



# RESULTS OF THE MAGNETIC AND METEOROLOGICAL OBSERVATIONS

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

1946

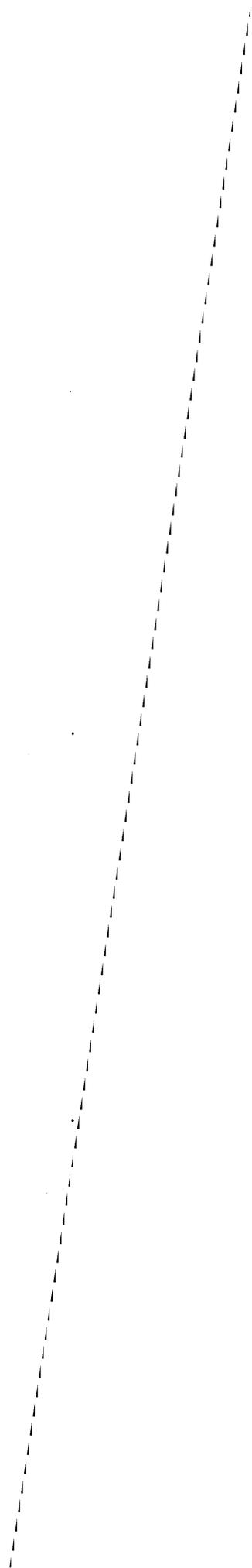
UNDER THE DIRECTION OF  
SIR HAROLD SPENCER JONES, Sc.D., F.R.S.  
ASTRONOMER ROYAL

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THE ROYAL OBSERVATORY, GREENWICH

AND

ABINGER MAGNETIC STATION, SURREY.

MAGNETIC AND METEOROLOGICAL OBSERVATIONS 1946.

INTRODUCTION

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STAFF

During the year 1946 the staff serving in the Magnetic and Meteorological Department consisted of W. M. Witchell, Superintendent, E. A. Chamberlain, G. F. Wells, P. L. Rickerby, B. R. Leaton, D. Oliver and Miss J. Mounteney. Mr. Chamberlain, resident observer and assistant-in-charge, and his assistant Mr. Rickerby, were employed exclusively at the Abinger Magnetic Station.

ABINGER MAGNETIC OBSERVATIONS

THE MAGNETIC STATION - Site (Lat.  $51^{\circ}11'5''$  N; Long.  $0^{\circ}23'12''$  W). Established in 1924, the station is situated on the northern slope of Leith Hill, Surrey, 800 feet above sea level. It is approximately 26 miles from the former site at Greenwich in a direction a little south of south-west. The nearest railway track lies at a distance of about  $2\frac{1}{2}$  miles.

*The Pavilions.* The absolute observations are made in the main pavilion which is constructed of carefully chosen non-magnetic materials. It is approximately 28 feet long by 15 feet wide and contains four stoutly built hard wood piers embedded into concrete bases 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 measuring horizontal intensity; on the south-east pier, the coil magnetometer for measuring vertical intensity; and on the south-west pier, the Earth-inductor for observing magnetic inclination.

A second pavilion, erected in 1926 for the testing and standardising of magnetic instruments (work formerly undertaken at Kew Observatory), and measuring 16 feet by 12 feet, is situated about 40 feet south-east of the main pavilion and contains three concrete piers passing through the floor without contact.

A third pavilion measuring 20 feet square was added in 1932. More convenient and suitable for comparative observations than the second, this pavilion occupies a corresponding position to the north-east of the main pavilion. It contains three circular wooden piers set into concrete and free from contact with the floor, similar to those in the main pavilion.

## ABINGER MAGNETIC OBSERVATIONS, 1946.

The *Magnetograph House* stands 50 feet east of the main pavilion and is oriented with its principal axis north and south. An inner chamber, designed to house the magnetographs at a uniform temperature, measures 15 feet long by 12 feet wide by 8 feet high and is supported on small concrete piers. The whole structure is contained within an outer chamber whose walls are constructed to have a low thermal conductivity and are nearly two 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 a series of low-temperature non-magnetic metallic resistances distributed along the base of the walls and fed by alternating current drawn from the public mains supply.

The temperature of the magnetograph chamber is controlled by a thermostat placed at the centre of the room at the same level as the magnetic instruments. Daily readings of a thermometer attached to one of the variometers show that the departures from a mean temperature do not exceed  $0^{\circ}.2$  C.

Projecting up through the floor are five concrete piers. Two of these, designed originally to support recording mechanisms, occupy the north-west and south-east corners of the room, their longer sides being transverse to the meridian. In 1938 a massive slate slab measuring 8 feet by 2 feet by  $1\frac{1}{4}$  inches was cemented upon the pier occupying the south-east corner. The other three piers are situated at positions 2 feet west and 2 feet 6 inches south of the north-east corner; 5 feet 6 inches west and 5 feet south of the same corner, and 2 feet east and 3 feet north of the south-west corner. Also, in 1938 a heavy wooden table 8 feet by 3 feet was installed near the centre of the room to carry new recording mechanism. The legs of this table pass freely through the floor of the chamber and are cemented into the concrete base of the main building.

LAYOUT OF RECORDING INSTRUMENTS. At the beginning of March 1938 the apparatus used since 1925 to record D and H was superseded by La Cour variometers. These instruments are set up at the south end of the recording chamber in a line running geographically east and west. They occupy the eastern half of the slate slab previously described. The La Cour recording mechanism is mounted upon the table also referred to in the previous paragraph.

Occupying the western halves of the slate slab and wooden table is a "quick-run" magnetograph (see p.vii). On the opposite corner pier is mounted the recording mechanism of a wide-range magnetograph, the declinometer of which is carried by the same pier (see p.vii). The accompanying H variometer is mounted on the south-west pier, formerly occupied by the Watson quartz-fibre Z variometer.

VARIOMETERS - *The La Cour Horizontal Intensity Variometer*. A complete description of this instrument is to be found in *Publikationer fra det Danske Meteorologiske Institut*, No.11 (Copenhagen 1930), but for general information some details are given here. The magnet of cobalt steel is 8 millimetres long and weighs about 25 milligrams, 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 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 of 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 proportional curving (under temperature changes) of a bi-metallic lamina which supports a prism controlling the ultimate direction of the ray.

## ABINGER MAGNETIC OBSERVATIONS, 1946.

A small Helmholtz-Gaugain coil, having a field of 7.43 gamma per milliampere and made to envelop the variometer, is used both to orientate the magnet correctly with respect to the earth's field and to determine the scale-value of the record. The orientation of the magnet was last adjusted on 1943 January 13 and was then correct within  $0^{\circ}.5$ . The adopted scale-value during 1946 was 4.35 gamma per millimetre.

*The La Cour Declination Variometer.* The general features of this instrument correspond closely to those of the variometer just described. The scale-value adopted during 1946 was  $0'.92$  per millimetre. Expressed as magnetic intensity the scale-value would be 4.97 gamma per millimetre at the present time.

*The La Cour Vertical Intensity Variometer.* This instrument is fully described in *Publikationer fra det Danske Meteorologiske Institut No.8*. The recording magnet, including knife-edges and mirror, is fashioned from a single piece of cobalt steel, with the purpose of eliminating the possibility of relative movements among its parts. It is oriented approximately at right-angles to the magnetic meridian. Compensation for temperature changes is optically effected as in the horizontal intensity variometer. The scale-value, determined by the small Helmholtz-Gaugain coil already mentioned, is 4.35 gamma per millimetre.

*The Quick-run Variometers.* These consist of a set of instruments closely resembling those described above and 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.

*The Wide-range Variometers.* Instruments formerly serving as standard variometers for H and D have been adapted to serve as wide-range recorders capable of registering on a small scale the largest variations in the two elements deemed possible of occurrence at Abinger. The H variometer, which was superseded as the standard by the La Cour recorder, has been "desensitised" by the addition, immediately beneath its base-plate, of a bundle of strongly magnetised needles set at right-angles to the magnetic meridian. The scale-value is 19.5 gamma per millimetre. The D variometer used at Greenwich from 1917 to 1925 is now fitted with a lens of 50 cms. focal length, which gives a scale-value of  $3'.7$  per millimetre. The two instruments are located as described on p. vi. The present position of the D variometer is such that it is necessary to deflect the recording light rays towards the recording cylinder through a large angle, and an appropriate mirror rigidly supported between the variometer and cylinder forms part of the apparatus. The wide-range variometers have been in regular operation since 1940.

*Recording Mechanism.* The two principal features of the La Cour recorders are: the three elements H, D and Z are recorded on separate strips of a single photographic sheet; the range over which the elements are able to record is greatly extended by the use of prisms in the optical train which furnish a multiple set of images. For each element are formed six secondary images, three on each side of the principal image, the separation being so adjusted that the image from one prism appears at the edge of the record just before the adjacent image passes off the opposite edge. The time-scale is approximately 15 mm. to the hour.

The time-marks are in all cases photographically printed on the sheets by momentary automatic illumination of an electric lamp. In the case of the La Cour magnetograph the original arrangement provides a series of small dots which con-

## ABINGER MAGNETIC OBSERVATIONS, 1946.

stitutes a second, interrupted, trace of the element. These marks, however, have been supplemented by thin time lines extending the whole width of each record, these lines being produced by adjustable long narrow mirrors which reflect light from an auxiliary time signal lamp. In the case of the "quick-run" and "wide-range" recorders, only the thin lines are printed.

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 the clock operates a relay which in turn operates the lamps. Additional signals at the first and fifty-ninth minute of each hour serve to distinguish the hour signals. The error of the clock is observed daily by comparison with a time-signal radiating from one of the official broadcasting stations. The error, which seldom exceeds one second, is eliminated by temporarily adjusting the clock rate electromagnetically over the required period of a minute or two.

**OBSERVING INSTRUMENTS - Declinometer.** 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.  $90^\circ$  of torsion deflects the magnet about 3'. The telescope has a six-inch circle on which azimuths are read by means of two microscope-micrometers to 1". An azimuth mark is fixed on the top of a concrete pillar 10 feet high, erected at the northern extremity of the Observatory grounds at a distance of approximately 300 feet from the observing pier. Determinations of the azimuth of this mark are made at intervals by means of observations of Polaris. During each observation both direct and reflected views of the star 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 Schuster-Smith Coil Magnetometer.* This instrument is on loan to the Observatory from the National Physical Laboratory. It is the second of the type constructed 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" 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 in a double spiral being that adopted in the original instrument referred to above. The whole forms a Helmholtz-Gauguin 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.

## ABINGER MAGNETIC OBSERVATIONS, 1946.

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 approximately 2 metres from the pier, and spots of light are reflected to them by small concave mirrors in the instrument.

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 quantity by rheostat according to the indications of a Broca galvanometer in a potentiometer circuit in which the fall of potential across a known resistance is brought to equality with the voltage 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 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  $180^\circ$  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  $\alpha$  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  $90^\circ$  from the spot reflected by the magnet mirror. A current is next passed round the coil in the direction which produces a field augmenting that of the earth, and the coil is turned in azimuth until the addition of the imposed field produced 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.

## ABINGER MAGNETIC OBSERVATIONS, 1946.

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  $90^\circ$  by the magnet. The azimuthal 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 measurement of horizontal intensity is readily obtained in two minutes.

If  $F$  be the factor of the coil and  $i$  be the current passing, in amperes, then the intensity of the field at the centre of the coil, in gamma units, is  $Fi \times 10^4$ . The adopted value of the factor  $F$  of the coil is 3.59570 ( $1 - .0000043t$ ),  $t$  being temperature Celsius.

The observed value of horizontal intensity obtained from this instrument is subject to a correction of  $-1\gamma$  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 1946 is based were verified in August 1943. To convert the measure of current from international units to c.g.s. units the factor adopted prior to 1938 January 1 was .99997; but from this date onward the value adopted has been .99988. The change introduced a discontinuity into the deduced values of  $H$  of  $-1.7\gamma$ .

*The Vertical Intensity Coil Magnetometer.* This instrument, designed by D. W. Dye for direct measurement of vertical intensity and constructed under his supervision at the National Physical Laboratory, Teddington, is on loan to the Royal Observatory from the 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-Gauguin 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.

## ABINGER MAGNETIC OBSERVATIONS, 1946.

The observation consists of 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. x*). The current is taken from the battery which supplies the *Schuster-Smith* instrument.

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 mentioned above.

A weak alternating current, supplied from a generator at some distance from the instrument, passes through the test-coil. The reaction between the field produced and the surrounding magnetic field subjects the test-coil to a forced oscillation 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 the small mirror on the test-coil of an image of illuminated cross-wires to a screen erected about 2 metres distant.

The adopted value of the factor  $F$  of the coil is  $F = 3.59643 (1 - .0000079t)$ ,  $t$  being temperature Celsius. The constants of the potentiometer in use during the year 1946 for the measurement of the current were verified at the National Physical Laboratory in August 1943. The factor adopted for the conversion from international units to c.g.s. units was the same as for the *Schuster-Smith* coil (see *p. x*). The change on 1938 January 1 introduces a discontinuity of  $-3.9\gamma$  into the deduced value of  $Z$ .

*The Absolute Inclination Instrument.* An Earth Inductor by the Cambridge Instrument Company, 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.

**REDUCTION OF RESULTS - Time** - The system of time used in the reductions is *Universal Time (U.T.)*.

*Hourly Values.* The estimated mean ordinates of the photographic traces for each hour are measured from the base-line by the aid of an etched glass scale - the

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hour being the period of sixty minutes commencing at the time named in the tables. From the tables of these measures are obtained the mean daily and mean monthly values for each hour of the day and the value of the elements for each day of the month.

*Base-lines.* Values of the base-lines are adopted from smooth curves drawn through points plotted upon charts, each point representing the mean of several independently observed values. Ten observations of declination, eight of horizontal intensity and six of vertical intensity are made, on an average, each week-day. Prior to 1929 the base-line values for vertical intensity traces were computed from absolute observations of inclination  $I$ , combined with simultaneous values of horizontal intensity  $H$ , taken from the magnetograms, in accordance with the relation  $Z = H \tan I$ . From 1929 January 1 the values have been obtained directly from observations of vertical intensity with the coil-magnetometer. The change introduces a discontinuity of about  $30\gamma$  into the definitive values of vertical intensity, corresponding to  $0'.9$  in inclination. The latter is to be attributed to hitherto unsuspected wear in the bearings of the Earth inductor which, at the time of its discovery, made the observed values of inclination too large by this amount.

*Temperature Corrections.* As the magnetograph chamber is maintained at a sensibly constant temperature and, moreover, the temperature compensation in the variometers themselves has been closely attained, in general no temperature corrections are required.

*K - Indices.* In conformity with a resolution passed at the Washington Assembly of the International Association of Terrestrial Magnetism and Electricity in 1939 September, the magnetic character of each day is estimated by means of three-hour-range indices, the index "K" for each three-hour period from  $0^h$  to  $24^h$  U.T. being assigned according to the principles described in an article published in *Terrestrial Magnetism and Atmospheric Electricity*, Vol.44, pp,411 et seq (December 1939).

The scale adopted for this purpose is constructed as follows:- The average quiet day variation during a particular three-hour period being reckoned as "0", any excess greater than  $5\gamma$  but less than  $10\gamma$  is reckoned as "1"; an excess between  $10\gamma$  and  $20\gamma$  as "2"; between  $20\gamma$  and  $40\gamma$  as "3"; between  $40\gamma$  and  $70\gamma$  as "4"; between  $70\gamma$  and  $120\gamma$  as "5"; between  $120\gamma$  and  $200\gamma$  as "6"; between  $200\gamma$  and  $330\gamma$  as "7"; between  $330\gamma$  and  $500\gamma$  as "8"; greater than  $500\gamma$  as "9".

The traces of all three elements are examined and the largest variation recorded in the interval is used to give the "K" index for that interval.

THE TABLES. Tables I to III contain respectively the hourly mean values of declination, horizontal intensity and vertical intensity.

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.

Table IVA contains, for each day of the year, the eight individual K-indices, arranged in succession, together with their sums.

Tables V to VII contain the 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 given values for the seasons, viz.

## GREENWICH METEOROLOGICAL OBSERVATIONS, 1946.

Winter (January, February, November, December), Equinox (March, April, September, October) and Summer (May, June, July, August). The values in these tables are *not* adjusted for the effect of non-cyclic change.

The figures quoted for the north and west components and the inclination are computed from the corresponding inequalities in declination, horizontal intensity and vertical intensity, the computations being in general carried out to one significant figure beyond that printed. Extreme values are indicated in heavy type.

Tables VIII and IX contain the harmonic coefficients obtained from an analysis of the inequalities in the north (X), west (-Y) and vertical (Z) components. In the case of the International Quiet and Disturbed days, the inequalities are adjusted for non-cyclic change before analysis, but in analysing the results for "All" days the non-cyclic change is ignored. The phase-angles in Table IX are corrected to refer to Abinger Local Mean Time.

Table X. In the annual volumes from 1926-1931 this table contains the range of the mean diurnal inequalities abstracted from the figures given in Tables V to VII for the months, the year and the seasons. In 1932 a change was made which was inadvertently not noted at the time. Thenceforth the figures given for the *year and the seasons* are derived from Table X itself by meaning the values of the months constituting the particular group.

Table XI gives in similar arrangement the non-cyclic change  $24^{\text{h}}$  minus  $0^{\text{h}}$ . The quantities are computed from Tables I to III, the value of  $0^{\text{h}}$  or  $24^{\text{h}}$  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 forming this table corrections are 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 XVA contain the daily values of the base-lines of the magnetograms reduced from the absolute observations.

Table XVI. The first part of this table contains 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 second part contains corresponding values determined at the Abinger Station since 1925.

REPRODUCTION OF MAGNETOGRAMS. A brief descriptive summary of the more significant movements recorded in the magnetic elements during the year is accompanied by reduced copies of the Abinger Magnetograms illustrating disturbances of special interest.

## GREENWICH METEOROLOGICAL OBSERVATIONS, 1946.

GENERAL. 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,

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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"; 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.xvii).

**INSTRUMENTS.** *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 are of brass. At its lower end the rod terminates in a point of ivory which in observation is made just to meet the reflected image of the point as seen in the mercury. The scale is divided to 0.05 inch, sub-divided 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.xviii).

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

*The Photographic Barometer.* A siphon barometer is employed which, at its open end, operates a plunger resting on the surface of the mercury. On account of the optical magnification associated with a moving mirror at some distance from the recording drum, the motion of the plunger must be mechanically reduced in being transferred to the arm which carries the mirror. In the actual arrangement two levers are used. One is connected to the stem of the plunger resting on the free surface of the mercury and is 12 inches long from plunger to pivot. A pin with a rounded conical point is screwed into this lever at a distance of 1 inch from the pivot. On this pin rests the plane under-surface of a shorter lever, which is 4 inches long from its pivot to the pin and is set at right angles to the first lever. Both levers are approximately horizontal in their mean position. The moving mirror of the instrument is mounted horizontally, in a suitable frame, just above the pivots of, and attached to the short lever. The first lever lies east and west, so that the axis about which the mirror turns is in the same direction. The

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recording drum is horizontal and the motion of the beam of light is transformed, so as to be horizontal, by a fixed right-angled prism supported above the mirror. A lens of suitable focus is mounted in a vertical plane in front of the prism and brings the beam of light from the straight-filament electric lamp to a focus on the drum. A base-line mirror, similar to the moving mirror, is mounted in a vertical plane below the lower half of this lens. Provision is made for all the 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 standard barometer. (Near the free surfaces 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 three 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  $9\frac{1}{2}$  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- 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. The old screen was subsequently erected in a new position on the north side of the Christie Enclosure, and daily readings, at 9<sup>h</sup>, of maximum and minimum temperature in the open screen were resumed from 1938 May 1.

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  $-0^{\circ}.4$  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  $-0^{\circ}.3$  has been applied to the readings of this thermometer.

The dry-bulb and wet-bulb thermometers are read at 9<sup>h</sup>, 12<sup>h</sup> (noon) and 15<sup>h</sup> every day. Readings of the maximum and minimum thermometers are taken at 9<sup>h</sup> and 15<sup>h</sup> 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.

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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. DB. 3544. The thermometer for radiation to the sky is a spirit minimum thermometer, Negretti and Zambra No. DC. 30597. The thermometers are laid on short grass, freely exposed to the sky.

*Earth Thermometers.* There are two thermometers 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 (9 ft. 2 in. 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 azimuth 90° east, 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 as long ago as 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

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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.

After certain structural alterations were carried out in 1941 October, which included the introduction of a ball bearing for the revolving shaft, a series of comparisons was made between wind speed deduced from the pressure recorded by the Osler anemometer and the velocity of the cups, known from the above-mentioned relation. These comparisons established a new empirical formula, valid at all ordinary speeds and very close to  $V = 2.70 v$ . Accordingly, from 1942 January 1, the formula  $V = 2.70 v$  has been adopted to modify the velocity recorded by the instrument.

*Rain Gauges.* During the year 1946 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 volumes 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 is fixed about 4 feet north of the standard gauge No.6 which is read daily at 9<sup>h</sup> and 15<sup>h</sup>. No.8 is used as a check on the readings of No.6 and is normally read at 9<sup>h</sup> 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 94 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 in 1926 and 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.

*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 (until 1946 August 15) on a brick pier about 20 yards south of the Altazimuth building, and permanently directed towards the celestial pole. On 1946 August 15 the site was changed to its original position (prior to 1940 November 18) in the courtyard to the north of the Transit Pavilion. 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

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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 ( $3\frac{1}{4}$  by  $4\frac{1}{4}$  inches). Exposure is intended to be made during the period that the sun remains more than  $10^\circ$  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  $\delta$  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  $0^h$  U.T., excepting 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 instruments.

The barometer results are not reduced to sea-level, neither are they corrected for the effect of gravity by reduction to the latitude of  $45^\circ$ . 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 62-84). 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

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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 (pp. D 89 and 90) have been calculated from the corresponding mean hourly values of air and evaporation temperatures (pp. D 88 and 89)

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 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, also in the Introduction to the *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.xvii). The continuous record of the Osler self-registering gauge shows whether the amounts measured at 9<sup>h</sup> 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 proportion of the 9<sup>h</sup> 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 87 and D 94 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.

It may be understood that the greatest wind pressures usually occur in gusts of short duration. In the "Mean of 24 Hourly Measures" each measure represents the mean hourly value centred at the nominal hour. With regard to "Proportions of wind referred to the cardinal points" in the monthly summary on pages D 62-85, 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 63 to D 85, and in the abstract table, page D 87, is the mean found from observations made at 9<sup>h</sup>, 12<sup>h</sup> (noon), 15<sup>h</sup> and 21<sup>h</sup> each day.

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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 symbols 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 intermittent  
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"

CLOUDS FORMS (\*)

<i>Acu</i> Alto-cumulus	<i>Cist</i> Cirro-stratus	<i>St</i> Stratus
<i>Ast</i> Alto-stratus	<i>Cu</i> Cumulus	<i>Stcu</i> Strato-cumulus
<i>Ci</i> Cirrus	<i>Cunb</i> Cumulo-nimbus	<i>Fr</i> Fracto-
<i>Cicu</i> Cirro-cumulus	<i>Nbst</i> Nimbo-stratus	

ADDITIONAL SYMBOLS

*lu-ha* lunar halo      *prhn* Parhelion      *so-ha* solar halo

ROYAL OBSERVATORY, GREENWICH.  
ABINGER MAGNETIC STATION.

# Results of Magnetic Observations

1946

MAGNETIC OBSERVATIONS, ABINGER 1946.

TABLE I. - HOURLY MEANS OF MAGNETIC DECLINATION

Table with columns for U.T. (0h to 24h) and rows for January and February. Each row contains 24 hourly magnetic declination values. Summary rows for Mean, Mean \*, and Mean \*\* are provided for each month. A legend at the bottom explains \* International Quiet Day and \*\* International Disturbed Day.

\* International Quiet Day. \*\* International Disturbed Day.

1946 03 1

MAGNETIC OBSERVATIONS, ABINGER 1946.

TABLE I. - HOURLY MEANS OF MAGNETIC DECLINATION

Table with columns for U.T. (0h to 24h) and rows for March and April. Each row contains 24 hourly magnetic declination values. Summary rows for Mean, Mean \*, and Mean \*\* are provided for each month. Includes a note about International Quiet Day and International Disturbed Day.

\* International Quiet Day. \*\* International Disturbed Day.
† March 28 has been omitted in computing the monthly mean values.

TABLE I. - HOURLY MEANS OF MAGNETIC DECLINATION

U.T.	0 <sup>h</sup>	1 <sup>h</sup>	2 <sup>h</sup>	3 <sup>h</sup>	4 <sup>h</sup>	5 <sup>h</sup>	6 <sup>h</sup>	7 <sup>h</sup>	8 <sup>h</sup>	9 <sup>h</sup>	10 <sup>h</sup>	11 <sup>h</sup>	12 <sup>h</sup>	13 <sup>h</sup>	14 <sup>h</sup>	15 <sup>h</sup>	16 <sup>h</sup>	17 <sup>h</sup>	18 <sup>h</sup>	19 <sup>h</sup>	20 <sup>h</sup>	21 <sup>h</sup>	22 <sup>h</sup>	23 <sup>h</sup>	24 <sup>h</sup>		
May																											
9° + Tabular Quantities																											
1	51.8	51.8	51.3	51.0	49.9	48.5	49.1	46.4	45.0	47.0	52.1	57.8	61.6	61.4	60.8	58.5	56.7	54.5	52.4	50.6	49.5	47.8	50.7	51.1			
2	53.1	49.3	47.0	47.9	47.9	46.9	45.4	46.0	46.9	48.8	53.0	58.4	61.3	61.5	60.0	57.4	55.4	51.9	51.5	51.9	52.5	52.4	51.9	50.4			
3	48.0	49.7	50.5	50.8	50.4	47.8	45.9	44.8	46.1	48.0	51.9	56.7	59.9	60.3	58.7	57.8	56.5	55.1	53.4	49.4	50.8	51.3	51.8	51.4			
4	52.9	48.3	48.8	49.0	47.1	46.9	47.4	47.0	47.5	50.6	53.5	57.5	60.5	60.8	61.4	59.4	56.8	54.6	53.4	52.4	51.0	50.9	50.4	50.2			
5	51.2	50.6	50.4	49.8	49.0	47.8	45.6	44.9	45.8	48.4	52.1	55.0	57.7	59.7	59.4	57.8	57.4	55.8	54.4	53.9	53.9	51.9	47.8	50.5			
6 **	51.5	50.7	53.9	54.0	50.4	51.4	56.3	56.5	52.3	50.6	50.9	53.9	54.9	55.6	55.4	55.0	55.8	55.3	54.3	52.8	52.8	53.3	49.0	47.5			
7	51.0	50.4	50.1	50.3	50.9	58.4	60.2	52.0	48.4	47.4	48.8	53.6	56.7	57.8	57.4	57.9	57.4	55.0	53.3	51.9	51.9	52.3	51.4	50.4			
8	51.2	51.9	53.4	53.8	53.4	57.0	63.5	58.4	52.4	49.2	50.8	53.2	55.9	56.8	57.3	56.9	55.4	54.1	52.0	51.8	49.0	49.7	48.0	48.0			
9 **	49.4	48.5	48.9	52.1	49.0	45.4	46.4	49.5	50.4	48.8	51.9	55.7	57.3	57.5	57.9	57.3	57.3	51.4	46.4	47.3	47.2	49.4	51.2	48.4			
10	48.9	48.5	47.5	48.8	46.9	48.9	52.8	48.6	47.0	48.8	51.8	55.4	57.3	60.2	61.0	59.8	56.8	56.2	55.4	53.5	52.0	52.9	52.7	51.8			
11 **	51.8	52.8	53.7	48.8	51.4	50.4	51.3	49.7	50.4	53.3	52.3	56.9	60.3	59.2	58.1	58.4	52.5	49.0	50.4	51.6	51.9	51.7	51.8	51.3			
12	51.8	51.3	50.4	49.4	49.8	47.3	45.9	46.4	47.5	50.2	52.7	54.7	55.9	56.4	55.4	53.6	52.4	51.4	50.8	51.0	51.3	51.7	52.2	51.9			
13	52.8	50.8	47.9	48.0	45.4	46.9	46.0	45.8	47.3	48.5	51.5	53.2	55.2	56.0	56.2	55.0	54.2	53.0	52.0	51.7	51.4	49.8	47.4	51.5			
14 *	51.1	52.8	52.0	50.8	48.9	47.8	46.4	46.9	48.1	50.4	56.0		57.4	58.0	58.1	56.1	54.8	53.4	52.4	51.9	51.5	51.5	51.5	51.7			
15 *	51.6	51.4	50.5	50.3	48.8	47.4	46.5	46.8	48.8	51.2	54.4	56.7	59.8	59.9	58.2	55.9	54.4	53.4	52.6	52.3	52.3	52.1	52.3	50.5			
16	50.5	50.4	50.7	50.4	50.4	50.8	48.9	47.8	47.7	48.0	50.4	53.1	55.3	55.6	55.5	54.9	54.0	53.0	52.4	50.9	51.3	51.9	51.8	52.0			
17	53.3	53.9	50.0	51.4	53.7	47.3	45.8	45.8	46.9	49.5	52.8	56.5	59.0	59.5	59.0	57.8	57.9	56.1	53.4	53.0	52.7	52.8	52.3	52.3			
18	52.0	52.8	55.5	50.8	47.4	46.7	44.9	44.3	46.9	48.5	49.8	53.9	55.4	56.5	55.4	54.4	52.9	51.3	51.1	51.4	51.5	51.8	51.5	51.3			
19 *	50.7	51.0	51.0	50.5	49.8	47.5	45.6	45.3	46.6	50.0	54.1	57.3	60.7	61.0	59.4	56.9	55.3	53.8	53.2	52.7	52.4	52.5	51.8	51.8			
20	51.9	51.4	51.4	51.0	49.4	48.0	46.9	46.1	45.5	47.0	51.0	54.7	57.5	59.5	59.3	58.1	56.0	54.0	53.6	54.7	53.9	53.0	44.5	45.2			
21	46.5	45.1	51.0	48.7	46.5	46.0	48.5	49.9	47.5	50.5	53.5	56.1	58.5	60.5	61.8	57.7	59.1	59.5	53.4	55.1	53.5	51.5	49.9	50.5			
22 **	48.9	48.0	47.6	48.0	47.1	50.8	48.3	52.6	53.0	50.6	53.9	57.9	59.9	58.1	58.1	57.7	53.6	52.0	52.7	45.0	51.1	51.6	52.4	52.6			
23 **	49.4	49.1	50.0	47.0	45.5	44.0	42.9	45.5	44.9	47.4	49.1	52.7	55.5	54.8	56.5	56.5	54.5	51.0	47.1	50.0	48.5	50.0	50.8	44.5			
24	48.5	49.3	47.1	47.5	48.2	46.5	46.5	44.8	46.1	50.1	53.6	57.0	59.0	60.6	61.5	56.2	57.4	55.5	53.9	52.2	51.5	51.4	51.0	51.5			
25	46.8	47.5	52.3	50.1	48.9	47.8	45.8	45.0	44.4	46.6	50.1	54.5	57.5	58.0	57.4	56.0	52.9	49.6	50.8	50.0	51.4	51.9	50.4	50.8			
26	50.4	51.9	51.4	49.5	48.4	45.4	45.0	45.3	46.1	48.9	53.5	56.9	58.1	58.3	57.4	55.8	54.0	51.4	50.8	51.3	51.4	50.9	50.9	51.4			
27 *	51.3	50.4	50.5	50.6	49.0	46.9	45.4	46.0	46.0	47.8	51.0	55.7	58.9	59.9	59.4	57.4	55.0	52.9	51.0	50.5	51.6	50.4	50.9	51.5			
28	51.0	51.4	50.8	48.0	47.6	44.6	43.8	43.4	43.9	47.9	51.9	55.4	57.9	58.4	57.9	54.6	52.9	52.0	50.4	50.8	48.9	50.3	52.0	52.0			
29	52.0	51.0	49.0	48.6	47.6	45.9	47.0	45.5	46.4	50.5	55.0	58.4	59.5	59.5	58.7	56.0	55.1	54.0	53.2	51.3	50.8	51.4	50.6	50.0			
30 *	49.9	50.5	49.8	49.4	48.4	47.0	46.1	45.5	45.1	47.5	52.8	57.4	59.5	59.5	59.4	57.6	55.0	52.9	51.9	51.8	48.9	48.8	48.5	49.4			
31	45.1	46.0	47.7	45.2	45.8	48.3	45.5	44.0	46.6	48.8	51.1	56.0	58.5	57.8	57.3	57.0	57.0	55.1	53.7	52.4	50.9	50.9	50.9	50.8			
Mean	50.5	50.3	50.4	49.7	48.8	48.1	47.9	47.3	47.3	49.1	52.1	55.7	58.1	58.7	58.4	56.8	55.4	53.5	52.2	51.5	51.3	51.3	50.7	50.5			
Mean *	50.9	51.2	50.8	50.3	49.0	47.3	46.0	46.1	46.9	49.5	53.3	56.6	59.3	59.7	58.9	56.8	54.9	53.3	52.2	51.8	51.3	51.1	51.0	51.0			
Mean **	50.2	49.8	50.8	50.0	48.7	48.4	49.0	50.8	50.2	50.1	51.6	55.4	57.6	57.0	57.2	57.0	54.7	51.7	50.2	49.3	50.3	51.2	51.0	48.9			
June																											
9° + Tabular Quantities.																											
1	50.9	50.2	50.2	50.5	49.1	49.5	47.5	44.5	44.0	46.8	49.4	52.9	56.6	59.9	60.5	58.2	56.3	54.7	52.8	50.4	51.6	51.9	51.5	51.9			
2 *	51.2	52.0	53.9	51.9	50.0	47.6	46.0	44.6	43.8	44.5	47.5	51.5	55.5	57.6	59.3	58.5	57.0	54.9	53.9	52.5	52.6	52.5	52.5	52.0			
3 *	51.8	52.0	51.3	50.8	49.5	47.5	45.5	43.9	44.1	46.8	51.6	54.7	56.9	59.1	59.7	58.3	55.5	53.8	52.2	51.7	51.7	51.9	52.0	51.6			
4	51.9	51.8	52.0	51.4	50.5	47.4	44.2	43.5	44.9	47.0	50.6	54.8	58.5	60.3	60.1	58.5	57.4	54.9	53.5	52.8	52.5	52.8	52.1	52.0			
5	51.5	51.5	50.9	50.5	49.5	47.9	46.8	45.6	45.6	46.0	49.0	53.1	56.7	57.4	57.5	56.4	55.2	53.8	52.5	52.6	55.3	52.0	50.6	51.6			
6	52.8	50.9	48.5	47.9	47.4	46.0	45.0	45.4	46.5	49.6	52.8	56.7	60.0	59.6	58.1	56.4	54.5	53.0	52.1	52.1	52.6	52.5	52.4	52.1			
7 **	53.5	53.1	51.2	50.8	49.5	48.5	46.8	45.9	46.5	48.0	50.7	56.0	59.9	60.8	63.2	60.3	60.6	55.5	54.6	54.0	49.1	51.7	51.5	49.9			
8 **	50.2	52.9	55.4	51.0	48.1	45.1	44.5	45.1	46.5	47.3	51.1	55.7	58.0	60.9	64.5	59.9	60.0	55.5	54.5	54.0	54.8	54.1	47.6	48.1			
9	49.4	50.4	53.0	50.8	50.9	52.0	51.4	51.3	51.1	52.0	52.6	53.4	55.9	57.0	57.3	56.7	55.1	53.9	52.4	51.4	51.9	52.0	51.0	51.4			
10	51.2	50.8	49.8	49.5	47.0	45.5	44.8	45.4	46.2	48.1	50.5	53.4	56.2	56.3	57.0	56.4	54.4	53.4	53.4	52.5	52.6	52.8	52.2	51.4			
11	51.4	51.4	50.7	50.8	51.9	49.3	47.3	46.4	47.8	49.5	52.7	55.4	55.6	55.0	55.3	54.7	54.3	54.1	52.8	52.5	52.4	52.4	52.0	51.8			
12 **	52.1	51.9	52.0	51.3	51.4	48.0	43.9	45.6	46.4	49.2	52.4	54.8	57.8	57.9	60.8	54.8	55.4	55.4	52.4	50.4	50.7	50.0	48.9	50.2			
13	48.8	47.8	46.6	44.4	47.5	49.8	47.4	44.8	44.8	47.3	49.8	51.5	55.3	55.9	55.8	54.7	53.9	53.4	51.8	51.6	51.8	51.5	51.5	51.4			
14	50.8	50.8	49.8	48.8	48.0	48.4	47.6	49.0	49.8	50.9	51.5	55.3	57.5	57.8	56.5	54.9	54.1	53.4	52.4	51.3	52.3	52.6	52.4	51.4			
15	51.3	51.0	51.3	51.8	51.1	48.9	47.4	48.9	47.5	48.7	51.3	54.7	57.3	57.8	58.4	56.9	54.8	52.8	51.7	50.8	50.4	52.1	51.9	52.2			
16	52.5	51.6	50.5	50.4	48.8	46.8	45.4																				

MAGNETIC OBSERVATIONS, ABINGER 1946.

TABLE I. - HOURLY MEANS OF MAGNETIC DECLINATION

U.T.	0 <sup>h</sup>	1 <sup>h</sup>	2 <sup>h</sup>	3 <sup>h</sup>	4 <sup>h</sup>	5 <sup>h</sup>	6 <sup>h</sup>	7 <sup>h</sup>	8 <sup>h</sup>	9 <sup>h</sup>	10 <sup>h</sup>	11 <sup>h</sup>	12 <sup>h</sup>	13 <sup>h</sup>	14 <sup>h</sup>	15 <sup>h</sup>	16 <sup>h</sup>	17 <sup>h</sup>	18 <sup>h</sup>	19 <sup>h</sup>	20 <sup>h</sup>	21 <sup>h</sup>	22 <sup>h</sup>	23 <sup>h</sup>	24 <sup>h</sup>		
July	9° + Tabular Quantities																										
1 *	51.3	50.5	49.9	49.9	48.8	46.4	44.9	44.5	44.0	45.7	48.8	52.0	55.4	56.5	57.0	56.3	55.0	54.0	53.4	52.8	51.9	51.8	52.0	51.1	51.3	51.0	51.3
2	51.0	50.8	50.4	51.8	52.5	48.5	46.8	46.3	47.4	46.9	48.1	50.7	53.3	54.8	55.9	55.9	55.2	53.4	52.3	52.5	52.5	53.0	51.9	51.3	51.0	51.3	51.0
3	51.1	51.3	51.7	50.9	53.3	52.9	48.8	51.7	53.7	53.2	54.6	54.2	55.2	54.1	54.3	53.8	53.7	52.8	53.8	54.0	53.2	52.8	52.3	51.1	51.0	51.3	51.0
4 *	50.3	49.7	49.3	48.4	47.3	46.3	45.3	45.9	47.1	48.8	50.6	54.8	58.2	59.0	57.4	56.8	56.3	55.3	54.3	53.5	52.8	51.9	51.3	50.7	51.3	51.0	50.7
5 *	50.9	50.4	50.7	49.1	47.4	46.4	46.6	46.7	46.4	47.3	49.2	52.9	55.4	57.3	57.4	57.1	54.9	53.9	54.3	53.9	52.6	53.1	52.5	52.0	51.3	51.8	51.2
6	50.5	50.3	50.1	49.4	48.6	48.3	48.3	48.3	48.3	49.3	50.8	53.4	55.4	57.0	56.9	56.1	54.9	54.3	53.9	52.6	53.1	52.5	52.0	51.3	51.8	51.2	50.9
7 **	50.3	50.3	50.8	51.8	53.3	48.9	50.0	46.1	45.2	46.7	50.5	53.5	56.2	57.6	58.7	57.8	55.0	55.7	54.7	51.8	50.3	48.9	47.7	45.5	45.5	51.8	51.7
8	51.8	42.3	41.0	40.5	41.2	41.7	43.8	44.8	47.7	50.5	52.9	56.8	59.2	60.5	58.7	57.8	57.4	53.3	53.0	53.5	52.6	52.2	51.9	51.7	51.0	51.3	51.0
9	51.7	51.7	53.6	46.9	44.2	42.2	43.3	44.2	45.7	48.7	51.5	55.1	56.2	56.2	56.4	56.6	54.3	53.3	53.3	52.8	52.4	49.8	49.8	50.9	50.9	50.9	50.9
10	50.7	50.4	51.7	50.8	47.8	46.7	46.6	47.7	49.6	50.9	54.8	56.7	57.4	57.3	56.9	55.6	54.5	50.9	51.3	53.8	54.1	53.7	52.8	51.3	51.3	51.0	51.3
11	51.2	51.8	53.0	1.5	47.8	47.2	46.2	45.7	46.7	47.3	48.8	51.3	53.3	53.8	53.3	53.3	52.7	52.3	50.3	50.4	51.8	50.3	50.8	52.3	52.3	52.3	52.3
12	51.0	50.5	49.8	48.6	48.5	47.3	47.2	48.3	48.9	49.7	50.0	52.4	54.5	55.4	54.5	53.3	52.0	51.7	51.9	52.1	52.0	51.9	52.4	52.3	52.3	52.3	52.3
13 *	51.8	51.7	51.7	51.3	49.9	47.9	47.4	49.3	49.2	51.4	52.5	54.8	57.5	58.8	58.3	56.0	53.4	52.3	50.7	50.3	51.3	51.5	51.8	51.3	51.3	51.3	51.3
14	50.9	50.8	51.0	49.7	48.7	46.6	46.4	47.4	49.5	47.8	49.5	54.2	57.4	58.9	58.8	56.9	58.3	56.4	53.9	54.4	53.6	53.0	50.5	48.4	48.4	48.4	48.4
15	47.6	48.9	49.1	46.5	46.6	47.8	44.8	46.5	46.8	48.0	50.9	54.1	56.4	57.9	58.0	55.3	52.5	51.6	51.3	51.5	51.1	51.0	50.5	50.0	50.0	50.0	50.0
16	49.9	49.2	49.4	48.8	48.2	46.6	45.5	46.0	47.1	47.3	50.3	53.5	55.0	55.8	56.6	56.7	50.8	53.0	51.9	51.4	51.2	50.5	48.6	48.2	48.2	48.2	48.2
17	49.2	50.5	48.0	47.0	47.1	47.1	49.1	45.3	46.4	48.9	52.0	54.2	57.2	59.5	58.3	57.0	55.0	54.0	51.9	51.5	51.6	50.8	48.5	46.9	46.9	46.9	46.9
18 **	47.3	47.9	49.0	48.9	47.1	45.5	44.2	44.1	45.2	45.6	48.6	51.9	55.7	58.6	65.0	66.4	60.0	58.4	54.4	50.0	51.4	48.6	47.5	49.5	49.5	49.5	49.5
19	48.5	51.0	52.0	47.9	50.8	51.5	49.9	50.9	48.9	47.5	50.0	53.5	57.4	57.9	54.6	54.1	52.8	51.1	50.8	51.3	48.6	50.8	50.9	48.8	48.8	48.8	48.8
20 *	50.5	48.5	48.6	47.5	45.8	44.1	43.2	43.4	44.1	46.0	49.1	52.9	56.3	58.8	59.0	57.2	54.5	52.5	51.5	50.9	51.0	51.1	50.9	50.5	50.5	50.5	50.5
21	48.8	48.5	49.1	48.6	45.6	45.0	44.0	44.1	45.0	48.4	50.6	53.8	57.0	58.7	58.6	57.1	54.5	52.5	52.0	52.5	52.2	48.3	49.1	46.5	46.5	46.5	46.5
22	47.0	48.5	48.2	47.1	48.5	46.6	42.9	43.1	44.9	47.6	50.6	53.4	55.9	57.5	58.0	58.1	56.7	53.4	51.5	52.1	52.1	50.9	51.2	47.6	47.6	47.6	47.6
23	46.3	45.6	46.7	46.6	44.1	42.9	43.4	43.2	45.5	47.7	51.0	55.6	55.5	57.1	58.1	58.4	56.7	52.9	51.4	50.7	51.0	50.6	50.8	50.9	50.9	50.9	50.9
24	50.1	49.6	49.1	49.0	47.6	46.9	47.1	47.5	47.5	47.1	49.4	52.5	55.1	56.0	55.1	54.2	52.9	52.5	51.9	51.0	51.1	52.0	52.0	51.5	51.5	51.5	51.5
25	51.1	51.0	50.5	49.9	47.0	45.0	45.1	47.9	49.2	53.0	55.9	57.1	59.0	58.5	57.5	56.1	54.0	48.9	50.5	51.4	50.3	51.0	50.3	46.8	46.8	46.8	46.8
26 **	47.5	44.1	44.7	46.4	44.8	48.1	61.0	45.6	45.6	45.5	48.5	52.0	56.1	58.1	57.2	57.0	55.0	53.4	53.5	56.3	67.9	60.9	49.5	58.6	58.6	58.6	58.6
27 **	46.8	18.3	22.0	26.9	43.2	39.5	46.5	35.7	38.9	44.2	52.5	56.5	57.9	56.5	54.7	51.6	48.9	47.5	46.5	46.0	46.5	46.9	47.2	48.3	48.3	48.3	48.3
28	48.5	48.0	46.7	46.1	45.2	44.5	43.9	42.4	42.4	44.1	47.9	54.1	56.5	56.0	56.4	54.5	51.5	50.3	48.2	47.5	47.8	48.1	50.6	48.5	48.5	48.5	48.5
29 **	49.5	48.9	47.5	48.9	49.5	54.8	53.0	50.0	48.7	48.4	52.5	58.5	60.3	58.5	57.6	55.6	54.8	50.0	48.9	49.4	51.0	51.0	48.1	51.5	51.5	51.5	51.5
30	50.4	47.2	51.1	53.5	47.5	45.5	42.6	42.0	42.3	45.0	48.1	52.0	54.4	58.5	55.6	54.8	53.1	50.5	49.3	49.7	50.4	49.9	50.0	49.9	49.9	49.9	49.9
31	51.9	51.6	49.1	48.1	47.2	47.1	46.8	45.9	47.0	47.8	48.9	53.5	57.5	59.6	58.7	56.1	52.9	50.5	48.1	48.5	48.6	49.6	50.6	50.6	50.6	50.6	50.6
Mean	49.6	48.4	48.6	48.0	47.6	46.6	46.6	45.8	46.6	47.9	50.6	53.9	56.4	57.4	57.2	56.2	54.3	52.7	51.8	51.6	51.9	51.2	50.5	50.2	50.2	50.2	
Mean *	51.0	50.2	50.0	49.2	47.8	46.2	45.5	45.8	46.2	47.8	50.0	53.5	56.6	58.1	57.8	56.7	54.8	53.6	52.8	52.4	52.1	51.8	51.6	51.0	51.0	51.0	
Mean **	48.3	41.9	42.8	44.6	47.6	47.4	50.9	44.3	44.7	46.1	50.5	54.5	57.2	57.9	58.6	57.7	54.7	53.0	51.6	50.7	53.4	51.3	48.0	50.7	50.7	50.7	
August	9° + Tabular Quantities																										
1	51.3	53.0	51.7	51.7	48.8	48.4	47.5	45.5	43.8	44.9	47.5	52.4	56.5	58.7	58.5	56.6	53.0	50.4	47.6	47.9	49.1	50.1	49.5	50.0	50.0	50.0	50.0
2	50.5	50.4	51.0	51.0	49.6	47.2	45.1	44.0	44.7	45.6	48.5	52.3	54.1	55.4	54.7	53.0	50.9	48.9	48.1	49.5	49.9	50.8	50.2	49.8	49.8	49.8	49.8
3	51.2	50.8	50.5	50.5	49.9	48.1	46.7	44.1	44.5	46.5	50.1	53.9	56.5	57.0	55.9	53.5	51.9	50.8	50.1	50.2	50.1	49.6	49.6	49.6	49.6	49.6	49.6
4	49.5	49.4	49.4	49.1	48.2	46.1	44.2	43.5	44.9	47.1	51.0	54.9	56.9	58.3	56.1	53.9	52.6	51.5	51.5	51.6	51.7	51.9	51.9	51.3	51.3	51.3	51.3
5	50.6	50.5	49.8	49.0	47.9	46.6	45.6	45.5	46.0	47.1	49.4	54.8	58.0	57.6	55.9	53.7	52.6	51.5	52.0	51.4	51.0	50.1	50.2	50.0	50.0	50.0	50.0
6	50.0	49.9	49.8	48.5	47.6	46.1	45.8	45.4	45.9	47.0	50.0	52.9	56.6	57.4	56.8	55.5	53.6	51.7	51.6	51.7	51.5	52.9	52.4	51.2	51.2	51.2	51.2
7 **	50.1	51.0	51.0	51.0	48.9	46.6	45.4	45.0	46.8	48.7	51.4	55.1	61.1	63.2	63.6	60.2	58.6	54.4	51.1	45.6	50.3	52.8	51.5	50.5	50.5	50.5	50.5
8	49.4	48.9	48.5	48.2	47.1	46.6	46.4	46.1	46.5	48.1	48.0	50.6															

## MAGNETIC OBSERVATIONS, ABINGER 1946.

TABLE I. - HOURLY MEANS OF MAGNETIC DECLINATION

U.T.	0 <sup>h</sup>	1 <sup>h</sup>	2 <sup>h</sup>	3 <sup>h</sup>	4 <sup>h</sup>	5 <sup>h</sup>	6 <sup>h</sup>	7 <sup>h</sup>	8 <sup>h</sup>	9 <sup>h</sup>	10 <sup>h</sup>	11 <sup>h</sup>	12 <sup>h</sup>	13 <sup>h</sup>	14 <sup>h</sup>	15 <sup>h</sup>	16 <sup>h</sup>	17 <sup>h</sup>	18 <sup>h</sup>	19 <sup>h</sup>	20 <sup>h</sup>	21 <sup>h</sup>	22 <sup>h</sup>	23 <sup>h</sup>	24 <sup>h</sup>	
September																										
9° + Tabular Quantities																										
1 *	46.9	47.6	47.6	47.4	46.8	46.2	45.7	45.6	45.3	45.2	46.2	49.1	52.1	54.2	54.7	54.1	52.7	51.2	50.3	50.0	49.7	49.3	48.7	48.6	48.6	48.6
2	48.6	48.3	48.1	48.7	48.1	46.3	46.2	47.3	46.0	46.6	47.8	51.7	54.2	55.4	56.7	56.7	54.7	52.2	48.3	49.7	49.1	49.1	48.7	48.9	48.9	48.9
3	49.6	48.9	50.4	49.7	48.4	47.6	46.3	44.7	44.1	45.0	47.3	51.8	56.7	59.8	59.7	59.1	57.8	52.8	50.3	50.3	49.9	47.1	47.2	49.5	49.5	49.5
4	49.3	48.7	47.7	47.8	48.3	48.1	48.7	47.3	45.3	45.8	47.1	51.7	54.5	56.3	57.1	56.8	54.2	49.1	49.7	48.5	47.2	47.8	49.4	49.2	49.2	49.2
5	45.2	47.6	48.6	48.3	47.8	47.2	45.7	45.7	47.2	48.0	50.5	54.2	56.2	57.8	57.7	56.7	54.3	51.2	51.3	51.0	50.9	50.7	48.3	47.2	47.2	47.2
6 *	45.9	45.1	47.0	50.7	52.0	48.7	46.2	44.1	43.8	44.8	47.0	52.7	56.2	56.6	55.7	54.3	52.7	51.7	50.8	50.7	50.6	50.2	50.0	49.7	49.7	49.7
7	49.6	49.2	49.2	48.7	48.3	48.1	48.1	47.4	46.2	50.5	54.9	57.9	58.3	60.8	57.4	52.8	51.2	49.6	49.4	47.7	48.4	51.8	49.8	49.4	49.4	49.4
8	48.7	48.8	47.7	46.9	47.2	46.3	44.8	45.2	45.7	48.3	51.0	54.7	56.5	55.2	54.2	52.3	51.1	50.5	49.1	46.7	48.1	48.0	48.0	44.7	44.7	44.7
9	48.2	47.9	47.8	46.4	46.6	46.1	46.0	44.8	45.2	46.8	50.1	52.9	54.7	55.0	56.8	56.0	55.6	52.8	47.7	48.4	49.8	49.5	48.3	48.5	48.5	48.5
10	48.3	47.4	48.1	47.7	46.7	45.7	45.1	44.1	45.7	51.0	50.8	53.1	56.3	56.7	56.5	53.3	52.8	52.1	51.3	49.9	49.8	49.7	51.5	46.9	46.9	46.9
11	45.6	46.2	47.1	47.7	46.7	47.1	46.7	45.7	45.4	47.1	49.3	51.7	54.7	56.2	55.7	56.0	54.5	53.0	51.1	48.1	49.9	49.7	49.1	47.8	47.8	47.8
12	48.7	48.2	47.7	48.2	48.2	47.2	45.7	46.7	47.8	47.5	49.2	53.7	56.5	57.4	55.0	54.2	53.2	52.0	51.0	49.8	49.1	47.1	43.7	47.8	47.8	47.8
13	48.7	48.7	48.0	48.2	48.0	50.2	46.2	45.1	44.8	45.7	48.1	51.7	55.5	57.3	57.7	55.2	53.4	51.9	51.0	49.7	49.1	49.1	48.6	46.6	46.6	46.6
14	43.3	46.1	47.6	48.4	47.7	47.8	46.4	44.7	43.3	43.8	46.7	51.7	54.3	56.7	56.6	54.7	52.7	51.1	50.6	49.7	49.1	49.1	46.9	46.6	46.6	46.6
15 *	47.6	48.2	47.7	47.8	47.2	46.5	45.4	43.9	43.7	44.8	48.8	53.4	57.6	58.7	58.2	56.3	52.9	51.1	50.7	50.1	50.2	50.1	49.7	49.0	49.0	49.0
16	48.6	47.3	47.7	47.7	47.7	48.1	47.7	46.4	45.2	45.8	48.7	51.8	55.6	57.2	57.2	55.7	55.8	54.8	49.4	40.2	44.3	49.2	48.4	43.8	43.8	43.8
17	40.5	40.3	45.1	46.5	47.6	50.6	45.7	43.2	43.2	45.3	48.3	52.0	53.6	54.8	54.7	53.6	50.2	50.6	49.6	47.5	45.6	45.7	46.3	50.1	50.1	50.1
18 **	51.4	42.2	45.1	44.8	39.7	53.1	55.2	48.2	51.6	55.2	52.2	52.6	56.9	54.8	57.3	58.8	59.3	51.5	54.1	44.3	44.1	46.4	44.7	47.6	47.6	47.6
19 **	45.3	43.6	40.8	50.9	43.7	41.7	42.9	41.0	41.6	43.8	49.3	54.9	61.0	60.7	61.1	53.1	51.1	49.7	49.5	49.5	47.7	48.1	48.0	47.3	47.3	47.3
20	45.6	45.8	46.3	46.4	46.3	45.7	46.2	48.1	46.1	45.4	45.8	48.7	50.9	52.1	51.8	52.3	52.1	51.2	50.4	49.7	48.7	47.8	47.2	47.0	47.0	47.0
21	49.7	46.1	46.3	46.1	46.2	46.1	45.7	44.8	44.1	45.4	48.7	52.3	56.8	57.6	56.6	54.2	52.3	47.5	47.6	52.1	51.6	51.2	49.6	45.5	45.5	45.5
22 **	45.3	44.7	43.9	40.3	51.6	69.3	47.8	34.3	37.1	47.6	52.7	46.2	56.2	62.7	77.7	69.2	58.7	52.2	50.6	35.7	46.1	47.2	41.2	47.1	47.1	47.1
23 **	53.4	54.8	55.4	59.3	59.8	58.3	61.2	48.2	46.8	50.8	51.3	55.3	56.7	55.2	55.7	56.4	47.2	46.1	42.4	44.7	46.9	43.2	40.9	40.7	40.7	40.7
24	38.7	41.5	41.7	46.6	44.6	44.2	43.7	41.8	41.2	42.5	45.8	49.8	51.3	53.8	54.2	52.2	49.8	48.9	48.9	48.0	48.4	48.2	48.7	48.7	48.7	48.7
25 *	48.4	48.4	48.2	47.7	47.9	47.4	46.5	44.8	44.6	45.7	48.8	52.3	54.4	54.9	53.8	52.5	51.3	49.6	48.5	47.9	47.4	48.4	48.3	47.4	47.4	47.4
26 *	48.1	48.4	48.1	47.8	47.7	47.6	46.7	45.9	44.9	45.7	48.7	52.4	54.7	56.5	56.2	54.5	53.4	51.7	49.9	49.0	48.6	45.9	47.3	47.7	47.7	47.7
27	47.3	47.7	48.6	47.3	46.9	46.9	47.1	49.1	49.4	49.8	49.8	51.4	54.6	55.1	54.8	53.4	51.5	41.8	40.2	36.8	42.8	40.8	36.7	43.9	43.9	43.9
28 **	46.3	47.5	48.8	46.8	45.4	48.3	52.9	60.4	51.8	48.2	53.4	54.5	55.8	55.7	55.2	53.9	48.8	47.5	43.8	46.5	44.8	43.4	40.3	38.2	38.2	38.2
29	42.2	47.4	37.8	42.5	43.7	43.3	42.8	41.8	42.3	44.7	47.5	52.1	54.6	55.4	55.8	56.2	51.8	44.8	46.8	42.3	44.6	46.2	46.3	41.0	41.0	41.0
30	41.7	41.3	48.3	49.8	51.7	55.4	55.0	52.2	48.2	47.4	49.0	52.7	54.3	54.9	54.3	50.4	47.4	48.3	46.3	38.7	43.6	44.3	47.3	48.2	48.2	48.2
Mean	46.9	46.8	47.1	47.8	47.6	48.5	47.3	45.8	45.3	46.8	49.2	52.4	55.4	56.5	56.9	55.2	52.8	50.3	49.0	47.1	47.9	47.8	47.0	46.8	46.8	46.8
Mean *	47.4	47.5	47.7	48.3	48.3	47.3	46.1	44.9	44.5	45.2	47.9	52.0	55.0	56.2	55.7	54.3	52.6	51.1	50.0	49.5	49.3	48.8	48.8	48.5	48.5	48.5
Mean **	48.3	46.6	47.0	48.4	48.0	54.1	52.0	46.4	45.8	49.1	51.8	52.7	57.3	57.8	61.4	58.3	53.0	49.4	48.1	44.1	45.9	45.7	43.0	44.2	44.2	44.2
October																										
9° + Tabular Quantities																										
1	46.9	46.3	48.0	48.2	48.8	50.6	48.4	48.1	46.9	45.0	46.8	51.4	53.1	54.9	55.4	52.4	51.3	50.4	47.3	42.3	46.4	48.8	47.3	46.7	46.7	46.7
2	48.3	48.5	47.8	48.6	47.7	47.5	46.2	44.7	44.4	45.2	48.2	51.9	55.4	55.7	54.4	52.7	51.4	49.1	48.2	48.9	49.7	49.7	49.3	48.7	48.7	48.7
3	47.8	48.2	46.4	46.9	47.8	51.8	50.4	45.9	44.4	45.3	47.7	52.2	56.2	56.7	56.3	53.8	50.9	51.4	50.3	49.2	49.3	49.4	48.6	48.5	48.5	48.5
4	48.8	48.3	48.7	47.8	45.8	47.3	47.7	45.6	46.4	47.3	49.6	53.5	55.5	55.3	54.8	52.2	48.8	49.1	50.2	49.7	48.7	48.4	48.4	48.3	48.3	48.3
5	48.7	48.2	48.0	50.1	48.8	47.0	46.3	45.4	45.3	46.7	50.2	52.2	54.7	57.4	58.0	56.7	53.1	52.2	45.9	48.6	49.7	49.7	49.7	48.9	48.9	48.9
6	48.5	48.1	49.1	50.6	48.5	47.5	46.7	45.6	45.7	47.8	50.1	52.6	54.6	55.2	53.5	51.7	49.7	48.3	47.8	45.7	41.2	45.2	45.9	43.1	43.1	43.1
7	45.2	46.8	46.9	49.0	48.8	48.5	48.0	47.0	46.5	46.9	48.8	52.7	52.8	55.7	55.3	54.1	54.0	53.1	50.7	49.7	49.1	48.1	48.3	48.4	48.4	48.4
8 *	48.2	48.1	48.3	48.1	48.0	47.3	47.4	46.0	44.3	44.7	46.8	49.7	52.5	53.7	53.7	52.8	51.3	51.7	51.4	50.7	50.7	49.3	49.1	49.2	49.2	49.2
9 **	48.3	46.8	44.7	41.6	44.6	43.8	43.8	48.9	45.7	45.9	46.7	50.3	53.0	54.6	52.1	51.2	50.5	50.1	49.7	48.3	46.8	45.7	47.9	46.9	46.9	46.9
10	46.3	47.1	45.8	47.9	48.0	47.8	47.0	45.6	44.4	44.8	48.2	51.8	56.2	55.8	55.6	53.6	51.2	50.5	50.3	49.3	44.8	42.9	45.9	47.5	47.5	47.5
11	47.9	49.4	47.4	47.0	47.5	47.2	46.9	46.2	45.8	47.2	49.7	52.9	54.3	55.7	54.8	53.5	51.3	50.7	49.8	46.9	46.0	47.3	48.6	48.8	48.8	48.8
12	48.5	47.8	50.3	45.8	46.2	46.8	48.7	43.7	43.3	43.8	47.4	51.4	52.9	53.2	52.3	50.8	49.8	49.8	49.8	49.3	48.8	48.8	48.1	47.9	47.9	47.9
13 *	50.7	48.4	48.5	48.3	47.8	47.9	47.0	45.8	44.2	45.4	47.9	51.7	53.8	54.8	54.2	52.3	50.7	50.4	49.9	49.7	49.5	48.8	48.7	47.8	47.8	47.8
14	47.2	46.8	47.1	47.8	48.3	47.8	46.3	44.5	43.8	43.7	48.2	53.2	56.8	57.7	56.0	52.8	50.7	50.4	51.1	50.5	48.8	49.3	48.9	47.9	47.9	47.9
15	48.7	48.3	48.2	4																						

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## MAGNETIC OBSERVATIONS, ABINGER 1946.

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TABLE I. - HOURLY MEANS OF MAGNETIC DECLINATION

U.T.	0 <sup>h</sup>	1 <sup>h</sup>	2 <sup>h</sup>	3 <sup>h</sup>	4 <sup>h</sup>	5 <sup>h</sup>	6 <sup>h</sup>	7 <sup>h</sup>	8 <sup>h</sup>	9 <sup>h</sup>	10 <sup>h</sup>	11 <sup>h</sup>	12 <sup>h</sup>	13 <sup>h</sup>	14 <sup>h</sup>	15 <sup>h</sup>	16 <sup>h</sup>	17 <sup>h</sup>	18 <sup>h</sup>	19 <sup>h</sup>	20 <sup>h</sup>	21 <sup>h</sup>	22 <sup>h</sup>	23 <sup>h</sup>	24 <sup>h</sup>		
November																											
$9^{\circ} +$ Tabular Quantities																											
1 **	44.3	44.8	46.6	46.3	49.7	48.4	49.3	48.3	47.6	49.5	52.6	53.2	54.2	53.4	54.1	52.3	53.2	49.1	45.7	46.7	44.2	41.8	42.0	46.1	46.1	46.6	
2	47.4	47.5	47.7	47.7	48.1	47.5	51.0	50.8	46.6	46.5	49.0	51.9	53.1	52.7	51.5	50.7	49.7	49.0	48.3	44.2	43.8	45.1	46.3	48.6	48.6	48.6	
3	49.4	48.4	47.1	47.4	47.6	47.6	47.6	47.0	45.3	45.3	47.0	48.5	49.7	50.1	49.6	49.5	49.6	49.6	48.8	48.7	48.4	47.7	46.1	47.2	47.2	47.2	
4	48.6	47.1	47.7	48.0	48.1	47.9	47.6	46.7	45.2	45.2	47.6	50.7	53.4	53.7	52.6	51.8	51.1	49.8	49.6	48.6	48.6	48.1	47.1	47.2	47.2	47.2	
5	47.6	47.3	47.1	47.4	46.7	46.6	47.1	46.7	45.6	45.8	49.4	51.2	52.6	53.2	52.6	51.7	51.1	51.1	50.6	50.6	49.1	48.8	48.0	47.7	47.7	47.7	
6 **	46.7	45.5	46.6	47.1	45.8	46.2	46.1	47.7	48.1	48.2	48.6	51.2	51.0	55.0	56.1	54.5	54.2	52.3	50.0	49.0	47.4	46.6	46.0	43.1	43.1	43.1	
7	44.2	46.0	45.4	46.3	47.6	46.3	46.4	45.9	44.2	44.1	45.4	48.1	50.3	51.2	51.6	51.1	50.7	50.3	50.1	49.1	48.2	47.9	47.5	47.6	47.6	47.6	
8	47.8	47.7	47.9	48.1	47.9	47.6	47.6	47.6	47.2	46.0	45.1	46.9	50.7	52.6	51.7	51.3	50.5	50.0	50.0	48.6	48.6	48.0	47.2	44.2	44.2	44.2	
9	42.0	43.6	45.9	46.6	47.4	46.6	46.6	45.9	45.9	46.6	46.5	49.1	53.0	54.1	54.9	53.2	52.2	50.6	49.7	49.2	49.1	48.7	47.8	45.9	44.2	44.2	
10	47.2	48.0	47.2	46.7	47.0	47.5	47.0	46.6	46.6	46.1	48.4	51.0	52.2	52.5	52.0	51.6	51.1	51.1	51.1	44.3	40.3	40.2	44.1	47.4	47.4	47.4	
11	46.7	46.5	47.7	43.8	45.8	46.6	46.2	46.2	45.6	45.7	48.6	49.7	50.7	52.2	52.1	51.2	51.2	50.6	50.5	49.2	48.2	43.2	45.4	46.2	46.2	46.2	
12	46.7	47.4	44.2	42.8	46.5	45.5	45.2	45.7	44.7	44.4	45.6	48.0	50.6	51.9	51.5	50.6	49.7	50.1	47.5	44.7	47.1	47.6	46.7	47.3	47.3	47.3	
13	47.2	47.1	47.6	47.7	48.2	47.3	47.4	46.8	46.2	46.2	46.5	48.7	51.1	52.2	51.4	51.2	50.6	50.7	50.2	48.8	48.6	46.5	45.6	48.0	48.0	48.0	
14 *	47.2	47.2	47.3	47.7	47.8	47.5	47.2	46.8	46.5	46.4	47.6	50.7	52.2	52.1	52.1	51.4	50.6	50.5	50.0	49.6	49.1	47.7	47.5	47.4	47.4	47.4	
15	47.6	47.7	47.6	47.6	47.7	47.2	47.1	46.7	46.4	47.2	47.7	50.7	51.5	53.4	53.0	54.1	53.6	56.2	53.7	54.0	50.5	47.1	46.5	43.2	43.2	43.2	
16	38.1	41.1	44.1	44.9	46.3	46.1	46.6	46.5	47.1	46.7	48.4	50.0	52.2	52.5	51.7	51.2	50.4	50.2	49.6	45.8	47.1	41.7	45.6	47.2	47.2	47.2	
17	46.7	47.2	46.7	49.2	47.7	46.8	46.4	46.1	45.5	46.0	47.4	49.7	51.1	51.8	51.6	50.7	49.6	49.3	48.7	48.6	49.1	44.7	43.6	45.6	45.6	45.6	
18	45.1	45.7	47.2	47.2	47.6	47.3	46.7	46.6	46.6	46.1	46.7	49.3	50.7	51.2	51.3	50.7	50.0	49.7	49.2	48.6	48.2	47.8	47.6	45.1	45.1	45.1	
19	39.7	42.1	44.5	46.1	45.3	45.4	46.6	48.0	46.4	47.7	47.2	47.9	49.7	52.0	52.3	50.8	48.7	48.8	49.4	50.4	46.5	43.7	37.6	42.1	42.1	42.1	
20	42.1	45.4	46.1	44.6	47.5	47.5	46.2	46.6	46.2	46.6	48.3	50.4	51.1	52.6	52.2	51.1	50.9	49.7	50.1	49.2	48.2	48.2	47.4	47.5	47.5	47.5	
21 **	46.2	47.0	46.0	45.9	46.1	46.2	46.5	46.9	46.8	46.8	50.2	54.0	55.6	56.0	49.6	50.6	49.3	48.6	45.5	46.6	47.5	45.9	38.4	39.1	39.1	39.1	
22	44.1	47.1	48.0	50.0	48.4	48.6	48.6	48.0	48.2	48.1	48.6	50.2	50.2	51.1	49.6	50.1	44.6	46.1	48.5	47.7	46.2	46.6	46.4	46.6	46.6	46.6	
23	46.8	50.4	48.0	47.8	47.6	47.4	48.3	47.5	46.6	46.7	48.6	50.5	52.2	52.4	52.1	51.1	50.1	49.2	48.6	48.1	47.6	47.5	47.2	47.2	47.2	47.2	
24 **	46.2	46.5	47.5	48.5	49.3	48.5	49.6	52.7	49.9	48.1	49.0	51.9	55.2	53.5	53.2	51.2	49.0	48.8	47.6	47.2	46.6	46.4	46.0	46.0	46.0	46.0	
25 **	46.4	46.4	46.4	47.4	46.9	46.3	47.0	47.1	46.6	48.2	48.5	50.8	51.6	51.8	51.5	44.2	49.0	48.9	48.5	44.2	45.5	46.0	44.0	43.5	43.5	43.5	
26	45.0	45.8	47.2	50.3	46.9	47.1	47.0	46.2	45.2	45.6	47.3	49.5	52.4	51.6	50.5	50.3	46.4	49.3	49.0	48.2	47.6	47.1	46.8	47.0	47.0	47.0	
27 *	46.9	47.2	47.2	47.6	47.6	47.4	47.2	47.1	46.7	46.1	47.6	49.7	51.6	51.6	50.8	50.6	49.7	49.6	49.3	48.6	48.1	47.6	46.9	47.2	47.2	47.2	
28 *	47.0	47.6	47.6	48.2	47.8	47.7	47.6	47.7	47.7	46.9	47.8	49.1	51.2	51.1	51.4	51.1	49.6	49.3	49.1	48.4	47.9	47.3	47.4	47.6	47.6	47.6	
29 *	47.3	47.6	48.0	48.1	48.0	47.7	47.6	47.1	46.2	45.7	47.2	49.1	51.2	51.2	50.6	49.6	49.2	49.1	48.8	48.6	48.1	47.7	47.2	46.5	46.5	46.5	
30 *	45.5	46.2	47.2	47.4	47.4	47.3	47.6	47.2	47.0	46.5	47.2	48.5	50.6	50.5	50.2	50.3	49.3	49.0	48.9	48.4	48.1	45.2	44.6	44.6	44.6	44.6	
Mean	45.8	46.5	46.8	47.1	47.4	47.1	47.3	47.2	46.4	46.5	48.0	50.2	51.8	52.4	51.8	51.0	50.1	49.9	49.2	48.1	47.4	46.3	45.6	45.9	45.9	45.9	
Mean *	46.8	47.2	47.5	47.8	47.8	47.5	47.4	47.2	46.8	46.3	47.5	49.4	51.4	51.3	51.0	50.6	49.7	49.5	49.2	48.7	48.3	47.1	46.7	46.7	46.7	46.7	
Mean **	46.0	46.0	46.6	47.0	47.6	47.1	47.7	48.5	47.8	48.2	49.8	52.2	53.5	53.9	52.9	50.6	50.9	49.5	47.5	46.7	46.2	45.3	43.3	43.6	43.6	43.6	
December																											
$9^{\circ} +$ Tabular Quantities																											
1	45.6	45.5	45.7	46.2	46.6	46.9	46.7	46.7	46.2	46.1	47.2	48.2	49.6	50.5	50.7	49.7	48.7	48.6	48.6	46.8	46.8	46.2	45.7	42.2	42.2	42.2	42.2
2	43.7	46.4	47.2	47.7	48.2	48.2	48.5	47.6	47.2	46.0	47.1	48.7	50.5	51.7	51.6	52.0	50.2	49.1	49.6	46.7	47.5	46.2	44.0	39.4	39.4	39.4	
3	40.1	41.7	46.1	45.2	48.0	48.6	47.3	47.1	46.1	45.9	47.6	49.3	49.6	50.7	49.7	48.6	48.1	48.2	48.0	47.5	46.7	46.5	46.7	46.9	46.9	46.9	
4	46.7	47.2	47.2	47.2	47.0	46.1	46.6	47.3	46.7	46.1	47.5	49.1	50.6	50.1	49.2	49.2	48.6	48.3	48.2	48.1	47.7	47.1	47.2	47.3	47.3	47.3	
5 **	47.5	47.1	46.7	47.1	47.3	46.6	46.1	46.1	46.2	46.2	47.2	49.8	51.6	51.6	51.6	52.8	51.1	52.2	48.6	48.1	47.7	46.1	44.5	45.9	45.9	45.9	
6	47.4	46.1	45.9	45.5	44.5	45.0	45.5	46.0	45.4	45.1	46.9	49.2	51.0	50.7	49.7	50.2	48.6	47.9	49.5	48.2	46.9	46.5	44.2	45.1	45.1	45.1	
7	46.2	47.2	45.1	44.0	45.7	45.0	47.0	46.5	44.6	45.1	46.9	49.2	49.4	50.3	50.0	49.8	49.5	48.7	48.0	48.1	47.5	46.5	46.2	45.8	45.8	45.8	
8	45.2	45.5	46.9	48.2	49.2	46.8	46.7	46.4	45.7	46.1	46.7	47.9	49.4	50.3	50.0	49.8	49.5	48.7	48.0	48.1	47.5	46.5	46.2	45.8	45.8	45.8	
9 *	44.8	45.6	46.1	46.6	47.4	47.1	46.6	46.0	45.7	45.2	46.6	48.5	49.9	50.1	49.6	50.0	49.7	50.0	48.8	48.2	46.4	47.0	46.3	46.0	46.0	46.0	
10 **	44.6	44.7	46.5	47.3	47.9	47.3	47.2	47.0	47.1	46.1	47.0	49.8	50.2	51.5	50.9	47.3	50.3	50.3	48.6	48.1	46.7	43.6	40.2	44.0	44.0	44.0	
11 **	46.2	46.9	47.7	48.1	48.0	47.1	47.4	47.0	47.0	46.1	46.5	48.9	49.6	50.4	50.7	51.4	51.1	48.0	48.6	40.6	43.2	42.2	43.0	44.6	44.6	44.6	
12 **	44.1	45.5	44.9	46.6	47.7	47.3	47.3	47.2	46.7	45.9	47.7	49.7	52.6	52.7	52.0	48.9	47.1	48.7	48.3	45.7	47.2	46.2	44.7	42.2	42.2	42.2	
13	43.8	46.3	46.3	46.7	47.1	46.8	47.6	47.1	46.9	46.2	47.2	49.5	51.1	52.2	52.0	49.8	50.2	49.7	48.1	47.7	46.8	46.7	46.6	46.5	46.5	46.5	
14 *	46.2	46.2	46.4	46.6	46.8	46.7	47.1	46.3	46.2	46.3	47.6	49.2	50.7	51.2	50.7	50.0	49.3	48.7	48.2	48.0	47.7	47.5	47.0	46.6	46.6	46.6	
15 *	46.3	46.3	46.6	46.7	46.9	47.0	46.8	46.5	45.9	45.7	46.6	49.7	52.2	52.8	51.3	50.3	49.4	48.8	48.6</								

## MAGNETIC OBSERVATIONS, ABINGER 1946.

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

U.T.	0 <sup>h</sup>	1 <sup>h</sup>	2 <sup>h</sup>	3 <sup>h</sup>	4 <sup>h</sup>	5 <sup>h</sup>	6 <sup>h</sup>	7 <sup>h</sup>	8 <sup>h</sup>	9 <sup>h</sup>	10 <sup>h</sup>	11 <sup>h</sup>	12 <sup>h</sup>	13 <sup>h</sup>	14 <sup>h</sup>	15 <sup>h</sup>	16 <sup>h</sup>	17 <sup>h</sup>	18 <sup>h</sup>	19 <sup>h</sup>	20 <sup>h</sup>	21 <sup>h</sup>	22 <sup>h</sup>	23 <sup>h</sup>	24 <sup>h</sup>	
January																										
18000 $\gamma$ + Tabular Quantities (in $\gamma$ )																										
1	579	574	575	576	573	574	581	586	581	571	563	565	570	567	560	555	552	567	545	552	565	570	571	578	578	578
2	585	565	563	568	571	576	579	577	578	575	573	568	567	563	559	567	555	557	560	569	576	576	577	577	578	578
3 **	578	577	578	580	580	582	585	585	604	618	605	513	492	554	545	461	453	457	426	439	464	502	511	504	504	504
4 **	503	510	515	548	567	566	555	571	545	539	549	546	536	521	528	530	547	529	549	545	525	530	575	540	540	540
5	548	548	552	554	560	565	556	562	561	556	555	558	559	566	564	565	566	567	564	556	557	555	552	561	561	561
6	572	562	565	566	569	570	571	571	580	575	569	569	566	565	565	567	553	561	562	559	570	575	570	570	569	569
7	570	571	571	570	574	579	579	580	581	576	569	569	565	565	566	564	561	569	582	566	568	571	566	566	565	565
8	566	565	568	572	577	579	578	575	574	567	565	565	565	569	572	574	576	576	577	579	577	577	576	576	575	575
9 *	574	574	575	576	579	584	585	585	585	576	571	574	576	581	581	581	581	581	578	572	569	571	572	572	574	574
10	573	572	574	576	579	585	594	595	592	589	583	585	589	589	590	584	573	574	579	582	585	586	583	581	581	581
11 **	585	585	588	594	591	565	606	591	588	590	572	572	568	565	565	555	564	564	565	569	567	569	577	571	571	571
12	567	572	575	575	575	577	579	581	581	572	554	551	565	568	566	569	566	567	554	566	562	574	575	574	574	574
13 *	571	570	573	575	578	577	577	576	576	572	568	562	564	572	581	580	578	578	579	574	578	581	581	580	580	580
14 *	582	582	583	585	586	589	586	586	586	584	577	571	571	572	569	572	575	578	579	581	582	581	581	581	581	581
15	582	582	585	586	589	591	592	590	592	591	586	578	575	574	576	588	592	594	594	594	594	581	571	564	560	560
16	556	565	567	570	569	577	591	592	589	587	585	580	577	573	566	566	567	569	575	576	576	577	581	580	580	580
17	580	577	578	581	585	591	600	591	578	576	576	573	578	578	576	574	573	566	573	576	574	582	575	565	565	565
18	572	572	573	572	572	572	579	582	577	568	562	556	560	566	558	566	570	572	563	592	550	550	566	545	545	545
19	550	582	560	568	564	566	572	575	580	580	574	578	580	580	578	580	577	576	575	574	578	566	567	570	570	570
20 *	566	569	567	575	573	577	578	578	574	568	562	562	575	584	586	583	580	582	581	580	580	576	577	575	575	575
21 *	576	577	579	578	580	580	582	580	576	572	568	567	574	581	585	586	586	587	588	586	580	576	570	561	561	561
22	566	566	578	572	579	583	596	581	578	589	582	570	563	572	579	577	577	581	582	578	579	576	575	574	574	574
23	578	573	573	585	583	588	594	591	586	568	555	550	560	562	561	570	569	573	576	580	575	560	586	563	563	563
24 **	571	575	581	580	579	583	590	584	582	574	553	556	552	511	552	530	551	574	556	545	552	562	596	586	586	586
25	570	564	566	570	572	578	582	577	572	565	557	555	548	552	548	565	550	564	562	576	573	576	579	577	577	577
26 **	577	576	582	587	580	579	581	588	576	555	569	562	562	566	569	571	572	541	549	559	571	576	575	573	573	573
27	570	569	573	576	572	575	576	578	578	573	574	575	573	577	583	581	581	579	579	577	574	572	575	575	575	575
28	577	577	577	578	580	582	582	581	578	570	569	572	573	573	576	580	584	587	587	586	580	574	581	581	582	582
29	581	582	584	587	591	586	594	589	584	575	565	563	569	574	561	570	578	581	580	579	579	581	581	584	584	584
30	584	582	581	582	586	588	594	596	595	588	579	574	577	578	580	585	588	589	588	589	589	586	589	596	596	596
31	585	581	580	581	583	585	585	589	587	590	582	582	582	581	584	578	567	569	574	574	575	576	594	584	584	584
Mean	571	571	572	576	577	579	583	583	580	576	570	565	566	568	569	567	567	568	567	569	568	570	574	570	570	570
Mean *	574	574	575	578	579	581	582	581	579	574	569	567	572	578	580	580	580	581	581	579	578	577	576	574	574	574
Mean **	563	565	569	578	579	575	583	584	579	575	570	550	542	543	552	529	537	533	529	531	536	550	567	555	555	555
February																										
18000 $\gamma$ + Tabular Quantities (in $\gamma$ )																										
1 *	583	581	580	581	582	588	586	586	585	584	583	583	584	585	586	585	579	579	581	581	584	582	581	580	580	580
2	581	585	580	588	581	582	585	591	593	585	567	562	565	569	576	583	584	580	581	575	575	578	577	574	574	574
3	573	575	579	580	581	584	584	584	581	569	564	562	565	579	605	596	595	581	589	591	582	569	551	560	560	560
4	563	567	564	563	568	576	580	581	578	566	553	555	564	565	559	563	550	558	569	570	572	569	567	564	564	564
5	567	564	562	570	569	558	557	565	564	564	558	558	556	567	565	563	568	568	575	580	574	571	574	574	574	574
6	588	566	564	566	568	570	568	568	571	570	570	570	564	553	564	570	569	574	578	584	578	580	580	580	584	584
7 **	578	570	570	570	571	574	574	570	574	536	463	500	539	554	498	504	533	522	494	501	514	496	537	522	522	522
8 **	315	364	443	427	447	460	466	456	478	487	461	496	500	484	489	495	534	524	543	535	536	540	547	543	543	543
9	538	539	535	537	538	540	544	543	528	519	542	549	550	543	544	538	544	544	553	565	572	560	550	551	551	551
10	548	550	545	544	539	524	525	513	533	528	524	538	538	539	558	560	559	560	563	562	560	554	554	556	556	556
11 *	558	558	550	549	547	552	554	557	551	545	544	545	545	534	542	551	554	557	557	563	561	564	563	563	563	563
12	564	562	563	564	560	561	565	564	562	554	547	544	548	549	547	545	542	546	546	551	555	548	554	557	557	557
13	555	556	554	550	548	561	564	554	538	528	551	550	565	565	562	560	560	562	563	563	566	567	567	568	568	568
14 **	567	568	568	5																						

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MAGNETIC OBSERVATIONS, ABINGER 1946.

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

U.T.	0 <sup>h</sup>	1 <sup>h</sup>	2 <sup>h</sup>	3 <sup>h</sup>	4 <sup>h</sup>	5 <sup>h</sup>	6 <sup>h</sup>	7 <sup>h</sup>	8 <sup>h</sup>	9 <sup>h</sup>	10 <sup>h</sup>	11 <sup>h</sup>	12 <sup>h</sup>	13 <sup>h</sup>	14 <sup>h</sup>	15 <sup>h</sup>	16 <sup>h</sup>	17 <sup>h</sup>	18 <sup>h</sup>	19 <sup>h</sup>	20 <sup>h</sup>	21 <sup>h</sup>	22 <sup>h</sup>	23 <sup>h</sup>	24 <sup>h</sup>		
March																											
	18000 γ + Tabular Quantities (in γ)																										
1	581	591	599	580	585	574	575	564	549	561	562	555	549	551	554	555	559	565	568	571	570	571	568	568	568	568	
2	586	561	554	555	561	556	570	571	564	557	567	560	560	556	559	564	560	561	564	566	567	568	568	568	568	568	
3 *	570	571	572	570	569	570	572	574	570	561	556	558	561	564	565	570	571	570	576	575	572	578	576	575	575	575	
4	572	579	569	574	578	581	580	570	555	549	538	526	545	560	567	553	551	559	576	567	561	535	582	540	540	540	
5	560	551	551	559	558	562	561	560	553	535	526	502	516	529	541	548	542	559	566	570	560	560	571	579	579	579	
6	565	561	567	571	566	560	552	552	551	540	531	514	531	551	568	574	568	563	575	566	563	572	590	568	568	568	
7	566	570	575	571	567	571	573	564	559	544	530	534	530	547	559	565	566	565	569	563	565	580	571	573	573	573	
8	574	570	569	570	575	574	575	572	568	560	554	554	556	560	568	571	574	570	575	577	573	577	570	569	569	569	
9	571	570	572	571	573	577	580	583	580	574	564	556	559	566	582	578	566	543	561	565	562	569	565	565	565	565	
10 **	564	569	588	586	581	570	575	581	575	567	555	555	558	575	583	555	569	568	579	587	564	536	520	530	530	530	
11	555	526	539	537	533	538	529	530	533	524	511	527	533	545	555	566	554	566	570	589	570	566	574	570	570	570	
12 *	555	557	559	563	561	562	564	564	560	556	555	557	561	566	567	566	564	565	569	570	570	572	574	574	574	574	
13 *	571	570	569	572	570	574	570	570	564	557	549	534	556	560	566	567	570	569	562	573	574	575	577	577	577	577	
14 *	575	575	571	570	570	570	574	575	569	565	556	563	561	565	559	567	570	572	570	571	577	580	582	582	582	582	
15	585	578	576	576	576	578	579	579	578	554	545	544	547	557	559	550	563	566	573	579	583	593	580	580	583	583	
16 *	580	577	577	577	577	578	579	579	575	570	568	569	569	571	570	575	576	575	581	584	583	585	589	586	586	586	
17	592	594	584	599	593	595	593	594	585	575	564	561	535	555	561	566	564	563	569	578	564	575	574	575	575	575	
18	584	579	585	586	584	587	588	586	584	574	577	580	579	574	572	571	571	573	569	578	582	585	585	585	582	582	
19	578	577	576	575	579	582	584	584	579	580	570	569	566	573	573	576	580	583	590	593	599	597	594	599	599	599	
20	599	590	586	588	590	592	592	591	584	577	572	567	557	565	569	568	573	578	579	581	591	586	586	587	587	587	
21	585	585	583	600	601	599	595	589	579	570	564	548	537	555	565	578	578	577	583	584	585	585	584	583	583	583	
22 **	582	580	581	584	585	593	602	599	563	559	540	545	522	543	534	564	570	583	578	571	582	590	588	608	608		
23	574	577	578	579	580	584	588	581	576	565	563	565	573	578	577	581	579	585	614	588	578	588	584	573	573		
24 **	571	432	489	401	500	499	509	521	505	493	463	478	476	482	509	562	533	485	508	512	520	528	548	553	553		
25 **	547	552	604	523	555	555	500	487	437	409	393	402	414	493	580	674	561	560	473	463	417	488	427	482	482		
26	453	427	470	488	486	499	459	489	487	465	473	499	497	498	513	514	527	537	543	550	562	529	530	537	537		
27	531	533	552	546	530	543	545	538	529	523	512	503	508	519	524	540	546	550	558	564	562	559	563	551	551		
† 28 **	550	543	529	548	557	523	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
29	452	449	453	453	463	467	466	463	457	465	466	464	474	474	477	500	514	514	522	527	530	539	542	536	536		
30	538	530	529	533	536	540	544	546	543	535	532	533	536	539	543	545	543	549	550	557	559	557	559	553	553		
31	556	553	551	553	553	554	550	548	541	519	506	508	508	516	533	547	549	553	556	562	565	572	553	547	547		
Mean	562	554	561	557	561	563	561	559	552	543	535	535	536	546	555	564	560	561	564	566	564	567	566	566	566	566	
Mean *	570	570	570	570	569	571	572	572	568	562	557	560	562	565	565	569	570	570	572	575	575	578	580	578	578	578	
Mean **	566	533	566	524	555	554	547	537	520	507	488	495	493	523	552	589	558	549	535	533	521	536	521	543	543	543	
April																											
	18000 γ + Tabular Quantities (in γ)																										
1	531	545	559	548	548	555	553	538	538	531	525	515	523	534	544	546	554	560	563	576	558	556	548	549	549		
2	550	558	554	554	559	549	562	555	547	526	509	525	519	542	540	554	553	557	562	566	565	555	549	553	553		
3	552	552	553	555	558	559	558	550	542	530	527	524	533	552	562	565	563	574	558	558	559	563	563	557	557		
4	558	559	563	564	561	564	563	559	552	537	530	532	537	548	561	560	562	566	573	573	574	576	566	558	558		
5	562	564	565	564	563	565	562	559	548	537	525	525	529	541	547	559	565	561	553	553	567	568	567	566	566		
6	563	570	567	563	562	565	565	564	558	536	524	516	525	542	547	566	567	572	570	569	574	565	558	563	563		
7	562	566	572	580	577	575	584	577	567	555	544	528	531	542	546	544	546	562	572	572	573	578	577	576	576		
8	573	573	575	576	576	582	568	567	566	545	538	537	536	528	539	556	565	570	570	583	586	586	588	596	596		
9 **	586	579	582	590	588	586	582	576	576	552	525	512	518	525	542	539	518	536	544	554	566	566	570	578	578		
10	562	565	555	556	557	562	557	552	542	533	526	512	529	531	542	553	558	563	564	566	567	570	577	573	573		
11 *	571	567	566	565	567	571	572	567	558	550	540	545	542	546	558	567	576	572	572	575	573	575	580	582	582		
12	580	582	575	572	573	576	576	572	566	557	556	543	556	566	565	567	568	577	582	596	598	626	599	592	592		
13	588	605	602	569	572	586	578	580	572	551	545	551	550	557	554	564	572	572	570	614	586	569	587	576	576		
14 **	582	576	566	567	568	567	567	568	567	562	550	535	525	567	546	561	552	557	566	560	570	590	588	568	568		
15 **	572	568	569	575	572	558	545	501	496	492	485	498	502	498	486	523	527	536	552	565	548	553	555	556	556		
16	554	553	554	552	555	556	552	548	540	530	525	521	526	540	551	560	562	566	569	569	576	586	562	556	556		
17	564	562	562	563	566	569	568	562	557	550	545	540	537	536	561	572	576	573	572	572	572	574	575	574	574		
18	571	571	571	573	576	576	573	566	554	527	515	527	531	547	555	563	571	576	584	577	578	581	578	579	579		
19 *	579	578	578	577	576	577	574	571	566	558	551	545	546	551	560	569	576	586	572	581	580	581	581	578	578		
20 *	570	572	573	576	580	581	579	575	569	558	545	536	538	548	562	574	568	574	582	585	584	583					

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

U.T.	0 <sup>h</sup>	1 <sup>h</sup>	2 <sup>h</sup>	3 <sup>h</sup>	4 <sup>h</sup>	5 <sup>h</sup>	6 <sup>h</sup>	7 <sup>h</sup>	8 <sup>h</sup>	9 <sup>h</sup>	10 <sup>h</sup>	11 <sup>h</sup>	12 <sup>h</sup>	13 <sup>h</sup>	14 <sup>h</sup>	15 <sup>h</sup>	16 <sup>h</sup>	17 <sup>h</sup>	18 <sup>h</sup>	19 <sup>h</sup>	20 <sup>h</sup>	21 <sup>h</sup>	22 <sup>h</sup>	23 <sup>h</sup>	24 <sup>h</sup>	
18000 $\gamma$ + Tabular Quantities (in $\gamma$ )																										
May																										
1	574	575	574	575	568	565	552	556	547	538	537	545	554	557	567	575	586	594	591	582	574	570	572	572	572	572
2	574	585	569	566	567	568	565	557	552	540	536	541	545	559	564	574	582	593	593	587	583	579	575	575	583	583
3	580	567	570	578	581	571	561	551	538	536	539	544	555	568	573	581	589	588	594	596	582	577	575	575	575	575
4	597	589	574	579	582	582	579	571	558	542	552	565	560	562	572	573	565	573	589	584	572	573	568	571	571	571
5	571	572	573	576	575	580	582	575	567	556	548	545	553	560	570	578	589	592	602	603	615	601	581	585	585	585
6 **	589	585	590	610	620	617	578	621	604	591	573	563	559	555	564	574	598	608	604	591	591	590	641	615	615	615
7	609	622	629	621	624	586	585	574	559	550	548	544	510	515	530	558	566	571	578	572	570	576	575	575	580	580
8	570	572	566	582	593	570	571	593	586	565	554	533	510	529	550	564	568	573	570	574	584	585	591	597	597	597
9 **	563	577	588	573	579	573	573	535	546	539	522	513	521	536	534	570	593	593	615	574	554	547	566	556	556	556
10	551	552	545	553	554	552	567	575	561	547	537	528	542	549	565	580	577	591	596	596	596	596	603	598	598	598
11 **	585	580	573	590	599	580	578	529	486	573	555	559	559	528	548	547	556	600	576	583	579	573	572	574	574	574
12	571	570	570	570	576	573	578	572	563	548	543	553	551	546	558	566	570	580	578	584	576	579	578	578	578	578
13	579	580	580	572	575	576	569	557	550	557	559	563	566	567	568	573	580	579	587	585	583	581	584	584	584	584
14 *	581	588	584	575	576	576	571	570	567	563	568	574	584	586	590	585	589	586	585	587	591	585	586	585	585	585
15 *	589	589	586	584	583	581	574	570	561	555	552	561	577	574	578	583	590	590	596	597	592	592	593	591	591	591
16	593	587	589	586	587	590	592	591	583	576	566	570	580	566	583	594	596	596	597	580	585	589	589	589	589	589
17	597	600	595	594	604	599	596	590	580	570	565	567	566	563	580	588	600	591	583	596	587	587	587	587	587	587
18	586	589	584	599	598	587	576	563	534	540	548	560	549	555	563	576	573	590	590	591	587	585	584	588	588	588
19 *	587	583	584	584	585	582	576	569	558	556	556	562	563	570	580	583	591	587	594	595	595	593	593	593	593	593
20	589	590	589	589	590	591	591	581	571	559	556	556	560	567	579	593	604	611	621	628	623	598	586	573	589	573
21	567	572	558	568	572	565	556	549	539	524	535	540	547	530	533	572	591	604	600	613	603	573	573	577	577	577
22 **	572	568	569	562	590	579	525	507	543	536	520	531	500	499	537	555	590	588	588	596	582	564	584	582	582	582
23 **	573	575	589	559	563	559	555	548	537	534	542	543	525	556	559	581	595	629	656	588	580	587	593	561	561	561
24	563	574	565	556	551	545	548	546	548	547	539	537	545	550	565	599	598	600	591	593	580	575	575	596	596	596
25	588	565	566	567	570	555	543	543	535	536	539	539	542	542	563	585	587	598	604	589	579	585	598	583	583	583
26	574	574	591	589	576	568	558	555	552	550	552	565	562	568	577	583	588	585	581	587	589	591	582	577	577	577
27 *	577	578	579	581	582	572	563	552	552	555	564	561	559	565	581	588	592	602	600	602	598	602	588	588	588	588
28	586	582	583	579	579	588	582	574	566	562	557	556	558	552	567	581	583	597	592	598	598	586	582	582	582	582
29	587	585	575	576	577	566	565	553	548	548	558	563	562	559	564	568	589	596	605	595	597	588	586	584	584	584
30 *	578	592	582	583	584	581	575	565	553	545	553	567	573	581	588	601	598	596	593	601	595	586	577	578	578	578
31	571	571	575	592	594	579	585	558	553	558	557	551	549	551	549	557	567	585	601	607	597	590	586	584	584	584
Mean	580	580	579	580	582	576	570	563	555	551	549	551	551	554	564	577	585	592	595	592	588	583	585	583	583	583
Mean *	582	586	583	581	582	578	572	565	558	555	559	565	571	575	583	588	592	592	594	596	594	592	587	586	586	586
Mean **	576	577	582	579	590	582	562	548	543	555	542	542	533	535	548	565	586	604	608	586	577	572	591	578	578	578
18000 $\gamma$ + Tabular Quantities (in $\gamma$ )																										
June																										
1	592	591	585	582	582	581	581	579	570	557	552	546	546	557	572	583	594	592	597	600	596	593	592	591	591	591
2 *	591	593	587	588	591	595	595	587	573	562	557	556	556	560	568	580	592	604	607	604	598	595	591	590	590	590
3 *	590	594	594	592	594	592	589	579	570	564	561	564	568	571	581	586	588	596	600	598	598	596	594	594	594	594
4	593	595	593	594	595	590	587	584	578	568	564	560	565	555	551	577	598	596	606	604	598	594	594	592	592	592
5	591	588	589	591	594	592	588	581	574	567	562	557	561	573	586	594	601	601	599	603	641	634	615	614	614	614
6	594	605	592	594	596	595	589	571	556	543	542	539	562	533	545	569	581	590	600	600	599	597	597	597	597	597
7 **	605	601	595	594	596	595	597	600	594	580	572	572	535	571	559	578	594	577	568	577	573	571	567	562	562	562
8 **	557	571	566	577	569	558	552	545	539	547	552	546	555	560	578	533	581	582	610	610	617	613	632	597	597	597
9	580	584	582	586	573	564	560	555	560	545	550	552	556	560	550	580	581	590	578	579	584	586	590	583	583	583
10	573	575	579	578	577	573	566	562	555	550	550	553	557	551	567	573	604	574	613	605	599	590	588	584	584	584
11	587	590	595	591	592	591	582	561	560	561	562	571	548	563	564	576	586	585	600	607	607	605	603	604	604	604
12 **	605	602	603	605	606	606	604	595	576	576	562	555	550	554	598	611	597	600	593	578	573	581	615	571	571	571
13	589	589	597	602	607	581	571	580	567	554	525	538	555	551	577	582	590	591	591	597	593	588	590	589	589	589
14	590	590	591	587	587	580	572	561	551	557	564	569	572	571	579	602	610	611	617	603	585	585	583	581	581	581
15	583	585	586	590	592	591	581	560	567	558	556	562	562	566	573	571	590	597	596	597	606	592	592	593	593	593
16	593	594	590	592	595	593	587	575	576	580	562	563	556	576	569	597	611	626	615	630	628	602	587	596	596	596
17	550	540	572	601	592	577	587	565	546	537	531	531	525	541	567	579	591	588	600	598	594	597	596	582	582	582
18	579	597	588	578	585	580	575	564	547	53																

1946 0721 X X 1 x 1010

MAGNETIC OBSERVATIONS, ABINGER 1946.

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 *	581	579	581	585	587	582	574	565	557	548	543	548	556	561	586	594	591	592	595	597	598	594	594	590	590	588
2	587	591	595	599	606	605	584	559	559	547	547	543	542	562	583	588	588	588	596	602	598	595	591	588	588	588
3	585	593	597	601	598	605	603	568	566	551	547	571	574	566	581	580	601	599	605	600	601	597	598	594	594	594
4 *	590	587	585	585	585	586	581	575	564	548	547	545	543	561	580	601	605	597	597	596	594	594	591	587	587	587
5 *	585	582	584	583	585	586	582	575	563	554	553	563	569	582	580	587	586	584	593	595	595	593	592	590	590	590
6	589	590	595	596	595	595	595	592	586	580	577	577	572	576	571	589	599	599	600	604	606	596	592	591	591	591
7 **	587	592	594	614	635	584	612	595	599	584	567	550	552	568	570	581	580	633	620	589	571	548	542	537	537	537
8	524	531	547	551	547	544	543	541	534	523	526	546	564	558	572	601	600	581	585	592	589	597	600	600	600	600
9	601	600	597	608	601	591	584	575	570	570	550	550	552	556	567	589	577	576	589	574	582	581	580	582	582	582
10	580	580	579	578	574	572	568	567	566	566	560	576	582	584	595	594	603	583	584	584	584	586	594	586	594	586
11	580	584	584	594	594	583	574	561	555	548	554	564	575	573	570	577	584	599	614	583	590	590	586	583	583	583
12	578	580	580	580	581	572	567	563	553	554	560	560	560	560	565	580	583	584	584	590	590	593	590	590	590	590
13 *	589	590	589	587	590	586	581	576	571	570	566	567	575	589	606	610	600	593	594	593	594	596	600	598	598	598
14	598	600	600	602	602	603	596	590	579	579	579	582	581	588	561	565	606	604	600	599	596	600	595	590	590	590
15	580	581	586	592	584	596	592	583	571	564	561	565	574	583	590	589	585	588	594	587	587	586	585	583	583	583
16	583	583	585	589	590	585	576	565	567	572	550	565	562	571	575	584	588	604	613	611	598	595	600	585	585	585
17	592	600	589	582	585	581	583	574	557	550	550	555	563	564	584	605	608	606	596	600	600	593	603	593	593	593
18 **	583	584	589	593	592	588	578	574	573	585	580	563	576	586	647	654	661	624	627	595	584	582	606	575	575	575
19	582	575	581	590	605	578	557	556	529	514	502	500	519	546	566	572	575	577	584	588	586	586	581	593	593	593
20 *	575	572	572	572	576	575	569	560	551	545	544	546	548	555	560	577	580	585	598	600	594	593	588	582	582	582
21	580	580	583	590	586	581	575	576	570	555	544	545	552	557	580	600	609	591	590	596	603	605	596	597	597	597
22	584	583	586	584	580	596	587	572	562	561	554	553	560	562	576	604	617	604	594	604	605	593	603	623	623	623
23	599	595	594	594	589	585	577	567	566	570	578	582	555	586	580	590	585	576	594	601	605	605	598	590	590	590
24	584	581	578	583	582	576	576	568	564	569	565	565	561	554	565	574	578	586	590	595	602	599	600	596	596	596
25	594	587	590	590	593	586	586	586	577	574	573	577	585	584	590	595	590	623	603	630	624	605	595	591	591	591
26 **	584	586	577	584	585	564	586	587	580	550	540	539	565	583	575	615	609	600	675	920	772	682	715	690	690	690
27 **	535	509	379	319	403	348	270	389	430	466	474	493	505	515	515	518	525	536	537	526	526	523	533	525	525	525
28	519	519	519	522	522	524	519	513	509	509	502	496	490	524	542	555	555	569	556	573	565	583	569	567	567	567
29 **	563	565	554	552	557	545	529	527	528	520	519	539	555	564	565	572	614	669	587	571	569	570	578	583	583	583
30	575	562	555	530	549	540	548	536	516	517	532	546	555	578	565	574	615	602	568	569	569	570	565	565	565	565
31	571	572	561	563	565	566	563	559	552	538	534	543	542	543	550	563	578	567	572	574	582	580	582	579	579	579
Mean	579	578	574	574	578	571	565	561	556	551	548	552	557	566	575	586	593	594	595	601	595	591	592	588	588	588
Mean *	584	582	582	582	585	583	577	570	561	553	551	554	558	570	582	594	592	590	595	596	595	594	593	589	589	589
Mean **	570	567	539	532	554	526	515	534	542	541	536	537	551	563	574	588	598	612	609	640	604	581	595	582	582	582
August	18000 γ + Tabular Quantities (in γ)																									
1	571	570	559	560	568	570	566	556	549	535	529	525	532	544	564	572	579	584	585	581	582	579	575	575	575	575
2	573	573	574	576	578	578	575	573	566	554	547	543	544	560	566	580	585	587	589	587	586	584	583	583	583	583
3	579	579	581	582	582	571	564	556	544	539	547	556	560	567	583	588	598	593	590	585	580	583	583	583	583	583
4	583	585	585	585	587	587	581	572	566	565	566	568	570	569	569	583	590	593	597	593	594	592	592	586	586	586
5	587	585	585	585	585	586	580	565	563	559	559	573	572	570	581	585	585	594	602	608	598	595	599	598	598	598
6	596	592	589	589	589	588	586	583	573	565	563	573	588	582	576	580	575	578	595	595	599	599	599	599	599	599
7 **	589	595	594	609	599	593	592	583	563	559	548	555	584	565	588	590	606	604	575	572	582	589	585	583	583	583
8	579	574	573	574	576	569	563	559	555	553	552	552	559	563	568	574	584	586	593	599	595	587	583	589	589	589
9	586	589	585	585	584	580	574	568	567	573	579	582	585	579	578	575	584	585	593	591	593	595	595	590	590	590
10	589	585	585	585	586	583	579	569	563	559	556	563	575	584	589	582	589	593	595	595	595	593	592	585	585	585
11 **	579	589	575	585	585	605	594	582	566	563	549	542	558	583	575	567	602	593	594	596	593	613	592	580	580	580
12	582	586	569	574	574	574	562	559	544	543	544	551	559	571	576	579	592	585	589	592	593	592	602	574	574	574
13	569	572	574	581	582	577	570	564	560	552	546	549	550	556	565	576	580	584	584	598	593	593	592	588	588	588
14 **	588	588	590	600	595	587	581	534	523	505	498	504	494	546												

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

U.T.	0 <sup>h</sup>	1 <sup>h</sup>	2 <sup>h</sup>	3 <sup>h</sup>	4 <sup>h</sup>	5 <sup>h</sup>	6 <sup>h</sup>	7 <sup>h</sup>	8 <sup>h</sup>	9 <sup>h</sup>	10 <sup>h</sup>	11 <sup>h</sup>	12 <sup>h</sup>	13 <sup>h</sup>	14 <sup>h</sup>	15 <sup>h</sup>	16 <sup>h</sup>	17 <sup>h</sup>	18 <sup>h</sup>	19 <sup>h</sup>	20 <sup>h</sup>	21 <sup>h</sup>	22 <sup>h</sup>	23 <sup>h</sup>	24 <sup>h</sup>	
September																										
18000 $\gamma$ + Tabular Quantities (in $\gamma$ )																										
1 *	564	563	563	565	567	566	567	566	562	551	541	545	551	550	550	556	566	581	588	584	583	582	583	587	587	587
2	586	583	583	578	576	579	570	576	582	572	560	554	552	551	558	570	577	581	586	591	581	582	582	582	587	587
3	587	582	584	584	583	586	589	588	581	564	547	541	557	571	576	589	587	571	571	583	587	587	587	592	589	589
4	597	596	596	597	600	600	584	595	568	544	521	529	543	540	563	566	573	577	584	577	574	579	585	602	589	602
5	587	577	577	579	582	580	577	563	548	543	544	543	543	566	566	573	582	587	578	581	586	592	597	597	595	595
6 *	597	581	582	581	591	599	590	585	577	558	549	552	563	573	581	582	583	585	587	591	593	592	592	592	591	591
7	590	593	593	596	591	593	593	589	569	543	556	558	553	557	545	551	571	572	582	574	583	593	591	588	588	588
8	583	583	577	577	577	575	581	563	557	557	557	570	555	560	567	570	576	580	582	575	573	576	593	587	587	587
9	585	585	587	583	581	582	572	564	560	557	555	566	573	580	583	575	582	573	569	580	577	581	584	577	577	577
10	580	581	582	582	582	580	573	569	543	530	557	565	577	567	563	568	577	578	581	582	583	591	611	589	589	589
11	573	572	573	580	583	590	583	577	561	552	546	546	564	568	578	592	580	590	581	587	592	585	581	587	587	
12	587	582	582	583	587	586	576	561	554	562	556	552	546	555	562	574	588	586	586	587	591	583	582	582	579	
13	581	583	582	586	587	585	588	581	567	553	547	542	547	561	574	578	587	589	593	592	592	591	597	608	608	
14	597	577	579	583	586	587	586	578	567	557	553	551	551	563	572	578	583	588	593	593	592	591	595	597	597	
15 *	583	583	585	585	586	587	585	579	565	560	553	554	561	572	583	592	583	593	595	593	595	593	593	593	593	593
16	591	588	588	590	590	591	589	581	570	554	548	554	562	576	592	601	627	603	563	560	527	550	562	587	587	
17	551	527	549	555	561	568	567	561	558	546	543	544	547	543	547	552	567	586	577	583	601	558	557	571	571	
18 **	594	614	563	477	487	531	467	457	427	459	477	480	439	443	498	534	514	535	551	527	514	537	547	547	547	
19 **	543	537	573	537	527	521	526	533	527	517	503	491	498	532	526	509	527	545	550	553	542	548	546	546	546	
20	563	543	546	547	551	554	551	554	554	542	533	527	519	522	528	540	550	560	561	554	562	563	561	561	561	
21	575	562	555	556	557	560	562	560	550	542	538	536	550	552	546	550	556	600	596	580	577	590	577	566	566	
22 **	562	572	560	555	555	499	340	410	432	438	429	431	453	590	452	472	542	511	496	516	509	521	548	570	570	
23 **	560	611	528	477	531	477	423	381	399	407	430	445	481	487	483	552	617	553	522	510	540	522	516	509	509	
24	546	538	528	530	537	536	536	516	516	508	502	509	522	532	546	542	542	547	553	556	555	557	556	557	557	
25 *	556	560	558	559	560	559	556	549	538	530	533	536	543	545	546	548	557	562	561	565	564	566	566	570	570	
26 *	569	567	565	566	569	569	567	557	549	539	531	528	540	550	548	551	558	564	566	570	572	571	574	573	573	
27	571	575	582	580	572	568	562	530	511	530	533	534	526	520	533	545	550	585	563	504	512	523	531	545	545	
28 **	548	551	569	582	595	595	551	549	538	515	483	480	495	522	509	575	563	525	494	474	475	482	475	470	470	
29	475	527	495	515	528	529	529	522	516	509	501	501	499	508	522	521	522	533	537	545	554	549	561	558	558	
30	540	542	542	560	573	558	577	561	543	518	498	497	510	525	537	526	550	551	552	559	556	548	559	561	561	
Mean	571	571	568	564	568	566	554	549	540	532	527	529	534	546	548	558	568	570	567	564	565	566	570	572	572	572
Mean *	574	571	571	571	575	576	573	567	558	548	541	543	552	558	562	566	569	577	579	581	581	581	582	583	583	583
Mean **	561	577	559	526	539	525	461	466	465	467	464	465	473	515	494	528	553	534	523	516	516	522	526	529	529	
October																										
18000 $\gamma$ + Tabular Quantities (in $\gamma$ )																										
1	566	560	555	565	571	570	577	557	525	524	525	509	511	519	522	535	551	557	549	561	559	565	571	565	565	
2	562	561	564	569	566	568	566	555	531	520	510	511	519	525	525	545	556	549	561	569	575	574	575	574	574	
3	574	579	576	580	579	569	589	577	560	544	539	541	546	545	542	540	550	561	571	571	571	571	575	575	575	
4	571	572	572	587	582	586	582	572	558	537	541	549	547	555	559	559	545	555	575	580	571	570	571	575	575	
5	576	577	575	585	585	580	580	585	569	560	555	545	552	563	548	535	551	560	545	576	578	580	584	578	578	
6	575	572	579	579	585	581	575	574	555	535	549	555	554	556	559	558	557	559	561	554	562	585	570	564	564	
7	567	569	571	569	578	584	581	577	568	557	550	538	530	539	541	535	540	555	572	573	584	588	588	584	584	
8 *	581	576	579	578	580	577	581	582	576	568	556	553	557	561	569	580	583	591	600	599	602	598	601	599	599	
9 **	595	592	591	574	581	588	577	580	571	563	541	549	542	543	553	568	571	572	564	554	565	569	583	592	592	
10	566	568	571	568	571	572	576	576	562	555	546	548	553	556	562	565	569	577	581	586	568	572	571	574	574	
11	581	583	580	576	572	574	576	576	573	566	563	566	570	578	579	564	568	574	577	578	579	582	581	585	585	
12	582	581	581	591	592	583	588	571	556	541	539	540	548	554	562	570	574	576	576	579	580	582	580	589	589	
13 *	595	578	580	582	584	584	582	573	560	546	536	540	546	557	567	575	580	584	587	589	590	590	590	580	580	
14	580	590	585	585	582	587	587	572	552	546	540	536	546	556	563	567	580	589	593	590	586	582	580	581	581	
15	585	584	586	586	587	587	586	580	565	545	539	543	557	566	574	582	586	592	591	595	586	588	586	586	586	
16	583	580	581	582	586	587	582	580	572	551	546	554	559	560	569	571	579	582	586	582	577	599	583	583		
17 *	582	582	581	581	586	584	587	587	577	566	555	552	556	562	570	577	582	588	592	596	600	596	595	596	596	
18 *	592	590	591	587	590	589	591	586	581	573	566	562	566	576	580	586	583	583	589	586	590	592	591	596	596	
19	586	582	580	584	586	586	586	584	576	566	565	566	568	572	570	573	581	583	577	572	577	595	589	579	579	
20 **	558	558	569	575	592	586	587	590	581	566	553	566	561	557	566	580	579	580	586	572	566	562	576	580	580	
21	580	580	584	578	580	579	583	582	571	560	551	550	552	557	566	572	576	584	591	586	586	595	596	596	596	
22	590	588	585	585	586	589	592	593	579	565	557															

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

Table with columns for U.T. (0h to 24h) and rows for November and December. Each row contains 24 columns of magnetic intensity data. Includes sub-headers for 18000 gamma + Tabular Quantities (in gamma) and summary rows for Mean, Mean \*, and Mean \*\*.

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

U.T.	0 <sup>h</sup>	1 <sup>h</sup>	2 <sup>h</sup>	3 <sup>h</sup>	4 <sup>h</sup>	5 <sup>h</sup>	6 <sup>h</sup>	7 <sup>h</sup>	8 <sup>h</sup>	9 <sup>h</sup>	10 <sup>h</sup>	11 <sup>h</sup>	12 <sup>h</sup>	13 <sup>h</sup>	14 <sup>h</sup>	15 <sup>h</sup>	16 <sup>h</sup>	17 <sup>h</sup>	18 <sup>h</sup>	19 <sup>h</sup>	20 <sup>h</sup>	21 <sup>h</sup>	22 <sup>h</sup>	23 <sup>h</sup>	24 <sup>h</sup>	
January																										
43000 $\gamma$ + Tabular Quantities (in $\gamma$ )																										
1	216	215	216	216	216	218	216	216	211	210	209	214	217	218	225	226	228	229	232	234	232	228	226	225		
2	218	214	216	217	218	220	219	218	217	215	212	214	216	216	222	223	226	232	230	228	224	221	220	220		
3 **	220	219	218	217	216	219	216	216	212	208	201	207	234	236	240	271	336	319	316	279	250	211	194	199		
4 **	186	186	187	183	190	196	200	206	207	216	225	228	230	232	239	244	256	250	250	249	236	239	222	218		
5	229	229	228	224	225	229	227	226	227	222	221	224	225	228	229	230	230	230	229	229	230	229	227	224		
6	219	221	225	226	226	225	224	222	219	215	215	216	221	226	230	229	231	237	234	233	231	226	224	221		
7	221	224	225	225	226	227	224	224	221	219	219	221	220	220	226	229	232	232	234	230	229	226	224	222		
8	221	223	224	224	224	224	223	224	220	216	219	219	220	224	226	226	228	227	229	228	226	224	223	222		
9 *	221	220	220	221	220	224	223	224	220	217	217	215	212	216	222	224	226	225	226	226	227	227	226	224		
10	223	221	220	220	219	220	219	220	220	219	220	218	214	214	216	219	222	223	225	225	224	221	220	219		
11 **	216	215	212	209	206	209	206	210	212	215	216	217	218	220	221	224	228	229	230	228	229	230	224	220		
12	222	220	218	219	217	220	220	221	219	220	222	224	225	226	223	223	224	225	226	230	229	226	224	222		
13 *	222	220	220	220	219	220	219	219	220	221	225	225	226	226	223	220	222	222	223	221	223	220	220	218		
14 *	219	220	220	219	217	215	216	217	216	218	220	219	220	220	221	223	224	223	222	222	221	220	220	219		
15	217	215	215	214	214	214	215	216	214	215	216	219	220	222	223	221	220	219	217	219	219	222	226	227		
16	228	225	222	220	219	220	220	219	216	215	216	220	220	220	220	220	223	222	222	222	222	221	221	220		
17	220	218	217	215	214	215	215	215	214	217	220	220	220	220	221	221	224	226	227	227	224	223	222	222		
18	222	221	221	221	220	221	220	219	219	218	217	219	215	220	229	231	229	228	230	224	220	224	225	221		
19	224	215	214	216	216	220	220	220	216	213	211	212	212	212	216	219	220	222	223	224	226	226	226	226		
20 *	226	224	223	222	221	220	219	220	219	218	220	219	218	220	221	220	221	221	222	220	219	219	219	215		
21 *	216	219	221	220	221	221	220	221	220	217	216	215	211	214	220	218	219	220	220	221	223	225	227	227		
22	225	223	221	219	219	217	216	214	216	214	213	214	213	213	220	220	222	223	223	223	222	220	220	219		
23	219	215	215	212	214	218	217	220	220	220	222	222	220	222	226	225	227	227	226	224	225	226	219	213		
24 **	216	213	202	201	206	214	216	218	217	217	216	219	220	230	238	235	241	234	231	238	239	230	221	212		
25	214	216	217	218	219	221	222	224	222	220	222	223	220	223	231	237	235	233	234	231	227	225	224	222		
26 **	221	219	218	212	212	217	216	218	219	220	221	223	220	221	224	225	227	232	235	235	233	226	225	223		
27	223	222	220	217	218	219	219	219	221	215	211	208	209	212	216	219	220	221	223	223	223	223	223	220		
28	219	221	220	220	220	222	219	222	220	217	214	213	214	215	220	221	221	220	220	220	221	224	225	220		
29	219	218	217	216	215	216	215	218	216	216	216	216	214	215	221	224	223	223	223	223	223	222	222	219		
30	217	217	216	216	216	217	214	216	215	212	205	204	208	210	219	219	219	219	219	219	219	219	217	217		
31	213	213	215	215	213	215	214	215	215	211	209	208	209	211	217	220	224	225	225	224	225	224	223	220		
Mean	219	218	218	217	217	218	218	219	217	216	216	217	218	220	224	226	230	230	230	228	226	224	222	220		
Mean *	221	221	221	220	220	220	219	220	219	218	220	219	217	217	221	221	222	222	223	222	223	222	222	221		
Mean **	212	210	207	204	206	211	211	214	213	215	216	219	224	228	232	240	258	253	252	246	237	227	217	214		
February																										
43000 $\gamma$ + Tabular Quantities (in $\gamma$ )																										
1 *	218	218	217	218	216	220	215	215	214	211	206	209	210	211	218	218	218	219	220	220	220	220	220	219		
2	219	217	219	214	213	215	216	211	210	204	198	200	206	216	224	224	224	224	224	224	224	225	226	223		
3	223	221	222	221	220	219	218	216	218	216	216	213	212	216	216	218	220	221	225	225	227	231	236	227		
4	226	226	226	226	226	226	220	219	220	218	219	220	222	222	228	234	239	239	235	232	230	226	226	224		
5	221	217	216	215	213	216	217	220	215	215	216	220	222	226	229	233	236	236	236	234	234	230	228	228		
6	225	221	225	225	225	227	224	222	220	215	216	220	219	221	226	229	229	230	230	229	228	224	223	220		
7 **	219	219	220	221	223	226	223	220	215	207	210	230	234	236	255	289	314	334	339	324	291	243	241	146		
8 **	71	84	110	127	160	210	230	249	256	257	256	270	275	285	302	291	297	284	264	251	241	236	236	234		
9	236	236	237	239	238	241	239	236	235	237	242	239	239	241	247	251	248	244	244	242	240	235	235	234		
10	236	234	234	236	237	240	244	249	255	250	249	245	241	244	250	252	250	245	243	242	240	240	239	236		
11 *	235	232	231	230	233	237	236	237	236	234	232	233	234	236	242	244	241	240	240	239	238	236	235	234		
12	234	233	232	230	230	233	232	232	232	230	225	224	223	226	233	242	247	246	246	244	241	242	239	234		
13	234	231	232	230	233	235	229	230	236	240	247	255	256	253	251	246	241	239	239	236	234	234	235	235		
14 **	234	233	233	231	230	231	230	231	226	236	238	244	240	240	240	240	240	240	236	237	240	240	237	236		
15	237	234	230	228	210	211	215	220	218	214	210	210	219	220	224	227	230	230	231	231	230	230	230	230		
16	231	230	230	230	230	230	227	226	227	224	221	220	221	222	223	226	228	229	229	229	230	229	229	228		
17	229	224	226	226	226	226	224	225	226	224	219	214	216	220	226	232	234	230	231	230	229	228	227	226		
18	229	228	229	230	230	230	225	227	227	224	216	213	216	217	225	230	230	230	230	228	229	227	227	225		
19 **	225	225	225	225	224	225	222	219	221	220	220	220	221	223	230	235	233	235	243	257	277	270	236	229		
20	231	231	233	232	231	233	230	231	232	229	225	221	221	224	228	231	232	232	235	241	247	221	212	211		
21 **	207	201	203	200	194	190	190	201	211	213	219	226	230	240	260	285	285	275	270	256	248	241	239	237		
22	236	233	221	206	201	212	217	226	229	22																

1946033

MAGNETIC OBSERVATIONS, ABINGER 1946.

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

Table with columns for U.T. (0h to 24h) and rows for March and April 1946. It contains hourly magnetic intensity data in gamma (γ) and includes summary rows for Mean, Mean \*, and Mean \*\*. Includes handwritten annotations like '1946033' and '1946043'.

\* International Quiet Day. \*\* International Disturbed Day.

† March 28 has been omitted in computing the monthly mean values.

MAGNETIC OBSERVATIONS, ABINGER 1946.

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

U.T.	0 <sup>h</sup>	1 <sup>h</sup>	2 <sup>h</sup>	3 <sup>h</sup>	4 <sup>h</sup>	5 <sup>h</sup>	6 <sup>h</sup>	7 <sup>h</sup>	8 <sup>h</sup>	9 <sup>h</sup>	10 <sup>h</sup>	11 <sup>h</sup>	12 <sup>h</sup>	13 <sup>h</sup>	14 <sup>h</sup>	15 <sup>h</sup>	16 <sup>h</sup>	17 <sup>h</sup>	18 <sup>h</sup>	19 <sup>h</sup>	20 <sup>h</sup>	21 <sup>h</sup>	22 <sup>h</sup>	23 <sup>h</sup>	24 <sup>h</sup>	
43000 γ + Tabular Quantities (in γ)																										
May																										
1	240	241	240	241	241	239	238	236	232	221	213	211	216	227	235	242	250	257	262	261	256	248	244	243		
2	241	230	230	235	242	242	243	241	234	226	217	205	205	215	229	238	245	252	251	248	245	242	240	240		
3	234	237	240	239	237	236	237	238	231	217	207	201	205	215	224	234	241	245	249	249	245	242	239	241		
4	238	226	229	232	235	233	236	236	226	221	219	216	216	224	234	245	250	253	258	256	254	250	246	244		
5	242	240	240	240	239	238	241	236	232	223	213	206	208	214	222	228	232	236	240	239	237	238	239	238		
6 **	237	236	236	229	224	224	228	227	223	219	212	214	215	224	232	238	243	245	247	245	243	242	238	224		
7	228	230	231	225	221	218	190	185	197	205	207	210	210	223	232	239	241	245	247	247	245	245	243	242		
8	238	237	238	232	228	222	217	208	212	221	219	217	218	232	235	235	239	245	249	254	253	249	239	230		
9 **	221	225	208	210	199	206	216	221	232	231	225	219	224	247	265	293	308	307	298	275	263	252	234	237		
10	239	241	242	244	245	240	226	221	219	212	205	202	210	218	227	233	239	245	243	241	240	241	239	239		
11 **	237	237	228	224	222	222	218	216	214	223	217	211	212	220	235	245	258	273	263	253	246	246	245	243		
12	246	240	242	242	243	243	242	244	239	235	230	223	222	225	234	241	245	247	245	245	241	241	239	241		
13	239	232	228	227	234	237	238	235	235	230	227	223	222	227	232	235	237	241	242	242	241	241	240	239		
14 *	237	236	232	235	239	239	239	236	235	227	220	213	214	219	226	228	232	235	238	236	235	235	235	235		
15 *	235	234	234	234	238	236	235	232	230	222	214	210	211	216	227	233	237	239	240	238	236	236	234	234		
16	235	234	235	235	237	236	234	237	234	230	226	217	215	222	227	231	235	240	245	245	242	238	236	234		
17	234	231	226	227	225	223	230	230	229	224	214	210	208	215	228	240	251	261	257	248	241	239	238	237		
18	236	237	233	225	222	225	229	230	225	218	215	216	220	231	243	252	257	256	250	244	240	237	236	235		
19 *	234	235	236	238	239	237	235	233	226	218	211	206	205	218	233	241	246	246	240	239	240	236	235	235		
20	235	236	236	238	240	238	241	240	233	228	216	205	205	212	222	229	233	240	243	242	241	239	225	223		
21	223	215	218	224	236	234	232	228	225	222	217	212	215	227	238	262	267	267	272	268	257	246	248	243		
22 **	237	239	241	237	200	188	187	197	203	208	211	217	226	239	251	262	278	285	279	277	262	252	247	228		
23 **	226	207	206	213	231	239	245	243	232	230	228	224	222	231	237	251	265	283	286	266	261	254	237	228		
24	228	221	222	217	226	228	231	232	233	226	222	212	216	226	244	265	270	275	267	260	253	248	242	233		
25	218	223	222	221	226	227	232	232	232	226	217	212	215	219	226	238	253	263	261	252	246	241	234	228		
26	230	229	226	218	224	231	233	232	225	218	212	206	206	218	228	237	242	247	246	245	243	241	239	239		
27 *	239	238	238	238	242	241	242	238	232	226	228	218	216	224	228	233	238	245	248	247	243	241	238	238		
28	237	237	232	229	232	229	224	216	211	210	209	202	203	216	232	245	251	253	253	250	244	238	238	238		
29 *	236	232	232	234	239	238	231	221	216	208	206	206	209	219	231	238	242	246	246	249	248	241	240	241		
30 *	238	236	232	234	239	239	239	237	232	220	210	206	206	216	223	233	239	245	246	242	242	241	239	239		
31	233	232	230	223	222	214	213	217	211	201	199	207	211	220	227	238	242	251	255	252	246	243	240	238		
Mean	235	232	231	230	231	230	230	228	225	221	216	212	213	223	232	242	249	254	254	250	246	243	239	236		
Mean *	237	236	234	236	239	238	238	235	231	223	217	211	210	219	227	234	238	242	242	240	239	238	236	236		
Mean **	232	229	224	223	215	216	219	221	221	222	219	217	220	232	244	258	270	279	275	263	255	249	240	232		
43000 γ + Tabular Quantities (in γ)																										
June																										
1	237	233	235	237	238	239	240	238	234	228	223	221	219	222	229	235	242	244	247	249	242	237	234	235		
2 *	234	235	234	232	233	234	237	233	232	229	218	213	210	213	217	227	235	236	239	248	243	238	234	235		
3 *	235	236	237	237	239	240	240	238	240	229	219	212	214	223	232	233	238	243	244	241	236	234	233	233		
4	232	233	233	235	239	240	239	236	233	226	214	208	207	216	226	235	243	243	244	239	237	235	233	233		
5	233	233	233	236	241	239	236	237	233	227	220	213	213	218	223	231	238	243	245	243	239	236	233	232		
6	223	224	228	232	240	240	242	239	232	222	214	217	223	230	237	243	243	244	244	243	242	238	237	237		
7 **	237	227	230	233	238	237	236	234	233	228	223	208	212	233	259	277	301	317	306	284	273	257	249	244		
8 **	239	228	214	219	229	238	242	237	230	225	222	217	218	223	234	247	247	249	249	245	244	237	230			
9	234	236	234	224	215	221	226	229	226	225	221	223	230	243	251	263	267	266	259	254	249	245	240	238		
10	236	239	240	240	241	241	238	233	232	227	222	223	224	230	233	243	256	252	253	247	243	239	238	239		
11	240	240	239	239	239	237	234	233	231	224	222	219	218	228	233	238	243	244	247	245	241	237	233	235		
12 **	236	236	234	234	235	233	233	231	232	222	217	217	224	233	254	278	282	287	288	279	267	256	237	231		
13	233	228	219	215	213	213	220	227	229	227	228	223	217	217	225	234	247	252	253	250	247	242	239	240		
14	240	239	237	237	242	239	234	228	227	222	218	213	215	224	234	242	249	253	255	251	243	237	237	237		
15	238	239	238	239	240	240	238	233	227	217	212	211	219	225	235	238	243	244	247	246	245	237	238	238		
16	236	236	235	238	238	238	237	233	223	218	208	210	204	211	214	228	233	245	245	251	253	236	235	222		
17	202	212	198	202	211	206	202	215	216	215	213	209	208	216	222	228	232	237	245	246	243	239	237	234		
18	231	221	211	218	229	228	231	228	217	211	208	209	208	212	222	234	246	260	263	257	251	246	236	222		
19 **	213	198	195	192	206	212	212	208	206	206	209	203	212	228	244	263	265	258	258	256	247	239	232	233		
20	228	226	226	230	233	235	236	232	229	226	222	214	218	224	230	232	236	239	244	247	244	241	237	238		
21	232	227	222	223	231	225	227	223	222	222	216	211	209	213	221	227	231	235	245	247	247	241	235	233		
22	225	223	222	226	234	238	238	237	231	227	225	221	214	213	219	229	233	236	243	247	244	240	235	234		
23 *	235	234	233	235	237	235	232	230	229	226	215	208	210	214	218	223	227									

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

U.T.	0 <sup>h</sup>	1 <sup>h</sup>	2 <sup>h</sup>	3 <sup>h</sup>	4 <sup>h</sup>	5 <sup>h</sup>	6 <sup>h</sup>	7 <sup>h</sup>	8 <sup>h</sup>	9 <sup>h</sup>	10 <sup>h</sup>	11 <sup>h</sup>	12 <sup>h</sup>	13 <sup>h</sup>	14 <sup>h</sup>	15 <sup>h</sup>	16 <sup>h</sup>	17 <sup>h</sup>	18 <sup>h</sup>	19 <sup>h</sup>	20 <sup>h</sup>	21 <sup>h</sup>	22 <sup>h</sup>	23 <sup>h</sup>	24 <sup>h</sup>	
July	43000 γ + Tabular Quantities (in γ)																									
1 *	239	240	242	243	246	244	244	241	238	237	231	223	225	228	235	241	245	245	246	245	242	240	236	236		
2	236	236	236	236	236	231	233	230	229	226	225	222	219	221	230	236	238	241	246	244	241	237	235	235		
3	234	235	235	235	238	236	235	227	226	221	218	221	227	238	246	250	257	257	254	246	243	240	236	237		
4 *	235	235	236	237	241	241	238	234	230	224	219	216	221	227	230	237	238	238	238	241	240	237	233	235		
5 *	234	234	234	234	238	239	235	233	232	229	221	213	211	220	225	234	237	238	238	240	237	237	235	235		
6	233	233	232	231	232	231	230	229	224	220	216	220	216	220	223	230	238	242	237	236	238	237	236	235		
7 **	234	234	233	230	219	214	213	212	207	207	200	199	206	216	226	236	246	265	270	274	273	262	255	250		
8	240	239	239	235	238	234	232	229	226	224	224	223	229	236	240	248	242	242	242	244	242	242	240	240		
9	236	237	226	223	234	235	235	233	229	221	220	222	224	234	248	261	266	261	253	246	243	242	241	240		
10	239	237	235	233	236	239	240	238	234	230	222	214	214	221	234	244	249	254	256	251	245	242	241	235		
11	235	236	234	225	225	230	230	230	226	217	215	214	219	230	240	244	245	247	252	251	250	245	243	240		
12	237	236	235	235	235	234	229	225	224	224	223	220	221	227	234	245	244	244	241	240	240	239	236	236		
13 *	235	236	236	236	239	238	236	234	235	234	230	228	224	229	236	242	238	239	239	240	236	233	231	229		
14	232	233	232	233	235	236	235	240	237	233	218	215	215	227	240	254	266	275	264	250	244	239	236	236		
15	235	236	237	237	235	216	221	225	218	218	220	219	222	222	230	235	237	240	238	237	235	234	233	234		
16	233	233	234	236	240	238	235	231	225	214	207	211	211	217	221	234	245	246	246	245	241	236	230	228		
17	228	221	217	225	234	235	226	221	211	208	206	200	204	211	223	237	241	240	239	236	236	234	234	227		
18 **	228	231	231	230	236	236	232	226	219	215	208	205	206	208	226	247	267	275	286	281	268	251	237	227		
19	226	222	212	219	227	222	226	227	227	227	228	225	225	238	259	268	271	269	266	259	255	257	241	236		
20 *	228	232	235	239	246	248	245	237	229	228	221	216	214	217	222	230	236	242	243	242	240	239	236	234		
21	232	232	233	231	232	236	233	235	230	228	218	213	209	216	227	245	255	246	244	242	238	236	232	229		
22	226	229	232	234	236	228	225	218	214	212	212	208	211	222	233	245	252	256	256	251	247	241	237	226		
23	219	222	226	230	234	232	228	222	218	212	209	205	211	214	217	228	231	235	241	242	242	237	235	235		
24	234	233	233	237	239	239	242	238	229	228	227	219	216	222	235	239	240	239	238	241	241	238	236	236		
25	234	234	232	230	230	231	230	229	225	222	221	217	214	214	222	232	233	239	239	248	247	240	237	236		
26 **	232	223	223	222	219	219	217	218	213	206	216	213	215	223	232	243	247	251	257	269	262	256	280	233		
27 **	121	80	55	-92	48	37	5	85	217	267	276	279	267	264	273	279	283	282	278	272	267	260	262	260		
28	258	258	259	259	259	260	263	262	257	249	242	237	240	247	255	262	262	269	270	274	267	259	245	248		
29 **	241	246	246	246	243	230	227	235	237	234	228	226	234	242	252	252	262	286	272	268	258	249	246	241		
30	227	228	229	224	236	243	246	246	246	242	236	230	229	238	246	254	269	270	260	253	247	244	242	242		
31	242	236	236	241	245	243	246	246	244	237	231	222	218	229	238	249	254	253	254	250	248	245	241	239		
Mean	230	229	228	223	230	228	226	227	228	226	222	219	220	226	235	245	249	252	252	250	247	243	240	236		
Mean *	234	235	237	238	242	242	240	236	233	230	224	219	219	224	230	237	239	240	241	242	239	237	234	234		
Mean **	211	203	198	167	193	187	179	195	219	226	226	224	236	231	242	251	261	272	273	273	266	256	256	242		
August	43000 γ + Tabular Quantities (in γ)																									
1	237	236	236	239	247	249	250	253	254	248	242	237	237	239	246	253	259	262	258	250	247	243	241	242		
2	241	243	242	245	249	250	247	245	243	237	230	225	224	224	229	241	250	257	257	251	249	247	243	243		
3	241	241	240	240	243	244	245	247	239	231	228	222	222	226	235	242	247	246	245	243	241	240	239	240		
4	240	240	240	241	243	243	241	241	236	227	220	212	213	219	225	235	239	241	242	241	241	240	239	239		
5	240	240	241	242	245	243	245	245	243	239	234	226	224	224	222	235	240	243	244	243	241	243	241	240		
6	236	237	238	239	241	242	242	242	238	230	221	212	211	220	229	238	242	242	245	242	245	241	237	238		
7 *	237	239	236	228	229	227	231	233	234	233	232	220	219	232	251	280	290	301	297	286	268	254	249	247		
8	246	246	245	245	249	246	246	246	241	232	231	226	225	231	238	244	246	245	246	245	243	245	245	241		
9	241	241	240	240	242	241	240	238	237	230	225	216	216	224	230	235	242	249	250	247	244	240	240	240		
10	238	237	237	239	242	241	240	237	232	224	214	206	209	220	227	235	240	246	244	246	242	240	239	240		
11 **	236	231	227	233	234	231	226	232	236	234	226	224	229	239	242	248	259	270	270	260	252	242	229	230		
12	227	220	221	226	235	237	238	240	235	233	229	220	219	223	230	239	245	243	241	240	240	242	234	233		
13	232	235	236	239	241	240	239	239	237	232	226	218	217	221	225	234	241	242	240	241	236	235	233	236		
14 **	236	236	236	236	237	237	236	235	231	224	219	217	219	236	237	243	252	257	258	261	262	237	238	242		
15 **	239	228	219	223	228	236	242	242	243	236	232	229	229	234	241	244	257	266	271	261	254	251	245	237		
16	236	234	231	234	240	240	241	239	232	224	219	215	211	219	227	238	245	249	249	257	252	246	220	223		
17	228	235	238	239	240	237	228	219	210	212	206	200	210	220	239	255	256	257	255	255	248	244	232	234		
18	236	238	238	238	240	241	244	244	236	230	219	212	220	231	235	240	242	248	246	244	243	241	236	237		
19	233	231	234	236	240	240	241	237	229	225	225	219	219	221	227	235	240	241	244	245	242	241	239	237		
20	235	233	233	234	235	238	241	241	241	232	229	215	212	218	222	231	237	239	240	242	241	240	239	238		
21 *	235	235	235	235	238	239	241	240	239	234	224	218	219	227	233	237	241	241	239	236	235	237	238	236		
22 *	234	234	232	234	237	238	238	235	232	228																

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

U.T.	0 <sup>h</sup>	1 <sup>h</sup>	2 <sup>h</sup>	3 <sup>h</sup>	4 <sup>h</sup>	5 <sup>h</sup>	6 <sup>h</sup>	7 <sup>h</sup>	8 <sup>h</sup>	9 <sup>h</sup>	10 <sup>h</sup>	11 <sup>h</sup>	12 <sup>h</sup>	13 <sup>h</sup>	14 <sup>h</sup>	15 <sup>h</sup>	16 <sup>h</sup>	17 <sup>h</sup>	18 <sup>h</sup>	19 <sup>h</sup>	20 <sup>h</sup>	21 <sup>h</sup>	22 <sup>h</sup>	23 <sup>h</sup>	24 <sup>h</sup>	
September																										
43000 $\gamma$ + Tabular Quantities (in $\gamma$ )																										
1 *	242	242	243	245	245	245		243	242	237	234	230	222	219	225	231	240	245	249		246	242	240	239	238	238
2	237	235	232	232	236	236		237	233	230	225	221	220	220	220	224	234	240	245		248	246	245	245	241	239
3	231	229	229	229	233	235		238	234	231	228	223	216	212	219	226	240	249	256		252	250	245	242	233	233
4	233	233	233	235	237	239		241	240	236	232	234	235	233	240	248	252	257	262		259	256	253	252	246	236
5	227	230	233	236	240	241		243	241	236	231	225	224	229	235	236	242	252	257		255	252	247	245	242	235
6 *	230	227	230	230	226	225		231	232	233	230	220	213	217	225	226	228	232	236		233	235	236	236	236	236
7	235	235	233	234	235	235		236	232	225	227	221	222	227	236	242	241	245	242		242	245	248	241	232	238
8	236	233	235	236	238	240		242	243	242	237	229	225	223	235	239	242	243	243		245	250	247	245	239	235
9	234	235	237	237	239	236		238	239	234	228	224	221	222	229	238	243	253	259		262	256	245	242	240	240
10	240	239	239	239	239	237		235	230	221	220	224	224	225	225	234	236	239	239		239	240	237	238	236	215
11	226	231	235	236	237	235		234	234	228	224	221	218	221	224	229	238	238	242		244	244	240	239	237	240
12	235	234	235	235	236	234		233	231	227	223	218	213	217	228	232	237	237	237		237	238	236	237	235	236
13	235	235	235	235	237	234		235	234	228	223	220	217	217	224	231	233	234	234		235	235	234	234	232	230
14	224	225	229	233	234	233		234	234	228	223	222	218	215	216	223	231	233	234		234	234	233	234	234	228
15 *	228	229	230	233	232	234		233	234	224	218	209	201	199	206	215	229	230	234		234	235	232	231	229	229
16	230	231	232	232	232	230		233	232	227	219	208	200	197	209	214	225	240	258		288	279	248	252	249	231
17	214	199	184	214	224	224		229	234	230	229	228	224	228	234	242	246	254	255		253	254	238	240	240	237
18 **	193	174	109	105	129	149		169	202	215	224	236	249	264	289	325	359	354	341		329	281	284	285	269	261
19 **	239	216	187	171	181	215		231	238	245	244	241	237	241	291	295	305	284	271		262	261	260	262	260	257
20	249	248	249	251	253	250		249	246	242	240	238	235	237	239	241	245	248	251		258	261	258	255	255	251
21	245	241	244	245	247	245		249	250	250	245	235	225	220	229	236	245	248	256		258	255	254	253	254	260
22 **	260	245	239	237	228	129		99	174	205	225	225	225	265	305	375	335	362	370		332	318	285	270	251	239
23 **	223	203	150	174	158	165		164	175	225	238	254	269	292	321	346	387	424	349		308	295	287	268	251	244
24	245	244	244	245	248	255		261	269	271	265	255	249	249	250	251	255	258	259		259	258	255	256	255	256
25 *	255	255	255	255	256	255		255	255	253	249	245	239	235	241	247	249	252	255		258	258	255	255	251	251
26 *	250	249	250	251	252	251		252	249	247	244	240	234	232	241	245	252	252	255		255	255	251	250	249	250
27	250	250	246	243	246	248		250	248	243	244	247	243	245	254	262	280	297	312		290	289	285	276	266	259
28 **	256	256	250	229	223	230		233	232	234	242	243	252	275	309	316	376	368	383		332	310	310	252	255	257
29	233	215	235	249	252	260		268	272	271	269	262	262	268	281	292	299	316	323		302	289	273	269	265	257
30	249	246	246	240	240	239		240	247	250	253	253	256	258	261	270	280	290	282		278	276	266	265	262	260
Mean	236	232	228	229	230	229		231	235	236	234	232	230	233	245	254	263	269	270		264	260	254	250	246	243
Mean *	241	240	242	243	242	243		243	242	239	235	229	222	220	228	233	240	242	246		245	245	243	242	241	241
Mean **	234	219	187	183	184	178		179	204	225	235	240	246	267	303	331	352	358	343		313	293	285	267	257	252
October																										
43000 $\gamma$ + Tabular Quantities (in $\gamma$ )																										
1	253	250	252	256	256	256		259	260	259	262	260	256	257	262	269	272	270	270		270	272	266	262	257	256
2	255	255	255	253	252	255		260	259	256	251	244	238	240	250	260	265	266	266		267	266	260	256	256	256
3	250	246	246	246	248	247		246	249	251	250	245	238	240	248	258	267	270	262		260	258	256	254	252	252
4	251	250	246	240	242	245		246	250	249	248	245	240	241	242	246	255	261	262		257	255	254	255	255	252
5	250	247	246	246	242	242		246	250	247	242	239	237	238	246	260	270	266	266		269	266	256	252	246	251
6	250	248	246	240	236	236		241	246	244	241	238	231	231	236	242	250	254	253		257	258	259	248	239	236
7	242	244	245	246	244	246		242	247	245	241	241	237	236	234	244	260	266	261		257	255	253	250	247	243
8 *	245	246	246	246	244	246		247	248	246	240	229	222	223	227	233	240	242	240		241	240	241	242	242	242
9 **	241	241	239	236	237	235		230	232	232	235	232	232	230	237	246	250	252	250		252	256	256	256	250	229
10	232	242	243	246	246	246		246	247	246	236	230	230	233	236	246	251	250	246		246	246	249	250	246	247
11	245	241	241	241	241	242		241	241	239	235	231	232	234	237	245	251	249	245		246	245	245	245	241	241
12	243	241	239	235	235	235		235	237	239	235	229	227	229	234	238	245	245	244		242	244	242	241	239	242
13 *	235	235	239	241	241	241		242	245	246	239	231	228	227	230	236	242	243	240		241	240	240	239	239	240
14	241	242	242	242	242	244		243	247	246	237	224	219	220	228	236	243	246	244		241	241	241	241	241	241
15	240	240	240	240	240	241		241	244	240	234	232	228	228	231	237	242	242	242		242	241	241	239	239	239
16	238	238	239	239	240	242		239	242	244	238	232	229	231	237	239	242	244	245		245	246	248	244	240	238
17 *	239	238	239	239	240	241		239	238	237	230	225	225	225	225	231	236	238	239		239	240	239	239	239	237
18 *	237	236	235	235	236	238		236	235	234	227	220	217	220	225	231	235	235	236		239	238	239	239	239	235
19	235	235	235	235	236	237		236	240	235	223	221	222	225	226	230	235	236	239		240	243	245	241	240	231
20 **	229	231	235	237	235	231		230	225	225	221	221	221	220	226	235	239	238	236		240	239	243	248	246	240
21	241	240	238	238	239	240		236	239	240	234	225	225	229	235	236	239	239	237		238	239	237	239	238	238
22	239	237	235	237	236	237		235	236	235	229	224	222	224	228	232	235	237	238		237	237	238	238	238	239
23	238	234	234	234	233	235																				

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MAGNETIC OBSERVATIONS, ABINGER 1946.

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

U.T.	0 <sup>h</sup>	1 <sup>h</sup>	2 <sup>h</sup>	3 <sup>h</sup>	4 <sup>h</sup>	5 <sup>h</sup>	6 <sup>h</sup>	7 <sup>h</sup>	8 <sup>h</sup>	9 <sup>h</sup>	10 <sup>h</sup>	11 <sup>h</sup>	12 <sup>h</sup>	13 <sup>h</sup>	14 <sup>h</sup>	15 <sup>h</sup>	16 <sup>h</sup>	17 <sup>h</sup>	18 <sup>h</sup>	19 <sup>h</sup>	20 <sup>h</sup>	21 <sup>h</sup>	22 <sup>h</sup>	23 <sup>h</sup>	24 <sup>h</sup>
November																									
43000 γ + Tabular Quantities (in γ)																									
1	**	245	241	236	230	233	235	236	237	239	234	235	240	250	256	261	271	289	287	279	268	264	256	243	242
2		242	244	245	246	246	248	247	242	241	236	236	236	242	249	251	250	250	250	250	250	249	246	245	244
3		239	235	237	240	242	242	242	246	248	241	238	237	236	237	241	243	244	245	241	242	242	242	242	241
4		241	240	241	242	241	244	241	246	249	245	235	235	235	239	241	242	244	243	241	241	241	241	244	241
5		242	241	241	240	240	239	238	237	238	235	228	227	229	230	232	238	238	237	235	235	237	238	236	236
6	**	238	238	239	238	235	235	235	237	239	239	238	240	240	237	248	258	260	262	258	252	250	249	248	247
7		236	238	240	240	238	235	235	238	240	240	235	234	235	237	239	241	244	241	242	243	242	241	240	241
8		241	241	241	240	239	239	235	235	235	232	227	228	228	232	238	238	240	239	239	240	241	240	240	242
9		242	240	239	238	240	241	238	240	240	234	230	230	231	231	239	239	241	241	239	236	239	239	241	246
10		245	244	236	237	239	238	236	239	241	239	235	234	237	238	240	242	244	240	241	243	244	245	247	243
11		244	245	243	223	230	238	238	239	242	241	236	235	233	234	236	239	241	241	241	241	241	243	239	239
12		240	241	232	225	225	225	232	239	241	244	239	236	236	237	243	245	249	249	250	251	248	245	243	240
13		239	239	239	240	241	241	240	239	240	241	238	235	235	237	240	241	244	245	245	246	245	241	244	240
14	*	237	238	239	239	240	241	241	242	243	241	236	235	239	236	241	241	244	241	241	239	241	240	239	239
15		236	237	237	237	237	238	239	238	237	234	230	227	226	229	229	235	240	241	249	254	259	261	259	253
16		249	247	243	236	237	239	241	245	246	243	240	235	236	237	240	241	245	246	246	249	251	242	239	240
17		241	240	241	239	235	238	239	241	244	242	242	239	238	236	235	239	242	241	241	240	240	244	245	243
18		238	237	240	240	240	241	240	240	239	239	236	233	232	236	237	240	239	238	240	239	239	240	239	239
19		237	241	236	236	236	238	236	236	235	236	240	240	241	240	244	243	248	246	246	249	256	260	252	241
20		238	241	243	243	240	235	237	239	239	240	238	238	237	245	243	242	241	240	241	246	244	245	245	241
21	**	235	237	237	237	237	238	237	236	236	234	236	237	242	245	259	260	256	253	252	253	249	247	244	236
22		235	231	233	232	232	236	235	235	234	238	238	242	245	249	250	251	255	254	248	248	247	246	243	239
23		239	239	237	239	239	241	240	239	238	236	236	236	242	247	250	251	250	249	244	242	242	241	240	241
24	**	242	242	241	240	236	231	229	226	222	220	223	230	237	249	254	256	256	252	250	246	246	244	245	242
25	**	246	247	247	246	246	246	240	238	240	237	236	236	233	242	246	257	260	253	256	256	246	240	242	236
26		232	236	240	230	230	236	234	236	236	230	227	226	226	232	238	240	247	246	244	244	243	241	240	237
27	*	240	238	240	240	240	242	238	236	240	237	233	231	230	236	236	239	242	241	240	240	240	239	237	236
28	*	236	236	236	238	237	240	237	236	236	235	231	230	231	236	238	239	241	239	238	239	239	238	238	236
29	*	236	235	235	236	236	238	236	235	235	234	232	230	230	236	238	239	240	238	240	238	238	236	236	235
30	*	236	236	236	236	237	239	236	236	236	233	232	232	232	232	232	238	240	240	237	238	238	237	236	236
Mean		240	240	239	237	237	239	238	238	239	237	235	234	235	239	242	245	247	246	245	245	245	244	242	240
Mean *		237	237	237	238	238	240	238	237	238	236	233	232	232	235	237	239	241	240	239	239	239	238	237	236
Mean **		241	241	240	238	237	237	235	235	235	233	234	237	240	246	254	260	264	261	259	255	251	247	244	241
December																									
1946 123																									
43000 γ + Tabular Quantities (in γ)																									
1		237	236	236	236	235	235	234	234	236	233	232	232	231	231	233	233	238	239	244	246	247	244	240	235
2		236	234	235	234	235	236	235	236	237	236	232	230	229	232	236	240	242	241	242	243	240	240	240	236
3		235	230	222	216	222	229	230	235	236	236	235	236	236	237	240	242	243	241	240	240	240	240	240	238
4		238	237	236	236	236	238	236	235	235	236	234	234	234	238	239	237	237	237	237	236	235	235	236	235
5	**	235	233	233	233	232	233	232	232	233	232	231	228	231	234	236	237	241	243	243	243	243	248	251	249
6		243	241	241	239	238	239	236	236	236	236	236	236	237	238	238	237	237	237	236	236	237	239	242	243
7		241	240	238	232	226	222	222	224	226	223	225	227	231	232	236	237	240	245	242	241	240	238	238	240
8		240	239	239	236	227	227	229	230	232	230	233	231	228	231	233	237	240	237	237	237	236	236	237	237
9	*	237	239	238	238	237	236	234	232	231	228	227	226	228	232	236	237	237	237	239	238	240	238	237	237
10	**	237	238	238	237	237	238	235	231	228	227	226	224	226	230	237	244	245	241	240	240	240	240	239	233
11	**	233	232	231	231	232	234	233	232	227	227	225	228	231	233	237	240	243	245	245	247	244	237	232	236
12	**	237	234	232	234	236	240	237	237	236	235	233	232	232	238	247	252	257	253	251	250	249	245	244	241
13		239	238	239	239	239	240	238	238	237	236	233	230	228	231	237	243	243	243	244	243	241	239	237	237
14	*	237	234	237	237	238	240	237	235	233	228	231	230	232	232	233	235	239	239	238	238	237	237	235	234
15	*	236	236	236	236	236	236	235	235	237	236	234	230	230	231	232	234	238	238	237	237	237	237	236	235
16		234	236	237	236	233	233	231	232	231	227	227	228	227	230	230	232	234	232	233	233	237	237	239	239
17		237	235	234	233	233	233	230	230	229	229	230	232	232	232	236	236	238	237	239	239	241	240	237	234
18		234	233	232	229	229	230	230	230	231	230	224	224	223	228	228	230	231	230	232	232	232	233	233	232
19	**	232	231	230	227	229	228	222	220	222	226	230	230	229	245	251	254	258	262	253	257	252	247	244	241
20	*	241	241	241	240	239	239	241	241	242	238	238	241	237	243	242	242	243	240	240	239	240	240	238	240
21		237	239	238	239	237	237	235	235	231	230	233	235	239	242	241	246	247	245	243	243	242	240	240	238
22		239	242	241	240	239	237	233	231	232	230	230	228	232	240	240	241	243	246	241	240	239	238	237	237
23		238	239	239	238	238	236	232	231	231	229	224	223	227	235	238	240	241	239	240	240	240	238	239	237

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	9°+ /	U.T. h m	9°+ /	9°+ /	U.T. h m	'	18000 Y +	U.T. h m	18000 Y +	18000 Y +	U.T. h m	Y	43000 Y +	U.T. h m	43000 Y +	43000 Y +	U.T. h m	Y
1	55.7	13 10	61.1	50.0	18 42	11.1	569	8 14	595	532	18 26	63	221	18 51	241	207	10 0	34
2	54.9	15 52	58.9	50.4	0 0	8.5	570	0 33	601	542	16 32	59	220	17 43	238	208	10 56	30
3 **	52.1	12 6	73.1	31.1	18 14	42.0	533	10 20	630	385	15 48	245	236	16 15	363	173	22 3	190
4 **	53.2	2 47	61.8	38.3	0 17	23.5	540	19 40	596	495	0 13	101	220	16 30	262	169	3 7	93
5	55.0	2 46	58.3	50.1	23 45	8.2	559	23 58	585	539	0 3	46	227	16 20	232	217	9 54	15
6	55.0	0 10	58.9	43.2	20 35	15.7	568	21 5	591	530	16 50	61	225	17 30	238	212	11 10	26
7	55.0	13 33	59.7	44.0	18 39	15.7	571	18 50	607	552	19 33	55	225	18 40	240	216	9 40	24
8	55.6	13 18	58.1	51.7	19 22	6.4	573	5 49	586	559	11 13	27	224	18 30	232	212	9 25	20
9 *	55.7	13 0	58.2	53.5	22 30	4.7	577	7 58	589	565	21 32	24	222	20 40	229	210	12 5	19
10	55.9	13 40	59.8	53.8	23 50	6.0	583	8 12	597	568	16 30	29	220	18 28	228	212	12 50	16
11 **	55.7	6 0	67.7	42.7	21 3	25.0	576	6 32	618	542	5 43	76	219	18 30	234	200	6 40	34
12	55.3	12 59	59.4	51.6	21 42	7.8	569	7 45	585	543	10 56	42	223	13 38	236	216	8 32	20
13 *	55.2	12 22	58.5	51.0	19 31	7.5	575	21 4	589	559	11 48	30	221	13 25	227	215	23 55	12
14 *	55.4	13 5	57.5	53.8	21 12	3.7	580	5 2	591	566	12 18	25	220	16 15	225	213	6 20	12
15	55.5	15 40	58.2	50.1	24 0	8.1	584	19 46	597	554	23 26	43	218	24 0	228	216	8 20	12
16	54.9	15 10	58.2	49.1	0 5	9.1	575	6 43	600	552	0 38	48	221	0 21	229	214	9 35	15
17	54.9	13 0	57.5	47.3	21 50	10.2	578	6 40	604	556	17 38	48	220	19 18	232	212	7 50	20
18	54.6	13 4	61.2	46.9	23 35	14.3	567	19 30	611	533	23 48	78	222	14 57	236	213	13 1	23
19	54.7	13 32	59.5	48.0	1 53	11.5	573	1 7	590	543	0 22	47	219	20 40	228	208	1 50	20
20 *	54.1	12 30	57.4	50.2	0 10	7.2	575	14 10	587	557	10 43	30	220	0 15	227	213	24 0	14
21 *	55.2	13 3	58.6	49.1	22 50	9.5	578	18 43	591	552	23 12	39	220	23 52	230	210	12 44	20
22	54.2	12 59	60.0	45.6	2 23	14.4	577	6 34	607	557	12 5	50	219	0 1	228	211	11 15	17
23	54.3	12 32	60.6	30.6	22 23	30.0	573	22 30	642	542	11 33	100	221	17 30	230	204	22 56	26
24 **	55.1	12 52	63.1	43.4	19 50	19.7	566	22 44	607	473	13 21	134	222	13 55	248	197	3 3	51
25	54.9	13 4	58.7	49.5	15 1	9.2	567	6 41	584	533	14 48	51	224	15 9	241	211	0 0	30
26 **	55.2	12 17	59.3	42.5	17 36	16.8	571	3 18	593	513	17 14	80	223	17 45	241	210	4 0	31
27	54.9	13 21	59.0	50.4	3 12	8.6	576	3 18	588	564	1 29	24	219	22 20	227	205	11 40	22
28	55.3	13 18	59.8	49.5	22 3	10.3	579	18 10	592	564	9 32	28	220	22 6	227	208	11 0	19
29	55.1	13 14	59.8	51.9	9 2	7.9	579	4 32	597	555	14 21	42	219	21 2	225	212	11 57	13
30	55.5	13 28	59.3	51.3	22 3	8.0	586	23 18	608	568	11 11	40	215	0 20	220	200	10 58	20
31	55.2	12 51	60.2	51.2	22 10	9.0	581	22 20	606	561	17 18	45	217	16 40	226	206	10 58	20
Mean	54.9	-	60.0	47.5	-	12.6	572	-	599	540	-	58.5	221	-	237	207	-	29.6
Mean *	55.1	-	58.0	51.5	-	6.5	577	-	589	560	-	29.6	221	-	228	212	-	15.4
Mean **	54.3	-	65.0	39.6	-	25.4	557	-	609	482	-	127.2	224	-	270	190	-	79.8
February	9°+ /	U.T. h m	9°+ /	9°+ /	U.T. h m	'	18000 Y +	U.T. h m	18000 Y +	18000 Y +	U.T. h m	Y	43000 Y +	U.T. h m	43000 Y +	43000 Y +	U.T. h m	Y
1	55.4	13 20	59.9	53.5	22 20	6.4	583	14 10	591	573	16 21	18	216	19 26	222	204	10 54	18
2	55.6	12 52	62.1	50.8	6 12	11.3	579	7 3	599	554	11 42	45	217	21 12	228	193	11 0	35
3	55.4	13 57	62.8	50.3	23 3	12.5	578	14 7	615	545	22 24	70	221	22 34	242	211	10 50	31
4	55.6	12 32	61.3	48.5	23 38	12.8	566	7 50	588	537	17 0	51	227	17 43	244	214	10 6	30
5	53.6	13 30	60.6	45.5	3 25	15.1	566	20 54	592	549	15 58	43	224	16 47	238	212	4 20	26
6	54.9	13 33	61.4	49.4	0 20	12.0	572	0 29	622	538	13 16	84	224	17 43	235	214	0 55	21
7 **	53.0	15 24	66.9	9.3	21 34	77.6	536	15 6	750	334	10 52	416	245	18 32	355	127	23 29	228
8 **	50.9	13 41	65.7	9.6	0 20	56.1	482	18 0	578	224	0 32	354	228	14 47	323	-20	0 35	343
9	53.6	11 50	58.2	49.5	15 19	8.7	544	21 14	580	502	9 10	78	240	15 20	254	230	8 50	24
10	53.1	5 0	62.3	44.5	8 6	17.8	545	15 1	574	502	7 20	72	243	8 20	258	232	1 18	26
11 *	54.1	13 14	59.0	49.6	20 36	9.4	553	21 3	568	529	13 22	39	236	15 10	246	228	1 30	18
12	54.5	13 18	59.8	47.3	21 17	12.5	554	23 0	576	533	16 3	43	235	16 16	251	221	10 50	30
13	53.7	6 51	58.5	45.6	13 27	12.9	557	13 56	579	518	9 30	61	239	11 42	261	224	6 55	37
14 **	54.3	7 46	65.7	50.2	8 45	15.5	557	17 39	647	510	8 57	137	236	17 39	265	220	8 19	45
15	55.8	4 26	67.5	51.7	2 1	15.8	565	4 25	601	538	11 33	63	224	0 45	238	201	4 46	37
16	54.3	14 55	58.3	50.2	23 4	8.1	570	23 0	585	548	12 32	37	227	17 40	232	217	10 53	15
17	54.4	13 0	59.1	50.8	8 26	8.3	569	0 45	603	552	10 22	51	226	0 40	233	211	12 0	22
18	54.9	13 55	60.2	51.7	9 45	8.5	575	18 50	602	545	12 0	57	226	15 40	233	212	11 1	21
19 **	55.2	18 2	62.7	38.1	22 7	24.6	570	22 12	629	513	21 3	116	232	20 42	287	214	12 1	73
20	53.4	21 10	61.2	29.0	21 38	32.2	563	21 10	621	478	22 41	143	229	20 19	252	201	22 40	51
21 **	53.5	14 59	65.3	32.1	0 26	33.2	536	6 14	590	485	0 59	105	230	15 15	294	182	6 20	112
22	53.3	14 30	59.9	46.5	4 32	13.4	557	3 50	594	532	9 35	62	226	19 30	242	199	4 20	43
23	53.6	9 11	60.4	40.4	18 45	20.0	555	1 40	585	521	10 54	64	232	16 0	251	215	2 44	36
24	53.3	14 38	58.3	46.7	23 25	11.6	560	22 8	589	525	19 30	64	232	20 30	249	222	13 23	27
25	54.0	14 2	59.3	46.4	23 42	12.9	565	4 50	590	526	11 16	64	229	16 20	243	217	4 53	26
26 *	53.9	13 0	58.8	48.1	0 0	10.7	567	22 0	595	546	11 30	49	229	18 50	239	217	13 0	22
27 *	54.1	13 10	57.4	50.8	9 13	6.6	572	7 10	585	547	11 50	38	227	16 20	232	208	12 3	24
28 *	54.6	13 15	59.4	50.9	9 15	8.5	580	8 2	598	553	11 33	45	222	0 5	228	203	11 56	25
Mean	54.1	-	61.9															

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	9°+	U.T.	9°+	9°+	U.T.		18000	U.T.	18000	18000	U.T.		43000	U.T.	43000	43000	U.T.	
	Y +	h m	Y +	Y +	h m	,	Y +	h m	Y +	h m	Y		Y +	h m	Y +	Y +	h m	Y
1	52.8	1 41	58.2	42.9	3 23	15.3	568	1 40	638	522	8 35	116	224	1 40	240	196	4 31	44
2	52.9	14 35	59.1	45.7	0 19	13.4	564	0 30	642	539	9 56	103	226	0 25	246	213	9 54	33
3 *	53.7	13 36	58.3	50.5	21 13	7.8	569	21 31	582	552	10 23	30	226	2 30	233	213	11 52	20
4	53.1	14 18	64.1	42.1	22 6	22.0	561	22 15	630	509	21 27	121	230	20 41	254	209	10 50	45
5	53.5	13 58	64.9	40.9	0 47	24.0	551	22 56	583	441	11 30	142	235	16 40	269	200	11 30	69
6	53.6	13 32	64.1	46.7	7 45	17.4	559	22 30	598	499	11 40	99	231	16 20	253	210	11 30	43
7	53.3	12 52	62.0	48.1	8 0	13.9	562	21 40	586	519	12 19	67	227	18 20	241	211	12 0	30
8	54.0	13 43	60.0	49.0	21 7	11.0	569	21 10	590	549	10 36	41	225	18 25	237	206	11 31	31
9	54.2	16 30	66.3	44.3	19 51	22.0	569	20 3	591	521	17 40	70	227	19 59	256	202	12 30	54
10 **	53.2	2 11	70.5	29.0	20 17	41.5	566	1 55	640	493	23 24	147	221	20 23	257	170	23 25	87
11	52.7	12 10	61.5	30.4	0 18	31.1	548	0 29	611	501	10 41	110	226	17 36	247	162	1 26	85
12 *	53.6	12 31	57.2	50.1	8 46	7.1	564	22 15	575	547	0 51	28	230	16 45	236	220	10 20	16
13 *	53.5	13 10	60.0	49.1	8 38	10.9	567	22 9	582	543	10 55	39	228	18 35	237	213	12 46	24
14 *	53.6	12 22	59.8	47.6	18 50	12.2	570	22 50	586	547	10 30	39	226	19 30	237	210	10 30	27
15	54.0	12 42	63.0	47.9	8 15	15.1	570	21 29	599	538	9 57	61	225	16 20	242	206	10 45	36
16 *	54.0	13 32	60.8	48.3	8 35	12.5	577	22 45	599	563	14 45	36	221	7 40	232	193	11 52	39
17	54.0	13 33	61.4	42.0	20 54	19.4	575	3 54	614	516	12 39	98	224	17 40	250	204	10 12	46
18	54.5	13 15	61.1	50.2	8 21	10.9	580	7 40	591	562	13 48	29	223	18 42	237	203	11 57	34
19	53.9	13 46	58.3	50.5	23 57	7.8	582	23 10	608	559	12 30	49	225	16 20	236	207	12 0	29
20	54.2	13 22	63.9	50.1	20 44	13.8	581	0 22	609	538	12 0	71	221	16 18	235	196	12 3	39
21	54.3	13 21	64.1	47.3	9 22	16.8	579	3 6	623	528	12 25	95	218	16 40	231	197	12 23	34
22 **	54.7	13 30	66.2	48.2	9 7	18.0	571	23 6	645	508	13 57	137	225	18 25	237	203	12 2	34
23	52.2	13 30	61.3	30.7	23 51	30.6	580	23 59	663	551	23 38	112	222	18 36	237	196	12 0	41
24 **	50.9	13 13	73.2	10.3	2 7	62.9	503	0 3	664	359	3 49	305	239	15 58	510	65	3 22	445
25 **	52.6	17 10	96.6	8.9	21 10	87.7	500	17 10	778	359	11 45	419	260	15 45	678	96	3 48	582
26	49.9	14 22	62.8	32.3	0 0	30.5	501	19 54	622	410	1 40	212	248	18 20	300	191	0 21	109
27	53.6	14 36	67.4	43.6	0 3	23.8	539	22 6	589	497	11 3	92	240	15 52	274	218	12 20	56
28 **	52.0	14 35	136.8	-24.9	19 48	161.7	...	13 31	1733	072	8 30	166.1	..	15 24	626	-292	13 16	918
29	52.6	13 0	64.7	42.2	8 42	21.5	486	22 30	534	409	8 40	145	265	6 20	281	238	0 10	43
30	52.6	13 32	59.3	46.7	7 52	12.6	543	22 14	574	523	2 3	51	248	6 10	257	234	12 0	23
31	52.1	13 4	61.0	42.1	22 57	18.9	544	21 15	580	497	10 36	83	245	21 37	251	228	23 44	23
Mean	53.3	-	66.0	39.8	-	26.3	557	-	648	493	-	155.1	231	-	282	181	-	101.3
Mean *	53.7	-	59.2	49.1	-	10.1	569	-	585	550	-	34.4	226	-	235	210	-	25.2
Mean **	-	-	88.7	14.3	-	74.4	-	-	892	358	-	533.8	-	-	462	48	-	413.2
April	9°+	U.T.	9°+	9°+	U.T.		18000	U.T.	18000	18000	U.T.		43000	U.T.	43000	43000	U.T.	
	Y +	h m	Y +	Y +	h m	,	Y +	h m	Y +	h m	Y		Y +	h m	Y +	Y +	h m	Y
1	51.2	12 50	62.5	43.4	21 30	19.1	546	19 25	583	509	11 42	74	242	16 20	257	218	11 40	39
2	52.0	13 12	63.9	43.3	21 50	20.6	548	21 4	606	502	10 28	104	241	16 42	263	218	11 59	45
3	52.9	12 44	61.4	46.6	8 29	14.8	553	17 48	581	515	11 40	66	244	17 42	264	220	11 50	44
4	52.4	12 46	60.3	45.2	8 17	15.1	558	21 36	580	527	11 46	53	241	16 20	252	216	11 0	36
5	52.9	14 48	64.3	44.4	8 45	19.9	555	23 0	576	516	10 41	60	243	18 45	272	213	11 31	59
6	52.9	13 32	64.3	46.3	8 18	18.0	557	19 46	579	511	11 20	68	239	19 27	257	207	11 12	50
7	52.7	14 40	65.7	44.5	3 36	21.2	563	2 50	591	522	11 31	69	237	15 36	257	214	11 10	43
8	53.8	13 12	62.4	48.4	8 2	14.0	566	23 54	616	522	13 30	94	239	19 9	252	220	11 0	32
9 **	53.3	15 11	64.5	39.5	22 48	25.0	558	0 0	611	496	12 6	115	245	15 36	292	220	11 20	72
10	51.8	13 0	58.2	45.3	8 30	12.9	553	22 45	589	503	11 20	86	237	7 25	252	220	12 50	32
11 *	52.9	12 30	59.9	46.7	7 51	13.2	565	23 28	588	535	10 46	53	237	7 40	249	224	10 50	25
12	53.0	13 54	63.5	46.0	8 3	17.5	576	22 0	659	536	11 35	123	232	6 40	241	213	12 32	28
13	51.5	13 25	60.9	39.0	19 17	21.9	574	19 30	639	533	9 42	106	230	19 21	257	210	10 52	47
14 **	53.2	13 33	67.5	45.9	7 28	21.6	564	22 17	608	500	11 59	108	236	14 10	258	214	11 57	44
15 **	54.6	8 13	65.3	36.8	19 25	28.5	535	19 0	608	456	14 12	152	246	15 37	321	204	2 42	117
16	51.8	13 4	59.5	44.3	22 20	15.2	553	21 49	589	518	11 23	71	242	16 27	251	224	12 2	27
17	52.5	13 23	59.5	46.4	8 22	13.1	563	16 45	580	529	13 17	51	238	17 29	254	222	11 40	32
18	53.4	12 55	61.4	46.6	8 18	14.8	563	18 10	592	507	10 22	85	238	18 38	251	219	11 50	32
19 *	52.4	13 41	57.3	47.2	8 55	10.1	570	17 31	595	542	11 25	53	233	17 28	244	211	12 40	33
20 *	52.7	14 13	58.3	47.8	8 36	10.5	570	19 30	589	530	11 30	59	233	17 38	247	211	11 57	36
21 *	52.8	13 50	60.1	47.1	7 53	13.0	574	21 37	591	548	10 33	43	229	19 35	241	204	12 2	37
22	53.7	13 32	60.1	44.9	7 5	15.2	577	18 18	634	521	11 30	113	231	18 20	248	216	11 5	32
23 **	52.0	15 50	75.0	-15.8	23 42	90.8	522	16 50	655	147	23 40	508	261	16 59	457	-114	23 35	571
24 **	47.3	13 53	60.1	14.0	0 28	46.1	560	16 49	729	354	2 41	375	240	16 46	362	43	0 0	319
25	50.3	13 27	55.6	40.6	1 37	15.0	525	0 50	563	483	9 40	80	251	7 42	268	216	1 30	52
26	51.2	14 22	58.2	45.2	24 0	13.0	551	18 42	582	529	4 5	53	250	19 32	262	233	12 0	29
27	50.9	13 57	57.1	40.6	0 51	16.5	545	1 3	574	520	9 36	54						

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	9°+	U.T.	9°+	9°+	U.T.		18000	U.T.	18000	18000	U.T.		43000	U.T.	43000	43000	U.T.	
	Y +	h m	Y +	Y +	h m	,	Y +	h m	Y +	h m	Y		Y +	h m	Y +	Y +	h m	Y
1	52.4	13 5	62.2	44.7	8 32	17.5	567	18 23	642	533	9 59	109	239	18 55	265	207	11 5	58
2	52.0	13 18	61.9	44.7	6 50	17.2	568	17 40	597	533	10 20	64	235	17 22	256	199	12 0	57
3	52.0	13 30	60.8	44.2	7 24	16.6	570	19 2	613	534	9 40	79	233	18 52	251	197	11 47	54
4	52.4	14 3	62.3	46.3	7 50	16.0	572	0 40	612	534	9 30	78	237	18 36	259	213	12 14	46
5	52.1	13 19	60.0	44.6	7 50	15.4	577	20 14	626	543	11 46	83	232	6 25	243	205	11 43	38
6 **	53.1	22 30	61.4	32.5	22 52	28.9	593	22 30	739	543	13 48	196	231	22 30	268	203	10 41	65
7	53.1	5 47	66.2	43.5	8 33	22.7	573	4 14	648	487	12 35	161	225	19 32	249	178	7 10	71
8	53.5	6 19	68.6	46.5	23 24	22.1	569	6 52	642	492	12 57	150	232	19 19	262	196	6 55	66
9 **	51.0	16 22	61.5	40.5	18 15	21.0	560	18 22	660	499	11 37	161	242	16 34	315	195	4 38	120
10	52.6	14 28	62.1	45.7	4 45	16.4	567	22 48	634	519	11 18	115	231	17 28	249	198	11 4	51
11 **	52.9	12 51	63.8	42.4	8 29	21.4	566	17 20	626	448	8 30	178	234	17 20	280	205	12 52	75
12	51.3	12 56	57.3	44.8	6 15	12.5	568	19 20	602	533	10 14	69	239	17 33	249	219	11 56	30
13	50.7	13 42	57.0	44.4	7 23	12.6	572	20 6	593	546	9 30	47	234	17 25	245	220	12 0	25
14 *	52.3	14 3	59.0	46.3	6 10	12.7	581	14 52	601	559	9 16	42	232	5 7	244	208	11 46	36
15 *	52.4	12 32	60.9	46.1	7 45	14.8	581	16 49	603	546	10 24	57	231	4 30	240	208	11 3	32
16	51.6	13 18	57.0	47.2	8 40	9.8	586	16 44	603	549	13 40	54	233	18 33	249	212	11 40	37
17	53.0	13 1	61.7	44.2	6 57	17.5	586	17 10	626	546	14 0	80	232	17 23	268	207	12 27	61
18	51.2	13 33	57.3	43.3	7 10	14.0	575	3 50	611	526	8 28	85	234	16 35	260	211	12 8	49
19 *	52.5	12 47	61.4	45.2	7 22	16.2	580	20 6	600	550	9 46	50	232	17 10	248	202	12 20	46
20	51.8	13 23	60.0	41.7	22 16	18.3	587	19 22	643	552	11 32	91	231	19 15	248	202	11 31	46
21	52.5	14 15	62.3	41.9	1 44	20.4	565	18 50	630	513	13 30	117	237	18 47	279	208	11 47	71
22 **	52.1	11 55	61.8	39.8	19 27	22.0	557	19 32	625	479	12 24	146	235	17 19	290	182	6 0	108
23 **	49.5	15 6	58.3	40.7	6 50	17.6	570	18 19	673	499	12 23	174	239	17 58	296	194	1 47	102
24	52.0	14 21	63.3	44.2	0 0	19.1	566	15 26	614	525	12 54	89	237	17 16	278	208	11 31	70
25	50.7	13 50	58.6	43.9	8 15	14.7	567	17 50	611	529	8 49	82	232	17 36	267	211	11 12	56
26	51.4	12 31	59.1	43.6	6 42	15.5	574	2 44	610	542	10 15	68	230	17 29	250	203	12 1	47
27 *	51.7	13 31	60.1	44.2	6 24	15.9	578	21 41	610	548	8 36	62	236	18 42	250	211	12 4	39
28	50.7	14 3	59.7	42.4	8 10	17.3	578	20 37	609	546	13 18	63	230	17 43	257	198	12 4	59
29	52.0	14 2	60.6	44.7	7 46	15.9	575	18 37	611	543	8 57	68	231	19 20	255	203	11 2	52
30 *	51.4	13 53	60.5	44.6	8 38	15.9	580	16 53	608	539	9 23	69	232	17 27	251	203	12 9	48
31	50.9	12 19	59.4	42.7	3 37	16.7	574	19 10	616	542	11 48	74	228	18 28	259	196	9 53	63
Mean	51.9	-	60.8	43.6	-	17.2	574	-	624	528	-	95.5	233	-	261	203	-	57.4
Mean *	52.1	-	60.4	45.3	-	15.1	580	-	604	548	-	56.0	233	-	247	206	-	40.2
Mean **	51.7	-	61.4	39.2	-	22.2	569	-	665	494	-	171.0	236	-	290	196	-	94.0
June	9°+	U.T.	9°+	9°+	U.T.		18000	U.T.	18000	18000	U.T.		43000	U.T.	43000	43000	U.T.	
	Y +	h m	Y +	Y +	h m	,	Y +	h m	Y +	h m	Y		Y +	h m	Y +	Y +	h m	Y
1	51.7	14 14	61.9	42.8	8 9	19.1	580	19 21	610	539	12 4	71	235	19 18	253	215	13 1	38
2 *	51.8	14 31	60.2	42.6	9 6	17.6	584	18 4	613	548	12 16	65	231	18 36	254	205	12 47	49
3 *	51.8	14 29	60.6	43.2	7 45	17.4	586	17 50	605	556	10 18	49	234	17 27	247	209	11 32	38
4	52.3	13 20	61.0	42.3	7 3	18.7	585	19 8	611	535	13 58	76	232	17 47	249	202	11 48	47
5	51.6	14 23	58.1	45.1	7 49	13.0	592	20 14	682	553	11 16	129	232	20 13	254	209	11 50	45
6	51.9	13 0	60.7	44.2	7 56	16.5	579	1 26	615	522	13 38	93	234	17 26	248	210	11 0	38
7 **	53.0	14 37	67.0	44.1	7 43	22.9	581	14 3	637	475	14 49	162	249	17 2	326	197	12 0	129
8 **	52.7	14 40	68.0	42.1	7 2	25.9	573	22 21	658	493	15 21	165	233	16 45	263	208	2 53	55
9	52.7	15 3	59.2	47.6	3 34	11.6	571	1 51	614	533	14 20	81	238	15 34	272	213	4 22	59
10	51.3	15 1	58.0	44.1	6 19	13.9	575	18 37	625	538	13 40	87	238	16 25	261	217	11 3	44
11	52.0	12 5	56.5	45.2	8 3	11.3	583	20 59	616	542	12 20	74	235	18 28	251	214	12 4	37
12 **	51.8	14 31	61.6	41.7	22 11	19.9	588	22 18	639	539	13 18	100	245	17 43	297	212	10 27	85
13	50.4	12 41	57.6	43.2	7 42	14.4	579	3 53	620	518	10 40	102	231	18 27	257	209	12 58	48
14	52.0	13 4	58.8	46.4	4 37	12.4	583	18 41	625	533	8 23	92	236	18 23	257	210	11 48	47
15	52.2	13 14	60.6	46.4	8 38	14.2	581	20 20	613	548	10 17	65	234	18 27	251	207	11 0	44
16	50.7	13 48	59.4	39.4	23 43	20.0	591	20 15	643	539	10 51	104	230	20 12	260	201	12 32	59
17	50.0	14 41	59.9	34.6	1 3	25.3	570	3 4	625	515	1 18	110	220	18 46	251	192	0 53	59
18	50.1	15 30	60.1	41.7	7 15	18.4	579	16 57	656	518	10 20	138	229	18 17	268	203	10 32	65
19 **	51.5	12 23	61.8	40.7	5 18	21.1	566	19 49	629	484	9 22	145	225	15 29	272	187	2 45	85
20	50.8	14 22	57.6	44.2	7 12	13.4	571	15 57	612	524	9 40	88	232	19 29	253	212	11 22	41
21	50.7	15 53	56.5	42.8	7 39	13.7	576	19 3	632	532	8 50	100	228	19 36	252	207	12 0	45
22	50.9	13 46	59.3	43.8	6 11	15.5	579	19 27	619	547	9 4	72	231	19 30	249	208	13 6	41
23 *	51.1	13 52	57.9	43.9	6 40	14.0	574	15 52	595	542	11 17	53	228	18 38	238	205	11 48	33
24 *	51.2	14 22	58.5	45.3	9 3	13.2	590	18 25	616	571	10 18	45	231	18 23	242	208	12 18	34
25	51.4	12 58	57.9	44.2	6 53	13.7	585	16 43	623	545	13 30	78	229	18 27	258	212	13 23	46
26	52.2	14 23	61.7	45.6	7 24	16.1	584	16 10	634	555	9 40	79	234	17 53	269	205	12 5	64
27	51.9	14 30	58.2	47.5	6 4	10.7	589	19 34	665	552	7 56	113	236	21				

MAGNETIC OBSERVATIONS, ABINGER 1946.

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
July	9 <sup>o</sup> + /	U.T. h m	9 <sup>o</sup> + /	9 <sup>o</sup> + /	U.T. h m	,	18000 Y +	U.T. h m	18000 Y +	18000 Y +	U.T. h m	Y	43000 Y +	U.T. h m	43000 Y +	43000 Y +	U.T. h m	Y
1 *	51.0	14 31	57.9	43.8	8 18	14.1	578	20 10	604	540	10 20	64	239	18 14	252	219	11 29	33
2	51.4	14 56	57.2	45.3	7 14	11.9	581	4 50	612	533	12 2	79	233	18 28	250	215	12 34	35
3	52.9	5 4	57.1	46.9	6 25	10.2	587	18 31	612	515	10 16	97	237	16 30	265	211	10 18	54
4 *	51.7	13 30	59.8	44.9	6 54	14.9	580	16 7	612	538	12 20	74	233	4 51	245	213	10 58	32
5 *	51.6	14 51	58.3	45.6	5 37	12.7	581	20 6	600	546	10 3	54	232	17 28	244	207	12 3	37
6	51.9	14 0	58.3	47.0	5 28	11.3	590	19 57	612	567	14 20	45	230	17 23	246	212	10 16	34
7 **	51.6	14 20	59.6	41.2	8 4	18.4	584	17 46	644	529	24 0	115	233	19 52	278	194	11 18	84
8	50.3	13 9	61.7	39.9	3 15	21.8	562	15 21	626	514	0 20	112	236	15 22	258	220	11 22	38
9	50.9	2 17	58.9	40.0	5 46	18.9	579	1 47	640	533	10 23	107	238	16 36	270	214	10 8	56
10	52.3	12 33	58.3	46.0	5 47	12.3	580	16 46	615	553	10 10	62	237	17 46	261	209	12 17	52
11	50.5	2 44	56.6	44.6	7 20	12.0	579	18 38	624	543	9 21	81	234	18 38	257	211	11 39	46
12	51.1	13 39	56.0	45.5	6 0	10.5	575	21 7	594	548	8 19	46	234	15 25	249	217	11 32	32
13 *	52.1	13 52	59.6	46.9	6 9	12.7	588	15 7	621	558	11 13	63	235	15 12	245	222	12 0	23
14	52.2	14 41	60.0	45.6	5 34	14.4	591	17 13	640	544	15 31	96	239	17 13	283	210	12 22	73
15	50.6	13 36	59.2	42.6	6 42	16.6	583	5 8	609	555	11 17	54	230	17 26	243	210	5 34	33
16	50.5	15 30	58.2	44.0	6 26	14.2	583	17 38	623	521	10 46	102	231	17 35	251	202	10 11	49
17	51.1	13 25	60.6	43.4	7 29	17.2	584	16 49	619	541	9 11	78	225	16 28	246	198	11 9	48
18 **	51.3	15 46	69.2	40.5	22 8	28.7	596	16 35	712	544	11 20	168	237	18 25	295	199	11 23	96
19	51.3	1 59	60.6	46.0	23 47	14.6	564	4 32	614	491	10 57	123	239	16 28	275	204	2 26	71
20 *	50.3	14 6	60.1	42.5	6 56	17.6	572	19 30	604	541	10 13	63	233	5 20	252	210	12 56	42
21	50.4	14 20	59.9	42.9	7 53	17.0	581	15 53	624	538	10 48	86	232	16 23	260	206	12 22	54
22	50.5	15 20	59.1	41.6	6 27	17.5	585	23 21	635	548	11 39	87	231	18 11	261	205	11 28	56
23	50.1	15 25	59.3	41.5	7 17	17.8	586	20 57	622	533	11 59	89	226	19 57	247	197	11 51	50
24	50.8	13 22	57.1	46.0	6 9	11.1	579	20 53	607	547	13 29	60	234	6 40	247	213	12 32	34
25	51.5	12 34	60.0	43.6	5 32	16.4	593	17 5	654	566	10 37	88	231	20 0	253	209	13 0	44
26 **	51.8	20 40	81.5	33.6	22 37	47.9	619	19 33	1006	525	9 53	481	233	18 49	339	202	9 30	137
27 **	45.2	6 25	79.6	5.1	1 3	74.5	471	0 12	641	82	3 23	559	193	16 43	291	278	3 17	569
28	48.7	14 6	58.5	41.1	7 58	17.4	534	21 50	615	472	12 23	143	237	18 52	284	233	11 41	51
29 **	52.0	12 18	62.8	42.8	6 50	20.0	562	16 40	735	487	9 52	248	246	17 29	301	214	11 27	87
30	49.7	13 13	60.5	38.8	7 27	21.7	558	16 59	655	498	9 0	157	243	17 0	282	217	1 12	65
31	50.7	13 43	61.0	45.3	6 58	15.7	562	16 3	597	529	10 0	68	241	18 23	258	215	12 32	43
Mean	50.9	-	60.9	42.1	-	18.8	576	-	640	519	-	120.9	234	-	264	195	-	69.6
Mean *	51.3	-	59.1	44.7	-	14.4	580	-	608	545	-	63.6	234	-	248	214	-	33.4
Mean **	50.4	-	70.5	32.6	-	37.9	566	-	748	433	-	314.2	228	-	301	106	-	194.6
August	9 <sup>o</sup> + /	U.T. h m	9 <sup>o</sup> + /	9 <sup>o</sup> + /	U.T. h m	,	18000 Y +	U.T. h m	18000 Y +	18000 Y +	U.T. h m	Y	43000 Y +	U.T. h m	43000 Y +	43000 Y +	U.T. h m	Y
1	50.6	13 56	60.0	43.1	8 41	16.9	563	18 18	594	522	11 46	72	246	17 28	266	233	1 53	33
2	49.8	13 47	56.8	43.1	8 5	13.7	573	20 9	595	538	11 12	57	242	17 47	265	219	12 58	46
3	50.5	13 8	58.2	43.2	7 54	15.0	574	16 35	606	531	9 19	75	239	16 35	252	217	11 32	35
4	50.7	13 20	59.7	43.0	7 26	16.7	582	18 56	603	559	9 15	44	235	5 27	246	209	12 0	37
5	50.7	13 0	59.8	45.1	6 47	14.7	583	19 43	614	555	9 15	59	238	17 25	249	219	14 9	30
6	50.9	13 20	59.1	45.0	7 4	14.1	585	13 18	609	558	10 1	51	235	18 50	249	206	12 4	43
7 **	52.2	14 22	66.5	39.9	19 43	26.6	583	16 52	627	537	10 37	90	248	17 37	306	212	11 50	94
8	49.8	13 34	55.7	44.9	8 38	10.8	573	19 51	613	548	11 0	65	241	16 46	252	221	12 4	31
9	50.6	12 35	58.9	45.1	7 23	13.8	583	18 57	606	563	8 33	43	237	17 47	254	211	11 48	43
10	50.4	12 32	61.1	42.2	7 45	18.9	582	18 10	611	550	10 52	61	234	17 27	250	201	11 5	49
11 **	50.7	13 7	61.7	42.4	17 53	19.3	582	13 5	634	532	11 12	102	239	17 47	278	220	11 17	58
12	49.2	14 3	59.4	40.3	1 58	19.1	574	22 8	640	538	9 14	102	233	16 41	250	215	1 18	35
13	49.7	13 29	59.7	42.4	7 48	17.3	573	19 7	611	541	12 1	70	234	19 7	247	212	12 1	35
14 **	50.3	12 59	61.9	31.4	20 37	30.5	557	21 1	681	465	12 10	216	238	21 0	276	207	11 57	69
15 **	48.9	14 28	59.8	40.5	2 27	19.3	565	16 55	636	497	10 20	139	241	18 10	277	216	2 35	61
16	49.0	13 42	59.3	38.8	22 33	20.5	570	22 4	630	522	9 21	108	234	19 40	266	208	12 20	58
17	50.9	14 0	62.1	42.7	21 40	19.4	563	21 43	636	508	14 43	128	233	18 53	260	197	11 32	63
18	50.3	13 23	59.1	45.4	6 32	13.7	571	21 43	603	528	10 30	75	237	17 46	254	207	11 30	47
19	49.6	13 12	60.0	40.7	0 56	19.3	571	20 52	599	541	11 16	58	234	19 27	252	215	12 0	37
20	49.9	12 49	58.7	44.2	7 57	14.5	576	18 58	603	532	10 27	71	234	19 36	248	207	11 53	41
21 *	50.6	13 23	59.5	43.3	8 12	16.2	576	23 13	601	534	9 56	67	235	17 29	246	211	11 3	35
22 *	49.7	13 30	56.9	43.1	8 10	13.8	580	18 56	598	551	9 30	47	232	16 28	242	214	12 31	28
23 *	50.0	13 30	58.2	43.1	8 4	15.1	583	23 42	613	552	9 34	61	232	7 7	244	217	9 58	27
24	50.3	14 4	58.3	42.7	6 58	15.6	592	2 46	622	563	9 23	59	229	17 23	246	206	12 10	40
25	48.8	12 55	58.5	40.5	7 20	18.0	577	2 14	603	539	9 16	64	225	16 23	241	199	10 59	42
26 *	50.0	13 3	58.5	42.9	7 50	15.6	578	19 29	603	533	9 30	70	229	7 43	241	208	11 4	33
27	49.5	12 4	58.4	42.3	7 50	16.1	577	21 11	601	526	9 38	75	230	17 27	243	214	9 47	29
28	50.8	13 30	62.8	44.8	7 1	18.0	581											

MAGNETIC OBSERVATIONS, ABINGER 1946.

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	9°+	U. T.	9°+	9°+	U. T.	18000	U. T.	18000	18000	U. T.	Y	43000	U. T.	43000	43000	U. T.	Y	
	/	h m	/	/	h m	Y +	h m	Y +	Y +	h m	Y	Y +	h m	Y +	Y +	h m	Y	
1 *	49.0	13 33	55.9	44.4	9 24	11.5	566	18 4	593	535	10 28	58	238	17 18	253	214	12 48	39
2	49.9	14 30	58.2	44.2	5 58	14.0	575	18 47	597	547	13 22	50	234	18 38	253	217	11 5	36
3	50.6	13 45	61.2	43.1	21 58	18.1	578	21 52	614	537	11 0	77	234	17 25	261	210	12 4	51
4	49.8	14 51	58.5	43.7	24 0	14.8	575	23 5	628	508	10 39	120	243	17 44	270	230	10 3	40
5	50.4	14 0	60.2	42.7	0 6	17.5	573	22 50	617	529	11 52	88	239	17 22	261	217	11 2	44
6 *	49.9	12 39	57.2	43.1	7 43	14.1	581	5 8	607	544	10 29	63	229	17 42	240	210	11 30	30
7	51.0	13 27	62.5	44.4	8 10	18.1	576	21 23	606	520	9 10	86	235	20 7	252	216	10 36	36
8	49.2	12 20	57.9	42.0	23 19	15.9	573	22 37	602	548	12 46	54	238	19 45	255	219	12 20	36
9	49.7	15 49	58.1	43.7	7 47	14.4	575	19 42	600	545	18 23	55	239	18 36	269	219	12 0	50
10	50.0	12 55	59.4	42.8	7 41	16.6	575	22 42	640	513	9 13	127	233	18 38	245	212	23 45	33
11	49.7	15 32	57.5	43.2	0 0	14.3	576	15 35	607	532	10 17	75	233	18 28	249	212	11 6	37
12	49.8	13 30	58.3	42.4	22 26	15.9	574	20 36	597	537	11 40	60	232	21 21	243	207	11 41	36
13	49.9	13 46	59.3	43.8	8 49	15.5	579	23 26	612	536	11 22	76	231	4 2	240	212	12 18	28
14	48.9	13 59	58.2	42.9	0 29	15.3	579	0 0	610	544	11 30	66	229	17 24	240	210	13 11	30
15 *	50.0	13 19	59.7	42.6	7 55	17.1	581	15 16	600	549	10 46	51	225	7 21	239	196	12 48	43
16	49.3	13 54	60.2	25.0	19 39	35.2	577	16 40	646	486	19 34	160	233	19 7	317	193	12 16	124
17	47.9	23 59	64.0	34.6	1 13	29.4	559	23 56	671	506	1 38	165	231	16 29	260	170	2 23	90
18 **	50.5	0 8	65.3	24.0	4 6	41.3	509	0 0	644	390	8 31	254	241	15 58	379	82	3 13	297
19 **	48.6	14 48	67.7	38.1	2 47	29.6	532	2 23	588	482	11 55	106	246	15 19	316	148	3 48	168
20	48.2	15 2	53.8	43.9	0 22	9.9	548	18 6	582	516	12 30	66	248	20 2	266	231	11 26	35
21	49.3	13 50	59.8	40.9	17 50	18.9	562	17 16	670	525	11 19	145	245	17 16	282	216	12 30	66
22 **	50.2	14 26	129.4	-6.2	11 32	135.6	498	13 30	1050	125	11 31	925	258	14 27	523	73	6 22	450
23 **	51.3	3 53	73.7	28.5	21 14	45.2	498	16 22	698	360	6 20	338	257	16 22	510	141	2 33	369
24	46.8	13 17	55.7	33.6	0 22	22.1	536	0 59	561	484	11 29	77	255	8 8	276	240	1 9	36
25 *	49.0	13 0	56.1	43.7	8 46	12.4	554	23 3	574	527	9 42	47	251	19 29	262	233	12 33	29
26 *	49.5	13 44	58.3	44.0	8 41	14.3	559	23 3	580	522	11 30	58	248	17 26	261	229	11 48	32
27	47.2	13 1	57.3	27.3	17 40	30.0	545	17 47	650	479	19 18	171	261	17 22	328	239	8 34	89
28 **	49.1	7 9	66.9	25.6	20 55	41.3	526	15 50	716	421	21 13	295	276	15 50	434	218	4 18	216
29	46.4	15 31	58.1	36.2	0 11	21.9	523	1 11	612	405	0 6	207	270	17 41	333	202	1 20	131
30	48.8	5 54	61.5	30.9	19 22	30.6	543	19 35	585	486	10 28	99	259	16 10	293	235	3 39	58
Mean	49.3	-	62.3	37.3	-	25.0	557	-	632	491	-	140.6	243	-	294	202	-	92.0
Mean *	49.5	-	57.4	43.6	-	13.9	568	-	591	535	-	55.4	238	-	251	216	-	34.6
Mean **	49.9	-	80.6	22.0	-	58.6	513	-	739	356	-	383.6	256	-	432	132	-	300.0
October	9°+	U. T.	9°+	9°+	U. T.		18000	U. T.	18000	18000	U. T.	Y	43000	U. T.	43000	43000	U. T.	Y
	/	h m	/	/	h m		Y +	h m	Y +	Y +	h m	Y	Y +	h m	Y +	Y +	h m	Y
1	48.8	14 11	57.1	37.5	19 11	19.6	549	19 22	584	503	11 35	81	261	19 24	278	247	1 31	31
2	49.3	12 23	57.2	42.9	8 59	14.3	551	24 0	596	503	11 20	93	256	18 24	271	233	11 6	38
3	49.8	13 35	57.6	43.7	8 47	13.9	564	0 5	596	532	15 43	64	252	16 19	275	234	11 48	41
4	49.4	12 24	57.2	45.5	7 30	11.7	565	3 16	595	531	16 22	64	249	16 46	270	235	3 38	35
5	50.1	14 53	60.3	39.2	18 47	21.1	568	4 5	594	519	15 50	75	251	18 57	277	234	10 58	43
6	48.4	13 48	56.7	34.6	20 45	22.1	565	21 5	605	526	9 4	79	244	19 40	264	227	11 22	37
7	49.8	13 40	57.4	43.0	0 1	14.4	564	5 48	597	521	12 16	76	247	16 20	273	230	13 15	43
8 *	49.3	14 20	54.5	43.5	8 37	11.0	580	20 7	610	549	11 43	61	240	7 37	251	219	11 57	32
9 **	47.8	13 11	56.4	39.8	3 32	16.6	570	23 32	610	530	13 30	80	241	20 22	259	224	6 28	35
10	48.7	12 12	58.4	39.4	20 57	19.0	567	19 39	594	529	10 52	65	243	21 6	256	223	10 51	33
11	49.3	13 39	57.2	44.1	19 56	13.1	575	1 1	592	557	15 58	35	241	15 11	254	228	10 59	26
12	48.6	12 57	54.4	42.0	8 56	12.4	571	24 0	607	534	11 13	73	238	16 24	247	223	11 15	24
13 *	49.3	13 19	55.4	43.6	8 29	11.8	574	0 7	610	533	10 40	77	238	7 56	249	225	12 10	24
14	49.4	12 44	58.7	42.2	9 8	16.5	573	18 45	602	534	11 20	68	239	7 41	251	216	12 7	35
15	48.8	13 23	57.6	42.2	8 50	15.4	578	19 4	601	531	9 43	70	238	7 40	247	224	12 57	23
16	49.0	12 43	56.6	42.5	21 4	14.1	576	20 12	613	540	9 59	73	240	20 38	251	225	11 16	26
17 *	49.1	13 41	55.4	42.4	9 12	13.0	580	21 42	603	549	12 21	54	236	19 28	243	222	10 56	21
18 *	49.5	12 36	55.6	45.4	8 35	10.2	584	23 2	611	556	11 28	55	233	22 52	242	216	10 59	26
19	48.7	13 15	55.8	39.8	23 58	16.0	578	22 2	606	559	9 40	47	234	20 35	247	216	10 58	31
20 **	48.1	13 57	56.1	38.8	0 11	17.3	573	4 16	606	545	10 40	61	233	21 37	252	216	9 57	36
21	48.9	12 23	53.7	43.4	9 17	10.3	576	21 21	610	546	11 32	64	237	8 5	244	222	11 6	22
22	49.1	11 56	55.1	43.6	8 52	11.5	578	7 19	601	547	12 55	54	234	17 27	244	217	11 5	27
23	49.2	11 58	55.4	45.6	2 40	9.8	577	1 11	596	542	12 23	54	237	15 44	249	227	12 5	22
24	49.0	12 46	57.5	43.2	8 28	14.3	570	23 59	592	530	10 58	62	240	16 21	250	224	10 57	26
25	48.4	12 50	56.4	41.9	24 0	14.5	568	6 12	594	531	11 17	63	238	19 29	253	221	12 4	32
26 **	47.8	11 58	58.3	28.9	23 26	29.4	564	22 8	670	489	23 58	181	237	20 36	263	188	23 54	75
27 **	46.7	14 19	61.2	22.4	2 18	38.8	555	1 7	644	468	9 20	176	239	16 33	295	168	2 16	127
28	48.9	13 16	55.6	43.4	9 18	12.2	556	23 49	589	520	9 32	69	243	16 22	261	222	10 33	39
29	49.0	12 53	56.0	43.5	20 33	12.5	564	23 6	603	524	11 1	79	243	20 27	254	228	10 56	26
30 *	49.0	12 50	54.6	45.1	7 57	9.5	570	19 55	587	536	10 23	51	241	18 29	251	224	11 59	27
31 **	48.8	13 32	58.4	41.0	22 20	17.4	560	4 18	588	509	13 42	79	248	17 38	278	222	11 23	56
Mean	48.9	-	56.7	41.1	-	15.6	568	-	603	530	-	73.6	242	-	258	222	-	36.1
Mean *	49.2	-	55.1	44.0	-	11.1	578	-	604	545	-	59.6	238	-	247	221	-	26.0
Mean **	47.8	-	58.1	34.2	-	23.9	560	-	624	508	-	115.4	240	-	269	204	-	65.8

\* 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	9°+	U.T. h m	9°+	9°+	U.T. h m	18000 Y +	U.T. h m	18000 Y +	18000 Y +	U.T. h m	Y	43000 Y +	U.T. h m	43000 Y +	43000 Y +	U.T. h m	Y	
1 **	48.5	16 20	57.1	33.1	22 3	24.0	545	21 33	590	497	11 49	93	250	16 39	294	229	2 54	65
2	48.5	7 2	55.3	42.5	19 59	12.8	565	19 12	584	529	11 31	55	245	14 44	255	230	10 4	25
3	48.1	13 20	51.0	44.3	8 50	6.7	575	22 2	589	553	11 28	36	241	8 36	250	233	13 21	17
4	48.8	13 25	54.9	43.9	8 42	11.0	574	20 41	592	538	11 17	54	241	8 43	255	228	10 59	27
5	49.1	12 13	56.7	40.3	9 28	16.4	585	19 0	623	544	9 24	79	236	0 12	245	222	10 53	23
6 **	48.9	14 49	59.2	39.7	23 45	19.5	566	23 52	623	506	15 10	117	244	17 42	269	230	6 32	39
7	47.7	14 47	52.7	43.1	0 36	9.6	568	0 0	609	540	11 28	69	239	16 30	249	229	12 4	20
8	48.5	13 32	54.4	41.2	23 58	13.2	577	18 33	590	553	12 19	37	237	17 26	248	219	11 18	29
9	48.3	12 47	56.9	40.4	0 13	16.5	574	21 24	594	546	11 21	48	238	23 37	252	223	11 21	29
10	47.8	13 53	54.3	38.2	21 37	16.1	572	20 4	609	536	21 20	73	240	22 21	253	231	11 6	22
11	47.9	14 0	53.0	40.3	21 10	12.7	575	2 52	628	542	11 16	86	238	2 23	249	219	3 36	30
12	47.2	13 59	54.4	39.8	2 59	14.6	566	1 42	610	542	4 36	68	240	18 48	257	219	3 51	38
13	48.4	13 27	53.2	44.0	22 4	9.2	573	17 43	596	550	12 15	46	241	19 24	249	230	12 3	19
14 *	48.8	12 21	53.4	45.5	9 19	7.9	577	20 7	597	543	12 28	54	240	16 30	248	230	11 11	18
15	49.5	17 30	57.4	38.8	23 59	18.6	583	7 54	620	556	22 0	64	240	21 12	266	222	12 30	44
16	47.1	13 15	54.7	36.2	0 43	18.5	567	21 10	610	540	1 17	70	242	19 39	256	232	11 33	24
17	47.9	13 33	52.7	42.1	22 2	10.6	571	19 55	595	542	10 38	53	240	21 48	249	231	13 58	18
18	48.0	13 58	52.8	42.5	23 56	10.3	580	17 57	596	561	10 30	35	238	0 2	247	228	12 7	19
19	46.6	14 29	54.2	33.5	22 30	20.7	569	22 32	620	537	20 40	83	242	22 11	264	229	8 20	35
20	48.2	13 43	54.2	40.3	0 12	13.9	574	17 51	608	543	14 13	65	241	13 42	251	231	12 41	20
21 **	47.6	13 41	57.3	33.7	22 36	23.6	566	8 53	607	517	11 20	90	243	14 52	267	227	11 2	40
22	48.0	13 6	52.3	39.1	16 50	13.2	567	5 52	591	530	16 26	61	242	16 49	263	228	1 2	35
23	48.7	13 59	54.7	45.7	8 59	9.0	572	20 57	590	538	11 23	52	242	13 45	257	231	9 50	26
24 **	49.1	13 13	67.4	45.3	22 11	22.1	573	4 20	627	480	13 42	147	240	13 14	269	213	9 22	56
25 **	47.4	14 5	53.6	37.0	20 17	16.6	563	20 22	638	511	15 20	127	245	16 6	267	225	23 41	42
26	47.9	12 44	54.0	43.0	0 0	11.0	573	3 18	594	557	11 39	37	236	16 38	254	220	12 4	34
27 *	48.3	12 47	52.3	45.4	9 29	6.9	580	19 55	594	559	11 38	35	238	16 36	247	224	12 3	23
28 *	48.5	12 54	52.4	45.6	9 7	6.8	584	7 10	603	559	11 20	44	237	5 23	245	224	10 48	21
29 *	48.2	12 46	52.6	44.7	9 40	7.9	584	6 40	603	557	11 18	46	236	16 19	244	220	12 5	24
30 *	47.7	12 38	53.2	43.5	22 46	9.7	583	7 58	597	560	10 16	37	236	5 24	244	225	14 3	19
Mean	48.2	-	54.7	41.1	-	13.7	573	-	604	539	-	65.4	240	-	255	226	-	29.4
Mean *	48.3	-	52.8	44.9	-	7.8	582	-	599	556	-	43.2	237	-	246	225	-	21.0
Mean **	48.3	-	58.9	37.8	-	21.2	563	-	617	502	-	114.8	244	-	273	225	-	48.4
December	9°+	U.T. h m	9°+	9°+	U.T. h m	18000 Y +	U.T. h m	18000 Y +	18000 Y +	U.T. h m	Y	43000 Y +	U.T. h m	43000 Y +	43000 Y +	U.T. h m	Y	
1	47.2	13 30	51.2	38.9	23 42	12.3	578	5 16	591	553	19 10	38	237	19 40	250	228	11 21	22
2	47.7	15 21	52.7	38.0	23 18	14.7	579	23 20	595	550	14 58	45	237	19 28	247	224	12 5	23
3	47.1	13 21	51.4	37.8	0 5	13.6	573	2 26	611	537	11 17	74	235	16 20	250	213	3 21	37
4	47.8	12 16	51.6	45.2	9 8	6.4	584	19 58	603	564	11 39	39	236	13 38	241	230	20 6	11
5 **	48.2	17 16	54.4	43.4	22 30	11.0	582	5 20	600	551	11 48	49	237	22 36	255	223	11 3	32
6	47.1	13 55	52.8	43.0	22 20	9.8	579	18 40	598	559	10 56	39	238	23 14	246	229	10 53	17
7	47.1	12 32	52.4	42.6	3 44	9.8	582	3 27	615	548	16 20	67	234	17 28	248	217	6 51	31
8	47.5	4 7	52.2	44.3	0 39	7.9	583	4 24	616	559	10 33	57	234	0 0	244	221	4 41	23
9 *	47.4	12 15	51.4	44.3	20 34	7.1	585	20 45	604	575	14 18	29	235	20 43	245	218	11 1	27
10 **	47.3	13 11	53.2	38.8	22 50	14.4	584	23 3	607	550	15 16	57	235	15 40	250	220	12 3	30
11 **	47.1	15 33	53.5	36.2	19 26	17.3	579	19 30	612	528	20 26	84	235	19 13	253	222	10 26	31
12 **	47.4	14 4	54.5	39.7	23 28	14.8	570	23 38	604	524	12 12	80	241	16 17	266	226	12 2	40
13	47.8	13 28	53.7	43.0	0 36	10.7	579	5 44	595	555	14 39	40	238	17 50	249	223	12 25	26
14 *	47.8	13 23	52.0	45.5	8 55	6.5	582	20 10	598	562	11 24	36	235	4 29	244	224	9 44	20
15 *	48.1	13 17	53.8	45.0	9 56	8.8	582	19 36	594	552	11 28	42	235	16 20	243	227	11 20	16
16	47.7	12 18	52.0	41.4	23 19	10.6	590	20 6	605	579	10 46	26	233	23 19	243	224	12 26	19
17	47.1	13 55	52.2	41.9	22 11	10.3	579	6 1	607	551	11 28	56	234	17 43	245	225	8 16	20
18	47.5	13 33	53.8	43.7	4 11	10.1	588	18 20	604	575	2 32	29	230	0 19	238	221	11 2	17
19 **	49.4	15 5	58.3	36.2	17 8	22.1	565	6 9	620	494	13 1	126	238	17 12	275	216	8 18	59
20 *	46.7	3 40	50.8	42.7	9 54	8.1	561	23 23	580	538	11 0	42	240	8 7	248	235	22 54	13
21	47.8	12 16	54.6	43.3	22 42	11.3	571	22 41	593	518	9 33	75	239	15 23	251	227	11 8	24
22	47.2	13 34	55.3	41.6	1 41	13.7	570	6 30	595	538	13 16	57	237	16 22	251	227	10 48	24
23	47.7	12 48	53.1	43.3	9 58	9.8	581	8 34	606	544	12 53	62	236	18 31	246	219	11 18	27
24	46.9	13 59	53.0	41.7	1 27	11.3	576	19 56	591	558	1 57	33	238	16 36	248	229	14 5	19
25	46.9	14 19	52.1	39.6	22 34	12.5	580	19 15	617	537	22 23	80	237	23 26	258	225	13 21	33
26	48.2	14 32	53.0	43.7	23 46	9.3	565	3 59	593	534	15 48	59	244	16 34	264	225	9 22	39
27	46.6	12 52	52.4	39.9	18 53	12.5	569	5 43	591	549	22 47	42	239	0 20	250	227	13 0	23
28	47.1	14 3	52.4	42.4	0 32	10.0	573	1 19	597	552	13 44	45	238	17 40	251	227	12 0	24
29	47.3	13 42	52.5	44.5	9 25	8.0	577	4 52	593	561	13 23	32	235	16 34	248	222	11 47	

TABLE IV(A). - THREE-HOUR-RANGE INDICES "K" FOR THE YEAR 1946.\* (SEE INTRODUCTION PAGE XII).

Date	January		February		March		April		May		June		
	Indices	Sum	Indices	Sum	Indices	Sum	Indices	Sum	Indices	Sum	Indices	Sum	
1	2232	3333	21	0101 1211	7	4443 2213	23	5233 3233	24	1333 2333	21	2232 3332	20
2	4111	2331	16	3233 3122	19	5334 3212	23	4323 4345	28	4123 2323	20	3222 3321	18
3	0146	6665	34	1011 4333	16	1121 1122	11	2123 3332	19	3222 2232	18	1221 2210	11
4	5543	3555	35	2323 4313	21	3333 3346	28	2223 3113	17	4133 3331	21	1232 4321	18
5	3222	2124	18	3321 3333	21	4225 4433	27	2123 3332	19	1221 2334	18	0112 3254	18
6	3131	1443	20	5122 3133	20	2333 3333	23	3223 3233	21	3453 3446	32	3233 4323	23
7	0111	2342	14	4148 7867	45	3123 3233	20	3333 4322	23	4554 4332	30	3135 6533	29
8	1212	1121	11	7667 5653	45	1111 1233	13	1133 3233	19	3564 4444	34	4334 5645	34
9	0011	2121	8	1134 3233	20	0122 3553	21	3235 5535	31	4443 5554	34	4432 4433	27
10	0112	2221	11	2353 3421	23	6555 5466	42	4123 2213	18	2333 4434	26	1212 3432	18
11	3443	3244	27	2211 3131	14	6334 3444	31	1132 2222	15	4464 5521	31	2333 3332	22
12	2213	2233	18	1211 3334	18	1121 1111	9	3113 3335	22	2223 3231	18	1333 5445	28
13	1100	2132	10	3334 4310	21	1112 2331	14	4443 3354	30	3321 2223	18	3434 4331	25
14	0211	2111	9	0154 3554	27	1112 2231	13	3124 5434	26	3111 1210	10	1232 2341	18
15	1011	1233	12	3433 3321	22	2123 2333	19	4454 5452	33	1122 3311	14	0132 3331	16
16	3321	3213	18	1222 3223	17	1021 2112	10	1211 3234	17	1222 4233	19	1234 4445	27
17	1232	1333	18	4222 0110	12	3333 4454	29	3212 3211	15	3422 4531	24	5542 4223	27
18	1112	3354	20	2111 3331	15	2123 3121	15	1133 3331	18	3343 3421	23	3233 3534	26
19	4322	1133	19	2343 2556	30	0122 2123	13	1112 2323	15	0211 2211	10	4543 5444	33
20	2201	2100	8	1322 2246	22	3124 3232	20	3113 3311	16	0121 2334	16	3332 4331	22
21	0000	1123	7	5544 4541	32	2323 3211	17	0111 2321	11	4333 4543	29	2333 3343	24
22	4331	2113	18	3433 3233	24	0355 4335	28	1133 3452	22	3554 5554	36	3223 4441	23
23	3322	2235	22	3333 3341	23	3222 2346	24	4355 5667	41	4333 5554	32	1132 2211	13
24	3333	5544	30	3122 2144	19	7644 5735	41	6654 4743	39	4333 4433	27	0011 2133	11
25	3221	3331	18	3334 2323	23	7755 8867	53	4331 3311	19	4322 4333	24	2333 2431	21
26	2333	2441	22	3122 1233	17	6454 3354	34	2132 1333	18	4323 3322	22	1313 4433	22
27	2321	1122	14	1112 0110	7	4413 3435	27	4111 1221	13	1222 3213	16	2133 3444	24
28	1002	1123	10	1123 1211	12	4498 9987	58	2122 2353	20	1322 3332	19	2442 4343	26
29	1222	3222	16			5455 4334	33	2133 2323	19	2322 2332	19	3343 4564	32
30	1112	2213	13			2222 1223	16	3222 3231	18	3123 3222	18	1113 3331	16
31	1021	3313	14			1133 3224	19			3442 3332	24		

\* Corresponding figures for the years 1929-1939 are given in an Appendix to the Magnetic and Meteorological Results for 1940.

TABLE IV(A). - THREE-HOUR-RANGE INDICES "K" FOR THE YEAR 1946.\* (SEE INTRODUCTION PAGE XII).

Date	July		August		September		October		November		December	
	Indices	Sum	Indices	Sum	Indices	Sum	Indices	Sum	Indices	Sum	Indices	Sum
1	1211 3211	12	2332 3321	19	1012 3311	12	3343 2442	25	4333 3445	29	1111 1333	14
2	2332 4222	20	1212 3221	14	1233 2232	18	1243 3323	21	1243 2133	19	3111 3324	18
3	3444 3321	24	1223 3321	17	1112 3334	18	3443 3311	22	2221 1112	12	4323 1311	18
4	0011 4310	10	1212 2222	14	2243 3334	24	3332 3321	20	2123 2212	15	1112 1232	13
5	1111 2210	9	1122 2232	15	3133 4323	22	1333 3441	22	1234 3433	23	2213 3333	20
6	2211 2311	13	1113 4231	16	3323 2111	16	2343 2344	25	2224 4424	24	2212 2123	15
7	1544 3553	30	3333 4442	26	1144 4333	23	3333 3332	23	4322 2211	17	3331 2322	19
8	4333 4521	25	2111 1432	15	2133 3333	21	1121 1222	12	1112 3123	14	2313 1111	13
9	4334 3342	26	3112 3231	16	1222 3342	19	3344 3234	26	3223 3213	19	1111 1131	10
10	2323 2433	22	0113 3333	17	2244 3315	24	3133 3244	23	3122 2244	20	2113 2433	19
11	3322 3443	24	3443 5444	31	3233 3333	23	3222 3332	20	4533 1144	25	1113 2354	20
12	1222 2211	13	4232 2325	23	2134 3323	21	3342 2113	19	4422 2341	22	3213 3433	22
13	0111 3312	12	2322 2232	18	1333 3223	20	3032 2112	14	1122 2333	17	2122 3311	15
14	1232 4543	24	2354 5466	35	3123 3223	19	2133 3322	19	1121 3222	14	1011 2101	7
15	2432 2331	20	5434 4534	32	2132 3312	17	0033 2123	14	1043 3344	22	0012 2101	7
16	1124 3433	21	3333 3454	28	1123 4564	26	1123 2233	17	4332 3234	24	1111 1123	11
17	3332 3323	22	3334 5435	30	5432 2456	31	1122 2111	11	1222 2123	15	2232 2123	17
18	2224 5655	31	1112 3223	15	6655 6564	43	2111 1103	10	3111 1213	13	3221 2221	15
19	4443 5133	27	3122 2322	17	5534 5533	33	1122 1334	17	3243 2345	26	3243 4541	26
20	3221 2312	16	1333 3222	19	3233 2332	21	4433 3343	27	3323 4343	25	1311 2201	11
21	2322 3433	22	1232 1212	14	4113 3644	26	3122 1333	18	4234 4234	26	1134 3312	18
22	3332 3434	25	1111 1110	7	3779 9865	54	1132 2311	13	4342 2422	23	3332 3311	19
23	3235 4433	27	0112 2121	10	7665 5656	46	3222 3312	18	3222 2211	15	0123 3223	16
24	1122 3321	15	2332 2312	18	4334 3320	22	1023 3122	14	1433 6321	23	2211 2111	11
25	2333 2543	25	3332 3321	20	1122 1211	11	3132 3223	19	1333 3454	26	2211 2144	17
26	3434 3487	36	1233 1221	15	1122 2213	14	3433 3346	29	3321 2311	16	2123 2332	18
27	8876 5443	45	1333 3123	19	3343 3664	32	6544 4454	36	1011 1110	6	2332 2143	20
28	1333 5444	27	2222 2321	16	4454 4766	40	2233 2322	19	1122 2111	11	3211 2111	12
29	5555 4664	40	1132 1312	14	7323 4544	32	3333 3334	25	1021 1112	9	1121 1311	11
30	5444 4532	31	0112 3235	17	4443 4453	31	1132 1211	12	1011 2112	9	0102 1110	6
31	3112 2422	17	5654 4422	32			0133 4443	22			2111 2212	12

\* Corresponding figures for the years 1929-1939 are given in an Appendix to the Magnetic and Meteorological Results for 1940.

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

All Days

DECLINATION WEST (Unit 0.01)

Month and Season, 1946	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
January	-149	-091	-058	-060	-051	-012	-007	+011	-011	+017	+092	+179	<b>+306</b>	+305	+238	+167	+058	+071	-043	-121	-168	-221	-247	-204
February	-239	-135	-116	-055	-077	-030	-023	-056	-130	-098	-013	+139	+318	<b>+375</b>	+312	+235	+151	+117	+071	-039	-078	-234	-149	-241
March	-290	-243	-204	-216	-166	-223	-205	-282	-328	-207	-014	+311	+562	<b>+701</b>	+631	+525	+276	+170	+030	-013	-120	-207	-197	-279
April	-207	-212	-207	-246	-204	-199	-303	-409	-446	-301	+012	+382	+648	<b>+769</b>	+672	+546	+310	+132	+045	-053	-089	-144	-209	-283
May	-137	-163	-151	-217	-310	-376	-398	-459	-456	-283	+021	+385	+624	<b>+676</b>	+646	+492	+347	+159	+027	-038	-063	-062	-125	-144
June	-123	-130	-154	-238	-318	-408	-537	-544	-474	-330	-094	+220	+516	<b>+644</b>	<b>+702</b>	+560	+438	+265	+138	+050	+010	-024	-057	-112
July	-134	-252	-234	-289	-332	-426	-430	-511	-429	-295	-027	+303	+548	<b>+654</b>	+631	+534	+343	+176	+086	+069	+101	+033	-041	-074
August	-102	-178	-209	-202	-260	-338	-439	-531	-506	-318	+012	+399	+674	<b>+760</b>	+675	+468	+296	+095	+006	-017	-048	-031	-074	-123
September	-244	-253	-222	-156	-171	-083	-199	-358	-408	-252	-017	+304	+606	+719	<b>+754</b>	+583	+349	+095	-031	-222	-146	-155	-236	-253
October	-186	-155	-196	-163	-148	-108	-143	-258	-373	-310	-020	+334	+552	<b>+609</b>	+526	+354	+178	+130	+070	-039	-121	-172	-162	-200
November	-238	-167	-133	-102	-075	-105	-087	-096	-176	-170	-017	+207	+363	<b>+423</b>	+366	+282	+196	+169	+103	-004	-073	-192	-255	-223
December	-192	-151	-124	-097	-071	-086	-065	-084	-108	-136	-026	+161	+307	<b>+357</b>	+326	+262	+178	+105	+076	-026	-057	-126	-210	-208
Year	-187	-178	-167	-170	-182	-200	-236	-298	-320	-224	-008	+277	+502	<b>+583</b>	+540	+417	+260	+140	+048	-038	-071	-128	-164	-195
Winter	-205	-136	-108	-079	-069	-058	-046	-056	-106	-097	+009	+172	+324	<b>+365</b>	+311	+237	+146	+116	+052	-048	-094	-193	-215	-219
Equinox	-232	-216	-207	-195	-172	-153	-213	-327	-389	-268	-010	+333	+592	<b>+700</b>	+646	+502	+278	+132	+029	-082	-119	-170	-201	-254
Summer	-124	-181	-187	-237	-305	-387	-451	-511	-466	-307	-022	+327	+591	<b>+684</b>	+664	+514	+356	+174	+064	+016	000	-021	-074	-113

INCLINATION (Unit 0.01)

January	+001	-002	-013	-038	-049	-056	-086	-081	-069	-040	-001	+034	+034	+025	+030	+048	+061	+050	+057	+043	+041	+022	-013	+006
February	+007	-008	-026	-040	-054	-049	-059	-056	-020	+024	+073	+065	+050	+046	+048	+041	+025	+016	+007	-003	-019	-016	-025	-029
March	-056	-019	-063	-040	-063	-058	-039	-019	+025	+070	+112	+112	+114	+060	+036	+012	+037	+019	-013	-031	-018	-051	-059	-073
April	-060	-073	-059	-071	-053	-072	-044	-008	+046	+106	+151	+154	+125	+084	+069	+024	+001	-032	-037	-050	-046	-062	-056	-040
May	-039	-049	-043	-050	-066	-026	+013	+056	+103	+113	+112	+085	+092	+101	+057	+003	-033	-069	-085	-076	-058	-040	-058	-052
June	-037	-052	-053	-056	-054	-021	+015	+076	+118	+138	+136	+109	+109	+088	+041	-013	-062	-061	-081	-093	-081	-056	-066	-044
July	-029	-027	-004	-018	-027	+015	+050	+079	+118	+143	+155	+117	+087	+046	+013	-040	-069	-070	-074	-123	-094	-073	-089	-073
August	-063	-063	-041	-046	-036	-025	+010	+083	+142	+172	+165	+110	+051	+022	+010	+006	-039	-039	-055	-079	-078	-081	-072	-053
September	-113	-128	-116	-090	-114	-102	-014	+033	+094	+143	+165	+151	+126	+078	+094	+054	+001	-009	-004	-000	-020	-041	-078	-100
October	-062	-059	-056	-066	-085	-086	-093	-054	+033	+112	+136	+130	+119	+097	+082	+068	+049	+007	-012	-020	-032	-059	-075	-075
November	-019	-008	-034	-038	-059	-069	-075	-055	-011	+041	+084	+102	+084	+077	+084	+062	+028	-009	-023	-032	-034	-029	-032	-042
December	-005	-012	-027	-036	-049	-066	-068	-049	-033	+009	+040	+061	+059	+054	+060	+048	+040	+002	-001	-012	-000	-003	+002	-016
Year	-040	-042	-045	-049	-059	-051	-033	+000	+046	+086	+111	+103	+088	+065	+052	+026	+003	-016	-027	-040	-037	-041	-052	-049
Winter	-004	-008	-025	-038	-053	-060	-072	-060	-033	+009	+049	+066	+057	+051	+056	+050	+039	+015	+010	-001	-003	-007	-017	-020
Equinox	-073	-070	-074	-067	-079	-080	-048	-012	+050	+108	+141	+137	+121	+080	+070	+040	+022	-004	-017	-025	-029	-053	-067	-072
Summer	-042	-048	-035	-043	-046	-014	+022	+074	+120	+142	+142	+105	+085	+064	+030	-011	-051	-060	-074	-093	-078	-063	-071	-056

HORIZONTAL INTENSITY (Unit 0.1γ)

January	-11	-11	+03	+37	+54	+71	+113	+108	+86	+39	-19	-67	-64	-42	-32	-50	-54	-39	-48	-32	-38	-21	+22	-15
February	-39	-22	+08	+26	+44	+52	+65	+68	+19	-53	-133	-115	-90	-70	-49	-20	+14	+26	+37	+47	+65	+42	+44	+28
March	+59	-20	+44	+05	+47	+63	+43	+23	-48	-137	-211	-215	-207	-103	-19	+72	+39	+44	+77	+95	+72	+100	+93	+92
April	+62	+86	+55	+81	+63	+97	+67	+14	-83	-198	-286	-300	-245	-149	-84	+19	+74	+124	+124	+136	+106	+117	+92	+32
May	+62	+68	+53	+61	+89	+25	-35	-106	-188	-222	-242	-220	-224	-198	-90	+33	+114	+190	+214	+186	+142	+99	+110	+91
June	+50	+65	+59	+69	+79	+29	-29	-126	-203	-252	-268	-244	-239	-178	-68	+51	+154	+168	+202	+212	+172	+113	+110	+72
July	+28	+20	-21	-19	+24	-46	-107	-147	-202	-248	-281	-237	-189	-100	-12	+106	+169	+184	+188	+254	+197	+148	+159	+120
August	+92	+90	+55	+67	+63	+42	-11	-118	-218	-286	-299	-239	-148	-76	-30	+12	+103	+115	+134	+161	+149	+142	+114	+87
September	+138	+143	+106	+73	+115	+94	-30	-84	-173	-250	-294	-282	-229	-109	-91	+08	+110	+128	+97	+73	+78	+92	+129	+147
October	+83	+76	+71	+90	+119	+124	+131	+82	-52	-189	-242	-242	-217	-161	-111	-68	-33	+25	+52	+62	+76	+107	+118	+106
November	+26	+09	+45	+45	+76	+95	+99	+73	+11	-76	-151	-179	-146	-122	-117	-75	-12	+37	+55	+68	+70	+56	+57	+63
December	+13	+19	+39	+49	+65	+92	+90	+60	+34	-34	-83	-117	-115	-93	-88	-58	-36	+19	+23	+38	+19	+19	+11	+31
Year	+47	+44	+43	+49	+70	+62	+33	-13	-85	-159	-209	-205	-176	-117	-66	+03	+54	+85	+96	+108	+92	+85	+88	+71
Winter	-03	-01	+24	+39	+60	+78	+92	+77	+38	-31	-97	-120	-104	-82	-72	-51	-25	+11	+17	+30	+29	+24	+34	+27
Equinox	+86	+71	+69	+62	+86	+95	+53	+09	-89	-194	-258	-260	-225	-131	-76	+08	+48	+80	+88	+92	+83	+104	+108	+94
Summer	+58	+61	+37	+45	+64	+13	-46	-124	-203	-252	-273	-235	-200	-138	-50	+51	+135	+164	+185	+203	+165	+126	+123	+93

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

All Days

NORTH COMPONENT (Unit 0.1γ)

Month and Season, 1946	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
January	+ 03	- 02	+ 08	+ 42	+ 58	+ 71	+ 112	+ 106	+ 86	+ 37	- 27	- 83	- 91	- 70	- 54	- 65	- 59	- 45	- 43	- 20	- 22	- 00	+ 45	+ 04
February	- 16	- 09	+ 19	+ 31	+ 51	+ 54	+ 66	+ 72	+ 31	- 43	- 130	- 126	- 118	- 104	- 77	- 41	- 00	+ 15	+ 30	+ 50	+ 71	+ 63	+ 57	+ 50
March	+ 85	+ 03	+ 62	+ 25	+ 62	+ 83	+ 61	+ 49	- 17	- 116	- 207	- 241	- 256	- 166	- 77	+ 23	+ 13	+ 28	+ 73	+ 95	+ 82	+ 118	+ 110	+ 117
April	+ 79	+ 104	+ 73	+ 103	+ 81	+ 114	+ 94	+ 52	- 41	- 167	- 283	- 331	- 301	- 218	- 145	- 32	+ 44	+ 110	+ 118	+ 139	+ 113	+ 129	+ 110	+ 58
May	+ 74	+ 82	+ 66	+ 80	+ 116	+ 59	+ 02	- 62	- 143	- 193	- 241	- 252	- 279	- 258	- 148	- 13	+ 80	+ 173	+ 209	+ 187	+ 146	+ 103	+ 120	+ 103
June	+ 61	+ 76	+ 72	+ 90	+ 107	+ 66	+ 21	- 74	- 156	- 218	- 255	- 261	- 283	- 235	- 132	- 01	+ 111	+ 141	+ 187	+ 204	+ 169	+ 114	+ 114	+ 81
July	+ 40	+ 43	+ 01	+ 08	+ 54	- 06	- 66	- 98	- 160	- 217	- 275	- 262	- 237	- 159	- 70	+ 55	+ 135	+ 165	+ 178	+ 244	+ 185	+ 143	+ 161	+ 125
August	+ 100	+ 105	+ 74	+ 85	+ 86	+ 73	+ 30	- 67	- 168	- 253	- 296	- 273	- 208	- 145	- 92	- 31	+ 74	+ 105	+ 132	+ 160	+ 151	+ 143	+ 119	+ 97
September	+ 159	+ 164	+ 125	+ 86	+ 129	+ 100	- 11	- 50	- 133	- 223	- 288	- 306	- 282	- 174	- 159	- 46	+ 76	+ 117	+ 99	+ 93	+ 90	+ 105	+ 149	+ 168
October	+ 99	+ 89	+ 88	+ 104	+ 131	+ 132	+ 142	+ 105	- 17	- 158	- 237	- 269	- 265	- 215	- 158	- 100	- 49	+ 13	+ 45	+ 65	+ 86	+ 121	+ 131	+ 123
November	+ 48	+ 24	+ 57	+ 54	+ 82	+ 103	+ 106	+ 81	+ 27	- 59	- 147	- 196	- 178	- 159	- 149	- 100	- 30	+ 21	+ 45	+ 67	+ 76	+ 73	+ 80	+ 83
December	+ 31	+ 33	+ 50	+ 57	+ 71	+ 99	+ 95	+ 67	+ 44	- 21	- 79	- 130	- 142	- 125	- 117	- 81	- 52	+ 09	+ 16	+ 40	+ 24	+ 30	+ 30	+ 50
Year	+ 64	+ 59	+ 58	+ 64	+ 86	+ 79	+ 54	+ 15	- 54	- 136	- 205	- 228	- 220	- 169	- 115	- 36	+ 29	+ 71	+ 91	+ 110	+ 98	+ 95	+ 102	+ 88
Winter	+ 17	+ 12	+ 34	+ 46	+ 66	+ 82	+ 95	+ 82	+ 47	- 22	- 96	- 133	- 132	- 115	- 99	- 72	- 35	00	+ 12	+ 34	+ 37	+ 42	+ 53	+ 47
Equinox	+ 106	+ 90	+ 87	+ 80	+ 101	+ 107	+ 72	+ 39	- 52	- 166	- 254	- 287	- 276	- 193	- 135	- 39	+ 21	+ 67	+ 84	+ 98	+ 93	+ 118	+ 125	+ 117
Summer	+ 69	+ 77	+ 53	+ 66	+ 91	+ 48	- 03	- 75	- 157	- 220	- 267	- 262	- 252	- 199	- 111	+ 03	+ 100	+ 146	+ 177	+ 199	+ 163	+ 126	+ 129	+ 102

WEST COMPONENT (Unit 0.1γ)

January	- 81	- 50	- 30	- 26	- 18	+ 06	+ 16	+ 24	+ 09	+ 16	+ 46	+ 84	+ 152	+ 155	+ 121	+ 81	+ 22	+ 31	- 31	- 70	- 96	- 121	- 128	- 111
February	- 134	- 76	- 60	- 25	- 34	- 07	- 01	- 18	- 66	- 61	- 30	+ 54	+ 154	+ 188	+ 158	+ 122	+ 83	+ 67	+ 44	- 13	- 31	- 118	- 72	- 124
March	- 145	- 133	- 101	- 114	- 80	- 108	- 102	- 146	- 183	- 134	- 43	+ 129	+ 264	+ 356	+ 333	+ 292	+ 154	+ 98	+ 29	+ 09	- 52	- 93	- 89	- 133
April	- 100	- 98	- 101	- 117	- 98	- 90	- 150	- 216	- 252	- 194	- 42	+ 153	+ 304	+ 384	+ 344	+ 294	+ 178	+ 91	+ 45	- 05	- 29	- 57	- 96	- 145
May	- 63	- 75	- 71	- 105	- 150	- 196	- 218	- 263	- 275	- 189	- 30	+ 168	+ 294	+ 326	+ 329	+ 268	+ 204	+ 117	+ 51	+ 11	- 09	- 16	- 48	- 61
June	- 57	- 58	- 72	- 115	- 156	- 212	- 291	- 311	- 287	- 219	- 96	+ 76	+ 234	+ 313	+ 362	+ 307	+ 259	+ 170	+ 108	+ 63	+ 35	+ 06	- 12	- 47
July	- 67	- 131	- 128	- 157	- 173	- 235	- 247	- 297	- 263	- 199	- 62	+ 121	+ 260	+ 331	+ 334	+ 303	+ 211	+ 125	+ 78	+ 80	+ 87	+ 43	+ 05	- 19
August	- 39	- 80	- 102	- 96	- 128	- 173	- 236	- 303	- 307	- 218	- 44	+ 172	+ 334	+ 392	+ 355	+ 251	+ 175	+ 70	+ 26	+ 18	- 00	+ 08	- 20	- 51
September	- 107	- 111	- 100	- 71	- 72	- 28	- 111	- 205	- 247	- 177	- 59	+ 114	+ 285	+ 365	+ 386	+ 312	+ 205	+ 72	00	- 106	- 65	- 67	- 104	- 110
October	- 85	- 70	- 92	- 72	- 59	- 36	- 54	- 124	- 208	- 197	- 52	+ 137	+ 257	+ 297	+ 261	+ 177	+ 89	+ 74	+ 46	- 10	- 52	- 73	- 66	- 89
November	- 122	- 88	- 63	- 47	- 27	- 40	- 30	- 39	- 92	- 104	- 35	+ 80	+ 169	+ 205	+ 175	+ 137	+ 102	+ 96	+ 64	+ 10	- 27	- 93	- 126	- 108
December	- 100	- 77	- 60	- 43	- 27	- 30	- 19	- 35	- 52	- 78	- 28	+ 66	+ 144	+ 174	+ 159	+ 130	+ 89	+ 59	+ 44	- 07	- 27	- 64	- 110	- 106
Year	- 92	- 87	- 82	- 82	- 85	- 96	- 120	- 161	- 185	- 146	- 40	+ 113	+ 238	+ 291	+ 276	+ 223	+ 148	+ 89	+ 42	- 02	- 22	- 54	- 72	- 92
Winter	- 109	- 73	- 53	- 35	- 27	- 18	- 09	- 17	- 50	- 57	- 12	+ 72	+ 155	+ 181	+ 153	+ 118	+ 74	+ 63	+ 30	- 20	- 45	- 99	- 109	- 112
Equinox	- 109	- 103	- 99	- 94	- 77	- 66	- 104	- 173	- 223	- 176	- 49	133	+ 278	+ 351	+ 331	+ 269	+ 157	+ 84	+ 30	- 28	- 50	- 73	- 89	- 119
Summer	- 57	- 86	- 93	- 118	- 152	- 204	- 248	- 294	- 283	- 206	- 58	+ 134	+ 281	+ 341	+ 345	+ 282	+ 212	+ 121	+ 66	+ 43	+ 28	+ 10	- 19	- 45

VERTICAL COMPONENT (Unit 0.1γ)

January	- 21	- 31	- 37	- 46	- 46	- 27	- 35	- 26	- 38	- 49	- 49	- 39	- 31	- 11	+ 28	+ 48	+ 87	+ 84	+ 87	+ 72	+ 53	+ 28	+ 07	- 14
February	- 67	- 79	- 74	- 81	- 82	- 48	- 53	- 33	- 25	- 40	- 55	- 43	- 33	- 05	+ 53	+ 97	+ 119	+ 113	+ 112	+ 102	+ 88	+ 42	+ 18	- 34
March	- 57	- 110	- 114	- 128	- 108	- 54	- 35	- 13	- 24	- 77	- 103	- 111	- 88	- 31	+ 80	+ 206	+ 219	+ 169	+ 135	+ 115	+ 104	+ 57	+ 10	- 39
April	- 62	- 52	- 77	- 60	- 39	- 24	+ 04	+ 02	- 34	- 94	- 141	- 166	- 139	- 57	+ 44	+ 129	+ 175	+ 178	+ 158	+ 141	+ 88	+ 59	+ 21	- 62
May	+ 11	- 10	- 23	- 31	- 22	- 30	- 37	- 52	- 79	- 126	- 177	- 219	- 203	- 109	- 09	+ 86	+ 152	+ 204	+ 203	+ 168	+ 127	+ 93	+ 55	+ 30
June	- 10	- 29	- 46	- 36	- 05	- 07	- 15	- 31	- 61	- 107	- 152	- 189	- 180	- 110	- 17	+ 73	+ 142	+ 179	+ 190	+ 168	+ 121	+ 68	+ 29	+ 15
July	- 34	- 49	- 62	- 108	- 38	- 56	- 76	- 68	- 62	- 82	- 116	- 146	- 139	- 73	+ 16	+ 107	+ 157	+ 187	+ 179	+ 165	+ 131	+ 90	+ 61	+ 27
August	- 03	- 11	- 15	- 03	+ 22	+ 12	+ 11	+ 14	- 13	- 69	- 123	- 175	- 165	- 99	- 34	+ 48	+ 105	+ 132	+ 120	+ 102	+ 76	+ 50	+ 18	+ 16
September	- 70	- 110	- 155	- 142	- 127	- 136	- 119	- 79	- 75	- 87	- 114	- 135	- 97	+ 16	+ 113	+ 204	+ 260	+ 265	+ 211	+ 168	+ 111	+ 72	+ 30	- 05
October	- 20	- 28	- 26	- 21	- 18	- 09	- 17	+ 02	- 07	- 53	- 95	- 113	- 92	- 39	+ 25	+ 75	+ 94	+ 82	+ 79	+ 77	+ 66	+ 45	+ 15	- 13
November	- 07	- 08	- 13	- 29	- 28	- 17	- 27	- 20	- 13	- 33	- 58	- 62	- 48	- 17	+ 17	+ 42	+ 69	+ 57	+ 48	+ 47	+ 44	+ 32	+ 21	+ 01
December	+ 15	+ 04	- 03	- 12	- 17	- 13	- 29	- 30	- 34	- 49	- 55	- 61	- 61	- 28	+ 03	+ 30	+ 56	+ 52	+ 48	+ 49	+ 46	+ 35	+ 31	+ 19
Year	- 27	- 43	- 54	- 58	- 42	- 34	- 36	- 28	- 39	- 72	- 103	- 122	- 106	- 47	+ 27	+ 95	+ 136	+ 142	+ 131	+ 115	+ 88	+ 56	+ 26	- 05
Winter	- 20	- 29	- 32	- 42	- 43	- 26	- 36	- 27	- 28	- 43	- 54	- 51	- 43	- 15	+ 25	+ 54	+ 83	+ 74	+ 74	+ 68	+ 58	+ 34	+ 19	- 07
Equinox	- 52	- 75	- 93	- 88	- 73	- 56	- 42	- 22	- 35	- 78	- 113	- 131	- 104	- 28	+ 66	+ 154	+ 187	+ 174	+ 146	+ 125	+ 92	+ 58	+ 19	- 30
Summer	- 09	- 25	- 37	- 45	- 11	- 20	- 29	- 34	- 54	- 96	- 142	- 182	- 172	- 98	- 11	+ 79	+ 139	+ 176	+ 173	+ 151	+ 114	+ 75	+ 41	+ 22

MAGNETIC OBSERVATIONS, ABINGER 1946.

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, 1946	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
January	-106	-060	-052	-042	-036	-060	-052	-070	-074	-040	+018	+106	+212	+228	+132	+098	+086	+086	+056	-032	-040	-094	-146	-114
February	-137	-119	-025	-009	-063	-093	-125	-169	-247	-239	-063	+133	+317	+369	+281	+207	+103	+081	+045	+029	-059	-065	-083	-073
March	-024	-028	-058	-082	-094	-150	-186	-288	-360	-228	-008	+252	+420	+462	+314	+186	+066	+032	+052	-018	-002	-046	-062	-034
April	-073	-043	-065	-109	-143	-211	-349	-517	-537	-411	-151	+161	+469	+601	+511	+381	+255	+149	+065	+041	+049	+029	-001	-099
May	-113	-083	-129	-173	-307	-473	-605	-595	-513	-257	+121	+457	+721	+761	+685	+473	+285	+123	+017	-021	-071	-099	-105	-107
June	-071	-075	-083	-161	-257	-417	-523	-559	-475	-195	+147	+463	+633	+689	+559	+359	+217	+109	+065	+075	+045	+043	-003	-007
July	-039	-119	-131	-211	-351	-513	-587	-559	-519	-351	-131	+213	+521	+673	+647	+533	+347	+225	+149	+093	+079	+047	+021	-039
August	-084	-116	-114	-150	-258	-356	-500	-600	-586	-328	+054	+458	+690	+710	+596	+376	+148	+022	+008	+048	+040	+012	-026	-038
September	-207	-191	-173	-117	-113	-217	-335	-459	-499	-421	-155	+253	+555	+673	+627	+489	+315	+161	+059	+009	-015	-067	-065	-097
October	-056	-104	-114	-136	-154	-200	-184	-324	-446	-384	-112	+212	+430	+500	+428	+272	+138	+160	+112	+070	+046	-014	-044	-098
November	-152	-114	-084	-050	-052	-078	-086	-112	-148	-198	-082	+112	+306	+300	+272	+230	+138	+120	+092	+042	-004	-120	-158	-164
December	-145	-115	-071	-017	-033	-081	-107	-161	-189	-207	-115	+069	+227	+283	+239	+195	+131	+115	+081	+039	-005	-011	-045	-069
Year	-101	-097	-092	-105	-155	-237	-303	-370	-390	-295	-068	+214	+444	+516	+452	+333	+198	+124	+062	+030	+008	-032	-056	-078
Winter	-135	-102	-059	-030	-046	-078	-093	-128	-165	-171	-061	+105	+266	+295	+231	+183	+115	+101	+068	+020	-027	-073	-108	-105
Equinox	-090	-092	-103	-111	-126	-195	-264	-397	-461	-361	-107	+220	+469	+559	+470	+332	+194	+126	+046	+026	+020	-025	-043	-082
Summer	-077	-098	-114	-174	-293	-440	-554	-584	-544	-355	-038	+319	+599	+694	+654	+486	+285	+147	+071	+046	+031	+001	-017	-047

INCLINATION (Unit 0.01)

January	+023	+018	+012	-006	-017	-031	-033	-027	-020	+011	+050	+061	+025	-010	-020	-021	-014	-023	-020	-006	+001	+006	+011	+019
February	-008	+008	+010	-009	-013	-026	-050	-057	-046	-005	+024	+060	+055	+072	+060	+022	+022	+013	+013	-015	-027	-039	-040	-027
March	+003	+004	+007	+002	+006	000	-007	-005	+020	+037	+056	+030	+022	+005	+020	+008	+007	+004	000	-020	-027	-048	-061	-054
April	-020	-019	-010	-010	-016	-022	-006	+015	+050	+083	+115	+106	+095	+069	+043	-021	-044	-061	-046	-051	-055	-060	-071	-066
May	-005	-031	-015	000	+006	+027	+070	+107	+142	+141	+097	+037	-006	-008	-038	-051	-064	-055	-063	-088	-076	-063	-039	-033
June	+002	-012	-005	-014	-021	-001	+031	+076	+102	+121	+122	+086	+067	+068	+020	-033	-038	-071	-083	-080	-098	-083	-082	-068
July	-029	-012	-010	-007	-010	-002	+031	+069	+120	+168	+167	+131	+100	+040	-031	-087	-072	-053	-087	-089	-089	-087	-090	-067
August	-042	-036	-033	-030	-019	-003	+033	+101	+170	+193	+156	+084	+032	+020	+014	-017	-041	-062	-073	-097	-092	-086	-085	-094
September	-031	-012	-007	-008	-032	-042	-020	+018	+068	+128	+152	+121	+060	+037	+028	+019	+003	-038	-056	-064	-077	-074	-084	-091
October	-049	-014	-017	-016	-031	-024	-033	-016	+041	+100	+152	+152	+125	+085	+051	+017	+008	-030	-071	-081	-097	-090	-087	-079
November	-004	-001	-011	-021	-040	-040	-049	-048	-020	+045	+086	+102	+088	+065	+043	+025	+003	-031	-041	-041	-037	-036	-026	-014
December	+004	+008	000	-002	-003	-011	-009	-000	+013	+041	+080	+087	+054	+026	+022	+008	-004	-032	-049	-054	-049	-044	-040	-040
Year	-013	-008	-007	-010	-016	-015	-004	+019	+053	+089	+105	+088	+060	+039	+018	-011	-020	-037	-048	-057	-060	-059	-058	-051
Winter	+004	+008	+003	-010	-018	-027	-035	-033	-018	+023	+060	+078	+056	+038	+026	+009	+002	-018	-024	-029	-028	-028	-024	-016
Equinox	-024	-010	-007	-008	-018	-022	-017	+033	+045	+087	+118	+102	+076	+049	+036	+006	-007	-032	-043	-054	-064	-068	-076	-073
Summer	-019	-023	-016	-013	-011	+005	+041	+088	+134	+156	+136	+085	+049	+030	-009	-047	-054	-060	-077	-089	-089	-080	-074	-066

HORIZONTAL INTENSITY (Unit 0.1γ)

January	- 33	- 27	- 17	+ 07	+ 21	+ 43	+ 45	+ 39	+ 23	- 27	- 79	- 99	- 51	+ 09	+ 33	+ 33	+ 29	+ 41	+ 39	+ 15	+ 07	- 01	- 09	- 29
February	+ 20	- 08	- 12	+ 10	+ 16	+ 42	+ 72	+ 90	+ 70	- 02	- 66	-124	-116	-134	- 94	- 28	- 22	- 06	00	+ 42	+ 58	+ 72	+ 70	+ 48
March	+ 06	+ 04	00	+ 08	- 02	+ 12	+ 22	+ 28	- 20	- 78	-128	- 94	- 80	- 44	- 42	- 06	+ 06	+ 20	+ 50	+ 56	+ 84	+100	+ 84	
April	+ 50	+ 46	+ 30	+ 32	+ 44	+ 56	+ 36	- 02	- 72	-150	-234	-240	-220	-158	- 86	+ 34	+ 82	+120	+ 96	+104	+102	+104	+114	+106
May	+ 25	+ 61	+ 31	+ 15	+ 21	- 15	- 81	-147	-217	-251	-213	-149	- 87	- 47	+ 35	+ 81	+121	+123	+137	+165	+143	+117	+ 75	+ 65
June	+ 10	+ 32	+ 24	+ 38	+ 58	+ 28	- 24	- 98	-146	-200	-234	-206	-184	-162	- 64	+ 40	+ 72	+136	+162	+160	+172	+138	+126	+110
July	+ 42	+ 22	+ 24	+ 26	+ 48	+ 32	- 24	- 96	-186	-268	-292	-260	-216	-102	+ 26	+140	+126	+104	+156	+164	+152	+142	+132	+ 96
August	+ 72	+ 66	+ 58	+ 58	+ 50	+ 28	- 22	-126	-238	-306	-282	-188	-112	- 70	- 36	+ 32	+ 80	+108	+116	+150	+144	+138	+136	+148
September	+ 56	+ 26	+ 24	+ 30	+ 64	+ 78	+ 48	- 10	-100	-206	-268	-252	-166	-102	- 66	- 24	+ 12	+ 88	+112	+124	+132	+126	+134	+146
October	+ 76	+ 26	+ 36	+ 36	+ 60	+ 54	+ 64	+ 40	- 48	-164	-268	-280	-236	-162	- 90	- 16	+ 04	+ 60	+122	+134	+156	+144	+140	+124
November	+ 04	- 02	+ 16	+ 34	+ 62	+ 72	+ 74	+ 70	+ 32	- 72	-148	-176	-152	-106	- 66	- 28	+ 14	+ 58	+ 70	+ 68	+ 64	+ 56	+ 38	+ 18
December	+ 02	- 06	+ 08	+ 10	+ 10	+ 24	+ 16	00	- 22	- 78	-136	-150	-104	- 54	- 40	- 10	+ 18	+ 58	+ 84	+ 88	+ 84	+ 72	+ 60	+ 60
Year	+ 28	+ 20	+ 19	+ 25	+ 38	+ 38	+ 19	- 18	- 77	-150	-196	-185	-144	- 94	- 41	+ 21	+ 45	+ 75	+ 93	+105	+106	+ 99	+ 93	+ 81
Winter	- 02	- 11	- 01	+ 15	+ 27	+ 45	+ 52	+ 50	+ 26	- 45	-107	-137	-106	- 71	- 42	- 08	+ 10	+ 38	+ 48	+ 53	+ 53	+ 50	+ 40	+ 24
Equinox	+ 47	+ 26	+ 23	+ 27	+ 42	+ 50	+ 43	+ 14	- 60	-149	-224	-217	-176	-117	- 72	- 03	+ 26	+ 69	+ 88	+103	+112	+115	+122	+115
Summer	+ 37	+ 45	+ 34	+ 34	+ 44	+ 18	- 38	-117	-197	-256	-255	-201	-150	- 95	- 10	+ 73	+100	+118	+143	+160	+153	+134	+117	+105

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

International Quiet Days

NORTH COMPONENT (Unit 0.1γ)

Month and Season, 1946	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
January	- 23	- 21	- 12	+ 11	+ 24	+ 48	+ 49	+ 45	+ 30	- 23	- 80	- 107	- 70	- 12	+ 20	+ 24	+ 21	+ 33	+ 33	+ 18	+ 11	+ 08	+ 05	- 18
February	+ 32	+ 03	- 10	+ 11	+ 22	+ 50	+ 83	+ 104	+ 92	+ 20	- 59	- 135	- 144	- 166	- 119	- 47	- 31	- 13	- 04	+ 39	+ 63	+ 77	+ 54	
March	+ 08	+ 07	+ 05	+ 16	+ 07	+ 26	+ 39	+ 54	+ 14	- 56	- 126	- 116	- 118	- 86	- 70	- 23	- 00	+ 03	+ 25	+ 51	+ 55	+ 87	+ 104	+ 86
April	+ 56	+ 49	+ 36	+ 42	+ 57	+ 75	+ 68	+ 46	- 21	- 110	- 217	- 252	- 260	- 211	- 132	- 02	+ 57	+ 105	+ 89	+ 99	+ 96	+ 100	+ 113	+ 114
May	+ 35	+ 68	+ 43	+ 31	+ 49	+ 29	- 24	- 90	- 167	- 224	- 221	- 189	- 152	- 117	- 29	+ 36	+ 93	+ 110	+ 134	+ 165	+ 148	+ 125	+ 84	+ 74
June	+ 17	+ 39	+ 31	+ 52	+ 81	+ 66	+ 25	- 43	- 92	- 153	- 213	- 217	- 224	- 218	- 127	- 12	+ 38	+ 114	+ 150	+ 152	+ 163	+ 132	+ 120	+ 109
July	+ 45	+ 33	+ 36	+ 45	+ 80	+ 79	+ 31	- 43	- 136	- 232	- 276	- 276	- 261	- 163	- 34	+ 89	+ 92	+ 82	+ 140	+ 153	+ 143	+ 136	+ 128	+ 98
August	+ 79	+ 76	+ 68	+ 71	+ 73	+ 61	+ 25	- 69	- 181	- 271	- 283	- 228	- 174	- 135	- 91	- 03	+ 65	+ 105	+ 114	+ 144	+ 138	+ 135	+ 137	+ 149
September	+ 74	+ 43	+ 40	+ 40	+ 74	+ 97	+ 78	+ 33	- 53	- 164	- 250	- 272	- 215	- 163	- 123	- 69	- 17	+ 72	+ 105	+ 121	+ 132	+ 130	+ 138	+ 153
October	+ 80	+ 35	+ 46	+ 48	+ 73	+ 72	+ 80	+ 69	- 06	- 126	- 254	- 296	- 272	- 206	- 128	- 41	- 09	+ 44	+ 110	+ 126	+ 150	+ 143	+ 142	+ 131
November	+ 18	+ 09	+ 24	+ 38	+ 66	+ 78	+ 81	+ 79	+ 45	- 53	- 138	- 184	- 178	- 132	- 90	- 49	+ 01	+ 46	+ 61	+ 63	+ 64	+ 66	+ 52	+ 33
December	+ 15	+ 05	+ 15	+ 12	+ 13	+ 31	+ 26	+ 15	- 04	- 58	- 124	- 154	- 124	- 79	- 62	- 28	+ 06	+ 47	+ 75	+ 83	+ 83	+ 72	+ 63	+ 66
Year	+ 36	+ 29	+ 27	+ 35	+ 52	+ 59	+ 47	+ 17	- 40	- 121	- 187	- 202	- 183	- 141	- 82	- 10	+ 26	+ 62	+ 86	+ 101	+ 104	+ 101	+ 97	+ 87
Winter	+ 11	- 01	+ 04	+ 18	+ 31	+ 52	+ 60	+ 61	+ 41	- 29	- 100	- 145	- 129	- 97	- 63	- 25	- 01	+ 28	+ 41	+ 51	+ 55	+ 56	+ 49	+ 34
Equinox	+ 55	+ 34	+ 32	+ 37	+ 53	+ 68	+ 66	+ 51	- 17	- 114	- 212	- 234	- 216	- 167	- 113	- 34	+ 08	+ 56	+ 82	+ 99	+ 108	+ 115	+ 124	+ 121
Summer	+ 44	+ 54	+ 45	+ 50	+ 71	+ 59	+ 14	- 61	- 144	- 220	- 248	- 228	- 203	- 158	- 70	+ 28	+ 72	+ 103	+ 135	+ 154	+ 148	+ 132	+ 117	+ 108

WEST COMPONENT (Unit 0.1γ)

January	- 62	- 37	- 31	- 21	- 16	- 25	- 20	- 31	- 36	- 26	- 04	+ 40	+ 104	+ 123	+ 76	+ 58	+ 51	+ 53	+ 36	- 14	- 20	- 50	- 79	- 66
February	- 70	- 65	- 15	- 03	- 31	- 42	- 54	- 75	- 120	- 128	- 45	+ 50	+ 149	+ 174	+ 134	+ 106	+ 51	+ 42	+ 24	+ 23	- 22	- 22	- 32	- 31
March	- 12	- 14	- 31	- 42	- 50	- 78	- 95	- 149	- 195	- 135	- 26	+ 118	+ 210	+ 239	+ 160	+ 98	+ 37	+ 18	- 24	- 01	+ 08	- 10	- 16	- 04
April	- 30	- 15	- 30	- 53	- 69	- 103	- 180	- 276	- 298	- 244	- 120	+ 45	+ 212	+ 293	+ 258	+ 209	+ 150	+ 100	+ 51	+ 40	+ 43	+ 33	+ 19	- 35
May	- 56	- 34	- 63	- 90	- 160	- 255	- 336	- 342	- 310	- 180	+ 28	+ 218	+ 369	+ 397	+ 371	+ 266	+ 172	+ 86	+ 32	+ 17	- 14	- 33	- 43	- 46
June	- 36	- 35	- 40	- 79	- 127	- 217	- 283	- 327	- 323	- 287	- 144	+ 43	+ 215	+ 310	+ 356	+ 305	+ 203	+ 139	+ 86	+ 62	+ 69	+ 48	+ 44	+ 17
July	- 14	- 60	- 66	- 108	- 179	- 268	- 317	- 314	- 308	- 233	- 119	+ 69	+ 241	+ 341	+ 349	+ 308	+ 206	+ 138	+ 106	+ 77	+ 68	+ 49	+ 34	- 05
August	- 33	- 51	- 51	- 70	- 129	- 185	- 270	- 341	- 353	- 227	- 19	+ 212	+ 349	+ 366	+ 311	+ 206	+ 92	+ 30	+ 34	+ 51	+ 46	+ 30	+ 09	+ 05
September	- 101	- 97	- 88	- 57	- 49	- 102	- 170	- 246	- 283	- 259	- 128	+ 92	+ 267	+ 341	+ 323	+ 256	+ 170	+ 101	+ 50	+ 26	+ 14	- 14	- 12	- 27
October	- 17	- 51	- 55	- 66	- 72	- 97	- 87	- 166	- 246	- 233	- 105	+ 65	+ 189	+ 239	+ 213	+ 142	+ 74	+ 95	+ 80	+ 60	+ 51	+ 17	+ 00	- 31
November	- 80	- 61	- 42	- 21	- 17	- 29	- 33	- 48	- 73	- 118	- 69	+ 30	+ 137	+ 142	+ 134	+ 118	+ 76	+ 74	+ 61	+ 34	+ 09	- 54	- 78	- 84
December	- 77	- 62	- 36	- 07	- 16	- 39	- 54	- 86	- 104	- 124	- 84	+ 11	+ 103	+ 142	+ 121	+ 102	+ 73	+ 71	+ 57	+ 36	+ 12	+ 06	- 14	- 27
Year	- 49	- 49	- 46	- 51	- 76	- 120	- 158	- 200	- 221	- 183	- 70	+ 83	+ 212	+ 259	+ 234	+ 181	+ 113	+ 79	+ 49	+ 34	+ 22	00	- 14	- 28
Winter	- 72	- 56	- 31	- 13	- 20	- 34	- 40	- 60	- 83	- 99	- 51	+ 33	+ 123	+ 145	+ 116	+ 96	+ 63	+ 60	+ 45	+ 20	- 05	- 30	- 51	- 52
Equinox	- 40	- 44	- 51	- 55	- 60	- 95	- 133	- 209	- 256	- 218	- 95	+ 80	+ 220	+ 278	+ 239	+ 176	+ 108	+ 79	+ 39	+ 31	+ 29	+ 06	- 02	- 24
Summer	- 35	- 45	- 55	- 87	- 149	- 231	- 302	- 331	- 324	- 232	- 64	+ 136	+ 295	+ 354	+ 347	+ 271	+ 168	+ 98	+ 65	+ 52	+ 42	+ 24	+ 11	- 07

VERTICAL COMPONENT (Unit 0.1γ)

January	+ 02	00	+ 02	- 02	- 10	- 06	- 12	- 04	- 16	- 24	- 10	- 20	- 32	- 14	+ 08	+ 04	+ 18	+ 16	+ 20	+ 14	+ 20	+ 16	+ 18	00
February	+ 18	+ 10	+ 06	- 06	- 06	+ 08	- 08	+ 12	+ 04	- 20	- 70	- 78	- 80	- 62	- 10	+ 12	+ 24	+ 32	+ 44	+ 44	+ 42	+ 30	+ 24	+ 16
March	+ 23	+ 23	+ 23	+ 23	+ 17	+ 27	+ 47	+ 25	- 53	- 105	- 113	- 109	- 85	- 29	+ 13	+ 37	+ 29	+ 45	+ 47	+ 39	+ 29	+ 21	+ 07	
April	+ 49	+ 41	+ 35	+ 43	+ 49	+ 55	+ 61	+ 49	+ 07	- 61	- 145	- 191	- 183	- 127	- 53	+ 07	+ 37	+ 69	+ 65	+ 47	+ 35	+ 21	+ 19	
May	+ 42	+ 34	+ 20	+ 34	+ 70	+ 60	+ 56	+ 28	- 14	- 98	- 158	- 218	- 220	- 138	- 50	+ 12	+ 60	+ 96	+ 100	+ 80	+ 68	+ 54	+ 38	+ 38
June	+ 31	+ 35	+ 39	+ 41	+ 61	+ 63	+ 53	+ 33	+ 13	- 45	- 121	- 181	- 197	- 143	- 79	- 21	+ 33	+ 69	+ 91	+ 97	+ 61	+ 35	+ 09	+ 21
July	- 02	+ 10	+ 22	+ 34	+ 76	+ 76	+ 52	+ 14	- 16	- 40	- 100	- 152	- 154	- 102	- 48	+ 24	+ 44	+ 60	+ 64	+ 72	+ 46	+ 28	- 02	- 06
August	+ 22	+ 26	+ 22	+ 32	+ 52	+ 56	+ 62	+ 56	+ 36	- 46	- 116	- 146	- 148	92	- 34	+ 18	+ 46	+ 38	+ 18	+ 14	+ 18	+ 24	+ 22	+ 16
September	+ 25	+ 19	+ 31	+ 43	+ 37	+ 35	+ 43	+ 39	+ 03	- 35	- 97	- 167	- 181	- 109	- 57	+ 11	+ 37	+ 73	+ 67	+ 65	+ 43	+ 37	+ 21	+ 23
October	+ 07	+ 11	+ 23	+ 29	+ 31	+ 43	+ 35	+ 37	+ 31	- 33	- 97	- 123	- 117	- 83	- 31	+ 21	+ 37	+ 33	+ 39	+ 31	+ 29	+ 25	+ 25	+ 15
November	- 02	- 06	00	+ 06	+ 08	+ 28	+ 04	- 02	+ 08	- 12	- 44	- 56	- 48	- 20	- 02	+ 20	+ 42	+ 26	+ 20	+ 16	+ 20	+ 08	00	- 08
December	+ 17	+ 13	+ 19	+ 19	+ 15	+ 19	+ 07	- 01	- 07	- 39	- 39	- 47	- 57	- 35	- 17	+ 03	+ 29	+ 23	+ 23	+ 19	+ 23	+ 13	+ 01	+ 01
Year	+ 19	+ 18	+ 20	+ 25	+ 33	+ 39	+ 32	+ 26	+ 06	- 42	- 92	- 124	- 127	- 84	- 34	+ 10	+ 37	+ 47	+ 50	+ 47	+ 38	+ 28	+ 17	+ 12
Winter	+ 09	+ 04	+ 07	+ 04	+ 02	+ 12	- 02	+ 01	- 03	- 24	- 41	- 50	- 54	- 33	- 05	+ 10	+ 28	+ 24	+ 27	+ 23	+ 26	+ 17	+ 11	+ 02
Equinox	+ 26	+ 24	+ 28	+ 35	+ 34	+ 40	+ 42	+ 43	+ 17	- 46	- 111	- 149	- 148	- 101	- 43	+ 13	+ 37	+ 51	+ 54	+ 52	+ 40	+ 32	+ 22	+ 16
Summer	+ 23	+ 26	+ 26	+ 35	+ 65	+ 64	+ 56	+ 33	+ 05	- 57	- 121	- 174	- 180	- 119	- 53	+ 08	+ 46	+ 66	+ 68	+ 66	+ 48	+ 35	+ 17	+ 17

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, 1946	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
	January	-240	-122	+020	-004	-056	+170	+152	+294	+268	+246	+232	+262	+514	+356	+348	+200	-144	+026	-296	-510	-526	-528	-342
February	-910	-378	-396	-154	-236	+038	+066	+172	-016	+122	+082	+110	+566	+692	+608	+564	+306	+148	+194	-086	-180	-672	-234	-402
March	-545	-798	-325	-355	-075	-165	+023	+038	-132	+003	+018	+223	+495	+855	+888	+1030	+365	+285	-060	+110	-272	-590	-480	-540
April	-470	-418	-410	-456	-224	+010	-192	-002	-166	+018	+350	+662	+844	+992	+850	+812	+302	+002	-032	-262	-276	-456	-534	-936
May	-152	-190	-090	-174	-304	-332	-268	-096	-152	-158	-010	+370	+586	+532	+548	+526	+302	+002	-154	-238	-142	-052	-068	-286
June	-209	-153	-203	-323	-527	-625	-705	-617	-477	-279	+035	+401	+769	+867	+1017	+647	+611	+333	+205	+015	-149	-183	-257	-203
July	-207	-845	-755	-577	-277	-299	+059	-605	-563	-427	+017	+413	+689	+751	+829	+733	+439	+265	+125	+035	+307	+091	-235	+033
August	-119	-311	-499	-303	-121	-139	-349	-563	-487	-327	+005	+341	+681	+843	+859	+679	+585	+137	-091	-111	-221	-113	-147	-221
September	-160	-338	-294	-152	-190	+420	+206	-352	-416	-082	+184	+276	+738	+788	+1146	+834	+308	-054	-186	-580	-402	-428	-692	-576
October	-510	-290	-548	-440	-226	+026	-026	-022	-166	-124	+158	+494	+672	+732	+672	+522	+262	+220	+180	-066	-250	-468	-428	-358
November	-231	-223	-165	-123	-071	-115	-057	+027	-047	-011	+151	+395	+525	+567	+463	+229	+267	+127	+081	-153	-203	-293	-499	-471
December	-189	-145	-089	-049	-019	-055	-049	-027	-023	-087	+015	+241	+393	+451	+449	+317	+251	+071	+007	-247	-181	-309	-411	-319
Year	-329	-351	-313	-259	-194	-089	-095	-146	-198	-092	+103	+349	+623	+702	+723	+591	+321	+130	-016	-174	-208	-333	-361	-384
Winter	-393	-217	-158	-083	-096	+010	+028	+117	+046	+068	+120	+252	+500	+517	+467	+328	+170	+093	-044	-249	-273	-451	-372	-379
Equinox	-421	-461	-394	-351	-179	+073	+003	-085	-220	-046	+178	+414	+687	+842	+889	+800	+309	+113	-025	-200	-300	-486	-534	-603
Summer	-172	-377	-387	-344	-307	-349	-316	-470	-420	-298	+012	+381	+681	+748	+813	+646	+484	+184	+021	-075	-051	-064	-177	-169

INCLINATION (Unit 0.01)

January	-072	-088	-125	-194	-200	-157	-213	-208	-176	-146	-106	+036	+104	+105	+061	+234	+231	+247	+273	+237	+184	+060	-084	-011
February	+057	-015	-136	-147	-161	-155	-151	-106	-046	+023	+178	+069	+067	+085	+171	+152	+080	+069	+081	+055	+023	+028	-098	-119
March	-272	-156	-394	-165	-312	-230	-141	-066	+062	+146	+288	+252	+310	+146	+052	-045	+106	+074	+108	+096	+175	+011	+072	-123
April	-237	-212	-202	-378	-260	-290	-187	-099	+012	+090	+223	+251	+221	+163	+208	+141	+097	+019	+074	+106	+087	+042	+034	+108
May	-062	-074	-121	-105	-202	-143	-001	+097	+130	+057	+129	+128	+197	+219	+162	+088	-018	-109	-149	-039	-000	+017	-137	-069
June	-117	-132	-153	-138	-095	-014	000	+025	+109	+122	+127	+093	+160	+100	+040	+016	-018	-036	-058	-045	+022	+001	-058	+049
July	-077	-079	+098	+052	-021	+154	+203	+119	+136	+163	+197	+187	+099	+028	-014	-079	-117	-184	-159	-368	-148	-020	-111	-065
August	-190	-216	-124	-155	-136	-155	-145	+036	+131	+215	+297	+241	+134	+058	+030	+071	-036	+033	+048	-002	-021	-090	-006	-016
September	-390	-540	-508	-297	-385	-307	+123	+164	+234	+244	+278	+290	+299	+122	+347	+173	+028	+110	+097	+085	+062	-029	-089	-121
October	-076	-109	-091	-078	-137	-159	-160	-131	-039	+070	+113	+098	+136	+135	+117	+058	+096	+062	+057	+089	+045	+026	-074	-055
November	-070	-064	-088	-094	-160	-191	-185	-160	-124	-028	+080	+123	+103	+181	+260	+244	+163	+141	+071	+022	-041	-029	-056	-108
December	-063	-078	-071	-067	-087	-119	-143	-113	-092	-055	+001	+063	+120	+114	+105	+129	+130	+034	+051	+020	+073	+027	+042	-016
Year	-131	-147	-160	-147	-180	-147	-083	-037	+028	+075	+150	+153	+163	+121	+128	+099	+062	+038	+041	+021	+038	+004	-047	-046
Winter	-037	-061	-105	-126	-152	-156	-173	-147	-110	-052	+038	+073	+099	+121	+149	+190	+151	+123	+119	+084	+060	+022	-049	-064
Equinox	-244	-254	-299	-230	-274	-247	-091	-033	+067	+138	+226	+223	+242	+142	+181	+082	+082	+066	+084	+095	+092	+013	-014	-048
Summer	-112	-125	-075	-087	-114	-040	+014	+069	+127	+139	+188	+162	+148	+101	+055	+024	-047	-074	-080	-114	-037	-023	-078	-025

HORIZONTAL INTENSITY (Unit 0.1γ)

January	+56	+74	+116	+206	+222	+178	+262	+266	+218	+180	+124	-74	-152	-138	-54	-278	-198	-242	-282	-258	-214	-74	+96	-24
February	-269	-157	+47	+75	+119	+155	+159	+115	+33	-67	-289	-87	-75	-81	-155	-81	+51	+67	+35	+51	+75	+09	+161	+101
March	+309	-18	+304	-116	+202	+192	+114	+19	-151	-281	-473	-401	-426	-118	+164	+537	+232	+139	-05	-18	-143	+04	-143	+82
April	+163	+199	+127	+407	+247	+315	+211	+77	-97	-219	-403	-417	-337	-171	-157	+29	+143	+223	+91	+11	-41	-11	-51	-353
May	+72	+78	+126	+96	+210	+124	-74	-212	-260	-146	-268	-274	-364	-344	-208	-38	+172	+344	+386	+172	+80	+30	+220	+84
June	+145	+133	+149	+131	+93	-19	-49	-103	-237	-273	-287	-259	-329	-181	-07	+101	+201	+243	+253	+203	+53	+39	+87	-81
July	+41	+09	-277	-339	-119	-405	-513	-319	-243	-253	-303	-295	-157	-31	+81	+217	+315	+461	+429	+739	+381	+147	+285	+157
August	+252	+268	+120	+170	+144	+148	+132	-104	-226	-360	-496	-424	-256	-96	-26	-36	+172	+104	+76	+114	+108	+164	+18	+28
September	+488	+644	+460	+130	+264	+120	-512	-466	-480	-454	-482	-472	-394	+22	-190	+158	+400	+212	+100	+34	+34	+94	+138	+162
October	+70	+104	+76	+76	+174	+208	+194	+160	+24	-148	-212	-188	-220	-182	-122	-26	-64	-16	-14	-62	-02	+10	+120	+44
November	+91	+81	+111	+113	+209	+253	+237	+197	+145	-09	-165	-217	-171	-263	-347	-295	-157	-137	-43	+13	+89	+55	+83	+145
December	+83	+99	+87	+79	+111	+165	+189	+139	+103	+47	-37	-133	-211	-175	-139	-157	-145	-01	-37	+13	-73	-13	-41	+35
Year	+125	+126	+121	+86	+156	+120	+29	-19	-98	-165	-274	-270	-258	-147	-97	+11	+94	+116	+82	+84	+29	+38	+81	+32
Winter	-10	+24	+90	+118	+165	+188	+212	+179	+125	+38	-92	-128	-152	-164	-174	-203	-112	-78	-82	-45	-31	-06	+75	+64
Equinox	+258	+232	+242	+124	+222	+209	+02	-53	-177	-276	-393	-370	-344	-112	-76	+175	+178	+140	+43	-09	-38	+24	+16	-16
Summer	+128	+122	+30	+15	+82	-38	-126	-185	-242	-258	-339	-313	-277	-163	-40	+61	+215	+288	+286	+307	+156	+95	+153	+47

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

International Disturbed Days

NORTH COMPONENT (Unit 0.1γ)

Month and Season, 1946	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
January	+ 77	+ 83	+113	+204	+224	+160	+244	+235	+190	+155	+101	- 97	-197	-169	- 85	-293	-182	-241	-251	-207	-163	- 24	+126	+ 06
February	-181	-120	+ 83	+ 88	+139	+149	+151	+ 98	+ 34	- 77	-293	- 96	-126	-144	-209	-132	+ 22	+ 52	+ 17	+ 58	+ 91	+ 71	+180	+137
March	+355	+ 56	+330	- 82	+206	+205	+110	+ 15	-137	-277	-468	-416	-466	-195	+ 80	+434	+195	+111	- 00	- 28	-116	+ 58	- 97	+131
April	+204	+235	+163	+443	+264	+310	+226	+ 76	- 80	-218	-430	-472	-410	-260	-233	- 46	+113	+220	+ 93	+ 35	- 15	+ 31	- 01	-262
May	+ 85	+ 94	+133	+111	+235	+153	- 48	-200	-242	-129	-263	-304	-413	-388	-256	- 86	+142	+339	+395	+192	+ 92	+ 34	+223	+109
June	+162	+145	+166	+159	+140	+ 39	+ 17	- 45	-190	-243	-286	-292	-395	-259	-101	+ 40	+142	+209	+231	+199	+ 66	+ 55	+110	- 61
July	+ 60	+ 87	-203	-281	- 92	-372	-511	-259	-188	-210	-300	-329	-218	-100	+ 03	+146	+270	+430	+412	+726	+347	+137	+303	+152
August	+260	+293	+164	+196	+153	+159	+162	- 51	-178	-325	-490	-450	-315	-173	-105	- 98	+116	+ 90	+ 83	+123	+127	+172	+ 31	+ 48
September	+496	+666	+481	+142	+278	+ 80	-524	-427	-435	-440	-492	-491	-457	- 51	-293	+ 79	+366	+214	+116	+ 87	+ 71	+132	+200	+213
October	+116	+129	+126	+116	+193	+203	+194	+160	+ 39	-135	-224	-231	-279	-247	-182	- 74	- 87	- 36	- 30	- 55	+ 21	+ 53	+158	+ 76
November	+111	+101	+125	+123	+213	+260	+239	+192	+147	- 08	-177	-251	-217	-312	-385	-312	-179	-147	- 35	+ 27	+107	+ 81	+128	+187
December	+ 99	+111	+ 94	+ 82	+111	+168	+191	+140	+104	+ 54	- 38	-153	-244	-214	-179	-184	-166	- 08	- 37	+ 36	- 55	+ 16	- 03	+ 64
Year	+154	+157	+148	+108	+172	+126	+ 38	- 06	- 78	-154	-280	-299	-311	-209	-162	- 44	+ 63	+103	+ 83	+ 99	+ 48	+ 68	+113	+ 67
Winter	+ 27	+ 44	+104	+124	+172	+184	+206	+166	+119	+ 31	-102	-149	-196	-210	-215	-230	-126	- 86	- 77	- 22	- 05	+ 36	+108	+ 99
Equinox	+293	+272	+275	+155	+235	+200	+ 02	- 44	-153	-268	-404	-403	-403	-188	-157	+ 98	+147	+127	+ 45	+ 10	- 10	+ 69	+ 65	+ 40
Summer	+142	+155	+ 65	+ 46	+109	- 05	- 95	-139	-200	-227	-335	-344	-335	-230	-115	+ 01	+168	+267	+280	+310	+158	+100	+167	+ 62

WEST COMPONENT (Unit 0.1γ)

January	-118	- 52	+ 30	+ 33	+ 08	+121	+126	+202	+180	+162	+145	+127	+248	+166	+176	+ 59	-110	- 27	-206	-316	-317	-294	-166	-177
February	-531	-228	-203	- 69	-106	+ 47	+ 62	+111	- 03	+ 54	- 05	+ 44	+289	+355	+298	+287	+172	+ 90	+109	- 37	- 83	-347	- 97	-197
March	-238	-428	-121	-209	- 06	- 55	+ 32	+ 23	- 96	- 46	- 71	+ 51	+191	+435	+501	+640	+234	+175	- 33	+ 56	-169	-314	-280	-274
April	-223	-189	-197	-174	- 77	+ 59	- 66	+ 12	-105	- 28	+118	+282	+392	+499	+426	+438	+185	+ 39	- 02	-138	-154	-245	-293	-559
May	- 69	- 88	- 27	- 76	-126	-156	-155	- 87	-125	-109	- 51	+151	+250	+225	+257	+274	+190	+ 60	- 16	- 98	- 62	- 23	+ 01	-138
June	- 87	- 59	- 83	-150	-265	-336	-384	-346	-294	-195	- 30	+170	+354	+431	+541	+362	+360	+219	+152	+ 43	- 70	- 91	-122	-122
July	-103	-449	-449	-365	-168	-228	- 56	-377	-341	-271	- 42	+170	+340	+395	+455	+427	+288	+220	+140	+144	+228	+ 74	- 77	+ 44
August	- 21	-120	-245	-133	- 40	- 49	-165	-318	-298	-235	- 82	+110	+319	+433	+453	+356	+341	+ 91	- 36	- 40	- 99	- 32	- 75	-113
September	- 02	- 71	- 78	- 59	- 56	+244	+ 23	-267	-303	-121	+ 16	+ 67	+326	+424	+578	+471	+232	+ 07	- 82	-303	-208	-212	-345	-279
October	-260	-137	-279	-222	- 91	+ 49	+ 19	+ 16	- 84	- 91	+ 48	+231	+321	+359	+337	+274	+129	+115	+ 94	- 46	-134	-248	-208	-183
November	-108	-105	- 69	- 46	- 02	- 18	+ 10	+ 48	- 00	- 07	+ 52	+174	+251	+257	+188	+ 72	+116	+ 44	- 50	- 79	- 93	-147	-252	-226
December	- 87	- 60	- 33	- 13	+ 09	- 01	+ 06	+ 09	+ 05	- 38	+ 02	+106	+174	+210	+216	+142	+109	+ 38	- 03	-129	-109	-167	-226	-164
Year	-154	-166	-146	-124	- 77	- 27	- 46	- 82	-122	- 77	+ 08	+140	+288	+349	+369	+317	+187	+ 89	+ 06	- 79	-106	-171	-178	-199
Winter	-211	-111	- 68	- 24	- 23	+ 37	+ 51	+ 93	+ 46	+ 43	+ 49	+113	+241	+247	+220	+140	+ 72	+ 36	- 38	-140	-152	-239	-185	-191
Equinox	-181	-206	-169	-166	- 58	+ 74	+ 02	- 54	-147	- 72	+ 28	+158	+308	+429	+461	+456	+195	+ 84	- 06	-108	-166	-255	-282	-324
Summer	- 70	-179	-201	-181	-150	-192	-190	-282	-265	-203	- 51	+150	+316	+371	+427	+355	+295	+148	+ 60	+ 12	- 01	- 18	- 68	- 82

VERTICAL COMPONENT (Unit 0.1γ)

January	-119	-133	-163	-193	-177	-127	-129	-101	-103	- 85	- 79	- 49	+ 07	+ 41	+ 87	+161	+339	+291	+287	+221	+137	+ 35	- 65	- 93
February	-430	-418	-360	-334	-280	-178	-152	-102	- 84	- 76	- 56	+ 38	+ 58	+106	+232	+338	+396	+394	+362	+308	+252	+118	+ 36	-178
March	-223	-583	-658	-840	-610	-348	-223	-183	-135	-148	-105	- 60	+ 82	+232	+560	+1095	+907	+577	+360	+290	+274	+ 47	- 83	-236
April	-440	-270	-406	-360	-326	-270	-156	-162	-184	-198	-166	-100	- 16	+166	+352	+554	+668	+586	+468	+390	+204	+122	00	-446
May	- 48	- 76	-126	-138	-212	-206	-176	-156	-156	-142	-178	-194	-166	- 42	+ 76	+214	+340	+422	+382	+268	+186	+128	+ 38	- 44
June	- 70	-150	-182	-174	-114	- 94	-114	-152	-172	-212	-230	-280	-210	- 76	+122	+292	+404	+440	+388	+316	+202	+ 92	00	- 18
July	-169	-253	-305	-609	-351	-409	-493	-329	- 95	- 23	- 25	- 37	- 25	+ 25	+137	+233	+329	+437	+445	+447	+375	+275	+279	+141
August	- 73	-125	-149	-141	-135	-195	-193	-117	- 73	- 95	-125	-153	-131	- 23	+ 45	+161	+277	+357	+341	+261	+181	+ 69	+ 21	+ 09
September	-215	-369	-687	-725	-719	-781	-765	-515	-309	-211	-159	- 93	+117	+473	+757	+967	+1027	+871	+569	+373	+295	+117	+ 15	- 41
October	-101	-135	-139	- 93	- 69	- 65	-103	- 81	- 81	-101	-101	- 97	- 43	+ 45	+121	+143	+185	+175	+165	+163	+153	+115	+ 23	- 85
November	- 32	- 34	- 44	- 62	- 70	- 74	- 90	- 96	- 92	-116	-108	- 78	- 40	+ 14	+ 92	+160	+198	+170	+146	+106	+ 66	+ 28	00	- 38
December	- 25	- 37	- 45	- 49	- 41	- 27	- 55	- 69	- 81	- 79	- 83	- 89	- 75	- 13	+ 43	+ 81	+115	+115	+ 91	+101	+ 83	+ 61	+ 47	+ 27
Year	-162	-215	-272	-310	-259	-231	-221	-172	-130	-124	-118	- 99	- 37	+ 79	+219	+367	+432	+403	+334	+270	+201	+101	+ 26	- 84
Winter	-152	-156	-153	-160	-142	-102	-107	- 92	- 90	- 89	- 82	- 45	- 13	+ 37	+114	+185	+262	+243	+222	+184	+135	+ 61	+ 05	- 71
Equinox	-245	-339	-473	-505	-431	-366	-312	-235	-177	-165	-133	- 88	+ 35	+229	+448	+690	+697	+552	+391	+304	+232	+100	- 11	-202
Summer	- 90	-151	-191	-266	-203	-226	-244	-189	-124	-118	-140	-166	-133	- 29	+ 95	+225	+338	+414	+389	+323	+236	+141	+ 85	+ 22

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

Values of a\_n, b\_n in the series Σ (a\_n cos nt + b\_n sin nt), t being reckoned in hours from O^h U.T. and converted into arc at the rate of 15° to each hour.

Table with 3 main columns: NORTH COMPONENT, WEST COMPONENT, VERTICAL COMPONENT. Rows include months (Jan-Dec), Year, Winter Equinox, Summer, and sub-sections for INTERNATIONAL QUIET DAYS and INTERNATIONAL DISTURBED DAYS.

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

Values of c\_n, alpha\_n in the series Σ 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 Local Apparent Time may be obtained from the tabulated angles by applying corrections alpha, 2alpha, 3alpha, 4alpha respectively, where alpha has the following values:-

Table of phase angles alpha for various months: January +2°19', February +3 28, March +2 12, April +0° 4', May -0 51, June +0 5, July +1°22', August +0 59, September -1 12, October -3°28', November -3 42, December -1 6, Winter +0°12', Equinox -0 36, Summer +0 24.

Table with 3 main columns: NORTH COMPONENT, WEST COMPONENT, VERTICAL COMPONENT. Rows include months (1946), Year, Winter Equinox, Summer, and sub-sections for INTERNATIONAL QUIET DAYS and INTERNATIONAL DISTURBED DAYS.

TABLE X. - RANGE OF MEAN DIURNAL INEQUALITIES FOR THE MONTHS, YEAR AND SEASONS OF 1946

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
January	5.53	1.47	18.0	3.74	0.94	14.4	10.42	4.86	54.8	20.3	28.3	13.6	15.6	20.2	5.2	53.7	56.5	53.2
February	6.16	1.32	20.1	6.16	1.29	22.4	16.02	3.39	45.0	20.2	32.2	20.1	27.0	30.2	12.4	47.3	88.6	82.6
March	10.29	1.87	31.5	8.22	1.17	22.8	18.28	7.04	101.0	37.4	53.9	34.7	23.0	43.4	16.0	90.2	106.8	193.5
April	12.15	2.27	43.6	11.38	1.86	36.0	19.28	6.29	82.4	47.0	63.6	34.4	37.4	59.1	26.0	91.5	105.8	111.4
May	11.35	1.98	45.6	13.66	2.30	41.6	9.18	4.21	75.0	48.8	60.4	42.3	38.9	73.9	32.0	80.8	43.0	63.4
June	12.46	2.31	48.0	12.72	2.20	40.6	17.22	3.13	58.2	48.7	67.3	37.9	38.7	68.3	29.4	62.6	92.5	72.0
July	11.65	2.78	53.5	12.60	2.58	45.6	16.74	5.65	125.2	51.9	63.1	33.3	42.9	66.6	23.0	123.7	90.4	105.6
August	12.91	2.53	46.0	13.10	2.90	45.6	14.22	5.13	76.4	45.6	69.9	30.7	43.2	71.9	21.0	78.3	77.1	55.2
September	11.62	2.93	44.1	11.72	2.43	41.4	18.38	8.87	115.6	47.4	63.3	42.0	42.5	62.4	25.4	115.8	92.3	180.8
October	9.82	2.29	37.3	9.46	2.49	43.6	12.80	2.96	42.8	41.1	50.5	20.7	44.6	48.5	16.6	48.2	63.8	32.4
November	6.78	1.77	27.8	5.04	1.51	25.0	10.66	4.51	60.0	30.2	33.1	13.1	26.5	26.0	9.8	64.5	50.9	31.4
December	5.67	1.49	20.9	4.90	1.41	23.8	8.62	2.73	40.0	24.1	28.4	11.7	23.7	26.6	8.6	43.5	44.2	20.4
Mean for Year	9.70	2.08	36.4	9.39	1.92	33.6	14.32	4.90	73.0	38.6	51.2	27.9	33.7	49.8	18.8	75.0	76.0	83.5
Winter	6.04	1.51	21.7	4.96	1.29	21.4	11.43	3.87	49.9	23.7	30.5	14.6	23.2	25.8	9.0	52.3	60.1	46.9
Equinox	10.97	2.34	39.1	10.20	1.99	36.0	17.19	6.29	85.5	43.2	57.8	33.0	36.9	53.4	21.0	86.4	92.2	129.5
Summer	12.09	2.40	48.3	13.02	2.50	43.4	14.34	4.53	83.7	48.8	65.2	36.1	40.9	70.2	26.4	86.4	75.8	74.1

TABLE XI. - NON-CYCLIC CHANGE (24<sup>h</sup> minus 0<sup>h</sup>)

Month 1946	All Days			Quiet Days			Disturbed Days		
	Declination	Horizontal Intensity	Vertical Intensity	Declination	Horizontal Intensity	Vertical Intensity	Declination	Horizontal Intensity	Vertical Intensity
January	-0.03	+0.1	+0.1	+0.08	+0.8	-0.4	-0.36	-8.4	+1.2
February	-0.03	-0.1	+0.3	+0.78	+4.0	-1.2	+3.12	-7.0	+10.0
March	-0.27	-1.4	+0.3	+0.24	+6.2	-1.0	-1.90	-29.5	-10.0
April	+0.23	+1.2	+0.2	+0.12	+3.8	-2.8	-1.06	-20.4	-7.2
May	-0.03	+0.4	-0.1	-0.50	+3.0	-1.6	-1.04	-6.6	-0.6
June	+0.04	-0.2	+0.0	+0.28	+9.4	-1.6	+0.06	-21.8	+3.2
July	-0.04	-0.3	-0.0	-0.34	+1.8	-1.6	-0.30	-23.6	+4.8
August	-0.12	-0.4	+0.2	+0.26	+5.4	-1.2	-0.78	-17.2	+4.8
September	+0.01	0.0	+0.4	+1.06	+7.2	-1.6	-2.96	-27.8	+2.2
October	-0.10	-0.3	-0.3	-0.58	+1.2	+0.2	+1.24	-7.2	+1.0
November	+0.03	+0.8	-0.4	-0.38	-0.4	-0.6	-1.76	-2.2	-2.4
December	+0.05	+0.4	-0.1	+0.46	+4.8	-1.6	-0.74	-7.2	+4.6
Year 1946	..	..	..	+0.12	+3.9	-1.3	-0.54	-14.9	+2.2

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

Month 1946	Declination West	Inclination	Intensity				
			Horizontal	North	West	Vertical	Total
January	9 54.9	66 44.8	.18572	.18295	.03198	.43221	.47042
February	9 54.1	66 45.8	.18560	.18285	.03192	.43229	.47045
March	9 53.3	66 46.1	.18557	.18281	.03187	.43231	.47046
April	9 52.2	66 46.4	.18556	.18281	.03181	.43240	.47054
May	9 51.9	66 45.0	.18574	.18299	.03182	.43233	.47054
June	9 51.5	66 44.6	.18581	.18307	.03181	.43233	.47057
July	9 50.9	66 44.9	.18576	.18302	.03177	.43234	.47056
August	9 50.2	66 44.9	.18576	.18303	.03174	.43235	.47057
September	9 49.3	66 46.5	.18557	.18285	.03166	.43243	.47057
October	9 48.9	66 45.7	.18568	.18296	.03165	.43242	.47060
November	9 48.2	66 45.3	.18573	.18302	.03162	.43240	.47060
December	9 47.5	66 44.8	.18578	.18307	.03160	.43236	.47058
Year 1946	9 51.1	66 45.4	.18569	.18295	.03177	.43235	.47054

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	9 49.9	9 19.7	9 19.7	9 19.5	9 19.4	9 19.5	9 19.4	9 19.5	9 19.7	9 19.8	9 19.7	9 19.6
2	49.9	19.7	19.7	19.4	19.4	19.5	19.4	19.5	19.7	19.7	19.6	19.6
3	49.9	19.7	19.7	19.4	19.4	19.5	19.3	19.5	19.7	19.8	<u>19.6</u>	19.6
4	49.9	19.7	19.7	19.4	19.5	19.5	19.2	19.5	19.7	19.7	19.6	19.6
5	49.8	19.6	19.7	19.5	19.4	19.5	19.3	19.5	19.7	19.7	19.6	19.6
6	49.7	19.8	19.7	19.5	19.5	19.5	19.3	19.6	19.7	19.7	19.6	19.6
7	<u>9 49.7</u> 9 19.4	19.6	19.6	19.4	19.4	19.5	19.3	19.5	19.7	19.7	19.6	19.6
8	19.5	19.7	19.7	19.4	19.4	19.5	19.3	19.6	19.7	19.7	19.6	19.6
9	19.5	19.7	19.6	19.4	19.4	19.4	19.3	19.5	19.7	19.8	19.7	19.7
10	19.6	19.7	19.5	19.5	19.4	19.4	19.4	19.6	19.7	19.8	19.6	19.6
11	19.6	19.7	19.6	19.5	19.4	19.4	19.3	19.6	19.7	19.8	19.5	19.6
12	19.7	19.7	19.6	19.5	19.4	19.4	<u>19.3</u>	19.5	19.7	19.8	19.6	19.7
13	19.7	19.6	19.6	19.5	19.4	19.4	19.1	19.6	19.7	19.8	19.6	19.7
14	19.7	19.7	19.6	19.5	19.5	19.4	19.4	19.6	19.7	19.7	19.6	19.7
15	19.7	19.7	19.5	19.5	19.5	19.4	19.5	19.6	19.7	19.7	19.6	<u>19.7</u>
16	19.8	19.7	19.5	19.5	19.4	19.4	19.5	19.6	19.7	19.7	19.6	-
17	19.8	19.6	19.5	19.5	19.4	19.4	19.6	19.6	19.8	19.8	19.6	19.5
18	19.8	19.6	19.5	19.5	19.4	19.4	19.6	19.6	19.7	19.7	19.6	19.6
19	19.8	19.7	19.5	19.5	19.4	19.4	19.5	19.6	19.7	19.7	19.6	19.6
20	19.8	19.7	19.5	19.5	19.5	19.4	19.5	19.6	19.7	19.8	19.5	19.7
21	19.8	19.7	19.5	19.5	19.5	19.5	19.6	19.6	19.8	19.8	19.6	19.6
22	19.8	19.8	19.5	19.6	19.5	19.4	19.5	19.6	19.7	19.8	19.6	19.6
23	19.7	19.8	19.4	19.4	19.5	19.4	19.6	19.6	19.8	19.8	19.6	19.6
24	19.8	19.7	19.5	19.4	19.5	19.5	19.5	19.6	19.8	19.8	19.5	19.6
25	19.8	19.7	19.5	19.5	19.4	19.4	19.5	19.6	19.8	19.8	19.5	19.6
26	19.7	19.8	19.5	19.4	19.4	19.4	19.5	19.7	19.8	19.7	19.5	19.5
27	19.8	19.8	19.4	19.4	19.4	19.5	19.6	19.7	19.8	19.8	19.6	19.6
28	19.7	19.8	19.4	19.5	19.5	19.4	19.5	19.6	19.8	19.7	19.6	19.6
29	19.6		19.5	19.4	19.5	19.3	19.5	19.8	19.8	19.8	19.6	19.7
30	19.6		19.5	19.4	19.6	19.4	19.6	19.7	19.8	19.8	19.6	19.6
31	19.6		19.5		19.5		19.5	19.8		19.8		19.6

Jan. 7. The position of the Base-line was altered.

July 13. The Recording-Room Temperature was raised from 18.0 C to 21.0 C.

Nov. 4. " " " " " lowered " 21.0 C " 18.0 C.

Dec. 18. " " " " " " " 18.0 C " 11.0 C

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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	Deducted Value of Base-line	Universal Time				No. of Obs.	Observed Horizontal Intensity	Deducted Value of Base-line	Universal Time				No. of Obs.	Observed Horizontal Intensity	Deducted Value of Base-line		
h	m	h	m		Y	Y	h	m	h	m		Y	Y	h	m	h	m		Y	Y		
Jan.	1	10	43 - 10 55	8	18563	18356	Mar.	20	10	38 - 10 49	8	18568	18353	June	9	9	45 - 9 57	8	18543	18351		
	2	10	18 - 10 27	8	18577	18355		21	10	44 - 10 52	8	18564	18354		11	8	13 - 8 27	8	18559	18351		
	3	10	28 - 10 39	8	18609	18355		22	10	36 - 10 44	8	18535	18354		12	10	13 - 10 27	8	18568	18351		
	4	10	33 - 10 42	8	18550	18355		23	10	1 - 10 9	8	18561	18353		13	9	40 - 9 53	8	18541	18352		
	5	10	46 - 10 54	8	18558	18355		25	10	8 - 10 17	8	18392	18353		14	9	26 - 9 34	8	18557	18352		
	8	9	41 - 9 53	8	18565	18355		26	10	17 - 10 26	8	18472	18353		15	9	41 - 9 50	8	18556	18351		
	9	10	33 - 10 47	8	18569	18355		27	10	7 - 10 15	8	18518	18352		17	9	41 - 9 50	8	18535	18351		
	10	10	1 - 10 12	8	18583	18355		30	8	31 - 8 45	8	18540	18353		19	9	39 - 9 47	8	18504	18352		
	11	10	17 - 10 29	8	18569	18356		Apr.	2	10	38 - 10 46	8	18505	18352		21	9	33 - 9 41	8	18534	18350	
	12	10	3 - 10 17	8	18559	18354			4	10	43 - 10 51	8	18528	18352		22	9	38 - 9 46	8	18550	18351	
	14	10	23 - 10 32	8	18576	18356			5	10	15 - 10 23	8	18525	18352		24	9	43 - 9 51	8	18576	18351	
	15	10	25 - 10 36	8	18586	18356			6	10	21 - 10 31	8	18524	18353		27	9	10 - 9 19	8	18566	18351	
	16	10	19 - 10 31	8	18585	18355			8	10	46 - 10 54	8	18540	18352		28	9	26 - 9 33	8	18587	18351	
	17	10	31 - 10 42	8	18574	18356			9	10	42 - 10 51	8	18530	18353		29	9	14 - 9 26	8	18566	18350	
	18	10	33 - 10 44	8	18559	18356			10	10	58 - 11 19	8	18514	18352		July	1	9	53 - 9 58	6	18545	18350
	19	10	41 - 10 48	8	18574	18356			11	11	49 - 12 2	8	18548	18353			3	14	28 - 14 36	8	18582	18351
	21	9	33 - 9 45	8	18571	18357			12	10	18 - 10 27	8	18552	18352			5	9	0 - 9 7	8	18557	18350
	22	9	49 - 10 1	8	18587	18356			13	10	49 - 10 56	8	18546	18351			6	9	47 - 9 54	8	18578	18350
	23	10	9 - 10 17	8	18558	18356			15	9	48 - 9 56	8	18464	18351			8	9	51 - 9 58	8	18522	18350
	24	10	5 - 10 15	8	18561	18355			16	9	6 - 9 15	8	18532	18352			11	10	5 - 10 17	8	18549	18350
	25	10	15 - 10 26	8	18558	18356			17	10	6 - 10 19	8	18545	18351			12	9	31 - 9 38	8	18551	18349
	26	10	19 - 10 31	8	18569	18356			18	9	22 - 9 30	8	18528	18351			13	9	27 - 9 34	8	18569	18351
	28	10	49 - 10 57	8	18570	18355			23	9	46 - 10 0	8	18493	18350			15	9	45 - 9 57	8	18557	18349
	29	10	37 - 10 49	8	18565	18355			24	9	32 - 9 41	8	18473	18350			16	9	8 - 9 21	8	18575	18350
	30	10	47 - 10 58	8	18577	18355			25	9	12 - 9 21	8	18488	18351			17	9	15 - 9 26	8	18547	18350
	31	10	34 - 10 45	8	18579	18355			26	9	39 - 9 47	8	18549	18352			18	9	43 - 9 55	8	18587	18350
Feb.	1	10	27 - 10 35	8	18582	18355			27	9	33 - 9 42	8	18521	18352			19	9	33 - 9 44	8	18507	18350
	4	10	5 - 10 13	8	18557	18355			29	9	47 - 9 55	8	18545	18351			20	9	21 - 9 33	8	18545	18350
	5	10	13 - 10 22	8	18558	18354			30	9	46 - 9 55	8	18547	18351			22	9	37 - 9 45	8	18561	18350
	6	10	11 - 10 19	8	18569	18353		May	1	8	11 - 8 24	8	18549	18350			26	9	13 - 9 23	8	18560	18349
	9	10	5 - 10 13	8	18534	18355			2	9	38 - 9 49	8	18536	18350			27	8	39 - 8 48	8	18442	18349
	11	10	42 - 10 49	8	18543	18355			3	9	51 - 9 58	8	18539	18352			30	9	29 - 9 39	8	18514	18349
	12	10	25 - 10 34	8	18546	18354			4	9	6 - 9 18	8	18541	18352			31	9	45 - 9 52	8	18532	18348
	13	10	21 - 10 29	8	18558	18354			6	9	7 - 9 20	8	18599	18353		Aug.	1	9	15 - 9 23	8	18536	18349
	14	10	25 - 10 33	8	18542	18354			7	8	58 - 9 11	8	18543	18352			2	9	42 - 9 53	8	18550	18349
	15	10	20 - 10 29	8	18557	18354			8	7	22 - 7 38	8	18589	18352			3	9	42 - 9 50	8	18544	18348
	16	11	22 - 11 33	8	18553	18354			9	9	5 - 9 16	8	18547	18352			6	9	37 - 9 45	8	18562	18349
	18	10	44 - 10 51	8	18554	18353			10	8	38 - 8 51	8	18557	18352			7	9	41 - 9 50	8	18552	18348
	19	10	24 - 10 31	8	18555	18354			11	8	32 - 8 46	8	18482	18352			8	8	6 - 8 19	8	18557	18348
	20	10	33 - 10 41	8	18557	18354			13	8	58 - 9 10	8	18550	18352			9	9	13 - 9 22	8	18571	18348
	21	10	57 - 11 16	8	18540	18354			14	8	29 - 8 41	8	18566	18352			10	9	38 - 9 46	8	18558	18349
	22	10	37 - 10 44	8	18548	18353			15	8	44 - 8 55	8	18560	18352			12	9	37 - 9 45	8	18546	18349
	23	10	44 - 10 53	8	18528	18355			16	7	57 - 8 16	8	18589	18352			13	10	28 - 10 42	8	18544	18348
	25	10	42 - 10 50	8	18543	18354			17	8	46 - 8 57	8	18578	17353			14	10	36 - 10 48	8	18488	18347
	26	10	34 - 10 45	8	18557	18353			18	9	10 - 9 23	8	18534	18351			15	8	39 - 8 52	8	18532	18347
	27	9	24 - 9 36	8	18571	18354			20	9	17 - 9 26	8	18561	18352			16	9	48 - 9 58	8	18526	18347
	28	10	24 - 10 32	8	18571	18354			21	9	48 - 9 57	8	18521	18353			17	10	32 - 10 42	8	18542	18348
Mar.	1	10	34 - 10 46	8	18562	18356			22	9	30 - 9 43	8	18542	18351			19	9	41 - 9 49	8	18548	18348
	2	10	10 - 10 23	8	18570	18356			23	10	11 - 10 24	8	18541	18352			20	9	44 - 9 52	8	18543	18348
	4	10	33 - 10 41	8	18538	18355			24	9	42 - 9 49	8	18536	18351			21	9	49 - 9 57	8	18538	18347
	5	9	54 - 10 8	8	18528	18354			25	10	8 - 10 20	8	18535	18351			22	9	46 - 9 54	8	18554	18348
	6	10	1 - 10 12	8	18538	18355			27	9	36 - 9 45	8	18554	18353			23	9	7 - 9 17	8	18561	18347
	7	10	46 - 10 54	8	18530	18354			28	9	37 - 9 45	8	18557	18352			24	9	48 - 9 56	8	18574	18347
	8	10	36 - 10 45	8	18553	18356			29	9	50 - 9 58	6	18549	18353			26	9	26 - 9 37	8	18536	18347
	9	10	46 - 10 58	8	18561	18355			30	9	31 - 9 41	8	18543	18351			27	15	3 - 15 14	8	18585	18347
	11	10	39 - 10 48	8	18501	18353			31	9	36 - 9 48	8	18560	18351			28	9	43 - 9 55	8	18553	18348
	12	10	35 - 10 44	8	18554	18355		June	1	9	41 - 9 50	8	18556	18351			29	9	50 - 9 59	8	18546	18347
	13	11	30 - 11 43	8	18551	18355			3	9	55 - 10 12	8	18562									

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					Universal Time					Universal Time										
		No. of Obs.	Observed Horizontal Intensity	Deduced Value of Base-line			No. of Obs.	Observed Horizontal Intensity	Deduced Value of Base-line			No. of Obs.	Observed Horizontal Intensity	Deduced Value of Base-line						
h	m	h	m	Y	Y	h	m	h	m	Y	Y	h	m	h	m	Y	Y			
Sept. 5	9 45	-	9 56	8	18547	18347	Oct. 14	11 9	-	11 24	8	18535	18346	Nov. 21	10 45	-	10 53	8	18542	18346
6	9 31	-	9 40	8	18555	18348	15	10 30	-	10 44	8	18538	18345	22	10 44	-	10 51	8	18554	18346
7	9 17	-	9 29	8	18536	18347	16	10 49	-	11 0	8	18546	18346	23	11 9	-	11 20	8	18547	18347
9	9 47	-	9 58	8	18556	18347	17	10 44	-	10 52	8	18553	18347	25	9 45	-	9 52	8	18561	18346
10	9 41	-	9 50	8	18542	18346	18	10 23	-	10 36	8	18564	18346	26	10 47	-	10 57	8	18562	18346
11	9 34	-	9 45	8	18551	18347	19	10 40	-	10 50	8	18566	18346	27	10 40	-	10 47	8	18567	18346
12	9 27	-	9 41	8	18559	18347	21	10 42	-	10 50	8	18551	18346	28	10 36	-	10 44	8	18568	18345
13	9 14	-	9 22	8	18553	18347	22	10 47	-	11 7	8	18558	18345	29	10 19	-	10 28	8	18564	18346
16	9 35	-	9 45	8	18550	18346	24	11 22	-	11 32	8	18537	18345	30	11 11	-	11 22	8	18565	18346
18	11 16	-	11 25	8	18476	18346	25	10 47	-	10 59	8	18538	18345							
19	8 36	-	8 48	8	18527	18347	26	11 26	-	11 38	8	18526	18346	Dec. 2	10 33	-	10 45	8	18570	18345
20	9 11	-	9 20	8	18546	18347	28	11 4	-	11 15	8	18538	18345	3	12 40	-	12 50	8	18551	18346
21	9 35	-	9 42	8	18541	18346	29	10 47	-	10 57	8	18533	18345	4	12 44	-	12 53	8	18571	18347
23	9 32	-	9 39	8	18406	18345	30	10 51	-	10 59	8	18440	18345	5	10 49	-	10 57	8	18574	18347
24	9 32	-	9 40	8	18505	18345	31	10 48	-	10 56	8	18574	18346	6	11 49	-	12 0	8	18568	18346
25	9 39	-	9 47	8	18530	18345							7	10 53	-	11 6	8	18576	18347	
26	9 41	-	9 50	8	18537	18345	Nov. 1	10 39	-	10 46	8	18508	18346	9	10 54	-	11 14	8	18582	18348
27	9 37	-	9 45	8	18531	18345	2	10 51	-	10 59	8	18543	18346	10	10 11	-	10 19	8	18582	18347
28	10 16	-	10 27	8	18484	18345	5	10 27	-	10 41	8	18564	18345	11	10 36	-	10 44	8	18572	18347
30	9 42	-	9 49	8	18509	18345	6	10 48	-	10 55	8	18520	18345	12	10 27	-	10 37	8	18569	18346
							7	10 40	-	10 53	8	18547	18345	13	12 2	-	12 11	8	18569	18347
Oct. 1	9 10	-	9 18	8	18516	18344	8	10 32	-	10 41	8	18567	18345	14	10 45	-	10 53	8	18568	18348
2	10 26	-	10 33	8	18511	18345	9	10 47	-	10 54	8	18556	18345	18	11 16	-	11 32	8	18586	18347
3	9 44	-	9 52	8	18540	18345	11	10 56	-	11 11	8	18553	18346	19	11 28	-	11 39	8	18556	18347
4	9 36	-	9 44	8	18539	18344	12	10 41	-	10 54	8	18548	18346	20	10 9	-	10 17	8	18544	18347
5	9 37	-	9 45	8	18556	18345	13	10 18	-	10 38	8	18552	18345	21	10 55	-	11 15	8	18559	18347
7	9 52	-	10 6	8	18550	18345	14	8 21	-	8 35	8	18575	18346	23	10 54	-	11 8	8	18578	18347
8	10 48	-	10 56	8	18554	18347	15	10 25	-	10 37	8	18590	18345	24	10 27	-	10 39	8	18572	18347
9	10 46	-	10 58	8	18550	18346	16	10 52	-	11 16	8	18552	18346	27	10 12	-	10 23	8	18559	18347
10	10 43	-	10 50	8	18545	18346	18	10 31	-	10 40	8	18565	18346	28	10 24	-	10 31	8	18571	18349
11	10 46	-	10 54	8	18562	18346	19	10 39	-	10 48	8	18551	18346	30	10 45	-	10 56	8	18572	18347
12	11 18	-	11 31	8	18539	18345	20	11 5	-	11 17	8	18570	18347	31	10 25	-	10 39	8	18579	18347

July 13 - Recording-Room Temperature raised from 16.0 C to 21.0 C.  
 Nov. 4 - " " " lowered " 21.0 C " 16.0 C.  
 Dec. 16 - " " " " " 16.0 C " 11.0 C.

TABLE XIV(A). No observations were made with Magnetometer CASELLA 181 during the Year 1946.

MAGNETIC OBSERVATIONS, ABINGER 1946.

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	Universal Time				No. of Obs.	Observed Vertical Intensity	Deduced Value of Base-line	Universal Time				No. of Obs.	Observed Vertical Intensity	Deduced Value of Base-line						
h m h m					Y	Y	h m h m					Y	Y	h m h m					Y	Y						
Jan.							Mar.							June												
1	10	9	-	10	33	8	43209	43021	19	10	3	-	10	26	8	43216	43020	8	9	16	-	9	39	8	43222	43021
2	9	53	-	10	12	8	43214	43020	20	10	1	-	10	30	8	43211	43019	11	7	38	-	8	5	8	43229	43021
3	10	6	-	10	24	8	43206	43021	21	10	17	-	10	39	8	43208	43018	12	9	30	-	9	54	8	43218	43023
4	10	11	-	10	28	8	43225	43020	22	10	11	-	10	32	8	43217	43021	13	9	5	-	9	30	8	43228	43022
5	10	26	-	10	42	8	43223	43021	23	10	17	-	10	40	8	43205	43019	14	8	58	-	9	20	8	43226	43024
8	10	4	-	10	30	8	43218	43020	25	10	29	-	10	54	8	43240	43020	15	9	10	-	9	34	8	43216	43021
9	9	45	-	10	14	8	43216	43021	27	10	22	-	10	36	8	43228	43017	17	9	12	-	9	34	8	43214	43022
10	10	22	-	10	42	8	43218	43019	30	8	58	-	9	28	8	43244	43020	19	9	14	-	9	32	8	43202	43020
11	9	45	-	10	9	8	43213	43020	Apr.							21	9	12	-	9	28	8	43224	43021		
12	10	24	-	10	47	8	43222	43020	2	10	7	-	10	32	8	43230	43018	22	9	19	-	9	34	8	43225	43020
14	9	52	-	10	18	8	43219	43020	3	9	50	-	10	14	5	43231	43019	24	9	20	-	9	38	8	43229	43022
15	9	50	-	10	16	8	43214	43019	4	10	13	-	10	34	8	43222	43019	27	8	46	-	9	3	8	43225	43022
16	9	40	-	10	7	8	43216	43020	5	9	50	-	10	8	8	43229	43018	28	8	53	-	9	19	8	43221	43023
17	9	54	-	10	22	8	43220	43020	6	9	52	-	10	14	8	43215	43017	July								
18	9	57	-	10	26	8	43218	43020	8	10	14	-	10	35	8	43229	43020	1	9	23	-	9	46	8	43237	43021
19	10	5	-	10	35	8	43213	43021	9	10	20	-	10	35	8	43226	43022	5	8	36	-	8	53	8	43231	43020
21	9	56	-	10	30	8	43218	43022	10	10	36	-	10	53	8	43226	43018	6	9	23	-	9	41	8	43221	43021
22	10	11	-	10	38	8	43212	43020	11	10	25	-	10	55	8	43224	43017	8	9	25	-	9	45	8	43222	43019
23	9	40	-	10	4	8	43220	43020	12	9	47	-	10	12	8	43228	43021	11	9	29	-	9	54	8	43214	43019
24	10	24	-	10	50	8	43216	43020	13	10	23	-	10	44	8	43214	43018	12	9	4	-	9	25	8	43225	43021
25	10	35	-	10	58	8	43222	43019	15	9	16	-	9	43	8	43221	43020	15	9	6	-	9	37	8	43218	43020
26	9	32	-	10	7	8	43219	43019	16	9	36	-	9	56	8	43239	43020	16	8	23	-	8	58	8	43223	43021
28	10	28	-	10	47	8	43210	43018	17	9	23	-	9	53	8	43233	43019	17	8	29	-	9	5	8	43210	43021
29	10	1	-	10	28	8	43213	32018	18	8	44	-	9	15	8	43237	43022	18	9	12	-	9	34	8	43217	43021
30	10	15	-	10	41	8	43204	43019	23	9	6	-	9	35	8	43217	43022	19	8	54	-	9	25	8	43228	43022
31	10	0	-	10	25	8	43212	43021	24	9	8	-	9	24	4	43250	43020	20	8	42	-	9	12	8	43229	43027
Feb.							May							Aug.												
1	9	59	-	10	21	8	43209	43021	1	8	34	-	9	29	8	43228	43022	2	8	42	-	9	32	8	43242	43025
4	9	26	-	9	59	8	43217	43019	2	9	2	-	9	28	8	43228	43022	3	9	15	-	9	37	8	43235	43027
5	9	37	-	10	7	8	43213	43018	3	9	12	-	9	46	8	43217	43021	6	9	11	-	9	32	8	43232	43027
6	9	48	-	10	5	8	43215	43021	4	8	22	-	8	52	8	43226	43023	7	9	14	-	9	34	8	43234	43026
7	9	54	-	10	34	4	43207	43020	6	8	33	-	8	58	8	43221	43020	9	8	45	-	9	6	8	43233	43026
9	10	25	-	10	46	8	43248	43023	7	8	13	-	8	48	8	43196	43020	10	9	16	-	9	35	8	43228	43028
11	10	21	-	10	37	8	43232	43019	8	7	50	-	8	13	8	43205	43020	12	9	14	-	9	30	8	43233	43026
12	9	54	-	10	19	8	43224	43019	9	8	28	-	8	57	8	43232	43020	13	9	22	-	9	56	8	43234	43028
13	9	55	-	10	14	8	43245	43020	10	8	3	-	8	30	8	43219	43021	14	9	12	-	9	52	8	43224	43026
14	9	54	-	10	18	8	43234	43019	11	7	44	-	8	22	8	43213	43020	15	9	30	-	9	57	8	43231	43024
15	9	50	-	10	13	8	43211	43020	13	8	17	-	8	42	8	43233	43021	16	9	15	-	9	40	8	43223	43025
16	10	27	-	10	51	8	43220	43021	14	8	52	-	9	25	8	43229	43021	17	9	22	-	9	55	8	43211	43025
18	10	12	-	10	37	8	43216	43021	15	7	57	-	8	34	8	43231	43022	19	9	16	-	9	36	8	43225	43024
19	9	49	-	10	17	8	43218	43021	16	8	29	-	9	7	8	43232	43020	20	9	23	-	9	39	8	43230	43023
20	10	13	-	10	28	8	43226	43020	17	7	57	-	8	37	8	43231	43023	21	9	21	-	9	43	8	43232	43022
21	10	21	-	10	54	8	43222	43022	18	8	8	-	8	58	8	43225	43022	22	9	20	-	9	42	8	43226	43024
22	10	9	-	10	28	8	43227	43020	20	8	50	-	9	11	8	43230	43023	23	8	35	-	8	58	8	43236	43026
23	10	13	-	10	40	8	43229	43020	21	9	18	-	9	43	8	43224	43023	24	9	26	-	9	42	8	43223	43025
25	10	15	-	10	35	8	43222	43020	22	8	43	-	9	20	8	43200	43020	26	8	52	-	9	15	8	43225	43026
26	9	54	-	10	24	8	43226	43021	23	9	37	-	9	59	8	43227	43020	28	8	59	-	9	29	8	43220	43025
27	9	47	-	10	37	8	43220	43021	24	9	15	-	9	36	8	43225	43021	29	9	21	-	9	44	8	43225	43025
28	10	0	-	10	19	8	43217	43021	25	9	22	-	9	56	8	43224	43023	30	9	9	-	9	36	8	43227	43026
Mar.							June							Sept.												
1	10	6	-	10	27	8	43216	43020	1	9	12	-	9	36	8	43229	43023	2	9	20	-	9	42	8	43224	43026
2	10	30	-	10	53	8	43220	43021	3	9	14	-	9	52	8	43229	43024	5	9	15	-	9	39	8	43231	43027
4	10	6	-	10	28	8	43212	43021	4	9	21	-	9	39	8	43227	43024	6	8	59	-	9	25	8	43234	43027
5	10	18	-	10	43	8	43223	43021	5	9	17	-	9	40	8	43226	43022	7	8	45	-	9	9	8	43218	43024
6	10	22	-	10	45	8	43220	43020	6	9	18	-	9	36	8	43222	43023	9	9	19	-	9	44	8	43231	43027
7	10	16	-	10	42	8	43214	43019	7	9	11	-	9	31	8	43225	43022	10	9	15	-	9	35	8	43220	43024
8	10	12	-	10	32	8	43210	43018	8	9	11	-	9	33	8	43211	43024	11	8	59	-	9	26	8	43224	43024
9	10	6	-	10	42	8	43212	43019	9	9	3	-	9	24	8	43226	43024	12	8	42	-	9	18	8	43226	43024
11	10	20	-	10	34	8	43227	43019	31	9	4	-	9	28	8	43203	43022									
12	10	0	-	10	30	8	43220	43018																		
13	10	27	-	10	50	8	43221	43019																		
14	10	7	-	10	31	8	43211	43019																		

MAGNETIC OBSERVATIONS, ABINGER 1946.

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	Universal Time				No. of Obs.	Observed Vertical Intensity	Deduced Value of Base-line	Universal Time				No. of Obs.	Observed Vertical Intensity	Deduced Value of Base-line										
h	m	h	m	Y	Y	h	m	h	m	Y	Y	h	m	h	m	Y	Y	h	m	h	m	Y	Y							
Sept.	13	8	46	-	9	8	8	43226	43024	Oct.	21	10	16	-	10	36	8	43226	43025	Nov.	26	10	15	-	10	42	8	43222	43023	
	14	8	59	-	9	56	8	43226	43027		22	10	7	-	10	36	8	43222	43023		27	10	11	-	10	36	8	43231	43023	
	16	9	11	-	9	28	8	43219	43023		24	10	40	-	11	14	8	43228	43026		28	10	5	-	10	32	8	43232	43026	
	18	9	36	-	9	57	8	43223	43025		25	10	15	-	10	39	8	43226	43024		29	9	52	-	10	15	8	43232	43026	
	19	9	6	-	9	35	8	43243	43025		26	10	31	-	11	14	8	43222	43023		30	16	35	-	17	4	4	43234	43023	
	20	8	52	-	9	6	8	43241	43026		28	10	31	-	10	53	8	43228	43027											
	21	9	13	-	9	29	8	43248	43026		29	10	8	-	10	41	8	43232	43024		Dec.	1	10	7	-	10	48	8	43232	43026
	23	9	8	-	9	26	8	43235	43026		30	10	28	-	10	45	8	43233	43024			3	12	18	-	12	33	8	43236	43025
	26	9	15	-	9	37	8	43242	43022		31	10	28	-	10	44	8	43230	43025			4	10	53	-	11	27	8	43232	43025
	27	9	8	-	9	31	8	43244	43026													5	10	21	-	10	44	8	43231	43026
	28	9	34	-	9	59	6	43242	43027													6	10	15	-	10	54	6	43235	43026
Oct.	2	9	50	-	10	19	8	43246	43026	Nov.	1	10	13	-	10	34	8	43232	43025			7	10	30	-	10	48	8	43225	43027
	3	9	21	-	9	38	8	43250	43026		2	10	24	-	10	45	8	43231	43021			9	10	26	-	10	50	8	43225	43027
	4	9	14	-	9	30	8	43249	43026		5	9	51	-	10	18	8	43227	43023			10	9	49	-	10	7	8	43224	43025
	5	9	18	-	9	33	8	43244	43027		6	10	5	-	10	40	8	43237	43023			11	10	11	-	10	32	8	43224	43027
	7	9	14	-	9	43	8	43238	43024		7	10	2	-	10	32	8	43236	43024			12	9	45	-	10	18	8	43233	43025
	8	10	16	-	10	41	8	43228	43026		8	10	2	-	10	23	8	43229	43026			13	11	29	-	11	51	8	43230	43027
	9	10	27	-	10	42	8	43229	43024		9	10	14	-	10	41	8	43233	43026			14	10	14	-	10	38	8	43232	43028
	10	10	16	-	10	39	8	43226	43023		11	10	30	-	10	54	8	43235	43027			18	10	27	-	10	49	4	43223	43025
	11	10	10	-	10	39	8	43230	43024		12	9	57	-	10	31	8	43241	43025			19	10	14	-	10	47	8	43231	43027
	12	10	24	-	11	1	8	43231	43027		13	9	1	-	9	41	8	43242	43025			20	9	43	-	10	2	8	43237	43028
	14	10	23	-	10	36	4	43227	43028		14	8	57	-	9	55	8	43241	43025			21	10	19	-	10	50	8	43235	43029
	15	9	50	-	10	21	8	43235	43027		15	9	44	-	10	17	8	43230	43025			23	10	25	-	10	50	8	43224	43027
	16	10	4	-	10	42	8	43236	43027		16	10	26	-	10	48	8	43239	43024			24	9	46	-	10	15	8	43235	43028
	17	10	17	-	10	38	8	43222	43022		18	9	55	-	10	24	8	43236	43026			27	9	23	-	9	57	8	43234	43030
	18	9	54	-	10	8	8	43222	43024		19	9	54	-	10	33	8	43237	43025			28	10	4	-	10	19	8	43236	43028
	19	10	16	-	10	34	8	43223	43026		20	10	25	-	10	53	8	43238	43027			30	10	20	-	10	42	8	43228	43026
											21	10	13	-	10	40	8	43239	43028			31	9	44	-	10	17	8	43233	43028
											22	10	19	-	10	39	8	43239	43027											

July 13 - The Recording-Room Temperature was raised from 16.0 C to 21.0 C.  
 Nov. 4 - " " " " " lowered " 21.0 C " 16.0 C.  
 Dec. 16 - " " " " " " " 16.0 C " 11.0 C.

MAGNETIC OBSERVATIONS, ABINGER 1946.

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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
1	Y 43023	Y 43029	Y 43022	-	Y 43023	Y 43024	Y 43024	Y 43030	Y -	Y 43025	Y -	Y -
2	43027	-	-	43018	43020	-	-	43027	43027	43025	-	43025
3	-	-	43025	-	43024	43022	-	43031	-	43025	-	-
4	43027	43027	43031	43018	43023	43024	-	-	-	43028	-	-
5	43026	43026	43028	43019	-	43026	43020	-	43027	43025	-	43028
6	-	43026	43027	43022	43021	43022	43021	43031	43025	-	43023	43026
7	-	-	43029	-	43024	-	-	43027	43026	43024	43024	43026
8	43025	-	43032	43012	-	-	43020	43031	-	43028	43023	-
9	43028	43025	43025	43019	43021	-	-	43027	-	43026	43023	43027
10	43029	-	-	-	43022	-	-	43029	43031	43024	-	43027
11	-	43025	43031	43020	-	43021	43024	-	43026	43023	43025	43025
12	43027	43025	43032	43020	-	43023	43025	43026	43027	43024	43028	43027
13	-	43027	43031	43021	43024	43022	43023	43028	43026	-	43025	43027
14	43030	43024	43033	-	43024	43025	-	43029	-	43026	43029	43026
15	43028	43030	43025	43021	43023	43023	43026	43029	-	-	43026	-
16	43031	43027	43028	43020	43018	-	43029	43030	43024	43028	-	-
17	43028	-	-	43020	43022	43023	43026	43029	-	43023	-	-
18	43027	43029	43029	43021	43023	-	43026	-	-	43026	43022	43028
19	43028	43027	43020	-	-	43024	43025	43023	43024	43027	43025	43026
20	-	43024	43021	-	43021	-	43027	43024	43021	-	43024	43027
21	43029	-	43019	-	43021	43027	-	43029	43026	43025	43026	43028
22	43024	43026	43026	-	43020	43022	43026	43025	-	-	43025	-
23	43024	43029	43017	43018	43019	-	-	43025	43026	-	43023	43029
24	43027	-	-	43019	43025	43022	-	43030	43028	-	-	43028
25	43025	43025	-	43022	43030	-	-	-	43029	-	43027	-
26	43025	43026	-	43017	-	-	43026	43031	43025	-	43025	-
27	-	43030	43018	43020	43032	43025	-	-	43025	-	43026	43027
28	43028	43020	-	-	43024	43025	-	43032	43023	-	43027	43027
29	43025	-	-	43020	43026	43024	-	43030	-	-	43026	-
30	43030	-	43017	43024	43031	-	43027	43031	43024	-	43023	43027
31	43029	-	-	-	43023	-	43026	43028	-	-	-	43030

Mar. 19 - The Inductor bearings were tightened.

July 13 - The Recording-Room Temperature was raised from 16° C to 21° C.

Nov. 4 - " " " " " lowered " 21° C " 16° C.

Dec. 16 - " " " " " " " 16° C " 11° C.

Oct. 22-Nov. 5 - The Inductor was dismantled for a general overhaul, in the course of which new bearings were fitted.

## MAGNETIC OBSERVATIONS, ABINGER 1946.

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 a 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 1925-1946.

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
1940	10 43.0	0.18533	0.43099	66 43.9
1941	10 33.8	0.18539	0.43128	66 44.3
1942	10 24.8	0.18554	0.43146	66 43.9
1943	10 16.2	0.18556	0.43172	66 44.5
1944	10 7.8	0.18566	0.43189	66 44.3
1945	9 59.5	0.18573	0.43207	66 44.3
1946	9 51.1	0.18569	0.43235	66 45.4

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.

\* Discontinuities of  $-1.7\gamma$  in H and  $-3.9\gamma$  in Z were introduced in 1938. See Introduction pp.x and xi.

## NOTES ON MAGNETIC ACTIVITY

January. There were two or three unimportant movements on 1st and 2nd, the traces being otherwise fairly steady, but at 3<sup>d</sup>8<sup>h</sup>10<sup>m</sup> there was a sudden rise in activity and two hours later this developed quickly into a storm of considerable magnitude. The most active stage was from 15<sup>h</sup> to 22<sup>h</sup> and included a range of 190γ in Z. During the same period declination moved approximately 20' eastwards and horizontal intensity remained about 100γ below its normal value. A brief revival of activity occurred between 4<sup>d</sup>15<sup>h</sup> and 23<sup>h</sup>, the principal movements being a wave in D (15'E) at 16<sup>h</sup> and a wave in H (-100γ) at 19<sup>h</sup>. Conditions then became relatively quiet, with occasional small isolated bays appearing on the traces. Unsteadiness gradually increased after 8<sup>d</sup>. A prominent wave occurred in H (+80γ) and in D (12'W) at 11<sup>d</sup>5<sup>h</sup> and another in D (12'E) at 11<sup>d</sup>21<sup>h</sup>. There were spells of marked unsteadiness from 15<sup>d</sup>20<sup>h</sup> to 16<sup>d</sup>6<sup>h</sup> and from 17<sup>d</sup>17<sup>h</sup> to 18<sup>d</sup>1<sup>h</sup>. These were followed by a short minor disturbance lasting from 18<sup>d</sup>14<sup>h</sup> to 19<sup>d</sup>4<sup>h</sup> in which, however, no movement exceeded about 50γ. A quiet period from 20<sup>d</sup>8<sup>h</sup> to 21<sup>d</sup>18<sup>h</sup> was followed by one of great unsteadiness which, at about 23<sup>d</sup>20<sup>h</sup>, merged into one of moderate disturbance. Prominent waves occurred in H at 23<sup>d</sup>22<sup>h</sup> (+100γ) and at 24<sup>d</sup>13<sup>h</sup> (-80γ); in D at 23<sup>d</sup>22<sup>h</sup> (20'E) and at 24<sup>d</sup>19<sup>h</sup> (12'E). The disturbance ceased soon after 24<sup>d</sup>0<sup>h</sup> though marked unsteadiness still prevailed for another 48 hours and there was a prominent wave in both the D and H traces at 26<sup>d</sup>17<sup>h</sup>; but there was a general tendency to quiet conditions during the remaining days.

The range in declination during the month was from 9°30'.6 on 23rd to 10°13'.1 on 3rd; in horizontal intensity, from .18385 on 3rd to .18642 on 23rd; in vertical intensity, from .43169 on 4th to .43363 on 3rd.

February. Conditions were rather unsteady at the beginning of the month. At 3<sup>d</sup>13<sup>h</sup>43<sup>m</sup> there was an abrupt movement in all traces followed by a marked increase of unsteadiness but no actual disturbance developed, the largest movement being a double wave in H at 6<sup>d</sup>0<sup>h</sup> (+40γ). There was also a prominent wave in D (9'E) at 7<sup>d</sup>0<sup>h</sup>. Signs of increasing activity appeared at 7<sup>d</sup>7<sup>h</sup> and then, with great suddenness at 7<sup>d</sup>10<sup>h</sup>20<sup>m</sup>, a great storm began which developed immediately and continued with varying intensity until 9<sup>d</sup>0<sup>h</sup>. The climax was reached at about 8<sup>d</sup>1<sup>h</sup> after which the ranges rapidly decreased. A characteristic of the storm was the frequency of the oscillations in field intensity, especially during the periods 7<sup>d</sup>13<sup>h</sup> to 16<sup>h</sup> and 8<sup>d</sup>7<sup>h</sup> to 12<sup>h</sup>, when ranges approaching 100γ occurred four or five times within ten minutes on several occasions. The extreme ranges in the three elements respectively during the storm were 1°17' in D, 525γ in H and 375γ in Z. The traces of the principal part are reproduced in Plates I and II. Conditions remained unsteady, in general, until 12<sup>d</sup>0<sup>h</sup>. In particular there was an easterly movement in D (18'), between 10<sup>d</sup>7<sup>h</sup> and 8<sup>h</sup>, accompanied by irregular oscillation in H. Unsteadiness was renewed from 12<sup>d</sup>14<sup>h</sup> to 13<sup>d</sup>15<sup>h</sup>. A short quiet period followed and then a spell of moderate activity of which the most notable features were: a decrease in H (70γ) between 14<sup>d</sup>7<sup>h</sup> and 9<sup>h</sup> accompanied by a wave in D (14'W); a sudden increase in H (90γ) at 14<sup>d</sup>17<sup>h</sup>37<sup>m</sup> followed immediately by a partial return; a counterpart of this movement in Z (+30γ); two further sharp peaks in H, (+80γ at 19<sup>h</sup> and +100γ at 20<sup>h</sup>); an oscillatory movement in D (15'W) between 15<sup>d</sup>2<sup>h</sup> and 4<sup>h</sup> accompanied by smaller movements in H (+50γ) and Z (-25γ). Activity declined rapidly after 15<sup>d</sup>8<sup>h</sup>, but general unsteadiness remained excepting a quiet period from 17<sup>d</sup>8<sup>h</sup> to 18<sup>d</sup>0<sup>h</sup>. At 19<sup>d</sup>14<sup>h</sup>59<sup>m</sup> there was another sudden movement in all traces, resembling the commencement of a large disturbance. The change in H was +70γ. The activity which followed immediately was short-lived, its principal features being a sharp peak in H (+90γ) and in D (17'E) and a temporary increase in Z (70γ) between 19<sup>d</sup>19<sup>h</sup> and 22<sup>h</sup>. Later, however, a disturbance of considerable intensity developed, the first movement in which was shown on the traces at 20<sup>d</sup>18<sup>h</sup>. Full development was not attained until 21<sup>h</sup>. An oscillatory decrease in H (120γ) between 20<sup>d</sup>20<sup>h</sup> and 21<sup>d</sup>1<sup>h</sup> was accompanied by a similar though much smaller decrease in Z, the latter persisting until 21<sup>d</sup>7<sup>h</sup>. In the same period irregular movements in D covered a range of 32'. After 21<sup>d</sup>7<sup>h</sup> activity declined somewhat, but many irregular movements continued to appear on the traces during the two succeeding days and a state of relative quiescence was not reached until 24<sup>d</sup>2<sup>h</sup>. Further activity ensued between 24<sup>d</sup>18<sup>h</sup> and 25<sup>d</sup>6<sup>h</sup>, the largest movement in which, however, did not exceed 50γ. Unsteadiness then gradually diminished and from 27<sup>d</sup>1<sup>h</sup> conditions were quiet.

The range in declination during the month was from 9°9'.3 to 10°26'.9 both on 7th; in horizontal intensity, from .18224 on 8th to .18750 on 7th; in vertical intensity, from .42980 on 8th to .43355 on 7th.

March. A sudden movement in all traces at 1<sup>d</sup>1<sup>h</sup>38<sup>m</sup> initiated a brief period of disturbance lasting for about eight hours. The movement in H was an increase of 60γ and this was the largest, the whole range in H being only 110γ. The range in D was 15' and that in Z, 40γ, almost all of which occurred between 1<sup>d</sup>4<sup>h</sup> and 5<sup>h</sup>. Conditions remained very unsteady during 2<sup>nd</sup> and 3<sup>rd</sup> and there was a prominent peak in H (+80γ) at 2<sup>d</sup>0<sup>h</sup>1<sup>h</sup>. On 4<sup>th</sup> activity increased to the dimension of moderate disturbance, there being a range of 120γ in H between 21<sup>h</sup> and 22<sup>h</sup> accompanied by irregular changes in D exceeding 10' and followed by a temporary decrease in Z (30γ). A sudden decrease in H (80γ) occurred at 5<sup>d</sup>11<sup>h</sup>29<sup>m</sup> which however soon passed, though many fluctuations of the order of 20γ were registered during the next two days. A temporary return to quieter conditions was shown from 8<sup>d</sup>0<sup>h</sup> to 9<sup>d</sup>12<sup>h</sup>, and then considerable disturbance began to develop. The first movement occurred at 9<sup>d</sup>13<sup>h</sup>1<sup>h</sup>; a period of irregular fluctuation in H accompanied by an easterly trend of 20' in D lasted from 16<sup>h</sup> to 21<sup>h</sup>; a period characterised by spells of extremely rapid oscillation began with a sudden movement in all traces at 10<sup>d</sup>1<sup>h</sup>52<sup>m</sup> (+80γ in H, 10'W in D) and ended about 10<sup>d</sup>18<sup>h</sup>; this was succeeded by the culminating stage, from 10<sup>d</sup>19<sup>h</sup> to 11<sup>d</sup>3<sup>h</sup>, during which large irregular fluctuations in all elements were registered, the ranges being 120γ in H, 80γ in Z and 28' in D. After 11<sup>d</sup>3<sup>h</sup> activity rapidly subsided, but the disturbance had not wholly ceased at the end of 11<sup>th</sup>. Nearly quiet conditions were established by 12<sup>d</sup>2<sup>h</sup>. These lasted only a few hours, the general character being one of slight unsteadiness until 16<sup>d</sup>21<sup>h</sup>. Unsteadiness then increased in a marked degree and two rather prominent waves occurred in D at 17<sup>d</sup>17<sup>h</sup> and 21<sup>h</sup> respectively, the second just exceeding 10' (eastwards). During the interval 18<sup>d</sup>16<sup>h</sup> to 19<sup>d</sup>20<sup>h</sup> unsteadiness was slight. It then increased again - markedly between 19<sup>d</sup>20<sup>h</sup> and 20<sup>d</sup>1<sup>h</sup> and between 20<sup>d</sup>11<sup>h</sup> and 21<sup>d</sup>5<sup>h</sup> - until 21<sup>d</sup>16<sup>h</sup> when about twelve hours quiescence set in, to be terminated by a prolonged period of disturbance. This began abruptly at 22<sup>d</sup>5<sup>h</sup>40<sup>m</sup>. The first six hours were characterised by rapid rather than large changes in the field. There followed about thirty-six hours of minor disturbance before the development of "storm" conditions at 23<sup>d</sup>23<sup>h</sup>1<sup>h</sup>. The storm continued until 26<sup>d</sup>7<sup>h</sup>. There were three main stages: the first, from 24<sup>d</sup>0<sup>h</sup> to 5<sup>h</sup>, was notable for diminished values of both H and Z shown by two separate bays of 150γ in each trace, the second, from 25<sup>d</sup>0<sup>h</sup> to 9<sup>h</sup>, which comprised movements up to 200γ in H and 30' in D, together with a temporary slow decrease in Z of 150γ; the third, from 25<sup>d</sup>11<sup>h</sup>1<sup>h</sup> to 26<sup>d</sup>2<sup>h</sup> (in which the climax was reached), remarkable for numerous large oscillations, and for the high value attained by Z (nearly 43700γ) during the hour 15 to 16. The extreme ranges during the storm were 88' in D 420γ in H and 610γ in Z. The traces are partly reproduced in Plates II and III. Considerable disturbance continued to show during 26<sup>th</sup> and 27<sup>th</sup> and then at 28<sup>d</sup>6<sup>h</sup>36<sup>m</sup>, began, suddenly, what proved to be the most intense magnetic storm since that of 1941 March 1. It was relatively short-lived, being over by 29<sup>d</sup>2<sup>h</sup>, but during the most active stages that is between 12<sup>h</sup> and 15<sup>h</sup>, the movements were so large and rapid that the traces became difficult to follow. A short revival of violent activity occurred around 20<sup>h</sup> and included the most easterly movement of the declination needle, after which the storm rapidly subsided. The ranges during this disturbance were 162' in D 1661γ in H and 918γ in Z (Plates IV and V). A large number of small oscillations took place in H and Z between 29<sup>d</sup>8<sup>h</sup> and 17<sup>h</sup>. The amplitude of these gradually diminished, but for the remainder of the month the traces exhibited marked irregularity.

The range in declination during the month was from 8°35'.1 to 11°16'.8 in horizontal intensity, from .18072 to .19733; all on 28<sup>th</sup>; in vertical intensity, from .42708 on 28<sup>th</sup> to .43678 on 25<sup>th</sup>.

April. The prevailing character during the earlier days of the month was the general unsteadiness of the field. A prominent wave in all traces occurred at 2<sup>d</sup>21<sup>h</sup> and there was a period of considerable activity, from 9<sup>d</sup>8<sup>h</sup>1<sup>h</sup> to 10<sup>d</sup>3<sup>h</sup> during which Z increased 70γ in three hours. A relatively quiet spell lasted from 10<sup>d</sup>2<sup>h</sup> to 12<sup>d</sup>10<sup>h</sup>. From 12<sup>d</sup>19<sup>h</sup>1<sup>h</sup> brisk activity was continuous until 15<sup>d</sup>20<sup>h</sup>, and in the period from 14<sup>d</sup>11<sup>h</sup> increased almost to "storm" dimensions. Between 15<sup>d</sup>12<sup>h</sup> and 15<sup>h</sup> Z rose 90γ, afterwards slowly diminishing until 20<sup>h</sup>, the whole range during the disturbance being 117γ. A short spell of unsteadiness between 16<sup>d</sup>20<sup>h</sup> and 17<sup>d</sup>4<sup>h</sup> was followed by relative quiet until 20<sup>d</sup>20<sup>h</sup>, after which conditions became substantially quiet until 22<sup>d</sup>7<sup>h</sup>. At 22<sup>d</sup>6<sup>h</sup>59<sup>m</sup> activity suddenly recommenced - at first inconsiderable, but gradually increasing. Much fluctuation in H was shown between 22<sup>d</sup>16<sup>h</sup> and 20<sup>h</sup>, including a sudden decrease of 80γ at 18<sup>h</sup>39<sup>m</sup>. At 23<sup>d</sup>7<sup>h</sup> a rapid decrease in H began amounting to 130γ in three hours. This was the initial stage of a great storm in which the ranges were 91' in D, 580γ in H and 570γ in Z. The full development was delayed until about 23<sup>d</sup>14<sup>h</sup>; the climax was reached at 23<sup>d</sup>23<sup>h</sup>1<sup>h</sup>, by 24<sup>d</sup>6<sup>h</sup> a great decline had set in, which, with the exception of one large wave movement at 24<sup>d</sup>16<sup>h</sup>1<sup>h</sup> (amounting to +200γ in H),

## NOTES ON MAGNETIC ACTIVITY

continued until the virtual end of the storm at 25<sup>d</sup>3<sup>h</sup>. The traces are in part reproduced in Plate VI. After a period of quiet lasting from 25<sup>d</sup>8<sup>h</sup> to 26<sup>d</sup>10<sup>h</sup>, the prevailing state of general unsteadiness returned (though a second quiet spell intervened from 27<sup>d</sup>4<sup>h</sup> to 28<sup>d</sup>12<sup>h</sup>) and remained to the end of the month.

The range in declination during the month was from 8°44'.2 to 10°15'.0, both on 23rd, in horizontal intensity from .18147 on 23rd to .18729 on 24th; in vertical intensity, from .42886 to .43457, both on 23rd.

**May.** Numerous small irregular movements appeared on the traces during the first five days, but activity was not notable until 5<sup>d</sup>22<sup>h</sup>, when both range and frequency began to increase. A peculiar abrupt displacement of all traces lasting for nine minutes occurred at 6<sup>d</sup>4<sup>h</sup>26<sup>m</sup> (+35γ in H; 6'W in D) and was followed by a period of continuous small-scale agitation accompanied by some prominent movements. Among these may be mentioned a wave in H (-80γ) at 6<sup>d</sup>6<sup>h</sup>½; a double wave in all traces at 6<sup>d</sup>17<sup>h</sup>40<sup>m</sup>, (±35γ in H); a large steep wave in H at 6<sup>d</sup>22<sup>h</sup>30<sup>m</sup> (+150γ) accompanied by similar though smaller waves in D (28'E) and Z (±25γ); a wave in D at 7<sup>d</sup>6<sup>h</sup> (15'W); a temporary decrease in Z from 7<sup>d</sup>5<sup>h</sup>½ (40γ). Activity decreased markedly after 7<sup>d</sup>15<sup>h</sup> but was resumed at 8<sup>d</sup>5<sup>h</sup>. A wave in H at 8<sup>d</sup>6<sup>h</sup> (-90γ) was followed at 6<sup>h</sup>54<sup>m</sup> by an extremely sharp double wave in the same element (±45γ) the whole movement occupying only two minutes of time. A train of irregular sharp oscillatory movements in all traces began at 8<sup>d</sup>13<sup>h</sup> lasting until 19<sup>h</sup>½, after which they became undulatory in character and gradually increased in amplitude. Among the most prominent in H were waves at 8<sup>d</sup>23<sup>h</sup>½ (+90γ), at 9<sup>d</sup>15<sup>h</sup> (+80γ) and 9<sup>d</sup>18<sup>h</sup>½ (+70γ). Each was accompanied by a rather smaller wave in the other two elements, and there was a considerably enlarged diurnal range in Z (125γ). Traces remained subject to much minor disturbance throughout 10<sup>d</sup>. This rapidly increased after 11<sup>d</sup>6<sup>h</sup>, the most notably feature being a large wave in H between 11<sup>d</sup>7<sup>h</sup> and 9<sup>h</sup> (-140γ) with a sharp accompanying movement in D (20'W). An abrupt movement occurred at 11<sup>d</sup>12<sup>h</sup>50<sup>m</sup> (-60γ in H) but an increase of 100γ in H at 14<sup>h</sup>½ restored this element to its normal value. After 12<sup>d</sup>0<sup>h</sup> the prevailing characteristic was a general unsteadiness which, between 14<sup>d</sup>10<sup>h</sup> and 15<sup>d</sup>11<sup>h</sup>, diminished almost to quiet conditions. Increased activity was shown from 17<sup>d</sup>12<sup>h</sup>, one movement in H amounting to -80γ. Nearly quiet conditions were re-established by 18<sup>d</sup>20<sup>h</sup> and continued until 20<sup>d</sup>15<sup>h</sup>. A period of considerable activity began at 20<sup>d</sup>16<sup>h</sup>, lasting for about six full days, in which the interval between 21<sup>d</sup>15<sup>h</sup> and 24<sup>d</sup>3<sup>h</sup> was the most disturbed. Several individual movements in H exceeded 100γ, one at 22<sup>d</sup>6<sup>h</sup> being particularly noteworthy (-120γ), while diurnal ranges approaching 100γ occurred each day in Z. After 25<sup>d</sup>20<sup>h</sup> activity declined rapidly and from 27<sup>d</sup>0<sup>h</sup> nearly quiet conditions became apparent. These lasted for only twelve hours, however, and then general unsteadiness set in once more to persist through the remainder of the month.

The range in declination during the month was from 9°32'.5 on 6th to 10°8'.6 on 8th; in horizontal intensity, from .18448 on 11th to .18739 on 6th; in vertical intensity, from .43178 on 7th to .43315 on 9th.

**June.** Conditions were nearly quiet until 4<sup>d</sup>13<sup>h</sup> when marked unsteadiness began in horizontal intensity. This ceased at about 20<sup>h</sup>, quiet conditions being resumed until 5<sup>d</sup>19<sup>h</sup>. At 5<sup>d</sup>20<sup>h</sup>10<sup>m</sup> there was an abrupt movement in all traces - +70γ in H - followed by considerable unsteadiness, but not by active disturbance, until 7<sup>d</sup>8<sup>h</sup>. Disturbance began at 7<sup>d</sup>7<sup>h</sup>40<sup>m</sup> and quickly developed. The largest movements were recorded in the early stages the maximum range in H, (160γ), occurring between 7<sup>d</sup>14<sup>h</sup> and 14<sup>h</sup>½. There was a nearly steady increase in Z (130γ) between 7<sup>d</sup>12<sup>h</sup> and 17<sup>h</sup> which declined, generally, during the next nine hours to normal value. A second period of brisk activity was recorded between 8<sup>d</sup>14<sup>h</sup> and 9<sup>d</sup>4<sup>h</sup>. The movements were again chiefly in H, notably one at 8<sup>d</sup>15<sup>h</sup> (-130γ), and diminished rapidly after 9<sup>d</sup>0<sup>h</sup>. Great unsteadiness persisted, however, until 12<sup>d</sup>13<sup>h</sup>, when further brisk activity developed. A sharp increase in H (80γ) at 12<sup>d</sup>13<sup>h</sup>½, followed by a general increase in Z (40γ) during the next three hours, was succeeded by smaller oscillations at irregular intervals until 13<sup>d</sup>5<sup>h</sup>, by which time Z had returned to normal intensity. During 13th 14th and 15th there was much unsteadiness and this, after almost disappearing on 16th, increased rapidly towards the end of the day, reaching the dimensions of a moderate disturbance between 16<sup>d</sup>20<sup>h</sup> and 17<sup>d</sup>8<sup>h</sup>. A series of oscillatory movements in all elements, superposed on a general decrease in H (130γ) and in Z (70γ), was the principal feature. After 17<sup>d</sup>14<sup>h</sup> H increased again to

normal, and declination also changed 18' westward to a normal value. Irregular movements appeared occasionally during 18th. From 18<sup>d</sup>16<sup>h</sup> these became very numerous, seldom however, greater than about 30γ in amplitude, and this state of unsteadiness persisted in a gradually diminishing degree until 23<sup>d</sup>10<sup>h</sup>. Nearly quiet conditions existed from 24<sup>d</sup>0<sup>h</sup> to 18<sup>h</sup> and then the prevailing unsteadiness re-appeared. At 27<sup>d</sup>17<sup>h</sup>30<sup>m</sup> an abrupt movement in all traces (+50γ in H) had the semblance of a "sudden commencement". The disturbance which followed, however, was slight (though oscillations were very numerous) until 29<sup>d</sup>12<sup>h</sup>, when a short period of brisk activity began, during which a range of 185γ occurred in H and 110γ in Z. Activity ceased at 30<sup>d</sup>1<sup>h</sup>, after which only a few small irregularities were recorded.

The range in declination during the month was from 9°34'.6 on 17th to 10°8'.0 on 8th; in horizontal intensity, from .18475 on 7th to .18728 on 29th; in vertical intensity, from .43187 on 19th to .43326 on 7th.

July. A series of small irregular oscillations, chiefly in H, extended from 1<sup>d</sup>14<sup>h</sup> to 21<sup>h</sup> and was followed by a temporary decrease in H (60γ) between 2<sup>d</sup>6<sup>h</sup> and 14<sup>h</sup>. Further small irregular movements between 2<sup>d</sup>17<sup>h</sup> and 24<sup>h</sup> preceded an abrupt movement in all traces which occurred at 3<sup>d</sup>1<sup>h</sup>20<sup>m</sup>. The largest movement was in H (+25γ). No marked disturbance followed, but there was a spell of increased unsteadiness lasting until about 3<sup>d</sup>22<sup>h</sup>. A period of nearly quiet conditions then began which was terminated by unsteadiness, developing from about 6<sup>d</sup>14<sup>h</sup>. This merged into a state of brisk activity between 7<sup>d</sup>3<sup>h</sup> and 20<sup>h</sup>, the main features of which were waves in H at 7<sup>d</sup>4<sup>h</sup> (+60γ) and 7<sup>d</sup>17<sup>h</sup> (+80γ) and short spells of more or less regular oscillation, having the appearance of "pulsations", in all traces. The most conspicuous of these was recorded between 7<sup>d</sup>6<sup>h</sup> and 7<sup>h</sup>. Considerable unsteadiness with similar characteristics prevailed until 12<sup>d</sup>0<sup>h</sup> when a quiet spell began, lasting for about thirty-six hours. Activity was renewed at 14<sup>d</sup>12<sup>h</sup>. Waves in H (+90γ) occurred at 14<sup>d</sup>16<sup>h</sup> and 17<sup>h</sup> and were accompanied by an enlarged diurnal range in Z (70γ). Partial relaxation on 15th was followed at 16<sup>d</sup>10<sup>h</sup> by a return to a state of incessant movement, occasionally regular, but generally quite irregular, with amplitudes of 10 to 20γ in H and less in the other elements. At 18<sup>d</sup>14<sup>h</sup>15<sup>m</sup> an abrupt increase in H (70γ), with smaller movements in D and Z, began a period of moderate disturbance. The principal feature was a wave in H (+150γ) at 18<sup>d</sup>16<sup>h</sup>, but several other movements exceeded 50γ and the whole range in Z was 95γ. Conditions became much steadier from 20<sup>d</sup>0<sup>h</sup>. At 21<sup>d</sup>10<sup>h</sup>, however, the prevailing unsteadiness returned, to continue in varying degree until the outbreak of the great storm on 26th. Periods of special activity, when unsteadiness amounted to "mild disturbance", occurred at 23<sup>d</sup>11<sup>h</sup> to 21<sup>h</sup> and 25<sup>d</sup>16<sup>h</sup> to 26<sup>d</sup>6<sup>h</sup>. Activity was still marked when, at 26<sup>d</sup>18<sup>h</sup>46<sup>m</sup> a sudden movement took place in all traces, which initiated a great storm. The movement in H was an increase of no less than 320γ in two minutes of time, while that in Z was an increase of 90γ in the same interval. The storm was at its climax between 27<sup>d</sup>1<sup>h</sup> and 7<sup>h</sup> after which time it rapidly subsided, being virtually over by 27<sup>d</sup>10<sup>h</sup>, though great unsteadiness prevailed for a further twelve hours. The extreme ranges during the storm were, respectively, 76' in D, 925γ in H and 615γ in Z. The traces are reproduced in Plate VIII. A further disturbance began at 28<sup>d</sup>12<sup>h</sup> which ultimately reached the dimensions of a small storm. There was a notable increase of H (100γ) between 29<sup>d</sup>17<sup>h</sup> and 18<sup>h</sup>, preceded at 16<sup>h</sup>40<sup>m</sup> by a very sharp wave (+150γ), but the remarkable feature of the disturbance was a long series of nearly regular "pulsations" in all elements. The first small examples appeared at 29<sup>d</sup>3<sup>h</sup>55<sup>m</sup>, and then intermittently during the next two hours. From 6<sup>h</sup>38<sup>m</sup> they were continuous and more or less regular until 11<sup>h</sup>25<sup>m</sup> and persisted, with less regularity almost until 29<sup>d</sup>16<sup>h</sup>. These pulsations, which in H had a amplitude (i.e. range) frequently exceeding 40γ, occurred at the rate of fifteen to twenty per ten-minute interval when fully developed. The principal time during which the maximum rate was attained were, 6<sup>h</sup>35<sup>m</sup> to 8<sup>h</sup>0<sup>m</sup>, 8<sup>h</sup>50<sup>m</sup> to 9<sup>h</sup>0<sup>m</sup> and 9<sup>h</sup>55<sup>m</sup> to 10<sup>h</sup>10<sup>m</sup>; but there were many shorter spells when the rate was as high, though the oscillations were less regular. The disturbance as a whole lasted until 30<sup>d</sup>19<sup>h</sup> and included a series of brisk irregular oscillations from 30<sup>d</sup>1<sup>h</sup> to 3<sup>h</sup>, the range of which averaged about 30γ in H. There was then a return to the prevailing condition of general unsteadiness.

The range in declination during the month was from 9°5'.1 on 27th to 10°21'.5 on 26th, in horizontal intensity, from .18082 on 27th to .19006 on 26th; in vertical intensity, from .42722 on 27th to .43339 on 26th.

**August.** Excepting occasional small irregularities the traces showed no magnetic activity until 6<sup>d</sup>13<sup>h</sup>, when there was a quick decrease of H (50γ) followed by a spell of marked unsteadiness. From 7<sup>d</sup>10<sup>h</sup> to 21<sup>h</sup> brisk activity was shown, which included a range of 100γ in Z and several movements approaching 50γ in H. Periods of activity occurred from 8<sup>d</sup>16<sup>h</sup> to 9<sup>d</sup>2<sup>h</sup>, (slight), from 10<sup>d</sup>23<sup>h</sup> to 12<sup>d</sup>4<sup>h</sup> (moderate with one sharp peak in H, +80γ, at 11<sup>d</sup>13<sup>h</sup>), and from 12<sup>d</sup>15<sup>h</sup> to 13<sup>d</sup>6<sup>h</sup> (slight). Activity became increasingly continuous from 14<sup>d</sup>6<sup>h</sup>. There was a decrease of H (90γ) between 14<sup>d</sup>7<sup>h</sup> and 9<sup>h</sup> which was rapidly retrieved at 12<sup>h</sup>; prominent movements in all traces occurred at 14<sup>d</sup>21<sup>h</sup>, namely a sharp peak in H (+100γ), a double wave in D (±14') and a fall in Z (40γ) following which there were many irregular, but smaller, movements at intervals until 18<sup>d</sup>0<sup>h</sup>. A condition of slight general unsteadiness then prevailed, declining to negligible dimensions by 21<sup>d</sup>0<sup>h</sup>. Slight unsteadiness revived at 24<sup>d</sup>2<sup>h</sup> and continued till 29<sup>d</sup>4<sup>h</sup> when a short quiet period began, terminating at 30<sup>d</sup>18<sup>h</sup> with the first movement of a short disturbance which, in respect of the ranges, proved to be the most considerable of the month. The principal movements occurred at 30<sup>d</sup>22<sup>h</sup>40<sup>m</sup> (a sharp peak in all traces), between 31<sup>d</sup>0<sup>h</sup> and 2<sup>h</sup> (15'E in D; -40γ in Z) and between 31<sup>d</sup>5<sup>h</sup> and 6<sup>h</sup> (-120γ in H; 25'W in D; -50γ in Z). The disturbance ended at 31<sup>d</sup>19<sup>h</sup> with a series of small irregular oscillations.

The range in declination during the month was from 9°31.4 on 14th to 10°12.7 on 31st; in horizontal intensity, from .18465 to .18681, both on 14th; in vertical intensity, from .43145 on 31st to .43306 on 7th.

**September.** Small irregularities in the traces occurred on 1st and 2nd and increased in magnitude on 3rd and 4th. There was a rapid decrease of H from 4<sup>d</sup>7<sup>h</sup> to 10<sup>h</sup> (60γ). Considerable unsteadiness persisted throughout 5th and 6th. A sharp decrease in H (60γ) between 7<sup>d</sup>8<sup>h</sup> and 9<sup>h</sup>, which quickly recovered, was succeeded by a further period of unsteadiness. This continued until the end of 15th, exhibiting no special features beyond an occasional prominent wave. At 16<sup>d</sup>13<sup>h</sup>49<sup>m</sup> there was a typical "sudden commencement" movement in all traces, the range in H being 65γ. The disturbance which followed was only of moderate intensity, however, and had practically ceased by 17<sup>d</sup>4<sup>h</sup>; it included two prominent waves in both H (100γ) and D (25') between 19<sup>h</sup> and 20<sup>h</sup> and a steady increase in Z (100γ) until 16<sup>d</sup>19<sup>h</sup>, followed by an oscillatory decrease of about the same amount until 17<sup>d</sup>2<sup>h</sup>. Other prominent movements occurred in H and D between 17<sup>d</sup>0<sup>h</sup> and 2<sup>h</sup>. A second and considerably more intense disturbance began at about 17<sup>d</sup>19<sup>h</sup>. Full development was not attained until 23<sup>d</sup>h. The most active periods were from 18<sup>d</sup>2<sup>h</sup> to 6<sup>h</sup> and 19<sup>h</sup> to 20<sup>h</sup>. The ranges were 41' in D, 280γ in H and 295γ in Z. Although the main disturbance was over by 19<sup>d</sup>5<sup>h</sup> there was brief revival between 19<sup>d</sup>12<sup>h</sup> and 18<sup>h</sup> one feature of which was a temporary increase in Z (80γ) between 12<sup>h</sup> and 13<sup>h</sup>. Conditions then relapsed into general unsteadiness until 21<sup>d</sup>17<sup>h</sup>. At 21<sup>d</sup>17<sup>h</sup>13<sup>m</sup> a large and very sudden movement in H (+115γ) was accompanied by smaller movements in the other elements. The onset of the storm which was to follow was not immediate however, and the initial movements occurred abruptly at 22<sup>d</sup>4<sup>h</sup>24<sup>m</sup>. The storm then developed rapidly. Between 22<sup>d</sup>5<sup>h</sup> and 6<sup>h</sup> there was a range 390γ in H and 170γ in Z, and between 5<sup>h</sup> and 6<sup>h</sup> a range of 60' in D. A lull then occurred, after which - from 22<sup>d</sup>10<sup>h</sup>12<sup>m</sup> onwards - the movements became so large and rapid that occasionally they can be followed only with difficulty on the record. The stage of rapid fluctuation ended at about 22<sup>d</sup>17<sup>h</sup> and during this interval the extreme ranges occurred, namely 925γ in H, 450γ in Z and 135' in D. The storm continued with somewhat diminished intensity for a further thirty-four hours, ceasing rather abruptly at 24<sup>d</sup>4<sup>h</sup>. Between 22<sup>d</sup>17<sup>h</sup> and 23<sup>d</sup>2<sup>h</sup> there was a continuous fall in the value of Z amounting in all to 250γ, the movement being reversed from 23<sup>d</sup>7<sup>h</sup> to 16<sup>h</sup> during which interval an increase of 360γ took place, before a steady return to normal values. During 23<sup>d</sup> several fluctuations exceeding 100γ were recorded in H, while movements exceeding 15' in D were numerous. The traces are reproduced in Plates IX and X. The period from 24<sup>d</sup>4<sup>h</sup> to 27<sup>d</sup>6<sup>h</sup> was nearly quiet, although many small fluctuations were apparent until 24<sup>d</sup>19<sup>h</sup>. At 27<sup>d</sup>6<sup>h</sup> a steady decrease in H began (70γ), possibly the first movement of a further spell of disturbance which developed eight hours later. The first peak of activity lasted from 27<sup>d</sup>16<sup>h</sup> to 20<sup>h</sup> and included a range of 170γ in H; the second and principal period began at about 28<sup>d</sup>15<sup>h</sup> - although for several hours previous the value of Z had been steadily increasing - and lasted until 29<sup>d</sup>4<sup>h</sup>. The main characteristic was the number of nearly regular oscillations in H (about 50γ in amplitude) superposed on a general decrease ending at 20<sup>h</sup>. These had their counterparts in D and to a minor extent in Z. The value of Z after reaching a maximum at 28<sup>d</sup>15<sup>h</sup>, declined in two stages to a minimum at 29<sup>d</sup>1<sup>h</sup>. (Specially prominent waves occurred in H at 28<sup>d</sup>21<sup>h</sup> (+180γ) and at 29<sup>d</sup>1<sup>h</sup> (+150γ) and a large double wave in D (±18') coincided with the second fall in Z referred

to already. The extreme ranges during this disturbance were:  $41'$  in D,  $310\gamma$  in H and  $230\gamma$  in Z. The conditions remained highly unsteady with enhanced daily ranges during the last two days of the month.

The range in declination during the month was from  $8^{\circ}53'.8$  to  $11^{\circ}9'.4$ ; in horizontal intensity, from .18125 to .19050, in vertical intensity, from .43073 to .43523, all on September 22.

**October.** The prevailing condition throughout the month was one of continuous slight disturbance. Occasionally the movements amounted to about  $50\gamma$  in H and  $10'$  in D, notable instances occurring at  $5^d18\frac{1}{2}h$ ,  $6^d20\frac{1}{2}h$ ,  $9^d23h$ . Movements became very numerous, though still small, between  $9^d1h$  and  $23h$  and again between  $20^d3h$  and  $21^d23h$ . There was a nearly quiet interval from  $13^d1h$  to  $14^d0h$  and also from  $17^d2h$  to  $19^d22h$ . At about  $25^d22h$  signs of increased activity appeared, which persisted until  $26^d21h$  and then gave way to the rapid development of a small storm. The principal features of this disturbance were two steep waves in H ( $+150\gamma$ ) culminating at  $26^d22h$  and  $27^d1h$ , respectively, and accompanied by a series of oscillatory changes in D superposed on a general easterly drift of about  $20'$ . There followed a westerly drift amounting to  $30'$ , between  $27^d2\frac{1}{2}h$  and  $5\frac{1}{2}h$ . During the period of maximum activity there was a temporary decrease of Z ( $70\gamma$ ). The disturbance declined rapidly after  $27^d6h$  and ceased at about  $28^d0h$ . It included ranges of  $38'$  in D,  $200\gamma$  in H and  $130\gamma$  in Z. During  $28^d$  and  $29^d$  slight general unsteadiness prevailed which, however, became negligible on  $30^d$ , and until  $31^d8h$ , when marked unsteadiness once more became the prevailing condition.

The range in declination during the month was from  $9^{\circ}22'.4$  to  $10^{\circ}1'.2$ , both on  $27^d$ ; in horizontal intensity, from .18468 on  $27^d$  to .18670 on  $26^d$ ; in vertical intensity, from .43168 to .43295, both on  $27^d$ .

**November.** Very unsteady conditions were recorded on 1st, especially during the second half, when movements of  $40\gamma$  in H occurred at  $18\frac{1}{2}h$  and  $21\frac{1}{2}h$  and a wave in D ( $12'E$ ) at  $22h$ . A period of relative inactivity then set in which lasted until  $5^d9h$ . At  $5^d9^h23^m$  there was a sudden movement in all traces, followed by many irregular rapid oscillations which persisted for about twenty hours though declining steadily in amplitude after  $6^d0h$ . The individual movements, however, seldom exceeded  $20\gamma$ , even in the most active stage. Larger irregularities occurred at intervals on 6th, the most prominent being a wave in H ( $+60\gamma$ ) at  $23\frac{1}{2}h$ . A second period of almost quiet conditions began at  $7^d6h$ , lasting until  $8^d23h$ . Considerable unsteadiness then developed, prominent features of which were a rapid movement east in D ( $13'$ ) between  $10^d19h$  and  $20h$  followed by a decrease of H ( $75\gamma$ ) between  $20h$  and  $21h$ ; a wave in H ( $+60\gamma$ ) at  $11^d3h$  accompanied by a fall in Z ( $30\gamma$ ); and several erratic changes of about  $40\gamma$  in H between  $11^d20h$  and  $12^d6h$ . Conditions remained unsteady generally until the end of 13th. At  $15^d7^h54^m$  there was another sudden oscillatory movement in all traces, similar to but rather larger than that at  $5^d9h$  mentioned above. The range of the double movement in H was  $70\gamma$  and in D,  $9'$ . As in the former case a long series of small rapid oscillations followed - sometimes nearly regular, but generally irregular. These finally ceased at about  $16^d18h$ . Unsteadiness continued to be the general characteristic, however, and during 19th  $20^d$  and  $21^d$  increased to the dimensions of a mild disturbance. The principal movements were waves in H ( $+70\gamma$ ) and D ( $11'E$ ) at  $19^d22\frac{1}{2}h$ , a wave in H ( $-50\gamma$ ) at  $20^d19h$ , and a marked decrease of H between  $21^d8^h55^m$  and  $11^d0h$  ( $90\gamma$ ). There was also a prominent movement in H ( $+50\gamma$ ) and D ( $12'E$ ) at  $22^d16\frac{1}{2}h$ . Conditions then became steadier for a time, but at  $24^d3^h46^m$  an abrupt movement in all traces occurred and was followed by a resumption of the rapid oscillatory changes mentioned in the respect of 15th and 16th. The initial movement was only  $+25\gamma$  in H and  $6'W$  in D; most of those following were much smaller, but there was a brief spell of activity extending from  $24^d13h$  to  $14h$  in which a range of  $115\gamma$  occurred in H and  $18'$  in D. Several prominent isolated waves appeared on the traces during 25th. The principal examples were recorded at  $15h$  (D,  $10'E$ ) and  $20\frac{1}{2}h$  (D,  $10'E$ , H,  $+80\gamma$ ). From  $26^d18h$  conditions were practically quiet.

The range in declination during the month was from  $9^{\circ}33'.1$  on 1st to  $10^{\circ}7'.4$  on 24th; in horizontal intensity, from .18480 on 24th to .18638 on 25th; in vertical intensity, from .43213 on 24th to .43294 on 1st.

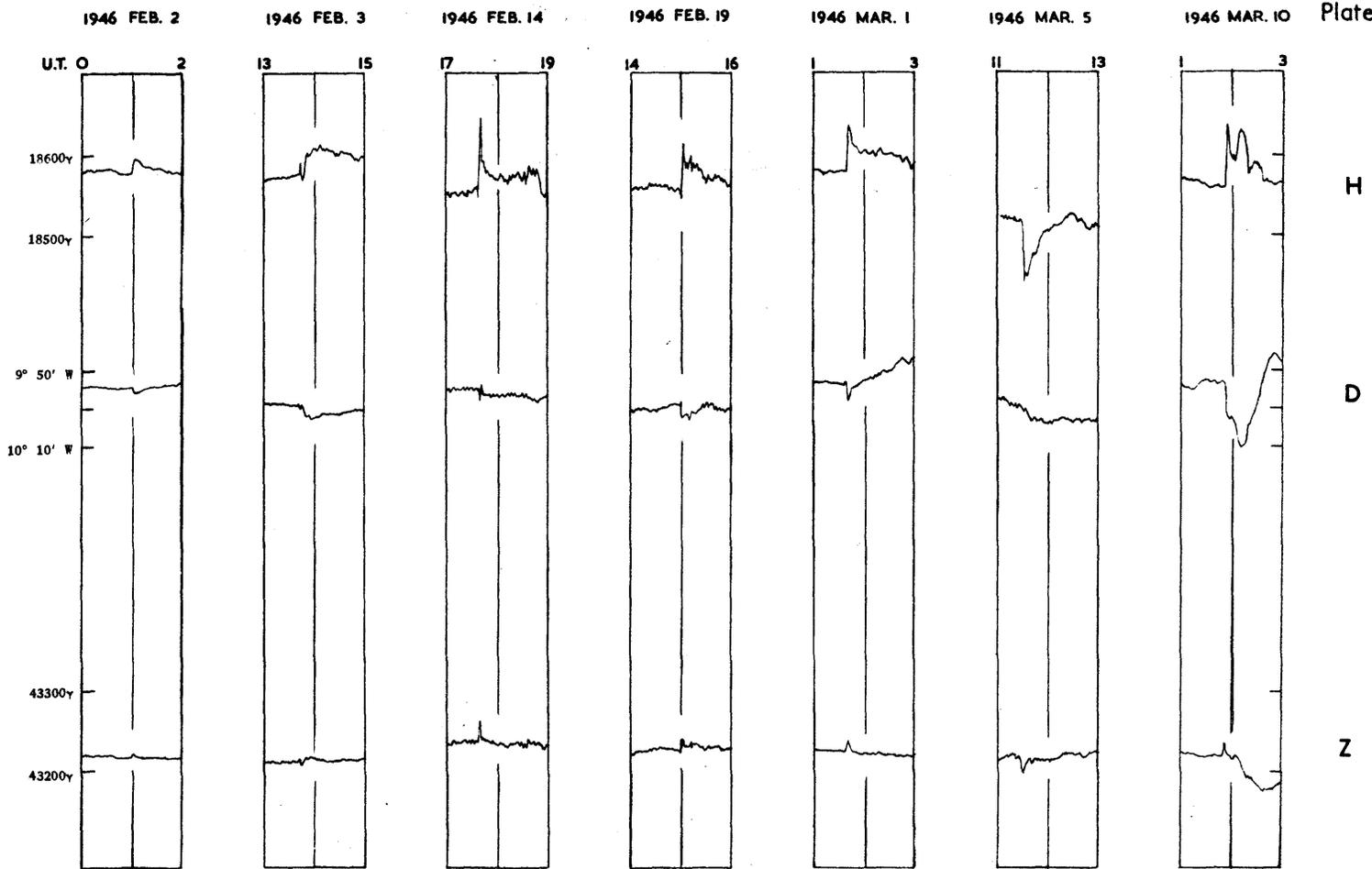
## NOTES ON MAGNETIC ACTIVITY

December. Slight unsteadiness was shown on the traces during 1st and 2nd, and increased on 3rd. There was a prominent wave in H (+50γ) at 3<sup>d</sup>2<sup>h</sup>, accompanied by a rapid decrease in Z (20γ). Between 4<sup>d</sup>20<sup>h</sup> and 11<sup>d</sup>16<sup>h</sup> conditions were almost continuously unsteady. Periods especially affected were 7<sup>d</sup>3<sup>h</sup> to 8<sup>h</sup> and 8<sup>d</sup>3<sup>h</sup> to 6<sup>h</sup>. A short-lived disturbance occurred between 11<sup>d</sup>17<sup>h</sup> and 12<sup>d</sup>2<sup>h</sup> in which the principal movement was a wave in H (-85γ) at 20<sup>h</sup>, preceded at 19<sup>h</sup> by a smaller wave in D (10'E). After further considerable unsteadiness, lasting until 13<sup>d</sup>1<sup>h</sup> quiet conditions gradually became established. These continued until 16<sup>d</sup>20<sup>h</sup> when general unsteadiness was resumed. A brief spell of activity extended from 19<sup>d</sup>11<sup>h</sup> to 20<sup>h</sup>, the climax of which was reached at 17<sup>h</sup> with a wave in D (17'E). Movements in H exceeding 50γ occurred at 19<sup>d</sup>12<sup>h</sup>-13<sup>h</sup> and at 19<sup>d</sup>17<sup>h</sup>-18<sup>h</sup>. Another prominent movement in H took place at 21<sup>d</sup>8<sup>h</sup> to 10<sup>h</sup>, namely a wave, -60γ. General unsteadiness remained the prevalent condition until about 25<sup>d</sup>0<sup>h</sup>. At 25<sup>d</sup>19<sup>h</sup>12<sup>m</sup> a small abrupt movement occurred in all traces (+30γ in H) and was followed by minor activity lasting five hours. The largest movement was in H (-60γ) at 22<sup>h</sup>. Unsteadiness still continued to a marked extent, especially from 27<sup>d</sup>18<sup>h</sup> to 28<sup>d</sup>3<sup>h</sup> but gradually declined after the middle of 28th.

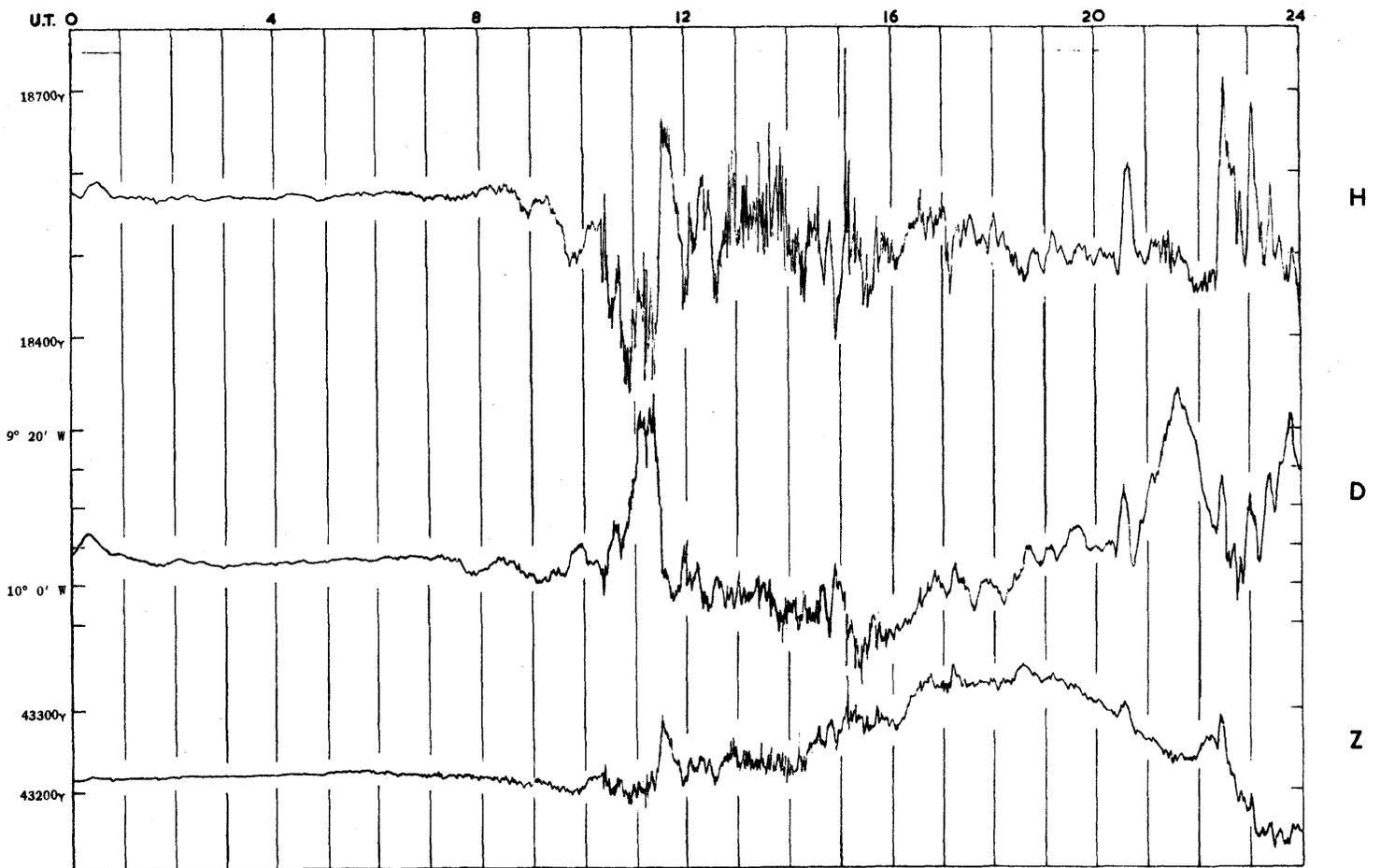
The range in declination during the month was from 9°36'.2 on 11th and 19th to 9°58'.3 on 19th; in horizontal intensity, from .18494 to .18620, both on 19th; in vertical intensity, from .43213 on 3rd to .43275 on 19th.

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

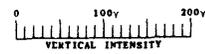
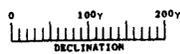
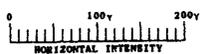
Declination: 11°16'.8 W; 8°35'.1 W } All on March 28.  
 Horizontal Intensity: .19733; .18072  
 Vertical Intensity: .43678 on March 25; .42708 on March 28.



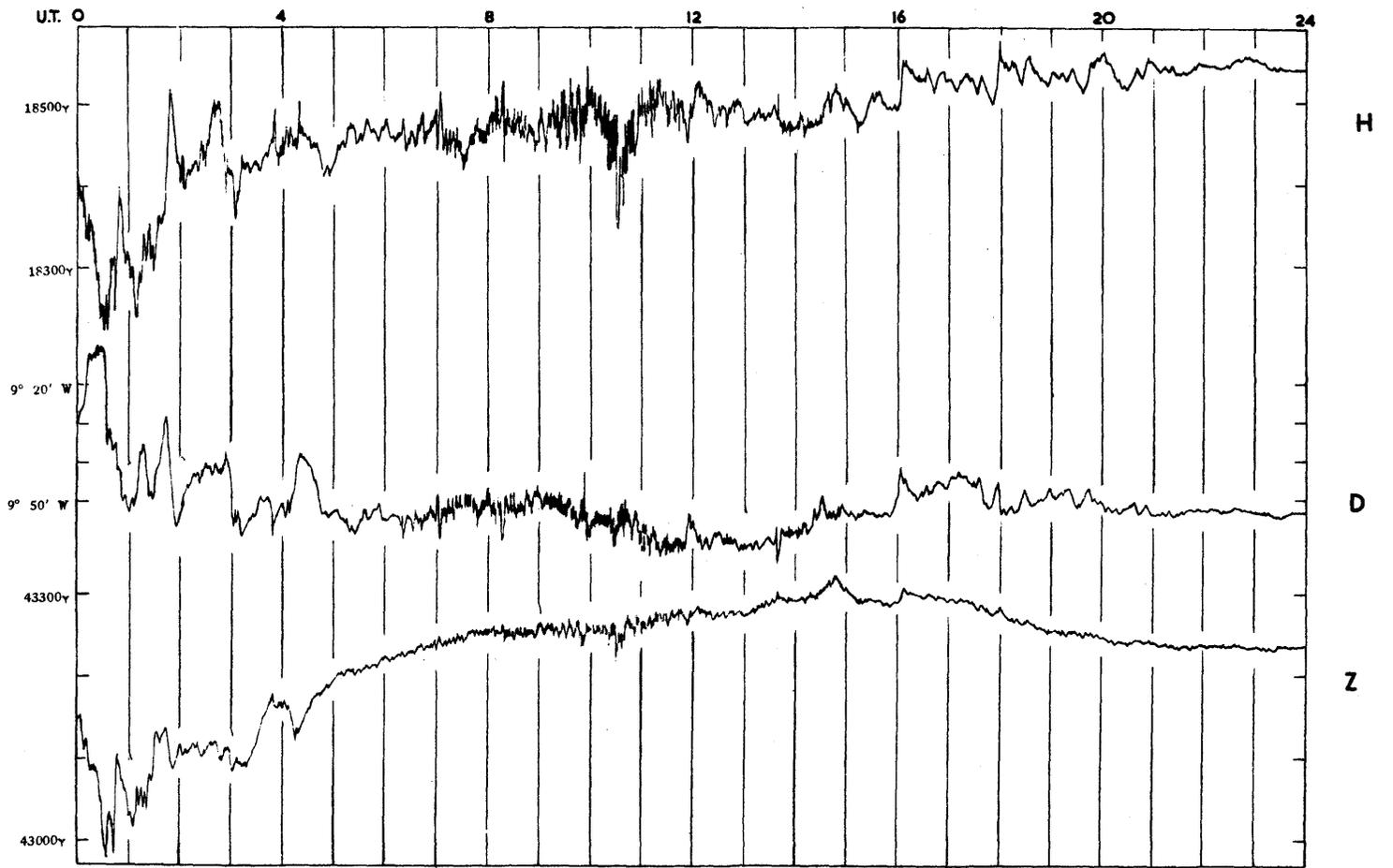
1946 FEBRUARY 7



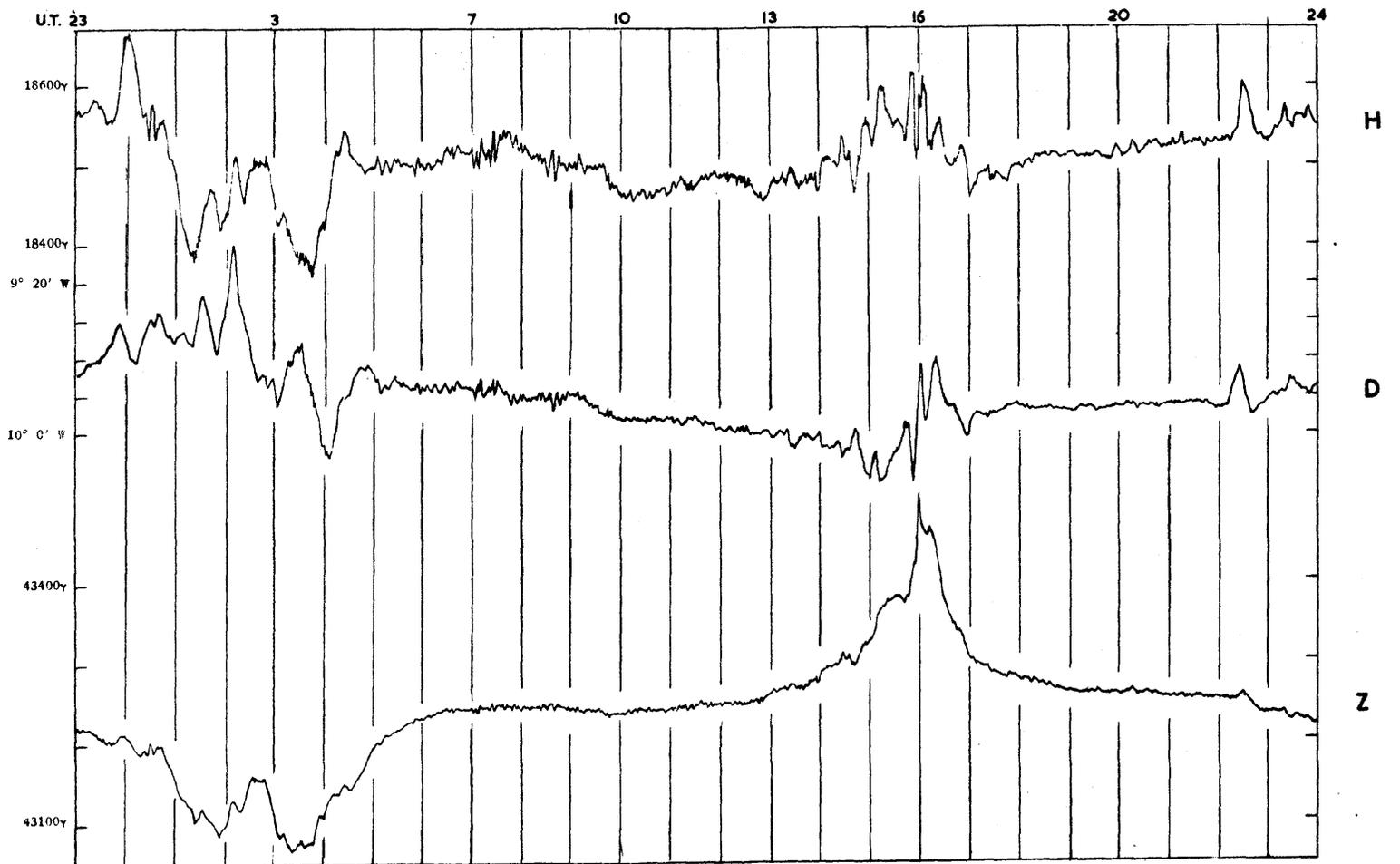
SCALES FOR THE MAGNETIC ELEMENTS



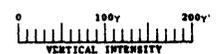
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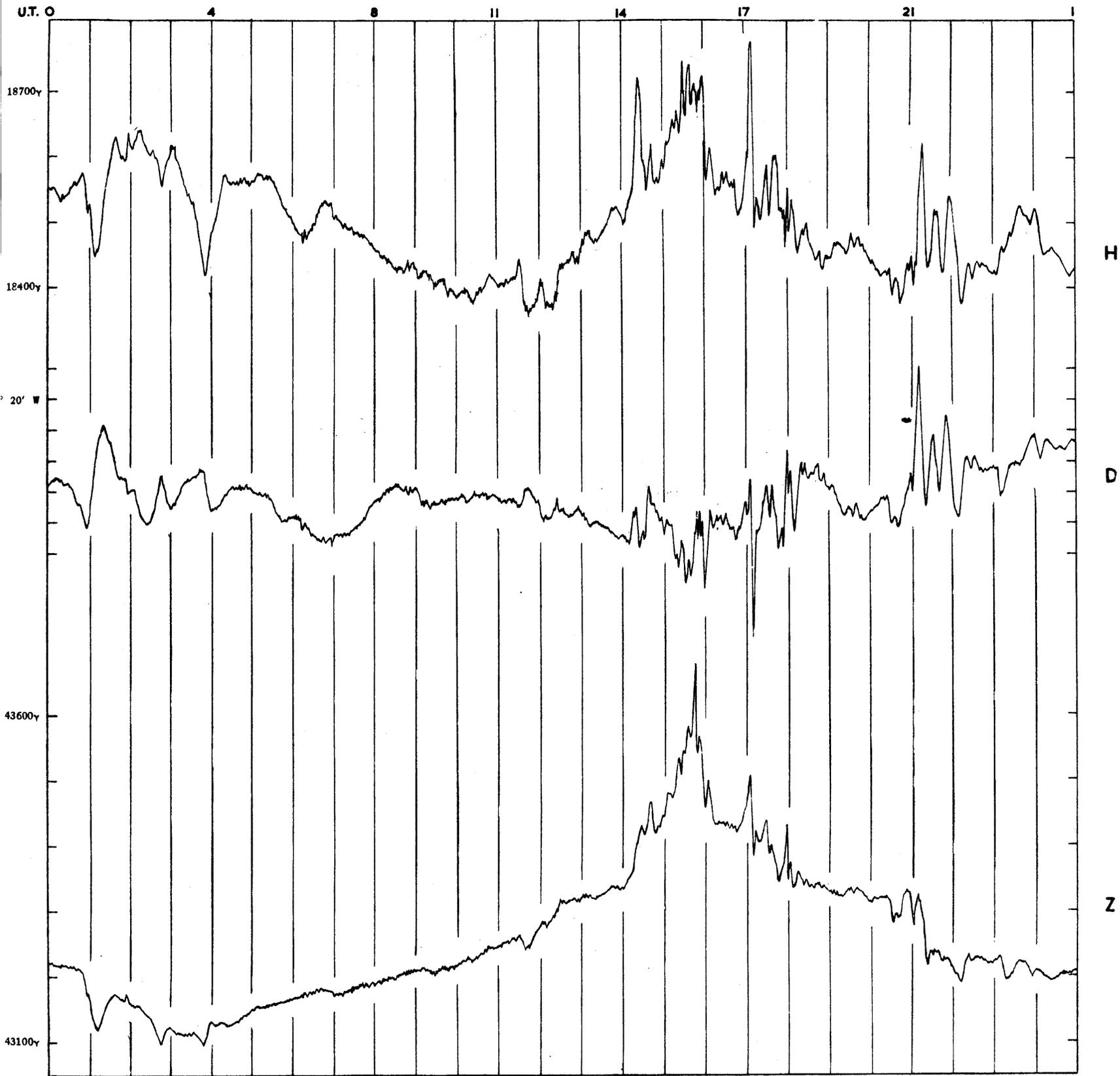


1946 MARCH 23-24

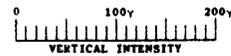
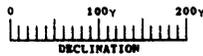


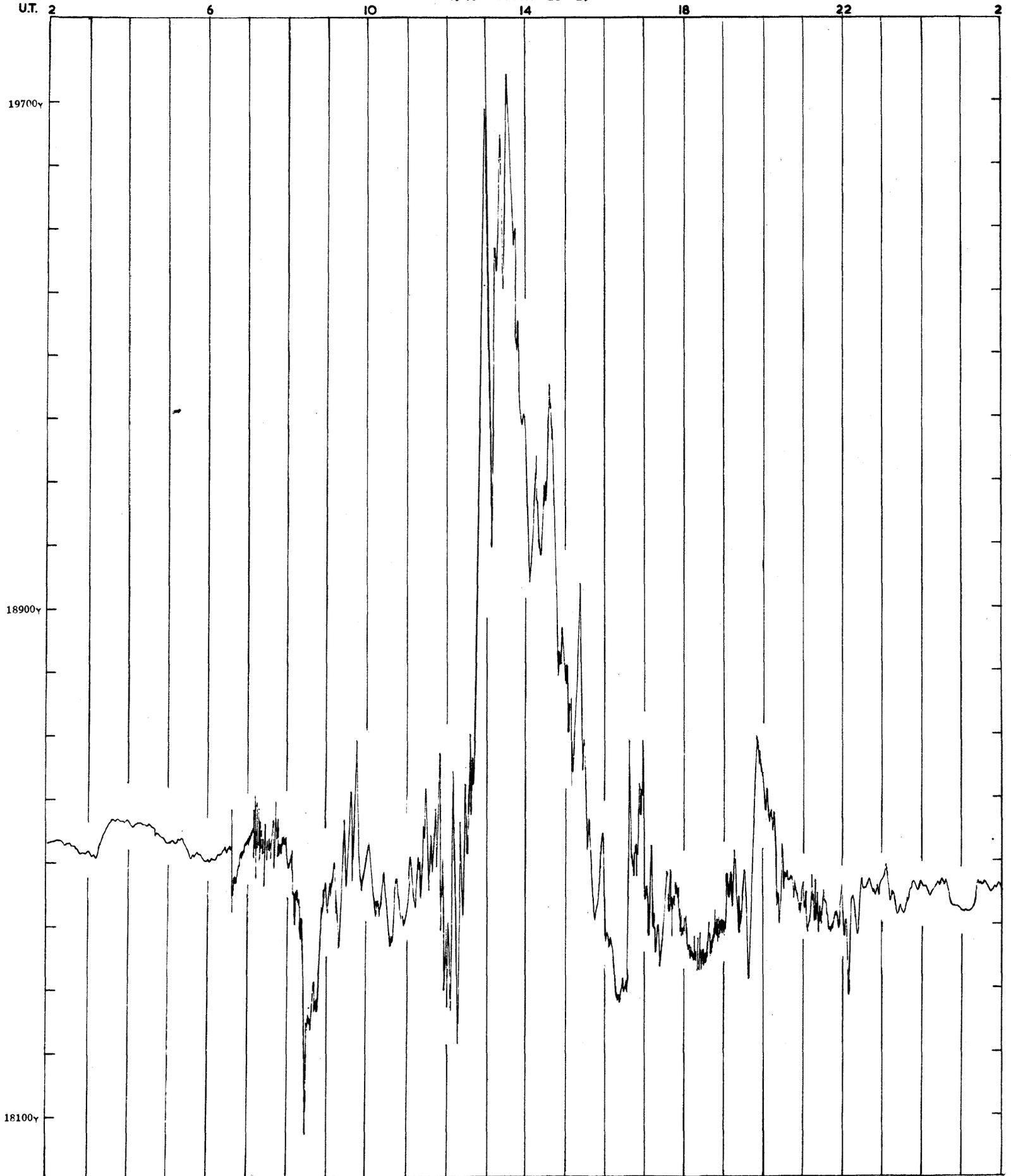
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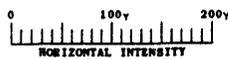


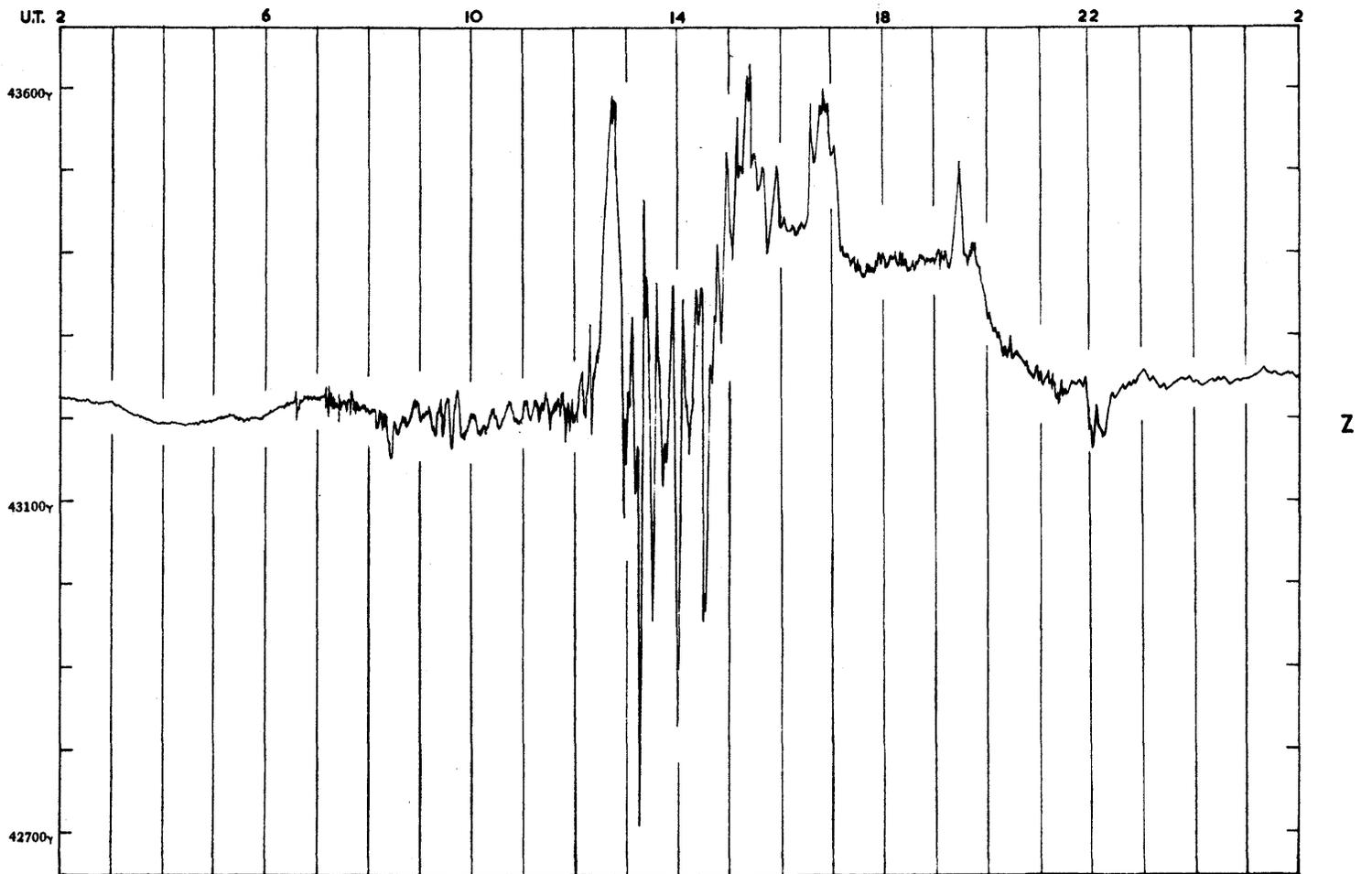
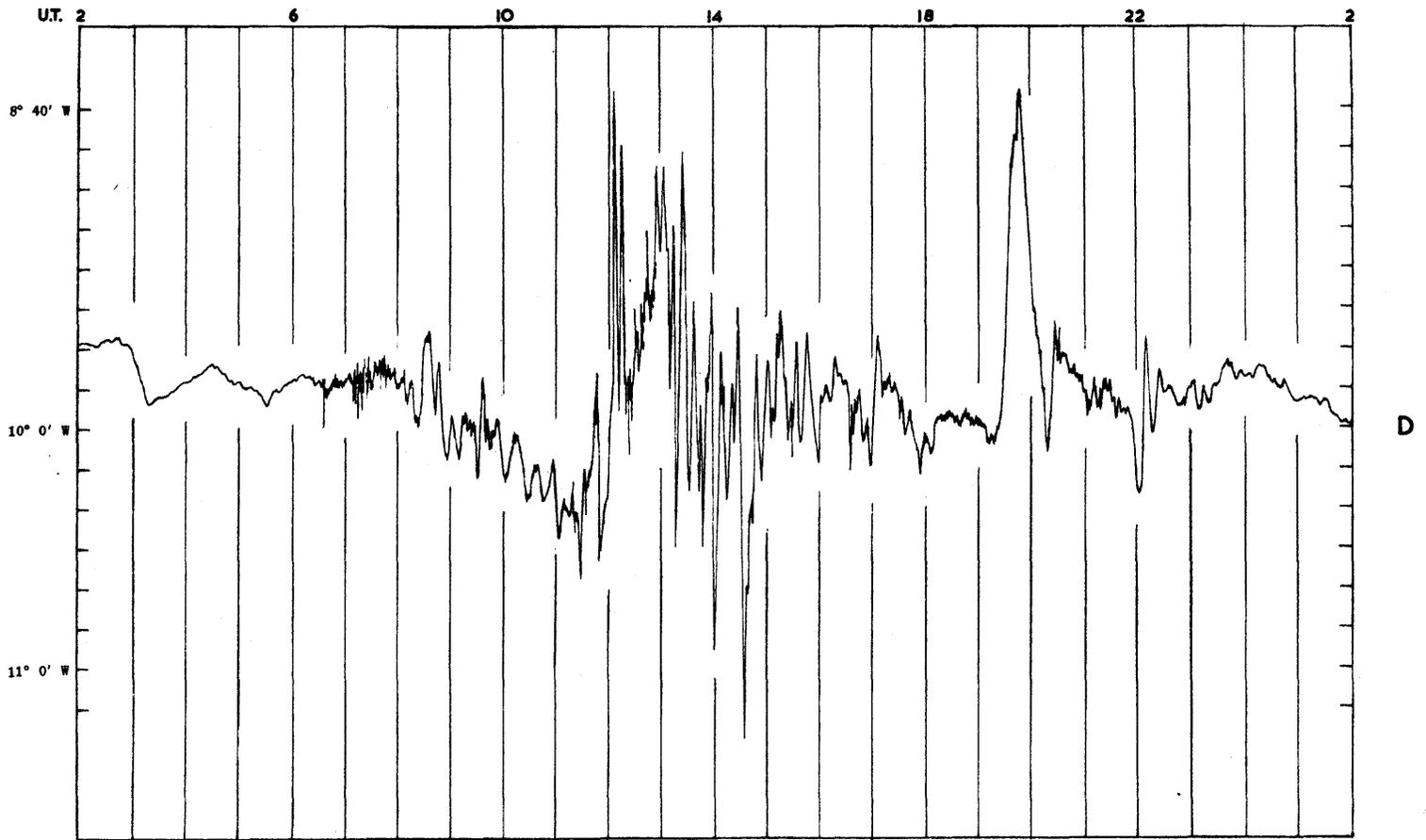
SCALES FOR THE MAGNETIC ELEMENTS





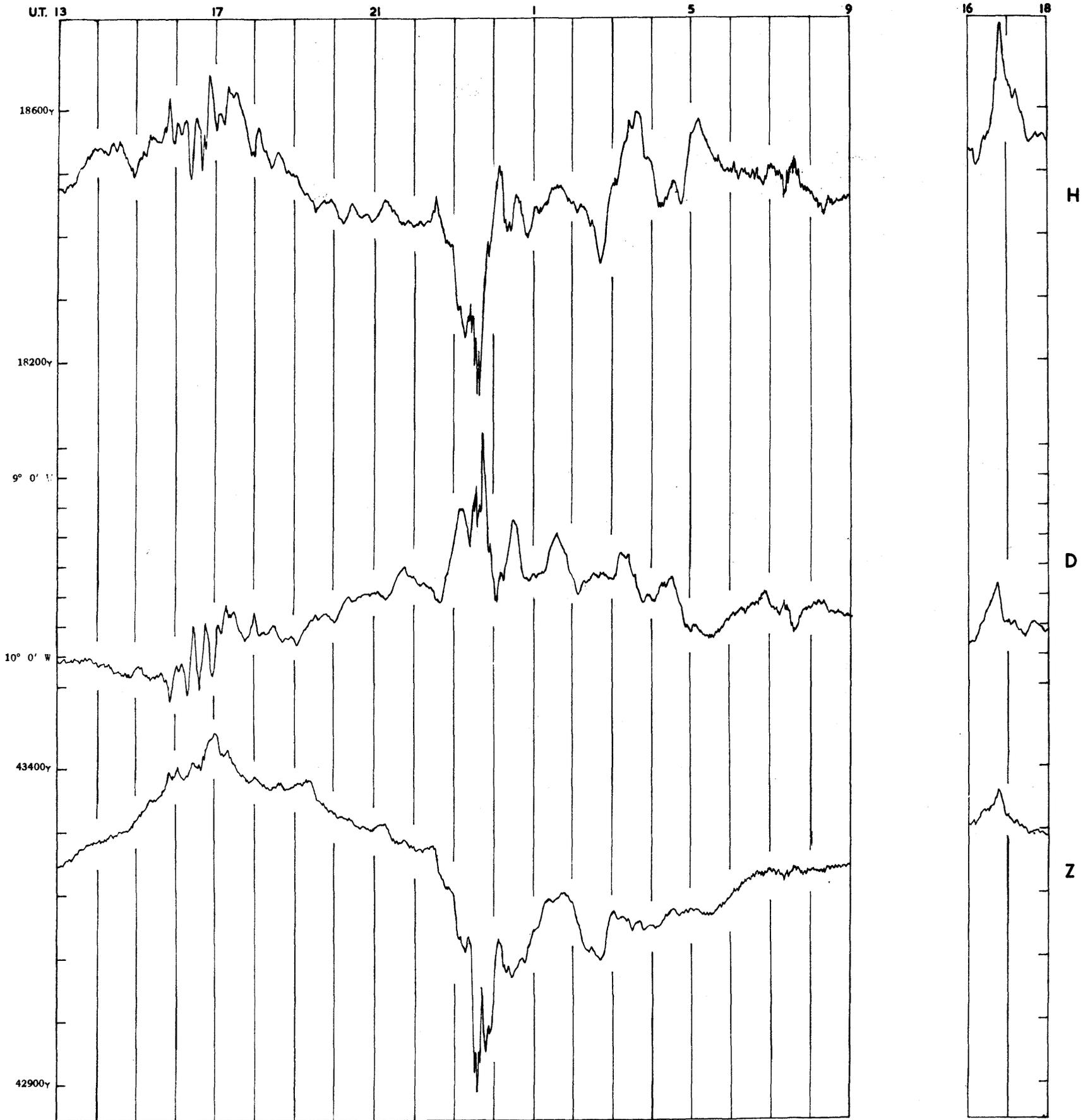
SCALE FOR H



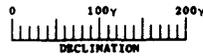
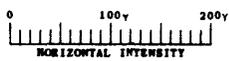


SCALES FOR THE MAGNETIC ELEMENTS





SCALES FOR THE MAGNETIC ELEMENTS



1946 MARCH 22

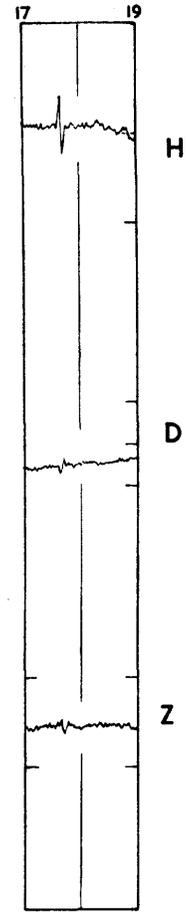
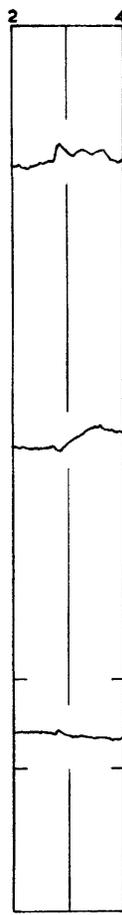
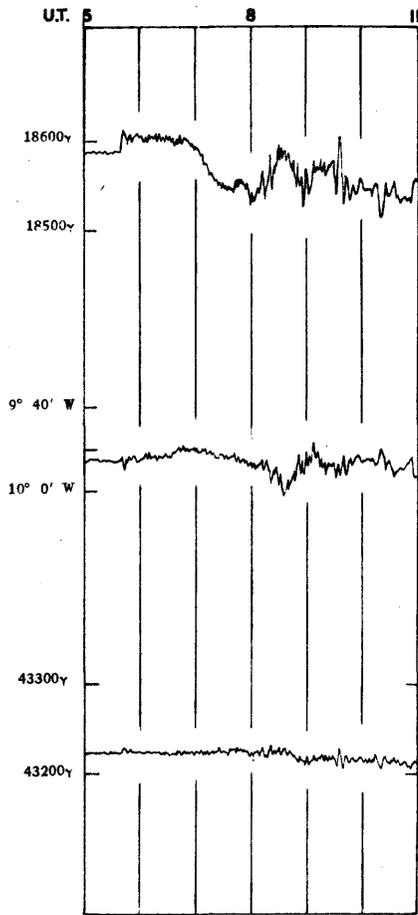
1946 MAR. 29

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1946 MAY 6

Plate VII



H

D

Z

1946 MAY 6-7

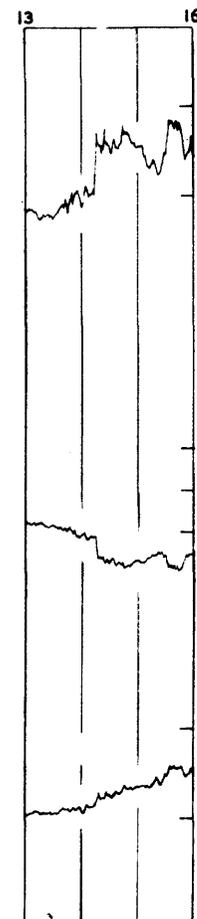
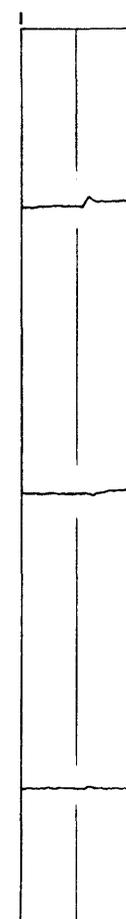
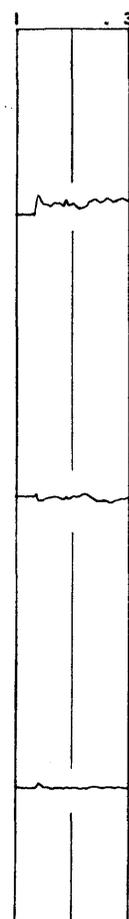
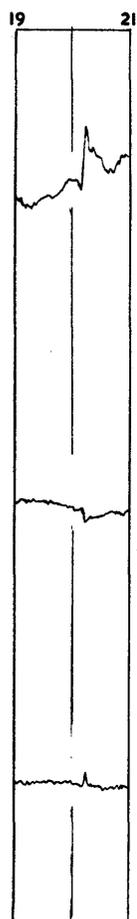
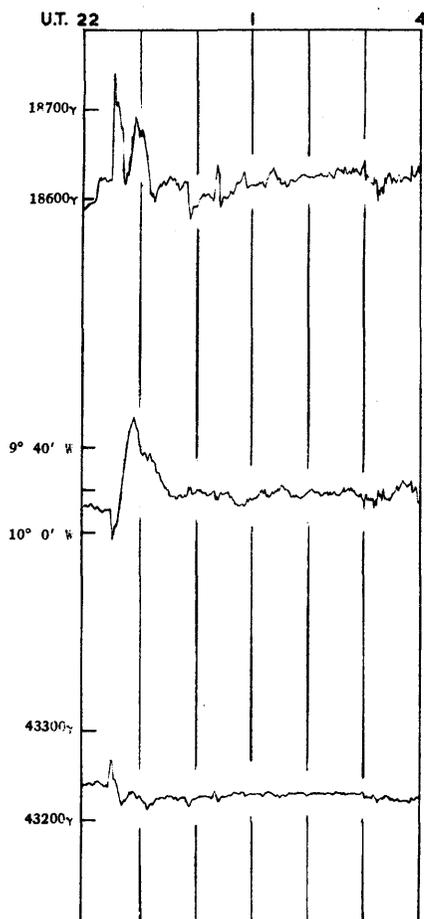
1946 JUNE 5

1946 JUNE 27

1946 JULY 3

1946 JULY 6

1946 JULY 18

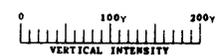
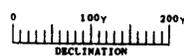
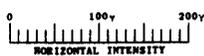


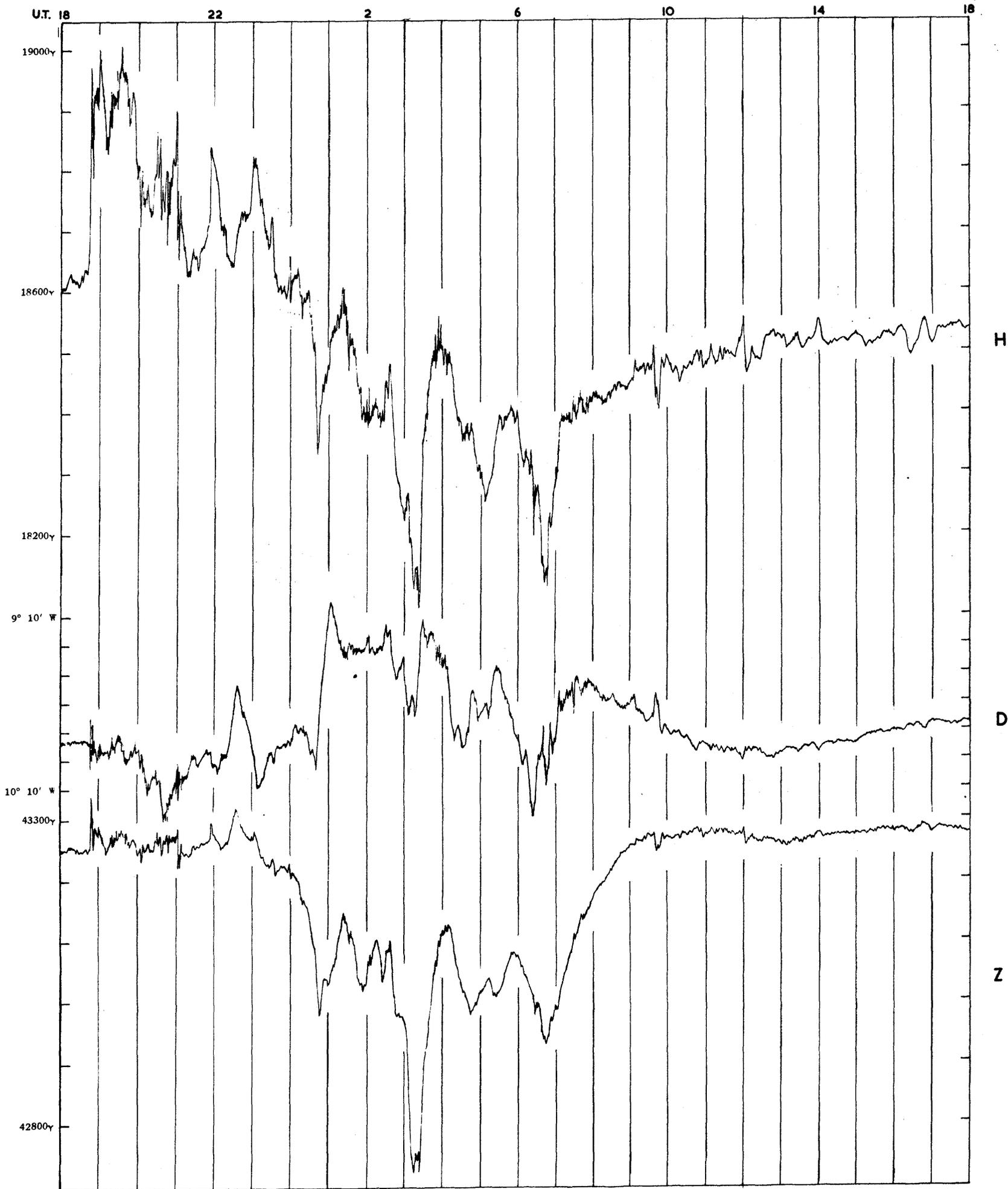
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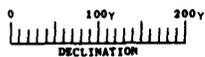
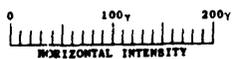
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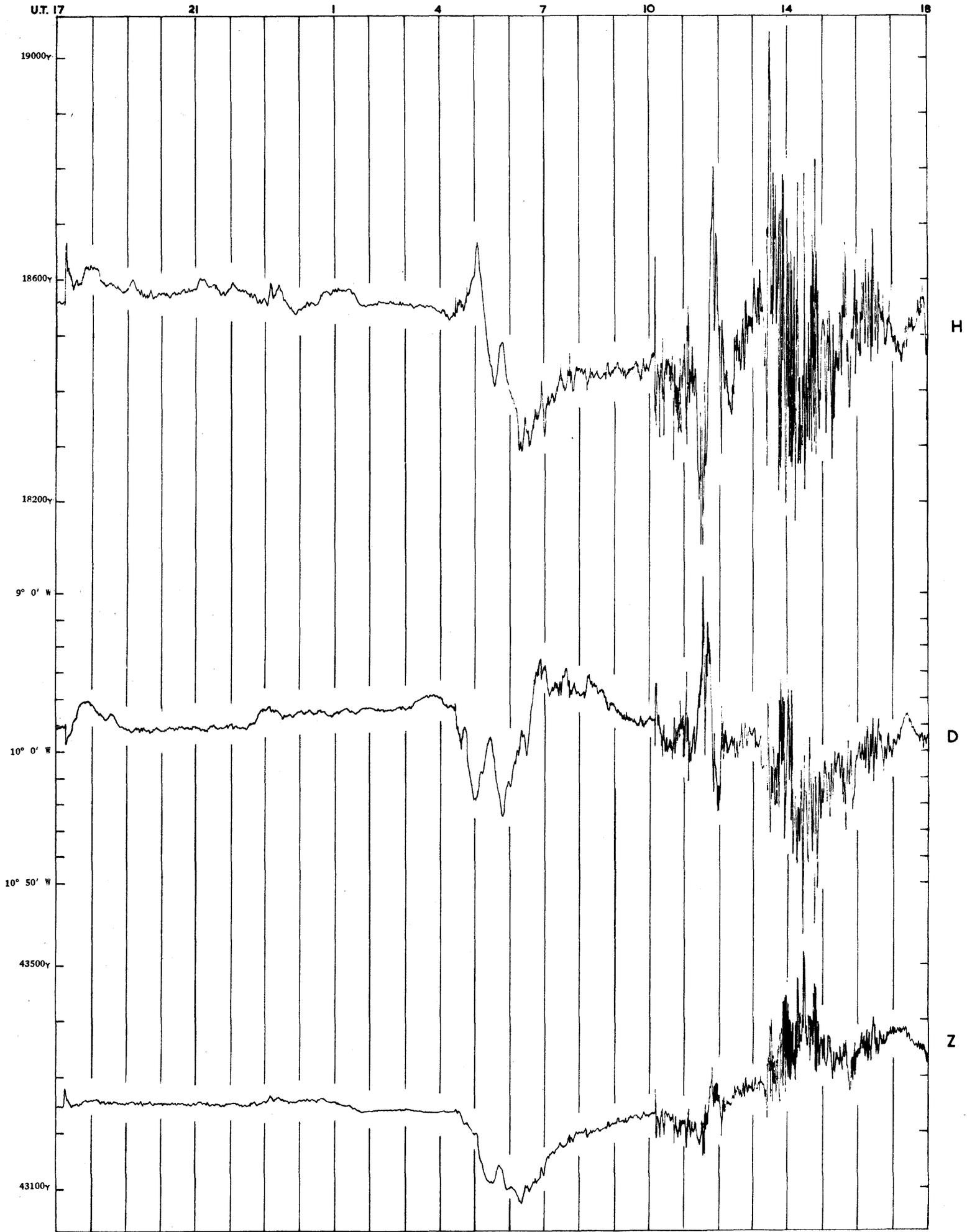
SCALES FOR THE MAGNETIC ELEMENTS



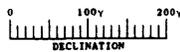
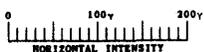


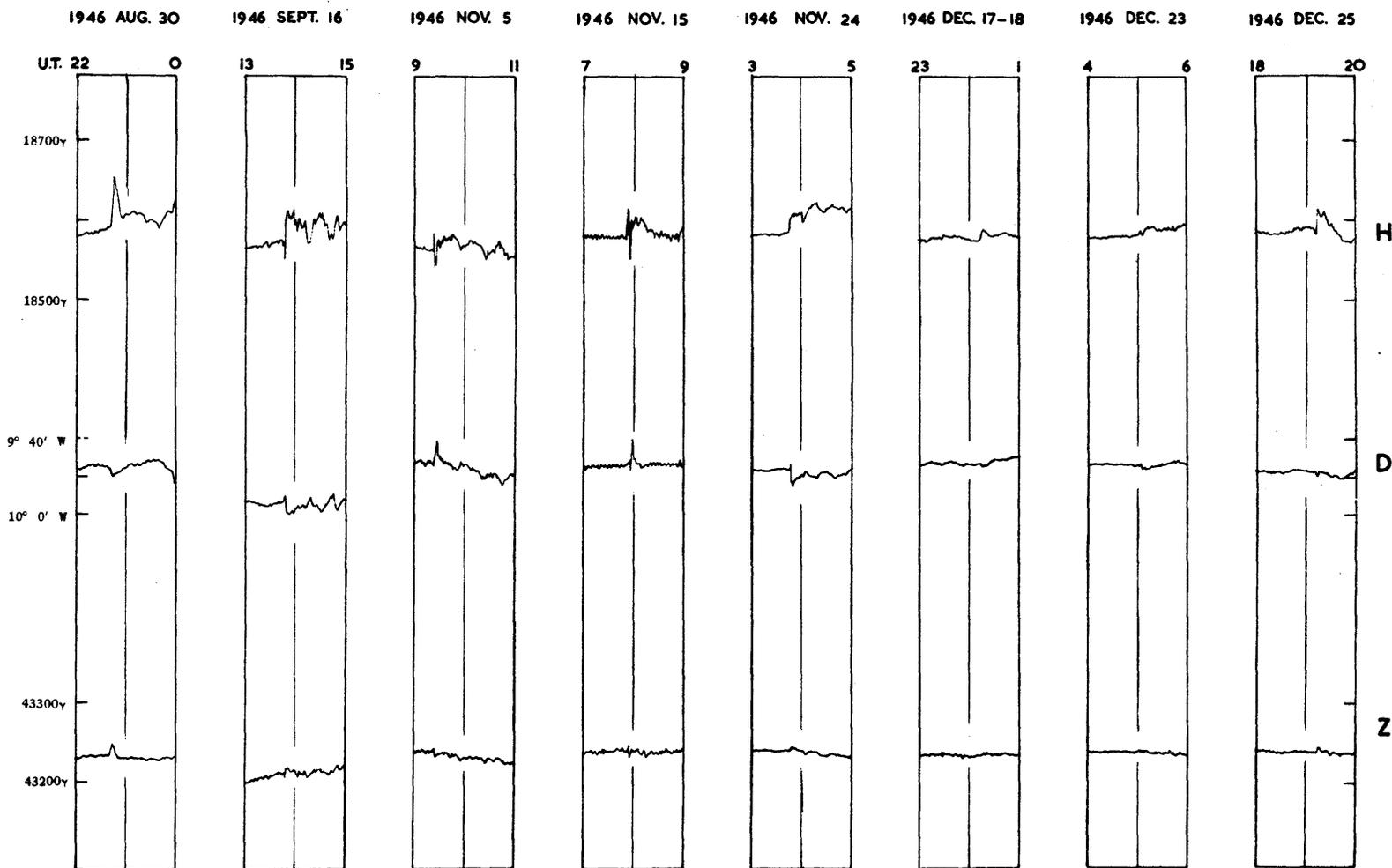
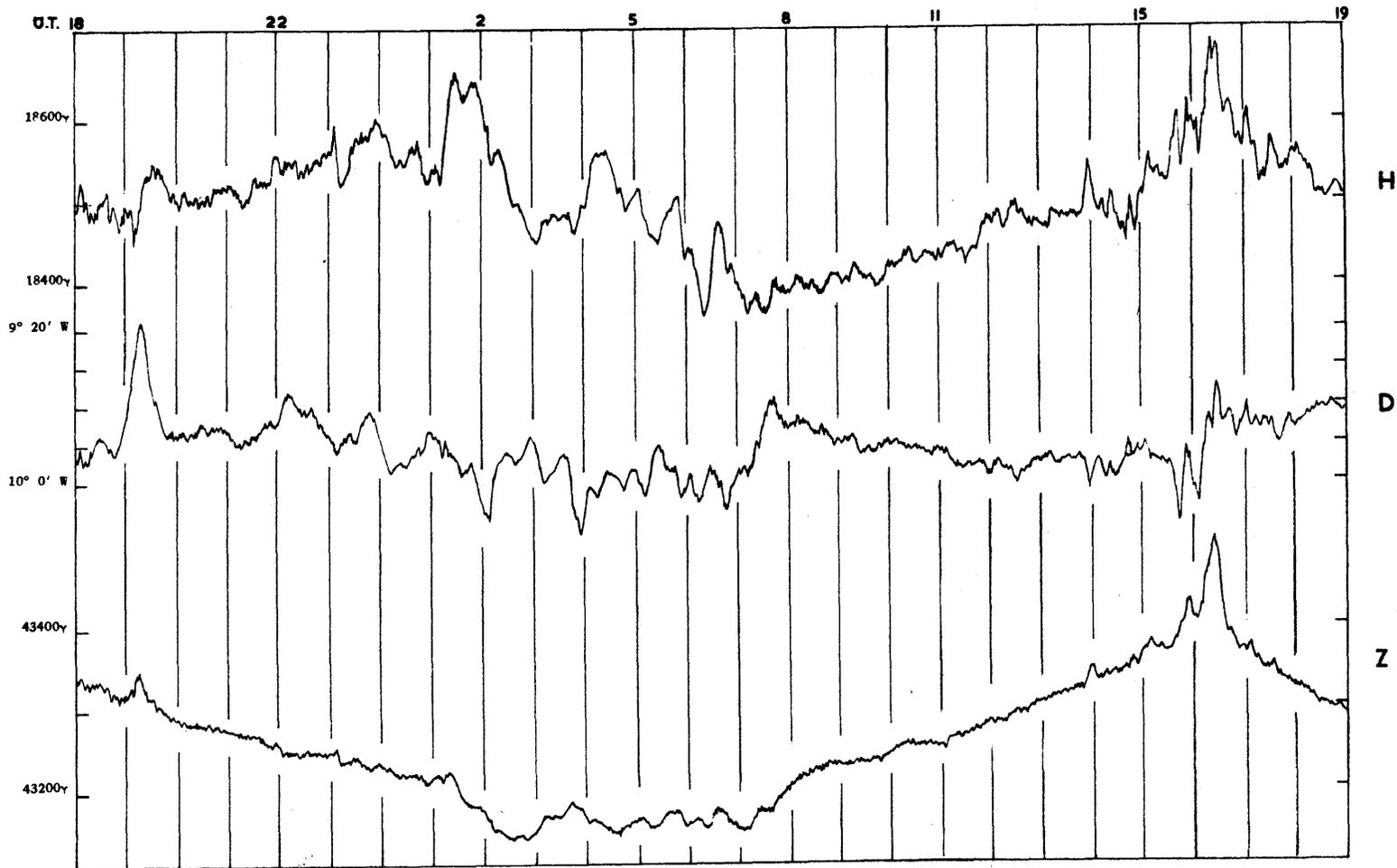
SCALES FOR THE MAGNETIC ELEMENTS



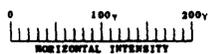


SCALES FOR THE MAGNETIC ELEMENTS





SCALES FOR THE MAGNETIC ELEMENTS



**ROYAL OBSERVATORY, GREENWICH.**

**Results of  
Meteorological Observations**

**1946**

TABLE XVII. - DAILY RESULTS OF THE METEOROLOGICAL OBSERVATIONS

Month and Day 1946	BAROMETER Mean of 24 Hourly Values (Corrected and reduced to 32° Fahrenheit)	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 Sun-shine	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					
		Highest	Lowest	Daily Range	Mean of 24 Hourly Values	Excess above Average of 65 Years	Mean of 24 Hourly Values	Deducted Mean Daily Value			Mean	Greatest	Least				Highest in Sun's Rays	Lowest on the Grass
Jan. 1	30.064	34.0	27.7	6.3	31.5	-7.1	30.2	28.1	3.4	5.5	1.2	86	45.2	21.2	46.5	0.000	0.6	7.9
2	30.288	32.9	31.0	1.9	32.3	-6.1	30.5	27.5	4.8	6.6	3.1	81	37.6	23.0	46.3	0.000	0.0	7.9
3	30.361	34.1	23.3	10.8	27.9	-10.4	26.5	23.7	4.2	6.7	1.3	83	56.3	9.7	46.0	0.000	5.1	8.0
4	30.153	40.0	25.2	14.8	33.4	-4.9	31.3	27.8	5.6	12.3	1.5	79	48.5	12.0	45.6	0.000	0.6	8.0
5	29.983	48.4	36.8	11.6	44.6	+6.4	41.9	38.2	6.4	8.4	4.4	78	54.6	32.6	45.5	0.000	0.0	8.0
6	29.995	48.9	42.3	6.6	45.4	+7.3	43.3	40.6	4.8	8.2	2.5	83	61.0	37.0	45.5	0.000	1.4	8.0
7	29.921	46.5	33.4	13.1	41.0	+3.0	39.4	37.2	3.8	9.6	0.0	86	71.4	24.0	45.1	0.000	3.8	8.1
8	29.700	47.9	43.0	4.9	45.6	+7.7	43.8	41.5	4.1	7.7	2.2	86	60.9	37.0	45.1	0.139	0.0	8.1
9	29.351	51.3	47.2	4.1	49.2	+11.3	47.5	45.6	3.6	7.2	0.8	87	55.1	43.7	45.1	0.453	0.0	8.1
10	29.368	54.6	46.3	8.3	50.6	+12.7	47.7	44.5	6.1	8.2	0.8	80	73.7	41.3	45.2	0.050	0.9	8.1
11	29.517	55.5	48.0	7.5	53.9	+16.0	52.3	50.8	3.1	3.9	1.2	89	57.2	43.2	45.5	0.489	0.0	8.2
12	29.729	49.2	41.2	8.0	45.6	+7.7	42.8	39.1	6.5	11.5	1.2	78	75.3	36.3	45.6	0.020	6.4	8.2
13	30.230	42.9	32.2	10.7	39.4	+1.4	36.9	32.8	6.6	10.5	3.0	77	59.2	24.8	45.9	0.000	3.3	8.2
14	30.567	38.3	31.1	7.2	34.3	-3.7	31.0	25.4	8.9	14.9	6.0	67	65.3	23.7	45.9	0.000	3.4	8.3
15	30.671	37.2	31.3	5.9	34.1	-4.0	31.1	26.0	8.1	12.5	5.4	70	77.3	23.8	45.7	0.000	5.0	8.3
16	30.509	38.8	29.5	9.3	34.0	-4.3	31.8	27.8	6.2	10.1	2.4	78	57.5	22.0	45.7	0.000	1.6	8.4
17	30.212	33.5	28.3	5.2	31.6	-6.9	29.8	26.9	4.7	10.1	2.3	81	55.0	23.2	45.1	0.000	3.6	8.4
18	29.790	32.6	26.9	5.7	30.0	-8.6	28.2	25.0	5.0	10.5	1.6	79	63.3	25.2	45.0	0.004	3.9	8.4
19	29.824	38.2	26.8	11.4	31.4	-7.3	29.7	26.9	4.5	11.7	1.9	81	63.5	16.8	44.6	0.000	2.6	8.5
20	30.049	27.9	20.5	7.4	25.3	-13.5	24.9	24.0	1.3	1.9	0.0	95	32.0	11.2	44.3	0.000	0.0	8.5
21	30.194	31.0	22.7	8.3	27.4	-11.4	26.6	25.1	2.3	3.0	0.0	90	33.5	15.8	44.0	0.000	0.0	8.6
22	30.043	35.0	29.4	5.6	32.7	-6.1	31.9	30.7	2.0	2.5	0.0	91	45.4	20.0	44.0	0.001*	0.0	8.6
23	29.806	36.6	31.6	5.0	33.8	-5.1	32.5	30.3	3.5	6.3	2.0	86	42.0	28.5	43.5	0.000	0.0	8.7
24	30.127	41.4	31.8	9.6	34.7	-4.2	33.1	30.3	4.4	8.7	2.1	83	58.4	25.8	43.4	0.000	1.8	8.7
25	30.048	43.1	36.7	6.4	41.1	+2.0	40.1	38.9	2.2	2.9	1.3	91	48.8	31.5	43.2	0.002	0.0	8.8
26	29.785	42.6	39.2	3.4	40.7	+1.4	40.1	39.2	1.5	2.5	0.0	94	55.3	38.0	43.2	0.020	0.0	8.8
27	29.808	42.9	31.5	11.4	37.3	-2.2	36.4	34.9	2.4	7.9	0.0	91	65.5	23.9	43.4	0.009	3.5	8.9
28	29.757	50.2	37.8	12.4	43.9	+4.3	42.4	40.5	3.4	7.1	1.5	87	83.7	32.3	43.5	0.095	2.6	8.9
29	29.393	53.0	40.8	12.2	46.1	+6.4	43.2	39.5	6.6	12.6	1.4	78	64.7	35.3	43.6	0.263	0.1	9.0
30	29.293	49.0	34.9	14.1	40.8	+1.1	37.7	32.7	8.1	10.2	2.6	73	51.5	30.2	43.4	0.040	0.4	9.0
31	29.657	49.8	34.7	15.1	42.1	+2.4	40.2	37.5	4.6	10.9	0.4	84	59.0	30.0	43.4	0.030	0.0	9.1
Means	29.942	42.2	33.6	8.5	38.1	-0.5	36.3	33.5	4.6	8.1	1.7	83.0	57.3	27.2	44.8	Sum 1.615	1.6	8.4
No. of Col. for Ref.	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 29.942 in., being 0.141 in. higher than the average for the 65 years, 1841-1905.

\* Rainfall (Column 16). The amount entered on January 22 is derived from wet fog.

TEMPERATURE OF THE AIR.

The highest in the month was 55°.5 on January 11; the lowest in the month was 20°.5 on January 20; and the range was 35°.0.

The mean of all the highest daily readings in the month was 42°.2, 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 33°.6, being 0°.6 lower than the average for the 65 years, 1841-1905.

The mean of all the daily ranges was 8°.5, being 0°.4 less than the average for the 65 years, 1841-1905.

The mean for the month was 38°.1, being 0°.5 lower than the average for the 65 years, 1841-1905.

TABLE XVII. - DAILY RESULTS OF THE METEOROLOGICAL OBSERVATIONS

Month and Day	RECORD OF THE NIGHT SKY				WIND AS DEDUCED FROM SELF-REGISTERING ANEMOMETERS					CLOUDS AND WEATHER			
	Polaris		δ URSÆ MINORIS		OSLER'S			Robinsons					
	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					
hours		hours				lbs.	lbs.	miles	0 <sup>h</sup> to 6 <sup>h</sup>	6 <sup>h</sup> to 12 <sup>h</sup>	12 <sup>h</sup> to 18 <sup>h</sup>	18 <sup>h</sup> to 24 <sup>h</sup>	
Jan.1	4.6	0.33	1.0	0.07	ESE	E	3.0	0.19	241	b c x	b x c Ci Stcu mo	bc c Ci Stcu mo	bc c
2	6.0	0.44	4.9	0.36	E	E:ENE	3.5	0.40	300	c	c Stcu	c Stcu	c
3	8.1	0.59	5.3	0.39	Cal:m:ESE	Cal:m	0.3	0.03	123	c b x f	b x f m	b m	b bc
4	3.6	0.26	1.8	0.13	Cal:m:SSW	SSW	2.0	0.18	250	bc c x f	bc f m	bc c Acu	c
5	5.8	0.42	1.2	0.09	SSW:SW	SW	3.6	0.35	354	c	c ro c Nbst	c Nbst	c bc
6	2.1	0.15	0.7	0.05	SW:SSW	SSW	2.2	0.22	282	bc m	bc Cist Acu m	c Stcu m	c m
7	2.4	0.17	1.2	0.09	S	SSW	0.4	0.03	179	bc x m	c m bc Ci so-ha	bc Ci Acu c	c b c
8	0.0	0.00	0.0	0.00	S:SSW	SSW	6.0	0.55	340	c	c Nbst 1 do	c Ast Nbst ro r	rr c
9	5.0	0.36	3.9	0.28	SSW	SSW:SW	16.5	2.34	573	c dodo	do c Nbst ro	c Nbst ro q rr	q rr c
10	0.0	0.00	0.0	0.00	SW:WSW	SW	6.0	1.58	512	c	p bc c Acu	c Nbst 1 ro d	1 ro d c
11	4.7	0.34	4.5	0.33	SW	SW:WSW	13.0	2.08	593	c	c rr d Nbst q	r d Nbst q	r c rr
12	9.5	0.72	8.1	0.62	WSW	W:WSW	7.2	0.73	437	r b	b Cicu	b Frcu bc b	b bc
13	12.1	0.91	12.0	0.90	WSW:N	N:NNE	2.2	0.33	276	b bc	c Stcu b Cu	b Cu	b
14	3.7	0.28	3.7	0.28	NE:ENE	ENE	2.2	0.23	230	b x	c Stcu mo b	b Stcu	b c
15	12.5	0.94	11.3	0.86	ENE:E:ESE	E:NE	1.6	0.17	203	c b x m	bc m b Cu	b Frcu	b c b
16	11.4	0.86	9.6	0.72	NE:ENE	ENE:NE	6.2	0.76	364	b c b x m	c m Stcu	c Stcu	c bc
17	4.1	0.31	1.9	0.14	NE:ENE	ENE	3.8	0.53	330	bc b x	b m bc Stcu	bc Frcu b	bc c
18	0.9	0.07	0.6	0.04	ESE	E	3.0	0.32	256	c x	c bc Cist Cicu so-ha	c Cicu Ast b c	s c
19	12.6	0.97	4.3	0.33	SE:S:Cal:m	Cal:m	1.1	0.03	95	c x	c b x m	b m	b m f x
20	0.9	0.07	0.0	0.00	Cal:m:WSW	WSW:SW	0.2	0.03	147	ff x	ff x	ff x	ff x
21	1.0	0.08	1.0	0.08	WSW:Cal:m	Cal:m	0.1	0.01	85	ff x	ff x	ff x	ff x
22	0.0	0.00	0.0	0.00	SE:Cal:m	Cal:m:SE	0.4	0.03	122	ff x	b x Fe f	c Stcu f m	c m
23	0.0	0.00	0.0	0.00	SE:Cal:m	Cal:m	0.4	0.01	97	c m	c Stcu m mo	c St mo	c m
24	6.3	0.48	5.2	0.40	Cal:m:SSW	SSW:S	0.6	0.05	158	c m	c Stcu m	c Stcu b Ci	b c mo
25	0.0	0.00	0.0	0.00	SSW	SSW:S	3.0	0.38	331	c mo	c Nbst 1 do mo	do c Nbst mo	c do mo
26	1.2	0.09	0.0	0.00	S	S:SSW	2.2	0.31	311	dodo	c Nbst ro c mo	c Nbst 1 do mo	c 1 do
27	8.1	0.63	6.5	0.51	NW:W:SW	Cal:m:W:SW	1.0	0.04	181	c 1 do	b Fe bc Cist f	bc Cist b m	b c m
28	3.3	0.26	1.3	0.10	SW	SSW:SW	10.5	1.07	446	c p b mo	bc Cist so-ha prin	bc Acu c Nbst 1 ro	c ro q 1 r
29	4.3	0.33	4.0	0.31	WSW:W	SW:S:WSW	23.0	2.05	576	r b bc	bc Cicu Cist so-ha	c Nbst 1 rro	q r c
30	11.5	0.91	11.3	0.88	WNW:W:WSW	W	26.0	2.06	565	c gale b	b c Nbst r	r c q r h c Acu	b
31	0.0	0.00	0.0	0.00	WSW	SSW:SW	8.0	0.86	430	b x	bc m c Cist Ast	c Nbst r c r do	do c
Means	4.7	0.35	3.4	0.26	...	...	...	0.58	303				
No. of Col. for Ref.	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 0° .9 lower than  
The mean Temperature of the Dew Point for the month was 33° .5, being 1° .6 lower than  
The mean Degree of Humidity for the month was 83.0, being 3.8 less than  
The mean Elastic Force of Vapour for the month was 0.192 in., being 0.013 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 0.194. The maximum daily amount of Sunshine was 6.4 hours on January 12.

The highest reading of the Solar Radiation Thermometer was 85° .7 on January 28; and the lowest reading of the Terrestrial Radiation Thermometer was 9° .7 on January 3.

The Proportions of Wind referred to the cardinal points were N.7, E.19, S.33, W.24, calm or nearly calm conditions 17, the whole month being represented by 100.

The Greatest Pressure of the Wind in the month was 26.0 lbs. on the square foot on January 30. The mean daily Horizontal Movement of the Air for the month was 303 miles; the greatest daily value was 593 miles on January 11, and the least daily value was 85 miles on January 21.

Rain (0.005 in. or over) fell on 11 days in the month, amounting to 1.615 in., as measured by gauge No. 6 partly sunk below the ground; being 0.286 in. less than the average fall for the 65 years, 1841-1905.

TABLE XVII. - DAILY RESULTS OF THE METEOROLOGICAL OBSERVATIONS

Month and Day 1946	BAROMETER Mean of 24 Hourly Values (corrected and reduced to 32° Fahrenheit)	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 the Earth 4 ft. below the surface of the Soil	Of Radiation										
		Highest	Lowest	Daily Range	Mean of 24 Hourly Values	Excess above Average of 65 Years		Of Evaporation			Of the Dew Point	Mean	Greatest				Least	
																		Highest in Sun's Rays
Mean	Greatest	Least	Highest in Sun's Rays	Lowest on the Grass	Of the Earth 4 ft. below the surface of the Soil	in.	hours	hours										
Feb. 1	29.374	53.9	43.8	10.1	48.2	+8.6	45.8	43.1	5.1	13.1	1.6	82	89.1	38.5	43.6	0.140	2.0	9.1
2	29.226	50.5	40.9	9.6	45.4	+5.9	42.8	39.3	6.1	12.5	1.6	80	83.6	35.4	43.8	0.135	1.4	9.2
3	29.410	53.6	44.9	8.7	49.5	+10.0	47.7	45.7	3.8	6.6	1.6	87	58.0	42.0	43.9	0.442	0.0	9.2
4	29.445	49.2	40.1	9.1	46.0	+6.5	43.1	39.3	6.7	12.6	3.1	77	60.3	35.7	44.0	0.079	1.1	9.3
5	29.701	51.9	40.6	11.3	45.4	+5.8	41.6	36.2	9.2	16.4	2.3	70	89.9	34.5	44.3	0.000	3.3	9.4
6	29.846	55.5	40.4	15.1	47.4	+7.8	45.3	42.9	4.5	12.1	1.0	84	65.9	34.2	44.3	0.125	0.0	9.4
7	29.841	55.7	47.6	8.1	52.9	+13.4	50.3	47.7	5.2	7.3	2.3	82	63.2	45.4	44.4	0.038	0.0	9.5
8	29.406	54.8	35.6	19.2	51.0	+11.7	48.7	46.2	4.8	8.0	1.7	84	61.3	34.6	44.5	0.198	0.0	9.5
9	29.750	45.4	37.1	8.3	41.5	+2.4	37.4	30.7	10.8	16.9	3.6	65	73.9	30.6	44.5	0.035	6.2	9.6
10	29.980	51.0	38.0	13.0	44.6	+5.7	42.6	40.0	4.6	8.1	1.7	84	61.5	33.0	44.9	0.134	0.8	9.7
11	30.053	49.9	39.2	10.7	44.5	+5.7	41.8	38.1	6.4	11.6	2.5	78	75.3	33.4	45.0	0.000	0.9	9.7
12	30.102	49.9	42.5	7.4	46.2	+7.4	45.0	43.5	2.7	5.0	0.0	91	52.0	38.2	45.0	0.018	0.0	9.8
13	30.252	49.9	44.5	5.4	46.9	+7.9	46.6	46.2	0.7	1.8	0.0	97	54.6	40.0	45.0	0.042	0.0	9.8
14	30.433	49.1	44.3	4.8	47.2	+7.9	46.7	46.1	1.1	2.0	0.0	96	52.2	38.6	45.0	0.000	0.0	9.9
15	30.516	47.5	44.7	2.8	46.5	+7.1	44.8	42.7	3.8	5.9	1.0	87	49.0	44.0	45.0	0.000	0.0	10.0
16	30.336	52.9	45.2	7.7	48.5	+9.0	46.0	43.2	5.3	9.8	1.9	81	73.3	40.0	45.3	0.040	0.1	10.0
17	30.291	50.5	39.0	11.5	44.6	+5.0	41.6	37.4	7.2	14.2	2.2	76	86.5	30.6	45.2	0.000	3.7	10.1
18	30.100	51.0	40.2	10.8	46.8	+7.3	44.5	41.7	5.1	6.3	3.3	82	53.0	34.1	45.2	0.000	0.0	10.1
19	29.884	53.8	43.2	10.6	48.2	+8.7	45.3	41.7	6.5	12.6	1.1	78	74.6	38.2	45.5	0.090	1.5	10.2
20	29.692	46.4	36.0	10.4	42.6	+3.1	37.9	30.1	12.5	19.5	3.6	61	91.7	32.4	45.5	0.083	6.0	10.3
21	29.882	40.1	32.8	7.3	36.7	-2.9	32.3	23.9	12.8	18.7	8.2	58	80.2	27.4	45.5	0.000	4.6	10.4
22	29.911	45.4	27.9	17.5	37.5	-2.2	33.8	27.2	10.3	15.8	3.0	65	88.9	22.5	45.4	0.000	1.2	10.4
23	29.388	49.8	36.3	13.5	43.6	+3.8	40.0	34.6	9.0	16.6	3.1	71	85.3	30.5	45.1	0.246	4.0	10.5
24	29.697	43.9	32.6	11.3	37.9	-2.1	33.9	26.7	11.2	17.4	4.3	63	88.4	26.8	45.0	0.000	7.7	10.5
25	29.710	42.3	31.9	10.4	36.5	-3.6	33.6	28.5	8.0	14.7	1.8	71	59.6	23.7	44.7	0.013	0.0	10.6
26	29.605	37.9	31.8	6.1	35.0	-5.2	34.4	33.3	1.7	3.0	0.0	94	40.0	31.8	44.7	0.627	0.0	10.7
27	29.612	38.0	25.5	12.5	32.1	-8.2	30.1	26.8	5.3	11.2	1.6	79	87.3	21.0	44.3	0.000	5.2	10.8
28	29.549	38.3	20.0	18.3	29.4	-10.9	27.1	22.7	6.7	19.6	1.5	73	62.3	15.3	44.0	0.002*	1.4	10.8
Means	29.822	48.5	38.1	10.4	43.7	+4.1	41.1	37.3	6.3	11.4	2.1	78.4	70.0	33.3	44.7	Sum 2.487	1.8	9.9
No. of Col. for Ref.	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 29.822 in., being 0.013 in. higher than the average for the 65 years, 1841-1905.

\* Rainfall (Column 16). The amount entered on February 28 is derived from hoar frost.

TEMPERATURE OF THE AIR.

The highest in the month was 55° 7 on February 7; the lowest in the month was 20° 0 on February 28; and the range was 35° 7.

The mean of all the highest daily readings in the month was 48° 5, being 3° 6 higher than the average for the 65 years, 1841-1905.

The mean of all the lowest daily readings in the month was 38° 1, being 3° 4 higher than the average for the 65 years, 1841-1905.

The mean of the daily ranges was 10° 4, being 0° 2 greater than the average for the 65 years, 1841-1905.

The mean for the month was 43° 7, being 4° 1 higher than the average for the 65 years, 1841-1905.

TABLE XVII. - DAILY RESULTS OF THE METEOROLOGICAL OBSERVATIONS

Month and Day 1946	RECORD OF THE NIGHT SKY				WIND AS DEDUCED FROM SELF-REGISTERING ANEMOMETERS					CLOUDS AND WEATHER			
	Polaris		δ URSÆ MINORIS		OSLER'S			Robin-son'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 <sup>h</sup> to 6 <sup>h</sup>	6 <sup>h</sup> to 12 <sup>h</sup>	12 <sup>h</sup> to 18 <sup>h</sup>	18 <sup>h</sup> to 24 <sup>h</sup>
hours		hours				lbs.	lbs.	miles					
Feb. 1	6.3	0.49	5.1	0.40	SW	SW	12.0	1.73	541	c i r	i r c bc Cu Cicu	c i r bc Acu	bc c r
2	7.4	0.59	6.9	0.55	SSW:SW	SW:WSW	10.8	1.58	528	c r c	c bc Ci Frcu q	c Nbst Frst p q c b	b c b
3	1.7	0.14	0.7	0.07	WSW:SW	SW:WSW	12.3	2.29	593	b c i do	rr Nbst	rr Nbst	r c r
4	12.4	0.99	12.4	0.99	WSW:SW	WSW	22.5	1.73	526	c	c r c Nbst Ast	r bc Stcu Nbst p c q r	b
5	7.6	0.61	5.7	0.45	WSW:W	W	9.0	1.58	495	b	b bc Ci Frcu q	q bc Ci Frcu y b	b c
6	0.0	0.00	0.0	0.00	SW:SSW:WSW	WNW:WSW	4.5	0.43	296	c r d	c Nbst dd m	c Frcu Cicu mo	c
7	0.0	0.00	0.0	0.00	WSW	WSW	13.0	1.77	551	c r c d	c Stcu mo	c Nbst do c q	c
8	4.6	0.37	4.6	0.37	WSW	WSW:NW	20.0	3.70	737	c r d q	c Nbst i do q	c Nbst i do r q	c r gale
9	4.8	0.40	4.7	0.39	NNW	NNW:W	14.0	2.40	523	r c b q	b bc Cu y	bc Frcu b y	b c
10	11.7	0.97	11.5	0.96	WSW:W	W:WNW	2.9	0.38	335	c d r	d c Ast Stcu	c Acu b	b
11	3.5	0.29	2.7	0.22	WSW:W	WNW:W:WSW	2.7	0.26	316	b	c Cicu Acu	c Stcu	c bc
12	0.0	0.00	0.0	0.00	WSW: Calm	NW: Calm	0.6	0.03	152	bc c	c Nbst d f m	c Stcu m	c dd
13	0.0	0.00	0.0	0.00	Calm	Calm	0.0	0.00	82	dd m f	o St f m	o St do f F g o f	o c ff
14	0.0	0.00	0.0	0.00	Calm	Calm	0.0	0.00	91	o ff	o c ff	c ff	c m
15	0.0	0.00	0.0	0.00	Calm:N:NW	NW:WNW	0.6	0.06	171	c m mo	c i do Nbst m	c Stcu mo	c mo
16	2.8	0.25	0.5	0.04	W:WNW	WNW:NW	2.7	0.23	274	c m	c m c Cicu Cist	so-ha c rr c Nbst	c
17	7.1	0.62	6.7	0.59	NNW:N	N:WSW	0.7	0.09	186	c b	c m b Ci	b bc b mo	b mo
18	0.0	0.00	0.0	0.00	W:WNW	NW	1.7	0.22	283	b c m	c Stcu Nbst do m	c Stcu mo	c
19	7.8	0.68	7.6	0.66	WSW:W	WNW	8.0	0.72	371	c i r	r c Stcu	c Stcu Cicu b	b bc
20	10.9	0.95	10.9	0.95	WNW:NW	NW	23.5	3.15	667	bc c	c p q h b bc q y	bc Frcu gale b y	b c p q b
21	11.0	0.95	10.7	0.93	NW:NNW	NNW:NW	7.5	1.11	443	b	b c Stcu Frst y	c Stcu bc y	bc b
22	1.4	0.12	0.9	0.08	NW:WSW	W:WSW	5.7	0.45	349	b x	c Stcu m	bc Ci Cist c y	c
23	10.2	0.92	9.7	0.88	WSW:W	NW	18.7	3.15	689	c r c q	ir gale c Frcu q	bc Cu gale y b q	b
24	3.5	0.32	2.2	0.20	WNW	NNW:NW	3.8	0.36	285	b c b x m	b m c Cu Acu y	c b c Stcu y	bc
25	0.0	0.00	0.0	0.00	Calm	Calm:E	0.2	0.01	89	bc b x m	c m c Stcu	c Ast i roSo	c r c
26	3.1	0.28	2.4	0.22	E	ENE:NE	3.7	0.41	364	c d rr	rr Nbst	Nbst r rs s	ss
27	9.9	0.90	4.9	0.44	NNE:N	NNE:Calm	1.5	0.06	214	c b c	c bc m b Cicu	b Cicu Cu bc	bc b f x
28	9.1	0.82	5.3	0.48	Calm	NE:Calm	0.2	0.01	121	c b f x	b f b Cicu	bc Cicu Cist so-ha y	bc b m
Means	4.9	0.42	4.1	0.35	...	...	...	1.00	367				
No. of Col. for Ref.	19	20	21	22	23	24	25	26	27	28	29	30	31

The mean *Temperature of Evaporation* for the month was 41°.1, being 3°.4 higher than  
 The mean *Temperature of the Dew Point* for the month was 37°.3, being 2°.3 higher than  
 The mean *Degree of Humidity* for the month was 78.4, being 5.2 less than  
 The mean *Elastic Force of Vapour* for the month was 0.223 in., being 0.019 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 7.4.

The mean proportion of *Sunshine* for the month (constant sunshine being represented by 1) was 0.183. The maximum daily amount of *Sunshine* was 7.7 hours on February 24.

The highest reading of the *Solar Radiation Thermometer* was 91°.7 on February 20; and the lowest reading of the *Terrestrial Radiation Thermometer* was 15°.3 on February 28.

The *Proportions of Wind* referred to the cardinal points were N.19, E.4, S.12, W.49, calm or nearly calm conditions 16, the whole month being represented by 100.

The *Greatest Pressure of the Wind* in the month was 23.5 lbs. on the square foot on February 20. The mean daily *Horizontal Movement of the Air* for the month was 367 miles; the greatest daily value was 737 miles on February 8, and the least daily value was 82 miles on February 13.

*Rain* (0.005 in. or over) fell on 17 days in the month, amounting to 2.487 in., as measured by gauge No.6 partly sunk below the ground; being 1.007 in. greater than the average for the 65 years, 1841-1905.

TABLE XVII. - DAILY RESULTS OF THE METEOROLOGICAL OBSERVATIONS

Month and Day 1946	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		
	Mean of 24 Hourly Values (Corrected and reduced to 32° Fahrenheit)	Of the Air					Of Evaporation	Of the Dew Point	Of Radiation		Of the Earth 4 ft. below the surface of the Soil									
		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	Great-est	Least				Highest in Sun's Rays	Lowest on the Grass
in.	°	°	°	°	°	°	°	°	°	°	°	°	°	in.	hours	hours				
Mar. 1	29.628	37.2	28.7	8.5	32.7	-7.7	31.1	28.6	4.1	9.8	0.6	84	54.2	19.6	44.0	0.002	0.0	10.9		
2	29.550	35.0	31.6	3.4	32.7	-7.7	31.5	29.6	3.1	8.2	0.0	87	49.5	28.8	43.6	0.150	0.0	10.9		
3	29.351	36.8	29.0	7.8	33.0	-7.5	31.9	30.1	2.9	5.8	1.2	89	44.0	23.5	43.6	0.096	0.0	11.0		
4	29.425	35.6	27.9	7.7	32.3	-8.4	31.6	30.5	1.8	3.3	0.0	92	35.7	22.1	43.0	0.135	0.0	11.1		
5	29.561	37.8	34.5	3.3	36.1	-4.8	35.5	34.4	1.7	2.1	0.0	94	39.3	32.2	43.1	0.248	0.0	11.1		
6	29.680	35.4	32.5	2.9	34.2	-6.8	32.7	30.2	4.0	6.3	1.3	84	37.8	31.8	42.8	0.036	0.0	11.2		
7	29.739	37.8	31.3	6.5	35.0	-6.0	32.1	27.0	8.0	16.3	4.4	70	57.0	26.5	42.6	0.000	0.4	11.3		
8	29.690	35.0	27.3	7.7	32.0	-9.1	29.3	24.6	7.4	12.7	1.8	71	50.3	19.8	42.4	0.000	0.0	11.3		
9	29.744	37.4	28.7	8.7	33.5	-7.5	30.4	25.1	8.4	15.7	2.6	69	77.3	21.8	42.3	0.000	0.7	11.4		
10	29.853	44.0	23.5	20.5	33.6	-7.3	30.8	26.1	7.5	16.1	2.5	72	89.8	16.2	42.2	0.000	7.6	11.5		
11	29.752	42.2	30.0	12.2	36.1	-4.9	34.1	30.5	5.6	8.1	3.3	80	62.8	22.0	42.1	0.005	0.0	11.5		
12	29.469	49.9	35.6	14.3	42.1	+1.0	39.4	35.3	6.8	14.3	1.1	77	88.8	33.8	42.1	0.000	0.5	11.6		
13	29.394	41.8	36.8	5.0	39.9	-1.4	38.5	36.5	3.4	4.1	2.5	87	53.0	35.8	42.1	0.007	0.0	11.7		
14	29.587	39.1	35.3	3.8	37.0	-4.5	35.0	31.6	5.4	7.0	3.6	81	46.2	34.8	42.0	0.000	0.0	11.7		
15	29.844	39.1	33.4	5.7	35.9	-5.8	33.4	29.1	6.8	10.9	4.2	75	56.6	32.9	42.2	0.000	0.0	11.8		
16	30.159	35.0	27.5	7.5	33.1	-8.8	30.5	26.2	6.9	8.4	4.6	73	42.4	20.0	42.1	0.000	0.0	11.8		
17	30.234	44.0	27.0	17.0	36.5	-5.5	33.6	28.5	8.0	14.1	4.7	71	89.8	19.0	42.4	0.006	1.9	11.9		
18	30.133	55.5	40.8	14.7	48.0	+6.0	45.7	43.1	4.9	8.2	1.9	83	90.3	39.2	42.4	0.002	0.1	12.0		
19	30.088	59.0	41.7	17.3	50.9	+9.0	46.6	41.6	9.3	19.4	2.7	70	106.9	34.0	42.4	0.000	0.8	12.1		
20	29.890	61.1	40.7	20.4	51.0	+9.1	45.3	37.9	13.1	23.6	2.9	61	111.7	27.9	42.6	0.021	3.3	12.1		
21	29.843	58.1	46.7	11.4	50.5	+8.6	47.0	42.9	7.6	17.6	1.2	75	103.6	41.8	43.0	0.260	1.7	12.2		
22	29.474	52.9	42.8	10.1	48.0	+6.0	46.8	45.4	2.6	4.1	1.4	91	79.2	37.0	43.1	0.243	0.0	12.2		
23	29.822	56.6	39.0	17.6	47.1	+4.9	42.9	37.4	9.7	23.9	0.7	68	117.4	33.2	43.5	0.000	8.7	12.3		
24	29.852	51.3	40.0	11.3	45.3	+2.9	43.1	40.2	5.1	10.5	1.2	83	68.3	32.4	43.5	0.000	0.0	12.4		
25	30.052	59.4	32.8	26.6	45.9	+3.2	41.7	35.7	10.2	21.5	0.0	67	92.6	26.0	43.8	0.000	6.6	12.5		
26	30.149	63.3	33.9	29.4	48.1	+5.1	43.1	36.2	11.9	29.2	1.0	63	103.8	24.8	44.0	0.000	7.5	12.5		
27	30.185	64.0	36.3	27.7	48.8	+5.5	44.1	38.0	10.8	21.0	0.8	66	106.6	26.8	44.0	0.000	6.0	12.6		
28	30.120	62.7	37.8	24.9	49.0	+5.3	45.8	41.9	7.1	13.6	1.2	77	115.9	26.3	44.1	0.000	7.8	12.6		
29	30.036	65.6	43.2	22.4	51.4	+7.3	47.8	43.7	7.7	15.9	1.7	75	117.8	33.8	44.2	0.000	7.7	12.7		
30	30.166	61.5	40.6	20.9	48.9	+4.4	46.4	43.6	5.3	14.2	0.0	81	110.0	36.0	44.4	0.002*	5.9	12.8		
31	30.135	60.3	40.0	20.3	49.0	+4.1	44.7	39.3	9.7	20.7	2.2	69	114.3	30.5	44.7	0.000	9.8	12.8		
Means	29.826	48.2	34.7	13.5	41.2	-0.7	38.5	34.5	6.7	13.1	1.8	76.9	77.8	28.7	43.0	Sum 1.213	2.5	11.9		
No. of Col. for Ref.	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 29.826 in., being 0.073 in. higher than the average for the 65 years, 1841-1905.

\* Rainfall (Column 16). The amount entered on March 30 is derived from wet fog.

TEMPERATURE OF THE AIR.

The highest in the month was 65°.6 on March 29; the lowest in the month was 23°.5 on March 10; and the range was 42°.1.

The mean of all the highest daily readings in the month was 48°.2, being 1°.0 lower than the average for the 65 years, 1841-1905.

The mean of all the lowest daily readings in the month was 34°.7, being 0°.9 lower than the average for the 65 years, 1841-1905.

The mean of the daily ranges was 13°.5, being 0°.1 less than the average for the 65 years, 1841-1905.

The mean for the month was 41°.2, being 0°.7 lower than the average for the 65 years, 1841-1905.

TABLE XVII. - DAILY RESULTS OF THE METEOROLOGICAL OBSERVATIONS

Month and Day 1946	RECORD OF THE NIGHT SKY				WIND AS DEDUCED FROM SELF-REGISTERING ANEMOMETERS					CLOUDS AND WEATHER			
	Polaris		δ URSÆ MINORIS		OSLER'S				Robin-son's				
	Duration	Fraction of Total Exposure	Duration	Fraction of Total Exposure	General Direction		Pressure on the Square Foot		Horizontal Movement of the Air	0 <sup>h</sup> to 6 <sup>h</sup>	6 <sup>h</sup> to 12 <sup>h</sup>	12 <sup>h</sup> to 18 <sup>h</sup>	18 <sup>h</sup> to 24 <sup>h</sup>
					A.M.	P.M.	Greatest	Mean of 24 Hourly Measures					
Mar. 1	8.0	0.73	3.8	0.35	N: NNE	NNE: N	2.2	0.18	240	b x m	c Nbst iso m	c Ast prha ps c mo	c b
2	0.0	0.00	0.0	0.00	N	N: NNW	8.0	1.16	447	b c	c so-ha Nbst so s	ss	ss
3	6.9	0.64	4.6	0.43	NNW	Calm	6.4	0.43	250	ss	ss c s c Nbst	c Stcu m	b
4	0.0	0.00	0.0	0.00	Calm: N	N: NE	0.6	0.03	151	b c m	c Nbst ss f	s c St do r f	c i do
5	0.0	0.00	0.0	0.00	NE	NE	2.0	0.21	291	i do rr c m	c Nbst m rr	Nbst rr c d mo	dd
6	0.0	0.00	0.0	0.00	NE	NE	4.8	0.80	448	dd mo	c Nbst iso	c Nbst iso	c
7	6.8	0.63	6.0	0.56	NE	NE	4.1	0.65	379	c	c Stcu	c Stcu y	c
8	3.5	0.33	2.3	0.22	NE	NE: Calm	1.3	0.07	190	c b x	b x c Stcu	c Stcu y	c
9	7.5	0.73	7.0	0.68	Calm: NNE	NNE: Calm	0.6	0.05	143	c bc	c Stcu Cu m	c Stcu y	c b c
10	7.4	0.72	6.2	0.60	Calm	NE: Calm	0.2	0.02	109	b x f	b f b zo y	b zo y	b c
11	0.0	0.00	0.0	0.00	Calm: E	E	1.1	0.06	158	bc c so ro	c Stcu m	c Stcu m	c
12	2.9	0.28	2.7	0.26	SE: E	SE: ESE	3.8	0.23	216	c	c f c Stcu	c Stcu y	c bc
13	0.0	0.00	0.0	0.00	E	ENE	8.0	1.13	486	bc c r c	c Nbst mo	c Nbst mo	c mo
14	0.0	0.00	0.0	0.00	ENE: NE	NE: ENE	4.7	0.59	401	c mo	c Stcu mo	c Stcu mo	c mo
15	0.0	0.00	0.0	0.00	ENE: E	E: NE	3.3	0.33	304	c mo	c Stcu	ro c Stcu	c
16	3.8	0.39	2.7	0.28	NE	ENE: ESE: Calm	1.5	0.16	237	c	c Nbst iso	c Nbst	c b
17	0.2	0.02	0.1	0.01	Calm: SW	SSW	0.6	0.09	158	b c	c b c Acu y	c Nbst ir c	c
18	0.5	0.05	0.3	0.03	SSW: SW	SSW: SW	4.0	0.40	324	c	c Nbst iro	c Nbst do c	c
19	8.8	0.90	8.7	0.89	SW	SW: SSW	4.0	0.39	306	c	c Acu Cist so-ha	c Acu Cist so-ha prin y	bc b
20	2.3	0.24	1.8	0.18	SSW: SW	SSW: SW	6.0	0.65	355	b	b bc c Ast Acu y	c Ast Acu y	c r do
21	0.0	0.00	0.0	0.00	WSW	WSW: SW: SSW	5.8	0.63	374	do c	c Ast Cist so-ha	c Cist y c iro	ro rr
22	7.5	0.77	7.2	0.74	SSW: SW	WSW: WNW	5.8	0.56	371	c ro r	ro r Nbst	rr c Nbst	c r c b
23	5.6	0.60	1.0	0.10	WSW: W	W: SSW	5.3	0.48	313	b	b bc Cu y	bc c Ci so-ha y	bc c
24	9.3	1.00	5.4	0.58	Calm	Calm	0.1	0.00	77	bc c w	c Ast Acu mo	c Ast Stcu m	c b f
25	9.3	1.00	7.5	0.81	Calm	W: Calm	0.2	0.02	118	b ff x	b f m	b zo y	b m f
26	8.6	0.93	6.3	0.68	SW: Calm	Calm	0.0	0.00	94	b f x	b f zo y	b zo y	b m f
27	9.3	1.00	9.3	1.00	Calm	E	0.6	0.05	107	b x f	bc f b zo y	b Ci zo y	b
28	8.0	0.86	5.3	0.57	Calm: E	E	2.7	0.26	220	b x mo	bc Ci mo	b Ci	b
29	3.4	0.37	2.9	0.31	Calm: E	E	1.0	0.08	152	b w f	b f b	b y	b f
30	8.7	1.00	8.7	1.00	Calm: ENE	ENE: E	0.7	0.04	152	fe fe	fe b	b	b m
31	8.7	1.00	8.7	1.00	ENE: E	ENE: E	2.6	0.17	223	b w	b	b	b
Means	4.4	0.46	3.5	0.36	...	...	...	0.32	251				
No. of Col. for Ref.	19	20	21	22	23	24	25	26	27	28	29	30	31

The mean *Temperature of Evaporation* for the month was 38°.5, being 0°.9 lower than  
 The mean *Temperature of the Dew Point* for the month was 34°.5, being 1°.1 lower than  
 The mean *Degree of Humidity* for the month was 76.9, being 1.2 less than  
 The mean *Elastic Force of Vapour* for the month was 0.200 in., being 0.009 in. less than  
 The mean amount of *Cloud* for the month (a clear sky being represented by 0 and an overcast sky by 10) was 7.1.  
 The mean proportion of *Sunshine* for the month (constant sunshine being represented by 1) was 0.210. The maximum daily amount of *Sunshine* was 9.8 hours on March 31.  
 The highest reading of the *Solar Radiation Thermometer* was 117°.8 on March 29; and the lowest reading of the *Terrestrial Radiation Thermometer* was 16°.2 on March 10.  
 The *Proportions of Wind* referred to the cardinal points were N.20, E.32, S.12, W.13, calm or nearly calm conditions 23, the whole month being represented by 100.  
 The *Greatest Pressure of the Wind* in the month was 8.0 lbs. on the square foot on March 2 and 13. The mean daily *Horizontal Movement of the Air* for the month was 251 miles; the greatest daily value was 486 miles on March 13, and the least daily value was 77 miles on March 24.  
*Rain* (0.005 in. or over) fell on 11 days in the month, amounting to 1.213 in., as measured by gauge No.6 partly sunk below the ground; being 0.307 in. less than the average fall for the 65 years, 1841-1905.

TABLE XVII. - DAILY RESULTS OF THE METEOROLOGICAL OBSERVATIONS

Month and Day 1946	BAROMETER Mean of 24 Hourly Values (corrected and reduced to 32° Fahrenheit)	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					
		Highest	Lowest	Daily Range	Mean of 24 Hourly Values	Excess above Average of 65 Years			Highest in Sun's Rays	Lowest on the Grass								
Apr. 1	30.080	62.4	37.3	25.1	49.1	+ 3.8	43.1	34.7	14.4	31.2	1.0	58	118.3	27.8	44.9	0.000	9.6	12.9
2	30.081	68.0	40.8	27.2	52.9	+ 7.2	47.0	39.8	13.1	30.7	1.9	61	118.9	30.5	45.0	0.000	9.3	13.0
3	29.989	76.8	44.1	32.7	59.9	+13.9	51.2	41.8	18.1	41.7	1.1	51	127.7	32.9	45.3	0.000	9.6	13.0
4	29.842	79.7	45.7	34.0	61.0	+14.8	52.9	44.8	16.2	29.9	3.0	55	132.1	34.3	45.6	0.000	9.2	13.1
5	29.920	55.0	41.5	13.5	49.5	+ 3.2	47.4	45.1	4.4	9.4	0.0	85	62.3	36.5	45.5	0.446	0.0	13.2
6	30.270	54.0	36.7	17.3	45.2	- 1.1	40.9	34.6	10.6	19.4	2.5	66	115.5	27.0	45.9	0.000	10.4	13.2
7	30.236	63.4	36.3	27.1	49.0	+ 2.7	42.8	34.0	15.0	26.2	1.3	56	120.8	26.3	46.1	0.000	9.7	13.3
8	29.987	57.0	40.3	16.7	49.4	+ 3.3	45.9	41.7	7.7	13.0	2.2	75	114.5	34.0	46.1	0.000	0.6	13.4
9	30.080	54.7	39.0	15.7	46.4	+ 0.4	41.2	33.4	13.0	23.5	3.6	60	116.9	27.0	46.2	0.000	6.9	13.4
10	30.234	49.0	31.4	17.6	41.0	- 4.9	36.8	29.8	11.2	24.1	1.6	64	105.5	18.8	46.1	0.000	6.8	13.5
11	30.084	56.3	27.1	29.2	43.6	- 2.2	38.1	29.1	14.5	26.4	0.0	56	113.1	15.5	46.4	0.000	7.1	13.5
12	29.859	59.9	38.0	21.9	49.0	+ 3.1	44.0	37.5	11.5	21.6	1.2	64	112.2	29.4	46.2	0.000	10.2	13.6
13	29.877	63.8	36.6	27.2	52.2	+ 6.1	47.1	41.2	11.0	19.3	0.0	66	106.3	25.2	46.2	0.000	8.4	13.7
14	29.892	67.2	40.9	26.3	53.9	+ 7.5	48.3	41.9	12.0	22.9	0.0	64	121.6	27.1	46.6	0.000	9.6	13.7
15	29.855	67.0	40.9	26.1	53.9	+ 7.1	47.9	40.8	13.1	25.7	0.0	61	127.3	26.8	46.5	0.000	9.6	13.8
16	29.887	74.0	45.4	28.6	57.9	+10.7	50.7	42.9	15.0	28.3	3.1	58	127.0	33.0	46.6	0.000	10.5	13.9
17	29.802	63.0	48.7	14.3	55.4	+ 7.8	50.8	46.1	9.3	20.3	1.6	71	103.9	46.3	46.8	0.070	0.2	14.0
18	29.944	53.0	38.8	14.2	49.1	+ 1.1	45.7	41.6	7.5	17.9	1.2	75	75.4	30.0	46.9	0.059	3.1	14.0
19	30.256	58.0	33.7	24.3	46.7	- 1.6	41.5	33.7	13.0	24.1	0.8	61	120.0	24.6	47.3	0.000	11.7	14.1
20	30.183	66.4	35.5	30.9	52.0	+ 3.5	45.2	36.3	15.7	28.2	1.4	55	119.5	24.5	47.5	0.000	11.6	14.1
21	30.193	59.7	45.1	14.6	52.5	+ 3.8	45.8	37.3	15.2	26.7	5.2	56	122.7	33.8	47.4	0.000	8.4	14.2
22	30.282	60.2	38.6	21.6	49.1	+ 0.4	43.5	35.9	13.2	25.5	0.9	60	124.2	29.0	47.4	0.000	9.9	14.3
23	29.997	63.5	35.7	27.8	50.1	+ 1.5	46.4	42.0	8.1	18.4	0.0	74	126.8	24.2	47.6	0.130	6.3	14.3
24	29.679	56.5	42.3	14.2	49.2	+ 0.6	45.4	40.8	8.4	18.1	0.9	73	108.3	31.9	47.6	0.030	1.4	14.4
25	29.389	54.0	43.7	10.3	49.1	+ 0.5	48.1	47.2	1.9	4.0	0.6	93	72.1	35.2	47.8	0.182	0.0	14.4
26	29.403	59.0	47.3	11.7	52.5	+ 3.9	50.0	47.4	5.1	10.7	0.0	83	104.4	45.5	47.9	0.082	0.4	14.5
27	29.411	64.2	48.9	15.3	56.5	+ 7.8	52.6	48.8	7.7	13.3	2.6	76	105.3	43.9	48.0	0.055	0.7	14.6
28	29.432	57.7	47.5	10.2	51.3	+ 2.5	49.8	48.3	3.0	6.5	1.2	89	87.3	46.6	48.2	0.204	0.1	14.6
29	29.357	50.2	45.7	4.5	48.6	- 0.4	48.2	47.8	0.8	2.0	0.0	97	57.4	40.6	48.2	0.418	0.0	14.7
30	29.633	65.1	43.5	21.6	54.0	+ 4.9	49.6	45.0	9.0	21.2	0.0	71	130.5	38.4	48.5	0.027	12.3	14.7
Means	29.904	61.3	40.6	20.7	51.0	+ 3.7	46.3	40.4	10.6	21.0	1.3	67.8	109.9	31.6	46.7	Sum 1.703	6.5	13.8
No. of Col. for Ref.	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 29.904 in., being 0.149 in. higher than the average for the 65 years, 1841-1905.

TEMPERATURE OF THE AIR.

The highest in the month was 79°.7 on April 4; the lowest in the month was 27°.1 on April 11; and the range was 52°.6.

The mean of all the highest daily readings in the month was 61°.3, being 5°.2 higher than the average for the 65 years, 1841-1905.

The mean of all the lowest daily readings in the month was 40°.6, being 1°.1 higher than the average for the 65 years, 1841-1905.

The mean of the daily ranges was 20°.7, being 4°.1 greater than the average for the 65 years, 1841-1905.

The mean for the month was 51°.0, being 3°.7 higher than the average for the 65 years, 1841-1905.

TABLE XVII. - DAILY RESULTS OF THE METEOROLOGICAL OBSERVATIONS

Month and Day 1946	RECORD OF THE NIGHT SKY				WIND AS DEDUCED FROM SELF-REGISTERING ANEMOMETERS					CLOUDS AND WEATHER			
	Polaris		ε URSÆ MINORIS		OSLER'S			Robin-son's					
	Duration	Fraction of Total Exposure	Duration	Fraction of Total Exposure	General Direction		Pressure on the Square Foot		Horizontal Movement of the Air	0 <sup>h</sup> to 6 <sup>h</sup>	6 <sup>h</sup> to 12 <sup>h</sup>	12 <sup>h</sup> to 18 <sup>h</sup>	18 <sup>h</sup> to 24 <sup>h</sup>
					A.M.	P.M.	Greatest	Mean of 24 Hourly Measures					
Apr. 1	8.7	1.00	8.7	1.00	ENE: Calm: E	E	2.5	0.09	181	b	b y	b Ci y	b y
2	8.3	0.94	7.8	0.89	Calm: ENE	E: ENE	2.7	0.08	180	b	b Ci zo y	b Ci zo y	b
3	8.7	1.00	8.7	1.00	Calm: SSE	SE: Calm	2.5	0.07	135	b w	b z y	b y	b
4	4.1	0.47	3.5	0.40	Calm	S: SSW	2.0	0.10	166	b w z	bc Acu b Ci y	b Cicu y	b c
5	6.1	0.69	5.7	0.65	SW: Calm: N	NNE	4.2	0.36	273	c r	rr Nbst m	rr Nbst	c b
6	8.3	1.00	8.3	1.00	N: NNE	NNE: SE	2.7	0.19	245	b	b bc Ci y	bc Ci so-ha y	b
7	8.3	1.00	8.3	1.00	SW	SW: WSW	2.4	0.16	252	b w	bc Ci y	bc Ci y	b
8	2.5	0.30	2.3	0.28	SSW: SW	SW: NW	1.8	0.23	293	b c m	c m c Stcu	c Stcu	c
9	7.7	0.93	7.5	0.91	NW: NNE	NNE: ENE	2.1	0.17	234	c b	b Ci c Stcu y	bc Stcu Cu y	c
10	8.3	1.00	8.3	1.00	NE: NNE	NE: E	3.4	0.23	239	bc b x	bc c Stcu Cu	c Stcu b y	b
11	8.3	1.00	8.3	1.00	Calm: SW	W: WSW	2.1	0.12	218	b x	b bc Cist y	bc Cist c y	bc b
12	8.3	1.00	8.1	0.98	WSW: NW	NW: NNW: Calm	2.0	0.07	175	b	b bc Cu b y	b y	b
13	6.2	0.82	5.7	0.75	Calm	N: Calm	0.3	0.02	87	b w	bc Acu Ci zo y	bc Cu zo c y	c b
14	7.5	1.00	7.5	1.00	Calm	Calm: ESE	0.3	0.01	85	b w	b Prcu z y	b Cist zo y	b
15	7.5	1.00	7.5	1.00	Calm	E: SE: SSW	0.6	0.03	124	b x	b f b Cu	b y	b
16	0.7	0.09	0.6	0.08	SW: WSW	SW	3.5	0.19	256	b	b z y	b zo c so-ha y	c bc c
17	0.0	0.00	0.0	0.00	SW: W	WSW: SW: Calm	5.4	0.45	332	c	c Ci Cist y	c Ast Acu y c roro	rr c
18	7.5	1.00	7.5	1.00	Calm: NE	NE	4.2	0.40	286	c r o c	c Nbst ro g r c	c bc Cu Acu b y	b
19	7.5	1.00	7.5	1.00	Calm	NE: Calm: S	1.1	0.05	138	b x	b y	b Prcu y	b
20	3.9	0.55	3.9	0.55	Calm: SW	W: SW: N	0.7	0.07	167	b x	b Ci y	b Acu bc y	b
21	6.0	0.86	5.4	0.77	N	N: NNW	3.6	0.33	291	b c	c bc Cu Cicu y	b bc Cu y	bc ro b
22	7.0	1.00	7.0	1.00	N: NNE	N: Calm: SSW	1.2	0.08	177	b c b	b bc Cu Prcu y	bc Prcu y	b
23	1.2	0.17	1.2	0.17	SW: WSW	WSW	3.0	0.30	275	b x	bc b c Cu y	bc Stcu c	c ro rr
24	3.3	0.48	3.2	0.45	Calm: NW	SW	2.3	0.11	172	r bc c	c Nbst g c Acu	c Stcu y	c b
25	0.0	0.00	0.0	0.00	SSW	SSW	5.0	0.76	366	b c r	rr ro Nbst	c Nbst iro do	do r do
26	3.5	0.50	3.4	0.48	S: Calm	Calm: ENE: NE	1.0	0.07	168	rr c	c Nbst	c Stcu	c b
27	0.0	0.00	0.0	0.00	NE	Calm: N: NNE	1.5	0.11	191	c r do c	c Acu Cist	c Cist so-ha prhn	c rr
28	0.0	0.00	0.0	0.00	NNE	ENE	2.5	0.21	254	rr	r c r c Nbst mo	c Nbst t l r mo	c do mo
29	0.0	0.00	0.0	0.00	SW: Calm	Calm: WSW: SSW	1.4	0.06	175	c dodo m	c Nbst do rr m	Nbst rr m f	iro m
30	4.2	0.65	3.4	0.52	Calm: ESE	E	1.4	0.08	167	rr c	bc Prcu Ci y	b Ci Cu y	b c
Means	5.1	0.65	5.0	0.63	...	...	...	0.17	210				
No. of Col. for Ref.	19	20	21	22	23	24	25	26	27	28	29	30	31

The mean *Temperature of Evaporation* for the month was 46°.3, being 2°.4 higher  
 The mean *Temperature of the Dew Point* for the month was 40°.4, being 0°.8 higher than  
 The mean *Degree of Humidity* for the month was 67.8, being 6.7 less than  
 The mean *Elastic Force of Vapour* for the month was 0.252 in., being 0.008 in. greater than  
 The mean amount of *Cloud* for the month (a clear sky being represented by 0 and an overcast sky by 10) was 5.0.  
 The mean proportion of *Sunshine* for the month (constant sunshine being represented by 1) was 0.466. The maximum daily amount of *Sunshine* was 12.3 hours on April 30.  
 The highest reading of the *Solar Radiation Thermometer* was 132°.1 on April 4; and the lowest reading of the *Terrestrial Radiation Thermometer* was 15°.5 on April 11.  
 The *Proportions of Wind* referred to the cardinal points were N.20, E.17, S.19, W.18, calm or nearly calm conditions 26, the whole month being represented by 100.  
 The *Greatest Pressure of the Wind* in the month was 5.4 lbs. on the square foot on April 17. The mean daily *Horizontal Movement of the Air* for the month was 210 miles; the greatest daily value was 366 miles on April 25, and the least daily value was 85 miles on April 14.  
*Rain* (0.005 in. or over) fell on 11 days in the month, amounting to 1.703 in., as measured by gauge No.6 partly sunk below the ground; being 0.137 in. greater than the average for the 65 years, 1841-1905.

TABLE XVII. - DAILY RESULTS OF THE METEOROLOGICAL OBSERVATIONS

Table with columns for Month and Day 1946, Barometer, Temperature (Air, Dew Point, Evaporation), Difference between Air and Dew Point Temperature, Degree of Humidity, Temperature (Radiation, Earth surface, Soil), Rain collected in Gauge, Daily Duration of Sunshine, and Sun above Horizon.

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 29.762 in., being 0.039 in. lower than the average for the 65 years, 1841-1905.

TEMPERATURE OF THE AIR.

The highest in the month was 70°.0 on May 30; the lowest in the month was 35°.0 on May 15 and 16; and the range was 35°.0.

The mean of all the highest daily readings in the month was 60°.9, being 1°.3 lower than the average for the 65 years, 1841-1905.

The mean of all the lowest daily readings in the month was 43°.3, being 0°.9 lower than the average for the 65 years, 1841-1905.

The mean of the daily ranges was 17°.5, being 0°.5 less than the average for the 65 years, 1841-1905.

The mean for the month was 51°.6, being 1°.4 lower than the average for the 65 years, 1841-1905.

TABLE XVII. - DAILY RESULTS OF THE METEOROLOGICAL OBSERVATIONS

Month and Day 1946	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 <sup>h</sup> to 6 <sup>h</sup>	6 <sup>h</sup> to 12 <sup>h</sup>	12 <sup>h</sup> to 18 <sup>h</sup>	18 <sup>h</sup> to 24 <sup>h</sup>
hours		hours				lbs.	lbs.	miles					
May 1	0.5	0.07	0.0	0.00	NE:E	E:ENE	2.2	0.17	220	b w	b Ci y	b Cist Cu so-ha bc y	bc c
2	0.0	0.00	0.0	0.00	ENE:NE	ENE:NE	4.9	0.43	308	c	c Stcu	c Stcu Acu y	b c r c
3	3.2	0.50	3.1	0.48	NE	ENE:NE	3.9	0.44	339	c	c Stcu St	c bc Ci Prcu y	b
4	5.6	0.93	5.5	0.91	NE:ENE	NE	4.3	0.61	380	c	c bc Stcu y	bc b Prcu y	b
5	3.8	0.63	3.8	0.63	NE:NNE	NNE:N	11.6	1.04	415	b c b	c Stcu p	bc Cu Nbst p	bc b
6	1.0	0.17	0.5	0.08	N:NE	ENE:NE	6.7	1.07	438	b c	c Stcu Nbst p	bc Acu Cicu c y	c
7	1.8	0.29	1.8	0.29	NE:ENE	ENE:NE	12.7	1.19	465	c	c bc c Acu y	bc Acu c y	c b c
8	2.1	0.35	1.3	0.22	NE:Cal	Cal:ESE:NE	3.2	0.19	208	t l RR	RR r Nbst f	c Nbst ir c mo	c b c
9	6.0	1.00	6.0	1.00	NE:ENE	E	6.2	0.53	357	c	c b Prcu y	b Prcu y	b
10	2.0	0.33	1.9	0.32	NE:ENE	ENE:NE	10.0	0.70	367	b	bc Cist so-ha b y	b Ci y	b c
11	0.0	0.00	0.0	0.00	ENE	ENE:NE	5.4	0.46	360	c	c Stcu	bc Ci so-ha c	b c id
12	0.0	0.00	0.0	0.00	NE:NNE	E:NE	3.9	0.35	314	c id r c	c bc Acu Cicu y	bc Acu y c	b c
13	3.4	0.61	3.3	0.60	NE:NNE	NE:NNE	6.0	0.93	453	c	c Stcu y	bc Stcu Ci c y	c
14	2.4	0.44	2.2	0.39	NNE:N	NNW:N:Cal	4.5	0.56	333	c b c	c bc do c Stcu y	c Nbst ro c y	c ro do c
15	4.6	0.83	4.6	0.83	Cal: N:NE	Var:NE:Cal	1.0	0.05	142	c b	b bc Ci Cu y	bc Ci Acu c y	c b
16	2.2	0.39	2.0	0.37	Cal	Cal:SW	2.1	0.05	128	bc c	c Nbst rr G c mo	c p bc Acu c mo	c r c
17	4.4	0.79	4.4	0.79	Cal:S	SSW:SE:ESE	1.9	0.12	164	b x bc	bc c Cu Ci y	c Cu Cist so-ha b y	c bc
18	1.3	0.24	1.3	0.24	E:ESE:SE	ESE:ENE	3.2	0.27	234	bc	c t l r R r c Prcu	bc c Prcu Ci	c b c
19	5.3	0.96	5.2	0.95	ENE:E	SE:SSW:Cal	2.7	0.26	244	c r	Nbst rRr	Nbst r c b	b
20	4.3	0.77	4.1	0.76	Cal:SSE	S:SSW	2.1	0.13	187	b bc p	bc p c Nbst	c Nbst P c po c	c prin b c
21	5.5	1.00	5.5	1.00	Cal:SSW	SSW	4.1	0.23	233	c b	c Stcu Prcu	c Ci Cu b y	b
22	2.6	0.48	2.4	0.43	Cal:Var	Var:Cal	0.6	0.03	98	b w c	c b c Ci Cu y	c Cu Ci y	bc b
23	2.1	0.38	2.0	0.37	Cal:NE	NNE:N	2.0	0.14	162	b c w	c Ci Cicu y	c Prcu Cu b y	bc b c
24	3.2	0.57	3.1	0.56	N:NNE	NNE:ENE	1.2	0.16	213	c id o	c id o c St	c Stcu bc	bc
25	0.1	0.01	0.0	0.00	NE	NE	3.0	0.31	323	bc c	c Stcu	c Stcu	c iro
26	0.0	0.00	0.0	0.00	NE:NNE	NNE:N:W	1.8	0.14	235	o do m	o c Nbst	c Nbst ro c	c RR
27	4.8	0.97	4.8	0.97	SW:SSW	SSW:SSE	5.0	0.43	307	r c do	c Stcu Nbst id o	c Cu Prcu Ci	bc b
28	3.6	0.73	3.5	0.70	Cal:ESE:SE	SSW:Cal	2.6	0.14	206	b c	c rr c Ci Prcu so-ha	bc Cu Cicu b y	b
29	5.0	1.00	5.0	1.00	Cal	Cal:SSW	0.1	0.00	95	c b c	c Nbst r ro	r ro c Nbst	bc b
30	1.2	0.24	1.0	0.20	Cal:S	SSW	2.4	0.13	198	b c	c po c Acu Cicu	c Cu Cumb b y	bc c r c
31	2.8	0.56	2.7	0.54	SW:SSW	S:WSW:SW	9.0	0.71	368	c b c	c Nbst ro	Nbst rr bc	bc b c r
Means	2.7	0.49	2.6	0.47	...	...	...	0.39	274				
No. of Col. for Ref.	19	20	21	22	23	24	25	26	27	28	29	30	31

The mean *Temperature of Evaporation* for the month was 48°.0, being 1°.0 lower than  
 The mean *Temperature of the Dew Point* for the month was 43°.8, being 1°.0 lower than  
 The mean *Degree of Humidity* for the month was 75.1, being 1.2 greater than  
 The mean *Elastic Force of Vapour* for the month was 0.287 in., being 0.011 in. less than  
 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 0.371. The maximum daily amount of *Sunshine* was 13.1 hours on May 10.  
 The highest reading of the *Solar Radiation Thermometer* was 135°.5 on May 23; and the lowest reading of the *Terrestrial Radiation Thermometer* was 24°.5 on May 16.  
 The *Proportions of Wind* referred to the cardinal points were N.28, E.35, S.16, W.6, calm or nearly calm conditions 15, the whole month being represented by 100.  
 The *Greatest Pressure of the Wind* in the month was 12.7 lbs. on the square foot on May 7. The mean daily *Horizontal Movement of the Air* for the month was 274 miles; the greatest daily value was 465 miles on May 7, and the least daily value was 95 miles on May 29.  
*Rain* (0.005 in. or over) fell on 17 days in the month, amounting to 3.152 in., as measured by gauge No.6 partly sunk below the ground; being 1.237 in. greater than the average for the 65 years, 1841-1905.

TABLE XVII. - DAILY RESULTS OF THE METEOROLOGICAL OBSERVATIONS

Month and Day 1946	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
	Mean of 24 Hourly Values (corrected and reduced to 32° Fahrenheit)	Of the Air				Of Evaporation	Of the Dew Point	Mean	Greatest	Least	Of Radiation		Of the Earth 4 ft. below the surface of the Soil					
		Highest	Lowest	Daily Range	Mean of 24 Hourly Values						Excess above Average of 65 Years			Mean of 24 Hourly Values	Deducted Mean Daily Value			
June 1	29.160	63.0	47.2	15.8	53.5	-3.9	50.6	47.7	5.8	13.2	1.4	80	129.4	41.4	51.7	0.410	6.7	16.3
2	29.238	62.1	47.7	14.4	54.5	-3.3	50.3	46.0	8.5	16.4	0.0	73	122.2	44.1	51.6	0.125	5.2	16.3
3	29.626	63.8	48.4	15.4	55.1	-3.0	50.3	45.3	9.8	19.6	0.8	70	130.0	41.0	51.7	0.184	7.7	16.4
4	29.795	61.0	45.3	15.7	53.1	-5.2	50.2	47.2	5.9	11.7	1.7	80	101.3	35.9	52.0	0.040	0.7	16.4
5	29.588	66.2	52.3	13.9	57.7	-0.7	53.8	50.3	7.4	26.8	2.4	76	121.9	47.0	52.0	0.000	4.3	16.4
6	29.719	68.0	50.1	17.9	58.4	+0.1	53.2	48.3	10.1	17.0	4.2	69	136.3	41.0	52.1	0.000	9.3	16.4
7	29.899	70.9	44.3	26.6	58.3	+0.1	52.1	45.9	12.4	22.6	1.4	63	131.2	32.7	52.3	0.008	9.8	16.5
8	29.699	64.9	54.3	10.6	58.2	+0.1	55.4	53.0	5.2	10.0	3.0	83	100.5	51.6	52.3	0.278	0.0	16.5
9	29.703	62.7	49.5	13.2	55.8	-2.2	52.2	48.7	7.1	13.7	2.0	77	119.9	46.2	52.6	0.013	3.6	16.5
10	29.463	63.6	47.7	15.9	55.6	-2.5	52.1	48.7	6.9	13.7	3.1	77	124.2	42.1	52.8	0.106	2.3	16.5
11	29.721	63.0	44.8	18.2	51.9	-6.3	48.7	45.3	6.6	15.7	0.8	78	130.0	36.0	53.0	0.005	4.3	16.6
12	29.802	59.6	45.1	14.5	52.3	-6.1	49.6	46.8	5.5	13.6	0.6	82	112.2	35.5	52.8	0.054	2.0	16.6
13	30.018	67.4	45.9	21.5	55.1	-3.4	50.4	45.5	9.6	25.3	0.0	70	124.5	36.5	53.0	0.054	8.8	16.6
14	29.951	68.4	47.6	20.8	57.3	-1.4	52.3	47.4	9.9	22.6	0.6	70	134.0	40.4	53.2	0.010	5.4	16.6
15	29.747	66.3	52.7	13.6	56.8	-2.0	53.9	51.3	5.5	15.1	1.7	82	131.0	50.8	53.3	0.328	2.8	16.6
16	29.707	67.8	50.3	17.5	56.6	-2.3	53.3	50.3	6.3	16.8	0.8	79	140.1	49.2	53.3	0.046	5.2	16.6
17	29.737	63.9	51.8	12.1	57.0	-2.0	53.1	49.4	7.6	18.1	0.8	76	123.4	50.6	53.5	0.020	4.0	16.6
18	29.682	65.0	49.6	15.4	56.6	-2.6	51.7	46.8	9.8	21.0	0.0	70	132.5	43.7	53.8	0.125	8.3	16.6
19	29.733	58.3	47.1	11.2	51.4	-8.1	48.9	46.2	5.2	12.8	1.2	82	96.1	41.2	53.7	0.135	1.6	16.6
20	29.910	65.8	45.7	20.1	54.5	-5.4	50.5	46.5	8.0	18.1	0.7	74	134.5	40.2	54.0	0.007	7.6	16.6
21	30.137	69.3	45.0	24.3	56.5	-3.8	52.3	48.2	8.3	19.3	0.0	74	133.3	37.1	54.0	0.060	10.2	16.6
22	30.211	69.8	48.9	20.9	60.2	-0.4	54.8	50.0	10.2	20.3	0.0	69	132.0	38.0	54.2	0.000	4.8	16.6
23	30.050	75.3	53.5	21.8	63.7	+2.8	57.4	52.2	11.5	22.9	1.2	66	134.2	46.6	54.3	0.000	11.7	16.6
24	29.842	72.2	57.1	15.1	63.0	+1.8	58.7	55.4	7.6	14.9	2.3	76	132.8	49.3	54.2	0.078	3.5	16.6
25	29.798	70.5	49.8	20.7	59.4	-2.0	54.3	49.6	9.8	21.2	1.2	70	132.7	39.8	54.6	0.040	5.1	16.6
26	29.699	71.4	53.3	18.1	61.0	-0.5	57.6	54.9	6.1	12.9	1.0	81	125.9	52.5	54.6	0.131	3.2	16.6
27	29.868	66.4	49.4	17.0	58.4	-3.2	54.3	50.7	7.7	15.6	0.4	76	127.4	41.4	55.0	0.060	4.3	16.6
28	29.839	70.3	53.3	17.0	60.7	-0.9	55.7	51.4	9.3	20.5	1.8	71	136.1	47.5	55.1	0.200	8.5	16.6
29	29.978	69.0	53.4	15.6	60.2	-1.4	55.0	50.4	9.8	15.2	3.9	70	127.4	45.8	55.2	0.000	6.6	16.6
30	30.052	73.3	57.5	15.8	64.1	+2.6	60.4	57.7	6.4	10.8	1.7	80	126.9	53.0	55.4	0.000	5.8	16.6
Means	29.779	66.6	49.6	17.0	57.2	-2.2	53.1	49.2	8.0	17.2	1.4	74.8	126.1	43.3	53.4	Sum 2.517	5.4	16.5
No. of Col. for Ref.	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 29.779 in., being 0.043 in. lower than the average for the 65 years, 1841-1905.

TEMPERATURE OF THE AIR.

The highest in the month was 75°.3 on June 23; the lowest in the month was 44°.3 on June 7; and the range was 31°.0.

The mean of all the highest daily readings in the month was 66°.6, being 2°.3 lower than the average for the 65 years, 1841-1905.

The mean of all the lowest daily readings in the month was 49°.6, being 0°.8 lower than the average for the 65 years, 1841-1905.

The mean of the daily ranges was 17°.0, being 1°.5 less than the average for the 65 years, 1841-1905.

The mean for the month was 57°.2, being 2°.2 lower than the average for the 65 years, 1841-1905.

TABLE XVII. - DAILY RESULTS OF THE METEOROLOGICAL OBSERVATIONS

Month and Day 1946	RECORD OF THE NIGHT SKY				WIND AS DEDUCED FROM SELF-REGISTERING ANEMOMETERS					CLOUDS AND WEATHER			
	Polaris		δ URSAE 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	0 <sup>h</sup> to 6 <sup>h</sup>	6 <sup>h</sup> to 12 <sup>h</sup>	12 <sup>h</sup> to 18 <sup>h</sup>	18 <sup>h</sup> to 24 <sup>h</sup>
					A.M.	P.M.	Greatest	Mean of 24 Hourly Measures					
June 1	0.5	0.10	0.4	0.09	SW	SSW:S	7.7	0.64	344	bc ir	bc c Nbst ir	c Nbst p bc c	c ir
2	3.5	0.77	3.4	0.75	Calm: WSW	WSW: SW	12.5	1.05	403	ir c	c Acu Nbst p	c Cumb p bc c	c b
3	4.3	0.96	4.3	0.96	SW: W	W: WSW	5.0	0.46	338	bc ir	ir c Ci Cu y	c Stcu Cu bc y	bc b
4	0.0	0.00	0.0	0.00	SW	SW	7.5	0.60	326	b c	c Ast Nbst	c Nbst ir o r	ro r c
5	3.4	0.75	3.1	0.68	SW	SW	11.5	1.30	489	c	c Nbst ro c	c b Cicu	bc
6	4.5	1.00	4.5	1.00	SW: WSW	SW: WSW	4.0	0.52	331	b	b bc Cu Cicu c	c ro bc Cu Acu	b
7	0.0	0.00	0.0	0.00	WSW: Calm	Calm: SE	0.8	0.03	116	b w	bc Cu Ci	b c Stcu	c ro c
8	0.5	0.09	0.5	0.09	ENE	Calm: NW: WNW	1.2	0.08	169	c mo	c Ast ro	rr ro Nbst	ro c
9	0.0	0.00	0.0	0.00	W: WSW: SW	SSW: SSE	3.6	0.24	253	c b	b c Acu Cu	c Nbst ro c	c ir
10	4.5	1.00	4.5	1.00	SSW: SW	W: WSW	10.8	0.99	391	c ir ro	c Nbst ir R	c Nbst ir	c b
11	3.9	0.87	3.8	0.85	WSW	SW: WSW: Calm	3.2	0.21	248	b c	c so-ha c Stcu	c Stcu Cumb p t c	c bc
12	3.4	0.76	3.4	0.76	SSW: Calm	Var: Calm	0.5	0.02	122	bc c	c Acu Cumb t p	c Nbst po	c b
13	1.9	0.43	1.9	0.43	Calm: N	N: Calm	2.2	0.11	181	b w c	c Cu	bc Cu c y	c t l r b c
14	0.0	0.00	0.0	0.00	Calm: W	W: WSW	1.4	0.13	188	c	c Cist so-ha y	c Ast Stcu y	c ro
15	0.0	0.00	0.0	0.00	Calm: WSW	SW: WSW	1.5	0.14	200	c r	c r c Cu Cicu	c Cu Cumb p c	c R c
16	0.0	0.00	0.0	0.00	WSW: SW	SW: SSW	2.0	0.19	243	c b	b c Cu Acu	c Acu y c Nbst r	r do d
17	0.0	0.00	0.0	0.00	WSW: W	WSW: SW	4.5	0.30	289	b c	c Stcu Acu y	c Acu Prst po c	c d
18	3.9	0.87	3.9	0.86	Calm: W	WNW: WSW	8.6	0.63	362	dd c	c bc Cu Frcu y	bc Cu c Nbst p bc	bc b
19	4.5	1.00	4.5	1.00	SW: SSW	NW: Calm: WSW	10.0	0.14	219	b c	c Ast Nbst rr	Nbst ro ro c P t c	c b
20	4.3	0.96	4.1	0.92	SW: WSW	WSW	5.2	0.18	267	b bc	bc c Cu Ci Cist	bc Cu Cist c pt bc	bc b
21	4.5	1.00	4.5	1.00	Calm: NW	NNW: Calm	4.7	0.10	158	b	b bc Frcu y	bc Cu c P c	bc b
22	...	...	...	...	Calm	NNW: Calm	0.4	0.02	103	b w	bc Cist so-ha zo y	c Stcu Frcu y	c
23	1.5	0.34	1.5	0.34	Calm	Calm: SSW	0.6	0.03	112	c b	b Ci y zo	bc Acu y	b brn bc
24	1.6	0.36	1.3	0.30	WSW: W	WSW: SW: NW	1.7	0.15	213	c	c Cicu Frcu	c Cist Stcu	c p
25	0.0	0.00	0.0	0.00	Calm	SSW	3.0	0.11	177	bc	c Cumb Cist so-ha y	bc c Cu Ast y	c rr
26	2.5	0.55	2.5	0.55	SSE: SW	WSW: W	2.6	0.20	229	rr c d	c Nbst id c	c Stcu bc c	c b
27	0.0	0.00	0.0	0.00	WSW: SW	SW: SSW	4.2	0.35	281	b	b c Acu Ci	c Nbst ro c Acu	c r c r
28	...	...	...	...	SSW: W	WSW: SW	3.1	0.29	292	rr	Nbst r d bc Frcu	bc Cu Ci c y	c b
29	1.7	0.37	1.5	0.34	SW	SW	5.2	0.43	316	b c	c Acu Cu ro c	c Cicu Acu bc c	c b
30	0.5	0.11	0.4	0.10	SW	SW	3.0	0.32	297	c b	c Stcu	c Stcu bc	c
Means	2.0	0.44	1.9	0.43	...	...	...	0.33	255				
No. of Col. for Ref.	19	20	21	22	23	24	25	26	27	28	29	30	31

The mean *Temperature of Evaporation* for the month was 53°.1, being 1°.8 lower than  
 The mean *Temperature of the Dew Point* for the month was 49°.2, being 1°.6 lower than  
 The mean *Degree of Humidity* for the month was 74.8, being 1.6 greater than  
 The mean *Elastic Force of Vapour* for the month was 0.352 in., being 0.023 in. less than  
 The mean amount of *Cloud* for the month (a clear sky being represented by 0 and an overcast sky by 10) was 7.4  
 The mean proportion of *Sunshine* for the month (constant sunshine being represented by 1) was 0.329. The maximum daily amount of *Sunshine* was 11.7 hours on June 23.  
 The highest reading of the *Solar Radiation Thermometer* was 140°.1 on June 16; and the lowest reading of the *Terrestrial Radiation Thermometer* was 32°.7 on June 7.  
 The *Proportions of Wind* referred to the cardinal points were N.6, E.2, S.29, W.44, calm or nearly calm conditions 19, 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 June 2. The mean daily *Horizontal Movement of the Air* for the month was 255 miles; the greatest daily value was 489 miles on June 5, and the least daily value was 103 miles on June 22.  
*Rain* (0.005 in. or over) fell on 24 days in the month, amounting to 2.517 in., as measured by gauge No.6 partly sunk below the ground; being 0.479 in. greater than the average fall for the 65 years, 1841-1905.

TABLE XVII. - DAILY RESULTS OF THE METEOROLOGICAL OBSERVATIONS

Month and Day 1946	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	Sum above Horizon		
		Of the Air					Of Evaporation	Of the Dew Point			Of Radiation		Of the Earth 4 ft. below the surface of the Soil					
		Highest	Lowest	Daily Range	Mean of 24 Hourly Values	Excess above Average of 65 Years					Mean of 24 Hourly Values	Deducted Mean Daily Value					Mean	Greatest
	in.	°	°	°	°	°	°	°	°	°	°	°	°	°	°	in.	hours	hours
July 1	30.112	80.3	59.8	20.5	68.6	+ 7.1	64.4	61.7	6.9	16.1	1.4	79	133.3	53.5	55.6	0.000	6.5	16.6
2	29.884	86.4	58.2	28.2	73.3	+11.7	67.1	63.4	9.9	18.9	1.1	71	144.3	46.3	56.0	0.000	10.5	16.6
3	29.762	82.2	57.7	24.5	71.5	+ 9.7	65.4	61.5	10.0	16.5	1.3	71	145.2	45.8	56.1	0.000	11.3	16.5
4	29.599	70.1	53.3	16.8	63.4	+ 1.3	60.0	57.5	5.9	13.3	1.5	81	130.3	46.1	56.3	0.253	2.0	16.5
5	29.808	66.5	53.3	13.2	59.6	- 2.7	54.7	50.3	9.3	19.1	3.1	71	112.2	46.1	56.5	0.000	1.5	16.5
6	30.143	70.5	50.3	20.2	61.0	- 1.4	54.4	48.3	12.7	22.0	1.0	63	136.0	40.7	56.9	0.000	11.9	16.5
7	30.300	73.0	50.9	22.1	61.5	- 0.9	54.9	48.8	12.7	23.9	2.8	63	140.7	40.6	57.0	0.000	12.4	16.4
8	30.276	73.3	49.4	23.9	61.1	- 1.3	55.0	49.5	11.6	25.6	1.2	66	113.8	37.2	57.0	0.000	3.5	16.4
9	30.234	78.5	50.2	28.3	66.0	+ 3.6	58.9	53.2	12.8	21.4	1.8	63	134.4	38.3	57.0	0.000	13.4	16.4
10	30.203	78.7	52.3	26.4	65.7	+ 3.2	59.7	55.1	10.6	20.0	1.2	69	140.3	40.3	57.1	0.000	13.6	16.4
11	30.056	83.9	54.4	29.5	69.6	+ 6.9	63.3	59.0	10.6	20.9	1.1	69	143.1	42.6	57.1	0.000	9.0	16.3
12	29.885	85.4	58.7	26.7	71.7	+ 8.8	64.1	59.0	12.7	24.4	1.4	64	144.4	46.0	57.4	0.000	9.1	16.3
13	29.682	83.7	59.3	24.4	71.8	+ 8.7	63.6	57.9	13.9	26.4	1.3	62	138.3	45.4	57.5	0.000	6.3	16.3
14	29.609	68.2	52.4	15.8	61.0	- 2.3	54.8	49.1	11.9	21.4	6.3	65	132.3	47.0	57.6	0.013	5.3	16.2
15	29.642	69.1	48.1	21.0	57.7	- 5.7	50.4	42.4	15.3	34.7	4.7	57	140.6	39.8	57.6	0.005	10.8	16.2
16	29.385	56.8	48.6	8.2	52.6	-10.8	50.8	49.1	3.5	7.4	0.9	87	71.5	43.8	57.4	0.296	0.1	16.2
17	29.490	68.0	43.8	24.2	54.4	- 9.0	51.2	48.1	6.3	20.9	0.9	79	129.3	34.8	57.6	0.040	3.8	16.2
18	29.538	66.4	55.6	10.8	60.2	- 3.1	56.5	53.4	6.8	12.8	3.3	79	115.2	51.9	57.4	0.008	1.0	16.1
19	29.661	68.6	55.3	13.3	60.0	- 3.2	56.6	53.7	6.3	12.9	2.6	80	131.7	48.8	57.3	0.014	1.4	16.1
20	29.773	68.4	55.7	12.7	60.2	- 3.0	55.1	50.5	9.7	17.8	3.5	71	138.3	52.8	57.4	0.000	3.5	16.0
21	29.845	69.9	54.1	15.8	60.4	- 2.8	55.8	51.8	8.6	18.5	1.3	73	126.5	50.2	57.4	0.040	0.5	16.0
22	29.808	78.4	55.3	23.1	65.4	+ 2.3	61.4	58.5	6.9	17.1	1.1	79	137.0	53.9	57.4	0.000	4.2	15.9
23	29.926	78.6	58.9	19.7	68.3	+ 5.3	62.8	59.1	9.2	19.0	2.1	73	140.9	49.2	57.5	0.000	9.9	15.9
24	29.727	87.0	58.4	28.6	72.4	+ 9.5	65.4	60.9	11.5	19.8	1.6	67	143.4	48.4	57.7	0.012	10.6	15.9
25	29.942	78.0	54.3	23.7	65.2	+ 2.5	57.5	50.9	14.3	26.4	2.9	60	138.3	43.1	57.7	0.000	13.2	15.8
26	29.733	77.2	51.3	25.9	63.4	+ 0.9	59.6	56.8	6.6	16.9	1.0	79	130.8	38.6	58.0	1.446	4.6	15.8
27	29.785	69.0	53.0	16.0	60.4	- 2.0	56.4	53.0	7.4	18.3	1.2	77	132.9	43.0	58.2	0.095	10.6	15.7
28	29.933	69.9	48.6	21.3	59.1	- 3.2	54.4	50.1	9.0	23.0	0.6	72	140.5	37.8	58.2	0.150	8.3	15.7
29	29.785	73.6	55.0	18.6	62.9	+ 0.6	57.0	52.0	10.9	23.1	0.7	68	134.3	49.3	58.3	0.021	10.7	15.6
30	29.767	72.0	55.7	16.3	63.0	+ 0.7	59.0	56.0	7.0	10.8	1.7	77	131.3	48.2	58.1	0.000	3.1	15.6
31	29.869	67.8	52.5	15.3	60.4	- 1.8	54.3	48.7	11.7	24.9	1.4	65	126.7	44.0	58.2	0.000	5.5	15.5
Means	29.844	74.2	53.7	20.5	63.6	+ 1.0	58.2	53.8	9.8	19.8	1.9	71.0	132.2	45.0	57.3	Sum 2.393	7.0	16.1
No. of Col. for Ref.	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 29.844 in., being 0.038 in. higher than the average for the 65 years, 1841-1905.

TEMPERATURE OF THE AIR.

The highest in the month was 87°.0 on July 24; the lowest in the month was 43°.8 on July 17; and the range was 43°.2.

The mean of all the highest daily readings in the month was 74°.2, being 2°.1 higher than the average for the 65 years, 1841-1905.

The mean of all the lowest daily readings in the month was 53°.7, being 0°.1 lower than the average for the 65 years, 1841-1905.

The mean of the daily ranges was 20°.5, being 2°.2 greater than the average for the 65 years, 1841-1905.

The mean for the month was 63°.6, being 1°.0 higher than the average for the 65 years, 1841-1905.

TABLE XVII. - DAILY RESULTS OF THE METEOROLOGICAL OBSERVATIONS

Month and Day 1946	RECORD OF THE NIGHT SKY				WIND AS DEDUCED FROM SELF-REGISTERING ANEMOMETERS					CLOUDS AND WEATHER			
	Polaris		δ URSÆ MINORIS		OSLER'S			Robin-son's					
	Duration	Fraction of Total Exposure	Duration	Fraction of Total Exposure	General Direction		Pressure on the Square Foot		Horizontal Movement of the Air	0 <sup>h</sup> to 6 <sup>h</sup>	6 <sup>h</sup> to 12 <sup>h</sup>	12 <sup>h</sup> to 18 <sup>h</sup>	18 <sup>h</sup> to 24 <sup>h</sup>
					A.M.	P.M.	Greatest	Mean of 24 Hourly Measures					
July 1	4.5	1.00	4.5	1.00	SW	SW: Calm	0.8	0.07	179	c	c Stcu	c bc Frcu Cu	bc b
2	4.2	0.93	4.0	0.90	Calm: SSE	SW: WNW: W	1.8	0.11	195	b w	c Stcu Acu	c bc Cu Ci y	bc b
3	1.2	0.27	1.2	0.27	W: Calm	SSE: E	1.0	0.07	144	b bc	bc Ci Cu y	bc Frcu y	bc l
4	3.3	0.74	3.2	0.71	Var: SSW	SSW: SW	5.0	0.33	289	bc c t l rr	rr c Ast Nbst	c Ast Acu	c b c
5	4.3	0.96	4.2	0.94	SW: WSW	W	3.5	0.33	308	c	c Nbst r o c	c Stcu Acu y	c b
6	4.7	1.00	4.7	1.00	WSW: WNW	NW: NNW	2.4	0.20	253	b bc	bc Cu Frcu y	bc Cu b y	b
7	4.6	0.98	4.6	0.98	NNW: Calm	NE: Calm	1.1	0.07	167	b	b bc Frcu Cist y	bc Cu b y	c b
8	4.7	1.00	4.7	1.00	Calm	NE: Calm	1.0	0.02	92	b c	c Stcu	c Acu Cu b zo c y	c b
9	4.1	0.86	4.1	0.86	Calm	ESE: Calm	0.3	0.01	104	b	b Frcu zo y	b bc Frcu zo y	bc
10	4.6	0.96	4.0	0.84	Calm: E	E: Calm	1.8	0.07	154	b	b Ci y	b Frcu y	b bc
11	2.9	0.60	2.9	0.60	Calm	SSW	0.4	0.04	122	b	b zo bc Frcu y	bc c Cu y	c
12	4.7	1.00	4.7	1.00	Calm	SSE: Calm	0.5	0.02	118	c b	so-ha b Frcu zo y	bc c Cu Ci zo y	b
13	1.3	0.24	1.0	0.19	Calm: SSE	SSW: W: NNW	3.5	0.14	192	b bc	bc Acu Cist so-ha y	c Cist so-ha b y	b c
14	4.9	0.92	4.8	0.91	NW: W: WSW	NNW: NW: W	7.0	0.52	346	c	c Cumb p	c Cu Cumb y	po c b
15	0.0	0.00	0.0	0.00	WSW: W	WSW: SSW	4.0	0.31	305	b bc	bc c Cicu Cu y	bc Cicu b y	b c ro
16	3.3	0.64	3.1	0.59	Var: NNW	NNW: Calm	4.5	0.14	218	rr d o d o m	c Nbst r o d o m	c Nbst Cu y	c
17	0.0	0.00	0.0	0.00	Calm	SW: SSW	4.8	0.11	181	bc c m	c Ast m b	b c Nbst r c	c r c
18	0.5	0.09	0.3	0.07	SSW	SSW: SW	6.5	0.64	351	c	c Ast Nbst p	c Nbst p	c r o d o
19	0.0	0.00	0.0	0.00	SW	SW	4.3	0.28	289	bc c	c Ast Nbst p	c Acu Cumb p	c
20	0.0	0.00	0.0	0.00	SW	WSW	2.9	0.17	258	c	c bc c Ci Acu y	c Acu Stcu	c
21	0.0	0.00	0.0	0.00	WSW	SW: SSW	2.5	0.16	236	c	c Stcu	c Stcu	c r o c r
22	...	...	...	...	SSW: SW	SW	2.7	0.27	304	d o c	c bc Stcu Cicu	bc Stcu c y	c b
23	5.3	0.93	4.8	0.83	SW	SW: S	2.9	0.18	238	b c	c bc Cicu Ci	bc Cicu Frcu b	b
24	2.9	0.50	2.7	0.46	Calm: SSW	WSW: WNW	2.7	0.17	225	b	b bc Frcu y	bc Frcu c p y	c b
25	3.9	0.67	3.8	0.66	W: WSW	SW: SSW	1.3	0.12	207	b c b	b Cu Frcu y	b bc Cist so-ha c y	b bc
26	3.9	0.68	3.9	0.68	Calm: E	E: Calm: WSW	8.0	0.26	215	b c	c bc Cicu Acu y	c t r G R t l r	r c b
27	6.3	1.00	6.3	1.00	SW: SSW	SW	6.3	0.63	352	b bc	bc Cumb p	c Frcu Cumb p bc b	b
28	1.1	0.18	1.0	0.15	SW	WSW: SW	4.0	0.18	276	b w	b bc c Acu Nbst p	c Cicu Nbst y	r o c rr
29	4.5	0.73	4.3	0.68	WSW: WNW	W: WSW	3.4	0.34	349	r c b	b bc Cicu Acu y	bc Acu Ci y	c b
30	2.7	0.44	2.5	0.40	WSW: SW	SW: WSW	9.7	0.93	426	bc c	c Cicu Stcu y	c Stcu Nbst	c
31	6.1	0.97	5.9	0.94	WSW: W	W	4.7	0.30	320	c b	b c Cicu Cu	c Stcu	c b
Means	3.1	0.61	3.0	0.59	...	...	...	0.23	239				
No. of Col. for Ref.	19	20	21	22	23	24	25	26	27	28	29	30	31

The mean *Temperature of Evaporation* for the month was 58°.2, being 0°.3 higher than  
 The mean *Temperature of the Dew Point* for the month was 53°.8, being 0°.3 lower than  
 The mean *Degree of Humidity* for the month was 71.0, being 2.2 less than  
 The mean *Elastic Force of Vapour* for the month was 0.417 in., being 0.004 in. less than  
 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 0.436. The maximum daily amount of *Sunshine* was 13.6 hours on July 10.  
 The highest reading of the *Solar Radiation Thermometer* was 145°.2 on July 3; and the lowest reading of the *Terrestrial Radiation Thermometer* was 34°.8 on July 17.  
 The *Proportions of Wind* referred to the cardinal points were N.7, E.6, S.29, W.38, calm or nearly calm conditions 20, the whole month being represented by 100.  
 The *Greatest Pressure of the Wind* in the month was 9.7 lbs. on the square foot on July 30. The mean daily *Horizontal Movement of the Air* for the month was 239 miles; the greatest daily value was 426 miles on July 30, and the least daily value was 92 miles on July 8.  
*Rain* (0.005 in. or over) fell on 13 days in the month, amounting to 2.393 in., as measured by gauge No.6 partly sunk below the ground; being 0.006 in. less than the average fall for the 65 years, 1841-1905.

TABLE XVII. - DAILY RESULTS OF THE METEOROLOGICAL OBSERVATIONS

Month and Day 1946	BAROMETER Mean of 24 Hourly Values (Corrected and reduced to 32° Fahrenheit)	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 Sun-shine	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					
		Highest	Lowest	Daily Range	Mean of 24 Hourly Values	Excess above Average of 65 Years	Mean of 24 Hourly Values	Deducted Mean Daily Value	Mean	Greatest	Least			Highest in Sun's Rays	Lowest on the Grass			
Aug. 1	29.982	73.1	48.6	24.5	61.2	-1.0	55.2	49.8	11.4	24.0	0.6	66	142.3	36.9	58.4	0.000	7.3	15.4
2	29.837	74.5	57.4	17.1	65.1	+3.0	60.8	57.7	7.4	12.0	3.3	77	121.2	55.9	58.3	0.010	0.3	15.4
3	29.827	76.0	58.0	18.0	65.5	+3.4	59.5	54.9	10.6	19.9	3.1	69	137.2	51.2	58.5	0.000	6.8	15.4
4	29.809	82.7	51.9	30.8	68.0	+5.9	61.8	57.4	10.6	22.1	1.0	69	141.9	40.2	58.7	0.000	12.9	15.3
5	29.690	83.3	57.3	26.0	70.3	+8.2	63.6	59.0	11.3	28.9	1.2	68	141.9	43.6	58.7	0.000	6.5	15.2
6	29.791	75.4	58.1	17.3	65.0	+2.8	59.7	55.7	9.3	19.9	2.0	72	137.8	50.1	58.6	0.000	5.4	15.2
7	29.751	72.0	54.0	18.0	62.2	-0.0	57.9	54.5	7.7	16.0	3.5	76	125.3	45.0	58.6	0.180	4.2	15.1
8	29.579	69.5	52.9	16.6	59.1	-3.2	55.2	51.9	7.2	18.2	1.8	77	121.9	44.5	58.7	0.170	4.5	15.1
9	29.542	70.1	50.6	19.5	58.9	-3.4	55.0	51.6	7.3	19.7	0.9	77	133.3	44.0	58.6	0.863	3.9	15.0
10	29.310	69.4	53.3	16.1	59.8	-2.5	57.0	54.7	5.1	12.8	1.0	83	126.3	45.5	58.8	0.237	4.4	15.0
11	29.739	71.2	49.8	21.4	60.1	-2.3	54.9	50.4	9.7	19.8	1.4	70	137.7	41.8	58.7	0.020	10.3	14.9
12	29.492	68.0	55.1	12.9	60.1	-2.4	56.3	53.1	7.0	15.1	2.0	78	119.6	51.4	58.5	0.149	4.2	14.8
13	29.681	68.7	54.6	14.1	60.5	-2.0	54.6	49.3	11.2	21.8	1.3	66	130.3	50.8	58.6	0.063	5.7	14.8
14	29.831	71.1	52.8	18.3	58.3	-4.2	54.9	51.9	6.4	19.9	0.8	79	123.9	46.4	58.4	0.419	4.9	14.7
15	29.792	66.2	49.5	16.7	57.4	-5.0	52.5	47.8	9.6	22.5	0.4	70	123.3	39.5	58.4	0.000	7.0	14.7
16	29.644	63.2	45.3	17.9	55.0	-7.3	51.6	48.3	6.7	14.7	1.0	78	110.5	32.9	58.2	0.695	3.4	14.6
17	29.614	59.3	51.1	8.2	55.5	-6.6	53.3	51.4	4.1	8.7	0.0	86	80.0	37.0	58.2	0.636	0.0	14.6
18	29.791	70.2	44.8	25.4	57.1	-4.8	52.7	48.5	8.6	21.1	0.6	73	125.1	31.8	58.0	0.000	8.7	14.5
19	29.688	64.0	50.3	13.7	57.2	-4.5	55.5	54.1	3.1	7.8	0.0	89	105.5	42.6	58.0	0.045	0.5	14.4
20	29.723	62.2	53.0	9.2	57.5	-4.0	55.5	53.8	3.7	9.2	0.0	88	91.5	45.0	57.8	0.083	0.1	14.4
21	29.861	68.4	48.7	19.7	58.2	-3.1	53.2	48.5	9.7	21.1	1.0	70	127.3	41.4	58.0	0.002	7.5	14.3
22	29.936	65.0	52.1	12.9	58.2	-2.9	56.3	54.7	3.5	10.9	1.2	89	107.4	44.6	57.9	0.021	0.1	14.3
23	29.885	71.4	54.1	17.3	63.0	+2.1	60.2	58.1	4.9	12.2	0.0	85	122.5	44.6	57.9	0.000	2.6	14.2
24	29.722	72.7	57.3	15.4	63.1	+2.3	60.4	58.5	4.6	14.1	0.3	85	128.3	46.5	58.0	0.060	2.1	14.1
25	29.633	72.0	55.0	17.0	61.4	+0.7	58.0	55.3	6.1	13.9	0.5	81	127.2	48.0	58.0	0.002	3.2	14.1
26	29.685	68.6	51.1	17.5	59.0	-1.7	54.4	50.3	8.7	17.6	0.8	73	124.6	42.8	58.0	0.000	7.0	14.0
27	29.659	68.4	47.5	20.9	57.1	-3.5	53.0	49.0	8.1	15.4	1.3	75	127.5	34.7	58.0	0.000	5.3	13.9
28	29.274	67.1	53.7	13.4	59.6	-0.8	55.6	52.2	7.4	17.8	2.7	77	124.1	50.2	58.1	0.498	7.4	13.9
29	29.344	66.6	52.0	14.6	57.2	-3.1	53.4	49.8	7.4	17.7	2.0	77	126.3	46.0	58.0	0.001	6.7	13.8
30	29.551	66.5	49.9	16.6	56.4	-3.7	53.0	49.8	6.6	17.9	0.0	78	127.0	44.5	58.0	0.018	9.9	13.8
31	29.656	63.8	54.8	9.0	57.2	-2.7	54.1	51.3	5.9	11.7	0.0	81	121.9	44.9	58.0	0.060	4.3	13.7
Means	29.688	69.7	52.4	17.3	60.1	-1.5	56.1	52.7	7.4	16.9	1.2	76.8	123.9	44.0	58.3	Sum 4.232	5.1	14.6
No. of Col. for Ref.	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 29.688 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 83°.3 on August 5; the lowest in the month was 44°.8 on August 18; and the range was 38°.5.

The mean of all the highest daily readings in the month was 69°.7, being 1°.1 lower than the average for the 65 years, 1841-1905.

The mean of all the lowest daily readings in the month was 52°.4, being 1°.2 lower than the average for the 65 years, 1841-1905.

The mean of the daily ranges was 17°.3, being 0°.1 greater than the average for the 65 years, 1841-1905.

The mean for the month was 60°.1, being 1°.5 lower than the average for the 65 years, 1841-1905.

TABLE XVII. - DAILY RESULTS OF THE METEOROLOGICAL OBSERVATIONS

Month and Day 1946	RECORD OF THE NIGHT SKY				WIND AS DEDUCED FROM SELF-REGISTERING ANEMOMETERS					CLOUDS AND WEATHER			
	Polaris		δ URSÆ MINORIS		OSLER'S			Robin-son's					
	Duration	Fraction of Total Exposure	Duration	Fraction of Total Exposure	General Direction		Pressure on the Square Foot		Horizontal Move-ment of the Air	0 <sup>h</sup> to 6 <sup>h</sup>	6 <sup>h</sup> to 12 <sup>h</sup>	12 <sup>h</sup> to 18 <sup>h</sup>	18 <sup>h</sup> to 24 <sup>h</sup>
					A.M.	P.M.	Greatest	Mean of 24 Hourly Measures					
Aug. 1	0.0	0.00	0.0	0.00	WSW:W	WSW:SW	1.7	0.10	226	b w	bc Cu Ci y	c Cicu Acu Cu y	c
2	3.0	0.49	2.3	0.38	SW	SW:WSW	3.8	0.33	327	c d ro c	c Ast Nbst ro	c Nbst ir o	ro c bc
3	4.7	0.69	4.4	0.65	WSW:W	WSW:NE	1.3	0.11	205	bc c	bc c Acu Frcu y	c Stcu y	c b
4	4.4	0.66	3.6	0.54	Calm	SW	0.6	0.03	119	b w	b Frcu y	b Ci y	b c do
5	5.0	0.74	4.8	0.71	Calm	Calm:W:WSW	2.9	0.15	191	b bc	c Ast Cu mo	c bc Ci Acu y	c b
6	2.0	0.30	1.5	0.22	WSW:SW	SW	3.5	0.30	294	b	c ro c Ci Frcu	c Cicu Cist so-ha	c bc
7	4.0	0.59	3.4	0.51	SW:SSW	SW:SSW	4.1	0.37	322	c	c Nbst ir o	c R bc Stcu	b
8	6.7	1.00	6.7	1.00	SW: Calm: SE	WSW	8.3	0.43	269	bc c ro	c Nbst rr	ir t b c Cumb	b
9	0.0	0.00	0.0	0.00	SW	SSW:SE: Calm	4.6	0.31	273	b bc c	c Stcu Nbst p	c bc Ci Frcu y c r	r R
10	7.1	0.98	6.8	0.94	SSW	SSW:W:SW	16.7	1.29	399	r R c	c Nbst p c	c Stcu q b	b
11	0.0	0.00	0.0	0.00	SW	SSW:SSE	2.4	0.16	232	b	b bc Ci so-ha	c bc Cumb Frcu y	c r c
12	0.8	0.11	0.7	0.10	SE:S:SSW	SSW	14.3	1.33	422	c rr d	d c ro c Acu	c bc Frcu Cicu y	bc c ir
13	1.0	0.14	0.9	0.13	WSW:W:WNW	WNW:WSW	17.0	1.52	492	c ir	c Stcu Cu y	bc Frcu y	bc c
14	5.6	0.77	4.7	0.65	SW:WSW	SW	3.0	0.19	236	c r c	c Acu Frcu	c Nbst Cumb p c t l R	t l l R bc
15	7.0	0.97	6.9	0.95	Calm:NW	WNW: Calm	1.5	0.07	154	bc	b c Acu y	c bc Acu Cu y	bc b
16	0.0	0.00	0.0	0.00	Calm:ENE	ENE:NNE	4.5	0.25	246	b w	bc Cist so-ha c Ast	c Nbst do RR	r R
17	7.0	0.90	6.8	0.88	N:NNW	NNW	7.2	0.75	394	r R	r R ro Nbst	c Ast	c b
18	5.2	0.67	5.2	0.67	Calm	Calm:SW:SSW	1.3	0.09	138	b w	b bc Cu y	bc Cu y c	c b
19	0.0	0.00	0.0	0.00	SSW:S	S:SSW	2.7	0.21	217	b c ir	c Nbst ir o	c Stcu	c ir ro
20	1.9	0.25	1.8	0.23	Calm:NW	NNW:NW	1.6	0.19	207	c ir ro	c ro c Nbst	c Acu Stcu	c r c b
21	0.0	0.00	0.0	0.00	NW:WSW:WNW	NW:WSW	1.0	0.14	196	b c	c bc Stcu Acu	bc Stcu Frcu y	bc c
22	1.8	0.23	1.8	0.23	SW:WSW	SW:SSW: Calm	2.0	0.12	195	c	c r c Nbst	c Nbst r c	c ro c
23	0.4	0.05	0.3	0.03	NNW: Calm: W	WSW:SW: Calm	0.6	0.05	135	c b c	b w m c Acu	c Ast Cumb	c
24	0.4	0.05	0.0	0.00	Calm:SW	Calm	0.4	0.01	117	c w	c Cu Cicu	bc Cu Cicu c ro c	c r c
25	5.1	0.64	4.3	0.54	Calm:WSW	WSW	4.0	0.06	153	c	c Stcu	c Acu Ci c t l	c ro bc b
26	7.1	0.89	5.4	0.67	WSW: Calm	NW: Calm	0.3	0.02	140	b w c	c Frcu y	bc Cumb y	bc b
27	0.2	0.03	0.0	0.00	Calm:SSW	SSW:S:SE	0.9	0.04	153	b w	b c Acu Cu	c Acu Cumb	c
28	2.1	0.26	1.4	0.17	SE:SSW	SSW	31.0	1.96	498	c ir	bc Cu Acu p	c Nbst p q	c q ir
29	8.0	1.00	8.0	1.00	SW	SW:SSW	13.6	1.52	464	c	bc c Ci Nbst p	b c Cu Cicu y	c b
30	4.7	0.58	4.5	0.56	SSW	SW:SSW	6.0	0.65	373	b w	bc p c Cist so-ha	bc c p Cicu Stcu Ci	c
31	3.5	0.42	2.8	0.33	SW:SSW	SW:SSW	3.6	0.34	313	c b c	c Frcu p	c Stcu p	bc c
Means	3.2	0.43	2.9	0.39	...	...	...	0.42	261				
No. of Col. for Ref.	19	20	21	22	23	24	25	26	27	28	29	30	31

The mean *Temperature of Evaporation* for the month was 56°.1, being 1°.4 lower than  
 The mean *Temperature of the Dew Point* for the month was 52°.7, being 1°.6 lower than  
 The mean *Degree of Humidity* for the month was 76.8, being the same as  
 The mean *Elastic Force of Vapour* for the month was 0.400 in., being 0.024 in. less than  
 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 0.347. The maximum daily amount of *Sunshine* was 12.9 hours on August 4.  
 The highest reading of the *Solar Radiation Thermometer* was 142°.3 on August 1; and the lowest reading of the *Terrestrial Radiation Thermometer* was 31°.8 on August 18.  
 The *Proportions of Wind* referred to the cardinal points were N.8, E.3, S.35, W.37, calm or nearly calm conditions 17, the whole month being represented by 100.  
 The *Greatest Pressure of the Wind* in the month was 31.0 lbs. on the square foot on August 28. The mean daily *Horizontal Movement of the Air* for the month was 261 miles; the greatest daily value was 498 miles on August 28, and the least daily value was 117 miles on August 24.  
*Rain* (0.005 in. or over) fell on 18 days in the month, amounting to 4.232 in., as measured by gauge No.6 partly sunk below the ground; being 1.888 in. greater than the average fall for the 65 years, 1841-1905.

TABLE XVII. - DAILY RESULTS OF THE METEOROLOGICAL OBSERVATIONS

Month and Day 1946	BAROMETER Mean of 24 Hourly Values (Corrected and reduced to 32° Fahrenheit)	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			
		Highest	Lowest	Daily Range	Mean of 24 Hourly Values	Excess above Average of 65 Years			Mean of 24 Hourly Values	Deducted Mean Daily Value	Mean		Greatest	Least				
Sept. 1	29.610	70.5	49.9	20.6	57.1	-2.7	53.9	51.0	6.1	19.4	0.0	80	141.1	41.9	58.0	0.166	7.5	13.6
2	29.597	66.4	51.2	15.2	57.2	-2.5	53.8	50.7	6.5	13.9	1.4	79	122.0	46.8	58.0	0.075	3.6	13.6
3	29.384	62.5	53.3	9.2	56.9	-2.7	55.2	53.8	3.1	7.8	1.0	89	97.1	48.7	57.9	0.190	0.0	13.5
4	29.221	60.8	56.0	4.8	57.9	-1.6	56.1	54.6	3.3	5.6	1.8	89	92.2	52.1	57.9	0.294	0.2	13.4
5	29.421	66.8	52.6	14.2	58.5	-0.9	55.1	52.2	6.3	13.5	2.3	79	124.2	46.0	57.9	0.000	5.1	13.4
6	29.571	63.0	50.2	12.8	55.0	-4.2	53.0	51.1	3.9	9.6	1.8	87	105.3	43.1	57.7	0.105	0.2	13.3
7	29.665	65.4	47.2	18.2	57.5	-1.5	54.7	52.3	5.2	10.9	0.3	83	118.5	37.6	57.7	0.065	4.4	13.2
8	29.600	60.7	54.9	5.8	57.7	-1.1	57.0	56.5	1.2	2.3	0.3	95	83.2	49.9	57.7	0.575	0.1	13.1
9	29.889	63.8	51.9	11.9	57.1	-1.5	53.2	49.5	7.6	15.6	2.2	76	114.5	48.2	57.6	0.000	5.4	13.1
10	29.960	67.0	50.7	16.3	57.8	-0.6	53.8	50.2	7.6	16.5	1.2	76	134.4	44.8	57.6	0.000	5.2	13.0
11	29.776	63.0	55.8	7.2	59.4	+1.3	55.8	52.8	6.6	11.1	3.7	79	113.3	51.9	57.4	0.005	1.6	13.0
12	29.924	67.5	49.7	17.8	58.6	+0.6	54.7	51.3	7.3	15.3	1.4	77	117.1	39.8	57.5	0.000	5.3	12.9
13	29.741	61.9	48.6	13.3	55.7	-2.1	51.9	48.2	7.5	17.3	2.0	76	112.5	41.8	57.4	0.098	2.8	12.9
14	29.718	60.8	46.3	14.5	55.2	-2.5	53.3	51.6	3.6	7.5	1.2	87	85.9	39.5	57.4	0.038	0.2	12.8
15	29.855	66.9	50.6	16.3	58.7	+1.1	53.5	48.6	10.1	21.5	1.6	69	122.7	43.0	57.7	0.000	11.3	12.7
16	29.906	63.9	44.7	19.2	54.2	-3.3	50.9	47.7	6.5	14.2	0.0	79	126.8	35.8	57.4	0.000	5.2	12.7
17	29.724	64.8	51.3	13.5	56.4	-0.8	53.5	50.9	5.5	12.6	2.7	82	115.4	45.1	57.3	0.012	1.6	12.6
18	29.548	60.4	52.4	8.0	56.5	-0.4	54.8	53.4	3.1	9.7	0.8	89	71.4	44.7	57.1	0.193	0.0	12.5
19	29.660	61.1	49.4	11.7	54.8	-1.7	51.3	47.8	7.0	13.7	0.6	77	115.1	46.1	57.1	0.068	0.3	12.5
20	29.246	63.6	47.7	15.9	57.7	+1.5	55.2	53.1	4.6	8.9	1.9	85	95.3	44.5	57.0	0.356	0.3	12.4
21	30.002	62.9	45.3	17.6	54.4	-1.5	50.6	46.8	7.6	16.3	1.5	75	113.0	38.2	57.0	0.000	8.0	12.3
22	29.950	65.2	53.2	12.0	57.6	+2.0	54.9	52.6	5.0	11.4	1.9	83	118.3	47.8	57.0	0.105	1.9	12.3
23	29.784	64.7	50.6	14.1	58.8	+3.4	56.3	54.3	4.5	13.6	1.9	85	105.3	45.0	57.0	0.091	2.5	12.2
24	29.872	65.5	50.4	15.1	56.3	+1.0	53.0	49.9	6.4	12.7	2.0	79	119.8	43.9	57.0	0.000	4.1	12.1
25	29.949	70.0	53.5	16.5	61.8	+6.6	59.4	57.7	4.1	8.3	1.5	86	114.6	46.5	57.0	0.000	1.4	12.1
26	29.945	71.0	58.3	12.7	63.3	+8.1	60.9	59.2	4.1	8.6	1.1	87	122.1	49.8	57.0	0.003	0.5	12.0
27	29.949	77.1	57.6	19.5	64.9	+9.8	61.6	59.3	5.6	14.7	1.1	82	135.1	48.4	57.1	0.009	8.0	11.9
28	30.001	73.3	56.1	17.2	63.4	+8.5	60.2	57.9	5.5	11.4	0.7	82	120.5	46.1	57.3	0.001*	8.1	11.9
29	29.825	64.2	58.0	6.2	61.2	+6.5	59.9	59.0	2.2	5.1	1.1	93	108.5	51.0	57.2	0.000	0.5	11.8
30	29.909	71.0	51.2	19.8	59.6	+5.2	56.0	53.0	6.6	17.9	0.8	79	133.5	39.8	57.4	0.022	7.6	11.7
Means	29.740	65.5	51.6	13.9	58.0	+0.8	55.1	52.6	5.5	12.2	1.4	82.1	113.3	44.9	57.4	Sum 2.471	3.4	12.7
No. of Col. for Ref.	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 29.740 in., being 0.078 in. lower than the average for the 65 years, 1841-1905.

\* Rainfall (Column 16). The amount entered on September 28 is derived from dew.

TEMPERATURE OF THE AIR.

The highest in the month was 77°.1 on September 27; the lowest in the month was 44°.7 on September 16; and the range was 32°.4.

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

The mean of all the lowest daily readings in the month was 51°.6, being 1°.9 higher than the average for the 65 years, 1841-1905.

The mean of the daily ranges was 13°.9, being 2°.8 less than the average for the 65 years, 1841-1905.

The mean for the month was 58°.0, being 0°.8 higher than the average for the 65 years, 1841-1905.

TABLE XVII. - DAILY RESULTS OF THE METEOROLOGICAL OBSERVATIONS

Month and Day 1946	RECORD OF THE NIGHT SKY				WIND AS DEDUCED FROM SELF-REGISTERING ANEMOMETERS					CLOUDS AND WEATHER			
	Polaris		δ URSÆ MINORIS		OSLER'S			Robin-son'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					
hours		hours				lbs.	lbs.	miles	0 <sup>h</sup> to 6 <sup>h</sup>	6 <sup>h</sup> to 12 <sup>h</sup>	12 <sup>h</sup> to 18 <sup>h</sup>	18 <sup>h</sup> to 24 <sup>h</sup>	
Sept. 1	3.5	0.42	2.6	0.31	SSW:WSW	SSW:WSW	2.0	0.10	219	c b	b bc Acu	bc c Cumb t l R it ro	bc c
2	0.3	0.04	0.3	0.03	WSW	SW	2.6	0.22	268	c	c Stcu	c p c Acu Ci	bc c r
3	0.9	0.10	0.7	0.08	S	SSE:S	6.3	0.52	294	lr do	c Nbst 1ro	c Nbst 1ro	c ir
4	0.1	0.01	0.0	0.00	S:SSW	SSW	13.3	1.67	503	c 1r	c Nbst 1r	c Nbst 1ro	c do c
5	8.2	0.97	7.9	0.94	SSW	SSW	4.8	0.50	324	c b	b c Ast Nbst po	c bc Cu Cicu c	b
6	4.7	0.56	4.4	0.51	SSW:S	S:SSW	1.8	0.09	195	b c do	c so-ha c Ast	c Nbst 1r	bc c
7	0.6	0.06	0.2	0.02	SSW:SW	SSW:S	2.0	0.12	204	c b w	c Acu Cu	c Stcu Acu	c rr
8	2.7	0.29	2.4	0.26	Calm:S	Calm:WSW:WNW	1.6	0.05	155	rr bc c	c Nbst r R	r R c Nbst r c	c
9	3.0	0.33	2.3	0.25	W:WNW	W:WSW	3.2	0.23	277	c bc	bc c Stcu Ci	c Nbst po bc Acu	bc c
10	0.5	0.05	0.3	0.03	WSW	SW:SSW	2.8	0.27	275	c w	c Ci b so-ha	bc c Acu Frcu	c
11	2.2	0.24	2.1	0.23	SW:WSW	WSW:W	5.0	0.45	326	c r c	bc Acu Cicu c	c Stcu	c
12	1.4	0.15	0.9	0.10	NNW:Calm	SSW:SW	1.8	0.09	161	c b w c m	c m b c Acu	c Stcu Acu b	b c
13	9.3	1.00	9.3	1.00	SW:WSW:W	WSW	4.6	0.32	298	c	rr c Ast	c bc Frcu y	b
14	4.2	0.43	3.6	0.37	WSW:SW	SW:WSW	6.5	0.48	345	b w c	c Nbst	dd c Nbst	c b
15	8.4	0.86	7.3	0.75	WSW:W:WNW	W:WSW:SW	5.0	0.34	300	b	b Frcu y	b Ci y	b
16	2.7	0.28	1.0	0.10	SSW:SW	SW:SSW	1.4	0.11	195	b w bc	bc c Cicu Ci	c Acu Cicu	c bc c
17	6.3	0.65	5.9	0.61	SSW:SW	SW	5.0	0.27	258	c r c	c so-ha c Ast	c bc Acu Frcu c	b
18	2.8	0.28	2.2	0.23	SW:Calm	SW:WSW:NW	13.0	0.87	334	b c d	c Nbst 1r d	1d r c Nbst	c q r c
19	0.1	0.01	0.0	0.00	W:WSW	WSW:S:SW	4.2	0.33	291	c	c Ci Cicu so-ha	c Cu Nbst ro	ro r c
20	7.6	0.78	7.6	0.78	SW	SSW:NW	27.0	2.40	558	c	c Nbst 1d	c Nbst 1r q	gale rr b
21	1.1	0.11	0.9	0.09	NW:WSW:W	WSW:SW	3.7	0.32	280	b	b bc Ci so-ha c	c bc Cist c y	c
22	0.0	0.00	0.0	0.00	SW	SW	5.0	0.51	361	1ro c	c Ast Nbst	c bc Acu c y	c r c
23	4.6	0.45	4.3	0.41	SW:WSW	W:WSW	3.0	0.23	277	c 1r c	c Nbst r c	c bc Acu Cicu b	bc
24	4.4	0.43	3.9	0.39	WSW	SW	1.6	0.14	234	c bc w	bc Frcu Cist so-ha	c Ast Cist so-ha	bc w
25	0.5	0.05	0.5	0.05	SSW:SW	SW	2.0	0.17	223	c	c Stcu	c Stcu	c
26	4.4	0.43	4.0	0.39	Calm:SE	S:Calm	1.0	0.04	141	c	c ro c Acu	c p c Acu Ci	b c
27	10.3	1.00	10.3	1.00	SSE:SW	SW:S:Calm	1.5	0.09	176	c p b	bc b Frcu	b Frcu	b
28	6.5	0.60	6.4	0.60	Calm:E	E:ENE	3.7	0.24	220	b w f	f mo bc Acu	bc Acu b	b
29	1.7	0.16	1.4	0.13	ENE:E	E:Calm:WSW	3.2	0.30	233	b c m	c Stcu mo	c Stcu mo fe	fe c
30	6.6	0.61	5.6	0.52	Calm:SW	SSW:S	2.5	0.07	180	c r c b	b bc Frcu Ci	b c Frcu Cicu	b w c
Means	3.7	0.38	3.3	0.34	...	...	...	0.38	270				
No. of Col. for Ref.	19	20	21	22	23	24	25	26	27	28	29	30	31

The mean *Temperature of Evaporation* for the month was 55°.1, being 1°.0 higher than  
 The mean *Temperature of the Dew Point* for the month was 52°.6, being 1°.5 higher than  
 The mean *Degree of Humidity* for the month was 82.1, being 2.2 greater than  
 The mean *Elastic Force of Vapour* for the month was 0.399 in., being 0.020 in. greater than  
 The mean amount of *Cloud* for the month (a clear sky being represented by 0 and an overcast sky by 10) was 7.4.  
 The mean proportion of *Sunshine* for the month (constant sunshine being represented by 1) was 0.270. The maximum daily amount of *Sunshine* was 11.3 hours on September 15.  
 The highest reading of the *Solar Radiation Thermometer* was 141°.1 on September 1; and the lowest reading of the *Terrestrial Radiation Thermometer* was 35°.8 on September 16.  
 The *Proportions of Wind* referred to the cardinal points were N.3, E.6, S.42, W.40, calm or nearly calm conditions 9, the whole month being represented by 100.  
 The *Greatest Pressure of the Wind* in the month was 27.0 lbs. on the square foot on September 20. The mean daily *Horizontal Movement of the Air* for the month was 270 miles; the greatest daily value was 558 miles on September 20, and the least daily value was 141 miles on September 26.  
*Rain* (0.005 in. or over) fell on 18 days in the month, amounting to 2.471 in., as measured by gauge No.6 partly sunk below the ground; being 0.323 in. greater than the average fall for the 65 years, 1841-1905.

TABLE XVII. - DAILY RESULTS OF THE METEOROLOGICAL OBSERVATIONS

Month and Day 1946	BAROMETER Mean of 24 Hourly Values (Corrected and reduced to 32° Fahrenheit)	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					Or Evaporation	Or the Dew Point					Of Radiation		Of the Earth 4 ft. below the surface of the Soil			
		Highest	Lowest	Daily Range	Mean of 24 Hourly Values	Excess above Average of 65 Years			Mean of 24 Hourly Values	Deducted Mean Daily Value	Mean		Greatest	Least				
Oct.1	29.850	70.0	52.5	17.5	60.1	+ 6.0	56.0	52.5	7.6	16.0	1.6	76	129.7	42.7	57.4	0.000	6.9	11.7
2	29.894	71.0	50.5	20.5	59.7	+ 6.0	56.7	54.2	5.5	13.8	1.0	82	127.8	39.4	57.4	0.000	5.4	11.6
3	29.812	69.8	52.4	17.4	61.9	+ 8.6	59.5	57.8	4.1	8.3	1.5	86	92.6	45.5	57.4	0.042	0.0	11.5
4	29.846	63.1	50.3	12.8	55.9	+ 2.9	53.1	50.6	5.3	10.2	1.0	82	100.6	43.0	57.4	0.000	1.3	11.5
5	29.802	60.8	53.3	7.5	56.7	+ 3.9	53.2	49.9	6.8	11.2	3.6	78	98.0	49.9	57.2	0.000	0.2	11.4
6	29.859	59.3	46.0	13.3	54.1	+ 1.6	49.4	44.4	9.7	18.2	2.8	70	117.5	38.0	57.4	0.040	7.8	11.4
7	30.006	61.7	37.9	23.8	50.0	- 2.3	46.4	42.1	7.9	18.9	0.7	74	117.2	27.4	57.1	0.000	4.6	11.3
8	30.151	59.9	44.1	15.8	52.0	- 0.0	49.0	45.8	6.2	14.8	0.6	79	107.3	31.8	57.1	0.000	2.1	11.2
9	30.193	56.1	47.1	9.0	51.9	+ 0.3	48.7	45.3	6.6	10.1	3.7	78	94.6	39.3	57.0	0.003	2.5	11.2
10	30.219	58.1	49.3	8.8	53.3	+ 2.0	48.4	42.9	10.4	17.5	3.2	68	114.7	43.8	56.9	0.000	7.3	11.1
11	30.160	61.4	46.1	15.3	52.7	+ 1.8	47.1	40.3	12.4	28.7	0.9	63	115.4	40.1	56.5	0.000	8.1	11.0
12	30.061	54.8	46.5	8.3	51.3	+ 0.7	48.5	45.5	5.8	10.3	1.4	81	70.0	44.0	56.3	0.000	0.0	11.0
13	29.955	54.6	50.0	4.6	52.0	+ 1.7	49.4	46.6	5.4	8.3	1.6	82	69.1	47.8	56.3	0.000	0.0	10.9
14	29.961	52.8	48.4	4.4	50.3	+ 0.2	47.4	44.1	6.2	8.4	3.4	80	65.3	46.6	56.0	0.000	0.0	10.8
15	30.015	50.3	45.5	4.8	48.0	- 1.9	45.0	41.2	6.8	13.2	2.2	77	59.5	34.6	55.8	0.000	0.0	10.8
16	30.068	53.3	45.6	7.7	49.3	- 0.5	46.3	42.7	6.6	11.2	3.6	78	71.8	43.0	55.8	0.000	0.1	10.7
17	30.013	55.4	47.1	8.3	50.9	+ 1.3	47.8	44.4	6.5	10.5	2.0	78	76.4	42.0	55.7	0.002	0.0	10.7
18	29.884	55.2	45.9	9.3	50.6	+ 1.3	47.3	43.6	7.0	12.4	1.4	77	95.3	37.3	55.4	0.000	0.4	10.6
19	29.595	62.0	48.8	13.2	54.3	+ 5.2	52.5	50.8	3.5	8.8	0.8	88	109.2	41.0	55.6	0.021	2.0	10.5
20	29.403	63.9	52.1	11.8	57.7	+ 8.9	56.3	55.1	2.6	7.7	0.8	91	92.2	39.9	55.2	0.057	0.7	10.5
21	29.469	61.3	52.1	9.2	56.0	+ 7.4	54.9	53.9	2.1	6.3	0.0	93	82.1	39.4	55.3	0.045	1.2	10.4
22	29.681	58.1	50.6	7.5	54.6	+ 6.3	54.1	53.7	0.9	2.8	0.0	97	68.5	46.0	55.2	0.108	0.0	10.3
23	29.888	54.3	42.2	12.1	49.5	+ 1.4	47.5	45.3	4.2	8.4	0.0	86	77.3	34.6	55.1	0.001	0.0	10.3
24	30.018	48.3	35.3	13.0	43.9	- 4.0	39.7	33.2	10.7	20.1	5.8	66	99.5	28.0	55.0	0.000	6.7	10.2
25	29.986	44.8	32.5	12.3	37.7	-10.0	34.5	29.0	8.7	14.6	3.2	70	98.1	22.6	54.8	0.000	5.9	10.1
26	29.726	49.4	37.2	12.2	44.3	- 3.3	43.0	41.4	2.9	5.1	0.7	89	66.3	27.8	54.7	0.270	0.2	10.1
27	29.574	48.8	39.9	8.9	45.6	- 1.9	44.5	43.2	2.4	5.8	0.0	91	50.6	27.8	54.3	0.060	0.0	10.0
28	29.860	51.0	38.2	12.8	44.3	- 3.1	41.3	37.1	7.2	13.3	1.7	75	95.0	32.2	54.0	0.000	4.6	9.9
29	30.063	49.4	29.6	19.8	39.8	- 7.5	37.7	34.5	5.3	12.9	0.0	81	87.9	20.5	53.7	0.000	3.6	9.9
30	29.991	52.6	42.0	10.6	45.9	- 1.3	42.9	39.0	6.9	11.9	2.8	77	99.2	32.5	53.4	0.003	1.1	9.8
31	29.966	48.7	41.4	7.3	44.6	- 2.5	42.5	39.7	4.9	9.5	1.6	83	76.1	30.8	53.3	0.055	0.3	9.8
Means	29.902	56.8	45.2	11.6	50.9	+ 0.9	48.1	44.8	6.1	11.9	1.7	79.9	91.1	37.4	55.8	Sum 0.707	2.3	10.7
No. of Col. for Ref.	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 29.902 in., being 0.174 in. higher than the average for the 65 years, 1841-1905.

TEMPERATURE OF THE AIR.

The highest in the month was 71°.0 on October 2; the lowest in the month was 29°.6 on October 29; and the range was 41°.4.

The mean of all the highest daily readings in the month was 56°.8, 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 45°.2, being 1°.4 higher than the average for the 65 years, 1841-1905.

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

The mean for the month was 50°.9, being 0°.9 higher than the average for the 65 years, 1841-1905.

TABLE XVII. - DAILY RESULTS OF THE METEOROLOGICAL OBSERVATIONS

Month and Day 1946	RECORD OF THE NIGHT SKY				WIND AS DEDUCED FROM SELF-REGISTERING ANEMOMETERS					CLOUDS AND WEATHER			
	Polaris		6 URSAE MINORIS		OSLER'S			Robin-son'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					
hours		hours				lbs.	lbs.	miles	0 <sup>h</sup> to 6 <sup>h</sup>	6 <sup>h</sup> to 12 <sup>h</sup>	12 <sup>h</sup> to 18 <sup>h</sup>	18 <sup>h</sup> to 24 <sup>h</sup>	
Oct.1	6.7	0.63	6.1	0.57	SSE:Caln	SE:ESE:Caln	1.9	0.09	164	b w c	c Cist so-ha bc y	bc Cicu Frcu y c	c t l p o b
2	4.8	0.45	3.6	0.33	Caln:SSW	Caln	0.2	0.02	128	b w bc .	bc Ci Frcu	bc Cist so-ha c	bc c r
3	7.1	0.67	6.8	0.63	Caln:S	SW:W	1.7	0.09	197	r t l c b c	c Nbst ir so-ha	c Cist Acu so-ha c	c l r b
4	0.0	0.00	0.0	0.00	WSW:W	WSW:WNW	3.4	0.22	282	b w bc	c Nbst	c Stcu	c
5	0.0	0.00	0.0	0.00	W:WNW:NW	NW:WNW	3.0	0.27	279	c	c Acu Cicu	c Ast Frst ro do	c
6	10.7	0.98	10.6	0.96	NW:NNE	N:NNE:NE	2.5	0.17	221	c rr c	c bc Acu y	bc Frcu y	b
7	9.2	0.84	8.8	0.80	Caln	Caln:E	0.3	0.02	111	b m x	b m b Frcu y	b y bc Frcu b	b
8	7.6	0.69	7.1	0.64	Caln	ENE	2.5	0.10	178	b w bc	bc m c Acu	c Stcu y c ro	bc
9	0.7	0.06	0.4	0.04	NE:E	E:ENE	4.2	0.29	276	bc c do c	c Frcu	c Stcu Ci	c r c
10	3.9	0.36	3.2	0.29	ENE:NE	ENE:NE	10.2	0.99	402	c	bc Frcu b Ci y	b Ci y c	c
11	5.3	0.48	4.5	0.41	NE:ENE	ENE:NE	7.0	0.77	361	c bc	bc Frcu b y	b y	b c
12	0.0	0.00	0.0	0.00	NE	NE:NNE	1.8	0.17	259	c	c Stcu	c Stcu	c
13	0.0	0.00	0.0	0.00	NNE:NE	NE	1.7	0.16	242	c	c Stcu	c Stcu	c
14	0.0	0.00	0.0	0.00	N:NNE	N	0.7	0.06	179	c	c Stcu	c Stcu	c
15	0.6	0.05	0.6	0.05	N:NNE	NNE:Caln	0.8	0.05	164	c	c mo Stcu	c Stcu	c m
16	0.0	0.00	0.0	0.00	Caln	NE:ENE	0.7	0.03	144	c m	c Stcu mo	c Stcu mo	c
17	5.7	0.50	4.3	0.38	ENE:E	E:ESE	2.7	0.17	227	c	c ro c Stcu mo	c Stcu	c
18	2.0	0.17	1.5	0.13	ESE	E	3.6	0.35	270	b c b	c Ci Cicu so-ha	c Ci Acu	c m
19	8.1	0.68	7.9	0.66	ENE:E	E:Caln	1.2	0.06	156	c m	bc m c Acu	c Acu Cicu c r	c b mo
20	2.7	0.23	2.0	0.17	SE:E	S:SSE:Caln	1.3	0.04	163	b c mo	c St do mo	c Stcu mo	c ir
21	2.1	0.17	0.8	0.07	S:Caln	Caln	0.0	0.00	109	c mo	c Frcu mo	c Nbst r g ro c mo	bc o ff
22	0.0	0.00	0.0	0.00	Caln:NE	NNE	2.0	0.06	176	o ff	o ff c Stcu mo	c Nbst r ro m	ir o c mo
23	2.9	0.24	2.9	0.24	NNE:NE	ENE:NE	4.0	0.20	271	c mo	c Stcu	c ro c Acu b	b c
24	11.9	0.99	11.8	0.99	NE:E	E:ESE	4.7	0.56	331	c	c bc Frcu Cu	b Ci y	b
25	8.6	0.72	6.3	0.52	ESE:SE	SE:ESE	1.4	0.10	192	b x	bc Ci so-ha y	bc Cist Acu so-ha c	c b m
26	3.1	0.25	1.9	0.15	ESE:SE	SE:Caln	1.0	0.06	163	b c m	c Acu m	c Nbst r c m f	c rr f
27	5.7	0.46	4.8	0.38	Caln:W:WNW	NW	6.5	0.40	279	b c f	c r f c Nbst do m	c St mo	c b
28	12.5	1.00	12.5	1.00	W:NW:N	N	3.6	0.28	273	b c mo	c bc Frcu Cu mo	bc Frcu b	b
29	5.5	0.44	4.8	0.38	Caln	NE	0.7	0.03	141	b x	b f b Cu mo	b bc c Stcu Cu	c b c mo
30	1.9	0.15	1.7	0.13	Caln:NE	E:NE	2.7	0.10	186	c mo	c b c Stcu	c ro c Acu	c do c
31	0.0	0.00	0.0	0.00	NE	NE:ENE	4.7	0.34	304	c mo	c Stcu mo	c Nbst ro r c	c ido
Means	4.2	0.36	3.7	0.32	...	...	...	0.20	220				
No. of Col. for Ref.	19	20	21	22	23	24	25	26	27	28	29	30	31

The mean *Temperature of Evaporation* for the month was 48°.1, being 0°.2 higher than  
 The mean *Temperature of the Dew Point* for the month was 44°.8, being 0°.8 lower than  
 The mean *Degree of Humidity* for the month was 79.9, being 5.0 less than  
 The mean *Elastic Force of Vapour* for the month was 0.298 in., being 0.010 in. less than  
 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 0.220. The maximum daily amount of *Sunshine* was 8.1 hours on October 11.  
 The highest reading of the *Solar Radiation Thermometer* was 129°.7 on October 1; and the lowest reading of the *Terrestrial Radiation Thermometer* was 20°.5 on October 29.  
 The *Proportions of Wind* referred to the cardinal points were N.25, E.37, S.8, W.9, calm or nearly calm conditions 21, the whole month being represented by 100.  
 The *Greatest Pressure of the Wind* in the month was 10.2 lbs. on the square foot on October 10. The mean daily *Horizontal Movement of the Air* for the month was 220 miles; the greatest daily value was 402 miles on October 10, and the least daily value was 111 miles on October 7.  
*Rain* (0.005 in. or over) fell on 9 days in the month, amounting to 0.707 in., as measured by gauge No.6 partly sunk below the ground; being 2.075 in. less than the average fall for the 65 years, 1841-1905.

TABLE XVII. - DAILY RESULTS OF THE METEOROLOGICAL OBSERVATIONS

Month and Day 1946	BAROMETER Mean of 24 Hourly Values (corrected and reduced to 32° Fahrenheit)	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					
		Highest	Lowest	Daily Range	Mean of 24 Hourly Values	Excess above Average of 65 Years	Mean of 24 Hourly Values	Deducted Mean Daily Value	Mean	Greatest	Least		Highest in Sun's Rays	Lowest on the Grass				
Nov. 1	29.742	43.8	37.0	6.8	41.1	- 5.9	40.1	38.9	2.2	6.2	0.0	91	64.7	33.0	52.8	0.028	0.5	9.7
2	29.824	48.5	36.3	12.2	42.7	- 4.1	41.4	39.6	3.1	5.7	0.0	89	66.9	29.1	52.8	0.076	0.6	9.7
3	29.974	57.4	48.0	9.4	53.4	+ 6.8	51.6	49.9	3.5	5.4	1.7	88	73.1	45.5	52.8	0.000	0.0	9.6
4	30.154	66.4	43.8	22.6	54.1	+ 7.7	50.6	47.2	6.9	16.9	0.8	77	111.5	35.8	52.7	0.000	7.8	9.5
5	30.315	59.1	38.3	20.8	47.6	+ 1.5	45.8	43.7	3.9	12.9	0.0	86	105.9	27.4	52.5	0.000	5.3	9.5
6	30.347	51.3	40.0	11.3	45.6	- 0.2	44.0	42.0	3.6	8.6	0.0	87	90.9	26.9	52.6	0.000	4.0	9.4
7	30.038	48.0	39.4	8.6	43.6	- 1.8	42.7	41.6	2.0	3.3	1.2	92	53.7	35.5	52.2	0.083	0.0	9.4
8	29.779	49.4	42.3	7.1	45.7	+ 0.7	43.7	41.2	4.5	8.2	3.0	84	72.5	37.3	52.1	0.043	1.5	9.3
9	29.771	46.8	42.2	4.6	44.7	+ 0.1	42.6	39.8	4.9	6.8	2.3	83	58.2	36.5	51.9	0.066	0.0	9.2
10	29.908	48.8	41.4	7.4	45.1	+ 0.8	42.9	40.0	5.1	9.2	2.3	83	87.0	35.7	51.8	0.005	3.8	9.2
11	30.023	47.6	44.3	3.3	46.4	+ 2.4	44.1	41.3	5.1	6.5	3.7	82	52.7	39.8	51.7	0.000	0.0	9.1
12	29.821	50.8	44.5	6.3	48.0	+ 4.3	44.9	41.0	7.0	8.4	2.7	77	58.0	42.8	51.6	0.000	0.0	9.1
13	29.624	51.6	42.4	9.2	47.9	+ 4.4	44.6	40.4	7.5	14.6	2.3	75	78.6	32.6	51.4	0.006	4.8	9.0
14	29.426	49.7	42.8	6.9	47.4	+ 4.1	46.6	45.7	1.7	4.7	0.0	94	55.7	38.8	51.3	0.540	0.0	9.0
15	29.311	49.0	44.9	4.1	46.9	+ 3.8	46.3	45.5	1.4	2.3	0.0	95	55.4	42.4	51.3	0.120	0.0	8.9
16	29.429	48.7	40.5	8.2	46.0	+ 3.2	44.7	43.0	3.0	5.8	0.5	90	67.6	35.5	51.2	0.045	0.1	8.9
17	29.137	49.3	38.1	11.2	44.5	+ 1.9	43.7	42.8	1.7	4.4	0.0	93	51.0	27.8	51.2	0.174	0.0	8.8
18	29.042	48.8	42.0	6.8	45.1	+ 2.7	41.1	35.1	10.0	15.5	4.1	69	70.2	34.7	51.1	0.000	1.6	8.8
19	29.143	54.2	42.2	12.0	46.8	+ 4.5	46.0	45.0	1.8	5.4	0.4	94	51.2	34.9	51.0	0.330	0.0	8.7
20	28.992	56.0	49.0	7.0	53.3	+11.1	51.8	50.4	2.9	5.8	1.2	90	74.8	41.8	51.0	0.050	0.5	8.7
21	29.105	53.2	41.4	11.8	48.3	+ 6.2	45.5	42.0	6.3	10.7	1.8	79	72.5	37.0	50.8	0.220	1.3	8.6
22	29.352	51.0	39.6	11.4	46.2	+ 4.1	43.1	39.1	7.1	13.2	2.3	76	66.9	33.0	50.8	0.115	0.8	8.6
23	29.770	53.0	34.3	18.7	46.2	+ 4.2	44.8	43.1	3.1	6.2	0.8	89	61.3	25.6	50.8	0.126	0.0	8.5
24	29.450	53.1	49.2	3.9	51.0	+ 9.0	49.4	47.8	3.2	6.0	1.8	89	57.5	43.5	50.8	0.317	0.0	8.5
25	29.374	54.4	47.2	7.2	50.9	+ 9.0	48.3	45.5	5.4	9.4	3.0	81	81.5	42.0	50.7	0.050	0.9	8.4
26	29.458	51.3	42.2	9.1	46.7	+ 4.9	43.9	40.5	6.2	12.5	2.6	78	84.9	32.7	50.5	0.000	4.8	8.4
27	29.521	54.9	42.4	12.5	51.3	+ 9.6	49.3	47.2	4.1	7.2	1.3	86	69.0	33.0	50.5	0.049	0.1	8.4
28	29.411	51.6	47.7	3.9	50.1	+ 8.6	48.2	46.1	4.0	6.7	1.7	87	59.0	44.0	50.5	0.030	0.0	8.3
29	29.260	50.4	45.6	4.8	48.5	+ 7.3	46.9	45.1	3.4	5.2	1.8	88	91.3	41.8	50.6	0.343	0.6	8.3
30	29.440	51.7	41.3	10.4	45.9	+ 4.9	44.5	42.7	3.2	4.8	1.2	89	57.0	35.6	50.5	0.150	0.0	8.2
Means	29.598	51.7	42.3	9.3	47.4	+ 3.9	45.4	43.1	4.3	7.9	1.5	85.4	70.0	36.1	51.5	Sum 2.966	1.3	8.9
No. of Col. for Ref.	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 29.598 in., being 0.167 in. lower than the average for the 65 years, 1841-1905.

TEMPERATURE OF THE AIR.

The highest in the month was 66°.4 on November 4; the lowest in the month was 34°.3 on November 23; and the range was 32°.1.

The mean of all the highest daily readings in the month was 51°.7, being 2°.8 higher than the average for the 65 years, 1841-1905.

The mean of all the lowest daily readings in the month was 42°.3, being 3°.9 higher than the average for the 65 years, 1841-1905.

The mean of the daily ranges was 9°.3, being 1°.2 less than the average for the 65 years, 1841-1905.

The mean for the month was 47°.4, being 3°.9 higher than the average for the 65 years, 1841-1905.

TABLE XVII. - DAILY RESULTS OF THE METEOROLOGICAL OBSERVATIONS

Month and Day 1946	RECORD OF THE NIGHT SKY				WIND AS DEDUCED FROM SELF-REGISTERING ANEMOMETERS						CLOUDS AND WEATHER			
	Polaris		δ URSÆ MINORIS		OSLER'SS				Robin-son's					
	Duration	Fraction of Total Exposure	Duration	Fraction of Total Exposure	General Direction		Pressure on the Square Foot		Horizontal Move-ment of the Air	0 <sup>h</sup> to 6 <sup>h</sup>	6 <sup>h</sup> to 12 <sup>h</sup>	12 <sup>h</sup> to 18 <sup>h</sup>	18 <sup>h</sup> to 24 <sup>h</sup>	
					A.M.	P.M.	Greatest	Mean of 24 Hourly Measures						
Nov. 1	0.0	0.00	0.0	0.00	NE: Calm	ESE: Calm	1.2	0.06	161	c id <sub>o</sub>	dd r <sub>o</sub> c Ast	c r <sub>o</sub> c Acu	c	
2	0.0	0.00	0.0	0.00	Calm	Calm: S	0.2	0.00	111	c rr d <sub>o</sub> c	c b f c Acu m	c Acu m <sub>o</sub>	c ir m <sub>o</sub>	
3	4.1	0.33	1.6	0.13	SSW: SW	SSW: SW	2.0	0.20	266	c m <sub>o</sub>	c Stcu Ast m <sub>o</sub>	c Acu m <sub>o</sub>	c bc	
4	12.5	1.00	12.5	1.00	SSW: SW	SSW	0.9	0.06	179	bc w	bc b Ci m <sub>o</sub>	b Ci y	b f	
5	2.7	0.22	1.6	0.13	Calm	Calm: ESE	0.6	0.02	92	b f x	b f m	b m f	b c fe	
6	4.1	0.33	3.7	0.30	Calm	E	0.5	0.03	137	bc c f	c b Ci m <sub>o</sub>	bc Frcu Ci b m <sub>o</sub>	b c	
7	5.3	0.43	3.9	0.31	Calm: NNE	NNE: N	4.8	0.32	239	c	c St m f	c Nbst r <sub>o</sub> r f c	c	
8	0.0	0.00	0.0	0.00	N: NNE	NNE: NE	9.0	1.37	475	c r c	c Cicu Frst	po c Stcu c ir	ir c	
9	7.5	0.57	5.2	0.40	NE: NNE	NNE	5.2	0.45	357	c	ir <sub>o</sub> c Acu	c Ast r c	r c	
10	0.0	0.00	0.0	0.00	NNE: NE	NNE: N	3.6	0.30	299	c b	b m <sub>o</sub> bc Frcu	c po c Stcu	c	
11	0.0	0.00	0.0	0.00	NNW: N	N: NNW	0.7	0.04	170	c	c Stcu m	c Stcu m	c m	
12	1.5	0.11	0.3	0.02	WSW	WSW	5.3	0.50	351	c m	c Stcu m <sub>o</sub>	c Ast m <sub>o</sub>	c m <sub>o</sub>	
13	1.2	0.09	0.6	0.05	WSW: W: WNW	W: SW: SSW	2.3	0.15	253	c r c m	c m b Cu m <sub>o</sub>	bc c Ci Stcu m <sub>o</sub>	c	
14	0.0	0.00	0.0	0.00	S: SSE: SE	SE: Calm	0.9	0.05	165	c ir <sub>o</sub>	c Nbst r <sub>o</sub> rr m <sub>o</sub>	rr Nbst m	rr d <sub>o</sub> c r <sub>o</sub> f	
15	0.0	0.00	0.0	0.00	Calm	Calm: E	0.1	0.00	100	c rr <sub>o</sub> f	c r <sub>o</sub> f c Stcu m <sub>o</sub>	c Nbst r m <sub>o</sub>	c d <sub>o</sub>	
16	2.0	0.15	0.1	0.01	NE	N: Calm	1.0	0.06	172	c d <sub>o</sub> d <sub>o</sub>	c r c Stcu m <sub>o</sub>	c Stcu m <sub>o</sub> m	c m f	
17	6.6	0.50	5.5	0.41	Calm: SSW: S	S: WSW	6.3	0.40	322	c f w	c Nbst r c r <sub>o</sub>	rr <sub>o</sub> c Nbst r	r bc	
18	5.5	0.41	4.9	0.37	WSW: W	W: WSW	7.2	1.03	475	bc c	bc c Stcu y	c Stcu y	c b	
19	0.1	0.01	0.1	0.01	SW: Calm: SSE	SE: SW	1.8	0.06	177	b c d <sub>o</sub>	c Nbst rr m <sub>o</sub>	rr m c Nbst	c id <sub>o</sub>	
20	9.2	0.69	8.4	0.64	SSW	SSW: SW	6.3	0.47	367	c id <sub>o</sub>	c Nbst ir <sub>o</sub>	c p c Nbst Ci	c r c b	
21	3.7	0.28	3.2	0.24	SW	SW: SSW	10.6	1.33	484	b	b c R bc Acu	bc c Cumb l	c ir	
22	12.0	0.91	10.5	0.80	SW: WSW	W: WSW	10.5	1.46	502	c ir	c Stcu	c r <sub>o</sub> c Cumb b	b	
23	0.0	0.00	0.0	0.00	SSW: S	SSW	10.3	1.04	403	b x	c Ast Frst d <sub>o</sub>	c Ast dd	d rr q c	
24	11.1	0.82	10.5	0.78	SSW	SSW: SW	12.0	1.92	562	rr c q	c Nbst ir <sub>o</sub>	r c Nbst rr <sub>o</sub>	b	
25	12.0	0.89	11.4	0.84	SW: SSW	SSW: SW	11.5	1.75	529	b c	c q Frcu	c Nbst ir <sub>o</sub> q r b	b c p <sub>o</sub>	
26	9.1	0.68	7.1	0.53	SW: WSW	WSW: SW	5.2	0.57	393	b	b c b Cu	b c b Cu Ci	b	
27	0.0	0.00	0.0	0.00	SSW: SW	SSW: SW	14.0	2.33	583	b w c	c r <sub>o</sub> c Stcu q	c Nbst r <sub>o</sub> r <sub>o</sub> q	r <sub>o</sub> r <sub>o</sub> q c	
28	1.9	0.14	1.4	0.10	SSW: S	S: SSW	6.6	0.83	381	c	c St ir <sub>o</sub>	c ir <sub>o</sub> c Stcu	c	
29	3.1	0.23	0.9	0.07	SSW	SSW: NW	4.6	0.43	339	c r c	c Ir c Acu Frcu	c so-ha prin p c r	r R c	
30	11.3	0.82	9.8	0.71	W: WSW: SW	WSW	5.7	0.40	344	c b c	c Nbst rr r <sub>o</sub>	c ir c Acu b	b c	
Means	4.2	0.32	3.4	0.26	...	...	...	0.59	313					
No. of Col. for Ref.	19	20	21	22	23	24	25	26	27	28	29	30	31	

The mean *Temperature of Evaporation* for the month was 45°.4, being 3°.5 higher than  
 The mean *Temperature of the Dew Point* for the month was 43°.1, being 3°.4 higher than  
 The mean *Degree of Humidity* for the month was 85.4, being 1.2 less than  
 The mean *Elastic Force of Vapour* for the month was 0.280 in., being 0.034 in. greater than  
 The mean amount of *Cloud* for the month (a clear sky being represented by 0 and an overcast sky by 10) was 7.7.  
 The mean proportion of *Sunshine* for the month (constant sunshine being represented by 1) was 0.146. The maximum daily amount of *Sunshine* was 7.8 hours on November 4.  
 The highest reading of the *Solar Radiation Thermometer* was 111°.5 on November 4; and the lowest reading of the *Terrestrial Radiation Thermometer* was 25°.6 on November 23.  
 The *Proportions of Wind* referred to the cardinal points were N.14, E.8, S.35, W.27, calm or nearly calm conditions 16, the whole being represented by 100.  
 The *Greatest Pressure of the Wind* in the month was 14.0 lbs. on the square foot on November 27. The mean daily *Horizontal Movement of the Air* for the month was 313 miles; the greatest daily value was 583 miles on November 27, and the least daily value was 92 miles on November 5.  
 Rain (0.005 in. or over) fell on 22 days in the month, amounting to 2.966 in., as measured by gauge No.6 partly sunk below the ground; being 0.746 in. greater than the average fall for the 65 years, 1841-1906.

TABLE XVII. - DAILY RESULTS OF THE METEOROLOGICAL OBSERVATIONS

Month and Day 1946	BAROMETER Mean of 24 Hourly Values (corrected and reduced to 32° Fahrenheit)	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					
		Highest	Lowest	Daily Range	Mean of 24 Hourly Values	Excess above Average of 65 Years			Highest in Sun's Rays	Lowest on the Grass	Mean			Greatest	Least			
Dec. 1	29.654	51.0	38.9	12.1	44.3	+ 3.4	41.6	37.9	6.4	12.4	1.9	78	68.9	31.5	50.4	0.217	4.7	8.2
2	29.528	48.8	38.0	10.8	44.9	+ 4.0	41.9	37.7	7.2	11.0	3.5	76	61.7	32.0	50.4	0.000	0.1	8.2
3	29.277	45.0	36.5	8.5	41.0	- 0.1	38.6	34.9	6.1	12.0	2.0	79	59.2	30.8	50.1	0.393	2.2	8.2
4	29.523	43.7	35.1	8.6	39.4	- 1.9	37.3	34.0	5.4	8.7	1.7	81	65.0	27.6	49.8	0.000	2.9	8.1
5	29.741	40.1	28.9	11.2	36.4	- 5.1	35.1	32.9	3.5	6.3	0.0	87	50.7	20.6	49.7	0.110	0.0	8.1
6	29.739	43.6	32.7	10.9	39.0	- 2.5	37.8	36.0	3.0	6.8	0.0	89	53.7	25.5	49.5	0.000	0.8	8.1
7	29.414	44.4	28.6	15.8	37.2	- 4.1	36.2	34.5	2.7	3.5	0.8	91	56.9	20.0	49.0	0.130	0.2	8.0
8	28.891	43.0	33.9	9.1	38.8	- 2.2	38.0	36.8	2.0	4.4	0.0	92	46.1	26.7	48.7	0.481	0.0	8.0
9	28.969	41.9	39.0	2.9	40.7	+ 0.1	39.4	37.7	3.0	4.5	0.9	88	47.4	33.4	48.6	0.020	0.0	8.0
10	29.651	40.9	29.3	11.6	36.1	- 4.3	35.1	33.3	2.8	4.5	0.0	90	46.6	23.6	48.2	0.000	0.5	8.0
11	29.551	47.7	33.5	14.2	41.6	+ 1.4	40.8	39.8	1.8	3.4	0.0	93	49.0	30.5	47.9	0.090	0.0	7.9
12	29.876	41.0	28.1	12.9	35.5	- 4.8	34.7	33.3	2.2	5.1	0.0	92	41.0	23.7	47.6	0.000	0.4	7.9
13	30.154	40.8	24.1	16.7	32.8	- 7.7	31.9	30.4	2.4	8.6	0.0	90	44.6	18.8	47.3	0.000	1.1	7.9
14	30.318	43.6	37.5	6.1	41.0	+ 0.3	40.1	39.0	2.0	4.2	0.5	92	47.6	35.4	47.1	0.007	0.0	7.9
15	30.523	38.0	27.8	10.2	32.3	- 8.5	29.7	25.3	7.0	12.2	3.1	72	48.6	21.3	47.0	0.000	2.8	7.9
16	30.517	33.0	26.2	6.8	30.1	-10.6	27.9	23.9	6.2	8.1	3.7	75	33.8	20.6	46.7	0.000	0.0	7.8
17	30.420	35.8	30.0	5.8	32.8	- 7.6	31.1	28.4	4.4	7.8	2.5	83	47.2	21.0	46.7	0.000	0.7	7.8
18	30.400	34.9	27.1	7.8	31.1	- 8.9	29.5	26.9	4.2	7.3	1.8	82	51.7	14.6	46.3	0.000	2.1	7.8
19	30.154	34.9	29.4	5.5	32.2	- 7.3	31.5	30.4	1.8	2.7	0.0	92	34.6	23.7	46.0	0.163	0.0	7.8
20	30.083	33.6	26.2	7.4	29.9	- 9.1	28.7	26.6	3.3	5.6	2.2	86	44.2	19.6	45.8	0.000	3.4	7.8
21	30.049	27.0	19.0	8.0	24.0	-14.7	23.3	21.7	2.3	3.3	1.0	90	30.0	13.8	45.4	0.004*	0.0	7.8
22	29.810	42.6	27.0	15.6	38.2	- 0.2	37.0	35.1	3.1	3.6	0.6	89	48.9	24.0	45.2	0.016	0.0	7.8
23	29.550	41.0	35.5	5.5	38.2	0.0	37.0	35.1	3.1	5.4	1.1	89	45.0	34.5	45.0	0.025	0.0	7.8
24	29.728	40.7	29.7	11.0	36.9	- 1.3	36.0	34.4	2.5	4.4	0.0	91	46.5	20.0	44.8	0.069	0.0	7.8
25	29.649	46.3	29.5	16.8	41.1	+ 2.7	40.0	38.6	2.5	4.0	0.0	90	52.2	19.6	44.9	0.048	0.0	7.8
26	29.458	45.7	38.0	7.7	42.2	+ 3.6	40.3	37.6	4.6	8.4	1.8	84	64.1	31.4	44.8	0.282	3.5	7.8
27	29.469	45.3	36.2	9.1	41.6	+ 2.8	39.7	37.0	4.6	8.4	1.1	83	52.3	29.4	44.7	0.000	0.0	7.9
28	29.877	45.6	38.5	7.1	41.8	+ 2.9	40.0	37.5	4.3	7.0	2.0	84	55.9	32.6	44.7	0.000	0.4	7.9
29	30.032	41.5	36.3	5.2	38.9	- 0.1	38.2	37.2	1.7	4.1	0.0	93	45.7	28.5	44.7	0.000	0.0	7.9
30	29.820	46.0	32.2	13.8	41.7	+ 2.8	40.5	38.9	2.8	5.9	0.7	90	55.0	25.3	44.8	0.042	0.0	7.9
31	29.547	44.8	31.9	12.9	39.4	+ 0.7	37.9	35.8	3.6	10.2	0.0	86	54.3	25.0	44.8	0.168	0.9	7.9
Means	29.786	41.7	31.8	9.9	37.5	- 2.5	36.0	33.8	3.6	6.6	1.1	86.4	49.9	25.3	47.0	Sum 2.265	0.9	7.9
No. of Col. for Ref.	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 29.786 in., being 0.006 in. lower than the average for the 65 years, 1841-1905.

\* Rainfall (Column 16). The amount entered on December 21 is derived from hoar frost.

TEMPERATURE OF THE AIR.

The highest in the month was 51°.0 on December 1; the lowest in the month was 19°.0 on December 21; and the range was 32°.0.

The mean of all the highest daily readings in the month was 41°.7, being 2°.5 lower than the average for the 65 years, 1841-1905.

The mean of all the lowest daily readings in the month was 31°.8, being 3°.7 lower than the average for the 65 years, 1841-1905.

The mean of the daily ranges was 9°.9, being 1°.2 greater than the average for the 65 years, 1841-1905.

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

TABLE XVII. - DAILY RESULTS OF THE METEOROLOGICAL OBSERVATIONS

Month and Day 1946	RECORD OF THE NIGHT SKY				WIND AS DEDUCED FROM SELF-REGISTERING ANEMOMETERS					CLOUDS AND WEATHER			
	Polaris		δ URSÆ MINORIS		OSLER'S			Pressure on the Square Foot	Robinson's				
	Duration	Fraction of Total Exposure	Duration	Fraction of Total Exposure	General Direction		Greatest						
					A.M.	P.M.		Oh to 6h	6h to 12h	12h to 18h	18h to 24h		
Dec. 1	8.2	0.60	7.4	0.54	WSW	WSW:SSW	15.0	0.91	412	c b m	b Ci m	bc Cist so-ha c r	r q R b
2	4.7	0.34	3.1	0.22	WSW:SW	WSW:SW	5.3	0.74	408	b	c Ast Stcu	c Ast Stcu mo	bc c mo
3	9.3	0.68	4.1	0.29	SSW:WSW	WSW:W	7.0	0.48	318	c RR b mo	bc Acu mo	c Stcu b f	b f mo
4	12.8	0.93	12.5	0.91	WNW:NNW	NNW	3.7	0.28	316	b x c mo	c Cist Frcu b mo	b Frcu mo m	b m
5	6.1	0.45	5.4	0.39	Calm:WSW	Calm:SW	0.5	0.02	144	b m f x	b c Acu ff	c Ast ff	c RR
6	12.0	0.87	10.1	0.74	WSW	WNW:WSW	3.0	0.13	260	c b x	bc Cist Cicu f m	bc Acu Cicu m	b m f b
7	10.5	0.76	8.6	0.63	SW:SSE	SW	3.2	0.17	253	b x c	c Nbst rr	r c Stcu	c Ro b
8	1.2	0.08	1.0	0.07	SSW:SSE:SE	SE:E	5.7	0.35	294	b x	c r c St	c Nbst r RR	r c do
9	5.5	0.40	3.7	0.27	NE:NW	NW	3.7	0.58	386	c	c Stcu	c Ir c Stcu	c
10	2.2	0.16	0.0	0.00	NW	Calm	1.6	0.07	168	c b x	b c Acu ff	b ff	b x f f f
11	12.3	0.90	11.7	0.85	SE	S:SW:W	4.5	0.38	295	f c	c r o r c Nbst	c r c Nbst b	b m
12	6.1	0.44	1.9	0.14	W:WSW	Calm	0.3	0.02	153	b m x	b ff x	b ff x	b f F x
13	2.6	0.19	0.0	0.00	Calm	Calm:SW	0.0	0.02	111	f F x	F b f x	bc Cist so-ha c f	f c
14	0.0	0.00	0.0	0.00	Calm	Calm:E	1.7	0.03	118	c Iro	iro c Acu ff	c f F g c f	c do c
15	9.0	0.64	6.6	0.47	E	E:NE	5.5	0.51	313	c	c Stcu	b c Acu b	b c b
16	0.7	0.05	0.2	0.01	NE:ENE	NE	6.7	0.68	409	bc c	c Nbst iso	c Stcu	c
17	12.5	0.89	12.0	0.86	NE	NE	4.5	0.59	400	c x	c Frcu Stcu	c b Frcu bc	bc b
18	6.1	0.43	5.5	0.39	NE	NE	5.0	0.47	343	b x mo	b Ci x	b Frcu c x	c b x c
19	8.9	0.64	8.1	0.57	NE:NW	WSW:CaIm:NE	1.4	0.05	183	b x c	c Nbst ss ff	ss o f F m	c b
20	11.5	0.82	9.6	0.69	NE	NNE	0.6	0.08	235	b x m	b Ci x mo	b Ci x mo	b x mo
21	5.1	0.36	1.3	0.09	NE:CaIm	Calm:SW	0.2	0.01	124	b c f x	c b ff x	b ff x	b f x c m
22	0.0	0.00	0.0	0.00	SSW	SSW	4.0	0.37	369	c m	c Cicu m	c St do	ddo c
23	0.0	0.00	0.0	0.00	SSW:S	S:SSE	2.8	0.25	309	c	c Stcu	c Stcu do	do r c r
24	10.8	0.77	7.1	0.51	CaIm:NNW	W:SW	1.0	0.05	162	rr f m	c Stcu m	c Frcu b m f	b f x
25	11.3	0.81	6.8	0.48	SSW:SW	SW:WSW	10.5	1.16	451	b x c	c Ast Frst	c Nbst r o r c	c b
26	7.3	0.52	7.0	0.50	SW:WSW	SW:SSW	6.4	0.34	366	b	b x c Ci Cicu	c Nbst R	RR b c
27	2.7	0.20	0.9	0.07	WSW:W	NW:WNW	1.3	0.13	264	c b c	c do c Stcu ff	c Stcu f m do	do c
28	5.0	0.36	4.0	0.29	WNW:W	W:NNW	2.8	0.12	242	c	c bc Acu ff	c b c f m	c Ro c b c
29	0.0	0.00	0.0	0.00	N:CaIm	CaIm:SSW	0.2	0.02	113	c b c	c Frcu Cist ff	f FF	F c m
30	6.7	0.49	0.9	0.06	SSW:NNW	NNW:CaIm	1.6	0.06	184	c r do m	c Nbst f m	P bc Acu m	ff x
31	13.7	0.99	13.6	0.99	SSW:W	WNW:W	2.3	0.16	288	f x b c	c rr c Stcu	c Stcu bc b	b
Means	6.6	0.48	4.9	0.36	...	...	...	0.30	271				
No. of Col. for Ref.	19	20	21	22	23	24	25	26	27	28	29	30	31

The mean *Temperature of Evaporation* for the month was 36°.0, being 2°.5 lower than  
 The mean *Temperature of the Dew Point* for the month was 33°.8, being 2°.6 lower than  
 The mean *Degree of Humidity* for the month was 86.4, being 1.1 less than  
 The mean *Elastic Force of Vapour* for the month was 0.194 in., being 0.022 in. less than  
 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 0.109. The maximum daily amount of *Sunshine* was 4.7 hours on December 1.  
 The highest reading of the *Solar Radiation Thermometer* was 68°.9 on December 1; and the lowest reading of the *Terrestrial Radiation Thermometer* was 13°.8 on December 21.  
 The *Proportions of Wind* referred to the cardinal points were N.17, E.14, S.22, W.32, calm or nearly calm conditions 15, the whole month being represented by 100.  
 The *Greatest Pressure of the Wind* in the month was 15.0 lbs. on the square foot on December 1. The mean daily *Horizontal Movement of the Air* for the month was 271 miles; the greatest daily value was 451 miles on December 25, and the least daily value was 111 miles on December 13.  
 Rain (0.005 in. or over) fell on 16 days in the month, amounting to 2.265 in., as measured by gauge No.6 partly sunk below the ground; being 0.438 in. greater 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., 1946.	Reading	U.T., 1946.	Reading	U.T., 1946.	Reading	U.T., 1946.	Reading	U.T., 1946.	Reading	U.T., 1946.	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		September		September	
3. 10. 0	30.391	9. 20. 25	29.009	4. 9. 0	30.072	7. 17. 25	29.830	7. 20. 35	29.705	4. 3. 45	29.153
11. 2. 45	29.579	11. 22. 0	29.444	9. 0. 15	30.063	14. 1. 15	29.588	10. 7. 40	30.024	8. 16. 0	29.552
15. 18. 45	30.698	18. 23. 0	29.694	17. 22. 40	29.807	20. 18. 0	29.660	12. 10. 0	29.975	11. 5. 0	29.699
21. 23. 30	30.240	23. 5. 0	29.722	22. 22. 15	29.974	27. 3. 15	29.301	15. 22. 25	29.958	14. 21. 0	29.625
24. 10. 15	30.185	26. 23. 15	29.713	29. 22. 45	29.640			19. 10. 30	29.755	18. 17. 35	29.325
27. 23. 20	29.893	28. 23. 57	29.399					21. 20. 0	30.100	20. 15. 40	28.911
29. 11. 30	29.588	30. 0. 35	28.997					25. 22. 15	30.026	23. 15. 25	29.761
31. 10. 40	29.766							28. 1. 0	30.044	27. 2. 45	29.872
				June		June		30. 19. 0	29.948	29. 14. 15	29.783
						2. 2. 15	28.990				
February		February				5. 16. 15	29.528	October		October	
				4. 9. 0	29.831	8. 16. 40	29.589				
		2. 13. 30	29.143	7. 8. 50	29.931	10. 10. 0	29.327			1. 20. 25	29.766
3. 5. 0	29.518	3. 17. 30	29.317	9. 9. 50	29.782	16. 22. 10	29.670	2. 10. 0	29.941	3. 16. 45	29.764
4. 2. 30	29.492	4. 13. 10	29.334	13. 22. 20	30.060	18. 4. 25	29.625	4. 12. 20	29.878	6. 2. 30	29.779
5. 23. 45	29.867	6. 9. 20	29.746	17. 17. 55	29.773	19. 9. 15	29.683	10. 11. 0	30.247	13. 4. 20	29.936
6. 22. 55	29.962	8. 22. 5	28.982	18. 21. 10	29.743	26. 6. 40	29.642	16. 9. 5	30.103	20. 17. 40	29.376
15. 10. 50	30.548	16. 19. 40	30.281	22. 8. 15	30.253	28. 5. 0	29.753	24. 21. 5	30.056	27. 4. 35	29.489
17. 10. 35	30.343	20. 14. 5	29.645	27. 7. 15	29.914			29. 7. 45	30.097	30. 14. 40	29.961
21. 23. 0	30.012	23. 9. 5	29.150					31. 10. 10	30.040		
25. 10. 35	29.733	26. 16. 0	29.564	July		July		November		November	
27. 11. 0	29.639	28. 16. 0	29.518								
				1. 9. 0	30.158	4. 4. 20	29.504	6. 8. 55	30.393	1. 12. 45	29.715
March		March		7. 22. 0	30.315	14. 13. 0	29.573	9. 1. 50	29.823	8. 15. 15	29.710
				15. 7. 55	29.676	16. 6. 45	29.291	11. 21. 30	30.039	9. 17. 0	29.712
1. 20. 20	29.682	3. 9. 0	29.317	21. 11. 0	29.865	22. 4. 0	29.760	16. 19. 10	29.504	15. 15. 10	29.260
7. 11. 25	29.767	8. 16. 15	29.669	23. 7. 45	29.973	24. 13. 15	29.666	19. 0. 10	29.209	17. 18. 15	28.845
10. 19. 30	29.873	13. 5. 0	29.335	25. 21. 0	29.983	26. 16. 12	29.503	21. 21. 15	29.169	20. 18. 55	28.886
16. 23. 15	30.276	21. 0. 10	29.758	28. 7. 10	29.976	30. 18. 0	29.679	23. 2. 5	29.864	22. 5. 25	29.033
21. 12. 0	29.921	22. 15. 20	29.321	30. 0. 20	29.858			25. 0. 45	29.475	24. 15. 10	29.322
27. 8. 35	30.207	29. 16. 0	30.014					26. 22. 40	29.630	25. 21. 20	29.311
30. 23. 35	30.202			August		August		30. 4. 30	29.500	29. 7. 10	29.199
										30. 12. 30	29.334
				1. 9. 45	30.011	5. 17. 15	29.627	December		December	
April		April		6. 20. 30	29.834	8. 14. 35	29.451				
				9. 7. 20	29.583	10. 13. 0	29.128	1. 12. 15	29.812	3. 14. 40	29.221
7. 1. 0	30.356	4. 16. 0	29.790	11. 10. 15	29.782	13. 0. 45	29.284	5. 8. 20	29.783	6. 0. 55	29.689
10. 21. 25	30.261	8. 17. 0	29.920	13. 22. 15	29.911	17. 2. 25	29.447	6. 18. 40	29.776	8. 20. 45	28.543
14. 7. 50	29.931	12. 16. 20	29.823	18. 8. 25	29.823	20. 2. 0	29.644	10. 18. 20	29.771	11. 15. 15	29.386
16. 9. 30	29.926	15. 16. 0	29.823	22. 12. 0	29.953	25. 17. 5	29.595	15. 19. 40	30.589	23. 17. 0	29.493
19. 9. 45	30.299	17. 16. 5	29.769	26. 22. 15	29.703	28. 23. 35	29.162	24. 21. 15	29.887	25. 16. 30	29.476
22. 9. 20	30.329	20. 18. 0	30.103	31. 21. 50	29.690			26. 8. 20	29.589	26. 20. 45	29.239
28. 8. 40	29.480	25. 17. 40	29.330					29. 10. 40	30.084	31. 10. 55	29.405
		29. 12. 0	29.305								

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 reading to reduce to sea level.

TABLE XVIII(B). - HIGHEST AND LOWEST READINGS OF THE BAROMETER IN EACH MONTH FOR THE YEAR 1946

	January	February	March	April	May	June	July	August	September	October	November	December
HIGHEST	in. 30.698	in. 30.548	in. 30.276	in. 30.356	in. 30.072	in. 30.253	in. 30.315	in. 30.011	in. 30.100	in. 30.247	in. 30.393	in. 30.589
LOWEST	28.997	28.982	29.317	29.305	29.301	28.990	29.291	29.128	28.911	29.376	28.845	28.543
RANGE	1.701	1.566	0.959	1.051	0.771	1.263	1.024	0.883	1.189	0.871	1.548	2.046

The highest reading in the year was 30.698 ins. on January 15. The lowest reading in the year was 28.543 ins. on December 8. The range of reading in the year was 2.155 ins.

TABLE XIX. - MONTHLY RESULTS OF METEOROLOGICAL ELEMENTS FOR THE YEAR 1946

MONTH 1946	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			
January	29.942	55.5	20.5	35.0	42.2	33.6	8.5	38.1	-0.5	36.3	33.5	83.0
February	29.822	55.7	20.0	35.7	48.5	38.1	10.4	43.7	+4.1	41.1	37.3	78.4
March	29.826	65.6	23.5	42.1	48.2	34.7	13.5	41.2	-0.7	38.5	34.5	76.9
April	29.904	79.7	27.1	52.6	61.3	40.6	20.7	51.0	+3.7	46.3	40.4	67.8
May	29.762	70.0	35.0	35.0	60.9	43.3	17.5	51.6	-1.4	48.0	43.8	75.1
June	29.779	75.3	44.3	31.0	66.6	49.6	17.0	57.2	-2.2	53.1	49.2	74.8
July	29.844	87.0	43.8	43.2	74.2	53.7	20.5	63.6	+1.0	58.2	53.8	71.0
August	29.688	83.3	44.8	38.5	69.7	52.4	17.3	60.1	-1.5	56.1	52.7	76.8
September	29.740	77.1	44.7	32.4	65.5	51.6	13.9	58.0	+0.8	55.1	52.6	82.1
October	29.902	71.0	29.6	41.4	56.8	45.2	11.6	50.9	+0.9	48.1	44.8	79.9
November	29.598	66.4	34.3	32.1	51.7	42.3	9.3	47.4	+3.9	45.4	43.1	85.4
December	29.786	51.0	19.0	32.0	41.7	31.8	9.9	37.5	-2.5	36.0	33.8	86.4
Means	29.799	87.0	19.0	Annual Range 68.0	57.3	43.1	14.2	50.0	+0.5	46.8	43.3	78.1

MONTH 1946	Mean Elastic Force of Vapour	Mean Tempera- ture of the Earth 4 feet below the Surface of the Soil	Mean Amount of Cloud (0-10)	RAIN		WIND								Number of Calm or Nearly Calm Hours	Mean Daily Pressure on the Square Foot	From Robin- son's Anemo- meter  Mean Daily Horizontal Movement of the Air
				Number of Rainy Days (0.005 in. or over)	Amount collected in Gauge No. 6, whose receiving surface is 5 inches above the Ground	From Osler's Anemometer										
						Number of Hours of Prevalence of each Wind referred to different Points of Azimuth										
						N.	N.E.	E.	S.E.	S.	S.W.	W.	N.W.			
January	0.192	44.8	7.2	11	1.615	14	67	95	31	125	204	76	8	124	0.58	303
February	0.223	44.7	7.4	17	2.487	56	23	13	1	5	146	193	126	109	1.00	367
March	0.200	43.0	7.1	11	1.213	62	167	143	18	27	109	33	11	174	0.32	251
April	0.252	46.7	5.0	11	1.703	77	99	61	17	53	151	44	28	190	0.17	210
May	0.287	49.9	6.6	17	3.152	84	241	129	28	69	68	8	9	108	0.39	274
June	0.352	53.4	7.4	24	2.517	26	14	7	6	41	326	140	24	136	0.33	255
July	0.417	57.3	6.4	13	2.393	30	6	31	19	67	283	117	44	147	0.23	239
August	0.400	58.3	7.2	18	4.232	30	10	9	20	102	300	96	53	124	0.42	261
September	0.399	57.4	7.4	18	2.471	4	6	32	14	132	335	109	24	64	0.38	270
October	0.298	55.8	7.5	9	0.707	71	198	147	53	28	20	43	31	153	0.20	220
November	0.280	51.5	7.7	22	2.966	65	60	17	23	132	216	75	16	116	0.59	313
December	0.194	47.0	6.2	16	2.265	39	99	37	29	69	170	109	83	109	0.30	271
Sums	...	...	...	187	27.721	558	990	721	259	850	2328	1043	457	1554	...	...
Means	0.291	50.8	6.9	...	...	...	...	...	...	...	...	...	...	...	0.41	269

The greatest recorded pressure of the wind on the square foot in the year was 31.0 lbs. on Aug. 28.

The greatest recorded daily horizontal movement of the air in the year was 737 miles on Feb. 8.

The least recorded daily horizontal movement of the air in the year was 77 miles on Mar. 24.

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	
0 <sup>h</sup>	in. 29.936	in. 29.843	in. 29.825	in. 29.918	in. 29.782	in. 29.775	in. 29.859	in. 29.698	in. 29.747	in. 29.906	in. 29.623	in. 29.789	in. 29.808	
1	29.933	29.840	29.823	29.914	29.777	29.769	29.855	29.692	29.747	29.903	29.620	29.788	29.805	
2	29.938	29.838	29.817	29.908	29.773	29.763	29.851	29.688	29.743	29.898	29.617	29.789	29.802	
3	29.939	29.831	29.814	29.906	29.768	29.759	29.846	29.683	29.738	29.893	29.610	29.785	29.798	
4	29.940	29.827	29.813	29.902	29.764	29.761	29.842	29.679	29.736	29.892	29.603	29.783	29.795	
5	29.938	29.824	29.814	29.905	29.764	29.764	29.842	29.680	29.736	29.892	29.599	29.783	29.795	
6	29.941	29.819	29.820	29.912	29.767	29.771	29.847	29.682	29.743	29.896	29.597	29.785	29.798	
7	29.948	29.820	29.827	29.918	29.769	29.778	29.850	29.686	29.748	29.903	29.599	29.788	29.803	
8	29.959	29.822	29.832	29.923	29.770	29.781	29.851	29.689	29.753	29.910	29.604	29.793	29.807	
9	29.970	29.819	29.835	29.925	29.770	29.782	29.849	29.690	29.757	29.917	29.606	29.800	29.810	
10	29.975	29.821	29.837	29.923	29.768	29.779	29.848	29.689	29.755	29.917	29.606	29.801	29.810	
11	29.971	29.818	29.837	29.917	29.765	29.779	29.845	29.687	29.749	29.915	29.599	29.795	29.806	
12	29.963	29.815	29.832	29.910	29.763	29.777	29.842	29.686	29.745	29.906	29.587	29.787	29.801	
13	29.952	29.807	29.824	29.905	29.759	29.776	29.839	29.684	29.737	29.899	29.580	29.778	29.795	
14	29.944	29.801	29.817	29.894	29.754	29.777	29.836	29.681	29.729	29.894	29.573	29.770	29.789	
15	29.940	29.800	29.810	29.884	29.747	29.776	29.833	29.680	29.722	29.891	29.571	29.769	29.785	
16	29.937	29.801	29.809	29.879	29.741	29.775	29.827	29.681	29.714	29.893	29.573	29.773	29.784	
17	29.932	29.807	29.814	29.878	29.740	29.777	29.825	29.681	29.716	29.895	29.577	29.777	29.785	
18	29.928	29.818	29.824	29.881	29.741	29.780	29.828	29.685	29.721	29.902	29.585	29.780	29.789	
19	29.927	29.825	29.833	29.888	29.748	29.786	29.834	29.691	29.733	29.906	29.593	29.785	29.796	
20	29.924	29.827	29.838	29.900	29.758	29.794	29.842	29.698	29.741	29.908	29.600	29.789	29.802	
21	29.924	29.834	29.841	29.904	29.764	29.804	29.853	29.700	29.747	29.909	29.607	29.791	29.806	
22	29.922	29.835	29.843	29.906	29.768	29.807	29.856	29.699	29.751	29.907	29.611	29.794	29.808	
23	29.921	29.840	29.844	29.908	29.770	29.807	29.856	29.695	29.755	29.904	29.613	29.797	29.809	
24	29.918	29.846	29.843	29.907	29.767	29.803	29.853	29.689	29.755	29.902	29.612	29.796	29.808	
Means	0 <sup>h</sup> -23 <sup>h</sup>	29.942	29.822	29.826	29.904	29.762	29.779	29.844	29.688	29.740	29.902	29.598	29.786	29.799
	1 <sup>h</sup> -24 <sup>h</sup>	29.941	29.822	29.827	29.904	29.761	29.780	29.844	29.687	29.740	29.902	29.598	29.786	29.799
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 <sup>h</sup>	° 37.5	° 41.9	° 37.8	° 45.3	° 46.4	° 52.5	° 57.8	° 56.0	° 55.4	° 48.6	° 45.8	° 36.2	° 46.8	
1	37.3	41.8	37.6	44.6	45.8	51.8	56.7	55.2	55.0	48.3	45.8	36.1	46.3	
2	37.1	41.7	37.4	43.9	45.0	51.2	56.0	54.7	54.7	47.9	45.5	35.9	45.9	
3	36.8	41.4	37.1	43.3	44.5	50.9	55.4	54.2	54.2	47.8	45.5	35.8	45.6	
4	36.4	41.1	36.5	42.8	44.5	50.8	55.1	53.7	53.8	47.6	45.3	35.4	45.3	
5	36.3	41.4	36.7	42.7	45.0	51.1	55.4	53.6	53.8	47.8	45.0	35.4	45.3	
6	36.4	41.6	36.8	42.9	46.7	52.6	57.5	54.3	53.9	47.9	45.4	35.8	46.0	
7	36.4	41.8	37.4	45.0	48.9	54.8	60.4	56.6	54.8	48.3	45.8	36.1	47.2	
8	36.3	42.1	39.1	48.4	51.0	57.1	63.3	59.2	56.9	49.6	46.3	36.4	48.8	
9	36.7	43.2	41.2	52.1	53.4	59.6	65.8	61.9	59.2	51.3	47.2	37.0	50.7	
10	37.8	44.2	43.4	55.3	54.9	61.2	67.9	63.7	61.0	53.0	48.5	38.0	52.4	
11	39.2	45.6	45.0	57.1	55.9	61.8	69.2	64.4	62.1	54.4	49.4	39.0	53.6	
12	40.3	46.6	46.0	58.4	57.0	62.5	70.2	64.9	63.0	55.4	50.3	40.0	54.5	
13	40.8	47.5	46.7	59.4	57.9	63.1	71.3	66.1	63.2	55.9	50.7	40.6	55.3	
14	41.1	47.4	47.3	60.0	58.9	63.8	71.8	67.0	63.1	55.8	50.6	40.6	55.6	
15	40.3	47.1	47.2	60.0	58.8	63.9	71.1	67.1	63.0	55.2	50.1	40.0	55.3	
16	39.7	46.6	46.6	59.4	58.5	63.2	70.9	66.5	62.1	54.1	49.5	39.4	54.7	
17	39.0	45.9	45.3	58.3	57.7	61.9	70.1	65.5	61.2	53.1	48.6	38.9	53.8	
18	38.4	45.0	43.7	56.1	56.5	60.5	68.8	63.9	59.6	51.9	48.1	38.4	52.6	
19	38.1	44.3	42.0	53.6	54.2	58.7	66.6	61.7	57.7	51.0	47.7	37.7	51.1	
20	38.2	43.6	40.9	51.2	52.0	57.1	64.2	59.8	56.9	50.2	47.0	37.1	49.9	
21	38.3	42.7	40.0	49.5	49.9	55.5	62.1	58.4	56.2	49.6	46.5	36.6	48.8	
22	38.3	42.1	39.2	48.2	48.4	54.6	60.3	57.6	55.9	49.1	46.2	36.4	48.0	
23	38.2	41.4	38.6	46.9	47.1	53.8	58.8	56.7	55.6	48.6	46.1	36.1	47.3	
24	38.1	41.2	38.2	45.5	46.4	52.9	57.6	56.0	55.4	48.2	45.8	35.9	46.8	
Means	0 <sup>h</sup> -23 <sup>h</sup>	38.1	43.7	41.2	51.0	51.6	57.2	63.6	60.1	58.0	50.9	47.4	37.5	50.0
	1 <sup>h</sup> -24 <sup>h</sup>	38.1	43.6	41.2	51.0	51.6	57.3	63.6	60.1	58.0	50.9	47.4	37.4	50.0
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 <sup>h</sup>	36.1	40.0	36.4	43.3	45.0	50.8	55.5	54.1	53.8	46.9	44.5	35.1	45.1	
1	36.0	40.0	36.3	42.7	44.6	50.5	54.9	53.7	53.5	46.7	44.5	35.0	44.9	
2	35.7	39.9	36.1	42.3	44.2	50.4	54.5	53.4	53.3	46.5	44.4	35.0	44.6	
3	35.5	39.9	35.8	42.1	43.9	50.2	54.2	53.1	53.0	46.5	44.3	34.8	44.4	
4	35.1	39.7	35.5	41.8	43.7	49.8	53.8	52.9	52.8	46.6	44.1	34.6	44.2	
5	35.0	39.8	35.4	41.2	43.9	49.9	53.9	52.7	52.6	46.4	44.0	34.7	44.1	
6	34.9	39.9	35.2	41.1	45.1	50.8	55.4	53.0	52.6	46.2	44.2	34.8	44.4	
7	34.8	40.0	35.7	42.7	46.5	52.1	57.0	54.5	53.3	46.5	44.2	34.9	45.2	
8	34.7	40.3	37.0	45.0	47.7	53.3	58.4	56.0	55.0	47.4	44.6	35.1	46.2	
9	35.2	41.2	38.6	47.3	49.1	54.4	59.4	57.3	56.1	48.5	45.3	35.7	47.3	
10	36.0	41.8	39.9	49.0	50.1	55.0	60.5	58.2	57.1	49.5	46.1	36.5	48.3	
11	36.9	42.5	40.9	49.8	50.5	55.2	61.1	58.5	57.5	50.1	46.7	37.2	48.9	
12	37.5	42.9	41.4	50.1	51.1	55.3	61.4	58.6	57.7	50.6	47.2	37.8	49.3	
13	37.9	43.2	41.7	50.4	51.6	55.8	61.8	59.1	57.7	50.8	47.5	38.3	49.7	
14	38.0	43.3	42.0	50.6	52.0	56.2	62.2	59.4	57.7	50.7	47.4	38.3	49.8	
15	37.6	43.1	41.9	50.7	51.8	56.0	61.7	59.1	57.8	50.2	47.1	37.8	49.6	
16	37.3	42.7	41.6	50.4	51.7	55.5	61.5	58.8	57.4	49.5	46.7	37.4	49.2	
17	36.8	42.3	41.0	49.9	51.1	55.2	61.1	58.4	56.7	49.1	46.2	37.0	48.7	
18	36.6	41.7	40.1	49.1	50.5	54.7	60.5	57.8	55.9	48.5	46.0	36.7	48.2	
19	36.5	41.3	39.2	48.2	49.4	54.1	59.5	57.0	54.9	48.1	45.8	36.2	47.5	
20	36.6	40.9	38.6	47.1	48.4	53.3	58.4	56.0	54.5	47.6	45.4	35.8	46.9	
21	36.8	40.4	38.0	46.0	47.3	52.5	57.5	55.5	54.2	47.3	45.0	35.5	46.3	
22	36.8	39.9	37.6	45.0	46.4	52.1	56.7	55.0	54.0	46.9	44.8	35.3	45.9	
23	36.7	39.4	37.1	44.3	45.5	51.7	55.9	54.5	53.8	46.7	44.6	35.0	45.4	
24	36.7	39.2	36.8	43.5	44.9	51.3	55.3	54.1	53.8	46.5	44.4	34.8	45.1	
Means	0 <sup>h</sup> -23 <sup>h</sup>	36.3	41.1	38.5	46.3	48.0	53.1	58.2	56.1	55.1	48.1	45.4	36.0	46.8
	1 <sup>h</sup> -24 <sup>h</sup>	36.3	41.1	38.5	46.3	48.0	53.1	58.2	56.1	55.1	48.0	45.4	36.0	46.8
No. of Days Employed	31	28	31	30	31	30	31	31	30	31	30	31	..	

TABLE XXIII. - MONTHLY MEAN TEMPERATURE 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 <sup>h</sup>	33.9	37.3	34.3	40.7	43.3	49.1	53.6	52.5	52.4	45.0	42.9	33.1	43.2	
1	33.9	37.5	34.3	40.2	43.1	49.3	53.4	52.4	52.2	44.9	42.9	33.0	43.1	
2	33.5	37.4	34.0	40.3	43.3	49.6	53.2	52.3	52.1	44.9	43.1	33.4	43.1	
3	33.4	37.9	33.7	40.5	43.3	49.5	53.2	52.2	52.0	45.0	42.9	33.0	43.1	
4	32.9	37.8	33.7	40.5	42.8	48.8	52.7	52.2	52.0	45.4	42.8	33.2	42.9	
5	32.8	37.6	33.3	39.1	42.6	48.7	52.6	51.9	51.5	44.8	42.9	33.4	42.6	
6	32.4	37.5	32.6	38.5	43.2	49.1	53.6	51.9	51.4	44.3	42.7	33.0	42.5	
7	32.1	37.5	33.0	39.6	43.8	49.6	54.2	52.8	52.0	44.5	42.2	32.8	42.8	
8	32.0	37.8	33.7	40.8	44.0	49.7	54.5	53.4	53.5	45.0	42.5	32.9	43.3	
9	32.8	38.4	34.5	41.8	44.5	49.6	54.5	53.6	53.6	45.5	43.1	33.6	43.8	
10	33.2	38.6	34.7	41.9	45.1	49.4	54.9	53.8	53.9	45.8	43.4	34.3	44.1	
11	33.2	38.3	34.8	41.7	44.9	49.1	55.1	53.8	53.8	45.7	43.6	34.5	44.0	
12	32.9	38.1	34.7	40.9	45.0	48.7	54.8	53.6	53.4	45.7	43.6	34.4	43.8	
13	33.2	37.5	34.3	40.3	45.2	49.3	54.7	53.5	53.2	45.5	44.0	34.8	43.8	
14	33.0	37.9	34.3	40.0	44.9	49.5	55.1	53.4	53.3	45.4	43.9	34.8	43.8	
15	33.3	37.9	34.2	40.3	44.5	49.0	54.7	52.7	53.6	45.0	43.6	34.4	43.6	
16	33.5	37.5	34.2	40.3	44.7	48.5	54.4	52.6	53.6	44.7	43.5	34.3	43.5	
17	33.3	37.4	34.7	40.4	44.2	49.0	54.3	52.6	53.0	44.9	43.5	34.1	43.5	
18	33.8	37.0	34.7	41.1	44.1	49.5	54.1	52.8	52.8	44.9	43.6	34.1	43.5	
19	34.1	37.1	34.9	42.0	44.3	49.9	54.0	53.1	52.5	45.0	43.6	33.9	43.7	
20	34.2	37.1	35.1	42.4	44.5	49.7	53.8	52.8	52.5	44.7	43.5	33.7	43.7	
21	34.6	37.0	35.0	41.8	44.4	49.7	53.8	53.0	52.6	44.8	43.2	33.6	43.6	
22	34.6	36.7	35.3	41.0	44.2	49.8	53.7	52.8	52.4	44.5	43.1	33.4	43.5	
23	34.5	36.5	34.9	41.2	43.6	49.7	53.5	52.7	52.2	44.6	42.7	33.0	43.3	
24	34.6	36.3	34.7	40.9	43.1	49.7	53.4	52.5	52.4	44.6	42.6	32.8	43.1	
Means	0 <sup>h</sup> -23 <sup>h</sup>	33.4	37.6	34.3	40.7	44.1	49.3	54.0	52.8	52.7	45.0	43.2	33.7	43.4
	1 <sup>h</sup> -24 <sup>h</sup>	33.4	37.5	34.3	40.7	44.1	49.3	54.0	52.8	52.7	45.0	43.2	33.7	43.4

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 <sup>h</sup>	87	83	87	84	89	88	85	87	90	87	90	89	87	
1	88	84	88	85	91	91	88	90	91	88	90	89	89	
2	87	84	88	87	93	94	91	91	91	89	91	91	90	
3	87	87	88	90	95	95	92	93	92	90	91	90	91	
4	87	88	90	91	93	93	91	95	93	92	91	92	91	
5	87	86	87	87	91	91	90	94	92	89	92	93	90	
6	85	85	84	84	87	87	87	91	91	87	91	90	87	
7	84	84	83	81	82	82	80	87	90	86	87	88	84	
8	84	84	81	74	77	77	73	81	88	84	87	87	81	
9	85	84	78	68	71	70	67	74	81	81	85	87	78	
10	83	80	71	61	69	65	63	70	77	77	82	86	74	
11	79	76	67	56	66	64	61	69	74	72	80	83	71	
12	75	71	65	52	64	61	58	67	71	70	78	80	68	
13	74	68	62	48	62	61	56	64	70	68	77	79	66	
14	73	69	60	47	60	60	56	61	71	68	77	79	65	
15	76	70	60	48	59	58	56	60	71	69	79	80	66	
16	78	70	62	49	60	59	56	61	73	70	80	82	67	
17	79	72	66	51	61	63	57	63	74	74	82	82	69	
18	83	74	71	57	63	67	60	67	78	77	84	84	72	
19	85	75	76	65	69	72	64	73	83	80	85	86	76	
20	85	78	79	72	75	77	69	78	85	81	87	88	79	
21	86	80	82	75	81	81	74	83	87	83	88	89	82	
22	86	81	86	76	85	84	79	84	87	84	89	89	84	
23	86	83	86	80	88	86	83	86	88	86	88	89	86	
24	87	83	87	84	88	89	85	87	90	87	89	89	87	
Means {	0 <sup>h</sup> -23 <sup>h</sup>	83	79	77	69	76	76	72	78	83	81	85	86	79
	1 <sup>h</sup> -24 <sup>h</sup>	83	79	77	69	76	76	72	78	83	81	85	86	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 1946

MONTH 1946	Registered duration of Sunshine in the Hour ending:-																Total Registered Duration of Sunshine in each Month	Corre-sponding aggregate Period during which the Sun was above the Horizon	Pro-portion of Sunshine	Mean Altitude of the Sun at Noon
	5 <sup>h</sup>	6 <sup>h</sup>	7 <sup>h</sup>	8 <sup>h</sup>	9 <sup>h</sup>	10 <sup>h</sup>	11 <sup>h</sup>	Noon	13 <sup>h</sup>	14 <sup>h</sup>	15 <sup>h</sup>	16 <sup>h</sup>	17 <sup>h</sup>	18 <sup>h</sup>	19 <sup>h</sup>	20 <sup>h</sup>				
January	h	h	h	h	0.7	5.1	6.2	10.2	10.0	10.5	7.2	0.7	h	h	h	h	50.6	260.7	0.194	18
February				1.0	4.1	4.4	7.8	8.3	8.9	7.9	5.4	3.1	0.2				51.1	278.5	0.183	26
March			1.0	3.2	6.9	6.5	8.0	9.4	9.4	10.2	9.7	7.9	4.8				77.0	367.5	0.210	37
April		1.2	6.9	14.5	18.4	18.9	18.7	19.1	19.2	19.2	16.7	17.2	15.5	6.9	1.2		193.6	415.1	0.466	48
May	0.5	4.8	8.1	11.4	12.7	11.3	9.9	12.4	14.9	17.6	17.5	16.6	14.6	14.9	11.3	0.7	179.2	483.5	0.371	57
June	2.0	8.2	9.4	12.3	15.3	13.5	11.5	13.5	11.5	13.6	13.2	12.4	11.5	9.1	5.1	1.2	163.3	496.2	0.329	62
July	2.8	9.3	12.9	16.0	17.1	19.4	17.2	17.6	17.4	15.6	13.8	16.4	15.2	14.2	11.7	1.5	218.1	500.1	0.436	60
August	0.1	4.2	10.9	12.6	13.5	14.5	10.6	11.0	12.3	15.1	14.9	12.4	11.7	9.2	4.1		157.1	452.6	0.347	52
September		0.1	5.1	8.5	10.4	10.4	12.1	11.7	8.9	7.1	9.9	8.1	7.0	3.5	0.1		102.9	380.5	0.270	41
October				2.4	6.3	7.4	9.5	11.7	10.7	9.2	7.8	5.4	2.6				73.0	332.2	0.220	30
November				0.2	3.5	5.5	6.2	7.1	5.9	5.4	3.2	1.8	0.2				39.0	267.7	0.146	20
December					0.8	2.5	5.2	5.9	5.1	5.5	1.7						26.7	245.7	0.109	16
For the Year	5.4	27.8	54.3	82.1	109.7	119.4	112.9	137.9	134.2	136.9	121.0	102.0	83.3	57.8	33.5	3.4	1331.6	4480.3	0.297	..

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<sup>h</sup>)

Table with columns for Day of the Month, Dry-Bulb Thermometers (Maxi-imum, Mini-imum, 9<sup>h</sup>, 12<sup>h</sup>, 15<sup>h</sup>, 21<sup>h</sup>), Wet-Bulb Thermometers (9<sup>h</sup>, 12<sup>h</sup>, 15<sup>h</sup>, 21<sup>h</sup>), and similar columns for MAY, JUNE, JULY, and AUGUST, including a Means row for each month.

TABLE XXVI. - READING 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<sup>h</sup>)

Day of the Month	Dry-Bulb Thermometers, 4 ft. above the Ground.					Wet-Bulb Thermometers, 4 ft. above the Ground.					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 <sup>h</sup>	12 <sup>h</sup>	15 <sup>h</sup>	21 <sup>h</sup>	9 <sup>h</sup>	12 <sup>h</sup>	15 <sup>h</sup>	21 <sup>h</sup>		Maxi-mum	Mini-mum	9 <sup>h</sup>	12 <sup>h</sup>	15 <sup>h</sup>	21 <sup>h</sup>	9 <sup>h</sup>	12 <sup>h</sup>	15 <sup>h</sup>	21 <sup>h</sup>
SEPTEMBER											NOVEMBER										
1	70.5	49.9	61.4	67.4	59.2	54.0	55.6	58.9	56.0	52.0	1	43.8	37.2	41.0	42.8	42.3	37.2	40.0	40.8	39.8	36.8
2	66.4	51.2	56.1	63.2	65.8	55.5	53.7	56.8	58.2	53.2	2	48.5	36.3	39.2	44.9	48.3	45.4	38.5	42.7	44.9	44.5
3	62.5	53.3	57.8	59.1	59.2	57.5	55.8	56.1	56.7	56.0	3	57.4	45.4	52.0	56.6	56.7	54.5	50.7	53.8	54.1	52.0
4	60.8	56.0	59.2	57.6	59.8	57.0	57.4	56.6	57.2	55.7	4	66.4	45.3	54.1	64.0	62.0	45.3	51.6	56.5	53.5	44.3
5	66.8	54.0	59.4	64.5	64.0	54.0	56.0	57.8	57.5	52.0	5	59.1	38.3	44.7	55.9	57.4	46.5	43.9	51.1	52.6	46.5
6	63.0	50.2	58.8	60.7	59.3	51.4	55.7	56.7	56.0	50.4	6	51.3	40.3	45.7	50.9	49.6	40.3	44.4	46.9	45.9	39.8
7	65.4	47.2	60.8	63.6	64.5	58.0	56.7	57.6	59.0	56.8	7	48.0	39.4	40.7	42.5	46.6	45.1	39.5	41.5	46.0	43.8
8	60.7	54.9	59.9	57.6	58.5	57.6	58.9	57.2	57.8	56.8	8	49.4	42.3	45.4	48.6	48.8	45.2	43.2	45.4	45.7	43.2
9	63.8	51.9	58.0	62.5	60.4	55.7	53.2	54.6	54.1	52.8	9	46.8	43.0	45.6	46.5	46.0	43.8	43.8	43.5	43.3	42.0
10	67.0	50.7	59.0	65.8	63.3	56.1	55.0	57.2	56.6	53.1	10	48.8	41.4	43.9	47.8	46.6	46.0	41.5	43.8	44.6	45.0
11	63.0	55.8	61.6	62.5	61.0	59.0	55.7	57.1	57.1	56.6	11	47.6	44.3	45.7	47.3	47.5	46.2	42.9	44.5	45.0	44.0
12	67.5	49.7	58.6	65.0	65.1	57.2	55.6	57.7	58.2	54.2	12	50.2	44.5	46.6	49.4	50.0	50.2	43.0	45.6	46.3	47.8
13	61.9	51.4	55.1	55.9	61.0	51.4	54.0	50.5	53.6	48.2	13	51.6	43.5	46.6	51.3	51.2	43.5	43.8	45.6	44.9	41.7
14	60.8	46.3	56.6	58.0	58.3	60.8	52.8	55.3	57.3	59.0	14	49.7	42.4	47.8	49.0	49.6	48.8	47.0	48.4	49.0	48.4
15	66.9	53.2	58.4	62.5	66.7	54.2	52.4	53.7	55.7	51.9	15	49.0	44.9	47.1	48.8	48.4	46.0	46.6	48.0	47.4	45.0
16	63.9	44.7	57.0	62.9	62.7	52.4	52.7	55.7	55.4	50.4	16	48.7	44.5	46.3	48.7	47.2	44.9	44.9	46.0	45.5	44.2
17	64.8	51.3	56.2	60.6	63.9	55.6	53.4	55.8	57.3	53.6	17	49.3	38.1	45.5	47.7	46.0	46.3	44.3	46.3	45.2	44.3
18	60.4	52.4	57.3	57.6	58.2	58.8	56.4	56.1	57.6	55.3	18	48.8	42.0	45.6	48.8	48.5	42.0	41.7	42.5	42.2	39.2
19	60.0	49.4	55.5	58.6	59.2	53.2	51.1	52.0	53.2	52.6	19	54.2	42.0	44.8	45.9	46.4	54.0	43.5	45.4	45.9	53.0
20	63.6	47.7	61.6	62.6	53.6	51.2	60.1	59.5	51.3	47.5	20	56.0	51.2	53.7	55.1	54.7	51.2	52.8	53.0	52.5	49.5
21	62.9	45.3	55.2	60.6	62.6	54.5	51.3	53.6	54.3	52.5	21	53.2	43.8	48.5	52.8	49.6	43.8	46.7	47.8	45.8	42.3
22	65.2	53.2	57.2	65.2	63.2	57.0	53.6	58.8	58.6	55.5	22	51.0	41.0	49.4	50.7	49.1	41.0	46.2	46.8	43.5	38.0
23	64.7	52.6	60.7	61.1	63.6	52.6	59.2	60.0	58.0	49.9	23	53.0	34.3	47.4	52.5	52.0	51.4	46.4	49.5	49.5	50.0
24	65.5	50.4	56.8	62.9	62.7	54.0	53.6	57.1	56.7	52.0	24	53.1	49.5	51.0	52.5	51.5	49.5	49.7	49.6	50.1	47.4
25	70.0	52.2	63.2	66.6	68.3	62.0	61.2	62.4	63.6	60.5	25	54.4	49.0	51.9	53.7	52.8	49.8	48.8	49.4	49.2	47.8
26	71.0	58.3	62.9	68.8	67.6	60.2	60.5	64.0	63.7	58.4	26	51.3	44.0	46.8	50.3	49.9	44.0	44.1	45.5	45.0	41.8
27	77.1	57.6	64.4	73.3	76.1	60.0	61.8	66.7	67.0	58.5	27	54.9	42.2	53.5	54.5	53.5	52.3	50.6	50.9	51.3	50.8
28	73.3	56.1	64.2	71.5	73.1	60.4	61.2	64.9	66.1	58.4	28	52.6	47.7	49.8	49.9	49.9	50.3	47.2	48.4	48.4	48.7
29	64.2	59.4	61.6	63.3	61.8	59.4	60.3	60.7	60.0	58.8	29	50.4	46.0	48.4	49.9	50.2	46.8	46.8	47.4	47.7	45.7
30	71.0	51.2	60.1	68.6	67.8	54.4	57.8	59.7	59.7	53.0	30	51.7	41.3	47.0	50.4	49.8	43.5	45.4	49.5	47.5	41.8
Means	65.5	51.9	59.2	63.0	63.0	56.2	56.1	57.7	57.8	54.2	Means	51.7	42.8	47.2	50.3	50.1	46.5	45.3	47.2	47.1	45.0
OCTOBER											DECEMBER										
1	70.0	52.5	62.9	68.8	69.4	58.0	57.7	59.9	60.4	55.5	1	47.0	38.9	40.9	46.3	45.5	47.0	38.5	41.5	41.8	45.5
2	71.0	50.5	61.2	68.6	68.3	58.0	58.3	62.2	61.1	56.4	2	51.0	39.6	46.2	47.9	46.7	39.6	43.0	44.3	42.1	37.6
3	69.8	57.5	62.2	68.1	67.2	58.2	61.1	64.1	62.5	56.2	3	45.0	36.8	38.8	44.2	44.4	38.2	36.8	41.0	39.7	36.4
4	63.1	50.3	57.2	60.2	60.7	56.0	54.1	56.2	56.9	51.0	4	43.7	35.1	40.4	43.0	42.8	38.7	38.1	39.9	39.7	36.2
5	60.8	53.3	57.1	60.6	59.0	57.0	51.7	54.7	54.8	53.8	5	40.1	28.9	32.0	39.3	39.6	38.8	31.4	36.9	37.9	38.6
6	59.3	48.4	54.4	57.7	58.0	48.4	48.9	50.0	49.6	44.8	6	43.6	34.9	36.2	42.6	43.2	37.6	35.4	40.1	40.4	37.0
7	61.7	37.9	48.9	58.0	58.3	49.7	46.7	50.0	51.2	47.7	7	44.4	28.6	37.6	40.4	44.0	40.3	36.6	39.4	42.5	38.8
8	59.9	44.1	54.4	56.0	58.5	51.5	51.6	52.2	51.3	48.1	8	43.0	33.9	39.6	43.0	37.1	42.7	38.9	41.2	36.8	41.2
9	56.1	47.1	53.6	54.0	54.6	53.8	49.2	49.6	49.7	49.4	9	42.7	39.2	40.7	41.9	41.3	39.4	39.3	40.1	39.7	37.6
10	58.1	49.3	52.9	58.0	56.3	51.3	48.7	49.8	49.1	45.5	10	40.9	30.5	35.6	39.3	39.9	30.5	34.6	37.5	38.4	30.3
11	61.4	46.3	54.2	60.0	60.6	47.5	49.7	50.9	48.7	46.2	11	47.7	29.3	42.5	44.2	46.6	42.6	41.4	43.4	45.8	41.6
12	54.8	46.1	51.2	52.5	54.8	51.5	46.9	48.0	49.8	50.0	12	42.6	30.4	35.2	39.1	37.6	30.4	34.2	37.1	36.8	30.3
13	54.6	50.6	52.8	54.6	54.0	50.6	50.5	50.5	50.0	46.8	13	40.8	24.1	28.3	34.0	39.7	38.5	28.3	31.0	37.5	38.0
14	52.8	48.8	50.2	52.4	52.3	49.2	47.5	48.4	48.3	47.4	14	43.6	37.5	39.4	43.6	42.8	40.8	38.7	41.8	42.1	40.2
15	50.3	46.3	47.8	49.9	49.9	46.4	45.6	44.9	44.4	44.2	15	40.8	27.8	32.8	33.5	31.5	28.4	30.3	29.5	27.5	26.8
16	53.3	45.5	49.2	51.3	52.9	50.0	46.7	48.4	47.7	46.5	16	32.5	26.2	28.0	27.9	29.7	32.5	26.7	25.4	27.3	30.7
17	55.4	47.1	49.8	53.3	54.2	51.0	47.8	50.4	49.2	47.8	17	35.8	30.5	33.6	35.4	35.3	31.3	32.5	32.7	32.5	29.8
18	55.2	45.9	49.6	54.7	55.2	50.2	46.0	49.2	49.3	48.5	18	34.9	27.1	30.9	34.6	33.8	29.8	29.5	32.0	31.5	29.0
19	62.0	48.5	53.6	61.3	58.8	54.0	51.9	56.5	55.8	52.8	19	34.9	28.6	32.4	32.4	32.8	33.4	31.6	32.0	32.4	32.4
20	63.9	52.1	58.6	62.0	63.0	57.0	57.6	59.3	59.2	56.2	20	34.0	26.7	28.6	32.3	32.8	28.4	27.3	30.2	30.7	27.0
21	61.3	52.5	56.5	60.3	59.2	53.0	55.5	57.3	57.6	52.8	21	28.4	19.0	23.9	26.1	25.0	21.0	23.3	25.2	24.0	20.4
22	58.1	51.8	55.7	57.7	57.5	51.8	55.3	56.4	56.3	51.8	22	42.6	21.0	38.6	42.3	41.0	40.6	37.8	41.0	40.0	39.6
23	54.3	42.2	52.4	53.4	50.5	42.3	50.7	49.3	47.0	40.9	23	41.4	35.5	38.3	38.3	39.0	35.8	37.1	36.7	36.9	35.4
24	48.3	38.0	44.8	48.0	46.6	38.0	41.7	42.3	39.4	34.2	24	40.7	31.5	39.0	40.4	39.3	31.5	37.9	38.6	37.8	31.2
25	44.8	32.5	37.0	43.0	41.7	38.0	33.3	37.5	37.5	36.0	25	46.3	29.5	43.3	46.1	46.2	44.4	41.7	44.3	44.9	42.9
26	49.4	36.2	44.0	48.6	48.7	47.5	41.8	46.4	47.8	46.9	26	45.7	38.0	39.4	45.3	45.0	41.8	37.9	42.0	41.7	40.2
27	48.8	39.9	44.5	47.7	48.6	46.6	44.1	46.7	46.6	44.0	27	45.3	36.2	39.5							

GREENWICH METEOROLOGICAL OBSERVATIONS, 1946.

TABLE XXVII. - READINGS OF THERMOMETERS AT 9<sup>h</sup> ON THE REVOLVING OPEN STAND (FORMERLY CALLED "ORDINARY") IN THE NEW SITE IN THE CHRISTIE ENCLOSURE

1946	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	36.4	27.1	51.0	38.2	38.7	26.0	62.0	35.9	68.2	41.5	..	46.6	75.1	59.6	69.0	48.2	64.6	49.2	69.3	51.3	49.3	39.5	52.2	38.3
2	33.6	28.1	53.8	40.7	37.4	31.5	63.5	39.6	68.5	45.6	64.0	47.4	82.5	56.7	74.4	57.2	70.4	51.2	71.2	50.2	45.2	34.8	51.2	39.7
3	33.0	21.3	50.8	44.2	35.3	31.4	69.4	42.6	64.5	45.4	64.1	48.2	88.6	56.6	75.8	57.7	67.1	53.0	70.5	56.4	52.3	38.8	48.7	36.4
4	33.5	21.3	53.7	46.4	36.6	26.3	77.9	44.6	63.9	43.1	65.8	45.1	84.5	62.2	77.3	50.7	63.5	56.1	70.0	50.2	58.0	50.5	45.5	34.5
5	45.6	27.7	49.4	39.9	37.2	32.4	78.6	51.0	61.7	38.9	62.4	53.4	72.1	52.3	84.0	55.8	62.7	53.8	64.1	53.1	65.3	37.4	44.0	28.1
6	48.7	42.6	51.8	40.4	37.9	32.5	53.6	35.3	57.2	37.4	67.3	50.1	68.9	49.9	84.6	57.5	67.0	49.6	62.1	51.4	59.5	43.2	40.6	31.0
7	49.4	32.8	55.3	44.8	35.7	33.4	56.0	35.4	58.9	46.9	68.5	43.1	73.4	49.0	75.9	57.8	64.7	46.6	61.1	36.5	52.0	38.2	43.9	29.1
8	45.8	34.6	55.8	51.5	39.2	25.7	65.1	40.1	66.3	44.6	74.0	53.5	75.0	47.7	73.8	52.5	67.3	54.3	62.4	42.1	48.1	40.4	45.7	34.3
9	49.2	45.2	53.2	45.4	35.3	27.2	58.4	39.2	52.2	41.9	65.6	49.7	75.6	49.2	70.7	50.4	60.9	52.0	61.7	45.3	49.9	42.8	43.3	37.1
10	51.9	46.1	45.7	36.7	38.5	22.4	57.2	31.6	62.2	40.2	64.3	53.2	80.0	51.2	70.5	56.2	65.2	50.4	57.6	48.4	47.4	40.7	42.4	33.6
11	55.1	46.5	51.7	38.7	45.2	27.1	52.2	26.5	66.7	44.6	64.8	44.8	81.5	53.3	70.7	49.1	67.4	55.6	59.7	45.2	50.8	43.3	42.9	29.0
12	56.0	42.6	50.6	42.2	43.1	35.5	57.5	37.6	60.0	43.4	64.0	44.3	85.2	57.3	72.0	54.5	64.1	48.2	62.8	45.1	48.0	44.9	48.0	32.7
13	48.2	38.4	49.8	44.6	51.4	38.2	60.9	35.7	67.6	42.7	61.0	44.2	87.1	57.5	68.8	54.6	68.5	54.7	55.3	50.6	51.6	43.5	39.0	23.3
14	43.1	29.7	49.9	43.9	41.8	35.3	64.4	39.9	60.0	39.2	69.4	46.2	85.6	58.4	70.0	53.2	62.6	46.2	55.3	48.5	52.3	43.0	42.0	28.1
15	38.8	30.3	49.5	44.9	39.3	35.2	68.4	39.0	51.2	33.6	70.1	52.3	71.0	47.8	73.0	49.6	61.2	53.0	53.8	46.3	49.9	44.8	44.6	32.5
16	37.1	28.2	47.4	44.9	40.0	31.8	68.6	45.2	57.8	34.6	67.7	50.4	71.0	48.6	67.9	43.2	67.8	45.2	50.7	44.6	49.4	44.4	34.1	26.3
17	39.9	28.1	53.7	38.0	38.2	25.4	74.0	49.5	54.9	33.9	68.8	53.7	57.6	43.2	64.5	52.5	65.0	51.0	54.2	46.9	49.5	37.9	33.7	26.6
18	33.3	27.1	50.6	39.4	49.5	38.1	64.5	48.2	61.7	44.2	65.3	51.6	69.1	54.6	61.1	42.6	65.3	52.2	56.3	44.9	49.5	42.8	36.1	24.8
19	33.1	26.2	50.6	45.8	56.3	46.3	54.9	32.6	62.0	46.6	67.4	46.9	67.7	55.1	70.9	49.9	60.9	49.3	56.9	47.8	48.8	41.5	34.9	28.2
20	37.1	19.4	53.8	39.6	59.1	40.1	60.3	35.0	63.7	38.8	60.9	45.4	69.9	55.6	66.2	53.5	62.0	52.2	63.6	50.6	54.7	44.4	34.9	25.9
21	27.7	21.3	46.6	33.4	61.8	46.8	67.3	47.1	65.3	43.9	66.7	43.6	70.3	53.8	62.6	48.5	64.3	44.8	64.7	52.2	56.3	47.2	33.7	19.8
22	33.0	25.0	41.0	27.4	58.7	46.7	62.4	38.7	63.7	40.5	71.4	47.2	70.6	55.2	70.0	51.9	63.4	53.2	62.2	50.8	54.0	41.3	39.0	18.9
23	35.6	31.2	46.5	34.0	53.5	38.4	62.6	35.7	67.9	46.7	71.4	52.2	79.0	60.6	66.0	52.5	65.3	56.6	58.8	50.2	51.4	34.9	43.1	38.0
24	37.2	31.2	50.2	31.8	57.4	40.1	64.1	40.5	70.1	48.6	78.1	56.5	81.2	57.3	73.4	57.0	66.1	50.2	54.9	41.3	53.4	47.0	39.7	35.6
25	41.7	32.1	45.2	31.1	52.6	33.1	..	43.6	66.7	47.9	72.7	48.4	87.6	53.6	73.7	56.3	66.3	51.9	49.3	31.5	53.9	49.4	44.0	29.2
26	43.5	40.7	42.7	35.6	59.8	32.9	..	47.4	63.1	50.4	71.5	53.1	79.1	50.3	72.9	50.3	70.5	57.5	45.6	35.0	54.8	45.0	47.0	37.9
27	43.2	32.9	36.9	28.3	63.1	35.1	61.2	48.8	58.9	51.2	73.6	48.8	79.9	54.1	70.3	46.1	72.0	57.2	49.6	38.7	53.7	42.0	46.0	35.6
28	42.5	32.6	38.0	19.5	64.8	36.2	64.7	47.4	65.9	46.1	67.4	53.5	69.9	48.2	68.7	54.3	76.7	54.7	48.7	39.7	55.3	49.8	45.3	38.0
29	50.8	40.4	64.8	41.1	59.2	46.7	67.9	45.6	66.2	45.6	70.2	55.8	74.7	55.2	66.7	49.5	65.9	50.2	50.3	34.9	51.2	41.1	45.3	36.1
30	52.9	37.9	67.0	40.8	58.6	43.0	..	49.2	..	49.2	..	49.2	72.9	52.2	66.3	50.6	..	..	..	..	..	..	46.5	31.8
31	43.8	34.1	62.9	38.9	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Means	42.0	32.3	49.1	39.0	48.5	34.6	63.1	40.8	62.8	43.3	67.9	49.4	76.1	53.6	71.0	52.2	66.1	51.9	58.4	45.1	52.2	42.7	42.7	31.5

TABLE XXVIII. - AMOUNT OF RAIN COLLECTED IN EACH MONTH OF THE YEAR 1946

Gauges partly sunk in the Ground in the Christie Enclosure	Monthly Amount of Rain collected in each Gauge														Height of Receiving Surface	
	Number of Gauge	January	February	March	April	May	June	July	August	September	October	November	December	Sums	Above the Ground	Above Mean Sea Level
		in.	in.	in.	in.	in.	in.	in.	in.	in.	in.	in.	in.	in.	ft. in.	ft. in.
6	1.615	2.487	1.213	1.703	3.152	2.517	2.393	4.232	2.471	0.707	2.966	2.265	27.721	0 5	149 6	
8	1.562	2.525	1.181	1.676	3.150	2.485	2.389	4.267	2.455	0.716	2.916	2.279	27.601	1 0	150 1	
Number of Rainy Days (0.005 in. or over)	11	17	11	11	17	24	13	18	18	9	22	16	187	..	..	

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
h	miles	miles	miles	miles	miles	miles	miles	miles	miles	miles	miles	miles	miles
1	12.6	14.5	9.0	7.0	10.0	8.1	8.7	8.9	10.3	7.4	11.6	10.5	9.9
2	12.4	14.8	9.1	6.7	9.6	7.9	8.2	9.3	10.8	7.3	11.5	11.0	9.9
3	11.6	14.9	9.1	6.6	9.5	8.1	7.8	9.5	10.3	7.1	12.0	10.6	9.8
4	11.7	14.3	9.3	7.1	9.7	8.6	7.4	9.3	10.1	7.4	12.2	10.7	9.8
5	11.7	14.7	9.3	7.0	9.6	8.5	7.8	9.0	10.1	7.9	12.6	10.8	9.9
6	12.0	14.6	9.2	7.1	9.9	8.3	7.8	8.9	9.7	7.8	12.7	10.5	9.9
7	11.9	14.7	9.7	7.0	10.6	8.7	7.8	9.4	9.6	8.1	13.0	11.2	10.1
8	11.5	14.6	10.0	7.8	11.1	8.7	8.6	9.8	9.5	8.8	12.7	10.7	10.3
9	11.3	14.9	10.5	8.6	11.5	9.9	9.0	10.5	10.2	8.6	12.6	10.8	10.7
10	11.1	15.3	10.5	8.4	11.8	11.1	9.3	11.1	10.9	9.3	12.8	11.1	11.1
11	11.8	15.6	11.4	9.1	12.1	11.9	10.3	11.6	12.3	10.3	13.2	11.9	11.8
12	13.8	16.7	12.4	10.6	13.5	12.4	11.2	12.8	12.6	10.7	14.3	12.6	12.8
13	13.5	16.9	12.3	10.7	13.8	13.7	12.0	12.6	13.0	11.1	14.2	12.5	13.0
14	13.5	17.5	12.6	11.1	13.7	13.3	12.2	13.0	13.9	11.4	14.5	12.7	13.3
15	13.7	17.6	12.9	11.3	13.6	13.6	12.3	13.9	13.5	12.1	14.5	13.0	13.5
16	13.2	16.3	12.0	10.6	12.8	13.9	12.2	13.2	12.5	11.7	14.5	12.2	12.9
17	12.8	16.4	12.2	10.8	13.2	14.5	13.4	13.5	12.2	11.1	13.8	11.9	13.0
18	13.2	15.7	12.0	11.2	12.3	13.4	12.6	13.1	12.2	10.5	13.4	11.5	12.6
19	13.2	14.9	10.8	9.8	12.0	12.5	11.3	11.7	11.4	9.8	13.2	11.4	11.8
20	13.3	14.9	10.1	9.3	11.4	11.2	11.0	10.9	11.2	9.2	13.1	11.0	11.4
21	14.1	14.9	10.0	8.8	10.7	10.1	10.3	10.5	11.2	8.7	13.5	10.6	11.1
22	13.1	14.0	9.4	8.4	10.9	9.5	9.8	10.0	11.1	8.4	13.2	10.5	10.7
23	12.9	14.2	9.2	8.2	10.5	9.2	9.4	9.6	11.0	7.8	12.6	10.4	10.4
24	12.7	14.0	8.8	7.0	10.1	8.3	8.9	9.3	10.4	7.8	11.5	10.6	9.9
Means	12.6	15.3	10.5	8.8	11.4	10.6	10.0	10.9	11.3	9.2	13.0	11.3	11.2
Greatest Hourly Measures	45	40	26	21	30	30	30	34	40	25	31	30	..

\* The measures are derived from the motion of the cups by the formula  $V = 2.7 v$ , where  $v$  is the hourly motion of the cups in miles. See Introduction p.xvi.

