



RESULTS OF THE MAGNETIC
AND METEOROLOGICAL
OBSERVATIONS

*Made at the Abinger Magnetic Station, Surrey
and the Royal Observatory, Greenwich
respectively in the year*

1949

UNDER THE DIRECTION OF
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ASTRONOMER ROYAL

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THE ROYAL OBSERVATORY, GREENWICH

AND

ABINGER MAGNETIC STATION, SURREY.

MAGNETIC AND METEOROLOGICAL OBSERVATIONS, 1949.

INTRODUCTION

STAFF

During the year 1949 the staff serving in the Magnetic and Meteorological Department consisted of W. Jackson, E. A. Chamberlain, G. F. Wells, P. L. Rickerby, B. R. Leaton, J. D. Winter and Miss C. M. Cannell. Mr. Chamberlain, resident observer and assistant-in-charge, and his assistants Mr. Rickerby and Miss Cannell, 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.

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 0.2 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 on the moment of the magnet and the torsional constant of the quartz fibre is attained by optical means in which compensatory deflection of the emergent ray is produced by proportional curving (under temperature changes) of a bi-metallic lamina which supports a prism controlling the ultimate direction of the ray.

A small Helmholtz-Gaugain coil, having a field of 7.43 gamma per milliamper 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 examined on 1947 December 2 and was then correct within 0.6. The adopted scale-value during 1949 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 1949 was 0.92 per millimetre. Expressed as magnetic intensity the scale-value would be 4.98 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 constitutes 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° 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-Gaugain system at the centre of which a very uniform magnetic field parallel to the axis exists when an electric current is passing through the coils.

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

To afford an easy means of reading the azimuth of the cylinder and the indications of the magnet, graduated ivorine scales are placed horizontally on stands at a distance of 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° with the earth's field, a precise angle can be found at which the resultant of the two fields becomes directed at right angles to the earth's field. The intensity F of the imposed field, and its angle α with the earth's field being known, the horizontal intensity of the earth's field can then be calculated from the simple relation $H = F \cos \alpha$.

An observation proceeds as follows:-

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

The current is now reversed in the coil by a commutator switch and the coil is turned until the resultant force on the magnet is in a direction at right angles to the earth's field. This is indicated on either the north or south scale by the magnet-mirror, which is carried round 90° by the magnet. The 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 -1γ for the effect of the field of magnets in instruments placed permanently in the vicinity. The effect is determined experimentally by reversal of the magnets. The correction is applied in the reduction of the observation.

The constants of the coil and of the potentiometer at various standard temperatures have been precisely determined at the National Physical Laboratory and are checked from time to time. The dimensions of the coil were re-examined in November 1931. The electrical constants on which the reduction of observations made in 1949 is based were verified in August 1949. 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 introduces a discontinuity into the deduced values of H of -1.7γ .

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

The observation consists 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 (see above). 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 1949 for the measurement of the current were verified at the National Physical Laboratory in 1949 September. 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 -3.9γ into the deduced values 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 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 30γ 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 γ but less than 10 γ is reckoned as "1"; an excess between 10 γ and 20 γ as "2"; between 20 γ and 40 γ as "3"; between 40 γ and 70 γ as "4"; between 70 γ and 120 γ as "5"; between 120 γ and 200 γ as "6"; between 200 γ and 330 γ as "7"; between 330 γ and 500 γ as "8"; greater than 500 γ 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. 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^h minus 0^h . The quantities are computed from Tables I to III, the value of 0^h or 24^h being taken as the mean of the last value on one day and the first value on the day following.

Table XII contains the mean monthly and annual values of the components collected together. In 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, 1949.

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

The Photographic Barometer. A siphon barometer is employed which, at its open end, operates a plunger resting on the surface of the mercury. On account of the optical magnification associated with a moving mirror at some distance from the recording drum, the motion of the plunger must be mechanically reduced in being transferred to the arm which carries the mirror. In the actual arrangement two levers are used. One is connected to the stem of the plunger resting on the free surface of the mercury and is 12 inches long from plunger to pivot. A pin with a rounded conical point is screwed into this lever at a distance of 1 inch from the pivot. On this pin rests the plane under-surface of a shorter lever, which is 4 inches long from its 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 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 9½ inches wide, a range of over 3 inches barometric motion can be included and re-adjustment of the 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^h, 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 -0.4 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 -0.3 has been applied to the readings of this thermometer.

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

Dry-bulb and Wet-bulb Recording Thermometers. The photographic apparatus which had been in use since 1887 was superseded on 1938 January 1 by a distant-recording thermograph. The action of this instrument depends on the pressure of mercury in a long flexible capillary tube of steel. The pressure alters the curvature of a Bourdon coil which in turn controls the position of a recording pen.

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

Radiation Thermometers. These thermometers are placed in an open position in the Christie Enclosure. The thermometer for solar radiation is a mercurial maximum thermometer with its bulb blackened and enclosed in a glass sphere from which the air has been exhausted. The thermometer employed was N.Z. No. DB 3544. The thermometer for radiation to the sky is a spirit minimum thermometer, N.Z. 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 (9ft. 2in. in length), connected by shaft and pinion with a rack-work carrying a pencil; the latter marks on a flat sheet of paper, moving horizontally. The vane is 25 feet above the roof of the Octagon Room, 60 feet above the adjacent ground and 215 feet above the mean level of the sea. A fixed mark near the north-eastern turret in 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 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 1949 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^h and 15^h. No.8 is used as a check on the readings of No.6 and is normally read at 9^h 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 92 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 on a brick pier in the courtyard to the north of the Transit Pavilion, and permanently directed towards the celestial pole. The lens is of 18.8 inches focal length and 0.8 inch aperture. The actual camera is enclosed in a larger box about twice its length, extending nine inches beyond the lens. The lens itself is further surrounded by a hood. Adequate protection from dew is thus obtained, and also from rain, except when 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° below the horizon. The period is thus centred approximately on apparent midnight, but in practice the mean times of commencing and ending the exposure are not varied at intervals of less than seven days.

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

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

ARRANGEMENT OF RESULTS. The results given in the Meteorological Section refer to the day commencing at 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°. 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 60-82). This correction, amounting to -.007 inch, was by oversight omitted in the years 1917-1926.

From 1926 January 1 the mean daily temperature of the dew-point and degree of humidity have been deduced from the mean daily temperatures of the air and of evaporation by use of *Hygrometric Tables*, issued by the Meteorological Office, Air Ministry. In the same way the mean hourly values of the dew-point temperature and degree of humidity in each month (pp. D 87 and 88) have been calculated from the corresponding mean hourly values of air and evaporation temperature (pp. D 86 and 87).

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 *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.xvi). The continuous record of the Osler self-registering gauge shows whether the amounts measured at 9^h 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^h 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 85 and 92, 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 60-83, 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 61 to D 83, and in the abstract table, page D 85, is the mean found from observations made at 9^h, 12^h (noon), 15^h and 21^h each day.

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"

CLOUD 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

<i>lu-ha</i>	lunar halo	<i>prhn</i>	Parhelion	<i>so-ha</i>	solar halo
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ROYAL GREENWICH OBSERVATORY

ABINGER MAGNETIC STATION

Results of Magnetic Observations

1949

MAGNETIC OBSERVATIONS, ABINGER 1949.

TABLE I. - HOURLY MEANS OF MAGNETIC DECLINATION

U. T.	0 ^h	1 ^h	2 ^h	3 ^h	4 ^h	5 ^h	6 ^h	7 ^h	8 ^h	9 ^h	10 ^h	11 ^h	12 ^h	13 ^h	14 ^h	15 ^h	16 ^h	17 ^h	18 ^h	19 ^h	20 ^h	21 ^h	22 ^h	23 ^h	24 ^h				
January																													
9° + Tabular Quantities																													
1	28.5	30.0	30.4	31.9	33.1	31.5	34.9	31.1	29.5	28.4	29.9	32.2	34.5	35.0	35.1	32.0	32.9	31.7	31.1	29.5	29.4	28.1	26.0	19.1					
2**	16.5	20.4	22.0	35.2	23.0	29.9	34.1	32.3	30.5	30.0	32.8	36.0	41.8	40.0	37.7	33.0	31.3	31.9	31.1	28.1	28.3	28.7	28.0	29.5					
3*	30.4	31.0	29.9	29.5	30.0	29.7	30.3	29.9	30.0	29.0	30.5	32.4	34.1	35.1	35.0	34.1	33.4	33.2	33.3	30.7	31.0	31.0	30.5	30.0					
4*	29.1	29.2	31.0	32.0	31.9	31.2	31.4	31.2	31.0	30.4	31.4	32.7	34.2	34.6	34.0	33.4	32.8	32.7	32.5	32.0	31.5	31.1	31.1	31.4					
5*	31.5	31.6	31.5	31.8	31.5	31.0	30.9	30.6	30.1	29.5	30.9	32.9	34.3	34.1	33.9	33.9	33.1	33.5	33.5	32.1	31.5	31.0	30.5	30.0					
6	29.9	30.5	29.9	28.9	30.0	30.7	31.3	31.0	29.7	30.0	31.4	32.2	33.9	35.5	35.0	34.5	34.1	35.0	33.4	32.2	31.5	25.9	26.1	25.5					
7	23.0	22.8	24.7	27.5	28.8	31.2	30.2	30.7	29.9	29.1	29.4	30.9	33.8	35.9	34.5	33.5	33.3	34.0	35.5	33.7	31.6	30.4	33.4	24.9					
8	28.2	30.4	31.2	31.6	31.3	31.2	31.3	30.8	29.8	29.4	31.7	32.9	33.8	35.5	35.7	35.4	29.8	34.3	33.8	31.4	29.8	28.4	29.4	27.7					
9	28.6	30.1	31.3	31.4	32.1	32.7	31.3	30.9	30.4	31.3	32.1	32.8	37.0	37.8	38.7	35.9	35.2	34.1	31.4	25.4	28.8	27.8	30.3	30.6					
10	30.6	30.8	32.4	31.3	30.2	30.3	30.8	31.9	30.3	30.5	31.4	32.4	33.9	36.5	34.2	33.8	34.1	32.2	32.3	31.8	29.2	21.6	25.0	29.8					
11	30.8	30.8	31.2	31.2	32.2	32.3	33.4	33.4	31.0	30.8	30.9	33.1	32.4	33.8	33.8	33.2	31.8	31.7	31.5	30.8	24.8	27.8	25.5	25.3					
12	26.1	28.8	30.7	32.1	33.5	33.0	31.8	30.7	29.8	28.8	29.8	31.5	33.6	35.0	34.9	34.3	33.9	31.1	33.8	31.3	25.3	22.8	25.0	23.0					
13	24.5	28.9	32.4	32.3	32.8	32.8	32.1	30.8	27.6	27.8	28.3	30.3	32.8	33.8	33.5	32.9	32.1	31.9	31.5	29.4	30.6	30.4	29.7	29.8					
14	30.3	30.7	30.3	31.4	31.2	30.6	30.0	29.6	28.5	27.9	28.8	31.0	33.4	34.7	35.4	33.9	33.1	32.9	32.8	31.8	30.8	27.6	29.8	30.4					
15*	31.1	31.2	31.4	31.6	31.5	30.9	30.7	29.4	27.6	28.1	29.6	32.3	33.5	36.4	34.8	33.4	32.8	32.4	32.3	31.4	30.9	30.8	29.2	26.8					
16	28.1	30.2	31.5	29.8	30.8	30.8	30.5	30.3	28.8	28.8	29.8	31.5	34.3	35.8	37.3	36.9	34.4	33.3	33.1	29.7	29.5	29.3	29.2	29.3					
17	29.8	27.3	29.3	30.8	31.4	30.8	30.4	29.8	28.8	28.1	29.8	32.3	35.2	36.8	36.4	34.8	33.8	33.7	33.7	32.3	31.2	30.7	29.8	29.4					
18**	29.0	29.3	29.8	29.3	28.7	29.8	30.2	29.8	28.3	26.8	30.4	30.8	33.3	34.3	34.7	36.4	33.5	35.1	37.3	35.8	32.4	29.5	21.8	22.6					
19	25.8	22.3	23.2	25.8	29.1	30.6	31.3	30.5	29.1	28.1	29.8	31.4	34.8	37.3	36.2	36.3	34.2	32.6	31.5	33.1	31.7	30.8	29.1	27.9					
20	28.7	29.3	30.1	30.7	30.8	30.6	30.7	31.5	32.0	31.1	31.3	31.5	34.6	36.0	34.8	34.0	33.9	34.3	33.8	32.9	31.7	31.1	30.5	29.2					
21	28.4	28.8	29.8	30.7	29.9	31.7	32.0	31.1	29.8	28.8	29.4	30.8	34.1	35.8	35.6	34.5	33.7	33.9	33.8	32.5	31.3	24.8	24.3	28.4					
22	29.1	30.3	29.5	29.8	28.8	30.8	30.3	27.5	26.7	26.9	29.1	30.8	34.6	36.3	34.8	35.7	34.8	34.0	33.2	31.9	30.8	29.9	29.8	30.5					
23	30.2	30.8	30.7	30.4	30.7	30.8	30.3	29.4	28.4	28.8	30.8	32.3	34.5	37.2	36.4	34.1	32.5	33.4	32.0	30.6	28.7	27.2	27.4	25.1					
24**	28.0	29.9	30.9	33.0	31.0	30.0	29.4	28.6	27.9	27.5	28.8	31.9	34.3	36.5	35.9	34.9	33.3	34.1	25.7	-3.1	29.0	31.1	27.5	24.1					
25**	28.5	-19.9	10.4	6.9	21.8	28.0	24.5	25.4	24.9	26.5	29.0	29.5	30.8	31.6	28.9	30.5	34.3	35.3	24.5	23.4	21.1	2.6	25.1	11.9					
26**	-11.8	11.2	-6.3	19.9	35.4	47.3	41.9	29.9	30.9	30.0	28.4	28.9	31.4	31.9	32.5	29.9	23.4	28.4	32.4	29.9	23.9	24.2	24.9	28.5					
27	29.8	29.5	29.6	31.0	28.8	29.9	29.9	28.9	29.0	28.3	28.5	30.3	33.0	33.7	31.2	28.8	29.9	31.4	29.9	25.0	28.9	28.8	29.0	29.7					
28	29.5	29.9	29.9	30.0	30.6	31.4	31.2	29.8	27.5	27.6	28.9	30.0	33.2	34.5	33.5	31.5	30.0	31.2	30.4	29.4	27.9	28.9	28.9	28.7					
29	28.6	30.9	30.5	30.4	29.9	29.6	29.9	29.5	28.4	28.5	28.9	30.3	32.4	33.4	33.0	31.9	31.0	31.0	30.4	30.8	29.4	27.9	29.3	29.9					
30*	30.1	30.6	30.1	30.1	29.9	29.6	29.2	28.5	27.8	28.2	29.5	31.0	32.8	33.7	33.0	32.0	31.4	31.5	30.9	30.8	29.9	29.8	29.3	29.1					
31	29.9	30.7	30.9	31.4	31.1	30.3	30.3	29.9	28.9	29.1	29.9	31.6	33.8	34.9	34.5	33.1	30.9	32.3	28.9	29.3	29.0	29.3	28.9	29.5					
Mean	27.1	27.0	28.1	29.7	30.4	31.3	31.2	30.2	29.1	28.8	30.0	31.6	34.0	35.3	34.7	33.6	32.5	32.8	32.0	29.5	29.4	27.7	28.2	27.3					
Mean*	30.4	30.7	30.8	31.0	31.0	30.5	30.5	29.9	29.3	29.0	30.4	32.3	33.8	34.8	34.1	33.4	32.7	32.7	32.5	31.4	31.0	30.7	30.1	29.5					
Mean**	18.0	14.2	17.4	24.9	28.0	33.0	32.0	29.2	28.5	28.2	29.9	31.4	34.3	34.9	33.9	32.9	31.2	33.0	30.2	22.8	26.9	23.2	25.5	23.3					
February																													
9° + Tabular Quantities																													
1*	29.9	29.9	30.5	30.9	30.5	30.2	29.9	28.9	27.7	26.9	28.8	30.6	34.2	34.9	34.5	33.3	32.4	32.0	31.9	31.2	30.5	30.1	29.9	29.9					
2*	30.2	30.6	30.4	30.5	30.8	30.5	30.3	29.2	28.0	27.4	28.9	31.1	32.9	34.9	34.3	33.4	32.6	31.6	31.5	30.7	30.0	29.5	29.4	29.6					
3	29.8	30.3	30.9	31.0	31.2	31.0	30.6	29.9	29.3	28.2	29.8	31.6	34.3	34.5	34.6	33.9	33.8	34.2	33.5	32.6	28.5	18.3	14.6	15.9					
4**	17.1	17.4	21.9	23.1	23.8	29.3	32.3	31.5	29.0	31.5	31.5	34.6	34.6	33.4	32.4	30.9	29.9	30.9	31.0	30.5	29.9	29.9	29.6	29.9					
5	29.9	30.2	30.4	30.3	29.7	29.3	28.9	28.8	27.7	26.9	28.6	31.9	34.9	36.7	36.9	35.4	34.5	33.4	32.8	31.9	31.1	30.5	30.0	29.4					
6**	26.9	27.9	29.0	29.8	29.9	30.4	29.9	28.3	26.9	27.0	31.4	33.6	38.8	37.1	36.9	35.7	36.5	36.3	28.9	25.7	29.4	25.5	25.0	21.8					
7	21.2	17.9	19.9	21.9	23.9	28.7	29.2	30.5	31.9	31.5	30.9	32.6	33.3	34.3	35.0	34.9	32.9	31.4	31.3	31.4	31.0	30.3	30.2	30.1					
8*	29.9	30.0	29.6	29.4	29.3	28.9	28.9	28.2	27.3	26.9	28.8	31.4	32.9	34.1	34.6	32.9	30.9	33.0	31.9	31.4	30.8	30.4	30.3	30.3					

MAGNETIC OBSERVATIONS, ABINGER 1949.

D 7

TABLE I. - HOURLY MEANS OF MAGNETIC DECLINATION

U. T.	0 ^h	1 ^h	2 ^h	3 ^h	4 ^h	5 ^h	6 ^h	7 ^h	8 ^h	9 ^h	10 ^h	11 ^h	12 ^h	13 ^h	14 ^h	15 ^h	16 ^h	17 ^h	18 ^h	19 ^h	20 ^h	21 ^h	22 ^h	23 ^h	24 ^h																									
November																																																		
9° + Tabular Quantities																																																		
1**	24.2	27.6	26.0	24.8	24.5	23.9	23.8	24.3	22.9	22.9	26.9	30.0	34.4	38.0	35.0	38.0	36.4	42.6	24.6	13.5	18.8	19.0	21.6	23.0	23.7	23.8	24.5	24.4	23.7	23.6	26.9	26.0	23.9	24.0	26.7	32.5	36.0	38.0	39.7	37.0	31.4	29.5	28.0	22.5	23.9	24.4	21.8	11.8		
2**	12.0	18.4	25.5	23.0	28.0	24.8	24.0	23.8	23.8	24.2	26.0	25.8	27.0	29.0	28.6	27.1	25.4	25.6	25.5	24.7	23.8	20.3	18.0	22.0	23.3	23.9	24.5	24.7	24.6	23.3	23.4	21.9	20.4	20.5	22.9	26.5	28.9	30.4	30.9	29.0	25.6	24.5	26.0	24.6	23.9	23.9	24.1	24.2		
3	25.1	26.3	24.9	23.9	22.9	25.3	27.9	23.6	20.5	20.8	22.9	26.6	29.9	30.7	29.9	29.2	27.9	27.9	26.9	26.9	24.9	24.3	22.9	17.0	18.9	6	20.9	18.3	21.7	22.2	23.9	24.7	23.8	22.6	22.4	23.5	25.9	27.3	29.8	30.9	29.9	27.9	27.3	26.9	26.3	25.2	24.2	23.9	23.4	23.9
7*	23.4	24.3	23.9	23.2	24.0	24.1	23.4	23.0	22.0	22.4	24.4	27.0	28.6	28.7	27.7	27.7	27.6	27.4	27.4	26.5	25.4	24.0	23.0	23.0	8*	23.6	23.9	24.0	23.8	23.7	23.3	23.0	22.4	22.0	22.7	25.0	27.3	29.0	29.3	28.4	27.6	27.0	26.7	26.3	25.5	24.6	24.4	24.0	23.6	
9	23.2	24.0	24.0	24.0	24.1	23.4	23.0	21.0	20.9	21.7	24.5	27.4	29.0	29.4	30.0	28.6	28.0	28.3	28.1	27.8	26.0	25.0	23.7	23.4	10	23.7	24.4	24.1	24.4	24.4	24.0	23.8	22.5	22.4	23.8	25.3	27.5	28.0	29.6	28.0	26.4	27.3	28.0	28.0	26.4	26.6	23.1	21.9	21.7	
11	21.4	18.0	19.5	25.7	23.5	24.1	24.3	23.6	22.4	22.0	23.6	25.0	28.4	28.8	27.6	28.0	19.4	20.3	27.0	24.0	24.0	22.2	21.5	22.3	12	23.0	24.3	23.9	24.3	24.0	23.4	25.0	25.0	23.1	22.5	24.0	25.6	28.8	30.0	29.3	29.4	27.7	27.6	27.0	21.0	21.4	18.8	19.5	21.0	
13	16.4	17.8	18.0	22.0	23.3	23.0	22.8	22.3	21.0	21.0	23.0	26.4	27.6	28.6	29.0	28.9	24.7	25.5	25.8	25.0	24.5	24.0	23.9	24.0	14	24.1	23.9	23.6	25.5	25.4	23.4	24.1	24.0	23.3	24.5	26.0	27.4	27.5	28.8	28.5	28.4	29.5	24.9	26.4	25.0	23.8	20.0	21.0	20.3	
15	20.3	21.6	23.7	24.4	24.0	24.0	23.6	22.9	22.0	21.4	23.4	26.7	28.5	29.6	28.1	29.3	26.6	27.7	27.2	23.6	21.4	22.0	20.4	19.5	16	16.5	15.3	15.5	21.0	22.4	24.7	23.5	23.0	21.6	22.1	23.4	25.6	28.0	28.7	28.3	27.4	26.4	26.4	25.6	24.7	24.0	24.2	24.0	24.0	
17*	24.0	24.5	24.5	24.5	24.1	23.8	23.4	22.8	22.4	22.4	24.0	26.6	28.7	29.0	28.0	27.3	26.5	26.7	26.5	25.0	24.6	24.0	24.4	23.6	18	23.0	24.6	23.8	24.3	24.5	23.7	23.4	23.0	22.4	23.5	25.8	28.8	27.7	29.0	29.0	28.6	28.0	27.6	26.8	26.0	24.9	24.4	24.4	23.6	
19**	22.5	22.6	24.0	25.0	25.0	24.0	23.4	24.0	22.4	21.9	23.4	26.6	28.0	31.0	32.0	33.5	34.1	34.8	30.1	26.9	30.0	23.8	20.0	18.4	20**	20.0	13.7	16.0	17.0	22.4	26.3	29.9	22.4	20.0	20.9	22.3	24.0	27.1	28.1	27.8	26.3	25.2	25.2	23.0	23.5	23.8	23.1	22.0	21.0	
21	21.5	22.0	22.8	23.8	23.4	22.8	23.1	22.5	22.0	21.4	22.2	24.1	25.8	27.1	29.1	29.2	28.6	27.5	27.8	16.2	20.2	22.9	23.1	23.1	22	22.9	23.4	24.0	24.9	24.5	24.0	24.0	23.8	23.1	22.5	22.9	23.5	24.4	25.9	26.4	26.2	25.7	24.0	25.4	23.5	22.0	23.0	22.5	24.0	
23	25.4	24.0	23.7	24.4	24.4	24.0	24.0	23.7	23.0	22.5	23.0	24.0	26.0	27.4	28.0	27.9	27.2	27.2	26.5	21.9	22.0	20.3	20.0	19.0	24	17.0	18.0	19.1	20.0	20.4	21.5	22.1	22.7	23.0	23.3	24.4	25.5	26.7	28.0	28.0	27.8	26.9	26.1	25.3	24.3	23.6	23.1	23.0	23.0	
25*	23.4	23.7	24.1	24.4	24.4	23.7	24.0	23.8	23.5	23.6	25.0	27.8	27.0	28.0	28.2	28.0	27.0	26.2	25.8	24.7	24.0	24.0	23.4	23.2	26*	23.7	24.0	24.2	24.2	24.2	24.2	24.2	23.7	22.8	22.4	24.3	26.4	28.0	28.0	27.9	27.0	26.3	25.9	25.3	25.0	25.0	24.7	23.7	23.0	
27	23.2	23.9	21.8	22.0	23.5	23.0	24.3	23.6	24.4	25.1	26.0	27.4	29.1	29.0	30.1	26.7	23.0	28.8	26.1	24.0	20.0	20.9	21.4	22.1	28	21.7	22.0	23.8	24.3	23.6	23.0	23.1	23.4	22.0	22.6	24.0	25.3	27.2	28.8	28.3	27.6	26.6	26.4	26.0	25.0	24.4	24.2	24.1	23.1	
29	18.0	20.6	14.6	18.0	21.0	23.6	26.0	24.2	24.0	24.0	25.2	27.8	30.0	30.3	30.8	29.5	32.0	31.5	27.9	17.8	15.5	22.6	22.5	19.8	30**	18.0	24.6	24.0	24.1	24.7	25.5	28.5	26.5	30.0	28.4	28.1	29.7	31.2	27.0	27.7	26.0	27.7	17.6	22.6	22.9	11.4	16.6	18.4	20.1	
Mean	21.6	22.2	22.6	23.4	23.9	23.9	24.3	23.4	22.7	22.8	24.5	26.7	28.5	29.5	29.3	28.7	27.4	27.2	26.4	23.7	23.0	22.7	22.1	21.8	Mean*	23.6	24.1	24.1	24.0	24.1	23.8	23.6	23.1	22.5	22.7	24.5	27.0	28.3	28.6	28.0	27.5	26.9	26.6	26.3	25.3	24.7	24.2	23.7	23.3	
Mean**	21.7	22.5	22.9	23.1	24.1	24.7	26.5	24.6	23.8	23.4	25.5	28.6	31.3	32.4	32.4	32.2	31.0	29.9	25.7	21.9	21.6	21.4	20.8	18.9																										
December																																																		
9° + Tabular Quantities																																																		
1	23.9	23.9	22.4	21.9	24.0	23.8	25.3	24.4	23.3	24.0	24.0	25.3	26.0	27.0	26.8	26.0	24.9	24.8	24.5	23.5	22.7	22.8	23.0	23.0	2	23.0	23.0	23.0	23.0	22.2	21.6	22.3	22.4	23.0	22.8	24.0	25.2	26.1	26.7	26.1	26.0	25.2	25.0	24.6	24.0	23.5	23.6	23.4	23.6	
3	22.0	22.0	22.6	23.5	23.5	23.0	23.0	23.1	24.0	24.3	25.5	27.3	29.2	27.7	28.4	29.0	28.6	27.1	25.9	25.0	23.9	19.0	21.6	23.1	4**	22.1	23.2	22.0	23.5	23.0	23.5	22.5	23.0	24.6	25.2	26.8	27.5	27.0	27.4	27.0	27.2	27.6	27.6	27.3	25.5	21.9	20.4	21.7	21.3	
5	21.4	22.5	23.9	21.9	23.7	23.5	21.8	21.4	22.0	23.0	25.0	25.7	27.6	27.5	28.0	27.7	26.4	26.0	23.4	24.4	23.8	21.3	21.0	22.4	6	22.1	21.0	22.4	23.0	23.0	22.7	24.4	23.6	24.0	24.3	25.5	27.0	28.0	28.3	28.1	27.9	25.9	26.4	24.6	23.0	23.0	23.0	23.5	23.8	
7*	23.7	22.7	24.0	23.0	22.0	23.1	23.8	23.6	23.6	23.5	24.5	24.8	25.6	26.6	26.1	26.0	25.9	25.7	25.6	25.5	24.5	23.9	23.3	23.2	8	23.1	23.5	23.8	23.7	23.6	23.5	23.6	23.6	23.8	24.5	25.9	26.4	26.6	28.0	28.0	27.7	27.0	26.9	26.4	25.4	24.5	24.4	23.6	22.8	
9**	23.0	23.6	23.3	24.6	27.0	25.0	25.0	25.2	27.7	28.7	25.3	27.0	27.6	30.0	29.9	27.4	24.0	26.2	25.1	23.5	22.3	21.6	21.2	17.5	10	21.3	22.4	23.0	23.9	24.0	24.0	23.6	23.0	22.7	24.1	25.3	25.4	26.0	26.9	26.6	25.6	25.1	25.4	24.6	23.1	20.7	22.9	23.5	23.9	
11*	23.9	23.8	24.0	23.9	23.9	23.8	23.3	23.4	23.5	24.4	25.3	25.3	25.7	26.6	26.6	26.5	26.1	25.5	24.6	24.0	24.2	23.3	23.2	23.4	12*	23.4	23.5	23.6	23.8	23.8	23.5	23.4	23.0	23.0	23.9	24.6	25.0	26.0	26.8	26.6	26.0	26.0	26.3	26.0	24.6	24.2	23.6	22.8	23.4	
13*	23.6	23.8	24.6	24.0	23.8	24.0	24.0	24.0	23.5	24.0	24.9	25.6	27.1	28.1	27.3	26.1	25.5	25.4	25.1	24.5	24.0	23.8	23.5	23.1	14**	22.0	21.4	21.0	20.3	22.1	22.0	22.5	24.8	24.2	24.8	26.1	26.0	27.4	30.4	29.8	32.6	32.4	27.4	25.6	24.9	23.9	23.9	23.0	22.7	
15	20.0	19.9	18.5	20.4	20.6	21.8	22.4	22.5	22.7	23.4	24.6	25.7	26.6	28.3	28.4	26.9	25.3	25.0	25.0	24.0	23.6	22.3	21.7	22.0	16	22.0	13.7	17.0	21.3	22.1	23.0	23.8	23.1	23.3	24.6	24.8	25.1	27.0	27.2	26.6	26.2	26.1	26.1	26.0	25.6	24.0	24.2	24.0	24.1	
17	24.0	23.0	23.3	23.7	23.0	23.0	22.8	22.9	22.8	23.0	23.7	25.6	26.7	26.4	25.3	25.5	25.0	24.5	24.2	23.6	23.0	22.2	23.0	21.2	18*	21.6	22.9	23.1	23.0	23.6	23.6	23.5	22.9	22.4	22.0	22.4	24.9	26.0	26.0	26.1	26.0	26.4	25.9	25.7	25.0	24.4	24.5	23.9	23.8	23.7
19	23.5	23.5	23.6	24.0	24.2	24.3	23.4	23.4	23.7	2																																								

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

U. T.	0 ^h	1 ^h	2 ^h	3 ^h	4 ^h	5 ^h	6 ^h	7 ^h	8 ^h	9 ^h	10 ^h	11 ^h	12 ^h	13 ^h	14 ^h	15 ^h	16 ^h	17 ^h	18 ^h	19 ^h	20 ^h	21 ^h	22 ^h	23 ^h	24 ^h	
January																										
18000 γ + Tabular Quantities (in γ)																										
1	588	590	591	588	594	604	593	598	594	579	564	561	566	577	578	570	582	592	587	573	572	574	577	568	568	586
2**	568	556	579	568	617	608	609	613	589	582	562	540	553	555	558	558	574	583	579	593	611	592	588	588	586	586
3*	589	588	587	591	597	596	594	593	593	586	577	575	583	585	589	594	600	604	603	591	593	598	598	598	593	593
4*	590	592	595	602	603	605	610	611	614	608	601	599	603	600	595	598	604	609	611	610	611	610	610	610	610	610
5*	608	608	613	614	614	615	617	617	611	604	597	597	602	610	612	616	615	616	620	620	618	616	612	603	603	603
6	598	598	598	608	610	612	615	615	604	598	603	606	603	602	602	605	612	611	614	615	616	605	598	580	580	580
7	570	576	578	578	588	620	623	605	597	591	580	573	574	588	592	595	598	596	591	588	596	594	613	595	595	595
8	591	591	594	599	602	608	614	614	611	603	609	602	595	597	594	590	591	596	587	604	604	598	597	598	598	598
9	607	608	608	612	617	617	615	615	604	595	591	584	583	583	599	586	593	598	582	560	572	594	603	601	601	601
10	598	602	606	606	611	614	608	608	608	598	588	582	584	582	574	588	588	597	612	608	592	609	586	586	586	586
11	597	598	599	603	606	610	616	615	602	592	585	584	585	589	588	595	601	598	602	601	615	585	568	604	604	604
12	594	596	598	599	603	608	604	608	607	602	594	595	599	599	602	605	608	589	584	563	576	581	568	570	570	570
13	573	588	587	591	592	591	598	599	586	580	560	559	569	572	581	587	594	595	593	604	603	603	599	600	600	600
14	600	602	603	601	602	604	609	610	603	593	588	579	584	585	588	593	598	598	604	607	598	592	599	604	604	604
15*	608	609	609	608	608	611	614	618	608	593	585	582	584	595	599	602	599	603	608	608	609	612	615	607	607	607
16	603	603	615	618	617	617	617	617	612	595	582	581	587	583	584	589	588	590	588	578	583	593	599	603	603	603
17	607	630	608	608	610	614	618	621	612	599	587	584	590	600	609	613	616	622	623	618	615	614	610	609	609	609
18**	611	604	605	604	624	611	614	613	610	592	585	586	598	589	595	601	593	603	609	588	573	595	585	585	585	585
19	586	602	602	602	591	586	593	595	598	584	568	558	564	568	580	591	597	598	601	598	604	602	601	599	599	599
20	598	598	603	604	608	613	620	618	619	613	596	584	584	590	589	603	610	615	618	615	617	616	612	612	612	612
21	607	608	609	613	614	619	632	623	618	612	607	593	587	589	594	602	603	601	605	612	612	593	588	596	596	596
22	605	616	608	604	608	604	618	615	601	602	597	589	578	579	587	594	597	595	602	608	609	611	613	609	609	609
23	605	606	608	605	608	612	617	618	612	595	594	582	584	589	588	574	578	577	586	585	572	572	582	605	605	605
24**	595	597	594	602	602	606	607	607	602	592	582	582	584	582	582	591	588	589	611	676	569	562	613	578	578	578
25**	484	420	403	370	416	453	444	458	469	488	499	504	494	522	532	542	543	541	507	443	462	378	251	318	318	318
26**	343	284	436	472	472	498	475	462	482	499	498	509	495	515	515	514	528	548	529	532	546	558	561	557	557	557
27	552	552	558	572	562	562	565	568	556	548	542	538	544	552	548	553	565	568	571	571	568	572	578	582	582	582
28	584	578	578	578	582	581	592	585	574	563	553	554	559	558	555	561	571	577	583	582	575	585	584	586	586	586
29	589	588	592	591	591	593	594	594	589	583	573	564	562	564	572	582	584	585	583	590	589	589	591	592	592	592
30*	592	594	595	595	595	597	599	602	594	584	579	578	577	580	585	588	592	593	593	594	597	596	595	599	599	599
31	598	598	598	599	604	607	608	604	594	591	579	572	568	569	577	582	584	588	597	588	591	594	594	594	596	596
Mean	582	580	586	587	593	597	598	598	593	585	578	573	575	579	582	586	590	593	593	591	589	587	583	585	585	585
Mean*	597	598	600	602	603	605	607	608	604	595	588	586	590	594	596	600	602	605	607	605	606	606	606	602	602	602
Mean**	520	492	523	523	546	555	550	551	550	551	545	544	545	553	556	561	565	573	567	566	552	537	520	524	524	524
February																										
18000 γ + Tabular Quantities (in γ)																										
1*	595	597	594	598	601	602	602	602	601	591	575	566	558	578	588	594	598	602	603	604	604	603	602	604	604	604
2*	603	604	607	607	611	613	618	619	618	610	600	592	591	592	593	598	598	599	599	598	603	605	603	602	602	602
3	601	602	608	612	612	614	618	618	616	613	609	607	611	606	603	604	613	616	618	609	579	542	529	545	545	545
4**	522	527	550	573	583	572	581	566	557	551	550	532	533	547	556	557	561	573	577	579	581	581	581	581	581	581
5	583	583	581	581	583	590	591	588	586	571	559	552	563	580	595	601	609	601	597	599	601	597	598	603	603	603
6**	601	591	592	596	600	606	608	607	602	578	553	539	544	546	557	553	557	549	557	552	557	548	561	558	558	558
7	576	543	550	572	592	596	585	580	562	557	555	541	547	557	557	567	578	585	587	583	581	578	583	583	583	583
8*	582	581	587	587	590	591	593	593	586	576	564	559	559	565	569	571	575	587	597	599	601	599	598	598	598	598
9*	598	597	600	601	604	605	607	602	590	581	574	572	574	573	580	588	595	601	605	606	609	608	608	610	610	610
10	606	605	610	607	607	611	611	610	604	591	582	580	581	583	588	594	599	600	606	602	596	606	604	605	605	605
11	605	607	603	606	605	612	624	630	614	588	573	565	580	583	586	593	598	607	606	608	610	587	580	591	591	591
12	587	591	592	591	592	594	603	609	597	587	577	569	561	553	563	567	587	588	597	602	599	601	604	597	597	597
13	618	601	601	600	605	597	607	617	607	581	569	564	568	570	579	581	587	593	593	599	602	615	639	608	608	608
14	602	605	593	599	596	600	609	597	593	588	579	576	577	577	580	585	594	598	602	606	607	601	620	602	602	602
15	599	597	599	601	603	608	616	613	599	587	576	582	587	588	589	582	582	580	574	602	601	602	602	602	609	609
16	610	607	612	603	608	610	617	607	606	594	582	576	574	577	586	592	598	603	610	614	614	616	617	608	608	608
17**	599	600	606	603	602	603	602	621	613	583	559	551	554	549	557	557	574	557	557	565	572	582	600	577	577	577
18	579	586	583	587	592	608	608	614	591	582	575	552	549	549	552	570	578	588	576	584	594	597	607	586	586	586
19	588	589	593	595	597	597	599	604	601	583	571	572	573	578	581</											

MAGNETIC OBSERVATIONS, ABINGER 1949.

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

U. T.	0 ^h	1 ^h	2 ^h	3 ^h	4 ^h	5 ^h	6 ^h	7 ^h	8 ^h	9 ^h	10 ^h	11 ^h	12 ^h	13 ^h	14 ^h	15 ^h	16 ^h	17 ^h	18 ^h	19 ^h	20 ^h	21 ^h	22 ^h	23 ^h	24 ^h	
March																										
18000 γ + Tabular Quantities (in γ)																										
1	615	609	613	614	618	621	625	624	619	606	593	591	584	570	566	576	568	573	579	580	582	593	597	601	601	601
2	601	600	614	608	599	606	619	620	612	589	556	566	570	564	560	570	576	577	581	578	588	621	605	609	609	609
3	604	613	627	612	613	615	608	607	605	591	571	548	547	562	567	570	576	614	583	568	579	593	593	593	595	595
4	609	595	598	600	603	608	608	608	601	582	568	567	563	563	581	586	594	609	612	612	606	607	608	609	609	609
5	602	605	609	613	627	622	626	617	598	581	565	557	559	567	581	595	603	604	607	610	612	611	608	609	609	609
6*	608	609	609	611	612	614	613	613	603	592	582	581	578	583	597	601	603	605	607	613	616	616	616	617	617	617
7	618	622	613	616	618	618	618	619	613	603	593	592	592	591	599	602	597	602	608	613	618	617	618	618	618	618
8	618	616	613	614	616	618	627	628	619	618	616	608	603	598	599	591	604	606	618	618	619	618	613	613	613	613
9	619	609	605	605	598	606	608	611	614	608	599	594	604	596	605	604	553	590	607	598	590	597	604	606	606	606
10*	603	601	602	600	600	603	607	605	602	598	593	588	586	585	588	592	596	604	604	604	612	614	613	613	613	613
11*	610	608	608	608	608	609	612	611	603	595	584	571	571	578	588	601	602	608	616	618	622	623	623	623	623	623
12	619	619	618	617	616	618	627	621	614	602	597	592	596	597	602	597	595	612	617	614	611	611	608	600	600	600
13	598	617	599	603	606	605	611	615	604	599	605	607	607	597	596	606	594	597	604	602	602	598	591	598	598	598
14**	585	587	565	601	589	587	574	574	579	546	542	569	573	567	567	566	570	582	565	557	565	567	577	589	589	589
15	585	592	590	590	590	590	585	581	576	559	534	544	547	563	566	569	573	584	575	576	578	587	596	598	598	598
16**	611	603	604	597	597	602	606	600	587	574	567	565	569	579	592	617	668	605	518	554	568	569	567	582	582	582
17**	592	588	591	593	591	590	590	589	586	572	550	553	561	571	575	566	583	586	613	567	548	540	547	586	586	586
18	561	562	557	579	589	584	573	567	570	557	551	552	570	567	573	582	594	578	590	606	596	591	587	589	589	589
19	593	596	593	597	597	593	593	594	585	567	557	567	574	584	589	597	597	601	604	609	602	604	617	608	608	608
20	603	599	599	601	606	621	614	602	586	567	560	564	579	589	592	609	606	608	620	601	598	594	596	597	597	597
21	601	601	601	601	605	596	600	598	591	580	580	582	587	587	596	588	606	612	601	611	611	623	675	601	601	601
22**	568	591	586	598	645	511	548	549	529	508	500	500	509	521	527	531	557	577	607	570	581	579	593	581	581	581
23**	578	582	596	582	597	587	562	565	543	546	549	538	514	533	547	555	575	577	579	585	590	596	594	596	596	596
24	592	592	591	588	593	597	602	597	583	566	552	548	552	564	573	589	593	598	601	611	610	611	607	607	607	607
25	606	603	602	602	601	613	618	611	601	583	581	574	568	585	592	596	601	601	607	611	613	613	622	620	620	620
26	627	601	600	601	601	611	601	621	592	571	570	569	566	581	581	587	593	593	601	607	604	611	611	611	611	611
27*	607	607	606	606	606	607	610	604	597	588	578	569	571	586	593	598	607	608	609	614	617	620	623	620	620	620
28	618	619	619	621	613	623	622	627	619	604	590	595	603	596	611	607	603	620	612	615	617	623	612	611	611	611
29	631	618	598	601	606	608	611	608	591	590	572	557	569	570	586	592	603	619	597	607	611	617	622	622	622	622
30	617	612	611	620	633	618	630	631	617	598	577	582	578	575	586	597	601	607	607	611	615	618	620	622	622	622
31*	627	616	611	613	613	620	624	619	608	602	593	587	586	588	596	604	610	614	618	620	622	623	625	626	626	626
Mean	604	603	602	604	607	604	606	604	595	582	572	570	572	576	583	588	594	599	599	599	600	603	606	606	606	606
Mean*	611	608	607	608	608	611	613	610	603	595	586	579	578	584	592	599	604	608	611	614	618	619	620	620	620	620
Mean**	587	590	588	594	604	575	576	575	565	549	542	545	545	554	562	567	591	585	576	567	570	570	576	587	587	587
April																										
18000 γ + Tabular Quantities (in γ)																										
1	623	623	622	623	627	627	631	629	617	602	594	587	591	598	611	616	622	630	636	638	623	627	628	633	633	633
2	637	616	613	616	619	622	623	618	608	596	584	579	585	594	606	611	617	625	628	628	629	629	631	632	632	632
3	625	623	626	627	623	625	621	619	610	597	586	574	577	584	601	615	622	611	622	623	623	623	623	623	623	623
4	624	623	623	621	624	627	631	627	613	601	582	580	585	589	597	613	624	627	628	625	625	626	627	622	622	622
5*	622	622	621	624	627	633	638	637	633	619	603	598	601	607	617	623	627	621	623	623	626	627	631	625	625	625
6*	620	618	618	619	620	626	632	633	627	619	605	599	597	603	610	616	623	625	627	627	627	627	627	627	627	627
7**	630	625	617	620	622	624	626	620	610	600	594	599	602	606	607	614	627	636	657	656	626	617	600	552	552	552
8**	517	548	579	587	557	564	563	539	512	478	446	467	482	490	561	579	577	561	584	582	581	577	577	571	571	571
9	571	573	571	571	572	577	583	577	564	552	541	536	537	543	558	572	586	596	601	601	603	605	607	601	601	601
10**	584	587	601	601	606	594	584	575	563	552	544	546	545	559	581	595	621	625	608	609	615	614	604	603	603	603
11**	594	591	596	599	600	602	605	614	616	598	583	570	581	575	627	620	605	603	607	612	611	615	615	616	616	616
12**	611	608	607	606	607	607	604	588	576	557	542	558	563	549	534	594	612	620	625	632	628	628	631	626	626	626
13	619	618	618	600	583	599	603	600	585	556	546	548	564	574	594	593	599	605	628	615	605	603	612	606	606	606
14	599	604	605	614	592	606	600	587	572	559	551	551	562	570	589	604	611	622	638	639	632	624	627	627	627	627
15	624	610	611	611	607	605	604	607	600	583	569	565	568	580	591	604	614	617	621	624	623	637	627	616	616	616
16	611	616	611	611	615	620	623	621	611	592	577	581	597	613	611	631	603	608	611	620	622	637	625	617	617	617
17	611	617	619	613	615	612	612	617	597	578	563	561	570	579	591	611	616	616	616	617	623	621	623	644	644	644
18	613	619	620	611	611	619	620	614	603	592	582	585	594	604	613	625	620	624	630	623	635	617	612	611	611	611
19	610	608	610	612	615	613	610	602	594	590	594	599	600	608	603	607	615	622	627	629	624	618	627	623	623	623
20*	613	614	612	612	612	617	618	616	610	602																

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

U. T.	0 ^h	1 ^h	2 ^h	3 ^h	4 ^h	5 ^h	6 ^h	7 ^h	8 ^h	9 ^h	10 ^h	11 ^h	12 ^h	13 ^h	14 ^h	15 ^h	16 ^h	17 ^h	18 ^h	19 ^h	20 ^h	21 ^h	22 ^h	23 ^h	24 ^h	
May																										
18000 γ + Tabular Quantities (in γ)																										
1*	616	616	614	616	616	612	604	595	587	585	585	589	597	602	609	622	646	646	637	631	617	610	604	608		
2	609	607	607	608	615	612	604	593	583	578	580	579	581	587	592	607	611	613	624	629	626	622	628	631		
3	624	622	617	622	625	628	627	619	606	596	585	583	588	591	601	611	622	626	653	652	646	649	619	599		
4**	559	589	599	601	600	590	595	602	591	579	568	556	556	564	589	580	608	616	621	612	613	611	609	606		
5	606	603	600	601	606	609	602	584	576	573	570	570	569	590	606	629	658	632	636	626	626	642	616	612		
6	615	628	636	618	605	595	593	588	580	572	568	571	572	576	590	596	613	619	643	630	621	616	615	618		
7	611	610	605	613	620	619	612	604	595	584	579	586	596	600	602	612	626	636	633	626	626	630	626	624		
8	616	606	607	605	611	610	612	610	602	599	595	602	599	594	605	609	619	613	619	626	635	634	650	622		
9	625	627	625	613	614	611	607	603	601	606	608	606	611	606	610	598	613	624	631	633	637	633	628	628		
10	624	622	619	617	619	617	611	602	598	596	589	584	586	598	616	613	625	620	626	622	636	631	634	620		
11	622	622	663	641	638	637	628	621	608	584	578	581	594	603	610	615	617	619	619	622	631	630	626	623		
12**	620	622	625	621	624	625	627	599	536	580	585	599	573	576	668	772	790	633	578	519	553	506	547	555		
13**	513	586	552	505	486	502	509	504	495	497	502	516	528	548	541	544	560	570	572	571	575	578	585	583		
14	576	585	577	566	572	572	566	550	527	527	536	543	570	575	590	607	605	610	596	601	610	620	604	596		
15	595	592	586	598	600	599	592	582	567	555	554	568	578	586	594	602	608	605	604	605	605	603	604	602		
16	603	599	598	601	603	591	577	582	581	572	561	561	553	572	584	595	597	609	606	602	604	601	608	628		
17	608	596	596	597	603	611	606	592	582	570	566	569	571	577	592	614	622	629	628	621	613	611	612	611		
18*	610	610	607	608	610	611	607	600	590	580	578	574	577	580	588	604	614	622	633	626	626	620	621	617		
19	612	612	612	618	621	622	618	611	605	598	595	591	593	596	600	615	627	626	631	633	632	627	626	625		
20*	620	617	613	615	621	621	622	617	610	601	600	596	591	595	601	617	621	630	638	633	626	628	626	620		
21	617	616	616	619	620	621	621	617	608	610	605	616	609	598	600	617	630	639	640	639	642	636	633	630		
22	631	626	622	618	626	627	617	616	612	616	613	609	597	596	608	621	626	639	636	639	639	637	636	633		
23	626	626	624	621	625	625	620	613	598	594	593	591	589	592	589	608	622	630	631	633	639	634	639	635		
24	611	608	613	615	609	604	597	606	602	599	592	592	587	591	600	612	625	631	631	636	634	632	633	628		
25	623	622	623	622	626	618	611	601	594	594	583	609	627	624	618	606	606	618	622	629	628	626	626	626		
26	621	621	620	621	622	619	616	603	592	578	582	588	592	606	629	635	628	616	619	621	619	624	624	620		
27	618	618	617	619	622	619	612	602	596	585	580	576	595	615	602	617	613	612	628	629	629	630	631	626		
28*	626	625	628	622	620	621	616	607	599	581	580	582	596	605	613	622	623	620	623	626	629	626	622	621		
29*	622	625	626	625	622	618	610	596	585	582	582	582	590	603	616	622	624	628	634	635	636	632	635	633		
30**	632	631	630	632	634	632	624	616	607	595	588	590	610	632	635	647	649	678	686	661	616	585	580	578		
31**	560	579	575	589	573	580	581	566	548	539	535	536	547	576	607	589	597	618	626	628	619	630	618	596		
Mean	609	612	611	609	610	609	605	597	586	581	578	580	585	592	603	615	624	623	626	622	622	619	618	615		
Mean*	619	619	618	617	618	617	612	603	594	586	585	585	590	597	605	617	626	629	633	630	627	623	622	620		
Mean**	577	601	596	590	583	586	587	577	555	558	556	559	563	579	608	626	641	623	617	598	595	582	588	584		
June																										
18000 γ + Tabular Quantities (in γ)																										
1	593	607	609	596	600	584	578	569	555	559	566	568	565	576	581	595	606	622	622	621	622	618	628	627		
2	623	612	606	608	613	615	611	593	568	574	576	576	592	604	603	606	627	630	636	633	631	630	622	622		
3	620	615	610	611	613	612	610	605	600	594	601	598	596	594	602	610	618	628	635	639	631	632	652	640		
4**	665	620	608	618	611	619	600	588	578	574	572	578	587	591	601	616	648	657	652	646	616	600	594	590		
5**	586	593	589	596	595	589	551	551	538	520	524	536	543	536	560	604	626	644	625	608	586	583	597	586		
6**	598	580	596	605	605	598	591	586	575	572	568	576	582	587	597	609	621	628	636	629	630	666	652	634		
7	642	631	624	624	627	623	614	601	604	606	596	596	597	596	610	616	626	633	631	633	628	626	626	624		
8*	626	626	622	621	620	615	609	604	601	596	598	606	612	617	616	616	614	622	624	631	630	630	628	627		
9	626	630	628	620	619	617	613	597	597	599	601	606	598	596	612	619	629	629	630	638	646	644	636	639		
10*	638	637	637	633	631	630	622	612	605	599	602	601	605	616	626	622	628	632	640	639	636	635	633	631		
11*	629	629	629	629	630	625	618	606	596	592	595	605	611	625	630	642	644	639	642	640	635	632	629	624		
12**	625	625	640	625	625	619	591	588	582	577	575	591	604	599	611	650	676	681	651	651	605	581	569	579		
13**	559	580	587	586	588	585	574	558	549	529	549	562	599	604	609	616	615	624	621	619	616	619	615	607		
14	601	602	605	605	605	600	592	586	581	579	584	586	582	583	593	608	619	624	633	639	634	638	629	634		
15	618	618	626	624	615	615	616	615	615	602	603	605	599	609	633	631	638	654	631	630	632	634	629	627		
16	625	629	629	630	631	632	621	607	601	606	602	592	600	609	622	635	651	651	642	647	647	641	639	640		
17	629	625	625	627	634	635	630	620	608	600	608	605	604	619	634	645	649	648	652	645	640	642	634	638		
18	616	614	613	632	628	621	619	614	592	583	589	591	587	593	609	612	637	622	648	642	641	634	634	635		
19	629	622	626	627	625	630	627	616	605	598	591	585	598	618	632	620	634	637	630	630	635	631	627	624		
20	622	621	625	625	629	626	617	605	600	605	605	611	608	607	600	613	629	629	641	647	643	633	629	625		
21*	621	619	622	625	627	626	620	612	607	605	600	612	614	620	628	639	647	647	637	635	631	633	635	635		
22	635	636	635	637	637	635	627	620	615	612	605	601	597	619	630	642	641	631	640	640	626	632	631	627		
23*	626	628	624	629	628	617	605	596	588	582	589	601	614	615	621	625	627	629	631	632	632	630	630	627		
24	625	624	625	627	630	627	617	610	600	591																

MAGNETIC OBSERVATIONS, ABINGER 1949.

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

U.T.	0 ^h	1 ^h	2 ^h	3 ^h	4 ^h	5 ^h	6 ^h	7 ^h	8 ^h	9 ^h	10 ^h	11 ^h	12 ^h	13 ^h	14 ^h	15 ^h	16 ^h	17 ^h	18 ^h	19 ^h	20 ^h	21 ^h	22 ^h	23 ^h	24 ^h	
July																										
18000 γ + Tabular Quantities (in γ)																										
1	620	628	628	633	627	628	625	623	618	617	596	588	599	609	624	628	632	634	644	634	634	630	624	624	624	624
2*	625	620	620	626	628	628	622	618	614	605	602	603	607	612	620	628	638	637	633	629	630	632	628	624	624	624
3	620	621	621	624	626	624	619	609	604	600	599	602	602	610	628	637	649	650	653	639	635	635	634	630	630	630
4*	629	623	623	624	628	628	626	621	612	602	599	605	611	615	623	634	642	646	649	646	645	644	638	634	634	634
5	631	633	631	635	641	636	628	616	608	604	609	627	636	634	627	626	632	636	638	642	644	640	640	640	633	633
6	629	627	625	624	632	634	626	623	616	613	614	623	627	635	629	624	627	631	638	645	643	642	648	646	646	646
7	644	646	646	638	638	638	632	626	620	616	614	615	632	628	643	594	605	625	632	632	634	633	632	632	632	632
8	632	631	633	632	632	635	629	622	612	604	602	610	614	621	626	642	657	648	643	627	625	627	627	632	632	632
9	632	631	628	628	631	629	615	589	582	580	601	612	623	628	618	624	629	636	637	635	632	632	633	631	631	631
10	629	631	633	636	633	628	626	619	609	608	607	614	620	628	629	636	641	640	635	639	634	632	630	630	630	630
11	628	630	630	632	631	627	631	626	617	609	602	595	599	606	619	637	637	632	641	632	632	630	629	628	628	628
12	625	624	626	631	635	632	622	609	605	599	592	596	602	615	621	624	637	643	647	647	668	672	662	662	660	660
13**	659	651	657	650	647	623	651	643	640	632	606	598	602	603	616	625	646	659	652	648	647	646	643	636	636	636
14	632	628	628	629	628	632	625	618	612	606	597	599	600	603	617	629	637	642	644	645	643	638	633	633	632	632
15*	630	628	627	629	632	629	625	622	615	606	605	606	606	608	616	628	637	645	643	640	638	637	636	632	632	632
16**	629	630	632	632	636	633	628	626	622	619	616	608	601	609	596	628	642	653	671	646	636	637	642	632	632	632
17**	626	623	621	618	620	618	618	614	597	601	612	598	598	597	595	615	622	622	640	639	636	636	635	632	632	632
18	632	628	624	623	626	622	617	612	607	606	590	606	612	621	616	643	656	652	663	645	647	643	645	628	628	628
19**	622	634	640	637	628	638	621	609	600	583	579	587	586	599	595	606	614	623	635	639	638	633	639	638	638	638
20	636	616	616	621	622	619	613	605	602	602	596	587	587	592	602	609	625	634	637	637	635	631	626	626	626	626
21	622	622	619	618	619	621	622	618	609	602	595	597	597	607	614	609	620	629	633	639	642	642	642	636	636	636
22	629	627	623	627	627	628	623	615	602	601	597	606	618	632	634	659	666	663	670	651	635	635	632	646	646	646
23**	642	638	635	639	637	622	612	607	598	595	599	622	612	619	610	617	627	635	644	636	638	640	641	638	638	638
24	625	627	621	617	621	617	617	615	615	611	611	616	617	602	611	621	621	622	638	641	631	626	627	630	630	630
25	628	626	626	634	634	621	602	613	611	600	591	595	596	591	614	626	635	645	643	636	635	641	631	625	625	625
26	631	628	621	621	619	615	597	597	605	601	596	598	601	611	616	625	627	625	628	635	631	629	627	625	625	625
27*	626	624	621	624	624	623	614	607	600	598	601	603	610	615	620	630	630	632	636	641	638	635	633	629	629	629
28*	625	624	625	626	627	626	617	603	594	586	582	581	594	604	620	631	637	643	646	646	636	634	632	633	633	633
29	633	632	632	632	632	630	627	622	617	616	619	627	637	634	640	640	645	650	648	649	645	640	637	635	635	635
30	636	635	635	641	641	642	634	620	607	598	610	614	620	624	634	641	646	654	656	646	644	636	636	636	637	637
31	635	634	626	634	630	619	624	620	616	613	604	606	610	608	614	630	636	653	636	638	640	640	639	636	636	636
Mean	630	629	628	630	630	627	622	616	609	604	601	605	609	614	619	627	635	640	644	640	638	637	636	633	633	633
Mean*	627	624	623	626	628	627	621	614	607	599	598	600	606	611	620	630	637	641	641	640	637	636	633	630	630	630
Mean**	636	635	637	635	634	627	626	620	611	606	602	603	600	605	602	618	630	638	648	642	639	638	640	635	635	635
August																										
18000 γ + Tabular Quantities (in γ)																										
1	632	630	629	626	629	629	625	618	619	616	613	604	599	613	609	622	631	634	636	645	643	636	636	636	633	633
2	632	628	628	632	633	636	636	636	617	607	599	604	614	597	609	578	588	599	613	616	622	626	633	623	623	623
3**	622	619	654	669	634	672	602	643	587	554	517	541	577	579	603	604	609	618	622	614	610	603	601	612	612	
4**	598	614	604	594	610	561	545	562	563	555	539	535	560	574	564	608	619	619	636	627	619	606	591	609	609	
5	600	579	583	589	583	580	579	575	571	568	573	584	592	596	608	597	615	640	609	617	618	603	611	624	624	
6	617	601	599	600	605	609	605	595	590	587	586	593	589	599	605	606	611	614	619	618	621	625	618	618	618	
7	619	617	612	611	611	606	602	597	595	594	597	602	613	612	637	643	609	615	624	634	627	624	629	619	619	
8**	598	614	619	553	553	575	571	562	563	560	553	553	568	592	599	596	603	611	610	611	609	608	606	605	605	
9	606	606	603	604	609	611	610	604	594	585	583	589	589	596	607	599	606	600	613	613	619	618	620	619	619	
10	616	614	616	615	614	620	622	609	604	596	594	590	597	594	604	602	610	625	624	623	624	625	621	625	625	
11*	611	612	614	613	614	615	609	600	591	590	590	590	595	598	600	616	619	625	628	626	628	624	620	614	614	
12	613	616	620	620	617	620	614	602	593	589	588	595	602	610	615	625	627	630	633	635	630	625	624	623	623	
13	623	630	630	629	630	627	623	623	621	610	607	612	615	620	625	621	640	630	634	633	640	637	640	637	637	
14**	635	617	644	636	627	619	615	597	585	600	590	613	600	587	597	603	625	618	610	617	620	640	610	593	593	
15**	635	616	604	626	628	650	614	605	597	590	580	597	600	602	610	606	629	623	626	625	626	636	617	637	637	
16	620	614	617	620	624	610	602	591	590	593	593	600	602	604	605	605	618	617	624	625	628	626	626	627	627	
17	630	626	627	631	625	625	620	620	619	614	616	626	628	630	604	630	637	630	620	636	631	634	627	625	625	
18	624	621	623	626	625	625	625	621	608	582	577	583	598	604	590	606	624	648	636	632	636	634	622	620	620	
19	624	630	626	623	624	624	613	606	602	594	588	598	599	614	606	614	634	632	626	630	630	639	625	625		

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

U. T.	0 ^h	1 ^h	2 ^h	3 ^h	4 ^h	5 ^h	6 ^h	7 ^h	8 ^h	9 ^h	10 ^h	11 ^h	12 ^h	13 ^h	14 ^h	15 ^h	16 ^h	17 ^h	18 ^h	19 ^h	20 ^h	21 ^h	22 ^h	23 ^h	24 ^h	
September																										
18000 γ + Tabular Quantities (in γ)																										
1	628	619	623	624	627	628	628	607	600	602	593	582	595	593	606	619	626	634	614	628	637	630	609	613		
2**	619	634	636	643	640	630	602	619	599	583	569	565	573	596	609	605	607	613	614	600	596	609	619	616		
3**	620	602	591	597	593	609	613	579	577	586	569	571	569	588	577	577	596	599	629	629	619	618	616	618		
4	613	613	613	605	607	604	603	589	580	574	578	584	599	607	604	605	602	616	621	625	639	621	623	628		
5	642	633	628	612	611	612	605	595	594	590	582	579	600	607	611	619	615	615	618	619	632	630	629	638		
6	631	621	617	617	619	622	621	614	595	581	575	581	595	599	600	603	610	615	618	623	628	628	629	627		
7	621	623	620	621	625	626	626	621	601	596	588	593	591	595	597	603	613	611	618	616	616	620	623	621		
8	621	615	617	619	621	627	619	604	599	588	597	599	612	614	617	619	618	621	631	624	628	633	629	633		
9	629	616	613	619	619	616	606	595	584	571	572	585	602	609	619	623	627	630	624	629	632	632	630	625		
10*	625	626	628	628	628	627	619	609	595	585	579	584	599	614	614	620	619	625	629	632	632	631	619	619		
11	624	629	624	625	624	633	618	613	601	585	571	589	595	608	619	619	622	625	625	629	623	625	624	623		
12**	624	628	633	639	633	634	608	601	573	563	549	550	556	579	584	597	598	584	595	599	609	612	611	611		
13	616	600	604	611	618	618	614	602	584	574	565	573	585	588	600	613	613	615	621	623	622	621	619	614		
14	611	614	615	619	619	614	611	605	593	582	573	561	573	589	584	585	607	616	621	621	625	629	629	625		
15	627	622	620	626	627	626	625	620	612	604	603	606	602	607	600	605	624	618	627	629	631	631	630	631		
16	630	637	632	624	625	625	621	616	602	587	579	579	581	593	598	603	607	623	629	629	635	626	629	629		
17	625	624	623	625	625	623	622	615	609	602	593	601	605	609	616	614	617	628	634	639	633	644	638	626		
18	629	629	624	625	623	621	622	616	599	579	580	589	597	609	617	621	623	629	630	632	634	634	636	634		
19*	631	630	631	630	630	630	629	623	612	601	593	596	608	616	620	624	626	629	632	634	632	632	633	632		
20*	629	629	628	628	629	629	623	614	599	589	584	590	598	605	618	625	627	630	631	635	638	637	636	632		
21*	633	633	630	630	631	629	624	614	608	603	603	605	609	616	623	627	634	635	639	639	639	641	642	651		
22	644	635	634	639	640	645	642	632	625	609	601	587	601	606	611	604	606	624	632	633	630	631	631	633		
23*	635	634	632	639	634	632	629	621	609	599	596	609	619	624	625	628	629	629	633	635	635	635	635	639		
24	635	635	633	635	639	633	633	621	609	602	598	603	605	609	603	612	622	633	639	636	642	626	627	624		
25**	611	609	605	631	621	619	622	619	610	593	562	552	568	581	586	584	585	579	583	629	609	607	602	609		
26	610	616	633	623	632	618	625	609	595	576	579	574	577	577	581	603	613	615	615	619	623	620	636	619		
27**	606	611	615	611	619	633	623	593	589	585	583	564	565	578	595	609	619	626	624	624	625	631	636	633		
28	622	636	623	616	627	629	618	601	603	593	580	574	582	589	598	609	618	623	624	624	624	624	622	619		
29	620	613	616	620	623	627	624	625	612	600	593	589	585	589	608	615	628	631	633	634	635	631	638	629		
30	629	627	628	635	638	639	630	613	616	601	581	576	575	570	585	594	600	614	613	619	619	616	625	625		
Mean	625	623	622	624	625	625	620	610	599	589	582	583	591	599	604	609	615	620	623	626	627	627	627	626		
Mean*	631	630	630	631	630	629	625	616	605	595	591	597	607	615	620	625	627	630	633	635	635	635	633	635		
Mean**	616	617	616	624	621	625	614	602	590	582	566	560	566	584	590	594	601	600	609	616	612	615	617	617		
October																										
18000 γ + Tabular Quantities (in γ)																										
1	642	616	623	622	621	622	620	619	613	609	599	593	592	589	599	608	619	622	629	629	631	633	633	633		
2	641	633	627	641	635	629	629	616	610	597	588	584	585	591	593	604	610	616	620	626	625	625	628	626		
3*	624	624	624	625	628	629	625	617	610	602	596	595	595	599	607	617	620	625	629	629	632	629	632	628		
4	629	624	639	634	645	640	642	641	627	617	614	605	614	601	580	609	618	619	613	603	613	616	616	621		
5	633	623	619	627	641	628	614	619	608	600	595	586	599	599	603	602	596	604	609	613	609	627	624	619		
6	620	620	619	620	625	625	619	619	607	600	599	599	592	579	610	619	581	591	612	629	608	609	623	635		
7**	619	620	625	629	609	609	611	593	578	559	548	546	539	559	566	563	569	569	559	530	542	548	540	526		
8**	523	549	555	570	579	578	573	560	556	549	543	556	558	555	565	555	586	585	579	587	592	596	599	607		
9	601	615	625	600	604	604	597	599	585	574	561	560	563	571	592	577	584	600	603	602	601	606	609	612		
10	612	610	611	611	612	613	611	607	592	588	583	574	583	586	593	601	602	608	618	614	618	618	618	618		
11	617	611	611	618	616	613	611	602	590	588	585	595	607	599	609	602	590	608	615	613	618	619	610	604		
12	606	618	619	614	616	618	620	613	601	582	577	576	582	589	604	608	610	614	618	622	623	628	627	623		
13	628	618	619	623	626	627	625	615	602	593	588	586	588	599	613	618	598	594	608	614	638	636	635	635		
14**	634	622	613	606	618	629	625	621	590	580	572	542	541	553	549	568	578	544	553	552	554	496	521	548		
15**	528	533	537	561	563	544	578	558	438	350	463	474	496	521	527	485	508	522	558	511	498	518	475	409		
16**	529	555	558	538	543	552	548	548	533	488	502	514	523	534	538	560	568	569	601	590	598	609	598	608		
17	598	598	601	598	602	598	591	593	573	567	569	562	552	560	566	577	588	578	581	594	606	603	606	596		
18*	597	601	598	600	605	608	615	608	601	588	568	564	568	569	573	574	576	583	596	600	605	606	606	604		
19	603	602	600	603	608	608	610	618	589	581	563	555	558	558	563	565	572	585	586	593	601	604	606	603		
20	603	598	599	600	602	602	602	597	588	584	577	582	568	568	586	588	598	604	593	578	578	596	604	598		
21	600	603	604	608	615	619	617	602	593	576	569	569	581	585	588	600	589	584	597	607	608	611	611	608		
22	610	608	607	608	612	613	610	600	596	579	573	578	588													

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

U.T.	0 ^h	1 ^h	2 ^h	3 ^h	4 ^h	5 ^h	6 ^h	7 ^h	8 ^h	9 ^h	10 ^h	11 ^h	12 ^h	13 ^h	14 ^h	15 ^h	16 ^h	17 ^h	18 ^h	19 ^h	20 ^h	21 ^h	22 ^h	23 ^h	24 ^h		
November																											
18000 γ + Tabular Quantities (in γ)																											
1**	621	628	628	624	626	630	629	625	615	604	602	588	578	568	568	551	556	551	503	518	533	556	573	573	573	573	
2**	595	581	582	588	593	598	582	604	582	558	545	547	536	559	553	549	574	581	573	543	577	593	589	581	581	581	
3	573	574	582	585	583	598	592	599	590	579	565	560	558	565	575	585	589	603	603	597	603	634	607	606	606	606	
4	604	599	602	603	606	613	613	609	589	576	570	568	567	580	589	598	598	614	613	622	623	625	624	625	625	625	
5	628	632	623	615	624	619	620	608	600	585	569	569	571	575	576	589	599	609	614	614	613	609	583	605	605	605	
6	607	625	603	605	604	608	609	612	604	603	602	605	609	614	610	610	614	622	623	621	620	621	619	619	619	619	
7*	617	619	619	621	622	624	623	616	607	597	594	596	605	616	619	619	622	627	625	619	619	619	619	619	619	617	
8*	616	616	617	619	619	621	619	615	607	598	592	593	600	609	615	619	621	625	629	629	629	628	626	627	627	627	
9	629	624	623	623	628	634	641	637	629	619	609	611	615	619	626	629	634	639	640	639	631	629	634	634	634	634	
10	629	629	628	629	629	635	637	638	618	602	599	596	593	598	598	609	626	635	639	634	634	602	614	624	624	624	
11	651	635	633	638	619	636	634	628	612	599	589	583	589	593	596	599	576	614	606	609	621	623	623	619	619	619	
12	616	612	613	615	624	625	617	620	613	591	593	588	593	593	585	593	609	594	585	606	599	591	592	607	607	607	
13	594	597	599	605	605	605	609	604	597	588	583	583	579	577	586	589	586	601	609	619	619	619	619	620	620	620	
14	616	614	615	617	634	629	633	634	619	600	599	594	596	600	599	598	590	609	619	619	609	594	606	615	615	615	
15	615	613	617	621	623	629	625	623	619	609	599	599	599	603	603	609	582	585	591	584	589	599	605	619	619	619	
16	613	597	596	605	609	613	613	609	605	599	585	580	583	587	593	602	610	617	619	622	623	621	621	621	621	621	
17*	619	617	616	617	621	625	629	626	622	613	605	599	607	615	619	621	623	627	629	630	635	634	635	627	627	627	
18	635	629	625	623	626	629	630	629	620	618	615	613	616	628	633	635	639	643	639	638	639	639	641	633	633	633	
19**	636	626	629	629	629	634	648	649	645	635	624	613	613	629	627	608	612	620	606	571	570	535	557	549	549	549	
20**	552	544	550	553	567	561	570	570	581	580	566	566	577	574	550	571	595	593	596	594	602	598	596	591	591	591	
21	581	596	594	595	600	605	608	609	607	600	593	588	587	592	596	583	604	614	595	565	581	596	597	599	599	599	
22	598	601	603	605	610	614	618	619	614	605	599	597	600	607	607	602	607	608	610	605	610	609	606	614	614	614	
23	624	611	614	614	620	624	626	626	624	620	619	611	607	610	615	620	621	621	621	600	605	596	599	599	599	599	
24	597	596	603	610	622	624	624	623	618	610	600	599	601	606	610	614	614	619	623	620	620	620	620	620	620	620	
25*	620	618	620	620	624	627	630	627	617	610	610	608	596	605	611	620	623	626	625	615	617	621	624	623	623	623	
26*	620	620	625	626	628	632	634	634	626	616	610	606	613	620	624	624	626	630	630	633	633	636	624	627	627	627	
27	623	630	630	632	631	635	631	630	630	616	610	601	601	599	595	595	605	602	617	624	627	624	620	620	620	620	
28	618	613	615	620	622	626	624	626	620	612	606	606	609	608	610	617	620	628	630	632	631	630	631	631	631	631	
29	604	633	623	613	624	626	634	623	626	626	616	597	593	594	590	578	574	561	556	570	594	608	605	600	600	600	
30**	596	598	601	608	608	624	608	600	588	583	583	587	526	554	552	541	550	572	588	575	625	609	586	585	585	585	
Mean	612	611	611	613	616	620	620	619	611	602	595	592	591	597	598	599	603	610	609	606	611	611	610	611	611	611	
Mean*	618	618	619	621	623	626	627	624	616	607	602	600	604	613	618	621	623	627	628	625	627	628	626	624	624	624	
Mean**	600	595	598	600	605	609	607	610	602	592	584	580	566	577	570	564	577	583	573	560	581	578	580	576	576	576	
December																											
18000 γ + Tabular Quantities (in γ)																											
1	600	602	590	594	602	611	611	600	580	586	588	590	592	594	596	599	601	608	610	610	614	615	616	616	616	616	
2	614	613	611	615	616	623	624	610	609	612	601	601	605	605	606	609	611	615	619	620	620	623	625	620	620	620	
3	615	611	613	617	621	625	629	630	632	629	633	634	631	609	619	611	612	615	623	622	617	618	620	618	618	618	
4**	610	611	625	621	621	622	625	617	625	622	618	615	611	610	617	620	620	619	626	598	597	594	617	625	625	625	
5	624	610	620	620	619	621	626	620	617	614	610	607	613	615	614	607	606	607	620	629	630	630	620	625	625	625	
6	616	617	621	624	625	626	624	626	624	617	613	611	602	602	612	613	617	623	622	634	631	629	628	626	626	626	
7*	627	622	623	632	622	622	624	625	624	619	616	616	619	620	618	620	622	626	629	628	630	627	627	627	627	627	
8	626	624	626	626	630	631	633	630	630	625	623	624	627	625	620	620	624	631	637	633	633	626	621	625	625	625	
9**	627	630	630	630	661	660	649	609	606	599	601	600	595	585	581	595	608	606	607	605	612	611	611	625	625	625	
10	612	609	612	613	619	621	617	607	604	600	598	600	605	609	610	609	611	613	617	618	618	621	621	630	630	630	
11*	626	621	623	627	627	627	627	624	618	610	608	609	611	610	611	618	622	617	622	629	630	629	628	627	627	627	
12*	625	624	625	628	629	633	632	625	620	618	615	616	619	622	625	623	619	620	620	624	625	624	623	623	623	623	
13*	622	620	626	631	634	633	633	626	623	620	621	622	621	623	623	625	625	631	632	633	633	632	631	627	627	627	
14**	622	626	626	622	629	635	636	628	633	630	623	617	616	616	607	613	600	615	629	630	630	629	625	624	624	624	
15	616	618	628	621	623	626	630	626	620	618	614	617	623	622	622	625	628	630	636	634	638	635	631	630	630	630	
16	619	613	615	611	615	619	626	630	626	622	616	615	617	622	625	630	630	635	635	634	629	635	635	633	633	633	
17	631	627	621	625	631	630	630	635	627	619	612	610	612	618	621	624	625	630	634	632	633	634	630	624	624	624	
18*	624	623	621	622	622	625	626	629	628	624	620	620	619	624	626	630	633	634	635	636	634	634	634	634	632	632	
19	630	630	632	636	644	647	644	642	639	636	634	635	635	630	628	621	626	628	630	634	635	632	624	624	624	624	
20	628	627	633	634	639	640	640	634	628	615	619	620	617														

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

U. T.	0 ^h	1 ^h	2 ^h	3 ^h	4 ^h	5 ^h	6 ^h	7 ^h	8 ^h	9 ^h	10 ^h	11 ^h	12 ^h	13 ^h	14 ^h	15 ^h	16 ^h	17 ^h	18 ^h	19 ^h	20 ^h	21 ^h	22 ^h	23 ^h	24 ^h		
January																											
43000 γ + Tabular Quantities (in γ)																											
1	271	271	270	269	269	269	268	267	270	270	272	270	268	270	277	283	283	279	278	280	285	282	280	274			
2**	266	265	259	221	239	240	240	246	258	262	260	259	262	265	277	289	291	284	284	281	275	270	271	271			
3*	270	270	272	273	272	271	270	270	272	270	266	264	261	264	269	273	277	274	273	275	276	274	271	271			
4*	272	273	271	270	269	269	269	269	269	266	261	258	254	259	265	269	272	270	270	270	269	267	265	264			
5*	264	264	262	263	263	265	264	266	264	259	254	254	254	254	258	263	266	266	267	268	267	265	264	265			
6	265	264	264	265	264	265	264	266	267	265	265	264	259	261	267	270	270	270	271	271	271	271	271	270			
7	271	269	270	269	269	263	256	258	262	264	266	262	261	259	265	269	270	269	271	277	276	275	269	262			
8	263	264	265	265	265	269	269	269	269	264	260	256	253	255	263	269	276	273	274	278	277	275	273	270			
9	268	266	265	262	262	259	262	263	262	262	260	258	258	260	270	271	272	271	274	284	290	284	271	267			
10	268	268	264	263	263	264	262	264	263	263	263	263	262	263	269	275	276	273	273	271	272	275	267	266			
11	263	264	265	265	264	263	260	258	260	259	260	261	264	265	267	270	271	268	269	270	270	268	272	273			
12	259	263	263	263	263	262	263	263	263	259	258	254	255	257	258	263	267	270	279	281	288	275	273	271			
13	262	249	259	263	263	265	268	267	271	271	272	270	271	271	278	279	279	274	274	275	272	270	270	269			
14	268	268	269	268	267	266	267	268	270	266	264	261	262	265	269	272	271	269	269	269	269	269	270	269	265		
15*	267	266	264	264	264	265	265	268	269	260	259	256	254	260	267	267	269	269	265	266	266	264	265	268			
16	267	265	263	260	261	261	261	262	261	259	262	256	253	260	270	271	273	274	277	279	280	279	274	271			
17	269	260	259	262	263	266	267	265	264	259	253	249	240	249	261	265	268	266	265	265	265	263	264	262			
18**	261	261	263	264	264	261	261	260	260	253	251	254	249	251	262	271	276	275	277	282	290	290	282	278			
19	274	261	261	259	259	262	267	270	268	266	265	266	264	268	279	279	276	275	280	280	280	274	275	273			
20	272	270	269	268	267	268	267	264	262	261	263	263	259	260	270	274	271	266	269	269	270	267	267	266			
21	265	264	263	263	262	264	260	259	257	254	256	252	249	252	262	266	266	266	270	270	270	271	275	270			
22	264	258	256	259	260	262	258	260	260	259	257	252	250	253	259	262	266	267	268	270	270	269	266	264			
23	264	264	264	264	264	263	263	263	264	264	263	259	260	262	271	274	280	280	283	284	286	289	283	267			
24**	263	262	261	259	260	262	263	266	266	265	264	260	260	264	274	278	282	287	290	299	299	300	279	274			
25**	301	237	134	156	173	227	272	299	304	302	302	303	301	307	320	332	366	376	411	398	331	251	241	214			
26**	145	98	138	169	128	167	234	265	276	277	289	301	316	331	336	344	346	330	327	327	319	304	296	294			
27	290	290	290	269	271	280	283	287	291	295	294	290	290	299	300	304	303	296	296	300	296	293	290	289			
28	287	285	286	285	284	284	283	283	280	280	278	278	277	282	289	293	294	291	288	290	290	287	285	284			
29	282	280	280	280	280	281	280	281	279	277	277	276	279	283	287	288	287	286	285	284	284	280	280	280			
30*	280	280	280	281	281	280	279	277	276	272	269	272	274	280	286	286	285	281	281	281	281	280	278	276			
31	277	278	277	279	279	279	275	275	274	270	271	269	269	271	279	283	287	286	286	284	284	281	280	279			
Mean	266	261	259	259	258	262	265	268	269	267	266	265	264	268	275	279	282	280	282	283	281	276	273	270			
Mean*	271	271	270	270	270	270	269	270	270	265	262	261	259	263	269	272	274	272	271	272	272	270	269	269			
Mean**	247	225	211	214	213	231	254	267	273	272	273	275	278	284	294	303	312	310	318	317	303	283	274	266			
February																											
43000 γ + Tabular Quantities (in γ)																											
1*	276	276	275	276	276	279	276	276	275	274	272	270	271	274	276	280	280	279	277	276	277	275	274	274			
2*	272	271	270	271	272	274	273	272	271	266	266	266	268	268	272	274	275	276	276	276	277	275	272	272			
3	271	270	270	270	269	272	270	269	266	266	264	259	257	260	264	268	271	269	270	271	276	283	278	270			
4**	256	264	247	265	262	265	267	270	276	275	279	284	286	286	290	295	293	290	288	287	286	284	282	280			
5	280	280	279	280	280	281	280	282	284	282	276	275	276	277	277	278	279	275	275	276	280	277	277	274			
6**	273	271	272	273	275	275	274	276	280	278	276	273	278	286	294	306	312	316	317	310	305	304	300	291			
7	269	257	265	262	251	256	259	266	270	273	277	276	279	285	291	294	291	290	290	290	290	290	289	285			
8*	284	281	281	281	281	282	281	281	283	284	280	278	281	282	288	292	291	286	284	283	284	281	280	280			
9*	278	277	276	276	275	275	275	277	278	276	271	270	267	270	276	279	280	277	275	275	275	274	274	275			
10	272	271	270	270	270	272	272	272	272	270	270	270	270	269	270	270	275	275	275	275	275	278	273	270			
11	270	268	270	267	267	270	270	270	269	267	261	254	259	260	269	271	276	274	275	279	280	289	287	282			
12	280	280	280	279	274	274	274	274	274	272	272	270	270	271	279	280	280	280	280	280	281	280	280	280			
13	271	270	273	271	271	269	267	270	266	260	255	253	255	261	265	270	277	277	279	278	278	276	266	263			
14	266	263	267	270	272	274	271	272	275	275	270	268	264	267	271	274	277	274	273	273	275	275	270	270			
15	272	272	273	274	274	276	274	273	277	270	262	260	256	257	264	275	285	291	294	290	283	281	279	276			
16	269	268	262	266	270	274	273	274	276	270	262	253	251	260	260	265	272	272	272	272	272	272	272	271			
17**	270	270	270	270	270	273	271	270	266	263	260	254	252	261	276	300	310	303	309	307	302	298	289	279			
18	272	268	273	276	276	272	269	269	270	272	270	259	257	261	269	276	283	285	288	292	289	284	274	273			
19	273	272	271	270	271	275	276	276	275	268	261	256	252	254	261	270	276	280	280	280	280	277	275	272			
20	274	271	272	272	272	272	271	274	280	274	267	260	261	266	271	276	281	285	287	284	283	281	278	271			
21**	265	263	263	266	270	271	271	272	275	273	268	263	262	263	267												

MAGNETIC OBSERVATIONS, ABINGER 1949.

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

Table with columns for Date, Declination West, Horizontal Intensity, and Vertical Intensity. Sub-headers include Mean Daily Value, Maximum, Minimum, and Range for each category. Data is provided for January and February, with mean values at the bottom of each month section.

* International Quiet Day. ** International Disturbed Day.

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

Date	DECLINATION WEST						HORIZONTAL INTENSITY						VERTICAL INTENSITY										
	Mean Daily Value		Maximum		Minimum		Range		Mean Daily Value		Maximum		Minimum		Range		Mean Daily Value		Maximum		Minimum		Range
May	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*	28.7	13 20	37.5	21.5	7 36	16.0	611	16 35	652	583	9 47	69	268	19 18	284	243	11 46	41					
2	28.1	13 27	37.2	21.5	2 35	15.7	605	19 53	641	576	9 40	65	271	16 35	298	251	11 37	47					
3	27.6	13 17	36.9	6.3	22 46	30.6	617	18 19	679	546	24 0	133	264	18 20	292	205	23 42	87					
4**	27.1	14 32	37.6	8.6	0 21	29.0	592	16 46	636	520	0 20	116	264	16 44	306	212	0 0	94					
5	29.4	12 28	39.4	20.3	8 10	19.1	606	21 44	680	558	12 40	122	273	16 28	305	234	12 2	71					
6	28.8	13 16	38.3	21.4	7 23	16.9	603	18 9	658	562	10 26	96	264	18 10	300	234	12 21	66					
7	28.7	13 31	35.0	20.7	7 10	14.3	611	17 59	650	574	10 45	76	262	18 10	290	229	11 20	61					
8	28.5	12 31	37.2	18.9	22 6	18.3	613	22 12	677	587	13 0	90	264	16 42	277	245	12 17	32					
9	28.0	12 9	39.2	18.5	6 40	20.7	617	20 40	650	554	15 34	96	257	21 40	273	226	10 58	47					
10	27.7	13 33	37.4	20.4	8 28	17.0	614	20 25	642	577	12 4	65	265	17 13	284	237	11 21	47					
11	28.1	13 16	36.8	19.0	8 5	17.8	618	2 34	688	572	10 1	116	264	17 43	282	236	3 4	46					
12**	26.9	15 53	73.6	-2.6	19 58	76.2	606	15 53	1098	393	17 5	705	322	16 9	691	194	10 31	497					
13**	26.2	0 42	40.7	9.4	3 38	31.3	538	1 39	624	426	3 37	198	283	15 43	317	156	0 57	161					
14	27.6	13 41	35.7	19.7	8 45	16.0	578	21 26	637	518	8 38	119	281	16 53	308	252	11 22	56					
15	28.0	12 41	37.5	18.9	6 24	18.6	591	16 34	611	548	9 57	63	278	16 51	293	256	12 22	37					
16	28.5	13 24	40.6	21.6	8 46	19.0	591	23 47	645	542	12 16	103	286	15 26	321	254	11 50	67					
17	26.8	13 32	33.0	18.1	6 51	14.9	600	17 11	634	563	10 16	71	273	5 10	290	244	11 45	46					
18*	28.4	14 12	36.8	20.4	6 55	16.4	605	19 2	637	567	11 29	70	275	18 35	290	255	12 17	35					
19	27.4	14 31	33.0	20.4	6 56	12.6	614	16 25	640	587	12 10	53	268	5 8	288	248	11 29	40					
20*	27.7	13 40	33.5	21.5	7 14	12.0	616	18 50	644	589	12 34	55	270	5 4	285	247	11 30	38					
21	29.4	12 51	37.7	23.8	5 50	13.9	621	17 25	649	585	13 36	64	271	5 7	285	244	12 11	41					
22	27.7	15 23	32.7	22.1	8 55	10.6	623	17 52	652	590	13 58	62	269	18 52	288	239	11 42	49					
23	27.2	13 35	33.6	17.7	6 55	15.9	617	23 15	648	580	14 16	68	272	18 36	290	255	11 58	35					
24	27.8	13 21	34.4	20.2	8 2	14.2	612	19 40	639	584	12 18	55	267	6 5	285	242	11 46	43					
25	29.0	12 59	39.0	21.2	6 35	17.8	616	12 48	637	572	10 20	65	273	16 43	297	245	11 33	52					
26	28.6	14 20	36.8	20.7	7 0	16.1	613	15 55	646	570	9 32	76	273	17 35	299	249	11 28	50					
27	28.3	13 28	37.6	20.2	7 0	17.4	612	22 7	637	565	11 40	72	270	18 28	288	244	11 23	44					
28*	27.8	13 32	36.4	18.7	7 44	17.7	614	20 4	634	569	9 54	65	269	16 34	285	243	11 2	42					
29*	29.0	12 46	38.7	20.4	8 11	18.3	615	20 38	640	577	9 26	63	265	5 46	281	236	11 46	45					
30**	28.5	16 31	41.4	12.4	22 29	29.0	624	18 56	739	524	23 52	215	264	19 55	313	232	13 22	81					
31**	26.8	14 0	39.1	13.9	3 20	25.2	584	20 52	651	523	11 18	128	276	18 5	305	237	4 40	68					
Mean	28.0	-	38.2	17.9	-	20.3	606	-	664	554	-	110.1	272	-	306	236	-	69.9					
Mean*	28.3	-	36.6	20.5	-	16.1	612	-	641	577	-	64.4	269	-	285	245	-	40.2					
Mean**	27.1	-	46.5	8.3	-	38.1	589	-	750	477	-	272.4	282	-	386	206	-	180.2					
June	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	27.6	14 13	35.8	18.2	7 54	17.6	594	22 43	638	547	8 13	91	271	18 12	293	246	11 49	47					
2	27.1	13 1	32.3	17.9	8 2	14.4	609	18 42	644	563	8 1	81	268	19 36	289	247	12 34	42					
3	28.1	14 6	37.6	19.1	24 0	18.5	615	21 56	670	587	13 17	83	270	18 48	292	245	11 47	47					
4**	28.1	16 12	42.8	6.7	1 47	36.1	610	18 3	743	562	8 19	181	283	18 1	390	205	1 12	185					
5**	27.4	16 19	40.4	7.6	22 10	32.8	578	22 18	671	513	9 46	158	299	17 34	401	233	5 30	168					
6**	26.8	21 19	38.6	14.7	1 8	23.9	605	21 17	734	562	10 39	172	278	21 17	310	243	1 7	67					
7	26.3	13 18	33.3	16.7	6 44	16.6	618	0 24	659	585	7 52	74	271	19 35	286	251	11 29	35					
8*	28.8	12 6	38.0	21.6	6 9	16.4	617	20 6	638	591	9 55	47	274	18 24	287	246	11 30	41					
9	28.5	14 21	36.9	20.9	7 58	16.0	620	20 57	659	587	13 10	72	268	6 9	285	238	11 43	47					
10*	28.1	13 57	37.4	20.3	7 50	17.1	625	18 50	642	594	9 39	48	271	7 44	284	242	12 42	42					
11*	28.2	13 42	38.5	18.0	7 47	20.5	624	15 54	655	589	9 49	66	270	18 36	291	241	11 12	50					
12**	28.3	13 54	43.7	18.2	24 0	25.5	613	16 31	703	556	22 29	147	279	17 10	346	240	9 20	106					
13**	26.2	13 44	37.6	12.9	0 15	24.7	590	17 27	632	520	9 17	112	284	17 26	312	264	11 53	48					
14	27.5	14 34	35.5	18.7	7 55	16.8	606	18 59	653	572	13 2	81	272	18 35	290	251	10 23	39					
15	27.9	14 24	36.5	20.5	8 41	16.0	622	17 33	678	592	12 40	86	271	4 8	284	252	11 54	32					
16	28.2	14 31	36.5	20.4	7 40	16.1	626	16 44	666	586	11 34	80	268	19 6	286	244	12 20	42					
17	27.7	14 55	37.2	18.7	23 54	18.5	629	18 50	659	597	9 20	62	263	18 40	281	234	11 40	47					
18	27.4	14 34	34.3	19.2	1 1	15.1	617	19 4	661	578	9 51	83	269	18 11	292	248	12 2	44					
19	27.7	13 21	34.7	19.0	7 22	15.7	621	17 14	647	579	11 29	68	271	17 37	297	244	12 47	53					

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°+	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	27.8	13 37	36.1	21.4	9 21	14.7	623	18 38	649	584	11 20	65	263	18 36	279	239	12 42	40
2*	26.9	15 45	33.4	19.9	8 29	13.5	622	16 14	642	599	10 57	43	266	18 36	282	246	13 1	36
3	27.7	13 20	37.2	21.1	6 46	16.1	624	17 27	659	595	10 58	64	265	17 53	279	236	12 10	43
4*	26.5	15 21	33.2	19.5	8 20	13.7	627	17 4	654	596	10 20	58	266	16 45	278	246	13 21	32
5	27.3	14 7	35.4	19.4	7 7	16.0	630	20 22	647	601	10 6	46	262	17 20	274	239	11 42	35
6	26.9	13 59	33.7	20.5	6 55	13.2	630	19 58	651	610	10 25	41	261	17 25	272	238	12 21	34
7	27.7	14 43	35.9	21.0	6 24	14.9	629	14 50	665	574	15 28	91	264	14 43	285	245	11 52	40
8	27.0	14 30	31.3	22.1	8 23	9.2	628	16 38	669	597	10 33	72	269	18 8	299	250	12 30	49
9	28.0	13 30	35.8	20.9	6 32	14.9	622	17 23	642	570	9 16	72	265	16 36	280	237	11 4	43
10	27.1	13 19	35.3	20.5	6 31	14.8	628	17 1	648	602	10 29	46	264	17 11	282	237	12 16	45
11	27.6	13 56	36.0	20.8	8 12	15.2	624	18 7	645	590	11 27	55	265	18 11	282	232	11 57	50
12	27.9	15 5	35.7	21.0	7 4	14.7	629	20 29	721	589	10 49	132	268	20 27	285	251	11 48	34
13**	28.7	14 54	37.3	22.9	8 25	14.4	637	0 52	678	592	11 25	86	266	18 36	288	246	8 18	42
14	26.8	13 34	35.8	17.5	7 20	18.3	625	18 31	649	589	12 25	60	266	18 34	278	239	12 24	39
15*	27.7	14 26	38.2	20.5	7 54	17.7	626	17 44	648	601	10 20	47	264	18 26	278	243	13 3	35
16**	27.7	13 10	37.6	19.5	7 50	18.1	629	18 4	701	568	12 32	133	267	18 40	316	232	11 14	84
17**	27.5	13 3	36.1	18.9	7 37	17.2	618	18 40	645	573	14 16	72	269	18 35	289	245	12 3	44
18	27.8	13 21	36.7	19.4	7 4	17.3	628	16 23	673	583	10 6	90	266	18 40	288	243	10 57	45
19**	28.0	13 16	36.4	21.2	6 41	15.2	618	3 1	655	572	10 24	83	267	18 34	299	238	10 58	61
20	26.4	13 58	32.5	19.1	7 46	13.4	616	0 26	645	580	11 51	65	268	19 33	283	248	11 3	35
21	27.7	12 42	33.3	21.4	7 24	11.9	620	22 5	649	587	12 11	62	268	15 5	276	249	11 26	27
22	27.8	13 20	37.5	19.5	7 35	18.0	631	18 31	682	590	10 20	92	268	18 34	291	237	12 33	54
23**	27.2	12 24	36.5	17.3	7 20	19.2	625	18 46	656	582	9 55	74	262	18 43	281	241	4 42	40
24	26.9	13 0	35.4	19.6	6 35	15.8	621	18 59	652	591	13 45	61	264	15 35	280	239	12 20	41
25	27.5	14 58	34.5	22.2	5 58	12.3	621	18 2	658	581	13 21	77	269	18 22	290	253	10 59	37
26	26.4	13 25	32.8	19.4	6 26	13.4	617	19 24	640	589	6 52	51	264	17 36	276	240	10 31	36
27*	27.1	13 25	35.5	20.4	8 5	15.1	621	19 17	647	592	9 28	55	269	18 5	284	255	11 2	29
28*	27.3	13 51	35.8	19.6	7 22	16.2	620	19 2	654	578	11 40	76	261	17 29	280	233	11 41	47
29	27.1	14 23	36.1	20.4	7 12	15.7	634	17 35	657	612	9 9	45	256	4 26	271	227	12 33	44
30	27.2	14 6	35.0	18.9	8 10	16.1	633	18 20	662	594	9 20	68	261	16 45	273	238	11 50	35
31	27.8	15 25	35.1	21.8	7 48	13.3	627	17 23	663	595	10 28	68	263	18 36	284	243	10 17	41
Mean	27.4	-	35.4	20.2	-	15.1	625	-	658	589	-	69.4	265	-	283	241	-	41.8
Mean*	27.1	-	35.2	20.0	-	15.2	623	-	649	593	-	55.8	265	-	280	245	-	35.8
Mean**	27.8	-	36.8	20.0	-	16.8	625	-	667	577	-	89.6	266	-	295	240	-	54.2
August	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	26.6	13 48	32.3	20.6	6 45	11.7	625	19 48	651	589	12 9	62	263	7 6	276	243	12 4	33
2	28.9	14 17	37.3	20.5	7 12	16.8	617	7 8	660	566	15 52	94	268	16 20	302	239	11 3	63
3**	29.2	7 25	44.9	18.9	23 31	26.0	607	5 6	691	499	10 35	192	262	14 30	296	205	7 32	91
4**	25.7	14 12	38.7	2.5	2 59	36.2	588	18 54	690	523	11 6	167	263	18 52	329	185	5 22	144
5	27.3	14 37	38.3	20.0	8 20	18.3	596	17 33	660	558	9 16	102	274	17 35	310	239	12 22	71
6	26.1	13 6	34.4	21.2	7 0	13.2	605	21 14	636	563	11 42	73	268	16 29	283	240	11 42	43
7	27.8	14 30	36.3	20.9	23 56	15.4	615	14 55	652	588	9 45	64	271	17 35	303	253	9 31	50
8**	25.4	2 2	35.1	16.2	4 25	18.9	587	2 12	640	529	3 28	111	264	17 6	294	174	3 23	120
9	26.8	14 13	36.4	19.2	8 11	17.2	604	20 19	627	578	9 45	49	277	16 29	311	243	9 57	68
10	27.0	14 25	34.2	19.1	22 54	15.1	612	23 4	648	580	15 30	68	272	15 56	290	254	13 4	36
11*	26.9	13 20	34.6	20.9	6 59	13.7	610	18 20	633	584	9 34	49	270	18 36	283	253	11 1	30
12	26.3	14 14	33.0	20.8	7 46	12.2	615	18 57	639	584	10 16	55	269	17 25	283	244	12 39	39
13	28.0	14 3	37.8	21.3	8 10	16.5	627	16 41	651	601	10 17	50	264	17 40	280	240	12 1	40
14**	26.5	0 53	40.3	17.2	23 38	23.1	612	21 16	681	567	12 56	114	268	18 37	306	233	1 18	73
15**	26.3	4 39	33.2	18.6	21 11	14.6	616	0 43	679	572	10 10	107	268	17 28	299	233	1 9	66
16	26.0	13 44	32.1	19.0	8 43	13.1	612	0 1	637	584	8 12	53	267	16 13	281	247	11 15	34
17	27.5	13 32	36.1	21.3	21 10	14.8	625	15 53	671	592	14 20	79	269	15 36	281	253	11 34	28
18	26.8	13 25	36.0	21.8	8 14	14.2	616	17 43	663	570	10 10	93	269	17 43	295	246	10 42	49
19	26.9	13 32	37.3	19.2	6 46	18.1	618	21 32	646	581	10 34	65	265	19 34	278	236	12 20	42
20	27.2	14 1	36.5	20.0	8 29	16.5	614	5 14	641	570	10 57	71	268	15 46	281	246	10 57	35
21	27.0	12 32	37.7	20.0	7 48	17.7	616	23 48	644	579	10 20	65	266	16 12	278	243	11 40	35
22	26.2	12 32	35.0	19.5	8 28	15.5	619	0 3	640	590	9 11	50	268	17 19	283	251	11 22	32
23*	26.8	12 42	35.2	21.8	7 50	13.4	621	22 24	635	593	9 30	42	265	5 4	274	243	11 1	31
24*	27.4	12 32	36.7	19.5	6 56	17.2	624	17 4	639	591	9 27	48	265	5 7	277	239	12 33	38
25*	26.9	13 20	34.8	20.2	8 14	14.6	626	19 3	644	583	10 20	61	260	5 5	275	231	11 56	44
26*	27.6	13 18	36.7	21.9	8 40	14.8	623	19 30	647	572	11 27	75	261	17 53	275	231	11 28	44
27	27.1	13 19	36.7	19.1	7 58	17.6	620	17 37	647	579	11 21	68	268	17 37				

TABLE IV(A). - THREE-HOUR-RANGE INDICES "K" FOR THE YEAR 1949. (SEE INTRODUCTION PAGE XII).

Date	January			February			March			April			May			June		
	Indices		Sum	Indices		Sum	Indices		Sum	Indices		Sum	Indices		Sum	Indices		Sum
1	2333	2334	23	0013	4000	8	2224	4333	23	0022	2233	14	0220	1332	13	3322	2313	19
2	4634	4343	31	0012	2010	6	3334	3344	27	3112	2211	13	2220	1432	16	2132	2322	17
3	2111	1131	11	2011	3254	18	4324	2542	26	1133	3311	16	3311	1246	21	2112	2224	16
4	2011	3110	9	5433	3210	21	3132	3222	18	0123	2211	12	5433	3431	26	5452	3665	36
5	1101	1012	7	1113	3322	16	3433	2113	20	0123	2202	12	0123	4435	22	3443	5446	33
6	0222	1214	14	2124	3454	25	1011	2111	8	2223	0111	12	4431	2443	25	5412	1335	24
7	3432	2225	23	4433	2221	21	1022	2212	12	2023	2356	23	2322	1333	19	3333	3221	20
8	3112	2332	17	1012	1200	7	1123	3312	16	5555	5542	36	2232	3234	21	1112	3222	14
9	3222	3344	23	1012	2100	7	3333	4532	26	1223	3313	18	3242	3531	23	3122	2143	18
10	2222	3335	22	2112	1232	14	1012	1120	8	4323	3444	27	2122	3323	18	0112	1110	7
11	1322	2145	20	2244	3234	24	0013	3210	10	4244	5532	29	5332	1131	19	0122	1322	13
12	4222	2454	25	3333	3322	22	1012	2324	15	1233	3643	25	2266	6976	44	4323	4444	28
13	5233	1131	19	4333	2224	23	4333	4334	27	4433	4243	27	6633	4312	28	4134	3222	21
14	1012	2123	12	3323	3114	20	4434	4454	32	3333	3333	24	3233	3323	22	1011	3233	14
15	0021	2102	8	2222	3443	22	4114	3343	23	3123	2223	18	3323	2110	15	3222	3441	21
16	3113	3232	18	3123	2113	16	2121	3754	25	2123	3423	20	1332	3224	20	2123	2323	18
17	4123	2111	15	3334	5434	29	4333	2456	30	3233	3324	23	3221	2220	14	2112	3234	18
18	2323	3344	24	3333	3234	24	6333	2453	29	2211	2232	15	0012	1221	9	3123	3432	21
19	4333	3333	25	2132	1110	11	2222	2323	18	1121	2113	12	1101	2311	10	3313	3311	18
20	1122	2211	12	0111	3343	16	1332	2332	19	1111	1222	11	2112	1121	11	1222	3321	16
21	1313	1224	17	3223	3534	25	3322	2336	24	2112	2122	13	0123	3311	14	1012	2221	11
22	3332	2111	16	5533	3454	32	5754	3553	37	1123	3321	16	3223	3321	19	0102	3431	14
23	1012	1244	15	3122	4323	20	4554	4412	29	0113	3331	15	2321	3323	19	1213	2110	11
24	3211	2376	25	4333	4313	24	0233	2121	14	3213	2312	17	2331	1211	14	0112	3333	16
25	8754	5588	50	1113	1211	11	0323	3114	17	2111	2211	11	0024	3310	13	3244	3321	22
26	8765	4554	44	1123	2313	16	4342	3211	20	3212	3211	15	0112	3410	12	1222	3333	19
27	3322	3342	22	3344	2212	21	0022	2211	10	3434	3211	21	0213	3321	15	3322	2222	18
28	2221	1320	13	0123	1411	13	1233	3434	23	0122	2332	15	3211	1210	11	2123	2333	19
29	2102	2222	13				4134	3333	24	1122	1553	20	1111	2110	8	3334	2344	26
30	1010	0001	3				1333	2211	16	3221	2120	13	0021	4565	23	1112	3333	17
31	0112	1231	11				3121	1100	9				4533	4444	31			

MAGNETIC OBSERVATIONS, ABINGER 1949.

TABLE IV(A). - THREE-HOUR-RANGE INDICES "K" FOR THE YEAR 1949. (SEE INTRODUCTION PAGE XII).

Date	July		August		September		October		November		December	
	Indices	Sum	Indices	Sum	Indices	Sum	Indices	Sum	Indices	Sum	Indices	Sum
1	2113 2121	13	0023 2221	12	2034 4433	23	4223 2202	17	3013 4563	25	3332 1110	14
2	1121 1111	9	0243 4322	20	3432 3343	25	3322 3111	16	3243 4445	29	0122 1102	9
3	0112 3231	13	4565 5434	36	4454 5432	31	0012 1012	7	5432 1235	25	1122 4324	19
4	1101 2211	9	5553 4354	34	2233 2242	20	3323 4332	23	2132 2321	16	3222 3245	23
5	0113 3111	11	4223 4444	27	3123 2333	20	4333 3313	23	3333 3324	24	4222 2332	20
6	0211 3122	12	3214 2132	18	2133 3211	16	0123 4544	23	4312 3211	17	2223 2231	17
7	3112 4411	17	1122 3433	19	0122 2221	12	3433 4466	33	1112 1221	11	1312 2100	10
8	1122 1343	17	5533 4220	24	2123 2333	19	6323 4433	28	0002 1101	5	0012 3212	11
9	1134 3210	15	1212 3332	17	4123 1111	14	4433 3322	24	1222 2232	16	1454 3323	25
10	1211 1210	9	1222 2423	18	0111 3212	11	1023 2321	14	1132 2434	20	1112 1132	12
11	0112 2322	13	0121 2111	9	2223 2231	17	4233 4433	26	4433 2532	26	2012 1220	10
12	0111 2252	14	1111 1120	8	3343 4432	26	3222 3121	16	2123 3353	22	0012 1111	7
13	4434 3411	24	2023 2323	17	4332 3113	20	2122 3453	22	3212 2320	15	1112 1101	8
14	0211 3111	10	5334 4435	31	2123 4422	20	3435 3666	36	1332 2323	19	2233 3323	21
15	0011 3111	8	5433 3334	28	2223 3322	19	5477 5677	48	3111 1333	16	3312 1113	15
16	0113 5453	22	3322 2311	17	4323 2313	21	6544 4543	35	4422 1210	16	4322 1221	17
17	2133 4311	18	1313 4433	22	0122 2133	14	4333 1443	25	0011 1112	7	2412 1012	10
18	1223 3433	21	0023 3423	17	1123 2111	12	1113 2111	11	3113 3222	17	1111 1111	8
19	3432 3322	22	3123 3313	19	0012 1210	7	0133 3333	19	3133 3466	29	1111 3213	13
20	3023 1311	14	2321 3211	15	0011 1101	5	3113 3233	19	6542 4333	30	3222 1333	19
21	0111 2312	11	1222 3233	18	0101 1102	6	2322 2330	17	3112 3452	21	1322 2332	18
22	1212 3344	20	2213 2211	14	2123 2310	14	2112 2146	19	1102 2222	12	2313 3132	18
23	4323 3333	24	0222 2100	9	1213 2111	12	3133 3354	25	2102 2132	13	1112 2342	16
24	3121 3332	18	1123 1210	11	1222 3335	21	4433 1212	20	2322 1100	11	4333 2321	21
25	2232 3232	19	0112 2101	8	4434 3353	29	2112 2111	11	0011 2131	9	2112 3311	14
26	2131 1110	10	0122 2121	11	3432 2325	24	2212 1232	15	1011 2013	9	3222 1211	14
27	1001 1120	6	1232 3322	18	4344 4323	27	1433 5455	30	3223 2432	21	2003 3232	15
28	0011 2121	8	2312 2211	14	4333 1201	17	5423 2333	25	1112 1103	10	1123 3343	20
29	0013 3211	11	0113 3233	16	1122 3222	15	3323 3334	24	5524 3454	32	3323 2122	18
30	0122 1131	11	3332 2221	18	1134 3353	23	1122 2213	14	4334 4554	32	1122 1354	19
31	1223 2331	17	3121 2333	18			4322 1232	19			2224 3352	23

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

All Days

DECLINATION WEST (Unit 0'.01)

Month and Season, 1949	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	-337	-345	-242	-082	-011	+083	+069	-034	-136	-165	-045	+114	+351	+478	+418	+314	+205	+235	+149	-094	-109	-277	-229	-315
February	-293	-204	-171	-166	-146	-060	-062	-135	-306	-355	-163	+119	+400	+525	+556	+447	+288	+227	+150	+065	000	-173	-249	-283
March	-199	-296	-229	-200	-174	-187	-217	-327	-438	-382	-103	+267	+593	+748	+714	+572	+350	+135	+040	-022	-106	-185	-175	-173
April	-187	-139	-183	-219	-236	-296	-409	-557	-644	-499	-151	+315	+709	+861	+770	+593	+367	+137	+021	-012	-007	-034	-044	-153
May	-085	-076	-147	-189	-291	-457	-600	-670	-657	-421	-020	+371	+671	+747	+684	+536	+368	+177	+096	+059	-007	+034	-047	-081
June	-113	-176	-186	-245	-372	-529	-638	-657	-560	-346	-026	+332	+606	+746	+738	+581	+432	+234	+121	+070	+044	+048	-022	-077
July	-048	-076	-129	-221	-306	-458	-549	-585	-545	-369	-104	+243	+528	+654	+639	+526	+368	+205	+088	+056	+051	+054	+009	-030
August	-109	-128	-239	-255	-265	-357	-466	-435	-447	-274	+043	+373	+599	+701	+639	+459	+263	+106	+025	+028	000	-053	-086	-127
September	-217	-234	-251	-218	-248	-258	-340	-422	-462	-342	+028	+438	+734	+808	+681	+477	+277	+126	+004	-049	-059	-112	-163	-196
October	-304	-318	-305	-251	-162	-113	-183	-255	-335	-307	+010	+423	+660	+712	+679	+521	+311	+236	+100	-039	-149	-269	-363	-290
November	-304	-243	-209	-127	-081	-081	-036	-128	-203	-189	-020	+206	+386	+482	+466	+404	+275	+250	+169	-099	-165	-202	-262	-289
December	-182	-195	-184	-133	-092	-088	-083	-094	-064	+003	+085	+184	+256	+266	+224	+213	+184	+159	+120	-002	-132	-132	-153	-155
Year	-198	-203	-206	-192	-199	-233	-293	-358	-400	-304	-039	+282	+541	+644	+601	+470	+307	+186	+090	-003	-053	-108	-149	-181
Winter	-279	-247	-202	-127	-083	-037	-028	-098	-177	-177	-036	+156	+348	+438	+416	+345	+238	+218	+147	-033	-102	-196	-223	-261
Equinox	-227	-247	-242	-222	-205	-214	-287	-390	-470	-383	-054	+361	+674	+782	+711	+541	+326	+159	+041	-031	-080	-150	-186	-203
Summer	-089	-114	-175	-228	-309	-450	-563	-587	-552	-353	-027	+330	+601	+712	+675	+526	+358	+181	+083	+053	+022	+021	-037	-079

INCLINATION (Unit 0'.01)

January	+023	+021	-025	-035	-071	-089	-093	-081	-043	+001	+052	+075	+063	+046	+047	+032	+012	-011	-007	+009	+016	+017	+031	+011
February	-029	-036	-046	-054	-074	-080	-105	-097	-034	+041	+106	+134	+124	+108	+085	+070	+047	+020	-009	-030	-028	-023	-049	-041
March	-066	-065	-054	-070	-097	-077	-085	-070	-013	+061	+113	+114	+108	+098	+076	+063	+050	+022	+023	+020	+005	-027	-056	-062
April	-030	-034	-044	-043	-033	-046	-041	-005	+052	+125	+179	+161	+121	+092	+031	-014	-042	-054	-059	-065	-061	-065	-068	-052
May	-030	-055	-048	-034	-024	-009	+020	+065	+125	+141	+138	+108	+088	+067	+028	-019	-069	-059	-084	-068	-077	-072	-073	-063
June	-046	-037	-035	-035	-025	-003	+059	+111	+150	+164	+138	+099	+067	+044	+010	-025	-071	-094	-090	-090	-074	-078	-074	-061
July	-034	-027	-023	-027	-022	-003	+027	+065	+097	+117	+119	+085	+058	+046	+035	-002	-044	-066	-086	-068	-068	-067	-060	-050
August	-057	-054	-057	-056	-046	-052	+009	+043	+095	+133	+148	+106	+061	+037	+034	+025	-011	-027	-036	-053	-061	-064	-050	-059
September	-079	-073	-071	-078	-080	-082	-042	+028	+094	+148	+174	+155	+106	+067	+053	+040	+017	-008	-031	-052	-071	-072	-077	-080
October	-065	-082	-106	-115	-120	-125	-129	-070	+029	+102	+108	+128	+114	+106	+090	+089	+083	+052	+023	+023	-014	-039	-048	-043
November	-041	-044	-046	-056	-075	-102	-104	-094	-041	+017	+058	+081	+092	+067	+076	+075	+058	+018	+029	+049	+008	-004	-004	-020
December	+012	+014	-004	-015	-040	-053	-062	-035	-001	+026	+039	+026	+014	+019	+026	+020	+021	+002	-022	+003	+009	+001	-002	-002
Year	-037	-039	-047	-052	-059	-060	-046	-012	+043	+090	+114	+106	+085	+066	+049	+030	+004	-017	-029	-027	-035	-041	-044	-044
Winter	-009	-011	-030	-040	-065	-081	-091	-077	-030	+021	+064	+079	+073	+060	+059	+049	+035	+007	-002	+008	+001	-002	-006	-013
Equinox	-060	-064	-069	-077	-083	-083	-074	-029	+041	+109	+144	+140	+112	+091	+063	+045	+027	+003	-011	-019	-035	-051	-062	-059
Summer	-042	-043	-041	-038	-029	-017	+029	+071	+117	+139	+136	+100	+069	+049	+027	-005	-049	-062	-074	-070	-070	-070	-064	-058

HORIZONTAL INTENSITY (Unit 0.1γ)

January	- 49	- 68	- 11	+ 05	+ 57	+ 98	+117	+112	+ 59	- 15	- 92	-134	-119	- 78	- 48	- 09	+ 33	+ 59	+ 62	+ 43	+ 25	+ 01	- 33	- 17
February	+ 35	+ 34	+ 44	+ 61	+ 89	+109	+144	+138	+ 51	- 72	-184	-238	-221	-182	-125	- 80	- 32	+ 04	+ 48	+ 76	+ 73	+ 63	+ 91	+ 67
March	+ 92	+ 81	+ 66	+ 87	+117	+ 90	+106	+ 95	+ 02	-129	-231	-247	-228	-189	-120	- 65	- 13	+ 42	+ 40	+ 38	+ 52	+ 85	+112	+108
April	+ 43	+ 46	+ 56	+ 57	+ 48	+ 78	+ 81	+ 29	- 70	-213	-333	-337	-277	-206	- 69	+ 36	+106	+144	+147	+147	+130	+130	+126	+ 92
May	+ 24	+ 56	+ 51	+ 30	+ 36	+ 27	- 17	- 95	-205	-255	-284	-258	-217	-142	- 29	+ 85	+177	+172	+196	+162	+159	+129	+119	+ 83
June	+ 51	+ 33	+ 34	+ 45	+ 48	+ 16	- 81	-170	-249	-291	-278	-239	-182	-118	- 25	+ 69	+167	+225	+220	+207	+161	+144	+122	+ 89
July	+ 52	+ 38	+ 30	+ 43	+ 49	+ 21	- 30	- 95	-160	-209	-238	-206	-163	-117	- 63	+ 21	+101	+148	+184	+149	+132	+120	+105	+ 80
August	+ 87	+ 71	+ 72	+ 66	+ 57	+ 63	- 20	- 75	-161	-233	-278	-231	-157	- 92	- 52	- 03	+ 71	+108	+113	+131	+128	+125	+ 98	+100
September	+113	+ 97	+ 89	+105	+115	+119	+ 68	- 32	-139	-240	-311	-304	-227	-146	- 92	- 39	+ 16	+ 61	+ 98	+128	+140	+134	+134	+125
October	+ 73	+ 83	+116	+126	+145	+155	+155	+ 95	- 57	-185	-212	-244	-206	-162	-103	- 65	- 37	- 02	+ 34	+ 34	+ 54	+ 77	+ 74	+ 50
November	+ 43	+ 36	+ 36	+ 53	+ 87	+128	+130	+118	+ 42	- 56	-123	-156	-167	-107	- 96	- 81	- 40	+ 24	+ 12	- 17	+ 37	+ 33	+ 25	+ 37
December	- 18	- 26	- 01	+ 10	+ 46	+ 70	+ 81	+ 41	- 09	- 50	- 67	- 49	- 34	- 33	- 34	- 26	- 19	+ 10	+ 47	+ 14	+ 11	+ 15	+ 13	+ 11
Year	+ 46	+ 40	+ 49	+ 57	+ 75	+ 81	+ 61	+ 13	- 75	-162	-219	-220	-183	-131	- 71	- 13	+ 44	+ 83	+100	+ 93	+ 92	+ 88	+ 82	+ 69
Winter	+ 03	- 06	+ 17	+ 32	+ 70	+101	+118	+102	+ 36	- 48	-117	-144	-135	-100	- 76	- 49	- 15	+ 24	+ 42	+ 29	+ 37	+ 28	+ 24	+ 25
Equinox	+ 80	+ 77	+ 82	+ 94	+106	+111	+103	+ 47	- 66	-192	-272	-283	-235	-176	- 96	- 33	+ 18	+ 61	+ 80	+ 87	+ 94	+107	+112	+ 94
Summer	+ 54	+ 50	+ 47	+ 46	+ 48	+ 32	- 37	-109	-194	-247	-270	-234	-180	-117	- 42	+ 43	+129	+163	+178	+162	+145	+130	+111	+ 88

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

All Days

NORTH COMPONENT (Unit 0.1γ)

Month and Season, 1949	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	-18	-37	+11	+12	+57	+89	+110	+114	+70	-00	-87	-143	-149	-120	-85	-37	+14	+37	+48	+51	+34	+26	-12	+11
February	+61	+52	+59	+75	+101	+113	+148	+148	+78	-40	-167	-246	-254	-227	-173	-119	-57	-16	+34	+69	+72	+78	+112	+91
March	+109	+106	+86	+104	+131	+106	+124	+123	+41	-94	-219	-268	-278	-253	-182	-115	-44	+30	+36	+40	+61	+101	+126	+122
April	+59	+58	+72	+76	+68	+103	+116	+78	-12	-166	-316	-361	-337	-280	-137	-17	+72	+130	+143	+146	+129	+131	+128	+105
May	+31	+62	+64	+46	+62	+67	+37	-34	-144	-214	-279	-288	-274	-207	-90	+36	+142	+154	+185	+155	+158	+125	+122	+89
June	+61	+48	+50	+66	+81	+63	-23	-110	-196	-257	-272	-266	-234	-183	-90	+17	+127	+202	+207	+198	+155	+138	+123	+95
July	+56	+44	+41	+62	+76	+62	+19	-42	-110	-174	-226	-225	-208	-174	-119	-26	+67	+128	+174	+142	+126	+114	+103	+82
August	+96	+82	+92	+88	+80	+94	+22	-35	-119	-206	-279	-261	-208	-153	-108	-44	+47	+97	+109	+127	+127	+128	+105	+110
September	+131	+116	+110	+123	+136	+141	+98	+06	-96	-207	-310	-339	-290	-216	-152	-81	-09	+49	+96	+131	+144	+142	+147	+141
October	+99	+110	+142	+147	+158	+163	+169	+117	-27	-156	-210	-279	-262	-224	-162	-111	-64	-23	+25	+37	+67	+100	+105	+75
November	+70	+57	+54	+64	+93	+134	+132	+128	+60	-39	-120	-172	-199	-149	-136	-116	-64	+01	-03	-08	+51	+51	+48	+62
December	-02	-08	+15	+22	+54	+77	+87	+49	-03	-50	-74	-65	-56	-56	-54	-45	-35	-04	+36	+14	+23	+27	+26	+25
Year	+63	+58	+66	+74	+91	+101	+87	+45	-38	-134	-213	-243	-229	-187	-124	-55	+16	+65	+91	+92	+96	+97	+94	+84
Winter	+28	+16	+35	+43	+76	+103	+119	+110	+51	-32	-112	-157	-165	-138	-112	-79	-36	+05	+29	+32	+45	+46	+44	+47
Equinox	+100	+98	+103	+113	+123	+128	+127	+81	-24	-156	-264	-312	-292	-243	-158	-81	-11	+47	+75	+89	+100	+119	+127	+111
Summer	+61	+59	+62	+66	+75	+72	+14	-55	-142	-213	-264	-260	-231	-179	-102	-04	+96	+145	+169	+156	+142	+126	+113	+94

WEST COMPONENT (Unit 0.1γ)

January	-188	-195	-131	-43	+04	+60	+56	+00	-63	-91	-39	+39	+168	+242	+215	+166	+115	+135	+90	-43	-54	-148	-128	-171
February	-151	-103	-84	-79	-63	-14	-10	-49	-155	-201	-117	+25	+177	+250	+276	+225	+148	+122	+88	+47	+12	-82	-118	-140
March	-91	-145	-111	-92	-74	-85	-98	-159	-233	-225	-93	+102	+279	+368	+361	+295	+185	+79	+28	-06	-48	-85	-75	-75
April	-93	-67	-88	-108	-118	-145	-205	-292	-355	-301	-135	+113	+333	+426	+400	+322	+213	+97	+35	+18	+18	+03	-03	-67
May	-41	-31	-70	-96	-149	-239	-323	-373	-384	-266	-57	+156	+322	+375	+360	+300	+225	+123	+83	+58	+22	+39	-06	-30
June	-52	-89	-94	-123	-191	-280	-354	-378	-340	-232	-60	+138	+294	+379	+390	+321	+258	+162	+101	+71	+50	+49	+08	-27
July	-17	-34	-64	-111	-155	-241	-298	-328	-317	-231	-95	+96	+255	+330	+331	+284	+213	+134	+77	+54	+49	+49	+22	-03
August	-44	-57	-116	-125	-132	-180	-252	-244	-265	-184	-23	+161	+294	+359	+332	+244	+152	+74	+32	+36	+21	-08	-30	-51
September	-97	-109	-119	-99	-113	-118	-170	-230	-269	-222	-36	+184	+354	+407	+348	+248	+150	+77	+18	-05	-09	-38	-65	-84
October	-150	-156	-144	-113	-63	-35	-72	-120	-188	-194	-30	+186	+318	+353	+345	+267	+160	+126	+59	-15	-71	-131	-182	-147
November	-155	-124	-106	-59	-29	-22	+02	-49	-101	-110	-31	+84	+179	+240	+233	+202	+140	+137	+92	-56	-82	-102	-136	-148
December	-100	-108	-98	-69	-42	-35	-31	-43	-36	-07	+34	+90	+131	+137	+114	+109	+95	+86	+72	+01	-69	-68	-80	-81
Year	-98	-102	-102	-93	-94	-111	-146	-189	-226	-189	-57	+115	+259	+322	+309	+249	+171	+113	+65	+13	-13	-44	-66	-85
Winter	-149	-133	-105	-63	-33	-03	+04	-35	-89	-102	-38	+60	+164	+217	+210	+176	+125	+120	+86	-13	-48	-100	-116	-135
Equinox	-108	-119	-116	-103	-92	-96	-136	-200	-261	-236	-74	+146	+321	+389	+364	+283	+177	+95	+35	-02	-28	-63	-81	-93
Summer	-39	-53	-86	-114	-157	-235	-307	-331	-327	-228	-59	+138	+291	+361	+353	+287	+212	+123	+73	+55	+36	+32	-02	-28

VERTICAL COMPONENT (Unit 0.1γ)

January	-35	-87	-110	-112	-114	-79	-47	-22	-12	-30	-36	-51	-58	-21	+51	+92	+119	+101	+122	+133	+113	+63	+32	+01
February	-20	-46	-56	-46	-47	-26	-28	-13	00	-23	-60	-89	-83	-49	+04	+57	+91	+80	+79	+74	+74	+65	+41	+14
March	-15	-39	-33	-42	-64	-58	-47	-21	-40	-89	-146	-179	-157	-101	-18	+66	+143	+172	+172	+155	+138	+104	+65	+33
April	-05	-11	-20	-16	-02	+20	+46	+49	+18	-61	-152	-224	-226	-159	-51	+36	+102	+149	+140	+117	+92	+75	+60	+34
May	-50	-58	-50	-47	-01	+30	+30	+02	-46	-105	-184	-226	-201	-98	+31	+132	+172	+195	+168	+142	+103	+53	+25	-25
June	-40	-51	-43	-19	+23	+28	+18	-11	-58	-108	-171	-212	-191	-123	-23	+74	+142	+199	+201	+169	+119	+67	+27	-05
July	+03	-06	-10	+07	+39	+37	+25	+04	-34	-80	-141	-185	-178	-114	-26	+41	+83	+115	+127	+112	+74	+49	+35	+15
August	+04	-22	-30	-41	-28	-33	-14	-23	-44	-81	-136	-170	-154	-87	-02	+79	+130	+155	+138	+121	+87	+68	+54	+28
September	-12	-29	-38	-28	-09	-08	+15	+26	+05	-44	-122	-171	-160	-106	-31	+49	+97	+114	+123	+118	+80	+61	+46	+14
October	-57	-90	-98	-103	-81	-72	-51	-20	-32	-78	-119	-124	-82	-11	+74	+156	+201	+178	+161	+161	+77	+45	+08	-30
November	-41	-68	-76	-69	-60	-54	-60	-52	-44	-72	-87	-85	-68	-19	+41	+72	+107	+119	+129	+132	+115	+64	+45	+18
December	+01	-12	-19	-27	-30	-22	-28	-23	-25	-27	-20	-26	-31	-11	+10	+12	+29	+31	+36	+41	+54	+37	+26	+18
Year	-22	-43	-49	-45	-31	-20	-12	-09	-26	-67	-115	-145	-132	-75	+05	+72	+118	+134	+133	+123	+94	+63	+39	+10
Winter	-24	-53	-65	-64	-63	-45	-41	-28	-20	-38	-51	-63	-60	-25	+27	+58	+87	+83	+92	+95	+89	+57	+36	+13
Equinox	-22	-42	-47	-47	-44	-30	-09	+09	-12	-68	-135	-175	-156	-94	-07	+77	+136	+153	+149	+138	+97	+71	+45	+13
Summer	-21	-34	-33	-25	+08	+16	+15	-07	-46	-94	-158	-198	-181	-106	-05	+82	+132	+166	+159	+136	+96	+59	+35	+03

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, 1949	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	-91	-63	-57	-35	-39	-87	-85	-143	-205	-231	-97	+91	+243	+343	+279	+201	+135	+131	+115	+5	-39	-61	-123	-189
February	-86	-54	-54	-60	-72	-110	-142	-246	-374	-408	-210	+28	+296	+434	+438	+312	+162	+148	+108	+38	-16	-46	-48	-40
March	-38	-62	-78	-120	-156	-206	-274	-442	-608	-572	-306	+80	+410	+590	+600	+436	+214	+134	+102	+68	+64	+66	+48	+38
April	-58	-78	-58	-156	-250	-298	-404	-568	-644	-514	-152	+284	+652	+726	+602	+404	+250	+114	+50	+20	+66	+40	+8	-36
May	+5	+5	-27	-161	-275	-451	-637	-721	-673	-447	-87	+305	+647	+747	+631	+441	+279	+165	+67	+67	+55	+63	+43	-43
June	+16	+6	-20	-138	-318	-500	-662	-714	-628	-356	+20	+384	+630	+762	+704	+486	+286	+90	-30	-6	+22	+4	-14	
July	-51	-109	-155	-195	-325	-457	-583	-649	-629	-425	-193	+189	+505	+673	+713	+609	+433	+273	+127	+75	+91	+41	+33	+11
August	-112	-130	-170	-194	-304	-442	-506	-518	-496	-278	+104	+524	+742	+746	+586	+346	+142	+54	+20	+48	+10	-22	-60	-96
September	-43	-87	-97	-127	-183	-219	-349	-485	-569	-417	-101	+293	+581	+639	+501	+325	+171	+111	+107	+55	+23	+11	-51	-87
October	-74	-62	-88	-106	-100	-110	-140	-234	-358	-306	-14	+270	+442	+474	+424	+332	+208	+130	+56	-114	-68	-98	-230	-238
November	-141	-95	-89	-101	-95	-121	-143	-189	-249	-233	-49	+199	+323	+357	+301	+249	+185	+155	+123	+31	-31	-81	-133	-175
December	-112	-102	-50	-82	-94	-76	-76	-98	-116	-80	-2	+76	+172	+238	+212	+174	+136	+116	+76	+8	-38	-72	-104	-100
Year	-65	-69	-79	-123	-184	-256	-333	-417	-462	-356	-91	+227	+470	+561	+499	+360	+217	+135	+77	+23	+9	-11	-51	-85
Winter	-108	-79	-63	-70	-75	-99	-112	-169	-236	-238	-90	+99	+259	+343	+308	+234	+155	+138	+106	+21	-31	-65	-102	-126
Equinox	-53	-72	-80	-127	-172	-208	-292	-432	-545	-452	-143	+232	+521	+607	+532	+374	+211	+122	+79	+7	+21	+5	-56	-93
Summer	-36	-57	+93	-172	-306	-463	-597	-651	-607	-377	-39	+351	+631	+732	+659	+471	+285	+146	+46	+40	+38	+26	+5	-36

INCLINATION (Unit 0.01)

January	+26	+20	+8	-6	-16	-26	-40	-49	-20	+27	+65	+73	+45	+28	+31	+14	+4	-21	-37	-19	-25	-37	-38	-13
February	-12	-8	-24	-31	-50	-58	-74	-63	-19	+40	+107	+143	+145	+111	+87	+59	+33	-17	-47	-51	-62	-68	-66	-71
March	-32	-17	-7	-11	-13	-28	-45	-19	+26	+57	+94	+122	+127	+98	+59	+32	+14	-14	-33	-50	-77	-89	-98	-94
April	-14	-4	+11	+14	+13	-23	-31	-14	+19	+54	+90	+89	+81	+39	+9	-14	-38	-44	-44	-43	-41	-31	-40	-41
May	-39	-37	-27	-21	-14	-1	+23	+70	+111	+147	+133	+125	+89	+60	+24	-37	-78	-92	-112	-93	-78	-58	-50	-42
June	-38	-38	-31	-29	-17	+14	+60	+115	+147	+162	+128	+52	+11	-18	-31	-39	-50	-56	-59	-67	-58	-59	-53	-43
July	-26	-6	+2	-6	-9	-3	+33	+74	+116	+140	+134	+113	+71	+40	+3	-41	-73	-93	-94	-93	-82	-82	-66	-51
August	-37	-37	-33	-28	-16	+2	+49	+97	+144	+165	+130	+87	+18	-10	-15	-28	-28	-50	-51	-65	-79	-80	-76	-64
September	-42	-41	-37	-44	-38	-35	+1	+56	+130	+181	+186	+129	+57	+10	-7	-17	-24	-45	-64	-72	-74	-75	-58	-73
October	-38	-64	-53	-48	-62	-90	-82	-35	+8	+56	+98	+134	+134	+120	+101	+80	+66	+4	-19	-43	-60	-69	-69	-63
November	+14	+10	-1	-10	-22	-39	-49	-26	+23	+70	+95	+106	+79	+33	+16	-4	-16	-46	-49	-32	-39	-52	-38	-27
December	-5	+12	+1	-31	-23	-26	-28	-8	+12	+42	+60	+52	+40	+32	+29	+11	+5	-5	-14	-34	-37	-32	-30	-21
Year	-20	-18	-16	-21	-22	-26	-15	+16	+58	+95	+110	+102	+75	+45	+26	+1	-15	-40	-52	-55	-59	-61	-57	-50
Winter	+6	+9	-4	-20	-28	-37	-48	-37	-1	+45	+82	+94	+77	+51	+41	+20	+7	-22	-37	-34	-41	-47	-43	-33
Equinox	-32	-32	-22	-22	-25	-44	-39	-4	+46	+87	+117	+119	+100	+67	+41	+20	+5	-25	-40	-52	-63	-66	-66	-68
Summer	-35	-30	-22	-21	-14	+3	+41	+89	+130	+154	+131	+94	+47	+18	-5	-36	-57	-73	-79	-80	-74	-70	-61	-50

HORIZONTAL INTENSITY (Unit 0.1γ)

January	-31	-23	-7	+15	+29	+43	+63	+77	+35	-55	-127	-143	-107	-65	-45	-9	+15	+45	+65	+41	+51	+59	+55	+19
February	+20	+12	+34	+46	+76	+92	+112	+98	+36	-66	-182	-240	-238	-180	-126	-72	-28	+40	+78	+82	+102	+102	+94	+102
March	+66	+38	+28	+32	+34	+62	+88	+60	-18	-94	-184	-252	-260	-204	-120	-52	-8	+34	+64	+94	+134	+148	+156	+154
April	+28	+12	-8	-4	+10	+68	+80	+54	-10	-100	-198	-232	-224	-134	-52	+16	+76	+96	+98	+98	+90	+72	+84	+76
May	+67	+65	+55	+51	+57	+45	-3	-91	-179	-263	-271	-275	-219	-151	-67	+53	+135	+171	+209	+181	+147	+111	+95	+77
June	+63	+61	+51	+57	+55	+9	-69	-157	-223	-269	-249	-167	-105	-31	+25	+71	+103	+121	+131	+137	+111	+103	+93	+71
July	+38	+6	+0	+26	+46	+36	-24	-90	-162	-238	-254	-236	-176	-124	-34	+70	+136	+174	+182	+172	+142	+132	+102	+72
August	+70	+76	+70	+66	+58	+32	-44	-126	-216	-276	-262	-216	-110	-42	-6	+48	+64	+102	+102	+122	+132	+132	+128	+106
September	+81	+79	+73	+85	+79	+69	+23	-63	-179	-271	-315	-257	-159	-75	-25	+23	+45	+71	+103	+125	+127	+127	+105	+121
October	+49	+81	+59	+61	+91	+133	+125	+65	-1	-103	-193	-249	-229	-191	-137	-93	-65	+25	+55	+91	+103	+113	+113	+93
November	-9	-13	+1	+13	+35	+65	+77	+43	-35	-125	-171	-189	-151	-63	-17	+13	+37	+77	+83	+59	+73	+83	+63	+49
December	+4	-24	-8	+36	+24	+36	+40	+14	-18	-62	-84	-78	-66	-46	-38	-12	-2	+12	+32	+56	+60	+48	+42	+28
Year	+37	+31	+29	+40	+50	+58	+39	-5	-81	-160	-208	-211	-170	-109	-54	+5	+42	+81	+100	+105	+106	+103	+94	+81
Winter	-4	-12	+5	+28	+41	+59	+73	+58	+5	-77	-141	-163	-141	-89	-57	-20	+6	+44	+65	+60	+72	+73	+64	+50
Equinox	+56	+53	+38	+44	+54	+83	+79	+29	-52	-142	-223	-248	-218	-151	-84	-27	+12	+57	+80	+102	+114	+115	+115	+111
Summer	+60	+52	+44	+50	+54	+31	-35	-116	-195	-262	-259	-224	-153	-87	-21	+61	+110	+142	+156	+153	+133	+120	+105	+82

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

International Quiet Days

NORTH COMPONENT (Unit 0.1γ)

Month and Season, 1949	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	- 16	- 2	+ 18	+ 31	+ 50	+ 70	+ 90	+ 52	- 34	-115	-149	-125	- 94	- 69	- 26	+ 2	+ 32	+ 54	+ 41	+ 56	+ 65	+ 65	+ 36
February	+ 28	+ 16	+ 38	+ 52	+ 80	+ 99	+122	+117	+ 68	- 28	-161	-240	-260	-215	-163	- 98	- 42	+ 26	+ 68	+ 77	+101	+103	+ 95	+104
March	+ 69	+ 43	+ 35	+ 42	+ 46	+ 78	+110	+ 98	+ 35	- 42	-155	-254	-293	-253	-172	- 90	- 25	+ 21	+ 54	+ 87	+126	+139	+150	+147
April	+ 33	+ 18	- 2	+ 11	+ 31	+ 94	+114	+102	+ 47	- 54	-181	-253	-278	-196	-104	- 20	+ 53	+ 85	+ 93	+ 94	+ 83	+ 66	+ 82	+ 78
May	+ 66	+ 64	+ 57	+ 65	+ 81	+ 85	+ 55	- 24	-115	-217	-255	-297	-273	-214	-121	+ 13	+108	+153	+200	+171	+139	+104	+ 91	+ 80
June	+ 61	+ 59	+ 53	+ 69	+ 82	+ 54	- 8	- 89	-162	-229	-244	-198	-159	- 98	- 37	+ 26	+ 77	+111	+132	+137	+108	+100	+ 92	+ 73
July	+ 42	+ 16	+ 15	+ 43	+ 75	+ 77	+ 29	- 30	-103	-195	-231	-248	-218	-182	- 96	+ 16	+ 95	+146	+166	+161	+130	+126	+ 97	+ 70
August	+ 79	+ 87	+ 84	+ 82	+ 85	+ 71	+ 4	- 78	-170	-245	-266	-258	-174	-106	- 59	+ 17	+ 50	+ 95	+ 98	+114	+129	+131	+132	+112
September	+ 84	+ 85	+ 81	+ 95	+ 94	+ 88	+ 54	- 18	-123	-226	-302	-280	-208	-130	- 70	- 5	+ 29	+ 60	+ 93	+117	+122	+122	+108	+126
October	+ 55	+ 86	+ 66	+ 70	+ 98	+141	+135	+ 84	+ 32	- 76	-189	-268	-263	-230	-172	-120	- 83	+ 13	+ 48	+100	+107	+120	+132	+116
November	+ 4	- 5	+ 9	+ 22	+ 44	+ 76	+ 90	+ 60	- 12	-102	-164	-204	-177	- 94	- 43	- 8	+ 20	+ 62	+ 72	+ 55	+ 75	+ 88	+ 74	+ 64
December	+ 14	- 14	- 3	+ 43	+ 32	+ 43	+ 46	+ 21	- 8	- 55	- 83	- 84	- 81	- 67	- 57	- 26	- 14	+ 1	+ 24	+ 54	+ 62	+ 54	+ 51	+ 36
Year	+ 43	+ 37	+ 36	+ 51	+ 65	+ 80	+ 68	+ 28	- 38	-125	-196	-228	-209	-157	- 97	- 27	+ 23	+ 67	+ 92	+101	+103	+102	+ 97	+ 87
Winter	+ 6	- 5	+ 11	+ 34	+ 47	+ 67	+ 82	+ 72	+ 25	- 55	-131	-169	-161	-118	- 83	- 40	- 9	+ 30	+ 55	+ 57	+ 74	+ 78	+ 71	+ 60
Equinox	+ 60	+ 58	+ 45	+ 55	+ 67	+100	+103	+ 67	- 2	-100	-207	-264	-261	-202	-130	- 59	- 7	+ 45	+ 72	+100	+110	+112	+118	+117
Summer	+ 62	+ 57	+ 52	+ 65	+ 81	+ 72	+ 20	- 55	-138	-222	-249	-250	-206	-150	- 78	+ 18	+ 83	+126	+149	+144	+127	+115	+103	+ 84

WEST COMPONENT (Unit 0.1γ)

January	- 54	- 37	- 32	- 16	- 16	- 39	- 35	- 64	-104	-132	- 73	+ 25	+112	+172	+141	+106	+ 75	+ 77	+ 72	+ 9	- 12	- 23	- 57	- 98
February	- 43	- 27	- 23	- 25	- 26	- 44	- 57	-115	-194	-229	-142	- 25	+119	+202	+213	+155	+ 82	+ 86	+ 70	+ 34	+ 8	- 8	- 10	- 5
March	- 10	- 27	- 37	- 59	- 78	-100	-132	-226	-327	-321	-194	+ 1	+176	+281	+300	+224	+113	+ 77	+ 65	+ 52	+ 56	+ 60	+ 51	+ 46
April	- 26	- 40	- 32	- 84	-132	-148	-202	-294	-345	-291	-114	+114	+311	+365	+313	+218	+146	+ 77	+ 43	+ 27	+ 50	+ 33	+ 18	- 7
May	+ 14	+ 13	- 5	- 78	-137	-233	-340	-400	-388	-282	- 91	+118	+309	+374	+326	+244	+171	+116	+ 70	+ 65	+ 53	+ 52	+ 39	- 10
June	+ 19	+ 13	- 2	- 64	-161	-265	-365	-407	-372	-234	- 30	+178	+319	+401	+380	+271	+170	+ 68	+ 6	+ 7	+ 15	+ 29	+ 17	+ 4
July	- 21	- 57	- 83	-100	-166	-238	-315	-361	-362	-266	-145	+ 62	+241	+339	+375	+336	+253	+174	+ 98	+ 68	+ 72	+ 44	+ 34	+ 18
August	- 48	- 57	- 79	- 93	-153	-231	-277	-297	-301	-194	+ 13	+244	+378	+391	+312	+193	+ 86	+ 46	+ 27	+ 46	+ 27	+ 10	- 11	- 34
September	- 10	- 33	- 40	- 54	- 85	-106	-182	-269	-333	-267	-106	+114	+284	+329	+263	+177	+ 99	+ 71	+ 74	+ 50	+ 33	+ 27	- 10	- 27
October	- 32	- 20	- 37	- 47	- 39	- 37	- 54	-114	-191	-180	- 39	+103	+198	+222	+204	+162	+100	+ 74	+ 39	- 46	- 19	- 34	-104	-112
November	- 77	- 53	- 47	- 52	- 45	- 54	- 64	- 94	-139	-145	- 54	+ 75	+148	+180	+158	+135	+105	+ 95	+ 79	+ 26	- 5	- 30	- 61	- 85
December	- 59	- 58	- 28	- 38	- 46	- 35	- 34	- 50	- 65	- 53	- 15	+ 28	+ 81	+120	+107	+ 91	+ 72	+ 64	+ 46	+ 14	- 11	- 31	- 49	- 49
Year	- 29	- 32	- 37	- 59	- 90	-128	-171	-224	-260	-216	- 83	+ 86	+223	+281	+258	+193	+123	+ 85	+ 57	+ 29	+ 22	+ 11	- 12	- 30
Winter	- 58	- 44	- 33	- 33	- 33	- 43	- 48	- 81	-126	-140	- 71	+ 26	+115	+169	+155	+122	+ 84	+ 81	+ 67	+ 21	- 5	- 23	- 44	- 59
Equinox	- 20	- 30	- 37	- 61	- 84	- 98	-143	-226	-299	-265	-113	+ 83	+242	+299	+270	+195	+115	+ 75	+ 55	+ 21	+ 30	+ 22	- 11	- 25
Summer	- 9	- 22	- 42	- 84	-154	-242	-324	-366	-356	-244	- 63	+151	+312	+376	+348	+261	+170	+101	+ 50	+ 47	+ 42	+ 34	+ 20	- 6

VERTICAL COMPONENT (Unit 0.1γ)

January	+ 18	+ 18	+ 10	+ 14	+ 10	+ 12	+ 6	+ 12	+ 12	- 34	- 70	- 80	- 94	- 54	+ 2	+ 28	+ 50	+ 32	+ 24	+ 32	+ 30	+ 12	- 2	0
February	+ 5	+ 1	- 3	+ 1	+ 3	+ 15	+ 5	+ 11	+ 11	- 13	- 51	- 63	- 51	- 35	+ 7	+ 39	+ 49	+ 33	+ 19	+ 15	+ 21	+ 1	- 11	- 9
March	+ 40	+ 28	+ 40	+ 34	+ 34	+ 50	+ 48	+ 74	+ 48	- 22	-102	-162	-164	-136	- 78	- 12	+ 30	+ 32	+ 36	+ 46	+ 44	+ 36	+ 24	+ 32
April	+ 19	+ 15	+ 21	+ 37	+ 71	+ 81	+ 81	+ 77	+ 43	- 45	-151	-231	-241	-177	- 89	- 11	+ 45	+ 71	+ 77	+ 81	+ 65	+ 59	+ 57	+ 35
May	+ 22	+ 24	+ 34	+ 46	+ 84	+100	+ 72	+ 30	- 32	-102	-170	-210	-202	-142	- 74	- 2	+ 44	+ 80	+ 98	+ 98	+ 72	+ 54	+ 48	+ 36
June	+ 14	+ 12	+ 12	+ 30	+ 70	+ 70	+ 50	+ 34	- 10	- 64	-134	-208	-204	-136	- 50	+ 30	+ 66	+ 88	+100	+ 88	+ 56	+ 36	+ 30	+ 16
July	- 2	- 6	+ 8	+ 38	+ 76	+ 74	+ 60	+ 48	+ 24	- 68	-126	-156	-164	-148	- 62	+ 20	+ 62	+ 82	+ 96	+ 76	+ 46	+ 24	+ 6	- 12
August	+ 35	+ 47	+ 47	+ 55	+ 79	+ 81	+ 65	+ 41	- 5	- 71	-161	-201	-193	-131	- 67	+ 15	+ 51	+ 63	+ 59	+ 59	+ 35	+ 31	+ 33	+ 23
September	+ 41	+ 43	+ 43	+ 45	+ 53	+ 39	+ 57	+ 49	+ 35	- 5	- 87	-151	-173	-139	- 85	- 7	+ 21	+ 11	+ 19	+ 41	+ 37	+ 35	+ 43	+ 29
October	- 16	- 34	- 46	- 26	- 2	- 4	+ 6	+ 32	+ 24	- 46	-112	-116	- 70	- 28	+ 30	+ 62	+ 76	+ 72	+ 62	+ 62	+ 32	+ 26	+ 26	- 4
November	+ 29	+ 3	- 1	- 5	+ 5	+ 17	+ 9	+ 9	- 1	- 47	- 71	- 73	- 75	- 31	+ 17	+ 19	+ 31	+ 21	+ 25	+ 29	+ 33	+ 15	+ 13	+ 21
December	- 7	- 15	- 13	- 25	- 25	- 7	- 3	+ 5	+ 1	- 1	+ 13	- 1	- 15	+ 3	+ 15	+ 9	+ 15	+ 11	+ 23	+ 15	+ 9	- 1	- 7	- 7
Year	+ 17	+ 11	+ 13	+ 20	+ 38	+ 44	+ 38	+ 35	+ 13	- 43	-102	-138	-137	- 96	- 36	+ 16	+ 45	+ 50	+ 53	+ 54	+ 40	+ 27	+ 22	+ 13
Winter	+ 11	+ 2	- 2	- 4	- 2	+ 9	+ 4	+ 9	+ 6	- 24	- 45	- 54	- 59	- 29	+ 10	+ 24	+ 36	+ 24	+ 23	+ 23	+ 23	+ 7	- 2	+ 1
Equinox	+ 21	+ 13	+ 15	+ 23	+ 39	+ 42	+ 48	+ 58	+ 38	- 30	-113	-165	-162	-120	- 56	+ 8	+ 43	+ 47	+ 49	+ 58	+ 45	+ 39	+ 38	+ 23
Summer	+ 17	+ 19	+ 25	+ 42	+ 77	+ 81	+ 62	+ 38	- 6	- 76	-148	-194	-191	-139	- 63	+ 16	+ 56	+ 78	+ 88	+ 80	+ 52	+ 36	+ 29	+ 16

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, 1949	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	-974	-1360	-1042	-292	+20	+522	+424	+142	+72	+38	+210	+364	+654	+708	+616	+516	+338	+518	+242	-496	-84	-456	-232	-446
February	-668	-618	-496	-378	-322	+36	+14	-52	-250	-238	+6	+328	+658	+678	+726	+516	+452	+410	+214	+84	+58	-236	-422	-492
March	-357	-623	-385	-347	-147	-143	-241	-247	-263	-91	+109	+443	+687	+889	+809	+679	+495	-85	-203	-105	-235	-205	-245	-187
April	-705	-551	-651	-535	-351	-411	-481	-545	-513	-413	-55	+495	+935	+1085	+953	+883	+681	+383	+191	+189	+67	-73	-95	-489
May	-254	-148	-298	-234	-292	-534	-594	-724	-950	-652	-84	+316	+674	+808	+972	+1014	+878	+476	+406	+50	+338	-120	-154	-224
June	-440	-744	-478	-388	-448	-476	-572	-506	-366	-274	+74	+418	+708	+858	+826	+696	+628	+448	+356	+208	+64	-10	-312	-262
July	-105	-59	-133	-343	-309	-465	-511	-597	-539	-335	-47	+291	+585	+687	+603	+615	+395	+223	+45	+21	-13	+45	+11	-61
August	-154	-152	-520	-494	-220	-418	-456	-58	-194	-92	+192	+426	+602	+620	+622	+404	+294	+184	-10	+42	+24	-120	-196	-338
September	-636	-584	-594	-344	-348	-240	-254	-194	-232	-290	+110	+538	+866	+1000	+854	+774	+434	+214	-84	-100	-126	-166	-276	-312
October	-611	-405	-645	-391	-189	-11	-211	-273	-155	-251	+141	+739	+1013	+1129	+1141	+845	+347	+363	+79	-233	-317	-485	-969	-643
November	-376	-298	-254	-238	-138	-78	+106	-80	-160	-200	+4	+312	+590	+698	+700	+672	+552	+450	+22	-358	-386	-406	-468	-658
December	-219	-211	-253	-249	-125	-145	-135	-89	-15	+95	+157	+251	+311	+395	+329	+309	+233	+171	+197	-1	-313	-183	-261	-253
Year	-458	-479	-479	-353	-239	-197	-243	-269	-297	-225	+68	+410	+690	+796	+763	+660	+477	+313	+121	-58	-133	-201	-302	-364
Winter	-559	-622	-511	-289	-141	+84	+102	-20	-88	-76	+94	+314	+553	+620	+593	+503	+393	+387	+169	-193	-181	-320	-346	-462
Equinox	-577	-541	-569	-404	-259	-201	-297	-315	-291	-261	+76	+554	+875	+1026	+939	+795	+489	+219	-4	-62	-153	-232	-396	-408
Summer	-238	-276	-357	-365	-317	-473	-533	-471	-512	-338	+34	+363	+642	+743	+756	+682	+549	+333	+199	+80	-66	-51	-163	-221
INCLINATION (Unit 0.01)																								
January	+96	+219	-30	-20	-178	-184	-83	-50	-33	-37	+3	+17	+19	-17	-12	-19	-18	-75	-14	-12	+41	+86	+177	+127
February	-26	-71	-108	-141	-170	-137	-166	-151	-79	+26	+125	+171	+154	+141	+84	+95	+97	+92	+52	+11	-1	+12	-20	+16
March	-118	-161	-141	-198	-301	-114	-94	-75	0	+108	+157	+136	+159	+123	+102	+86	+25	+38	+102	+136	+90	+64	+8	-86
April	-16	-47	-104	-129	-109	-102	-71	+1	+77	+182	+268	+213	+180	+205	+54	-10	-38	-28	-93	-135	-104	-99	-76	-14
May	-27	-183	-129	-97	-29	-15	-8	+50	+183	+154	+146	+120	+109	+54	-36	-97	-197	-68	-79	+25	+14	+71	+19	+5
June	-114	-82	-103	-106	-83	-61	+85	+128	+186	+252	+219	+141	+66	+91	+59	-46	-131	-160	-118	-102	-3	-40	-56	-26
July	-71	-78	-96	-84	-68	-18	-11	+24	+68	+98	+108	+97	+124	+112	+156	+70	+9	-34	-88	-53	-54	-63	-83	-60
August	-104	-133	-213	-188	-157	-191	+18	+2	+121	+181	+285	+212	+138	+125	+100	+61	-16	-18	-37	-35	-42	-69	+10	-45
September	-123	-142	-141	-194	-175	-197	-109	-21	+68	+117	+205	+238	+210	+118	+109	+105	+90	+95	+39	-27	-26	-64	-84	-98
October	-146	-229	-224	-246	-249	-239	-258	-174	+64	+271	+150	+157	+146	+107	+139	+209	+149	+142	+30	+130	+11	-1	+21	+48
November	-144	-112	-128	-142	-165	-202	-194	-206	-154	-94	-38	-5	+103	+67	+147	+201	+127	+109	+201	+282	+108	+99	+64	+71
December	+4	-2	-37	-38	-100	-109	-116	-37	-19	+12	+35	+15	+1	+19	+43	+6	+27	+8	-3	+98	+95	+77	+36	-15
Year	-65	-85	-121	-132	-149	-131	-84	-42	+40	+106	+139	+126	+117	+95	+79	+55	+6	+9	-1	+27	+11	+6	+1	-6
Winter	-18	+9	-76	-85	-153	-158	-140	-111	-71	-23	+31	+49	+69	+53	+66	+71	+58	+34	+59	+95	+61	+69	+64	+50
Equinox	-101	-145	-153	-192	-209	-163	-133	-67	+52	+170	+195	+186	+174	+138	+101	+98	+44	+62	+20	+26	-7	-25	-33	-38
Summer	-77	-119	-135	-119	-84	-71	+21	+51	+140	+171	+190	+143	+109	+96	+70	-3	-84	-70	-81	-41	-21	-25	-28	-32
HORIZONTAL INTENSITY (Unit 0.1γ)																								
January	-244	-524	-212	-214	+16	+106	+52	+60	+58	+60	+6	-4	+2	+80	+118	+166	+206	+282	+224	+218	+76	-76	-250	-208
February	-8	+34	+76	+138	+178	+144	+196	+194	+102	-60	-216	-288	-250	-212	-100	-74	-58	-58	+4	+58	+66	+42	+80	0
March	+143	+177	+159	+217	+313	+29	+35	+29	-77	-233	-309	-275	-273	-183	-109	-55	+181	+129	+39	-59	-21	-23	+31	+143
April	-26	+20	+102	+128	+86	+84	+66	-26	-144	-328	-480	-418	-352	-340	-38	+106	+186	+192	+264	+284	+224	+204	+156	+38
May	-119	+127	+75	+9	-53	-29	-15	-113	-333	-307	-331	-293	-259	-95	+193	+377	+521	+343	+279	+95	+65	-67	-9	-51
June	+74	+4	+48	+68	+56	+28	-178	-250	-348	-448	-416	-306	-162	-158	-36	+198	+380	+476	+378	+314	+114	+106	+62	0
July	+102	+98	+116	+98	+82	+14	+6	-56	-140	-194	-230	-228	-256	-200	-230	-72	+48	+130	+230	+162	+136	+130	+146	+98
August	+155	+139	+229	+135	+83	+133	-127	-83	-231	-303	-463	-343	-211	-153	-75	+13	+149	+157	+187	+167	+147	+165	+29	+91
September	+137	+145	+137	+219	+189	+227	+113	-1	-127	-203	-359	-419	-361	-179	-121	-79	-13	-21	+67	+139	+93	+131	+145	+151
October	+189	+201	+219	+251	+267	+267	+313	+203	-167	-505	-301	-293	-243	-113	-67	-95	+61	+21	+143	-17	+11	-23	-91	-161
November	+138	+92	+118	+142	+184	+232	+212	+234	+160	+58	-22	-60	-202	-94	-162	-222	-88	-28	-130	-260	-48	-80	-60	-104
December	-7	-1	+41	+39	+117	+129	+135	+25	+5	-41	-67	-41	-27	-39	-55	+3	-19	+13	+29	-111	-85	-69	-21	+43
Year	+38	+43	+92	+103	+127	+114	+67	+18	-104	-209	-266	-247	-216	-141	-57	+22	+130	+136	+143	+83	+65	+37	+18	+3
Winter	-30	-100	+6	+26	+124	+153	+149	+128	+81	+4	-75	-98	-119	-66	-50	-32	+10	+52	+32	-24	+2	-46	-63	-67
Equinox	+91	+136	+154	+204	+214	+152	+132	+51	-129	-317	-362	-351	-307	-204	-84	-31	+104	+80	+128	+87	+77	+72	+60	+43
Summer	+53	+92	+117	+78	+42	+37	-79	-126	-263	-313	-360	-293	-222	-152	-37	+129	+275	+277	+269	+185	+116	+84	+57	+35

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

International Disturbed Days

NORTH COMPONENT (Unit 0.1γ)

Month and Season, 1949	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	-154	-397	-117	-185	+14	+58	+14	+47	+51	+56	-13	-36	-56	+16	+62	+118	+173	+233	+200	+260	+83	-35	-226	-166
February	+52	+89	+119	+170	+205	+139	+192	+196	+123	-38	-214	-314	-307	-270	-163	-119	-98	-94	-15	+50	+60	+63	+117	+44
March	+173	+230	+191	+245	+322	+41	+56	+51	-53	-222	-315	-311	-331	-260	-180	-115	+135	+135	+57	-49	+0	-5	+52	+158
April	+37	+69	+159	+174	+116	+120	+108	+23	-97	-287	-469	-457	-431	-433	-122	+26	+123	+156	+244	+264	+215	+208	+163	+81
May	-95	+139	+101	+30	-26	+19	+38	-47	-244	-245	-320	-318	-316	-166	+104	+282	+437	+297	+240	+89	+94	-56	+5	-31
June	+112	+70	+90	+102	+95	+70	-125	-202	-311	-418	-418	-340	-223	-233	-109	+134	+320	+430	+342	+292	+107	+106	+89	+23
July	+110	+102	+126	+127	+109	+55	+51	-2	-90	-162	-223	-251	-305	-259	-281	-126	+12	+109	+223	+158	+136	+124	+143	+102
August	+167	+151	+273	+177	+102	+169	-85	-77	-211	-291	-475	-377	-262	-206	-130	-23	+121	+139	+186	+161	+143	+174	+46	+120
September	+192	+195	+188	+247	+218	+246	+134	+16	-105	-175	-365	-462	-434	-266	-196	-147	-51	-40	+74	+146	+103	+144	+168	+177
October	+162	+235	+274	+283	+281	+265	+328	+225	-151	-477	-310	-355	-330	-212	-168	-169	+29	-12	+134	+4	+39	+21	-4	-102
November	+170	+117	+139	+162	+194	+236	+200	+238	+172	+75	-22	-87	-252	-155	-222	-279	-136	-68	-130	-225	-13	-43	-18	-44
December	+13	+18	+63	+61	+127	+140	+145	+33	+6	-49	-80	-63	-54	-74	-84	-25	-40	-2	+11	-110	-56	-52	+3	+65
Year	+78	+85	+134	+133	+146	+130	+88	+42	-76	-186	-269	-281	-275	-210	-124	-37	+85	+107	+131	+87	+76	+54	+45	+36
Winter	+20	-43	+51	+52	+135	+143	+138	+129	+88	+11	-82	-125	-167	-121	-102	-76	-25	+17	+17	-6	+19	-17	-31	-25
Equinox	+141	+182	+203	+237	+234	+169	+157	+79	-102	-290	-365	-396	-382	-293	-167	-101	+59	+60	+127	+91	+89	+92	+95	+79
Summer	+74	+116	+148	+109	+70	+78	-30	-82	-214	-279	-359	-322	-277	-216	-104	+67	+223	+244	+248	+175	+120	+87	+71	+54

WEST COMPONENT (Unit 0.1γ)

January	-560	-811	-591	-191	+13	+296	+235	+86	+48	+30	+113	+194	+349	+391	+348	+303	+214	+323	+166	-229	-32	-256	-165	-272
February	-358	-324	-252	-179	-143	+43	+40	+4	-117	-137	-32	+128	+310	+327	+371	+263	+232	+209	+115	+54	+42	-119	-212	-263
March	-167	-303	-179	-150	-27	-72	-123	-127	-153	-87	+8	+191	+322	+444	+414	+353	+294	-24	-102	-66	-129	-113	-126	-76
April	-380	-291	-331	-264	-173	-206	-246	-295	-297	-274	-108	+196	+441	+523	+502	+489	+394	+236	+145	+147	+72	-5	-25	-255
May	-155	-58	-147	-123	-165	-290	-319	-405	-561	-398	-99	+121	+317	+416	+550	+603	+554	+310	+262	+42	-170	-75	-84	-128
June	-223	-396	-247	-196	-230	-249	-334	-311	-252	-220	-29	+173	+351	+432	+435	+404	+397	+317	+252	+163	+53	+12	-156	-140
July	-39	-15	-52	-167	-152	-246	-272	-328	-311	-211	-63	+118	+270	+334	+284	+316	+219	+140	+62	+38	+15	+45	+30	-16
August	-57	-58	-240	-241	-104	-201	-264	-45	-141	-99	+27	+171	+287	+306	+320	+218	+181	+124	+25	+50	+37	-37	-100	-165
September	-317	-288	-294	-148	-155	-91	-117	-104	-145	-188	-0	+218	+403	+504	+436	+400	+229	+111	-34	-31	-52	-67	-123	-142
October	-308	-183	-308	-167	-57	+38	-61	-112	-111	-217	+26	+346	+501	+584	+598	+435	+195	+197	+66	-127	-167	-263	-532	-369
November	-178	-144	-116	-104	-43	-4	+91	-4	-59	-97	-2	+157	+282	+357	+347	+322	+280	+236	-10	-234	-214	-230	-260	-368
December	-118	-113	-128	-126	-48	-56	-50	-43	-7	+44	+73	+127	+162	+204	+167	+165	+121	+93	+110	-19	-181	-109	-143	-128
Year	-238	-249	-240	-171	-107	-87	-118	-140	-176	-155	-7	+178	+333	+402	+398	+356	+276	+189	+88	-18	-61	-101	-158	-194
Winter	-304	-348	-272	-150	-55	+70	+79	+11	-34	-40	+38	+152	+276	+320	+308	+263	+212	+215	+95	-107	-96	-179	-195	-258
Equinox	-293	-266	-278	-182	-103	-83	-137	-160	-176	-192	-19	+238	+417	+514	+488	+419	+278	+130	+19	-19	-69	-112	-202	-211
Summer	-119	-132	-172	-182	-163	-247	-297	-272	-316	-232	-41	+146	+306	+372	+397	+385	+338	+223	+150	+73	-16	-14	-78	-112

VERTICAL COMPONENT (Unit 0.1γ)

January	-235	-461	-597	-569	-579	-393	-167	-35	+21	+11	+25	+47	+69	+129	+231	+321	+415	+397	+471	+467	+321	+123	+31	-45
February	-108	-166	-198	-166	-178	-140	-118	-72	-38	-50	-68	-78	-50	-4	+58	+156	+202	+184	+192	+172	+148	+140	+118	+56
March	-77	-145	-117	-181	-315	-329	-247	-195	-179	-167	-173	-171	-85	-1	+99	+171	+333	+433	+445	+333	+265	+169	+101	+35
April	-115	-119	-125	-149	-177	-159	-95	-57	-69	-133	-187	-231	-195	-81	+99	+211	+301	+351	+291	+195	+161	+133	+101	+37
May	-337	-339	-275	-315	-227	-117	-63	-91	-139	-179	-263	-269	-227	-33	+325	+541	+531	+563	+375	+309	+201	+89	+45	-101
June	-221	-275	-247	-207	-157	-147	-119	-139	-165	-169	-209	-223	-151	-51	+121	+303	+429	+553	+471	+379	+253	+107	-47	-91
July	-12	-42	-62	-62	-44	-32	-26	-48	-92	-110	-160	-194	-168	-78	+8	+78	+144	+184	+228	+194	+128	+84	+52	+20
August	-1	-139	-205	-337	-351	-355	-231	-187	-117	-77	-91	-63	-13	+77	+173	+243	+293	+303	+305	+267	+197	+145	+99	+57
September	-106	-156	-170	-164	-166	-156	-114	-76	-58	-66	-124	-150	-112	-6	+98	+182	+280	+280	+290	+228	+124	+84	+46	+12
October	-254	-326	-266	-272	-244	-208	-166	-132	-168	-236	-182	-140	-58	+106	+328	+502	+660	+542	+436	+412	+64	-56	-138	-208
November	-177	-173	-171	-163	-145	-159	-179	-171	-163	-191	-185	-155	-113	+13	+131	+181	+235	+313	+397	+375	+265	+155	+83	+3
December	-2	-10	-30	-42	-72	-78	-88	-68	-56	-56	-34	-44	-58	-26	+20	+28	+50	+58	+56	+84	+132	+106	+78	+48
Year	-137	-196	-205	-219	-221	-189	-134	-106	-102	-119	-138	-139	-97	+4	+141	+243	+323	+347	+330	+285	+188	+107	+47	-15
Winter	-131	-203	-249	-235	-244	-193	-138	-87	-59	-72	-66	-58	-38	+28	+110	+172	+226	+238	+279	+275	+217	+131	+78	+16
Equinox	-138	-187	-170	-192	-226	-213	-156	-115	-119	-151	-167	-173	-113	+5	+156	+267	+394	+402	+366	+292	+154	+83	+28	-31
Summer	-143	-199	-197	-230	-195	-163	-110	-116	-128	-134	-181	-187	-140	-21	+157	+291	+349	+401	+345	+287	+195	+106	+37	-29

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 0^h U.T. and converted into arc at the rate of 15° to each hour.

Table with columns: Month and Season, NORTH COMPONENT (a1-b4), WEST COMPONENT (a1-b4), VERTICAL COMPONENT (a1-b4). Rows include 1949 monthly data, Winter/Summer/Equinox, All Days, 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 with months and phase angles: 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 columns: Month and Season, NORTH COMPONENT (c1-alpha4), WEST COMPONENT (c1-alpha4), VERTICAL COMPONENT (c1-alpha4). Rows include 1949 monthly data, Winter/Summer/Equinox, All Days, International Quiet Days, and International Disturbed Days.

TABLE X. - RANGE OF MEAN DIURNAL INEQUALITIES FOR THE MONTHS, YEAR AND SEASONS OF 1949

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	8.23	1.68	25.1	5.74	1.22	22.0	20.68	4.03	80.6	26.3	43.7	24.7	23.9	30.4	14.4	63.0	120.2	106.8
February	8.11	2.39	38.2	8.46	2.19	34.2	13.94	3.41	48.4	40.2	47.7	18.0	38.2	44.2	11.2	51.9	72.9	40.0
March	11.86	2.11	36.4	12.08	2.25	41.6	15.12	4.60	62.2	40.9	60.1	35.1	44.3	62.7	23.8	35.3	74.7	77.4
April	15.05	2.47	48.4	13.70	1.34	33.0	17.90	4.03	76.4	50.7	78.1	37.5	39.2	71.0	32.2	73.3	90.3	58.2
May	14.17	2.25	48.0	14.68	2.59	48.4	19.64	3.66	85.4	47.3	75.9	42.1	49.7	77.4	31.0	75.7	116.4	90.2
June	14.03	2.58	51.6	14.76	2.29	40.6	16.02	3.70	92.4	47.9	76.8	41.3	38.1	80.8	30.8	84.8	83.1	82.8
July	12.39	2.05	42.2	13.62	2.34	43.6	12.84	2.52	48.6	40.0	65.9	31.2	41.4	73.7	26.0	52.8	66.2	42.2
August	11.67	2.12	40.9	12.64	2.45	40.8	11.42	4.25	65.0	40.7	62.4	32.5	39.8	69.2	28.2	74.8	58.4	66.0
September	12.70	2.56	45.1	12.08	2.61	44.2	16.36	4.35	64.6	48.6	67.6	29.4	42.8	66.2	23.0	70.9	82.1	46.0
October	10.75	2.57	39.9	8.32	2.24	38.2	21.10	5.29	81.8	44.8	54.7	32.5	40.9	41.3	19.2	80.5	113.0	98.6
November	7.86	1.96	29.7	6.06	1.58	27.2	13.58	4.88	49.4	33.3	39.5	19.4	29.4	32.5	10.8	51.7	72.5	58.8
December	3.61	1.01	14.8	3.54	0.97	14.4	7.08	2.14	24.6	15.1	24.5	8.5	14.6	18.5	4.8	25.5	34.7	22.0
Year	10.87	2.15	38.4	10.47	2.01	35.7	15.47	3.74	65.0	39.7	58.1	29.4	36.9	55.7	21.3	61.7	82.0	65.8
Winter	6.95	1.76	26.9	5.95	1.49	24.5	13.82	3.62	50.8	28.7	38.9	17.7	26.5	31.4	10.3	48.0	75.1	56.9
Equinox	12.59	2.43	42.5	11.55	2.11	39.3	17.62	4.57	71.3	46.3	65.1	33.6	41.8	60.3	24.6	65.0	90.0	70.1
Summer	13.07	2.25	45.7	13.83	2.42	43.4	14.98	3.53	72.9	44.0	70.3	36.8	42.3	75.3	29.0	72.0	81.0	70.3

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

Month 1949	All Days			Quiet Days			Disturbed Days		
	Declination West	Horizontal Intensity	Vertical Intensity	Declination West	Horizontal Intensity	Vertical Intensity	Declination West	Horizontal Intensity	Vertical Intensity
January	+0.03	+0.2	+0.2	-0.76	+3.8	-1.8	+1.96	-10.4	+8.4
February	+0.00	+0.7	-0.3	+0.70	+5.8	-3.2	+1.62	-7.6	+7.8
March	+0.00	+0.0	-0.1	+0.58	+7.0	-1.8	+1.76	-5.4	+1.6
April	-0.04	-0.3	-0.1	-0.10	+4.2	-0.4	+0.60	-5.6	+5.0
May	-0.12	-0.1	+0.1	-0.82	-0.2	+5.0	+1.70	-10.6	+11.8
June	+0.07	+0.8	-0.1	-0.42	-0.2	-0.8	+0.28	-7.2	+4.2
July	-0.01	+0.4	-0.2	+0.20	+1.4	-1.8	+0.48	-5.0	+1.8
August	-0.08	-0.3	+0.2	-0.06	+1.4	-1.0	-0.30	-5.6	+1.0
September	+0.00	+0.3	+0.2	-0.92	+3.0	-1.4	+2.42	-0.6	+7.2
October	-0.02	-0.4	+0.4	-1.18	+3.4	-1.0	-0.32	-11.0	+6.0
November	-0.07	-0.9	+0.2	-0.22	+5.2	-2.6	-2.16	-19.6	+2.8
December	+0.04	+1.0	-0.2	+0.06	+0.8	-1.2	-0.90	+0.2	+2.0
Year 1949	..	..	..	-0.25	+3.0	-1.0	+0.60	-7.4	+5.0

TABLE XII. - MEAN MONTHLY AND ANNUAL VALUES OF GEOMAGNETIC ELEMENTS

Month 1949	Declination West	Inclination	Intensity				
			Horizontal	North	West	Vertical	Total
January	9 30.5	66 45.2	.18587	.18332	.03070	.43270	.47093
February	9 30.3	66 45.1	.18591	.18336	.03070	.43274	.47099
March	9 29.8	66 44.8	.18595	.18340	.03068	.43273	.47099
April	9 29.1	66 43.7	.18608	.18354	.03066	.43266	.47098
May	9 28.0	66 44.0	.18606	.18353	.03060	.43272	.47103
June	9 27.6	66 43.3	.18616	.18363	.03060	.43271	.47106
July	9 27.4	66 42.5	.18625	.18372	.03060	.43265	.47104
August	9 26.9	66 43.3	.18615	.18362	.03056	.43267	.47102
September	9 26.2	66 43.5	.18613	.18361	.03052	.43270	.47104
October	9 24.7	66 45.1	.18596	.18346	.03041	.43286	.47111
November	9 24.7	66 44.4	.18607	.18357	.03043	.43287	.47117
December	9 24.3	66 43.2	.18622	.18372	.03043	.43280	.47116
Year 1949	9 27.5	66 44.0	.18607	.18354	.03058	.43273	.47104

TABLE XIII. - DAILY MEAN VALUE OF THE BASE-LINE OF THE DECLINATION MAGNETOGRAMS

Day	January	February	March	April	May	June	July	August	September	October	November	December
1	9 20.0	9 20.0	9 19.9	9 20.0	9 19.8	9 19.8	9 19.9	9 20.0	9 20.0	8 49.9	8 49.9	8 50.1
2	20.0	19.9	19.9	19.9	19.8	19.8	19.9	20.0	19.9	49.9	50.0	50.0
3	20.0	19.9	20.0	19.9	19.8	19.9	20.0	20.0	20.0	49.9	50.0	49.9
4	20.0	19.9	20.0	19.9	19.8	19.7	19.9	20.0	20.0	49.8	49.9	50.0
5	19.9	19.9	20.0	19.9	19.8	19.8	19.9	20.0	20.0	49.9	49.9	50.0
6	20.0	19.9	19.9	19.8	19.8	19.7	20.0	19.9	20.0	50.0	49.9	49.9
7	19.9	19.9	19.9	19.9	19.8	19.8	20.0	20.0	19.9	49.9	50.0	49.9
8	19.8	19.9	19.9	19.9	19.9	19.8	20.0	19.9	20.0	49.9	50.0	49.9
9	19.8	19.9	19.9	20.0	19.9	19.7	19.9	19.9	20.0	49.9	50.0	50.0
10	19.8	19.9	19.9	19.9	19.8	19.8	20.0	20.0	20.0	49.9	49.9	49.9
11	19.9	19.8	19.9	19.9	19.9	19.8	20.0	20.0	20.0	49.9	49.9	50.0
12	19.8	19.9	19.9	19.9	-	19.7	20.0	20.0	20.0	50.0	50.0	50.0
13	19.8	19.9	19.9	19.9	19.8	19.8	19.9	20.0	19.9	49.9	50.0	50.0
14	19.8	19.8	19.9	19.9	19.9	19.8	20.0	20.0	20.0	49.9	50.0	50.0
15	19.8	19.9	19.9	19.9	19.8	19.7	20.0	20.0	20.0	49.9	50.0	50.0
16	19.9	19.9	19.9	19.9	19.9	19.7	20.0	20.0	20.0	50.0	50.0	49.9
17	19.8	19.9	19.9	19.9	19.8	19.8	20.0	19.9	19.9	50.0	49.9	49.9
18	19.8	19.9	19.9	19.9	19.8	19.7	20.0	19.9	19.9	50.1	49.9	50.0
19	19.8	19.8	19.9	19.9	19.9	19.8	20.0	20.0	19.7	50.0	50.0	50.0
20	19.8	19.8	19.9	19.8	19.9	19.8	20.0	20.1	19.8	50.0	50.0	50.0
21	19.8	19.9	19.9	19.9	19.9	19.7	20.0	20.0	$\begin{array}{r} 9 \ 19.9 \\ 8 \ 50.1 \\ \hline 50.0 \end{array}$	50.1	50.0	50.0
22	19.8	19.9	19.9	19.9	19.9	19.7	20.0	20.0		50.0	50.1	50.1	49.9
23	19.9	19.9	19.9	19.9	19.8	19.8	20.0	20.0	50.0	50.0	50.0	49.9
24	19.9	19.8	19.9	19.9	19.8	19.9	20.0	20.0	49.8	50.0	50.1	50.0
25	19.9	19.9	19.9	19.9	19.8	19.9	20.0	20.0	49.8	50.0	50.0	49.9
26	19.9	19.9	19.9	19.8	19.8	20.1	20.0	19.9	49.8	50.1	50.0	49.9
27	20.0	19.9	19.9	19.8	19.8	20.0	20.0	20.0	49.8	50.1	49.9	49.8
28	19.9	19.9	19.9	19.8	19.8	19.9	19.9	20.0	49.8	50.1	50.0	49.9
29	19.9		19.9	19.8	19.8	19.9	20.0	20.1	49.9	50.0	50.0	50.1
30	19.9		19.9	19.8	19.8	19.8	20.0	20.0	49.8	50.0	50.0	50.0
31	19.9		19.9		19.8		20.0	19.9		50.0		50.0

June 23. Temperature of recording room raised from 16° C to 21° C.
 Nov. 2. " " " " lowered from 21° C to 16° C.
 Sept. 21. Position of Trace adjusted, causing change of Base-line Value.

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

Table with columns for Universal Time, No. of Obs., Observed Horizontal Intensity, and Deduced Value of Base-line. Data is organized by month (Jan., Feb., Mar., Apr., May, June, July, Aug.) and includes specific time readings and intensity values.

TABLE XIV. - RESULTS OF THE DETERMINATIONS OF THE ABSOLUTE VALUE OF HORIZONTAL INTENSITY FROM OBSERVATIONS MADE WITH THE SCHUSTER-SMITH COIL MAGNETOMETER IN THE MAGNETIC PAVILION AT ABINGER, WITH THE DEDUCED VALUES OF THE BASE-LINE OF THE HORIZONTAL INTENSITY MAGNETOGRAMS

Universal Time				No. of Obs.	Observed Horizontal Intensity	Deduced Value of Base-line	Universal Time				No. of Obs.	Observed Horizontal Intensity	Deduced Value of Base-line	Universal Time				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				
Aug.	19	10 35	-	10 46	8	18582	18488	Oct.	1	8 8	-	8 26	8	18616	18489	Nov.	19	10 8	-	10 19	8	18631	18491	
	20	9 15	-	9 25	8	18587	18489		3	8 27	-	8 49	8	18608	18489		21	10 6	-	10 16	8	18599	18490	
	22	9 16	-	9 23	8	18592	18490		4	8 34	-	8 50	8	18624	18488		22	9 58	-	10 11	8	18602	18490	
	23	8 51	-	8 58	8	18600	18490		5	9 26	-	9 36	8	18600	18489		23	10 31	-	10 41	8	18614	18490	
	24	8 40	-	8 49	8	18600	18491		6	9 1	-	9 15	8	18601	18488		24	9 46	-	10 1	8	18605	18490	
	25	8 13	-	8 20	8	18605	18490		7	8 21	-	8 37	8	18576	18488		25	10 14	-	10 34	8	18609	18488	
	26	9 16	-	9 26	8	18591	18490		8	8 16	-	8 37	8	18556	18489		26	9 47	-	10 5	8	18611	18489	
	27	9 21	-	9 28	8	18588	18488		11	9 8	-	9 21	8	18586	18488		28	10 14	-	10 23	8	18601	18489	
	29	9 14	-	9 22	8	18625	18489		12	9 23	-	9 36	8	18583	18488		29	10 12	-	10 20	8	18621	18490	
	30	8 53	-	9 3	8	18604	18491		13	8 59	-	9 9	8	18600	18488		30	10 15	-	10 24	8	18578	18489	
	31	8 51	-	8 59	8	18604	18489		14	9 2	-	9 14	8	18587	18487									
Sept.	1	8 54	-	9 14	8	18601	18489		17	8 53	-	9 3	8	18568	18487		Dec.	1	10 5	-	10 17	8	18586	18489
	2	8 48	-	9 5	8	18595	18489		18	9 19	-	9 37	8	18585	18488			2	9 57	-	10 8	8	18607	18491
	3	9 12	-	9 30	8	18586	18489		19	9 24	-	9 35	8	18579	18487			3	10 7	-	10 15	8	18631	18490
	5	8 44	-	8 58	8	18591	18489		20	9 12	-	9 24	8	18585	18488			5	10 11	-	10 21	8	18609	18490
	6	9 13	-	9 30	8	18583	18490		22	9 3	-	9 20	8	18585	18487			6	9 54	-	10 8	8	18616	18489
	7	9 3	-	9 15	8	18601	18490		24	8 25	-	8 45	8	18586	18487			7	10 12	-	10 23	8	18616	18489
	8	9 22	-	9 32	8	18588	18489		25	8 29	-	8 46	8	18599	18487			8	10 6	-	10 15	8	18623	18490
	9	9 29	-	9 38	8	18570	18489		27	8 25	-	8 57	8	18629	18489			9	10 19	-	10 29	8	18600	18489
	10	9 13	-	9 22	8	18589	18488		28	8 55	-	9 9	8	18565	18487			10	10 13	-	10 24	8	18595	18489
	12	8 53	-	9 4	8	18567	18489		29	8 35	-	8 48	8	18603	18489			12	10 2	-	10 10	8	18616	18490
	13	9 9	-	9 16	8	18580	18489		31	9 37	-	9 53	8	18589	18488			13	9 45	-	9 53	8	18620	18490
	14	9 37	-	9 44	8	18577	18488	Nov.	1	9 24	-	9 40	8	18604	18489			14	10 3	-	10 11	8	18623	18488
	15	8 40	-	9 1	8	18611	18488		3	9 18	-	9 40	8	18577	18487			15	10 5	-	10 20	8	18616	18489
	17	9 20	-	9 27	8	18600	18488		4	9 30	-	9 48	8	18578	18489			16	9 57	-	10 12	8	18622	18491
	19	9 30	-	9 37	8	18598	18489		5	9 31	-	9 49	8	18582	18489			17	10 26	-	10 38	8	18612	18489
	20	9 16	-	9 23	8	18588	18489		7	15 10	-	15 24	8	18621	18489			19	10 0	-	10 9	8	18636	18490
	21	9 26	-	9 35	8	18603	18489		8	9 21	-	9 46	8	18598	18489			20	9 55	-	10 5	8	18614	18490
	22	9 12	-	9 22	8	18612	18490		10	10 10	-	10 28	8	18597	18488			21	10 2	-	10 14	8	18637	18489
	23	9 24	-	9 33	8	18595	18488		11	9 50	-	10 9	8	18591	18488			22	9 47	-	9 58	8	18637	18490
	24	8 26	-	8 46	8	18605	18489		12	9 57	-	10 15	8	18593	18488			23	10 18	-	10 28	8	18622	18489
	26	8 29	-	8 51	8	18580	18487		14	10 9	-	10 24	8	18598	18490			24	10 9	-	10 18	8	18611	18489
	27	8 28	-	8 47	8	18584	18486		15	10 5	-	10 21	8	18601	18489			28	10 20	-	10 30	8	18625	18489
	28	9 22	-	9 30	8	18595	18489		16	9 51	-	10 3	8	18594	18488			29	10 18	-	10 27	8	18607	18488
	29	8 35	-	8 57	8	18607	18489		17	9 53	-	10 10	8	18611	18489			30	10 18	-	10 27	8	18614	18488
	30	8 16	-	8 37	8	18617	18488		18	10 12	-	10 26	8	18616	18489			31	10 12	-	10 22	8	18597	18489

June 23. Temperature of recording room raised from 16.0 C to 21.0 C.
 Nov. 2. " " " " lowered " 21.0 C " 16.0 C.

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

Table with columns for Universal Time (h m), No. of Obs., Observed Vertical Intensity (Y), and Deduced Value of Base-line (Y) for months Jan, Feb, Mar, Apr, May, June, and Aug.

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
Sept. 16	9 5 - 9 41	8	43265	43044	Oct. 21	8 26 - 8 48	6	43288	43045	Nov. 28	9 44 - 10 9	8	43278	43046
17	8 53 - 9 13	8	43268	43043	22	8 31 - 8 53	8	43289	43046	29	9 38 - 9 54	8	43280	43046
19	9 0 - 9 26	8	43266	43042	24	8 55 - 9 16	8	43280	43046	30	9 52 - 10 10	8	43284	43046
20	8 39 - 9 12	8	43268	43045	25	9 0 - 9 29	8	43289	43046					
21	8 52 - 9 21	8	43266	43043	27	9 14 - 9 30	8	43275	43045	Dec. 1	9 23 - 9 56	8	43287	43045
22	8 49 - 9 6	8	43268	43044	28	8 16 - 8 41	8	43281	43045	2	9 26 - 9 46	8	43285	43047
23	8 47 - 9 18	8	43266	43044	29	8 58 - 9 23	8	43281	43043	3	9 37 - 9 58	8	43280	43046
24	9 0 - 9 18	8	43262	43046	31	10 16 - 10 35	8	43270	43043	5	9 39 - 10 4	8	43271	43045
26	8 59 - 9 24	8	43270	43044						6	9 25 - 9 45	8	43276	43044
27	9 5 - 9 33	8	43272	43045	Nov. 1	9 58 - 10 25	8	43269	43043	7	9 48 - 10 3	8	43281	43045
28	8 50 - 9 16	8	43267	43046	3	10 0 - 10 36	8	43285	43040	8	9 34 - 9 55	8	43276	43045
29	9 10 - 9 29	8	43262	43046	4	10 1 - 10 24	8	43294	43042	9	9 48 - 10 11	8	43273	43044
30	8 51 - 9 22	8	43268	43045	7	14 30 - 15 3	8	43287	43045	10	9 45 - 10 3	8	43278	43043
					8	10 10 - 10 40	8	43274	43043	12	9 35 - 9 57	8	43281	43046
Oct. 1	8 44 - 9 8	8	43271	43046	10	9 15 - 10 0	8	43277	43045	13	9 23 - 9 40	8	43284	43046
3	8 59 - 9 27	8	43272	43043	11	9 21 - 9 38	8	43266	43044	14	9 33 - 9 58	8	43276	43045
4	9 2 - 9 33	8	43261	43044	12	9 14 - 9 43	8	43283	43043	15	9 22 - 9 52	8	43280	43045
5	8 53 - 9 20	8	43274	43045	14	9 15 - 9 45	8	43285	43045	16	9 24 - 9 43	8	43277	43044
6	8 16 - 8 47	8	43273	43045	15	9 17 - 9 55	8	43277	43045	17	9 56 - 10 16	8	43282	43045
7	8 50 - 9 10	8	43270	43046	16	9 16 - 9 40	8	43281	43045	19	9 27 - 9 53	8	43270	43045
10	9 16 - 9 52	8	43275	43045	17	9 19 - 9 46	8	43279	43046	20	9 25 - 9 46	8	43276	43046
11	8 23 - 9 1	8	43282	43046	18	9 37 - 10 1	8	43272	43045	21	9 25 - 9 54	8	43273	43045
12	8 37 - 9 13	8	43272	43044	19	9 37 - 9 56	8	43268	43045	22	9 20 - 9 42	8	43270	43044
13	8 33 - 8 50	8	43290	43045	21	9 41 - 10 0	8	43283	43046	23	9 50 - 10 10	8	43273	43045
14	8 31 - 8 54	8	43271	43045	22	9 25 - 9 49	8	43284	43045	24	9 41 - 10 2	8	43278	43045
15	8 34 - 9 7	8	43263	43044	23	9 49 - 10 22	8	43278	43045	28	9 46 - 10 10	8	43269	43045
18	8 16 - 8 50	8	43293	43046	24	9 18 - 9 38	8	43279	43045	29	9 47 - 10 10	8	43281	43045
19	8 38 - 9 9	8	43280	43044	25	9 18 - 9 56	8	43281	43046	30	9 51 - 10 11	8	43274	43044
20	8 30 9 6	8	43287	43044	26	9 19 9 40	8	43277	43046	31	9 47 10 6	8	43281	43045

June 23. Temperature of recording room raised from 16.0 C to 21.0 C.

Nov. 2. " " " " lowered " 21.0 C " 16.0 C.

MAGNETIC OBSERVATIONS, ABINGER 1949.

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 43039	Y 43041	Y 43037	Y 43041	Y -	Y 43038	Y 43042	Y -	Y -	Y -	Y 43043	Y 43047
2	-	-	43038	43041	43040	43039	43039	-	-	-	-	43043
3	43036	-	43040	-	43039	43040	-	-	-	-	43042	43043
4	43041	43037	43039	43039	43042	-	43039	-	-	-	43045	-
5	43039	43041	43041	43040	43040	-	43037	-	-	-	43046	43044
6	43039	-	-	43038	43039	-	43035	-	-	-	-	43043
7	43034	43039	43042	43040	-	43037	43036	-	-	-	43043	43041
8	43036	43039	43039	-	-	43041	43039	-	-	-	43045	43044
9	-	-	43039	43042	43041	43040	-	-	-	-	43045	43044
10	43040	-	43040	-	43039	43037	-	-	-	-	43043	43043
11	43036	43036	43040	43040	43040	43038	43040	-	-	-	43045	-
12	-	43039	43040	43042	-	-	43040	-	-	43043	43043	43044
13	43041	-	-	43041	-	43040	43041	-	-	43044	-	43040
14	43041	43037	43042	43039	43040	43038	43045	-	-	43044	43044	43043
15	43038	43039	43041	-	-	43038	43042	-	-	-	43046	-
16	-	-	43043	43038	43038	43038	43042	-	-	-	43043	43044
17	43038	43038	43041	-	43039	43036	-	-	-	43046	43044	43046
18	43039	43037	43039	-	43038	43039	-	-	-	43044	43042	-
19	43036	43037	43039	43041	43037	-	43039	-	-	43045	43042	43044
20	43038	-	-	43036	43039	43038	43040	-	-	43044	-	43043
21	43037	43038	43037	-	43036	43038	43039	-	-	43046	43042	43044
22	43039	43044	-	43042	-	43038	43038	-	-	43045	43039	43043
23	-	43038	43041	43039	43041	-	-	-	-	-	43044	43039
24	43039	43038	43042	-	43037	43041	-	-	-	43045	43044	43042
25	43039	43040	43041	43039	-	43042	-	-	-	43042	-	-
26	-	43038	43037	43033	43040	-	-	-	-	43045	43044	-
27	43037	-	-	43040	43039	43040	-	-	-	43038	-	-
28	43039	43041	43041	43038	43038	43042	-	-	-	43042	43043	43041
29	43040		43040	43040	-	43038	-	-	-	43043	43043	43043
30	-		43037	43039	43037	43039	-	-	-	-	-	43044
31	43037		43040		43040		-	-		43045		43040

June 23. Temperature of recording room raised from 16° C to 21° C.
 Nov. 2. " " " " lowered " 21° C " 16° C.
 July 23 to Oct. 11. Inductor under repair and re-adjustment.

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 1925-1949.

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
1947	9	43.1	0.18577	0.43246	66	45.2
1948	9	35.4	0.18593	0.43255	66	44.4
1949	9	27.5	0.18607	0.43273	66	44.0

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 -1.7γ in H and -3.9γ in Z were introduced in 1938. See Introduction pp. x and xi.

January. Following minor irregularities in the traces an easterly trend in D from 1^d22^h was succeeded by a large westerly bay (22') between 3^h and 4^h on the 2nd. This was accompanied by a bay in Z (-40γ) and followed by a rise in H of 78γ between 3^h55^m and 4^h22^m. Agitation was noticeable about noon but by midnight conditions had become relatively calm. These conditions continued until 6^d21^h when irregularities began to appear, but by 7^d7^h these had subsided. A sharp positive bay in H (60γ) at 7^d22^h was accompanied by a similar westerly movement in D, and a decrease in Z of about 20γ. Small irregularities were recorded during the evening of the 8th, and on a slightly increased scale on the 9th. At 10^d21^h there occurred a sharp positive bay in H (72γ) with a similar easterly movement in D (17'). A similar bay in H (+78γ) occurred on 11^d23^h accompanied by a decrease in Z of 25γ. The period 12^d17^h to 13^d2^h was marked by increased activity, particularly in D, where a range of 19' was recorded, the largest single movement occurring between 0^h22^m and 0^h56^m with a westerly swing of 17'. Thenceforth conditions remained relatively quiet, with bays at 17^d1^h and 18^d4^h, until 18^d10^h when activity increased. A sharp rise in H (40γ) at 19^d0^h45^m was noteworthy, this being immediately followed by a sharp easterly movement in D of 9' and a small drop in Z, (15γ). From 20^d0^h the traces were again relatively calm with the occurrence of an easterly bay in D at 21^d22^h (10'). Apart from some irregularities during evening hours the records remained featureless until the onset of a major storm which showed in the form of a sudden commencement at 24^d18^h27^m (H, +95γ). This storm continued until about 27^d0^h, after which, with the exception of a westerly bay in D (9') at 27^d3^h and a similar easterly bay at 27^d19^h the traces become inactive.

Ranges for the month: D, from 8°25'.3 on 25th to 9°54'.0 on 26th; H, from 18060γ on 25th to 18716γ on 24th; Z, from 42988γ on 26th to 43478γ on 25th.

February. The month opened with a notably quiet period which lasted until the evening of the 3rd. During this period at 1^d12^h19^m there occurred a crochet (H, -40γ), and at 3^d2^h20^m a rise in H of 15γ extending over 3 minutes, after which the trace dropped back during the next 20 minutes, though not to its original value. The movement, though small, was conspicuous on the quiet trace and was accompanied by slight movements in the other elements. During the period 3^d20^h to 4^d4^h some disturbance accompanied a lowering in the value of H (80γ) and an easterly displacement in D (20'); a sharp positive bay occurring in H (80γ) at 4^d2^h. This activity had subsided by the following mid-day, but reappeared forty-eight hours later and continued until about 7^d6^h when calm conditions again prevailed for several days. Agitation appeared around 11^d8^h and a well defined easterly bay occurred in D at 11^d22^h (12') followed by a similar movement at 13^d0^h. During this interval irregularities had become more pronounced and continued intermittently until 19^d0^h, being most marked between 17^d10^h and 18^d0^h. The 19th was quiet, but irregularities again appeared from 20^d17^h. A sudden commencement at 21^d15^h16^m was followed during the night hours by activity approaching storm intensity, the most outstanding single movement occurring in H at 22^d1^h (+96γ). By 22^d7^h mere agitation of the trace remained, though this became more pronounced between 19^h and 24^h, being followed by a quiet spell from 23^d0^h. Irregularities appeared intermittently until the end of the month with bays at 24^d1^h and 24^d22^h and notable SC movements at 26^d21^h22^m and 28^d15^h46^m; otherwise this period was generally calm.

Ranges for the month: D, from 9°11'.2 on 22nd to 9°50'.7 on 17th; H, from 18511γ on 4th to 18652γ on 21st and 24th; Z, from 43210γ on 22nd to 43330γ on 6th.

March. The beginning of the month was characterised by minor activity. Notable bays occurred at 2^d21^h (H, +50γ; D, 12' East) and at 3^d17^h (H, +90γ; D, 10' East) the latter extending over only about 30 minutes of time. By the 4th activity had become less pronounced, though a westerly bay in D of 10' occurring at 5^d4^h was noteworthy. After a calm spell irregularities began to appear in the traces on the 8th. A shallow, broad easterly bay in D extending from 9^d0^h20^m to 9^d5^h, was followed, after a short spell of inactivity by a sudden commencement at 9^d12^h45^m, which preceded a period of activity lasting until 21^h. The principal movement was a negative bay in H of 80γ between 16^h and 18^h. Calm prevailed until the 12th when irregularities began to appear. These increased in intensity throughout the following day and the 14th was characterised by a considerable amount of disturbance. Activity was on a much reduced scale during the 15th and

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continued so until 16^d15^h33^m when a sudden commencement marked a sharp rise in H (50γ) culminating in a peak at 16^h52^m. This was followed by a rapid fall of 280γ to a minimum at 18^h25^m after which a recovery set in. The largest movement in D occurred between 16^h50^m and 17^h15^m with an easterly swing of 44'. This activity was accompanied by a fairly steady rise in Z of about 120γ to a maximum at 17^h54^m following which the value steadily declined to normal around midnight. Following continued agitation throughout the day, increased activity reappeared in the evening of the 17th, the largest movement occurring at midnight in the form of a positive bay in H (120γ) associated with a sharp westerly movement in D (19') that was followed by an easterly swing of 27' between 0^h2^m and 1^h18^m. Z also showed a shallow negative bay at this time. A bay at 18^d19^h (H, +60γ; D, 11' East) was the most notable feature of the traces which were characterised by only minor activity until the appearance of a sudden commencement at 21^d21^h27^m. This marked the beginning of a storm which had died out by 23^d18^h. During this interval a second sudden commencement movement was recorded at 22^d1^h42^m. Other movements of special interest were, in H, a bay at 21^d22^h (+100γ), a sharp peak at 22^d4^h30^m followed by a fall of 200γ to a minimum at 5^h20^m; in D, a high maximum (East) at 22^d1^h, a fairly sharp minimum at 22^d5^h28^m followed by a maximum at 6^h. The morning hours of both the 22nd and 23rd were characterised by much agitation in all three elements. Little of interest appeared upon the traces until the occurrence of two small bays in H at 25^d23^h and 26^d0^h (+50γ each). For some twelve hours following these, irregularities were a little more marked after which the traces remained comparatively calm until 28^d6^h, when slight activity again became apparent. This was most marked around midnight of the 28th-29th, following which the traces remained featureless until the end of the month.

Ranges for the month: D, from 9°4'.5 on 22nd to 9°54'.4 on 16th; H, from 18468γ on 22nd to 18767γ on 16th; Z, from 43161γ on 22nd to 43390γ on 16th.

April. The beginning of the month was notable for a lack of activity. This period terminated at 7^d17^h when disturbance gradually rose to storm intensity. Most notable was an easterly swing in D of 24' between 22^h22^m and 23^h12^m followed by a recovery at about 8^d4^h. Activity had subsided by 8^d20^h though small irregularities remained in the traces. A recurrence of activity appeared on a limited scale from 9^d23^h with a slight increase in intensity during the evening hours of the 10th. A well defined sudden commencement at 11^d7^h25^m was followed during the afternoon by some appreciable movements in H with maxima at 14^h33^m and 15^h51^m, the latter preceded by a positive movement of 100γ. A second sudden commencement at 12^d15^h21^m (H, +80γ) was followed at 17^h0^m by a sharp maximum in H (+120γ). In D the most outstanding feature was a broad easterly bay between 13^d2^h and 4^h (10') following which the traces were characterised by minor activity and some agitation. Similar conditions continued, with the appearance of occasional small bays, until the 19th when little activity remained. Conditions similar to those prevailing before the 19th were renewed about the 24th, but in general the traces remained featureless until a sudden commencement at 29^d15^h44^m (H +50γ) was followed by a steady rise in H to a maximum, (between 17^h and 17^h^h) about 100γ above its initial value. By 20^h H had fallen to slightly below this initial value where it continued with little variation. The last day of the month was quiet.

Ranges for the month: D, from 9°3'.3 to 9°47'.1, both on 8th; H, from 18411γ on 8th to 18724γ on 29th; Z, from 43199γ to 43370γ, both on 8th.

May. In addition to slight irregularities in the traces occurring during the first two days minor activity was recorded in H during the afternoon and evening hours of the 2nd. Increased activity followed immediately after a sudden commencement at 3^d18^h15^m (H, +59γ). A rapid easterly swing in D (22') recorded between 22^h15^m and 45^m was notable. The irregular recovery of D extended over the following 5 hours, and was accompanied at 0^h by a temporary depression of Z (60γ). By 4^d18^h the disturbance had died out but was followed by a recrudescence around mid-day on the 5th. For several days from the 6th activity remained at a low level with the occurrence of a bay at 8^d22^h, (H, +50γ, D, 9' East) and an irregular oscillatory movement in H between 9^d15^h10^m and 50^m with a range of 80γ. This was accompanied by a sudden easterly displacement in D of 4'. A temporary rise in H followed an SQ at 11^d2^h4^m (H +50γ) though no marked increase in activity was recorded, the period from 11^d10^h to 12^d6^h being nearly calm. The outbreak of a major storm occurred with

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an SC at 12^d6^h40^m activity dying out rather suddenly almost exactly 24 hours later. Two positive bays in H at 13^d13^h and 14^h were accompanied by rapid oscillations of small amplitude (agitation). Minor activity continued throughout the 14th and reappeared on the 16th at 4^h after a calm spell of 24 hours, though with little of note other than a bay in H at 16^d23^h (+50γ). Thenceforth the traces continued featureless, with intermittent periods of minor activity, until the occurrence of an SC at 30^d12^h30^m (H, +50γ). This was followed immediately by marked activity rising to storm intensity, though no single movement exceeded 100γ and the disturbance had subsided by the end of the month.

Ranges for the month: D, from 8°57'.4 to 10°13'.6, both on 12th; H, from 18393γ to 19098γ, both on 12th; Z, from 43156γ on 13th to 43691γ on 12th.

June. After three days of relative inactivity a sudden commencement at 3^d21^h53^m, (H +41γ) was followed by a storm lasting until the early hours of the 6th. The principal features of this storm were the high maxima attained in Z about 18^h on the 4th and 5th and some well defined phase-difference movements in H and D around 5^d23^h. A second sudden commencement (H +90γ, D 9'W) occurring at 6^d21^h13^m was followed by little activity, and a relative calm prevailed until the 12th when some disturbance was apparent. On 14^d18^h56^m there occurred a small SC in H but throughout the remainder of the month the traces remained featureless, showing at most, minor activity.

Ranges for the month: D, from 9°6'.7 on 4th to 9°43'.7 on 12th; H, from 18513γ on 5th to 18743γ on 4th; Z, from 43205γ on 4th to 43401γ on 5th.

July. Apart from a double wave in H occurring on 7th between 13^h and 16^h (90γ) the traces continued calm, or nearly so, until 12^d20^h24^m when a large sudden commencement in H (+80γ) was followed by some agitation. Activity, however, did not further develop and by 6^h next day the relatively calm conditions had been restored. During the afternoon hours of the 16th minor activity reappeared, with comparable movements of the traces occurring during the periods 18th-19th, 22nd-23rd, but at no time during the remainder of the month was there any feature of special note.

Ranges for the month: D, from 9°17'.3 on 23rd to 9°38'.2 on 15th; H, from 18568γ on 16th to 18721γ on 12th; Z, from 43227γ on 29th to 43316γ on 16th.

August. A modified sudden commencement at 2^d7^h7^m was followed by only a slight increase of activity until the occurrence of a second SC at 3^d2^h5^m (H +49γ) marked the onset of a storm that continued until the 5th. Though not outstanding for its range (H 192γ, D 42') or for any striking movements in the elements, this storm was characterised by short period oscillations suggesting considerable activity. This activity had practically subsided by 0^h on 5th though there was a recurrence during the latter half of that day. During the relatively quiet period that followed there occurred at 6^d11^h12^m a striking movement in H (+48γ) resembling a pulsating sudden commencement. After attaining a maximum at about 11^h17^m, H fell approximately 2γ during the following four minutes and then dropped suddenly by 7γ. A steady decline, accompanied by small pulsations of about 2 minutes period, continued until 11^h34^m when a rapid fall of 47γ set in, minimum being reached at 11^h41^m. After a short spell of activity in the early hours of the 8th the traces remained featureless, except for a small polar bay at 10^d23^h, until the 14th. A sharp westerly swing in D (19') occurring between 0^h28^m and 0^h51^m with a recovery during the following 90 minutes was noteworthy. Similar large movements in H occurred about 21^h and shortly after midnight (90γ). Throughout the remainder of the month the traces remained quiet or showed only minor activity.

Ranges for the month: D, from 9°2'.5 on 4th to 9°44'.9 on 3rd; H, from 18499γ to 18691γ, both on 3rd; Z, from 43174γ on 8th to 43329γ on 4th.

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September. An increase of activity that marked the beginning of the month continued until the 3rd. During the period 4^d-11^d the traces remained relatively quiet, the most notable movement taking the form of a polar bay in which H increased by 46γ between 4^d19^h50^m and 20^h0^m, returning to its former value by 20^h40^m. During the twenty four hours of the 12th activity was apparent, but by the next day conditions were relatively quiet, though a radio fade-out at 13^h07^m was accompanied by a movement (crochet) in declination of 5' West, minimum occurring at 13^h12^m. Minor activity was again apparent at times during the interval 14^d-17^d, but the traces were again calm by the 18th when a solar flare was accompanied by a decrease in H of 30γ between 9^h43^m and 50^m. From thence onward conditions remained quiet, or nearly so, until 24th the sole feature of interest being a small crochet in H (-9γ) at 19^d11^h25^m. An easterly movement in D (14') occurring between 20^h0^m and 35^m on the 24th marked the beginning of a spell of activity which continued intermittently until the 28th. Most outstanding of the movements recorded were polar bays at 24^d23^h (H +90γ) and 26^d22^h (H +65γ, D 12'E). During the remainder of the month conditions remained comparatively quiet with the exception of a notable polar bay in D (20'E) occurring on the 30th between 20^h and 21^h and accompanied by a corresponding, though smaller movement in H (+50γ).

Ranges for the month: D, from 9°2'6 on 30th to 9°44'9 on 12th; H, from 18534γ on 3rd to 18696γ on 24th; Z, from 43234γ on 23rd to 43330γ on 12th.

October. Only slight unsteadiness of the traces was apparent during the first three days of the month when a crochet was recorded at 2^d14^h1^m, (H, -23γ; D, 4'W). A sudden commencement at 4^d2^h2^m was followed by a slight increase of activity, which after some variation of intensity became more marked during the forenoon of the 6th. By the evening of the 7th activity had grown to storm intensity. A notable feature of this storm, was a series of oscillations occurring between 20^h and 22^h in H and D of period about 20 minutes, the double amplitude of the former ranging between 50γ and 150γ and that of the latter between 10' and 23'. The largest single movement occurred in D, which showed a rapid westerly movement of 29' between 8^d0^h59^m and 1^h10^m, accompanied by a correspondingly sharp peak in the H trace (+70γ) and a decrease of 60γ in Z. Activity during the 8th and 9th was comparable with that immediately preceding the storm, though by the evening of the second day this had largely subsided. Minor activity continued intermittently until 13^d20^h12^m when a large SC (H +78γ) marked the beginning of activity which grew to storm intensity during the afternoon and evening of the following day. On 15^d8^h8^m a pulse in H of +82γ was followed immediately by a negative pulse of -199γ with similar movements in Z on a reduced scale (+14γ and -59γ). From then onwards throughout the day the traces were subject to large and sudden movements accompanied by much agitation. By the early hours of the 16th conditions had become more normal, though activity continued on a diminishing scale throughout the 16th and 17th. A large polar bay appeared between 22^d21^h and 22^h on an otherwise featureless record. In the course of 20 minutes H had increased by 150γ with a corresponding easterly peak in the declination trace of approximately 20'. Seldom quiet during the remainder of the month, the traces showed no outstanding features apart from a series of movements constituting a small storm which occurred mainly during the night hours of 27^d-28^d.

Ranges for the month: D, from 8°53'0 on 15th to 9°43'7 on 14th; H, from 18291γ on 15th to 18703γ on 22nd; Z, from 43212γ to 43421γ, both on 15th.

November. A quiet spell during the forenoon of the 1st gave place to increasing activity which culminated in an uneven easterly swing in D between 17^h37^m and 19^h32^m of 43'. This accompanied a high maximum in Z. Considerable activity was maintained throughout the 2nd and 3rd with continued unsteadiness during the following two days. By the 6th conditions had become relatively quiet and continued so until the afternoon of the 10th when a renewal of activity set in. This continued until the morning of the 16th with few outstanding features, the most noteworthy being an easterly bay in D (17') occurring on the 11th between 16^h and 18^h with a maximum about 17^h. From 16^d10^h conditions remained quiet, or nearly so, until unsteadiness began to appear on the 18th. This suddenly increased in magnitude shortly before 18^h on the 19th and continued with oscillations in H of the order of 100γ, and corresponding movements in D, until 20^d1^h when conditions became less

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active. Unsteadiness continued, however, until the 24th, the largest movement during this period being an easterly swing in D of 18' which occurred between 21^d18^h and 20^h. Quiet conditions prevailed until 26^d20^h when small movements of the traces reappeared and continued until 27^d22^h. The comparative quiet was broken about 29^d0^h with considerable movements in H and D. The month closed with a period of disturbance that extended over some 48 hours.

Ranges for the month: D, from 9°1'.0 on 2nd to 9°51'.4 on 1st; H, from 18480γ on 1st to 18665γ on 11th; Z, from 43241γ on 11th to 43433γ on 1st.

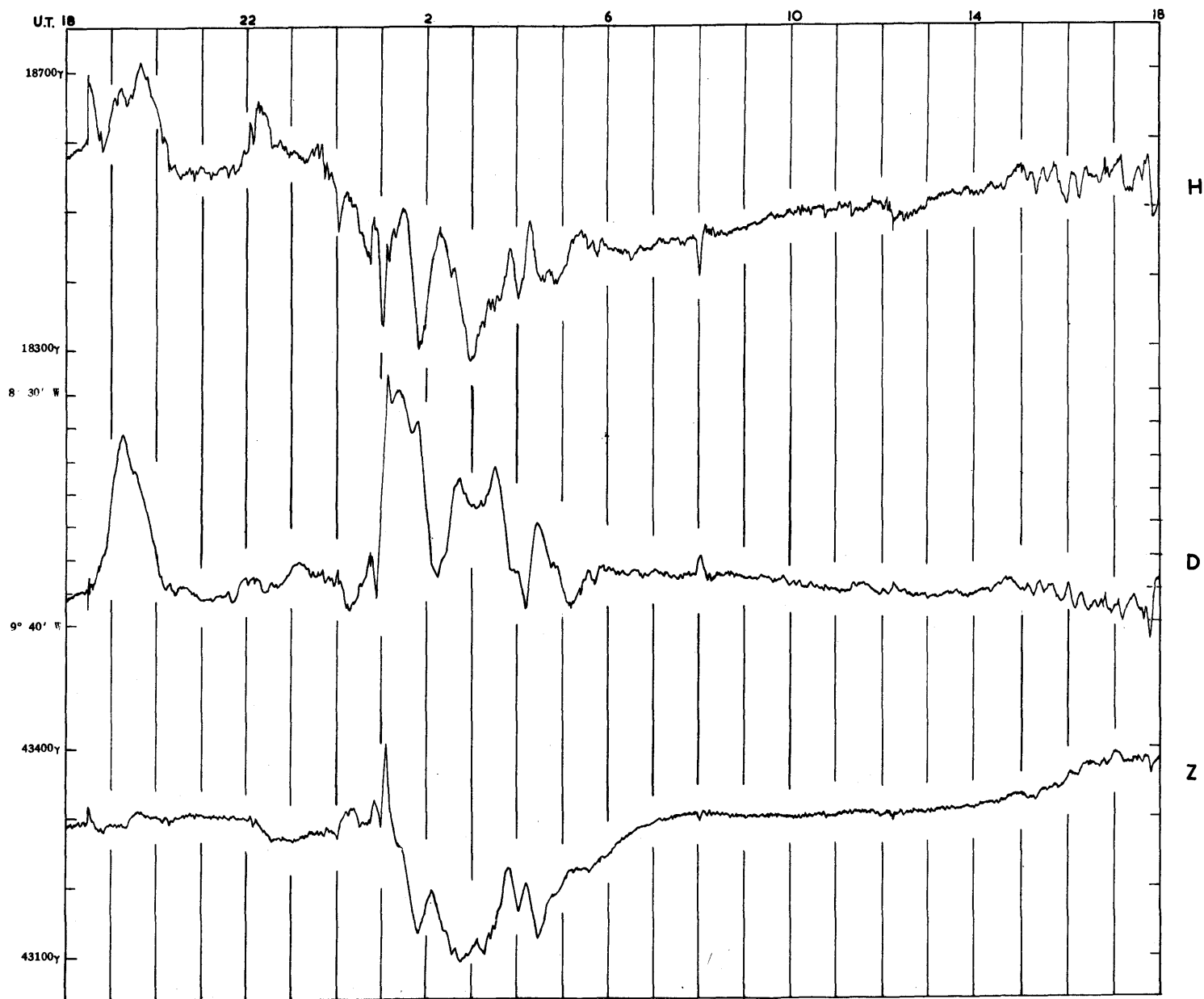
December. A generally quiet month with activity seldom rising above that described as unsteadiness of the traces. The most active periods were 9^d4^h-10^d0^h, 23^d15^h-24^d05^h, 28^d18^h-29^d1^h and 30^d18^h onwards. Periods of lesser unsteadiness were from the 3rd to the 7th, and during the 14th and 15th. On the 16th, between 1^h-2^h, there occurred an easterly bay in D of 10' and a larger one (17') on the 31st centred about 20^h.

Ranges for the month: D, from 9°7'.6 on 31st to 9°35'.8 on 14th; H, from 18557γ on 30th to 18674γ on 9th; Z, from 43255γ on 9th to 43309γ on 9th and 30th.

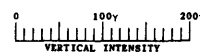
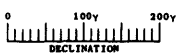
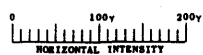
The absolute maximum and minimum values respectively of the elements recorded during the year were:

Declination: 10°13'.6 on May 12th; 8°25'.3 on January 25th.
 Horizontal Intensity: .19098 on May 12th; .18060 on January 25th.
 Vertical Intensity: .43691 on May 12th; .42988 on January 26th.

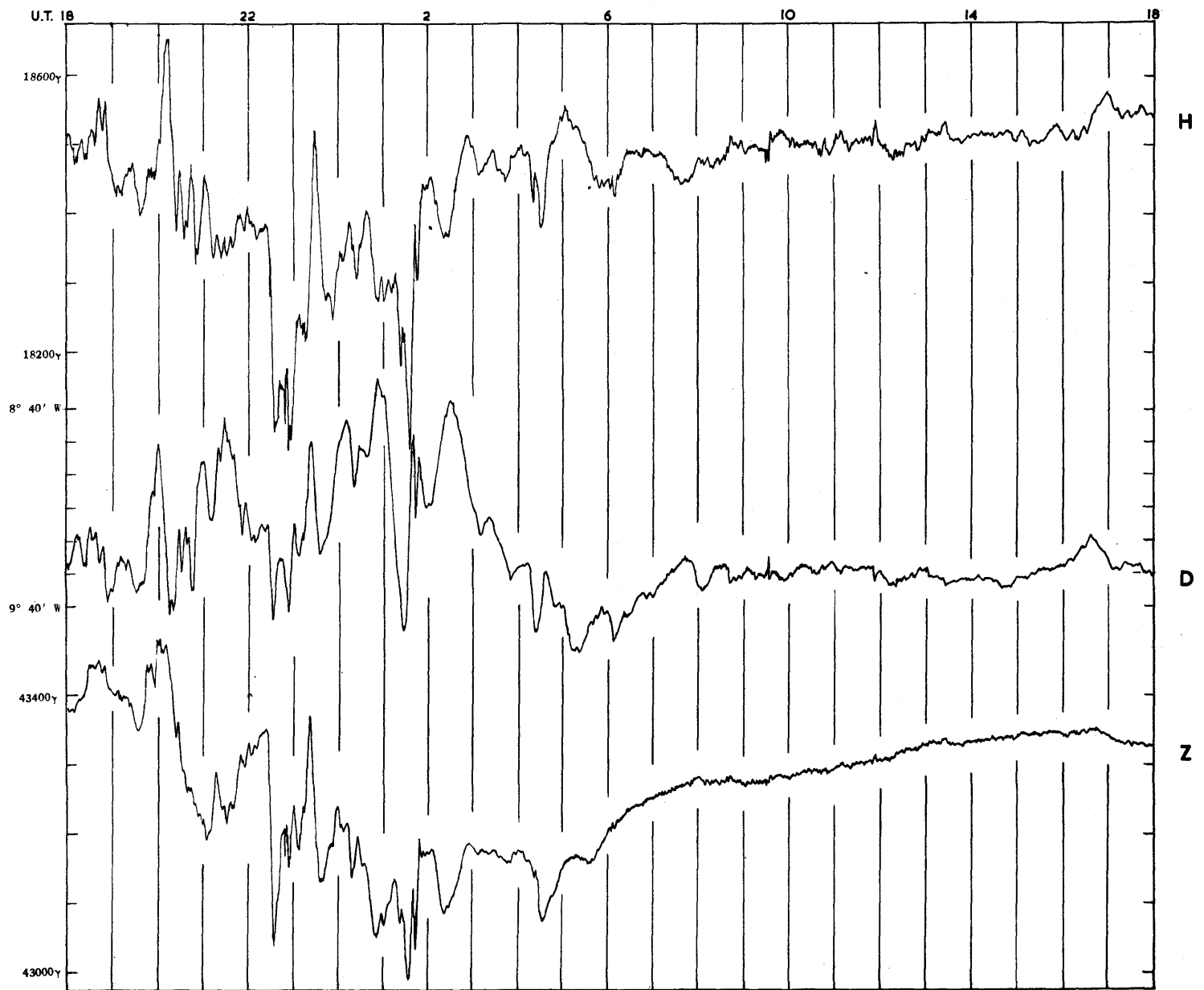
1949 JAN 24-25



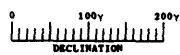
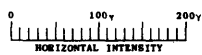
SCALES FOR THE MAGNETIC ELEMENTS



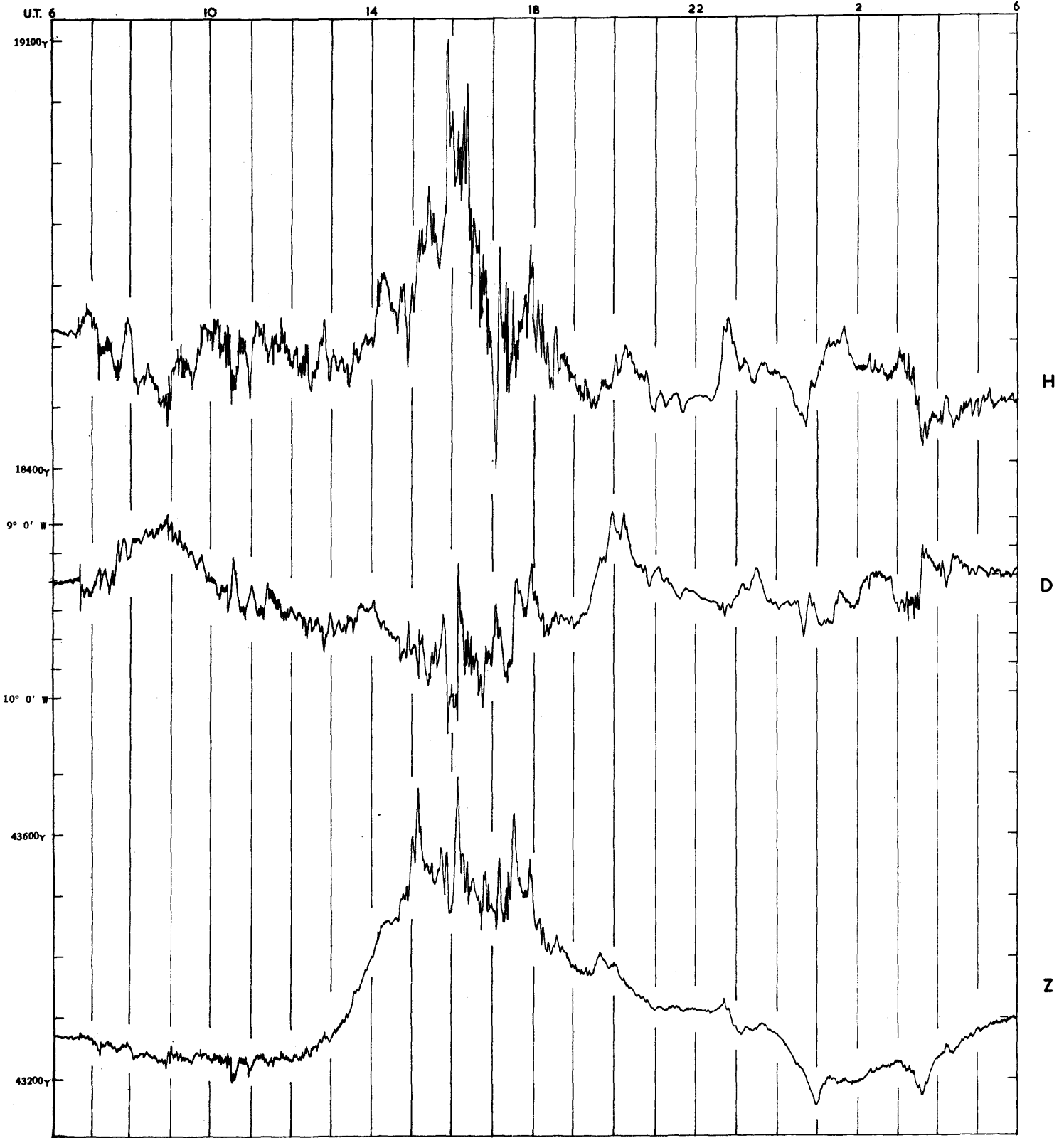
1949 JAN 25-26



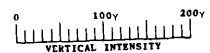
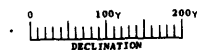
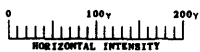
SCALES FOR THE MAGNETIC ELEMENTS

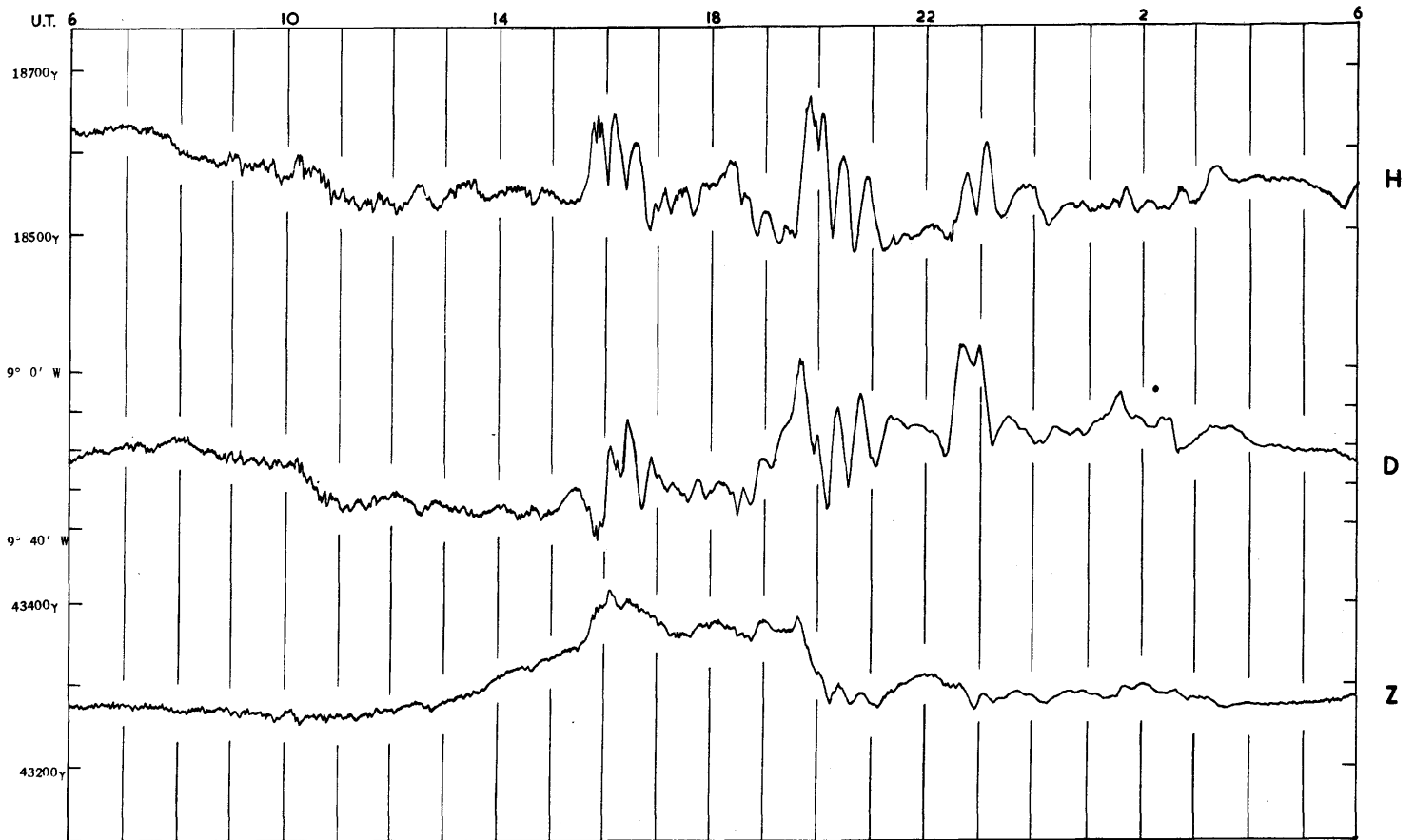
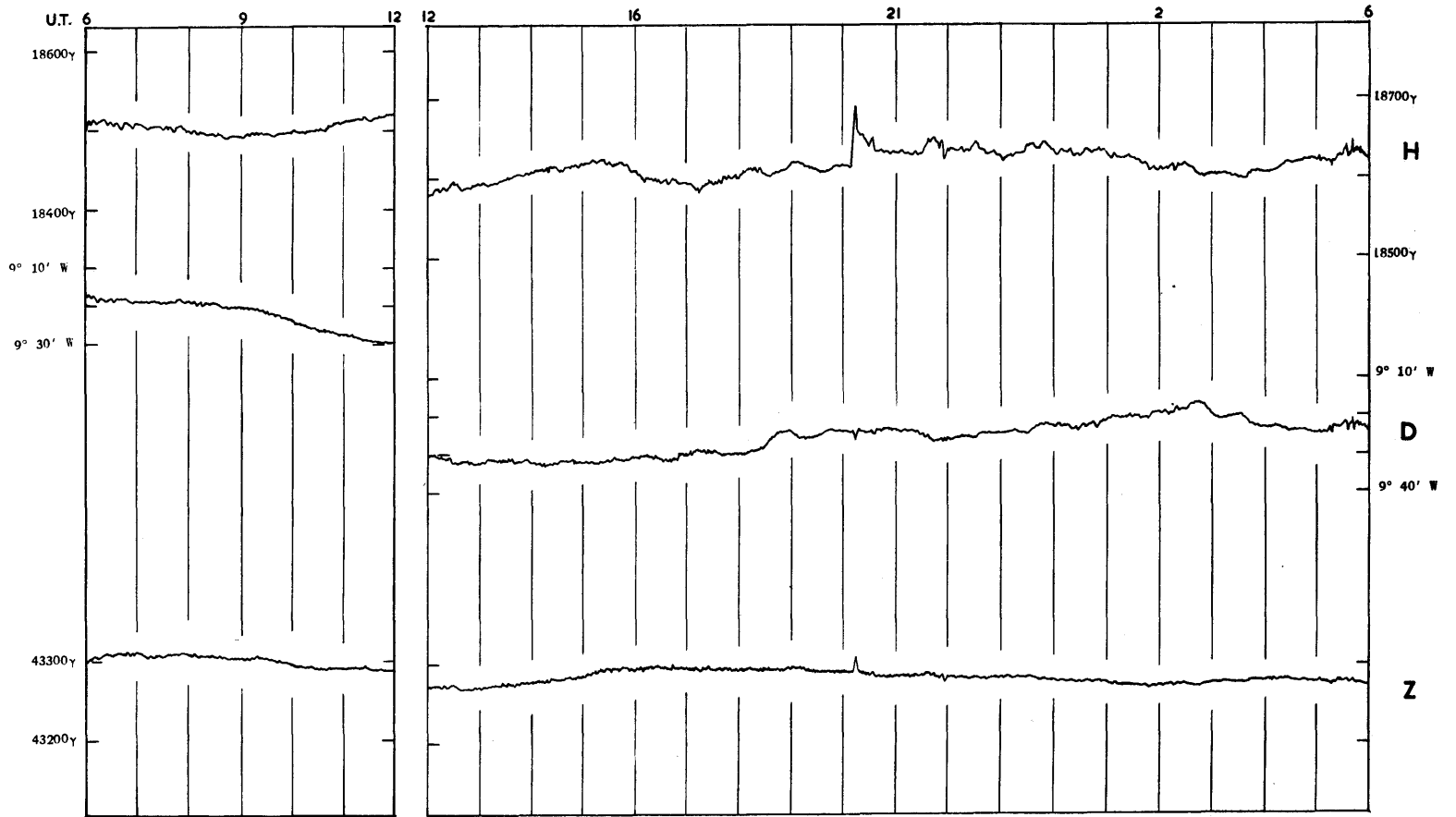


1949 MAY 12-13

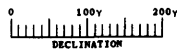
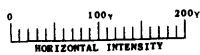


SCALES FOR THE MAGNETIC ELEMENTS



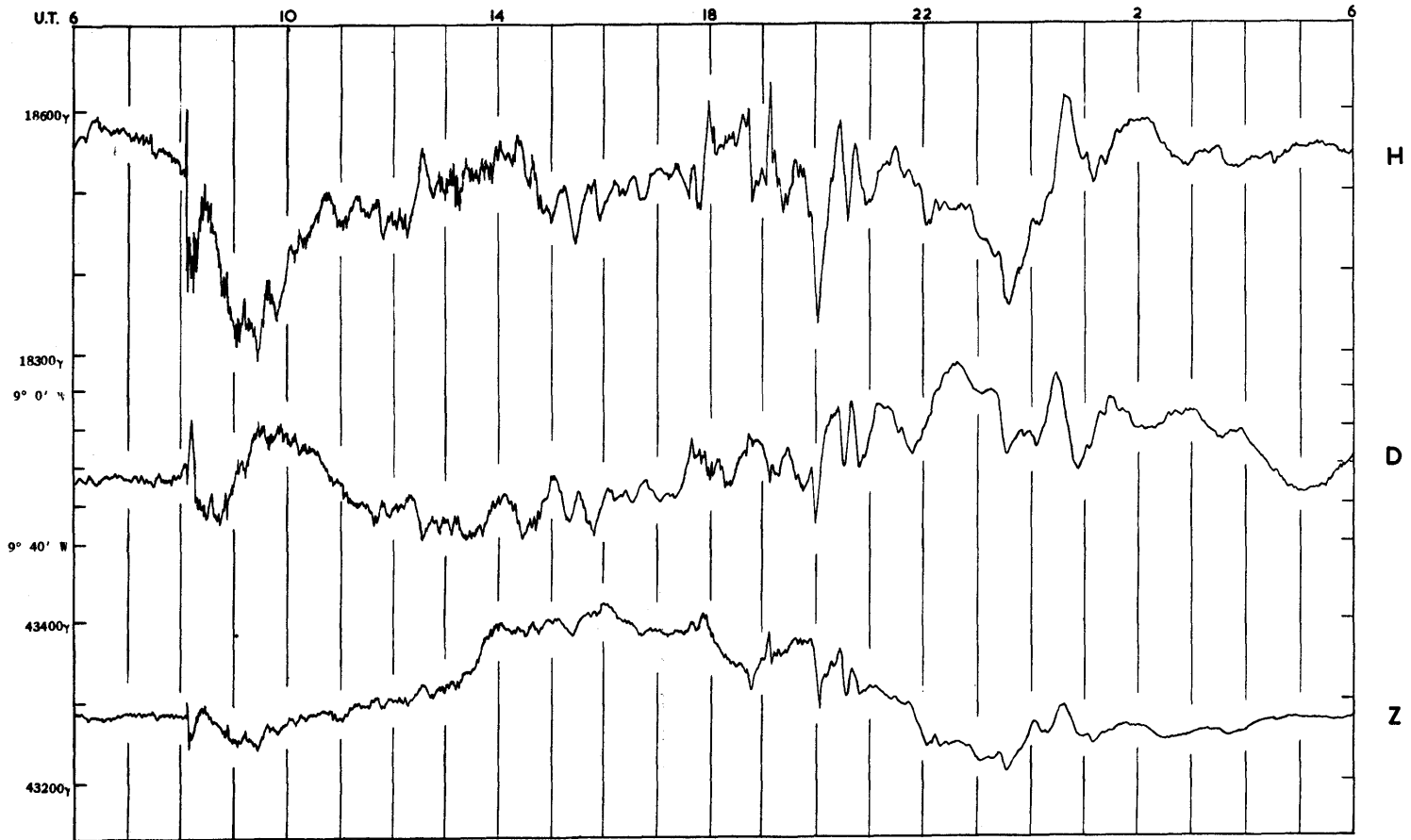


SCALES FOR THE MAGNETIC ELEMENTS

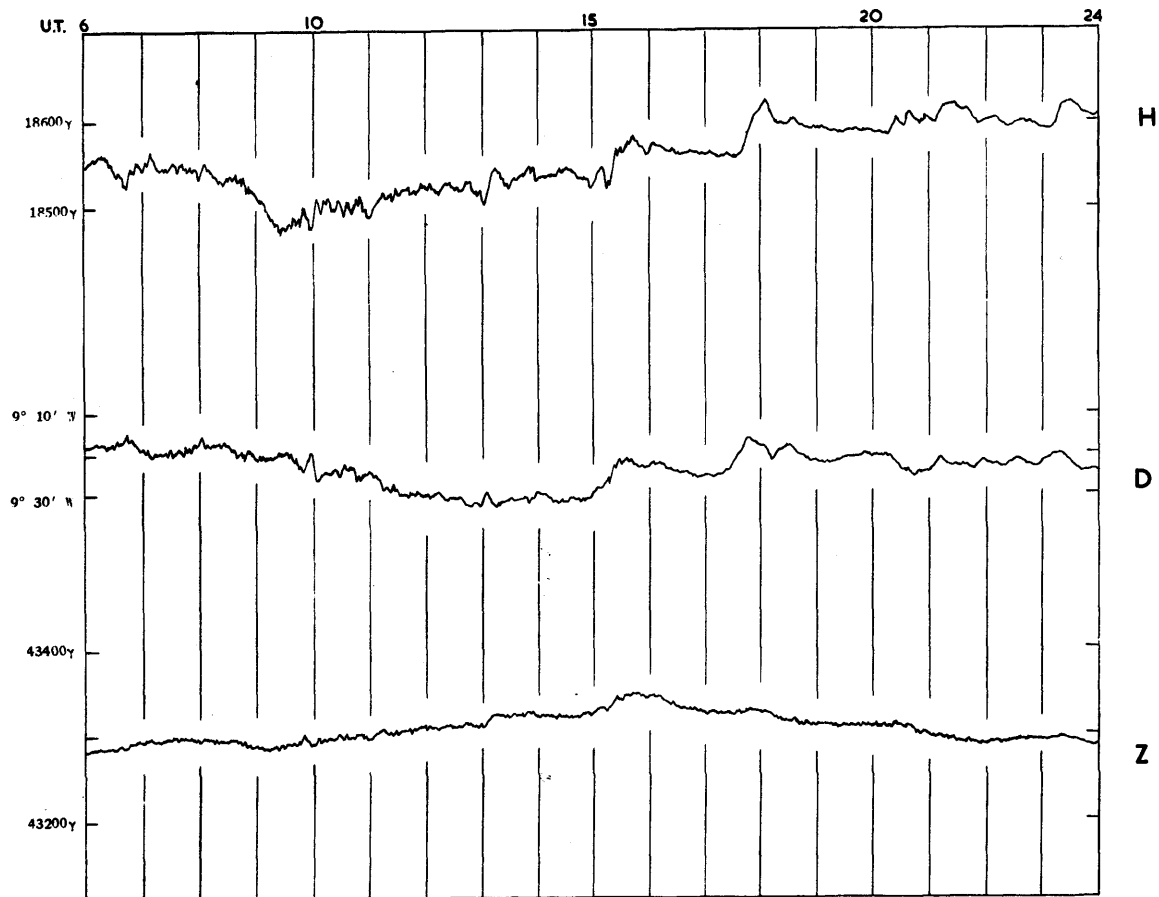


1949 OCT 15-16

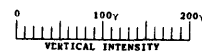
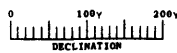
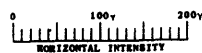
Plate V

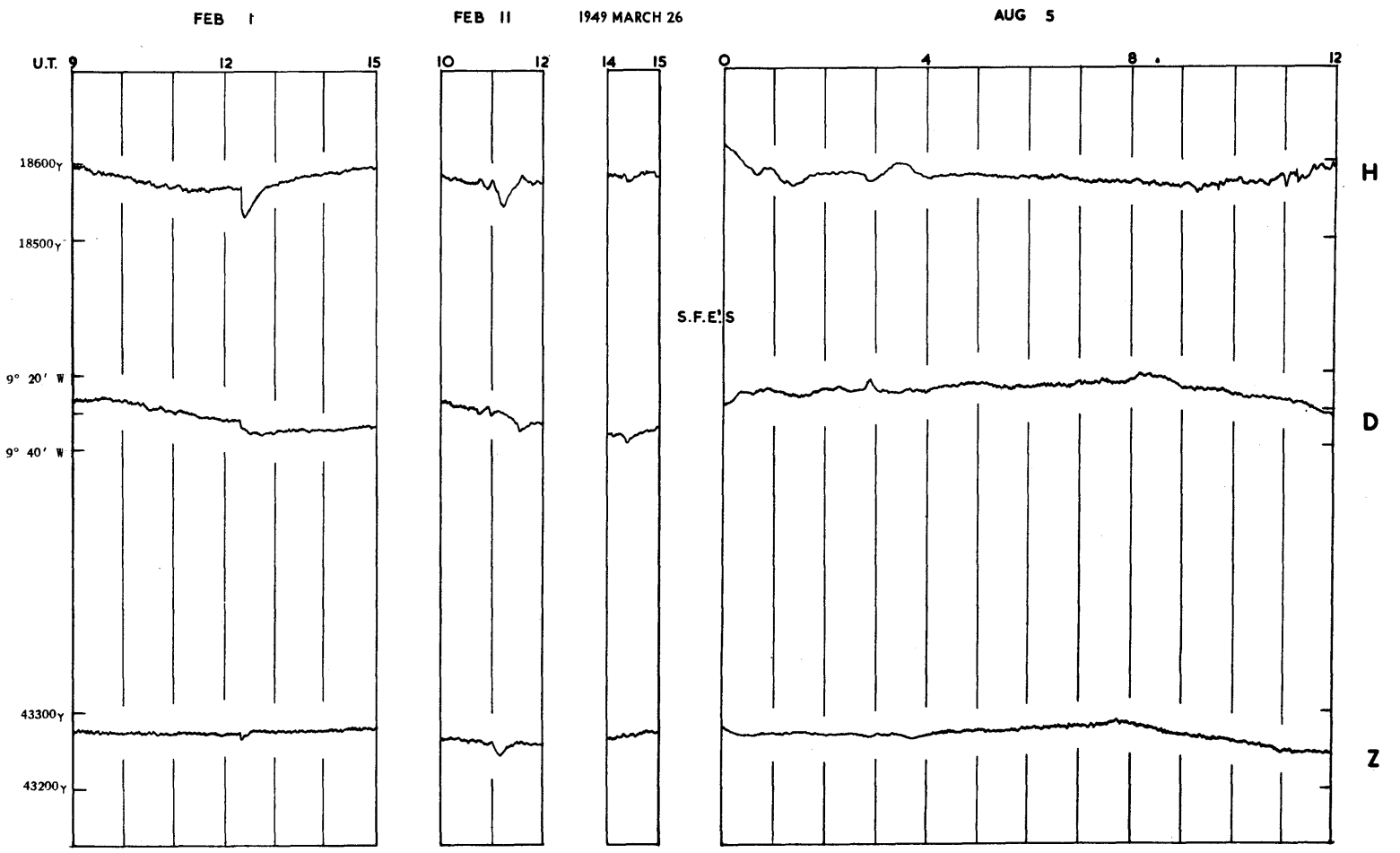
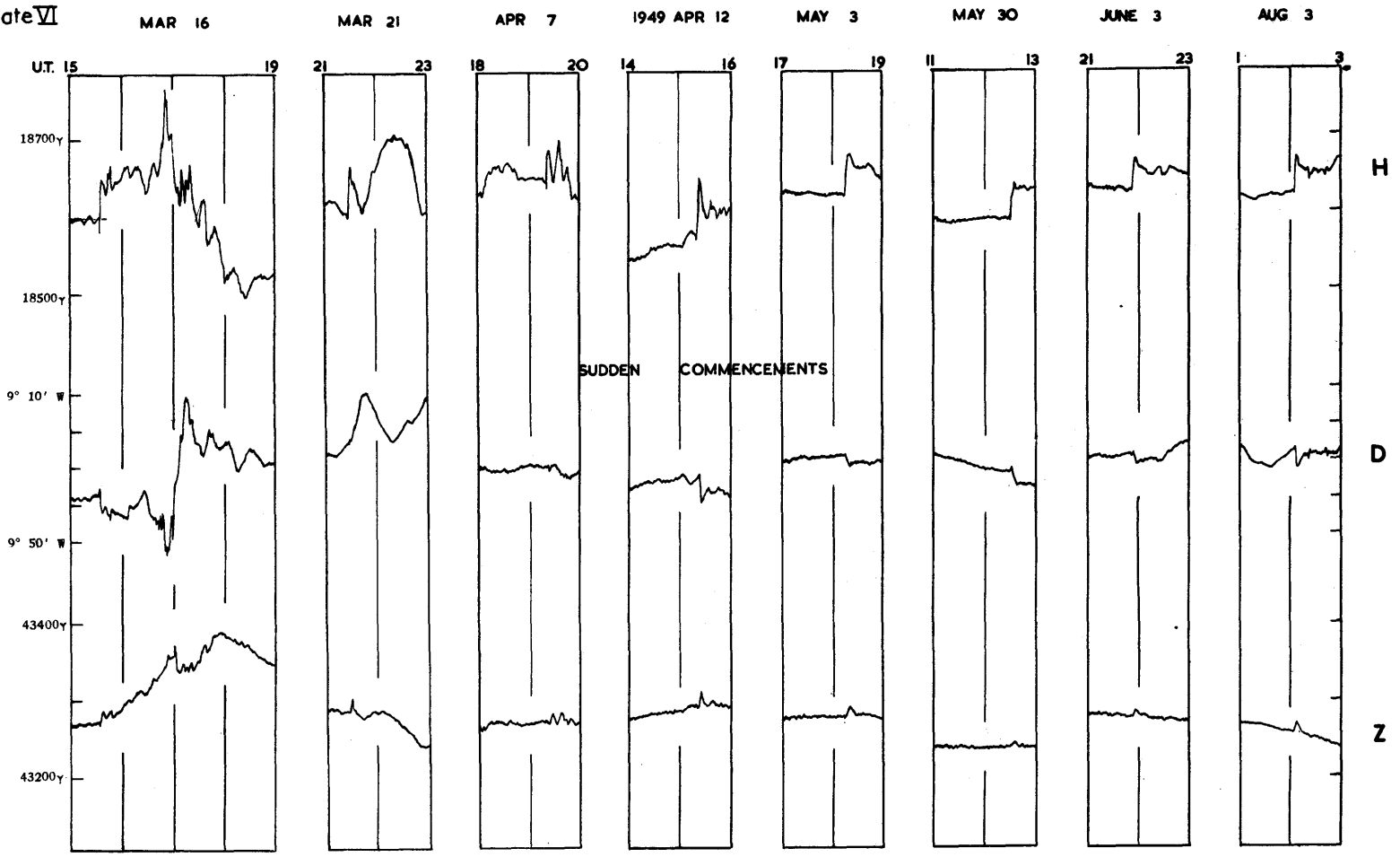


1949 OCT 16

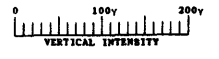
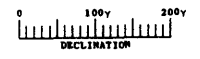
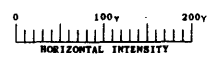


SCALES FOR THE MAGNETIC ELEMENTS





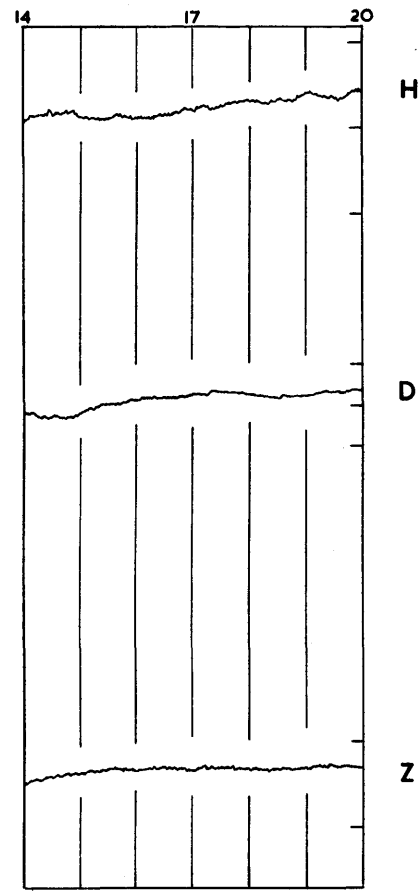
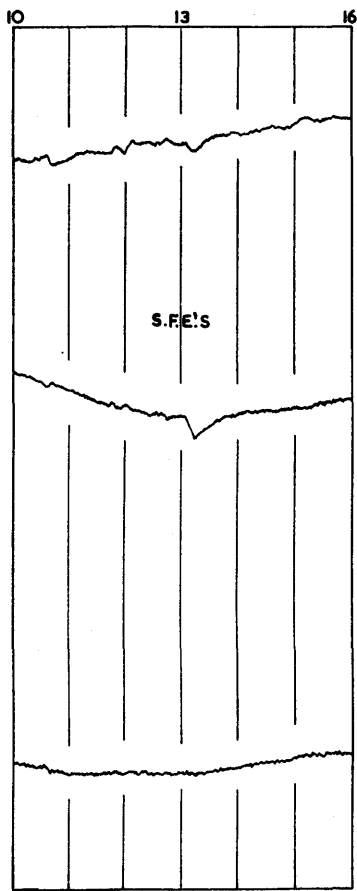
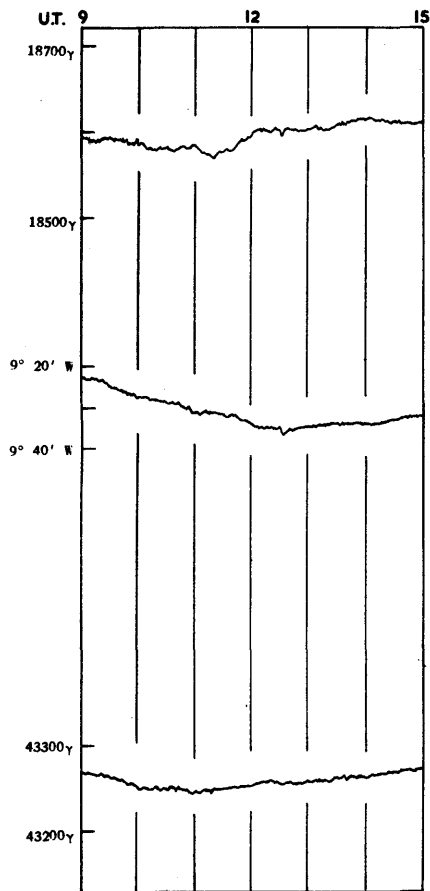
SCALES FOR THE MAGNETIC ELEMENTS



SEPT 5

1949 SEPT 13

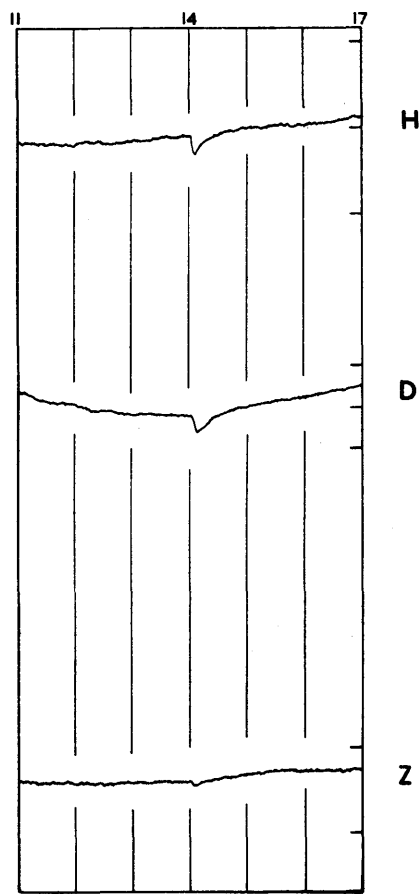
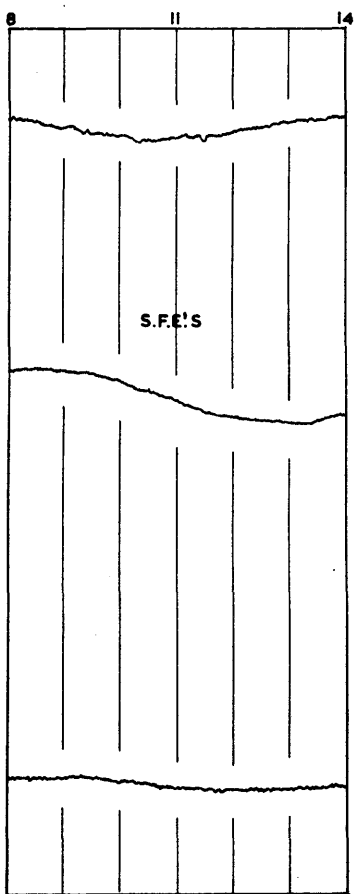
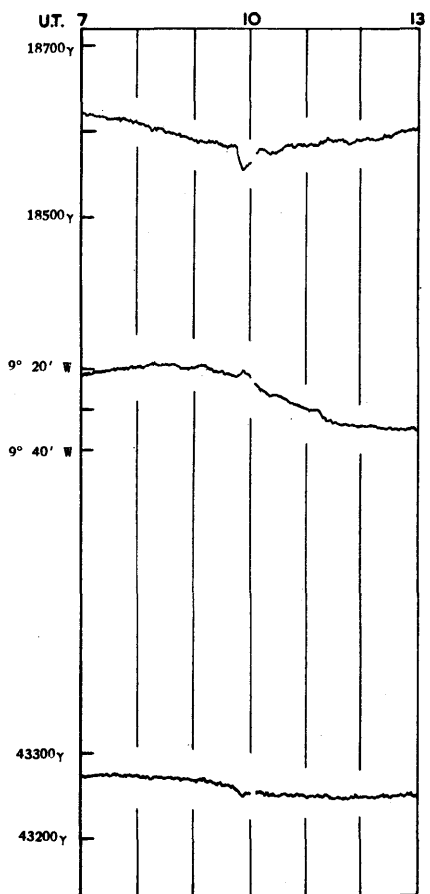
SEPT 17



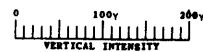
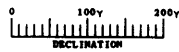
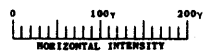
SEPT 18

1949 SEPT 19

OCT 2



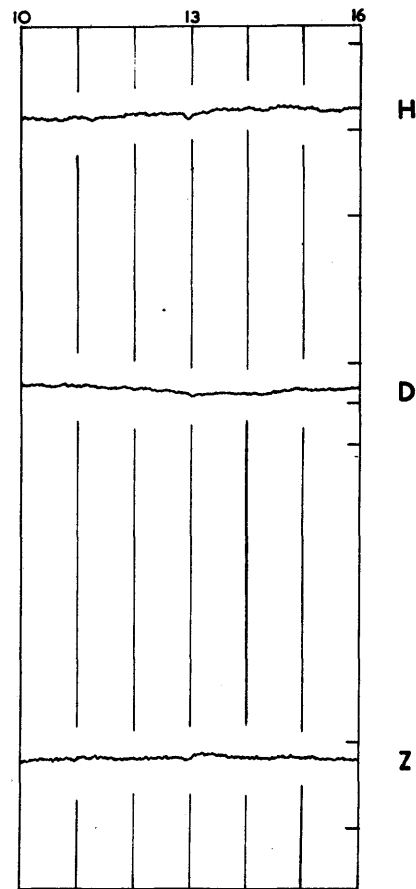
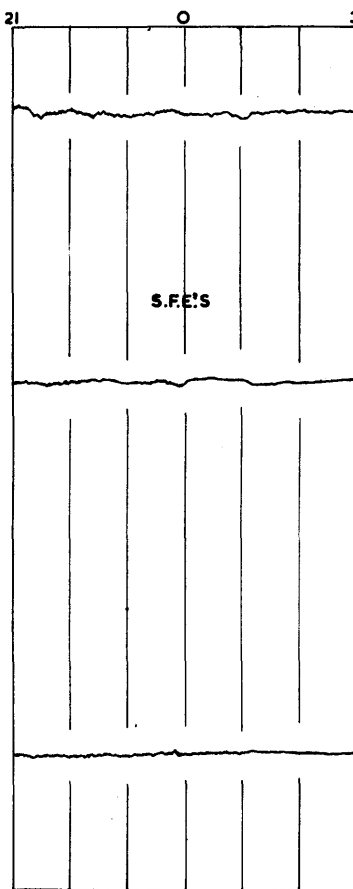
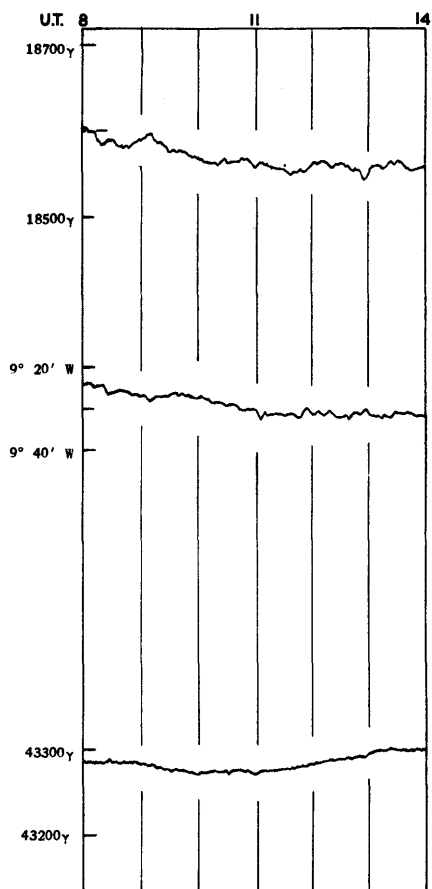
SCALES FOR THE MAGNETIC ELEMENTS



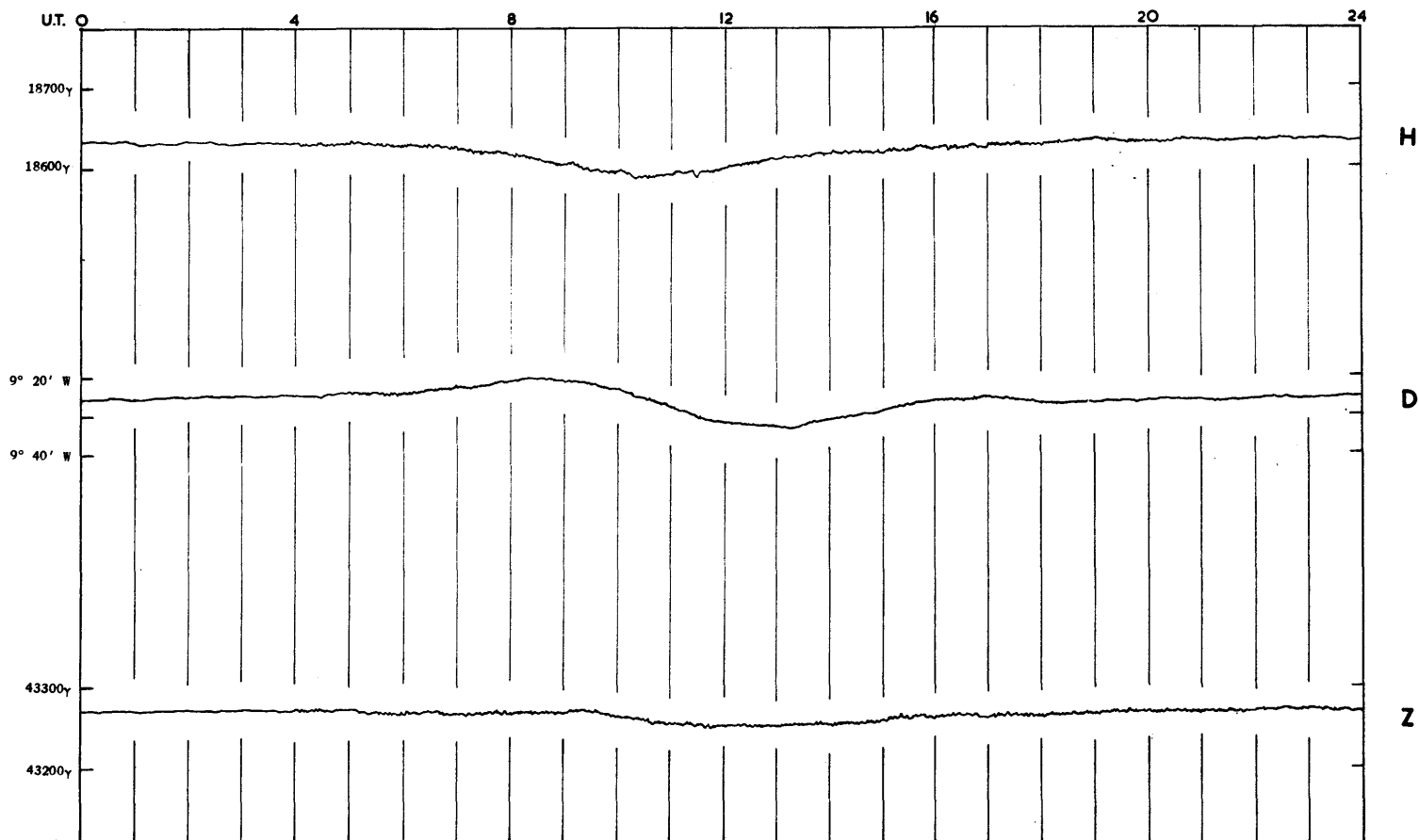
OCT 19

1949 NOV 6-7

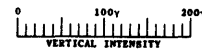
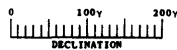
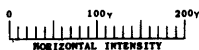
DEC 12

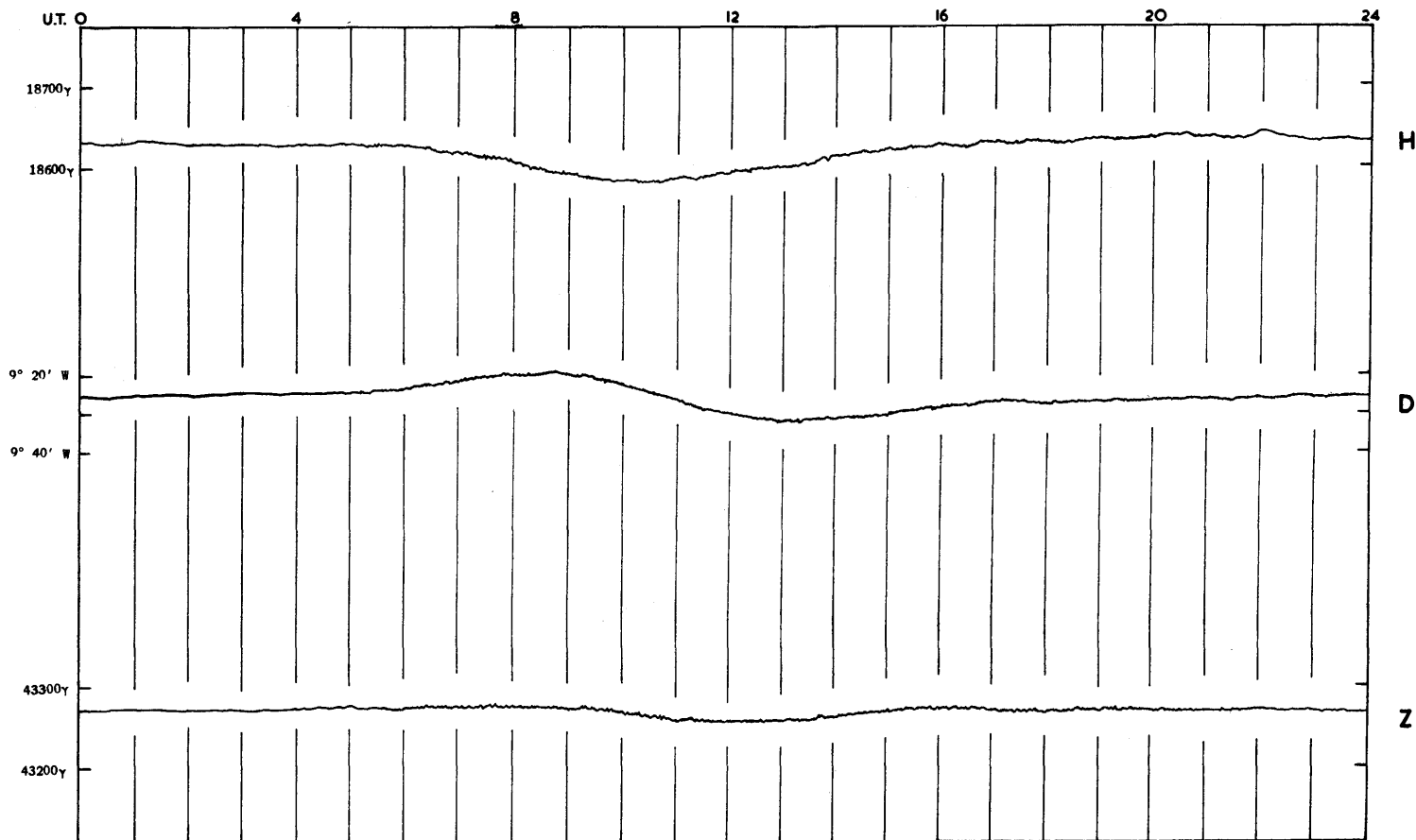


1949 SEPT 19



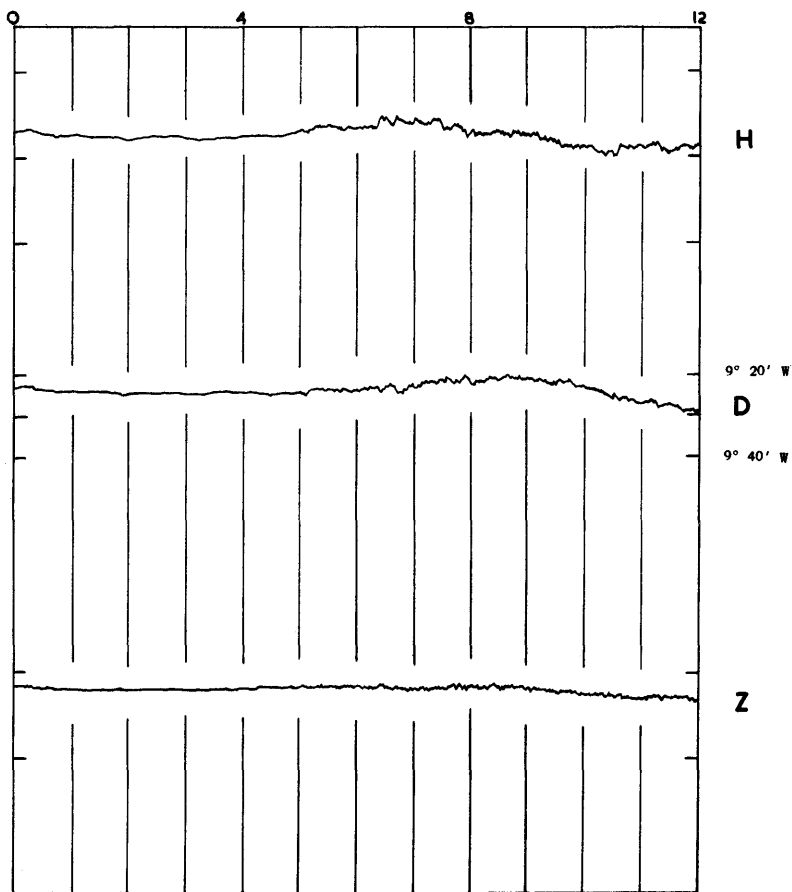
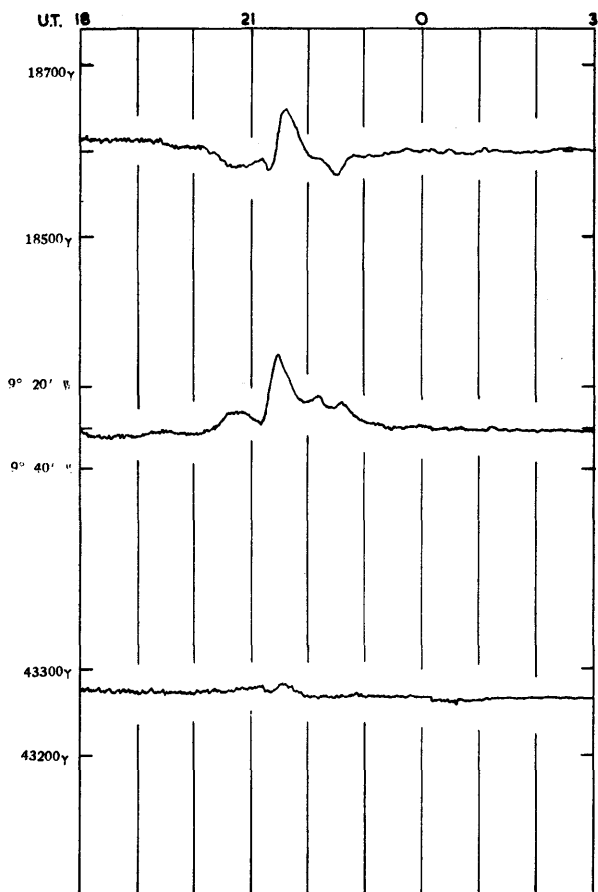
SCALES FOR THE MAGNETIC ELEMENTS



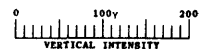
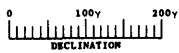
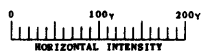


JAN 10 - 11

1949 NOV 9



SCALES FOR THE MAGNETIC ELEMENTS



ROYAL GREENWICH OBSERVATORY

Results of
Meteorological Observations

1949

TABLE XVII. - DAILY RESULTS OF THE METEOROLOGICAL OBSERVATIONS

Month and Day 1949	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				Or 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			
Jan.1	28.427	49.0	39.2	9.8	43.7	+ 5.1	41.1	37.5	6.2	10.9	2.4	79	70.9	36.2	45.8	0.363	1.5	7.9
2	28.881	47.0	35.0	12.0	42.3	+ 3.9	39.3	34.7	7.6	14.0	0.9	74	68.6	30.5	45.7	0.160	1.4	7.9
3	29.423	37.0	30.0	7.0	34.2	- 4.1	32.8	30.4	3.8	8.0	0.8	85	54.4	21.2	45.7	0.018	1.3	8.0
4	29.407	48.8	29.1	19.7	40.8	+ 2.5	40.1	39.1	1.7	3.6	0.0	94	54.3	20.3	45.6	0.194	0.0	8.0
5	29.983	44.0	35.8	8.2	40.5	+ 2.3	39.0	37.0	3.5	7.5	1.4	87	49.7	27.9	45.4	0.000	0.0	8.0
6	30.343	49.3	36.0	13.3	44.7	+ 6.6	44.0	43.3	1.4	2.5	0.0	94	57.8	28.5	45.4	0.000	0.0	8.0
7	30.196	50.4	45.3	5.1	47.8	+ 9.8	46.8	45.6	2.2	6.1	0.0	92	58.1	40.2	45.5	0.000	0.0	8.1
8	29.967	49.4	34.1	15.3	41.7	+ 3.8	39.8	37.1	4.6	8.7	1.2	83	55.1	27.0	45.5	0.057	1.1	8.1
9	30.214	40.0	30.4	9.6	35.0	- 2.9	33.4	30.5	4.5	9.0	1.3	83	58.3	22.1	45.4	0.000	4.1	8.1
10	30.030	43.4	30.7	12.7	38.8	+ 0.9	37.1	34.5	4.3	8.7	0.0	84	48.3	21.3	45.5	0.001*	0.0	8.1
11	29.655	47.5	39.0	8.5	43.7	+ 5.8	41.0	37.3	6.4	10.6	2.2	78	60.9	33.0	45.4	0.020	0.4	8.2
12	29.980	39.9	33.0	6.9	37.6	- 0.3	34.3	28.6	9.0	13.9	2.5	69	55.2	25.0	45.2	0.000	3.6	8.2
13	30.296	47.8	30.9	16.9	40.6	+ 2.6	38.5	35.4	5.2	8.1	0.0	81	68.2	21.4	45.1	0.000	1.1	8.2
14	30.178	53.5	44.8	8.7	49.8	+11.8	47.5	45.0	4.8	6.4	1.0	83	62.4	42.0	45.2	0.033	0.0	8.3
15	30.134	49.5	41.8	7.7	46.4	+ 8.3	45.7	44.8	1.6	2.4	0.0	95	51.8	36.1	45.0	0.130	0.0	8.3
16	30.009	51.1	44.3	6.8	48.4	+10.1	45.5	42.0	6.4	10.8	2.4	78	57.9	40.0	45.2	0.020	0.0	8.4
17	29.903	51.0	41.9	9.1	47.7	+ 9.2	45.1	42.1	5.6	9.1	2.8	80	63.3	37.1	45.3	0.000	0.6	8.4
18	29.941	51.1	42.9	8.2	47.6	+ 9.0	44.7	41.1	6.5	8.4	4.9	78	62.8	36.3	45.4	0.000	0.6	8.5
19	29.862	50.9	47.2	3.7	49.0	+10.3	45.4	41.0	8.0	9.7	1.9	73	66.0	44.1	45.7	0.015	1.0	8.5
20	29.886	49.3	40.6	8.7	44.9	+ 6.1	41.3	36.1	8.8	13.8	1.4	71	68.6	36.1	45.7	0.015	1.1	8.6
21	29.961	47.8	41.7	6.1	44.4	+ 5.6	40.3	34.1	10.3	14.6	6.3	67	71.5	35.4	45.7	0.000	1.6	8.6
22	30.172	46.5	33.2	13.3	41.3	+ 2.5	39.2	36.1	5.2	9.5	0.0	82	63.0	24.6	45.8	0.000	0.5	8.6
23	30.099	49.0	36.6	12.4	44.0	+ 5.1	41.9	39.2	4.8	9.3	1.3	83	75.3	27.6	45.8	0.000	1.7	8.7
24	30.157	44.4	33.1	11.3	40.1	+ 1.2	39.0	37.4	2.7	4.6	0.0	90	45.0	24.1	45.7	0.036	0.0	8.7
25	30.278	48.0	39.5	8.5	42.4	+ 3.3	40.2	37.0	5.4	13.8	2.2	81	82.4	30.0	45.7	0.000	4.7	8.8
26	30.237	47.5	37.1	10.4	42.8	+ 3.5	41.8	40.5	2.3	3.2	0.0	91	57.6	26.1	45.5	0.000	0.0	8.8
27	30.284	53.4	33.5	19.9	42.3	+ 2.8	40.9	39.0	3.3	13.2	0.0	88	85.1	27.6	45.6	0.000	6.7	8.9
28	30.355	54.8	33.4	21.4	39.9	+ 0.3	38.0	35.2	4.7	17.7	0.0	83	90.9	20.5	45.4	0.000	7.0	9.0
29	30.495	50.0	29.2	20.8	39.5	- 0.2	37.2	33.5	6.0	15.2	0.0	79	75.3	16.0	45.1	0.000	4.5	9.0
30	30.616	44.2	34.4	9.8	38.9	- 0.8	36.5	32.5	6.4	14.1	2.2	77	72.3	23.2	45.0	0.000	0.4	9.0
31	30.445	44.6	31.6	13.0	39.1	- 0.6	37.0	33.7	5.4	12.5	0.5	81	50.0	23.8	44.8	0.017	0.0	9.1
Means	29.994	47.7	36.6	11.1	42.6	+ 4.0	40.5	37.5	5.1	9.7	1.3	82.0	63.3	27.2	45.4	Sum 1.079	1.4	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.

* Rainfall (Column 16). The amount entered on January 10 is derived from hoar frost.

The mean reading of the Barometer for the month was 29.994 in., being 0.193 in. higher than the average for the 65 years, 1841-1905.

TEMPERATURE OF THE AIR.

The highest in the month was 54°.8 on January 28; the lowest in the month was 29°.1 on January 4; and the range was 25°.7.

The mean of all the highest daily readings in the month was 47°.7, being 4°.6 higher than the average for the 65 years, 1841-1905.

The mean of all the lowest daily readings in the month was 36°.6, being 2°.4 higher than the average for the 65 years, 1841-1905.

The mean of the daily ranges was 11°.1, being 2°.2 greater than the average for the 65 years, 1841-1905.

The mean for the month was 42°.6, being 4°.0 higher than the average for the 65 years, 1841-1905.

TABLE XVII. - DAILY RESULTS OF THE METEOROLOGICAL OBSERVATIONS

Month and Day 1949	RECORD OF THE NIGHT SKY				WIND AS DEDUCED FROM SELF-REGISTERING ANEMOMETERS					CLOUDS AND WEATHER			
	Polaris		δ 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 Move-ment of the Air				
					A.M.	P.M.	Greatest	Mean of 24 Hourly Measures		0 ^h to 6 ^h	6 ^h to 12 ^h	12 ^h to 18 ^h	18 ^h to 24 ^h
Jan. 1	11.4	0.83	9.9	0.72	SSW: SW	SSW: SW	29.7	2.72	647	c ir c	c gr bc Nbst Ci Prhn	r q bc b Ci	b
2	4.0	0.29	3.9	0.28	SW	SW: Calm: NW	9.5	0.95	377	b bc c	c Frcu Ci	c Acu ir	c ir
3	8.4	0.61	8.2	0.60	NW: W: WSW	WSW: SW	2.0	0.15	259	r c b x m	b Ci c Acu m	c Acu m b Frcu m _o	b m _o x
4	1.0	0.07	0.8	0.06	SSW: SSE: S	SW: WSW	5.5	0.24	272	b x c r _o s _o r	rr d Nbst	d _o c Stcu p	c p _o m
5	7.1	0.52	5.4	0.39	NNW: N	Calm: SSW	4.5	0.19	228	c	c Stcu m _o	c Stcu b m	b f x
6	4.0	0.29	3.3	0.24	SSW: SW	SW: SSW	1.6	0.12	246	c m	c d _o c Stcu m	c Stcu m	c m b w c
7	2.6	0.19	2.6	0.19	SW	SW	7.2	0.53	363	c w	c Stcu	c Stcu d _o	c d _o
8	12.9	0.96	12.5	0.93	SW: N: NNW	N: NNE	11.5	0.75	374	c dd q b	b m c Stcu	c r _o bc Frcu	b x
9	7.2	0.53	4.9	0.36	W: NW: N	N: W	2.3	0.10	206	b x	b Acu m	b Ci cu	b f x
10	0.1	0.01	0.1	0.01	WSW	WSW	1.5	0.08	208	b f c m x	c Stcu m	c Stcu m	c m _o
11	11.4	0.85	11.0	0.81	WSW	W	3.2	0.28	334	c m _o	c Nbst r _o c m _o	c Acu b m _o	b
12	10.7	0.79	10.0	0.74	WNW: NNW	NNW: NW	4.4	0.35	351	b x c	c m _o b z _o y Ci	b Cu z _o y	b x m
13	0.0	0.00	0.0	0.00	SW	SW	2.6	0.19	280	b c m x	c Frst d _o c b Acu m	b m c Stcu m _o	c m _o
14	0.0	0.00	0.0	0.00	WSW	W: NNW	5.0	0.44	358	c m _o	c Stcu m _o	c Frcu Ci cu m	c r r _o m
15	0.9	0.07	0.0	0.00	NNW: WSW	WSW	2.2	0.11	225	r p _o c m f	c St d f	d c Nbst dd f	d c m
16	4.6	0.35	0.9	0.07	WSW: W: NW	NW: NNW	5.0	0.32	328	c m	c Stcu m m _o	c Stcu bc m _o	c r c m _o
17	5.4	0.41	4.2	0.31	WSW	WSW	10.0	0.82	421	c m _o	c Stcu m _o	c bc c Stcu m _o	c m _o
18	3.1	0.23	2.0	0.15	WSW	WSW	11.0	0.72	412	c m _o	c Ast m _o	c Acu Ci m _o	c b c
19	3.4	0.25	2.7	0.20	WSW: SW	SW: WSW	13.8	1.73	577	c	c Stcu	c Frcu	c r _o
20	5.3	0.40	4.6	0.35	W: WSW	WSW	7.3	0.76	421	r _o c	c Acu b Ci	b c Stcu	c
21	11.5	0.87	10.4	0.79	WSW: W	W	7.0	1.00	468	bc	c Stcu	c Acu b	b c b
22	0.4	0.03	0.4	0.03	W: NW: Calm	SSW	1.4	0.06	179	b x	b Ci f x b m	b Acu c m	c d _o m
23	10.5	0.81	8.5	0.66	SSW	SSW	2.2	0.15	263	c m _o	c Stcu m _o	c Frcu b m _o	b m _o
24	0.7	0.05	0.4	0.03	SW	NE: ENE	2.7	0.11	218	b x c	c Nbst d r _o m	r _o c Stcu m	c m _o
25	10.7	0.82	9.5	0.73	E	SW: SSE	1.1	0.11	204	c m _o	c Stcu b	b c Acu b	b c
26	9.0	0.69	6.5	0.50	S: Calm	Calm: SW	0.6	0.02	126	b c b x f	b c Ast f m	c Acu f b	f b m
27	13.0	1.00	13.0	1.00	S: Calm	S: SSE	0.7	0.01	157	b c b x m	b f m	b	b m
28	13.0	1.00	13.0	1.00	S: Calm	S	0.4	0.01	194	b x	b Ci x f F	b Acu	b x m
29	11.1	0.89	9.0	0.72	SW: Calm	WSW	0.0	0.00	130	b x m f	Fe b Ci f	b Ci m	b f
30	2.3	0.18	1.3	0.10	Calm: NNE	Calm	1.1	0.03	123	b f x	c Ast f m	c b Ci cu c m	c m f
31	0.5	0.04	0.2	0.01	SW: WSW	W: NW: NNE	2.7	0.11	235	b c b x f	c Acu f	c d c Ast m	c d c m _o
Means	6.0	0.45	5.1	0.39	..	..	..	0.42	296				
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 40°.5, being 3°.3 higher than
 The mean *Temperature of the Dew Point* for the month was 37°.5, being 2°.4 higher than
 The mean *Degree of Humidity* for the month was 82.0, being 4.8 less than
 The mean *Elastic Force of Vapour* for the month was 0.225 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 8)* was 5.6.
 The mean proportion of *Sunshine* for the month (constant sunshine being represented by 1) was 0.172. The maximum daily amount of *Sunshine* was 7.0 hours on January 28.
 The highest reading of the *Solar Radiation Thermometer* was 90°.9 on January 28; and the lowest reading of the *Terrestrial Radiation Thermometer* was 16°.0 on January 29.
 The *Proportions of Wind* referred to the cardinal points were N.12, E.4, S.31, W.43, calm or nearly calm conditions 10, the whole month being represented by 100.
 The *Greatest Pressure of the Wind* in the month was 29.7 lbs. on the square foot on January 1. The mean daily *Horizontal Movement of the Air* for the month was 296 miles; the greatest daily value was 647 miles on January 1 and the least daily value was 123 miles on January 30.
Rain (0.005 in. or over) fell on 13 days in the month, amounting to 1.079 in., as measured by gauge No.6 partly sunk below the ground; being 0.802 in. less than the average fall for the 65 years, 1841-1905.
 * This scale, ranging from 0 to 8, was adopted from January 1, 1949, in accordance with the new International Code.

TABLE XVII. - DAILY RESULTS OF THE METEOROLOGICAL OBSERVATIONS

Month and Day 1949	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			
Feb. 1	30.438	42.7	35.7	7.0	39.1	-0.5	36.7	32.8	6.3	10.3	3.6	78	76.1	28.7	44.5	0.000	0.4	9.1
2	30.594	41.9	25.2	16.7	34.0	-5.5	31.7	28.1	5.9	14.1	0.8	77	76.3	19.5	44.4	0.000	3.1	9.2
3	30.594	41.0	21.6	19.4	29.5	-10.0	26.7	21.0	8.5	18.8	1.4	67	78.3	6.5	44.2	0.000	7.2	9.3
4	30.467	45.7	19.8	25.9	31.2	-8.3	27.6	20.5	10.7	26.5	2.1	60	84.6	6.5	44.1	0.000	7.6	9.3
5	30.325	47.8	24.4	23.4	33.0	-6.6	30.2	25.5	7.5	23.9	1.3	71	81.3	7.4	43.9	0.000	7.1	9.4
6	30.231	46.1	26.2	19.9	34.0	-5.6	31.2	26.6	7.4	20.8	0.9	72	74.0	8.5	43.6	0.000	7.3	9.4
7	30.038	48.9	30.3	18.6	41.1	+1.6	40.0	38.6	2.5	4.9	0.7	90	75.6	13.4	43.3	0.165	0.3	9.5
8	29.907	49.2	39.7	9.5	45.3	+6.0	42.5	38.7	6.6	16.5	1.6	78	88.8	33.2	43.0	0.001*	4.2	9.5
9	29.608	53.5	38.7	14.8	43.8	+4.7	40.8	36.6	7.2	14.9	1.4	75	84.0	34.0	42.9	0.281	1.8	9.6
10	30.005	48.8	30.0	18.8	40.3	+1.4	37.1	31.9	8.4	17.5	0.5	71	78.1	27.5	42.9	0.000	6.1	9.7
11	30.081	48.1	28.2	19.9	37.2	-1.6	35.0	31.2	6.0	15.4	0.0	79	74.6	25.8	42.8	0.000	0.8	9.7
12	29.883	45.8	33.6	12.2	40.2	+1.4	38.6	36.4	3.8	7.2	0.0	86	76.4	26.9	42.8	0.199	0.9	9.8
13	30.082	48.0	34.4	13.6	41.4	+2.4	39.1	35.7	5.7	10.8	1.9	80	62.4	29.1	42.8	0.001	0.3	9.9
14	30.108	51.4	43.5	7.9	48.2	+8.9	46.3	44.2	4.0	5.2	1.8	86	57.6	38.1	42.8	0.000	0.0	9.9
15	30.207	52.4	46.0	6.4	49.7	+10.3	47.2	44.5	5.2	8.1	2.3	82	61.1	38.0	42.9	0.000	0.0	10.0
16	30.216	55.7	37.8	17.9	45.6	+6.1	42.9	39.3	6.3	17.3	1.0	79	101.4	31.1	43.1	0.001*	8.2	10.1
17	30.095	58.7	32.1	26.6	42.7	+3.1	39.7	35.3	7.4	24.5	0.0	74	102.5	26.6	43.3	0.001*	7.8	10.1
18	29.935	58.6	36.9	21.7	46.4	+6.9	43.2	39.1	7.3	15.8	2.2	75	101.9	27.1	43.5	0.016	6.4	10.2
19	30.099	55.8	34.9	20.9	45.1	+5.6	41.6	36.6	8.5	24.1	0.0	72	92.0	27.2	43.5	0.000	8.2	10.2
20	30.107	57.0	34.1	22.9	45.2	+5.7	43.1	40.3	4.9	14.6	0.8	83	104.2	26.4	43.4	0.000	7.2	10.3
21	30.035	55.8	43.2	12.6	50.6	+11.0	48.2	45.6	5.0	12.7	1.8	83	77.3	37.0	43.5	0.031	1.4	10.4
22	30.221	54.6	37.6	17.0	46.4	+6.7	42.2	36.4	10.0	17.4	7.3	67	104.0	31.4	43.7	0.000	5.1	10.4
23	30.185	54.5	48.9	5.6	52.2	+12.4	49.1	45.8	6.4	9.0	2.0	79	62.2	45.0	43.8	0.020	0.0	10.5
24	30.266	51.0	42.6	8.4	48.7	+8.7	46.3	43.6	5.1	14.3	0.0	82	78.1	35.0	44.0	0.226	0.6	10.6
25	30.402	48.7	38.3	10.4	43.5	+3.4	39.0	31.8	11.7	16.0	4.9	63	76.2	29.5	44.2	0.000	2.3	10.6
26	30.101	53.0	38.5	14.5	46.2	+6.0	42.4	37.3	8.9	17.1	5.1	70	93.3	33.4	44.3	0.000	1.6	10.7
27	29.909	47.7	38.2	9.5	43.3	+3.0	38.9	31.9	11.4	19.8	6.5	64	85.1	31.3	44.3	0.021	2.8	10.8
28	30.124	48.8	32.6	16.2	41.5	+1.2	37.6	31.3	10.2	20.3	1.4	67	83.3	25.7	44.3	0.000	3.4	10.8
Means	30.152	50.4	34.7	15.7	42.3	+2.8	39.5	35.2	7.1	15.6	1.9	75.4	81.8	26.8	43.6	Sum 0.963	3.6	10.0
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.

* Rainfall (Column 16). The amounts entered on February 8 and 16 were derived from dew and that on February 17 from hoar frost.

The mean reading of the Barometer for the month was 30.152 in., being 0.343 in. higher than the average for the 65 years, 1841-1905.

TEMPERATURE OF THE AIR.

The highest in the month was 58° 7 on February 17; the lowest in the month was 19° 8 on February 4; and the range was 38° 9.

The mean of all the highest daily readings in the month was 50° 4, being 5° 5 higher than the average for the 65 years, 1841-1905.

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

The mean of the daily ranges was 15° 7, being 5° 5 greater than the average for the 65 years, 1841-1905.

The mean for the month was 42° 3, being 2° 8 higher than the average for the 65 years, 1841-1905.

TABLE XVII. - DAILY RESULTS OF THE METEOROLOGICAL OBSERVATIONS

Month and Day 1949	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		Oh to 6h	6h to 12h	12h to 18h	18h to 24h
Feb.1	8.6	0.69	6.6	0.53	N:NNE	NNE	2.3	0.22	259	c m _o	c Stcu m _o	c Stcu m _o	c m _o
2	12.5	1.00	12.5	1.00	NE: Calm	Calm: SE	0.2	0.01	118	c b x m _o	b c r b Cu m _o	b Cu m _o	b x m _o
3	12.5	1.00	12.5	1.00	Calm	S: Calm: SE	0.1	0.00	130	b m _o x	b m b y	b y	b m x
4	12.5	1.00	12.5	1.00	Calm	SE: Calm	0.0	0.00	102	b m x	b f b y	b y	b m f x
5	12.0	1.00	12.0	1.00	Calm	SE: Calm	0.4	0.01	107	b m x	b f m	b y	b m x
6	9.4	0.78	9.3	0.77	Calm	SE: Calm	0.1	0.00	111	b m _o x	b f	b z y	b x m
7	..	..	..	..	S: SW	SW	6.3	0.49	340	b m _o x	o St f c Stcu	c Nbst id _o	c r r _o
8	4.0	0.33	2.9	0.24	SW	WSW: SW: SSW	9.6	0.60	382	c b w	b c Acu	bc Ci Frcu	bc w-hac
9	11.9	0.99	11.9	0.99	S: SW	WSW	33.0	2.76	640	c r r gale	rr c Acu gale so-ha	c Cumb Ci p so-ha b	b
10	11.9	0.99	7.3	0.61	WSW	NW: Calm	7.3	0.41	280	b	b Frcu m	b bc Frcu	b f x
11	5.8	0.49	5.8	0.49	SW	WSW: SW	0.2	0.00	171	b x ff	ff bc Cist Cicu so-ha	bc Cist m so-ha b f	b x f
12	9.7	0.82	9.1	0.78	SW: SSW	W: NW	16.5	0.69	398	b m x c	c Nbst r _o r	r _o c ph Acu b	b
13	1.5	0.13	0.5	0.04	NW: W: WSW	WSW: SW	1.9	0.09	220	b x c	c Acu m f	c Stcu f d _o m	c m
14	0.0	0.00	0.0	0.00	SW	SW: WSW	2.6	0.18	278	c m	c St m	c Stcu m _o	c m _o
15	11.5	0.98	9.3	0.79	WSW	SW	3.6	0.34	348	c m _o	c Stcu m _o	c Ast Frst m _o	bc
16	11.7	1.00	11.7	1.00	SW: SSW	SSW: SW	3.8	0.20	248	bc bw m _o	b Ci	b Ci	b m
17	11.7	1.00	11.7	1.00	SW: Calm	SW: S: Calm	0.2	0.00	144	b m x	b Ci f z _o	b y z _o	b m
18	5.8	0.49	4.3	0.36	Calm: SSW	SSW	4.0	0.32	302	b m x	b Acu m _o	b c Acu	c ir
19	11.3	1.00	11.3	1.00	W: Calm	SW: SSW	1.2	0.03	168	c b x	b f b y	b Frcu y	b
20	0.0	0.00	0.0	0.00	S: SSW	SSW	4.7	0.21	317	b x	b f b Ci	b bc Ci Frst	c
21	7.7	0.68	7.4	0.66	SSW: SW	SW: W	12.6	0.47	374	c r _o	c Stcu id _o	c Acu Cu	b c r
22	4.1	0.36	3.1	0.27	W: WSW	SW	12.5	1.40	513	b	b bc Frcu Cist	c Ast Acu	c b c
23	0.0	0.00	0.0	0.00	SW: WSW	WSW	6.8	0.90	438	c	c Stcu	c Stcu	c r c
24	6.8	0.60	5.5	0.49	WSW: W: N	NNW: NN	1.4	0.13	249	c r r	c id m g Stcu	c Stcu	c
25	4.1	0.37	3.1	0.28	NW: W	WNW: W	0.8	0.09	220	c b c	c m bc Frcu	c Stcu	c
26	2.5	0.23	1.8	0.17	WSW	WSW	9.0	0.90	463	c b c	c Stcu	c Frcu Stcu	c
27	10.5	0.97	10.5	0.97	W: WNW	NW: NNW	14.0	1.03	482	c b c	c Nbst p _o	ph c bc Frcu b y	b
28	0.6	0.06	0.3	0.03	NNW: W	WSW	10.3	0.81	398	b x f	b f so-ha bc Frcu	bc c Acu Cu y	c
Means	7.4	0.63	6.8	0.57	..	..	..	0.44	293				
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 39°.5, being 1°.8 higher than
 The mean *Temperature of the Dew Point* for the month was 35°.2, being 0°.2 higher than
 The mean *Degree of Humidity* for the month was 75.4, being 8.2 less than
 The mean *Elastic Force of Vapour* for the month was 0.205 in., being 0.001 in. greater than
 The mean amount of *Cloud* for the month (a clear sky being represented by 0 and an overcast sky by 8)* was 4.3.
 The mean proportion of *Sunshine* for the month (constant sunshine being represented by 1) was 0.366. The maximum daily amount of *Sunshine* was 8.2 hours on February 16 and 19.
 The highest reading of the *Solar Radiation Thermometer* was 104°.2 on February 20; and the lowest reading of the *Terrestrial Radiation Thermometer* was 6°.5 on February 3 and 4.
 The *Proportions of Wind* referred to the cardinal points were N.9, E.4, S.31, W.40, calm or nearly calm conditions 16, the whole month being represented by 100.
 The *Greatest Pressure of the Wind* in the month was 33.0 lbs. on the square foot on February 9. The mean daily *Horizontal Movement of the Air* for the month was 293 miles; the greatest daily value was 640 miles on February 9 and the least daily value was 102 miles on February 4.
Rain (0.005 in. or over) fell on 8 days in the month, amounting to 0.963 in., as measured by gauge No.6 partly sunk below the ground; being 0.517 in. less than the average fall for the 65 years, 1841-1905.

} the average for the 65 years, 1841-1905.

* This scale, ranging from 0 to 8, was adopted from January 1, 1949, in accordance with the new International Code.

TABLE XVII. - DAILY RESULTS OF THE METEOROLOGICAL OBSERVATIONS

Month and Day 1949	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
Mar. 1	29.958	49.0	33.4	15.6	43.0	+ 2.6	36.4	24.6	18.4	29.3	6.5	47	91.3	29.0	44.4	0.000	8.3	10.9
2	30.361	45.3	30.7	14.6	36.1	- 4.3	32.1	24.5	11.6	20.4	4.6	60	93.3	26.3	44.3	0.000	4.7	11.0
3	30.348	45.9	29.0	16.9	37.8	- 2.7	33.9	27.0	10.8	18.6	1.7	63	89.1	25.2	44.2	0.000	4.7	11.0
4	30.089	39.0	30.7	8.3	35.6	- 5.1	34.4	32.3	3.3	7.5	0.0	88	44.3	25.7	44.1	0.299	0.0	11.1
5	30.058	39.4	28.6	10.8	33.0	- 7.9	30.4	26.1	6.9	24.1	0.0	73	77.6	25.7	43.9	0.000	1.6	11.1
6	29.897	34.0	29.0	5.0	31.4	- 9.6	30.8	29.8	1.6	4.9	0.5	93	40.0	29.3	43.7	0.044	0.0	11.2
7	29.721	42.7	32.5	10.2	37.0	- 4.0	34.6	30.3	6.7	9.5	1.2	77	68.9	33.0	43.5	0.000	0.0	11.3
8	29.694	38.3	32.5	5.8	35.1	- 6.0	31.5	25.5	9.6	14.9	6.6	65	62.4	31.0	43.4	0.000	0.0	11.4
9	29.741	40.1	29.0	11.1	33.7	- 7.3	30.3	24.5	9.2	17.7	2.2	66	83.1	26.2	43.2	0.000	2.6	11.4
10	29.851	43.2	31.5	11.7	36.4	- 4.5	33.2	27.5	8.9	15.2	1.9	68	91.5	27.6	43.2	0.000	2.4	11.5
11	29.856	44.5	28.3	16.2	36.0	- 5.0	34.1	30.7	5.3	13.9	0.0	81	87.1	25.3	43.1	0.000	0.7	11.5
12	29.686	47.6	27.3	20.3	39.0	- 2.1	36.8	33.3	5.7	14.7	0.8	79	68.3	24.0	43.1	0.007	0.0	11.6
13	29.608	52.2	39.8	12.4	47.2	+ 5.9	44.7	41.7	5.5	9.2	2.5	81	79.1	33.6	43.1	0.010	0.1	11.7
14	29.736	50.7	40.2	10.5	46.4	+ 4.9	44.2	41.5	4.9	8.8	1.2	83	66.9	35.9	43.1	0.236	0.0	11.7
15	30.128	48.0	35.5	12.5	41.8	+ 0.1	37.8	31.3	10.5	20.3	3.3	66	93.8	30.0	43.1	0.003	7.7	11.8
16	29.882	56.9	39.4	17.5	46.8	+ 4.9	42.8	37.5	9.3	21.8	3.9	69	96.0	33.5	43.4	0.000	2.6	11.9
17	29.821	54.9	37.9	17.0	46.6	+ 4.6	42.9	38.1	8.5	19.2	1.2	71	103.4	29.5	43.5	0.000	2.5	11.9
18	29.834	47.6	37.0	10.6	43.4	+ 1.4	38.6	30.7	12.7	20.7	5.4	61	93.3	31.5	43.6	0.004	4.0	12.0
19	30.136	48.0	34.0	14.0	40.0	- 1.9	36.2	29.9	10.1	21.5	2.8	66	101.2	28.9	43.7	0.000	7.6	12.1
20	30.144	47.7	26.8	20.9	38.5	- 3.4	34.9	28.7	9.8	22.0	0.0	67	82.0	22.8	43.8	0.050	0.4	12.1
21	30.036	54.4	40.0	14.4	46.3	+ 4.4	42.7	37.9	8.4	17.5	1.3	72	102.2	34.8	43.9	0.103	5.5	12.2
22	30.255	54.6	44.0	10.6	49.8	+ 7.8	47.7	45.4	4.4	7.2	2.0	85	63.7	39.0	43.8	0.001	0.0	12.3
23	30.344	53.7	43.6	10.1	49.9	+ 7.7	47.1	43.9	6.0	12.3	2.0	80	84.7	35.0	44.0	0.000	0.1	12.3
24	30.154	57.7	39.8	17.9	47.0	+ 4.6	43.2	38.3	8.7	23.7	2.0	71	113.6	29.8	44.2	0.000	10.3	12.4
25	29.958	61.1	34.5	26.6	47.5	+ 4.8	43.5	38.3	9.2	20.0	0.0	70	95.2	27.3	44.3	0.000	2.9	12.5
26	30.032	64.4	37.7	26.7	49.6	+ 6.6	44.1	36.7	12.9	28.4	1.5	61	112.9	28.7	44.7	0.000	7.1	12.5
27	30.105	51.9	37.9	14.0	42.8	- 0.5	40.0	35.9	6.9	15.7	1.2	76	113.6	37.6	44.5	0.000	3.3	12.6
28	30.084	44.6	37.5	7.1	41.2	- 2.5	40.0	38.5	2.7	5.9	0.4	90	48.1	37.5	44.6	0.000	0.0	12.7
29	30.088	47.0	36.4	10.6	41.0	- 3.1	39.8	38.3	2.7	6.8	0.0	89	72.8	37.7	44.7	0.000	0.0	12.7
30	30.010	47.0	38.0	9.0	41.7	- 2.8	40.9	39.9	1.8	4.6	0.0	93	55.1	37.8	44.8	0.000	0.0	12.8
31	29.894	47.5	38.4	9.1	41.5	- 3.4	40.5	39.3	2.2	7.0	0.0	91	82.8	35.2	44.8	0.000	2.3	12.8
Means	29.984	48.4	34.9	13.5	41.4	- 0.5	38.4	33.8	7.6	15.6	1.8	74.3	82.5	30.8	43.9	Sum 0.757	2.6	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 29.984 in., being 0.231 in. higher than the average for the 65 years, 1841-1905.

TEMPERATURE OF THE AIR.

The highest in the month was 64°.4 on March 26; the lowest in the month was 26°.8 on March 20; and the range was 37°.6.

The mean of all the highest daily readings in the month was 48°.4, being 0°.8 lower than the average for the 65 years, 1841-1905.

The mean of all the lowest daily readings in the month was 34°.9, being 0°.7 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°.4, being 0°.5 lower than the average for the 65 years, 1841-1905.

TABLE XVII. - DAILY RESULTS OF THE METEOROLOGICAL OBSERVATIONS

Month and Day 1949	RECORD OF THE NIGHT SKY				WIND AS DEDUCED FROM SELF-REGISTERING ANEMOMETERS					CLOUDS AND WEATHER			
	Polaris		δ URSÆ MINORIS		OSLER'S			Robinson's					
	Duration	Fraction of Total Exposure	Duration	Fraction of Total Exposure	General Direction		Pressure on the Square Foot						Horizontal Movement of the Air
					A.M.	P.M.	Greatest	Mean of 24 Hourly Measures	0h to 6h	6h to 12h	12h to 18h	18h to 24h	
Mar. 1	10.7	1.00	10.7	1.00	W: WNW	N	20.5	2.98	629	c gale	c b Frcu y	b bc Frcu y	b
2	..	..	..	..	N	N: NNW	6.4	0.84	366	b	bc Stcu	c Cumb Nbst s _o c b y	c b
3	7.6	0.71	4.8	0.44	NW: N	N: NNW	4.5	0.20	267	b x	b m b Frcu y	b c Stcu y b	b
4	2.4	0.22	2.4	0.22	WSW: SW	SSE: ESE	2.7	0.14	218	b c m	c Ast m rs	rr Nbst	r _o c
5	0.0	0.00	0.0	0.00	ESE: SE	SE: SW	1.3	0.09	204	c b x	c Cist so-ha y	c Ast y	c s _o
6	0.0	0.00	0.0	0.00	Calm: SSE	S: Calm	0.2	0.00	120	s _o c	c s _o c Nbst	c Nbst s s _o	c
7	0.0	0.00	0.0	0.00	Calm: S	SE	1.6	0.12	204	c	c Stcu	c Ast Frcu	c
8	2.1	0.20	0.6	0.06	SE: ESE	ESE: E: ENE	7.8	1.02	424	c	c Acu	c Acu y	c
9	4.0	0.38	3.1	0.30	NE: ENE	ENE: NE	6.0	0.50	367	c	c Stcu m _o	c b Acu Frcu y	bc c
10	4.1	0.40	3.0	0.29	NNE	N	2.3	0.14	249	c	c Acu m _o	c Acu Cu	c
11	6.2	0.60	2.2	0.21	N	NNE: Calm	1.0	0.04	152	c	c Stcu m	c Stcu b	b F x
12	7.6	0.78	7.1	0.72	SSW: SW	SW: WSW	3.6	0.20	285	b F x c m	c m Nbst r _o	c Nbst r _o	c b
13	4.1	0.42	3.0	0.31	WSW	WSW	13.6	1.15	474	b c	c Frst 1r _o	r _o c Acu	c r c
14	4.9	0.51	4.4	0.45	WNW: WSW	WSW: NNE	7.2	0.47	344	c b c	c Nbst r _o	rr c Nbst m	c m _o
15	1.1	0.12	1.1	0.12	NNW: N	NW: W	1.8	0.16	238	c b m _o	b m _o b Cu	b Frcu y	b m c r _o
16	6.6	0.68	6.4	0.66	W	WNW: NNW	13.6	1.15	442	c	c Frst	c Cumb D _o c b y	b c
17	4.2	0.43	3.9	0.40	Calm: WNW	W: NW	15.0	0.78	365	c	c m c Acu	c Stcu	b c r _o b
18	8.6	0.88	8.2	0.84	NW: N	N	14.0	1.25	430	b c	c Acu c r _o	c Cumb b y	c p b
19	9.3	0.98	9.3	0.98	N	NNE: NE	5.8	0.54	330	b bc	bc Cu Cumb	bc Frcu b y	b x
20	1.3	0.13	0.7	0.08	Calm: SW	WSW: SW	1.4	0.10	196	b x	c Ast m z y	c Ast z _o y	c r
21	1.7	0.18	1.4	0.15	SW: W: N	NNW: Calm	1.1	0.07	188	rr c m _o	b m _o b Frcu	b c Acu y	c f
22	0.5	0.05	0.5	0.05	SW: Calm	NNW: Calm	0.2	0.01	142	c	c Nbst d _o f m	c m m _o Stcu	c m
23	9.5	1.00	9.5	1.00	Calm: E	E: ENE	2.6	0.19	224	c m	c Stcu m _o	c Stcu b	b w m _o
24	9.5	1.00	9.5	1.00	ENE: E	E	7.3	0.46	252	b w m _o	b m _o	b y	b
25	8.3	0.88	8.2	0.86	Calm	W: SW	1.3	0.03	133	b	b x f c Ast z	c Ast b c z _o	b c m
26	0.6	0.07	0.4	0.05	SW: Calm	Calm: E	1.4	0.05	173	b x	b Acu z y	b c Stcu y	c
27	0.0	0.00	0.0	0.00	ENE: NE	ENE: NE	3.3	0.26	300	c	c St m _o	bc Ci c	o
28	0.0	0.00	0.0	0.00	NE	NE	1.2	0.11	232	o	o St m	c Stcu m m _o	c m
29	0.2	0.02	0.0	0.00	NE	NE: NNE	0.2	0.02	169	c f fe	c f c Stcu m	c Stcu b c m	c m
30	0.0	0.00	0.0	0.00	NE	NE: NNE	0.2	0.02	176	c m	c Stcu fe	o St m _o	o m fe
31	0.0	0.00	0.0	0.00	Calm: E	E: ESE	0.3	0.01	146	o fe m	o fe St m	c b Cu m _o	c m _o
Means	3.8	0.39	3.3	0.34	..	..	..	0.42	272				
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°.4, being 1°.0 lower than
 The mean *Temperature of the Dew Point* for the month was 33°.8, being 1°.8 lower than
 The mean *Degree of Humidity* for the month was 74.3, being 3.8 less than
 The mean *Elastic Force of Vapour* for the month was 0.194 in., being 0.015 in. less than
 The mean amount of *Cloud* for the month (a clear sky being represented by 0 and an overcast sky by 8)* was 5.9.
 The mean proportion of *Sunshine* for the month (constant sunshine being represented by 1) was 0.221. The maximum daily amount of *Sunshine* was 10.3 hours on March 24.
 The highest reading of the *Solar Radiation Thermometer* was 113°.6 on March 24 and 27; and the lowest reading of the *Terrestrial Radiation Thermometer* was 22°.8 on March 20.
 The *Proportions of Wind* referred to the cardinal points were N.32, E.23, S.12, W.19, calm or nearly calm conditions 14, the whole month being represented by 100.
 The *Greatest Pressure of the Wind* in the month was 20.5 lbs. on the square foot on March 1. The mean daily *Horizontal Movement of the Air* for the month was 272 miles; the greatest daily value was 629 miles on March 1 and the least daily value was 120 miles on March 6.
 Rain (0.005 in. or over) fell on 7 days in the month, amounting to 0.757 in., as measured by gauge No.6 partly sunk below the ground; being 0.763 in. less than the average fall for the 65 years, 1841-1905.

* This scale, ranging from 0 to 8, was adopted from January 1, 1949, in accordance with the new International Code.

TABLE XVII. - DAILY RESULTS OF THE METEOROLOGICAL OBSERVATIONS

Month and Day 1949	BAROMETER Mean of 24 Hourly Values (corrected and reduced to 32° Fahrenheit)	TEMPERATURE Of the Air							Difference between the Air Temperature and Dew Point Temperature			Degree of Humidity (Saturation = 100)	TEMPERATURE Of Radiation			Rain collected in Gauge No. 6, whose receiving surface is 5 inches above the ground	Daily Duration of Sunshine	Sun above Horizon
		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	Of the Earth 4 ft. below the Surface of the Soil			
Apr. 1	29.820	48.1	38.2	9.9	41.5	- 3.8	40.6	39.5	2.0	6.5	0.0	92	100.3	35.0	44.9	0.000	4.8	12.9
2	29.758	64.5	40.3	24.2	49.8	+ 4.1	46.7	43.0	6.8	20.1	0.0	78	115.7	40.0	45.0	0.124	4.8	13.0
3	29.687	59.0	51.7	7.3	54.7	+ 8.7	51.8	49.0	5.7	10.6	1.1	81	97.3	48.8	45.1	0.074	0.1	13.0
4	29.527	58.9	50.3	8.6	53.1	+ 6.9	49.5	45.7	7.4	16.3	4.2	76	102.3	45.0	45.3	0.260	4.7	13.1
5	29.693	57.5	46.4	11.1	52.3	+ 6.0	49.5	46.5	5.8	12.5	1.5	81	95.2	40.9	45.7	0.160	0.2	13.2
6	29.277	59.0	50.2	8.8	54.8	+ 8.5	52.8	50.9	3.9	7.5	1.0	87	84.9	49.3	45.9	0.071	1.0	13.2
7	29.301	50.2	38.0	12.2	44.8	- 1.5	40.7	34.5	10.3	23.9	1.6	67	107.0	33.1	46.0	0.110	6.0	13.3
8	29.876	47.6	38.2	9.4	42.1	- 4.0	38.0	31.4	10.7	19.6	2.3	66	108.3	32.0	46.3	0.029	3.8	13.4
9	30.165	53.5	32.6	20.9	43.1	- 2.9	37.7	28.8	14.3	27.1	3.9	56	111.2	26.0	46.4	0.000	10.7	13.4
10	30.085	57.3	29.8	27.5	45.5	- 0.4	39.6	30.1	15.4	25.8	2.8	55	112.1	23.7	46.4	0.011	5.5	13.5
11	29.789	64.9	44.1	20.8	53.7	+ 7.9	47.8	40.9	12.8	23.4	7.2	62	116.3	34.8	46.4	0.000	5.7	13.6
12	29.724	61.5	51.9	9.6	56.3	+10.4	53.4	50.8	5.5	8.3	3.3	82	80.8	49.5	46.4	0.000	0.0	13.6
13	29.881	64.2	49.8	14.4	56.1	+10.0	50.8	45.3	10.8	20.5	3.5	67	121.9	48.5	46.7	0.000	6.8	13.7
14	30.015	70.0	48.5	21.5	58.2	+11.8	52.9	47.8	10.4	20.7	2.4	69	127.9	37.8	47.0	0.000	9.8	13.8
15	29.960	74.4	46.4	28.0	59.0	+12.2	53.5	48.3	10.7	26.8	1.4	68	130.1	35.1	47.2	0.000	9.2	13.8
16	29.824	84.0	47.0	37.0	65.4	+18.2	56.5	48.6	16.8	34.2	1.4	54	136.0	34.5	47.7	0.000	12.2	13.9
17	29.960	74.7	51.2	23.5	61.7	+14.1	55.8	50.6	11.1	20.3	3.2	67	129.3	43.0	48.0	0.000	11.5	14.0
18	29.998	73.9	46.6	27.3	59.0	+11.0	53.4	48.1	10.9	21.0	1.4	67	134.3	37.9	48.4	0.000	10.9	14.0
19	30.080	68.0	43.6	24.4	55.5	+ 7.2	49.1	41.9	13.6	26.1	4.0	61	127.3	31.8	48.7	0.000	10.7	14.1
20	29.984	59.2	40.2	19.0	51.6	+ 3.1	44.7	35.4	16.2	29.8	3.0	54	121.0	30.0	48.9	0.000	11.8	14.1
21	29.618	64.9	37.8	27.1	49.5	+ 0.8	46.2	42.3	7.2	15.2	0.9	76	123.7	26.9	49.1	0.255	2.2	14.2
22	29.986	58.6	36.1	22.5	48.5	- 0.2	43.3	36.2	12.3	21.3	2.5	63	125.3	28.5	49.2	0.000	8.8	14.3
23	30.023	64.9	41.2	23.7	52.5	+ 3.9	47.1	40.6	11.9	24.4	1.9	64	126.7	32.5	49.4	0.000	13.0	14.3
24	29.743	69.3	38.1	31.2	53.5	+ 4.9	47.9	41.4	12.1	30.7	0.9	64	132.2	28.9	49.5	0.072	11.1	14.4
25	29.617	55.4	43.8	11.6	49.4	+ 0.8	44.2	37.5	11.9	24.1	3.2	63	123.1	36.0	49.4	0.004	6.1	14.5
26	29.959	56.8	41.4	15.4	47.4	- 1.2	42.7	36.2	11.2	23.6	1.1	65	112.2	33.0	49.3	0.003	4.9	14.5
27	30.064	66.1	42.6	23.5	54.1	+ 5.4	49.3	44.1	10.0	22.1	1.1	69	131.2	38.5	49.6	0.000	5.0	14.6
28	29.970	60.0	46.0	14.0	54.2	+ 5.4	51.9	49.7	4.5	11.0	1.5	85	78.1	45.5	49.5	0.328	0.0	14.7
29	29.971	55.5	40.4	15.1	47.2	- 1.8	42.3	35.3	11.9	21.6	1.8	63	114.5	36.5	49.5	0.130	7.3	14.7
30	30.155	54.2	37.9	16.3	45.6	- 3.5	41.7	36.2	9.4	22.4	0.7	69	122.0	29.8	49.7	0.000	4.5	14.8
Means	29.850	61.9	43.0	18.9	52.0	+ 4.7	47.4	41.9	10.1	20.6	2.2	69.0	114.9	36.4	47.6	Sum 1.631	6.4	13.9
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 29.850 in., being 0.095 in. higher than the average for the 65 years, 1841-1905.

TEMPERATURE OF THE AIR.

The highest in the month was 84°.0 on April 16; the lowest in the month was 29°.8 on April 10; and the range was 54°.2.

The mean of all the highest daily readings in the month was 61°.9, being 5°.8 higher than the average for the 65 years, 1841-1905.

The mean of all the lowest daily readings in the month was 43°.0, being 3°.5 higher than the average for the 65 years, 1841-1905.

The mean of the daily ranges was 18°.9, being 2°.3 greater than the average for the 65 years, 1841-1905.

The mean for the month was 52°.0, being 4°.7 higher than the average for the 65 years, 1841-1905.

TABLE XVII. - DAILY RESULTS OF THE METEOROLOGICAL OBSERVATIONS

Month and Day 1949	RECORD OF THE NIGHT SKY				WIND AS DEDUCED FROM SELF-REGISTERING ANEMOMETERS					CLOUDS AND WEATHER			
	Polaris		δ URSE 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		Oh to 6h	6h to 12h	12h to 18h	18h to 24h
Apr. 1	0.0	0.00	0.0	0.00	E	E	3.3	0.30	279	c m Fe	Fe c m bc Frst	b Cu mo c	c mo fe
2	0.0	0.00	0.0	0.00	E: Calm	SW: SSW	4.6	0.23	240	fe fe	fe b	b c Stcu	c rr
3	0.0	0.00	0.0	0.00	SSW: SW	SSW	16.5	1.89	561	rr c	c Stcu Acu	c Cu Cumb ro	c ir
4	6.0	0.71	5.4	0.63	SSW: SW	SW	27.5	3.88	710	c r c	c gale Cumb p	R tl p c Cumb b	b c
5	0.0	0.00	0.0	0.00	SW	SSW: SW	10.0	0.73	384	c b c	c Frst Cist so-ha	c Nbst ir	c R ir c
6	1.0	0.12	0.7	0.09	SW	SW: SSW	11.3	0.95	409	c ir c	c Frcu	c Stcu ir	c r c
7	3.7	0.44	3.5	0.41	SW: NW: WNW	WNW: W	26.0	3.14	641	c rr	c Nbst Cumb p	c Cumb Cu p b y	b c
8	6.7	0.79	6.6	0.78	W: NW: NNW	NNW: NW	8.0	0.58	352	c	c Acu Cumb p rs h	c Cu Cumb p bc	bc c b
9	8.0	1.00	6.7	0.84	NW: W: NNW	NW: Calm: SW	5.9	0.24	259	b m x	b Cu y	b Cu y	b
10	3.6	0.45	3.1	0.38	SW: Calm: SSW	SW: SSW	3.8	0.30	295	b x	c bc Cist Cicu y	c Acu y	c r c
11	0.0	0.00	0.0	0.00	SW: WSW	WSW: SW	9.0	0.88	437	c b	b bc Ci so-ha c y	c Acu Ci so-ha y	c ro
12	0.6	0.07	0.2	0.02	WSW	WSW	10.0	1.37	512	c	c Stcu	c Nbst	c
13	3.0	0.38	2.9	0.36	WSW: W	W: WSW	6.5	0.79	396	c	c Stcu b Ci	b bc Ci Cu y	bc c
14	8.0	1.00	8.0	1.00	WSW	SW: SSW	1.1	0.06	190	c b	b bc Ci Frcu so-ha	b Frcu y	b
15	8.0	1.00	8.0	1.00	Calm: SE	SE: E: Calm	1.3	0.09	176	b w-ha	b Ci Cicu	b Ci	bc b
16	6.4	0.86	6.3	0.84	Calm	S: SW	2.0	0.07	137	b	b zo y	b y	b
17	7.5	1.00	7.5	1.00	E: Calm	ESE: Calm	1.6	0.03	130	b	b Acu	b	b
18	6.6	0.88	5.4	0.72	Calm: W	NW: N: NNE	4.0	0.18	211	b	b Acu Frcu	b bc Acu y	c b
19	1.9	0.26	0.9	0.12	Calm: WSW	WSW: W	6.8	0.79	348	b	b Ci y	bc Ci Ast y	c
20	7.4	0.99	7.3	0.98	W: N: NNE	N: Calm: SE	3.2	0.17	207	c	b y	b y	b
21	5.5	0.73	5.1	0.67	Calm: SSW	SW: W: NNW	7.9	0.41	266	b x c	c Stcu	c Stcu r r	rr b
22	7.5	1.00	7.1	0.95	NW: WSW: WNW	WNW: W: WSW	3.0	0.13	227	b x	b Frcu Ci y	c Cu so-ha y	c b
23	7.0	1.00	7.0	1.00	WSW	WSW: W: Calm	2.7	0.15	236	b	b Frcu y	b y	b
24	0.0	0.00	0.0	0.00	Calm: SSW	SSW: SW	2.8	0.10	194	b	b Frcu y	b Ci y c	c rr
25	7.0	1.00	7.0	1.00	WSW: WNW	NW: WNW	5.4	0.43	343	c	c Frcu Cu	c Cu Cumb Ci p c	c b
26	3.0	0.43	2.7	0.39	NW: N	N: Calm: S	3.3	0.16	255	b bc	c Stcu p m	c bc Frcu y	b c
27	0.0	0.00	0.0	0.00	SSW: SW	WSW: SW	2.3	0.14	243	c	c Ci Cicu y	c Acu Ast y	c
28	0.1	0.02	0.1	0.02	SW: WSW	WSW: SSW: N	4.0	0.19	258	c mo	c St d	c Stcu	c rr
29	6.6	0.95	6.6	0.94	N: NNW	NNW	5.2	0.35	307	r c b	b bc Frcu y	bc c Frcu Cumb p o y	c bc
30	5.3	0.82	5.1	0.79	N: Calm: NNE	NNE: ENE: Calm	2.4	0.06	159	b c	c b c Cu y	bc Cu	bc b
Means	4.0	0.53	3.8	0.50	..	..	..	0.60	312				
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 47°.4, being 3°.5 higher than
 The mean *Temperature of the Dew Point* for the month was 41°.9, being 2°.3 higher than
 The mean *Degree of Humidity* for the month was 69.0, being 5.5 less than
 The mean *Elastic Force of Vapour* for the month was 0.267 in., being 0.023 in. greater than
 The mean amount of *Cloud* for the month (a clear sky being represented by 0 and an overcast sky by 8)* was 4.6.
 The mean proportion of *Sunshine* for the month (constant sunshine being represented by 1) was 0.465. The maximum daily amount of *Sunshine* was 13.0 hours on April 23.
 The highest reading of the *Solar Radiation Thermometer* was 136°.0 on April 16; and the lowest reading of the *Terrestrial Radiation Thermometer* was 23°.7 on April 10.
 The *Proportions of Wind* referred to the cardinal points were N.15, E.9, S.24, W.39, calm or nearly calm conditions 13, the whole month being represented by 100.
 The *Greatest Pressure of the Wind* in the month was 27.5 lbs. on the square foot on April 4. The mean daily *Horizontal Movement of the Air* for the month was 312 miles; the greatest daily value was 710 miles on April 4 and the least daily value was 130 miles on April 17.
Rain (0.005 in. or over) fell on 12 days in the month, amounting to 1.631 in., as measured by gauge No.6 partly sunk below the ground; being 0.065 in. greater than the average fall for the 65 years, 1841-1905.

* This scale, ranging from 0 to 8, was adopted from January 1, 1949, in accordance with the new International Code.

TABLE XVII. - DAILY RESULTS OF THE METEOROLOGICAL OBSERVATIONS

Month and Day 1949	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 Sun-shine	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					Highest in Sun's Rays	Lowest on the Grass				
	in.	°	°	°	°	°	°	°	°	°	°		°	°	°	in.	hours	hours
May 1	30.345	57.9	36.4	21.5	46.9	- 2.4	41.9	34.5	12.4	26.4	1.3	62	118.3	26.9	49.7	0.000	12.9	14.8
2	30.286	61.9	37.8	24.1	49.6	+ 0.1	44.2	37.0	12.6	23.8	2.9	62	119.3	28.5	49.7	0.000	8.8	14.9
3	30.072	63.1	43.3	19.8	51.7	+ 1.9	46.9	41.3	10.4	22.3	2.8	68	120.4	43.0	49.8	0.000	9.0	14.9
4	29.642	63.3	43.6	19.7	51.0	+ 1.0	48.3	45.4	5.6	14.6	1.1	81	102.9	41.6	49.7	0.000	3.0	15.0
5	29.362	54.6	42.4	12.2	48.3	- 2.0	44.6	39.9	8.4	20.1	2.2	73	99.0	32.1	49.7	0.066	3.3	15.0
6	29.659	56.6	41.6	15.0	48.1	- 2.4	42.1	33.3	14.8	27.8	6.2	56	124.9	31.3	49.8	0.000	6.0	15.1
7	29.950	56.7	38.0	18.7	48.9	- 1.8	44.2	38.1	10.8	19.9	3.3	66	111.9	28.5	49.8	0.012	3.3	15.2
8	30.176	64.3	33.4	30.9	51.0	- 0.0	44.9	36.9	14.1	24.4	1.1	59	118.1	23.9	49.9	-0.000	10.8	15.2
9	30.274	52.4	39.5	12.9	47.1	- 4.1	41.4	33.0	14.1	20.6	6.9	58	102.9	27.0	49.8	0.000	5.2	15.3
10	30.354	59.6	35.8	23.8	47.4	- 4.1	42.1	34.5	12.9	25.9	2.4	61	118.6	23.3	49.8	0.000	13.1	15.3
11	30.291	65.0	38.7	26.3	52.9	+ 1.1	47.4	40.8	12.1	23.3	1.2	64	122.3	29.8	50.0	0.000	6.6	15.4
12	30.259	60.9	44.4	16.5	51.7	- 0.4	48.0	43.9	7.8	13.8	1.9	74	124.3	32.4	50.0	0.000	4.9	15.4
13	30.085	63.8	44.3	19.5	52.4	- 0.0	48.1	43.3	9.1	20.9	0.8	71	124.6	37.0	50.0	0.000	7.3	15.5
14	29.713	66.0	43.0	23.0	53.4	+ 0.8	48.9	44.0	9.4	22.8	0.0	70	123.9	35.4	50.2	0.000	2.2	15.6
15	29.535	68.3	50.0	18.3	56.2	+ 3.4	51.6	47.1	9.1	23.9	2.0	71	126.2	47.9	50.4	0.051	7.2	15.6
16	29.420	68.6	50.5	18.1	56.6	+ 3.6	52.1	47.8	8.8	22.3	1.8	72	123.4	46.1	50.6	0.066	4.0	15.7
17	29.339	63.7	48.0	15.7	54.3	+ 1.2	49.7	44.9	9.4	20.5	0.9	70	126.3	42.8	50.8	0.031	5.3	15.7
18	29.514	63.5	45.4	18.1	53.7	+ 0.4	49.5	45.1	8.6	19.0	1.8	73	128.6	36.4	51.0	0.007	4.5	15.7
19	29.757	67.8	41.2	26.6	54.7	+ 1.2	49.6	44.2	10.5	24.9	0.5	68	132.9	32.2	51.2	0.000	2.9	15.8
20	29.923	67.4	43.7	23.7	54.2	+ 0.4	50.6	47.0	7.2	18.8	0.0	76	117.0	32.9	51.2	0.000	1.5	15.8
21	29.987	70.8	45.4	25.4	57.5	+ 3.3	51.5	45.5	12.0	23.2	0.9	64	130.2	32.6	51.3	0.000	9.4	15.9
22	29.786	73.0	43.6	29.4	59.3	+ 4.7	51.6	43.4	15.9	30.0	4.2	56	134.2	29.8	51.4	0.012	11.5	15.9
23	29.606	69.6	53.0	16.6	58.5	+ 3.6	53.5	48.8	9.7	22.0	3.0	70	134.3	49.0	51.7	0.005	2.1	16.0
24	29.405	63.0	47.4	15.6	55.5	+ 0.2	51.1	46.7	8.8	17.4	1.4	72	121.3	47.3	51.7	0.711	2.8	16.0
25	29.578	64.0	50.0	14.0	56.3	+ 0.8	50.6	44.6	11.7	27.5	3.2	65	122.9	45.8	52.0	0.010	4.9	16.1
26	29.528	57.8	47.2	10.6	51.7	- 4.1	48.8	45.7	6.0	14.0	0.0	80	91.3	39.3	51.9	0.448	0.5	16.1
27	29.689	60.8	45.3	15.5	53.3	- 2.7	48.8	43.9	9.4	16.7	2.9	70	115.9	37.4	52.0	0.000	1.3	16.1
28	29.525	64.0	48.8	15.2	55.6	- 0.6	52.8	50.3	5.3	15.7	1.2	82	123.5	38.5	52.0	0.167	2.7	16.2
29	29.596	63.7	41.6	22.1	52.4	- 4.0	47.7	42.4	10.0	20.3	0.9	69	125.0	31.3	52.0	0.006	7.8	16.2
30	29.613	61.9	43.6	18.3	52.7	- 4.0	48.2	43.1	9.6	22.6	1.6	70	123.7	34.8	52.0	0.054	11.3	16.2
31	29.588	66.7	41.0	25.7	54.7	- 2.4	49.2	43.1	11.6	23.1	0.8	65	130.5	30.0	52.2	0.002	12.5	16.3
Means	29.802	63.2	43.5	19.8	52.8	- 0.2	48.1	42.6	10.3	21.6	2.0	68.3	120.6	35.3	50.8	1.648	6.1	15.6
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 29.802 in., being 0.001 in. higher than the average for the 65 years, 1841-1905.

TEMPERATURE OF THE AIR.

The highest in the month was 73°.0 on May 22; the lowest in the month was 33°.4 on May 8; and the range was 39°.6.

The mean of all the highest daily readings in the month was 63°.2, being 1°.0 higher than the average for the 65 years, 1841-1905.

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

The mean of the daily ranges was 19°.8, being 1°.8 greater than the average for the 65 years, 1841-1905.

The mean for the month was 52°.8, being 0°.2 lower than the average for the 65 years, 1841-1905.

TABLE XVII. - DAILY RESULTS OF THE METEOROLOGICAL OBSERVATIONS

Month and Day 1949	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 ^h to 6 ^h	6 ^h to 12 ^h	12 ^h to 18 ^h	18 ^h to 24 ^h
May 1	6.5	1.00	6.5	1.00	Cal: NE	NNE: ENE	2.8	0.16	219	b c b	b Frcu Y	b Frcu Y	b
2	0.1	0.01	0.0	0.00	NE: ENE	NNE: NE	8.6	0.99	386	b	b c Ast Frcu Y	c bc Acu c y	c
3	1.7	0.26	1.7	0.26	NNE: NE	NE: NNE	6.8	0.93	413	c	c Stcu b Frst Y	b Cu Y	b c
4	4.8	0.74	4.7	0.73	NNE: N	Cal: SW	1.0	0.05	156	c m	c St m ₀	b Acu z	b z ₀
5	5.1	0.78	4.9	0.75	SW: NNW	W: WSW	4.0	0.15	225	b z ₀ c	c r c Acu Cumb	c Acu Cumb p ₀ bc y	b c ₀
6	2.9	0.44	2.5	0.39	NW: NNW	WSW: SW	2.0	0.21	264	c	bc Frcu Cist Y	c Cist so-ha c Stcu Y	c b c
7	6.0	1.00	5.8	0.97	SW: W: NNE	NNE: Cal: m	2.8	0.15	229	c 1r	1r c Acu Cu	c Acu Cu bc y	b
8	1.6	0.27	1.4	0.24	Cal: WSW	NW: NNW	4.2	0.19	184	b x	b Frcu Y	b Frcu c bc y	c
9	6.0	1.00	6.0	1.00	N: NNE	NNE	6.5	0.68	346	c	c Cu Stcu Y	c Stcu Y	c b
10	4.7	0.78	4.6	0.76	N: NNE	NNE: E: Cal: m	2.0	0.09	178	b x	b Frcu Y	b Frcu Y	b
11	0.8	0.14	0.7	0.11	Cal: NNE	NNE: NE	9.5	0.36	259	b c m ₀	c Acu Y	c Acu Cist bc y	bc c
12	1.4	0.22	1.3	0.21	NE: NNE	NE: E: Cal: m	2.5	0.13	204	c	c Stcu Cu	c Frcu b	b c
13	1.7	0.29	1.6	0.27	Cal: m	E: Cal: m	0.4	0.02	104	c	c m b Ci	b Ci Y	b m f
14	0.0	0.00	0.0	0.00	Cal: m	E: Cal: m	1.1	0.03	104	ff	ff c Acu z ₀	c Acu z ₀ y	c
15	0.1	0.02	0.0	0.00	Cal: N	NNW: WSW: E	1.2	0.04	124	c r ₀	c r b Cu m ₀	b Cu y c z ₀	c m ₀
16	0.7	0.13	0.6	0.12	Cal: m	S: SSE	2.3	0.08	152	c m ₀	c Acu Cu	c Acu Cu Cumb Y	c rr
17	0.9	0.16	0.8	0.15	S: SSW	SSW	2.7	0.09	193	r c ₀	c Cumb Acu p	c Acu Cu Y	c
18	5.5	1.00	5.5	1.00	SW	WSW: SSW	4.6	0.15	234	c	c Frcu p ₀	c Cumb Frcu p ₀ c	b
19	5.4	0.98	5.3	0.97	SSW: Cal: m	Cal: m	0.2	0.00	98	b w c m ₀	c Acu Cu z ₀ Y	c Stcu Y z ₀	c b
20	4.1	0.75	3.9	0.71	Cal: m	SW: Cal: m	1.4	0.02	92	b w c m	c m Stcu z ₀	c Stcu z ₀	c b m ₀
21	5.0	1.00	5.0	1.00	Cal: m	ESE: Cal: m	2.3	0.07	125	b c m	b bc Frcu Y	bc Frcu Y	bc b
22	0.2	0.04	0.1	0.01	Cal: SE	SSE: Cal: m	1.7	0.08	161	b	b bc Frcu Y	bc c Frcu Y	c r c
23	0.0	0.00	0.0	0.00	Cal: WSW	WSW: SW	4.0	0.21	222	c	c Ci Acu so-ha	c Ast Cu Y	c r c
24	1.3	0.26	1.0	0.20	SSW: NW	NNW: WSW	9.0	0.57	330	c rr	r c Cumb p	c Frcu Cumb Y	c
25	0.0	0.00	0.0	0.00	SW: WSW	W: SW	6.7	0.71	328	c	c Acu Cu Y	c Cu so-ha Y	c r ₀
26	4.3	0.87	4.1	0.82	S: W	NW: W	8.2	0.53	276	c rr	rr c Stcu Frst	c Nbst	c b c
27	0.0	0.00	0.0	0.00	WSW: SW	SW: SSW	11.0	1.26	411	c	c Stcu Acu	c Stcu Nbst Y	c r ₀
28	4.5	1.00	4.5	1.00	SSW: SW	WSW: SW	6.6	0.61	296	c 1r m ₀	c Nbst rr m ₀	c bc Cu Acu	c b
29	4.5	1.00	4.5	1.00	Cal: SW	SW	5.4	0.38	245	b bc	bc c Cu Acu p	bc Cu b Y	b
30	4.5	1.00	4.5	1.00	SSW: SW	SW: SSW	6.0	0.38	287	b	b c Cumb p	b c Cu Cumb b Y	b
31	2.3	0.50	1.7	0.37	S: SSW	SSW: S	4.0	0.27	240	b	b c Cumb Frcu p Y	b Cu Y	c
Means	2.8	0.50	2.7	0.49	..	..	..	0.31	229				
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°.9 lower than
 The mean *Temperature of the Dew Point* for the month was 42°.6, being 2°.2 lower than
 The mean *Degree of Humidity* for the month was 68.3, being 5.6 less than
 The mean *Elastic Force of Vapour* for the month was 0.274 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 8)* was 5.0.
 The mean proportion of *Sunshine* for the month (constant sunshine being represented by 1) was 0.390. The maximum daily amount of *Sunshine* was 13.1 hours on May 10.
 The highest reading of the *Solar Radiation Thermometer* was 134°.3 on May 23; and the lowest reading of the *Terrestrial Radiation Thermometer* was 23°.3 on May 10.
 The *Proportions of Wind* referred to the cardinal points were N.17, E.14, S.22, W.21, calm or nearly calm conditions 26, the whole month being represented by 100.
 The *Greatest Pressure of the Wind* in the month was 11.0 lbs. on the square foot on May 27. The mean daily *Horizontal Movement of the Air* for the month was 229 miles; the greatest daily value was 413 miles on May 3 and the least daily value was 92 miles on May 20.
Rain (0.005 in. or over) fell on 14 days in the month, amounting to 1.648 in., as measured by gauge No.6 partly sunk below the ground; being 0.267 in. less than the average fall for the 65 years, 1841-1905.

* This scale, ranging from 0 to 8, was adopted from January 1, 1949, in accordance with the new International Code.

TABLE XVII. - DAILY RESULTS OF THE METEOROLOGICAL OBSERVATIONS

Month and Day 1949	BAROMETER Mean of 24 Hourly Values (Corrected and reduced to 32° Fahrenheit)	TEMPERATURE Of the Air							Difference between the Air Temperature and Dew Point Temperature			Degree of Humidity (Saturation = 100)	TEMPERATURE Of Radiation		Of the Earth 4 ft. below the Surface of the Soil	Rain collected in Gauge No. 6, whose receiving Surface is 5 inches above the Ground	Daily Duration of Sun-shine	Sun above Horizon
		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	Great-est	Least		Highest in Sun's Rays	Lowest on the Grass				
June 1	29.583	61.0	46.0	15.0	52.5	- 4.9	50.1	47.7	4.8	13.7	1.5	83	110.0	35.3	52.2	0.196	2.8	16.3
2	29.728	66.9	41.7	25.2	54.2	- 3.6	48.9	43.1	11.1	22.8	0.7	66	129.7	33.0	52.3	0.000	11.2	16.3
3	29.559	59.0	46.8	12.2	52.6	- 5.5	50.7	48.9	3.7	6.6	0.9	87	105.4	41.1	52.3	0.217	0.2	16.4
4	29.590	65.7	48.3	17.4	56.7	- 1.6	51.2	45.5	11.2	23.2	2.2	66	130.2	42.2	52.3	0.125	10.0	16.4
5	29.871	67.5	46.6	20.9	56.9	- 1.5	50.4	43.3	13.6	26.4	2.2	61	133.3	40.9	52.6	0.000	11.1	16.4
6	29.911	76.7	48.3	28.4	63.0	+ 4.7	57.2	52.4	10.6	19.7	1.6	69	136.3	39.1	52.8	0.000	14.7	16.5
7	29.702	75.1	53.5	21.6	62.3	+ 4.1	57.6	53.8	8.5	15.1	1.8	74	135.9	44.6	52.8	0.000	5.4	16.5
8	29.831	67.0	52.7	14.3	59.2	+ 1.1	55.3	52.0	7.2	13.4	1.8	77	103.4	40.7	53.0	0.000	0.6	16.5
9	29.904	69.8	52.7	17.1	60.9	+ 2.9	56.5	52.8	8.1	16.9	1.9	74	95.5	41.7	53.2	0.000	0.0	16.5
10	29.953	71.2	54.8	16.4	63.0	+ 4.9	57.8	53.6	9.4	15.6	0.5	71	128.3	52.0	53.6	0.000	3.6	16.5
11	29.928	71.1	55.4	15.7	62.7	+ 4.5	56.9	52.0	10.7	15.5	5.5	68	131.3	48.5	53.6	0.000	3.9	16.6
12	30.095	74.5	50.1	24.4	62.7	+ 4.3	56.1	50.3	12.4	22.9	2.0	64	145.4	37.6	53.9	0.000	12.0	16.6
13	30.115	75.6	54.5	21.1	63.7	+ 5.2	59.3	56.0	7.7	15.4	2.1	76	119.9	47.6	54.0	0.000	0.2	16.6
14	30.090	65.8	51.0	14.8	59.1	+ 0.4	55.6	52.7	6.4	14.3	0.8	79	126.1	42.0	54.1	0.130	3.3	16.6
15	30.099	62.2	43.7	18.5	54.1	- 4.7	49.6	44.9	9.2	18.2	0.9	71	122.2	36.0	54.3	0.000	5.6	16.6
16	30.088	62.4	42.3	20.1	52.9	- 6.0	48.3	43.1	9.8	16.8	1.1	69	117.5	34.3	54.3	0.000	6.3	16.6
17	30.132	64.7	47.8	16.9	54.2	- 4.8	50.5	46.9	7.3	19.7	3.0	76	101.7	40.1	54.4	0.000	3.0	16.6
18	30.088	67.0	46.3	20.7	56.0	- 3.2	49.7	42.8	13.2	25.9	2.5	61	127.5	38.1	54.6	0.000	14.1	16.6
19	30.083	62.8	49.4	13.4	53.6	- 5.9	48.8	43.5	10.1	16.7	2.7	69	116.9	41.2	54.5	0.000	3.6	16.6
20	30.110	75.1	46.9	28.2	59.3	- 0.6	53.5	48.1	11.2	25.1	0.0	66	131.6	38.6	54.7	0.000	8.6	16.6
21	30.044	75.2	49.8	25.4	62.4	+ 2.1	56.7	51.8	10.6	20.5	1.3	69	134.5	36.0	54.7	0.000	14.5	16.6
22	30.010	68.0	50.5	17.5	57.0	- 3.6	53.4	50.0	7.0	20.5	1.8	77	126.3	40.9	54.6	0.000	4.6	16.6
23	29.954	72.0	46.8	25.2	58.2	- 2.7	52.6	47.1	11.1	24.5	1.4	67	136.6	35.5	54.9	0.000	11.9	16.6
24	30.004	72.9	48.6	24.3	59.8	- 1.4	52.3	44.5	15.3	32.2	0.8	57	134.6	39.6	55.0	0.000	11.1	16.6
25	29.918	80.0	51.5	28.5	63.9	+ 2.5	56.8	50.8	13.1	28.2	4.0	62	130.9	37.7	55.1	0.000	9.0	16.6
26	29.942	81.9	52.6	29.3	66.9	+ 5.4	58.5	51.6	15.3	32.0	2.2	58	134.4	41.5	55.3	0.000	14.2	16.6
27	30.012	89.3	57.9	31.4	73.8	+12.2	62.9	55.0	18.8	47.3	2.0	52	142.3	45.9	55.7	0.000	12.8	16.6
28	30.024	82.7	63.2	19.5	72.9	+11.3	65.1	60.0	12.9	22.6	4.2	64	140.6	50.9	55.8	0.000	7.4	16.6
29	30.076	75.8	58.6	17.2	66.5	+ 4.9	61.3	57.6	8.9	15.3	2.3	73	126.5	48.6	56.0	0.000	1.5	16.6
30	30.104	84.0	58.4	25.6	69.8	+ 8.3	62.9	58.1	11.7	24.9	1.8	66	142.2	50.6	56.2	0.000	4.6	16.6
Means	29.952	71.4	50.6	20.9	60.4	+ 1.0	54.9	50.0	10.4	21.1	1.9	69.1	126.6	41.4	54.1	Sum 0.668	7.1	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 29.952 in., being 0.130 in. higher than the average for the 65 years, 1841-1905.

TEMPERATURE OF THE AIR.

The highest in the month was 89° 3 on June 27; the lowest in the month was 41° 7 on June 2; and the range was 47° 6.

The mean of all the highest daily readings in the month was 71° 4, being 2° 5 higher than the average for the 65 years, 1841-1905.

The mean of all the lowest daily readings in the month was 50° 6, being 0° 2 higher than the average for the 65 years, 1841-1905.

The mean of the daily ranges was 20° 9, being 2° 4 greater than the average for the 65 years, 1841-1905.

The mean for the month was 60° 4, being 1° 0 higher than the average for the 65 years, 1841-1905.

TABLE XVII. - DAILY RESULTS OF THE METEOROLOGICAL OBSERVATIONS

Month and Day 1949	RECORD OF THE NIGHT SKY				WIND AS DEDUCED FROM SELF-REGISTERING ANEMOMETERS					CLOUDS AND WEATHER			
	Polaris		δ 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	0 ^h to 6 ^h	6 ^h to 12 ^h	12 ^h to 18 ^h	18 ^h to 24 ^h
					A.M.	P.M.	Greatest	Mean of 24 Hourly Measures					
hours		hours				lbs.	lbs.	miles					
June 1	4.5	1.00	4.5	1.00	SSE: S: SSW	SSW	2.1	0.12	206	c	c Nbst rr c	c Nbst r bc	bc b
2	2.9	0.64	2.6	0.58	SSW: WSW	SSW: S	3.7	0.16	215	b	b c Cu Cmb y	bc Cu b y	b
3	4.1	0.90	4.0	0.89	SSE: S: SSW	SSW: SW	4.6	0.25	251	b c ir _o	r _o c Nbst rr	r c Nbst p	c bc
4	4.5	1.00	4.4	0.99	SW: W	W	15.0	1.57	470	bc c r	c Frcu Cmb p	p c Cmb b y	b c
5	4.5	1.00	4.5	1.00	WSW: W	WNW: W: SW	4.0	0.32	289	b	b c Frcu y	c bc Frcu Stcu y	b
6	4.3	0.95	4.2	0.93	SW: SSW	SW: SSW	6.0	0.39	280	b	b Frcu	b Frcu	b
7	3.0	0.67	2.9	0.64	S: SSW	SW	10.6	0.55	297	b c	c Acu r _o c	bc Cu Cist so-ha c	b
8	2.3	0.50	2.1	0.47	SW: WSW	SW	1.2	0.09	189	b c	c Stcu	c Stcu	c b c
9	0.0	0.00	0.0	0.00	Calm	Calm	0.1	0.00	67	c m	c m c Stcu	c Stcu	c
10	2.6	0.57	2.5	0.55	Calm	Calm: NNW: W	2.0	0.06	133	c m _o	c m _o bc Cu z _o	c Nbst p _o	c
11	4.0	0.90	3.8	0.84	WSW: W	NW: NNW	2.8	0.25	277	c	c Stcu	c bc Stcu	bc b
12	2.1	0.46	1.8	0.41	Calm: NE	Calm: SSW	1.0	0.05	127	b	b bc Cu y	b Cu y	c
13	0.0	0.00	0.0	0.00	SW: SSW	W: N: NNE	0.7	0.05	164	c	c Stcu	c Stcu	c ir _o
14	4.4	0.97	4.3	0.96	NNW	N: NNE: Calm	1.8	0.10	177	c R c m _o	c m _o bc Frcu	c Stcu Cmb	c b
15	3.6	0.81	3.3	0.74	Calm: E	E: Calm	1.2	0.07	157	b c m	c b ^o Cu c Stcu y	c Stcu b y	b c
16	1.3	0.30	1.2	0.26	Calm: NE	E: Calm	1.0	0.04	136	c b m _o	b c Stcu	c Frcu y	c
17	3.7	0.82	3.4	0.75	Calm	Calm: NE	0.4	0.01	80	c m _o	c Stcu m _o	c Stcu b z _o	b
18	2.4	0.53	2.2	0.49	Calm: NNE: N	N: NNE	2.8	0.14	204	b c ^o b m _o	b Cu y	b Ci y	b c
19	3.2	0.71	2.9	0.66	NNE	Calm: NE	1.0	0.04	146	c	c Stcu	c Frcu y	c b c
20	4.5	1.00	4.5	1.00	NE: Calm	NE: Calm	0.8	0.01	129	c b c m _o	c m _o b Ci y	b Ci bc Frcu y	b
21	2.9	0.65	2.8	0.62	Calm: N	NNE	1.8	0.08	162	b m _o	b Cu y	b Cu y	b
22	4.3	0.96	4.3	0.96	NNE	NNE: ENE	1.0	0.07	173	b c m	c Stcu	c bc Cu Acu b y	b
23	4.2	0.94	3.9	0.87	Calm: N	NNE: E	3.5	0.20	201	b c m	c b Frcu y	b Frcu y	b
24	4.5	1.00	4.5	1.00	NNE: Calm: ENE	ESE: S: SW	1.8	0.05	147	b c m	c b Cu y	b Cu y	b
25	3.6	0.79	1.7	0.37	WSW	NW: E	0.7	0.04	172	b m _o	b bc Cu z _o y	bc c Frcu z _o y	c z _o
26	4.5	1.00	4.5	1.00	Calm	Calm: NNW: S	0.4	0.01	108	b m _o	b Cu z _o y	b Cu z _o y	b
27	4.5	1.00	4.4	0.98	SW: WSW	NW: NNW	2.5	0.05	174	b bc m	b Cist so-ha y	b Ci y	b
28	4.5	1.00	4.5	1.00	Calm: NNW	N: E: Calm	1.7	0.05	154	b bc	bc c Stcu y	c Frcu y	b
29	0.3	0.06	0.3	0.06	Calm: NNE	NE: E	1.3	0.04	129	b c m	c Stcu	c Stcu	c c
30	3.4	0.76	3.0	0.66	Calm: SW	WSW: NNW: SSW	1.5	0.05	131	c m	c Acu m _o	c Acu Cu y	bc c
Means	3.3	0.73	3.1	0.69	..	..	..	0.16	185				
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 54°.9, being the same as
 The mean *Temperature of the Dew Point* for the month was 50°.0, being 0°.8 lower than
 The mean *Degree of Humidity* for the month was 69.1, being 4.1 less than
 The mean *Elastic Force of Vapour* for the month was 0.363 in., being 0.012 in. less than
 The mean amount of *Cloud* for the month (a clear sky being represented by 0 and an overcast sky by 8)* was 4.6.
 The mean proportion of *Sunshine* for the month (constant sunshine being represented by 1) was 0.427. The maximum daily amount of
Sunshine was 14.7 hours on June 6.
 The highest reading of the *Solar Radiation Thermometer* was 145°.4 on June 12; and the lowest reading of the *Terrestrial Radiation
 Thermometer* was 33°.0 on June 2.
 The *Proportions of Wind* referred to the cardinal points were N. 19, E. 15, S. 18, W. 19, calm or nearly calm conditions 29, 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 June 4. The mean daily *Horizontal Movement
 of the Air* for the month was 185 miles; the greatest daily value was 470 miles on June 4 and the least daily value was 67
 miles on June 9.
Rain (0.005 in. or over) fell on 4 days in the month, amounting to 0.688 in., as measured by gauge No. 6 partly sunk below the ground;
 being 1.370 in. less than the average fall for the 65 years, 1841-1905.
 * This scale, ranging from 0 to 8, was adopted from January 1, 1949, in accordance with the new International Code.

TSBLE XVII. - DAILY RESULTS OF THE METEOROLOGICAL OBSERVATIONS

Month and Day 1949	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	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					Highest in Sun's Rays	Lowest on the Grass				
July 1	30.216	78.8	55.4	23.4	67.3	+ 5.8	58.5	51.3	16.0	29.2	5.8	56	138.3	46.4	56.3	0.000	13.0	16.6
2	30.194	74.1	52.2	21.9	63.3	+ 1.7	55.1	47.5	15.8	27.7	2.1	56	143.5	38.5	56.5	0.000	8.4	16.6
3	30.073	83.0	46.6	36.4	66.4	+ 4.6	55.5	45.1	21.3	36.9	2.6	46	144.2	31.7	56.9	0.000	15.2	16.5
4	29.929	87.9	52.2	35.7	70.5	+ 8.4	58.9	49.0	21.5	39.6	2.0	47	146.8	38.1	57.1	0.021	12.7	16.5
5	29.940	71.8	56.0	15.8	63.4	+ 1.1	55.3	47.9	15.5	27.1	3.6	57	127.3	50.0	57.0	0.000	7.1	16.5
6	30.040	66.8	53.0	13.8	59.7	- 2.7	52.5	45.2	14.5	22.9	6.4	59	121.0	43.9	57.2	0.000	0.5	16.5
7	30.098	57.4	50.8	6.6	54.4	- 8.0	50.5	46.5	7.9	9.6	5.4	75	66.8	43.2	57.1	0.000	0.0	16.4
8	30.126	72.4	48.7	23.7	58.4	- 4.0	52.3	46.3	12.1	26.5	3.1	64	133.6	39.8	57.4	0.000	9.4	16.4
9	30.132	69.8	50.6	19.2	59.5	- 2.9	54.1	49.1	10.4	19.9	2.6	69	135.3	38.0	57.2	0.000	7.0	16.4
10	30.145	77.4	48.2	29.2	62.6	+ 0.1	56.2	50.6	12.0	24.5	1.2	65	137.3	36.0	57.3	0.000	12.3	16.4
11	30.108	81.1	49.3	31.8	65.3	+ 2.6	58.2	52.3	13.0	27.7	1.0	63	146.3	36.0	57.3	0.000	9.5	16.4
12	29.888	86.0	55.2	30.8	70.8	+ 7.9	60.2	51.7	19.1	37.5	2.0	51	144.3	40.2	57.6	0.000	14.3	16.3
13	29.688	78.9	58.5	20.4	68.9	+ 5.8	62.6	58.2	10.7	20.8	3.4	69	119.4	45.9	57.5	0.048	0.4	16.3
14	29.735	81.3	59.6	21.7	68.2	+ 4.9	61.8	57.3	10.9	25.1	1.6	68	150.0	53.4	57.8	0.019	4.0	16.2
15	29.658	78.9	60.1	18.8	67.5	+ 4.1	61.7	57.5	10.0	24.9	1.2	71	144.1	53.0	57.8	0.000	4.2	16.2
16	29.602	76.0	58.5	17.5	64.3	+ 0.9	60.5	57.7	6.6	18.0	1.6	79	136.0	49.6	57.8	0.790	2.2	16.2
17	29.657	75.3	57.7	17.6	62.5	- 0.9	59.3	56.9	5.6	21.0	1.3	82	140.3	50.3	58.0	0.131	3.3	16.1
18	29.830	65.6	53.0	12.6	58.5	- 4.8	54.9	51.8	6.7	15.2	1.3	78	108.1	53.0	58.0	0.000	0.1	16.1
19	30.028	70.8	53.0	17.8	60.8	- 2.4	54.0	47.5	13.3	24.8	5.7	61	131.8	45.9	58.1	0.000	6.3	16.1
20	30.015	72.4	48.6	23.8	62.4	- 0.8	55.2	48.6	13.8	24.3	2.2	60	125.1	37.4	58.2	0.000	6.7	16.0
21	29.939	80.9	58.6	22.3	68.6	+ 5.4	58.4	49.7	18.9	30.5	5.9	51	138.8	55.0	58.3	0.000	7.1	16.0
22	29.930	86.3	60.8	25.5	72.0	+ 8.9	62.0	54.5	17.5	34.1	7.1	54	146.3	51.0	58.3	0.000	5.4	15.9
23	29.909	86.0	60.7	25.3	74.2	+11.2	63.3	55.5	18.7	37.3	4.2	52	147.5	51.1	58.5	0.000	6.5	15.9
24	29.941	83.5	61.2	22.3	71.9	+ 9.0	63.3	57.3	14.6	26.1	3.4	60	142.0	50.0	58.7	0.000	12.0	15.8
25	29.906	88.2	60.8	27.4	74.6	+11.9	65.1	58.8	15.8	31.9	2.6	58	140.0	51.8	59.0	0.000	6.3	15.8
26	29.897	86.8	62.4	24.4	74.9	+12.4	65.3	58.9	16.0	28.9	3.4	57	145.7	48.9	59.1	0.000	11.4	15.7
27	29.880	82.9	63.4	19.5	72.6	+10.2	66.3	62.4	10.2	19.3	4.1	71	142.3	53.4	59.4	0.000	4.5	15.7
28	29.904	79.4	60.0	19.4	68.3	+ 6.0	59.3	52.1	16.2	28.1	2.2	56	142.1	53.8	59.6	0.000	11.6	15.6
29	29.901	74.3	58.4	15.9	65.3	+ 3.0	56.2	48.0	17.3	29.1	4.8	53	141.2	50.0	59.7	0.000	8.0	15.6
30	29.949	78.0	53.5	24.5	65.3	+ 3.0	56.4	48.4	16.9	28.9	3.9	54	142.2	42.6	60.0	0.000	6.5	15.6
31	29.738	74.9	58.4	16.5	64.5	+ 2.3	61.3	59.1	5.4	9.4	0.8	82	127.8	51.5	59.7	0.093	0.7	15.5
Means	29.935	77.6	55.7	22.0	66.0	+ 3.4	58.5	52.4	13.7	26.0	3.2	62.1	135.3	46.1	58.0	Sum 1.102	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 29.935 in. being 0.129 in. higher than the average for the 65 years, 1841-1905.

TEMPERATURE OF THE AIR.

The highest in the month was 88°.2 on July 25; the lowest in the month was 46°.6 on July 3; and the range was 41°.6.

The mean of all the highest daily readings in the month was 77°.6, being 5°.5 higher than the average for the 65 years, 1841-1905.

The mean of all the lowest daily readings in the month was 55°.7, being 1°.9 higher than the average for the 65 years, 1841-1905.

The mean of the daily ranges was 22°.0, being 3°.7 greater than the average for the 65 years, 1841-1905.

The mean for the month was 66°.0, being 3°.4 higher than the average for the 65 years, 1841-1905.

TABLE XVII. - DAILY RESULTS OF THE METEOROLOGICAL OBSERVATIONS

Month and Day 1949	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 ^h to 6 ^h	6 ^h to 12 ^h	12 ^h to 18 ^h	18 ^h to 24 ^h
July 1	4.2	0.93	4.1	0.90	N: NNW	NNE: ENE	7.6	0.33	231	c m _o	b Cu y	b Frcu Ci y	b
2	4.7	1.00	4.7	1.00	ENE: Calm	ESE: E	2.2	0.10	174	b bc	bc Ci so-ha y	bc Cist so-ha y	b y
3	4.7	1.00	4.7	1.00	Calm	SSE: Calm	1.2	0.05	103	b	b Cu y	b Ci Cicu y	b y
4	2.4	0.51	2.4	0.51	Calm: SSW	SW: W	5.5	0.21	201	b	b Cicu y	b Cu Cicu	c Ir
5	1.4	0.29	1.2	0.25	W: NW	NNW	3.8	0.37	285	b c	bc Cu Frcu y	bc c Cu y	c y
6	3.1	0.65	3.0	0.62	NNW: N	N: NNE	1.5	0.10	199	c b c	c Cu Acu y	c Acu Stcu y	c
7	4.3	0.91	4.3	0.90	NNW	N: NNE	2.9	0.20	261	c b c	c Nbst d _o m _o	c Stcu	c b
8	3.2	0.66	3.1	0.65	NNE	NE: ENE: Calm	2.2	0.10	178	b c m _o	c Stcu b y	b y	b
9	5.0	1.00	5.0	1.00	NE: NNE	N: NE: Calm	1.2	0.11	189	b c	c Stcu y	c Stcu b c y	b
10	4.5	0.90	4.4	0.87	Calm	ENE: Calm	1.4	0.05	126	b	c b Cu y	b y	b z _o
11	..	..	..	..	Calm: ENE	E: Calm	1.4	0.06	132	b f	f b Cist y	b Cist so-ha y	Prhn bc b
12	4.9	0.99	4.9	0.99	Calm: ENE	ENE	3.5	0.18	203	b m	b Ci y	b y	b
13	5.0	1.00	5.0	1.00	Calm: ENE	Calm: SSW	2.9	0.06	152	b c m	c m c Ast y	c r c Ast Stcu	P t c b
14	1.7	0.35	1.4	0.28	SW	SW: Calm	2.0	0.16	230	b c m _o	c Stcu Acu y	c Cu Frcu bc c y	c Ir
15	2.2	0.44	2.1	0.42	E: SE: S	SSW: S	2.2	0.13	197	c m	c bc Stcu y	bc c Stcu Cu y	c
16	2.2	0.39	2.0	0.36	Calm	Var: Calm	0.7	0.02	90	c p _o m _o	c Stcu c Cumb R tl	c b c Cumb	c r t b c
17	0.0	0.00	0.0	0.00	Calm: SSW	SSW: NNE: Calm	3.0	0.04	146	c	c Cumb p	c Cu Cumb p t c	c
18	1.6	0.29	0.7	0.13	NNW	NNW	1.7	0.11	211	c m _o	c m _o c Stcu	c Stcu	c
19	5.4	0.99	5.4	0.99	NW	NW: NNW	3.0	0.12	218	c b m _o	c Acu Cu y	c bc Frcu y	bc c
20	0.0	0.00	0.0	0.00	Calm	Calm: W: WSW	0.3	0.01	113	b w m _o	b bc Cist so-ha prhn	c Acu Frcu y	c
21	2.2	0.40	2.2	0.40	Calm: SW	SW: WSW	1.0	0.05	154	c	c Acu y	c bc Acu y	b c
22	1.3	0.24	0.8	0.15	Calm	Calm: SSE	0.9	0.02	121	c m _o	c m _o bc Acu Ci y	c Acu Cu y	c
23	5.7	0.99	5.7	0.99	Calm: WSW	NW: Calm	1.2	0.04	149	c	bc Ci c Stcu y	c Acu y	b
24	4.5	0.77	4.3	0.74	Calm	ENE: E: Calm	0.9	0.03	139	b m _o	b Cu z _o y	b Acu y	b z _o b
25	5.5	0.96	5.4	0.94	Calm	SSW: SW	1.1	0.05	133	b c m _o	c m _o c Acu y	c Frcu y	c b
26	5.7	0.99	5.3	0.92	W: NW	NW	1.1	0.07	164	b m _o	b m _o bc Cu Ci y	bc c Cu y	c b
27	4.7	0.81	4.3	0.74	W: WSW	WSW: W	3.5	0.26	268	b bc	bc c Stcu r _o	c Stcu	c b
28	0.5	0.09	0.3	0.05	W: WNW	W	4.5	0.46	332	b bc	bc Ci Frcu v y	c Cu Frcu y	c
29	5.7	1.00	5.7	1.00	W: WNW	WNW: NW	5.5	0.49	322	c	c Stcu y	c bc Frcu y	b
30	..	..	..	..	W	WSW: SW	3.0	0.15	232	b	b c Cu Acu y	c Acu Cu bc y	c
31	3.1	0.50	3.0	0.48	SW	SW: WSW	4.8	0.42	311	c	c Nbst r id _o	c Nbst Cumb rr	c
Means	3.4	0.66	3.3	0.63	..	..	..	0.15	192				
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°.5, being 0°.6 higher than
 The mean *Temperature of the Dew Point* for the month was 52°.4, being 1°.7 lower than
 The mean *Degree of Humidity* for the month was 62.1, being 11.1 less than
 The mean *Elastic Force of Vapour* for the month was 0.396 in., being 0.025 in. less than
 The mean amount of *Cloud* for the month (a clear sky being represented by 0 and an overcast sky by 8)* was 4.7.
 The mean proportion of *Sunshine* for the month (constant sunshine being represented by 1) was 0.433. The maximum daily amount of *Sunshine* was 15.2 hours on July 3.
 The highest reading of the *Solar Radiation Thermometer* was 150°.0 on July 14; and the lowest reading of the *Terrestrial Radiation Thermometer* was 31°.7 on July 3.
 The *Proportions of Wind* referred to the cardinal points were N.21, E.14, S.13, W.24, calm or nearly calm conditions 28, the whole month being represented by 100.
 The *Greatest Pressure of the Wind* in the month was 7.6 lbs. on the square foot on July 1. The mean daily *Horizontal Movement of the Air* for the month was 192 miles; the greatest daily value was 332 miles on July 28 and the least daily value was 90 miles on July 16.
Rain (0.005 in. or over) fell on 6 days in the month, amounting to 1.102 in., as measured by gauge No.6 partly sunk below the ground; being 1.297 in., less than the average fall for the 65 years, 1841-1905.

* This scale, ranging from 0 to 8, was adopted from January 1, 1949, in accordance with the new International Code.

TABLE XVII. - DAILY RESULTS OF THE METEOROLOGICAL OBSERVATIONS

Month and Day 1949	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	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							Highest in Sun's Rays	Lowest on the Grass				
Aug. 1	In. 29.609	72.8	58.8	14.0	64.6	+ 2.4	60.6	57.7	6.9	16.5	2.2	78	113.3	53.4	60.0	0.050	0.6	15.4
2	29.175	71.5	58.0	13.5	62.9	+ 0.8	60.7	59.1	3.8	12.0	1.5	87	131.6	54.3	60.0	0.724	5.8	15.4
3	29.525	68.0	56.0	12.0	60.7	- 1.4	53.4	46.2	14.5	26.3	3.3	59	130.6	50.0	60.1	0.000	7.7	15.3
4	29.867	73.8	50.4	23.4	62.2	+ 0.1	54.3	46.8	15.4	30.2	2.0	57	132.6	43.2	60.1	0.000	13.1	15.3
5	29.805	80.1	50.3	29.8	66.2	+ 4.1	57.7	50.5	15.7	30.7	1.6	57	135.9	41.1	60.3	0.000	13.6	15.2
6	29.781	78.1	54.9	23.2	65.3	+ 3.1	57.9	51.7	13.6	30.4	2.2	62	140.9	46.4	60.1	0.000	5.3	15.2
7	29.726	70.6	48.8	21.8	62.2	- 0.0	56.6	51.8	10.4	21.3	1.8	69	113.6	38.9	60.2	0.004	1.9	15.1
8	29.680	73.0	57.8	15.2	64.5	+ 2.2	56.3	49.0	15.5	30.9	5.4	57	138.3	50.0	60.2	0.000	11.0	15.1
9	29.930	71.8	48.7	23.1	61.5	- 0.8	53.5	45.7	15.8	28.4	2.0	56	134.3	38.0	60.2	0.000	10.4	15.0
10	30.130	72.5	49.3	23.2	60.2	- 2.1	53.1	46.1	14.1	28.5	1.8	60	129.3	41.2	60.2	0.005	7.8	14.9
11	30.090	64.8	52.1	12.7	58.4	- 4.0	53.8	49.6	8.8	17.7	0.0	72	100.0	43.5	60.0	0.130	5.2	14.9
12	30.360	72.4	46.4	26.0	59.8	- 2.7	52.4	44.8	15.0	28.8	2.0	58	128.3	37.8	60.1	0.000	12.9	14.8
13	30.280	81.0	51.7	29.3	66.1	+ 3.6	58.1	51.4	14.7	32.3	1.2	59	139.8	41.8	60.2	0.000	12.0	14.8
14	30.178	85.0	54.4	30.6	70.2	+ 7.7	59.7	51.1	19.1	40.6	1.8	51	140.6	44.1	60.2	0.000	13.0	14.7
15	30.055	88.4	52.1	36.3	71.4	+ 9.0	58.5	47.2	24.2	43.0	2.2	42	142.1	41.0	60.2	0.000	13.3	14.7
16	29.979	76.3	54.7	21.6	63.9	+ 1.6	56.7	50.5	13.4	21.0	5.4	62	126.7	41.2	60.2	0.000	5.2	14.6
17	30.109	70.8	52.7	18.1	61.5	- 0.6	53.4	45.5	16.0	28.4	3.0	55	126.7	43.2	60.2	0.000	6.3	14.6
18	30.083	69.8	55.4	14.4	61.5	- 0.4	54.5	47.9	13.6	23.8	3.8	61	99.9	46.4	60.2	0.000	0.3	14.5
19	30.072	81.7	52.7	29.0	67.1	+ 5.4	60.6	55.7	11.4	23.0	1.4	67	142.0	42.8	60.3	0.000	8.1	14.4
20	30.044	80.1	59.6	20.5	68.0	+ 6.5	62.4	58.5	9.5	20.4	2.7	72	128.8	50.2	60.3	0.000	5.9	14.4
21	30.000	76.9	54.8	22.1	65.6	+ 4.3	59.4	54.6	11.0	21.1	1.5	68	134.9	45.4	60.3	0.000	11.6	14.3
22	29.930	82.4	51.7	30.7	68.1	+ 7.0	60.2	54.1	14.0	30.9	0.8	61	133.5	41.0	60.6	0.000	6.5	14.3
23	29.913	75.8	56.8	19.0	64.7	+ 3.8	61.3	58.9	5.8	16.6	1.0	81	114.6	44.9	60.5	0.055	0.8	14.2
24	29.954	76.3	59.4	16.9	66.4	+ 5.6	62.8	60.4	6.0	15.9	1.1	81	128.5	53.0	60.6	0.006	2.6	14.1
25	29.926	73.8	59.0	14.8	65.4	+ 4.7	62.3	60.2	5.2	13.5	0.7	83	104.9	48.5	60.7	0.000	0.5	14.0
26	29.869	73.0	58.7	14.3	64.7	+ 4.0	61.6	59.4	5.3	12.7	1.1	83	104.3	48.1	60.7	0.000	0.0	14.0
27	29.908	76.8	58.2	18.6	66.5	+ 5.9	62.6	60.0	6.5	16.2	0.9	79	123.3	49.4	60.8	0.000	4.3	13.9
28	30.043	74.4	58.4	16.0	65.8	+ 5.4	60.8	57.2	8.6	18.2	2.2	74	123.3	52.5	60.8	0.000	5.0	13.9
29	30.011	79.0	58.0	21.0	67.1	+ 6.8	61.8	58.1	9.0	21.8	0.9	73	129.6	47.6	60.8	0.000	3.3	13.8
30	29.936	80.4	58.6	21.8	68.2	+ 8.1	62.0	57.6	10.6	23.1	1.1	69	137.9	48.8	60.9	0.002	6.7	13.7
31	29.762	84.7	57.4	27.3	70.9	+11.0	63.1	57.7	13.2	30.0	1.2	63	134.1	46.7	61.0	0.300	8.0	13.7
Means	29.927	76.0	54.7	21.3	64.9	+ 3.3	58.5	53.1	11.8	24.3	1.9	66.3	127.2	45.6	60.4	Sum 1.276	6.7	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 29.927 in., being 0.137 in. higher than the average for the 65 years, 1841-1905.

TEMPERATURE OF THE AIR.

The highest in the month was 88°.4 on August 15; the lowest in the month was 46°.4 on August 12; and the range was 42°.0.

The mean of all the highest daily readings in the month was 76°.0, 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 54°.7, being 1°.1 higher than the average for the 65 years, 1841-1905.

The mean of the daily ranges was 21°.3, being 4°.1 greater than the average for the 65 years, 1841-1905.

The mean for the month was 64°.9, being 3°.3 higher than the average for the 65 years, 1841-1905.

TABLE XVII. - DAILY RESULTS OF THE METEOROLOGICAL OBSERVATIONS

Month and Day 1949	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				
					A.M.	P.M.	Greatest	Mean of 24 Hourly Measures					
hours	hours	hours	hours			lbs.	lbs.	miles	0h to 6h	6h to 12h	12h to 18h	18h to 24h	
Aug. 1	0.0	0.00	0.0	0.00	WSW	SW	6.7	0.75	355	c	c Stcu Acu	c Nbst r _o	c r c
2	3.6	0.57	3.1	0.49	SW: WSW	WSW	12.6	1.16	435	c r R	r c Nbst p	c Acu Cumb p	c b
3	4.7	0.75	4.5	0.71	W: WNW	WNW: WSW	12.5	1.72	490	b c d _o	c Frcu y	c Cu Frcu y	b c p _o
4	6.3	1.00	6.3	1.00	WSW: W	WSW: SW	3.2	0.18	235	b	b bc Ci Frcu y	bc Ci Frcu b y	b
5	5.9	0.95	5.9	0.95	Calm: SSW	SSW: S	5.5	0.24	235	b	b Ci y	b Cicu y	b
6	5.9	0.84	5.8	0.82	Calm: W	WSW: W	2.5	0.20	234	b c	c bc Frcu y	bc Cist so-ha c y	c b
7	0.7	0.10	0.4	0.06	SW: S	SSE: SSW	10.9	0.38	250	b c	c Cu Cist so-ha c y	c Ast Acu y	c r _o c
8	4.7	0.67	4.5	0.65	SW: WSW	WSW: SW	11.2	0.93	372	c	bc Frcu y	bc c Frcu Cu y	c b
9	7.0	1.00	7.0	1.00	SW: WSW	WSW	4.4	0.31	270	b	b c Cu d _o y	c Cu y	b
10	0.0	0.00	0.0	0.00	WSW: NW	WSW: SW	2.7	0.17	228	b	b c Frcu y	c Cist Cu so-ha c y	c ir
11	7.0	1.00	7.0	1.00	SW: NNW	NNW: N	9.0	1.21	400	c	c Stcu	c Stcu bc y	b
12	7.0	1.00	7.0	1.00	N: NNE	NNW: Calm: S	2.0	0.07	147	b	b Ci Frcu y	b Ci y	b
13	7.5	1.00	7.5	1.00	SW: WSW	Calm: SW	0.8	0.04	137	b	b bc Ci y	bc Ci y	b
14	7.5	1.00	7.5	1.00	Calm: W	NW: NNW: Calm	1.4	0.07	153	b	b Ci y	b Ci y	b
15	7.5	1.00	7.5	1.00	Calm	WSW: SW	2.9	0.07	133	b m _o z _o	b Ci z _o y	b y	b
16	5.2	0.69	5.0	0.67	SW: WSW: WNW	NNW: NNE	5.0	0.15	208	b bc	bc Ci c Stcu y	c Stcu y	c b
17	1.7	0.22	0.9	0.13	NNE	Calm: NNW	1.6	0.07	161	c	c bc Cist Ci so-ha b y	c Stcu Cu y	c
18	7.5	1.00	7.3	0.97	Calm	Calm: Var	0.2	0.00	83	c	c Cu Acu y	c Stcu y	c b
19	4.1	0.55	3.9	0.52	WSW	NNW	1.4	0.07	160	b m	b y	bc c Stcu y	c
20	4.2	0.53	3.0	0.37	NNW: Calm	Calm: E	1.6	0.07	133	b c	c b c Cu Ci y	c bc Ci y	bc
21	8.0	1.00	8.0	1.00	Calm: E	E: Calm	1.0	0.04	117	bc	bc b Ci y	b Ci y	b
22	7.6	0.95	7.3	0.91	Calm	Calm	0.1	0.00	70	b w m	b Cist so-ha z _o y	bc Ci so-ha z _o y prhn	bc b
23	1.2	0.15	0.9	0.12	Calm: Var	E: S: Calm	1.5	0.04	118	b c m	c Nbst ir _o m	c Ast Frcu	c r _o
24	1.7	0.21	1.2	0.15	Calm	NNE: Calm	0.4	0.01	69	c r _o m	c Stcu m _o	c m _o bc Frcu	c
25	3.0	0.38	3.0	0.38	Calm	E: Calm	0.2	0.00	73	c m	c id _o c Stcu	c Stcu bc Cu	b
26	5.7	0.71	1.9	0.23	Calm	Calm: SW	0.2	0.00	77	b c m	c Stcu m _o	c bc Frcu m _o	bc m _o
27	4.5	0.53	0.0	0.00	Calm: SW	WSW: NW: NNE	0.8	0.02	134	bc m _o o fe	o fe c m b Cu m _o	b z _o	bc
28	5.2	0.61	2.2	0.26	Calm: NNE	N: SE: S	0.7	0.02	142	bc m	bc b Cu m _o	c Stcu z _o y	bc c
29	3.9	0.46	3.5	0.41	Calm	SW	1.3	0.05	158	c m	c m bc Frcu y	c Stcu y	c
30	2.2	0.26	1.8	0.21	Calm: SSW	SW	1.3	0.07	176	c	bc Frcu Cicu y	c Cu Cist so-ha y	c r _o
31	0.1	0.01	0.0	0.00	Calm: S	S: Var	4.6	0.16	195	c b	b c Acu Cu y	c bc Acu Cu y	c Rtl cr _o
Means	4.5	0.62	4.0	0.55	..	..	..	0.27	198				
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°.5, being 1°.0 higher than
 The mean *Temperature of the Dew Point* for the month was 53°.1, being 1°.2 lower than
 The mean *Degree of Humidity* for the month was 66.3, being 10.5 less than
 The mean *Elastic Force of Vapour* for the month was 0.407 in., being 0.017 in. less than
 The mean amount of *Cloud* for the month (a clear sky being represented by 0 and an overcast sky by 8)* was 4.9.
 The mean proportion of *Sunshine* for the month (constant sunshine being represented by 1) was 0.462. The maximum daily amount of *Sunshine* was 13.6 hours on August 5.
 The highest reading of the *Solar Radiation Thermometer* was 142°.1 on August 15; and the lowest reading of the *Terrestrial Radiation Thermometer* was 37°.8 on August 12.
 The *Proportions of Wind* referred to the cardinal points were N.12, E.5, S.20, W.29, calm or nearly calm conditions 34, the whole month being represented by 100.
 The *Greatest Pressure of the Wind* in the month was 12.6 lbs. on the square foot on August 2. The mean daily *Horizontal Movement of the Air* for the month was 198 miles; the greatest daily value was 490 miles on August 3 and the least daily value was 69 miles on August 24.
Rain (0.005 in. or over) fell on 7 days in the month, amounting to 1.276 in., as measured by gauge No.6 partly sunk below the ground; being 1.068 in. less than the average fall for the 65 years, 1841-1905.
 * This scale, ranging from 0 to 8, was adopted from January 1, 1949, in accordance with the new International Code.

TABLE XVII. - DAILY RESULTS OF THE METEOROLOGICAL OBSERVATIONS

Month and Day 1949	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	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							Highest in Sun's Rays	Lowest on the Grass				
Sept. 1	29.623	76.0	59.3	16.7	66.5	+ 6.7	62.3	59.4	7.1	18.0	1.1	78	127.4	52.5	61.0	0.010	5.0	13.6
2	29.618	75.0	52.7	22.3	63.8	+ 4.1	57.5	52.3	11.5	25.4	1.0	66	136.2	43.1	61.1	0.000	9.3	13.5
3	29.702	78.3	59.8	18.5	66.7	+ 7.1	61.5	57.8	8.9	21.5	1.6	73	136.4	53.8	61.1	0.000	6.2	13.5
4	29.787	87.8	58.7	29.1	72.3	+12.8	65.0	60.3	12.0	26.2	1.1	66	143.9	48.8	61.2	0.000	10.1	13.4
5	29.741	89.1	64.2	24.9	75.8	+16.4	66.1	59.9	15.9	29.8	6.7	57	139.9	57.0	61.3	0.000	8.4	13.3
6	29.951	78.7	58.0	20.7	66.4	+ 7.2	59.7	54.5	11.9	26.3	2.4	66	139.5	48.0	61.3	0.000	8.4	13.3
7	30.034	74.5	56.6	17.9	63.9	+ 4.9	57.6	52.4	11.5	24.8	1.3	66	131.5	46.3	61.3	0.000	7.4	13.2
8	30.085	72.8	52.7	20.1	63.2	+ 4.4	56.9	51.6	11.6	21.2	2.4	66	132.7	42.7	61.4	0.000	6.2	13.2
9	30.025	74.9	55.7	19.2	64.4	+ 5.8	59.3	55.4	9.0	18.5	2.4	73	123.1	48.7	61.3	0.000	2.9	13.1
10	29.946	77.9	51.4	26.5	63.6	+ 5.2	57.8	53.1	10.5	24.1	1.0	69	133.3	40.5	61.3	0.000	9.2	13.0
11	30.021	76.2	54.3	21.9	64.7	+ 6.6	59.1	54.7	10.0	22.8	1.3	70	122.9	40.6	61.2	0.000	7.4	12.9
12	30.009	77.5	59.1	18.4	66.9	+ 8.9	60.6	55.9	11.0	26.2	2.3	68	131.3	52.8	61.3	0.000	7.3	12.9
13	29.818	73.4	59.3	14.1	65.4	+ 7.6	60.1	56.1	9.3	19.8	3.4	72	126.0	58.0	61.3	0.000	6.4	12.8
14	29.522	63.9	57.6	6.3	61.0	+ 3.3	59.0	57.6	3.4	5.7	1.7	88	72.0	55.0	61.1	0.046	0.0	12.8
15	29.544	70.3	55.2	15.1	62.6	+ 5.0	59.5	57.1	5.5	16.2	2.2	83	106.1	48.5	61.1	0.349	1.9	12.7
16	29.749	68.0	48.5	19.5	58.6	+ 1.1	53.7	49.1	9.5	18.3	1.6	71	122.6	41.8	61.2	0.000	6.9	12.7
17	29.880	70.4	53.4	17.0	60.1	+ 2.9	54.4	49.3	10.8	23.0	3.5	68	120.4	46.5	61.1	0.000	7.0	12.6
18	29.905	67.8	46.8	21.0	57.3	+ 0.4	53.5	50.0	7.3	18.1	0.9	77	117.3	38.3	60.9	0.000	0.9	12.5
19	29.945	67.3	49.8	17.5	58.1	+ 1.6	54.5	51.3	6.8	18.8	0.2	78	123.1	40.6	60.8	0.000	3.9	12.4
20	29.887	67.7	53.6	14.1	59.9	+ 3.7	56.4	53.5	6.4	14.8	0.6	79	120.2	44.1	60.6	0.000	4.6	12.4
21	29.794	62.2	55.9	6.3	58.9	+ 3.0	57.0	55.5	3.4	6.8	2.1	89	74.4	50.8	60.3	0.162	0.0	12.3
22	29.736	71.0	60.2	10.8	64.0	+ 8.4	61.9	60.5	3.5	8.8	0.9	89	127.4	56.1	60.3	0.112	2.2	12.3
23	29.708	71.8	58.4	13.4	64.8	+ 9.4	62.2	60.4	4.4	11.8	0.7	86	99.8	52.7	60.3	0.010	0.2	12.2
24	29.628	71.4	60.8	10.6	65.6	+10.3	63.1	61.5	4.1	8.9	0.5	87	109.5	53.0	60.3	0.090	1.2	12.1
25	29.882	77.0	56.1	20.9	64.4	+ 9.2	60.7	58.0	6.4	19.1	0.9	80	129.8	48.2	60.2	0.000	8.0	12.1
26	30.120	70.1	54.8	15.3	62.1	+ 6.9	60.5	59.3	2.8	7.4	0.0	91	95.0	46.0	60.2	0.020	0.8	12.0
27	30.138	72.0	59.0	13.0	64.5	+ 9.4	62.3	60.8	3.7	11.7	0.5	88	117.7	53.5	60.2	0.000	3.5	11.9
28	30.098	70.8	57.5	13.3	62.5	+ 7.6	59.5	57.2	5.3	11.8	1.1	83	120.3	50.2	60.2	0.000	3.7	11.9
29	29.962	69.3	58.2	11.1	61.7	+ 7.0	59.3	57.6	4.1	9.5	0.9	86	102.3	51.0	60.2	0.000	2.0	11.8
30	29.946	66.6	55.5	11.1	61.3	+ 6.9	57.7	54.8	6.5	11.7	3.1	80	93.2	50.2	60.1	0.000	0.3	11.7
Means	29.860	73.0	56.1	16.9	63.7	+ 6.5	59.3	55.9	7.8	17.6	1.6	76.4	119.2	48.6	60.8	Sum 0.799	4.7	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 29.860 in., being 0.042 in. higher than the average for the 65 years, 1841-1905.

TEMPERATURE OF THE AIR.

The highest in the month was 89°.1 on September 5; the lowest in the month was 46°.8 on September 18; and the range was 42°.3.

The mean of all the highest daily readings in the month was 73°.0, being 6°.8 higher than the average for the 65 years, 1841-1905.

The mean of all the lowest daily readings in the month was 56°.1, being 6°.4 higher than the average for the 65 years, 1841-1905.

The mean of the daily ranges was 16°.9, being 0°.4 greater than the average for the 65 years, 1841-1905.

The mean for the month was 63°.7, being 6°.5 higher than the average for the 65 years, 1841-1905.

TABLE XVII. - DAILY RESULTS OF THE METEOROLOGICAL OBSERVATIONS

Month and Day 1949	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	0h to 6h	6h to 12h	12h to 18h	18h to 24h
					A.M.	P.M.	Greatest	Mean of 24 Hourly Measures					
Sept. 1	6.7	0.79	6.5	0.77	Calm: W	WSW: SW	1.0	0.03	152	c	c d ₀ bc Ci Frcu	bc c Cist Frcu y	b c
2	2.6	0.31	1.6	0.19	SW	SSW	4.8	0.32	255	b	b Ci Cu y	b Cu c Acu y	c
3	7.3	0.81	6.7	0.74	Calm: SW	SSW: S	2.1	0.08	179	c	bc c Cu Stcu y	c bc Cu Cumb y	bc c b
4	7.4	0.82	6.6	0.73	Calm: SE	SE: E	2.3	0.11	155	b m ₀	b Ci y	b bc Acu Cu y	b
5	4.5	0.49	3.3	0.37	S: SE	SSW: SW	8.3	0.47	268	b c b	bc p ₀ bc Acu Cumb y	bc Acu y	b c
6	8.1	0.90	7.7	0.86	SW: SSW	SSW	1.9	0.11	207	c	bc Cu Cist	bc Frcu Ci Cist y	bc b
7	7.2	0.80	7.1	0.79	WSW	W	1.9	0.07	180	b c m ₀	bc Cu Ci m ₀	bc Cu Ci y	b
8	5.9	0.66	4.9	0.54	WSW	WSW	2.3	0.16	229	b c b	b Ci c Stcu y	c Cu Stcu y	c
9	..	..	..	..	SW: WSW	WSW: SW	0.9	0.07	182	c	c Acu Ci so-ha	c Cu Stcu y	b
10	9.5	1.00	9.5	1.00	Calm	Calm	0.6	0.01	83	b w c	bc Cist b Cicu y	b Cu y	b
11	..	..	..	..	Calm: NE	ENE: NE	5.3	0.33	237	b w c m	c bc Frcu y	b Ci y	b
12	2.8	0.30	2.6	0.27	NNE: NE	NE	5.0	0.55	326	c m ₀	c Ci Cist so-ha y	c Cu Frcu b Ci y	b c
13	0.0	0.00	0.0	0.00	NE	NE: NNE	10.3	1.39	435	c m ₀	c Stcu m ₀ b Cu y	b y c Frcu	c
14	1.6	0.17	1.5	0.16	NNE: N: NNW	SW: SSW	1.3	0.13	206	c m ₀	c Nbst r r ₀	c Stcu	c
15	6.3	0.67	5.7	0.61	SSW: NW	NW: WSW	2.1	0.12	192	c R	c Frcu Cist	c Acu Cumb R	c b
16	5.3	0.56	5.2	0.55	WSW	W: WSW	3.5	0.22	257	b c b	b c Acu	c bc Frcu Cu y	b
17	9.1	0.93	9.0	0.92	WSW: WNW	WNW: Calm	2.0	0.11	187	b c	c Stcu y	c Frcu y	c b
18	9.1	0.93	8.5	0.87	Calm	Calm: E	0.7	0.00	75	b w c m	c Ci Ast m so-ha	c Stcu y	c b
19	4.1	0.42	3.3	0.33	Calm: N	Calm	0.6	0.02	98	b w c m	c bc Frcu Cu	bc c Cu Ast y	c
20	3.9	0.40	3.6	0.37	Calm: E	E: NE	4.8	0.30	227	c b f	f bc c Acu	bc Cu Ci	b c
21	0.5	0.05	0.3	0.03	NE: E	ENE: E	3.6	0.22	233	c	c Nbst r r ₀ m	c Nbst r r ₀ m	r c
22	4.2	0.43	3.4	0.35	E: ENE	E	5.1	0.17	211	c r r c f	c f c Stcu m ₀	c Acu m ₀	c r c m ₀
23	0.2	0.02	0.1	0.01	SE: Calm	Calm	0.3	0.00	76	c b c m ₀	c Stcu m ₀	c Acu	c r m ₀
24	5.7	0.56	5.4	0.52	Calm: SSW	S: Calm	1.1	0.05	137	c r r ₀ m ₀	c r c Stcu m ₀	c Stcu	c b
25	8.6	0.84	8.4	0.82	Calm: SSW	SSW: Calm	0.3	0.02	125	b m ₀	b bc Cu	bc b Cu y	b
26	5.8	0.57	5.8	0.57	Calm	ENE: Calm	1.3	0.04	103	b w c f	c f c Nbst r m	r m c Stcu	b m ₀
27	7.5	0.73	6.3	0.61	Calm: ENE	E: Calm	1.0	0.05	129	c m	c m c Stcu	c b Frcu	b m ₀ c
28	1.8	0.18	1.5	0.15	Calm: ENE	E: Calm	2.1	0.10	161	c w m	c Stcu m ₀	c bc Frcu m ₀	c m ₀
29	1.3	0.13	1.2	0.12	Calm	Calm	0.1	0.00	88	c m	c St m ₀	c Stcu b Cu m ₀	bc c m ₀
30	5.1	0.50	3.7	0.36	NE	NE	3.6	0.25	261	c m ₀	c Acu m ₀	c Stcu m ₀	c m ₀
Means	5.1	0.53	4.6	0.49	..	..	..	0.18	188				
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 59°.3, being 5°.2 higher than
 The mean *Temperature of the Dew Point* for the month was 55°.9, being 4°.8 higher than
 The mean *Degree of Humidity* for the month was 76.4, being 3.5 less than
 The mean *Elastic Force of Vapour* for the month was 0.451 in., being 0.072 in. greater than
 The mean amount of *Cloud* for the month (a clear sky being represented by 0 and an overcast sky by 5)* was 5.1.
 The mean proportion of *Sunshine* for the month (constant sunshine being represented by 1) was 0.372. The maximum daily amount of *Sunshine* was 10.1 hours on September 4.
 The highest reading of the *Solar Radiation Thermometer* was 143°.9 on September 4; and the lowest reading of the *Terrestrial Radiation Thermometer* was 38°.3 on September 18.
 The *Proportions of Wind* referred to the cardinal points were N.11, E.20, S.20, W.18, calm or nearly calm conditions 31, the whole month being represented by 100.
 The *Greatest Pressure of the Wind* in the month was 10.3 lbs. on the square foot on September 13. The mean daily *Horizontal Movement of the Air* for the month was 188 miles; the greatest daily value was 435 miles on September 13 and the least daily value was 75 miles on September 18.
Rain (0.005 in. or over) fell on 8 days in the month, amounting to 0.799 in., as measured by gauge No.6 partly sunk below the ground; being 1.349 in. less than the average fall for the 65 years, 1841-1905.

* This scale, ranging from 0 to 8, was adopted from January 1, 1949, in accordance with the new International Code.

TABLE XVII. - DAILY RESULTS OF THE METEOROLOGICAL OBSERVATIONS

Month and Day 1949	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			Highest in Sun's Rays	Lowest on the Grass	Mean			Greatest	Least			
Oct.1	29.991	65.3	51.4	13.9	57.3	+ 3.2	52.7	48.4	8.9	18.3	2.8	72	117.8	44.0	60.1	0.000	4.2	11.7
2	30.027	67.0	48.6	18.4	56.6	+ 2.9	52.0	47.5	9.1	20.9	2.2	71	104.2	40.7	60.1	0.000	7.9	11.6
3	30.129	75.0	50.3	24.7	61.4	+ 8.1	56.9	53.2	8.2	17.4	1.4	74	121.4	43.6	60.0	0.000	4.9	11.5
4	30.137	74.0	53.3	20.7	61.9	+ 8.9	58.0	54.9	7.0	17.4	1.4	77	123.0	42.5	60.0	0.000	8.4	11.4
5	29.939	71.3	51.6	19.7	60.2	+ 7.4	57.1	54.5	5.7	16.6	0.0	82	115.7	40.2	59.8	0.000	4.5	11.4
6	29.904	72.9	54.5	18.4	60.9	+ 8.4	57.7	55.1	5.8	18.3	0.0	81	116.0	47.7	59.7	0.000	5.2	11.3
7	29.833	68.4	53.5	14.9	59.0	+ 6.7	56.1	53.7	5.3	15.2	1.2	83	108.2	43.8	59.6	0.000	4.2	11.3
8	29.675	68.5	51.2	17.3	59.1	+ 7.1	56.2	53.8	5.3	22.6	0.0	83	111.5	39.6	59.6	0.000	4.2	11.2
9	29.644	66.6	53.4	13.2	60.1	+ 8.5	57.5	55.3	4.8	12.2	0.7	85	108.7	44.9	59.4	0.260	2.8	11.2
10	29.788	70.0	51.4	18.6	59.0	+ 7.7	56.8	55.1	3.9	13.8	0.0	87	113.1	42.9	59.3	0.000	3.6	11.1
11	29.795	66.8	56.5	10.3	61.9	+11.0	60.4	59.3	2.6	5.5	0.9	91	88.3	49.5	59.3	0.226	1.0	11.0
12	30.100	71.0	52.7	18.3	59.8	+ 9.2	57.1	54.9	4.9	16.9	0.4	84	121.3	42.8	59.3	0.000	8.7	11.0
13	30.216	68.4	51.9	16.5	59.0	+ 8.7	57.5	56.3	2.7	10.9	0.0	91	119.4	42.0	59.2	0.000	1.7	10.9
14	30.021	70.0	51.7	18.3	60.3	+10.2	57.9	56.0	4.3	11.2	0.8	86	115.3	41.3	59.2	0.000	4.6	10.8
15	29.804	70.0	57.8	12.2	64.2	+14.3	60.0	56.9	7.3	18.7	1.6	77	121.7	54.0	59.2	0.000	8.6	10.8
16	29.655	63.0	54.5	8.5	59.3	+ 9.5	57.9	56.8	2.5	4.7	1.2	92	69.6	42.2	58.9	0.267	0.3	10.7
17	29.576	62.8	47.5	15.3	54.7	+ 5.1	50.6	46.5	8.2	16.9	1.8	74	121.3	39.6	59.0	0.093	7.2	10.6
18	29.453	63.4	47.0	16.4	57.0	+ 7.7	55.1	53.6	3.4	7.7	1.7	88	70.4	39.1	58.9	0.389	0.0	10.6
19	29.461	60.7	49.6	11.1	54.5	+ 5.4	50.8	47.2	7.3	16.1	2.0	76	111.8	45.3	58.6	0.190	6.0	10.5
20	29.479	59.4	47.6	11.8	52.3	+ 3.5	50.2	48.1	4.2	10.0	0.6	86	118.3	42.3	58.5	0.835	4.0	10.4
21	29.432	56.1	42.6	13.5	49.3	+ 0.7	47.0	44.5	4.8	12.0	0.6	83	97.3	34.6	58.1	0.190	2.5	10.4
22	29.530	55.7	41.0	14.7	46.8	- 1.5	45.2	43.3	3.5	8.5	0.8	87	103.0	33.0	57.9	0.113	1.5	10.3
23	29.407	59.0	39.5	19.5	49.2	+ 1.1	48.2	47.3	1.9	5.3	0.7	93	73.4	30.9	57.5	0.988	0.0	10.2
24	29.538	56.7	45.2	11.5	49.5	+ 1.6	46.5	42.9	6.6	13.6	1.1	79	82.3	37.8	57.1	0.000	0.4	10.2
25	29.390	68.8	47.6	21.2	57.8	+10.1	55.2	53.0	4.8	11.6	1.7	84	103.3	45.0	57.1	0.181	2.2	10.1
26	29.303	58.0	37.6	20.4	48.2	+ 0.6	46.9	45.4	2.8	6.1	0.0	90	49.5	31.5	56.8	1.274	0.0	10.0
27	30.089	47.0	31.5	15.5	38.5	- 9.0	35.8	31.2	7.3	17.2	0.7	75	83.3	25.5	56.4	0.000	5.7	10.0
28	30.268	50.8	29.6	21.2	39.1	- 8.3	37.0	33.7	5.4	12.6	0.0	81	82.3	23.2	56.1	0.009	3.5	9.9
29	30.212	50.7	33.7	17.0	41.5	- 5.8	39.3	36.1	5.4	11.3	1.9	81	70.3	25.5	55.8	0.000	0.0	9.9
30	30.278	50.5	31.4	19.1	39.3	- 7.9	37.5	34.8	4.5	13.2	0.0	84	80.5	24.6	55.3	0.003*	2.5	9.8
31	30.341	48.9	29.8	19.1	38.3	- 8.8	36.2	32.8	5.5	15.6	0.0	80	87.2	23.0	54.9	0.003*	4.6	9.8
Means	29.820	63.1	46.6	16.5	54.1	+ 4.1	51.4	48.8	5.3	13.5	0.9	82.5	100.3	38.8	58.4	Sum 5.021	3.7	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.

* Rainfall (Column 16). The amounts entered on October 30 and 31 were derived from hoar frost.

The mean reading of the Barometer for the month was 29.820 in., being 0.092 in. higher than the average for the 65 years, 1841-1905.

TEMPERATURE OF THE AIR.

The highest in the month was 75° 0 on October 3; the lowest in the month was 29° 6 on October 28; and the range was 45° 4.

The mean of all the highest daily readings in the month was 63° 1, being 6° 1 higher than the average for the 65 years, 1841-1905.

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

The mean of the daily ranges was 16° 5, being 3° 3 greater than the average for the 65 years, 1841-1905.

The mean for the month was 54° 1, being 4° 1 higher than the average for the 65 years, 1841-1905.

TABLE XVII. - DAILY RESULTS OF THE METEOROLOGICAL OBSERVATIONS

Month and Day 1949	RECORD OF THE NIGHT SKY				WIND AS DEDUCED FROM SELF-REGISTERING ANEMOMETERS					CLOUDS AND WEATHER			
	Polaris		δ URSÆ MINORIS		OSLER'S			Robinson's					
	Duration	Fraction of Total Exposure	Duration	Fraction of Total Exposure	General Direction		Pressure on the Square Foot		Horizontal Movement of the Air				
					A.M.	P.M.	Greatest	Mean of 24 Hourly Measures		0 ^h to 6 ^h	6 ^h to 12 ^h	12 ^h to 18 ^h	18 ^h to 24 ^h
hours		hours				lbs.	lbs.	miles					
Oct.1	4.2	0.39	3.1	0.29	NNE:NE	N: Calm	0.9	0.04	162	c m _o	c bc Cu Acu m _o	b c Acu y	c b c m _o
2	9.3	0.86	9.1	0.84	Calm	Calm: SW	0.4	0.00	88	c m _o	c m _o b Cu y	b Ci y	b m
3	8.9	0.83	8.1	0.76	SW	Calm	1.0	0.02	127	b	b c Acu m b	b bc Ci y	b
4	8.3	0.77	8.1	0.75	Calm	SE: Calm	1.2	0.04	104	b c m	b Frcu y	b Frcu y c b	b m _o
5	2.9	0.27	2.7	0.25	Calm	SW	0.6	0.01	115	b o fe	o fe b Ci	b Ci y	b c
6	7.3	0.68	6.2	0.58	SW: Calm	Calm	0.1	0.00	74	c m	c fe b Acu	b c Acu Oi	c b
7	9.3	0.86	7.5	0.69	Calm: SE	E: Calm	1.5	0.07	150	b c w m _o	c m _o bc Frcu	bc Frcu b	b m
8	0.0	0.00	0.0	0.00	Calm: E	ENE	1.4	0.05	131	b m fe	fe bc Ci Cu	b Ci Frcu y c	c r _o
9	10.0	0.91	9.8	0.89	Calm: WSW	WSW: SSW	1.1	0.07	169	c r _o R m _o	c r _o c bc Frst	c so-ha c Stcu b	b
10	1.0	0.09	0.3	0.03	Calm	S: SE	1.0	0.03	117	b w c	c fe c Cu	c bc Acu Ci prhn	c
11	11.0	1.00	10.9	0.99	SSE: S	SSW: S	7.5	0.38	271	c	c Nbst ir	c Nbst r R b	b
12	7.2	0.65	6.9	0.63	SSW: SW	SW: SSW	1.5	0.10	211	b	b bc Cu Frcu Ci	b bc Cu Frcu b	b w
13	7.1	0.65	6.9	0.63	Calm	Calm	0.2	0.00	71	b c fe	fe c Stcu	c Stcu	c b w
14	0.4	0.04	0.1	0.01	Calm: SE	SE: SSE	0.9	0.04	131	b w c	c Stcu b Frcu	b Frcu c	c
15	5.6	0.49	5.4	0.47	SSW: SW	SW: S: SSE	5.4	0.38	281	c p _o c	c b bc Cu	bc Cu c	c b c
16	4.2	0.37	3.3	0.29	SSW	SSW: S	3.5	0.10	196	c r b	b c Nbst r c	c Nbst ir c	c b c r
17	8.1	0.71	7.1	0.62	S: SW	SW	12.0	0.45	336	c ir	c b c Cu Cumb	c bc Cu Frcu y b	b
18	3.3	0.29	2.8	0.24	SSW	SSW: SW	26.0	2.27	550	b c r	c Nbst rr	c Nbst Frst q ir	c q r r b
19	5.2	0.46	3.7	0.32	SW	SW: SSW	11.8	0.91	392	b c b	b Ast	c Ast Cumb p bc	c b c R
20	0.0	0.00	0.0	0.00	SSW: SW	SSW	9.3	0.47	315	R tl c	c b c Cumb p	c Cumb ir tl c	c tl r
21	10.9	0.95	10.8	0.94	SSW: SW	SW: SSW	2.1	0.13	224	rr c	c Ast	c Ast bc Cu b	b
22	10.0	0.83	9.6	0.80	S	SSW: SW	5.6	0.20	255	b	c ir c Ast	b c Ast r c	b
23	5.1	0.43	0.1	0.01	SSW: S: SSE	SSW: WSW	12.2	0.73	315	b c	c Nbst rr c Ast	c Nbst r r r R	Rr c
24	2.6	0.22	2.3	0.19	SW	SW: S	2.6	0.17	232	c	c Ast Frst	c bc Cu Ci	b c
25	2.0	0.17	1.8	0.15	SE: SSE	S: SSW	15.7	1.29	372	c ir	c ir c Nbst	bc Nbst Acu Ci p c r	c b o r
26	11.3	0.94	11.1	0.93	SSW: NNW	NW: NNW	19.0	1.85	466	o rr	c Nbst rr	rr c Nbst	b
27	11.7	0.97	6.3	0.52	WSW	NW: Calm	0.7	0.05	168	b x m	b m b y	b y b Frcu m	b f x
28	10.3	0.86	7.0	0.59	Calm	SSE: SE	1.2	0.03	124	b x f Fe	b f bc Cist so-ha	so-ha c Acu	c b m _o
29	10.0	0.80	9.3	0.74	SE	SE: Calm	0.2	0.01	122	b x m _o c	c Acu m _o	c Acu m _o	c b lu-ha m
30	12.5	1.00	11.7	0.94	Calm	E: Calm	0.1	0.00	75	b m x	b F f	b f	b f
31	8.1	0.64	7.1	0.57	Calm	E: ENE	1.6	0.05	121	b f x	b f bc Acu m	bc m b Ci Frcu	b c
Means	6.7	0.58	5.8	0.51	..	..	..	0.32	209				
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 51°.4, being 3°.5 higher than
 The mean *Temperature of the Dew Point* for the month was 48°.8, being 3°.2 higher than
 The mean *Degree of Humidity* for the month was 82.5, being 2.4 less than
 The mean *Elastic Force of Vapour* for the month was 0.347 in., being 0.039 in. greater than
 The mean amount of *Cloud* for the month (a clear sky being represented by 0 and an overcast sky by 8)* was 4.4.
 The mean proportion of *Sunshine* for the month (constant sunshine being represented by 1) was 0.347. The maximum daily amount of *Sunshine* was 8.7 hours on October 12.
 The highest reading of the *Solar Radiation Thermometer* was 123°.0 on October 4; and the lowest reading of the *Terrestrial Radiation Thermometer* was 25°.0 on October 31.
 The *Proportions of Wind* referred to the cardinal points were N.4, E.9, S.38, W.19, calm or nearly calm conditions 30, 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 October 18. The mean daily *Horizontal Movement of the Air* for the month was 209 miles; the greatest daily value was 550 miles on October 18 and the least daily value was 71 miles on October 13.
Rain (0.005 in. or over) fell on 13 days in the month, amounting to 5.021 in., as measured by gauge No.6 partly sunk below the ground; being 2.239 in. greater than the average fall for the 65 years, 1841-1905.
 * This scale, ranging from 0 to 8, was adopted from January 1, 1949, in accordance with the new International Code.

TABLE XVII. - DAILY RESULTS OF THE METEOROLOGICAL OBSERVATIONS

Month and Day 1949	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				
Nov. 1	30.338	46.8	29.6	17.2	38.5	- 8.5	36.1	32.1	6.4	18.5	1.0	77	84.9	25.1	54.4	0.000	4.4	9.7
2	30.320	51.6	27.5	24.1	37.2	- 9.6	35.1	31.5	5.7	18.2	0.0	80	81.8	20.8	54.0	0.003*	4.7	9.6
3	30.223	51.9	32.6	19.3	42.5	- 4.1	40.3	37.1	5.4	10.4	0.9	81	71.2	24.4	53.7	0.000	1.2	9.6
4	30.069	56.2	42.6	13.6	49.5	+ 3.1	46.7	43.5	6.0	9.6	2.6	80	82.3	34.5	53.3	0.000	0.2	9.5
5	29.369	51.1	40.4	10.7	47.7	+ 1.6	46.0	44.1	3.6	6.6	1.0	87	54.6	35.0	53.0	0.235	0.0	9.5
6	29.105	47.7	35.6	12.1	41.0	- 4.8	39.0	36.1	4.9	13.7	1.4	83	83.3	30.0	52.6	0.035	5.4	9.4
7	29.149	48.4	35.4	13.0	40.9	- 4.5	38.9	36.0	4.9	12.0	1.1	82	72.0	29.8	52.6	0.005	5.1	9.3
8	29.386	49.0	39.0	10.0	43.6	- 1.4	40.6	36.4	7.2	16.0	2.8	75	79.1	31.4	52.2	0.030	4.6	9.3
9	29.512	56.5	40.1	16.4	47.1	+ 2.5	45.7	44.1	3.0	4.8	1.0	89	62.4	35.3	52.0	0.534	0.0	9.2
10	29.544	55.8	46.0	9.8	49.8	+ 5.5	46.1	41.7	8.1	15.4	2.9	73	94.3	39.8	51.9	0.000	6.6	9.2
11	29.540	56.1	44.6	11.5	50.7	+ 6.7	49.0	47.2	3.5	6.4	1.5	88	60.9	38.6	51.8	0.079	0.0	9.1
12	29.474	52.4	43.2	9.2	48.8	+ 5.1	45.6	41.7	7.1	9.1	1.6	76	70.6	38.0	51.7	0.039	2.6	9.1
13	29.556	48.0	39.1	8.9	44.0	+ 0.5	40.9	36.5	7.5	12.2	4.3	75	72.2	33.7	51.5	0.000	3.7	9.0
14	29.930	48.9	36.6	12.3	43.2	- 0.1	40.2	36.0	7.2	14.7	2.2	75	78.9	32.4	51.5	0.000	4.3	9.0
15	30.110	48.0	27.7	20.3	36.2	- 6.9	34.9	32.7	3.5	12.5	0.0	87	70.3	23.0	51.3	0.000	4.0	8.9
16	29.985	45.0	29.6	15.4	37.1	- 5.7	36.3	35.0	2.1	3.2	0.0	92	75.3	22.5	51.0	0.000	1.6	8.8
17	29.566	45.5	36.6	8.9	41.8	- 0.8	39.7	36.7	5.1	9.8	1.9	82	64.3	32.9	50.7	0.000	0.1	8.8
18	29.302	50.0	34.6	15.4	44.3	+ 1.9	43.0	41.4	2.9	6.5	0.0	89	62.3	28.0	50.5	0.025	0.0	8.8
19	29.421	51.9	36.0	15.9	43.8	+ 1.5	42.4	40.6	3.2	7.5	1.1	88	78.9	30.5	50.4	0.070	2.6	8.7
20	29.529	48.0	35.1	12.9	41.6	- 0.6	41.0	40.2	1.4	3.8	0.0	95	44.8	28.0	50.1	0.034	0.0	8.7
21	29.165	57.4	45.5	11.9	51.0	+ 8.9	48.8	46.4	4.6	11.8	2.2	85	90.3	37.5	50.1	0.497	2.5	8.6
22	29.209	52.1	43.4	8.7	46.4	+ 4.3	44.3	41.7	4.7	9.9	1.8	84	77.4	35.3	50.0	0.000	1.9	8.6
23	29.029	49.1	39.7	9.4	45.2	+ 3.2	44.0	42.5	2.7	4.4	0.0	91	64.9	30.8	49.9	0.190	0.1	8.5
24	29.173	48.8	45.8	3.0	47.2	+ 5.2	46.1	44.8	2.4	4.9	1.4	91	50.5	44.5	49.9	0.150	0.0	8.5
25	29.293	49.2	46.3	2.9	47.9	+ 6.0	47.1	46.2	1.7	3.6	1.4	94	53.9	45.5	49.9	0.147	0.0	8.4
26	29.362	47.9	45.8	2.1	46.9	+ 5.1	46.2	45.3	1.6	2.2	0.0	95	51.8	43.5	49.9	0.140	0.0	8.4
27	29.423	47.3	41.8	5.5	45.0	+ 3.3	44.2	43.3	1.7	3.5	0.0	93	57.0	37.6	49.8	0.000	0.0	8.3
28	29.704	44.6	36.3	8.3	41.8	+ 0.3	39.8	36.9	4.9	8.6	2.5	83	53.7	30.0	49.8	0.014	0.7	8.3
29	29.951	41.1	30.1	11.0	36.6	- 4.6	35.2	32.9	3.7	7.8	0.0	86	45.8	23.7	49.8	0.000	0.5	8.3
30	29.944	48.9	38.8	10.1	44.9	+ 3.9	42.4	39.0	5.9	9.5	3.1	80	54.2	34.0	49.5	0.000	0.0	8.2
Means	29.589	49.8	38.2	11.7	44.1	+ 0.6	42.2	39.7	4.4	9.2	1.3	84.5	68.1	32.5	51.3	Sum 2.227	1.9	-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 8) 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.

* Rainfall (Column 16). The amount entered on November 2 was derived from hoar frost.

The mean reading of the Barometer for the month was 29.589 in., being 0.176 in. lower than the average for the 65 years, 1841-1905.

TEMPERATURE OF THE AIR.

The highest in the month was 56° 5 on November 9; the lowest in the month was 27° 5 on November 2; and the range was 29° 0.

The mean of all the highest daily readings in the month was 49° 8, being 0° 9 higher than the average for the 65 years, 1841-1905.

The mean of all the lowest daily readings in the month was 38° 2, being 0° 2 lower than the average for the 65 years, 1841-1905.

The mean of the daily ranges was 11° 7, being 1° 2 greater than the average for the 65 years, 1841-1905.

The mean for the month was 44° 1, being 0° 6 higher than the average for the 65 years, 1841-1905.

TABLE XVII. - DAILY RESULTS OF THE METEOROLOGICAL OBSERVATIONS

Month and Day 1949	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		Oh to eh	eh to 12h	12h to 18h	18h to 24h
hours		hours				lbs.	lbs.	miles					
Nov.1	12.0	0.96	9.1	0.73	Calm: E	E: Calm	3.0	0.07	116	c b x c	b f b Ci so-ha	bc Ci Acu so-ha prhn y	b f x
2	12.5	1.00	12.5	1.00	Calm	Calm: S	0.1	0.00	124	ff x	f b c Acu m _o	b bc Acu Ci b m _o	b m _o
3	4.7	0.38	3.7	0.30	S	S	0.6	0.08	235	b m _o x	bc prhn c Acu Cist	c Acu Cicu m _o	c b c m _o
4	1.2	0.10	0.7	0.06	SSW	SSW	3.3	0.30	297	c m _o	c Stcu m _o	c Stcu	c
5	8.9	0.69	8.9	0.69	SSW	SSE: NNW: W	7.0	0.88	383	c	c Nbst r _o r	c Nbst rr	c r _o lu-ha b
6	7.9	0.61	7.7	0.59	WSW	SW	2.1	0.10	207	b	b m bc Ci	c Cist Ast m	c r c b
7	9.3	0.71	7.3	0.56	WSW: W	WSW	5.3	0.29	312	b c p b	b Ci c Cumb	c Cu Acu b	b c
8	1.4	0.11	0.4	0.03	WSW: NW	NW: NNW: WSW	6.0	0.38	282	c b c m	c r _o bc Cu Frcu	c bc Cu Frcu	c
9	11.9	0.92	11.3	0.87	SW: SE: S	S: SW	6.1	0.49	302	c rr	c Nbst d _o rr	c Nbst Acu d _o p _o b	b m
10	7.0	0.54	5.4	0.42	SW: WSW	WSW	9.4	0.96	415	b	b y	b Frcu y	b c
11	3.3	0.25	2.2	0.17	SW	SSW: WSW	5.4	0.32	256	c	c Nbst Id _o	d _o c Nbst r c	c
12	12.7	0.97	12.4	0.95	SW	SW: WSW	20.0	1.46	519	c	c b c Frcu p	c Nbst Cumb p c	b
13	10.9	0.84	9.9	0.77	SW: WSW	NNW: NW	6.2	0.82	392	b m _o	bc Ci Frcu m _o	c Stcu m _o	c b m _o
14	11.2	0.86	6.6	0.51	NNW: WSW	NW: Calm	4.2	0.29	260	b w m _o	b m bc Frcu	bc c Ci Cu Cist	c b m f
15	12.9	0.99	12.5	0.96	Calm	Calm: SSE	0.0	0.00	76	b ff x	Fe b f	b f m	b m x
16	2.3	0.18	0.7	0.06	Calm	SE	0.8	0.04	125	b m x f	f Fe x b so-ha Ci m	bc c St m _o	c m _o
17	0.3	0.03	0.2	0.01	SE: SSE	SSE	6.3	0.46	280	c	c St	c Stcu	c d _o ir _o
18	7.7	0.60	4.8	0.37	S: Calm	Calm	4.7	0.15	130	c ir _o	c Stcu f m	c Stcu ff	Fe f r _o
19	0.0	0.00	0.0	0.00	Calm	Calm: E: NNE	0.9	0.03	124	c bc ff	c Stcu f b Ci so-ha	b c Stcu m	c rr m
20	3.9	0.29	3.8	0.28	N: NNW: W	SW: SSE	6.0	0.12	190	r r _o c m	o St m f	c Stcu f b m	b m x c
21	8.7	0.64	8.2	0.61	S: SSW	SW: SSW	13.0	1.34	457	c rr	rr d c Cu Cumb	bc Cu Frcu b	b c r b
22	7.9	0.59	6.5	0.48	SSW: S	S: SSE	3.3	0.21	262	b c p	c Ci Cumb	c b Acu Cu	bc ir _o
23	0.0	0.00	0.0	0.00	SSE: Calm	ENE: NE	1.4	0.06	173	c b c m	c r _o m c Stcu Cumb	c Stcu m _o	rr
24	0.0	0.00	0.0	0.00	NE	NNE: N	4.0	0.29	310	rr c m _o	c Nbst m _o	c Nbst d _o m _o	c id r _o
25	0.0	0.00	0.0	0.00	N: NNE	N: NNW	1.7	0.07	200	c r _o d r	c Nbst d r m	c Nbst d _o m	c ir
26	0.2	0.01	0.1	0.01	Calm: NNE	Calm	0.1	0.00	116	r c r m	c Nbst r d d _o f m	c Nbst d _o r _o m	r _o c m
27	1.7	0.12	0.0	0.00	Calm	NNE: N	1.2	0.03	135	c f	c Nbst f	c m _o	c m _o
28	12.5	0.91	12.3	0.90	N	NNW	4.1	0.23	276	c m _o x	c Ci Frcu m _o	c Cu p bc m _o	b
29	6.1	0.44	5.7	0.42	Calm: SW	SW	0.4	0.03	187	b m x	c Acu Ast f	b c Acu Ci b f	b m c
30	0.3	0.02	0.1	0.01	SW	SW	1.6	0.15	292	c m	c Stcu m	c Nbst d c	c lu-ha
Means	6.0	0.46	5.1	0.39	..	..	..	0.32	248				
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 42° .2, being 0° .3 higher than
 The mean *Temperature of the Dew Point* for the month was 39° .7, being the same as
 The mean *Degree of Humidity* for the month was 84.5, being 2.1 less than
 The mean *Elastic Force of Vapour* for the month was 0.245 in., being 0.001 in. less than
 The mean amount of *Cloud* for the month (a clear sky being represented by 0 and an overcast sky by 8)* was 5.6.
 The mean proportion of *Sunshine* for the month (constant sunshine being represented by 1) was 0.212. The maximum daily amount of *Sunshine* was 6.6 hours on November 10.
 The highest reading of the *Solar Radiation Thermometer* was 94° .3 on November 10; and the lowest reading of the *Terrestrial Radiation Thermometer* was 20° .8 on November 2.
 The *Proportions of Wind* referred to the cardinal points were N.15, E.8, S.32, W.26, calm or nearly calm conditions 19, the whole month being represented by 100.
 The *Greatest Pressure of the Wind* in the month was 20.0 lbs. on the square foot on November 12. The mean daily *Horizontal Movement of the Air* for the month was 248 miles; the greatest daily value was 519 miles on November 12 and the least daily value was 76 miles on November 15.
Rain (0.005 in. or over) fell on 16 days in the month, amounting to 2.227 in., as measured by gauge No.6 partly sunk below the ground; being 0.007 in. greater than the average fall for the 65 Years, 1841-1905.
 * This scale, ranging from 0 to 8, was adopted from January 1, 1949, in accordance with the new International Code.

TABLE XVII. - DAILY RESULTS OF THE METEOROLOGICAL OBSERVATIONS

Month and Day 1949	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			Highest in Sun's Rays	Lowest on the Grass	Mean			Greatest	Least			
Dec. 1	29.768	47.0	42.6	4.4	45.4	+ 4.5	43.4	40.9	4.5	5.2	2.0	84	52.6	38.3	49.4	0.030	0.0	8.2
2	29.729	45.4	37.6	7.8	41.1	+ 0.2	38.2	33.6	7.5	11.2	4.3	75	49.5	29.2	49.2	0.000	1.1	8.2
3	29.478	55.7	39.2	16.5	50.7	+ 9.6	48.2	45.5	5.2	7.0	3.5	82	56.8	35.5	49.3	0.029	0.0	8.1
4	29.449	52.6	42.6	10.0	46.8	+ 5.5	42.8	37.4	9.4	17.1	4.9	69	64.3	37.3	49.1	0.000	5.8	8.1
5	29.554	49.5	40.0	9.5	44.9	+ 3.4	41.6	37.0	7.9	12.4	3.5	74	62.5	35.2	49.1	0.028	0.7	8.1
6	29.665	54.0	39.0	15.0	46.0	+ 4.5	44.2	42.0	4.0	6.4	2.0	86	55.9	34.2	49.0	0.017	0.0	8.0
7	29.490	54.7	51.0	3.7	53.1	+11.8	50.1	47.1	6.0	9.0	2.2	79	65.3	46.2	49.0	0.010	1.0	8.0
8	29.300	52.7	34.2	18.5	42.8	+ 1.8	40.5	37.3	5.5	11.7	2.2	80	52.0	27.7	48.9	0.210	0.0	8.0
9	29.311	40.0	32.4	7.6	35.8	- 4.8	33.5	29.5	6.3	12.4	2.2	77	55.0	25.9	48.9	0.011	3.7	8.0
10	29.699	39.0	31.4	7.6	35.8	- 4.6	34.5	32.3	3.5	5.3	1.3	87	45.2	24.8	48.7	0.025	0.0	8.0
11	30.149	38.2	32.0	6.2	35.7	- 4.5	34.2	31.6	4.1	5.2	1.6	85	48.0	26.4	48.5	0.000	0.6	7.9
12	30.176	40.7	27.9	12.8	34.4	- 5.9	32.4	28.9	5.5	11.8	0.0	79	46.0	22.3	48.1	0.000	1.4	7.9
13	29.846	52.1	40.7	11.4	47.7	+ 7.2	45.2	42.2	5.5	10.1	3.3	81	75.1	37.0	48.0	0.020	0.4	7.9
14	29.548	48.5	42.0	6.5	45.7	+ 5.0	44.0	41.9	3.8	7.9	1.9	86	60.8	34.0	47.7	0.438	3.5	7.9
15	29.360	47.1	35.6	11.5	43.5	+ 2.7	41.2	38.0	5.5	11.9	1.6	81	52.0	27.5	47.5	0.183	0.0	7.9
16	29.558	51.1	33.0	18.1	42.9	+ 2.2	41.2	38.9	4.0	5.3	2.5	85	54.0	24.5	47.5	0.000	0.2	7.9
17	29.348	51.1	38.5	12.6	45.1	+ 4.7	41.5	36.4	8.7	18.1	1.6	72	58.0	31.3	47.5	0.109	3.3	7.8
18	29.476	52.7	38.7	14.0	42.6	+ 2.6	39.8	35.7	6.9	10.2	1.4	76	52.0	31.5	47.2	0.221	0.0	7.8
19	29.380	53.0	39.8	13.2	47.3	+ 7.8	42.9	36.9	10.4	16.4	3.9	67	65.3	29.8	47.2	0.006	2.7	7.8
20	29.721	45.6	33.1	12.5	38.7	- 0.3	36.2	32.0	6.7	13.2	1.7	76	62.3	23.1	47.1	0.000	3.1	7.8
21	29.923	46.1	35.0	11.1	39.5	+ 0.8	37.6	34.6	4.9	13.1	1.5	83	59.8	25.5	47.0	0.025	5.7	7.8
22	30.170	49.4	33.4	16.0	42.3	+ 3.9	40.4	37.7	4.6	9.1	2.3	84	60.9	23.8	46.9	0.016	1.6	7.8
23	30.288	49.3	47.0	2.3	48.6	+10.4	47.4	46.1	2.5	3.4	1.4	91	50.0	44.2	46.7	0.000	0.0	7.8
24	30.242	47.0	40.5	6.5	45.2	+ 7.0	44.3	43.2	2.0	2.1	0.9	93	47.0	37.5	46.6	0.000	0.0	7.8
25	29.888	50.2	39.9	10.3	45.1	+ 6.7	42.6	39.3	5.8	10.0	1.5	80	55.7	34.4	46.6	0.000	0.0	7.8
26	29.676	54.0	50.2	3.8	52.5	+13.9	50.4	48.3	4.2	6.9	2.2	86	59.3	47.0	46.8	0.093	0.0	7.8
27	29.895	53.0	45.6	7.4	50.4	+11.6	47.8	45.0	5.4	7.6	3.6	81	57.0	35.0	46.8	0.000	0.0	7.9
28	29.961	50.0	42.0	8.0	46.8	+ 7.9	45.3	43.5	3.3	5.2	2.0	88	57.1	31.4	46.9	0.001	0.0	7.9
29	29.815	47.4	37.4	10.0	43.4	+ 4.4	42.0	40.2	3.2	5.2	0.9	88	62.7	29.3	47.0	0.000	0.0	7.9
30	29.743	44.9	36.1	8.8	40.2	+ 1.3	39.3	38.0	2.2	4.1	0.9	92	55.8	28.0	47.0	0.003*	2.8	7.9
31	30.052	40.7	38.0	2.7	39.4	+ 0.7	37.8	35.3	4.1	6.5	1.5	86	48.9	31.8	47.0	0.002*	0.0	7.9
Means	29.731	48.5	38.6	9.9	43.9	+ 3.9	41.6	38.6	5.3	9.1	2.1	81.7	56.3	31.9	47.8	Sum 1.477	1.2	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.

* Rainfall (Column 16). The amount entered on December 30 was derived from hoar frost, and that on December 31 from dew.

The mean reading of the Barometer for the month was 29.731 in., being 0.061 in. lower than the average for the 65 years, 1841-1905.

TEMPERATURE OF THE AIR.

The highest in the month was 55° 7 on December 3; the lowest in the month was 27° 9 on December 12; and the range was 27° 8.

The mean of all the highest daily readings in the month was 48° 5, being 4° 3 higher than the average for the 65 years, 1841-1905.

The mean of all the lowest daily readings in the month was 38° 6, being 3° 1 higher 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 43° 9, being 3° 9 higher than the average for the 65 years, 1841-1905.

TABLE XVII. - DAILY RESULTS OF THE METEOROLOGICAL OBSERVATIONS

Month and Day 1949	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				
					A.M.	P.M.	Greatest	Mean of 24 Hourly Measures		0h to 6h	6h to 12h	12h to 18h	18h to 24h
hours		hours				lbs.	lbs.	miles					
Dec.1	3.6	0.26	3.1	0.23	SW:SSW	SSW:SW	2.5	0.25	314	c m ₀	c Nbst id ₀ m	c Stcu m ₀	c r ₀ r c
2	0.0	0.00	0.0	0.00	WSW:WNW:NW	NW:SW	5.0	0.39	320	c b m ₀	b bc Frcu m ₀	bc c Ast m ₀	c m ₀
3	2.9	0.21	2.7	0.19	SW:WSW	WSW:SW	15.8	2.87	703	c ir ₀	c Acu Prst ir ₀	r ₀ c Nbst	c
4	10.6	0.77	9.6	0.70	SW:W:WSW	WSW:SW	23.5	2.41	609	c gale b	b Ou y	b ₀ Ou y	b
5	3.6	0.26	2.7	0.20	SW	W:WSW	10.0	1.07	442	b c	c p ₀ c Acu	c Nbst ir bc Ou	bc c
6	2.6	0.19	1.5	0.11	SW: Calm	SSW:SW	7.4	0.47	273	c r	c Nbst r f m	c Nbst d ₀ m	d ₀ c
7	0.0	0.00	0.0	0.00	SW	SW	13.5	2.27	563	c	bc c Acu Ou	c Nbst ir ₀	c r ₀
8	7.7	0.56	7.4	0.54	SW:NW:WSW	SW:SSW	5.8	0.27	245	r ₀ rr c	c Stcu m ₀	c Stcu b m ₀	b x
9	2.6	0.19	2.0	0.15	Calm:W:WSW	SSW: Calm	2.5	0.08	177	bc r c	c b x m bc Acu	bc Ci b m ₀	b c m
10	11.6	0.84	10.0	0.73	Calm:NNW	NNW	6.4	0.69	272	c m x	c Nbst s ₀ rs m ₀	c Acu Ci m	c b m
11	11.4	0.83	10.5	0.77	NNW	NNW	3.3	0.21	224	b m x	b bc Ci c Stcu m ₀	c Stcu m ₀	c b m
12	0.4	0.03	0.2	0.01	NW:SW	SW:SSW	1.0	0.05	174	b x c m ₀	c b Ci f	b Acu Cicu f c m	c
13	2.1	0.16	1.8	0.13	SSW:SW	SSW	4.8	0.57	334	c	c Stcu Prst	c Stcu bc	c ir
14	3.7	0.27	1.9	0.13	SSW	SSW	4.2	0.33	283	c r R	bc Acu m b	bc c Cist Frcu	c rr
15	13.5	0.98	11.8	0.86	SSW:SW:WSW	WNW:WSW	7.6	0.51	335	c r ₀ R b	b c Nbst Umb	c bc Ou Frcu	b
16	1.2	0.09	0.7	0.05	SW:SSW	SSW:SW	4.7	0.40	328	b x	c Acu Ci	c Nbst ir	c
17	14.0	1.00	13.9	0.99	SW:WSW:W	W:WSW	30.0	2.80	637	c r c	c Umb p b c gale	bc Ou gale b y	b
18	5.9	0.42	4.5	0.32	WSW:SW	SW:SSE	9.5	1.00	433	b	b c Stcu Ci	c Nbst rr	r c
19	12.1	0.87	11.8	0.84	WSW:SW	SW:WSW	19.5	1.70	519	r ₀ c b	b c Acu b	b Acu c	c r ₀ b
20	10.1	0.72	8.7	0.62	SW:SSW	S:SSE	1.7	0.07	201	b x	b x m bc Ci m ₀	c Ast Acu m	c b x m
21	14.0	1.00	13.9	0.99	S:SW	SW:SSW	1.0	0.05	229	b c p b x m	b m	b m ₀	b m ₀ x
22	1.0	0.07	0.3	0.02	SSW	SSW	2.6	0.17	278	b m ₀ x	b c Acu Ci m ₀	c Acu Cicu m ₀	c r ₀ c
23	0.0	0.00	0.0	0.00	WSW: Calm	Calm	0.6	0.01	122	c m ₀	c St ff	c St ff	c ff
24	1.2	0.08	0.5	0.04	Calm	Calm:S	0.1	0.00	110	c f m	c St f m	c St f m	c m
25	1.4	0.10	1.0	0.07	S:SSW	SSW:SW	12.0	0.73	359	c m ₀	c Stcu m m ₀	c Stcu m ₀	c m ₀
26	0.0	0.00	0.0	0.00	SW:WSW	WSW:SW	15.5	1.20	481	c r ₀ r	c Stcu m ₀	c Stcu r ₀ d m ₀	d c m ₀
27	10.3	0.73	10.1	0.72	SW:WSW	SW	3.8	0.36	322	c m ₀	c Stcu m ₀ m	c Stcu m b m ₀	b m ₀
28	0.9	0.06	0.3	0.02	SSW	S	0.7	0.02	189	b c m ₀	c Stcu r ₀ m	c Stcu m ₀	c m ₀
29	10.9	0.78	9.5	0.68	Calm	Calm:E	0.3	0.01	110	c m ₀ f x	c Stcu m	c Stcu b ₀ Ci m	b m ₀ f
30	9.4	0.67	7.3	0.52	E	E:ENE	3.4	0.12	212		b f m	b m m ₀	b c m ₀ w
31	3.9	0.28	3.6	0.25	ENE:E	ENE	2.8	0.17	240	c m ₀ w	c Stcu	c Stcu	c
Means	5.6	0.40	4.9	0.35	..	..	..	0.69	324				
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°.6, being 3°.1 higher than
 The mean *Temperature of the Dew Point* for the month was 38°.6, being 2°.2 higher than
 The mean *Degree of Humidity* for the month was 81.7, being 5.8 less than
 The mean *Elastic Force of Vapour* for the month was 0.235 in., being 0.019 in. greater than
 The mean amount of *Cloud* for the month (a clear sky being represented by 0 and an overcast sky by 8)* was 5.6.
 The mean proportion of *Sunshine* for the month (constant sunshine being represented by 1) was 0.153. The maximum daily amount of *Sunshine* was 5.8 hours on December 4.
 The highest reading of the *Solar Radiation Thermometer* was 75°.1 on December 13; and the lowest reading of the *Terrestrial Radiation Thermometer* was 22°.3 on December 12.
 The *Proportions of Wind* referred to the cardinal points were N.6, E.7, S.40, W.36, calm or nearly calm conditions 11, the whole month being represented by 100.
 The *Greatest Pressure of the Wind* in the month was 30.0 lbs. on the square foot on December 17. The mean daily *Horizontal Movement of the Air* for the month was 324 miles; the greatest daily value was 703 miles on December 3 and the least daily value was 110 miles on December 24 and 29.
Rain (0.005 in. or over) fell on 17 days in the month, amounting to 1.477 in., as measured by gauge No.6 partly sunk below the ground; being 0.350 in. less than the average fall for the 65 years, 1841-1905.

* This scale, ranging from 0 to 8, was adopted from January 1, 1949, in accordance with the new International Code.

GREENWICH METEOROLOGICAL OBSERVATIONS, 1949.

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., 1949.	Reading	U. T., 1949.	Reading	U. T., 1949.	Reading	U. T., 1949.	Reading	U. T., 1949.	Reading	U. T., 1949.	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		April		April		September		September	
4. 0. 10	29.566	1. 14. 45	28.310	22. 23. 10	30.105	25. 3. 15	29.532	4. 8. 40	29.836	1. 5. 30	29.585
6. 22. 55	30.392	4. 12. 25	29.266	27. 7. 45	30.095	28. 20. 50	29.869	8. 1. 15	30.116	5. 6. 30	29.684
9. 20. 50	30.240	8. 2. 5	29.825					11. 22. 45	30.072	10. 17. 0	29.909
13. 9. 15	30.338	11. 14. 0	29.593	May		May		14. 22. 15	29.574	14. 9. 35	29.462
16. 20. 50	30.044	16. 6. 15	29.943	1. 8. 35	30.389	5. 6. 0	29.307	19. 10. 25	29.970	15. 9. 40	29.498
18. 8. 40	30.001	17. 13. 25	29.799	8. 7. 30	30.235	8. 19. 0	30.117	23. 12. 0	29.744	22. 21. 45	29.664
20. 8. 45	29.936	19. 19. 45	29.785	10. 10. 30	30.375	17. 3. 45	29.318	27. 9. 0	30.157	24. 6. 0	29.608
22. 10. 25	30.225	29. 15. 50	29.857	21. 8. 45	30.020	24. 7. 40	29.259			30. 5. 10	29.916
24. 23. 20	30.350	24. 1. 0	30.028	27. 0. 40	29.785	28. 6. 20	29.468	October		October	
30. 11. 10	30.668	26. 6. 15	30.190	30. 23. 0	29.636			4. 1. 35	30.198	9. 4. 30	29.590
		31. 19. 45	30.351					10. 21. 00	29.833	11. 15. 10	29.722
February		February		June		June		13. 9. 45	30.250	17. 5. 30	29.442
2. 23. 20	30.627	8. 2. 50	29.788	2. 22. 0	29.753	1. 4. 50	29.545	17. 22. 0	29.721	18. 20. 50	29.287
8. 20. 10	30.014	9. 9. 15	29.236	6. 0. 5	29.978	3. 19. 0	29.438	19. 19. 10	29.555	21. 3. 40	29.295
11. 11. 10	30.102	12. 13. 30	29.728	10. 9. 20	29.986	7. 10. 45	29.644	22. 0. 15	29.586	22. 16. 30	29.429
16. 1. 20	30.260	18. 16. 10	29.868	17. 12. 50	30.156	11. 7. 35	29.907	23. 1. 45	29.578	23. 18. 10	29.185
19. 22. 20	30.183	21. 16. 10	29.991	20. 8. 45	30.160	15. 19. 10	30.062	24. 22. 30	29.719	26. 4. 0	28.870
22. 11. 10	30.282	23. 5. 0	30.149	24. 8. 15	30.033	18. 18. 15	30.048	28. 8. 50	30.301	29. 15. 50	30.194
25. 10. 15	30.448	27. 6. 5	29.844			23. 15. 0	29.913	31. 9. 40	30.363		
28. 9. 20	30.258					25. 18. 0	29.860	November		November	
March		March		July		July		6. 2. 35	29.194	5. 15. 15	29.079
2. 21. 30	30.454	1. 3. 40	29.634	1. 21. 20	30.262	4. 17. 20	29.837	9. 4. 25	29.657	7. 0. 0	28.984
5. 10. 45	30.110	4. 15. 55	29.922	11. 0. 5	30.165	13. 11. 25	29.629	11. 0. 45	29.638	9. 14. 50	29.371
11. 9. 0	29.894	7. 16. 15	29.661	14. 22. 10	29.762	16. 16. 10	29.569	15. 10. 50	30.147	12. 12. 5	29.430
14. 8. 15	29.817	13. 16. 30	29.548	19. 21. 15	30.060	23. 16. 0	29.886	20. 12. 0	29.585	18. 5. 0	29.261
15. 11. 20	30.218	14. 17. 30	29.641	24. 23. 30	29.959	27. 17. 40	29.831	22. 10. 40	29.267	21. 9. 5	29.112
17. 1. 10	29.935	16. 14. 15	29.754	30. 7. 30	30.004			29. 9. 30	29.985	23. 14. 35	28.997
19. 21. 0	30.213	17. 21. 50	29.657					December		December	
23. 9. 0	30.397	21. 3. 0	29.941					2. 19. 10	29.855	2. 1. 0	29.574
27. 9. 45	30.133	25. 15. 5	29.916					5. 0. 30	29.602	4. 3. 10	29.192
April		April		August		August		6. 9. 0	29.711	5. 12. 0	29.462
5. 9. 25	29.819	4. 6. 0	29.444	4. 11. 50	29.907	2. 18. 0	29.091	6. 9. 0	29.711	9. 2. 0	29.222
9. 23. 30	30.204	7. 2. 10	28.940	6. 23. 45	29.886	6. 4. 0	29.712	12. 9. 20	30.237	15. 5. 5	29.205
14. 9. 40	30.051	12. 5. 0	29.680	10. 12. 40	30.175	7. 23. 40	29.462	16. 2. 55	29.661	17. 7. 45	29.196
19. 7. 10	30.162	16. 17. 20	29.786	12. 9. 15	30.401	11. 5. 10	29.923	18. 10. 20	29.626	19. 1. 10	29.183
20. 7. 30	30.070	19. 18. 15	29.980	17. 9. 10	30.153	16. 3. 30	29.948	23. 22. 0	30.338	26. 2. 20	29.552
		21. 15. 20	29.490	24. 9. 50	29.979	23. 5. 55	29.888	28. 2. 10	29.990	30. 13. 10	29.709
				28. 21. 20	30.083	26. 17. 45	29.835				

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 1949

	January	February	March	April	May	June	July	August	September	October	November	December
	in.	in.	in.	in.	in.	in.	in.	in.	in.	in.	in.	in.
HIGHEST	30.668	30.627	30.454	30.204	30.389	30.160	30.262	30.401	30.157	30.363	30.147	30.338
LOWEST	28.310	29.236	29.548	28.940	29.259	29.438	29.569	29.091	29.462	28.870	28.984	29.183
RANGE	2.358	1.391	0.906	1.264	1.130	0.722	0.693	1.310	0.695	1.493	1.163	1.155

The highest reading in the year was 30.668 ins. on January 30. The lowest reading in the year was 28.310 ins. on January 1. The range of reading in the year was 2.358 ins.

GREENWICH METEOROLOGICAL OBSERVATIONS, 1949.

TABLE XIX. - MONTHLY RESULTS OF METEOROLOGICAL ELEMENTS FOR THE YEAR 1949

MONTH 1949	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	29.994	54.8	29.1	25.7	47.7	36.6	11.1	42.6	+4.0	40.5	37.5	82.0
February	30.152	58.7	19.8	38.9	50.4	34.7	15.7	42.3	+2.8	39.5	35.2	75.4
March	29.984	64.4	26.8	37.6	48.4	34.9	13.5	41.4	-0.5	38.4	33.8	74.3
April	29.850	84.0	29.8	54.2	61.9	43.0	18.9	52.0	+4.7	47.4	41.9	69.0
May	29.802	73.0	33.4	39.6	63.2	43.5	19.8	52.8	-0.2	48.1	42.6	68.3
June	29.952	89.3	41.7	47.6	71.4	50.6	20.9	60.4	+1.0	54.9	50.0	69.1
July	29.935	88.2	46.6	41.6	77.6	55.7	22.0	66.0	+3.4	58.5	52.4	62.1
August	29.927	88.4	46.4	42.0	76.0	54.7	21.3	64.9	+3.3	58.5	53.1	66.3
September	29.860	89.1	46.8	42.3	73.0	56.1	16.9	63.7	+6.5	59.3	55.9	76.4
October	29.820	75.0	29.6	45.4	63.1	46.6	16.5	54.1	+4.1	51.4	48.8	82.5
November	29.589	56.5	27.5	29.0	49.8	38.2	11.7	44.1	+0.6	42.2	39.7	84.5
December	29.731	55.7	27.9	27.8	48.5	38.6	9.9	43.9	+3.9	41.6	38.6	81.7
Means	29.883	89.3	19.8	Annual Range 69.5	60.9	44.4	16.5	52.4	+2.8	48.4	44.1	74.3

MONTH 1949	Mean Elastic Force of Vapour	Mean Tempera- ture of the Earth 4 feet below the Surface of the Soil	Mean Amount of Cloud (0-8)*	RAIN			WIND									
				Number of Rainy Days (0.005 in. or over)	Amount collected in Gauge No. 8, whose receiving Surface is 5 inches above the Ground	From Osler's Anemometer								Number of Calm or Nearly Calm Hours	Mean Daily Pressure on the Square Foot	From Robin- son's Anemo- meter
						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	0.225	45.4	5.6*	13	1.079	50	18	11	16	94	258	161	63	73	0.42	296
February	0.205	43.6	4.3	8	0.963	26	15	3	33	72	240	122	55	106	0.44	293
March	0.194	43.9	5.9	7	0.757	149	123	93	37	30	84	77	49	102	0.42	272
April	0.267	47.6	4.6	12	1.631	65	10	52	17	57	224	133	71	91	0.60	312
May	0.274	50.8	5.0	14	1.648	56	100	44	16	75	167	56	39	191	0.31	229
June	0.363	54.1	4.6	4	0.668	82	71	66	11	62	121	63	33	211	0.16	185
July	0.396	58.0	4.7	6	1.102	84	58	67	12	31	111	84	85	212	0.15	192
August	0.407	60.4	4.9	7	1.276	50	24	22	10	56	179	104	49	250	0.27	198
September	0.451	60.8	5.1	8	0.799	17	106	80	17	64	136	56	19	225	0.18	188
October	0.347	58.4	4.4	13	5.021	12	17	30	63	151	200	31	15	225	0.32	209
November	0.245	51.3	5.6	16	2.227	69	38	15	45	119	182	77	37	138	0.32	248
December	0.235	47.8	5.6	17	1.477	22	10	44	6	129	333	79	43	78	0.69	324
Sums	..	..	..	125	18.648	682	590	527	283	940	2235	1043	558	1902	..	..
Means	0.301	51.8	5.0*	..	..	..	..	..	..	..	..	..	..	..	0.36	245

The greatest recorded pressure of the wind on the square foot in the year was 33.0 lbs. on February 9.

The greatest recorded daily horizontal movement of the air in the year was 710 miles on April 4.

The least recorded daily horizontal movement of the air in the year was 67 miles on July 9.

* This scale, ranging from 0 to 8, was adopted from January 1, 1949, in accordance with the new International Code. In previous years a scale of 0 to 10 has been used.

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 ^h	in. 29.977	in. 30.169	in. 29.993	in. 29.844	in. 29.826	in. 29.954	in. 29.949	in. 29.931	in. 29.861	in. 29.822	in. 29.607	in. 29.723	in. 29.888	
1	29.972	30.166	29.992	29.837	29.819	29.951	29.946	29.928	29.859	29.819	29.602	29.716	29.884	
2	29.974	30.162	29.986	29.833	29.812	29.948	29.943	29.924	29.856	29.813	29.597	29.717	29.880	
3	29.978	30.157	29.980	29.832	29.807	29.946	29.939	29.921	29.852	29.807	29.593	29.714	29.877	
4	29.977	30.156	29.976	29.834	29.802	29.946	29.940	29.921	29.850	29.805	29.591	29.710	29.876	
5	29.976	30.153	29.979	29.841	29.804	29.948	29.944	29.925	29.849	29.805	29.587	29.711	29.877	
6	29.976	30.150	29.986	29.852	29.804	29.953	29.950	29.931	29.854	29.806	29.585	29.717	29.880	
7	29.980	30.151	29.993	29.862	29.807	29.957	29.951	29.936	29.861	29.816	29.590	29.726	29.886	
8	29.991	30.154	30.000	29.867	29.809	29.960	29.952	29.941	29.868	29.827	29.597	29.735	29.892	
9	30.003	30.159	30.003	29.873	29.809	29.961	29.950	29.945	29.873	29.832	29.600	29.744	29.896	
10	30.008	30.161	30.003	29.873	29.808	29.959	29.946	29.944	29.872	29.833	29.599	29.751	29.896	
11	30.007	30.164	30.000	29.868	29.805	29.958	29.944	29.941	29.869	29.830	29.594	29.749	29.894	
12	29.993	30.157	29.992	29.860	29.801	29.954	29.938	29.935	29.864	29.819	29.582	29.739	29.886	
13	29.986	30.148	29.981	29.856	29.796	29.951	29.934	29.932	29.859	29.814	29.575	29.732	29.880	
14	29.981	30.141	29.970	29.848	29.789	29.945	29.926	29.925	29.854	29.809	29.568	29.731	29.874	
15	29.985	30.135	29.961	29.841	29.785	29.940	29.918	29.916	29.848	29.806	29.566	29.729	29.869	
16	29.990	30.133	29.958	29.839	29.781	29.936	29.913	29.909	29.847	29.809	29.573	29.732	29.868	
17	29.996	30.138	29.962	29.835	29.781	29.935	29.911	29.905	29.848	29.812	29.579	29.733	29.870	
18	30.002	30.147	29.968	29.839	29.785	29.937	29.914	29.906	29.852	29.820	29.586	29.733	29.874	
19	30.009	30.151	29.975	29.846	29.790	29.943	29.917	29.913	29.861	29.828	29.591	29.738	29.880	
20	30.015	30.153	29.983	29.854	29.799	29.952	29.922	29.922	29.869	29.832	29.594	29.740	29.886	
21	30.022	30.151	29.989	29.858	29.806	29.965	29.930	29.929	29.872	29.838	29.595	29.742	29.891	
22	30.026	30.150	29.993	29.858	29.808	29.970	29.934	29.930	29.874	29.839	29.597	29.740	29.893	
23	30.030	30.150	29.994	29.860	29.808	29.973	29.935	29.930	29.873	29.837	29.595	29.739	29.894	
24	30.031	30.147	29.996	29.859	29.802	29.974	29.934	29.929	29.873	29.834	29.593	29.733	29.892	
Means	0 ^h -23 ^h	29.994	30.152	29.984	29.850	29.802	29.952	29.935	29.927	29.860	29.820	29.589	29.731	29.883
	1 ^h -24 ^h	29.996	30.151	29.984	29.851	29.801	29.952	29.935	29.927	29.861	29.820	29.589	29.731	29.883
No. of Days Employed	31	28	31	30	31	30	31	31	30	31	30	31	..	

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

Hour, Universal Time	January	February	March	April	May	June	July	August	September	October	November	December	Yearly Means	
0 ^h	° 40.9	° 39.7	° 38.8	° 47.6	° 47.4	° 53.8	° 60.1	° 59.7	° 59.7	° 50.7	° 42.0	° 43.1	° 48.6	
1	40.6	39.2	38.4	46.9	46.7	53.0	59.1	58.6	59.1	50.1	41.7	43.0	48.0	
2	40.3	38.9	37.8	46.3	45.9	52.4	58.0	57.5	58.6	49.8	41.3	42.9	47.5	
3	39.8	38.4	37.2	45.7	45.5	51.9	57.2	56.8	58.0	49.6	41.1	42.8	47.0	
4	40.1	38.0	36.7	45.0	45.2	51.7	56.4	56.1	57.7	49.5	41.0	42.5	46.7	
5	40.3	38.1	36.5	44.3	44.8	52.3	56.6	55.5	57.5	50.1	41.0	42.3	46.6	
6	40.5	38.2	36.8	45.3	46.5	54.1	58.7	56.6	57.7	50.5	41.1	42.0	47.3	
7	40.7	38.2	37.2	47.6	48.7	56.3	61.3	59.3	58.9	51.0	41.3	42.2	48.6	
8	40.8	39.0	38.6	50.6	51.2	58.9	64.5	62.4	61.5	52.1	42.0	42.4	50.3	
9	41.4	41.0	40.7	53.5	53.7	61.3	67.8	65.6	64.3	53.8	43.5	42.9	52.5	
10	42.7	43.6	42.5	55.8	55.6	63.5	69.9	68.2	66.7	56.0	45.3	44.1	54.5	
11	44.1	45.9	44.1	57.0	57.6	65.2	71.8	70.2	68.5	58.0	46.8	45.0	56.2	
12	45.5	47.3	45.5	58.8	58.9	66.4	73.4	71.4	69.8	59.9	48.0	45.9	57.6	
13	46.4	48.6	46.5	59.5	60.1	67.7	74.5	73.0	70.8	61.0	48.8	46.6	58.6	
14	46.8	49.1	47.2	59.7	61.2	68.8	75.4	74.1	71.4	61.4	48.9	46.4	59.2	
15	46.5	48.8	47.3	59.5	61.3	69.5	75.7	74.1	71.7	60.7	48.1	45.8	59.1	
16	45.6	47.4	46.7	58.7	60.8	69.2	74.9	73.8	70.6	59.4	47.2	45.2	58.3	
17	44.5	45.7	45.8	57.5	59.8	68.7	73.4	72.2	68.9	57.5	46.1	44.7	57.1	
18	43.6	44.1	44.5	55.7	58.0	67.1	71.8	70.8	66.8	55.8	45.1	44.5	55.7	
19	43.0	42.9	43.0	53.5	55.8	64.7	69.4	68.5	64.7	54.1	44.4	44.2	54.0	
20	42.6	42.0	41.8	51.7	53.5	61.3	66.9	66.0	63.2	52.9	43.9	44.0	52.5	
21	42.2	41.2	40.6	50.4	51.3	58.6	64.5	63.7	61.8	51.7	43.5	43.6	51.1	
22	41.6	40.8	39.9	49.0	49.6	56.7	62.7	62.2	60.9	51.0	43.1	43.3	50.1	
23	41.1	40.3	39.3	48.1	48.4	55.5	61.0	61.0	60.1	50.6	42.6	43.0	49.3	
24	40.7	39.9	38.6	47.6	47.7	54.4	59.8	59.8	59.4	50.1	42.2	43.0	48.6	
Means	0 ^h -23 ^h	42.6	42.3	41.4	52.0	52.8	60.4	66.0	64.9	63.7	54.1	44.1	43.9	52.4
	1 ^h -24 ^h	42.6	42.3	41.4	52.0	52.8	60.4	66.0	64.9	63.7	54.0	44.1	43.9	52.3
No. of Days Employed	31	28	31	30	31	30	31	31	30	31	30	31	..	

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

Hour, Universal Time	January	February	March	April	May	June	July	August	September	October	November	December	Yearly Means	
0 ^h	39.6	37.8	37.1	45.3	45.4	51.6	56.3	56.6	57.8	49.5	40.8	41.2	46.6	
1	39.3	37.4	36.7	44.8	44.9	51.2	55.7	56.0	57.4	49.0	40.6	41.2	46.2	
2	39.1	37.2	36.2	44.5	44.3	50.7	55.1	55.4	57.0	48.8	40.4	41.1	45.8	
3	38.9	37.0	35.8	44.0	44.0	50.4	54.7	54.9	56.6	48.7	40.2	41.0	45.5	
4	39.0	36.8	35.5	43.4	43.8	50.4	54.3	54.6	56.4	48.7	40.2	40.9	45.3	
5	38.9	36.6	35.3	42.9	43.9	50.6	54.2	54.3	56.4	49.0	40.1	40.7	45.2	
6	38.9	36.5	35.1	43.3	45.0	51.7	55.4	54.8	56.3	49.2	40.1	40.5	45.6	
7	39.0	36.7	35.2	44.8	46.3	52.9	56.7	56.3	57.2	49.6	40.3	40.4	46.3	
8	39.0	37.4	36.3	46.6	47.5	54.2	58.2	57.7	58.9	50.5	40.8	40.5	47.3	
9	39.6	39.1	37.7	48.2	48.7	55.5	59.4	59.0	60.4	51.7	41.9	41.0	48.5	
10	40.5	41.0	38.9	49.4	49.7	56.6	59.8	59.9	61.3	53.2	43.3	41.9	49.6	
11	41.4	42.3	39.9	49.9	50.5	57.3	60.6	60.6	61.7	54.3	44.1	42.5	50.4	
12	42.3	42.7	40.8	51.0	51.3	58.0	61.3	60.8	62.0	55.0	44.9	42.9	51.1	
13	42.9	43.6	41.4	51.3	51.6	58.5	61.6	61.5	62.1	55.3	45.3	43.3	51.5	
14	43.1	43.7	41.7	51.5	52.0	58.9	62.2	61.9	62.2	55.4	45.1	43.0	51.7	
15	42.9	43.3	41.7	51.2	52.0	59.0	62.3	61.7	62.2	54.7	44.9	42.8	51.6	
16	42.4	42.3	41.5	50.7	51.8	59.1	62.0	61.7	61.6	54.1	44.2	42.4	51.2	
17	41.7	41.2	41.0	50.3	51.4	58.9	61.4	61.2	61.1	53.2	43.6	42.0	50.6	
18	41.3	40.5	40.4	49.3	50.6	58.1	60.8	60.8	60.4	52.4	42.9	41.9	49.9	
19	40.9	39.7	39.6	48.4	49.7	56.9	60.0	60.3	59.8	51.6	42.4	41.9	49.3	
20	40.7	39.3	39.1	47.7	48.7	55.8	59.0	59.4	59.2	50.9	42.2	41.7	48.6	
21	40.4	38.8	38.4	47.1	47.8	54.5	58.3	58.7	58.6	50.1	41.9	41.5	48.0	
22	40.1	38.5	38.0	46.0	46.7	53.4	57.6	58.0	58.2	49.6	41.5	41.2	47.4	
23	39.6	38.2	37.4	45.4	46.0	52.7	56.6	57.4	57.9	49.3	41.1	41.1	46.9	
24	39.4	38.0	37.0	45.3	45.7	52.1	56.1	56.8	57.5	48.9	41.0	41.1	46.6	
Means	0 ^h -23 ^h	40.5	39.5	38.4	47.4	48.1	54.9	58.5	58.5	59.3	51.4	42.2	41.6	48.4
	1 ^h -24 ^h	40.5	39.5	38.4	47.4	48.1	54.9	58.5	58.5	59.3	51.4	42.2	41.6	48.4
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 ^h	37.9	35.0	34.6	42.6	43.1	49.5	53.1	54.0	56.4	48.3	39.2	38.6	44.4	
1	37.5	34.7	34.1	42.3	42.7	49.5	52.9	53.9	56.1	47.9	39.2	38.7	44.1	
2	37.4	34.7	33.7	42.3	42.3	49.0	52.6	53.6	55.7	47.8	39.3	38.6	43.9	
3	37.5	34.9	33.6	41.9	42.1	48.8	52.6	53.4	55.4	47.8	39.1	38.5	43.8	
4	37.4	34.9	33.5	41.3	42.0	49.1	52.6	53.3	55.3	47.9	39.1	38.7	43.8	
5	37.0	34.4	33.3	41.2	42.9	48.9	52.2	53.3	55.5	47.9	38.8	38.5	43.7	
6	36.7	33.9	32.3	40.7	43.2	49.4	52.6	53.3	55.1	47.9	38.7	38.4	43.5	
7	36.6	34.5	31.8	41.4	43.6	49.7	52.9	53.8	55.9	48.2	38.9	37.9	43.8	
8	36.4	35.1	32.5	41.9	43.3	49.9	53.2	53.9	56.9	48.9	39.2	37.9	44.1	
9	37.1	36.4	32.8	42.2	43.1	50.4	52.7	53.8	57.6	49.7	39.8	38.4	44.5	
10	37.3	37.4	33.4	42.3	43.3	50.7	51.6	53.4	57.4	50.7	40.8	39.0	44.8	
11	37.7	37.4	33.4	42.1	42.8	50.5	51.7	53.2	56.8	51.0	40.8	39.2	44.7	
12	37.9	36.4	33.9	42.5	43.1	51.0	51.8	52.5	56.4	50.6	41.1	39.0	44.7	
13	38.3	36.9	33.8	42.5	42.5	50.9	51.5	52.6	55.7	50.3	41.1	39.0	44.6	
14	38.3	36.5	33.7	42.8	42.2	50.6	52.1	52.5	55.5	50.0	40.4	38.5	44.4	
15	38.2	35.8	33.5	42.2	42.1	50.3	52.0	52.1	55.2	49.3	41.0	38.9	44.2	
16	38.1	35.0	33.8	41.9	42.1	50.7	52.1	52.3	54.9	49.2	40.5	38.6	44.1	
17	37.8	34.7	33.9	42.4	42.4	50.7	52.0	52.6	55.3	49.2	40.5	38.4	44.2	
18	38.1	35.2	34.2	42.2	42.6	50.6	52.1	53.1	55.6	49.1	40.1	38.3	44.3	
19	37.9	35.0	34.5	42.7	43.0	50.1	52.5	54.0	56.2	49.3	39.8	38.8	44.5	
20	38.0	35.1	34.9	43.1	43.4	51.0	52.6	54.3	56.2	49.0	40.0	38.6	44.7	
21	37.9	35.1	35.1	43.3	43.9	50.9	53.4	54.7	56.1	48.5	39.8	38.6	44.8	
22	38.1	35.0	35.2	42.4	43.3	50.4	53.4	54.7	56.1	48.2	39.4	38.3	44.5	
23	37.6	35.0	34.5	42.2	43.3	50.2	53.0	54.5	56.2	48.0	39.1	38.4	44.3	
24	37.7	35.2	34.6	42.6	43.4	49.9	53.0	54.3	56.1	47.7	39.4	38.4	44.4	
Means	0 ^h -23 ^h	37.6	35.4	33.8	42.2	42.8	50.1	52.5	53.5	56.0	48.9	39.8	38.6	44.3
	1 ^h -24 ^h	37.6	35.4	33.8	42.2	42.9	50.1	52.5	53.5	56.0	48.9	39.8	38.6	44.3

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

Hour, Universal Time	January	February	March	April	May	June	July	August	September	October	November	December	Yearly Means	
0 ^h	88	83	84	82	85	85	78	81	89	91	90	84	85	
1	88	84	84	84	86	87	80	84	89	92	90	84	86	
2	89	84	85	86	87	88	83	87	90	93	92	84	87	
3	92	87	87	86	88	89	85	88	91	93	92	84	88	
4	90	89	88	87	89	91	87	91	91	94	93	86	90	
5	87	86	88	88	93	88	85	92	93	92	92	86	89	
6	86	84	83	84	88	84	80	88	91	91	91	87	86	
7	85	86	81	79	82	78	74	82	89	90	91	84	83	
8	84	85	78	72	74	72	67	74	85	89	90	84	79	
9	84	83	73	65	68	68	59	66	79	86	87	84	75	
10	81	79	69	61	63	63	52	60	72	82	84	82	71	
11	78	72	66	57	58	59	49	55	66	77	79	80	66	
12	75	66	63	55	56	57	47	51	62	71	77	77	63	
13	73	64	61	53	53	55	45	49	59	68	74	75	61	
14	72	62	59	54	50	52	44	47	57	66	72	74	59	
15	72	61	58	53	49	50	44	46	56	66	76	77	59	
16	75	62	61	54	50	52	45	47	57	69	77	78	61	
17	77	65	63	57	53	53	47	50	61	74	81	78	63	
18	81	71	67	61	56	55	50	53	67	78	83	79	67	
19	83	73	71	67	62	59	55	60	74	84	84	81	71	
20	84	77	77	73	69	69	60	66	78	86	86	81	75	
21	84	79	80	77	76	76	67	73	82	89	87	83	79	
22	87	79	83	78	79	79	72	76	84	90	87	83	81	
23	87	81	83	80	82	82	75	79	87	91	87	84	83	
24	88	83	85	82	85	85	78	82	89	91	90	84	85	
Means	0 ^h -23 ^h	83	77	75	71	71	70	64	69	77	83	85	82	76
	1 ^h -24 ^h	83	77	75	71	71	70	64	69	77	83	85	82	76

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 1949

MONTH 1949	Registered duration of Sunshine in the Hour ending:-																Total Registered Duration of Sunshine in each Month	Corresponding aggregate Period during which the Sun was above the Horizon	Proportion of Sunshine	Mean Altitude of the Sun at Noon	
	5 ^h	6 ^h	7 ^h	8 ^h	9 ^h	10 ^h	11 ^h	Noon	13 ^h	14 ^h	15 ^h	16 ^h	17 ^h	18 ^h	19 ^h	20 ^h					
January	h	h	h	h	0.7	5.1	8.0	9.5	8.0	7.4	4.5	1.7	h	h	h	h	h	44.9	261.0	0.172	18
February				2.2	10.0	13.0	12.2	14.1	14.3	14.9	13.4	6.9	1.1					102.1	279.0	0.366	26
March			0.1	5.9	7.3	8.5	9.2	9.0	10.5	10.5	9.9	6.3	4.0	0.2				81.4	368.0	0.221	37
April		3.6	11.0	15.7	17.5	18.8	16.9	20.0	19.3	16.5	15.6	15.2	13.8	8.6	0.6			193.1	415.6	0.465	48
May	0.7	6.3	10.3	11.4	13.7	14.0	15.5	15.4	14.5	15.3	16.5	17.1	17.7	13.8	5.8	0.6		188.6	483.9	0.390	57
June	2.1	9.6	11.4	14.0	14.3	16.7	14.2	13.6	13.9	14.9	17.0	15.7	17.3	18.4	14.7	4.0		211.8	496.3	0.427	62
July	2.0	9.6	12.6	15.5	17.0	15.3	17.0	18.2	16.8	17.0	17.5	17.1	14.9	14.2	10.0	1.9		216.6	499.8	0.433	60
August	0.1	7.2	14.5	16.8	16.8	18.1	18.8	18.5	19.1	17.8	16.7	15.7	11.4	10.7	6.5			208.7	452.2	0.462	52
September		0.3	3.9	8.0	10.6	12.8	14.2	15.2	14.0	15.1	17.5	15.0	11.7	3.0				141.3	380.1	0.372	41
October				2.8	8.7	10.3	12.6	16.6	15.8	15.7	15.3	12.7	4.4					114.9	331.6	0.347	30
November				0.6	4.8	6.6	8.5	8.9	9.7	9.6	7.0	1.1						56.8	267.3	0.212	20
December					0.5	4.7	7.3	8.3	8.3	6.2	2.3							37.6	245.6	0.153	16
For the Year	4.9	36.6	63.8	92.9	121.9	143.9	154.4	167.3	164.2	160.9	153.2	124.5	96.3	68.9	37.6	6.5		1597.8	4480.4	0.357	..

The hours are reckoned from "Apparent" midnight.

TABLE XXVI. - READINGS OF THE THERMOMETERS IN THE STEVENSON SCREEN IN THE CHRISTIE ENCLOSURE (The readings of the maximum and minimum thermometers apply to the 24 hours ending 21^h)

Table with columns for Day of the Month, Dry-Bulb Thermometers (4 ft. above the Ground), and Wet-Bulb Thermometers (4 ft. above the Ground). Rows are organized by month: JANUARY, MARCH, FEBRUARY, and APRIL. Each row contains 21 columns of temperature readings (Maximum, Minimum, and hourly readings at 9h, 12h, 15h, 21h) for each day, plus a 'Means' row at the end of each month. The data is presented in a grid format with temperature values in degrees Fahrenheit.

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 21h)

Table with 21 columns: Day of the Month, Dry-Bulb Thermometers (Max, Min, 9h, 12h, 15h, 21h), Wet-Bulb Thermometers (9h, 12h, 15h, 21h). Rows are organized by month: MAY, JULY, JUNE, AUGUST, and Means.

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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^h)

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 ^h	12 ^h	15 ^h	21 ^h	9 ^h	12 ^h	15 ^h	21 ^h		Maxi-mum	Mini-mum	9 ^h	12 ^h	15 ^h	21 ^h	9 ^h	12 ^h	15 ^h	21 ^h
SEPTEMBER											NOVEMBER										
1	76.0	62.7	64.4	70.5	74.7	62.7	61.3	64.5	64.2	59.4	1	46.8	33.9	37.1	45.6	45.0	34.5	36.2	39.6	38.7	33.5
2	75.0	52.7	66.9	72.6	70.8	64.8	59.4	59.6	58.7	59.2	2	51.6	27.5	33.2	48.4	49.4	35.2	32.2	43.0	43.9	34.0
3	78.3	59.8	65.8	71.9	76.4	65.0	60.5	62.9	65.2	62.0	3	51.9	32.6	43.6	50.7	50.4	45.2	41.6	46.6	46.4	42.7
4	87.8	58.7	74.7	84.5	86.5	72.8	66.7	69.3	70.5	67.6	4	56.2	42.6	50.9	55.8	54.4	46.9	48.3	51.4	50.5	45.4
5	89.1	68.6	80.0	83.6	87.7	68.6	68.4	68.6	69.9	61.6	5	51.1	45.1	50.6	49.2	50.1	45.1	47.5	47.7	48.6	42.9
6	78.7	58.1	67.6	73.8	77.9	62.4	60.6	63.0	63.0	58.8	6	47.7	35.6	39.4	46.5	45.6	41.4	37.7	42.0	41.1	40.8
7	74.5	56.6	62.8	71.8	74.5	62.8	58.3	60.3	60.8	56.6	7	48.4	35.4	39.6	47.2	45.2	39.6	37.9	43.1	41.4	38.6
8	72.8	52.7	64.7	72.0	72.0	63.7	58.7	62.0	60.7	57.7	8	49.0	38.8	44.1	46.7	48.2	43.5	41.9	41.5	41.8	41.0
9	74.9	55.7	66.4	70.9	74.0	62.6	60.9	62.5	63.9	58.9	9	56.5	40.1	43.6	48.4	55.4	48.8	42.9	47.7	54.6	47.3
10	77.9	51.4	63.3	73.0	76.5	60.4	59.3	60.5	63.0	57.4	10	55.8	46.0	49.3	54.4	53.5	48.3	45.8	47.4	47.5	45.9
11	76.2	54.3	66.5	73.9	75.5	63.6	63.5	63.8	62.5	57.4	11	56.1	44.6	49.4	52.6	54.7	54.0	46.8	49.5	53.9	52.2
12	77.5	59.1	67.2	75.8	75.7	64.0	62.0	61.6	61.5	60.7	12	54.0	44.5	50.6	52.3	47.0	44.7	47.8	48.0	43.8	41.0
13	73.4	61.4	66.0	72.9	70.6	61.4	61.3	61.7	61.6	57.7	13	48.0	39.1	42.0	46.6	47.0	44.6	39.3	41.9	42.2	42.0
14	63.9	58.6	61.4	63.5	63.8	58.6	60.4	60.7	60.5	56.4	14	48.9	38.6	41.8	47.8	47.3	42.6	39.3	42.1	41.7	40.6
15	70.3	57.6	66.2	65.8	69.2	59.8	62.7	62.2	60.1	58.0	15	48.0	27.7	32.2	44.2	45.7	34.0	31.8	40.9	42.8	33.5
16	68.0	48.5	59.0	64.5	66.6	59.0	54.7	57.5	56.9	54.0	16	45.0	29.6	34.3	44.6	42.2	38.0	34.2	43.3	41.1	36.8
17	70.4	53.4	60.5	66.2	68.8	59.8	54.5	57.4	57.8	54.8	17	45.5	36.6	42.4	44.6	44.3	44.6	39.9	41.3	41.2	41.7
18	67.8	46.8	56.3	65.4	66.3	56.5	53.6	57.3	57.3	55.0	18	50.0	37.6	46.1	49.6	47.6	38.0	45.4	46.8	46.2	37.5
19	67.3	49.8	56.6	64.5	66.1	57.2	54.9	57.6	56.6	55.2	19	51.9	34.6	42.6	50.5	48.6	46.5	41.8	48.2	46.4	45.2
20	67.7	53.6	60.0	67.0	66.9	57.0	57.4	59.6	59.0	54.8	20	46.5	35.1	42.3	41.4	41.2	38.0	41.7	40.9	40.8	37.6
21	62.2	55.9	58.4	61.4	62.0	59.0	56.9	58.6	58.6	57.8	21	57.4	38.0	52.2	55.9	54.4	49.8	51.1	52.9	49.6	47.8
22	71.0	59.0	63.5	68.0	68.5	64.3	61.6	63.8	63.9	63.0	22	52.1	43.4	46.7	49.4	50.1	45.2	45.0	46.0	46.5	44.1
23	71.8	58.4	65.6	68.3	70.8	64.0	63.6	64.6	64.0	62.0	23	49.1	39.7	44.1	48.6	48.0	46.6	43.3	46.8	46.0	45.8
24	71.4	61.9	66.4	70.0	70.8	63.0	64.9	65.5	66.2	61.2	24	48.8	45.6	48.2	48.6	48.4	46.5	46.5	46.3	46.9	45.8
25	77.0	56.6	65.0	69.8	76.2	60.0	62.5	63.3	65.2	58.8	25	49.3	46.5	48.5	49.3	49.2	47.5	47.8	47.9	47.5	46.3
26	70.1	54.8	62.8	66.9	69.5	62.4	61.3	64.5	65.2	61.4	26	47.9	45.8	47.2	47.6	47.7	47.0	46.5	47.0	46.9	46.0
27	72.0	60.0	65.8	69.4	70.8	60.0	63.6	64.7	64.3	59.0	27	47.3	41.8	43.3	46.0	47.0	44.8	43.0	44.7	45.4	43.8
28	70.8	57.5	62.8	68.6	69.0	60.0	60.5	62.0	62.7	58.0	28	44.8	38.0	39.1	43.4	44.3	38.0	37.6	40.8	41.3	36.7
29	69.3	58.0	60.5	63.9	68.6	59.0	58.5	60.4	62.9	57.8	29	41.1	30.1	34.6	38.0	41.1	38.2	33.9	36.4	38.4	36.6
30	66.6	57.9	62.6	63.6	65.8	59.2	58.6	58.6	59.5	56.8	30	48.9	38.2	44.5	46.7	48.9	46.5	42.9	44.7	44.7	42.9
Means	73.0	56.7	64.3	69.8	71.7	61.8	60.4	62.0	62.2	58.6	Means	49.9	38.4	43.5	48.0	48.1	43.5	41.9	44.9	44.9	41.9
OCTOBER											DECEMBER										
1	65.3	51.4	59.4	63.7	63.3	53.2	54.4	55.2	54.8	50.7	1	47.0	42.6	46.5	46.1	45.8	45.5	44.5	43.8	43.7	44.9
2	67.0	48.6	55.3	63.6	65.0	54.5	50.8	55.1	55.7	51.7	2	45.8	37.6	39.7	42.3	42.3	38.4	36.5	38.5	38.3	36.4
3	75.0	50.3	58.5	69.5	73.2	62.2	54.9	61.6	63.8	59.2	3	55.7	38.4	53.0	54.6	55.5	53.5	50.2	52.5	52.4	50.0
4	74.0	54.0	64.1	72.4	71.6	57.0	60.1	62.4	62.8	55.3	4	53.5	42.8	45.7	47.8	46.8	43.2	41.4	41.6	40.6	40.7
5	71.3	51.6	58.7	65.8	71.3	58.7	58.5	60.5	61.8	56.5	5	49.5	41.6	47.2	49.4	46.9	41.6	43.3	45.0	41.9	38.5
6	72.9	54.5	56.4	67.7	70.5	59.4	55.0	61.6	62.1	57.3	6	54.0	39.0	41.5	46.6	48.2	53.8	40.6	44.2	46.7	50.6
7	68.4	53.5	59.5	64.8	66.2	55.8	57.5	58.7	58.4	54.3	7	54.7	51.0	53.0	54.0	53.4	53.5	50.4	50.0	50.7	50.8
8	68.5	51.2	56.6	66.7	67.5	59.5	56.5	60.4	57.0	57.5	8	53.7	37.5	43.0	43.8	43.1	37.5	40.3	39.8	39.7	35.6
9	66.6	55.8	59.2	64.8	65.9	55.8	58.3	60.1	59.7	54.4	9	40.0	32.4	33.2	37.7	37.8	34.7	31.5	33.7	34.0	32.4
10	70.0	51.4	57.5	66.3	68.4	57.9	57.1	62.5	61.4	56.8	10	39.0	31.4	33.4	37.1	39.0	37.2	32.2	36.4	37.3	35.2
11	66.8	57.6	64.6	66.1	63.5	57.6	64.0	64.1	62.1	56.3	11	38.2	33.2	34.8	38.1	38.1	33.8	33.5	36.1	36.2	32.4
12	71.0	53.8	60.9	66.8	69.2	56.2	58.9	60.3	60.7	55.2	12	40.0	27.9	29.7	36.1	37.0	40.0	29.4	32.0	34.1	36.8
13	68.4	51.9	58.1	65.5	65.7	56.1	57.7	61.7	62.1	54.9	13	52.1	40.0	47.2	51.5	50.6	48.8	45.7	48.2	46.8	46.3
14	70.0	51.7	58.3	63.8	69.5	62.2	56.8	59.6	62.9	60.4	14	48.8	42.0	43.2	47.1	46.5	45.7	42.4	44.9	43.8	44.4
15	70.0	57.8	65.5	69.1	67.2	57.8	60.9	60.7	58.7	56.9	15	47.1	38.2	44.7	45.6	44.1	38.2	43.0	42.3	39.5	35.7
16	63.0	54.8	62.3	60.0	60.0	54.8	60.0	59.0	59.0	53.1	16	51.1	33.0	39.5	46.6	48.4	50.0	37.5	44.2	47.2	48.0
17	62.8	50.0	55.0	61.6	58.4	50.0	51.7	54.6	50.4	47.2	17	51.1	38.9	47.4	44.6	43.6	38.9	44.7	39.2	37.5	34.8
18	63.4	47.0	59.2	59.9	62.7	60.0	56.7	58.4	58.9	58.8	18	50.7	38.5	40.1	43.7	41.0	50.7	36.7	39.7	39.0	49.5
19	60.7	49.6	55.5	59.6	59.1	49.6	50.4	52.3	51.3	47.8	19	53.0	41.8	45.0	48.6	49.1	41.8	40.3	42.7	43.9	38.8
20	59.4	47.6	53.4	58.5	52.4	51.5	49.3	53.7	50.1	50.5	20	45.7	33.1	35.1	45.7	42.9	36.4	33.5	40.5	39.9	35.5
21	56.1	43.7	49.6	51.6	54.5	43.7	48.2	47.8	47.7	42.5	21	46.1	34.8	37.3	43.7	44.3	37.4	36.5	40.4	39.8	35.6
22	55.7	41.0	48.1	53.9	53.5	45.0	46.1	50.6	50.0	43.8	22	49.4	33.4	39.1	46.9	48.0	47.5	38.1	44.3	45.0	45.9
23	59.0	39.5	48.3	53.0	58.5	48.9	47.7	52.3	56.0	48.4	23	49.3	47.5	48.4	49.3	48.9	48.0	47.7	48.2	47.9	46.7
24	56.7	45.2	50.8	54.6	55.6	46.0	46.8	49.6	49.6	45.5	24	48.0	42.7	45.6	46.5	46.0	42.7	44.8	46.0	45.2	41.4
25	68.8	45.8	57.4	66.6	65.6	59.5	56.6	62.9	61.2	54.5	25	48.8	39.9	43.6	46.0	48.2	48.8	42.3	44.5	43.9	44.4
26	60.1	40.6	49.0	46.6	43.6	40.6	48.6	46.6	42.3	38.5	26	54.0	48.0	52.6	53.5	53.8	51.4	50.5	51.5	51.8	49.4
27	47.0	33.8	37.6	44.8	46.1	33.8	35.9	38.9	40.3	33.3	27	53.0	47.0	50.6	52.3	52.8	47.0	47.5	49.0	49.6	45.3
28	50.																				

GREENWICH METEOROLOGICAL OBSERVATIONS, 1949.

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

1949	January	February	March	April	May	June	July	August	September	October	November	December
Day	Max. Min.	Max. Min.	Max. Min.	Max. Min.	Max. Min.	Max. Min.	Max. Min.	Max. Min.	Max. Min.	Max. Min.	Max. Min.	Max. Min.
1	49.6 34.6	44.5 36.3	49.1 35.8	49.8 38.9	57.8 34.9	68.2 47.5	86.1 61.1	76.8 58.6	85.7 62.4	68.2 50.8	49.5 32.6	48.8 43.0
2	44.7 39.8	43.2 28.0	46.8 30.0	50.1 39.0	61.2 36.2	63.6 41.8	82.4 51.9	74.6 62.3	77.6 51.9	68.0 47.9	47.3 26.5	47.3 36.9
3	47.3 30.9	42.1 21.0	46.2 28.3	64.2 44.5	64.8 43.7	68.0 46.8	78.9 45.1	74.3 56.9	76.3 59.6	67.1 49.9	51.0 34.0	53.0 37.1
4	39.2 28.8	.. ..	47.1 30.8	60.0 52.6	65.9 44.2	61.5 48.0	86.4 50.5	70.4 50.0	79.9 57.1	76.0 53.6	52.2 43.0	55.5 44.8
5	49.0 39.1	.. ..	39.4 27.6	59.2 46.6	64.7 45.3	67.5 46.1	90.0 55.8	76.5 50.2	89.9 67.7	75.0 50.7	57.1 47.8	48.8 41.5
6	46.1 35.2	.. ..	39.5 28.5	59.5 52.1	56.4 40.8	70.0 48.3	75.0 52.0	81.1 54.5	89.8 57.9	71.3 54.4	51.4 35.0	50.1 38.9
7	49.7 44.9	.. ..	38.7 31.4	60.0 41.0	59.2 44.0	78.1 54.2	70.1 50.7	80.0 49.0	80.2 55.8	72.3 52.1	47.4 34.5	54.1 40.8
8	50.6 38.3	.. ..	43.5 32.7	51.2 37.8	59.8 32.8	76.3 52.9	58.6 47.1	72.5 57.8	75.5 51.7	70.0 49.5	49.1 38.0	54.7 41.1
9	44.1 30.0	.. ..	39.0 28.9	49.7 32.0	66.6 44.2	69.1 51.8	76.2 49.5	74.8 48.4	74.9 55.0	70.2 56.3	48.3 39.9	44.0 31.5
10	39.9 29.9	.. ..	41.1 30.8	55.3 31.1	54.6 33.8	71.8 54.6	73.7 47.3	74.1 48.5	77.1 50.9	67.4 51.0	57.1 43.2	40.3 30.5
11	43.6 38.0	.. ..	44.1 30.9	58.1 43.9	63.2 38.1	75.1 55.3	81.0 48.0	74.2 53.7	79.3 52.6	70.8 57.1	55.4 44.3	38.8 32.2
12	47.8 34.8	.. ..	46.4 27.1	66.4 52.4	68.0 47.6	74.1 48.2	85.2 52.8	66.4 44.4	78.6 57.7	67.3 53.7	56.3 48.1	38.3 26.9
13	39.4 31.0	.. ..	48.9 39.6	62.2 50.2	64.5 43.3	77.7 54.4	90.0 56.9	73.6 50.7	80.3 62.8	71.2 51.7	53.2 38.7	47.1 27.9
14	49.2 38.1	.. ..	52.9 42.8	65.6 48.4	68.1 43.3	77.9 54.3	80.9 59.1	83.3 53.4	75.9 59.3	68.3 50.1	48.4 38.0	52.8 40.8
15	53.8 41.7	.. ..	50.9 34.6	71.4 44.8	70.5 49.8	69.4 45.8	83.8 59.7	87.9 51.6	68.2 57.8	71.2 58.0	49.2 27.9	48.3 42.1
16	51.2 44.0	.. ..	48.9 38.7	76.6 45.0	71.9 50.1	65.3 41.0	81.9 58.1	89.4 53.8	71.5 47.9	70.4 57.3	47.3 29.8	45.9 31.8
17	49.8 42.0	.. ..	57.6 37.0	85.2 52.3	71.3 48.4	65.5 47.3	80.4 57.8	78.2 51.3	69.5 53.4	63.2 51.2	44.8 34.1	51.2 39.9
18	51.0 43.0	.. ..	55.7 40.3	77.3 45.1	66.5 46.9	67.2 45.5	78.4 53.6	72.8 54.6	72.3 46.6	64.0 47.0	46.3 42.1	48.2 37.0
19	51.3 44.1	.. ..	49.0 33.7	75.1 42.5	66.2 41.1	70.4 48.5	67.5 51.9	71.5 51.7	70.1 48.7	63.5 51.3	50.7 34.5	53.2 39.1
20	51.0 40.5	.. ..	49.2 26.6	70.5 46.9	71.3 42.9	66.0 46.6	73.8 47.5	84.7 59.6	69.9 52.2	61.1 47.0	52.1 42.1	50.0 31.6
21	47.6 41.3	.. ..	49.0 38.0	62.4 37.4	69.9 43.7	78.5 48.5	75.2 58.6	83.4 53.6	70.8 55.0	60.0 48.5	52.4 34.3	46.2 34.1
22	47.9 32.8	.. ..	55.5 43.0	65.8 35.6	74.3 42.2	78.7 51.9	83.2 60.6	80.3 51.3	64.1 57.6	56.3 41.8	57.8 43.5	44.6 33.3
23	46.5 34.0	.. ..	54.9 45.5	61.1 40.9	77.0 53.0	70.7 45.8	89.0 60.9	84.0 55.8	73.1 57.8	56.6 39.4	52.3 38.6	49.3 38.9
24	49.0 33.1	.. ..	54.7 38.5	65.7 37.7	73.2 46.9	75.2 48.0	89.2 59.2	77.9 58.8	73.4 61.7	60.2 45.2	50.1 42.5	49.2 45.4
25	44.2 40.4	.. 37.7	59.6 33.3	70.3 45.9	65.0 50.1	76.5 50.8	87.0 59.8	79.5 59.0	72.6 55.4	58.2 45.9	48.8 46.7	46.7 39.5
26	47.7 36.4	49.7 38.5	61.7 37.1	57.6 41.2	65.2 47.3	83.0 51.2	90.9 60.8	76.2 57.7	77.4 54.5	69.3 48.7	49.2 46.0	52.1 43.3
27	48.9 37.5	54.1 41.6	65.2 38.2	60.3 41.8	59.0 44.9	85.0 57.8	89.0 62.8	74.9 57.7	71.6 59.4	49.0 33.1	48.2 42.0	54.2 49.6
28	52.2 34.6	48.4 31.2	53.5 37.8	68.2 51.8	62.2 52.1	92.0 63.6	84.6 59.6	78.5 57.8	74.1 57.1	47.2 29.5	47.5 38.1	53.3 41.0
29	53.5 29.3	.. ..	44.9 36.8	60.6 40.0	65.7 41.1	86.0 58.6	82.5 58.4	77.7 56.7	72.5 56.7	51.6 32.8	44.1 29.4	50.7 42.1
30	49.8 32.9	.. ..	48.0 38.0	57.9 36.6	65.3 43.4	79.3 57.9	77.2 52.6	81.1 57.9	70.2 56.8	51.9 30.4	44.3 33.6	48.0 35.0
31	44.7 31.8	.. ..	47.7 39.3	.. ..	63.8 40.6	.. ..	80.8 58.0	82.2 56.0	.. ..	51.0 29.4	.. ..	44.9 37.1
Means	47.8 36.5	.. ..	49.3 34.9	63.2 43.2	65.6 43.8	73.6 50.4	80.9 55.1	77.8 54.3	75.4 56.0	64.1 47.3	50.3 38.3	48.7 37.9

TABLE XXVIII. - AMOUNT OF RAIN COLLECTED IN EACH MONTH OF THE YEAR 1949

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	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	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	1.079	0.963	0.757	1.631	1.648	0.668	1.102	1.276	0.799	5.021	2.227	1.477	18.648	00 5	149 6	
8	1.072	0.951	0.759	1.580	1.663	0.666	1.092	1.267	0.798	5.027	2.191	1.499	18.565	1 0	150 1	
Number of Rainy Days (0.005in. or over)	13	8	7	12	14	4	6	7	8	13	16	17	125	..	..

TABLE XIX. - 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	11.9	12.0	10.7	11.9	8.1	6.1	6.3	7.0	6.3	7.4	10.0	13.3	9.3
2	11.5	11.3	10.2	11.3	7.8	6.0	6.4	7.1	6.0	7.4	9.8	13.7	9.0
3	11.9	10.7	10.4	11.0	7.9	5.7	6.4	7.2	5.9	7.4	9.6	13.5	9.0
4	11.9	10.4	10.6	11.4	7.3	5.9	6.3	6.8	6.0	7.5	9.9	12.9	8.9
5	11.8	10.2	10.8	11.4	7.5	6.5	6.3	6.6	6.0	7.4	9.7	12.2	8.9
6	12.0	9.9	10.5	11.5	7.4	6.7	6.1	6.8	6.1	7.9	9.6	12.4	8.9
7	11.9	10.6	10.0	12.1	8.0	6.8	6.5	7.0	6.5	8.0	9.3	12.0	9.1
8	10.5	11.1	10.6	12.0	9.0	7.0	6.7	6.8	6.6	7.5	9.8	12.2	9.2
9	10.1	11.6	10.8	12.2	9.1	7.5	7.6	7.0	6.9	7.5	9.7	12.5	9.4
10	10.6	11.6	10.8	12.9	9.5	7.4	8.0	7.9	7.5	8.1	9.7	13.5	9.8
11	12.6	12.2	12.2	13.9	9.9	8.0	8.8	8.5	8.9	8.9	10.2	14.1	10.7
12	13.2	13.8	12.4	13.7	10.1	8.1	8.7	8.7	9.5	9.3	11.3	14.5	11.1
13	12.9	13.1	11.9	14.7	10.6	7.9	8.9	8.8	9.8	9.9	10.0	14.1	11.1
14	13.8	13.4	12.2	15.0	11.4	8.4	9.2	9.4	9.9	10.7	10.9	14.3	11.5
15	14.2	14.3	13.0	15.7	12.2	8.9	9.0	10.0	10.1	11.3	11.4	13.9	12.0
16	13.3	13.7	12.9	15.4	12.3	8.9	9.1	10.0	10.2	10.7	11.2	13.0	11.7
17	13.2	13.8	12.6	14.8	12.7	9.4	10.7	10.5	10.4	10.7	11.1	14.1	12.0
18	13.5	12.9	12.7	15.4	11.8	9.9	10.7	10.0	10.3	9.8	10.4	14.4	11.8
19	12.7	12.9	12.3	14.0	11.0	9.6	9.9	9.4	9.2	9.8	10.5	14.6	11.3
20	13.4	13.0	11.7	12.8	10.1	9.3	9.5	8.9	8.7	8.5	10.7	13.8	10.9
21	12.5	12.8	11.5	12.5	9.5	8.7	8.9	9.4	7.6	8.6	10.9	14.0	10.6
22	12.3	12.8	10.5	12.0	9.1	8.1	8.1	8.5	7.0	8.1	10.8	13.8	10.1
23	12.8	12.5	10.6	12.5	8.1	7.3	7.4	8.3	6.6	8.1	10.5	13.6	9.9
24	11.8	12.4	10.3	12.0	8.0	6.5	7.1	7.6	6.4	8.1	10.8	13.4	9.5
Means	12.3	12.2	11.3	13.0	9.5	7.7	8.0	8.3	7.9	8.7	10.3	13.5	10.2
Greatest Hourly Measures	36	41	39	37	27	31	19	27	25	32	34	37	..

* 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.

