	49·8	52·2	51·0	44·6	44·6	45·4	46·2	42·8
4	58·2	37·4	52·4	57·3	56·8	42·8	47·8	50·4	49·6	41·2
5	57·6	38·7	56·0	55·3	50·9	47·1	48·4	50·6	48·7	45·6
6	61·8	40·8	53·5	56·1	61·1	48·3	48·9	50·8	53·6	45·6
7	63·0	38·6	57·3	60·5	62·2	49·4	51·6	54·3	55·0	47·5
8	69·3	40·5	56·4	64·7	61·9	53·7	51·5	54·2	55·1	50·9
9	69·7	43·4	61·0	68·3	65·9	54·4	52·7	57·4	56·3	51·1
10	68·3	46·1	57·7	60·7	67·9	61·7	51·9	52·0	59·0	55·1
11	61·7	46·9	60·0	57·7	53·2	46·9	52·5	50·9	48·0	43·3
12	53·4	44·2	48·3	49·4	50·6	49·0	44·5	46·0	47·1	44·8
13	63·4	46·2	56·9	61·3	62·4	51·7	48·7	49·7	51·4	46·2
14	62·1	40·6	54·6	61·9	55·0	50·2	47·6	51·9	50·7	48·4
15	50·2	44·4	45·5	48·4	48·8	47·6	43·8	46·1	46·9	46·3
16	58·2	45·5	49·1	54·8	56·3	47·8	48·0	51·0	49·2	45·3
17	55·8	45·3	48·2	52·3	54·7	49·3	47·3	49·4	50·1	47·8
18	54·4	42·1	50·2	54·4	50·2	48·4	48·1	50·0	49·5	45·7
19	55·5	43·3	48·1	50·4	55·5	46·0	42·5	44·3	47·0	43·2
20	63·1	39·9	55·2	61·8	57·5	52·2	49·2	51·0	49·0	48·9
21	62·8	41·1	57·4	60·8	59·8	54·3	50·9	52·6	52·8	50·9
22	67·9	42·5	61·5	64·3	65·6	58·0	54·1	56·5	58·3	55·8
23	74·2	46·3	66·3	69·6	73·6	57·8	58·9	59·3	61·8	54·3
24	74·9	46·6	67·2	72·2	73·4	58·1	56·1	57·6	60·0	55·0
25	67·0	51·9	63·4	66·7	60·7	53·1	53·6	58·0	56·4	51·1
26	66·3	46·8	56·1	62·4	65·7	54·0	48·8	52·1	55·3	52·5
27	70·2	49·3	66·0	67·6	67·0	60·0	57·8	60·1	60·0	56·0
28	64·8	48·6	53·6	62·6	64·4	53·9	49·4	54·2	54·9	49·1
29	64·3	44·3	54·8	61·4	64·0	52·3	48·8	52·6	55·5	49·9
30	65·0	47·9	56·0	61·7	63·9	53·8	50·6	54·4	55·7	52·0
31	69·9	47·5	56·2	67·4	69·3	56·5	52·1	58·8	60·9	52·0
Means	62·0	43·9	55·1	59·3	59·4	51·3	49·6	52·0	52·7	48·5
JUNE										
d	°	°	°	°	°	°	°	°	°	°
1	65·7	47·1	52·0	58·2	64·4	52·6	49·2	52·0	53·0	48·6
2	73·7	50·1	63·0	73·2	73·2	60·6	56·8	60·7	58·5	53·6
3	71·4	47·8	64·8	70·6	59·9	58·0	54·6	55·6	54·6	46·5
4	73·5	45·1	67·3	71·9	73·1	58·0	55·3	56·9	58·2	50·6
5	75·9	48·0	69·6	73·5	75·0	63·0	56·6	59·4	57·4	56·0
6	82·6	56·2	71·1	78·7	80·9	66·9	64·1	68·0	66·6	62·4
7	85·2	57·1	77·5	83·6	82·4	66·0	64·3	68·2	67·4	62·5
8	73·7	54·1	67·4	73·3	72·5	58·0	58·6	62·8	61·6	52·0
9	65·6	47·4	61·4	63·5	65·0	52·3	52·3	53·3	53·8	48·3
10	78·8	45·0	65·5	73·6	78·8	63·4	54·7	60·0	62·5	56·2
11	63·4	50·6	55·6	58·8	60·4	53·4	52·6	53·8	54·6	49·2
12	61·0	45·9	55·5	59·8	55·9	45·9	49·1	49·7	49·0	42·1
13	59·7	42·9	52·6	57·3	58·3	49·1	44·8	47·7	49·1	47·3
14	65·6	47·6	58·8	62·3	60·5	56·8	53·0	54·8	56·9	54·6
15	64·1	54·6	58·9	63·6	63·6	59·1	56·9	57·3	59·0	56·4
16	62·3	56·1	59·4	58·3	57·3	56·4	56·2	56·7	56·8	51·0
17	66·9	46·1	63·3	65·7	64·8	55·8	55·8	56·3	56·3	53·0
18	66·2	51·9	63·5	63·6	64·9	56·4	56·0	58·7	59·3	55·1
19	67·2	49·9	58·4	61·1	64·9	57·6	52·5	52·9	53·8	50·2
20	63·7	48·8	56·8	59·2	58·3	54·3	51·9	53·7	53·0	51·1
21	69·0	51·0	56·6	65·1	66·6	58·4	54·9	58·2	59·9	56·6
22	62·3	54·1	57·4	58·8	58·5	54·1	56·5	57·0	56·8	51·9
23	61·0	52·8	54·9	57·4	60·3	54·1	54·1	55·4	57·6	53·3
24	59·1	52·1	55·3	57·0	54·5	52·1	52·3	53·9	51·3	47·8
25	60·2	47·8	54·3	55·7	56·8	53·6	49·8	49·2	50·3	48·6
26	64·9	48·0	60·6	62·6	69·9	52·7	51·5	53·0	53·8	51·6
27	71·9	45·2	63·5	68·9	71·4	59·0	55·9	57·7	56·8	53·3
28	66·1	56·8	64·4	61·6	63·5	62·2	57·5	58·8	60·1	59·0
29	74·0	57·7	59·7	70·0	70·5	58·9	56·6	58·6	59·4	52·6
30	66·6	50·3	64·8	64·2	66·6	53·4	56·6	56·9	60·4	51·8
Means	68·0	50·3	61·1	65·0	65·8	56·7	54·7	56·6	56·9	52·4

Day of the Month	Dry-Bulb Thermometers, 4 ft. above the Ground.						Wet-Bulb Thermometers, 4 ft. above the Ground.			
	Maxi-mum	Mini-mum	9^h	12^h	15^h	21^h	9^h	12^h	15^h	21^h
JULY										
d	°	°	°	°	°	°	°	°	°	°
1	66·4	48·0	61·4	62·3	64·8	53·4	53·1	52·7	55·5	50·7
2	66·0	44·4	60·5	63·8	59·4	56·6	54·1	54·4	56·2	53·4
3	71·2	52·8	63·1	67·5	68·3	58·6	56·1	56·9	57·8	53·9
4	80·4	55·5	68·8	75·4	78·9	68·2	60·6	64·5	63·7	60·2
5	71·7	57·2	63·9	68·6	70·4	57·2	60·8	59·3	59·6	52·7
6	65·7	52·2	59·6	63·8	58·6	60·3	55·3	56·0	56·0	56·8
7	73·3	56·9	60·2	65·3	72·9	60·2	59·3	61·2	62·1	56·9
8	67·4	57·9	64·4	66·8	64·4	61·5	61·9	62·1	60·6	59·1
9	70·5	56·7	63·5	69·5	70·2	60·6	56·0	59·4	58·6	55·0
10	68·7	51·8	62·0	62·8	67·7	60·5	54·8	55·0	57·1	53·5
11	69·4	49·8	60·6	63·7	69·4	59·8	54·0	54·5	56·9	53·3
12	69·2	53·3	61·0	65·2	67·9	60·0	53·4	55·0	56·4	55·0
13	72·1	50·1	66·6	68·0	71·4	59·0	59·6	58·6	58·2	53·7
14	69·9	50·0	61·1	64·5	68·0	58·5	58·7	59·8	58·5	55·0
15	72·0	54·0	64·8	70·5	70·0	62·1	58·7	61·1	59·7	58·1
16	73·2	56·2	66·0	67·3	71·3	58·9	59·0	59·3	61·3	56·6
17	72·2	55·8	63·2	70·8	67·5	57·2	59·4	61·3	61·4	54·2
18	71·1	54·0	69·1	64·3	63·9	62·4	60·7	59·3	60·9	60·8
19	69·2	54·5	64·4	65·4	67·8	59·8	59·9	60·9	61·0	57·0
20	68·7	53·8	62·9	66·4	63·6	58·2	58·0	59·4	58·8	57·6
21	69·2	57·2	59·8	63·0	66·6	58·7	59·4	60·9	61·4	57·7
22	67·0	56·1	59·2	65·3	67·0	59·3	57·7	60·1	61·9	58·1
23	66·3	55·3	60·0	64·3	63·4	55·3	55·0	56·3	54·5	50·1
24	62·3	47·7	57·3	58·5	56·9	52·3	53·6	52·6	51·3	49·8
25	72·1	48·2	62·1	68·9	71·2	60·2	55·0	57·1	57·9	55·5
26	66·0	53·7	59·4	59·0	62·7	56·2	56·6	55·7	57·2	54·8
27	74·8	50·0	67·4	73·3	71·0	62·6	59·8	60·3	62·1	60·6
28	71·8	59·7	66·9	70·9	69·8	62·7	62·1	63·8	63·1	59·4
29	71·3	59·3	65·9	69·7	71·0	66·2	62·5	64·9	65·5	63·7
30	75·5	59·8	66·9	72·3	75·5	60·7	61·9	63·5	63·5	58·0
31	68·1	54·6	64·1	66·5	59·7	57·7	57·4	60·4	57·7	55·5
Means	70·1	53·8	63·1	66·6	67·5	59·5	57·9	58·8	59·2	56·0
AUGUST										
d	°	°	°	°	°	°	°	°	°	°
1	71·8	53·6	60·6	69·2	71·0	58·8	57·7	60·5	61·0	57·9
2	69·0	52·2	60·5	66·2	65·5	59·5	57·1	58·2	57·7	56·7
3	59·5	54·0	56·8	54·3	56·4	55·3	56·1	53·5	55·2	54·3
4	64·0	54·8	59·6	60·1	60·0	59·1	57·7	58·6	58·6	57·1
5	64·3	55·6	58·2	64·3	61·3	56·2	57·3	59·9	59·5	55·2
6	71·8	52·3	58·3	68·9	67·7	58·2	56·7	60·8	60·2	54·7
7	65·0	52·2	59·1	60·4	62·5	54·8	57·1	56·4	59·5	53·8
8	70·7	53·1	63·1	67·9	64·3	60·4	57·4	60·1	62·1	58·4
9	68·7	51·7	60·2	65·9	63·8	62·8	57·1	58·8	59·5	61·0
10	67·6	58·6	63·4	63·5	67·2	58·6	61·5	62·6	63·4	57·5
11	70·0	54·0	59·1	65·9	67·8	60·4	56·1	57·5	57·1	54·6
12	69·9	50·0	62·9	67·6	68·0	59·9	57·6	58·2	59·4	55·2
13	69·2	51·1	63·7	65·6	69·0	57·6	56·6	55·6	58·0	54·4
14	70·8	47·3	61·9	68·4	69·4	57·6	56·6	58·9	60·0	54·6
15	73·4	48·0	65·4	69·9	72·6	58·7	59·7	57·6	60·6	57·1
16	76·3	51·1	66·4	75·4	73·8	61·0	59·2	64·5	64·8	59·8
17	73·8	54·3	66·9	72·8	72·5	60·7	56·7	62·8	61·7	59·1
18	74·6	58·1	64·7	72·9	73·1	64·8	61·5	64·6	64·0	61·8
19	78·7	58·4	65·3	74·6	78·3	67·4	62·9	67·1	67·8	64·1
20	79·6	62·1	65·9	76·4	79·4	69·3	62·7	67·8	68·0	64·9
21	82·3	61·6	69·2	79·1	78·9	62·5	64·8	67·9	69·7	62·3
22	75·6	60·1	63·9	68·6	75·6	62·0	61·8	63·9	65·8	59·1
23	73·8	52·0	62·9	69·2	71·4	63·2	58·9	61·4	63·5	60·0
24	68·7	59·3	61·6	63·4	67·4	63·9	60·4	61·0	61·9	61·4
25	68·3	60·1	61·9	67·2	65·7	61·4	60·8	63·7	63·9	60·9
26	76·2	55·7	66·4	73·2	72·6	62·3	62·5	65·3	65·4	61·1
27	76·8	59·8	68·1	72·2	74·4	62·1	63·3	64·4	66·4	60·9
28	77·4	55·0	66·7	73·9	74·4	67·3	63·2	65·1	66·0	64·4
29	77·2	57·3	70·0	74·1	76·3	62·8	64·6	63·7	63·1	60·8
30	70·5	59·6	62·6	66·2	69·6	59·8	59·0	60·3	62·5	59·0
31	70·0	56·1	61·4	66·8	68·3	61·7	60·0	63·4	65·3	60·7
Means	71·8	55·1	63·1	68·5	69·6	61·0	59·5	61·4	62·3	58·8

TABLE XXVI. - READINGS OF THE THERMOMETERS IN THE STEVENSON SCREEN IN THE CHRISTIE ENCLOSURE

(The readings of the maximum and minimum thermometers apply to the 24 hours ending 21^h)

SEPTEMBER

Day of the Month	Dry-Bulb Thermometers, 4 ft. above the Ground.						Wet-Bulb Thermometers, 4 ft. above the Ground.			
	Maximum	Minimum	9^h	12^h	15^h	21^h	9^h	12^h	15^h	21^h
d	°	°	°	°	°	°	°	°	°	°
1	74·8	56·0	68·9	71·1	73·4	64·7	64·6	64·9	67·0	64·0
2	76·1	62·4	68·5	73·6	74·9	68·3	65·4	67·5	67·6	64·6
3	73·7	60·1	69·0	72·0	71·8	60·5	64·5	63·0	65·8	59·5
4	75·8	55·8	63·8	71·4	74·8	59·8	59·8	62·4	63·0	58·1
5	78·0	53·5	63·6	73·2	77·2	59·7	60·0	62·7	63·5	56·2
6	76·2	47·8	63·3	73·5	74·1	61·1	57·8	62·6	63·6	59·0
7	79·5	49·9	67·9	76·3	79·3	60·8	60·2	65·1	64·6	59·1
8	81·7	58·0	72·7	80·0	79·5	65·4	66·9	68·8	68·8	63·0
9	80·7	56·2	66·8	74·2	80·3	66·1	63·3	67·4	69·3	63·1
10	73·2	58·0	66·7	71·6	70·0	62·6	62·2	65·6	62·2	59·1
11	66·6	58·3	61·4	64·1	63·8	58·5	55·0	55·5	55·8	55·9
12	61·1	52·7	56·7	59·6	60·6	57·4	53·2	55·0	56·4	55·3
13	63·1	54·0	57·0	58·9	63·1	56·6	53·9	54·4	55·5	54·6
14	62·1	50·9	58·7	59·6	58·6	56·8	54·7	54·4	53·9	53·9
15	57·9	52·1	54·7	56·2	56·9	54·4	50·5	53·4	55·7	52·1
16	68·0	52·5	58·8	67·2	63·0	59·0	56·7	60·1	60·6	57·8
17	68·7	57·6	61·5	67·0	66·4	57·7	58·0	58·6	58·0	55·2
18	68·2	54·6	61·7	66·6	66·8	58·1	57·1	58·7	58·0	55·6
19	67·9	56·6	60·9	65·7	65·1	57·2	57·1	58·8	57·9	55·2
20	64·2	54·2	59·8	64·6	61·1	57·1	56·2	57·7	56·6	54·8
21	65·9	53·1	60·1	63·9	65·0	56·1	55·5	57·3	57·3	55·3
22	61·6	55·3	57·4	59·4	60·6	55·4	55·2	53·4	53·0	54·0
23	61·2	53·1	56·2	60·1	58·3	55·0	52·8	54·3	54·5	50·5
24	60·0	49·4	53·7	59·5	59·8	53·8	50·9	54·5	53·8	50·3
25	59·2	48·2	54·7	58·0	58·4	54·1	50·7	50·1	51·1	49·4
26	60·8	43·9	53·9	60·4	58·7	51·1	49·9	52·5	50·6	48·0
27	56·0	46·1	52·1	54·5	54·3	47·4	49·1	48·6	47·6	44·4
28	58·0	41·9	50·8	57·4	57·0	50·4	45·8	48·9	48·4	47·2
29	60·7	48·9	53·5	59·2	60·0	50·6	50·7	50·2	50·8	48·3
30	61·3	43·5	54·2	59·8	58·8	50·2	50·7	51·4	51·0	47·0
Means	67·4	52·8	60·3	65·3	65·7	57·5	56·3	57·9	58·1	55·0

OCTOBER

Day of the Month	Dry-Bulb Thermometers, 4 ft. above the Ground.						Wet-Bulb Thermometers, 4 ft. above the Ground.			
	Maximum	Minimum	9^h	12^h	15^h	21^h	9^h	12^h	15^h	21^h
d	°	°	°	°	°	°	°	°	°	°
1	58·7	47·5	53·3	57·0	58·3	51·2	49·3	50·2	50·6	48·8
2	58·9	47·7	52·8	56·8	58·3	49·0	48·0	50·3	51·1	46·3
3	57·3	46·7	53·3	56·3	54·1	51·8	47·8	50·4	50·3	47·8
4	53·7	47·0	51·5	51·7	51·7	50·1	45·7	46·5	47·4	48·8
5	64·7	49·2	59·4	64·3	62·9	52·0	58·4	59·0	57·4	51·4
6	63·9	49·0	54·6	61·0	62·9	49·9	52·5	55·1	55·1	48·9
7	60·9	44·0	51·9	58·0	54·2	51·6	49·8	52·7	53·0	50·1
8	57·0	48·8	50·8	56·2	55·3	49·6	49·1	51·7	51·3	48·6
9	56·1	48·2	49·5	51·2	53·8	50·7	48·7	50·5	53·5	50·4
10	61·3	41·1	52·4	58·6	59·9	51·0	50·4	53·2	54·5	50·1
11	63·3	46·0	55·6	61·4	56·7	51·1	52·8	54·4	54·1	51·0
12	59·3	46·8	50·6	57·6	56·6	48·3	49·7	53·6	51·6	47·4
13	59·5	42·1	50·9	57·4	57·6	50·6	49·9	53·6	53·7	50·0
14	53·5	47·1	48·9	52·2	53·2	50·0	48·1	49·5	50·1	49·5
15	50·5	46·8	49·1	50·2	50·4	47·5	48·6	49·8	49·7	46·8
16	57·8	40·6	44·7	54·4	56·6	43·9	44·2	49·2	50·8	43·6
17	57·7	43·3	49·9	55·6	55·9	51·2	49·5	52·6	52·4	50·2
18	56·2	48·0	51·5	54·9	55·5	48·8	49·1	50·2	47·7	46·8
19	49·4	45·2	48·0	48·0	47·4	46·0	47·3	47·0	46·4	43·2
20	51·1	41·0	44·2	50·0	49·3	42·0	41·2	45·0	43·7	40·0
21	53·4	34·4	42·3	49·0	53·4	46·9	41·2	46·5	49·2	45·6
22	52·5	35·7	39·0	49·8	49·9	38·4	38·7	46·4	47·4	38·4
23	55·5	31·9	45·5	52·3	54·8	50·8	44·5	49·2	50·4	49·8
24	54·0	45·6	50·2	53·9	53·4	46·0	47·4	48·6	48·4	45·5
25	47·4	40·6	42·0	46·4	46·3	40·8	38·6	41·0	39·9	37·0
26	43·1	31·1	37·3	42·9	41·9	39·0	36·2	38·6	37·8	37·8
27	44·9	36·4	40·4	42·6	41·2	36·4	38·4	40·2	40·0	35·2
28	45·5	35·3	42·9	44·4	43·0	42·9	41·0	42·8	41·5	39·8
29	45·5	36·5	42·5	43·9	45·2	37·8	41·9	42·4	40·8	37·0
30	49·0	33·6	41·4	46·9	47·4	42·2	39·8	43·8	43·8	41·1
31	46·8	42·2	45·6	46·8	45·4	45·6	42·6	43·6	42·8	44·1
Means	54·5	42·6	48·1	52·6	52·7	46·9	46·1	48·6	48·6	45·5

NOVEMBER

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

DECEMBER

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

TABLE XXVII. - READINGS OF THERMOMETERS AT 9^h ON THE REVOLVING OPEN STAND (FORMERLY CALLED 'ORDINARY') IN THE NEW SITE IN THE CHRISTIE ENCLOSURE

1939	January		February		March		April		May		June		July		August		September		October		November		December	
Day	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.
	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°
1	49·4	34·2	39·6	34·6	50·7	37·6	57·2	37·5	44·6	42·5	73·5	46·5	69·2	47·6	70·0	53·5	..	55·3	64·3	46·3	48·6	44·0	56·8	51·8
2	48·6	38·3	40·5	33·0	48·9	42·7	57·9	45·7	47·0	41·6	..	49·3	69·6	44·3	74·2	52·1	75·8	62·0	60·3	47·0	49·4	42·7	56·0	47·4
3	39·9	31·2	38·8	27·6	55·1	40·1	54·5	36·1	53·6	39·0	77·0	47·1	68·3	52·8	71·2	54·9	77·3	61·5	61·9	46·2	51·7	43·7	50·0	36·1
4	42·7	29·9	41·3	29·3	59·7	46·4	52·3	45·4	55·6	37·8	74·6	43·7	72·9	55·1	59·5	53·1	73·7	55·2	60·5	46·1	57·4	46·6	48·8	36·1
5	45·9	31·1	46·2	34·2	56·3	44·2	55·4	43·7	60·2	38·4	77·5	46·4	81·4	61·4	66·7	55·0	77·3	52·6	59·3	48·8	56·4	45·2	44·4	36·0
6	36·5	23·4	50·3	34·8	56·9	44·1	58·2	40·0	58·9	40·1	79·1	55·4	73·6	52·8	66·4	51·9	78·2	47·4	65·9	48·6	54·7	45·7	43·0	35·6
7	40·0	27·5	51·4	34·5	56·0	39·9	45·8	36·4	63·9	38·2	85·5	57·5	67·4	57·0	72·9	52·2	76·7	49·7	63·7	42·8	55·4	48·0	45·4	29·1
8	52·4	39·5	53·6	42·4	51·1	39·8	50·9	30·1	66·5	40·3	88·5	53·2	74·8	57·8	66·7	52·6	79·9	57·3	62·7	49·0	58·8	50·7	49·7	32·0
9	54·5	47·1	51·5	47·5	52·6	37·8	57·4	35·9	71·3	42·8	78·8	46·7	68·5	56·9	73·2	51·6	81·9	55·1	59·6	48·2	58·2	50·5	53·3	39·5
10	51·9	43·0	53·7	47·9	51·7	33·7	64·6	38·2	71·6	45·4	67·8	45·7	73·2	51·7	70·2	60·0	81·7	56·7	56·3	40·0	55·2	43·4	53·8	42·1
11	47·3	40·1	56·3	48·0	51·0	30·0	65·7	42·4	70·7	50·1	80·3	51·0	72·7	48·5	69·2	53·3	74·7	57·6	61·4	46·6	55·9	41·0	50·3	38·0
12	48·0	35·1	56·9	47·3	44·8	39·3	71·2	47·9	65·0	43·6	65·9	45·6	71·7	53·0	72·3	49·7	68·7	52·5	62·8	46·8	52·1	45·1	48·1	37·0
13	41·8	31·5	55·0	37·6	47·2	30·6	75·0	48·0	59·3	45·3	64·4	41·6	71·7	50·1	72·3	49·1	62·3	54·0	59·4	42·3	51·4	44·4	39·3	36·3
14	44·0	27·7	44·7	34·0	49·1	36·6	65·3	47·4	67·1	40·6	62·7	48·0	73·6	49·7	71·8	47·3	64·3	50·4	60·5	47·1	53·7	45·7	39·2	34·9
15	55·6	31·6	46·9	37·8	52·0	42·0	60·5	43·7	66·1	44·8	66·7	54·7	71·6	53·6	73·4	47·4	65·2	52·0	53·4	47·1	56·8	45·6	38·6	34·4
16	54·3	46·8	54·9	42·0	47·6	39·2	60·9	52·6	50·9	44·9	65·4	57·1	73·9	56·2	75·4	51·0	59·4	51·0	50·3	40·1	54·0	43·0	37·0	34·2
17	51·9	44·0	49·8	32·3	51·6	39·0	62·7	44·7	60·3	45·3	64·4	46·2	75·4	56·0	76·9	53·2	70·2	56·4	56·9	42·3	56·6	42·8	37·7	32·2
18	54·0	46·1	46·4	36·4	46·5	31·1	59·4	39·6	58·1	41·0	69·3	52·0	74·4	54·2	76·5	57·2	71·6	54·0	59·3	46·6	54·9	46·2	37·3	33·3
19	51·4	47·1	48·2	39·1	42·3	35·8	57·3	34·4	56·0	43·3	67·8	49·6	72·4	53·7	77·4	57·3	70·4	56·4	57·8	45·0	55·0	46·3	37·4	34·7
20	49·6	43·8	52·8	31·0	45·3	37·1	63·4	39·1	58·4	39·2	69·8	48·1	71·2	53·7	81·0	61·9	70·6	53·3	48·8	40·2	51·4	36·4	38·2	33·4
21	51·7	41·2	48·4	31·5	48·0	40·0	71·9	39·8	63·8	41·8	67·5	48·9	70·5	57·2	81·7	59·8	65·9	51·6	53·6	33·7	47·5	38·0	41·7	33·1
22	51·9	44·0	50·6	39·0	50·3	39·2	71·0	44·8	65·4	42·5	71·8	54·9	70·8	55·8	82·4	59·8	68·3	54·6	54·0	34·4	45·2	32·7	37·6	21·3
23	48·8	42·8	43·8	39·1	52·5	35·0	58·8	41·8	70·1	46·8	64·4	53·0	68·9	55·2	76·3	51·1	64·5	52·8	53·5	32·0	50·4	38·7	34·1	22·2
24	47·2	36·9	49·6	28·0	49·8	29·8	53·4	45·3	76·7	44·8	62·7	52·4	68·6	48·3	75·4	58·6	63·7	48·7	55·8	44·3	48·9	40·6	32·6	26·5
25	42·5	32·3	47·0	37·5	50·0	32·1	58·2	34·2	77·6	51·1	61·4	47·7	63·6	48·0	70·4	60·0	61·9	46·3	54·9	39·7	44·3	32·0	34·8	29·3
26	37·1	32·0	46·8	35·8	45·9	34·7	..	32·2	70·7	46·6	63·3	47·6	74·6	53·3	69·8	54·8	60·8	43·0	48·8	31·1	57·6	36·3	39·7	33·7
27	36·9	33·9	50·0	34·0	42·8	34·6	53·4	33·8	70·2	49·7	67·2	45·9	68·5	49·4	77·0	58·2	63·2	44·8	44·9	36·3	57·5	45·7	..	..
28	39·7	33·2	50·2	40·0	41·4	36·0	52·0	32·7	74·4	46·4	73·3	56·8	76·9	59·6	78·2	54·1	58·2	39·6	46·8	34·0	56·3	38·1	35·6	22·9
29	40·4	35·1	..	..	43·4	33·0	52·9	34·8	69·3	44·0	65·6	58·0	73·0	59·3	78·4	56·0	60·3	47·9	45·9	40·6	56·0	40·7	31·0	24·4
30	39·7	36·0	..	..	50·4	35·2	52·5	40·0	68·5	47·5	75·6	50·8	72·4	59·7	78·9	59·6	63·4	41·2	45·6	31·4	58·1	54·8	33·4	19·0
31	39·2	35·0	..	..	52·2	37·9	..	..	69·6	47·7	..	..	77·0	54·6	72·4	55·3	..	..	50·0	40·9	..	..	34·8	25·8
Means	46·3	36·8	48·8	37·0	49·8	37·2	59·3	40·3	63·9	43·6	70·8	50·0	72·0	53·8	73·5	54·6	69·3	52·0	56·1	42·1	53·6	43·2	42·0	33·1

TABLE XXVIII. - AMOUNT OF RAIN COLLECTED IN EACH MONTH OF THE YEAR 1939

Gauges partly sunk in the Ground in the Christie Enclosure	Number of 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	4·233	1·072	1·205	2·488	1·642	1·382	2·359	3·097	1·196	6·155	4·132	1·180	30·141	0	5	149	6
	8	4·276	1·057	1·171	2·447	1·604	1·380	2·323	3·105	1·182	6·130	4·124	1·167	29·966	1	0	150	1
Number of Rainy Days (0·005 in. or over)		21	8	16	17	8	11	17	12	12	19	23	17	181	..	..	..	..

TABLE XXIX. - 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	January	February	March	April	May	June	July	August	September	October	November	December	Mean for the Year
	miles	miles	miles	miles	miles	miles	miles	miles	miles	miles	miles	miles	miles
1h	14·6	13·2	12·6	10·8	9·3	10·4	10·4	8·8	10·3	11·5	13·9	12·0	11·5
2	14·7	13·2	12·6	10·7	9·6	10·3	10·2	9·2	9·7	11·6	14·3	11·7	11·5
3	15·0	13·1	12·4	10·6	9·3	10·1	9·6	8·7	9·6	11·5	13·8	11·7	11·3
4	15·2	12·9	12·6	10·5	9·3	9·9	9·9	8·5	9·5	11·3	13·7	11·9	11·3
5	14·8	13·1	12·8	10·9	9·8	10·5	9·6	8·6	9·6	11·6	13·3	11·7	11·4
6	14·9	13·1	12·6	11·1	9·0	10·5	9·8	8·2	9·7	11·4	12·6	11·4	11·2
7	15·5	13·1	13·3	11·4	9·7	11·3	10·8	8·6	9·5	11·6	12·3	11·9	11·6
8	15·0	13·3	13·7	11·2	9·8	11·1	11·1	8·8	9·7	11·9	13·2	10·7	11·6
9	15·3	13·9	14·0	12·1	9·9	11·2	12·0	9·4	10·7	12·0	13·7	11·1	12·1
10	14·9	13·7	14·6	12·3	10·3	11·7	12·1	9·2	11·0	11·7	13·6	11·0	12·2
11	15·6	14·6	15·8	12·9	10·4	12·3	13·0	9·9	11·9	12·6	14·4	11·0	12·9
12	16·4	15·4	16·7	13·3	10·7	12·8	13·8	10·5	12·3	13·1	13·9	11·8	13·4
13	15·2	14·7	16·0	13·8	10·4	13·0	13·9	10·6	12·8	13·5	14·0	11·5	13·3
14	15·0	14·9	16·1	14·0	11·3	13·4	13·6	10·8	12·5	13·3	14·0	11·5	13·4
15	15·3	14·2	16·5	14·2	11·7	13·8	13·8	10·6	13·1	13·1	14·4	11·7	13·5
16	14·8	13·5	15·5	14·1	11·1	13·5	13·6	10·1	12·3	12·6	13·5	11·4	13·0
17	14·5	13·2	15·0	13·7	11·0	13·7	13·6	10·1	12·3	12·1	13·5	11·5	12·9
18	14·8	12·7	14·5	13·6	11·2	13·5	13·7	10·1	12·2	11·6	13·8	12·0	12·8
19	14·3	12·9	13·6	13·4	10·8	12·8	13·1	10·1	11·3	11·6	14·0	11·9	12·5
20	14·0	13·5	13·3	12·1	10·4	12·1	12·5	9·5	11·1	12·1	14·3	11·6	12·2
21	14·4	13·5	13·0	11·9	10·2	11·7	11·6	9·4	10·8	11·5	14·2	11·7	12·0
22	14·5	13·2	12·7	11·1	10·0	11·6	11·1	9·0	10·8	11·3	13·8	11·8	11·7
23	14·5	13·4	12·6	11·1	9·9	11·1	11·0	8·9	10·4	11·3	14·1	11·6	11·7
24	14·3	13·7	12·0	10·8	9·7	10·7	10·5	8·5	10·2	11·5	14·1	11·1	11·4
Means	14·9	13·6	13·9	12·1	10·2	11·8	11·8	9·4	11·0	12·0	13·8	11·5	12·2
Greatest Hourly Measures	31	33	32	27	22	20	22	19	20	23	34	27	..

* 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.

January. – Generally a quiet month, a prominent feature was the number of small bays appearing near midnight on an otherwise quiet trace. Positive bays in H, for example, accompanied by bays in D, occurred at 22h on the 5th, 20h on the 8th, 22h on the 9th, and 21h on the 11th, while a negative bay in H at 19h on the 22nd, followed by a positive bay at 23h, was prominent.

The range in declination, during the month was from 10° 43′·6 on 22nd to 11° 2′·9 on 21st; in horizontal intensity, from ·18476 on 21st to ·18586 on 5th, in vertical intensity, from ·43039 on 17th to ·43090 on 21st.

February. – The month started with small disturbance of the recurrent type near the midnight hours of the 1st–2nd and 2nd–3rd. A sudden-commencement at 19h 50m on the 5th began a minor storm which lasted until the early hours of the 7th. Slight activity remained until the 11th, but from then to the 24th conditions were either quiet or only very slightly disturbed. The first large storm of the year began with a sudden-commencement at 17h 7m on the 24th (Plate I). There was considerable agitation of the trace and ranges reached 290 γ in H, 65′ in D and 330 γ in Z. By 23h on the 25th the trace was quiet, and remained so until the end of the month. A positive bay in H of 100 γ at 22h on the 25th at the end of the storm was of note, and another smaller one at 23h on the 26th both accompanied by bays in D.

The range in declination during the month was from 10° 17′·7 to 11° 22′·6, both limits occurring on 24th, in horizontal intensity, from ·18284 on 25th to ·18577 on 5th and 25th, in vertical intensity, from ·42989 on 25th to ·43319 on 24th.

March. – With the exception of quiet periods from the 13th to 14th, and from the 18th to 20th, continuous but mainly slight activity was in evidence up to the 27th. Enhanced activity which started about 17h on the 27th increased on the 28th and 29th and the traces remained disturbed until the end of the month. Though the oscillations on the 28th were neither rapid nor of large amplitude, a steady drift in each element produced ranges of 177 γ in H, 156 γ in Z, and 41′ in D. (Plate II).

Some examples of isolated bay-like movements in H were notable during the month, usually accompanied by an out-of-phase movement in D, at 23½h on the 3rd a positive bay in H of some 100 γ, a negative bay in H between 16h and 18h on the 15th, positive bays in H between 21h and 23h on the 23rd and 24th, and one between 0 and 1h on the 26th. The period between 16h on the 30th to 2h on the 31st contained three movements showing a phase-difference between H and D, one of which, lasting from 20h to 22h, reached a range of 132 γ in H and 29′ in D. They appeared to follow similar movements the day previous.

The range in declination during the month was from 10° 30′·2 to 11° 10′·7, both on 28th, in horizontal intensity, from ·18377 on 28th to ·18612 on 3rd, in vertical intensity from ·43026 on 2nd to ·43196 on 28th.

April. – The month was noteable for the large number of sudden-commencement storms. The first of these, on the 17th, began with a large sudden-commencement of 110 γ in H at 1h 57m, and was unusual in that a preliminary, small sudden-commencement movement was recorded at 21h 28m on the 16th. The storm which followed (Plate III) showed rapid oscillations in the three elements, with ranges of 350 γ in H, 309 γ in Z and 53′ in D, though the trace became quiet about 22h on the 17th, fresh activity soon started on the morning of the 18th, while at 6h 5m on the 19th, a reversed sudden-commencement began a new type of disturbance lasting for several days. Mainly slight, it was marked between 17h and 18h on the 19th by a large, sharp pinnacle of almost 200 γ in H accompanied by a corresponding movement in East D of different phase. Further disturbance, lasting 15 hours with ranges of 293 γ in H, 205 γ in Z, and 37′ in D, began with a reversed sudden commencement at 5h 43m on the 23rd (Plate IV).

A short-lived but large-amplitude storm (Plate V) was preceded by a huge sudden-commencement of 170 γ in H at 17h 35m on the 24th. Ranges of 557 γ in H, 169 γ in Z and 46′ in D were unusual for activity the greater part of which had ceased by 4h on the 25th. The last sudden-commencement of the month, at 21h on the 27th, was followed by only a few hours slight disturbance.

The first part of the month had periods of recurrent-storm-type activity from the 1st to 4th, and from the 8th to 11th; in the latter sequence positive bays in H lasting for about 1 hour, from 0 to 1h on the 10th, 23½h on the 10th to 0½h on the 11th, and 17½h to 19h on the 11th, were prominent.

The month was altogether highly disturbed, though the period 12th to 16th was quiet.

The range in declination during the month was from 10° 21′·4 on 24th to 11° 19′·8 on 17th; in horizontal intensity, from ·18304 on 25th to ·18861 on 24th; in vertical intensity, from ·42977 on 24th and 25th to ·43287 on 17th.

May. – A sudden-commencement of 85 γ in H at 11h 36m on the 1st began storminess lasting some two days. Oscillations were not rapid, and the depression of H was quite small, the range of 170 γ in H being only slightly greater than that of Z (154 γ). Fresh oscillations of similar type, with a large sudden-commencement of 160 γ in H at 20h 40m on the 5th (Plate VI) lasted until the 9th, and produced ranges of 284 γ in H, 141 γ in Z and 26′ in D. From the 10th to the 20th conditions were either quiet or only very slightly disturbed. Bay-like oscillations were resumed on the afternoon of the 21st and remained a feature of the traces until a small sudden-commencement at 20h 50m on the 27th began new disturbance which continued with small displacements until nearly the end of the month. A negative bay of 60 γ in H at 23h on the 22nd was prominent on an otherwise fairly quiet trace.

This was on the whole a quiet month.

The range in declination during the month was from 10° 36′·0 on 29th to 11° 13′·3 on 1st; in horizontal intensity, from ·18425 on 7th to ·18709 on 5th; in vertical intensity, from ·43002 on 7th to ·43176 on 1st.

June. – Except for minor disturbance on the first four days, conditions were quiet until 11h of the 13th when activity increased to reach a maximum depression of H at 10h on the 14th. The range of the disturbance was 270 γ. Similar activity on the 15th, starting with a possible sudden-commencement at 14h, gave a range of 155 γ in H by 9h on the 16th. After a period of instability from the 18th to the 24th and a fairly quiet period from the 24th to 28th, disturbance was resumed from noon on the 28th until the end of the month. A noteable feature of the quiet period mentioned was a sudden-commencement movement at 20h 20m on the 26th, followed by a sudden drop in H at 21h 08m, the whole giving the effect of a sharply-defined positive bay in H.

The range in declination during the month was from 10° 32′·2 to 11° 4′·1 both on 14th, in horizontal intensity from ·18358 on 14th to ·18658 on 26th, in vertical intensity, from ·43015 to ·43136 both on 14th.

July. – A small storm with a range of just over 200 γ in H was preceded by a sudden-commencement at 0h 36m on the 3rd. By 1h on the 4th the storm had subsided, but a much larger sudden-commencement storm began at 14h 06m on the 4th, and continued until midnight on the 5th, with enhanced activity in the late afternoon hours. A feature of this storm, (Plate VII) which had ranges of 275 γ in H, 210 γ in Z, and 28′ in D was the repetition in its later stages of bay-like oscillations of approximately constant periodicity. The ensuing period from the 6th to the 13th was exceptionally quiet, broken only by two small periods of minor disturbance in the afternoon hours of the 11th and 12th.

A small sudden-commencement at 3h 47m on the 14th started a period of small-scale activity which remained until the 17th, another sudden-commencement at 22h 02m on the 19th set off fresh activity, a feature of which was the very large sudden-commencement movement of 155 γ in H at 13h 30m on the 21st, in the middle of afternoon disturbance and near the end of the storm. The remainder of the month was quiet, with the exception of a short period from 4h to 22h on the 26th.

The range in declination during the month was from 10° 40′·2 on 16th to 11° 14′·1 on 3rd; in horizontal intensity, from ·18379 on 5th to ·18662 on 3rd; in vertical intensity from ·42997 to ·43207 both on 5th.

August. – The month began with a very quiet period lasting until near the end of the 11th, and particularly quiet on the first 8 days. A storm with ranges of 305 γ in H, 165 in Z and 28′ in D started with a sudden-commencement at 1h 39m on the 12th, though the trace recorded small disturbance for some hours previous. It lasted with decreasing intensity until near the end of the 13th. Pronounced storminess on the afternoon and evening of the 16th (Plate VIII) was marked by a sharp peak in H between 15 and 16h, followed by a sudden fall, the whole movement attaining a range of 345 γ. Ranges of Z and D during the storm were 185 γ and 34′ respectively. A quiet spell to the 21st was broken at 0h 40m on the 22nd by a sudden-commencement which initiated one of the largest storms of the year (Plate IX), lasting until the end of the 23rd, it was notable for the range of 360 γ in Z, which fell by some 150 γ to a minimum at 3h on the 22nd, soon after the beginning of the storm, and rose to a high maximum at 17h. A striking feature was the long series of bay-like oscillations from 17h on the 22nd to 2h on the 23rd showing a phase-difference of several minutes between H and D. The overall ranges in H and D for the whole storm were 300 γ in H and 47′ in D.

The remainder of the month was quiet, the only other feature of comment being a bay in West D appearing on a quiet trace at 0h 30m on the 29th.

The range in declination during the month was from 10° 21′·3 on 22nd to 11° 8′·5 on 16th and also on 22nd; in horizontal intensity, from ·18327 on 23rd to ·18740 on 16th; in vertical intensity, from ·42912 to ·43271 both on 22nd.

September. – This was generally a quiet month.

A large sudden-commencement of 80 γ in H at 21h 42m on the 2nd produced only moderate disturbance, and reasonably quiet conditions prevailed until the 17th. The period from 11h to 24h on the 17th produced changes of small-storm intensity, the ranges in the interval being 135 γ in H, 145 γ in Z and 39′ in D. Apart from some disturbance on the 19th and 20th the remainder of the month was mainly quiet.

The range in declination during the month was from 10° 27′·9 to 11° 6′·5 both on 17th; in horizontal intensity, from ·18430 on 17th to ·18630 on 2nd; in vertical intensity, from ·43029 on 3rd to ·43198 on 17th.

October. – A small storm beginning about 12h on the 3rd and centred around the late afternoon hours produced a range of 200 γ in Z, 37′ in D, but only 120 γ in H (Plate X). Some minor activity, mostly in the evening hours of the 5th, 6th and 7th, in which a bay at 19h on the 5th was prominent, was followed by a relatively quiet period to the 13th, broken by an unusually large dip of about 150 γ in H between 7 and 8h on the 9th and a sudden-commencement movement at 19h 45m on the 11th. No storm developed until the early hours of the 13th, when great activity took place on the 13th, 14th, and first 5 hours of the 15th (Plates XI and XII). Ranges on the 13th were 290 γ in H, 225 γ in Z and 52′ in D. A large bay at 18h on the 15th was followed by recurrent-storm-type disturbance in the late afternoon hours of the 16th, 17th, and 18th. The remainder of the month was quiet and featureless.

The range in declination during the month was from 10° 10′·4 on 13th to 11° 5′·6 on 3rd; in horizontal intensity, from ·18305 on 13th to ·18620 on 15th; in vertical intensity, from ·42970 on 15th to ·43217 on 15th.

November. – This was a very quiet month, without any storm of note. Minor fluctuations recurred on the 13th and 14th, while a small depression of H lasting from about 19h on the 24th to 5h on the 25th recurred as a larger negative bay of some 100 γ between 20h on the 25th and 2h on the 26th.

The range in declination during the month was from 10° 29′·8 on 13th to 10° 57′·9 on 25th; in horizontal intensity, from ·18429 on 25th to ·18607 on 13th; in vertical intensity, from ·43057 to ·43144 both on 13th.

December. – Also a quiet month, there was only one small storm, with ranges of 136 γ in H, 120 γ in Z, and 33′ in D. It began about 20h on the 6th and lasted until midnight on the 8th. Positive bays in H showing on a quiet trace occurred between 22 and 23h on the 16th, 0 and 1h on the 22nd, 22 and 23h on the 23rd, 0 and 1h on the 30th; all were accompanied by bays in D of different phase.

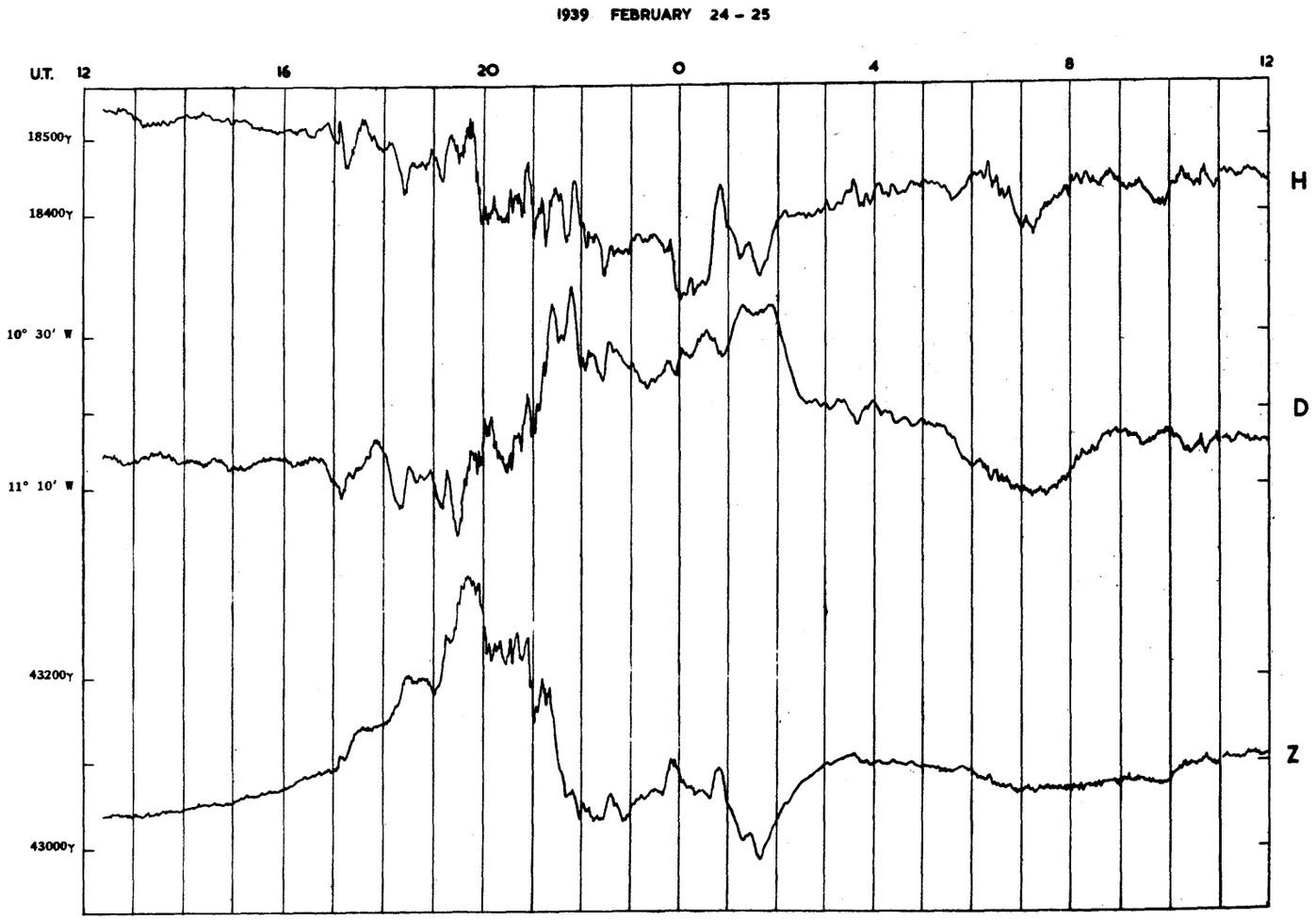
The range in declination during the month was from 10° 27′·3 on 6th to 10° 59′·9 on 7th; in horizontal intensity, from ·18434 to ·18575 both on 7th; in vertical intensity, from ·43041 to ·43152 both on 7th.

The absolute maximum and minimum values, respectively, of the elements recorded during the year were:

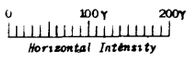
Declination 11° 22′·6 on February 24th, 10° 10′·4 on October 3rd.
Horizontal Intensity ·18861 on April 24th, ·18284 on February 25th.
Vertical Intensity ·43319 on February 24th, ·42912 on August 22nd.

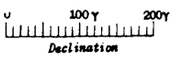
Plate I

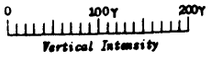
MAGNETIC DISTURBANCES AS RECORDED AT THE ABINGER MAGNETIC STATION



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

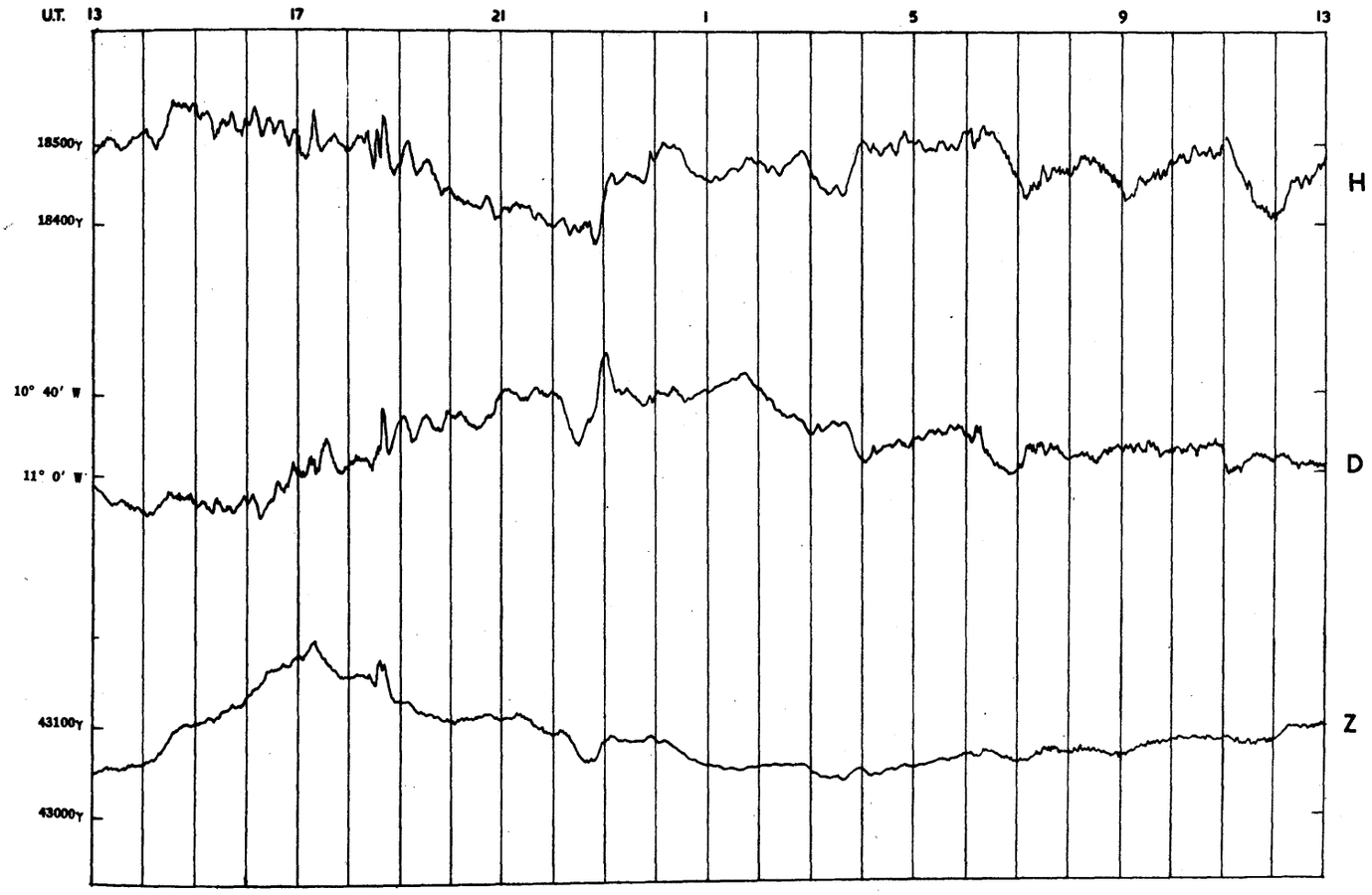




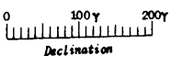


MAGNETIC DISTURBANCES AS RECORDED AT THE ABINGER MAGNETIC STATION.

1939 MARCH 28 - 29



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



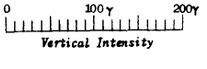
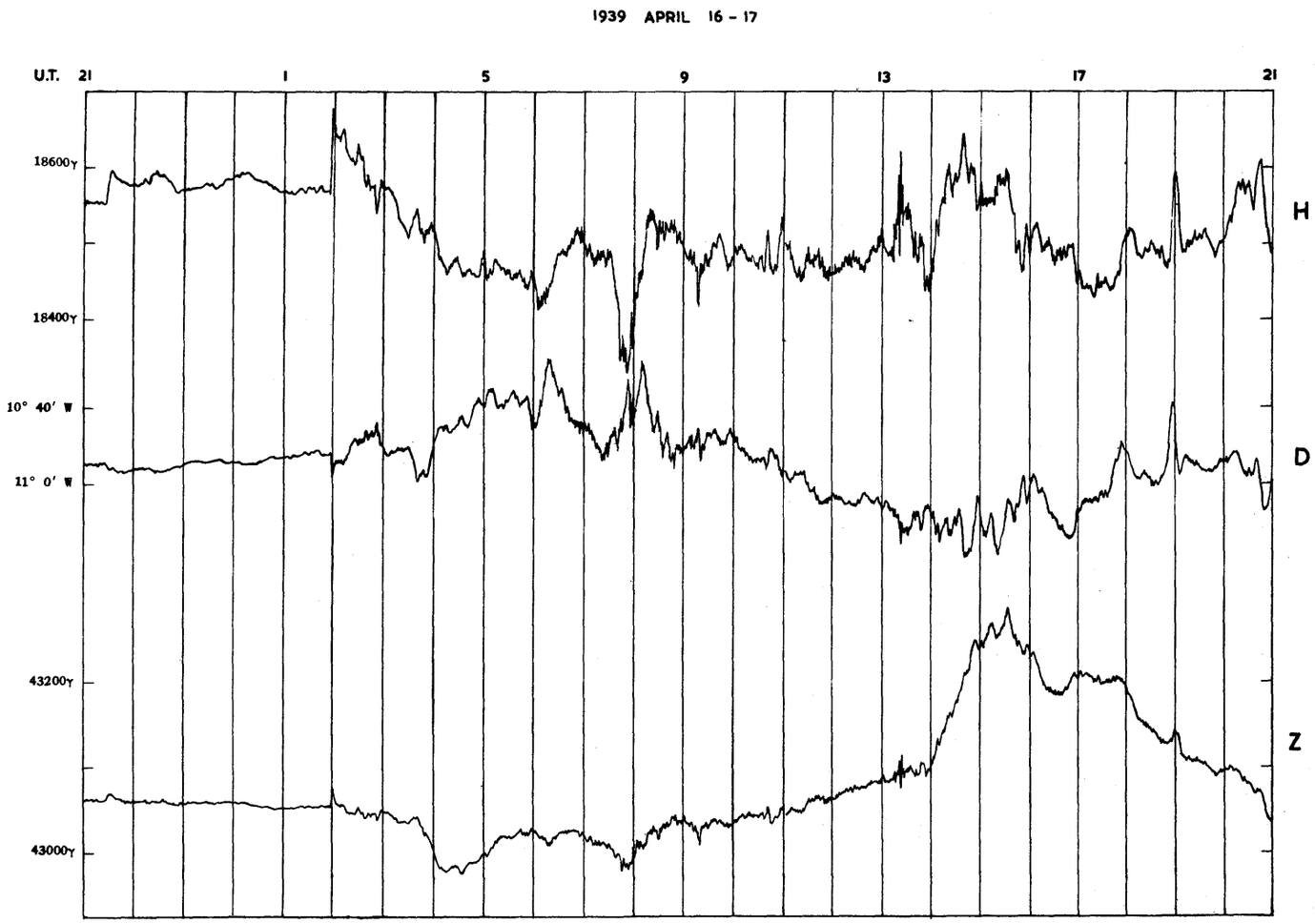
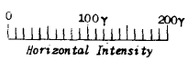


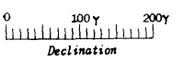
Plate III

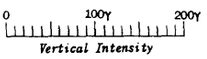
MAGNETIC DISTURBANCES AS RECORDED AT THE ABINGER MAGNETIC STATION



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

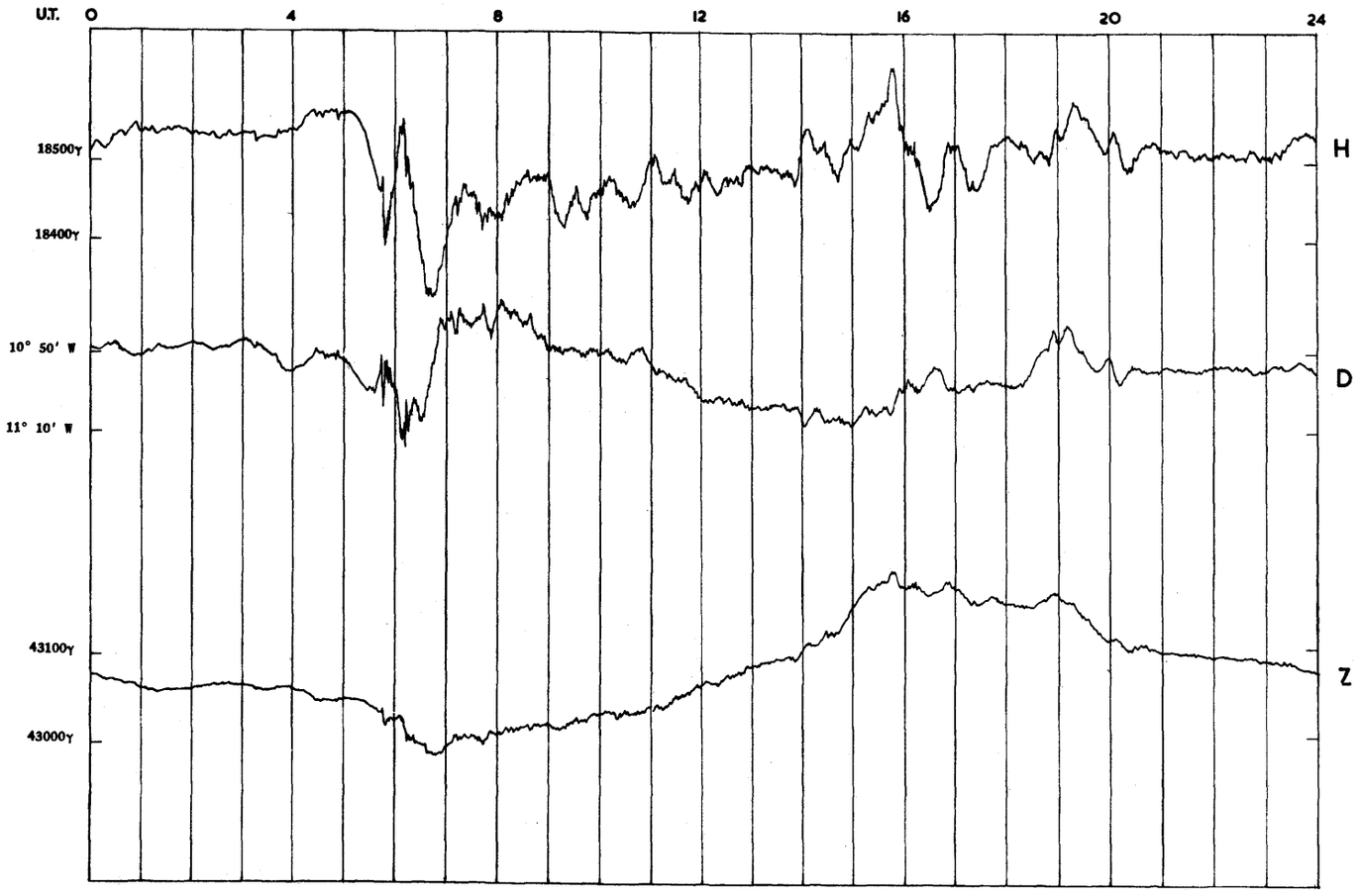




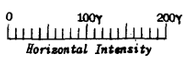


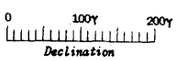
MAGNETIC DISTURBANCES AS RECORDED AT THE ABINGER MAGNETIC STATION.

1939 APRIL 23



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





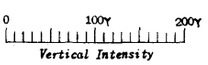
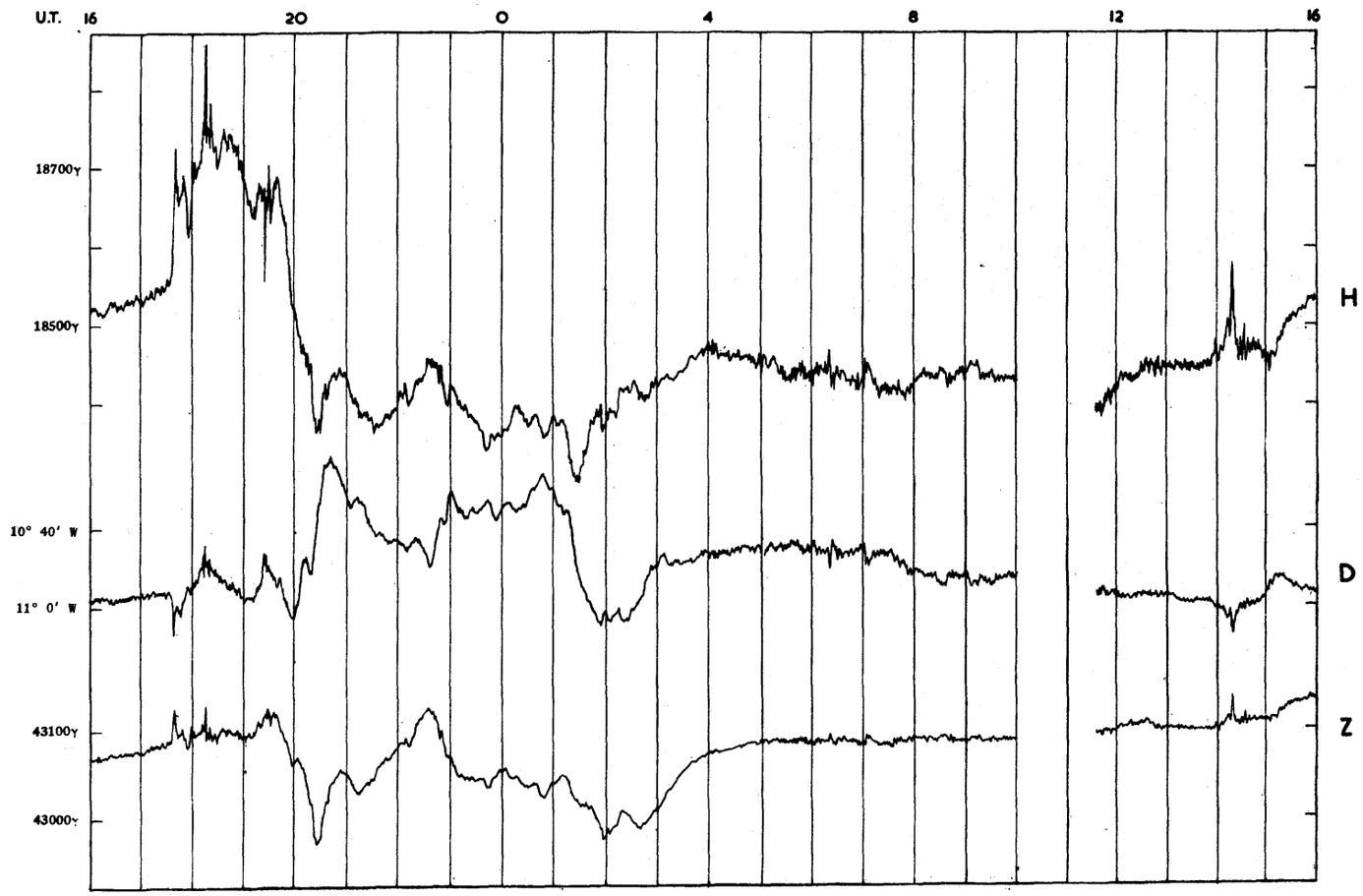


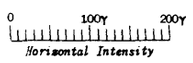
Plate V

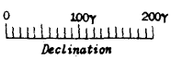
MAGNETIC DISTURBANCES AS RECORDED AT THE ABINGER MAGNETIC STATION

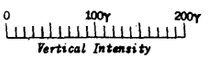
1939 APRIL 24 – 25



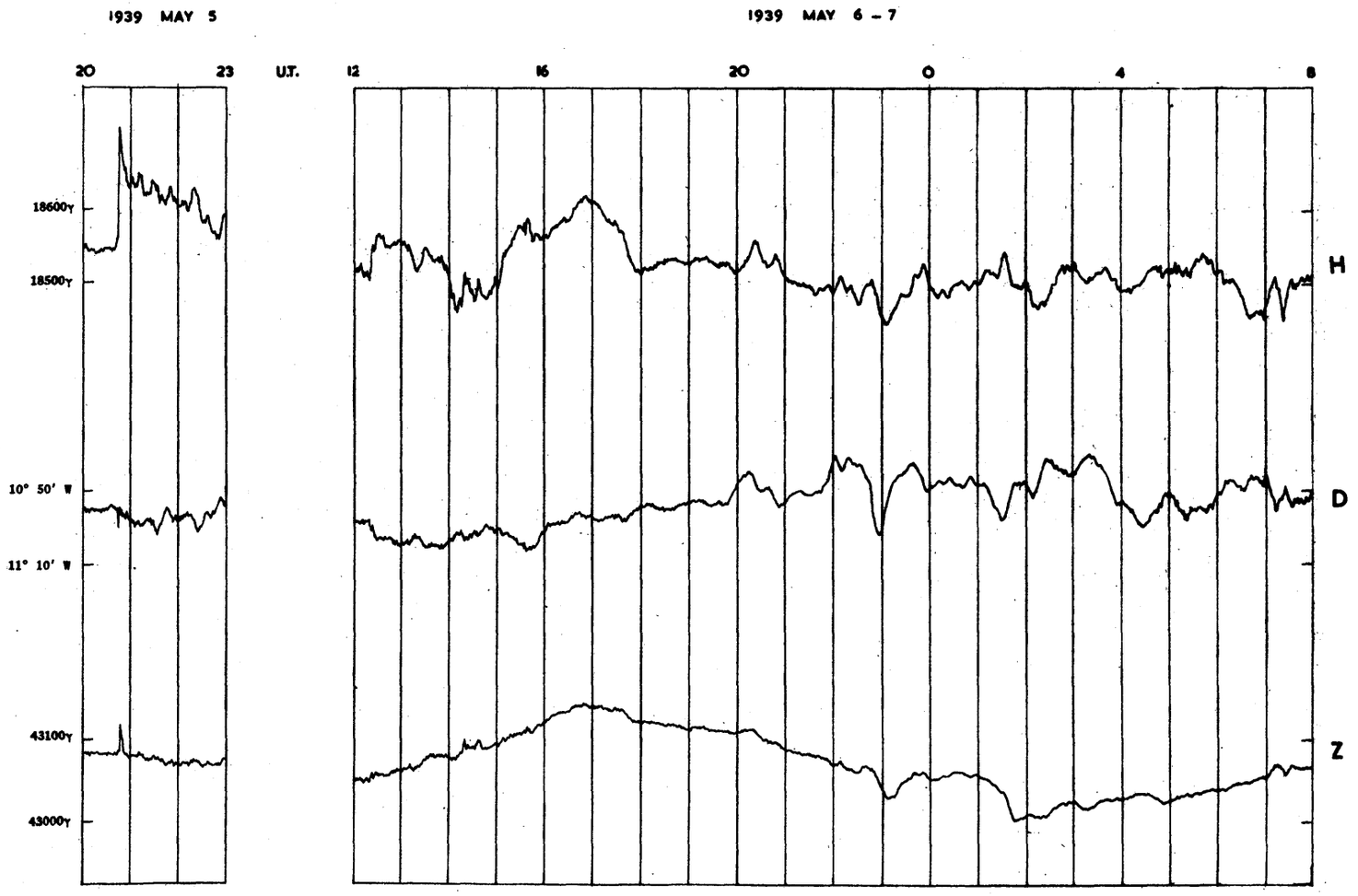
SCALES FOR MAGNETIC ELEMENTS IN C.G.S. UNITS







MAGNETIC DISTURBANCES AS RECORDED AT THE ABINGER MAGNETIC STATION



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

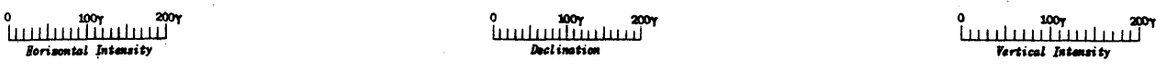
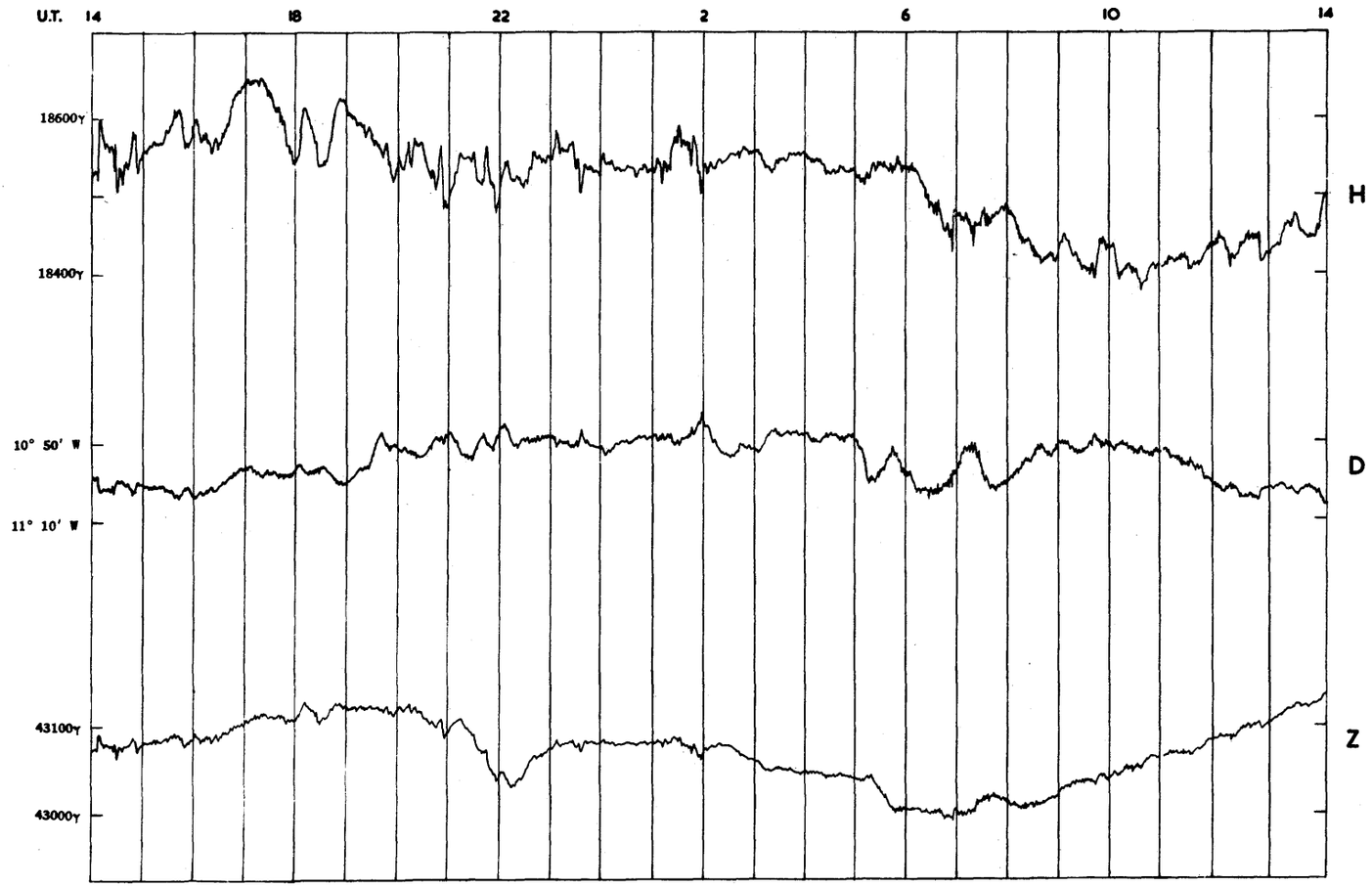


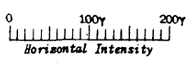
Plate VII

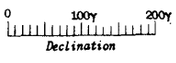
MAGNETIC DISTURBANCES AS RECORDED AT THE ABINGER MAGNETIC STATION

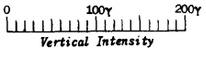
1939 JULY 4 – 5



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

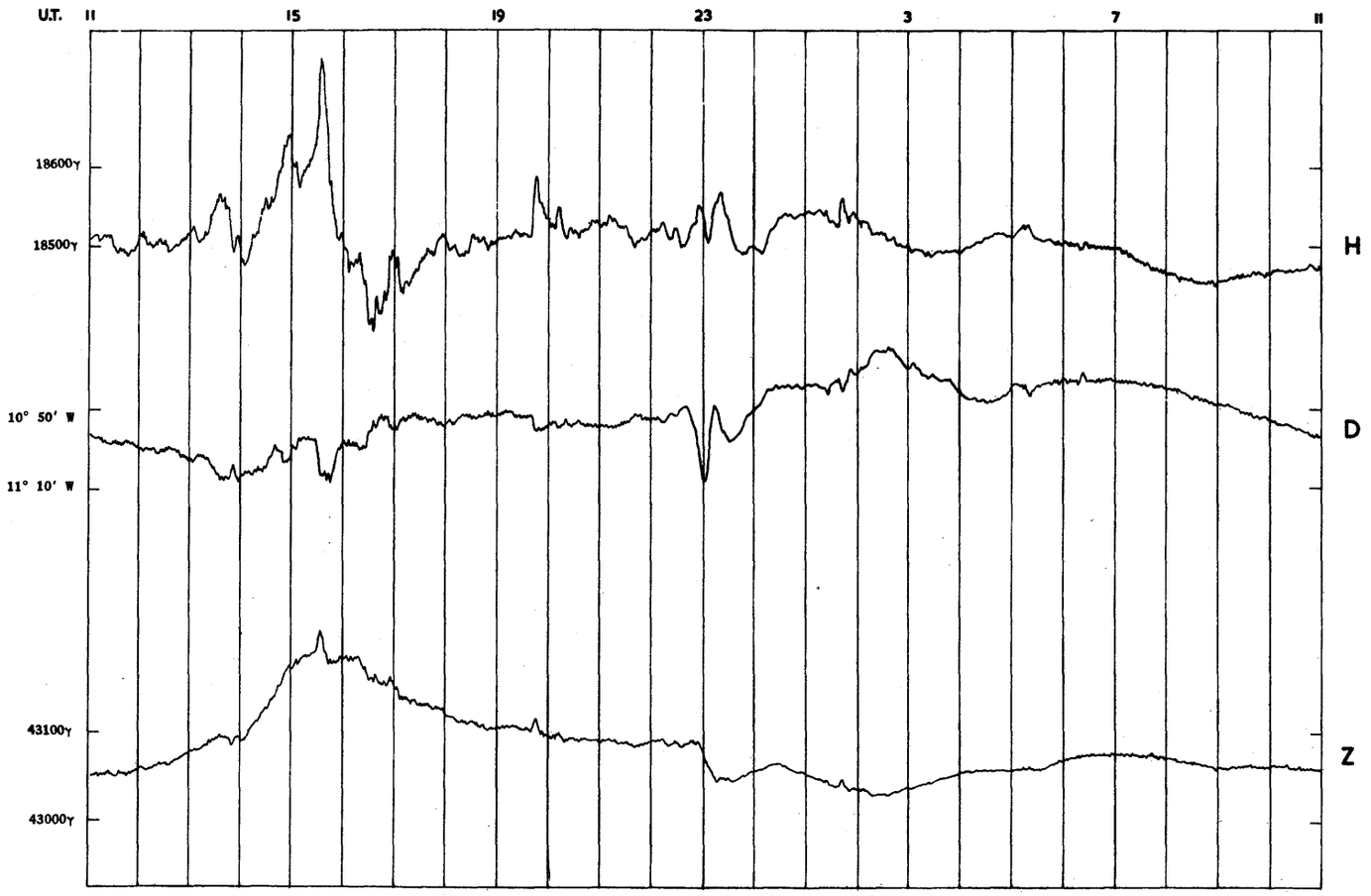




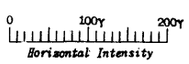


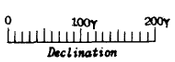
MAGNETIC DISTURBANCES AS RECORDED AT THE ABINGER MAGNETIC STATION

1939 AUGUST 16 – 17



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





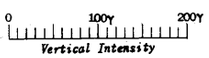
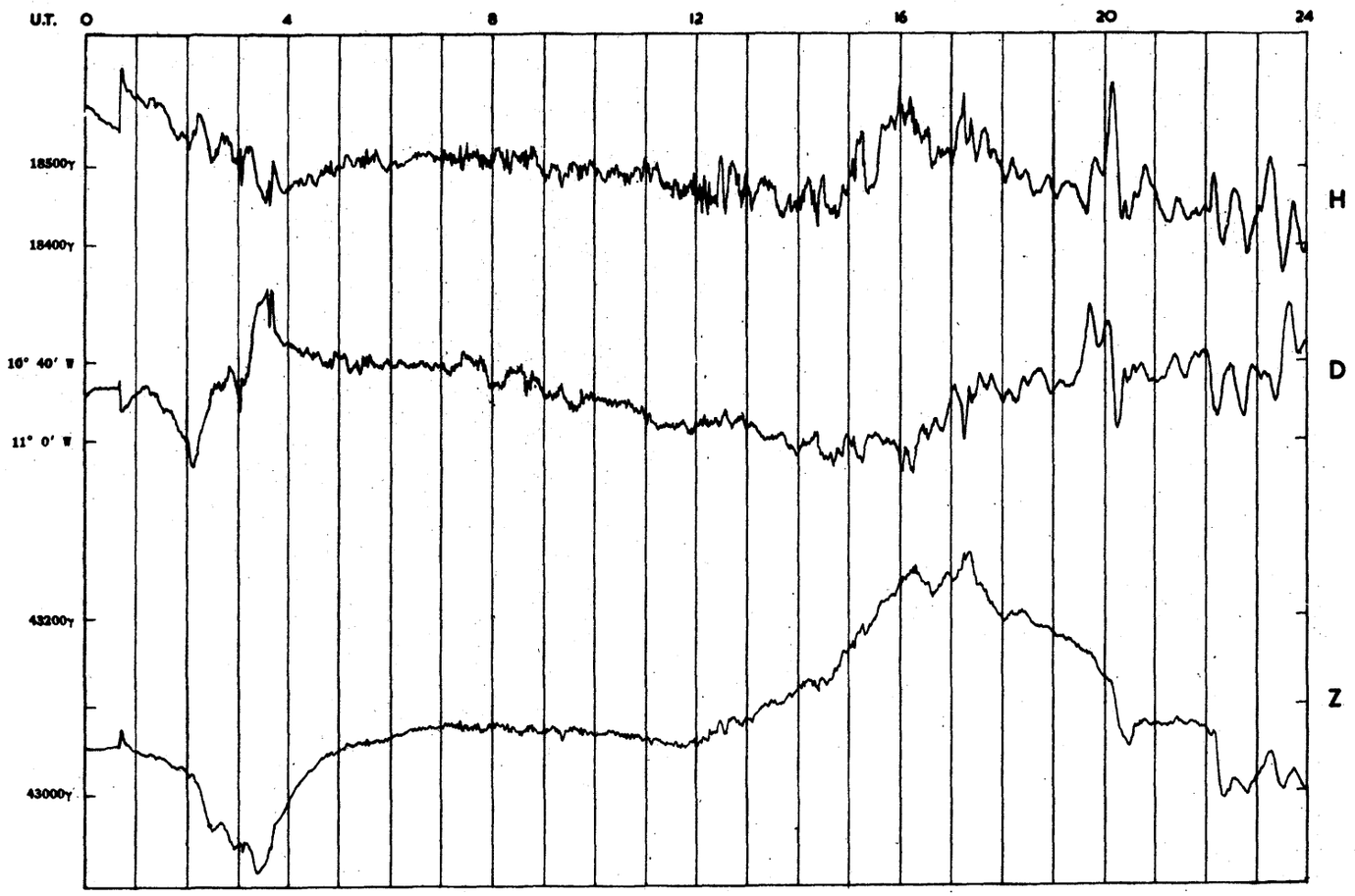


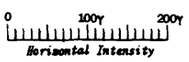
Plate IX

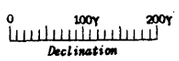
MAGNETIC DISTURBANCES AS RECORDED AT THE ABINGER MAGNETIC STATION

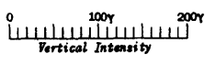
1939 AUGUST 22



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

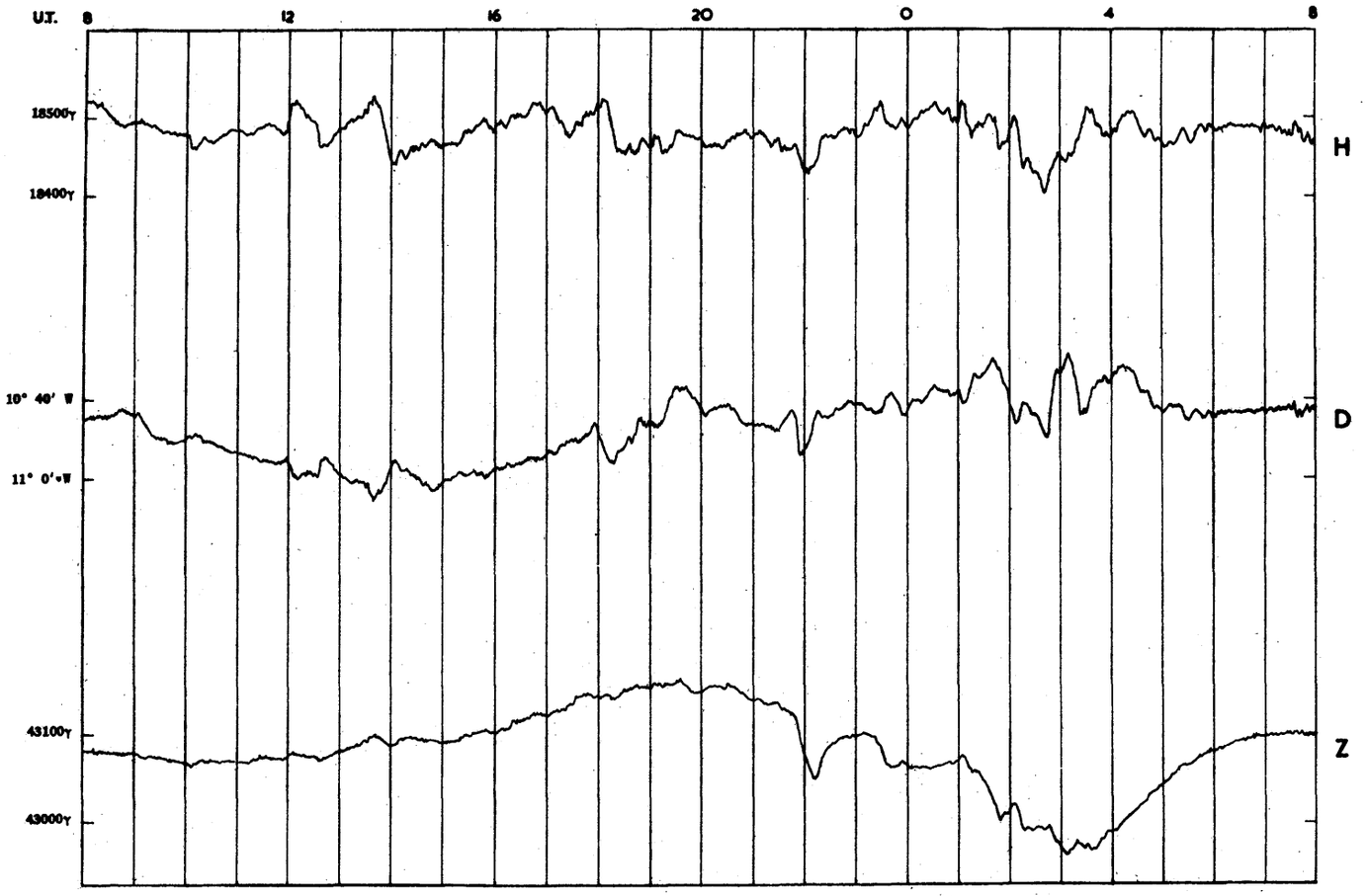




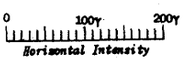


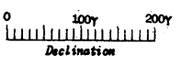
MAGNETIC DISTURBANCES AS RECORDED AT THE ABINGER MAGNETIC STATION

1939 OCTOBER 3 - 4



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





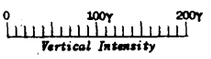
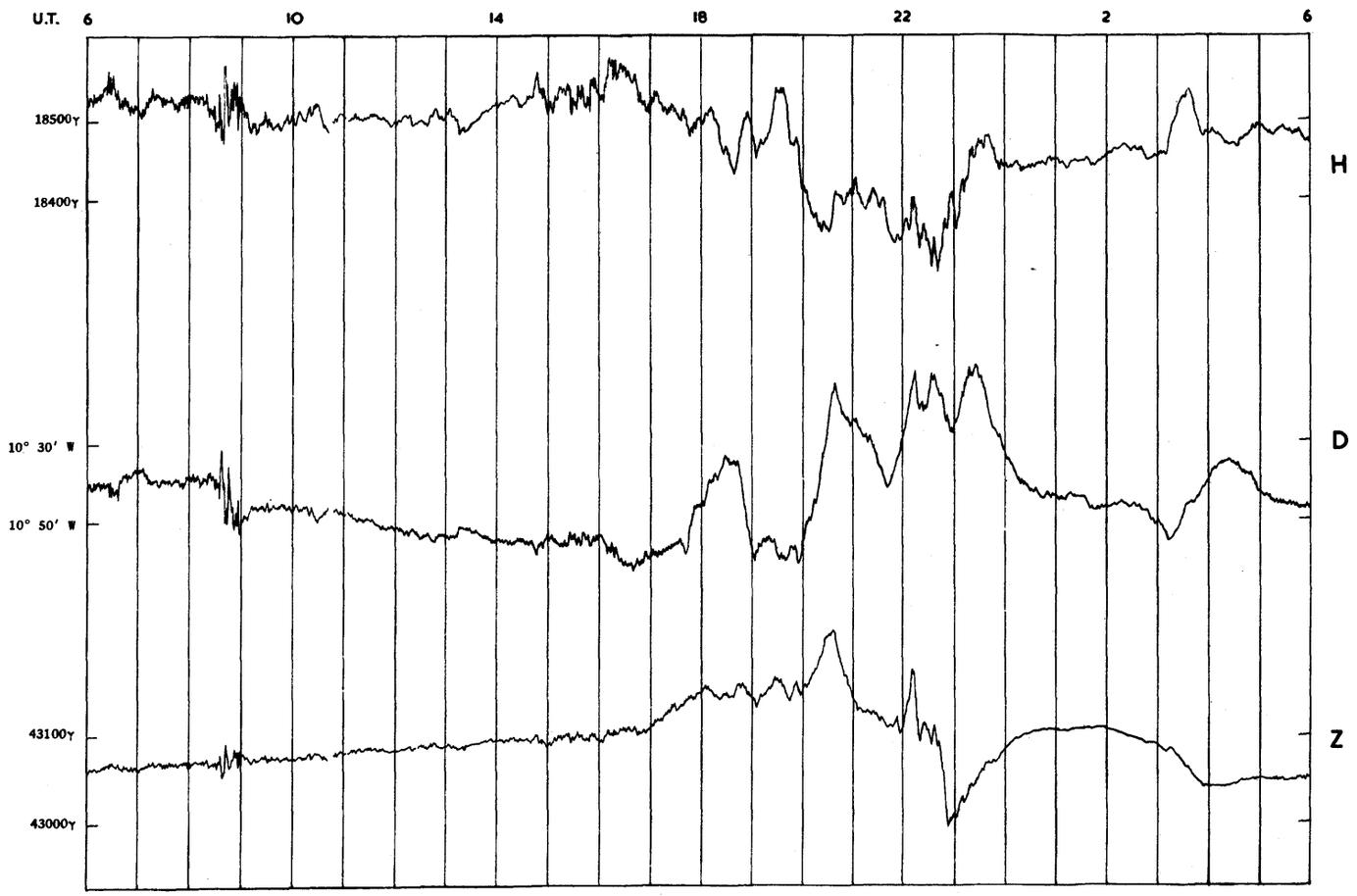


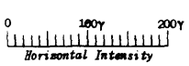
Plate XI

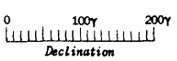
MAGNETIC DISTURBANCES AS RECORDED AT THE ABINGER MAGNETIC STATION

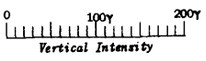
1939 OCTOBER 13 – 14



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

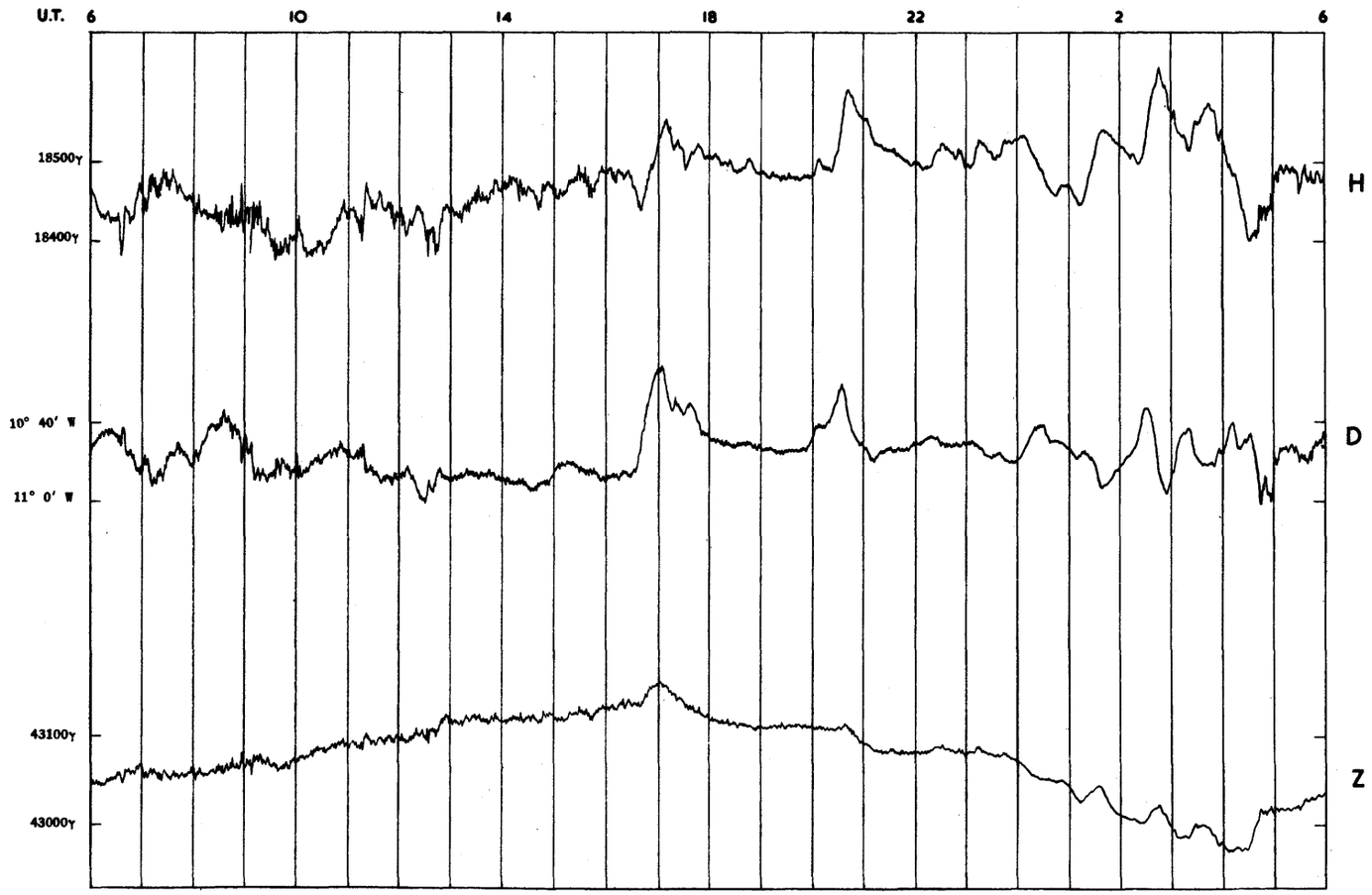




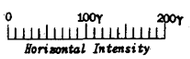


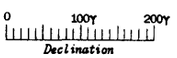
MAGNETIC DISTURBANCES AS RECORDED AT THE ABINGER MAGNETIC STATION

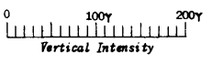
1939 OCTOBER 14 – 15



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







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