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RESULTS OF THE MAGNETIC AND METEOROLOGICAL OBSERVATIONS

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

1947

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

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THE ROYAL OBSERVATORY, GREENWICH,

AND

ABINGER MAGNETIC STATION, SURREY.

MAGNETIC AND METEOROLOGICAL OBSERVATIONS, 1947.

INTRODUCTION

STAFF

During the year 1947 the staff serving in the Magnetic and Meteorological Department consisted of W. M. Witchell, Superintendent, E. A. Chamberlain, W. Jackson, G. F. Wells, P. L. Rickerby, B. R. Leaton and Miss J. Mounteney. Mr. Chamberlain, resident observer and assistant-in-charge, and his assistant Mr. Rickerby, were employed exclusively at the Abinger Magnetic Station.

ABINGER MAGNETIC OBSERVATIONS

THE MAGNETIC STATION - Site (Lat. 51° ll' 5" N; Long. 0° 23′ l2" 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 then 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 l_{4}^{1} 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 milliampere and made to envelop the variometer, is used both to orientate the magnet correctly with respect to the earth's field and to determine the scale-value of the record. The orientation of the magnet was last examined on 1947 December 2 and was then correct within 0°.6. The adopted scale-value during 1947 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 1947 was 0'.92 per millimetre. Expressed as magnetic intensity the scale-value would be 4.97 gamma per millimetre at the present time.

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

The Quick-run Variometers. These consist of a set of instruments closely resembling those described above and adapted by La Cour's method to record on a time scale of 3 mm. to one minute, i.e. twelve times as great as the normal scale. This recorder has been in regular use since 1938 November.

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

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

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

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

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

OBSERVING INSTRUMENTS - Declinometer. A hollow cylindrical magnet with scale and collimating lens is used in conjunction with a small telescope mounted independently on the same pier. The magnet is suspended by tungsten wire of diameter 0.02 mm. Frequent reversals are made to eliminate the collimation error of the magnet from the results, and the position of torsional zero of the suspension wire is also frequently checked. 90° 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 F cos G.

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 aximuth 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 -l γ 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 1947 is based were verified in June 1947. 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 $(cf\ p.\ x)$. The current is taken from the battery which supplies the Schuster-Smith instrument.

The special feature of the instrument is the means adopted for ascertaining when the vertical component of the Earth's field is exactly annulled at the centre of the marble cylinder. This consists of a diamond-shaped vibrating test-coil about 2 cms. long suspended by bronze strip stretched horizontally between two supports and carrying a light plane mirror. The principle of the instrument requires that the axis of rotation of the detector coil should be horizontal and its plane vertical in the equilibrium position. The method of securing these adjustments is included in the full description mentioned above.

A weak alternating current, supplied from a generator at some distance from the instrument, passes through the test-coil. The reaction between the field produced and the surrounding magnetic field subjects the test-coil to a forced oscillation which vanishes only when the vertical field is annulled. The resulting vibration is brought to a maximum by adjustment of the generator frequency to synchronism with the natural frequency of the coil (about 15 per second) and high sensitivity is thus obtained. Microscopic vibration is exhibited by projection from the small mirror on the test-coil of an image of illuminated cross-wires to a screen erected about 2 metres distant.

The adopted value of the factor F of the coil is F = 3.59643 (1-.0000079t), t being temperature Celsius. The constants of the potentiometer in use during the year 1947 for the measurement of the current were verified at the National Physical Laboratory in June 1947. The factor adopted for the conversion from international units to c.g.s. units was the same as for the Schuster-Smith coil (see p. x). The change on 1938 January 1 introduces a discontinuity of -3.9 γ 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 aximuth 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 Ch to 24h 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 "O", 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, tut 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 $24^{\rm h}$ minus $0^{\rm h}$. The quantities are computed from Tables I to III, the value of $0^{\rm h}$ or $24^{\rm h}$ 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.

Tatles 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.

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 $9\frac{1}{2}$ inches wide, a range of over 3 inches barometric motion can be included and re-adjustment of position of the trace is unnecessary.

Dry-bulb and Wet-bulb Thermometers. On 1937 December 31 the standard dry-bulb and wet-bulb thermometers and maximum and minimum self-registering thermometers, both dry- and wet-bulb, were transferred from the revolving open screen, on which hitherto they had been mounted, to a Stevenson screen of large dimensions which had been set up a few yards to the westward. The old screen was subsequently erected in a new position on the north side of the Christie Enclosure, and daily readings, at 9^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 bult blackened and enclosed in a glass sphere from which the air has been exhausted. The thermometer employed was Negretti and Zambra No. DB 3544. The thermometer for radiation to the sky is a spirit minimum thermometer, Negretti and Zambra No. DC 30597. The thermometers are laid on short grass, freely exposed to the sky.

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

Osler Anemometer. This self-registering instrument, devised for continuous registration of the direction and pressure of the wind together with the amount of rain, is fixed above the north-western turret of the ancient part of the Observatory. The direction of the wind is registered by means of a large vane (9 ft. 2 in. in length), connected by shaft and pinion with a rack-work carrying a pencil; the latter marks on a flat sheet of paper, moving horizontally. The vane is 25 feet above the roof of the Octagon Room, 60 feet above the adjacent ground and 215 feet above the mean level of the sea. A fixed mark near the north-eastern turret in azimuth 90° east, as determined by celestial observation, is used for examining at any time the position of the direction-plate over the registering table to which reference is made by means of a direction pointer when adjusting a new sheet on the travelling board.

A circular pressure plate with an area of 192 square inches is attached 2 feet below the vane; moving with the latter it is always kept directed against the wind. A light wind causes the plate to compress slender springs, the motion being registered on the horizontal sheet by a pencil connected with the plate by a flexible brass chain which is always in tension. Higher wind pressures bring stiffer springs into play behind the plate, and the two sets of springs are adjusted by screws and clamps so as to afford fixed scales on the sheet, the scale for light winds being double that for strong winds. The scale is determined experimentally in pounds per square foot from time to time. The most recent determination was made on 1934 November 20. The recording sheet is changed daily at noon. The time scale is approximately 15 millimetres to the hour. The instrument was brought into use as long ago as 1840.

Robinson Anemometer. This instrument, for registration of the horizontal movement of the air, is mounted above the roof of the Octagon Room and was brought into use in 1866. The four hemispherical cups are 5 inches in diameter, the centre of each cup being 15 inches distant from the vertical axis of rotation. The cups are 21 feet above the roof of the Octagon Room, 56 feet above the adjacent ground 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 ν 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 1947 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 $9^{\rm h}$ and $15^{\rm h}$. No.8 is used as a check on the readings of No.6 and is normally read at $9^{\rm h}$ 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 90 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 Ursæ 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 O^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 58-81). 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. D85 and D86) have been calculated from the corresponding mean hourly values of air and evaporation temperatures (pp. D84 and D85).

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.

The daily register of rain contained in column 16 is that recorded by the gauge No.6, whose receiving surface is 5 inches above the ground (see p. xvii). The continuous record of the Osler self-registering gauge shows whether the amounts measured at 9^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 83 and D 90, 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 58-81, 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 59 to D 81, and in the abstract table, page D 83, is the mean found from observations made at 9^h , 12^h (noon), 15^h and 21^h each day.

The following are the symbols which have been adopted for clouds and weather.

BEAUFORT WEATHER NOTATION

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

- t blue sky (less than one quarter covered with cloud)
- tc 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)
- 1 lightning
- m $\,$ mist, with limit of visibility between 1100 and 2200 yards
- o sky overcast with unbroken cloud
- p passing showers
- q squall
- r rain
- s snow
- rs sleet
- t thunder
- u threatening sky
- v exceptional visibility; i.e. abnormal transparency of air
- w dew
- x hoar frost
- y dry air; i.e. relative humidity less than 60 per cent
- z haze

A capital letter indicates "intense"

The suffix o indicates "slight"

A letter repeated indicates "continuous"

CLOUD FORMS

Acu	Alto-cumulus	Cist	Cirro-stratus	St	Stratus
Ast	Alto-stratus	Cu	Cumulus	Stcu	Strato-cumulus
Ci	Cirrus	Cun b	Cumulo-nimtus	Fr	Fracto-
Cicu	Cirro-cumulus	Nost	Nimto-stratus		
		ADDIT	FIONAL SYMBOLS.		
lu-ha	lunar halo	prhn	Parhelion	so-ha	solar halo

ROYAL OBSERVATORY, GREENWICH

ABINGER MAGNETIC STATION

Results of Magnetic Observations 1947

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26 27 28	41.6	41.6	42.1	42.8	46.6 44.6 43.2	43.1	43.9	44.0	43.0	41.6 42.6 41.7	44.3	47.6	50.7	51.9	50.8 50.6 51.4	48.8	47.2	47.2	47.0	46.5	46.0 46.7 46.1	46.1	44.5	44.3
Mean					44.8		44.7	44. 0	42.7	42.4	44.4	47.4	50.2	51.5	51.7	50.4	49.0	47.8	47.5	46.7	45.5	44.3	43.8	43.9
Mean * Mean *					45.7 43.3					40.9 43.0					50.2 54.6						46.7 41.6			

^{*} International Quiet Day. ** International Disturbed Day.

													MAGNE						-					
U.T. 0	h 1	h 2	h 3	gh ,	ip .	5 ^h	6 ^h	7 ^h	8 ^h	9 ^h 1	0 ^h 1	1 ^h	12 ^h 1	3 ^h 1	4 ^h 1	5 ^h 1	6 ^h 1	7 ^b	18 ^h 1	9 ^h 2	0 ^h :	21 ^h 2	22 ^h 2	23 ^h 24
March								 ,		9°	+ Tabi	ılar Q	uantitie	s ,					,	,			,	
1 * 2 ** 3 ** 4	45.4 44.1 30.2 31.6	43.6 43.1 27.1 39.2 47.2	43.5 42.0 27.4 40.8	43.1 43.0 40.2 40.1	42.8 44.6 41.1 49.1	42.6 41.4 41.2 54.2	43. 41. 46. 52.	0 42. 2 42. 2 46. 3 46.	6 41.6 0 39.6 0 47.0 6 41.1	41.8 47.0 47.2 51.0 39.6	44.6 44.6 50.7 43.0	48.6 49.6 51.3 46.1	50.7 55.1 52.2 49.1	52. 1 54. 1 54. 1 49. 9	51.1 53.2 53.1 47.6	49.0 53.6 54.7 47.8 48.0	47.3 50.4 51.0 46.0	47.0 53.2 49.3 43.9	46.6 51.5 33.6 35.6	46.2 52.9 25.6 38.6	46.2 46.0 25.7 41.1	45.5 44.5 27.6 41.2	43.6 35.6 34.6 45.0	43.6 25.9 41.1 45.0 44.1
6 * 7 8 ** 9 10 *	44.7 44.6 42.1	45.1 45.1 44.7 32.0 44.9	45.5 46.5 34.4	45.1 48.1 36.2	44.2 45.2	43.6 45.6 41.2	42. 49. 42.	9 39. 6 48. 6 48.	37.6 1 45.3	39.1 38.2 49.5 43.2 40.4	41.3 49.1	46.6 54.9 49.6	54.6 58.6 53.7	55. 4 59. 7 54. 4	54.2 63.0 53.1	49.5 51.5 53.7 50.0 51.1	48.7 52.8 48.7	48.3 43.0 46.9	47.1 41.3 44.2	45.8 43.5 43.1	45.6 38.0 41.1	44.6 36.9 40.9	44.1 36.3 43.6	44.7 44.5 37.5 44.6 44.1
11 * 12 13 14 15 **	45.0 44.5 45.6	45.1 43.7 44.3 46.2 42.9	44.4 44.1 46.3	44.5 44.5 47.0	46.8 44.5 47.7	46.2 44.5 47.6	42. 44. 44.	6 40. 0 41. 0 40.	39.3 5 39.6 7 41.3	39.5 39.3 40.0 41.6 36.0	42.7 42.7 42.6	49.1 47.5 46.6	51.8 51.0 50.0	52.8 53.5 50.6	55.0 54.0 50.6	49.9 52.9 52.6 50.6 57.9	49.1 50.6 48.7	47.7 47.3 46.1	47.0 46.8 46.8	47.0 46.7 46.1	46.6 46.2 44.0	45.3 46.4 45.2	44.2 45.9 44.6	44.9 44.4 44.6 43.2 41.6
16 17 18 19 20	41.1 43.4 44.1 44.6	42.8 39.0 44.5 41.7 42.4	39.2 43.2 41.1 40.6	41.7 45.1 41.2 41.7	39.4 44.0 42.0 42.0	43.6 43.0 42.0 42.6	45. 41. 40.	3 42. 3 39. 0 39.	39.6 39.1 39.6	40.6 42.1 39.7 39.4 38.6	45.7 42.3 42.1	47.7 45.5 45.8	48.3 48.7 50.0	47.7 50.5 51.1	48.6 50.6 51.0	51. 0 47. 4 50. 2 50. 0 51. 4	46.5 46.2 48.6	43.6 46.6 45.6	43.2 45.7 45.6 46.2	44.6 45.6 44.7 43.7	42.2 43.0 41.3 42.7	42.1 43.2 42.5 43.5	43.6 44.5 43.0 42.7	35.4 43.0 45.0 41.7 41.3
21 * 22 23 24 25	43.5 44.2 45.1 44.8	43.2 43.5 43.6 41.9 43.9	42.1 41.7 40.8 43.1	43.6 42.4 47.1 42.1	41.7 42.6 50.6 42.1	41.1 44.9 52.1 43.7	41. 43. 52. 44.	7 40. 0 41. 6 42. 0 42.	41.0 5 40.7 2 39.6 1 40.7		48. 1 46. 3 42. 4 44. 4	51.6 52.1 44.7 48.6	53.7 54.1 47.9 51.1	55.0 52.3 49.6 51.6	54.1 51.4 49.9 50.5	50.6 50.2 48.0 49.6 49.2	49.5 43.1 47.6 47.3	47.1 42.6 47.1 45.1	39.6 44.6 45.7 44.8	41.6 45.2 44.6 43.5	44.8 43.6 45.6 43.5	46.0 43.6 44.6 42.0	45.8 43.0 44.3 42.0	41.7 45.2 43.9 46.2 42.5
26 27 28 ** 29 30	41.3 38.2 39.4 42.8	42.6 42.0 27.7 40.7 39.6	40.3 28.6 40.6 32.6	42.3 31.6 40.5 36.9	42.1 35.6 40.2 34.1	41.1 41.6 40.6 36.2	43. 44. 39. 39.	7 43.5 6 50.6 3 37.6 0 38.	9 40.5 5 47.2 5 37.6 1 38.1	41.5 44.4 49.1 39.4 38.4	48.3 48.5 43.4 43.7	49. 2 50. 9 48. 1 48. 3	50. 8 54. 1 52. 1 52. 1	51.5 54.0 51.4 53.1	51. 2 52. 1 51. 1 55. 3	52.9 50.7 48.7 50.4 54.6	50. 1 46. 1 48. 1 50. 6	48. 1 38. 6 46. 6 46. 0	45.6 43.2 43.7 45.2	41.8 46.6 41.3 43.6	45.6 46.5 42.7 44.6	44.4 41.6 42.6 44.7	47. 2 39. 3 42. 0 44. 4	42.0 46.0 42.5 37.9 43.7
31		41.6								42.7			·			49.7								44.3
Mean Mean *		41.8								41.9						50.9								42.5 43.8
Mean ★★	40.4	37.1	37.6	41.2	42.1	43.2	45.	7 46.	43.6	45.8	45.9	50.5	54.9	55.7	55.8	53.7	50.4	46.7	43.5	42.9	40.4	38.8	37.8	37.7
April										9°	+ Tabu	ılar Q	uantitles	3					···					
1 * 2 3 4 5	44.1 44.6 40.6	43.6 44.2 44.6 42.1 41.2	44.3 45.4 42.3	44.6 46.7 43.1	43.2 42.0 43.6	43.5 42.0 45.6	43. 40. 43.	39.0 2 37.1 1 40.1	37.6 2 36.2 3 39.5	40.6 38.1 37.2 41.6 37.3	41.5 42.5 47.1	46.1 48.6 53.6	51. 0 53. 0 57. 2	53.3 55.5 54.8	52. 2 54. 7 54. 0	52. 1 50. 6 53. 6 50. 6 47. 7	48. 1 50. 1 44. 6	44.6 47.6 44.2	44.5 46.6 43.6	45.1 46.0 42.1	45.6 45.6 38.8	45.1 46.6 40.8	45.0 44.2 39.0	44.1 44.4 42.5 38.6 44.1
6 7 8 9 ** 10	44.5 43.6 40.6	44.8 44.3 44.2 40.6 43.2	44.6 43.9 40.4	44.0 43.6 43.0	43.9 43.4 44.7	43.6 43.2 46.9	42. 41. 43.	39.6 38.6 42.6	37.4 36.6	39.7 37.8 37.8 41.7 37.5	41.3 42.2	47.9 47.1 43.2	53.9 55.0 50.0	56. 5 56. 3 52. 1	54.7 54.5 48.6	49.4 53.0 51.0 46.6 51.1	48.1 48.4 44.2	46. 2 46. 4 44. 5	46.0 45.3 44.4	46.0 45.6 44.7	45.6 45.5 44.6	45.6	45.0 46.2 44.0	45.0 41.6 45.7 42.6 45.2
11 12 13 14 15	41.6 39.6 40.0 41.2	40.5 41.9 40.7 38.3 37.1	41.6 37.2 38.2 38.8	40.7 40.0 38.7 43.3	41.0 40.2 41.2 42.5	40.9 41.6 41.3 42.7	40. 40. 40. 42.	4 38.1 1 38.1 9 39.1 2 39.1	37. 2 5 37. 1 3 38. 5 7 38. 5	37.3 39.2 38.8 40.1 41.1	43.0 43.0 44.3 45.8	47.7 48.5 48.2 49.8	52.3 52.9 50.8 51.7	56. 5 52. 1 52. 7 53. 5	54.7 52.6 51.1 51.7	51.6 52.6 49.6 50.2 50.8	49.6 48.1 46.8 47.7	47.1 45.9 45.6 45.4	43.3 45.1 45.7 44.0	43.6 44.6 44.0 44.7	45.6 43.7 40.9 44.8	42.4 40.8 41.2 43.1	37.8 42.2 42.1 43.7	42.8
16 17 ** 18 ** 19 ** 20 **	36.5 35.2 43.2 45.0	43.7 39.7 34.7 41.6 42.2	42.8 35.2 46.7 42.1	40.8 36.1 42.2 42.3	40.6 37.9 40.6 42.9	42. 2 39. 9 40. 7 46. 8	41. 41. 39. 45.	3 40. 3 43. 9 39. 1 41.	40.2 44.2 39.2 39.7	40.2 42.0 46.8 40.8 41.0	44. 2 49. 5 43. 7 43. 9	47.0 54.1 47.7 46.7	52. 2 54. 7 53. 0 49. 1	56.8 53.3 49.2	58.6 56.9 51.8 49.0	62.7 52.9 49.3 48.1	50.7 47.7 46.7	55.7 47.1 43.0 46.3	57.1 45.2 45.2 41.7	50.3 46.0 45.8 41.6	31.4 45.5 45.6 44.0	32.1 45.2 45.1	15.6 40.1 44.7 44.2	24.9 43.2 40.7 43.7
21 * 22 * 23 * 24 * 25	43.7 44.2 44.1	43.7 43.8 43.8 43.9 43.2	43.7 44.4 43.8	43.2 43.9 43.7	43.2 44.2 43.4	42.7 41.4 42.6	40. 39.	38.3 2 37.4	38.9 36.5 36.7 37.2 36.7	37.8	42.3 41.4 44.8 42.4 40.7	46.2 49.9	49.8 53.3	51.8 53.7	50.9 52.3		47.1 48.2	45.2 46.4	44.4 45.8 46.1	44.1 45.8 45.8	44.2 45.7 45.6	44.5 45.2	44.3 44.8 44.5	44.1
26 27 28 29 30	42.6 44.7 43.9	45.3 42.8 44.0 43.9 42.8	42.6 43.2 43.6	42.2 44.4 43.7	42.4 44.9 44.7	41.8 44.1 42.3	40. 39. 40.	39.6 5 37.3 7 38.4	36.7 36.8 38.1		39.5 42.1 45.7	42.8 46.7 46.3	46.9 50.8 52.7	49.3 53.8 52.4	49.7 52.0 51.2	50.3 47.2 49.8 48.8 50.2	46.1 47.7 46.7	45.3 45.7 45.0	43.2 44.7 44.2	42.2 43.7 44.7	43.1 42.8 44.5	44.4 44.5 44.7	44. 5 44. 2 44. 2	40.4 44.7 43.0 44.7 44.4
Mean * Mean **	44.1	42.3 43.8 39.8	43.8	43.5	43.9	42.6	40.	39.0	37.8	39.5 39.1 42.5	42.9	47.6	51.0	52.8	52.1	50.7 50.3 51.9	48.4	46. 6	45.5	45.3	44.9	44.3	44. 2	42.4 44.3 39.0

^{*} International Quiet Day. ** International Disturbed Day.

							TA	BLE 1	I	HOURL	Y MEA	NS OF	MAGNET	ric D	ECLIN	ATION								
U.T.	0 ^h 1	l ^h 2	2 ^h :	3 ^h 4	4 ^h	5 ^h	6 ^h	7 ^h (3 ^h						4 ^h 1	5 ^h 1	6 ^h 1	7 ^h	18 ^h 1	9 ^h 2	20 ^h 2	1 ^h 2	22 ^h 2	24 ^l
May		·								9°	+ Tab	ular Q	uantities ,	s										
1 2 * 3 4 5	43.9 43.7 43.8 44.3 44.3	44.1 44.6 43.9	44.0 43.3	43.8 42.1 44.2 42.5	46.2 40.7 42.2	47.6 39.3 41.5 38.3	44.0 38.0 40.4 36.3	41.3 37.0 39.8	37.2 39.7 38.3	41.3	43.2 44.5 46.0	43.7 47.0 49.1 49.5 48.0	48.3 48.2 52.2 51.7	50.7 49.4 52.8	48.0 50.7 50.1		45.3 44.8 45.1	43.9 43.2 43.7	43.8 43.3 43.2		44.2 44.7 43.8	44.7	44.7 44.6 45.0	44.2 44.7 44.7
6 7 8 * 9 * 10 *	44.7 44.7 44.2 44.6 44.7	43.8 44.1 44.1	44.2 43.6 44.2	43.7 43.0 42.7	42.6 42.7 41.9 42.1 42.2	41.2 40.2 39.7	40. 2 39. 5 38. 7 38. 5 37. 7	38.7 38.0	39.0 38.2 37.7	42.7 41.2 40.7 40.7 39.2	45.2 44.1 44.7	49.3 47.6	52.3 49.3	52.8 51.3 52.1	50.3 50.9 51.2	49.1	46.3 46.8 47.1	43.4 44.7 44.7 46.0 45.2	43.8 43.9	44.7 44.7 45.7	46.1 45.3 45.3 45.7 45.1	44.4 45.1	44.7 45.2 45.0	44.4 44.7 44.9
11 12 13 14 ** 15 **	40.6 40.7 39.4 44.5	41.0 41.2 37.7 43.1	41.3 42.1 37.3 44.4	38.4 41.3 36.3 41.6	39.7 35.7 40.1	36.7 36.3 34.2 37.7	35.7 35.7 34.2 35.3 35.7	36.5 34.7 34.1	38.7 38.0	42.3 44.6	45.7 46.0 48.3	49.7	50.8 51.8	52.4 50.8 50.7	51.9 49.7 50.7	51. 2 49. 6 48. 9 48. 1 49. 1	47.2 48.7 46.6	45.6 46.8 43.4	42.9 45.9	45.7 43.3 44.8	45.6 42.2 43.2 39.7	38.3 43.8 42.7	44.1 40.7 45.0 42.5	45.6 41.7 44.8 41.9
16 ** 17 18 19 20	42.2 43.3 40.7 41.8	39.3 43.2 41.3 41.8	39.6 40.1 41.8 41.7	40.4 39.8 40.2 41.0	38.7 38.8 41.2 37.8 40.7	38.3 39.7 36.7 37.7	37.7 34.3 36.7	38.8 36.7 36.1 38.2	39.4 38.7 40.7 39.7	43.3 43.1	47.2 45.7 47.2 48.3	50.8 49.1 51.8 52.1	51.1 54.7 53.7	53. 2 52. 8 56. 6 54. 3	52.4 53.7 54.6 53.3	50.7	48.3 49.7 48.2 47.6	47.2 46.7 45.5 45.8	44.7 44.7 43.7 45.3	43.8 43.2 44.3 45.5	43.7 44.1 43.7 44.5 45.3	44.2 44.8 43.7 44.7	44.4 42.8 42.7 43.5	44.2 40.7 42.1 43.2
21 22 23 ** 24 ** 25	42.3 42.7 43.3 42.1	42.3 42.6 43.1 42.6	43.3 44.5 43.2 42.7	42.2 46.0 42.8 39.8	42.5 38.7	40.2 28.7 42.3 38.2	-	39.6 36.6 38.7 37.3	41.0 34.7 28.1 37.5	36.2 46.8 40.9	48.5 39.8 43.9 46.1	52. 2 45. 2 47. 8 50. 7	49.6 50.7 54.0	55.0 52.5 51.5 52.7	53.2 52.9 52.6 51.5	51.0 50.6	48.2 51.1 49.1 47.2	45.7 46.8 46.7 44.7	43.3 44.6 45.6 43.0	43.5 44.1 44.7 43.7	45.1 44.6 44.8 43.7 44.3	44.7 44.3 43.7 45.1	45.2 44.1 43.2 44.8	43.5 43.4 42.7 46.7
26 27 28 29 30 *	45.8 44.2 42.7 45.1	46.1 44.2 43.3 44.1	47.7 42.9 43.7 42.8	44.6 41.2 43.7 41.2	40. 2 42. 7 39. 1	39.7 37.6 42.9 35.7	35.0 42.2 32.6		38. 1 36. 2 42. 2 34. 3	39.0 39.0 41.3 37.5	43.7 42.6 45.1 42.2		52. 8 52. 2 50. 2 49. 9	52.8 54.7 51.1 50.6	51.3 56.1 49.7 49.5	50. 2 49. 7 51. 6 43. 7 47. 2	46.9 50.7 43.5 45.4	44.3 47.2 43.6 43.5	41.7 44.6 42.2	43.1 44.7 43.1	44.5 43.7 45.2 40.7 43.3	44.7 46.1 45.3	44.7 42.3 45.9	44.9 43.5 45.6
31				· · · · · · · · · · · · · · · · · · ·	40.6	· · · · · · · · · · · · · · · · · · ·				43.2						50,0			45.1	45.2	44.1	40.7	42.9	46.2
Mean Mean *					40.7					41.1 39.5					_	49.3					44. 2 44. 7			
Mean ★★	41.5	40.6	42.5	41.0	37.6	36.9	37.7	36.4	35.5	42.2	44.4	48.0	50.7	52.1	51.7	49.8	48.4	46.0	44.6	43.8	43.0	43.8	44.0	43.0
June										9°	+ Tabu	ılar Qı	uantities	3										
1 ** 2 * 3 4 5 **	44.3 45.6 44.2	45.1 44.1	43.2 45.2 43.1	41.9 46.6 41.7	35.9 39.6 43.6 40.2 41.0	36.7 39.1 38.7	34.3 34.5 37.2	34.0 33.3 38.6	35.6 35.1 40.7	38.2 39.1 40.2 45.0 48.1	43.8 45.6 49.1	47.6 51.1 51.5	51.6 54.8 52.2	53.6 56.6 52.5	53.1 54.2 51.1	47.1 50.2 50.6 48.2 52.2	47.1 47.7 46.8	43.6 45.7 44.2	41.1 45.3 44.6	41.9 44.9 45.1	43.5 43.2 44.7 45.2 47.0	43.6 44.7 45.6	44.6 44.8 44.7	45.1 44.6
6 7 8 9 10	40.6 34.7 40.7	40.4 36.8 42.2	39.7 35.7 44.7	40.3 34.7 41.7	37.7 39.6 40.6 37.8 39.3	36.4 37.8 40.1	38.6 38.9	35.1 36.7 36.7	36.6 34.5 36.9	39.2 34.9	41.1	50.3 43.7 46.2	49.3	54.1 50.5 51.0	53.4 52.3	49.1 52.4 51.6 50.2 50.0	48.6 49.5	45.6 49.5 46.8	44. 2 46. 2 43. 6	44.2 42.1 44.8	42.7 43.4 44.3 44.8 42.2	40.7 45.6 43.3	39.2 42.6 43.7	33.6 40.1 42.1
11 12 * 13 14 ** 15	42.7 39.7 37.6	40.8 43.2 41.1 35.2 37.8	42.8 39.7 38.3	41.7 39.6 45.1	38.8 39.0 39.7 30.2 34.9	36.6 36.8 31.1	37.9 35.2 33.7	35.7 38.2 36.7 33.4 33.0	38.3 38.7 35.8	40.5 39.8 38.2	43.5 43.3 42.6 45.7 41.3	46.2 46.5 48.3	48.7 48.2 49.2	50.2 50.2 49.6	50.2 52.5 49.1	50.0 48.7 51.1 47.7 49.7	47.2 48.9 45.8	46.7 46.9 44.2	46.5 46.0 42.2	45.1 43.0 44.8	44.8 44.0 44.7 45.0 43.6	43.2 46.3 44.8	42.3 43.3 44.7	40.7
16 * 17 ** 18 19 20	43.6 42.1 43.1	43.2	43.3 40.4 40.7	48.2 39.9 40.8	39.1 45.3 39.8 41.2 42.2	43.6 39.4 36.2	38.1 39.7 34.5	37.1 40.1	38.2 40.9 35.5	44.3 39.7	44.6 48.3	49.7 52.7 48.6	51.4	52.7 54.1 53.5	55.1 52.6	50. 2 57. 1 51. 1 53. 1 51. 8	55.3 49.4	56.3 46.6 45.2	47.9 45.2 43.4	44.7 45.8 44.3	43.7 43.7 44.7 44.2 43.3	43.6 44.2 43.2	44.7 39.7 42.8	44.1 41.8
21 22 23 24 25 **	43.0 45.5 45.1	44.2 46.9 44.7	41.7 44.2 45.3	42.7 40.8 43.8	41.9 38.7 40.7 40.3 39.7	36.1 40.6 38.7	34.3 39.3 38.9	39.3	34.6 40.6 37.2	38.3 43.3 38.9	45.7	47.3 48.3 44.5	51.3 50.7 47.1	53.4 51.7 47.6	52.9 53.9 48.2	50.2 50.7 50.7 47.7 47.2	48.1 48.0 47.9	46.4 46.9 47.3	45.1 45.2 46.7	44.1 43.9 45.4	43.8 43.7 45.3 45.0	44.9 44.2 43.0	43.5 44.5 43.7	44.2 44.9 44.7
26 27 * 28 29 * 30	43.6 44.5 44.3	43.3 44.2	41.7 42.3 43.6	40.1 41.4 41.8	40.7 38.1 40.3 39.7 41.7	36.0 38.7 37.7	34.7 37.3 37.3	34.9 37.3 36.2	35.2 38.8 35.5	41.4 37.1 42.3 37.2 42.7	40.4 43.7 41.2	44.3 48.0 47.0	47.0 50.5 49.7	49.1 51.2 51.2	50.2 49.7 50.7	49.1 48.9 48.7 48.6 48.7	45.8 46.0 45.7	43.8 43.7 43.3	43.2 42.5 43.2	44.1 44.2 43.2	46.3 43.8 44.3 43.5 44.7	44.1 43.7 43.7	44.3 43.7 44.7	44.9 44.3 45.4
Mean	42.5	42.2	41.6	41.2	39.6	38.1	36.7	36.4	37.3	39.9	43.6	47.6	50.2	51.6	51.4	50.1	48.0	46.3	44.7	44.2	44.2	44.1	43.6	42.7
Mean * Mean **					39.1 38.4					38.4 41.2						49.3					43.6 44.8			
		1			, ·		,							, ·	, ,				.,,.					

^{*} International Quiet Day. ** International Disturbed Day.

## Company Part Par								T	ABLE	1	HOURL	Y MEA	NS OF	MAGNET	ric D	ECLIN	ATION								
1	U.T. (0 ^h 1	h	2 ^h 3	3 h	4 ^h 5	, h	6 ^h	7 ^h 1	3 ^h	9 ^h 1	0 ^h 1	1 ^h	12 ^h 1	3 ^h 1	4 ^h 1	5 ^h 1	6 ^h 1	7 ^h	18 ^h	19 ^h	20 ^h 2	21 ^h 2	2 ^h 2	3 ^h 24
1	July							·				+ Tabı	ılar Q												
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12	7 8 9	38.8 40.8 39.9	38.9 39.7 40.1	38.8 40.3 38.9	39.4 39.7 39.2	37.3 39.0 38.1	34.8 36.8 35.5	35.3 37.7 34.4	34.5 37.4 35.1	35.8 39.3 34.2	37.4 38.7 37.2	40.8 39.9 41.2	45.6 43.9 46.6	50.6 48.3 50.0	53.8 52.3 51.6	54.3 52.8 52.6	52.8 51.8 51.6	49.2 48.8 49.6	47.6 47.3 47.6	46.6 44.1 47.2	45.1 43.0 46.0	l 43.8 0 44.4 0 43.6	43.9 44.4 43.0	44.4 43.0 43.2	41.3 40.9 43.3
17 # 84	12 13 14 *	40.1 40.8 43.2	41.0 37.8 42.9	40.9 37.9 41.8	42.8 38.8 40.5	42.5 38.0 39.0	39.3 36.7 37.3	36.9 35.1 35.8	37.4 34.9 34.9	37.7 36.4 36.2	39.5 39.8 38.8	43.2 43.3 42.3	46.4 46.4 46.8	49.9 49.4 50.1	51.8 52.6 50.8	51.0 51.4 50.4	48.8 50.3 50.0	47.2 47.8 48.8	45.6 44.1 45.8	44.3 42.5 44.8	43.8 43.8 44.3	9 43.8 8 44.9 3 45.2	43.8 44.3 44.8	43.8 42.3 44.2	43.5 42.8 42.7
22 41,2 40,6 40,2 41,8 39,7 38,9 37,2 38,0 38,1 39,7 40,8 44,6 47,7 51,7 33,0 38,1 40,7 41,2 41,1 40,1 40,8 44,1 43,0 42,2 41,2 41,4 41,0 41,6 41,3 41,4 41,4 41,5 41,5 41,5 41,5 41,5 41,5	17 ** 18 ** 19 **	42.6 33.6 39.8	42.0 35.3 41.7	41.2 38.3 46.2	40.2 34.1 39.6	38.9 34.6 35.6	36.7 29.1 35.2	35.3 26.9 37.6	34.4 29.2 37.1	34.5 29.9 39.0	36.1 34.6 39.3	39.6 39.6 41.4	45.9 45.9 43.6	51.1 47.2 47.5	54.0 51.7 48.8	52.8 55.1 46.1	50.5 52.1 45.0	49.0 50.1 44.3	49.1 48.1 41.7	55.3 41.8 40.6	51.1 44.0 42.2	1 50.6 0 43.0 2 42.8	48.6 45.3 43.0	47.7 42.5 43.2	43.0 39.6 43.3
27 42.8 42.5 42.5 45.5 46.0 48.0 48.0 48.7 38.5 38.5 42.0 45.6 48.7 49.5 50.1 48.5 46.9 45.0 42.0 43.5 46.3 42.0 43.6 48.7 49.5 31.3 40.1 41.3 41.4 41.7 41.4 41.3 40.2 38.5 37.4 39.3 40.7 42.0 48.8 49.1 31.3 50.3 47.8 45.9 44.4 44.3 48.9 43.8 43.8 42.3 31. 42.3 41.8 40.3 38.7 37.3 36.3 35.7 35.4 36.3 35.7 41.6 45.8 49.1 31.3 50.3 47.8 45.9 44.4 44.3 44.9 43.8 43.8 43.8 42.3 41.8 40.3 38.7 37.3 36.3 35.7 36.8 35.7 36.8 35.8 41.6 42.8 49.9 50.9 52.7 53.8 51.7 48.6 44.4 44.3 44.3 44.0 43.9 43.8 43.8 42.8 48.8 49.1 49.1 49.1 49.1 49.1 49.1 49.1 49.1	22 23 ** 24	41.2 40.6 42.2	40.6 42.2 42.7	40.2 42.4 41.3	41.8 44.6 42.0	39.7 41.1 42.6	38.9 40.1 37.7	37. 2 37. 6 36. 5	37.0 37.8 35.2	38.1 35.6 35.6	39.7 37.5 37.8	40.8 38.8 41.6	44.6 42.8 44.7	47.6 46.6 47.0	51.7 50.3 48.6	53.0 48.9 48.5	51.2 49.6 48.2	48.6 48.2 46.6	46.0 46.2 44.3	44.2 43.6 43.5	43.1 43.2 43.7	1 40.1 2 42.6 7 43.6	40.8 41.2 43.8	44.1 39.6 43.7	43.6 42.1 42.9
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17	12 13 14	40.8 38.3 38.3	37.3 40.1 39.0	34.2 39.6 43.3	38.6 39.2 39.5	38.4 38.4 39.8	37.8 35.9 37.8	37.3 36.5 38.4	37.5 37.6 38.4	36.8 40.4 37.3	38.9 41.4 38.8	40.5 42.6 41.0	44.9 46.2 44.1	49.1 50.9 46.9	50.0 51.5 49.3	51.5 51.9 48.9	47.8 50.3 46.2	45.4 52.4 44.4	45.4 46.9 44.3	44.9 43.3 43.1	44.9 44.1 43.8	43.9 41.9 44.4	43.4 45.6 43.3	43.4 45.2 44.4	40.0 38.2 41.8
22 **	17 18 ** 19	43. 4 39. 9 39. 4	40.4 47.1 40.3	39.2 34.2 40.4	42.3 36.3 44.0	48.7 38.4 40.0	42.8 46.6 36.4	34.4 41.4 39.1	39.1 34.6 37.4	38.4 33.1 39.5	40.3 38.9 40.9	42.4 41.5 45.2	46.8 47.0 48.6	48.6 48.8 50.4	50.0 51.1 49.6	50.8 52.5 48.4	48.9 49.8 51.9	45.9 46.4 46.1	41.0 42.6 46.5	38.4 37.6 42.4	37.8 37.7 42.2	38.7 41.1 42.4	34.4 36.9 41.9	40.4 42.8 39.4	38.4 45.4 40.9
27	22 ** 23 ** 24	42.2 42.0 41.4	42.4 41.0 40.2	43.0 31.7 40.9	40.4 35.0 42.1	41.8 39.8 42.7	44.3 36.4 40.4	42.5 36.0 41.9	38.4 32.9 43.4	40.4 34.9 42.9	25.6 38.0 40.7	28.2 42.4 41.9	44.4 44.7 45.4	47.7 48.0 48.2	48.0 49.4 48.1	45.9 50.6 47.2	44.9 45.9 43.5	40.7 44.2 41.4	43.0 41.6 40.4	44.1 37.5 38.5	41.1 40.9 36.9	43.5 43.8 38.4	41.3 42.5 39.4	41.0 42.0 40.5	43.0 42.0 40.4
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Mean * 41.4 40.5 39.8 40.4 38.7 37.4 36.9 36.1 36.0 37.9 41.4 46.3 50.5 52.0 51.5 49.7 47.3 44.8 43.9 43.8 43.4 43.1 42.6 41.7	31	40.6	40.7	39.9	38.4	38.9	37.9	35.4	33.7	34.1	38.7	43.9	47.6	51.1	52,5	50.8	48.7	46.3	45.2	44.7	43.9	41.6	42.8	39.0	39.7
The day some series and series	Mean *																								
101 1010 JULY JULY JULY JULY JULY JULY JULY JULY																									

^{*} International Quiet Day. ** International Disturbed Day.

			·		- 1		T	BLE :		HOURL	Y MEA	NS OF	MAGNET	ric D	ECLIN	ATION					- 1, 1, 2				
U.T. (0 ^h 1	h 2	^h 3	3 ^h 4	h 5	h	6 ^h	7 ^h 8	3 ^h	9 ^h 1	0 ^h 1	1 ^h	12 ^h 1	3 ^h	14 ^h	15 ^h 1	6 ^h 1	7 ^h	18 ^h	19 ^h	20 ^h	21 ^h	22 ^h	23 ^h	24 ^h
September										9°		ular Q	uantitles												
1 * 2 3 ** 4 5		37.2 41.2	39.8 35.3 37.3	39.3 34.3 35.5	38.2 31.3	33.9 35.3	35.8 35.2 30.7 36.3 36.8	28.0	34. 4 23. 7 36. 2	37.4 39.4 38.3	43.1 42.2 48.2 41.0 45.3	47.7 48.3 45.3	53.3 50.9 52.9 48.2 53.3	50.7 53.6 50.1	48.2 49.3 50.4	48.4 45.4 44.5 49.0 45.4	42.7 46.6 46.3	44.3	42.3 39.5 44.1	42. 37. 39.	3 42. 7 43. 3 37. 1 40.	3 42.7 3 43.5 3 37.4 3 40.6 8 43.3	41. 42. 39.	7 40.3 5 39.3 3 38.9	3 3 9
6 7 8 9 * 10 *		40.0 32.8 38.5	37.6 35.2	38.1 38.7	37.4 39.8 39.7 38.4 38.4	34.9 38.9	35.2	33.4 35.3	35.9 32.3 35.0	35.3 36.2	42.7 39.1 39.8	44.8	47.7	51.3 49.3 48.7	54.8 48.2 48.4	51.3 49.9 46.6 47.0 47.4	49.3 44.9 44.8	48.3 42.8 42.8	42.9 42.0 41.7	32.41.42.	4 36.6 9 42.1 1 42.4	4 41.7 5 35.3 2 42.7 4 42.4 3 42.4	38.3 41.9 41.4	36.8 9 41.4	8 4 3
11 12 13 14 ** 15 **	40.8 33.0 37.9	40.9 40.9 29.7 41.1 41.1	40.3 34.3 33.0	38.8 36.3 37.5	38.1 40.1 43.7	36.8 42.6 44.4	34.5 41.8 43.5	33.9	35.3 44.3 39.8	40.1 45.7 40.0	42.4 43.8 49.9 45.8 43.9	47.3 49.8 48.8	48. 4 52. 0 51. 0	46.4 51.3 47.0	44.4 47.0 47.3	47.1 42.8 45.3 44.3 49.5	41.3 41.2 44.4	41.3 40.4 30.4	42.2 41.0	44.3 38.	3 45.3 4 37.	5 40.8 3 39.3 5 32.8 3 40.7 8 43.5	38. 4 28. 7	3 39.8 35.6 7 34.5 5 33.7 4 39.5	6 5
16 17 18 19 20		39.3	42.4 37.8 41.7	36.3 39.1 45.0	38.3 36.5 35.8 42.7 41.7	38.3 39.3 40.1	39.9 40.9	38.1 36.8 37.3 39.3 37.8	36.8 37.1		42.3	45.4 45.9 46.3 44.7 41.4	47.4	50.7 47.6 48.4	49.3 46.6 48.4	44. 4 46. 6 46. 3 48. 4 46. 9	42.6 44.3 43.7	42.9 36.3 38.8	37.8 42.4 42.2	35. 38.	3 36. 2 37. 8 38. 3 36. 9 40.	9 36.8 1 39.2 3 36.9	31.9 40.4 39.3	3 41.3 9 44.8 4 37.3 3 42.8 4 34.9	8 3 8
21 22 23 24 ** 25 **	39.3 40.0 40.6 40.9 42.0 44.8 42.1 43.4 40.3 36.9 40.9 43.0 47.3 49.6 50.4 49.7 42.2 44.0 42.2 36.2 35.3 32.6 35.6 33.4 39.3 36.3 38.8 40.9 41.1 50.0 44.2 40.8 42.5 42.8 44.3 46.8 47.9 48.4 48.3 46.9 44.8 43.4 42.8 42.3 41.9 41.4 40.7 40.7 40.7 40.7 40.8 42.8 36.6 41.5 44.3 42.8 42.4 40.3 38.8 40.4 44.9 46.1 51.1 53.6 54.4 54.5 41.7 42.5 27.6 29.7 31.3 32.5 33.2 33.9 42.8 18.8 22.8 30.0 38.9 38.8 34.5 25.8 32.3 35.7 44.0 48.8 51.8 50.4 51.3 49.8 46.8 45.2 38.6 39.1 31.3 35.4 32.6 36.8 39.9 37.7 31.3 32.4 34.8 36.7 35.3 35.3 35.0 36.9 41.0 46.3 49.6 49.3 45.9 43.3 41.4 41.3 42.2 42.7 42.3 41.3 39.8 37.9 37.6 37.3 37.7 38.5 38.2 36.4 34.4 33.9 35.4 38.7 47.5 44.3 43.4 43.1 43.1 43.0 43.8 40.7 38.9 39.2 39.3 38.9 38.4 38.3 38.6 36.9 35.3 34.0 32.6 35.6 39.8 43.3 45.3 46.4 46.7 46.2 43.5 41.3 41.3 41.3 40.9 37.3 35.0 35.5 35.5 35.0 35.9 41.0 46.3 46.4 46.7 46.2 43.5 41.3 41.3 41.3 41.3 40.9 37.3 35.0 35.5 36.4 34.8 36.9 35.3 35.0 35.6 39.8 43.3 45.3 46.4 46.7 46.2 43.5 41.3 41.3 41.3 41.3 40.9 37.3 35.0 35.5 35.0 35.5 35.0 35.0 35.0 35															4 7 9 8									
26 27 28 * 29 * 30	39.9 38.7 39.3	37.7 37.6 38.9	31.3 37.3 38.4	32.4 37.7 38.3	34.8 38.5 38.6	36.7 38.2 36.9	35.3 36.4 35.3	35.3 34.4 34.0	35.0 33.9 32.6	36.9 35.4 35.6	41.0 38.7 39.8	46.3 45.3 43.3	49.6 50.7 45.3	49. 3 49. 4 46. 4	45.9 47.5 46.7	43.3 44.3 46.2	41.4 43.4 43.5	41.3 43.1 41.3	42.2 43.1 41.3	42. 43. 41.	7 42. 0 43. 3 40.	3 41.3 8 40.7 9 37.3	39.8 38.9 35.0	37.9 39.2 35.5	9 2 5
Mean	37.8	37.6	37.7	38.3	38.6	39.1	37.7	35.8	36.0	38.1	42.2	46.1				47.0						2 39.3			
Mean.* Mean.★★		38. 4 34. 5									40.4					46.7 48.5						3 41.1 4 37.9			
October										9°	+ Tabi	ular Q	uantities	3											
1 2 *** 3 4 5	31.0 37.3	33.3 27.9 33.2 37.9 39.3	29.6 38.9	30.3 32.8 39.3	38. 2	35.4 33.9 38.3	36. 2 36. 3	37.2 31.9 33.5	38. 1 29. 7 32. 0	39.9 32.7 32.9	41.3 45.9 37.7 36.9 39.6	49.3 42.1 42.4	54.0 45.3 46.9	53.4 50.9 48.5	51.4 47.3 48.8	45.8 43.3 45.2 46.6 46.6	45.5 42.7 44.0	44.8 42.1 42.7	43.7 41.4 42.3	36. 41. 41.	2 40.	5 31.3 9 38.9 9 40.2	26. 32. 39.	5 35.3	9 3 2
6 7 8 9 ** 10 **	37.9 38.7 38.8 35.3 33.1	37.8 39.1 37.9 37.7 37.9	38.3	33.7	39.4 39.7 39.3 37.4 35.8	39.7 39.6 38.5 39.3 40.1	39. 2	37.3 38.1 42.0	35.3 36.3 43.2	35.4 35.8 41.1	36.4 37.8 38.3 43.3 46.0	41.3 40.9 47.2	45.4 45.4 52.2	47.0 48.3 52.7	47.9 48.0 50.9	48.4 47.7 46.2 46.3 50.3	47.3 45.4 50.8	47.0 42.7 48.9	42.7 43.0 41.4	45. 42.	9 39. 2 42. 0 37.	39.3 7 32.0 4 41.9 9 35.7 3 35.0	39.3 41.3	3 39.6 3 39.8 1 39.2 5 30.2 0 31.3	8 2 2
11 12 ** 13 14 15 **	37.1 37.3 35.9	31.2 40.6 38.4	32.4 42.1 42.8	39.3 38.2 39.7	42.6 39.3	41.2 46.3 47.4	44.4 53.2	47.7 40.9 40.7	39.8 38.3 37.3	38.8 37.2 38.8	41.9 42.3 40.8 41.3 40.3	45.0 42.7 45.3	44.7 47.9	50. 1 45. 2 48. 4	46.9 44.4 48.4	38.0 43.9 43.3 44.6 44.3	37.3 43.3 43.0	34.3 40.9	33.7 31.3 33.4	32. 38. 35.	7 34. 7 39. 0 27.		38.2 31.4 31.4	9 30.8 2 38.3 4 33.6 4 33.3 9 36.3	3 6 3
16 17 18 19 20	42.4 39.1	33.8 40.3 40.4 39.8 43.2	38.4 40.5 40.9	39.3 41.3 40.9	40.9	39.9 40.3 40.3	39.4 40.4	37.7	36.0 37.9 38.3	38.1 39.3 42.3	39. 9 42. 4 42. 9 46. 1 41. 9	46.5 46.3 50.0	49.0 50.8	47.5 50.3 49.2	47.4 48.7 48.3	39.8 42.4 39.3 47.9 41.7	43.4 40.8 43.0	41.5 41.8 43.6	35.3 40.4 44.4	38. 36. 34.	6 39. 4 36. 1 32.	5 39.4 3 39.8 3 37.9 8 35.3 4 33.7	39.4 35.1 38.2	2 40.0	9 3 0
21 22 23 24 25	39.3 37.0 39.7	33.2 39.7 37.9 33.2 37.6	37.9 38.7 34.7	36.8 38.4 36.7	39.7 38.8 38.4 38.3 39.0	40.4 42.9 38.3	38. 2 40. 5	37.3 36.9 36.3 35.6 36.3	36.0 35.8	38.3 35.8	40.3 41.7 40.4 42.2 38.3	43.9	46.8 46.2	48.8 47.6 48.0	47.3 45.9 46.5	44.9 45.9 45.7 44.5 43.6	44.3 42.9 42.8	42.8 42.3 42.3	41.8 43.6 42.8	41. 38. 42.	4 41. 7 39. 6 42.	5 40.7 3 40.8 6 39.4 3 40.9 8 40.7	39.8 40.6 39.3	0 39.2 3 38.3	8 2 3
26 * 27 * 28 * 29 * 30 *	40.3		40.3	39.4 40.2 39.8		39.3	38. 5 38. 3 38. 4 38. 4 38. 8	36.8 36.8 36.9	35.3 35.7 35.3	37.3 37.0 36.9 36.5 36.8	41.1 39.8	43.8 44.5 42.7 43.7 42.8	46.6 44.5 45.8	46.0 44.3 46.3	45.3 43.9 44.9	43.2 43.3 43.1 43.8 43.6	42.8 42.9 44.3	42.9 42.8 44.7	42.6 42.7 43.0	41. 42. 43.	8 41. 0 41. 7 42.	0 41.0 5 41.4 8 41.3 7 41.5 3 40.8	41.0 40.9 40.4	0 40.9 9 40.7 4 40.3	9 7 5
31	40.4	40.3	39.9	39.3	38.8	39.9	39. 2	38.3	37.3	37.4	40.9	44.8	46.3	45.4	45.7	44.8	44.5	43.7	42.6	42.	3 41.	3 40.4	38.9	38.4	4
Mean Mean *		37.5 39.8									40.9 40.1					44.5 43.4						9 37.9 9 41.2			_
Mean ★★		34.7									43.6					45.6						4 34.4			

^{*} International Quiet Day. ** International Disturbed Day.

									TA	BLE	ı	HOURL	Y ME	ns o	F MAGNE	TIC I	ECLI	OITAN	1								
U.T.	0 ^h	1 ^h	2	h 3	h .	∮ h	5 ^h	6 ^h	7	,h {	3 ^h	9 ^h 1	0 ^h 1	1 ^h	12 ^h 1	3 ^h	14 ^h	15 ^h	16 ^h 1	7 ^h	18 ^h	19 ^h	20 ^h	21 ^h	22 ^h	23	h 24 ^h
November		,		,			 ,					9°	+ Tab	ular G	uantitie:	s			,			,	,				
1 2 3 * 4 5 *	37. 39. 40.	.9 3 .3 3 .3 4	38. 9 38. 8 10. 3 17. 4 19. 3	39.9 40.3 40.3 38.9 40.6	39.3 38.0 40.2 39.8 39.4	39.3 37.3 40.1 39.3	39.3 38.4 39.4	3 4 4 3	39.3 38.3 39.3 39.3 38.9	38. 2 38. 0 38. 4 38. 3 38. 3	36.9 36.3 37.0 37.3	37.9 36.8 36.8 38.3	39.7 39.7 41.7	44.4 42.8 41.7 44.4 43.9	44.5 45.3 43.8 46.8	45.4 45.7 44.4 47.1	43.8	43.8 43.5 43.9 41.9	43.0 42.3 42.8 43.7	42.3 42.3 42.8 43.7 42.0	42. 42. 42. 42.	1 41.	8 41. 7 41. 8 40. 4 40.	3 3 0 4 3 4 8 4	0.4 3 0.0 3 0.3 3	9.2	38.3 39.8 37.5 38.6 39.8
6 * 7 * 8 ** 9 ** 10 **	40 37 39	.9 3 .9 3 .8 3	10. 1 16. 4 16. 6		40.1 40.3 37.2 38.7 37.3	38.3 37.9	40.0 38.9 40.3	0 9 3	39.0 40.0 40.8 41.2 42.4		39. 1 39. 3 37. 5	38.3 39.2 38.6 39.5 37.8	41.4 42.3 42.8		45.7 48.3	43.5 47.9 51.7	42.9 49.0 46.7	41.8 42.2 46.4 49.4 43.0	42.4 42.8 44.3		41. 40. 36.	.9 41. .6 41. .1 37. .7 40. .2 39.	4 41.	8 4 8 3 9 2	0.8 3 2.9 3	9.4 6.4 0.5	40.4 37.1 36.6 35.0 36.3
11 ** 12 13 14 15	37. 36. 38.	.3 3	6.9 8.0 9.7	32.4 36.6 39.8 40.4 39.9	38.3 35.8 39.6 40.4 38.4	39.9 39.3 40.1	37.9 39.5 38.5 39.4	5 5 4	38.3 39.0	37.8	39.8 36.7 38.4	38.2 38.8 38.0	38.9 41.2 40.1	44.0 41.3 42.9 43.0 42.6	42.9 45.4	44.2	42.7 43.3 46.4	42.7 42.3 44.8	40.8 40.3 42.4	33.9 38.6 40.7 38.7 41.5	38. 36. 40.	1 40. 6 38. 6 38. 5 38. 4 40.	8 38. 3 39. 4 36.	2 3 4 3 4 3	8.7 3 9.3 3	8.4 5.8	38.4 36.4 37.7 38.3 35.0
16 17 18 19 ** 20	36. 39. 37. 38.	.7 3 .9 3 .4 3	8. 0 8. 5 9. 5 8. 4	38.9 40.4 39.5 38.0	40.5 40.3 39.4	41.2 38.9 41.4 39.3	38. 4 41. 4 38. 3	4 4 4 3	39.0 38.4 40.3 38.4	38.4 38.4 41.9 37.8	37.9 38.7 40.5 37.0	37.9 39.4 36.8	39.8 39.7 40.9 39.3	43.9 42.4 41.4 43.1 41.9	44.2 45.0 43.4	44. 4 45. 1 45. 6 45. 3	44.4 45.0 44.0 44.6	43.6 43.8 45.0 42.4 43.0	43.0 44.9 40.8 41.4	43.4 44.8 42.4 40.4	42. 42. 39. 40.	8 38. 1 40.	4 40. 2 39. 0 36. 4 40.	5 3 8 3 4 3 1 3	9.7 3 8.0 3 5.8 3 7.1 3	9. 0 6. 4 6. 0 5. 8	35.9 39.1 36.3 36.8 37.9
21 22 23 24 25	39. 40. 37. 35.	.8 3 .0 3 .4 3	9. 4 9. 4 7. 6 8. 5		38.9 38.6 38.5 38.4 38.4	38.8 39.3 38.4 37.9	38.9 38.4 38.5 37.8	9 4 5 8	38.6 38.3 38.5	38.4 40.4 38.0 37.9	37.9 43.3 37.0 38.5	37.5 38.5	39.5 41.1 39.6 38.5	41.0 40.9	43.2 44.4 42.8 42.3	45.1 44.4 43.3 43.0	44.2 44.0 42.7 42.2	43.9 42.3 43.5 42.6 42.0	40.9 42.8 41.8 41.0	41.0 42.4 41.6 40.9	41. 41. 44. 40.	8 40.	5 40. 6 40. 4 36. 6 40.	4 39 5 39 6 40	9.7 3 9.5 3 7.7 3 0.0 3	9. 6 8. 3 7. 0 9. 5	39.7 39.8 38.1 32.8 39.0
26 * 27 28 29 30	36. 39. 38.	.5 3 .2 3 .7 3 .8 3	7. 6 8. 9 8. 7	38.3 38.8 39.9 38.9 39.7	40.1 37.7	38.7	40.0 37.7	5) 7	39.7 38.6	39.2 39.1	37.1 38.4 38.3		37.7 38.8 38.8	41.1 40.6 41.3 40.9 40.2	42.7 42.9	44.5 43.7 44.3	43.7 44.3 44.8	42.2 43.0 44.0 43.8 43.5	42.0 43.7 43.4	41.6 42.8 43.4	41. 42. 44.	0 41. 6 41. 2 41. 2 40. 1 37.	1 40. 2 39. 6 39.	5 40 9 39 8 3	0.0 3 9.6 3 7.1 3	9.6 8.8 5.2	36.0 39.6 39.1 37.3 38.2
Mean Mean *					39.0 39.7					-	-	38.1 38.1						43.6 42.5				2 40. 1 41.					
Mean ★★ December		.9 3	6.3	35.8	38.4	38.8	39.6	5	40.7	40.3	38.9	38.8 9°			45.2 uantitles		44.9	46.0	42.9	38.9	39.	2 39.	0 36.	4 33	3.5 3	3.8	36.6
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1 2 3 * 4 5	37. 39.	7 3 9 3	8.4 9.6				39.4 38.3 39.6	<u>1</u> 3	38.3	39.2 39.6 39.3 40.1 39.7	38.8	38.4 38.6 38.5	40. 2 39. 8 38. 7		42.0	45.0 42.9	44.2 42.3 42.2	43.3 44.7 42.2 42.3 43.1	41.8 41.7 41.7	41.1	41.	8 40. 2 40. 7 40. 9 40.	0 39. 2 39. 7 39. 2 38.	7 3: 8 39 0 30 9 39	7.7 3 9.4 3 6.6 3	8.8 7.1	38.7 37.2 39.1 38.3 33.1
6 ** 7 8 9 ** 10	37. 38. 39.	8 3	9.6 8.8 9.4	29.0 40.2 39.6 39.1 40.6	40.7 39.3	37.3	40.3 39.1 39.3	3 [.	40.2 43.9 41.7		38.8 38.6 40.3	37.7 39.2	38.5 39.3 39.7	46.3 40.1 40.5 43.4 42.7	42.2 41.2 43.7	42.6 43.1 45.6	42.8 41.7 41.8	46.6 43.7 41.1 41.5 42.6	38.9 40.6 41.1	42.7 40.7 37.8	42. 40. 38.		3 39. 7 35.	6 39 3 38 2 39	9.7 3 8.7 3 5.2 3	8.5 5.1	33.2 39.0 38.6 36.8 34.7
11 12 ** 13 ** 14 15	35. 37. 38.	2 3	8.3 8.2 9.6	38.4 40.2 40.5 39.7 38.6	38.7 40.9 40.7	41.2 41.5 39.3 39.7 39.6	39.5 40.2 39.8	5 2 3	40.8 40.4	40.3 41.7 41.0	42. 2 41. 2		39.7 40.5 40.7	42.0 41.3 41.6 43.2 39.8	42.8 45.8	45.1 43.1 43.6	44.5 44.2 41.3	42.6 43.7 42.3 41.3 42.9	42.7 38.8 40.1	41.6 38.2 38.7	38. 39.	7 38. 7 38. 2 39.	4 38.	1 30 3 34 7 37	5.9 3 4.7 3 7.7 3	7.6 7.0	35.5 34.3 38.3 37.1 37.0
16 17 * 18 19 20 *	38. 38. 37. 36. 38.	7 3 5 3 1 3	9.3 6.8 7.8	39. 1 38. 7 38. 7 39. 2 39. 1	39.0 38.7 40.4	39. 3 39. 4 39. 1 40. 7 39. 5	40.1 39.3 40.3	l :	38.7 39.4 39.8	39. 1 39. 7	38.7 38.7 39.7	38.3	38.8 41.1 39.5		43.3	43.4 43.2 44.3	43.4 42.3 43.8	41.7 43.1 41.8 44.2 43.7	41.7 40.9 43.4	41.3 41.2 42.8		1 40. 1 40. 2 40.	2 39. 0 37. 6 39.	5 38 9 39 7 38	3.8 3 9.2 3 3.8 3	8.3 7.7	38.7 37.4 35.2 38.8 38.0
21 * 22 23 ** 24 25	38. 39. 35. 37. 38.	3 3 0 3 7 3	9.5 4.0 8.6	38.9 39.6 36.8 38.3 39.7	39.5 38.2 38.2	39.4 39.3 38.4 38.7 38.7	39.1 38.0 38.6	l)	39. 2 38. 5	38.8 38.7 38.7 38.7 38.6	38.3 38.3 38.7 38.7	38.2 38.6 38.7	39.7 40.2 39.8	40.1	43.2 43.1 40.8	44.6 44.2 41.7	43.8 47.4 41.6	41.8 44.2 45.1 42.0 41.5	44.3 44.7 41.8	42.3 42.3 41.2	41. 40.	2 39. 7 41. 2 39. 1 40. 1 41.	6 39. 7 39. 4 39.	.7 39 .5 38 .7 36	9.2 3 8.2 3 5.7 3	8.7 8.4 7.4	39.1 33.6 36.8 36.9 38.7
26 27 28 29 30	35. 37.	3 3 2 3 0 3	6.1 8.5 7.4	37.5 36.1 39.7 38.2 39.2	39.6	37.1 38.7 39.2	38.1 38.8 39.0	} }	39. 1 38. 7	39.2 38.1 38.8 38.7 39.0	38. 2 39. 3	38.2 38.9	42.2	40.9 41.9	42.7 42.7	43.2 43.6	42.8 43.2 44.7	42.1 41.6 42.2 42.7 42.0	40.7 41.0 42.9	41.9 40.5 42.4	39. 40.	6 38. 9 40. 8 38. 2 38. 2 39.	1 39. 8 38. 7 37.	7 38 2 38 2 33	3.2 3 3.4 3 3.8 3	7.6 5.0 6.3	37.8 34.2 35.5 36.7 38.0
31 *	38.	3 3	8.8	39.5	40.0	39.2	39.2	! :	39.1	39.0	39.5	39.6	40.0	40.9	41.7	41.7	41.7	41.7	41.6	41.3	41.	0 40.	1 39.	2 38	3.9 3	8.5	38.6
Mean *					39.3 39.1							39.0 38.7						42.8 42.5				7 39. 9 40.					-
Mean ★★	36.	0 3	5.0	37.1	38.5	39.3	39.3		40.3	40.2	40.0	39.9	40.8	42.5	44.4	44.7	44.7	43.8	42.3	40.4	39.	7 38.	1 37.	1 35	5.1 3	4.8	35.9

^{*} International Quiet Day. ** International Disturbed Day.

				TABL	E II.	- н	OURLY N						PONENT				NTENS	SITY	AT AB	INGER				
U.T. 0	h 1	h 2	h 3	h 4	h 5	h	6 ^h 7	h 8	h 9	, ^h 1	0 ^h 1	1 h	12 ^h 1	3 ^h 1	4 ^h 1	5 ^h 1	6 ^h 1	7 ^h	18 ^h	19 ^h	20 ^h	21 ^h 2	2 ^h 2	3 h 24 h
January									18000	γ+	Tabu	lar Qı	ıantiti	es (1)	n y)									
1 2 3 4 ** 5 **	587 583 585 570 573	588 583 584 565 569	591 583 587 572 563	599 583 587 571 571	601 588 589 569 573	599 593 585 572 577	600 597 585 573 590	598 597 593 571 583	593 587 588 567 580	592 578 578 557 561	579 573 566 554 557	571 572 571 562 560	579 576 568 552 562	573 582 565 570 567	569 576 560 577 565	568 564 561 540 567	577 539 563 545 566	587 560 561 555 555	58 58 53 55 55	0 58 9 54 0 55	5 584 2 552 4 574	587 571 576	581 588 582 571 551	587 589 572 567 560
6 7 8 9 * 10 *	567 571 577 582 589	569 573 578 581 588	570 581 581 586 589	568 583 578 587 589	569 577 582 589 591	570 576 582 591 593	572 575 582 592 595	560 583 585 592 593	555 573 575 587 591	552 560 572 579 586	548 553 575 569 581	542 547 574 568 577	541 554 577 568 580	546 563 577 569 581	540 567 572 571 582	558 570 573 573 587	553 568 579 577 591	557 576 582 583 597	55 57 58 58 59	1 58: 5 58:	0 580 3 583 4 584	572 582 584	567 574 582 584 591	567 578 583 585 591
11 * 12 * 13 * 14	587 590 591 583 589	588 590 590 589 586	591 591 593 587 587	593 592 592 587 589	597 594 595 589 591	599 597 597 594 598	602 596 601 597 595	603 597 597 597 597	602 593 592 589 585	596 587 581 578 572	588 583 570 572 563	581 583 571 574 567	586 587 577 582 574	584 587 583 587 577	585 588 590 585 583	589 591 597 587 583	591 594 597 581 591	593 597 597 585 593	59 59 59 58 59	8 59° 7 59° 9 59°	7 597 7 597 1 593	597 592 597	591 592 584 593 568	590 591 586 592 571
16 ** 17 18 19 20	567 533 562 582 571	569 563 568 571 573	568 545 567 563 573	586 547 567 568 575	537 552 567 573 577	567 552 570 580 584	587 554 573 582 591	594 557 572 575 589	597 563 567 572 583	580 551 555 563 572	563 531 551 549 563	567 542 548 541 561	568 552 555 551 563	567 550 559 556 566	572 552 557 554 572	566 557 566 561 577	594 562 570 571 577	547 568 559 577 587	55 56 56 58 57	9 56 9 56 1 58 1 56	7 567 7 562 1 582	583 570 573	542 564 574 575 581	543 563 574 583 583
21 22 23 24 25 **	575 582 577 587 582	585 582 577 588 581	580 587 576 589 587	576 587 577 591 617	576 589 581 592 611	587 589 586 593 569	587 593 587 596 551	583 593 587 557 531	585 584 587 559 517	577 575 583 563 510	571 568 573 551 488	566 561 571 544 473	571 562 573 542 496	575 573 582 548 513	570 582 582 556 514	569 585 583 573 543	576 581 581 574 517	582 567 583 574 527	58 57 58 57 51	0 57 6 58 1 56 7 51	1 577 3 574 1 563 7 493	575 580 571 495	587 585 581 575 502	583 584 587 583 500
26 ** 27 28 29 30	511 556 581 567 579	511 559 565 568 578	521 555 565 568 574	541 560 568 572 573	577 560 572 583 573	537 561 572 577 579	553 561 572 583 579	527 556 563 579 578	521 549 561 571 579	506 538 558 559 580	501 535 550 543 573	500 533 543 537 565	502 545 545 543 560	508 554 556 554 568	528 550 556 552 572	533 567 567 551 573	543 572 570 561 572	543 584 574 569 577	54- 56- 57- 57: 58-	9 562 4 576 5 582 1 586	2 592 5 580 2 583 0 582	569 572 579 584	555 562 567 581 573	560 559 565 579 567
31	562			577			579				555		·				573		579			583		
Mean Mean *	574 588	575 587	576 590	579 591	581 593	581 595	583 597	580 596	575 593	567 586		556 576	560 580	565 581	566 583	569 587	571 590	573 593	574 594	4 573 4 593		574 591		574 589
Mean **	-			577					556				-				553					538		
February									18000	γ +	Tabu]	lar Qu	antitie	es (in	ι γ)									
1 2 3 4 5	587 584 580 597 583	582 584 579 606 582	580 585 581 594 582	580 584 582 584 584	586 587 582 583 585	591 591 584 588 587	589 590 590 599 587	588 587 592 607 587	572 581 593 597 584	563 571 590 577 577	554 561 570 564 567	551 553 553 554 568			570 567 558 557 582		577 579 581 569 578	577 586 583 577 579	580 581 581 571 583	4 581 7 593 8 581	7 587 3 591 1 581	577 573 591 574 587		586 578 594 590 582
6 7 8 ** 9 ** 10	583 588 591 553 557	588 587 597 551 561	590 589 594 563 566	591 592 587 577 563	592 593 587 569 566	590 597 587 577 571	607 597 592 564 583	603 593 585 561 593	582 596 576 563 586	572 586 569 547 572	567 574 551 538 542	563 562 527 538 534	561 565 527 557 535	568 564 541 558 540	575 561 537 558 541	574 581 531 561 545	579 587 541 562 561	577 583 537 558 572	57 56 53 57 57	2 568 1 539 5 585	572 524 571	591 580 543 574 575	590 582 553 572 580	590 589 551 558 577
11 12 13 14 * 15 *	576 589 582 591 592	575 586 585 590 592	576 587 587 591 593	578 587 589 592 594	583 592 593 593 595	582 596 596 597 597	583 598 597 599 601	581 594 597 595 598	571 585 586 587 585	555 568 571 578 572	542 559 551 567 557	540 552 549 554 547	545 553 553 550 551	552 563 557 562 561	564 567 562 573 572	577 573 573 580 574	578 573 581 580 577	583 580 581 582 581	587 588 588 587 587	2 585 8 590 7 592	5 589 594 2 593	592	585 587 593 591 593	587 582 593 590 592
16 ** 17 ** 18 . 19 ** 20	592 479 566 561 586	591 537 551 562 564	593 537 556 561 574	619 532 558 560 584	621 518 562 563 582	615 563 563 565 570	619 547 557 562 564	620 519 553 577 562	597 507 547 570 557	565 505 541 556 552	524 503 533 549 551	492 501 536 540 551	464 507 543 541 554	476 501 549 542 554	491 513 554 560 561	472 523 553 558 563	472 531 557 544 565	504 538 563 560 571	512 555 569 542 573	l 551 9 564 3 554	557 556 563	509 554 563 567 579	512 554 565 567 579	504 553 553 565 581
21 * 22 * 23 * 24 25	581 587 592 587 594	580 585 588 593 593	583 587 589 593 592	583 587 593 599 594	583 589 593 602 597	583 592 593 607 597	587 593 592 609 602	583 588 591 607 603	573 583 583 599 594	557 577 574 586 574	546 570 563 570 562	539 565 557 563 552	547 572 561 552 549	561 579 569 565 542	571 587 577 579 554	575 587 581 582 563	576 587 586 589 572	579 587 586 593 579	581 589 590 582 583	9 591 9 592 2 574	592 590 584	584 591 591 592 584	586 592 590 598 583	587 591 589 597 585
26 27 28	601 572 586	593 572 583	577 575 583	577 572 584	577 582 587	587 587 591	593 590 594	587 592 597	576 585 595	573 572 582	571 567 577	561 565 578	553 562 584	562 565 584	564 569 581	567 577 579	571 580 577	577 585 584	587 590 597		594	585 592 586	586 590 589	579 590 592
Mean	579	580	581	582	584	587	58 9	587	579	567	555	548	548	554	561	565	568	573	575	5 577	578	578	580	579
Mean *	589	587	589	590	591	592		591		572		552	556	566	576	579	581	583	587			590	590	590
Mean **	555	568	570	575	572		577 Intern		563								530	539	542	548	546	549	552	546

^{*} International Quiet Day. ** International Disturbed Day.

				TABL	E II.	- HO	OURLY 1	1E ANS	OF F	HORIZ	ONTAI	COMI	PONENT	OF M	AGNE	ric i	NTENS	SITY A	T ABI	NGER				·
U.T.	0 ^h	1 h	2 ^h 3	3 ^h 4	i ^h 5	, h	6 ^h 7	,h g	3 ^h 9) ^h 1	0 ^h 1	1 h	12 ^h 1	3 ^h 1	4 ^h 1	5 ^h 1	6 ^h 1	7 ^h 1	8 ^h	19 ^h 2	0 ^h 2	1 ^h 2	2 ^h 2	3 ^h 24 ^h
March									18000	γ+	Tabul	lar Qu	antitie	es (in	1 Y)	-a	···							
1 * 2 ** 3 ** 4		588 587 511 469 555	584 582 511 501 552	584 581 502 551 549	587 592 522 501 555	587 594 532 569 560	590 593 532 542 559	592 592 519 520 558	585 651 477 450 562	572 655 442 455 556	565 592 458 506 538	569 581 447 511 541	573 556 430 513 546	577 505 440 503 542	575 502 478 498 536	579 524 462 521 544	581 540 481 528 546	581 545 517 534 555	587 524 517 538 559	496 501 569	594 511 437 529 568	593 506 464 540 569	596 513 409 552 571	588 499 377 552 571
6 * 7 8 ** 9 10 *	569 577 591 488 561	576 576 586 514 563	566 576 589 496 563	567 576 602 536 569	573 578 601 530 566	576 585 600 526 572	578 586 609 500 571	578 580 593 491 561	567 568 569 460 543	552 549 520 470 522	542 533 510 456 511	542 536 506 449 512	550 531 509 455 521	552 526 483 482 529	555 545 536 501 536	551 551 542 517 559	558 566 533 523 561	564 586 531 526 561	568 586 497 542 566	582 466 549	576 584 462 568 579	578 583 464 568 579	576 582 460 562 576	578 581 480 562 573
11 * 12 13 14 15 **	575 591 587 602 580	574 589 587 591 578	573 588 586 593 572	576 593 582 596 571	579 597 591 609 572	580 618 591 604 561	580 613 597 603 560	576 606 585 605 538	557 589 576 592 500	541 565 566 574 469	531 551 557 562 470	530 548 556 558 506	528 548 547 552 539	543 559 558 534 529	553 584 569 553 489	565 569 573 576 521	570 566 581 579 533	573 579 585 550 489	578 583 596 575 521	605 577	582 590 596 572 531	581 589 603 576 529	581 586 602 570 529	581 588 600 572 547
16 17 18 19 20	534 529 572 581 585	536 543 559 586 590	540 550 562 568 578	536 540 559 572 581	537 560 560 567 585	540 536 565 569 585	541 538 566 571 585	542 537 561 561 577	536 519 556 550 568	530 518 549 545 558	522 517 536 541 551	520 518 536 545 552	521 531 549 551 559	530 541 553 552 567	526 546 556 558 571	526 543 549 564 572	539 548 570 571 575	560 560 566 580 577	567 566 576 578 585	567 586 580	532 578 577 587 577	536 574 579 566 584	536 571 575 571 582	536 569 576 571 581
21 * 22 23 24 25	581 575 590 575 581	578 579 593 577 578	576 585 586 585 578	585 611 584 578 582	581 619 588 552 579	589 627 588 608 575	584 599 588 581 572	578 572 588 562 561	571 563 585 555 552	558 541 570 539 531	552 551 570 531 535	561 559 575 530 541	564 560 577 545 540	577 568 559 560 549	586 569 572 567 562	578 553 569 572 569	575 576 567 569 570	580 571 540 572 571	587 573 550 570 579	578	593 580 555 575 588	590 585 560 575 584	576 587 573 588 582	570 588 573 585 592
26 27 28 ** 29 30	587 572 570 549 551	575 580 555 545 575	590 575 550 545 581	580 582 584 553 561	572 576 581 555 564	573 591 573 558 555	571 595 558 555 557	561 581 533 545 550	538 563 510 535 545	537 548 528 523 535	528 545 515 515 524	518 552 506 518 517	528 545 514 525 507	551 547 555 525 529	556 551 557 541 551	568 567 556 551 558	571 579 576 560 548	563 579 589 562 561	555 575 555 570 581	585 532 581 575	580 572 511 568 575	602 567 509 565 575	581 589 535 578 574	572 585 545 560 579
31	580			559					555		······································			529						577				
Mean Mean *	566 575	567 576		570 576			573 581	564 577		537 549	531 540	532 543	534 547	537 556	546 561	552 566		561 572	564 577		561 585	563 584	563 581	561 578
Mean **	561	563	561	568	574	572	570	555	541	523	509	509	510	502	512	521	533	534	523	505	490	494	489	490
April									18000	γ+	Tabul	ar Qu	antitie	es (in	γ)	·····	······································							
1 * 2 3 4 5		570 585 591 585 570	569 586 595 583 567	568 588 609 585 566		578 591 588 599 579		579 597 591 600 571		547 570 557 540 540	536 559 547 530 527			550 558 574 539 542	557 559 585 562 565	570 570 601 552 576		587 585 589 574 589	590 586 595 562 581	587 592 601 575 581	590 591 609 573 589	595 595 605 579 591	593 595 602 565 591	590 594 599 561 595
6 7 8 9 **	589 591 590 602 570	591 588 590 584 568	601 589 591 585 575	611 589 591 590 564	597 591 594 598 569	595 595 598 590 576	599 596 599 571 577	579 587 592 544 577	555 573 577 533 567	527 555 559 508 551	517 542 536 497 533	526 547 541 495 524	545 544 545 531 532	555 556 552 539 539	569 555 563 527 555	570 586 575 545 575	561 569 590 548 582	579 580 593 565 591	585 591 594 578 590	595 590 595 576 588	592 590 595 575 585	590 590 604 581 585	594 595 621 568 589	595 595 621 567 608
11 12 13 14 15	596 574 576 590 598	578 572 580 590 588	572 578 595 586 572	575 580 578 590 584	575 578 580 595 590	585 581 582 591 602	579 579 588 587 599	572 570 581 582 587	560 555 569 584 578	545 538 559 581 559	537 536 546 565 549	536 535 545 561 555	538 540 559 566 555	557 557 568 584 565	581 561 587 585 586	590 577 583 595 602	599 582 595 590 608	591 595 595 595 589	582 592 595 609 594	587 592 596 599 604	585 595 596 604 603	587 596 604 592 590	590 596 593 589 591	582 586 585 589 590
16 17 ** 18 ** 19 ** 20 **		595 572 514 545 575	597 581 507 551 579	578 589 509 546 583	583 585 515 555 595	585 592 525 561 574	584 587 534 558 588	576 588 527 537 579	570 579 516 539 574	565 567 509 529 547	561 561 505 511 535	558 565 485 514 536	550 609 476 538 536	558 611 508 535 538	569 574 535 535 555	579 666 560 557 561	573 599 529 582 569	589 602 527 581 597	598 637 545 577 585	595 625 565 575 582	582 527 565 575 575	588 460 549 580 578	586 516 541 588 581	589 496 551 584 579
21 * 22 * 23 * 24 * 25	583 590 602 601 605	585 587 600 601 603	581 588 596 602 604	581 587 597 602 606	585 589 600 602 608	585 589 602 601 611	578 589 599 600 614	563 583 591 597 606	562 572 579 585 595	559 564 568 566 583	555 555 566 548 567	555 555 566 542 556	562 565 579 550 566	565 569 582 566 581	571 575 591 583 592	579 585 602 597 612	585 595 606 605 636	585 595 610 606 610	587 595 610 606 622	588 596 610 605 612	591 597 607 606 621	590 595 606 606 616	587 595 604 604 612	591 597 600 603 616
26 27 28 29 30	614 596 601 592 605	616 596 598 590 604	606 597 591 592 597	601 600 595 594 599	606 600 589 600 600	604 606 598 602 606	605 615 606 604 600	608 610 600 600 592	606 602 584 594 579	600 580 576 582 562	586 556 564 560 551	576 549 561 568 557	580 556 573 590 574	580 566 580 571 572	587 581 579 582 578	608 572 592 582 582	609 591 600 592 594	616 606 600 598 600	613 604 600 599 615		610 599 600 602 602	606 599 602 603 601	610 599 601 601 600	596 599 597 600 599
Mean *	586	584	584	585	586	589	590	582	571	556	545	543	553	561	569	583	587	591	594		591	589	590	588
Mean ** Mean **	589 560	589 558	587 561	587 563	589 570	591 568	589 568	583 555	572 548		552 522	551 519	559 538	566 546	575 545	587 578	595 565	597 574	598 584	597 585	598 563	598 550	597 559	596 555

^{*} International Quiet Day. ** International Disturbed Day.

				TABL	E II.	- н	OURLY 1	Æ ANS	OF I	IORIZ	ONTAI	COMP	ONENT	OF M	AGNE	ric i	ntens	SITY A	T ABII	NGER				
U.T.	0 ^h	1 h	2 ^h :	3 ^h 4	i ^h 5	5 h	6 ^h 7	,h	8 ^h 9) ^h 1	0 ^h 1	1 ^h 1	.2 ^h 1	3 ^h 1	4 ^h 1	5 ^h 1	6 ^h 1	7 ^h 1	8 ^h 1	9 ^h 2	0 ^h 2	1 ^h 2	2 ^h 2:	3 ^h 24
May	7								18000	γ+	Tabu:	lar Qu	antitie	es (in	η γ)							····		
1 2 * 3 4 5	597 584 596 600 604	583 596 601	606 580 593 600 608	595 576 596 596 614	596 581 594 592 606	602 589 596 586 603	586 586 592 582 594	587 579 586 578 579	582 579 578 576 577	572 576 564 569 578	570 573 560 567 570	567 579 570 570 571	574 581 582 581 581	560 590 597 588 588	563 590 602 594 596	579 592 612 596 617	602 599 618 600 612	601 601 610 602 610	584 596 602 616 609	598 596 602 604 608	601 596 598 605 606	599 598 598 609 607	592 602 600 608 602	589 598 599 604 604
6 7 8 * 9 * 10 *	601 601 603 604	601 595 601 601 604	600 599 604 600 605	601 602 604 604 606	601 603 606 605 608	596 601 602 601 609	595 595 598 592 599	588 589 591 582 589	579 581 584 574 577	572 571 575 575 574	565 569 575 580 574	576 569 572 584 568	588 575 579 586 575	588 584 581 585 581	604 591 596 591 588	600 606 605 599 598	591 611 613 597 607	599 610 609 602 608	610 609 604 610 613	600 605 605 613 609	605 607 609 614 609	603 605 607 611 601	602 601 605 607 594	609 601 604 605 594
11 12 13 14 ** 15 **	594 593 604 574 591	594 598 588 555 589	596 619 589 569 592	599 588 592 564 585	596 594 590 574 589	594 585 585 576 594	587 571 587 578 585	578 560 590 567 583	574 557 594 569 574	571 554 596 578 549	565 561 590 559 567	569 554 581 574 575	568 559 567 564 577	570 570 564 562 587	580 586 573 556 576	599 594 594 553 554	610 604 611 567 576	621 610 629 574 593	628 609 623 590 603	618 610 627 612 604	604 611 610 606 622	598 608 614 598 612	591 596 586 603 601	591 598 586 589 594
16 ** 17 18 19 20	587 594 593 579 589	574 591 599 577 590	580 574 588 582 590	573 587 578 584 591	556 584 579 580 592	574 580 585 578 588	548 568 580 561 576	541 570 568 549 561	554 568 560 549 558	552 556 569 554 570	524 563 577 564 577	532 570 578 558 566	542 561 576 562 564	563 554 574 571 577	557 582 594 556 589	564 607 596 569 598	583 604 614 592 594	601 615 648 608 596	598 615 640 607 599	608 608 614 603 608	600 608 590 605 613	600 618 594 603 608	600 598 594 598 608	594 594 601 589 610
21 22 23 ** 24 ** 25	604 600 628 610 566	608 597 630 609 574	605 601 627 621 572	607 604 627 619 572	604 608 608 620 569	594 602 611 608 569	584 595 631 604 559	571 587 624 568 549	576 577 601 447 535	579 568 584 527 522	584 568 564 551 518	584 569 556 534 529	580 570 559 511 532	571 567 570 523 547	584 576 588 533 576	601 586 617 546 592	608 597 623 577 601	609 609 614 581 600	607 612 616 594 609	617 614 617 586 609	620 618 621 577 603	619 614 616 578 602	611 617 612 584 593	610 631 609 573 591
26 27 28 29 30 *	587 598 605 617 590	582	599 607 594 608 582	606 602 597 609 584	600 605 603 612 588	604 601 600 611 583	601 597 593 610 573	580 574 585 608 559	566 570 576 598 548	553 559 564 595 543	547 552 558 580 543	529 556 553 575 543	524 546 561 574 549	528 547 577 570 556	544 549 585 588 563	574 574 574 649 580	580 598 604 631 593	620 622 629 610 599	619 601 623 602 605	621 608 616 590 603	614 605 612 590 607	619 608 616 594 607	630 604 619 594 604	610 604 614 590 600
31	603			599	604		593		573		586	· · · · · · · · · · · · · · · · · · ·	604		620		627		613	646	630	604	601	
Mean Mean *	597 596		597 594	595 595	595 598	594 597	587 590	578 580	568 572	566 569	565 569	565 569	566 574	571 579	580 586	592 595	601 602	608 604	609 606	609 605	607 607	605 605	602 602	600 600
Mean **	598	591	598	594	589	593	589	577	549	558	553	554	551	561	562	567	585	593	600	605	605	601	600	592
June									18000	Υ +	Tabul	ar Qu	antitie	es (in	γ)									
1 ** 2 * 3 4 5 **	627 592 603 610 612	609 592 597 609 614	587 592 600 609 614	590 592 598 610 613	572 592 598 610 611	589 583 602 606 609	573 572 592 593 605	544 562 582 582 581	530 552 573 574 554		519 551 566 583 611	533 551 573 586 598	537 555 576 598 587	539 561 586 606 596	559 568 592 616 590	570 575 593 617 606	579 593 596 629 622	583 597 601 622 667	590 597 608 606 674	592 598 613 616 642	588 601 613 618 638	590 606 609 612 632	589 612 609 610 613	591 606 608 611 582
6 7 8 9 10	563 592 570 586 593	564 589 578 584 592	562 595 592 592 600	567 599 566 599 588	572 597 578 576 590	564 593 566 572 598	555 578 560 565 584	547 565 552 566 577	546 552 548 562 567	546 547 540 548 554	552 568 538 529 543	557 575 541 524 557	566 576 546 527 564	572 564 553 544 577	578 572 574 562 578	584 602 575 583 582	589 607 576 600 592	592 606 614 614 602	601 602 604 609 612	596 616 605 612 620	596 617 595 610 616	598 622 598 604 596	592 596 593 587 596	588 576 592 592 592
11 12 * 13 14 **	594 596 585 602 592	594 599 593 587 578	586 601 595 595 574	591 601 595 566 593	589 597 595 567 589	588 587 592 568 578	590 589 584 558 565	574 595 581 560 556	565 592 576 532 555	564 585 573 498 547	558 581 571 517 542	556 582 568 533 540	559 580 559 528 564	576 584 560 537 557	596 598 578 537 567	608 612 583 552 583	606 612 595 567 590	610 622 617 594 605	626 634 646 610 608	608 623 626 618 606	605 606 621 620 610	600 608 638 604 608	598 598 624 599 605	598 593 613 604 597
16 * 17 ** 18 19 20	600 614 592 604 601	596 614 594 597 598	591 612 596 594 598	594 627 602 594 605	595 605 598 594 607	595 625 590 612 604	588 602 582 597 588	583 586 582 579 571	576 562 578 559 560	564 567 567 548 548	560 564 567 556 552	563 549 574 568 563	582 555 585 572 575	587 568 592 588 582	589 579 587 608 586	597 577 598 622 609	596 577 598 618 609	602 643 599 592 618	614 617 614 609 622	610 648 628 612 619	612 606 612 609 622	610 605 615 609 622	612 596 620 611 619	618 597 612 616 616
21 22 23 24 25 **	613 612 628 614 617	616 617 616 608 607	617 622 614 608 602	620 621 616 611 614	622 622 621 612 614	614 617 618 609 584	602 608 608 600 597	582 597 604 592 586	558 578 581 577 566	546 568 568 574 567	556 566 573 570 556	568 572 578 578 552	579 577 575 583 575	586 594 576 576 551	588 594 608 582 554	597 609 632 583 574	605 626 622 602 585	619 646 610 624 603	612 617 615 618 617	618 622 605 623 614	628 632 605 622 616	622 640 608 618 609	622 622 609 616 596	612 622 609 618 589
26 27 * 28 29 *	587 586 606 612 616	587 599 605 610 596	585 600 600 608 596	594 597 602 603 603	605 605 607 605 607	605 605 606 598 606	611 594 601 590 580	597 584 595 585 578	586 579 581 582 581	574 575 564 576 571	567 576 561 572 577	550 571 563 571 581	560 568 569 574 581	571 578 594 577 578	566 586 601 584 581	575 591 607 594 587	571 591 608 605 596	599 600 611 610 607	597 610 621 619 602	609 621 615 624 616	607 617 618 621 622	616 616 617 622 620	601 610 613 618 616	584 608 611 617 614
30																								
Mean *	601 597	598 599	598 598	599 597	598 599	596 594	587 587	578 582	566 576	559 570	560 568	563 568	568 572	574 577	582 585	593 594	599 599	611 606	614 615	616 615		612 612	607 610	603 608

^{*} International Quiet Day. ** International Disturbed Day.

The color of the					TABLE	E II.	- но	OURLY M	ŒANS	OF H	ORIZ	ONTAL	COMP	ONENT	OF M	AGNET	ic i	NTENS	SITY	AT ABII	NGER				
1	U. T.	0 ^h 1	h a	2 ^h 3	h 4	h 5	h	6 ^h 7	,h e	3 h 9	,h 1	0 ^h 1	1 ^h 1	2 ^h 1	3 ^h 1	4 ^h 1	5 ^h 1	6 ^h 1	7 ^h	18 ^h 1	9 ^h 2	0 ^h 2	1 ^h 2	2 ^h 2	3 ^h 24 ^h
2	July									18000	Y +	Tabu]	lar Qu	antitie	s (i	1 y)									
7 644 666 687 698 611 607 328 698 612 607 328 698 613 607 328 698 613 617 618 618 618 618 618 618 618 618 618 618	2 3 * 4 *	597 600 602	596 601 601	610 601 601	611 604 605	611 606 608	606 597 606	596 582 596	579 574 587	569 567 581	566 568 575	570 565 569	565 571 566	571 574 574	581 577 589	591 584 606	631 605 614	634 597 611	596 614 608	606 611 609	616 612 609	621 614 610	627 611 613	612 609 612	606 605 610
11 5 609 609 509 509 509 509 509 509 509 509 509 5	7 8 9	614 601 600	606 501 599	602 605 600	606 605 606	613 609 613	605 612 613	596 610 605	590 604 593	585 593 581	575 584 569	569 569 566	570 560 565	574 564 565	589 576 575	603 590 590	610 614 606	604 619 615	624 627 619	640 642 634	642 623 626	625 621 627	620 615 608	615 611 606	600 616 610
17 ## 622	12 13	592 599 603	594 595 605	602 589 600	609 589 598	595 596 599	592 591	592 589 579	581 576 571	566 574	563 559 581	553 552 579	559 549 579	582 565 584	594 588 590	599 583 592	597 614 605	603 612 624	615 624 615	623 620 622	603 610 625	610 616 617	606 609 606	603 607 604	601 599 603
22 *** 596 593 597 600 602 599 598 596 597 578 578 578 578 578 578 578 578 578 57	17 ** 18 **	622 563 559	618 586 546	616 592 554	617 600 573	616 619 569	614 602 573	607 582 558	591 576 562	581 566 537	573 553 507	575 553 493	590 541 529	591 547 539	597 592 536	600 589 552	613 540 571	633 575 589	663 623 605	801 641 604	739 600 596	694 553 605	620 562 593	588 576 589	549 585 589
27	22 23 ** 24	596 597 598	593 596 594	587 594 593	600 599 591	605 595 589	599 606 601	595 588 601	586 574 582	566 565 572	557 543 555	567 540 546	571 542 547	564 559 564	590 571	579 553 588	577 583 613	601 579 619	612 600 604	618 606 603	625 613 610	614 621 618	605 613 610	601 595 609	595 592 607
Mean # 600 598 598 600 602 601 591 581 573 565 560 561 567 577 586 600 608 613 622 618 615 609 604 600 608 mean # 602 602 601 604 607 602 591 582 576 575 573 575 580 587 597 610 613 612 613 612 616 615 612 609 606 608 mean # 587 588 588 584 594 596 596 581 569 581 544 537 541 553 565 569 579 585 612 649 629 615 596 587 578 578 578 578 578 578 578 578 578	27 28	595 604 599	600 599 594	596 599 598	599 599 589	600 599 589	596 598 577	590 592 578	591 583 579	584 569 566	583 559 549	570 561 535	556 559 543	564 569 561	570 587 582	574 596 594	588 606 595	584 612 599	597 614 594	616 615 604	601 604 603	605 603 595	602 606 595	599 602 594	601 597 592
Hean * 602 602 601 604 607 602 591 582 576 575 573 575 580 587 597 610 613 612 613 616 615 612 609 606 Hean *** ********************************	31	608	607	600	600	599	598	601	597	586	579	578	578	578	572	590	611	622	617	608	612	626	620	617	600
Hean ** 587 588 588 594 596 596 581 569 561 544 537 541 533 565 569 579 585 612 649 629 615 596 587 788									•															-	
1 598 613 603 590 597 588 569 577 563 551 544 573 582 587 596 614 600 606 614 620 622 604 601 598 593 595 590 597 599 588 586 579 579 596 549 583 594 586 597 597 598 608 597 599 588 586 579 579 596 649 589 597 599 598 698 597 599 588 586 579 579 596 649 589 597 598 698 597 599 598 698 597 599 598 698 597 599 598 698 599 599 599 599 599 599 599 599 599 5						•	-		-	-							-			-					
2 598 597 600 597 599 598 592 578 572 566 561 568 584 586 584 586 594 604 619 594 602 616 617 598 593 385 593 595 595 596 596 596 596 596 549 543 553 562 571 577 588 598 598 597 598 603 609 609 600 600 597 590 581 577 570 578 578 578 588 588 504 610 600 600 610 611 600 600 600 600 600	August									18000	Y +	Tabul	ar Qu	antitie	s (ir	γ)									
7 615 603 608 602 602 602 604 598 587 560 553 555 562 568 578 584 594 607 617 607 618 608 608 602 9 8 * 608 618 595 596 602 601 594 588 574 560 552 555 566 569 574 588 594 600 603 604 609 608 608 608 9 9 * 603 601 604 611 608 607 607 597 587 574 558 574 580 572 576 570 576 580 597 10 10 * 609 607 605 603 604 606 599 597 587 574 578 581 510 500 500 500 500 500 500 500 500 50	2 3 4	598 593 603	597 595 603	600 598 600	597 597 600	599 593 597	598 588 590	592 586 581	578 579 575	572 569 570	566 556 568	561 549 552	568 543 558	584 553 563	586 562 568	596 571 578	594 574 598	604 583 598	619 600 597	594 613 598	602 620 603	616 609 609	617 608 609	598 608 606	593 601 600
12 607 628 621 594 993 567 561 557 542 540 540 540 540 540 540 540 540 540 540	7 8 * 9 *	615 608 603	603 618 601	608 595 604	602 596 611	602 602 608	604 601 607	598 594 607	587 588 597	569 574 587	553 560 566	555 552 554	562 555 553	568 556 562	578 569 572	584 574 578	594 588 597	607 594 607	617 600 617	607 603 615	618 604 613	608 609 613	608 608 617	602 608 600	608 604 597
17	12 13 14	607 591 578	628 591 586	621 595 607	594 594 586	593 598 588	567 586 585	561 572 585	557 568 580	542 558 573	540 553 564	543 552 560	541 561 563	549 568 570	546 556 570	565 576 566	562 598 581	580 639 595	588 582 596	589 606 583	595 609 593	609 596 600	605 600 598	593 600 603	583 579 602
22 ** 588 588 594 588 600 594 600 580 550 426 385 450 458 465 471 516 524 565 579 569 555 550 564 23 ** 600 575 542 524 544 538 539 530 518 513 511 500 520 541 610 564 561 590 581 564 568 566 569 382 24 588 571 564 565 578 574 557 548 539 528 529 532 554 546 550 555 567 577 578 601 580 574 583 578 25 580 594 588 570 576 564 562 559 520 511 519 540 557 574 549 565 550 580 597 596 595 595 604 589 595 595 604 589 595 595 595 604 589 595 595 604 589 595 595 595 604 589 595 595 595 604 589 595 595 595 604 589 595 595 595 604 589 595 595 595 604 589 595 595 595 604 589 595 595 595 595 595 604 589 595 595 595 595 595 604 589 595 595 595 604 589 595 595 595 595 604 589 595 595 595 595 595 604 589 595 595 595 595 595 595 595 595 595	17 18 ** 19	573 562 574	571 561 571	585 551 573	578 577 577	575 559 577	579 564 587	555 572 584	531 539 559	509 514 539	509 477 529	519 492 504	497 516 524	501 484 509	519 514 514	530 540 558	531 550 587	544 553 523	568 540 558	605 594 577	575 575 579	565 570 586	594 574 579	571 574 591	564 591 567
27 609 590 599 588 585 589 574 549 559 560 566 562 568 570 573 569 579 586 591 590 592 591 591 588 28 586 584 590 591 590 594 596 589 582 572 572 580 589 592 600 591 584 606 602 607 614 602 596 580 29 607 584 598 599 586 580 574 559 552 548 556 565 568 576 578 601 587 588 599 606 610 606 601 596 30 * 595 593 595 601 596 586 576 569 562 552 546 555 566 572 576 583 590 584 588 592 599 599 602 602 31 600 596 596 592 592 596 590 581 566 566 571 580 586 581 581 579 605 619 606 598 600 593 591 588 Mean * 603 604 600 603 603 599 593 585 575 562 554 555 563 572 577 587 598 603 605 607 610 611 606 603	22 ** 23 ** 24	588 600 588	588 575 571	594 542 564	588 524 565	600 544 578	594 538 574	600 539 557	580 530 548	550 518 539	426 513 528	385 511 529	450 500 532	458 520 554	468 541 546	465 610 550	471 564 555	516 561 567	524 590 577	565 581 578	579 564 601	569 568 580	555 566 574	550 569 583	564 582 578
Mean \$ 590 589 589 587 588 584 578 568 555 542 537 544 552 560 569 576 582 587 595, 597 599 596 591 588 Mean * 603 604 600 603 603 599 593 585 575 562 554 555 563 572 577 587 598 603 605 607 610 611 606 603	27 28 29	609 586 607	590 584 584	599 590 598	588 591 590	585 590 586	589 594 580	574 596 574	549 589 559	559 582 552	560 572 548	566 572 556	562 580 565	568 589 568	570 592 576	573 600 578	569 591 601	579 584 587	586 606 588	591 602 599	590 607 606	592 614 610	591 602 606	591 596 601	588 580 596
Mean * 603 604 600 603 603 599 593 585 575 562 554 555 563 572 577 587 598 603 605 607 610 611 606 603	31	600	596	596	592	592	596	590	581	566	566	571	580	586	581	581	579	605	619	606	598	600	593	591	591
Mean this	Mean Mean *																								-
	Mean **																								

^{*} International Quiet Day. ** International Disturbed Day.

					TABL	E II.	- н	OURLY N	IEANS	OF F	IOR I Z	ONTAI	COMP	ONENT	OF M	AGNET	ric i	NTENS	SITY A	T ABII	1GER				
U. T.	o ^h	1	h 2	h 3	3 h 4	h s	, h	6 ^h 7	,h g	3 ^h 9) ^h 1	0 ^h 1	1 ^h 1	2 ^h 1	3 h 1	4 ^h 1	5 ^h 1	6 ^h 1	7 ^h 1	8 ^h 1	9 ^h 2	0 ^h 2	1 h 2	2 ^h 2	3 ^h 24 ^l
Septemt	er									18000) Y +	Tabu:	lar Qu	antitie	es (ir	ι γ)									
1 * 2 3 * 4 5	· ·*	594 599 612 566 577	600 600 607 574 563	599 598 611 550 574	593 597 614 546 572	591 596 604 547 573	581 596 585 552 577	572 582 596 513 570	559 565 580 520 544	548 546 519 511 530	552 542 488 501 519	563 549 471 512 509	576 568 500 519 529	582 582 518 531 546	590 593 503 557 540	593 601 506 567 552	598 600 531 578 565	601 602 552 586 571	605 606 580 600 576	613 609 581 583 595	616 612 542 571 601	601 612 554 578 611	596 612 549 575 616	603 606 585 574 608	601 607 592 579 595
6 7 8 9 * 10 *		599 572 566 586 587	598 578 574 575 581	584 586 559 576 580	583 582 566 580 582	583 578 572 582 588	579 582 570 585 587	566 571 571 581 585	554 542 578 576 576	546 530 576 567 563	547 523 570 558 552	548 513 556 548 545	561 511 550 546 545	569 529 552 550 551	573 526 559 556 560	576 566 554 568 568	600 575 563 577 576	618 587 570 589 586	583 589 571 595 593	582 602 579 600 600	570 598 586 600 600	578 551 586 596 604	584 534 586 586 609	576 543 586 586 607	583 568 582 586 605
11 12 13 14 * 15 *		601 600 550 571 551	599 598 547 591 557	600 599 579 575 554	602 597 595 564 559	601 600 590 570 565	602 601 594 591 566	595 604 563 573 559	586 593 519 535 514	577 567 509 536 510	566 552 491 519 510	564 558 492 475 491	566 568 476 470 502	557 572 491 489 522	548 580 489 505 516	569 580 490 522 523	567 582 521 510 546	630 591 529 530 527	576 592 556 557 565	569 591 561 552 551	582 589 563 573 564	583 573 579 556 575	589 561 559 561 553	601 554 576 575 565	600 548 564 569 569
16 17 18 19 20		573 583 565 577 586	580 575 572 571 568	574 589 565 571 579	573 576 589 571 579	574 586 599 587 581	560 565 586 581 578	549 553 562 559 582	539 565 550 557 581	555 545 529 539 571	550 536 524 529 554	541 529 509 525 535	539 516 514 519 530	547 525 525 537 540	559 547 524 547 545	569 562 555 549 561	571 561 555 565 565	571 551 569 562 580	585 539 585 587 589	562 575 589 589 580	575 553 581 596 580	573 564 605 605 588	585 549 581 586 585	559 559 579 582 582	563 571 562 585 572
21 22 23 24 * 25 *	*	579 586 580 605 480	580 587 571 588 439	584 585 568 595 486	581 585 579 594 530	599 588 580 599 549	609 602 615 597 485	598 580 609 593 435	598 579 569 573 428	574 569 558 554 473	559 522 535 533 492	545 507 515 518 505	533 511 516 508 493	535 531 530 521 478	535 535 537 541 532	538 523 542 599 552	552 544 548 600 541	565 560 561 595 542	571 575 571 549 542	588 585 579 531 536	576 582 585 501 552	580 575 590 456 557	566 561 595 455 547	588 568 591 448 531	598 575 597 455 538
26 27 28 * 29 * 30	:	555 570 576 584 585	559 570 585 587 583	565 579 581 587 588	546 561 579 586 589	552 563 575 585 581	556 567 570 580 580	552 563 566 577 579	540 557 562 575 572	531 549 551 565 559	522 544 546 557 549	518 541 532 552 543	530 551 538 541 535	544 565 549 543 535	558 584 568 548 542	557 579 577 552 554	560 579 577 556 563	560 575 585 571 573	565 575 585 579 581	570 580 589 578 604	579 584 593 580 615	578 585 587 585 591	575 580 595 575 590	580 579 584 572 594	571 571 584 585 590
Mean		577		577			579			545								573		580	580		573		576
Mean * Mean *		585 564	586 556	585 564	584 572	584 577	581 565	576 551	570 526	559 518	553 508	548 492	549 495	555 506	564 519	572 540	577 546	586 549	591 559	596 550	598 546	595 540	592 533	590 541	592 545
Octobe	r									18000	γ+	Tabu]	Lar Qua	antit1e	s (in	γ)									
1 2 * 3 4 5	*	586 553 517 559 577	585 543 539 563 579	585 540 536 566 579	590 551 547 570 581	592 581 564 575 581	585 569 561 572 585	596 545 544 571 583	559 535 543 561 569	545 525 521 543 553	543 498 492 528 539	539 489 479 512 535	520 496 475 514 533	535 499 505 519 547	565 519 532 539 558	575 535 539 555 572	574 575 545 561 577	584 554 547 569 584	588 555 554 575 590	595 550 565 580 591	603 515 571 583 592	561 529 572 583 592	565 509 594 581 590	556 542 575 579 589	545 500 560 580 595
6 7 8 9 * 10 *		595 589 577 583 541	591 591 577 607 565	589 590 579 592 558	588 591 582 592 553	590 595 592 587 569	593 595 600 599 553	589 597 597 589 561	579 593 594 590 541	560 580 577 579 509	541 550 558 555 506	533 532 556 531 512	523 535 545 508 508	535 539 551 506 507	549 548 561 491 475	559 558 561 507 495	571 570 551 550 506	580 589 569 561 525	591 594 581 532 540	597 572 576 525 550	600 584 580 506 535	597 578 590 532 505	589 578 595 552 551	590 582 597 532 551	592 583 589 529 561
11 12 * 13 14 15 *		562 556 578 562 563	550 549 575 563 563	549 586 582 571 568	557 551 584 571 575	554 568 580 576 572	554 558 592 575 582	558 541 578 565 565	532 543 561 562 581	528 535 554 551 565	530 522 549 519 550	521 507 543 487 540	519 512 532 501 529	539 520 536 515 487	525 530 541 505 526	532 523 548 522 535	545 540 555 531 558	552 555 573 562 548	535 551 551 554 540	535 551 553 569 545	546 574 567 576 560	568 541 562 550 564	531 560 577 542 580	528 573 569 545 657	528 581 552 580 565
16 17 18 19 20		579 590 581 575 577	568 579 582 579 584	569 575 579 584 588	569 585 580 591 578	582 589 584 581 584	585 591 589 584 575	574 580 586 592 567	571 562 589 584 566	561 544 567 559 551	546 539 541 537 539	525 530 545 525 531	506 535 545 540 530	528 539 549 549 532	534 537 555 531 537	545 542 559 553 556	561 550 553 558 560	561 565 570 552 568	566 565 569 558 576	565 570 569 541 572	571 564 555 568 577	579 572 560 555 579	581 580 575 557 582	580 585 572 565 579	585 585 580 575 599
21 22 23 24 25		561 585 585 583 589	568 599 584 605 582	575 590 584 584 580	572 589 589 589 583	575 585 591 574 583	583 593 590 575 585	573 590 598 575 586	565 582 585 575 583	555 569 574 571 576	548 559 559 553 565	545 555 549 549 555	541 551 528 554 555	536 545 530 550 559	547 551 540 551 569	559 555 553 558 575	565 569 553 567 579	562 573 562 575 585	563 584 570 589 588	575 589 557 596 592	581 589 561 601 592	582 590 561 600 585	589 590 576 585 594	591 592 585 579 595	589 589 581 577 591
26 * 27 * 28 * 29 * 30 *		590 594 600 600 599	589 593 597 599	589 593 599 601 599	589 592 598 602 601	590 595 599 602 601	591 595 599 604 603	585 591 595 601 602	585 583 588 596 602	570 570 575 586 593	552 560 562 572 584	545 557 563 569 575	553 562 565 572 578	561 573 568 580 583	571 584 575 586 587	582 591 586 589 591	585 593 587 590 588	590 595 591 599 598	595 596 595 601 591	595 598 599 592 598	599 600 601 601 598	596 602 605 601 599	598 603 605 601 601	598 604 606 603 605	594 601 605 601 601
31	····	602	603	601	603	600	599	595	598	587	580	580	586	585	583	595	595	599	599	599	599	600	598	589	589
Mean *		577 597	579 595	579 596	580 596	584 597	584 598	580 595	573 591	559 579	544 566	536 562	534 566	5 3 9 573	545 581	555 588	563 589	571 595	572 596	573 596	576 600	574 601	578 602	580 603	577 600
Mean ★	*		565			575		560	558	543		516		504	508	519	546	549	544	544	538		550	-	

^{*} International Quiet Day. ** International Disturbed Day.

					TABL	E II.	- н	OURLY 1	1E ANS	OF I	ioriz	ONTAI	COMP	ONENT	OF M	AGNE	ric i	NTENS	SITY A	T ABI	NGER				
U.T.	. o ¹	1	h 2	h 3	h 4	h 5	h	6 ^h 7	h 8	s h 9	h 1	0 ^h 1	1 ^h 1	2 ^h 1	3 ^h 1	4 ^h 1	5 ^h 1	6 ^h 1	7 ^h 1	8 ^h 1	9 ^h 2	0 ^h 2	1 ^h 2:	2 ^h 2	3 ^h 24 ^h
Novemb	ber									18000	y +	Tabu]	ar Qu	antitie	es (in	ι γ)									
1 2 3 4 5	*	599 589 596 605 593	596 593 596 589 591	595 593 598 589 590	595 605 598 592 595	599 605 599 595 592	599 595 600 598 597	596 595 600 599 595	590 590 597 594 591	583 576 586 585 581	578 560 577 571 569	571 553 570 560 558	570 553 563 550 561	572 558 571 555 570	577 568 582 565 579	585 577 587 569 581	589 581 591 563 585	593 588 591 578 589	598 592 600 582 592	599 598 596 585 600	600 600 588 590 601	604 598 591 596 601	589 598 595 595 599	576 594 604 594 596	585 596 614 597 597
	*	595 597 601 589 491	595 596 596 592 506	596 597 592 577 523	597 600 599 582 525	597 600 599 585 529	598 601 601 581 525	598 602 598 590 527	595 599 598 587 535	587 596 582 579 535	578 596 569 562 529	575 595 565 570 509	575 593 555 579 521	577 592 555 515 520	585 590 551 530 524	590 591 549 508 542	595 592 538 500 545	595 598 552 501 551	601 594 560 514 529	606 597 559 542 560	605 599 559 550 566	605 602 563 509 614	601 600 571 525 584	599 601 579 491 551	598 610 581 493 541
11 12 13 14 15	**	552 555 573 578 579	529 564 567 580 580	558 584 566 585 596	556 550 574 584 589	559 561 580 581 589	568 578 582 585 589	565 562 579 588 591	571 555 571 584 588	570 550 556 581 566	570 543 556 561 555	568 546 536 551 554	559 545 524 549 555	541 547 549 544 555	552 540 551 539 561	520 536 550 542 569	528 547 552 557 575	516 555 565 550 585	507 559 569 572 582	535 569 591 574 580	548 572 581 566 583	567 569 582 559 579	555 582 581 566 586	559 584 583 567 581	571 577 590 578 581
16 17 18 19 20	**	593 577 588 583 575	588 581 590 585 572	587 581 587 588 572	592 581 598 590 572	592 586 591 588 572	583 591 590 605 577	581 590 591 579 578	585 585 585 569 578	580 574 576 558 566	562 568 586 546 555	548 556 581 540 547	547 552 576 535 536	545 560 579 531 550	549 571 578 532 557	558 571 572 542 563	555 568 565 546 571	559 578 571 559 577	567 585 575 550 571	580 591 577 557 577	583 593 580 543 585	583 594 575 544 588	581 592 583 558 585	590 593 582 581 581	593 591 588 575 581
21 22 23 24 25		582 581 585 586 570	583 582 585 586 573	589 583 586 588 575	590 582 591 586 574	587 585 595 587 576	591 586 595 590 580	591 588 590 596 580	587 588 578 594 585	581 586 582 592 586	572 580 589 592 580	567 575 578 585 567	566 566 568 576 577	569 565 571 577 576	571 567 574 579 576	567 565 579 581 573	573 565 571 586 578	581 569 573 590 584	581 569 580 596 594	562 572 580 604 596	566 583 585 571 596	563 582 591 551 598	576 588 590 566 594	586 588 599 585 591	583 587 602 576 587
26 27 28 29 30	*	584 581 597 603 593	585 578 596 597 593	587 581 597 595 592	584 587 601 608 593	584 585 603 607 592	582 590 605 603 597	582 597 607 610 593	582 598 603 599 596	586 597 600 596 594	586 592 596 591 584	587 583 591 587 577	578 573 587 588 572	576 572 587 587 574	577 577 587 588 580	583 588 591 593 584	588 597 593 591 589	595 603 596 592 593	601 604 593 598 599	601 612 601 583 582	594 616 601 577 581	597 610 602 587 574	591 606 603 578 578	587 601 603 584 589	587 600 603 590 590
Mean		582	581	584	586	587	589	588	585	579	572	565	562	561	565	567	569	574	577	582	582	583	583	583	585
Mean Mean		593 563	593 562	594 568	595 570	594 572	596 576	595 572	593 572	587 565		577 550	574 550	577 532	583 538	586 532	590 531	594 536	598 532	600 551	597 553	599 559	597 559	597 552	601 552
Decemb	er									18000	γ +	Tabul	ar Qua	antitie	es (ir	η γ)									
1 2 3 4 5	*	593 589 590 591 591	602 589 590 592 606	592 591 587 592 599	593 595 589 592 593	595 593 591 596 618	598 593 593 599 602	598 594 594 610 607	597 592 592 619 601	596 594 596 619 596	569 587 588 614 592	578 582 584 598 579	587 572 588 597 581	582 577 584 591 585	583 585 587 583 583	590 584 592 590 576	591 576 594 586 580	593 567 595 570 587	599 578 597 577 586	601 586 599 587 588	598 595 598 596 591	596 593 597 596 591	595 590 596 590 597	594 587 597 590 596	593 584 592 591 573
6 7 7 8 9 1	**	589 574 582 590 576	568 576 586 592 579	575 580 586 596 591	571 576 586 610 587	581 580 587 602 590	585 582 596 602 591	588 586 602 602 581	591 586 597 608 585	592 570 587 601 577	576 576 579 590 566	564 571 576 570 552	566 566 571 564 572	547 561 568 570 576	541 561 576 559 571	536 563 579 543 566	542 566 580 576 572	546 570 580 570 573	546 569 580 557 590	524 559 587 546 594	538 557 586 552 590	567 568 590 592 586	576 585 591 575 592	589 588 591 571 582	580 583 595 580 579
11 12 13 14 15		580 588 584 587 582	582 582 585 588 597	586 592 595 586 593	588 586 596 591 596	596 598 596 596 595	602 595 591 600 596	596 600 586 590 596	592 591 585 580 587	591 590 592 567 583	582 586 573 556 580	569 576 563 551 579	560 570 556 542 573	558 541 559 552 572	561 567 547 560 571	557 560 557 549 560	567 566 552 546 556	573 536 551 556 561	568 560 561 568 576	556 559 582 576 577	556 566 580 572 581	577 575 575 570 576	586 576 581 576 582	589 567 586 587 588	596 582 586 585 590
16 17 18 19 20		588 591 596 590 590	589 592 601 594 590	589 596 595 595 593	592 598 597 593 593	604 599 602 596 595	596 601 602 610 597	600 601 601 601 599	600 596 596 595 596	595 592 596 593 596	586 589 596 586 593	572 582 591 577 587	569 581 587 575 581	573 587 583 575 580	580 586 582 580 582	580 586 586 576 580	581 582 589 571 574	585 580 587 572 573	591 586 596 580 578	594 591 596 582 586	594 590 588 576 589	595 592 580 576 590	593 592 586 586 586	592 590 590 592 591	593 593 597 594 596
21 = 22 = 23 = 24 = 25		594 598 572 587 586	594 599 569 586 586	593 601 579 588 589	596 602 587 591 596	598 606 589 596 599	598 609 590 597 600	596 609 584 599 600	600 606 591 598 601	596 604 596 597 603	592 599 599 596 602	587 598 601 590 597	586 597 597 588 593	584 597 602 587 595	586 596 600 592 597	587 591 596 590 597	589 583 583 590 596	594 580 583 594 600	600 589 592 596 601	603 589 597 591 600	603 573 599 592 600	604 588 596 586 602	604 593 596 601 601	602 590 592 592 589	600 585 590 588 590
26 27 28 29 30		589 592 578 586 588	597 589 585 586 590	602 585 589 586 587	601 586 589 587 591	605 586 590 587 593	608 602 590 591 598	607 606 596 596 595	600 603 599 593 593	599 597 596 596 593	596 592 591 595 590	599 587 588 588 582	597 582 592 585 583	596 586 590 582 590	595 587 596 583 595	590 587 596 569 602	587 587 594 559 601	596 592 593 581 598	592 596 595 581 599	596 586 597 593 600	602 578 596 592 599	601 584 596 594 601	600 591 599 617 597	600 592 594 604 593	597 576 587 588 594
31	*	595	594	596	601	603	602	602	602	602	600	596	597	601	604	605	601	598	601	600	593	598	598	598	599
Mean Mean Mean		587 592	589 592	590 593	592 595	596 597	597 598	597 598	596 597	594 596	588 592	581 587	579 587	578 587	580 589	578 590	578 588	579 588	583 592		`595	588 596	591 595	590 596	589 596
	•	585	579	587	590	275	593) 7 7 2	593	リソ4	585	217)/L	564	563	558	40ر	557	505	302	567	100	581	10ر	704

^{*} International Quiet Day. ** International Disturbed Day.

				TABL	E III	I	HOURLY	ME AN	S OF	VERT	ICAL	COMP	ONENT (OF MA	GNE T	C IN	TENSI	TY A	r ABIN	GE R				
U.T. 0)h 1	h a	2h	3 h 4	i ^h	5 h	6 ^h	7 ^h 8	3 ^h 9	9 ^h 1	0 ^h 1	1 h	12 ^h 1	3 ^h 1	4 ^h 1	5 ^h 1	6 ^h 1	7 ^h	18 ^h 1	.9 ^h 2	20 ^h 2	1 ^h 2	2 ^h 2	3 ^h 24 ^h
January	····								43000	γ+	Tabu	lar Qı	uantiti	es (1	n γ)									
1 2 3 4 ** 5 **	234 230 229 241 242	231 231 230 239 241	231 232 231 238 243	229 232 230 237 241	229 233 230 236 239	230 235 232 238 236	230 234 231 238 233	230 232 231 238 232	229 232 232 238 236	227 229 229 234 233	225 228 227 234 237	222 223 225 232 235	223 220 224 232 231	227	231 228 232 240 243	233 236 237 251 246	237 245 244 253 251	236 253 246 253 247	237 247 251 254 253	261	240 261	237 237 257 243 249	236 236 252 237 251	243 241
6 7 8 9 * 10 *	246 242 243 239 239	234 244 243 239 236	232 244 243 239 238	236 236 242 239 239	235 236 242 239 239	235 239 242 241 240	232 239 239 239 237	235 239 239 236 235	235 238 237 236 232	235 239 239 238 228	240 240 239 235 225	240 239 236 233 228	246 241 236 233 225	255 246 244 239 232	261 250 243 242 235	264 249 244 242 233	256 250 245 242 235	254 249 243 241 236	254 246 244 243 238	243	251 243 241 241 238	244 244 239 239 234	241 244 239 238 235	243 244 239 239 235
11 * 12 * 13 * 14	233 232 230 236 234	233 233 232 232 231	234 233 233 231 231	234 233 232 230 231	235 232 233 233 232	238 232 232 232 234	234 231 231 232 232	232 232 229 231 234	228 231 228 229 234	226 228 228 232 234	224 228 225 229 233	222 227 222 229 232	221 224 223 228 228	226 230 229 234 232	230 233 233 232 230	232 232 232 229 229	233 232 231 231 230	234 232 230 232 229	233 232 232 234 233	233 233 234 237 234	234 232 234 237 238	231 232 232 234 240	232 232 237 234 242	231 229 234 233 240
16 ** 17 18 19 20	237 259 249 241 241	234 252 248 238 242	233 244 244 240 244	228 247 243 241 245	202 248 243 241 243	218 249 244 242 244	225 248 245 241 240	225 248 244 241 239	232 251 245 242 239	231 249 245 238 241	23 2 250 242 234 240	228 247 240 232 240	228 242 240 230 239	231 244 246 233 241	235 247 247 237 243	238 246 251 240 239	245 247 248 242 238	258 248 249 241 239	273 248 254 241 240	268 248 252 239 248	268 250 252 241 249	272 248 251 242 246	268 247 245 245 244	246 239 243
21 22 23 24 25 **	240 235 239 235 234	243 239 240 235 235	239 239 242 234 238	239 239 240 235 234	239 239 240 235 213	240 239 241 236 213	237 236 239 233 213	236 235 237 233 219	235 238 234 239 219	234 238 233 237 223	235 238 229 237 229	237 239 229 235 242	223 234 231 236 271	235 230 235 240 295	239 232 236 249 304	238 233 233 249 323	236 236 235 245 309	239 239 235 244 295	239 243 236 245 290	239 246 238 249 281	239 244 239 250 281	239 244 239 248 281	237 242 237 242 277	
26 ** 27 28 29 30	270 248 243 241 241	269 248 241 241 241	269 247 242 242 241	263 245 242 241 241	248 241 243 235 240	235 243 245 235 240	235 245 244 237 239	240 248 244 237 238	248 247 243 236 235	243 247 244 237 232	240 243 243 239 230	235 240 238 237 230	234 242 235 234 229	245 247 241 237 231	255 252 248 244 233	261 254 248 244 235	272 250 247 247 236	266 245 246 247 236	269 249 246 247 239	272 252 246 245 239	266 254 246 245 239	256 249 244 243 239	253 247 244 241 242	252 251 243 241 241
31	240	240	241	238	235	236	236	239	240	240	233	234	230	229	234	236	237	238	239	240	241	240	242	236
Mean *	240 235			238 235	236 236	237 237	236 234	236 233		235 230	234 227	233 226	233 225	238 231	242 235	244 234		245 235	246 236	247 236	246 236	244 234		242 234
Mean **	245			241					235								266		268		264			
February									43000	γ+	Tabu]	lar Qu	antitie	es (ir	ι γ)									
1 2 3 4 5		231 236 241 229 238		230 233 239 223 236	230 233 237 226 236	229 233 239 230 236	229 233 235 230 236	230 234 234 230 232	232 237 231 230 232	233 232 228 228 231	232 229 220 224 222	233 228 220 224 223	232 226 226 223 222	233 230 230 230 230 227	238 236 232 231 232	238 236 236 236 233	237 236 239 238 233	238 235 240 236 233	239 236 237 236 235	241 236 237 236 233	241 238 237 237 234	240 240 236 239 235	238 241 235 240 235	236 241 234 239 236
6 7 8 ** 9 ** 10	238 235 236 240 236	239 237 231 238 243	238 236 230 236 246	236 236 230 228 247	235 236 233 227 246	233 236 235 226 246	230 233 234 232 242	226 232 235 238 242	226 230 232 240 241	229 227 227 236 236	228 217 228 238 230	229 215 227 238 227	227 218 229 237 226	230 225 238 236 236	231 232 246 239 249	236 233 256 241 252	240 236 264 250 250	242 237 272 249 249	242 238 279 246 246	242 244 276 246 247	241 244 264 249 247	237 242 255 247 246	235 238 248 240 241	233 237 240 234 241
11 12 13 14 * 15 *	241 234 237 233 233	240 235 235 233 233	241 236 235 235 234	241 237 235 234 234	241 237 236 234 233	241 239 236 235 234	239 237 236 235 232	239 238 236 234 231	243 240 239 233 234	233 238 233 233 236	222 231 227 230 230	220 225 224 224 228	220 224 223 224 220	224 225 223 224 222	228 229 227 231 228	229 234 232 233 231	233 236 233 231 231	237 236 237 233 231	238 236 237 231 231	238 238 237 230 231	238 239 237 232 233	239 238 237 232 233	238 237 237 232 232	236 238 236 232 232
16 ** 17 ** 18 19 ** 20	233 233 252 256 223	234 246 247 253 231	234 228 244 252 235	232 214 241 251 221	227 219 240 248 223	226 220 238 246 229	225 225 237 243 234	223 234 241 243 237	222 239 239 242 241	222 232 236 244 242	218 228 237 243 237	222 229 237 241 233	232 233 239 240 229	254 238 243 244 231	283 250 249 261 238	312 258 259 265 243	318 272 259 264 247	318 276 256 266 248	292 267 253 273 247	280 261 255 267 247	282 258 259 264 248	284 258 258 251 247	272 258 257 243 245	261 254 255 238 244
21 * 22 * 23 * 24 25	243 241 237 237 235	241 240 236 237 234	241 240 238 237 234	241 239 238 237 236	241 240 238 236 236	243 241 237 234 236	242 241 238 233 237	243 241 241 237 239	247 242 241 240 239	238 237 231 233 232	230 228 227 227 226	229 227 224 222 222	232 228 222 222 224	234 231 222 223 225	239 233 224 230 230	242 237 232 232 235	242 239 236 234 244	241 239 236 239 245	242 239 237 243 246	243 238 235 244 244	241 238 235 244 244	241 237 237 242 243	241 239 236 240 244	241 237 236 237 241
26 27 28	232 242 239	222 240 238	220 240 237	225 239 238	229 239 238	233 238 241	235 238 242	240 240 242	242 242 243	235 235 237	228 229 234	220 225 229	218 222 228	226 225 232	234 234 238	243 239 240	246 244 243	244 243 242	244 242 244	243 243 244	242 242 242	242 242 243	243 244 247	243 243 240
Mean	237	237	236	235	235	235	235	236	237	233	229	227	227	231	238	243	246	246	246	245	245	244	242	240
Mean * Mean **	237 240	237 240	238	237		238	238	238		235		226	225	227		235	236	236	236	235 266	236 263	236	236 252	236
	240	24U	270	231	27 L	4 J I	232	43)	235	456	471	471	434	444	ا ال	200	274	4/0	2/1	200	203	4 J 7	272	447

^{*} International Quiet Day. ** International Disturbed Day.

				TABL	E III	1	HOURLY	MEAN	s of	VERT	ICAL	COMPO	NENT (OF MA	GNET	IC IN	TENS	ra yr:	ABIN	GER				
U.T. 0	,h 1	h 2	h 3	h 4	h 5	h	6 ^h 7	h 8	3 ^h 9	h 1	0 ^h 1	1 h 1	2 ^h 1	3 h 1	4 ^h 1	5 ^h 1	6 ^h 1	7 ^h 1	8 ^h 1	9 ^h 2	0 ^h 2	1 h 2	2 ^h 2	3 ^h 24 ^h
March									43000) Y +	Tabu:	Lar Qu	antitie	s (ir	n γ)			-						
1 * 2 ** 3 ** 4	232 238 243 238 257	43000 y + Tabular Quantitles (In y) 232 234 235 237 238 246 247 248 242 242 242 242 242 242 242 242 242														241 244 162 259 258								
6 * 7 8 ** 9	256 251 248 227 259	250 247 231	250 247 233	249 242 231	251 239 237	250 241 243	240	250 243	249 241	238 237 260	228 236 260	222 237 260	253 268	266 274	236 309 282	244 372 291	253 383 294	252 387 292	353 288	252 346 284	251 327 277	251 300 268	251 286 265	251 251 257 260 255
11 * 12 13 14 15 **	253 249 246 239 253	243 245 236	246 245 237	247 245 238	246 245 240	246 236	250 241	259 255	258 256	245 249 258	241 241 259	238 232 253	236 232 255	239 262	241 241 275	248 242 291	252 250 312	252 250 288	251 272	252 251 268	252 250 268	252 249 266	251 246 263	241 261
16 17 18 19 20	266 244 248 253 252	227 250 249	236 252 246	228 251 247	229 253 249	233 255 253	242 260 259	266 260	250 260 257	253 253 255	252 253 247	256 249 244	260 247 243	262 246 246	266 251 249	270 259 252	272 273 261	276 268 267	274 262 265	267 261 264	264 263 262	262 259 262	258 257 261	256 256 256 259 255
21 * 22 23 24 25	251 251 247 249 236	250 243 244	250 241 238	244 243 221	227 243 223	211 241 223	240 221	223 242 234	227 239 245	231 231 244	225 225 243	227 221 240	230 238	233 233 243	241 247 246	247 278 252	252 321 253	254 310 253	261 280 254	261 270 254	256 267 251	250 263 250	247 256 249	
26 27 28 ** 29 30	227 245 234 253 234	242 234 257	242 222 261	239 198 260	243 213 262	242 227 264	240 238 270	240 238 271	234 238 267	225 245 259	223 248 243	221 252 239	222 267 242	232 296 251	242 318 261	251 332 269	257 338 272	263 340 275	272 316 284	271 303 277	267 297 266	266 290 265	256 280 257	243 248 263 252 261
31	257	249	241	234	246	251	259	267	257	250	244	242	247	262	276	282	279	274	265	261	260	259	258	257
Mean Mean *	246	_								-														249 250
Mean **	-	-					-									-		-	-		-	-	-	
April									43000	Υ +	Tabu]	ar Qu	antitie	s (ir	ι γ)									
1 * 2 3 4 5	256 249 248 237 242	249 249 239	249 247 242	247 242 243	247 236 243	246 240 244	250 243 246	250 243 247	247 237 240	237 229 233	232 223 226	227 214 220	228 217 231	241 222 248	246 231 259	249 238 266	253 241 281	261 242 288	257 242 283	253 243 278	249 243 268	250 242 260	250 241 249	251 250 242 249 249
6 7 8 9 **	247 244 246 210 253	245 246 224	247 247 234	247 247 240	249 248 241	248 247 237	250 249 234	249 248 241	248 243 241	243 236 242	227 224 238	212 210 239	209 206 243	223 218 247	237 233 256	258 241 266	268 246 267	264 247 267	254 246 266	250 244 261	247 243 257	247 245 254	247 241 254	247 247 237 254 243
11 12 13 14 15	233 244 241 243 241	247 242 241	247 233 241	247 236 241	247 238 238	244 239 237	245 242 239	243 241 239	240 237 239	231 226 232	228 217 221	222 211 218	221 208 225	230 214 229	241 234 235	250 243 245	259 253 250	263 257 247	262 257 250	257 256 253	251 251 253	249 248 247	245 246 244	246 240 243 247 245
16 17 ** 18 ** 19 ** 20 **	245 239 289 262 247	240	242	237	238	231	232	234	232	224	218	214	218	219	224	257	272	301	328	328	280	322	212	244 274 266 257 255
21 * 22 * 23 * 24 * 25	254 247 243 241 239	254 247 243 241 239	253 247 244 242 241	254 250 247 247 243	247 248 247 247 243	243 248 248 247 245	245 250 251 245 245	247 248 251 243 243	252 243 247 238 241	250 237 236 233 236	243 226 222 225 223	237 218 217 217 213	238 222 218 219 208	241 227 223 223 211	247 231 230 232 223	247 237 237 237 241	247 242 239 240 257	250 246 241 243 247	251 246 242 243 251	248 247 241 242 247	248 244 241 241 243	247 243 239 240 239	247 243 238 239 240	247 243 238 238 237
26 27 28 29 30	237 242 242 241 241	234 242 241 240 236	235 243 240 241 235	239 243 243 243 239	244 246 241 244 240	247 247 238 244 235	243 248 235 244 232	243 247 236 242 233	241 241 238 237 235	234 227 229 228 231	226 222 213 222 220	217 216 203 220 211	209 212 203 221 209	217 217 216 228 210	227 231 232 237 223	237 235 237 237 232	243 242 247 242 236	253 245 250 246 241	257 247 247 247 247	257 251 248 246 247	253 249 248 246 247	247 247 247 244 245	247 244 244 244 242	243 243 241 242 242
Mean	245	245	245	245	245	245	246	246	243	236	227	221	222	230	240	249	255	257	258	256	252	252	246	247
Mean * Mean **	248	248	248	250	249	248	249	248	245		228	222	223 239	228	235	240	243	246		246 279	245	244 274	244	243
	247	2)1	4)4	252	2)2		Intern	248	440	241				246			274	4/0	202		200	2/4	∪ر ∡	

^{*} International Quiet Day. ** International Disturbed Day.

				TABL	E III		HOURLY	MEAN	S OF	VERT	ICAL	COMPO	NENT (OF MA	GNET	C IN	TENSI	TY A	r ABIN	GER				
U.T.	0 ^h 1	h 2	h 3	3 ^h 4	i ^h 5	h	6 ^h 7	7 ^h {	3 ^h 9) ^h 1	0 ^h 1	1 ^h 1	12 ^h 1	3 ^h 1	4 ^h 1	5 ^h 1	6 ^h 1	7 ^h 1	18 ^h 1	9 ^h 2	0 ^h 2	1 ^h 2	2 ^h 2	3 ^h 24 ^h
May									43000) Y +	Tabu!	lar Qu	antitie	es (i	η γ)									
1 2 * 3 4 5	241 243 241 241 240	240 244 241 241 241	236 246 242 241 241	237 247 243 241 238	243 250 243 243 237	240 252 242 243 241	237 250 237 242 237	239 243 237 237 232	237 240 236 231 230	232 231 231 219 223	223 219 223 211 217	219 211 217 203 214	223 213 217 204 217	227 221 224 217 221	237 231 234 230 231	243 234 242 234 241	254 237 247 239 247	257 241 249 241 252	252 241 247 243 250	248 241 242 244 247	244 241 241 243 243	243 242 241 239 241	242 241 240 239 241	242 240 241 239 241
6 7 8 * 9 * 10 *	241 236 238 238 234	240 237 239 239 236	242 240 241 240 237	246 244 242 242 242 240	247 246 243 243 242	250 246 243 244 245	247 243 240 242 246	243 240 237 238 243	242 234 231 231 235	236 224 223 217 225	220 217 217 204 212	207 211 211 197 206	207 214 217 197 207	222 223 226 204 214	239 237 232 218 227	249 241 237 230 238	252 244 242 234 248	254 247 243 238 252	251 244 243 238 252	243 241 241 237 249	241 241 239 237 247	240 238 239 237 243	239 238 238 236 243	239 237 238 234 241
11 12 13 14 ** 15 **	240 245 237 230 239	239 239 237 227 239	239 229 239 223 237	239 228 242 228 221	243 215	241 241 246 227 228	238 242 240 232 233	234 240 232 227 234	231 234 224 221 227	219 226 221 210 225	208 217 211 201 218	198 213 206 200 212	196 219 209 210 213	207 226 215 218 228	222 232 223 229 242	233 240 232 241 250	246 249 238 249 252	257 254 247 256 248	259 253 253 257 244	257 249 256 257 244	252 248 255 251 250	247 245 249 244 248	248 241 241 241 239	246 241 236 237 223
16 ** 17 18 19 20	223 233 239 243 245	209 230 238 246 245	198 231 233 246 245	196 236 237 244 247	207 237 240 245 247	217 241 241 242 245	222 240 240 238 241	229 237 238 238 235	227 233 237 237 234	222 227 233 227 234	217 222 228 211 225	219 214 217 197 219	222 215 221 205 228	234 221 227 222 232	251 234 241 233 238	257 246 247 242 244	257 253 259 248 249	257 259 273 253 248	257 266 278 253 247	259 261 272 249 242	254 254 261 250 242	246 244 253 246 242	239 240 251 244 243	231 239 245 244 242
21 22 23 ** 24 ** 25	240 237 236 235 253	239 238 238 235 253	242 239 237 237 250	244 243 218 238 251	244 204 242 254	254	239 244 222 237 254	232 243 220 224 251	235 238 222 207 241	225 227 218 231 230	214 209 208 222 224	207 198 203 216 217	213 202 203 220 220	208 230 229	227 224 222 244 238	237 238 228 252 249	243 239 231 259 260	244 247 238 262 264	243 249 244 261 267	243 248 244 259 265	241 243 241 256 261	240 238 238 255 256	240 238 237 254 252	238 235 236 252 248
26 27 28 29 30 *	246 240 243 239 252	248 242 242 239 252	246 242 242 241 252	246 246 247 245 255	243 242 250 249 258	242 248 252 251 257	245 248 250 250 253	240 244 245 248 250	231 239 236 240 243	222 224 222 236 237	219 214 213 228 219	214 211 209 228 210	214 214 215 230 212	224 228 228 241 221	242 238 242 264 229	259 249 254 294 237	268 260 261 305 243	279 267 265 314 247	274 263 265 312 247	268 260 258 293 244	257 254 249 282 245	250 250 248 268 244	243 247 242 259 244	238 245 240 254 243
31				244					230					218	228		249		253				249	
Mean Mean *		239 242	239 243	239 245	240 247	242 248	241 246	238 242	233 236	226 227	216 214	210 207	213 209	222 217	234 227	244 235	250 241	255 244	255 244	252 242	249 242	245 241	-	240 239
Mean **	233	230	226	220	218	226	229	227	221	221	213	210	214	224	238	246	250	252	253	253	250	246	242	236
June									43000	Υ+	Tabu]	ar Qua	antitie	s (ir	γ)					Mary - 1870				
1 ** 2 * 3 4 5 **	223 248 245 244 241		199 249 242 244 242	195 252 241 248 247	201 254 233 249 248	204 258 237 249 244	212 254 239 248 239	221 251 241 242 232		210 240 228 231 228		207 216 218 218 213		229 223 225 234 234	242 233 234 242 244	253 243 243 247 252	262 252 252 254 254	268 258 252 260 258	265 258 249 258 258	257 253 248 254 252	249 252 248 248 253	247 248 244 242 251	247 245 243 242 249	248 245 •244 241 248
6 7 8 9 10	231 242 228 244 241	234 239 218 243 238	245 240 217 240 234	253 239 216 228 234	258 234 218 232 239	258 238 220 240 230	254 238 229 235 233	248 235 228 234 235	239 233 229 234 234	238 227 222 228 226	228 219 222 218 224	223 219 216 215 222	235 228 225 224 224	234 234 238 236 235	239 242 250 248 244	244 252 258 247 250	249 259 263 249 252	253 269 274 258 254	253 268 273 263 255	248 263 270 260 255	249 259 262 254 256	249 252 253 250 250	248 233 250 249 246	244 228 247 242 243
11 12 * 13 14 **	241 241 238 205 244	236 241 238 185 241	238 239 235 197 243	243 242 235 171 241	244 243 239 171 237	242 244 244 204 242	238 241 242 208 250	231 235 235 206 245	231 230 234 204 238	228 228 226 201 230	219 228 218 208 227	213 221 210 198 222	222 221 212 223 228	230 222 222 242 228	241 235 233 248 239	242 243 240 256 245	244 243 250 263 250	248 244 257 273 251	252 251 254 277 254	249 251 251 268 252	247 250 243 258 249	243 248 242 249 245	242 245 238 248 244	242 242 223 247 244
16 * 17 ** 18 19 20	244 239 249 239 240	244 239 251 239 242	245 239 251 242 245	247 237 252 245 248	246 224 252 241 248	244 221 251 240 249	242 215 244 246 248	235 219 239 246 245	234 219 232 245 248	225 224 226 238 252	217 220 222 225 245	213 214 221 227 229	214 220 225 233 230	221 229 233 235 238	228 237 244 243 247	235 250 251 255 252	241 263 260 261 259	244 287 263 263 265	248 297 264 266 268	244 292 259 259 263	240 271 254 253 254	238 260 254 250 249	238 251 249 247 245	239 249 241 242 243
21 22 23 24 25 **	243 239 239 242 242	243 239 235 241 240	244 239 233 244 239	250 239 240 246 233	253 240 245 249 223	259 243 245 251 232	260 248 242 248 231	255 241 239 243 229	244 234 238 240 235	228 226 232 235 245	209 219 220 225 241	204 211 224 224 235	219 222 228 230 239	229 227 230 239 245	239 234 249 246 251	243 243 263 251 255	249 253 270 258 265	258 263 271 261 269	259 264 265 262 268	255 263 255 265 266	250 256 251 263 264	245 248 246 257 259	243 243 243 251 255	239 240 242 246 253
26 27 * 28 29 * 30	249 249 243 243 240	248 246 243 243 235	249 244 243 243 238	253 251 248 245 242	250 253 249 248 240	245 255 249 252 243	242 255 245 250 241	234 252 239 244 241	234 250 234 243 235	235 248 233 236 236	230 242 230 225 229	231 234 222 218 224	241 234 220 222 229	248 235 225 228 237	254 243 235 235 239	264 246 245 235 245	272 253 248 242 255	279 255 254 245 261	278 258 262 244 259	266 255 252 245 260	259 253 249 244 255	254 249 246 243 248	251 245 245 242 244	251 244 243 242 244
Mean	240	238			239	241		237	235		224	219	225	232	241	248	255	261	262		253	249	245	243
Mean * Mean **	245 230	244 223	244 223		249 213	251 221	248 221	243221	240 222	235 222		220 213	221 224	226 236	235 244	240 253	246 261	249 271	252 273	250 267	248 259	245 253	243 250	242 249

^{*} International Quiet Day. ** International Disturbed Day.

				TABL	E III	1	HOURLY	MEAN	s of	VERT	ICAL	COMP	ONENT (F MA	GNETI	C IN	TENSI	TY A'	r ABIN	GER				
U. т. о ¹	h 1	h 2	h 3	h 4	h 5	h .	6 ^h 7	h 8	3 ^h 9	h 1	0 ^h 1	1 h	12 ^h 1	3 ^h 1	4 ^h 1	5 ^h 1	6 ^h 1	7 ^h :	18 ^h 1	9 ^h 2	0 ^h 2	1 h 2	2 ^h 2	3 ^h 24 ^h
July									43000	γ+	Tabul	lar Qu	antitie	es (ir	η γ)									
1 2 3 * 4 * 5 *	240 239 239 239 237	240 237 240 239 237	240 238 241 240 239	245 242 244 242 242	249 239 246 245 244	249 239 245 249 245	249 243 238 244 242	247 243 230 241 238	244 236 230 236 233	239 229 231 225 225	229 215 228 216 215	224 208 227 209 208	228 219 226 212 211	234 229 231 219 215	241 234 238 225 222	245 243 243 233 230	250 254 242 242 242 236	257 255 249 246 243	260 259 250 247 246	243	248 244 247 242 241	245 242 244 239 239	243 239 241 238 237	242 240 239 236 236
6 7 8 9 10	236 234 234 232 229	235 235 233 233 229	233 234 235 235 227	235 238 239 238 225	238 235 240 238 227	239 234 240 238 229	242 229 235 235 231	239 225 236 233 226	234 226 232 224 225	229 223 227 214 220	213 215 224 203 212	201 212 221 197 215	203 214 223 202 219	210 218 223 206 219	226 223 232 217 225	233 228 239 229 239	243 238 244 235 249	245 248 248 239 249	246 250 253 243 249	250 241	242 243 245 244 248	239 240 239 239 241	239 235 236 238 239	238 233 233 236 236
11 12 13 14 *	229 229 237 239 237	229 230 235 237 232	231 229 234 233 230	235 228 236 238 230	235 224 242 239 234	235 229 240 239 235	237 233 235 231 233	235 231 231 227 235	233 225 225 221 227	217 223 221 219 221	212 222 208 216 219	205 213 205 209 209	203 217 208 204 208	205 225 215 212 221	214 230 228 223 233	224 234 240 230 242	234 238 251 239 246	243 245 260 247 248	244 250 259 251 249	246 247 249 251 244	241 245 242 249 244	239 241 239 244 239	233 238 239 242 236	229 238 239 240 236
16 17 ** 18 ** 19 ** 20 **	238 234 255 235 250	234 234 239 224 244	233 235 252 217 243	239 238 254 216 241	242 239 263 233 240	244 239 264 251 248	242 239 260 250 249	241 235 252 249 239	235 232 242 253 242	229 229 233 249 233	213 225 229 245 229	201 216 229 246 223	209 206 232 241 234	216 203 249 242 244	225 214 287 248 255	232 233 302 259 274	241 243 321 269 286	245 252 325 282 284	241 257 329 283 283	297 273	234 302 277 266 269	234 290 264 259 256	252	233 266 245 249 247
21 22 23 ** 24 25	248 243 239 243 241	249 241 241 239 239	249 242 241 241 231	249 245 243 245 232	245 247 239 244 239	250 249 249 246 241	241 246 249 252 241	239 245 252 250 240	235 238 245 246 235	232 231 235 241 230	228 223 231 234 224	219 211 230 232 215	222 213 224 232 203	219 222 224 228 214	229 233 229 241 224	241 243 242 254 242	250 253 250 261 247	254 262 256 259 261	256 266 258 259 264	255 265 257 254 264	254 261 255 252 261	248 256 248 249 252	244 248 245 247 245	242 243 244 244 242
26 27 28 29 30 *	240 245 244 241 243	239 244 242 239 243	238 242 242 238 243	232 242 243 236 244	219 239 245 238 247	229 239 249 239 248	236 236 248 239 248	239 228 245 237 245	239 226 243 229 236	235 227 236 225 230	228 223 226 223 229	219 220 222 219 226	213 229 222 219 221	224 235 229 225 222	243 243 238 236 230	251 251 248 246 239	252 254	270 259 254 257 244	266 261 256 256 244	255	258 253 248 245 243	252 250 246 243 241	249 249 242 244 242	246 248 242 244 242
31	240	239	238	239	244	247	246	244	237	229	220	212	206	208	220	237	247	253	254	251	245	245	245	242
Mean Mear *			-		240				234					222					258				243	
Mean * Mean **	239 243	23 <i>9</i> 236	239 238		244 243	245 250	241 249	_	231 243	226 236	221 232	214 229	215 227	220 232	228 247	235 262	241 274	246 280	248 282	246 276	244 274	241 263	240 254	239 250
August									43000	γ+	Tabul	ar Qu	antitie	s (ir	ι γ)									
1 2 3 4 5 *		229 240 239 235 235	228 239 241 237 238	234 ⁻ 241 242 238 236	242 241 244 239 237	241 239 245 243 239	240 238 244 240 239	234 238 238 236 239	223 238 232 229 235	214 229 218 220 225	216 220 205 215 220	218 202 201 211 217		214 204 211 219 219					248 245 251 239 240	243 248	250 244 243 236 239		242 237 239 237 233	241 236 239 235 235
6 7 8 * 9 * 10 *	235 232 233 235 235	235 229 229 235 233	236 233 227 234 234	237 235 233 236 235	239 234 239 239 239	241 234 240 239 239	239 233 239 237 237	235 230 236 233 230	230 225 230 225 222	223 219 227 220 210	215 208 219 209 200	213 199 206 193 196	211 193 205 193 198	219 193 218 206 208	227 209 234 219 218	236 224 249 229 230	242 230 249 235 235	246 235 247 239 239	243 239 242 239 239	240 239 239 239 239	243 238 238 238 238	240 236 236 236 237	237 234 235 237 236	236 234 235 238 237
11 12 13 14 15 **	237 238 249 244 243	237 233 244 236 244	237 228 242 229 244	237 212 241 231 245	238 210 243 239 246	236 208 241 244 246	235 208 235 249 246	233 203 227 244 243	227 205 225 235 236	221 210 224 231 231	213 214 222 225 210	208 214 219 223 202	209 216 215 221 195	215 218 221 229 198	220 225 235 239 215	238 238 254 255 227	245 245 268 262 233	253 245 262 267 235	253 243 271 268 238	248 243 264 259 236	246 244 263 253 243	241 245 260 249 251	238 246 253 248 209	235 246 244 242 232
16 ** 17 18 ** 19 20	170 243 250 234 244	223 231 229 246 217	238 233 215 248 229	240 229 239 242 248	248 238 244 241 253	256 229 235 249 255	262 248 229 249 253	263 253 239 245 253	260 248 239 245 253	258 251 231 236 245	259 245 229 242 239	260 239 234 251 239	265 245 240 250 244	285 258 255 258 249	309 269 264 266 263	329 288 284 292 284	339 298 297 309 299	333 322 301 305 289	309 320 313 304 278	299 299 293 292 270	289 285 279 279 265	269 258 267 269 260	264 243 259 250 255	251 248 231 237 244
21 22 ** 23 ** 24 25	227 249 233 249 251	236 249 203 245 240	239 248 203 245 231	220 249 211 245 225	229 252 208 239 237	233 248 218 239 244	236 240 231 243 251	240 245 238 245 252	243 245 240 245 245	242 211 239 248 236	240 228 235 252 237	239 259 235 249 234	240 263 233 254 234	243 270 253 262 245	256 272 295 272 249	273 279 293 275 267	283 303 284 276 273	289 303 293 275 281	293 289 293 274 275	283 279 275 278 271	270 269 265 265 262	256 265 262 256 261	252 265 259 254 251	251 261 257 253 247
26 27 28 29 30 *	246 242 252 242 247	249 237 252 236 248	251 234 251 239 248	252 228 249 233 246	254 239 250 243 244	254 245 251 247 244	249 248 251 249 245	248 249 250 248 248	244 244 245 242 246	242 241 235 230 243	235 239 229 222 235	225 234 224 220 228	230 233 218 226 228	244 241 224 241 236	256 246 233 251 246	263 248 243 262 252	264 252 250 261 253	265 254 258 256 249	267 252 253 251 246		258 250 251 249 248	255 251 254 248 248	253 252 257 248 248	252 252 253 248 246
31	245	245	245	245	245	244	245	244	237	233	222	219	220	228	240	249	257	259	258	260	261	259	255	253
Mean Mean *	239		236		240	241		241	237	230	226	223	223	232	244	256	-	265		259	255			244
nean ** Mean **	238 229	236 230	236 230	237 237	240 240	240 241	239 242	237 246		225		208	209	217 252	228 271		241 291	243 293	241 288		240 269	239 263	238 251	238 246

^{*} International Quiet Day. ** International Disturbed Day.

					TABL	E II	ı	HOURLY	ME AN	S OF	VERT	ICAL	COMP	ONENT	OF MA	GNET	IC IN	TENS	TA YT	ABIN	GER				
U. T.	. 0 ¹	1	h 2	2 ^h :	3 h	4 ^h	5 h	6 ^h	7 ^h 8	3 ^h 9) ^h 1	0 ^h 1	1 h	12 ^h 1	3 h 1	4 ^h 1	5 ^h 1	6 ^h 1	7 ^h 18	8 ^h 1	9 ^h 2	0 h 2	21 ^h 2	2 ^h 2	3 ^h 24
Septem	ber					····				43000	γ+	Tabu	lar Qı	antiti	es (1	n γ)									
1 2 3 4 5	* **	251 244 241 215 239	248 245 241 224 236	245 244 238 234 242	245 245 236 245 247	246 245 234 255 252	244 245 239 257 257	245 245 241 252 257	243 244 234 253 254	236 236 206 253 250	228 226 217 249 236	217 220 225 241 227	213 213 239 236 228	215 216 239 244 235	224 230 246 255 246	234 240 266 257 258	245 243 289 256 269	249 244 302 256 276	249 241 316 263 275	248 240 336 264 270	249 242 335 268 262	250 243 301 266 258	262	248 242 240 259 249	245 242 230 255 249
6 7 8 9 10	* *	249 249 233 253 250	249 239 244 253 249	250 232 252 253 249	252 235 259 253 249	254 237 261 253 249	256 237 262 253 249	258 243 266 255 253	255 241 264 254 253	248 241 253 251 249	239 239 242 245 243	233 229 239 238 237	229 226 234 233 238	228 229 233 232 233	233 234 234 234 231	245 252 234 237 233	266 272 241 243 238	289 286 250 248 243	296 285 254 253 248	306 294 256 253 248	303 293 256 254 249	284 259 255 254 249	256	261 258 254 253 248	256 258 255 252 246
11 12 13 14	** **	245 250 269 254 242	245 251 257 243 236	244 249 239 237 229	245 246 231 239 239	245 248 231 234 236	248 250 224 229 246	253 252 216 239 254	249 249 224 237 249	243 241 230 233 247	238 240 228 230 240	229 234 223 233 236	228 234 234 242 240	232 241 259 264 250	242 250 275 280 259	250 255 277 293 269	251 257 289 297 299	270 256 290 306 303	279 255 285 333 313	280 259 278 297 299	278 262 278 280 283	272 269 274 279 269	270 259 273	254 269 253 253 255	250 270 249 239 258
16 17 18 19 20		258 233 224 245 229	256 225 232 248 239	251 221 233 249 245	256 213 223 248 249	258 235 233 242 253	259 239 234 248 252	260 245 241 254 254	260 246 249 258 254	262 244 244 251 253	253 240 247 254 253	243 236 247 252 249	238 240 247 253 249	237 248 252 258 247	243 259 260 263 249	247 269 269 259 260	252 289 269 267 272	258 306 274 275 283	268 308 290 280 283	269 300 275 270 273	270 288 269 269 269	269 276 260 259 265	249 253 262		241 245 219 236 256
21 22 23 24 25	** **	250 250 227 245 168	253 252 232 244 197	251 252 246 242 213	249 252 251 241 183	239 254 249 240 171	234 252 236 243 174	242 254 232 245 196	248 259 243 255 225	250 254 251 253 258	255 250 250 252 267	254 254 247 249 278	249 249 245 254 275	253 247 242 267 285	257 253 252 292 294	265 262 253 352 305	272 274 257 407 315	277 289 259 470 340	285 285 258 427 341	285 275 258 368 326	272 275 258 278 304	269 272 257 266 294	256 253 275	262 261 255 262 268	249 247 253 186 270
26 27 28 29 30	* *	268 263 263 259 249	260 263 258 258 251	246 258 257 258 249	249 255 256 256 248	261 258 256 253 252	264 260 255 251 254	270 264 260 254 258	271 267 260 254 259	268 263 252 248 260	258 256 245 241 256	252 247 240 235 244	248 238 235 228 237	254 238 235 231 237	263 246 242 238 242	264 251 248 245 247	271 257 254 254 251	272 258 258 264 254	268 257 258 269 255	265 256 259 267 255	268 256 259 266 253	268 258 258 263 258	268 261 260 264 262	268 263 258 264 263	264 264 260 254 263
Mean >	*	244 255			243 252	244	245 250	249 253	250 253	248 247	244	240 233	238 229	243 229	251 234	260 239	271	280 252	283 255	278 255	272 255	266		256 254	
Mean ?				232		223			240		240 241		250		-		247321	-		325		255 282		256	
Octobe	er									43000	γ+	Tabu]	ar Qu	antitie	es (in	ι γ)									
1 2 3 4 5	* *	264 265 204 261 259	262 259 229 263 258	252 258 232 264 258	239 258 233 262 258	235 247 218 262 258	209	232 237	242 238 252 272 268	244 240 258 268 262	239 243 257 262 254	245 254	227 248 259 239 237	228 254 263 237 235	230 272 278 243 239	238 292 278 249 244	245 343 278 258 252	249 340 277 264 257		254 320 272 263 258	254 302 270 262 258	269 291 268 261 258	282 289 265 261 258	272 264 252 259 260	267 228 258 259 259
6 7 8 9 7	** **	255 254 258 253 264	254 254 258 239 228	254 253 258 227 228	254 253 255 228 249	258 254 254 234 251	255 253 250 238 249	260 256 250 244 254	265 258 254 245 255	264 259 256 246 258	255 255 252 242 259	247 246 245 241 258	235 237 240 239 259	228 231 238 247 267	238 237 244 262 274	242 242 247 283 286	253 251 252 312 302	255 260 254 317 318	258 265 262 318 312	258 270 263 326 296	256 272 263 323 289	254 276 261 316 298	258 273 258 299 272	258 268 258 284 239	257 261 257 272 238
11 12 13 14 15		247 248 253 239 244	237 241 258 241 254	232 228 248 249 259	225 244 249 254 259	237 253 252 260 259	241 252 242 252 250	251 248 244 240 252	253 244 254 248 259	254 246 258 258 258	249 247 257 255 259	248 248 252 259 254	255 252 248 261 254	264 267 250 265 259	268 290 258 274 273	278 292 265 287 286	308 289 272 288 298	321 298 288 287 302	304 292 299 281 301	300 292 293 281 294	298 277 280 272 285	290 269 273 262 277	264 271 268 261 272	264 266 254 263 253	262 258 250 243 224
16 17 18 19 20		239 251 258 257 258	245 242 258 257 254	248 247 254 255 243	250 249 257 254 245	252 248 257 252 252	257	254 253 258 255 262	260 258 255 257 262	264 254 248 254 261	262 246 245 247 260	254 239 242 243 258	253 243 242 244 253	262 251 241 250 258	266 259 248 252 263	276 268 255 262 272	295 284 270 274 282	287 283 277 287 282	281 278 273 294 278	276 281 273 302 273	269	267 269 274 271 268	264 267 270 271 257	262 265 258 268 255	258 260 259 264 234
21 22 23 24 25		234 251 251 255 257	242 245 251 238 253	247 244 252 240 251	248 248 253 241 251	255 252 256 245 253	254	258 252 245 254 255	263 257 247 259 258	262 258 249 260 258	256 252 247 248 251	244 245 240 234 243	242 243 241 240 239	242 242 245 247 242	248 248 254 255 244	252 251 262 258 248	259 257 270 260 252	262 257 276 260 253	267 258 278 259 252	272 258 278 258 253	268 258 281 257 254	264 258 274 257 254	261 257 270 256 254	258 258 266 260 255	254 253 260 262 255
26 * 27 * 28 * 29 * 30 *	c	253 251 247 246 246	251 252 247 246 247	251 252 247 246 247	251 250 247 246 247	250 251 250 246 247	250 247 247 243 245	251 249 247 242 243	252 254 248 243 243	251 252 247 241 242	248 243 243 237 238	242 238 241 230 230	240 236 237 225 221	240 236 238 227 225	246 241 243 237 233	247 247 243 242 239	249 248 246 243 247	249 246 244 242 248	249 244 243 243 247	248 244 243 246 247	248 247 243 247 248	249 247 244 247 247	249 247 247 247 246	250 247 247 247 244	250 247 246 247 246
31		246	246	245	246	247	246	243	243	242	239	233	231	234	238	241	246	247	245	247	247	246	248	251	251
Mean Mean *		251 249	249 249	247 249	248 248	250 249	248 246	250 246	254 248	254 247		245 236	243 232	246 233	253 240	260 244	270 247	274 246	273245	272 246	269 247	266 247	263 247	258 247	253 247
Mean *	* 	255	244	240	248	249	245	246	248	250	250	249	250	259	274	288	309	315	310	306	295	290	281	261	244

^{*} International Quiet Day. ** International Disturbed Day.

					TABL	E III	I	HOURLY	ME AN	s of	VERT	ICAL	COMP	ONENT (OF MA	GNET1	C IN	TENSI	TY A'	r ABIN	GER			· ·	
U.T.	o ^h	1	h 2	h 3	sh 4	h 5	₅ h	6 ^h 7	,h 8	3 ^h 9	^h 1	0 ^h 1	1 ^h	12 ^h 1	3 ^h 1	4 ^h 1	5 ^h 1	6 ^h 1	7 ^h	18 ^h 1	.9 ^h 2	0 ^h 2	1 ^h 2	2 ^h 2	3 ^h 24 ^h
Novembe	er									43000	Y +	Tabu:	lar Qu	antiti	es (in	η γ)			-						
1 2 3 * 4 5 *		251 248 244 234 247	248 247 245 237 245	247 247 247 241 246	247 242 247 243 245	247 241 247 245 247	247 242 247 248 250	244 242 244 248 249	245 245 245 248 249	244 246 246 248 250	238 240 241 242 245		237 232 236 238 247	237 234 234 241 248	241 239 240 248 249	247 244 247 254 253	247 249 247 262 251	247 250 247 260 248	247 247 247 258 248	247 247 247 258 248	247 247 249 257 248	247 246 251 254 248	248 245 248 252 248	252 245 247 252 248	251 244 241 250 248
6 * 7 * 8 * 9 * 10 *	* *	247 243 241 248 233	246 243 240 237 229	245 243 241 241 244	244 243 241 243 257	244 243 241 243 259	246 241 243 243 263	246 241 242 243 261	248 243 243 244 260	249 244 242 248 263	245 242 242 245 263	238 238 242 247 260	237 239 246 246 267	240 238 248 254 271	241 236 248 272 283	245 242 254 288 298	243 241 264 291 285	242 243 268 297 282	243 244 269 295 286	244 244 271 288 285	246 244 273 278 274	246 245 268 289 269	246 247 263 262 246	248 248 257 238 243	244 247 250 225 233
11 * 12 13 14 15	*	231 258 250 254 260	213 253 252 253 257	239 241 249 254 253	247 240 250 254 243	252 250 251 254 245	255 252 254 256 249	255 253 255 254 251	254 256 258 250 250	250 256 259 253 247	249 259 254 249 243	246 259 254 250 245	252 260 259 258 249	255 262 265 262 250	267 265 267 266 254	305 274 269 268 258	316 275 269 271 260	324 274 273 274 261	324 269 269 278 259	306 270 267 269 259	291 268 262 267 259	274 267 260 269 259	264 264 259 266 258	269 259 259 264 255	
16 17 18 19 *	*	253 253 253 254 255	249 254 252 252 253	249 254 252 252 253	244 255 250 251 253	245 254 250 252 255	246 255 253 244 259	249 254 253 240 259	249 254 254 244 260	249 255 253 244 259	244 250 246 251 255	248 249 240 257 253	252 249 239 259 254	255 249 242 257 258	259 251 248 264 258	262 255 253 269 260	264 258 256 274 262	265 260 260 277 264	264 259 263 278 260	263 258 264 279 264	261 256 263 280 263	260 256 263 284 261	259 256 262 279 259	259 256 259 269 258	249 255 258 259 258
21 22 23 24 25		256 260 255 250 263	255 259 254 253 259	254 258 254 253 258	252 257 253 253 255	252 258 249 253 255	254 259 249 253 254	253 258 249 253 252	255 256 249 251 249	256 254 249 249 246	252 252 243 244 247	249 252 243 240 245	246 251 242 239 244	252 249 243 241 246	255 253 245 247 245	261 259 249 253 251	259 259 253 250 254	266 260 255 252 256	263 263 258 249 253	265 264 259 249 252	272 263 258 263 254	276 263 257 269 255	274 260 258 272 255	268 258 256 269 255	263 256 250 266 255
26 * 27 28 29 30		255 255 250 250 252	255 254 251 250 251	254 254 250 250 250	253 253 249 249 250	253 251 246 244 250	254 252 249 245 249	252 250 249 244 246	250 245 244 244 246	252 244 244 245 246	250 241 242 241 241	246 240 236 235 240	247 237 235 234 238	246 240 238 233 236	249 244 240 239 243	254 254 246 245 247	253 254 250 250 250	254 254 250 251 253	254 250 250 250 250 252	251 251 250 250 253	253 246 250 257 258	254 249 250 258 260	255 250 250 260 257	256 250 250 255 256	256 252 250 255 253
Mean		250	248	249	249	249	250	250	250	250	247	245	246	247	252	259	261	262	262	261	260	260	257	255	252
Mean * Mean *	*	247 241	247 234	247243	246 248	247 249	248 250	246 248	247249	248 249	245 250	240 250	241 254	241 257	243 267	248 283	247 286	247 290	247 290	247 286	248 279	249 277	249 263	249 255	247 246
Decembe	er									43000	Y +	Tabu]	ar Qu	antitie	es (ir	1 γ)		<u></u>							
1 2 3 * 4 5	*****	253 250 250 245 244	245 249 250 244 236	245 250 250 243 233	249 249 250 244 233	249 249 249 245 228	250 250 249 246 233	249 250 248 245 239	244 248 248 241 241	244 246 246 241 241	238 243 243 240 242	242 240 242 236 236	243 239 241 236 236	240 237 240 234 237	238 240 240 234 240	244 245 244 240 244	246 250 244 244 247	252 259 248 254 251	250 263 250 255 252	250 259 250 255 253	252 256 250 254 252	251 254 250 250 253	250 252 249 250 251	250 252 248 249 250	250 251 247 248 248
6 * 7 8 9 * 10		239 251 255 250 250	225 250 254 247 254	229 250 252 249 247	230 250 250 242 241	236 250 250 242 244	241 250 250 244 248	246 250 246 242 245	249 249 244 240 248	251 249 250 241 247	250 245 250 244 248	250 241 249 245 248	249 240 248 246 250	250 243 249 248 249	256 246 254 251 251	264 250 254 256 256	266 256 254 257 259	270 260 255 260 260	275 263 254 264 258	282 266 252 269 254		276 270 254 260 254	269 261 254 254 254	258 258 253 258 254	252 257 252 255 256
11 12 ** 13 ** 14 15		255 250 256 251 250	254 250 253 250 241	250 249 250 250 247	247 241 240 248 246	246 241 240 246 244	244 243 244 246 244	240 241 245 244 246	246	246 244 243 246 247	244 235 241 245 246	245 238 241 246 248	249 240 243 249 250	250 241 243 248 247	250 249 249 254 250	254 250 255 260 254	260 259 263 266 261	261 266 270 270 263	261 276 271 266 260	264 274 264 264 260	269 270 260 260 260	270 270 260 260 260	260 264 257 256 258	256 261 256 254 254	251 260 252 250 247
16 17 * 18 19 20 *		250 246 245 245 251	250 248 244 244 251	250 247 243 245 251	249 248 244 244 249	248 249 245 246 250	247 249 246 245 251	249 247 245 244 251	246	247 246 243 244 246	246 244 237 240 242	248 241 236 236 237	249 243 236 239 240	245 241 240 240 240	245 245 241 240 237	251 246 247 247 241	252 249 248 253 250	256 254 250 256 255	254 252 250 255 256	252 253 250 257 257	253 251 250 259 258	254 251 256 261 257	251 250 253 260 254	250 250 251 255 253	248 248 248 251 251
21 * 22 23 * 24 25	*	247 245 250 251 250	246 245 247 249 250	247 246 247 248 247	247 246 246 248 246	247 245 246 248 243	246 246 247 250 241	244 245 247 250 241		243 244 243 246 241	237 238 239 245 240	234 234 237 246 240	236 235 241 246 241	238 236 236 244 237	236 237 235 245 241	238 241 241 246 246	244 244 245 247 246	248 250 250 251 245	247 252 252 251 248	250 255 255 251 248	248 257 255 251 248	248 262 255 253 249	247 258 255 254 248	246 255 251 247 250	
26 27 28 29 30		249 250 255 249 243	251 247 251 248 244	244 245 251 248 245	242 245 250 248 245	241 244 245 248 244	240 246 246 249 245	239 241 245 246 244	243	241 240 238 239 241	240 237 231 237 236	240 237 235 241 234	241 240 239 246 237	241 241 238 246 240	244 245 242 251 241	246 251 246 253 245	247 251 250 258 244	249 252 252 261 247	250 250 250 258 246	251 251 251 256 246	253	248 252 248 251 248	247 253 246 248 246	247 254 246 240 244	246 251 247 240 246
31 *		245	244	244	243	243	244	243	241	237	235	235	235	235	236	238	241	243	246	246	246	247	246	244	244
Mean Mean *		249	247 248	247	245 247	245 248	246 248	245 247			241 240		242 239	242 239	244 239	248 241	252 246	255 250	256 250	256 251	256 251	256 251	253 249	251 248	250 247
Mean ★	k	248 249		248 245				244				242		244		253	258		268	269				257	255

^{*} International Quiet Day. ** International Disturbed Day.

	1.	ABLE IV.		IN MEA		XTREME	VALUES		ZONTAL			HECORDE	BI TH			INTENS	τ 	
Date	Mean						Mean						Mean					
	Daily Value	Maximu	m		imum	Range	Daily Value	Maxi	mum	Min	imum	Range	Daily Value	Maxin	mum	Mir	nimum	Range
January	9°+ '	U.T. h m	9°+	9°+	U.T. h m	•	18000 Y +	U. T.	18000 Y ⁺	18000 Y [†]	U.T. h m	Y	43000 Y +	U.T. h m	43000 Y ⁺	43000 Y ⁺	U.T.	Y
1 2 3 4 ** 5 **	48.0 47.4 47.7 47.5 46.4	13 32 5 18 13 5 15 5 5	53. 2 53. 2 55. 4 58. 1 53. 7	44.9 36.3 32.7 37.3 37.9	9 43 17 20 22 19 19 42 16 20	8.3 16.9 22.7 20.8 15.8	586 580 572 564 565	6 4 7 13 22 24 11 23 18 32	604 601 604 602 611	561 527 520 528 521	15 21 17 10 18 32 15 20 18 51	43 74 84 74 90	231 234 237 241 242	16 18 17 29 19 35 15 43 20 3	242 262 266 261 265	219 216 220 226 228	11 31 12 21 12 0 11 49 7 31	23 46 46 35 37
6 7 8 9 * 10 *	46.3 47.2 46.7 46.9 46.8	12 3 5 12 59 5 13 40 5	51.0 51.8 51.0 50.1	39.9 41.4 43.1 44.3 44.2	0 13 22 26 2 32 9 50 9 13	11.1 10.4 7.9 5.8 5.3	559 571 579 581 589	21 51 7 18 7 10 7 6 17 43	585 591 591 598 601	520 541 565 564 575	12 9 11 34 9 8 10 27 10 40	65 50 26 34 26	244 243 241 239 235	15 2 16 16 16 18 18 35 5 10	271 253 250 247 244	229 235 232 227 222	6 21 11 5 12 4 12 0 12 8	42 18 18 20 22
11 * 12 * 13 * 14	46.9 46.8 47.2 47.4 46.8	13 16 5 12 58 5 16 22 5	19.9 50.0 51.2 52.1	44.8 45.0 44.4 44.4 42.4	9 7 7 55 7 57 8 9 23 11	5.1 5.0 6.8 7.7 9.3	592 592 590 587 584	8 2 18 8 6 40 6 40 18 33	608 602 604 601 605	574 578 565 567 556	11 17 11 19 10 50 10 56 10 50	34 24 39 34 49	231 231 231 323 233	5 47 18 45 22 36 19 30 22 30	241 238 239 243 246	217 221 219 225 225	12 10 12 28 12 0 17 3 17 0	24 17 20 18 21
16 ** 17 18 19 20	45.5 46.0 46.3 46.4 46.5	13 0 5 13 39 5 13 48 5	51.4 51.2 52.5 51.3	33.8 38.9 42.0 39.9 41.6	4 59 1 10 1 50 23 28 0 0	27.6 12.3 10.5 11.4 9.9	563 556 565 569 575	3 30 21 30 23 41 23 1 6 40	638 603 586 601 597	497 519 540 532 557	20 34 10 18 11 22 11 38 18 53	141 84 46 69 40	241 248 246 239 242	18 46 0 9 18 20 22 7 20 36	281 263 257 249 251	197 238 235 227 231	4 10 12 55 12 10 12 45 16 3	84 25 22 22 20
21 22 23 24 25 **	46.1 46.8 46.0 45.6 47.3	17 29 5 17 52 4 7 30 5	19.5 12.9 19.9 10.0	41.6 42.8 42.8 40.9 35.1	1 40 20 54 1 34 19 19 23 2	7.9 10.1 7.1 9.1 24.0	580 579 581 571 531	1 48 7 8 8 2 23 59 3 51	595 601 592 625 658	562 554 565 534 461	11 30 17 40 11 40 7 49 11 30	33 47 27 91 197	238 238 236 240 258	1 19 18 13 5 26 19 28 15 14	246 248 244 255 342	230 226 225 226 200	12 59 13 23 10 21 6 58 6 45	16 22 19 29 142
26 ** 27 28 29 30	44.9 46.4 45.9 46.4 45.9	13 10 5 13 31 5 14 33 5	55.4 52.9 52.3 54.8	30.2 35.4 41.3 40.5 36.0	3 48 20 20 22 22 4 42 23 10	25.2 17.5 11.0 14.3 15.9	532 559 566 567 575	4 31 20 21 0 10 20 6 21 24	588 621 590 591 592	531	10 30 11 23 11 41 11 9 23 53	94 94 52 60 37	254 247 244 241 237	16 35 20 8 0 2 18 35 22 44	278 262 254 252 249	230 235 232 231 226	5 6 11 48 12 23 12 39 12 59	48 27 22 21 23
31	46.1	13 57 5	50.5	40.1	23.50	10.4	574	23 10	591	550	10 57	41	237	8 0	245	223	13 3	22
Mean * Mean **	46.6 46.9 46.3	- 5	2.5 0.1 7.5	40.2 44.5 34.9	- - -	12.4 5.6 22.7	572 589 551	- - -	602 603 619	541 571 500	 - -	61.3 31.4 119.2	240 233 247	- - -	256 242 285	225 221 216	- -	31.3 20.6 69.2
February	9°+	U.T. 9	9°+	9°+	U.T. h m	,	18000 Y	U.T. h m	18000 Y	18000 Y +	U.T. h m	Υ	43000 Y	U.T.	43000 Y	43000 Y	U.T. h m	Υ
1 2 3 4 5	45.9 47.3 47.2 46.3 46.7	13 27 5 17 51 5 12 47 5	1.5 2.5 3.2 1.9 3.6	38.3 42.0 43.2 40.1 43.0	0 22 9 26 9 30 2 40 9 37	13.2 10.5 10.0 11.8 10.6	576 577 580 578 581	5 20 19 6 19 53 1 27 18 51	596 592 605 611 591	540 547 520	11 48 12 40 10 58 13 0 10 40	52 52 58 91 33	234 235 234 231 233	20 26 22 38 0 3 23 12 18 30	246 245 243 244 239	225 222 210 216 217	6 51 12 31 10 58 2 40 10 54	· 21 23 33 28 22
6 7 8 ** 9 **	46.6 47.4 46.3 44.0 46.3	13 9 5 14 18 5 14 33 5	2.8 6.4 9.9 0.5 7.3	41.8 42.6 29.6 27.9 58.4	9 23 20 51 8 17 22 13 21 5 0 30	11.0 13.8 30.3 22.6 18.9	582 581 558 562 564	6 36 8 22 1 38 21 40 8 3	615 607 604 591 602	550 501 529	12 0 14 10 18 41 10 58 11 31	64 57 103 62 82	234 233 244 239 242	18 30 19 29 18 54 20 44 15 19 17 38	245 246 289 260 257	217 208 222 224 219	12 0 11 4 10 58 2 59 12 6	28 38 67 36 38
11 12 13 14 *	46.2 46.4 46.7 46.9 46.5	14 42 5 14 5 5 14 0 5	2. 0 2. 4 3. 2 2. 8 1. 9	40.5 39.5 41.3 40.7 39.5	8 56 9 17 9 36 9 38 9 21	11.5 12.9 11.9 12.1 12.4	574 580 581 584 583	20 21 6 30 7 2 6 51 6 41	600 601 602 601 605	544 543 546	11 15 11 30 11 32 12 19 11 15	66 57 59 55 64	235 235 234 232 231	8 15 7 47 8 3 6 20 9 20	248 245 243 239 241	214 220 218 220 215	12 3 12 55 13 42 12 2 12 11	34 25 25 19 26
16 ** 17 ** 18 19 ** 20	46.3 43.9 45.6 44.1 45.5	15 42 5 12 31 5 15 22 5	0.8 5.0 3.2 9.9 1.8	34.0 25.6 39.7 32.5 38.2	21 13 0 54 1 16 21 31 0 13	26.8 29.4 13.5 27.4 13.6	541 528 555 558 568	4 10 5 13 0 38 23 59 0 0	630 568 583 618 618	527 529	12 25 0 17 10 42 18 20 11 11	179 104 56 89 73	254 243 247 252 238	17 3 16 48 16 8 18 30 19 29	341 280 264 278 252	212 201 233 232 216	10 45 3 46 11 59 23 59 3 31	129 79 31 46 36
21 * 22 * 23 * 24 25	45.5 45.8 46.0 45.9 46.0	13 24 50 14 22 5	9.7 0.4 1.0 3.7 3.3	39.0 40.9 40.8 39.7 36.3	9 6 9 4 9 22 9 23 21 56	10.7 9.5 10.2 14.0 17.0	575 585 584 588 580	23 46 6 10 0 18 6 18 7 9	591 596 596 611 607	561 552 542	11 40 11 18 11 21 12 18 13 30	57 35 44 69 72	240 237 234 235 236	8 35 8 13 8 30 19 29 18 38	250 247 245 247 251	225 221 219 219 220	11 0 12 10 13 30 12 15 11 48	25 26 26 28 31
26 27 28	45.0 45.5 45.6	13 14 5	2.9 2.4 3.2	33.2 39.8 37.4	2 24 0 11 23 10	19.7 12.6 15.8	578 580 587	0 20 7 7 7 10	618 598 605	557	12 37 11 55 10 16	72 41 31	235 238 239	16 36 16 20 22 20	249 249 252	214 219 224	12 4 12 26 12 3	35 30 28
Mean * Mean **	46.0 46.1 44.9	- 5	3.5 1.2 7.2	38.1 40.2 29.9	- -	15.5 11.0 27.3	573 582 549	<u> </u>	602 598 602	535 547 495	- - -	67.0 51.0 107.4	238 235 246	- - -	255 244 290	219 220 218	- -	36. 2 24. 4 71. 4

^{*} International Quiet Day. ** International Disturbed Day.

	1	TABLE IV DA	ILY MEAN AND E	EXTREME	VALUES	OF MAGNETIC	ELEMENTS AS	RECORDE	D BY T	HE MAGNETOGRA	PHS	
	3	DECLINAT	TION WEST			HORIZONTAL	. INTENSITY			VERTICAL	INTENSITY	
Date	Mean Daily Value	Maximum	Minimum	Range	Mean Daily Value	Maximum	Minimum	Range	Mean Daily Value	Maximum	Minimum	Range
March	9°+ ,	U.T. 9°+	9°+ U.T.	,	18000 Y	U.T. 18000 h m Y +	18000 U.T.	Υ	43000 Y +	U.T. 43000 h w Y +	43000 U.T.	Υ
1 *	45.5	13 25 53.1	40.5 8 5	12.6	584	22 3 601	561 10 13	40	238	17 36 248	223 12 4	25
2 **	45.8	19 6 65.9	23.9 23 16	42.0	559	8 46 714	457 13 46	257	256	20 47 366	190 10 6	176
3 **	41.6	23 31 65.8	6.2 18 59	59.6	477	18 29 645	233 23 41	412	259	18 29 443	99 23 41	344
4	44.4	5 2 61.6	16.6 0 0	45.0	519	19 6 600	427 8 31	173	250	14 37 296	176 2 2	120
5	44.8	13 48 52.3	38.1 9 1	14.2	554	22 59 577	529 14 14	48	259	7 53 273	244 2 20	29
6 *	45.2	12 52 54.7	38.5 9 30	16.2	565	21 42 584	536 10 36	48	251	16 19 264	226 11 42	38
7	45.8	13 21 58.0	36.2 9 1	21.8	568	17 58 610	503 12 52	107	245	16 50 259	218 12 0	41
8 **	47.3	14 54 72.3	13.2 23 46	59.1	535	14 50 657	389 23 10	268	281	17 18 420	226 23 10	194
9	44.2	13 59 55.3	26.5 1 9	28.8	511	0 0 587	426 0 49	161	262	16 48 301	209 0 44	92
10 *	45.9	13 40 56.4	38.4 8 44	18.0	555	20 19 587	507 10 59	80	258	8 29 274	244 12 20	30
11 *	45.5	14 8 54.2	38.1 8 22	16.1	566	24 0 588	518 12 13	70	250	7 25 267	235 13 21	32
12	46.2	15 11 58.1	37.0 8 1	21.1	582	5 45 631	511 12 17	120	246	18 50 257	223 12 18	34
13	46.1	13 59 57.3	37.8 8 30	19.5	582	19 30 627	512 12 22	115	246	7 57 264	220 12 23	44
14	46.0	12 59 52.9	37.6 8 1	15.3	578	5 23 620	518 13 29	102	260	16 30 326	232 0 43	94
15 **	46.2	14 29 62.7	31.6 10 38	31.1	578	0 43 596	440 8 51	156	270	16 16 386	237 8 58	149
16	43.6	15 20 52.8	32.2 22 18	20.6	536	18 27 596	513 12 22	83	271	17 47 311	248 23 54	63
17	43.7	0 40 52.3	34.5 0 0	17.8	546	20 53 588	510 9 55	78	254	17 48 278	215 0 58	63
18	44.6	14 4 52.3	36.2 20 52	16.1	562	20 56 624	528 11 33	96	256	16 25 280	241 12 6	39
19	43.9	13 8 53.5	37.5 20 4	16.0	566	20 12 603	536 10 16	67	255	17 22 271	238 12 16	33
20	44.3	14 49 52.7	38.0 9 0	14.7	575	7 0 590	544 10 49	46	249	20 7 268	226 11 5	42
21 *	45.4	14 43 55.5	38.7 22 42	16.8	578	21 20 598	546 10 28	52	247	17 30 261	224 11 55	37
22	45.6	14 1 55.8	37.2 18 36	18.6	578	5 30 635	534 9 33	101	240	18 41 266	204 5 52	62
23	45.1	12 40 57.5	38.3 8 0	19.2	573	14 55 613	527 17 30	86	253	16 40 335	215 11 18	120
24	45.9	6 2 56.4	36.7 2 31	19.7	568	5 51 634	525 10 48	109	242	18 38 258	212 3 37	46
25	44.8	13 24 52.8	37.9 24 0	14.9	568	19 56 609	526 9 18	83	243	17 47 265	220 12 18	45
26	45.9	13 40 55.6	35.8 0 24	19.8	564	21 27 631	506 11 16	125	247	17 29 295	211 4 4	84
27	45.5	16 1 52.6	37.9 8 18	14.7	571	22 8 629	533 12 40	96	245	18 26 277	215 11 54	62
28 **	43.6	13 20 57.4	24.3 2 29	33.1	546	17 18 613	482 21 0	131	268	17 10 354	191 3 3	163
29	43.2	13 15 54.1	35.2 19 39	18.9	549	19 53 603	507 10 51	96	262	18 28 289	234 11 57	55
30	43.6	14 9 57.1	29.6 2 21	27.5	555	19 1 604	497 12 39	107	249	18 48 298	210 1 6	88
31	45.3	13 5 55.5	36.7 7 50	18.8	562	1 41 590	517 13 40	73	257	15 22 288	231 3 37	57
Mean	45.0	- 56.6	33.1 -	23.5	557	- 612	497 -	115.7	254	- 298	217 -	80.7
Mean *	45.5	- 54.8	38.8 -	15.9	570	- 592	534 -	58.0	249	- 263	230 -	32.4
Mean **	44.9	- 64.8	19.8 -	45.0	530	- 645	400 -	244.8	267	- 394	189 -	205.2
April	9°+	U.T. 9°+	9°+ U.T.	,	18000 Y +	U.T. 18000 h m γ +	18000 U.T.	Υ	43000 Y +	U.T. 43000	43000 U.T.	Υ
1 *	45.4	13 37 56.5	37.8 7 45	18.7	571	21 45 600	527 10 28	73	245	4 50 260	213 12 12	47
2	45.0	13 19 54.9	36.4 9 23	18.5	581	6 20 606	543 11 41	63	247	17 39 265	222 11 52	43
3	45.6	13 51 56.4	35.1 8 47	21.3	588	19 58 629	541 10 34	88	237	1 20 251	211 11 9	40
4	44.6	12 50 58.5	35.3 20 30	23.2	570	6 39 619	517 12 21	102	251	17 20 291	215 11 43	76
5	44.0	13 8 53.7	35.2 8 40	18.5	568	17 56 602	518 11 16	84	251	7 24 272	225 11 3	47
6	45.2	12 3 56.5	35.1 8 1	21.4	576	2 59 629	500 11 55	129	244	15 46 266	213 11 57	53
7	45.5	13 29 57.8	36.2 8 44	21.6	579	22 44 603	532 10 43	71	244	16 26 275	203 12 9	72
8	45.5	13 42 57.7	35.1 9 5	22.6	584	21 52 686	529 10 23	157	239	21 53 265	201 12 10	64
9 **	44.2	13 9 54.0	35.9 0 12	18.1	558	0 21 628	476 11 21	152	246	16 29 274	207 0 4	67
10	44.4	14 48 53.7	36.2 9 20	17.5	570	23 24 616	517 11 43	99	244	6 50 261	218 13 10	43
11	43.7	14 23 55.5	34.4 8 14	21.1	574	0 18 609	522 11 52	87	245	17 29 276	218 11 54	58
12	44.1	13 46 57.8	33.5 21 53	24.3	573	21 57 615	531 11 20	84	244	17 54 268	218 11 59	50
13	43.5	12 52 54.2	36.0 2 12	18.2	581	21 16 609	540 11 34	69	238	17 34 261	208 13 4	53
14	43.4	13 22 54.5	36.1 20 38	18.4	587	20 42 624	556 12 13	68	240	20 22 259	214 10 57	45
15	44.4	13 42 55.2	35.3 1 33	19.9	585	15 50 618	542 10 51	76	240	16 29 267	220 10 49	47
16	43.9	14 29 53.3	37.3 24 0	16.0	579	1 57 616	545 12 33	71	242	18 36 269	212 11 56	57
17 **	44.3	15 21 66.1	-1.2 22 28	67.3	578	15 38 705	332 22 17	373	251	21 52 374	29 22 11	345
18 **	44.6	13 35 60.2	20.3 21 27	39.9	524	21 32 588	459 11 59	129	276	15 47 329	249 11 55	80
19 **	44.6	13 11 55.7	37.7 7 6	18.0	554	23 56 627	482 10 53	145	256	17 27 282	225 10 55	57
20 **	44.5	5 33 51.0	34.9 18 55	16.1	571	0 0 624	524 11 14	100	248	19 0 282	226 11 25	56
21 *	44.5	13 56 49.6	37.6 7 51	12.0	577	5 10 600	549 7 50	51	247	3 20 257	236 11 48	21
22 *	44.2	13 51 52.8	36.0 9 8	16.8	584	23 55 600	552 10 17	48	241	7 1 253	216 11 46	37
23 *	45.2	12 33 54.7	36.4 8 10	18.3	595	17 52 618	561 10 17	57	238	6 40 255	212 12 5	43
24 *	45.4	13 53 56.3	36.5 8 20	19.8	591	21 6 610	540 11 40	70	238	5 40 251	215 12 0	36
25	44.8	13 51 53.5	35.8 9 11	17.7	602	16 39 668	551 11 41	117	237	16 39 271	205 12 24	66
26	44.1	13 30 53.6	36.1 8 20	17.5	602	17 2 646	571 13 53	75	239	19 1 264	205 12 13	59
27	43.3	14 28 51.7	34.0 8 47	17.7	591	19 47 622	543 11 37	79	239	19 42 255	210 12 41	45
28	44.5	13 24 54.9	35.7 7 23	19.2	591	19 20 615	558 12 17	57	236	17 24 255	200 12 5	55
29	44.9	12 24 55.3	36.3 8 27	19.0	592	12 23 622	550 10 23	72	239	6 1 251	217 12 49	34
30	45.1	12 55 54.0	37.4 8 39	16.6	590	18 3 626	543 10 39	83	234	18 27 251	204 12 26	47
Mean	44.5	- 55.3	34.1 -	21.2	579	- 623	525 -	97.6	244	- 270	209 -	61.4
Mean *	44.9	- 54.0	36.9 -	17.1	584	- 606	546 -	59.8	242	- 255	218 -	36.8
Mean **	44.4	- 57.4	25.5 -	31.9	557	- 634	455 -	179.8	255	- 308	187 -	121.0

^{*} International Quiet Day. ** International Disturbed Day.

		TABLE IV DA	ILY MEAN AND	EXTREME	VALUES	OF MAGNETIC	ELEMENTS AS	RECORDE	D BY T	HE MAGNETOGRA	PHS	
		DECLINA	TION WEST			HORIZONTAL	INTENSITY			VERTICAL	INTENSITY	
Date	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 Y +	U.T. 18000 h m Y +	18000 U.T.	Υ	43000 Y +	U.T. 43000 h m Y +	43000 U.T. γ + h m	Y
1	44.5	13 42 53.4	37.5 8 17	15.9	588	3 1 617	549 13 16	68	239	17 36 261	216 11 26	45
2 *	43.4	13 50 50.3	36.4 7 54	13.9	588	17 23 608	570 10 20	38	237	6 2 257	207 12 4	50
3	44.7	13 40 53.8	38.7 7 51	15.1	593	16 22 624	555 10 39	69	237	17 36 254	210 12 7	44
4	44.1	13 30 52.9	35.5 7 21	17.4	593	18 23 625	562 9 31	63	234	18 36 248	200 11 50	48
5	44.7	13 49 53.8	36.4 7 46	17.4	598	15 53 627	563 10 39	64	236	17 37 257	212 12 18	45
6	45.2	13 4 54.7	37.8 7 50	16.9	595	18 27 623	552 10 17	71	239	17 24 259	202 11 57	57
7	44.8	13 23 54.1	38.0 7 8	16.1	595	0 10 621	565 11 1	56	236	16 20 250	210 12 4	40
8 *	44.4	13 22 52.3	37.2 7 50	15.1	597	16 12 618	568 11 17	50	235	4 6 248	208 11 17	40
9 *	44.7	13 22 52.8	36.7 8 17	16.1	597	20 46 617	570 8 41	47	230	5 30 247	194 12 16	53
10 *	44.6	13 48 54.3	35.8 6 43	18.5	596	18 19 618	565 11 16	53	236	17 40 256	201 11 53	55
11	44.0	13 30 55.7	35.1 6 17	20.6	591	18 51 637	562 10 25	75	235	18 38 264	192 12 7	72
12	43.9	13 11 53.3	34.7 7 5	18.6	587	2 14 635	542 11 44	93	237	17 42 260	211 11 9	49
13	43.1	11 58 51.9	32.2 7 6	19.7	595	18 49 644	555 13 24	89	235	20 58 261	203 11 30	58
14 **	42.8	12 8 54.3	31.3 5 56	23.0	575	19 23 620	540 1 42	80	230	18 14 261	197 11 32	64
15 **	44.4	13 29 55.8	32.9 7 10	22.9	586	20 41 638	535 15 23	103	234	16 20 256	208 11 34	48
16 **	42.8	13 28 53.0	33.9 1 5	19.1	571	22 32 621	505 10 29	116	231	16 30 263	184 2 50	79
17	44.5	12 33 54.7	36.6 6 59	18.1	586	21 12 631	545 13 1	86	238	18 45 271	210 12 14	61
18	44.3	14 20 54.9	35.6 7 20	19.3	591	18 3 669	555 8 26	114	244	18 13 287	213 11 32	74
19	44.3	13 50 58.2	33.4 6 4	24.8	578	17 0 614	539 7 39	75	238	17 14 258	193 11 48	65
20	44.8	13 52 55.2	35.6 6 27	19.6	588	20 51 620	553 8 20	67	240	16 34 255	216 11 30	39
21	43.6	13 43 53.2	34. 2 7 56	19.0	597	19 59 629	566 13 15	63	235	17 22 249	204 11 28	45
22	45.4	12 59 56.2	38. 6 6 57	17.6	595	22 48 670	561 13 32	109	234	18 25 252	194 11 42	58
23 **	43.2	15 20 54.9	24. 4 5 5	30.5	606	6 44 645	549 10 32	96	226	18 43 248	195 4 12	53
24 **	44.5	9 11 55.8	18. 0 8 26	37.8	570	6 45 702	374 8 28	328	240	17 35 267	187 8 27	80
25	44.3	12 22 55.7	36. 4 6 43	19.3	570	19 9 618	509 10 13	109	248	18 38 271	211 11 47	60
26	45.2	14 3 55.4	36.1 7 35	19.3	585	22 10 648	508 12 8	140	244	17 19 284	209 12 8	75
27	44.6	12 42 53.7	33.1 7 21	20.6	587	17 20 643	533 13 16	110	242	17 22 271	205 11 50	66
28	44.3	14 53 57.6	34.0 6 25	23.6	594	17 10 655	545 12 59	110	242	17 12 271	205 11 50	66
29	44.4	13 51 52.3	37.7 20 20	14.6	601	15 26 633	560 13 30	73	259	17 30 320	224 11 2	96
30 *	42.6	13 23 51.3	31.0 7 13	20.3	579	20 44 609	535 10 1	74	241	4 20 261	206 11 51	55
31	44.6	12 48 54.2	35.7 8 16	18.5	606	19 24 658	563 8 14	95	238	20 30 264	198 12 2	66
Mean	44.2	- 54.2	34.5 -	19.7	590	- 633	544 -	89.8	238	- 262	204 -	58.3
Mean *	43.9	- 52.2	35.4 -	16.8	591	- 614	562 -	52.4	236	- 254	203 -	50.6
Mean **	43.5	- 54.8	28.1 -	26.7	582	- 645	501 -	144.6	232	- 259	194 -	64.8
June	9°+	U.T. 9°+	9°+ U.T.	,	18000 Y +	U.T. 18000 h m γ +	18000 U.T.	Υ	43000 Y +	U.T. 43000 h m Y +	43000 U.T. γ + h m	Υ
1 **	41.9	0 20 53.7	27.4 8 2	26.3	571	0 21 680	508 9 18	172	229	17 38 271	191 3 20	
2 *	43.5	13 31 54.7	33.0 7 8	21.7	581	22 33 614	545 11 13	69	245	17 30 262	212 12 4	50
3	45.2	13 30 57.8	32.5 6 53	25.3	594	19 54 620	562 10 20	58	239	17 29 257	217 11 35	40
4	45.0	13 44 53.0	36.7 6 48	16.3	604	16 17 644	569 9 10	75	243	17 45 263	217 11 22	46
5 **	46.1	13 46 55.2	29.9 7 43	25.3	611	18 6 701	511 8 15	190	242	18 6 266	207 11 6	59
6	42.5	13 0 52.3	26.7 0 12	25.6	573	18 49 608	542 9 15	66	244	4 10 259	220 11 5	39
7	42.9	12 48 55.5	33.1 23 34	22.4	588	21 48 644	534 9 10	110	241	17 38 274	210 11 0	64
8	42.1	14 40 53.4	32.7 2 55	20.7	573	17 41 630	529 9 57	101	239	17 44 282	212 3 11	70
9	43.5	14 12 52.5	34.3 8 3	18.2	577	17 10 636	517 11 49	119	240	18 44 266	214 11 16	52
10	42.4	13 57 51.9	33.5 6 54	18.4	586	19 33 624	536 10 20	88	240	20 40 259	219 11 35	40
11 12 * 13 14 ** 15	43.4 43.5 42.9 41.9	14 12 51.3 13 55 52.4 14 51 53.6 3 49 55.2 14 3 52.5	34.0 6 56 35.6 5 34 34.2 6 46 22.6 7 12 29.7 5 38	17.3 16.8 19.4 32.6 22.8	589 599 595 569 580	18 20 631 18 4 641 17 52 693 20 48 707 20 44 618	550 11 32 573 12 21 556 13 38 481 9 38 521 10 54	81 68 137 226 97	238 239 236 225 241	18 20 255 19 13 255 17 53 274 17 34 290 18 19 261	211 11 24 219 12 59 207 11 51 142 4 0 218 11 25	44 36 67 148 43
16 *	43.6	13 22 54.8	34.1 7 44	20.7	593	23 7 630	553 11 8	77	236	18 35 252	210 12 2	42
17 **	46.3	15 33 59.7	34.9 7 35	24.8	596	17 56 693	537 11 29	156	242	18 44 304	209 5 53	95
18	44.9	13 5 55.0	37.0 22 28	18.0	595	19 22 635	557 10 6	78	245	18 44 270	217 11 50	53
19	43.6	14 7 56.3	32.9 7 43	23.4	595	15 49 635	543 9 40	92	245	18 10 272	223 10 55	49
20	44.3	14 34 53.6	35.2 8 12	18.4	596	18 45 636	544 9 36	92	248	18 45 272	223 11 50	49
21	43.9	13 2 54.3	33.6 8 57	20.7	600	20 6 633	543 9 15	90	243	6 40 263	200 11 8	63
22	43.6	13 41 55.1	32.2 7 36	22.9	608	17 41 673	558 10 24	115	241	17 42 273	206 11 25	67
23	45.1	14 52 55.1	37.9 7 0	17.2	604	15 37 647	563 9 6	84	244	17 31 275	215 10 30	60
24	43.8	14 58 49.2	36.5 7 53	12.7	601	17 42 636	564 10 10	72	247	19 1 267	222 11 4	45
25 **	44.3	13 19 51.1	38.1 4 36	13.0	589	0 52 635	528 14 5	107	246	17 38 274	219 4 33	55
26	44.1	13 53 52.1	38.1 8 16	14.0	588	19 14 629	543 11 44	86	251	17 38 284	227 11 18	57
27 *	42.4	14 4 51.2	34.1 5 57	17.1	594	19 35 626	559 12 55	67	248	18 39 262	231 12 59	31
28	43.8	13 16 52.0	36.4 7 20	15.6	599	18 2 636	554 10 9	82	242	18 38 267	211 12 5	56
29 *	43.3	14 1 52.1	34.5 8 18	17.6	599	19 52 631	565 10 3	66	240	5 54 258	214 11 42	44
30	44.6	13 30 51.1	38.7 8 18	12.4	596	19 58 625	562 9 32	63	243	17 33 267	222 11 48	45
Mean	43.7	- 53.6	33.7 -	19.9	591	- 643	544 -	99.5	241	- 268	212 -	56.3
Mean *	43.3	- 53.0	34.3 -	18.8	593	- 628	559 -	69.4	242	- 258	217 -	40.6
Mean **	44.1	- 55.0	30.6 -	24.4	587	- 683	513 -	170.2	237	- 281	194 -	87.4

^{*} International Quiet Day. ** International Disturbed Day.

	Т	ABLE IV DA	AILY MEAN AND	EXTREME	VALUES	OF MAGNETIC	ELEMENTS AS	RECORDE	D BY TH	E MAGNETOGRA	PHS	
	\	DECLINA	TION WEST			HORIZONTAI	INTENSITY			VERTICAL	INTENSITY	
Date	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 Y +	U.Τ. 18000 h m γ ⁺	18000 U.T.	Υ	43000 Y +	U.T. 43000 h m Y +	43000 U.T.	Υ
1 2 3 * 4 * 5 *	43.9 43.2 42.7 43.0 43.1	13 48 53.3 13 20 52.1 13 43 50.3 14 3 53.5 14 50 52.0	34.9 7 21 33.6 6 54 33.4 5 25 33.7 6 50 32.7 6 56	18.4 18.5 16.9 19.8 19.3	600 599 594 598 604	17 11 658 16 5 658 17 46 625 15 20 620 20 26 626	554 12 40 559 11 15 559 10 26 563 10 56 569 10 14	104 99 66 57 57	243 238 239 235 235 233	18 37 264 18 37 265 18 19 253 5 41 253 18 37 251	220 11 5 204 11 26 222 12 24 203 11 47 203 12 5	44 61 31 50 48
6	44.1	13 28 54.7	35.0 7 10	19.7	598	18 31 642	550 11 25	92	233	17 10 251	198 11 18	53
7	43.0	13 51 56.3	33.6 5 24	22.7	603	18 57 653	565 11 35	88	231	18 26 253	209 11 30	44
8	43.1	14 1 54.7	35.5 5 34	19.2	603	17 52 658	549 12 2	109	236	18 53 257	217 11 40	40
9	42.9	14 55 53.8	32.7 6 40	21.1	600	18 46 646	560 11 33	86	229	20 39 249	193 11 25	56
10	42.7	14 1 50.7	35.5 6 10	15.2	599	0 10 641	557 11 21	84	231	16 45 257	210 10 48	47
11 12 13 14 *	42.4 43.5 42.6 43.4 43.1	15 12 53.5 13 43 52.5 14 0 53.7 13 51 51.9 13 22 52.1	34.0 7 55 34.2 6 13 33.4 6 7 34.3 7 45 35.7 8 0	19.5 18.3 20.3 17.6 16.4	601 594 592 598 595	19 6 645 18 3 631 17 54 633 19 11 639 16 55 638	556 11 48 546 10 38 539 11 10 569 7 20 557 11 13	89 85 94 70 81	229 232 234 233 233	19 8 251 18 38 256 17 47 267 18 37 256 18 19 252	198 12 0 208 11 57 201 11 10 202 12 0 201 12 10	53 48 66 54 51
16	43.0	13 11 52.8	34.5 7 2	18.3	598	1 30 627	566 9 56	61	232	17 24 252	197 11 33	55
17 **	44.6	18 57 60.4	33.5 7 47	26.9	621	18 11 992	519 22 56	473	242	20 49 328	197 13 5	131
18 **	40.5	14 18 57.3	20.2 6 40	37.1	580	18 32 667	482 15 11	185	265	18 28 341	206 11 13	135
19 **	41.9	13 21 50.1	32.8 5 6	17.3	564	18 31 628	470 10 32	158	250	18 28 290	210 2 50	80
20 **	42.4	13 20 50.4	32.8 5 52	17.6	568	15 40 619	495 11 21	124	252	16 49 292	220 11 9	72
21	43.6	14 58 51.9	34.0 7 2	17.9	587	18 53 640	536 10 54	104	242	18 54 263	214 12 5	49
22	43.1	14 21 54.1	35.6 7 39	18.5	592	19 0 637	550 9 11	87	243	18 48 271	209 11 36	62
23 **	42.6	13 30 51.8	33.4 8 30	18.4	584	20 55 638	526 10 2	112	243	18 35 263	217 12 57	46
24	42.7	13 50 49.5	33.9 5 58	15.6	590	16 14 640	536 10 42	104	246	16 21 267	226 13 8	41
25	42.8	13 35 53.5	34.4 7 22	19.1	590	19 13 635	538 14 26	97	239	17 37 272	198 12 30	74
26	43.6	14 46 52.4	37.4 7 50	15.0	591	22 28 619	548 13 30	71	241	17 13 275	206 12 9	69
27	44.4	14 3 51.7	36.6 9 14	15.1	590	18 24 627	545 11 20	82	242	18 30 266	216 11 20	50
28	42.0	14 33 49.6	34.3 7 46	15.3	593	18 6 622	549 10 56	73	242	18 20 260	220 11 33	40
29	43.1	14 54 52.1	36.0 8 21	16.1	584	14 56 617	526 10 38	91	238	18 34 262	215 11 17	47
30 *	43.3	13 28 52.0	36.8 7 17	15.2	598	16 24 623	569 11 48	54	239	6 1 250	218 12 35	32
31	42.7	13 44 54.6	35.0 7 15	19.6	600	16 32 634	562 13 15	72	237	17 51 260	203 13 5	57
Mean	43.0	- 52.9	33.9 -	18.9	594	- 648	544 -	103.5	239	- 266	208 -	57.6
Mean *	43.1	- 51.9	34.2 -	17.8	598	- 627	566 -	60.8	236	- 253	210 -	43.0
Mean **	42.4	- 54.0	30.5 -	23.5	583	- 709	498 -	210.4	250	- 303	210 -	92.8
August	9°+	U.T. 9°+	9°+ U.T.	,	18000 Y +	U.T. 18000 h m γ +	18000 U.T.	Υ	43000 Y +	U.T. 43000 h m γ +	43000 U.T.	Υ
1	42.3	15 19 59.9	27.7 6 15	32.2	592	18 7 636	527 9 50	109	234	20 22 255	208 12 50	47
2	42.8	14 21 56.0	31.3 6 58	24.7	593	17 29 632	550 10 55	82	233	17 31 254	193 12 5	61
3	42.5	13 50 54.9	33.2 7 1	21.7	585	19 28 630	530 11 27	100	234	18 39 254	198 11 29	56
4	42.8	13 21 55.3	34.4 8 3	20.9	589	21 47 617	540 10 30	77	233	16 25 250	205 12 15	45
5 *	43.4	13 0 53.7	35.0 6 40	18.7	594	17 54 619	560 12 18	59	233	18 27 246	211 11 57	35
6	42.7	13 12 56. 2	32.4 6 42	23.8	597	17 50 635	532 11 2	103	233	17 53 253	206 11 5	47
7	43.3	13 50 55. 1	32.6 7 40	22.5	594	19 23 629	547 10 20	82	226	18 37 245	189 12 56	56
8 *	43.1	13 26 54. 5	35.0 5 48	19.5	590	1 36 623	549 10 38	74	233	15 39 253	201 11 56	52
9 *	42.6	14 16 51. 7	34.2 8 45	17.5	595	21 8 629	547 10 58	82	228	20 59 243	183 12 6	60
10 *	43.3	14 20 54. 5	33.5 8 19	21.0	592	21 8 628	531 11 25	97	228	18 51 245	192 11 26	53
11	43.0	13 55 57.0	31.7 8 12	25.3	594	18 11 622	544 11 51	78	233	18 15 259	203 11 25	56
12	42.2	14 35 53.3	32.1 9 10	21.2	577	1 21 644	513 9 7	131	227	17 6 253	197 9 8	56
13	43.3	16 35 54.1	34.6 5 34	19.5	585	16 53 669	544 10 16	125	243	18 39 276	210 12 35	66
14	42.4	14 5 50.0	35.1 0 2	14.9	584	2 30 627	552 10 20	75	243	17 40 273	218 12 48	55
15 **	45.0	16 8 60.3	27.8 22 45	32.5	594	16 12 711	474 24 0	237	231	21 35 257	184 22 29	73
16 **	39.6	0 15 60.1	20. 1 0 39	40.0	527	23 16 605	398 0 29	207	270	16 43 347	50 0 22	297
17	42.1	14 18 52.4	25. 8 21 31	26.6	552	18 23 641	480 15 52	161	259	18 3 334	224 3 35	110
18 **	42.2	14 50 53.9	31. 0 8 32	22.9	548	18 22 622	460 9 20	162	254	18 23 323	192 2 0	131
19	43.1	15 48 53.6	30. 5 22 54	23.1	559	23 2 621	478 12 59	143	260	16 21 318	221 0 0	97
20	42.1	14 10 53.0	31. 8 2 10	21.2	560	16 12 615	505 11 27	110	255	16 25 308	199 1 48	109
21	42.2	14 24 50.9	28. 0 20 36	22.9	566	21 22 626	487 {10 26	139	251	18 14 300	213 3 22	87
22 **	41.6	9 11 57.6	3. 3 10 32	54.3	534	9 11 651	238 10 41	413	260	16 44 317	174 10 32	143
23 **	41.0	14 12 53.9	28. 0 2 45	25.9	552	0 12 701	473 11 9	228	248	18 1 310	193 2 7	117
24	42.0	13 49 51.8	35. 1 18 55	16.7	563	19 6 613	521 9 33	92	256	19 7 285	236 4 52	49
25	42.4	13 48 54.1	35. 3 7 26	18.8	568	22 1 617	498 9 37	119	250	17 26 288	222 3 32	66
26	41.9	13 18 49.3	35.5 8 0	13.8	572	23 48 630	520 11 44	110	251	18 25 271	221 12 5	50
27	41.3	12 59 49.0	33.2 3 45	15.8	580	0 21 619	539 7 47	80	244	17 18 258	224 3 18	34
28	42.4	14 22 52.9	34.9 8 9	18.0	591	20 55 626	567 10 22	59	245	22 5 263	213 12 19	50
29	42.2	12 24 54.3	31.4 3 36	22.9	584	2 31 621	538 9 2	83	243	15 44 273	216 10 58	57
30 *	41.5	12 45 51.5	32.5 7 1	19.0	582	3 30 611	540 10 28	71	245	16 34 258	223 11 53	35
31	42.3	13 3 53.5	32.3 7 38	21.2	590	17 37 638	560 8 58	78	245	19 37 266	212 12 31	54
Mean	42.4	- 54.1	30.9 -	23.2	577	- 633	511 -	121.5	243	- 275	201 -	74.3
Mean *	42.8	- 53.2	34.0 -	19.1	591	- 622	545 -	76.6	233	- 249	202 -	47.0
Mean **	41.9	- 57.2	22.0 -	35.1	551	- 658	409 -	249.4	253	- 311	159 -	152.2

^{*} International Quiet Day. ** International Disturbed Day.

												
·····			ILY MEAN AND	EXTREME	VALUES			RECORDE	D BY TH	IE MAGNETOGRA	PHS	
		DECLINA'	TION WEST		<u> </u>	HORIZONTAI	INTENSITY			VERTICAL	INTENSITY	
Date	Mean Daily Value	Maximum	Minimum	Range	Mean Daily Value	Maximum	Minimum	Range	Mean Daily Value	Maximum	Minimum	Rang
September	9°+	U.T. 9°+ h m '	9°+ U.T.	,	18000 Y	U.T. 18000 h m γ +	18000 U.T.	Y	43000 Y	U.T. 43000 h m Y +	43000 U.T. Y + h ■	Y
1 *	42.2	13 10 54.7	33.7 7 46	21.0	589	19 4 630	544 8 54	86	240	0 3 254	209 11 2	45
2	41.7	13 1 52.3	32.6 7 43	19.7	591	23 29 650	535 8 58	115	238	23 30 255	210 11 32	45
3 **	39.8	13 25 59.3	12.8 8 0	46.5	558	7 58 636	419 9 15	217	257	19 8 347	181 8 30	166
4	41.4	14 8 54.0	33.5 5 16	20.5	554	16 51 629	491 9 6	138	251	19 35 277	212 0 6	65
5	42.3	12 40 54.7	33.6 7 19	21.1	567	21 49 634	499 10 22	135	251	18 6 287	223 10 23	64
6	41.5	12 45 54.4	31.3 6 52	23.1	577	16 30 631	537 10 18	94	259	19 27 312	221 11 59	91
7	41.0	14 53 57.2	26.8 19 5	30.4	560	16 14 654	502 10 56	152	251	19 10 310	224 11 48	86
8	40.5	13 52 50.7	28.1 7 5	22.6	570	1 20 595	537 11 53	58	249	7 15 273	225 0 36	48
9 *	41.3	14 2 50.1	34.2 8 47	15.9	577	19 10 606	542 11 25	64	248	7 24 259	229 12 50	30
10 *	41.4	14 24 50.1	33.7 8 17	16.4	580	21 25 613	540 10 28	73	245	6 43 256	229 13 4	27
11	41.9	12 55 53.4	32.4 19 46	21.0	585	16 35 645	536 13 15	109	251	17 20 287	222 11 56	65
12	40.8	12 7 49.8	32.6 8 23	17.2	581	6 18 618	542 24 0	76	252	21 35 274	227 11 10	47
13	40.7	13 10 54.8	17.3 22 6	37.5	541	3 34 606	463 11 13	143	253	16 33 295	212 6 16	83
14 **	41.1	12 52 52.9	24.8 17 10	28.1	545	5 16 608	447 11 3	161	260	17 11 344	223 5 30	121
15 **	41.4	15 1 61.5	25.6 20 28	35.9	542	20 29 617	482 11 14	135	258	15 54 323	222 2 8	101
16 17 18 19 20	40.7 40.5 40.5 41.8 40.8	12 42 48.5 13 24 52.0 13 34 49.8 14 9 49.5	31.4 21 9 27.5 22 29 26.9 17 41 32.9 20 27 31.1 22 58	17.1 24.5 24.1 16.9 18.4	564 557 561 566 570	21 20 608 2 50 636 17 50 640 20 2 620 16 52 610	526 7 44 496 11 20 493 13 20 512 11 32 522 11 27	82 140 147 108 88	255 255 250 256 257	19 20 275 18 15 322 17 45 303 17 18 285 16 48 294	227 23 57 200 3 0 212 23 11 226 24 0 225 0 15	48 122 91 59 69
21	41.7	14 10 49.8	34.1 18 26	15.7	572	22 57 618	523 14 26	95	258	17 50 294	231 5 55	63
22	41.4	13 49 52.2	28.5 19 53	23.7	563	5 31 608	499 10 1	109	260	16 54 303	242 11 51	61
23	43.2	5 22 54.6	34.0 0 0	20.6	568	5 31 637	469 12 32	168	249	16 28 263	219 0 39	44
24 **	40.8	15 38 79.0	12.4 18 30	66.6	546	15 32 714	415 23 27	299	283	16 19 486	144 23 49	342
25 **	37.8	12 34 54.5	12.1 1 50	42.4	510	17 6 599	406 7 33	193	259	17 5 356	147 0 45	209
26	40.4	13 20 50.7	33.6 { 7 43	17.1	555	19 49 585	512 10 15	73	263	7 23 277	240 2 38	37
27	40.0	13 29 51.6	28.2 2 34	23.4	569	13 27 600	535 10 40	65	257	7 14 270	234 11 54	36
28 *	40.8	12 8 52.6	32.7 8 42	19.9	572	21 31 606	526 10 29	80	254	0 43 266	231 11 34	35
29 *	39.7	14 52 47.8	31.3 8 10	16.5	571	23 29 593	538 11 17	55	253	17 20 274	227 12 1	47
30	40.4	19 45 48.4	31.7 8 54	16.7	574	18 10 632	532 11 46	100	252	18 10 268	234 11 49	34
Mean	41.0	- 53.4	28.7 -	24.7	564	- 623	504 -	118.6	254	- 296	217 -	79.4
Mean *	41.1	- 51.1	33.1 -	17.9	578	- 610	538 -	71.6	248	- 262	225 -	36.8
Mean **	40.2	- 61.5	21.9 -	39.5	540	- 642	446 -	196.0	263	- 353	198 -	154.8
October	9 0+	U.T. 9°+	9°+ U.T.	,	18000 Y +	U.T. 18000 h m Y +	18000 U.T.	Υ	43000 Y +	U.T. 43000 h m Y +	43000 U.T. γ + h m	Υ
1 2 ** 3 4 5	39.5 38.4 38.1 40.2 41.0	19 39 51.8 12 12 55.5 13 22 53.2 13 24 50.4 14 39 50.4	25.8 3 19 18.4 22 33 18.9 0 41 31.1 8 51 32.7 8 26	26.0 37.1 34.3 19.3 17.7	570 534 541 560 574	19 18 650 15 5 626 21 34 612 18 2 591 23 56 604	505 11 40 474 23 54 463 11 11 509 19 19 524 11 2	145 152 149 82 80	248 271 253 259 255	21 32 22 7 287 15 42 354 13 10 283 7 13 276 7 18 271	220 11 20 219 23 49 174 0 30 232 12 27 234 12 22	67 135 109 44 37
6	40.8	13 3 52.0	30.7 8 48	21.3	576	20 0 611	519 11 1	92	253	7 13 269	225 12 34	44
7	41.0	17 32 49.8	29.7 21 21	20.1	576	17 32 625	525 10 58	100	256	20 58 282	228 12 20	54
8	41.0	14 9 51.3	34.9 9 1	16.4	576	5 11 613	537 11 16	76	254	17 44 270	235 12 16	35
9 **	41.5	13 21 56.7	24.6 21 10	32.1	551	1 16 615	466 13 43	149	268	17 59 356	224 2 30	132
10 **	40.3	14 35 54.5	22.5 20 32	32.0	532	4 30 583	459 13 26	124	267	16 51 334	214 1 45	120
11	39.2	14 27 52.2	26.8 21 32	25.4	541	20 34 581	504 11 30	77	265	16 7 328	222 3 14	106
12 **	40.1	6 59 53.6	20.3 18 48	33.3	547	2 18 615	496 10 40	119	263	16 37 304	222 2 15	82
13	39.7	5 1 48.0	20.7 21 35	27.3	562	21 41 617	523 18 16	94	261	17 44 304	236 5 34	68
14	40.1	6 11 55.5	24.8 20 15	30.7	548	18 59 611	471 10 16	140	262	14 20 292	235 0 34	57
15 **	41.1	12 47 50.4	30.3 22 6	20.1	559	22 36 686	470 12 18	216	266	16 46 306	219 23 30	87
16	40.6	13 22 50.1	32.3 1 15	17. 8	562	4 56 596	492 11 20	104	262	15 40 306	232 0 3	74
17	41.0	12 22 50.5	32.6 18 14	17. 9	565	0 24 596	523 10 46	73	259	15 43 292	238 10 42	54
18	40.7	13 44 51.5	31.0 22 53	20. 5	568	21 50 600	533 11 22	67	259	15 48 283	238 12 14	45
19	41.8	12 43 52.2	22.4 19 42	29. 8	562	19 49 647	512 10 3	135	264	19 20 314	239 10 3	75
20	40.7	12 48 50.4	27.4 21 0	23. 0	566	23 0 621	524 10 28	97	261	15 37 291	227 23 40	64
21	39.7	12 58 47.7	29.8 0 55	17.9	567	23 2 607	531 12 20	76	255	18 15 274	233 0 16	41
22	41.2	13 18 49.8	34.8 8 39	15.0	578	1 46 606	541 12 28	65	252	19 35 262	240 12 30	22
23	40.7	13 20 48.8	33.6 19 44	15.2	569	6 26 605	521 11 32	84	258	19 33 284	235 10 55	49
24	40.6	12 20 49.4	31.6 1 15	17.8	576	1 15 622	542 9 53	80	252	23 13 266	229 10 52	37
25	40.3	13 15 48.6	33.7 8 50	14.9	580	0 34 602	545 11 28	57	252	8 19 262	238 11 32	24
26 *	40.9	13 20 46.4	36.0 8 56	10.4	583	19 51 604	542 10 21	62	249	7 21 255	238 12 5	17
27 *	41.1	12 35 47.7	34.3 8 52	13.4	589	23 9 606	551 10 44	55	247	7 34 259	233 11 46	26
28 *	40.9	12 31 45.8	34.9 8 16	10.9	590	22 1 613	516 9 56	97	245	5 10 253	234 11 23	19
29 *	41.3	12 58 47.5	34.1 9 17	13.4	594	6 8 609	566 10 12	43	242	19 35 251	223 11 56	28
30 *	41.1	14 50 45.9	35.4 8 50	10.5	595	22 1 613	572 10 30	41	242	16 26 255	220 11 19	35
31	41.3	12 39 49.8	35.0 8 3	14.8	594	16 52 613	574 9 1	39	244	22 10 255	228 12 4	27
Mean * Mean **	40.5	- 50.6	29.4 -	21.2	567	- 613	517 -	95.8	256	- 286	228 -	58.5
	41.1	- 46.7	34.9 -	11.7	590	- 609	549 -	59.6	245	- 255	230 -	25.0
	40.3	- 54.1	23.2 -	30.9	545	- 625	473 -	152.0	267	- 331	220 -	111.2

^{*} International Quiet Day. ** International Disturbed Day.

	7	TABLE IV DA	ILY MEAN AND	EXTREME	VALUES	OF MAGNETIC	ELEMENTS AS	RECORDE	D BY TH	HE MAGNETOGRA	APHS	
		DECLINAT	TION WEST			HORIZONTAL	INTENSITY			VERTICAL	INTENSITY	
Date	Mean Daily Value	Maximum	Minimum	Range	Mean Daily Value	Maximum	Minimum	Range	Mean Daily Value	Maximum	Minimum	Range
November	9°+	U.T. 9°+	9°+ U.T.	,	18000 Y +	U.T. 18000 h m Y +	18000 U.T.	Υ	43000 Y ⁺	U.T. 43000 h m Y +	43000 U.T. γ + h m	Υ
1	40.6	13 4 48.8	34.8 22 0	14.0	589	20 16 611	556 11 55	55	245	22 11 258	231 11 52	27
2	40.5	13 5 46.7	34.8 8 14	11.9	586	4 11 614	547 10 27	67	244	16 13 256	229 11 25	27
3 *	40.6	15 25 45.6	35.8 23 36	9.8	591	23 20 619	557 11 10	62	245	20 30 256	229 12 5	27
4	41.0	12 35 48.6	35.2 0 53	13.4	583	0 3 617	545 11 18	72	248	15 46 270	231 0 52	39
5 *	40.9	12 17 46.3	36.9 8 30	9.4	588	19 36 606	552 10 47	54	248	14 44 260	240 9 44	20
6 *	40.6	13 1 44.6	37.1 8 43	7.5	593	18 10 612	571 10 40	41	244	8 44 255	232 11 17	23
7 *	40.9	13 0 45.2	35.2 23 34	10.0	597	23 2 626	588 13 44	38	243	23 0 253	234 13 2	19
8 **	40.2	13 27 51.5	30.8 21 33	20.7	574	0 0 609	527 15 30	82	252	19 35 278	239 1 16	39
9 **	39.9	13 21 54.3	17.3 21 2	37.0	548	1 2 614	449 23 6	165	259	20 40 304	190 23 7	114
10 **	38.0	20 57 47.0	21.5 0 52	25.5	537	20 42 656	475 0 41	181	263	14 28 305	219 1 26	86
11 **	39.8	14 11 59.1	27. 5 17 41	31.6	551	0 49 605	461 14 21	144	267	16 46 335	209 1 19	126
12	39.4	12 54 46.2	31. 5 3 6	14.7	560	22 35 601	530 13 51	71	260	14 45 283	230 3 3	53
13	39.6	13 31 45.1	34. 5 18 45	10.6	567	18 49 606	511 11 20	95	259	16 28 280	247 2 14	33
14	40.3	13 56 48.4	34. 9 21 53	13.5	568	6 30 593	528 13 16	65	261	17 36 281	247 10 10	34
15	40.1	13 10 48.0	31. 8 23 24	16.2	577	2 50 629	546 10 3	83	253	16 20 267	240 9 41	27
16	40.7	13 29 46.8	34. 2 23 50	12.6	574	22 53 629	537 10 12	92	254	16 37 269	241 9 50	28
17	40.6	14 34 45.8	34. 9 0 0	10.9	580	28 36 596	546 10 50	50	254	16 20 264	244 9 45	20
18	40.5	15 59 47.1	35. 1 22 40	12.0	582	3 27 599	559 15 1	40	254	18 30 270	235 11 7	35
19 **	40.4	13 20 48.8	35. 1 22 24	13.7	562	5 10 614	522 12 19	92	261	20 12 288	235 6 33	53
20	39.7	14 1 45.9	32. 4 21 45	13.5	570	21 50 601	528 11 13	73	258	18 46 269	246 10 50	23
21	40.7	18 16 47.2	35.0 9 34	12.2	578	5 46 595	549 18 29	46	259	20 38 279	240 11 32	39
22	40.3	13 30 46.0	37.0 9 55	9.0	578	21 40 593	556 14 48	37	258	17 27 266	244 10 52	22
23	40.9	12 27 46.5	36.8 22 50	9.7	584	22 56 621	565 11 21	56	251	0 5 265	238 10 44	27
24	39.2	18 45 47.0	23.4 19 54	23.6	584	17 58 639	540 20 41	99	253	22 15 276	236 10 59	40
25	39.7	13 20 43.8	33.0 0 9	10.8	582	20 6 605	562 10 12	43	252	0 20 268	240 11 23	28
26 *	39.8	13 30 44.2	35.3 23 40	8.9	587	17 55 611	572 12 21	39	252	16 28 261	242 12 4	19
27	39.9	13 5 45.5	34.2 8 46	11.3	593	18 39 628	567 11 30	61	249	0 36 260	235 11 58	25
28	40.7	12 59 46.2	37.2 9 52	9.0	598	6 14 613	581 11 54	32	247	2 52 256	231 11 5	25
29	40.0	14 15 47.3	34.3 22 38	13.0	593	6 20 621	572 21 3	49	247	20 20 263	231 12 31	32
30	39.7	14 3 45.2	33.7 19 7	11.5	587	17 39 606	567 21 26	39	249	20 45 264	234 12 32	30
Mean	40.2	- 47.3	33.0 -	14.3	578	- 613	542 -	70.8	253	- 272	234 -	38.0
Mean *	40.6	- 45.2	36.1 -	9.1	591	- 615	568 -	46.8	246	- 257	235 -	21.6
Mean **	39.7	- 52.1	26.4 -	25.7	554	- 620	487 -	132.8	260	- 302	218 -	83.6
December	9°+	U.T. 9°+	9°+ U.T.	•	18000 Y	U.T. 18000 h m γ +	18000 U.T.	Y	43000 Y +	U.T. 43000 h m Y +	43000 U.T.	Y
1	40.0	15 23 44.2	35. 4 8 55	8.8	592	1 5 614	552 9 39	62	247	16 49 256	233 13 20	23
2	40.5	12 32 47.8	36.0 22 18	11.8	586	19 55 603	554 16 32	49	249	17 11 268	234 12 10	34
3 *	39.9	13 24 43.7	37. 4 8 35	6.3	592	18 50 603	579 10 31	24	247	19 27 255	236 13 5	19
4	39.9	16 41 45.6	34.5 21 10	11.1	594	8 9 628	557 17 0	71	245	16 45 261	228 12 54	33
5	40.3	13 48 46.2	31.6 23 31	14.6	592	4 20 629	563 23 28	66	243	17 34 258	225 4 41	33
6 **	38.6	12 51 49.2	22. 2 1 25	27.0	566	21 49 613	514 18 53	99	254	19 49 290	220 1 15	70
7	40.3	17 46 45.6	33. 0 16 43	12.6	573	22 10 593	544 19 46	49	253	20 18 273	237 11 21	36
8	40.0	6 18 46.0	36. 9 9 0	9.1	585	6 30 615	563 12 32	52	252	16 36 261	239 6 55	22
9 **	39.6	13 40 47.8	31. 8 20 29	16.0	580	8 2 620	525 13 53	95	252	19 48 281	233 8 11	48
10	39.6	13 5 45.5	32. 4 22 33	13.1	580	21 14 605	546 10 42	59	251	16 47 267	240 3 20	27
11 12 ** 13 ** 14 15	39.8 40.0 39.9 40.1 39.5	13 4 45.6 12 30 48.2 13 1 45.9 12 15 47.3 15 37 44.2	32.1 20 27 32.9 23 25 33.0 20 40 35.8 23 53 33.6 0 15	13.5 15.3 12.9 11.5 10.6	578 575 576 572 581	5 45 614 4 30 607 2 44 623 5 20 606 1 11 606	545 18 10 508 16 45 536 13 24 534 11 30 550 14 46	69 99 87 72 56	253 252 252 252 253 251	19 28 274 17 19 282 17 29 276 16 44 275 16 15 268	239 6 2 229 9 34 237 4 7 242 7 43 239 1 23	35 53 39 33 29
16	39.9	14 3 43.7	37. 2 9 42	6.5	589	4 33 611	563 11 13	48	250	16 38 261	241 12 52	20
17 *	40.0	12 59 44.6	35. 2 23 58	9.4	591	6 5 606	574 16 21	32	248	16 45 259	237 12 4	22
18	39.8	12 2 44.1	32. 4 23 50	11.7	593	23 21 611	574 20 16	37	246	20 44 261	231 12 3	30
19	40.6	13 48 45.6	33. 3 0 0	12.3	586	5 33 614	567 15 40	47	248	19 11 267	233 10 57	34
20 *	40.3	13 32 45.6	37. 5 22 34	8.1	588	6 7 604	569 16 13	35	249	20 38 260	232 10 58	28
21 *	39.7	14 33 43.3	37.5 8 57	5.8	595	19 5 608	581 10 26	27	244	18 35 252	230 10 23	22
22	40.4	16 10 45.7	31.1 23 29	14.6	595	6 1 613	554 19 36	59	246	20 20 266	229 10 54	37
23 **	39.8	14 7 50.2	32.9 1 23	17.3	591	14 5 614	560 1 22	54	247	18 24 259	227 13 25	32
24	39.4	16 32 42.8	32.0 21 44	10.8	592	21 49 642	579 22 40	63	249	21 44 259	241 13 2	18
25	39.9	13 28 44.1	37.5 22 50	6.6	597	20 55 610	583 1 4	27	245	22 57 255	235 12 20	20
26	40.0	13 58 45.6	34.2 24 0	11.4	598	5 56 619	580 15 21	39	245	18 50 256	238 6 25	18
27	39.2	12 22 44.2	31.5 23 44	12.7	590	5 45 621	567 23 29	54	246	22 38 259	235 9 10	24
28	39.4	14 8 44.6	29.9 22 51	14.7	592	22 57 618	570 23 28	48	246	0 23 259	229 9 23	30
29	39.7	14 59 46.9	31.8 21 10	15.1	588	21 49 632	532 15 16	100	248	16 28 265	234 8 52	31
30	40.0	13 16 44.3	37.4 0 0	6.9	594	14 44 615	578 10 30	37	243	19 36 254	233 11 5	21
31 *	40.0	12 32 43.0	37.9 0 25	5.1	599	14 22 609	587 19 27	22	242	17 29 252	232 11 4	20
Mean	39.9	- 45.5	33.8 -	11.7	587	- 614	558 -	56.1	248	- 264	234 -	30. 4
Mean *	40.0	- 44.0	37.1 -	6.9	593	- 606	578 -	28.0	246	- 256	233 -	22. 2
Mean **	39.6	- 48.3	30.6 -	17.7	578	- 615	529 -	86.8	251	- 278	229 -	48. 4

^{*} International Quiet Day. ** International Disturbed Day.

				T	'ABLE IV	(A)	THREE-	HOUR-RA	NGE IN	DICES '	K' FOR	THE YE	AR 1947	•				
Date	į	January		F	ebruar y	,		March			April			May			June	
Date	Indi	ices	Sum	Ind	ices	Sum	Ind	ices	Sum	Ind	ices	Sum	Ind	ices	Sum	Ind	ices	Sum
1	1113	3301	13	3231	3122	17	2122	1112	12	1233	3311	17	3432	4332	24	5543	3231	26
2	0121	2532	16	0112	2221	11	2366	6556	39	1133	3411	17	1211	2111	10	0212	2321	13
3	0223	3445	23	1124	2331	17	6454	5578	44	3333	3443	26	1313	3230	16	2423	2321	19
4	2204	3443	22	3333	3223	22	6665	4353	38	3344	4344	29	1332	1231	16	1233	2331	18
5	3323	4553	28	2012	2211	11	3233	3221	19	3233	3232	21	2322	2331	18	1364	4555	33
6	4332	3343	25	1233	2223	18	2123	2311	15	4444	3331	26	1123	3332	18	5122	1132	17
7	2232	2213	17	1033	3232	17	0234	4443	24	1233	3413	20	3212	2211	14	2334	3335	26
8	2223	1111	13	2234	4455	29	2344	7567	38	1133	3315	20	0111	2210	8	4432	3433	26
9	1111	1210	8	4323	2354	26	6453	4343	32	4344	4333	28	0212	1100	7	3433	3423	25
10	1000	0110	3	3234	4311	21	2232	3221	17	2233	3313	20	1123	1211	12	3323	3332	22
<u> </u>																		
11	0012	1000	4	1122	3223	16	1133	3101	13	3233	4313	22	1122	3332	17	2232	3331	19
12	0001		4	1132		14	2334		25	1223	3334	21	4223	3223	21	2231	3333	20
13	0011		7	1123	2121	13	2234		26	3323	3233	22	3333	3444	27	3233	3545	28
14	1112		11	0022	3221	12	3333	4533	27	2323	3243	22	4433	4343	28	5654	4563	38
15	1112		13	1033	3111	13	3355	5633	33	4323	4323	24	3334	4444	29	4433	3322	24
,,	2/22	2554	2.1	2245	1511	20	1121	2454	20	3222	2333	20	5444	4434	32	2113	3333	19
16	2633		31	2245	4544 3421	30 27	1121 5432		26	4322	6677	37	1	4333	25	2444	5653	33
17 18	4234	3234 2333	25 18	5543 3213	2233	19	3212		22		5546	37	3323	3553	27	2333	3333	23
19	2122 3123		17	2133		27	3222		20		3414	26		3422	22	1	3423	24
20	2211		14	4312		14	3332		20	ŀ	4442	29		3222	17	1	2331	18
1 20	2211	1292	- 1	.,,,,			,,,,,											
																2221		
21	3211		14	0023		11		3313	18	1331		11	1	3222	20	l	2333 3443	22 25
22	1021		16	0022		11	ŀ	3341	24	1122		8	l	2325 4431	18		4431	22
23	2112		15	0022		7		4533	28 29	l	1211 3200	12		4431	34	İ	3433	22
24	0153		21		3232	19	5553	3234	22	i	3542	21		4323	22		5423	28
25	4554	46))	38	1124	3224	19	2233	3234	22	1129	3742		7177	4929] ,,,,	<i>y</i> 12 <i>y</i>	
26	3443	3442	27	4423		21		4334	28	l	3433	22	l	4534	30	1	3433	25
27	3233		25	2312		12	3343		28	ŀ	4431	24		3532	26	ł	3221	15
28	4221		19	1122	3213	15	1	5555	38		3332	21	l	4543	24	l	3332	20
29	1323		18					3243	20	l	4211	16	ì	4532	25		1222	15
30	2112	2114	14				5433	4443	30	2323	3332	21	2322	1311	15	3 2 3 3	3332	22
31	2122	1013	12				2343	3411	21				1233	3444	24			
													[
ш				L		<u> </u>	L			<u> </u>			1		<u> </u>	1		

				T	ABLE IV	(A)	THREE~	HOUR-RA	NGE IN	DICES '	K' FOR	THE YE	AR 1947	7				
Date		July	-		August		S	eptembe:	r		October		N	lovember		Γ	ecember	
Date	Ind	ices	Sum	Ind	ices	Sum	Ind	ices	Sum	Ind	ices	Sum	Ind	ices	Sum	Ind	ices	Sum
1	3222	3433	22	3344	2432	25	3323	2232	20	4554	4255	34	2213	3123	17	3124	1110	13
2	3333	4533	27	1243	3433	23	2134	3224	21	3443	5565	35	3322	2111	15	1012	2331	13
3	1331	2322	17	2223	2333	20	4476	5655	-42	6533	4224	29	1112	1223	13	1122	1101	9
4	1313	3210	14	2323	3322	20	4434	5543	32	2233	4321	20	3113	2322	17	1132	3323	18
5	1213	2212	14	1223	3321	17	3233	3344	25	1132	3213	16	1111	2211	10	4422	3123	21
		:																
6	2132	3432	20	2234	3333	23	4233	3443	26	2233	3323	21	1012	1211	9	4433	4344	29
7	2312		20	2322	3331	19	4343	5565	35	1133	2454	23	0112	2213	12	3132	2441	20
8	2234		26	3222	2210	14	4343	3310	21	1333	3433	23	2233	3333	22	1232	2111	13
9	2233		22	1233	1213	16	3111	2221	13	4434	5545	34	4334	6466	36	2333	4353	26
10	4222	3433	23	2133	3313	19	1111	1210	8	4454	5555	37	5334	3455	32	3223	2223	19
	2221	(222	٠,	2222	(212	22	0122	25 (2	21	5442	1551	24	£222	5554	22	2222	2242	24
11	3224		24	2333		22	_	3543	21		4554	34	ļ	5554	33	3333	2343	24
12	3332		22	4435	3434	30	2243	3243	23		3454	34	3432	3323	23	3323	4533	26
13	3222		21	3333	3644	29	4443	3445	31		1455	29	{	1232	20	4333	3333	25
14	1221	2332	16	4223	3333	23	4445	4545	35		4455	36	l	3333	19	2233	3322 3333	20
15	3322	2331	19	0225	5656	31	4454	5555	37	3444	5436	33	4333	3223	23	4112	3333	20
-																		
16	4121	1211	13	6335	3444	32	3331	3345	25	3334	3421	23	3333	3224	23	1212	1100	8
17	1123	2786	30	4444	4555	35	5544	4555	37	3233	3342	23	2222	2211	14	1101	1102	7
18	5455	6665	42	5555	5444	37	5433	4555	34	1243	2434	23	3221	3223	18	2111	1133	13
19	4334	4442	28	3344	5644	33	3343	3444	28	3243	3464	29	2332	3334	23	3212	1122	14
20	3444	4533	30	5343	4543	31	4333	3414	25	3332	3345	26	2123	2223	17	0111	1111	7
21	3333	4337	24	5434	3544	32	3333	3434	26	4232	2443	24	1113	2432	17	1011	1100	5
22	2233		24		5543	35		4544	29	3332		18	i	2121	8		2244	13
23	3343		27	6434		34		5323	30		3342	24	1	2223	16	l	4322	20
24	2433		25	4334		29		5765	37		2313	20	ĺ	0454	16	İ	1114	10
25	3233		26		4433	28		5554	41		2121	13		1211	15	1011	1123	10
					÷ **													
																	2255	
26	3433		27	2233		21	3333		23	0122		10	l	2223	14	}	2223	18
27	2344		25	3343		19	4323		23	0022		8		2232	16		1224	20
28	2132		18	1122		18		3323	20		2211	11		2211	12		2214	15
29	2323		19		3422	25		2213	16	0022		111		3233	20	1	3434	19
30	1212	1212	12	2332	2221	17	3222	3243	21	1111	2312	12	0112	1243	14	1111	2211	10
31	1112	3333	17	1133	3433	21				1232	3323	19				1011	1120	7
						l			<u> </u>			L	<u></u>		`	L		L

Summer

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TABLE V. - MEAN DIURNAL INEQUALITIES OF THE MAGNETIC ELEMENTS
                                          DECLINATION. INCLINATION AND HORIZONTAL INTENSITY
                                                                  All Days
                                                      DECLINATION WEST (Unit 0.01)
  Month
   and
                                                      Universal Time. Hour commencing
 Season.
  1947
                  1
                             3
                                        5
                                              6
                                                                    10
                                                                         11
                                                                               12
                                                                                               15
                                                         8
                                                               9
                                                                                    13
                                                                                          14
                                                                                                     16
                                                                                                          17
                                                                                                                18
                                                                                                                      19
                                                                                                                           20
                                                                                                                                            23
                                                                             +295 + 353 +287
January
           -166 -173 -124 -083
                                - 091
                                      -070
                                            -059
                                                 -095
                                                       -152 -134 -028
                                                                        +124
                                                                                              + 257
                                                                                                   + 193
                                                                                                         +215
                                                                                                                    -018
                                                                                                                         - 105
                                                                                                                               -140
                                                                                                                                     - 203
                                                                                                                                          - 205
February
           -181
                -228
                      - 202
                            -140
                                 -118
                                      -135
                                            -131
                                                  -195
                                                       -325
                                                             - 361
                                                                  - 162
                                                                        +139
                                                                             +418
                                                                                   + 556
                                                                                         +570
                                                                                              +443
                                                                                                    + 299
                                                                                                         +181
                                                                                                               +148
                                                                                                                    +070
                                                                                                                          -047
                                                                                                                               -166
                                                                                                                                     - 217
                                                                                                                                            209
                - 321
March
                                      - 120
                                            -124
                                                  -280
                                                       -458
                                                            - 304
                                                                                         +746
                                                                                                         +135
                                                                                                               -035
                                                                                                                    -076
                                                                                                                          -135
                                                                                                                               -198
                                                                                                                                     -218
           - 248
                           -230
                                                                  -085
                                                                        +340
                                                                              +680
                                                                                   +777
                                                                                              +590
                                                                                                    +350
                                                                                                                                            253
April
                 - 220
                                            -349
                                                       -650
                                                                  -143
                                                                                                                                     - 186
           ~ 201
                       189
                            -190
                                 -187
                                      - 194
                                                  -519
                                                             - 506
                                                                        +298
                                                                              +710
                                                                                   +873
                                                                                         +799
                                                                                              +612 +362
                                                                                                         +171
                                                                                                              +056
                                                                                                                          -057
                                                                                                                               -091
                                                                                                                    +016
                                                                                                                                           214
                - 121
May
           -113
                      -110
                           -220
                                 -355
                                      - 516
                                            -648
                                                  -707
                                                                  +077
                                                       -629
                                                              309
                                                                        +466
                                                                              +745
                                                                                   +838
                                                                                         +743
                                                                                              +514
                                                                                                   + 285
                                                                                                         +084
                                                                                                               -022
                                                                                                                          +002
                                                                                                                    +004
                                                                                                                               +023
                                                                                                                                     -008
                                                                                                                                          -014
June
           -116 -150
                                 -410
                                      - 558
                                            -669
                                                            -374
                                                                        +392
                                                                                                         + 263
                      - 208
                           -247
                                                  -725
                                                       -640
                                                                              +650
                                                                                   +787
                                                                                         +775
                                                                                                                               +044
                                                                  -007
                                                                                              +641 +431
                                                                                                              +104
                                                                                                                    +055 +055
                                                                                                                                     -006 -094
                - 157
                      - 197
                           -201
                                 -318
                                      - 552
                                                            -451
           -159
                                            -638
                                                  -671
                                                       -635
                                                                  -137
                                                                        + 285
                                                                                   +795
                                                                                                                          +072
                                                                              +623
                                                                                         +786
                                                                                              +670
                                                                                                    +450
                                                                                                         +243
                                                                                                               +097
                                                                                                                    +088
                                                                                                                               +056
                                                                                                                                     +002
                                                                                                                                          -053
August
                - 216
                                 - 321
                                      -440
                                                                       +411
                                                                                                         +180
                                                                                                              +036
                                                                                                                                     -074
                                                                                                                    +018
                                                                                                                         -001 -071
           - 187
                      -318
                           -317
                                            - 548
                                                  -593
                                                       -540
                                                            - 370
                                                                  -052
                                                                             +755
                                                                                   +806
                                                                                         +856
                                                                                              +659
                                                                                                   + 393
                                                                                                                                          -149
September
           ~318 ~343
                      - 328
                           - 267
                                 -237
                                      -185
                                            -330
                                                  -517
                                                       -497
                                                             -288
                                                                  +122
                                                                        + 509
                                                                                   +861
                                                                                         +784
                                                                                              +604
                                                                                                         +127
                                                                              +863
                                                                                                    +318
                                                                                                              +029
                                                                                                                    -070
                                                                                                                          -178
                                                                                                                               -167
                                                                                                                                     -275
                                                                                                                                          -223
           -319 -299
                     - 265
October |
                                      -066
                                            -069
                                                 - 264
                                                                                   +761
                           -242 -139
                                                       -409
                                                            -330
                                                                  +036 +387
                                                                                                   + 305
                                                                                                         +202 +037
                                                                                                                    -007 -157
                                                                                                                               - 258
                                                                             +679
                                                                                        +675
                                                                                              + 393
                                                                                                                                     - 324
                                                                                                                                          -337
                      -147
                                                 -118
                                                            - 203
                                                                                                                                          -248
November
           ~229
                - 194
                           -118 -101
                                      -110
                                            -095
                                                       -195
                                                                  -012
                                                                       + 227
                                                                             + 394
                                                                                   +494
                                                                                        +406
                                                                                              +343
                                                                                                   + 219
                                                                                                         +132 +101
                                                                                                                    +004 -082 -201
                                                                                                                                     -261
December
                     -127 -062 -064
                                                 -038
                                                                                                                               -212
                                      -060
                                            -022
                                                       -077
                                                            -087
                                                                  +019 +158
                                                                             + 301
                                                                                   +364
                                                                                         +331
                                                                                              ± 288
                                                                                                   +182
                                                                                                         +144
                                                                                                              +079
                                                                                                                    -025 -130
                                                                                                                                     -249
                                                                                                                                          -294
Year
          -206 -217 -214 -193 -210 -251 -307 -394 -434 -310 -031 +311 +593 +696 +647 +501 +316 +173 +063 +005 -064 -115 -168 -191
Winter
           -202 -194 -150 -101 -094 -094 -077 -112 -187 -196 -046 +162 +352 +442 +399 +333 +223 +168 +112 +008 -091 -180 -233 -239
Equinox
           -272 -296 -284 -232 -186 -141 -218 -395 -504 -357 -018 +384 +733 +818 +751 +550 +334 +159 +022 -034 -132 -179 -251 -257
Summer
          -144 -161 -208 -246 -351 -517 -626 -674 -611 -376 -030 +389 +693 +829 +790 +621 +390 +193 +054 +041 +032 +013 -022 -078
                                                          INCLINATION (Unit 0.01)
January
                                      -068 -086 -062 -030
                                                            +025 +079
           -012 -020
                     -025 -052 -068
                                                                       +090
                                                                             +064 +043 +046 +030 +020 +007 +008 +017 +005 +001
                                                                                                                                      000 -010
                           -070
                                                            +028
                                                                       +136
Februar<sub>3</sub>
                      -053
                                -078
                                                 -098
                                                       -040
           -042 -047
                                      -101 -112
                                                                  +093
                                                                             +135 +110 +082 +068 +056 +026 +011
                                                                                                                    -007 -014 -019
                                                                                                                                     -033 - 032
March
           -081 -100
                      -100
                           -130
                                      -165
                                                       +034
                                                                  +138
                                                                             +123 +120
                                                                                                                               -014
                                                                                                                                     -028
                                -129
                                            -131
                                                  -057
                                                             +109
                                                                        +130
                                                                                         +092
                                                                                              +084
                                                                                                   +067
                                                                                                         +049
                                                                                                              +017
                                                                                                                    -001
                                                                                                                          +008
                                                                                                                                          -044
April
                                                                                                   - 023
                                                                                                                               -044
                                                                                                                                    -068
                                                                                                                                          -057
           -043 -030
                     -031 -034
                                -047
                                      -065
                                            -070
                                                 -017
                                                       +048
                                                            +127
                                                                  + 180
                                                                       +173
                                                                             +113 +082
                                                                                        +050
                                                                                              -016
                                                                                                         -039
                                                                                                              -060
                                                                                                                    -069
                                                                                                                         -059
Мау
                                                                                         +056
                                                                                                         -076
           -042 -033
                           -036
                                 -030
                                      -014
                                            +027
                                                 +081
                                                       +130
                                                                  +106
                                                                        +088
                                                                             + 086
                                                                                   +079
                                                                                              -001
                                                                                                   -042
                                                                                                              -077
                                                                                                                    -088
                      -043
                                                            +124
                                                                                                                          -084
                                                                                                                               -084
                                                                                                                                     -067
                                                                                                                                          -061
June
                      -053
                                -055
                                      -033
                                            +028
                                                                                              +012
                                                                                                         -077
           -066 -055
                           -059
                                                 +081
                                                            +183
                                                                  +159
                                                                       +129
                                                                             +112
                                                                                  +093
                                                                                                   -011
                                                                                                              -095
                                                                                                                         -114
                                                                                                                               -121
                                                       +151
                                                                                        +064
                                                                                                                    -117
                                                                                                                                     -091
                                                                                                                                          -072
July
                -037
           -042
                      -032
                           -041
                                 -053
                                      -033
                                            +023
                                                  +083
                                                       +123
                                                             +166
                                                                  +178
                                                                        +155
                                                                             +113
                                                                                   +064
                                                                                         +032
                                                                                              -032
                                                                                                   -058
                                                                                                         -077
                                                                                                               -137
                                                                                                                    -119
                                                                                                                          -106
                                                                                                                               -081
                                                                                                                                     - 060
                                                                                                                                           036
August
                                                                                                                         -113
                                                                                                                                          -073
           -097 -101
                      -100
                           -086
                                -086
                                      -052
                                            -009
                                                  +052
                                                       +126
                                                             +202
                                                                  + 217
                                                                       +165
                                                                             +108
                                                                                   +083
                                                                                        +054
                                                                                              +045
                                                                                                   +023
                                                                                                         -004
                                                                                                              -063
                                                                                                                    -091
                                                                                                                               -104
                                                                                                                                     -088
                           -125
                                                                                        +069
September
                                                            + 171
                                                                  +210
                                                                        +195
                                                                             +143
                                                                                                   +018
                -100
                                 -141
                                      -125
                                                  +045
                                                       +111
                                                                                   +111
                                                                                              +049
                                                                                                         -005
                                                                                                               -037
                                                                                                                    -054
                                                                                                                          -060
                                                                                                                               -040
                                                                                                                                           -090
          -115
                      -116
                                            -044
                                                                                                                                     -063
                      - 107
                           -111
                                -128
                                      -138
                                                                                  +140
                                                                                                                               -049
                                                                                                                                          -073
October
           -082 -100
                                            -099
                                                 -045
                                                       +048
                                                            +135
                                                                  +176 +184
                                                                             + 160
                                                                                        +094
                                                                                              +067
                                                                                                   +026
                                                                                                         +015 +009
                                                                                                                    -019
                                                                                                                         -015
                                                                                                                                     -083
                                                 -058
November
                                           -076
           -037 -037
                     -053 -064 -069
                                      -079
                                                       -015 +024 +063 +089
                                                                             +096 +083
                                                                                        +091
                                                                                              +082 +052 +031 -005
                                                                                                                    -007 -010 -022
                                                                                                                                     -029 -048
                                 -066
           +001 -015 -028
                           -041
                                                  -069
                                                       -056
                                                                       +035
                                                                                                         +048
                                                                                                              +040
                                                                                                                                     -013 -007
December
                                       -075
                                                             -023
                                                                  +018
                                                                             +039 +036
                                                                                        +060
                                                                                              +071
                                                                                                   +079
                                                                                                                    +041 +015 -013
                                            -079
Year
          -055 -056 -062 -071 -079
                                      -079
                                           -052 -005 +053 +106 +135 +131
                                                                             +108 +087 +066 +038 +017 -009 -032
                                                                                                                   -043 -046 -049 -052 -050
Winter
          -023 -030
                     -040 -057 -070 -081 -088 -072 -035 +014 +063 +088 +084 +068 +070 +063 +052 +028 +014 +011 -001 -013 -019 -024
Equinox
          -080 -083 -089 -100 -111 -123 -086 -019 +060 +136 +176 +171 +135 +113 +076 +046 +022 +005 -018 -036 -032 -037 -061 -066
Summer
          -062 -057 -056 -056 -033 +017 +074 +133 +169 +165 +134 +105 +080 +052 +006 -022 -059 -093 -104 -104 -098 -077 -061
                                                    HORIZONTAL INTENSITY (Unit 0.17)
January
           + 20
                           + 70
                                      + 88
                                           + 111
                                                 + 74 + 30 -
                                                               56 -142 -163
                                                                             -124
                                                                                   - 73
                                                                                        - 59
                                                                                                27
                                                                                                         + 11
                                                                                                                15
                                                                                                                    + 04
                                                                                                                           21 + 18
                       34
                                   84
                                                            - 59
                     + 75
                           + 93
                                                      + 58
                                                                 - 177
                                                                             -249
                                                                                  -194 -122
                                                                                             _
                                                                                                   - 49
                                                                                                        - 02
                                                                                                              + 18
                                                                                                                    + 42
                                                                                                                                    + 68
                + 68
                                +105
                                                                       -251
                                                                                                                         + 51 +
February
                                      +142 +157 +140
                                                                                                80
            61
                                                                                                                                 54
                                                                                        -111
                + 100
                          +135
                                                            - 199
                                                                                                                                          + 46
March
            88
                       95
                                + 138
                                      +193
                                           +157
                                                   68 - 70
                                                                  - 260
                                                                       -253
                                                                             -233
                                                                                  -197
                                                                                                54
                                                                                                     11 + 36
                                                                                                              + 71
                                                                                                                      80
                                                                                                                            46
                                                                                                                                 60
                                                                                                                                       57
April
                + 49
                                      +102 +112
                                                             -224
                                                                  -342
                                                                       -354
                                                                             - 261
                                                                                   -182
                                                                                                   + 81 +118 +151
                                                                                                                    +157
                                                                                                                         +122
                                                                                                                               +100
                                                                                                                                     +111
                                                                                                                                          + 97
                           + 57
                                                 + 34
            68
                       50
                                  76
                                                         74
                                                                                          93
                                                                                                46
                          + 59
                                                                                        - 99
May
          + 71
               + 55
                     + 69
                                + 55
                                      + 42 - 25
                                                                  -251
                                                                       -250
                                                                             -234 -185
                                                                                                                    +194
                                                                                                                                    +122
                                                 -121 --215
                                                            - 236
                                                                                                   +118 +188 +190
                                                                                                                         +174 +158
                                                                                                                                          +103
                                                                                                27
                                           - 44
                                                                                        - 95
          + 92
                           + 76
                                + 70
                                      + 47
                                                                                  - 177
                                                                                                   + 73
                                                                                                                                     +153
                                                                                                                                          +115
June
                                                                                                              +230
                                                                                                                    + 244
                                                                                                                         + 220
                                                                                                                               +211
                + 66
                     + 65
                                                 -139
                                                       - 253
                                                            -321
                                                                  -313
                                                                       - 289
                                                                             -237
                                                                                                12
                                                                                                         +196
                                           - 23 -123
                                                                                        - 74 + 66
July
               + 47
                                                                       - 328
                                                                                                   +138
                                                                                                                                     +108
                     + 40 + 60
                                + 83
                                      + 66
                                                      - 203
                                                            - 291
                                                                  -339
                                                                             -262 -167
                                                                                                         +189 +286
                                                                                                                    +242 +211 +155
                                                                                                                                          + 64
                                                                                        - 76
August
                           +101
                                +115
                                      + 69
                                           + 07
                                                 - 86
                                                                  -396
                                                                       -332
                                                                             -244
                                                                                   -171
                                                                                             - 08
                                                                                                   + 52
                                                                                                         +105
                                                                                                              +184
                                                                                                                    + 204
                                                                                                                         + 220
                                                                                                                               +189
                                                                                                                                     +145
                                                                                                                                          +112
          +127
               +122 +120
                                                       -214
                                                             -354
                                                                                        - 77
                                                                                             - 03
                                           + 41
                                                 - 83 -193
                                                            - 298
                                                                                                   + 85
                                                                                                                                          +110
September
          +127 +107 +128 +138
                                      +148
                                                                  -375
                                                                       -358
                                                                             -263 -179
                                                                                                         +129 +156
                                                                                                                    +155 +140 + 87
                                                                                                                                    +102
                                +168
                                                 + 56
                                                                                             - 39
October |
                                                                                                   +
                                                                                                        + 49
                                                                                                              + 57
          + 98
               +118
                     +122 +132
                                +164
                                      +171 +124
                                                       - 81
                                                            -228
                                                                  -313
                                                                       -333
                                                                             -283
                                                                                  - 220
                                                                                        -122
                                                                                                     37
                                                                                                                    + 86
                                                                                                                         + 67 + 105
                                                                                                                                     +132
                                                                                                                                          + 96
                                                                                             - 89
               + 35
                     + 62
                           + 77
                                + 87
                                           + 99
                                                 + 72 + 09
                                                            - 62
                                                                  -130
                                                                       ~ 164
                                                                             -167
                                                                                  -128
                                                                                        -111
                                                                                                   - 38
                                                                                                         - 09 + 42
                                                                                                                    + 41
                                                                                                                         + 46 + 52
                                                                                                                                    + 53
                                                                                                                                          + 67
November
            43
                                      +107
                                                            + 05
                                                                  - 60
                                                                                                         - 37
                                                                                                                               + 41
          + 02 + 18
                                + 84
                                                                             - 87
December
                     + 34 + 48
                                      +102 +104 + 88 + 65
                                                                                                     86
                                                                         79
                                                                                     72
                                                                                          90
                                                                                                                      26
Year
          + 72 + 68 + 75 + 87 + 102 + 106 + 68 - 02 - 95 - 194 - 258 - 263 - 220 - 162 - 94 - 20 + 34 + 81 + 115 + 119 + 111 + 103 + 92 + 76
Winter
          + 32 + 38 + 51 + 72 + 90 + 110 + 118 + 94 + 41 - 43 - 127 - 164 - 157 - 117 - 96 - 72 - 46 - 09 + 13 + 15 + 32 + 41 + 42 + 42
Equinox
          + 95 + 94 + 99 +116 +137 +154 +109 + 19 -105 -237 -323 -325 -260 -195 -101 - 13 + 54 + 83 +109 +120 + 94 + 88 +101 + 87
```

+ 89 + 73 + 74 + 74 + 81 + 56 - 21 -117 -221 -301 -325 -300 -244 -175 - 86 + 24 + 95 +170 +223 +221 +206 +178 +132 + 99

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

All Days

```
NORTH COMPONENT (Unit 0.1 y)
   Month
     and
                                                                                        Universal Time. Hour commencing
 Season,
   1947
                                                                                                                                                                                                19
                    0
                                      2
                                                                           6
                                                                                    7
                                                                                                              10
                                                                                                                       11
                                                                                                                                12
                                                                                                                                         13
                                                                                                                                                  14
                                                                                                                                                            15
                                                                                                                                                                     16
                                                                                                                                                                              17
                                                                                                                                                                                       18
                                                                                                                                                                                                         20
                                                                                                                                                                                                                  21
                                                                                                                                                                                                                            22
                                                                                                                                                                                                                                    23
                                                                                + 82 + 43
January
                                                              + 93
                                                                       +115
                                                                                                  - 43 -137
                                                                                                                     -172
                                                                                                                              -149
                                                                                                                                       -104
                                                                                                                                                - 84
                                                                                                                                                         - 50
                                                                                                                                                                  ~ 27
                                                                                                                                                                                     + 04
                                                                                                                                                                                                                                   + 42
                  + 35 + 44
                                                                                                            -160
                                                                                                                                                         -119
                                            +105
                                                     +114
                                                              +152
                                                                                 +156
                                                                                                                     - 260
                                                                                                                              -284
                                                                                                                                       -242
                                                                                                                                                -172
February
                                                                        +167
                                                                                                                                                                               19
                                                                                                                                                                                        04
                                                                                                                                                                                              + 35
                                                                                                                                                                                                           55
                                                                                                                                                                                                                    68
                                                                                                                                                                                                                                      75
                             88
                                                                                             87
                                                                                                                                                                      76
                                                                                                                                                                                                                             87
                                                                                                                                                                            + 23
                                                                                                  -169
                                                                                                                                                         - 107
                                                                       +166
                                                                                                            -249
                                                                                                                     - 281
                                                                                                                                                -177
                                                                                                                                                                                                                         + 76
                                                                                                                                                                                                                                   + 68
March
                  +109
                          +128
                                   +126
                                            +154
                                                      +152
                                                               +201
                                                                                                                              -292
                                                                                                                                                                                     + 73
                                                                                                                                                                                                          58
                                                                                                                                                                                                                   77
                                                                                    93
                                                                                             27
                                                                                                                                         265
                                                                                                                                                                      21
                                                                                                                                                                                                 86
                                            + 74
                                                     + 92
                                                                                                  -175
                                                                                                                     -376
                                                                                                                                                -165
                                                                                                                                                                            +101
                                                                                                                                                                                     +144
                                                                                                                                                                                                                +107
April
                          + 68
                                                                       + 142
                                                                                                             -324
                                                                                                                                                                                              +153
                                                                                                                                                                                                       + 126
                                                                                                                                                                                                                         +126
                                                                                                                                                                                                                                   +115
                 + 85
                                                              +118
                                                                                                                                       - 259
                                                                                                                              -322
                                                                                                                                                             10
                                                                                                                                                                      47
                                      67
                                                                                    81
                                                                                             14
                                                                                         -155
                                                                                                  -205
                                                                                                                                       - 259
                                            + 78
                                                     + 87
                                                                       + 34
                                                                                                            -255
                                                                                                                     -289
                                                                                                                              -299
                                                                                                                                                                                                       + 171
                                                                                                                                                                                                                +154
May
                                                              + 88
                                                                                                                                                -165
                                                                                                                                                                            +178
                                                                                                                                                                                     + 189
                                                                                                                                                                                                                         +121
                                                                                                                                                                                                                                   +103
                          + 65
                                                                                                                                                                                              +191
                    80
                                      78
                                                                                    55
                                                                                                                                                             20
                                                                                                                                                                      90
                                                                       + 18
                                   + 83
                                            + 97
                                                                                         - 191
                                                                                                  - 282
                                                                                                            - 308
                                                                                                                                       - 246
                                                                                                                                                 -164
                                                                                                                                                                   + 33
                                                                                                                                                                            + 169
                                                                                                                                                                                              +236
                                                                                                                                                                                                                        +151
June
                  +101 + 79
                                                     +106
                                                              + 97
                                                                                                                     -321
                                                                                                                              -293
                                                                                                                                                                                     +217
                                                                                                                                                                                                      + 212
                                                                                                                                                                                                                + 204
                                                                                                                                                                                                                                  +122
                                                                                    71
                                                                                                                                                             47
                                            + 78
                                                                       + 35
                                                                                                                                       -237
                                                                                                                                                - 145
                                                                                                                                                                                                                +148
July
                 + 78
                                   + 57
                                                     +111
                                                                                         - 142
                                                                                                            -322
                                                                                                                     -349
                                                                                                                              -315
                                                                                                                                                                            +164
                                                                                                                                                                                     +273
                                                                                                                                                                                                       + 201
                                                                                                                                                                                                                         +106
                                                                                                                                                                                                                                   + 68
                          + 61
                                                               +115
                                                                                    60
                                                                                                  -246
                                                                                                                                                             04
                                                                                                                                                                      95
                                                                                                                                                                                              +231
                                                                                                                                                                  + 16
                                                     +143
                                                                                                  -315
                                                                                                           -386
                                                                                                                              - 309
                                                                                                                                       -250
                                                                                                                                                                            + 87
                                                                                                                                                                                                                +193
                                                                                                                                                                                                                                  +124
August.
                 +142 +140
                                   +147 +129
                                                              + 108
                                                                       + 57
                                                                                         - 162
                                                                                                                     -365
                                                                                                                                                -153
                                                                                                                                                             68
                                                                                                                                                                                     +178
                                                                                                                                                                                              +200 +217
                                                                                                                                                                                                                         +150
                                                                                    31
September
                          +137
                                            + 160
                                                     +187
                                                               +163
                                                                          71
                                                                                         - 145
                                                                                                  - 268
                                                                                                            -381
                                                                                                                     -399
                                                                                                                              -338
                                                                                                                                       -255
                                                                                                                                                 -147
                                                                                                                                                             58
                                                                                                                                                                      55
                                                                                                                                                                            +116
                                                                                                                                                                                     +151
                                                                                                                                                                                              +159
                                                                                                                                                                                                       + 154
                                                                                                                                                                                                                + 101
                                                                                                                                                                                                                         +126
                                                                                                                                                                                                                                   +129
                 +154
                                   + 156
                                                                                    35
                                                                                                                                                -182 - 74
                                                                                                                              -341 -286
                                                                                + 79
                                                                                         - 43 -195
                                                                                                                                                                  + 09
                                                                                                                                                                           + 30 + 53
October
                 +126 +144 +144 +152 +174
                                                              +175 +129
                                                                                                           -312 -364
                                                                                                                                                                                             + 85 + 80
                                                                                                                                                                                                               +127 +160 +125
                                                                                                           -127
- 61
                                                                       +106
                                                                                        + 27
                                                                                                  - 43
                                                                                                                     - 182
- 92
                                                                                                                                                         -119
                                                                                                                                                                  - 58
                                                                                                                                                                            - 21
                                                                                                                                                                                    + 32
                                                                                                                                                                                                                         + 76
November
                          + 52 + 75
                                            + 87
                                                     + 95
                                                                                    82
                                                                                                                              -201 -171
                                                                                                                                                -146
                                                                                                                                                                                              + 40
                                                                                                                                                                                                                + 70
                                                                                                                                                                                                                                  + 89
                 + 63
                                                              +116
                                                                                                                                                                                                          53
                                                                                         + 71 + 13
                                                                                                                                      -104
                                                                                                                                                                            - 50
                                                                                                                                                -119
                                                                                                                                                         -116
                                                                                                                                                                  -101
                                                              +106
                                                                       +105
                                                                                + 90
December
                                   + 45 + 53
Year
                 + 89 + 87 + 93 + 104 + 120 + 128 + 95 + 34 - 54 - 163 - 252 - 288 - 271 - 223 - 152 - 65 + 05 + 64 + 107 + 117 + 115 + 112 + 106 + 92
Winter
                 + 50 + 55 + 64 + 81 + 97 + 117 + 123 + 103 + 57 - 25 - 121 - 177 - 187 - 155 - 130 - 101 - 66 - 25 + 02 + 15 + 40 + 57 + 63 + 63
Equinox
                 +119 +119 +123 +135 +151 +164 +127 + 55 - 57 -202 -317 -355 -323 -266 -168 - 62 + 23 + 68 +105 +121 +105 +103 +122 +109
Summer
                 +100 + 86 + 91 + 96 +112 +102 + 36 - 54 -163 -262 -318 -331 -304 -248 -157 - 33 + 59 +150 +214 +215 +200 +175 +132 +104
                                                                                           WEST COMPONENT (Unit 0.1 y)
January
                  - 85 - 87 - 60 - 32 - 34 - 23 - 13 - 38
                                                                                         - 76 - 81 - 39 + 39 + 136 + 176
                                                                                                                                                +143 +132 +101 +116
                                                                                                                                                                                        67
                                                         45 - 48
                                                                       - 43 -
- 40 -
                 - 86 -110 - 95 - 59 -
                                                                                         -164 -202 -116 + 32 +181 +264
                                                                                                                                                         + 223
                                                                                                                                                                  +151
February
                                                                                                                                                +283
                                                                                                                                                                               96
                                                                                                                                                                                        82 + 44
                                                                                                                                                                                                           17
                                                                                                                                                                                                                         -104 -102
                                                                                    80
                                                              - 32
                                                                                 -138
                                                                                         -256
                                                                                                   -195
                                                                                                            - 89
                                                                                                                                       +381
                                                                                                                                                 +379
                                                                                                                                                                                                                         - 107
                                                                                                                                                                                                                                  -127
                                                                                                                     +139
                                                                                                                              +323
                                                                                                                                                          + 305
                                                                                                                                                                   +188
March
                          -154 -173
                                            -100
                                                                                                                                                                               78
                                                                                                                                                                                        07
                                                                                                                                                                                                  27
                 -117
                                                        72
                                                                           40
                                                                                                                                                                                                                         - 81
                                            - 92 - 87
                                                              - 86 - 167 - 271
                                                                                                                                                                            +111
                                                                                                           -134 + 99
                                                                                                                                                 +410
                                                                                                                                                                   + 207
April
                                   - 92
                                                                                         -359
                                                                                                  -307
                                                                                                                              + 335
                                                                                                                                       +435
                                                                                                                                                         + 334
                                                                                                                                                                                        55
                                                                                                                                                                                                 35
                                                                                                                                                                                                          10
                                                                                                                                                                                                                   32
                                                                                                                                                                                                                                      98
                                                                                                                                                                                                                          + 16
                                                                                                            - 01
                                                                                                                                                                                                                                  + 10
                                   - 47
                                                                                                                     + 206
                                                                                                                                                                            + 76
May
                                            -107 -180
                                                              - 268
                                                                       -350
                                                                                 -397
                                                                                          -371
                                                                                                   -204
                                                                                                                              +358
                                                                                                                                       +416
                                                                                                                                                 +379
                                                                                                                                                         +279
                                                                                                                                                                   +172
                                                                                                                                                                                        20
                                                                                                                                                                                                  35
                                                                                                                                                                                                          30
                                                                                                                                                                                                                   39
                                                                                                           - 56
                                                                                                                                                                                                                         + 23
                                                                      -364
                                                                                         - 384
                                                                                                                                                                            + 173
                                                                                                                                                                                     + 94
                                                                                                                                                                                                                                  - 31
                                   -100 -119 -207
                                                                                                                                                +307
.Tune
                                                              - 290
                                                                                 -410
                                                                                                  -253
                                                                                                                     + 160
                                                                                                                              +307 +390
                                                                                                                                                         +344
                                                                                                                                                                   + 242
                                                                                                                                                                                                  70
                                                                                                                                                                                                          66
                                                                                                                                                                                                                   59
                                                                                                                                                                                                                                  - 17
July
                                            - 97
                                                                                 -378
                                                                                          -373
                                                                                                   -289
                                                                                                            -130
                                                                                                                     + 97
                                                                                                                              + 288
                                                                                                                                       +396
                                                                                                                                                 +407
                                                                                                                                                         + 368
                                                                                                                                                                   + 263
                                                                                                                                                                            + 161
                                                                                                                                                                                     +100
                                                                                                                                                                                                 88
                                                                                                                                                                                                       + 74
                                                                                                                                                                                                                    56
                                                                                                                                                                                                                         + 19
                             76
                                                     - 156
                                                               - 283
                                                                       -344
                          - 95
                                                                                                                                                                                                                                  - 61
                                                                       - 291
                                                                                         -324
                                                                                                            - 94
                                                                                                                                                                                                                         - 15
                                                                                                                     + 163
                                                                                                                                                                   + 218
                                                                                                                                                                                                                   06
August
                                            -152
                                                                                -331
                                                                                                   -257
                                                                                                                              +361 +449
                                                                                                                                                +443
                                                                                                                                                         +350
                                                                                                                                                                            +114
                                                                                                                                                                                     + 50
                                                                                                                                                                                                       + 37
                                                                                                                                                                                                          71 -
                          - 165
                                                                                                                                                +405
                                                                                                                                                                                              - 11
September
                 - 148
                                   -153
                                            -119
                                                     - 98
                                                              - 74
                                                                       -169
                                                                                 -290
                                                                                          - 297
                                                                                                   - 204
                                                                                                            + 02
                                                                                                                     + 211
                                                                                                                              +416
                                                                                                                                       +429
                                                                                                                                                         + 321
                                                                                                                                                                   + 184
                                                                                                                                                                            + 89
                                                                                                                                                                                        42
                                                                                                                                                                                                                   74
                                                                                                                                                                                                                        -130
                                                                                                                                                                                                                                 - 100
                                                    - 47
                                                              - 07
                                                                                                                                                                                             + 11
                                                                                                                                                                                                      - 72 -120 -151 -164
                  -154 -140
                                   -121
                                            -107
                                                                      - 16
                                                                                -131
                                                                                         -232
                                                                                                  -214
                                                                                                                     +150
                                                                                                                              +314 +369
                                                                                                                                                +339
                                                                                                                                                         + 203
                                                                                                                                                                  + 169
                                                                                                                                                                            +116
                                                                                                                                                                                    + 29
October
                                                                                                               33
                                   - 68 - 50
- 62 - 25
                                                              - 41
- 15
                                                                                 - 51
- 06
                                                                      - 34
                 -115
                          - 98
                                                                                          -102
                                                                                                                     + 93
                                                                                                                              +182
                                                                                                                                       +242
                                                                                                                                                         +168
                                                                                                                                                                   +110
                                                                                                                                                                            + 69
                                                                                                                                                                                    + 61
                                                                                                                                                                                             + 09
                                                                                                                                                                                                                - 98
                                                                                                                                                                                                                         -130
November
                                                         39
                                                                                                  -119
                                                                                                                28
                                                                                                                                                +198
                                                                                                                                                                                                                                  -121
                                                                                         - 30
                                                                                                   - 46
                                                                                                                     + 71
                                                                                                                                                +161
                                                                                                                                                         + 138
                                                                                                                                                                   + 83
December
                                                                                    06
                                                                                                                              +146
                                                                                                                                       +182
                                                         20
                 -98 -104 -102 -88 -95 -116 -152 -210 -247 -198 -60 +122 +279 +344 +329 +264 +174 +106 +53 +23 -15 -44 -74
Year
                 -102 -97 -71 -42 -35 -32 -21 -44 -93 -112 -46 +59 +161 +216 +196 +165 +111 +88 +62 +07 -44 -89 -117 -121
Winter
                 -129 \quad -142 \quad -135 \quad -105 \quad -76 \quad -50 \quad -98 \quad -208 \quad -286 \quad -230 \quad -64 \quad +150 \quad +347 \quad +404 \quad +383 \quad +291 \quad +187 \quad +99 \quad +30 \quad +02 \quad -54 \quad -80 \quad -117 \quad -122 \quad +387 \quad +387 \quad +387 \quad +387 \quad +387 \quad +387 \quad +387 \quad +387 \quad +387 \quad +387 \quad +387 \quad +387 \quad +387 \quad +387 \quad +387 \quad +387 \quad +387 \quad +387 \quad +387 \quad +387 \quad +387 \quad +387 \quad +387 \quad +387 \quad +387 \quad +387 \quad +387 \quad +387 \quad +387 \quad +387 \quad +387 \quad +387 \quad +387 \quad +387 \quad +387 \quad +387 \quad +387 \quad +387 \quad +387 \quad +387 \quad +387 \quad +387 \quad +387 \quad +387 \quad +387 \quad +387 \quad +387 \quad +387 \quad +387 \quad +387 \quad +387 \quad +387 \quad +387 \quad +387 \quad +387 \quad +387 \quad +387 \quad +387 \quad +387 \quad +387 \quad +387 \quad +387 \quad +387 \quad +387 \quad +387 \quad +387 \quad +387 \quad +387 \quad +387 \quad +387 \quad +387 \quad +387 \quad +387 \quad +387 \quad +387 \quad +387 \quad +387 \quad +387 \quad +387 \quad +387 \quad +387 \quad +387 \quad +387 \quad +387 \quad +387 \quad +387 \quad +387 \quad +387 \quad +387 \quad +387 \quad +387 \quad +387 \quad +387 \quad +387 \quad +387 \quad +387 \quad +387 \quad +387 \quad +387 \quad +387 \quad +387 \quad +387 \quad +387 \quad +387 \quad +387 \quad +387 \quad +387 \quad +387 \quad +387 \quad +387 \quad +387 \quad +387 \quad +387 \quad +387 \quad +387 \quad +387 \quad +387 \quad +387 \quad +387 \quad +387 \quad +387 \quad +387 \quad +387 \quad +387 \quad +387 \quad +387 \quad +387 \quad +387 \quad +387 \quad +387 \quad +387 \quad +387 \quad +387 \quad +387 \quad +387 \quad +387 \quad +387 \quad +387 \quad +387 \quad +387 \quad +387 \quad +387 \quad +387 \quad +387 \quad +387 \quad +387 \quad +387 \quad +387 \quad +387 \quad +387 \quad +387 \quad +387 \quad +387 \quad +387 \quad +387 \quad +387 \quad +387 \quad +387 \quad +387 \quad +387 \quad +387 \quad +387 \quad +387 \quad +387 \quad +387 \quad +387 \quad +387 \quad +387 \quad +387 \quad +387 \quad +387 \quad +387 \quad +387 \quad +387 \quad +387 \quad +387 \quad +387 \quad +387 \quad +387 \quad +387 \quad +387 \quad +387 \quad +387 \quad +387 \quad +387 \quad +387 \quad +387 \quad +387 \quad +387 \quad +387 \quad +387 \quad +387 \quad +387 \quad +387 \quad +387 \quad +387 \quad +387 \quad +387 \quad +387 \quad +387 \quad +387 \quad +387 \quad +387 \quad +387 \quad +387 \quad +387 \quad +387 \quad +387 \quad +387 \quad +387 \quad +387 \quad +387 \quad +387 \quad +387 \quad +387 \quad +387 \quad +387 \quad +387 \quad +387 \quad +387 \quad +387 \quad +387 \quad +387 \quad +387 \quad +387 \quad +387 \quad +387 \quad +387 \quad +387 \quad +387 \quad +387 \quad +387 \quad +387 \quad +387 \quad +387 \quad +387 \quad +387 \quad +387 \quad +387 \quad +387 \quad +387 \quad +387 \quad +387 \quad +387 \quad +387 \quad +387 \quad +387 \quad +387 \quad +387 \quad +387 \quad +387 \quad +387 \quad +387 \quad +387 \quad +387 \quad +387 \quad +387 \quad +387 \quad +387 \quad +387 \quad +387 \quad +387 \quad +387 \quad +387 \quad +387 \quad +387 \quad +387 \quad +387 \quad +387 \quad +3
Equinox
                 -62 - 74 - 99 - 119 - 174 - 266 - 337 - 379 - 363 - 251 - 70 + 157 + 329 + 413 + 407 + 335 + 224 + 131 + 66 + 59 + 52 + 37 + 11 - 25
                                                                                       VERTICAL COMPONENT (Unit 0.1 γ)
                                                                                                               54 - 65 - 67 - 20 + 22 + 41 +
                                      06
                                                                                             36 - 45 -
                                                                                                                                                                           + 48 + 64 + 68
                                                                                                                                                                                                          66 + 46 + 35
January
                                                         40
                                                              - 31 -
                                                                           41
                                                                                    40
                                                                                                                                                                      50
                             05
                                                16
                                            - 29 - 28
                                                              - 22 - 25
                                                                                - 15
                                                                                                  - 42 - 90 -110
                                                                                                                             -110 - 68 -
                                                                                                                                                    00 + 50 + 79
                                                                                                                                                                            + 88
                                                                                                                                                                                    + 80
                                                                                                                                                                                              + 73
                                                                                                                                                                                                                   60 + 44
February
                                                                                             05
                                                                                                                                                                                                          70
                                                                                                                                                                                                                                      22
                                                                       - 90
                                                                                                  - 85 -123 -138
                                                                                                                                                                                                                          + 33
March
                          -113
                                                     -123
                                                                                             46
                                                                                                                              -113 - 43
                                                                                                                                                + 62 + 167 + 256
                                                                                                                                                                           + 253
                                                                                                                                                                                     + 224
                                                                                                                                                                                              +184
                                                                                                                                                                                                       +136
                                                                                                                                                                                                                   89
                                                                                                                                                                                                                                      45
                                            -135
                                                                                    38
                                                                                + 22
                                                                                                  - 78
                                                                                                           -168 -226
                                                                                                                                                                                                                         + 22
                                            + 13
                                                                                                                              -214
                                                                                                                                       -140
                                                                                                                                                         + 52 + 108
                                                                                                                                                                            +137
                                                                                                                                                                                     +143
                                                                                                                                                                                              +126
                                                                                                                                                                                                       + 80
                                                                                                                                                                                                                    78
                                                                                                                                                                                                                                      29
April
                                                                                             08
                                                                                                                                                    41
                                            + 15
                                                                                             50
                                                                                                  -119
                                                                                                            -214
                                                                                                                     - 278
                                                                                                                              - 246
                                                                                                                                                         + 60
                                                                                                                                                                            +173
                                                                                                                                                                                     +173
                                                                                                                                                                                              +144
                                                                                                                                                                                                       +114
                                                                                                                                                                                                                    77
                                                                                                                                                                                                                             52
                                                                                                                                                                                                                                      26
May
                                                         25
                                                                       + 33
                                                                                    01
                                                                                                                                        -156
                                                                                                                                                    35
                                                                                                                                                                   +127
                             15
                                                                                                                                      - 91
                                                                                         _
                                                                                                  -110 -176
                                                              - 02
                                                                       - 07
                                                                                                                     -226
                                                                                                                              -164
                                                                                                                                                         + 70
                                                                                                                                                                            + 192
                                                                                                                                                                                              +164
                                                                                                                                                                                                      + 118
June
                                                                                             66
                                                                                                                                                                   +135
                                                                                                                                                                                     +204
                                                         26
                                      32
                                                26
                     14
                             37
                                            - 02 +
                                                                       + 26
                                                                                                                                                          + 41
                                                                                                                                                                                                                          + 42
                          - 16
                                   - 18
                                                                                                             -169
                                                                                                                     -225
                                                                                                                                                                                     +190
July
                 + 03
                                                                                    01
                                                                                             44
                                                                                                   -101
                                                                                                                              -218
                                                                                                                                        -166
                                                                                                                                                    62
                                                                                                                                                                   +122
                                                                                                                                                                            + 174
                                                                                                                                                                                              +149
                                                                                                                                                                                                       +125
                                                                                                                                                                                                                    78
                                                                                                                                                                                                                                      23
                                                         12
                                                                  38
                                   - 65
                                            - 62
                                                                                - 22
                                                                                                   -124
                                                                                                            -170
                                                                                                                    - 199
                                                                                                                              -195
                                                                                                                                       -111
August
                 - 41
                                                                                             61
                                                                                                                                                          +137
                                                                                                                                                                   + 201
                                                                                                                                                                                     +208
                                                                                                                                                                                              +159
                                                                                                                                                                                                                    79
                                                         30
                                                                  20
                                                                           13
                                                                                                                                                    11
                             67
                                                                 91 -
78 -
                                                                               -
                                                                                                   -102
                                                                                                                                                         + 164
                                                                                                                                                                   + 261
                                                                                                            -145
                                                                                                                     - 157
                                                                                                                              -114
                                                                                                                                                                            + 285
                                                                                                                                                                                     + 235
                                                                                                                                                                                              +174
                                                                                                                                                                                                       +117
                                                                                                                                                                                                                                      54
September
                             98 - 105
                                            -109
                                                         96
                                                                                    37
                                                                                             65
                                                                                                                                           32
                                                                                                                                                    58
                 -103
                                                                           55
                         - 74 - 87 - 76 - 63 - 78 - 77
- 47 - 38 - 41 - 37 - 25 - 33
- 30 - 33 - 24 - 31
                                                         63 - 78
                                                                                                                              -105
                                                                                                                                       _
                                                                                                   - 62 -116
                                                                                                                     -135
                                                                                                                                                                                                                         + 21
                                                                                                                                                                                                                                  - 32
                                                                                                                                                                            +165
                                                                                                                                                                                              +134 +103
                                                                                                                                                    43 + 143
                                                                                                                                                                   +177
                                                                                                                                                                                     + 161
October
                                                                                             22
                                                                                                                                           27
                                                                                    24
                  - 55
                                                                               - 33
- 34
                                                                                                  - 64 - 82
- 70 - 76
                                                                                                                             - 54
- 65
                                                                                         _
                                                                                                                     - 73
- 62
                                                                                                                                                                                                                         + 24
                                                                                                                                                         + 77
                                                                                                                                                                   + 93
                                                                                                                                                                            + 87
                                                                                                                                                                                     + 78
                                                                                                                                                                                              + 73
                                                                                                                                                                                                       + 73
                                                                                                                                                                                                                    45
                                                                                                                                                                                                                                      09
                                                                                             32
November
                                                                                                                                           10
                                                                                                                                                    59
                                                              - 24
                                                                                                                                                          + 34
                                                                                                                                                                            + 78
                                                                                                                                                                                     + 81
                                                                                                                                                                   + 72
December
                                                                                             43
                                                                                                                        62
                                                                                                                                           42
                                                                                                                                                    00
```

-23 -37 -40 -42 -35 -27 -23 -22 -40 -84 -132 -158 -139 -76 +10 +86 +140 +159 +154 +128 +100 +68 +33 +02

-05 - 17 - 18 - 29 - 35 - 26 - 33 - 31 - 29 - 55 - 76 - 78 - 74 - 35 + 20 + 51 + 74 + 75 - 76 + 74 + 72 + 51 + 34 + 13

-56 -69 -77 -77 -67 -70 -46 -19 -35 -82 -138 -164 -137 -61 +31 +132 +201 +210 +191 +155 +109 +76 +23 -26

- 08 - 26 - 27 - 19 - 05 + 16 + 10 - 16 - 55 -114 - 182 - 232 - 206 - 131 - 22 + 77 + 146 + 192 + 194 + 154 + 120 + 77 + 42 + 18

Year

Winter

Equinox

Summer

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

International Quiet Days

DECLINATION WEST (Unit 0.01)

Monta and Season,								Ũ	Iniver	sal T	ime.	Hour	commei	ncing									-	·
1947	0	,	2	,			,	_	^	•	10			••	• •				• •					
_	U	ı	2	3	4)	6	/	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
January	-089	- 063	-027	-013	-017	-051	-065	-113	-159	-151	-085	+047	+ 205	+ 239	+163	+127	+ 137	+123	+089	+015	-045	~069	- 101	-091
February	-035	-029	+001	-017	-041	-073	- 139	-231	-419	-523	-339	-025	+ 247	+393	+409	+ 297	+ 187	+149	+131	+095	+055	-029	-045	-017
March April	- 142	-112	-128	-138	-166	-198	-248	- 402	-552	-500	- 200	+ 274	+618	+758	+664	+452		+148	+056	+026	-010	-102	- 208	-170
May	-086	-118	-118	-142	-106	- 238	-404	-592 -764	-716 -710	~580	- 206 206	+ 270	+608		+712	+ 538	,	+ 162	+060	+034	-002	~060	-070	-068
June	+052 +008	+020	-042 -086	-150 -218	-274 -414	-488 -630	-684 -710	-764 -744	-712 -712	-448 -484	-024 -088	+392 +338	+636 +670	+746 +832	+654 +804	+452 +608		+072	+016	+054	+078	+072	+ 068	+036
July	-062	-088	-158	-236	-350	- 580	-710	-720	-650	~404 ~404	-084	+308	+676	+776	+736	+582	٠,٠	+ 148 + 226	+070 +124	+044	+040	+042	+072	+092
August	-142	-228	-300	- 242	-406	- 540	- 590	-672	-682	-494	-144		+ 774	+918	+874	+692		+202	+ 108	+096	+064	+030	-024	-108
September	-198	- 266	-300	-314	-302	- 348	-494	-628	-686	~488	-072		+802	+840	+754	-,-	+ 352	+ 194	+ 148	+ 150	+126	+002	-136	-148
October	-087	-123	-115	-135	-173	-205	- 257	-379	-515	-415	-095	+245	+431	+429	+361	+ 235		+231	+179	+137	+081	+015	-027	-045
November	-091	-115	-081	-091	-083	-123	-145	- 171	-261	-251	-021	+ 183	+319	+313	+ 243	+ 189	+ 169	+149	+151	+069	+045	-017	-133	-243
December	- 146	-114	-108	-086	-070	-074	- 098	-078	-108	-124	-050	+086	+198	+ 284	+286	+254	+174	+114	+098	+014	-054	-108	-138	-152
Year	-085	- 105	-122	-149	- 200	-296	- 379	-458	-514	-405	-117	+ 243	+515	+610	+555	+415	+276	+160	+103	+068	+039	-015	-059	-079
Winter	= 000	-000	-054	-052	-063	-000	-112		-227	•			,-,			_					• •		/ /	
	-090	-080	-054	-052	-053	-080	-112	-148	-237	-262	-124	+073	+242	+307	+275	+ 217	+ 167	+ 134	+117	+048	+000	-056	- 104	-126
Equinox	- 128	-155	-165	-182	-187	-247	-351	- 500	-617	~496	-143	+311	+615	+703	+623	+446	+ 297	+ 184	+111	+087	+049	-036	-110	-108
Summer	-036	-081	-147	-212	-361	- 560	-674	-725	-689	-458	-085	+347	+689	+818	+767	+ 584	+ 364	+ 162	+080	+068	+067	+048	+037	-002

INCLINATION (Unit 0.01)

January +011 +014 -001 -005 -022 -034 -053 -051 -034 +011 +055 +067 +039 +048 +042 +013 -003 -026 -027 -018 -020 -014 +008 +003 February -036 -029 -036 -045 -051 -060 -075 -050 +013 +071 +128 +175 +146 +082 +029 +018 +008 -003 -049 -051 -050 -052 -049 -028 March -034 -042 -018 -042 -047 -071 -066 -031 +050 +139 +170 +141 +110 +063 +041 +025 +022 +001 -036 -066 **-095** -090 -071 -054 April -022 -018 -007 000 -021 -034 -016 +022 +086 +141 +172 +157 +111 +074 +034 -026 -074 -077 -081 -081 -089 -**093** -083 -082 -002 -063 May -021 -003 000 +002 -011 +040 +092 +125 +124 +085 +063 +038 +030 +012 -027 -058 -061 -073 -076 -**090** -077 -051 June -026 -010 -015 +026 +066 +084 +112 +139 +131 +112 +087 +062 +037 -006 -026 -063 -114 -122 -103 -015 -030 -116 -106 - 097 -017 -015 -009 -018 -031 +004 +065 July +112 +136 +127 +128 -013 -081 -085 -065 -064 +096 +064 +027 -088 -085 -077 -058 -042 August -070 -082 -051 -071 -065 -035 +001 +049 +104 +168 +202 +165 +116 +083 +079 +039 -024 -054 -071 -088 -110 -121 -089 -068 September -030 -037 -034 -031 -012 +026 +069 +124 +144 +158 +138 +098 +017 +003 -046 -070 -102 -113 -094 -033 +049 -076 -067 -087 October -033 -025 -031 -033 -038 -051 -027 +004 +080 +152 +164 +123 +080 +049 +012 +014 -028 -037 -041 -051 -065 -071 -083 -063 November -036 -046 -008 -008 -013 -023 -020 -025 -028 -008 +033 +063 +078 +101 +080 +048 +038 +009 -014 -039 -057 -033 -032 -063 December +012 +012 +006 -011 -023 -029 -034 -027 -029 -011 +017 +024 +019 +007 +008 +033 +045 +017 -003 +004 -007 -004 -010 -015 Year -022 -022 -018 -024 -031 -027 -008 +022 +067 +106 +124 +114 +082 +052 +026 +001 -024 -040 -058 -065 -071 -069 -059 -056 Winter -005 -003 -011 -021 -029 -037 **-048** -034 **-**004 +034 +070 **+092** +071 +046 +039 +018 +009 -013 -029 -025 -031 -025 -022 -031 Equinox -030 -031 -023 -027 -035 -042 -021 +016 +085 +144 +166 +140 +100 +059 +026 +004 -032 -046 -065 -078 -086 -083 -076 -072 Summer -031 -033 -022 -024 -031 -002 +043 +084 +119 +140 +137 +109 +076 +051 +029 -019 -048 -061 -081 -094 -097 -098 -079 -065

HORIZONTAL INTENSITY (Unit 0.1 y)

January	- 11	- 14	: +	11	+ 17	+	43	+ 65	+ 83	+ 75	+ 41	- 31	- 107	-129	- 93	- 81	-	57 .	- 15	+ 11	+ 45	+ 51	+ 39	+ 41	+ 23	- 05	- 03
1			•	11	17											-		-						•			
February	+ 66	+ 50) +	66	+ 78	+	86	+ 104	+124	+ 90	+ 02	- 104	-214	-296	- 258	-156	-	60 .	- 26	- 08	+ 10	+ 48	+ 76	-	. •	+ 84	+ 78
March	+ 57	+ 63	3 +	29	+ 67	+	77	+113	+ 111	+ 75	- 49	- 205	-293	- 267	- 223	- 139	-	85 .	- 31	- 05	+ 23	+ 77	+115	+153	+ 147	+115	+ 85
April	+ 60	+ 52	? + .	38	+ 36	+	60	+ 76	+ 54	- 08	- 116	- 226	-314	-3 2 0	- 248	- 170	~	80	+ 32	+114	+ 132	+142	+138	+148	+150	+ 132	+128
May	+ 53	+ 31	. +	31	+ 37	+	65	+ 57	- 15	-111	- 187	-225	-221	-219	- 171	-125	-	55 '	+ 37	+ 107	+127	+145	+141	+ 159	+137	+113	+ 91
June	+ 38	+ 58	3 +	50	+ 40	+	54	+ 02	- 68	-116	-172	-232	- 254	-258	- 216	-160	- ,	84 ·	+ 04	+ 60	+ 128	+ 214	+218	+ 180	+ 190	+ 166	+150
July	+ 40	+ 38	} +	28	+ 54	+	82	+ 34	- 76	- 166	-224	~232	- 256	- 238	- 186	-110	-	16	116	+ 148	+ 140	+ 146	+174	+ 164	+138	+ 104	+ 74
August	+124	+134	+	88	+122	+ 1	24	+ 82	+ 26	- 56	- 162	- 286	-372	-354	- 278	-192	-1	38 -	- 36	+ 68	+120	+ 140	+ 162	+194	+ 204	+152	+ 122
September	+ 76	+ 78	+	68	+ 62	+	64	+ 28	- 16	- 82	- 190	- 248	- 298	- 286	- 228	-134	-	62 -	- 10	+ 86	+136	+ 182	+200	+168	+144	+126	+ 144
October	+ 66	+ 54	+	62	+ 64	+	74	+ 84	+ 48	+ 08	-112	-240	-282	- 240	- 170	- 94	-	22 -	- 14	+ 46	+ 56	+ 64	+ 98	+106	+116	+132	+ 104
November	+ 17	+ 13	+	23	+ 35	+	31	+ 43	+ 41	+ 15	- 41	-101	-143	-173	-141	- 87		49 -	- 11	+ 23	+ 63	+ 87	+ 61	+ 79	+ 59	+ 61	+ 99
December	- 11	- 11	_	01	+ 23	+	41	+ 51	+ 53	+ 41	+ 33	- 07	- 59	- 65	- 59	- 41	-	31 -	- 51	- 51	- 07	+ 27	+ 15	+ 31	+ 21	+ 25	+ 29
Year	+ 48	+ 45	+	41	+ 53	+	66	+ 62	+ 30	- 20	- 98	-178	- 234	- 237	- 189	-124	- ,	62 -	- 00	+ 50	+ 81	+ 110	+120	+125	+117	+ 100	+ 92
1		• • •			,,,													-		, ,				_			
Winter	+ 15	+ 09	+	25	+ 38	+	50	+ 66	+ 75	+ 55	+ 09	- 61	-131	-166	-138	- 91		49 -	- 26	- 06	+ 28	+ 53	+ 48	+ 58	+ 46	+ 41	+ 51
Equinox	+ 65	+ 62	+ .	49	+ 57	+	69	+ 75	+ 49	- 02	-117	- 230	- 297	- 278	- 217	- 134	- (62 -	- 06	+ 60	+ 87	+116	+138	+144	+139	+126	+115
Summer	+ 64	+ 65	+ .	49	+ 63	+	81	+ 44	- 33	- 112	- 186	-244	-276	- 267	- 213	-147	- ·	73 +	30	+ 96	+129	+161	+174	+174	+ 167	+134	+ 109

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

International Quiet Days

```
NORTH COMPONENT (Unit 0.1 y)
  Month
  and
                                                       Universal Time. Hour commencing
 Season,
  1947
                        2
                                                                9
            0
                  1
                             3
                                   4
                                         5
                                               6
                                                    7
                                                          8
                                                                     10
                                                                          11
                                                                                12
                                                                                      13
                                                                                            14
                                                                                                15
                                                                                                      16
                                                                                                             17
                                                                                                                  18
                                                                                                                        19
                                                                                                                              20
                                                                                                                                    21
                                                                                                                                         22
                                                                                                                                               23
           - 03 - 09 + 13 + 18 + 44 + 69 + 88 + 84 + 55 - 17 - 98 - 132 - 110 - 102 - 71 - 26 + 68 + 52 + 65 + 78 + 89 + 109 + 135 + 110 + 40 - 55 - 180 - 290 - 277 - 190 - 97 - 53
January
                                                                                                     - 02 + 33
                                                                                                                 + 42
                                                                                                                             + 45
                                                                                                                                  + 29
                                                                                          - 97
February
           + 68
                                                        + 40
                                                                                                  53
                                                                                                        25
                                                                                                                   35
                                                                                                                       + 66
                                                                                                                                        + 87
                                                                                                                                              + 78
                                       +129 +132
                                                  +111 + 02 -157
                                                                                          -144
                                                                                                           + 09
                                                                                                                 + 71
                                                                                                                             +152
                                                                                                                                              + 99
March
                                                                   - 271
                                                                         ~ 288
                                                                               -276
                                                                                    - 206
                                                                                                                       +111
                                                                                                                                        +132
                                                                                                  72
                                       + 97
April
                                                  + 46
                                                                                                                       +133
                                                                                                                             +146
                                                                                                                                        +137
                                                                                                                                              +132
                + 62
                     + 48
                           + 48
                                   69
                                            + 90
                                                        - 49
                                                             - 170
                                                                    - 291
                                                                         -340
                                                                               -300
                                                                                    - 239
                                                                                          - 144
                                                                                                  17
                                                                                                        81
                                                                                                            +115
                                                                                                                 + 135
                                                                                                                                  +153
                                                        -120
May
                + 29
                                   89
                                       + 101
                                            + 48
                                                  - 40
                                                             - 181
                                                                   -216
                                                                         -252
                                                                               -227
                                                                                    -191
                                                                                          -114
                                                                                                            +119
                                                                                                                 +142
                                                                                                                       +134
                                                                                                                             +150
                                                                                                                                  +129
             48
                              50
                                                                                                  05
                                                                                                                                        +105
                                                                                                                                              + 86
                                                                                                        84
                                                  - 47
June
                + 60
                      + 57
                                 + 91
                                                                                          -156
                                                                                                     + 27
                                                                                                                 + 205
                              59
                                       + 59
                                            - 02
                                                       -105
                                                             - 185
                                                                   -242
                                                                         -285
                                                                               -274 -234
                                                                                                           +113
                                                                                                                       +211 +174
             37
                                                                                                  52
                                                                                                                                  +184 +157
                                                                                                                                              +140
                                       + 86
                                            - 10
                                                                               -245
July
                + 46
                      + 42
                           + 75
                                                  - 98
                                                             -192
                                                                   -245
                                                                                    -179
                                                                                          - 83
                                                                                                           +117
                                                        - 162
                                                                         -263
                                                                                                                 + 133
                                                                                                                                  +132
                                                                                                                                        +100
             45
                                 +113
                                                                                                  61 +109
                                                                                                                       +165 +154
                                                                                                                                              + 76
                                            + 79
                                                  + 06
                                                        - 98
                                                                                          - 216
August
           +135
                +153
                      +114 +142 +159
                                       +130
                                                             - 237
                                                                               -345 -273
                                                                                                     + 26 + 100 + 128
                                                                                                                                       +152
                                                                    -354
                                                                         -381
                                                                                                                       +151 +186
                                                                                                                                  +198
                                                                                                  99
                                                                                                                                             + 130
                                                       -125
                                                             - 200
                +101
                                                  - 24
                                                                   - 287
                                                                               -298
                                                                                    - 209
September
                      + 94 + 90
                                       + 59
                                            + 29
                                                                                          -130
                                                                                                        53 +116
                                                                                                                            +154
                                 + 91
                                                                         -323
                                                                                                                 + 166
                                                                                                                       +184
                                                                                                                                  +142 +137
             93
               +101 + 94 + 90 + 91 + 79 + 27 27 27 4 + 64 + 72 + 75 + 89 + 102 + 71 + 42 - 64 - 199 - 269
                                                                                                  61
                                                                                                                                              +156
                                                                               -207 -132 - 55 - 35 + 25 + 34 + 47 + 84 + 97 +113 +133 +107
           + 73
October
                                                                         - 259
                                                                                          - 70
           + 25
                + 23 + 30 + 43
                                 + 38
                                                                               -168 -114
                                                                                                - 28 + 07 + 49
                                                                                                                 + 72
November
                                                                   -139
                                                                         -187
                                                                                                                       + 54
                                                                                                                            + 74 + 60
                                                                                                                                       + 72 +120
           + 03 - 00 + 09 + 31 + 47 + 57 + 61 + 48 + 42 + 04 - 54
                                                                         - 72 - 76 - 66
                                                                                          - 57 - 73 - 66 - 17 + 18
December
                                                                                                                       + 14 + 36
Year
           + 55 + 54 + 52 + 66 + 84 + 88 + 65 + 22 - 50 -139 -221 -256 -234 -178 -111 - 38 + 24 + 65 +100 +112 +120 +117 +104 + 98
Winter
          + 23 + 17 + 29 + 43 + 55 + 72 + 85 + 68 + 30 - 36 - 118 - 170 - 158 - 118 - 74 - 45 - 22 + 15 + 42 + 43 + 57 + 51 + 50 + 61
Equinox
          + 76 + 75 + 64 + 73 + 85 + 97 + 81 + 44 - 59 -182 -280 -303 -270 -197 -118 - 46 + 32 + 69 +105 +128 +137 +141 +135 +124
          + 66 + 72 + 62 + 82 + 113 + 94 + 29 - 45 - 121 - 199 - 264 - 295 - 273 - 219 - 142 - 24 + 62 + 112 + 152 + 165 + 166 + 161 + 129 + 108
Summer
                                                         WEST COMPONENT (Unit 0.1 y)
January
                           - 04 - 02 - 16 - 21 - 48 - 78 - 86 - 63 + 03 + 94 + 114 + 77 + 65 + 75 + 73
                     + 12
                                 - 08
                                         21 - 53
                                                                         - 63
                                                                               + 88
February
             08
                  07
                             04
                                                  -108
                                                       - 223
                                                             -296 -217
                                                                                    +183 +208
                                                                                                +154
                                                                                                           + 81
                                                                                                                    78
                                                                                                                         63
                                                                                                                               43
                                                                                                                                                04
                                 - 76
                                       - 87
                                            -114 -202 -302
March
                                                             -301 -156
                                                                         +101 +292 +381 +340
                                                                                                + 236
                                                                                                     +144
                  49
                                                                                                                         33
             66
                        63
                             62
                                                                                                                    43
                                                                                                                                                76
April
                                 - 46 -114 -206
                                                  -317
                                                       -401
                                                                   -163
                                                                         + 90
                                                                               +282
                                                                                    +390
                                                                                           +366
                                                                                                + 292
                                                                                                      + 203
                                                                                                            +109
                        57
                             70
                                                              -347
                                                                                                                   56
                                                                                                                               24
             36
                  54
                                                                                                                         41
                                                                                                                                          15
                                                                                                                                                15
                + 16
                      - 17
                           - 72 -135
                                       -251
                                            -367
                                                  -426
                                                             - 277
                                                                   - 50
                                                                                                                                        + 55
                                                                                                                                              + 35
                                                        -411
                                                                               +310
                                                                                                      +146
                                                                                                            + 60
May
                                                                         +172
                                                                                    +377
                                                                                           +339
                                                                                                + 247
             37
                                                                                                                   33
                                                                                                                         53
                                                                                                                               68
                                                                                                                                     61
                                                                   - 90
- 88
                - 04 - 37 -110 -212 -336 -390
- 41 - 80 -117 -173 -303 -391
June
                                                       -408
                                                                         +137
                                                                               +321 +417
                                                                                                     +200 +100
                                                                                                                 + 73
                                                                                                                      + 60 + 52
                                                                                                                                       + 66
                                                                                                                                             + 74
           + 11
                                                  -416
                                                             - 297
                                                                                          +414 +325
                                                                                                                                     54
                                            -391
                                                        -384
July
                                                  -412
                                                              -254
                                                                                    +395
                                                                                          +390
                                                                                                +330
                                                                                                           +144
                                                                                                                            + 72
                                                                                                                                        + 34
                                                                         +124
                                                                               +329
                                                                                                      + 242
                                                                                                                   91
             26
                                                                                                                         71
                                                                                                                                     48
                                                                                                                                                03
                                                             -2)4
-311 -139
-302 - 89
                - 99 -145 -109 -196 -274 -310 -368 -391 -129 -149 -157 -150 -181 -266 -349 -398
                                                                                          + 443
                                                                                                                                              - 37
August
                                                                         +126
                                                                                               + 363
                                                                                                                 + 81 + 78 + 67
                                                                                                                                       + 13
                                                                               + 366 + 457
                                                                                                     +253 +128
             55
                                                                                                                                     50
           - 93
                                                       -398
September
                -129 -149 -157
                                 -150
                                                                         + 194
                                                                                    +425
                                                                                          +392
                                                                                                + 296
                                                                                                     +202 +126
                                                                                                                 +110
                                                                                                                      +114
                                                                                                                            + 95
                                                                               +389
                                                                                                                                    25
                                                                                                                                          51
                                                                                                                                                55
          - 35
                - 57 - 51 - 61 - 80 - 95 - 129 - 201 - 293
                                                             -262 - 98 + 90
October
                                                                               +201 +213 +189
                                                                                               +123 +126 +133 +106 + 90 + 61 + 28 + 08 - 07
                                       - 58
                                            - 70
                                                             -151 - 35
                - 59 - 39 - 43 - 39
                                                  - 89 - 146
          - 46
                                                                         + 68
                                                                               +146 +152 +121 + 99
                                                                                                     + 94 + 90
November
                                                                                                                 + 95
                                                                                                                       + 47 + 37 + 01 - 61 -113
                - 63 - 58 - 42 - 30 - 31 - 43 - 35 - 52 - 67 - 37 + 35 + 96 + 145 + 147
                                                                                               +127 + 84 + 60 + 57 + 10 - 24 - 54 - 69
December
Year
          -37 -49 -58 -70 -96 -147 -197 -248 -291 -246 -102 +90 +243 +304 +286 +221 +156 +99 +73 +56 +42 +12 -15 -27
Winter
          -46 -41 -25 -21 -20 -32 -47 -70 -125 -150 -88 +11 +106 +149 +138 +111 +88 +76 +72 +34 +10 -22 -49 -59
Equinox
          - 58 - 72 - 80 - 88 - 88 - 119 - 179 - 267 - 349 - 303 - 127 + 119 + 291 + 352 + 322 + 237 + 169 + 113 + 79 + 70 + 50 + 04 - 38 - 38
Summer
          -\ 08\ -\ 32\ -\ 70\ -\ 102\ -\ 179\ -\ 291\ -\ 365\ -\ 406\ -\ 399\ -\ 285\ -\ 92\ +\ 140\ +\ 332\ +\ 412\ +\ 397\ +\ 316\ +\ 210\ +\ 108\ +\ 70\ +\ 66\ +\ 65\ +\ 53\ +\ 42\ +\ 17
                                                      VERTICAL COMPONENT (Unit 0.1 y)
```

January	+ 14 + 14	4 + 22	+ 22	+ 24	+ 34	+ 12	- 04	- 22	- 36	- 58	- 68	- 80	- 20	+ 14	+	10	+ 14	+ 14	+ 24	+ 26	; +	26	+ 04	+ 16	+ 04
February	+ 27 + 19	9 + 29	+ 25	+ 25	+ 33	+ 29	+ 33	+ 47	+ 03	- 57	- 83	- 95	- 81	- 37	+	03	+ 11	+ 13	+ 13	+ 07	/ +	11	+ 13	+ 13	+ 09
March	+ 14 00	+ 02	+ 10	+ 16	+ 18	+ 26	+ 66	+ 58	+ 02	- 92	-132	-138	- 104	- 54	+	14	+ 66	+ 56	+ 54	+ 38	3 +	28	+ 30	+ 20	+ 10
April	+ 63 + 59	9 + 61	+ 83	+ 67	+ 59	+ 69	+ 59	+ 27	- 39	- 135	-201	-189	-137	- 69) –	19	+ 07	+ 41	+ 49	+ 43	3 +	35	+ 25	+ 17	+ 15
May	+ 51 + 6	1 + 73	+ 93	+113	+123	+103	+ 63	+ 01	- 93	-217	- 289	-267	-187	- 85	. –	07	+ 49	+ 83	+ 83	+ 65	5 +	59	+ 51	+ 45	+ 33
June	+ 36 + 30) + 26	+ 60	÷ 74	+ 92	+ 70	+ 20	- 10	- 60	-136	-210	- 200	-156	- 66	; -	10	+ 48	+ 78	+ 104	+ 82	. +	64	+ 38	+ 16	+ 10
July	+ 35 + 3	3 + 33	+ 61	+ 83	+ 93	+ 47	+ 03	- 47	- 99	-151	-221	-211	-161	- 83	. –	09	+ 49	+ 99	+117	+ 99) +	85	+ 55	+ 41	+ 27
August	+ 45 + 2	7 + 29	+ 39	+ 63	+ 69	+ 61	+ 39	- 17	- 83	- 167	- 253	- 247	-159	- 49) +	53	+ 77	+ 93	+ 79	+ 71	+ ۱	69	+ 55	+ 45	+ 49
September	+ 71 + 5	1 + 43	+ 37	+ 33	+ 23	+ 53	+ 47	- 09	- 77	-147	-187	-189	- 143	- 87	-	13	+ 43	+ 73	+ 69	+ 73	; +	67	+ 73	+ 61	+ 33
October	+ 38 + 38	3 + 38	+ 34	+ 40	+ 16	+ 16	+ 32	+ 18	- 30	- 86	-1 3 0	-116	- 48	- 12	+	18	+ 10	+ 04	+ 08	+ 18	3 +	20	+ 24	+ 22	+ 24
November	+ 09 + 0	5 + 07	+ 01	+ 05	+ 13	+ 01	+ 07	+ 19	- 17	- 61	- 51	- 51	- 33	+ 19) +	07	+ 05	+ 09	+ 05	+ 17	7 +	25	+ 25	+ 31	+ 09
December	+ 19 + 19	9 + 19	+ 15	+ 17	+ 19	+ 07	+ 05	- 23	- 57	- 81	- 69	- 71	- 71	- 45	. –	03	+ 37	+ 43	+ 53	+ 47	, +	47	+ 33	+ 23	+ 13
V											4 = 0		100												1 20
Year	+ 35 + 30) + 32	+ 40	+ 47	+ 49	+ 41	+ 31	+ 04	- 49	-116	-158	-155	- 108	- 46	, +	04	+ 35	+ 51	+ 55	+ 49) +	45	+ 36	+ 29	+ 20
Winter	+ 17 + 14	4 + 19	+ 16	+ 18	+ 25	+ 12	+ 10	+ 05	- 27	- 64	- 68	- 74	- 51	- 12	+	04	+ 17	+ 20	+ 24	+ 24	+	27	+ 19	+ 21	+ 09
Equinox	+ 47 + 37	7 + 36	+ 41	+ 39	+ 29	+ 41	+ 51	+ 24	- 36	- 115	-163	-158	-108	- 56	;	00	+ 32	+ 44	+ 45	+ 43	3 +	38	+ 38	+ 30	+ 21
İ		. ,						- 10	- 01	-160	-242	- 221	-166	_ 71	_	0.7	٠	± 00	٠,٠	4 70			+ •0	± 25	+ 20
Summer	+ 42 + 38	3 + 40	+ 63	+ 83	+ 94	+ 70	+ 31	- 18	- 84	- 168	-243	-231	- 166	- 71	. +	07	+ 56	+ 88	+ 96	+ 79) +	69	+ 50	+ 37	+ 30

Summer

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

International Disturbed Days

DECLINATION WEST (Unit 0.01)

```
Month
   and
                                                        Universal Time. Hour commencing
 Season,
  1947
             0
                   1
                        2
                                          5
                                               6
                                                           8
                                                                      10
                                                                            11
                                                                                  12
                                                                                       13
                                                                                             14
                                                                                                   15
                                                                                                         16
                                                                                                              17
                                                                                                                    18
                                                                                                                          19
                                                                                                                                     21
                                                                                                                                20
                                                                                                                                           22
                                                                                                                                                 23
January
           -242 -282
                      -214
                            -094
                                 -228 -042
                                             -026 -014
                                                                                           +524
                                                         -104 -116 +062
                                                                          + 284
                                                                                +488
                                                                                      +496
                                                                                                  + 484
                                                                                                       +210
                                                                                                             +372
                                                                                                                   +016
                                                                                                                         - 264
                                                                                                                              - 330
                                                                                                                                    - 292
                                                                                                                                          -326
                                                                                                                                               -364
February
                 -401
                                        -193
                                                                                                             + 195
                                                                                                                        -005
           ~221
                       -339
                            -229
                                  -161
                                              -131
                                                    -215
                                                         - 283
                                                               -197
                                                                     +061
                                                                           +357
                                                                                +627
                                                                                      +821
                                                                                            +965
                                                                                                  +761
                                                                                                       +605
                                                                                                                   +191
                                                                                                                              -331
                                                                                                                                    -647
                                                                                                                                           645
                                                                                                                                                 595
                -780
                                                   +122
                                                         - 132
                                                                                                                              -452
March
           -454
                                        -166
                                              +082
                                                               +086
                                                                     + 100
                                                                           +556
                                                                                +996 +1082 -
                                                                                                  +882
                                                                                                       +548
                                                                                                             +184
                                                                                                                   - 136
                                                                                                                        - 196
                                                                                                                                          -710
                                                                                           +1090
                                                                                                                                    -612
                                                                                                                                                 718
April
                                                   - 294
                                                                                                                              - 222
           - 434
                 - 468
                       -300
                            -356
                                  -310
                                        -114
                                              -200
                                                                     +056
                                                                           +330
                                                                                +736
                                                                                      +940
                                                                                                 +748
                                                                                                       + 530
                                                                                                                  + 228
                                                                                                                        +124
                                                          410
                                                               -198
                                                                                                                                          -672
                                                                                            +854
                                                                                                            + 288
                                                                                                                                     -322
                                                                                                                                               - 542
May
                                  - 595
                                        -663
                                                   -713
           -201
                - 291
                      -101
                            - 257
                                              -589
                                                               -139
                                                         -801
                                                                     +089
                                                                           +443
                                                                                +717
                                                                                      +851
                                                                                            +813
                                                                                                 +621
                                                                                                       +483
                                                                                                                              -053
                                                                                                             +243
                                                                                                                   +101
                                                                                                                        +027
                                                                                                                                    +021
                                                                                                                                          +049
                                                                                                                                               -059
June
                 -274
                       -238 -134
                                  - 568
                                       - 516
                                              -608
                                                   -794
                                                               -290
                                                                    +074
                                                                          +412
                                                                                + 582
           -038
                                                         -634
                                                                                      +690
                                                                                            +638 +616
                                                                                                       +436
                                                                                                                  +114
                                                                                                             +368
                                                                                                                        +066 +074
                                                                                                                                    +066
                                                                                                                                           000
                                                                                                                                               -050
                -124
                                       -710
                       -036 -196
July
                                  - 364
                                                    -708
           -218
                                                         -726
                                              -758
                                                               - 540
                                                                    -220
                                                                          +218
                                                                                +582
                                                                                      +834
                                                                                           +766
                                                                                                 +658
                                                                                                       +444
                                                                                                             +324
                                                                                                                  + 202
                                                                                                                        +192
                                                                                                                              +170
                                                                                                                                    +180
                                                                                                                                          +052
                                                                                                                                               -008
August
           -143 -121
                                  -311 -217
                       -491 -439
                                                        - 575
                                                               - 587
                                                                    - 269
                                                                          +475
                                                                                                 +735
                                                                                                            +253
                                                                                                                        -045
                                              -421
                                                   -681
                                                                                +841 +907
                                                                                           +010
                                                                                                       +447
                                                                                                                  +049
                                                                                                                              +057
                                                                                                                                    -093
                                                                                                                                         - 107
                                                                                                                                               -173
September
           - 526
                 - 568
                      -706
                            - 306
                                  -094
                                       -120
                                              -308
                                                   - 594
                                                         -534
                                                               -080
                                                                    +518
                                                                          +750 +1084 +1078
                                                                                                 +834
                                                                                           +1020
                                                                                                       +438
                                                                                                             +096
                                                                                                                  -260
                                                                                                                        - 200
                                                                                                                              -678
                                                                                                                                    - 228
                                                                                                                                          - 392
                                                                                                                                                234
October
           -606 -554
                      -664 -468
                                  -288 -014
                                             +158
                                                   +152 -008 -086 +328 +632 +1040 +1082 +864 +534
                                                                                                            +290
                                                                                                                        - 226
                                                                                                                              -490
                                                                                                                                         -722
                                                                                                       +440
                                                                                                                  -052
                                                                                                                                   - 588
                                                                                                                                               -748
                            -130
                                                                                                                  -048
                                                                                                                                         -582
November
                -338
                                       -010
                                                         - 080
                                                               -084
                                                                    + 164
           -478
                      -384
                                  -084
                                             +102
                                                   +062
                                                                          +434 +556 +790
                                                                                           +522
                                                                                                 +630
                                                                                                       +326
                                                                                                             -072
                                                                                                                        -066
                                                                                                                              -322
                                                                                                                                               - 304
                                                                                                                                    -612
                                       -027
                                                                                                                        -151
                                                                                                                              - 245
December
                -455
                                  -025
                                             +067
                                                   +061
                                                         +037 +031 +125
                                                                          + 295
                                                                                                            +083
                                                                                +483
                                                                                           +509
                                                                                                 +425
                                                                                                       + 275
                                                                                                                  +015
                                                                                                                                    -449
                                                                                                                                         -481
                                                                                                                                               -371
Year
           -327 -388 -371 -257 -276 -233 -219 -301 -354 -183 +091 +432 +728 +840 +790 +661 +432 +219 +035 -062 -235 -298 -378 -347
Winter
           -326 - 369
                      -296 -142 -125 -068 +003 -027 -108 -092 +103 +343 +539 +654
                                                                                           +630 +575 +354 +145 +044 -122 -307
                                                                                                                                   - 500
                                                                                                                                               -409
Equinox
           -505 -593 -600 -374 -243 -104 -067 -154 -271 -070 +251 +567 +964 +1046 +957 +750 +489 +215 -055 -125 -461 -438 -624 -561
Summer
           -150 -203 -217 -257 -460 -527 -594 -724 -684 -389 -082 +387 +681 +821 +784 +658 +453 +297 +117 +060 +062 +044
                                                                                                                                         -002 -073
```

INCLINATION (Unit 0.01)

```
January
           -071 -063 -082 -194 -206 -144 -185 -115 -072 +015 +087 +088 +078 +043 +023 +057 +042 +086 +106 +144 +114 +125 +075
                                                                                                                                         +057
February
                -138
                      -164 -214 -193
                                      - 258
                                            -225 -187 -120 -033 +067 +158 +169 +162 +146 +196 +211 +154 +121 +065 +074 +050 +004 +020
           -057
March
                -308
           - 280
                      -304
                           - 367
                                 -392
                                      -366
                                            -349
                                                 - 238
                                                       -150
                                                            -042
                                                                  +064
                                                                        +076
                                                                             +094
                                                                                  +190
                                                                                        +199
                                                                                             + 205
                                                                                                   +180
                                                                                                        +159
                                                                                                              +210
                                                                                                                   +305
                                                                                                                         +361
                                                                                                                               +286
                                                                                                                                    + 280
                                                                                                                                          +188
                                                 -010 +031
April
                      -035
                           -055
                                                                  + 177
                                                                       +194 +081
                                                                                                        -051
                                                                                                                         -013
                                                                                                                                          +027
           -035
                -020
                                -096
                                      -097
                                            -099
                                                            +127
                                                                                  +046 +076
                                                                                             -099
                                                                                                   -003
                                                                                                              - 107
                                                                                                                   -118
                                                                                                                               +102
                                                                                                                                    - 029
                                                                                                         -014
Mav
           -108
                -0.72
                      ~124
                           -114
                                 -093
                                      -090
                                            -059
                                                 +019
                                                       +187
                                                            +128
                                                                  +138
                                                                        +121
                                                                             +155
                                                                                  +115
                                                                                        +148
                                                                                             +138
                                                                                                   +027
                                                                                                              -064
                                                                                                                    ~099
                                                                                                                         -105
                                                                                                                               -087
                                                                                                                                    -094
                                                                                                                                          - 057
June
           -203 -169
                     -140
                           -159
                                      -099
                                            -045
                                                 +060 +214
                                                            +220
                                                                  +174
                                                                       +161
                                                                             +168
                                                                                  +191 +178
                                                                                             +123
                                                                                                   +078
                                                                                                        -108
                                                                                                              -127
                                                                                                                   -153
                                                                                                                         -114
                                                                                                                               -093
                                                                                                                                    -039
                                                                                                                                          -002
July
                -072
           -047
                      -068
                           - 106
                                 -106
                                      -085
                                            +014
                                                 +080
                                                       +131
                                                            +225
                                                                  +257
                                                                        +221
                                                                             +137
                                                                                  +070
                                                                                        +085
                                                                                             +065
                                                                                                   +055
                                                                                                         -103
                                                                                                              -350
                                                                                                                   -232
                                                                                                                         - 144
                                                                                                                               -047
                                                                                                                                    -015
                                                                                                                                          +034
                           -137
                                -139
                                                                                                                         -160
August
           -160 -203
                     -139
                                                                                                        +063
                                                                                                                                    -045
                                      -103
                                            -101
                                                 +002
                                                       +123
                                                            +329
                                                                  +363
                                                                       +185
                                                                             + 176
                                                                                  +124
                                                                                        +031
                                                                                             +097
                                                                                                   +077
                                                                                                              - 100
                                                                                                                   -098
                                                                                                                               -079
                                                                                                                                          -115
September
           -256
                - 200
                      - 254
                           -319
                                 -367
                                      -274
                                            -157
                                                 +027
                                                       +076
                                                            +148
                                                                  +267
                                                                       +266
                                                                             + 223
                                                                                  +170
                                                                                        +095
                                                                                             +130
                                                                                                   +172
                                                                                                        +114
                                                                                                              +110
                                                                                                                   +052
                                                                                                                         +056
                                                                                                                               +054
                                                                                                                                    -028
                                                                                                                                           - 108
October
           - 132
               - 205
                     - 240
                                            -164
                                                 - 143
                                                      -036
                                                            +075
                                                                 +143
                                                                                             +114
                                                                                                   +113
                                                                                                                              +002
                                                                                                                                    - 192
                           - 188
                                -258
                                      -247
                                                                       +181 +251
                                                                                  +266 +232
                                                                                                        +132 +115 +127
                                                                                                                         +137
                                                                                                                                           083
                           -144
                                -150
November
           -114 -124 -138
                                      -177
                                            -152 -151
                                                      -101 -035 -002 +012 +138
                                                                                  +130 +213
                                                                                             +229
                                                                                                   + 209
                                                                                                        +237 +099 +062 +014 -021
                                                                                                                                         -028
                                                                                                                                     000
                                                 -123
                                                       -132
               -031 -085
                           -117
                                -135
                                      -123
                                            -118
                                                            -076
December
                                                                  -008
                                                                                                   +170
                                                                                                        +143
           -055
                                                                       +024 +070
                                                                                  +089 +133
                                                                                             +111
                                                                                                             +158 +121
                                                                                                                         +014
                                                                                                                              +003
                                                                                                                                    -007
                                                                                                                                          -031
Year
          -127 -134 -148 -176 -187 -172 -137 -065 +013 +090 +144 +141 +145 +133 +130 +114 +111 +068 +014 +015 +020 +025 -008 -008
Winter
           -074 -089
                     -117 -167 -171 -176
                                            -170 -144 -106 -032 +036 +071 +114 +106 +129 +148
                                                                                                  +158 +155 +121 +098
                                                                                                                         +054 +039
                                                                                                                                    +018
                                                                                                                                         +005
Equinox
          -176 -183 -208 -232 -278 -246 -192 -091 -020 +077 +163 +179 +162 +168 +151 +088 +116 +089 +082 +092 +135 +111 +008
Summer
          -130 -129 -118 -129 -113 -094 -048 +040 +164 +226 +233 +172 +159 +125 +111 +106 +059 -041 -160 -146 -131 -077 -048 -035
```

HORIZONTAL INTENSITY (Unit 0.1 Y)

```
January
                     +111 +261 +223 +133 +197 +101 + 53 - 83 -185 -187 -151 - 61 + 01 - 13 + 19 - 57 - 69
                                                                                                                  -131 - 99 -129
                                                           - 12
                                                                                                                        - 38
                                                                                                                                        - 34
February
                                                                 - 166
                                                                                       -178 -206
                                                                                                                  - 12
                                                                            -304 -260
                                                                                                                             - 02
                                                                                                                                   + 20
               + 180
                     +200
                          + 254
                                + 220
                                      +318
                                           + 272
                                                 + 228
                                                      +130
                                                                       -300
                                                                                                  -196
                                                                                                       -102 - 72
             56
March
                                                            - 68
                                                                                            - 86
                                                                                                                  - 248
                                                                                                                                        -400
               +338
                     +312
                           +384
                                +440
                                                +254 +118
                                                                       -204 -200
                                                                                 -272 -172
                                                                                                       + 46
                                                                                                             - 68
                                                                                                                        -392 -352 -404
           +316
                                      +424
                                           +408
                                                                 - 206
                                                                                                    30
                                                                                                                             - 73
                                                            - 249
                                                                            -189
                                                                                       -117
                                                                                                             + 275
                + 11
                      + 37
                                      +115
                                           +107
                                                 - 19
                                                      - 87
                                                                 -351
                                                                       -379
                                                                                  -107
                                                                                            + 209
                                                                                                       +175
                                                                                                                  +277
                                                                                                                                   + 19
April
                           + 65
                                 +127
                                                                                                    85
                                                                                                                          65
                                                                                                                                           15
May
                                 + 76 + 108 + 74
                                                      -328 -238
                                                                 - 288
                                                                       - 276
                                                                                  -208 -198
                                                                                            -150
                                                                                                                        +234 +190 +182
                                                                                                                                        +100
           +162
                + 96 + 160
                           +118
                                                                            -312
                                                                                                       +108 +184 +236
                                                   52
                                                                                                    34
                                                                                            -113
June
                                           - 01 -157
                                                                                       ~ 233
               +191 +149
                                 + 67
                                      + 79
                                                            -393
                                                                       -341
                                                                                  - 289
                                                                                                             +345
                                                                                                                  +357
                                                                                                                             +209
                           +149
                                                                                                        +309
                                                                                                                                   +115
           + 273
                                                      - 383
                                                                  - 337
                                                                             -307
                                                                                                    11
                                                                                                                        + 265
                                                                                                                                           55
July
           + 38 + 48 + 48
                                           - 24 -140
                                                                                            - 46
                                                                                                  + 20
                           +108 +126 +126
                                                      -226 -396
                                                                 -462
                                                                       -422 -302 -180
                                                                                       -142
                                                                                                       +282 +658 +456
                                                                                                                        +316 +126
                                                                                                                                   + 40
                                                                                                                                           50
                                                - 35
                                                                                            - 17
August
                                                                                                                                        +145
           +137 +203 +107
                           +135
                                +151
                                      +101
                                           +103
                                                      - 221
                                                           -571
                                                                 -629
                                                                       -339
                                                                            -321
                                                                                  -187
                                                                                       + 33
                                                                                                    51
                                                                                                        + 79
                                                                                                             +303 +247
                                                                                                                        +309
                                                                                                                             + 161
                                                                                                                                   + 61
September
                                                                                                                        - 05
           +237 +163 +241
                          +321 +373
                                     +247 +111 -141
                                                      -217 -317
                                                                       -455
                                                                            -345
                                                                                 -207 + 03
                                                                                            + 55 + 91 + 185 + 101 + 63
                                                                                                                             - 71 + 07
                                                                 -481
                                                                      -341
- 45
October
                                                      - 21 -185
                                                                                            + 11 + 39
                                                                                                                        -105 + 57 + 263
           +145 +207
                     +241
                          +197
                                +307
                                      + 275
                                           +155 +133
                                                                 - 289
                                                                            -409
                                                                                  - 365
                                                                                       - 257
                                                                                                       - 11
                                                                                                             - 05
                                                                                                                  - 67
                                                                                                             - 37
                                                                                                                  - 11
                                                                                                                             + 43
                     +133
                                                                                                                        + 51
November
          + 89 + 73
                                     +217
                                           +175 +177 +105 + 09
                                                                 - 39
                                                                            -219
                                                                                 -165 -221 -229 -185
                                                                                                       -223
                          +161 +177
                                                                       - 69
December
                     + 99
                                +157
                                      +151
                                           +145
                                                      +167
                                                            + 73
                                                                 _
                                                                            - 137
                                                                                            -137
                                                                                                       -143
                                                                                                             - 159
                                                                                                                             + 33
          + 71
                + 17
                           +125
                                                +157
                                                                                  - 147
                                                                                       - 191
                                                                                                  -203
                                                                                                                  - 105
                                                                                                                        +
                                                                   27
                                                                                                                          35
Year
          +137 +134 +153 +190 +204 +191 +144 + 42 - 76 -203 -288 -280 -266 -204 -139 - 60 - 19 + 54 +121 + 89 + 53 + 16 + 21 - 12
Winter
          + 78 + 87 + 136 + 200 + 194 + 205 + 197 + 166 + 114 - 03 - 104 - 150 - 203 - 158 - 147 - 146 - 141 - 131 - 84 - 65 - 13 - 14 - 09 - 11
Equinox
          +181 +180 +208 +242 +312 +265 +195 + 57 - 52 -205 -332 -345 -286 -238 -136 + 47 + 61 + 99 + 76 + 06 -109 -110 - 29 - 86
```

+153 +135 +116 +128 +105 +104 + 38 - 96 -290 -400 -429 -345 -311 -216 -135 - 82 + 24 +195 +373 +324 +281 +172 +100 + 63

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

International Disturbed Days

NORTH COMPONENT (Unit 0.1 y)

```
Mont.h
   and
                                                     Universal Time. Hour commencing
 Season
  1947
                  1
                             3
                                             6
                                                         8
                                                                   10
                                                                        11
                                                                              12
                                                                                    13
                                                                                         14
                                                                                               15
                                                                                                    16
                                                                                                          17
                                                                                                               18
                                                                                                                     19
                                                                                                                           20
                                                                                                                                21
                                                                                                                                           23
January
           +116 +104 +129
                           +266 +241
                                      +135 +197
                                                 +101
                                                       + 62
                                                            - 71
                                                                  - 188
                                                                       -210
                                                                             -193
                                                                                   -105
                                                                                        - 47
                                                                                              - 57
                                                                                                   - 00
                                                                                                         - 90
                                                                                                                70
                                                                                                                    - 105
                                                                                                                               -101
                                                                                                                                          - 17
                                                                                                                           68
                                                                                                                                      38
                                                                                                                         _
February
                     + 228
                                      +331 +280
                                                      +154
                                                            + 06
                                                                                  -331
                                                                                        - 263
                                                                                             -272
                                                                                                   -248
                                                                                                        -118
                                                                                                                    - 11
                                                                                                                                    + 79
                                                                                                                                          + 21
          + 75
                +214
                                +232
                                                                 - 169
                          +271
                                                                       -328
                                                                             -357
                                                                                                                88
                                                                                                                           07
                                                                                                                                 57
March
                                                      +128
                                                                       -252
                                                                                  -367
                                                                                                         + 29
                                                                                                                    - 227
                                                                                                                         -345
                + 404
                     + 374
                           +412
                                +459
                                      +433
                                           + 395
                                                 +239
                                                              75
                                                                  -212
                                                                             - 288
                                                                                        -269
                                                                                             -165
                                                                                                                               -291 -334
                                                                                                     20
                                                                                                                55
                                                                                                                                         - 329
                                                            - 228
Apr11
                + 53
                     + 64
                                +153
                                      +124
                                           +124
                                                      - 48
                                                                  -351
                                                                       -404
                                                                                   -191
                                                                                        - 193
                                                                                                         +146 +250
                                                                                                                         + 84
                                                   08
                                                                                              +138
                                                                             -253
                                                                                                                    +262
                                                                                                                                    + 80
                                                                                                     36
                                                                                                                                 43
                                                                                                                                          + 35
May
                                      +167
                                                                 - 292
           +178
                +121
                     +167
                           +140
                                +129
                                           +127
                                                       -250
                                                                                   - 283
                                                                                                   - 11
                                                                                                                               +185
                                                   14
                                                            -222
                                                                       -313
                                                                             - 373
                                                                                        - 269
                                                                                                         + 84 + 172
                                                                                                                   +230 +236
                                                                                              - 205
                                                                                                                                    +175
                                                                                                                                         +104
                                                            -361
June
                           +159
                                      +125
                                            + 54
                                                       -320
                                                                  -339
                                                                       -374
           +273
                +213
                     +169
                                +118
                                                                                   -348
                                                                                        - 288
                                                                                              - 168
                                                                                                                   +346
                                                                             -356
                                                                                                                                    +113
                                                   83
                                                                                                     51
                                                                                                         +271
                                                                                                              +330
                                                                                                                         + 255
                                                                                                                               + 200
                                                                                                                                          + 59
July
                + 59
                                           + 45
                                                                 -436
                                                                                                   - 21 +249
           + 57
                     + 51
                                      + 189
                                                       -157 -341
                           +124 +157
                                                                                  -254
                                                                                             - 105
                                                   74
                                                                       -436
                                                                             -351
                                                                                        -210
                                                                                                             +630
                                                                                                                   +432 +296
                                                                                                                               + 108
August
                +211 +150
                                + 177
                                                 + 28
                                                      -166 -510
                           +173
                                      +119
                                           +140
           +148
                                                                  -596
                                                                       -378
                                                                             -393
                                                                                  - 267
                                                                                        - 51
                                                                                              - 84
                                                                                                   + 10
                                                                                                        + 55
                                                                                                              +294
                                                                                                                   +248
                                                                                                                         +300
                                                                                                                               +167
                                                                                                                                    + 70
September
                +212 +302 +344 +376
                                                 - 85 -165 -305 -522 -517
                                                                                        - 90
                                                                                             - 22 + 50 +174 +123
          + 282
                                      +254 +138
                                                                                  -302
                                                                                                                                         + 66
                                                                             -439
                                                      - 20
October
                +255 +298
                           +237 +329
                                      +273 +138 +117
                                                            -175
                                                                                             - 38
                                                                                       -332
                                                                                                              - 00
                                                                                                                   - 46
                                                                                                                         - 59
           +198
                                                                 -315 -394
                                                                             -498
                                                                                  -459
                                                                                                   - 02 - 37
                                                                                                                               +110
                                                                                                                                    + 325
                                                                                                                                         + 93
                                                                       - 84
                                                                                                                   - 05
November
                                                                 - 53
          +131 +103 +166 +171 +182 +215 +163 +169 +111 + 17
                                                                             -267 -235
                                                                                       - 266
                                                                                             -283 -212 -213 -32
                                                                                                                         + 80
                                                                                                                               + 98
                                                                                                                                    + 32
                                                                                                                                          + 07
                                                                 - 38
                                                                       - 95
December
          +103
                + 58
                     +120
                           +134 +157
                                      +151 +137 +149
                                                      +161
                                                            + 69
                                                                             - 179
                                                                                  - 191
                                                                                       -235
                                                                                                                         +
                                                                                                                               +
                                                                                             -174 -225
                                                                                                        -149
                                                                                                              -158
          +165 +167 +185 +211 +226 +210 +162 + 69 - 43 -183 -293 -315 -329 -278 -209 -120 - 58 + 33 +116 + 93 + 74 + 43 + 55 + 20
Year
Winter
          +106 +120 +161 +211 +203 +208 +194 +166 +122 + 05 -112 -179 -249 -216 -203 -197 -171 -143 - 87 - 53 + 16 + 32 + 38
Equinox
          +225 +231 +260 +273 +329 +271 +199 + 70 - 26 -196 -350 -392 -370 -330 -221 - 22 + 16 + 78 + 80 + 17 - 66 - 68 + 29 - 34
          +164 +151 +134 +149 +145 +150 + 92 - 29 -223 -359 -416 -375 -368 -288 -205 -141 - 18 +165 +357 +314 +272 +165 + 98 + 68
Summer
```

WEST COMPONENT (Unit 0.1 y)

```
January
                                                                       - 06 - 84 - 00 + 19 + 10 - 47 - 79 - 49 - 50 - 24 - 76 - 129 -
                              -113 -137 -
                                                                                                                                                                                                                                                                                                          03 -163 -193 -177 -185 -203
90 - 05 -183 -345 -340 -323
                                                               96
                                                                                                                                                                     76 + 02 +120 +235 +254 +280 +256 +115 +189 -
                                          -184
February
                                                                                                                    - 24
                                                                                                                                  - 76
                                                                                                                                                 - 129
                                                          -147
                                                                                                                                                                -107 + 05 +140 +283 +394
                                                                                                                                                                                                                                                                      + 290
                             -108
                                                                                                                                                                                                                                                                                      + 87
                                                                                                                                                                                                                                         +484
                                                                                                                                                                                                                                                         +371
March
                                                          -337 -131 - 74
                                                                                                           17 +112 +108
                                                                                                                                                 - 51 + 34 + 19 + 262 + 497 + 531
                                                                                                                                                                                                                                         +552
                                                                                                                                                                                                                                                                                     +106
                             - 189
                                          -359
                                                                                                                                                                                                                                                        +456 +297
                                                                                                                                                                                                                                                                                                                                 - 307
                                                                                                                                                                                                                                                                                                          84
                                                                                                                                                                                                                                                                                                                 -146
                                                                                                                                                                                                                                                                                                                                                -385 -446 -450
                                                                        -179
                                                                                      - 144
                                                                                                     - 42
                                                                                                                    - 89
                                           - 248
                                                                                                                                                                              - 29
April
                             - 227
                                                          -154
                                                                                                                                  - 160
                                                                                                                                                  -233
                                                                                                                                                                - 147
                                                                                                                                                                                             +112
                                                                                                                                                                                                            +361 +483
                                                                                                                                                                                                                                          +436
                                                                                                                                                                                                                                                         +434
                                                                                                                                                                                                                                                                       + 297
                                                                                                                                                                                                                                                                                      +183
                                                                                                                                                                                                                                                                                                   + 168
                                                                                                                                                                                                                                                                                                                   +113
                                                                                                                                                                                                                                                                                                                                 - 107
                                                                                                                                                                                                                                                                                                                                                               -355
                                                                                                                                                                                                                                                                                                                                                 -184
                                                                                                                                                                                                                                                                                                                                                                             -291
                                                          - 27 -117 -304
May
                                 80 -139
                                                                                                    -335 -302
                                                                                                                                                                              - 01 +190
                                                                                                                                  - 389
                                                                                                                                                  -482
                                                                                                                                                                 -114
                                                                                                                                                                                                            +330 +419
                                                                                                                                                                                                                                                                      + 263
                                                                                                                                                                                                                                         +400
                                                                                                                                                                                                                                                        + 306
                                                                                                                                                                                                                                                                                      +148 + 85
                                                                                                                                                                                                                                                                                                                                 + 11
                                                                                                                                                                                                                                                                                                                                               + 43
                                                                                                                                                                                                                                                                                                                                                               + 57
June
                                                         -102 - 46
                                                                                      -291
                             + 26
                                          -114
                                                                                                     -262 -324
                                                                                                                                                                - 221
                                                                                                                                  -450
                                                                                                                                                  -402
                                                                                                                                                                                   17
                                                                                                                                                                                             +162
                                                                                                                                                                                                            +259
                                                                                                                                                                                                                          +310
                                                                                                                                                                                                                                          + 301
                                                                                                                                                                                                                                                         +309
                                                                                                                                                                                                                                                                       + 231
                                                                                                                                                                                                                                                                                       +248
                                                                                                                                                                                                                                                                                                     +119
                                                                                                                                                                                                                                                                                                                   + 95
                                                                                                                                                                                                                                                                                                                                 + 84
                                                                                                                                                                                                                                                                                                                                                               + 19
                                                                                                                                                                                                                                                                                                                                                 + 70
                                                         - 11 - 86 -173
July
                                                                                                                                  -401 -425 -354 -195
                                                                                                                                                                                                                                                                                                                                                                             ~ 13
                            -110
                                          - 58
                                                                                                    -357 -408
                                                                                                                                                                                                            +260 +414
                                                                                                                                                                                                                                         +384
                                                                                                                                                                                                                                                                      + 240
                                                                                                                                                                                                                                                                                     +220 +218
                                                                                                                                                                                                                                                                                                                  +179
                                                                                                                                                                                                                                                                                                                                 + 144
                                                                                                                                                                                                                                                         +343
                                          - 30
August
                                                        -244
                                                                                                                                                                                                                          +452
                             - 53
                                                                        -211
                                                                                      -140
                                                                                                     - 99
                                                                                                                   - 207
                                                                                                                                  - 369
                                                                                                                                                                -409
                                                                                                                                                                              - 249
                                                                                                                                                                                             +196
                                                                                                                                                                                                                                         +495
                                                                                                                                                                                                                                                                                                                                                 - 23
                                                                                                                                                 -344
                                                                                                                                                                                                            +394
                                                                                                                                                                                                                                                         +389
                                                                                                                                                                                                                                                                       + 247
                                                                                                                                                                                                                                                                                      +148
                                                                                                                                                                                                                                                                                                                                  + 82
                                                                                                                                                                                                                                                                                                                                                               - 47
                                                                                                                                                                                                                                                                                                                                                                                   68
                                                                                                    - 23
September
                                                                                                                                                                                                                                                                                                                  - 96
                                                                                                                                                                                                                                                                                                                                                - 133
                                                                                                                                                                                                                                                                                                                                                               -208
                            -241 -275
                                                        -336 -109 + 13
                                                                                                                   -146
                                                                                                                                  -340 -321
                                                                                                                                                                              + 195
                                                                                                                                                                                             + 323
                                                                                                                                                                                                            + 520
                                                                                                                                                                                                                         + 540
                                                                                                                                                                                                                                         +544
                                                                                                                                                                                                                                                                                     + 82
                                                                                                                                                                                                                                                                                                                                                                             -117
                                                                                                                                                                                                                                                         +454
                                                                                                                                                                                                                                                                       + 249
                                                                                                                                                                                                                                                                                                   -122
                                                                                                                                                                                                                                                                                                                                 -362
                                                                                                                                                               - 77
October
                                                       -313 -216 -102 + 39
                                                                                                                   +110
                                                                                                                                 +103 - 08
                                                                                                                                                                                                                                                                                      +153 - 29
                                                                                                                                                                                                                                                                                                                  -132
                                                                                                                                                                                                                                                                                                                                 - 279
                                                                                                                                                                                                                                                                                                                                                - 304
                             -299 -261
                                                                                                                                                                              +126
                                                                                                                                                                                             + 280
                                                                                                                                                                                                            +486
                                                                                                                                                                                                                          +515
                                                                                                                                                                                                                                         +417
                                                                                                                                                                                                                                                        + 286
                                                                                                                                                                                                                                                                       + 241
                                                                                                                                                                                                                                                                                                                                                               -341 -395
                                                                                                                                                - 25
                                                                                                                                                               - 43
                                                                                                                                                                                                                                                                                                                  - 37
                                                                                                                                                                                                                                                                                                                                 -163
                                                                                                    + 31 + 84
                                                                                                                                  + 63
                                                                                                                                                                              + 81
                                                                                                                                                                                                                                                                                      - 76
                                                                                                                                                                                                                                                                                                                                                -319
November
                            -240 -168 -182 - 42 - 15
                                                                                                                                                                                                                                                                      +143
                                                                                                                                                                                                                                                                                                                                                               -314 -166
                                                                                                                                                                                             +224
                                                                                                                                                                                                            +260 +393
                                                                                                                                                                                                                                        +241
                                                                                                                                                                                                                                                        + 297
                                                                                                                                                                                                                                                                                                          32
December
                                                                        - 39 + 13
                                                                                                    + 11 +
                                                                                                                                  + 59
                                                                                                                                                 + 48
                                                                                                                                                                + 29
                                                                                                                                                                              + 62
                                                                                                                                                                                            + 146
                                                                                                                                                                                                                                                                      +113
                                                                                                                                                                                                                                                                                                                   - 98 -125
                            -182
                                          - 240
                                                         -115
                                                                                                                         60
                                                                                                                                                                                                            + 234
                                                                                                                                                                                                                          +247
                                                                                                                                                                                                                                         + 239
                                                                                                                                                                                                                                                        + 204
                                                                                                                                                                                                                                                                                     + 20
                                                                                                                                                                                                                                                                                                                                               - 234
                                                                                                                                                                                                                                                                                                                                                               -251 -188
                                                                                                                                                                                                                                                                                                          19
                            -151 -184 -172 -105 -113 - 92 - 93 -154 -202 -132 - 00 +183 +343 +413 +398 +342 +227 +126 + 39 - 18 -117 -156 -198 -187
Year
Winter
                            -161 -182 -135 - 42 - 34 - 02 + 35 + 14 - 38 - 49 + 38 + 158 + 253 + 322 + 311 + 282 + 165 + 55 + 09 - 76 - 166 - 269 - 273
Equinox
                            -239 \quad -286 \quad -285 \quad -159 \quad -77 \quad -11 \quad -03 \quad -72 \quad -153 \quad -72 \quad +78 \quad +244 \quad +466 \quad +517 \quad +487 \quad +408 \quad +271 \quad +131 \quad -17 \quad -65 \quad -264 \quad -252 \quad -338 \quad -313 \quad +131 \quad -17 \quad -65 \quad -264 \quad -252 \quad -338 \quad -313 \quad -17 \quad -17 \quad -17 \quad -17 \quad -17 \quad -17 \quad -17 \quad -17 \quad -17 \quad -17 \quad -17 \quad -17 \quad -17 \quad -17 \quad -17 \quad -17 \quad -17 \quad -17 \quad -17 \quad -17 \quad -17 \quad -17 \quad -17 \quad -17 \quad -17 \quad -17 \quad -17 \quad -17 \quad -17 \quad -17 \quad -17 \quad -17 \quad -17 \quad -17 \quad -17 \quad -17 \quad -17 \quad -17 \quad -17 \quad -17 \quad -17 \quad -17 \quad -17 \quad -17 \quad -17 \quad -17 \quad -17 \quad -17 \quad -17 \quad -17 \quad -17 \quad -17 \quad -17 \quad -17 \quad -17 \quad -17 \quad -17 \quad -17 \quad -17 \quad -17 \quad -17 \quad -17 \quad -17 \quad -17 \quad -17 \quad -17 \quad -17 \quad -17 \quad -17 \quad -17 \quad -17 \quad -17 \quad -17 \quad -17 \quad -17 \quad -17 \quad -17 \quad -17 \quad -17 \quad -17 \quad -17 \quad -17 \quad -17 \quad -17 \quad -17 \quad -17 \quad -17 \quad -17 \quad -17 \quad -17 \quad -17 \quad -17 \quad -17 \quad -17 \quad -17 \quad -17 \quad -17 \quad -17 \quad -17 \quad -17 \quad -17 \quad -17 \quad -17 \quad -17 \quad -17 \quad -17 \quad -17 \quad -17 \quad -17 \quad -17 \quad -17 \quad -17 \quad -17 \quad -17 \quad -17 \quad -17 \quad -17 \quad -17 \quad -17 \quad -17 \quad -17 \quad -17 \quad -17 \quad -17 \quad -17 \quad -17 \quad -17 \quad -17 \quad -17 \quad -17 \quad -17 \quad -17 \quad -17 \quad -17 \quad -17 \quad -17 \quad -17 \quad -17 \quad -17 \quad -17 \quad -17 \quad -17 \quad -17 \quad -17 \quad -17 \quad -17 \quad -17 \quad -17 \quad -17 \quad -17 \quad -17 \quad -17 \quad -17 \quad -17 \quad -17 \quad -17 \quad -17 \quad -17 \quad -17 \quad -17 \quad -17 \quad -17 \quad -17 \quad -17 \quad -17 \quad -17 \quad -17 \quad -17 \quad -17 \quad -17 \quad -17 \quad -17 \quad -17 \quad -17 \quad -17 \quad -17 \quad -17 \quad -17 \quad -17 \quad -17 \quad -17 \quad -17 \quad -17 \quad -17 \quad -17 \quad -17 \quad -17 \quad -17 \quad -17 \quad -17 \quad -17 \quad -17 \quad -17 \quad -17 \quad -17 \quad -17 \quad -17 \quad -17 \quad -17 \quad -17 \quad -17 \quad -17 \quad -17 \quad -17 \quad -17 \quad -17 \quad -17 \quad -17 \quad -17 \quad -17 \quad -17 \quad -17 \quad -17 \quad -17 \quad -17 \quad -17 \quad -17 \quad -17 \quad -17 \quad -17 \quad -17 \quad -17 \quad -17 \quad -17 \quad -17 \quad -17 \quad -17 \quad -17 \quad -17 \quad -17 \quad -17 \quad -17 \quad -17 \quad -17 \quad -17 \quad -17 \quad -17 \quad -17 \quad -17 \quad -17 \quad -17 \quad -17 \quad -17 \quad -17 \quad -17 \quad -17 \quad -17 \quad -17 \quad -17 \quad -17 \quad -17 \quad -17 \quad -17 \quad -17 \quad -17 \quad -17 \quad -17 \quad -17 \quad -17 \quad -17 \quad -17 \quad -17 \quad -17 \quad -17 \quad -17 \quad -17 \quad -17 \quad -17 \quad -17 \quad -17 \quad -17 \quad -17 \quad -17 \quad -17 \quad -17 \quad -17 \quad -17 \quad -17 \quad -17 \quad -17 \quad -17 \quad -17 \quad -17 \quad -17 \quad -17 \quad -17 \quad -17 \quad -17 \quad -17 \quad -17 \quad -17 \quad -17 \quad -17 \quad -17 \quad -17 \quad -17 \quad -17 \quad -17 \quad -17 \quad -17 \quad -17 \quad -17 \quad -17 \quad -17 \quad -17 \quad -17 \quad -
Summer
                            -54 -85 -96 -115 -227 -263 -310 -402 -413 -275 -116 +148 +311 +401 +395 +337 +245 +191 +125 +87 +80 +52 +16 -29
```

VERTICAL COMPONENT (Unit 0.1 y)

```
- 23 - 35 - 29 - 65 - 195 - 191 - 183 - 163 - 125 - 143 - 127 - 127 - 79 + 07 + 83 + 167 + 189 + 167 + 207 + 193 + 165 + 131 + 101 + 79 - 67 - 59 - 103 - 153 - 155 - 157 - 145 - 117 - 113 - 141 - 153 - 149 - 121 - 43 + 95 + 201 + 273 + 299 + 251 + 197 + 171 + 127 + 59 - 09
January
February
March
                                                                             -212 -140 + 24 +290
                 -280 -326 -378
                                   -334 -280 -260 -234 -246 -306 -256
                                                                                                      +508 +692
                                                                                                                  +656
                                                                                                                        + 568
                                                                                                                                          +172 + 32
                                                                                                                                                      - 276
April
                             - 38
                                   - 38
                                         - 68
                                               - 92
                                                     - 78
                                                           - 92
                                                                 -140
                                                                        -204
                                                                              - 208
                                                                                    -160
                  - 44
                       - 34
                                                                                         - 90
                                                                                                  10
                                                                                                      +142
                                                                                                            +188
                                                                                                                  +230
                                                                                                                        +270
                                                                                                                              + 236
                                                                                                                                    +106
                                                                                                                                          +184
                                                                                                                                                      + 58
                                               - 31
                                                     - 55
                 - 27
                                         - 61
                                                                                         - 87
                                                                                               + 53
                                                                                                                                                      + 35
                       - 59 - 121
                                   -145
                                                           -115
                                                                                   -187
                                                                                                            +173
May
                                                                 -111 -191
                                                                              -223
                                                                                                      +133
                                                                                                                  +199
                                                                                                                        +203
                                                                                                                                    +181
                                                                                                                                          +139
June
                       -137 -203
                                   -235
                                          -159
                                               -159 -155
                                                           -149
                                                                 -153
                                                                        - 179
                                                                              -235
                                                                                    -131
                                                                                          - 11
                                                                                                      +163
                                                                                                            + 245
                                                                                                                  +341
                                                                                                                        +361
                                                                                                                              + 301
                                                                                                                                    +221
                                                                                                                                          + 163
                                                                                                                                                +131
                                                                                                                                                      +121
                                               - 07
                                                                                               - 35
July
                       -125 -117
                                   - 73
                                         + 01
                                                           - 73
                                                                 -143
                                                                       -183
                                                                                   -227
                                                                                         - 177
                                                                                                      +119
                                                                                                                        +319
                                                                                                                              +255
                                                                                                                                    + 237
                                                                                                                                                + 41
                 - 137
                                                                              -213
                                                                                                            + 237
                                                                                                                  + 297
                                                                                                                                          +133
                                                                                                                                                        01
                                                     - 71
August
                 - 231
                                                                              -147
                                                                                    -135
                                                                                         - 05
                       -231 -159
                                   -131
                                         -121
                                               -111
                                                              87
                                                                 -187
                                                                       - 205
                                                                                               +183
                                                                                                      + 297
                                                                                                            +385
                                                                                                                  +403
                                                                                                                        +357
                                                                                                                              +237
                                                                                                                                    +163
                                                                                                                                          +101 - 15
                                                                                                                                                        63
                                               -286
                                                     - 236
                                                                                                                                                - 80
September
                 -314
                                         -374
                                                           -242
                                                                 - 224
                                                                       -194
                                                                              -136
                                                                                    - 26
                                                                                         +106
                                                                                                                                                      - 270
                       -318
                             -360
                                                                                                +334
                                                                                                      +578
                                                                                                            +806
                                                                                                                  +824
                                                                                                                        +616
                                                                                                                              + 324
                                                                                                                                    +182
                                                                                                                                          + 22
           ~336
                                   -406
                                   -181 -215 -209 -187 -173
-108 -106 -120 -112 -108
                                                                 -169 -177
-102 - 98
                                                                             -165
- 62
                                                                                   - 81 + 73
- 32 + 66
October
            -121 -227
                       -269 - 193
                                                                                               + 209
                                                                                                            +481
                                                                                                                                          +137 - 57 - 229
                                                                                                     +419
                                                                                                                  +433
                                                                                                                        +387 +283 +233
                -260
                                                                                                                                                - 50
November
           ~188
                       -168 -124
                                                                                                +226 +258 +294
                                                                                                                  +302
                                                                                                                       + 256
                                                                                                                              +190
                                                                                                                                                      - 146
                                                                                                                                    +166
                                                                                                                                          + 26
December
                                         - 75
                                               - 71
                                                     - 61
                                                           - 69
                                                                 - 95
                                                                       - 91
                                                                              - 75
                                                                                    - 77
                                                                                         - 33
                 - 69
                                                                                                + 19
                                                                                                      + 67
                       - 65 -115
                                   -103
                                                                                                            +119
                                                                                                                                          + 85 + 55 + 33
           ~ 23
                                                                                                                        + 175
                                                                                                                                   +129
                                                                                                                  +163
                                                                                                                              +177
Year
           -119 -152 -155 -169 -175 -151 -140 -126 -133 -160 -172 -163 -116 - 14 +127 +254 +340 +360 +331 \cdot +256 +191 +118 + 22 - 56
Winter
           -75 -106 -91 -114 -140 -132 -130 -113 -104 -120 -117 -103 -77 -01 +106 +173 +219 +233 +222 +189 +158 +92 +41 -11
Equinox
                 -216 -237 -242 -240 -234 -212 -184 -188 -210 -208 -180 -102 + 28 +206 +412 +542 +536 +460 +331 +215 +129
           ~188
                                                                                                                                                - 40 - 179
Summer
           - 95 -134 -138 -150 -146 - 85 - 77 - 82 -106 -149 -190 -205 -170 - 70 + 69 +178 +260 +310 +310 +249 +201 +134 + 64 + 24
```

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.

Month and	Y Y Y Y Y Y Y Y Y Y Y Y Y 13.7 + 8.0 - 8.7 - 3.8 + 4.0 - 0.7 + 0 + 17.7 + 5.4 - 11.1 + 0.4 + 2.1 - 1.0 + 1										WES	ST COM	ONENT						VERT	CAL C	OMPON	ENT		
Season	а ₁	^b 1	a ₂	<i>b</i> ₂	а ₃	<i>b</i> ₃	a_ 4	b _ 4	a ₁	$b_{\mathbf{l}}$	<i>a</i> ₂	b ₂	<i>a</i> ₃	<i>b</i> ₃	<i>a</i> 4	<i>b</i> 4	a ₁	b_{1}	a_{2}	$^{b}\mathbf{_{2}}$	<i>a</i> ₃	<i>b</i> ₃	a_{4}	b 4
											A11	Days												
1947	Υ	Y	Υ	Y	Y	Υ	Υ	Υ	Υ	Y	Υ	Υ	Υ	Υ	Υ	Υ	Y	Υ	Υ	Υ	Υ	Υ	Υ	Υ
Jan. Feb. March April May June July Aug. Sept. Oct. Nov. Dec. Year Winter Equinox Summer	+13.7 +17.7 +18.3 +18.7 +21.9 +19.5 +23.6 +21.5 +11.5 +16.5 +17.1 +9.3	+ 8.0 + 5.4 - 1.2 - 6.2 - 7.4 - 2.0 + 3.6 + 5.1 + 6.9 + 0.4 + 1.4	- 8.7 -11.1 -13.3 -11.4 -11.4 -14.1 -11.3 -12.6 -11.0 - 5.9 - 3.0 -10.0 - 5.8 -12.0	-3.8 +0.4 -1.2 -0.0 +0.1 +0.7 +1.7 +4.0 +0.9 -2.8 -3.4 -0.3 -2.6 +1.0	+4.0 +2.1 +5.1 +0.9 -0.9 +0.5 -0.0 +1.7 +4.0 +1.6 +0.7 +1.8 +2.1 +3.2	-0.7 -1.0 -1.8 +0.6 -1.0 -0.3 -2.3 -1.3 -2.2 -0.7 -1.5 -1.2	+0.1 +1.9 -0.0 +1.1 +1.4 +0.8 +0.2 +0.7 -0.6 -0.0 -0.3 +0.2 -0.6 +0.3	-1.5 +1.0 +1.3 -1.5 -0.1 +0.3 +2.1 +0.6 -0.1 +0.2 +0.5 +0.5 +0.5	- 8.7 -14.7 -10.8 - 9.3 - 8.6 - 7.4 -12.0 -16.7 -14.8 -10.3 -10.5	-11. 4 -13. 1 -19. 3 -22. 8 -26. 7 -23. 5 -17. 1 -17. 5 - 3. 9 -15. 8 - 7. 2 -15. 3	- 1.8 - 1.5 + 2.3 + 4.2 + 13.6 + 10.2 + 7.9 + 8.9 + 0.6 - 0.5 - 1.9 + 4.0 - 1.4 + 3.4 + 10.1	+10.0 +13.0 +16.3 +12.8 +13.2 +14.4 +13.9 +14.1 +7.5 +5.7 +11.6 +7.4 +13.9	-1.8 -2.7 -5.3 -6.3 -4.9 -4.4.5 -6.2 -4.9 -2.7 -1.6 -3.9 -1.8 -4.8	-5.5 -9.2 -8.7 -4.1 -3.8 -5.4 -7.1 -7.1 -6.8 -3.0 -1.8 -5.4 -3.0 -8.0	+3.5 +3.0 +2.1 +0.1 -0.0 -0.9 +0.7 +3.3 +1.4 +0.6 +1.5 +1.3 +3.2	-0.2 +1.5 +2.2 -0.3 -0.5 +0.5 +1.4 -0.1 +2.4 +1.6 +1.3 +2.1 +1.5	+ 0.5 + 8.2 +10.4 + 6.9 + 5.4 + 0.7 + 1.2 + 3.4 + 4.5 + 2.9 + 2.7	- 5. 1 - 16. 1 - 5. 1 - 6. 6 - 9. 7 - 6. 8 - 11. 5 - 15. 4 - 11. 1 - 6. 7 - 5. 7 - 8. 8 - 5. 6 - 12. 0	- 4.1 - 8.6 - 8.3 -11.3 -10.8 -10.9 -10.2 - 7.6 - 2.9 - 7.5 - 3.1 - 8.8	-0.8 -1.5 -4.3 +0.5 -0.0 -1.2 -0.1 +0.1 -0.6 +0.4 -0.4 -0.3 -0.2	+2.477773783928 6 34 +1.40 +2.43.42.14 +4.45 +1.	+0.3 +1.0 +0.9 +0.9 +0.9 +0.9 +0.1 +0.3 +0.3 +0.7	-1.2 -1.2 -1.4 -0.9 -0.2 -0.1 -0.5 -0.6 -1.8 -1.0 0.0 -0.8 -1.3	-0.3 -0.5 +0.3 +0.4 -0.4 -0.4 -0.1 -0.0 +0.1 -0.0
										INTERN	ATIONA	L QUIE	r days	3										
Year Winter Equinox Summer	+ 7.8 +17.1	+ 2.8 - 0.3	- 5.8 - 9.6	-1.6 +0.1	+2.2 +2.9	-0.9 -2.0	-0.6 -0.2	+0.8 +1.3	i	- 8.0 -18.3	- 0.9 + 4.9	+ 6.1 +13.0	~2.1 ~5.9	-2.8 -6.5	+1.2 +3.0	+1.8 +2.2	+ 3.3	- 0.9 - 0.9	- 2.6 - 5.5	-0.2 -0.9	+1.1 +3.0	70.3 +0.0	-0.6 -1.3	-0.0 +0.2
									IN	rernat:	IONAL I	OISTUR	BED DA	ays										
Year Winter Equinox Summer	+20.5 +13.1 +21.4 +27.0	+13.0 + 2.9	- 5.9 -15.5	-3.8 +5.1	+0.9 +4.2	-1.5 -0.1	-2.0 +0.9	+0.2 -1.5	-20.5 -30.8	- 5.5 -13.1	+ 2.2 - 1.9 + 0.0 + 8.5	+10.6 +14.4	-0.6 -2.2	-3.8 -8.0	+1.7 +4.0	+2.0 +0.9	- 4.1	-17.9 -34.8	-11.0 - 6.0 -15.7 -11.3	+0.0 +2.9	†1.5 †3.6	+0.3 +2.1	-1.3 -1.3	-0.4 -1.5

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

Values of c_n , α_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 corrctions α , 2α , 3α , 4α respectively, where α has the following values:-

			Januar Februa March	.ry +3	19 28 12	-	April May June	+0 4 -0 51 +0 5		Αι	uly ugust eptembe	+1 +0 r -1	59		October November December		42		Winter Equino Summer	0× -0	36			
Month and			N	ORTH (COMPONE	ENT					W	EST CO	OMPONEN	IT					VER	TICAL	COMPO	ENT	•	
Season	°1	α_{1}	^с 2	$\alpha_{\mathbf{\hat{2}}}$	с ₃	α3	^C 4	α4	c_{1}	$\alpha_{\mathbf{l}}$	^с 2	α_2	^с 3	α_3	c ₄ α	4	c ₁	$\alpha_{\mathbf{l}}$	c_{2}	α_{2}	с ₃	α_3	^C 4	α 4
											All	Days												
1947	Y	0	Y	0	Y	0	Υ	0	Υ	0	Y	0	Υ	0	γο)	Υ	o	Υ	0	Y	0	Υ	٥
Jan. Feb. March April May June July Aug. Sept. Oct. Nov. Dec. Year Winter Equinox Summer	8.9 15.9 18.5 18.4 19.8 23.1 21.0 24.8 23.7 21.8 12.6 9.4 17.1 11.6 20.3 22.1	109 112 101 95 81 67 44 79 59 86	11.1 13.4	247 273 266 271 271 274 280 288 275 245 222 269 247 276	4.1 2.3 5.4 1.1 1.4 0.6 2.3 2.1 4.7 1.6 2.2 2.4 3.6	127 101 116 111 57 224 125 182 129 121 116 157 124 119 118 174	1.1 1.5 1.4 1.3 1.8 1.4 0.9 2.1 0.9 0.6 0.2 0.3 0.5 0.7 0.8	180 45 1 146 95 72 8 49 260 356 285 24	10.0 14.4 19.7 22.1 24.2 28.1 27.7 26.4 23.9 18.7 12.8 11.8 20.9 26.9	218 229 210 203 198 196 207 225 233 234 250 215 233 223	10.1 13.2 16.8 18.6 16.7 16.4 16.5 15.5	11 15 48 38 29 34 25 4 357 343 20	2.1 5.8 9.6 10.1 7.5 6.2 7.0 8.4 4.0 2.4 6.6 3.5 9.3	199 198 213 238 234 221 213 222 217 223 227 217 212 212		15 13 16 16 17 13 13 11 14 17	6.5 16.1 9.7 12.3 11.9 11.2 12.7 15.4 11.2 6.8 6.6	123 123 145 128 155 178 174 170 150 153 154 168	4.2 8.7 9.3 11.3 9.5 10.9 10.9 7.1 3.6 2.9 7.5	271 264 271 272 266 277 264 268 267 267	0.8 3.8 3.8 3.7 2.4 2.8 3.8 3.9 1.6 0.8 2.6 1.3 3.5	91 85 76 77 89 76 87 73 89 76 89 133 84 98 98 79	1.3 1.5 0.9 0.5 0.4 1.1 0.7 1.8 1.0 0.1	260 250 281 282 336 188 207 236 267 271
2	1 22.1	10,	12.1	2/4	0.0	1/4	0.9	00 1					7.2 ET DAYS		0.2 3)	• '	111.7	1)0	10.0	270	3.2	0)	0.4	244
Year Winter Equinox Summer	14.3 8.3 17.1 18.3	91 70 91 101	8.5 6.0 9.6 10.2	256 271	2.3 2.4 3.6 1.0	113 126	0.6 1.0 1.3 0.6	325 353	18.1 8.6 19.5 26.3	198 202 201 195	12.3 6.1 13.9 18.6	27 353 22 41	6.5 3.5 8.8 7.2 RBED DA	224 218 224 228	2.2 4 2.1 3 3.7 5 0.8 1	5	6.9 3.4 6.9 10.4	99 106 98 97	2.6 5.6	268 266 261 272	2.4 1.1 3.0 3.0	91	0.6	268 269 279 244
Year Winter Equinox Summer	20.6 18.4 21.6 28.6	85 46 83 120	12.5 7.0 16.3 16.1	239 289	1.1 1.7 4.2 3.1	151 93	1.1 2.0 1.8 4.9		25.1 21.2 33.5 29.0	256 247	13.0 10.8 14.4 15.8	11 351 1 33	6. 2 3. 9 8. 3 7. 1	190 197	2.5 6 2.6 4 4.1 7 1.2 6	2 8	23.8 17.9 35.1 19.1	177 187	11.0 6.0 16.0 11.4	271 281	3.1 1.6 4.2 3.5	79 61	1.3 2.0	237 254 223 237

		TABLE	Е Х	RANGE O	F MEAI	N DIURN	IAL INEQ	UALIT	IES FOR	THE MO	NTHS,	YEAR A	ND SEA	sons (OF 1947	,		
Month	A	ll Day	s	Qu	iet Da	.ys	Dist	turbed	Days		All Da	ys	Qı	iet Da	ays	Dis	turbed	Days
and Season	D	I	Н	D	I	Н	D	I	Н	х	Y	Z	х	Y	Z	Х	Y	Z
	,	,	Y	,	,	Y	,	,	Υ	Υ	Υ	Υ	Υ	Υ	Y	Y	Y	Υ
January February	5. 58 9. 31	1.76 2.48	27.4 40.8	3.98 9.32	1.20 2.50	21.2	8.88 16.12	3.50	44.8	28.7	28. 2		22.0	20.0	11.4	47.6	47.3	40.2
March	12.35	3.03	45.3	13.10	2.65	42.0 44.6	18.70	4.69 7.53	62.2 84.4	45.1	48.5	19.8 39.4	42.5	50.4	14.2 20.4	68.8	82.9 100.2	45.6 107.0
April	15. 23	2.50	51.1	15.02	2.65	47.0	16.12	3.12	65.6	52.9	79.4	36.9	49.3	79.1	28.4	66.6	83.8	47.8
May	15.45	2.18	44.5	15.10	2.15	38.4	16.52	3.11	56.4	49.0	81.3	45.1	40.2	80.3	41.2	60.9	90.1	42.6
June	15.12	3.04	56.5	15.76	2.61	47.6	14.84	4.23	75.0	55.7	80.7	43.0	49.6	83.3	31.4	72.0	76.9	59.6
July	14.66	3.15	62.5	14.96	2.24	43.0	15.92	6.07	112.0	62.2	78.5	41.5	42.8	80.7	33.8	106.6	83.9	54.6
August	14.89	3.30	61.6	16.00	3.23	57.6	16.00	5.66	93.8	60.3	78.0	42.6	57.9	84.8	34.6	89.6	90.4	64.0
September October	13.80	3.51	54.3	15.26	2.71	49.8	17.90	6.34	85.4	58.6	72.6	44.2	50.7	82.3	26.2	89.8	90.6	123.0
November	11.70	3.22	50.4	9.46	2.47	41.4	18.30	5.24	71.6	53.9	60.1	31.2	40.2	50.6	17.0	82.7	91.0	75.0
December	7.55 6.58	1.75 1.58	27.4 19.5	5.80 4.38	1.64	27.2 11.8	14.02 9.90	4.14	44.6	31.7	37.2	17.5	30.7	30.3	9.2	49.8	71.2	56.2
200011001	0.76	1. 70	19.)	4.50	0.79	11.0	9.90	3.05	37.0	22.5	33.6	15.8	13.7	22.7	13.4	39.6	49.8	29.2
Mean for Year	11.85	2.63	45.1	11.51	2.24	39.3	15.27	4.72	69.4	47.5	61.8	32.5	40.3	61.1	23.4	71.4	79.8	62.1
Winter	7.26	1.89	28.8	5.87	1.53	25.6	12.23	3.85	47.2	32.0	36.9	16.7	27.2	30.9	12.1	51.5	62.8	42.8
Equinox	13.27	3.07	50.3	13.21	2.62	45.7	17.76	5.56	76.8	53.7	69.0	37.9	46.1	70.1	23.0	80.4	91.4	88. 2
Summer	15.03	2.92	56.3	15.46	2.56	46.7	15.82	4.77	84.3	56.8	79.6	43.1	47.6	82.3	35.3	82.3	85.3	55.2

TABLE	XI.	-	NON-CYCLIC	CHANGE	(24 ^h	minus	o ^h)
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		All Days			Quiet Days			Disturbed Days	
Month 1947	Declination West	Horizontal Intensity	Vertical Intensity	Declination West	Horizontal Intensity	Vertical Intensity	Declination West	Horizontal Intensity	Vertical Intensity
	,	Y	Y	,	Υ	Υ	,	Y	Y
January	-0.16	-0.1	+0.0	0.00	+0.4	~0.8	-0.78	-12.6	- 7.8
February	+0.07	+0.1	0.0	+0.12	+1.4	-1.8	-2.50	- 9.0	- 1.4
March	+0.02	70.6	+0.7	+0.42	+4.4	~2.6	-3.06	-64.0	- 4.0
April	-0.00	+0.8	-0.5	-0. 06	+7.8	-4.6	+1.00	- 8.8	+ 8.6
May	+0.09	+0.7	-0,2	-0.70	+3.0	-1.8	+0.16	- 9.2	+ 3.2
June	-0.05	~0.2	+0.3	+0.30	+9.8	~3.6	-0.74	-25.4	+12.4
July	-0.16	-0.5	0.0	+0.04	+5.0	-1.4	+0.08	- 8.4	+ 3.4
August	-0.05	-0.2	+0.3	-0.10	+1.4	-0.2	+0.50	- 1.0	- 1.8
September	-0.12	-0.2	+0.4	+0.06	+7.4	-5.4	+1.02	-16.4	+ 1.4
October	+0.09	+0.2	-0.4	+0.16	+2.2	-1.6	-0.42	- 5.2	-14.6
November	+0.00	-0.1	+0.1	-1.52	+4.6	~2.0	+0.18	-10.8	+ 3.4
December	+0.00	+0.3	-0.3	+0.16	+4.0	-2.4	+1.30	- 2.8	+ 2.6
Year 1947	_			-0.09	+4.3	-2.4	-0.27	-14.5	+ 0.5

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

Month	Declination				Intensity		
1947	West	Inclination	Horizontal	North	West	Vertical	Total
	0 /	o ,	c.g.s.	c.g.s.	c.g.s.	c.g.s.	c.g.s.
January	9 46.6	66 45.4	.18572	.18302	.03154	. 43240	.47059
February	9 46.0	66 45.2	.18573	. 18304	.03154	.43238	. 47058
March	9 45.0	66 46.7	. 18557	. 18289	. 03153	. 43254	. 47067
April	9 44.5	66 45.0	.18579	. 18311	. 03153	. 43244	.47066
May	9 44.2	66 44.1	.18590	. 18323	.03153	. 43238	. 47065
June	9 43.7	66 44.1	. 18591	. 18324	.03153	.43241	. 47068
July	9 43.0	66 43.9	. 18594	. 18327	.03153	. 43239	. 47067
August	9 42.4	66 45.1	. 18577	. 18311	. 03152	. 43243	. 47065
September	9 41.0	66 46.3	.18564	. 18300	.03151	. 43254	. 47069
October	9 40.5	66 46.2	. 18567	.18303	.03151	. 43256	.47072
November	9 40.2	66 45.3	. 18578	. 18314	.03151	. 43253	. 47074
December	9 39.9	66 44.6	. 18587	.18323	.03151	.43248	. 47073
Year 1947	9 43.1	66 45.2	. 18577	.18310	.03152	.43246	. 47067

Day	January	February	March	April	May	June	July	August	September	October	November	Decembe
	o ,	0 /	0 /	0 /	0 /	0 /	0 /	0 /	o ,	0 /	0 /	0 1
1	9 19.5	9 19.7	9 19.5	9 19.6	9 19.7	9 19.6	9 19.7	9 19.3	9 19.3	9 19.4	9 19.2	9 19.
2	19.6	19.6	19.6	19.6	19.7	19.6	19.8	19.3	19.3	19.4	19.3	19.
3	19.5	19.6	19.6	19.6	19.7	19.6	19.8	19.3	19.3	19.3	19.3	19.
4	19.5	19.6	19.6	19.6	19.7	19.5	$\frac{19.7}{20.3}$ }	19.3	19.3	19.3	19.2	19.
5	19.6	19.6	19.7	19.6	19.7	19.6	20.3	19.3	19.4	19.4	19.3	19.
6	19.6	19.6	19.6	19.6	19.7	19.7	20.2	19.3	19.4	19.3	19.3	19.
7	19.7	19.6	19.6	19.5	19.7	19.6	20.3	19.5	19.3	19.3	19.3	19.
8	19.6	19.6	19.7	19.6	19.6	19.7	20.3	19.5	19.4	19.3	19.3	19.
9	19.6	19.6	19.6	19.6	19.7	19.6	20.6	19.5	19.4	19.3	19.3	19.
10	19.5	19.6	19.6	19.5	19.7	19.7	$\frac{20.6}{20.1}$ }	19.5	19.3	19.4	19.3	19.
11	19.5	19.6	19.6	19.7	19.7	19.8	$\frac{19.6}{20.6}$	19.4	19.3	19.3	19.3	19.
12	19.5	19.7	19.6	19.6	19.7	19.8	$\frac{20.1}{19.8}$	19.4	19.4	19.3	19.3	19.
13	19.5	19.7	19.6	19.6	19.7	19.7	19.8	19.4	19.3	19.3	19.2	19.
14	19.5	19.7	19.6	19.7	19.8	19.7	19.8	19.4	19.3	19.3	19.4	19.
15	19.5	19.7	19.5	19.7	19.7	19.7	19.8	19.4	19.4	19.2	19.4	19.
16	19.5	19.7	19.5	19.7	19.6	19.7	19.7	19.4	19.3	19.4	19.3	19.
17	19.5	19.6	19.6	19.6	19.7	19.7	19.6	19.4	19.2	19.3	19.4	19.
18	19.5	19.6	19.6	19.8	19.7	19.7	19.5	19.4	19.3	19.3	19.4	19.
19	19.4	19.7	19.6	19.7	19.7	19.7	19.6	19.4	19.3	19.4	19.4	19.
20	19.6	19.6	19.6	19.7	19.7	19.7	19.6	19.4	19.3	19.3	19.3	19.
21	19.5	19.6	19.6	19.7	19.6	19.8	19.6	19.4	19.3	19.3	19.2	19.
22	19.6	19.6	19.5	19.7	19.8	19.7	19.6	19.4	19.3	19.3	19.2	19.
23	19.5	19.6	19.6	19.7	19.8	19.7	19.6	19.3	19.3	19.3	19.3	19.
24	19.7	19.6	19.6	19.7	19.7	19.7	19.6	19.4	19.3	19.3	19.3	19.
25	19.6	19.6	19.6	19.7	19.7	19.7	19.6	19.3	19.3	19.3	19.5	19.
26	19.6	19.5	19.6	19.8	19.7	19.7	19.6	19.4	19.3	19.3	19.6	19.
27	19.7	19.6	19.6	19.8	19.7	19.7	19.6	19.4	19.3	19.3	19.6	19.
28	19.6	19.6	19.7	19.8	19.6	19.7	19.4	19.2	19.3	19.3	19.8	19.
29	19.7		19.6	19.7	19.7	19.7	19.4	19.3	19.3	19.3	19.8	19.
30	19.6		19.6	19.7	19.5	19.7	19.3	19.3	19.3	19.3	19.7	19.
31	19.7		19.6		19.7		19.3	19.3		19.2		19.

Apr.10 - Recording-Room temperature raised from 11.0 C to 16.0 C. May 30 - " " " " " " 16.0 C " 21.0 C.

July 4-12 -Unit containing magnet being installed by Time Department near Recording-Room.

Unit removed on July 12, after discovery and tests by Magnetic Department.

Smaller changes of Base-line value were traced to Chronograph magnets in another

Time Dept. building. Such magnets were eventually replaced by relays on Aug. 27.

Nov. 4 - Recording-Room temperature lowered from 21.0 C to 16.0 C.

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

Universal Time	No. of Obs.	Observed Horizontal Intensity	Deduced Value of Base-line	Unive	ersal 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	1	Y	Υ		h m h m		Y	Y	hm hr	1	Υ	Υ
Jan. 1 10 4 - 10 16 2 10 46 - 10 53 3 10 37 - 10 45 4 10 38 - 10 45 6 10 20 - 10 28 7 10 42 - 10 49 8 10 42 - 10 49 10 10 34 - 10 52 11 10 33 - 10 42	8 8 8 8 8	18583 18573 18563 18558 18548 18552 18574 18579 18585	18348 18347 18347 18346 18346 18348 18347	Mar. 24 25 26 27 28 29 31	9 42 - 9 51 9 44 - 9 52 9 46 - 9 54 9 54 - 10 19 9 22 - 9 30 9 21 - 9 29 9 52 - 10 16	8 8 8 8 8	18532 18532 18543 18544 18529 18523 18535	18345 18345 18345 18345 18345 18344 18345	June 10 8 11 - 8 23 11 8 23 - 8 32 12 8 10 - 8 18 13 8 7 - 8 16 14 8 17 - 8 30 16 8 15 - 8 24 17 8 17 - 8 25 18 8 14 - 8 23 19 8 4 - 8 14	8 8 8 8 8 8 8	18568 18565 18593 18577 18541 18577 18559 18581 18566	18342 18343 18342 18342 18342 18342 18342 18342
13 10 54 - 11 7 15 9 52 - 9 59 16 10 46 - 10 57 17 10 41 - 10 57 18 10 47 - 10 55 20 10 41 - 10 49 22 10 6 - 10 14 23 9 58 - 10 10 24 10 36 - 10 46 25 10 45 - 10 56	8 8 8 8 8 8 8	18569 18568 18564 18536 18551 18563 18573 18579 18550 18479	18348 18347 18346 18347 18347 18348 18347 18346	Apr. 1 2 3 5 8 9 11 12 14	9 51 - 9 59 9 12 - 9 24 9 6 - 9 14 9 35 - 9 43 9 13 - 9 21 9 47 - 9 58 9 40 - 9 48 8 44 - 8 55 8 51 - 8 58 8 48 - 8 56	8 8 8 8 8 8 8	18544 18574 18564 18567 18501 18544 18555 18584 18575	18345 18346 18345 18345 18346 18344 18345 18345 18345	20 8 23 - 8 35 21 8 0 - 8 5 23 7 45 - 8 1 24 8 8 - 8 21 25 8 11 - 8 25 26 8 5 - 8 15 27 8 13 - 8 25 28 8 1 - 8 14 30 8 3 - 8 17	8 8 8 8 8 8 8 8 8	18560 18568 18595 18578 18562 18593 18580 18586	18341 18341 18341 18342 18341 18341 18342 18341 18341
27 10 47 - 10 57 28 10 43 - 10 55 29 10 41 - 10 53 30 10 43 - 10 58 31 10 42 - 10 54 Feb. 1 10 46 - 10 54	8 8 8 8 8	18535 18547 18538 18573 18554	18347 18347 18346 18348 18347	16 17 18 19 21 22 23 24	8 8 - 8 22 6 51 - 7 3 7 40 - 7 54 7 42 - 7 57 8 10 - 8 22 7 29 - 7 41 8 20 - 8 32 8 32 - 8 43	8 8 8 8 8 8	18574 18591 18526 18538 18559 18582 18579 18583	18345 18345 18345 18345 18344 18345 18346	July 1 8 7 - 8 18 2 8 17 - 8 29 3 8 13 - 8 21 4 7 54 - 8 29 5 8 35 - 8 46 7 8 38 - 8 49 8 9 31 - 9 39	8 8 16 8 8 8 8 8	18588 18568 18565 18582 18579 18583 18581	18341 18341 18341 18341 18341 18340 18340
3 10 52 - 11 7 4 10 46 - 10 53 5 10 41 - 10 49 6 9 52 - 10 4 7 9 53 - 10 5 8 9 46 - 9 55 10 9 49 - 9 57 11 9 45 - 9 53		18554 18567 18566 18571 18581 18561 18556 18551	18347 18346 18347 18346 18347 18347 18347	25 26 28 29 30 May 1	7 30 - 7 49 8 48 - 9 8 8 39 - 8 47 8 1 - 8 10 8 7 - 8 15 8 6 - 8 14	8 8 8 8	18606 18606 18583 18597 18585	18347 18347 18346 18347 18347	9 9 27 - 9 36 10 9 30 - 9 39 11 8 41 - 8 49 14 9 25 - 9 49 15 8 27 - 8 35 16 9 26 - 9 38 17 8 27 - 8 42 18 8 13 - 8 26	8 8 8 8 8 8 10	18566 18566 18590 18582 18573 18569 18580 18551	18340 18339 18340 18339 18338 18339 18340 18339
12 9 51 - 9 59 13 9 51 - 9 58 14 9 45 - 9 54 15 9 52 - 9 59 17 9 52 - 10 5 18 10 8 - 10 22 19 9 40 - 9 49 20 9 55 - 10 9 21 11 3 - 11 14	8 8 8 8 8 8	18563 18560 18576 18563 18506 18534 18556 18548 18539	18348 18347 18348 18347 18345 18346 18346 18347	2 3 5 6 7 8 9 10	9 55 - 10 8 8 12 - 8 20 8 19 - 8 27 8 22 - 8 30 8 8 - 8 19 8 1 - 8 13 8 17 - 8 25 8 18 - 8 25 8 19 - 8 26	8 8 8 8 8 8 8	18573 18580 18577 18580 18582 18588 18574 18577	18345 18347 18346 18345 18345 18344 18345 18343	19 8 26 - 8 37 21 8 20 - 8 32 23 9 41 - 9 52 24 8 16 - 8 28 25 8 12 - 8 26 26 8 33 - 8 42 28 8 19 - 8 28 29 8 22 - 8 36 30 8 16 - 8 23	8 8 8 8 8 8 8 8 8 8	18537 18561 18539 18575 18562 18589 18569 18565 18577	18339 18339 18339 18339 18339 18339 18339
22 10 13 - 10 25 24 10 4 - 10 16 25 9 56 - 10 12 26 9 53 - 10 8 27 10 5 - 10 17 28 10 5 - 10 16	8 8 8 8	18571 18574 18572 18576 18567 18576	18346 18348 18346 18347 18347	13 14 15 16 17 19 20 21	8 27 - 8 35 8 19 - 8 27 8 13 - 8 21 8 16 - 8 26 8 9 - 8 18 8 29 - 8 36 8 14 - 8 22 8 22 - 8 30	8 8 8 8 8 8	18593 18567 18580 18555 18571 18546 18553 18575	18345 18344 18344 18344 18344 18344 18344	Aug. 1 8 5 - 8 19 2 8 13 - 8 29 5 8 19 - 8 29 6 8 23 - 8 30 7 9 21 - 9 29 6 8 20 - 8 20 7 9 21 - 9 20 6 8 20 7 9 21 - 9 20 6 8 20 7 9 21 - 9 20 6 8 20 7 9 21 - 9 20 6 8 20 7 9 21 - 9 20 6 8 20 7 9 21 - 9 20 6 8 20 7 9 21 - 9 20 6 8 20 7 9 21 - 9 20 6 8 20 7 9 21 - 9 20 6 8 20 7 9 21 - 9 20 6 8 20 7 9 21 - 9 20 6 8 20 7 9 21 - 9 20 6 8 20 7 9 21 - 9 20 6 8 20 7 9 21 - 9 20 6 8 20 7 9 21 - 9 20 7 9 2	8 8 8 8 8 8 8	18573 18574 18578 18578 18592 18551	18339 18338 18338 18338 18338
Mar. 1 10 6 - 10 18 3 9 44 - 9 53 4 9 55 - 10 14 5 10 16 - 10 34 6 10 4 - 10 16 7 9 54 - 10 10 8 10 4 - 10 16 10 11 4 - 11 18 11 10 45 - 10 54	8 8 8 8 8	18564 18425 18480 18538 18546 18541 18509 18513 18533	18347 18346 18346 18346 18346 18345 18345	22 23 24 27 28 29 31	8 37 - 8 11 8 37 - 8 45 7 54 - 8 3 8 0 - 8 8 9 28 - 9 41 7 35 - 7 48 7 57 - 8 6	8 8 8 8 8 8	18581 18600 18511 18575 18563 18607 18577	18344 18345 18344 18343 18344 18344	8 8 19 - 8 25 9 8 16 - 8 25 11 9 28 - 9 36 12 9 5 - 9 15 13 8 32 - 8 46 14 9 3 - 9 15 15 9 7 - 9 18 16 8 32 - 8 46 18 9 18 - 9 25	8 8 8 4 4 8 8 8 8 8 8	18577 18591 18555 18539 18555 18565 18561 18494 18468	18338 18337 18337 18337 18336 18336 18336 18335 18335
11 10 45 10 34 12 10 20 - 10 34 13 9 45 - 10 11 14 9 53 - 10 8 15 10 14 - 10 25 17 9 1 - 9 9 21 9 30 - 9 43 22 10 27 - 10 35	8 8 8 8 8	18552 18562 18563 18467 18519 18555 18551	18348 18347 18347 18346 18346 18344	June 2 3 4 5 6 7 9	8 0 - 8 10 8 22 - 8 35 8 1 - 8 14 8 36 - 8 44 8 21 - 8 32 8 11 - 8 22 8 12 - 8 21	8 8 8 8 8	18555 18572 18575 18576 18546 18554 18566	18342 18341 18341 18342 18341 18341	19 9 13 - 9 20 20 9 32 - 9 40 21 9 28 - 9 35 22 8 49 - 8 50 23 8 50 - 8 50 25 9 21 - 9 30 26 9 12 - 9 20	8 8 8 8 8 8 8 8	18549 18514 18531 18555 18520 18511 18544	18335 18335 18335 18335 18336 18335

Apr. 10 - Recording-Room temperature raised from 11.0 C to 16.0 C. May 30 - Recording-Room temperature raised from 16.0 C to 21.0 C.

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

Unive	ersal Time	No. of Obs.	Observed Horizontal Intensity	Deduced Value of Base-line	Univ	ersal Time	No. of Obs.	Observed Horizontal Intensity	Deduced Value of Base-11ne	Uni	versal Time	No. of Obs.	Observed Horizontal Intensity	Deduced Value of Base-line
	h m h m		Υ	Y		h m h m		Υ	Y		h m h m		Y	Y
Aug. 27	9 33 - 9 44	8	18563	18335	Oct. 4	9 18 - 9 28	8	18531	18337	Nov. 15	11 33 - 11 42	8	18555	18334
28	8 47 - 8 57	8	18581	18338	6	9 20 - 9 32	8	18539	18336	17	10 8 - 10 17	8	18563	18335
29	9 19 - 9 27	8	18552	18335	7	9 27 - 9 35	8	18552	18335	19	11 38 - 11 52	8	18536	18334
30	9 28 - 9 36	8	18552	18336	8	10 27 - 10 37	8	18559	18335	21	11 31 - 11 40	8	18566	18334
					9	8 17 - 8 29	8	18579	18337	22	11 28 - 11 36	8	18562	18335
					10	9 19 - 9 32	8	18511	18336	24	10 22 - 10 32	8	18588	18337
Sept. 1	9 13 - 9 22	8	18552	18336	11	10 19 - 10 30	8	18525	18335	25	10 28 - 10 36	8	18568	18336
2	8 43 - 8 55	8	18541	18336	13	9 16 - 9 24	8	18547	18337	26	10 28 - 10 36	8	18593	18337
4	9 7 - 9 16	8	18499	18336	14	15 21 - 15 30	8	18522	18335	27	10 19 - 10 33	8	18586	18338
5	9 11 - 9 20	8	18524	18336	15	8 53 - 9 5	8	18557	18336	28	18 50 - 18 54	4	18601	18338
6	8 41 - 8 51	8	18547	18336	16	9 6 - 9 21	8	18554	18335					
8	9 7 - 9 15	8	18581	18336	17	9 21 - 9 32	8	18540	18336					
9	9 19 - 9 29	8	18561	18336	18	9 22 - 9 34	8	18541	18336	Dec. 1	11 31 - 11 40	8	18588	18338
11	9 16 - 9 24	8	18568	18336	20	9 11 - 9 25	8	18543	18337	2	10 18 - 10 28	8	18582	18337
12	9 16 - 9 24	8	18548	18336	21	7 45 - 7 57	8	18562	18337	3	11 45 - 12 1	8	18585	18337
13	9 18 - 9 27	8	18494	18336	22	9 7 - 9 20	8	18562	18336	4	10 24 - 10 34	8	18599	18338
15	9 31 - 9 39	8	18508	18337	23	9 2 - 9 16	8	18565	18335	5	12 35 - 12 52	8	18584	18336
16	9 20 - 9 32	8	18550	18335	24	8 33 - 8 45	8	18571	18336	6	11 33 - 11 45	8	18565	18336
17	9 22 - 9 34	8	18536	18336	25	10 27 - 10 43	8	18557	18335	9	10 31 - 10 40	8	18566	18337
18	9 17 - 9 31	8	18524	18335	27	10 30 - 10 39	8	18560	18336	10	10 33 - 10 45	8	18551	18336
19	9 23 - 9 34	8	18532	18336	28	10 29 - 10 44	8	18566	18336	11	10 23 - 10 34	8	18573	18336
20	9 17 - 9 27	8	18556	18337	29	10 30 - 10 39	8	18569	18335	12	11 45 - 12 0	8	18563	18336
22	9 26 - 9 33	8	18523	18335	30	9 11 - 9 21	8	18588	18336	13	11 0 - 11 23	8	18559	18336
23	9 13 - 9 22	8	18537	18335	31	10 23 - 10 31	8	18578	18336	15	10 8 - 10 22	8	18581	18336
24	9 14 - 9 26	8	18542	18336						16	10 16 - 10 24	8	18572	18336
25	10 30 - 10 41	8	18507	18336	Nov.		_		1000	17	11 35 - 11 48	. 8	18582	18337
26	10 28 - 10 41	8	18517	18336		10 24 - 10 32	8	18571	18335	18	15 7 - 15 46	9	18589	18336
27	9 19 - 9 27	8	18547	18335	3	11 25 - 11 34	8	18566	18336	20	10 23 - 10 32	8	18590	18337
29	11 21 - 11 42	8	18543	18335	-	11 27 - 11 35	8	18558	18334	22	10 25 - 10 38	8	18598	18335
30	11 3 - 11 24	8	18537	18336		11 34 - 11 48	8	18574	18334	23	10 2 - 10 11	- 8 8	18602	18336
					•	11 25 - 11 33	8	18594	18336	24	, , - ,	•	18597	18337
Oct. 1	9 37 - 9 51	8	18551	18337	8	9 54 - 10 5	8	18568	18336	26	10 36 - 10 48 10 25 - 10 34	8 8	18599 18588	18336
2	9 19 - 9 28	8	18498	18335		11 25 - 11 34	8	18531	18334	29		8 8	18588	18336
2	9 19 9 28	8	18494	18337	11 12	10 24 - 10 32	8 8	18568	18335	30 31		8 8	18582	18338
,	91) 921	0	10474	10337	12	11 24 - 11 35	ď	18544	18334	31	10 30 - 10 40	8	10)90	18338

Nov. 4 - Recording-Room temperature lowered from 21.0 C to 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

		OF THE VERTICAL INTENSITY MAGNETOGRAMS	
Universal Time	observed Vertical Intensity Deduced Value of Base-line	Opserved Vertical Intensity Deduced Value of Base-line	opserved vertical Intensity Deduced value of Base-line
No mail of the color of the c	Y Y 8	Mar. 21 8 59 - 9 23 8 43242 43026 22 9 46 - 10 15 8 43229 43029 24 9 18 - 9 36 8 43244 43026 25 9 20 - 9 39 8 43232 43027 26 9 18 - 9 41 8 43241 43027 27 9 24 - 9 50 8 43225 43026 28 8 56 - 9 17 8 43246 43027 31 9 16 - 9 42 8 43252 43028 Apr. 1 9 31 - 9 48 8 43244 43028 3 9 23 - 9 1 8 43242 43028 Apr. 1 9 31 - 9 48 8 43231 43028 Apr. 1 9 31 - 9 48 8 43231 43028 Apr. 1 9 31 - 9 48 8 43231 43028 Apr. 1 9 31 - 9 48 8 43231 43028 Apr. 1 9 31 - 9 48 8 43231 43028 Apr. 1 9 31 - 9 48 8 43231 43028 Apr. 1 9 31 - 9 48 8 43231 43028 Apr. 1 9 31 - 9 48 8 43231 43028 Apr. 1 9 31 - 9 48 8 43231 43028 Apr. 1 9 31 - 9 48 8 43231 43028 Apr. 1 9 31 - 9 48 8 43231 43028 Apr. 1 9 31 - 9 48 8 43234 43029 2 8 32 - 9 1 8 43242 43028 Apr. 1 9 31 - 9 48 8 43234 43029 2 8 32 - 9 1 8 43231 43026 Apr. 1 9 31 - 9 48 8 43234 43026 Apr. 1 9 31 - 9 48 8 43234 43026 Apr. 1 9 31 - 9 48 8 43234 43027 Apr. 1 9 31 - 9 48 8 43234 43027 Apr. 1 9 31 - 9 48 8 43234 43027 Apr. 1 9 31 - 9 48 8 43234 43027 Apr. 1 9 31 - 9 48 8 43245 43028 Apr. 1 9 31 - 9 48 8 43245 43026 Apr. 1 9 31 - 9 48 8 43245 43026 Apr. 1 9 31 - 9 48 8 43245 43026 Apr. 1 9 31 - 9 48 8 43246 43027 Apr. 1 9 31 - 9 48 8 43246 43027 Apr. 1 9 31 - 9 48 8 43246 43027 Apr. 1 9 31 - 9 48 8 43246 43027 Apr. 1 9 31 - 9 48 8 43246 43027 Apr. 1 9 31 - 9 48 8 43246 43027 Apr. 1 9 31 - 9 48 43 843246 43027 Apr. 1 9 31 - 9 48 43 843246 43027 Apr. 1 9 31 - 9 48 43 843246 43027 Apr. 1 9 31 - 9 48 43246 43027 Apr. 1 9 31 - 9 48 43246 43027 Apr. 1 9 31 - 9 48 43246 43027 Apr. 1 9 31 - 9 48 43246 43027 Apr. 1 9 31 - 9 48 43246 43027 Apr. 1 9 31 - 9 48 43246 43027 Apr. 1 9 31 - 9 48 43246 43027 Apr. 1 9 31 - 9 48 43246 43027 Apr. 1 9 31 - 9 48 43246 43027 Apr. 1 9 31 - 9 48 43246 43027 Apr. 1 9 31 - 9 48 43246 43029 Apr. 1 9 31 - 9 48 43246 43029 Apr. 1 9 31 - 9 48 43246 43029 Apr. 1 9 31 - 9 48 43246 43029 Apr. 1 9 31 - 9 48 43246 43029 Apr. 1 9 31 - 9 48 43246 43029 Apr. 1 9 10 10 15 10 15 10 10 10 10 10 10 10 10 10 10 10 10 10	h m h m y y y July 9 8 11 - 8 34 8 43226 43030 10 8 11 - 8 30 8 43225 43029 11 8 19 - 8 36 8 43223 43030 14 7 45 - 8 35 8 43223 43030 15 8 2 - 8 22 8 43230 43029 16 8 22 - 8 40 8 43236 43030 17 7 50 - 8 18 8 43232 43029 18 7 37 - 8 3 8 43249 43030 19 7 55 - 8 16 8 43252 43029 21 7 50 - 8 10 8 43252 43029 21 7 50 - 8 10 8 43252 43029 21 7 50 - 8 10 8 43252 43029 23 8 4 - 8 31 8 43252 43029 23 8 4 - 8 31 8 43252 43029 25 7 47 - 8 6 8 43237 43028 26 8 10 - 8 26 8 43237 43028 26 8 10 - 8 26 8 43238 43029 27 7 57 - 8 16 8 43235 43030 30 7 45 - 8 9 8 43243 43029 29 7 53 - 8 16 8 43235 43030 30 7 45 - 8 9 8 43244 43022 29 7 55 - 8 20 8 43244 43022 31 8 7 - 8 30 8 43244 43032 Aug. 1 7 42 - 8 1 8 43227 43030 8 7 52 - 8 15 8 43233 43029 7 7 57 - 8 40 8 43227 43030 8 7 52 - 8 15 8 43233 43029 9 7 54 - 8 9 8 43235 43030 12 8 13 - 8 46 8 43208 43031 13 8 45 - 9 17 8 43225 43030
5 10 20 - 10 35 6 9 19 - 9 47 7 9 29 - 9 50 8 9 20 - 9 39 10 9 26 - 9 44 11 9 19 - 9 46 12 9 29 - 9 46 13 9 31 - 9 46 14 9 23 - 9 42 15 9 34 - 9 48 17 9 31 - 9 48 18 9 39 - 9 58 19 9 19 - 9 35 20 9 30 - 9 51 21 9 45 - 10 26 22 9 40 - 9 58 24 9 39 - 9 55 25 9 37 - 9 53 26 9 30 - 9 49 27 9 36 - 9 55 28 9 41 - 9 57 Mar. 1 9 39 - 9 55 28 9 41 - 9 57 Mar. 1 9 39 - 9 57 6 9 39 - 9 55 7 9 38 - 9 57 6 9 39 - 9 55 7 9 38 - 9 51 8 9 39 - 9 56 10 9 47 - 10 35 11 9 39 - 9 57 12 9 47 - 10 11 13 9 13 - 9 35 15 9 43 - 9 59 17 8 29 - 8 53	8 43223 43026 8 43227 43026 8 43224 43024 8 43229 43027 8 43234 43025 8 43232 43025 8 43236 43027 8 43233 43029 8 43235 43029 8 43235 43027 8 43235 43027 8 43242 43025 8 43242 43025 8 43242 43028 8 43233 43029 8 43235 43027 8 43242 43025 8 43242 43025 8 43233 43029 8 43233 43027 8 43242 43025 8 43233 43029 8 43236 43029 8 43237 43027 8 43239 43027 8 43239 43025 8 43249 43025 8 43249 43025 8 43249 43026 8 43249 43026 8 43253 43026 8 43253 43026 8 43253 43026 8 43253 43026 8 43253 43026 8 43253 43026 8 43253 43026 8 43253 43026 8 43253 43026 8 43253 43026 8 43253 43026 8 43253 43026	May 1 7 48 - 8 3 8 43235 43024 2 8 19 - 8 32 8 43242 43028 3 7 47 - 8 6 8 43236 43027 May 1 7 48 - 8 3 8 43242 43028 3 7 47 - 8 6 8 43236 43028 5 7 50 - 8 15 8 43231 43027 6 8 0 - 8 18 8 43234 43029 7 7 38 - 8 2 8 43238 43027 8 7 26 - 7 56 8 43235 43027 9 7 52 - 8 11 8 43236 43028 10 7 59 - 8 14 8 43236 43028 10 7 59 - 8 14 8 43237 43026 12 7 56 - 8 15 8 43239 43028 13 8 5 - 8 23 8 43225 43027 15 7 50 - 8 8 8 43233 43027 16 7 53 - 8 12 8 43233 43027 16 7 53 - 8 12 8 43232 43028 17 7 49 - 8 5 8 43237 43026 17 7 49 - 8 5 8 43237 43026 20 7 54 - 8 11 8 43233 43027 19 8 8 - 8 26 8 43237 43028 21 7 51 - 8 19 8 43233 43027 22 7 41 - 7 57 8 43244 43029 23 8 13 - 8 33 8 43223 43039 27 8 18 - 8 43 8 43233 43025 22 7 41 - 7 57 8 43244 43029 23 8 13 - 8 33 8 43223 43039 27 8 18 - 8 43 8 43234 43023 31 7 39 - 7 52 8 43234 43023 31 7 39 - 7 52 8 43237 43027 June 3 7 59 - 8 16 8 43231 43028 June 3 7 59 - 8 16 8 43241 43030 29 8 40 - 8 57 8 43234 43023 31 7 39 - 7 52 8 43237 43027	14 8 31 - 8 58 8 43231 43027 15 8 35 - 8 59 8 43232 43028 16 8 52 - 9 8 8 43235 43029 19 8 48 - 9 9 8 43235 43029 19 8 48 - 9 9 8 43244 43030 20 8 56 - 9 27 8 43246 43028 21 8 49 - 9 23 8 43245 43030 22 8 22 - 8 43 8 43246 43030 23 9 6 - 9 30 8 43239 43030 25 9 1 - 9 16 8 43240 43028 26 8 36 - 9 1 8 43240 43028 26 8 36 - 9 1 8 43240 43028 27 9 1 - 9 26 8 43241 43029 28 9 12 - 9 34 8 43238 43030 29 8 52 - 9 13 8 43236 43030 30 9 7 - 9 22 8 43247 43031 Sept. 1 8 48 - 9 9 8 43232 43028 4 8 42 - 9 0 8 43250 43028 5 8 45 - 9 6 8 43245 43029 6 8 59 - 9 20 8 43239 43028 8 8 37 - 9 1 8 43250 43028 8 8 37 - 9 1 8 43250 43028 11 8 56 - 9 14 8 43237 43029 11 8 56 - 9 14 8 43237 43028 12 8 49 - 9 9 8 43240 43027 13 8 55 - 9 11 8 43240 43027 13 8 55 - 9 11 8 43240 43027 13 8 55 - 9 11 8 43240 43027 13 8 55 - 9 11 8 43240 43027 14 8 49 - 9 9 8 43240 43027 15 8 49 - 9 9 8 43240 43027 16 8 43 - 9 12 8 43240 43027 17 8 53 - 9 14 8 43240 43027 18 8 38 - 9 9 8 43245 43030 17 8 53 - 9 14 8 43240 43027 20 8 31 - 9 8 43245 43030 19 8 48 - 9 16 8 43249 43027 20 8 31 - 9 8 8 43249 43027 22 8 56 - 9 20 8 43224 43028 23 8 48 - 9 7 8 43248 43027 24 8 36 - 9 5 8 43250 43027 25 8 44 - 9 36 8 43260 43027 25 8 44 - 9 36 8 43264 43027

Apr.10 - Recording-Room temperature raised from 11.0 C to 16.0 C. June 6 - July 4 - Potentiometer at N.P.L. for re-measurement of current May 30 - " " 16.0 C " 21.0 C. values and fitting of new shunt to Standard Resistance.

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

Univ	versal Time	No. of Obs.	Observed Vertical Intensity	Deduced Value of Base-line	Uni	/ersal	Tin	ne		No. of Obs.	Observed Vertical Intensity	Deduced Value of Base-line	Un	11ve	ersa	11 7	[ime		No. of Obs.	Observed Vertical Intensity	Deduced Value of Base-line
	h m h m		Y	Υ		h	m	h	m		Y	Y			h	m	1	n m		Y	Υ
Sept.27	8 54 - 9 14	8	43256	43026	Oct. 24	7 4	3 -	8 2	25	8	43259	43028	Nov. 2	6	9	56	- 10	24	8	43250	43031
29	8 49 ~ 9 10	8	43248	43030	25	9	3 -	9 2	29	8	43251	43027	2	7	9	13	- 10	7	8	43247	43035
30	11 41 ~ 11 55	4	43238	43031	27	9	9 -	9 :	31	8	43247	43027	2	8	9	23	- 10) 5	8	43239	43031
ł					28	8 5	9 -	9 2	28	8	43244	43027									
					29	9 1		9 1	16	2	43239	43026	_								
Oct. 1	8 58 ~ 9 27	8	43242	43029	30	8 3		9	3	8	43244	43029			10	4	- 10		8	43246	43034
2	8 55 ~ 9 14	8	43241	43026	31	9	3 -	9 3	38	8	43246	43031		2	-	44	- 10		8	43241	43029
3	8 37 - 9 4	8	43255	43025										3	10	9	- 10	-	8	43243	43031
4	8 40 - 9 8	8	43267	43027	No.			_	_					4	-	34	- 10	-	8	43242	43033
6	8 41 - 9 9	8	43258	43027	Nov. 1	9 1			30	8	43242	43029		5	10	4		25	8	43241	43032
7	9 1 - 9 22	8	43252	43024	. 3				38	6	43236	43028		6		13	- 10	-	8	43248	43029
8	9 8 ~ 9 40	8	43254	43029	5	9 4:		10	4	8	43239	43026		9		14		26	8	43247	43032
9	7 29 - 7 56	8	43247	43029	6	10 20	-	10 4		8	43235	43025	1		-	,,		19	8	43248	43032
10	8 34 - 9 7	8	43260	43028	7	10 1		-		8	43231	43023	1	-	-	50		12	8	43244	43028
11	9 2 - 9 36	8	43251	43029	8	11 40		12 1		6	43246	43025	1	-	10	-		34	8	43233	43026
13	8 50 - 9 12	8	43257	43029	10	10 1	-	10 2		8	43258	43027	1	-	16		- 16		8	43257	43030
14	14 56 - 15 16	8	43288	43028	11	9 5		10 2		8	43247	43029	2		-	50		12	8	43237	43030
15	9 15 ~ 9 39	8	43258	43027	12	11 43	_	12 4		8	43259	43027	2			34		16	8	43239	43034
16	8 20 - 8 54	8	43263	43027	15	10 13	-	10 3		8	43243	43027	2	-	9	-		58	8	43239	43032
17	8 31 - 9 8	8	43253	43029	17	12 30		12 5		6	43243	43023	2				- 10		8	43248	43032
18	8 44 - 9 14	8	43247	43028	19	9 50		10 4	-	8	43250	43024	2		-	,,		46	8	43239	43031
20	8 29 ~ 9 2	8	43262	43029	21	10 22			38	8	43250	43030	2	-	9 .			21	8	43238	43030
21	8 38 ~ 9 10	8	43260	43028	22	9 5			29	8	43247	43026	3		9 .		- 10		8 8	43234	43031
22		8	43256	43028	24	9 44		10 1		8 8	43243	43029	3	1	9	57	10	21	8	43236	43030
23	8 18 ~ 8 47	B	43248	43026	25	9 40)	10 2	4	ō	43247	43030									

Nov. 4 - Recording-Room temperature lowered from 21.0 C to 16.0 C.

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

	·····											
Day	January	February	March	April	May	June	July	August	September	October	November	December
	Y	Y	Y	Υ	Y	Y	Y	Y	Y	Υ	Y	Y
1	43030	43029	43025	43020	43025	_	43025	43026	43030	43029	43029	43029
2	028	-	_	024	028	43027	025	028	027	029	-	031
3	028	028	026	026	029	023	027	-	-	-	025	030
4	028	030	-	_	_	027	026	-	031	-	-	030
5	-	029	027	026	027	028	026	028	026	-	026	031
6	031	031	025	-	027	029	<u>-</u>	028	028	-	037	027
7	029	028	025	-	025	026	026	031	-	027	026	-
8	027	030	023	026	025	-	028	030	028	027	025	-
9	-	-	-	029	028	024	027	026	029	_	-	030
10	-	032	024	- '	027	026	030	-	-	030	028	028
11	028	033	025	027	-	023	026	028	026	024	027	027
12	-	030	023	028	029	027	-	-	027	-	029	029
13	030	032	-	_ ,	027	028	-	028	028	024	-	-
14	•	031	030	022	026	027	026	026	-	030	-	-
15	029	034	_	028	027	-	031	024	028	025	029	028
16	031	-	-	026	027	025	028	027	027	030	-	028
17		034	024	028	028	027	028	-	025	026	027	030
18	030	032	-	028	-	024	026	026	028	025	-	031
19	<u>-</u>	035	_	030	026	028	026	022	023	-	029	028
20	027	035	-	-	026	028	_	024	029	_	-	036
21	-	037	025	027	027	029	027	031	-	022	026	
22	029	036	024	024	029	_	-	029	027	027	026	029
23	028	-	-	029	027	027	028	027	027	027	_	030
24	028	037	027	028	-	026	027	-	026	027	030	028
25	027	035	025	028	_	027	027	028	024	027	025	-
26	_	034	025	_	-	024	029	027	029	-	031	030
27	029	023	026	_	028	027	_	025	027	025	032	_
28	028	027	024	026	028	028	026	026	_	028	-	_
29	028		029	026	026	_	-	027	028	028	_	028
30	029		_	027	_	025	025	029	018	029	_	028
31	030		025	34 7	026	32)	-	-	0.40	017		025

Feb. 27 - Bearings re-adjusted using spring-washers to take up future wear automatically.

Apr. 10 - Recording-Room temperature raised from 11.0 C to 16.0 C.

May 30 - " " " " 16.0 C " 21.0 C.

Nov. 4 - " " Nowred " 21.0 C " 16.0 C.

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
	0 /	C.G.S.Unit	C.G.S.Unit	0 /		0 1	C.G.S.Unit	C.G.S.Unit	0 /
1818	24 19 †	• •	••	• •	1882	18 22.3	0.1806	0.4375	67 34.
1819	24 21	• •	• •		1883	18 15.0	0.1812	0.4381	67 31.
1820	24 21	• •	• •	• •	1884	18 7.6	0.1814	0.4379	67 29.
1841	23 16.2	• •	••	• •	1885	18 1.7	0.1817	0.4380	67 28.
1842	23 14.6	• •	• •	• •	1886	17 54.5	0.1818	0.4377	67 27.
1843	23 11.7	• •	••	69 0.6	1887	17 49.1	0.1819	0.4380	67 26.
1844	23 15.3	• •	• •	69 0.3	1888	17 40.4	0.1822	0.4383	67 25.
1845	22 56.7	• •	• •	68 57.5	1889	17 34.9	0.1823	0.4380	67 24.
1846	22 49.6	0.1731	• •	68 58.1	1890	17 28.6	0.1825	0.4381	67 23.
1847	22 51.3	0.1736	• .•	68 59.0	1891	17 23.4	0.1827	0.4380	67 21.
1848	22 51.8	0.1731	• •	68 54.7	1892	17 17.4	0.1829	0.4379	67 20.
1849	22 37.8	0.1733	• •	68 51.3	1893	17 11.4	0.1831	0.4373	67 17.
1850	22 23.5	0.1738	• •	68 46.9	1894	17 4.6	0.1831	0.4374	67 17.
1851	22 18.3	0.1744	• •	68 40.4	1895	16 57.4	0.1834	0.4378	67 16.
1852	22 17.9	0.1745	• •	68 42.7	1896	16 51.7	0.1835	0.4382	67 15.
1853	22 10.1	0.1748	• •	68 44.6	1897	16 45.8	0.1838	0.4377	67 13.
1854	22 0.8	0.1749	• •	68 47.7	1898	16 39.2	0.1840	0.4377	67 12.
1855	21 48.4	0.1756	• •	68 44.6	1899	16 34.2	0.1843	0.4380	67 10.
1856	21 43.5	0.1759	• •	68 43.5	1900	16 29.0	0.1846	0.4380	67 8.
1857	21 35.4	0.1769	• •	68 31.1	1901	16 26.0	0.1850	0.4381	67 6.
1858	21 30.3	0.1762	• •	68 28.3	1902	16 22.8	0.1852	0.4377	67 3.
1859	21 23.5	0.1761	••	68 26.9	1903	16 19.1	0.1852	0.4368	67 1.
1860	21 14.3	• •	• •	68 30.1	1904	16 15.0	0.1854	0.4359	66 57.
1861	21 5.5	0.1773	• •	68 24.6	1905	16 9.9	0.1854	0.4355	66 56.
		0 1770			1906	16 3.6	0.1854	0.4353	66 55.
1861		0.1759		68 15.8	1907	15 59.8	0.1855	0.4357	66 56.
1862	20 52.6	0.1763	0.4403	68 9.6	1908	15 53.5	0.1854	0.4356	66 56.
1863	20 45.9	0.1764	0.4396	68 7.0	1909	15 47.6	0.1854	0.4348	66 54.
1864	•••	0.1767	0.4393	68 4.1	1910	15 41.2	0.1855	0.4345	66 52.
1865	20 33.9	0.1767	0.4388	68 2.7	1911	15 33.0	0.1855	0.4342	66 52.
1866	20 28.0	0.1773	0.4397	68 1.3	1912	15 24.3	0.1855	0.4340	66 51.
1867	20 20.5	0.1777	0.4392	67 57.2	1913	15 15.2	0.1853	0.4333	66 50.
1868	20 13.1	0.1779	0.4395	67 56.5					
1869	20 4.1	0.1782	0.4396	67 54.8	1017	16 6 2	0 1053	0 (222	
1870	19 53.0	0.1784	0.4392	67 52.5	1914	15 6.3	0.1853	0.4333	66 50.1
1871	19 41.9	0.1786	0.4389	67 50.3	1915	14 56.5	0.1851	0.4331	66 51.0
1872	19 36.8	0.1789	0.4383 0.4386	67 47.8	1916	14 46.9	0.1848	0.4326	66 52.2
1873 1874	19 33.4 19 28.9	0.1793 0.1797	0.4386 0.4387	67 45.8	1917	14 37.1 14 27.8	0.1848	0.4330*	66 53.0
1874 1875	19 28.9	0.1797	0.4383	67 43.6	1918	14 27.8	0.1846	0.4325	66 52.8
		0.1797	0.4383 0.4383	67 42.4	1919		0.1845	0.4324	66 53.3
1876 1877	19 8.3 18 57.2	0.1799	0.4381	67 41.0	1920	14 8.6	0.1845	0.4325	66 53.0
1877 1878	18 49.3	0.1800	0.4382	67 39.7	1921	13 57.6 13 46.7	0.1845	0.4322	66 53.0 66 52.
1878 1879	18 49.5	0.1802	0.4382	67 38.2 67 37.0	1922 1923	13 46.7	0.1844 0.1843	0.4318	66 51.9
1879 1880	18 32.6	0.1805	0.4382			13 22.8		0.4314	66 51.
1881	18 27.1	0.1807	0.4379	67 35.7 67 34.7	1924 1925	13 9.9	0.1843 0.1841	0.4311 0.4308	66 51.4

In 1818, 1819 and 1820 numerous observations of Declination were made with a Dollond 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 1925-1947

Year	Declination West	Horizontal Intensity	Vertical Intensity	Inclination
	0 1	C.G.S. Unit	C.G.S. Unit	0 /
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
l e				

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

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

* Discontinuities of -1.7 γ in H and -3.9 γ in Z were introduced in 1938. See Introduction p. x and xi.

The range in declination during the month was from $9^{\circ}30'.2$ on 26th to $10^{\circ}1'.4$ on 16th; in horizontal intensity from .18461 to .18658, both on 25th; in vertical intensity, from .43197 on 16th to .43342 on 25th.

February. During the first six days the general condition was quiet, though a few irregularities showed occasionally on the traces. From γ^d6^h the irregularities increased in extent, becoming a moderately active disturbance by 8^d17^h. This comprised several movements of at least 50γ in H and 10' in D but had ceased at 9^d6^h. At 9^d20^h21^h there was a sharp easterly movement in D (21') which was partially regained during the next hour and was accompanied by a minor series of oscillations in H. Unsteady conditions then prevailed, gradually lessening, until 15th, which was quiet. At 16^d2^h59^m0 a sudden movement occurred in all traces, and five hours later a disturbance of moderate dimensions began to develop. The principal characteristic was the large number of semi-regular oscillations. Z increased 130γ between 10^h2^h and 17^h and there were notable changes in D at 16^d16^h to 17^h (23'E), at 17^d0^h20^m to 0^h50^m (20'E), and at 17^d2^h2^h to 3^h2^h (20'W). The disturbance ceased at 17^d7^h, but unsteadiness continued to affect the traces at intervals, unsteadiness amounting to a state of brisk activity between 19^d14^h and 20^d4^h. At the height of this activity there were movements in H just exceeding 50γ, -notably one at 23^h2^h (*70γ) - and a wave in D at 21^h (12'). The interval from 20^d12^h to 24^d0^h was practically quiet. Unsteadiness then set in again and prevailed for the remainder of the month, becoming specially marked between 25^d21^h and 26^d5^h.

The range in declination during the month was from 9°25.6 on 17th to 10°0.8 on 16th; in horizontal intensity, from .18451 to .18630, both on 16th; in vertical intensity, from .43201 on 17th to .43341 on 16th.

March. A prominent, though small, wave appeared on all traces at 2^d4^h1^m which may have been the initial movement of the prolonged disturbance, which began to develop rapidly following an abrupt movement in all elements at 2^d8^h17^m6. Oscillations at first were numerous rather than large, but there was a general decrease of H between 2^d11^h and 13^a1^h (160γ), followed by a slow increase of Z (250γ) which lasted until 2^d20^a1^h and then relapsed rather quickly. A general easterly trend in D occurred between 2^d19^h and 3^d2^h during which the value ranged through 50′. A temporary lull was shown from 3^d4^h to 16^h, the elements returning to about normal values. The storm then rose to its climax, which occurred from about 3^d18^h to 4^d2^h. The extreme ranges during this interval were: 60′ in D, 410γ in H and 345γ in Z. Large movements continued until 4^d9^h, after which the disturbance rapidly subsided, the final movements being a wave in H (+80γ) and in D (16′E) at

 $4^{d}19^{h}$. Beginning with a sudden small change at $7^{d}5^{h}36^{m}$ there was prolonged minor, but rapid oscillation. This merged into the second large disturbance of the month which first showed as a rapid decrease of H (120y) from 8d8h to 9th. By 8d12h the disturbance was in full activity. Oscillations were numerous, — occasionally as many as ten per hour. The largest waves in H occurred at $8^d14^h_1$ (+180 γ), $9^d0^h_1$ (+150 γ), $9^d0^h_2$ (+140 γ) and $9^d1^h_1$ (+120 γ). Between $8^d23^h_1$ and 84^h_1 there was a double wave in D (24'E and W) followed during the next hour by two other waves of 20'. Z increased 200γ between 8^d12^h and $17\frac{1}{2}^h$ and then gradually declined to normal values which were reached by 9^d2^h . The disturbance was virtually over by 9^d10^h . There was much unsteadiness during the remainder of 9th and this condition persisted through 12th, 13th and 14th, prominent bays showing at 14d16h (+80y in H). At 15d8h41m4 there was a large typical movement of the sudden commencement class in all traces. That in H ranged through 90%, in D through 13'. The disturbance which followed was not specially noteworthy, and was quite short-lived, being over in less than ten hours. The principal feature was an increase of Z (140y) between 12th and 16th, soon afterwards declining to normal value. There was at the same time a temporary increase of H (100 γ). Further brisk disturbance was recorded between $16^{d}16^{h}$ and $17^{d}7^{h}$, the principal movement in which was a wave in D (15'W) at 17^dO₄^h. Considerable irregularity persisted during the next six days without presenting any notable features until 23d10h, when activity became very marked. Z increased 120 γ between $11\frac{1}{2}^h$ and $16\frac{3}{2}^h$ but quickly returned nearly to normal value. A wave in H (+50 γ) appeared at 15^h, accompanied by a steady easterly movement in D (16'); a rather prominent wave in D (15'W) occurred at 24^d3^h and a broad wave in H (+110 γ) between 24^d4³^h and 7^h, with which was associated an oscillatory easterly trend in D (15'). After 24^d8^h the normal condition of general unsteadiness returned and continued until 27d18h, becoming greatly accentuated during the second half of the period. A sudden movement of the traces at $27^{d}4^{h}29^{m}$ may have been connected with a protracted disturbance which began to develop at $27^{d}18^{h}$. This disturbance though not comprising large ranges, was very active and included many oscillatory movements of about 30 or 40 γ . A notable feature was the general easterly movement in D (25') between $27^d23\frac{1}{2}^h$ and 28^d2^h . There was also a considerably enlarged diurnal inequality in Z on 28th, the whole range being 160 γ . After a short lull, extending from 29^d2^h to 12^h, activity was resumed with the same general characteristics, and prevailed until 31^d18^h.

The range in declination during the month was from 9°6.2 on 3rd to 10°12.3 on 8th; in horizontal intensity, from .18233 on 3rd to .18714 on 2nd; in vertical intensity, from .43099 to .43443 both on 3rd.

April. Conditions were markedly unsteady throughout the month, the only days on which smooth or nearly smooth traces appeared being 21st to 24th. A movement of "sudden commencement" type took place at 3d15h1,0, but was not followed by a significant disturbance, although many small irregularities were shown during the next thirty-six hours. A decrease of H (85γ) occurred between 6d7h and 9h and a very steep wave (-40y) at 6d11h50m. Another "sudden commencement" movement (in which the range in H was 105 γ) was recorded at 8^d 21 h 49 m 2, affecting all traces, but again, the activity which followed was confined to a large number of minor oscillations, few of these exceeding 5y, and the prevalent state of general unsteadiness was scarcely accentuated. At about 16^d12ⁿ there were signs of increasing disturbance but they led to no development until 17^d12^h24.8 when a very sudden movement in all traces was the beginning of a storm, which though comparatively short was at its climax relatively intense. Almost the full ranges (which were 67' in D and 3737 and 345 γ in H and Z respectively) were comprised within the period $19\frac{1}{2}^h$ to $22\frac{1}{2}^h$; and in the case of Z the extreme range was accomplished between 21^h55^m and 22^h11^m that is in sixteen minutes of time. The storm was virtually over by $18^{d}2^{h}$, though large numbers of small oscillations continued for a further eighteen hours, and at $18^{d}21\frac{1}{2}^{h}$ there was a prominent wave in D (25'E). A further period of minor activity began at $19^{d}5^{h}$ and lasted until $21^{d}0^{h}$. This also was notable for the number of small oscillations, as many as 15 being recorded in one hour. A quiet period which began at 21d9h lasted until 25d15h when a wave in H (+60y) at 163h presaged the return to marked unsteading ness, - a condition which prevailed for the remainder of the month, though most pronounced between 26^d14^h and 27^d0^h.

The range in declination during the month was from 8°58'8 to 10°6'1; in horizontal intensity, from .18332 to .18705; in vertical intensity, from .43029 to .43374. All these ranges occurred on 17th.

May. Conditions were very unsteady on 1st, especially during the earlier hours, and there were waves in H at $12\frac{1}{2}^h$ (+25y) and $18\frac{1}{2}^h$ (-40y). Unsteadiness prevailed in a smaller degree until the end of 6th. A period of quiet conditions followed which continued until 11^d12^h. Irregular movements then began and became increasingly frequent during 12th. The largest was a wave in H (+45 γ) at $12^{d}2^{+}_{4}$. Brisk activity set in at $13^{d}15^{h}$ in the form of a series of nearly regular oscillations having an average period of about one hour and an amplitude in H, of 30 to 40%. The regularity disappeared after $14^{
m d}5^{
m h}$ the character then changing to large numbers of quite small movements. These gradually increased in size during 15th until they reached the dimensions of those on 13th, being however, less regular and more frequent. After 16d 18h activity declined markedly, though the diurnal inequality remained above average in range. An instance of this was the increase of 90γ in H between 18^d16^h and 18^h . From 19^d18^h to $22^d22^{\frac{1}{2}h}$ only slight irregularities disturbed the traces, but at 22 122 143 4 there was an abrupt movement in each which in the case of H represented an increase of 70γ in five minutes. Considerable activity followed during the next thirty hours, but the movements were seldom greater than 20 y excepting the very rapid easterly drift in D (26') between 23^d3½^h and 5^h, partially restored by an even more rapid westerly movement (14') between 23^d6^h and 6½^h. At 24^d6^h45.0 an exceptionally sudden movement was recorded in all elements, amounting almost to a momentary dislocation of the traces. The change in H was +110y; in D 10'W, in Z +28γ. Normal values were regained within two minutes and the subsequent disturbance was particularly brief. It consisted mainly of one large double wave in each element (having many minor oscillations superposed) beginning at 24^d7^h30^m and ending at 24^d10^h30^m. The full ranges were: 240 y in H,60 y in Z and 38' in D. From 24^d11^h until 28^d3^h almost continuous slight disturbance affected the traces. Occasionally as many as ten small waves (about 10 γ) were recorded in one hour. Disturbance was particularly notable between 26^d15^h and 27^d4^h and between 28^d12^h and 29^d0^h . At $29^d14^{\frac{1}{4}h}$ a sharp increase in H began which had amounted to 110γ by $15^{\frac{1}{2}h}$. It was preceded and followed by a steady increase in Z (90γ), the maximum being reached at $17^{\frac{1}{2}h}$. The decline to normal values was gradual. A nearly quiet period began to 30^d3^h and lasted until 31^d8^h . Activity then recommenced and by the end of the day was brisk, several movements in H approaching 50 y.

The range in declination during the month was from 9°18.0 on 24th to 9°58.2 on 19th; in horizontal intensity, from .18374 to .18702, both on 24th; in vertical intensity, from .43184 on 16th to .43320 on 29th.

June. A brief spell of activity, in progress at the opening of the month, ended at 1^d10^h . The principal movement was a double wave in H $(\pm 50\gamma)$ at 1^d0^h to $1\frac{1}{4}^h$ accompanied by a related change in D (9'W and E) and a rapid temporary decrease in Z (45 γ). A period of considerable unsteadiness followed which, with a very sudden movement at $5^d \gamma^h 25^m 6$, merged into one of brisk activity lasting until $6^{d}3^{h}$. The initial movement in H was an increase of 65γ followed, after three rapid oscillations, by a wave (-90γ) at $8\frac{1}{4}$. Subsequent movements were much smaller and of an oscillatory character, but a slow general increase in H occurred (150 γ) between $14\frac{1}{2}^h$ and $18\frac{1}{4}^h$ with a gradual return to normal value which was attained by $6^{d}O_{\frac{1}{2}}^{1}$. A movement of D (18'W) accompanied the wave in H, and the disturbed period ended with a prominent wave in D (17'E) at 6dO1h. Very unsteady conditions persisted throughout 7th 8th and 9th, moderating on 10th, but still far from quiet. At 13d17h49m0 a typical "sudden commencement" was registered in all elements, - +85Y in H, +22Y in Z, 5'W in D. The disturbance which followed was only of minor dimensions, the movements being numerous rather than large. The principal periods of activity were from 12^d23^h to 13^d5^h and from $14^{d}17_{2}^{h}$ to 22^{h} . Waves just exceeding 20' occurred in D during the first of these, the total range being 32', that of both H and Z being approximately 100%. In the second period, the most prominent feature was a steep wave in H (+120 γ) at $14^{d}20_{4}^{3h}$. The disturbance had subsided by $15^{d}3^{h}$, though much unsteadiness was still shown by the traces. Further disturbance began with an abrupt change in all elements at 17^d3^h1^m and continued as a sequence of small rapid irregular oscillations until 14h when the oscillations in H were superposed on larger waves. The most prominent of these was between 17^d17^h and 18½^h (+110γ). Between 17^d18^h and 19^h there was an easterly swing of 16' in D. From $18^{d}4^{h}$, by which time the disturbance was over, a return to the prevailing condition of marked unsteadiness was apparent. This continued unabated until the end of 28th, particularly conspicuous periods being between $22^{d}16^{h}$ and $23^{d}18^{h}$ and between $24^{d}16^{h}$ and $25^{d}20^{h}$, when the dimensions of a minor disturbance were nearly reached, with several movements exceeding 50γ in H. After a short quiet spell on 29th, unsteady conditions returned on 30th.

The range in declination during the month was from $9^{\circ}22.6$ on 14th to $9^{\circ}59.7$ on 17th; in horizontal intensity, from .18481 to .18707 both on 14th; in vertical intensity, from .43142 on 14th to .43304 on 17th.

July. There was a continuance of unsteady conditions during the first three days, and a broad wave appeared on the H trace between 2d14h and 18h (+90y). An almost quiet period lasted from 3d22h to 6d10h. Conditions then became unsteady again, particularly during the second half of 8th, the early part of the 10th and the middle part of 11th when a few movements in H approached 50y. There was also a rapid increase of H (60y) between 13d15h and 16h and an abrupt movement, most noticeable in D, at 16d1h10m. A second quiet spell began at 16d3h and ended at 17d9h when signs of approaching disturbance appeared. The disturbance itself commenced suddenly at 17d17h48m4 with a very large movement in H (+350y in twenty minutes) accompanied by much smaller changes (50y) in D and Z. H returned to normal values in three main oscillations, the first and chief (-300y) between 17d18h10m and 18h40m, the others between 19h20m and 21h5m and between 21h5m and 22h55m respectively. The large movements were succeeded by a series of many oscillations of the order of 20y in H and D, with a few rising to 50y and over, especially during the period 18d8h to 12h. The character then changed and large irregular movements began again. The principal example was in H which experienced a wave of ~150y between 18d14h and 16h. The change in Z between 18d13h and 18h was *110y, but this increase was steadily lost and had disappeared by 19d1h. Oscillations of a more or less regular type began about 19d10h, the range in H being between 30y and 40y. There was a sharp movement in D (15 E) between 20d4h and 5h, - by which time the oscillations had become insignificant, - and a prominent wave in H (+80y) at 20d15h. Great unsteadiness continued to be the prevailing characteristic of the traces until the end of 27th, although less marked on 21st and the first half of 22nd. Mention may be made of a rapid decrease of H (65y) between 23d6h and 6h40m and of a steady increase (90y) between 24d13h40m and 16h15m. Three specially prominent oscillations in H occurred

The range in declination during the month was from 9°20'2 on 18th to 10°0'4 on 17th; in horizontal intensity, from .18470 on 19th to .18992 on 17th; in vertical intensity, from .43193 on 9th to .43341 on 18th.

August. Conditions were rather disturbed at the beginning of the month, irregular oscillation, particularly in H, being the prevailing characteristic. A few of the movements were of the order of 30y. There was a notable abrupt change of declination (crochet 7'W) at 1d15h17m which however, was quite short-lived, the value returning to normal in twelve minutes. Unsteadiness gradually diminished after 3rd, but there was a temporary revival between 6d10h and 7d5h. From 8d18h to 9^d21^h conditions were practically quiet. Small irregular movements then re-appeared and increased in size and frequency until by 12^d0^h a state of moderate disturbance existed. A particularly sharp movement, resembling a "sudden commencement" was recorded at 12d9h5m9, in which the range of the double wave in H was 70 γ . During the second half of 13th disturbance further increased and between $16^{h}55^{m}$ and $17^{h}30^{m}$ H decreased 130 γ , recovering most of this decrease during the next hour. From $14^{d}4^{h}$ to $15^{d}9^{h}$ only small irregularities appeared on the traces. Then a brisk storm began with a sudden movement in all elements at 15^d9^h50.6 (H, +50γ; D, 49'E). Subsequent oscillations were very numerous, averaging six or seven per hour, and were most extensive in H, a few reaching 50 γ . A notable wave in H occurred between $15\frac{1}{2}^h$ and $16\frac{1}{2}^h$ (+140 γ). The climax of the storm was between 15^d 22 h and 16^d 1 h . There was an oscillatory decrease of H (270 γ) from 15^d 20 $\frac{1}{2}^h$ to 16^d 0 $\frac{1}{2}^h$ followed immediately by a rapid increase (1807). Similar changes in the other two elements were registered (20 E in D; 70 Y in Z), and then at $16^{\rm d}O_2^{\rm ih}$ an exceptionally prominent wave in both D and Z practically brought the storm to an end. The amplitudes of these waves were, respectively, *40' and ~180γ. After a short period of relative quiet, disturbance recommenced at 16 to and continued without intermission until the end of 21st. The movements were numerous, and many approached 100 y in horizontal intensity with corresponding changes in D. The principal movements approached 100 γ in horizontal intensity with corresponding changes in D. The principal movements only will be mentioned. In H: an increase of 80 γ between $16^d 10\frac{1}{2}^h$ and $11\frac{1}{2}^h$; a wave (-90 γ) at $17^d 16\frac{1}{2}^h$; a decrease of 130 γ between $18^d 6^h$ and $9\frac{1}{4}^h$; a wave (+80 γ) at $18^d 18\frac{1}{2}^h$; an irregular wave (-120 γ) at $19^d 16\frac{1}{2}^h$; a wave (+90 γ) at $20^d 16^h$. In D: a movement 20'E, between $17^d 4\frac{1}{2}^h$ and $6\frac{1}{2}^h$; a wave, 15'E, at $17^d 21\frac{1}{2}^h$; a wave, 12'W, at $18^d 1\frac{1}{2}^h$; a wave, 15'W, at $20^d 1\frac{1}{2}^h$; a wave, 14'E, at $21^d 20\frac{1}{2}^h$. In Z: a slow surge (+110 γ) between $17^d 12^h$ and 22^h ; a wave (-60 γ) at $18^d 2^n$; much enlarged diurnal inequality on 18th, (100 γ), and on 19th; a wave (-40 γ) at $20^d 1\frac{1}{2}^h$; increase of 65 γ between $20^d 12^h$ and $16\frac{1}{2}^h$. A second relatively quiet spell lasting from $20^d 12^h$ and $20^d 12^h$. $22^{
m d}$ $^{
m h}$ to $^{
m h}$ was terminated at $22^{
m d}$ $^{
m h}$ 10 $^{
m m}$ 8 by a remarkable sudden change in all elements. In H an increase of 95 yoccurred in less than one minute, followed immediately by a decrease of 170 y in the next minute. There was a similar change in D, 18'W and 33'E and in Z +25 y and -55 y and a very

active storm developed at once. The climax was soon past, however, and with the exception of a prominent peak in H (+160 γ) at 23^dO₂^h movements were numerous rather than large after 22^d13^h. The total ranges during the most active period were 415 γ , 140 γ and 54' in H, Z and D respectively. There were prominent changes on 23rd which it is desirable to mention besides that in H, already noted, namely, a movement in D (23'E) between 1½^h and 2½^h; a decrease of Z (70 γ) between 0½^h and 1½^h; and an increase of H (110 γ) accompanied by an increase of Z (70 γ) between 13½^h and 14^h. Great and continuous unsteadiness persisted until 26^dO^h, after which the movements were intermittent and smaller, declining to a practically quiet condition between 27^d9^h and 28^d12^h. Unsteadiness then revived, but was slight between 30^d10^h and 31^d10^h.

The range in declination during the month was from 9°20'.1 on 16th to 10°0'.3 on 15th; in horizontal intensity, from .18238 on 22nd to .18711 on 15th; in vertical intensity, from .43050 to .43347 both on 16th.

September. Conditions were unsteady, generally, during the whole of the month. The first storm was preceded by an abrupt movement in all traces at $2^d23^h26^m$, that of H showing +60 γ . Full development was delayed until 3^d6th when it was almost sudden and was characterised by rapid oscillatory changes frequently exceeding 50 γ in H. There was a general decrease of H (200 γ) between $3^d \gamma^h$ and , including one double wave (±70γ) in the short space of three minutes at 8h30m, but recovery set in at once and in spite of several large oscillations, three of which exceeded 1007, was complete by $17^{\rm h}$. After the initial stages the movements in D were comparatively small, though numerous. The most remarkable change occurred between $3^{\rm d}9^{\rm h}$ and $9^{\rm ah}_{\rm a}$ (30'W). Vertical intensity increased steadily between $3^{\rm d}10^{\rm h}$ and $19^{\rm h}$ (120 γ), after which there was an irregular return to normal value, complete.by 24h. The final movement was a decrease of H (60y) between 4d5h and 6h. Another abrupt movement in all traces occurred at $4^d 13^h 46^m$ (+65 γ in H). It was followed at once by about six hours of brisk disturbance, but no movement exceeded 90%. A third abrupt movement was registered at 5^d18^h2^m and was followed by about eight hours of moderate activity. The movements, however, were considerably smaller than those on the previous day. Beginning at 6d12h and lasting for approximately 48 hours there was a period of very considerable disturbance. Movements at first were not large, although the diurnal range of Z reached 90 y on the 6th, but from 7d14h to 22h numerous irregular oscillations appeared, at least one of which exceeded 100γ in H. Prominent changes in D occurred at 7^d1^h (12'W) and at 7^d18½^h (18'E) and 20^h (15'W); while the total range in Z was 85γ. From 9^d1^h to 11^d11^h conditions were nearly quiet, but from then onwards they were, in Z was 85γ. From 9^d1ⁿ to 11^d11ⁿ conditions were nearly quiet, but from then onwards they were, in general, highly disturbed until 29^d0^h, — an unusually prolonged period. Some of the principal features of the traces will be mentioned:— 11^d16^h to 17½^h, a wave in H (*85γ); 13^d6^h to 7½^h, a decrease of H (90γ); 13^d21½^h to 23^h, a wave in D (22'E); 14^d11^h to 24^h slow surge in Z (*120γ) 14^d17-18^h, a wave in D (17'E); 14^d21^h to 23^h a wave in D (21'W); 15^d14^h54^m9, a movement of "sudden commencement" type in all traces, *105γ in H, 13'W in D; 15^d20-21½^h, a double wave in D (16'W and E); 17^d18-18½^h, a sharp peak in H (*95γ); 17^d22½^h to 18^d1^h, a wave in D (20'W); 18^d17^h to 18^h, a wave in D (18'E) followed by a wave in H (*90γ); 18^d23½^h a wave in Z (~50γ) and in D (15'W); 22^d16½^h a wave in D (17'E); 23^d5^h to 7^h, a wave in H (*80γ); 23^d12^h9^m1, a quasi-sudden commencement move in all traces. move in all traces, (-90 γ in H). The last mentioned movement was probably connected with a great storm which developed fairly quickly from $24^{d}13^{h}50^{m}$ onwards. The storm was remarkable for the range in Z (340 γ), which exceeded the range in H by about 30 γ . The period of greatest activity extended from $24^{d}15^{h}$ to 21^{h} and included the maximum range in D (67'), but there was a second very active interval from $25^{d}0^{h}$ to 7^{h} , after which the storm rapidly declined, though continuing in a minor degree until 26^d4^h. During the remainder of the month there was a state of diminishing general unsteadiness, terminated at 30d18h18m2 by a sudden "kick" in all traces presaging another storm. The movement in H was an increase of 60%. The development of this storm, however, did not take place at once and belongs to October.

The range in declination during the month was from 9°12.1 on 25th to 10°19.0 on 24th; in horizontal intensity, from .18406 on 25th to .18714 on 24th; in vertical intensity, from .43144 to .43486, both on 24th.

October. From $1^d 4\frac{1}{4}^h$ the traces were agitated by many small movements, a state which lasted until $1^d 12^h$. The irregularities then became fewer, but after $1^d 19^h$, considerably larger. There was a decrease of H (110 γ) between $19\frac{1}{2}^h$ and $19\frac{1}{2}^h$ and a movement of D (17'E) between $21\frac{1}{2}^h$ and 22^h . The

period from 2^d15^h to 3^d6^h comprised a disturbance sufficiently great to be classed as a small storm. Several movements exceeded 100 γ in H and 10' in D, while Z, which had been steadily increasing, diminished irregularly by 180 γ between $2^d15^h_2$ and $3^d0^h_2$. The largest movements in H occurred between $2^d18^h_2$ and 19^h (-120 γ) and between $3^d0^h_2$ and 1^h (+120 γ), the latter being accompanied by a wave in D (22'E) and a wave in Z (-60 γ). After 3^d6^h conditions became rapidly less disturbed and the period from 4^d0^h to 7^d16^h was relatively quiet. Activity, which recommenced at 7^d16^h , steadily increased during the next two days. It continued unabated until the end of 12th and then in varying degree, but with no quiet intervals, until the end of 15th. Some of the more prominent movements will be given individual mention. The first was a wave in D (15'E) $7^d20^h_1$ to 22^h_1 ; there was an increase of H (100 γ) between 9^d16^h and 16^h ; a range of 140 γ in Z between 9^d16^h and 10^d2^h ; a wave in D (15'E) at $9^d21^h_2$; a wave in D (20'E) between $10^d19^h_2$ and 16^h ; a wave in H (+100 γ) between $12^d1^h_2$ and 16^h ; a wave in H (+100 γ) between $12^d1^h_2$ and 16^h ; a wave in H (+100 γ) between $12^d1^h_2$ and 16^h ; a wave in H (+100 γ) between $12^d1^h_2$ and 16^h ; a wave in H (+180 γ) between $16^d1^h_2$ and 16^h between $11^d19^h_2$ and 16^h ; a wide bay in D (16'W) between $14^d10^h_2$ and, finally, a doublewave in H (+180 γ) between $15^d21^h_2$ and 23^h_2 . From 16^d0^h the irregularities became, in general, much smaller, but on 18th and 19th there was a partial return to the earlier condition and prominent waves occurred in all traces at $19^d19^h_2$ h. From 16^d0^h the irregularities became, in general, much smaller, but on 18th and 19th there was a partial return to the earlier condition set in. There were still isolated waves on the traces, however, the most prominent of which was one in D (12'W) between $24^d0^h_2$ and

The range in declination during the month was from 9°18.4 on 2nd to 9°56.7 on 9th; in horizontal intensity, from .18459 on 10th to .18686 on 15th; in vertical intensity, from .43174 on 3rd to .43356 on 9th.

November. General unsteadiness prevailed at first, which diminished gradually until 5^d, conditions then becoming quiet. Unsteadiness was resumed from about 7^d20^h and from 8^d10^h took the form of a series of almost regular oscillations, specially notable in H and concluding at 9^d1½^h. The average amplitude of these was 20\gamma in H and 3' in D. They were inconspicuous in Z. A spell of brisk activity began at 9^d12^h.0^m with a sharp decrease of H (100\gamma). This was followed by a series of irregular oscillations, a few of which reached 50\gamma in amplitude, terminating at about 10^d5^h. The accompanying changes in D were similar, but between 9^d20^h and 10^d2^h were considerably larger. In particular, there was an easterly movement of 26' between 10½^h and 21^h; a steep wave (23'W) at 23^h and a broader wave (18'W) between 10^d1^h and 2^h. The most prominent feature of the Z trace was a trough (-60\gamma) at 9^d23^h. A temporary lull extending from 10^d5^h to 10^h was followed by renewed activity, the movements being rather less frequent than on the previous day. A series of four sharp peaks in H, with associated changes in Z and D, was recorded between 10^d20^h and 11^d2^h, the largest of which (+90\gamma) occurred at 10^d20^h. At 11^d6^h52^m the character of the disturbance changed abruptly to one in which many small sharp movements predominated, - sometimes at the rate of fifteen to twenty per hour. A few larger isolated waves appeared, the principal of which, in H, occurred at 11^d14^h (-90\gamma), and in D, at 11^d41^h (22'E) and 17^h18'E). In Z there was a slow surge (+80\gamma) between 11^d13^h and 21^h. After 11^d21^h the former character returned, but activity steadily declined, and by 12^d6^h the normal degree of prevailing irregularity was reached. A rather prominent wave in the H trace (+50\gamma) occurred at 15^d2h, and another (+55\gamma), with a steep rise at 16^d22^h41^m and associated movements in the other traces, - reached its crest

The range in declination during the month was from 9°17.3 on 9th to 9°59.1 on 11th; in horizontal intensity, from .18449 on 9th to .18656 on 10th; in vertical intensity, from .43190 on 9th to .43335 on 11th.

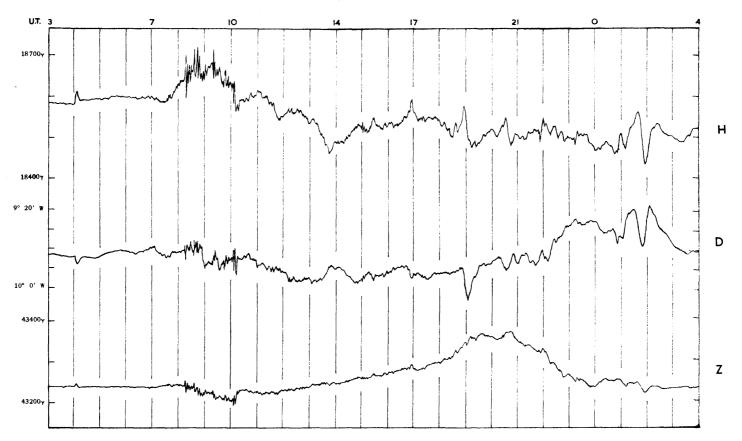
December. There was an abrupt movement in all traces at 1^d8^h52^m7 followed merely by a small wave in H (-50γ). From 1^d12^h to 2^d10^h conditions were practically quiet, but slight general unsteadiness then appeared which increased considerably during 4^d. At 5^d3ⁿ a wave in D (10'W) was followed by a rather smaller one in H (+35γ) and unsteadiness continued to increase, the period between 5^d23^h and 7^d2^h being moderately active with many minor oscillations superposed on larger movements. The whole range, however, amounted only to 100γ in H and 29' in D. There was a prominent wave in D (10'E) at 7^d16ⁿ and a short spell of moderate activity between 9^d13^h and 10^d0^h in which the largest movement was an increase of 70γ in H at 9^d19ⁿ Unsteadiness became very marked from 11^d16^h to 13^d4^h and comprised one bay in H just exceeding 60γ (at 12^d16ⁿ2^h). From 16^d6^h to 18^d0^h quiet conditions supervened. Slight unsteadiness then returned, but a further quiet spell appeared which lasted from 21^d14^h to 22^d8^h. Between 22^d12^h and 31^d0^h there was general unsteadiness in varying degree, including a few isolated bays, the chief of which was one in H (+60γ) at 24^d21ⁿn. December 31 was practically quiet.

The range in declination during the month was from 9°22.2 on 6th to 9°50.2 on 23rd; in horizontal intensity, from .18508 on 12th to .18642 on 24th; in vertical intensity, from .43220 to .43290 both on 6th.

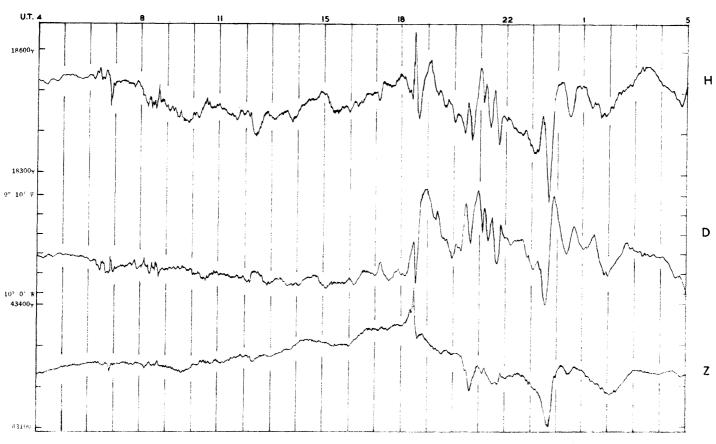
The absolute maximum and minimum values respectively of the elements recorded during the year were:

Declination, 10°19'.0 on September 24th; 8°58'.8 on April 17th. Horizontal Intensity, .18992 on July 17th; .18233 on March 3rd. Vertical Intensity, .43486 on September 24th; .43029 on April 17th.



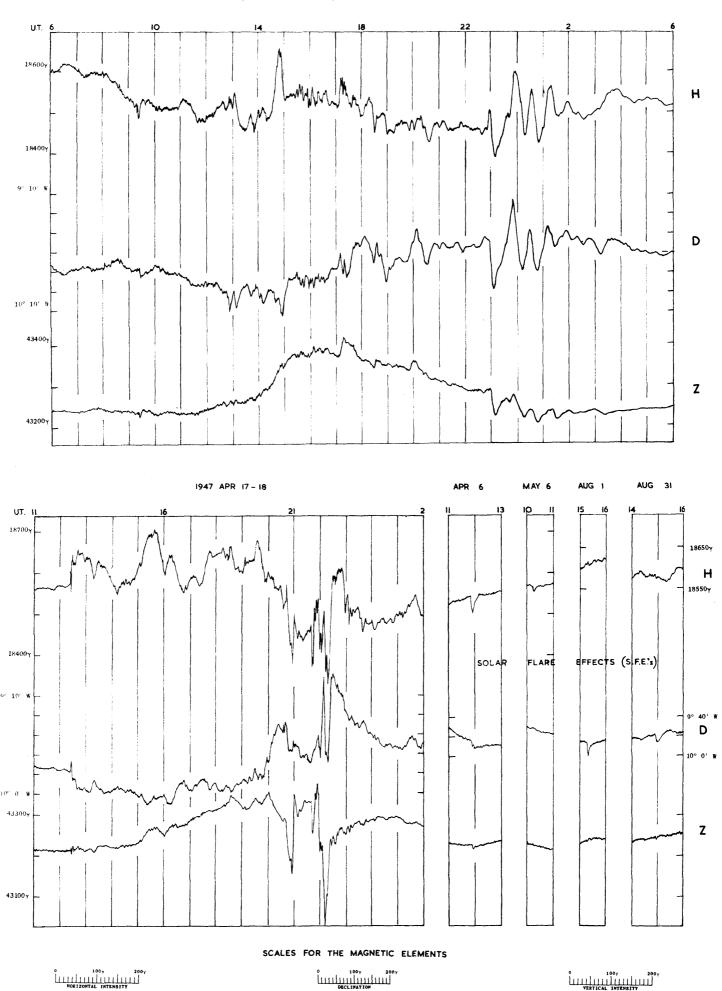




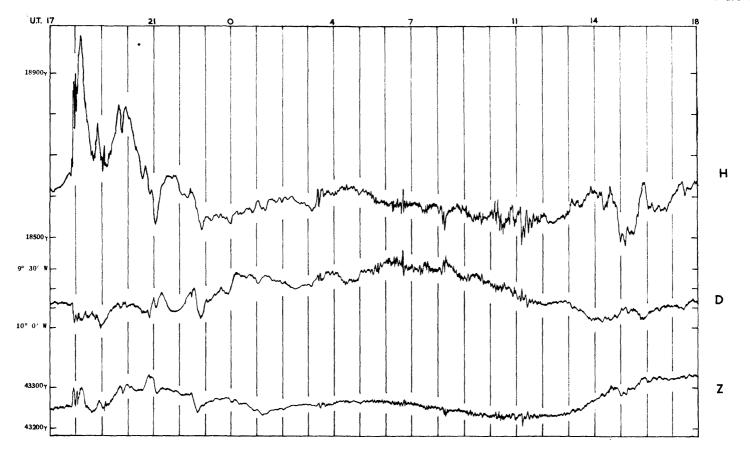


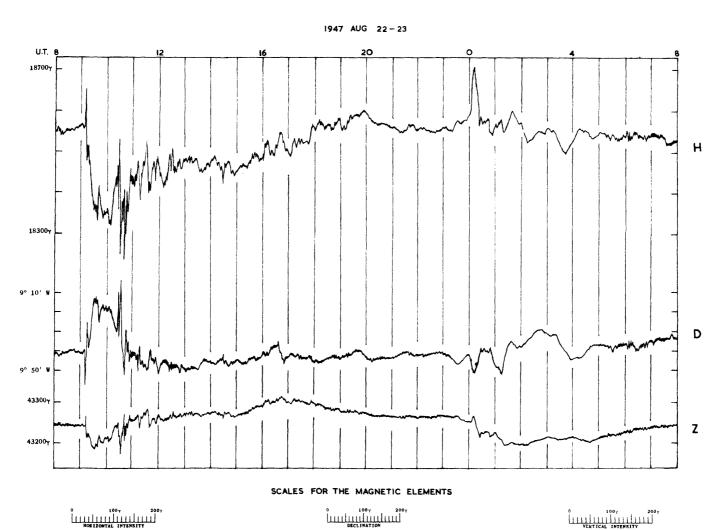
SCALES FOR THE MAGNETIC ELEMENTS

Plate II 1947 MAR 8-9



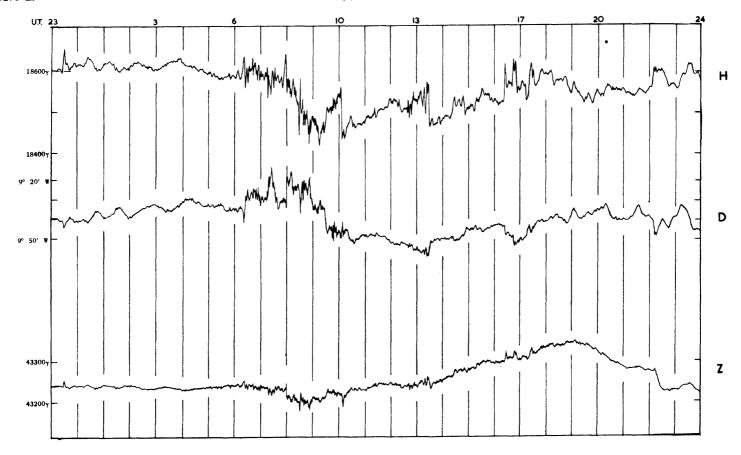




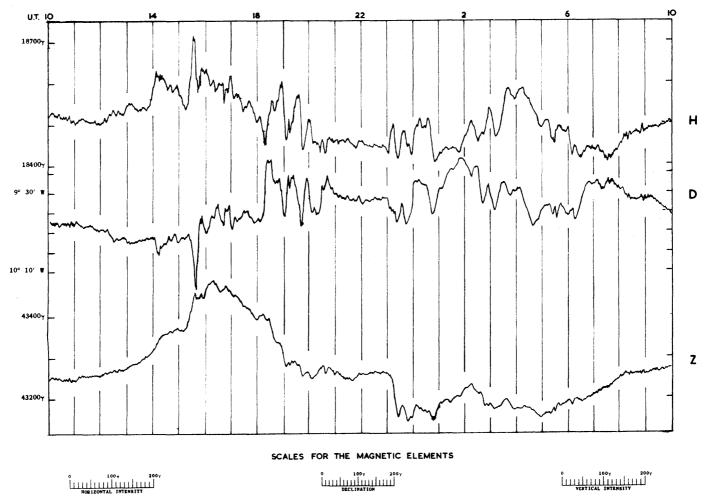


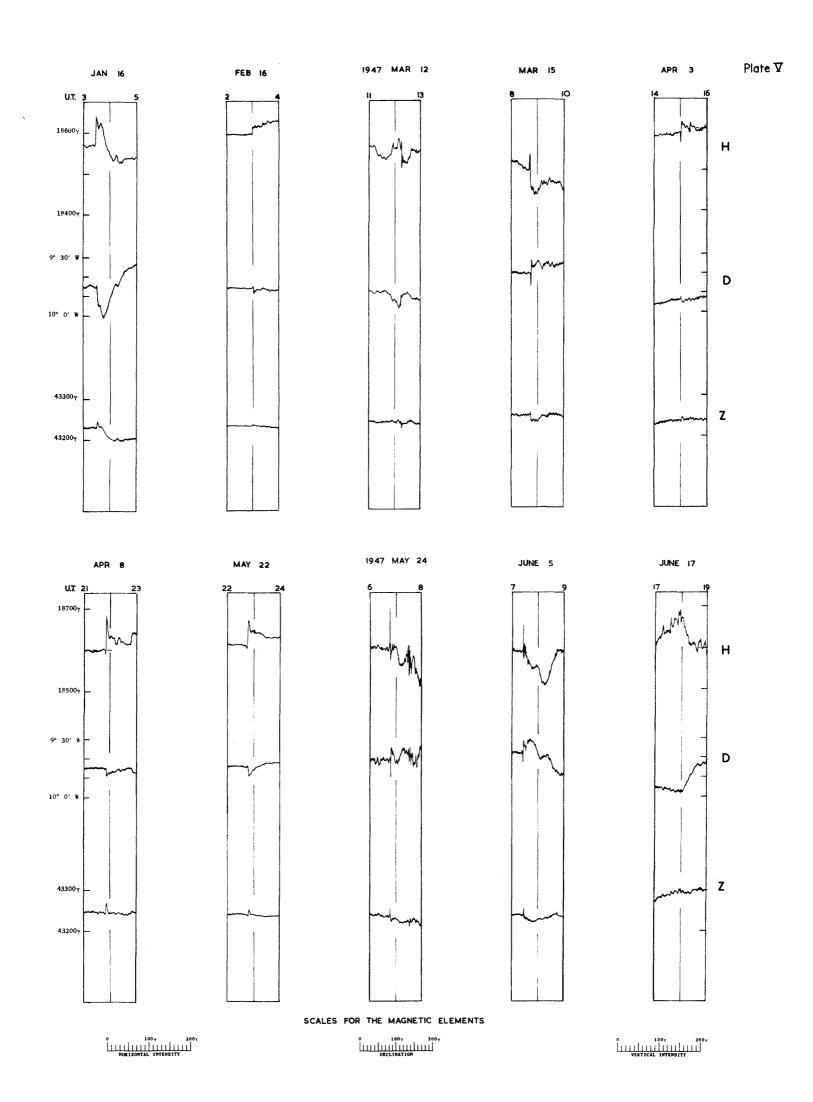


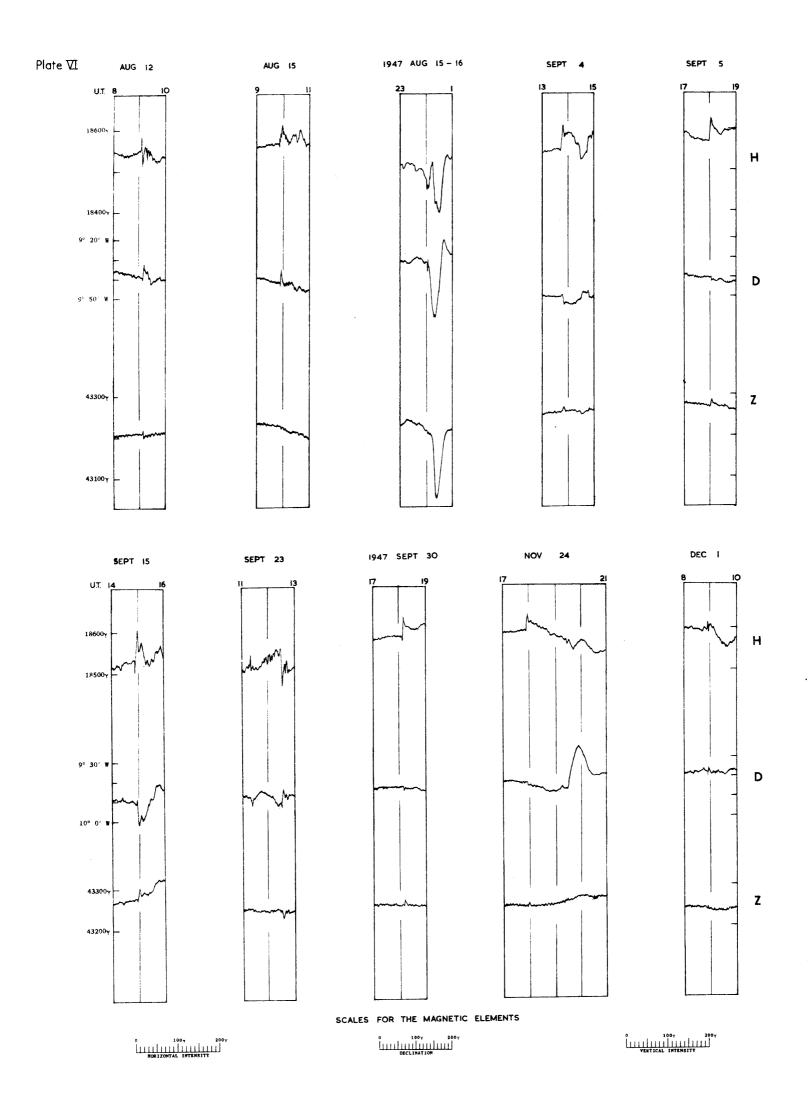
1947 SEPT 2 - 3











Results of Meteorological Observations

1947

				TABLE	XVII.	- DAIL	Y RESUL	TS OF 1	гне мет	EOROLO	GICAL	OBSER	VATIONS					
	BAROMETER			ŗ	EMPERATU	RE							TE	MPERATUR	E	ω.		
Month and	Hourly rrected 1 to 32 e1t)		(Of the A	ir		Of Evapo- ration	Of the Dew Point	the Ai and	rence be r Temper Dew Poi mperatur	ature nt	f Humidity ion = 100)	Of Rad:	iation	Of the Earth 4 ft.	Rain collected in Gauge No.6, whose receiving surface is 5 inches above the Ground	Daily Dura- tion	Sun above
Day 1947	Mean of 24 Hourly Values (corrected and reduced to 32° Fanrenhelt)	Highest	Lowest	Daily Range	Mean of 24 Hourly Values	Excess above Average of 65 Years	Mean of 24 Hourly Values	Deduced Mean Daily Value	Mean	Great- est	Least	Degree of (Saturatio	Highest in Sun's Rays	Lowest on the Grass	below the surface of the Soil	Rain collection No.6, whose surface above t	of Sun- shine	Horizon
	in.	۰	0	0	0	٥	۰	٥	0	۰	٥		0	٥	0	in.	hours	hours
Jan. ₁ 2 3 4 5	29. 828 29. 888 29. 981 29. 973 29. 672	43.0 44.8 44.0 37.4 36.3	32. 2 28. 9 28. 8 29. 8 29. 8	10.8 15.9 15.2 7.6 6.5	35.7 38.9 35.8 34.7 32.7	- 2.9 + 0.5 - 2.5 - 3.6 - 5.5	34. 7 37. 6 34. 2 33. 4 31. 4	32.9 35.7 31.4 31.1 29.4	2.8 3.2 4.4 3.6 3.3	5.1 9.1 6.7 5.1 6.0	1.0 1.3 1.9 0.3 1.0	90 88 84 86 86	52. 2 46. 9 72. 4 45. 2 45. 8	23.6 18.5 18.4 23.0 23.0	44.8 44.7 44.6 44.4 44.2	0.000 0.147 0.002* 0.000 0.000	1.6 0.1 2.7 0.3 0.0	7.9 7.9 7.9 8.0 8.0
6 7 8 9 10	29.552 29.621 29.539 29.554 29.758	31.0 34.9 45.8 45.1 44.5	24. 7 28. 0 33. 8 35. 1 29. 5	6.3 6.9 12.0 10.0 15.0	27.7 32.2 37.4 40.9 38.1	-10.4 - 5.8 - 0.5 + 3.0 + 0.2	26.1 31.3 37.0 39.4 37.4	22. 7 29. 8 36. 4 37. 4 36. 3	5. 0 2. 4 1. 0 3. 5 1. 8	7.0 3.8 1.7 9.4 4.1	3.4 0.0 0.0 1.1 0.0	80 90 96 87 93	30.0 44.3 46.0 69.9 58.0	25. 4 27. 0 31. 6 27. 0 20. 4	43.9 43.8 43.7 43.6 43.6	0.183 0.179 0.166 0.000 0.124	0.0 0.0 0.0 4.2 0.4	8.0 8.0 8.1 8.1 8.1
11 12 13 14 15	29.349 29.363 29.228 29.556 29.782	50.0 48.6 48.7 53.0 52.2	40.3 39.4 38.2 37.0 45.8	9.7 9.2 10.5 16.0 6.4	44.4 44.1 43.8 46.9 49.7	+ 6.5 + 6.2 + 5.8 + 8.9 +11.6	42.9 42.2 40.5 45.1 46.9	41.0 39.7 35.7 43.0 43.7	3. 4 4. 4 8. 1 3. 9 6. 0	7. 2 7. 5 16. 3 7. 0 8. 6	0.7 1.7 4.0 2.2 3.2	88 85 73 86 80	55.8 60.3 77.7 57.2 65.6	34.9 34.0 31.2 30.0 39.0	43.6 43.3 43.5 43.7 43.8	0.048 0.201 0.116 0.050 0.002	0.0 2.5 3.6 0.0 0.0	8. 2 8. 2 8. 2 8. 3 8. 3
16 17 18 19 20	29.816 30.020 30.280 30.244 30.097	54.2 51.5 47.6 39.2 39.7	43.9 39.0 35.3 35.2 33.3	10.3 12.5 12.3 4.0 6.4	48.3 45.6 41.1 37.5 37.0	+10.0 + 7.1 + 2.5 - 1.2 - 1.8	45.6 42.7 39.2 37.1 35.5	42.4 38.8 36.5 36.5 33.1	5. 9 6. 8 4. 6 1. 0 3. 9	12.5 12.5 9.5 2.5 10.7	2.1 3.4 0.6 0.0 0.4	80 77 83 96 85	88.1 75.3 73.0 42.1 62.6	32.5 32.0 26.2 27.1 28.0	43.8 43.9 44.2 44.0 44.0	0.005 0.028 0.000 0.000 0.000	6.5 2.5 5.2 0.0 0.9	8.3 8.4 8.4 8.5 8.5
21 22 23 24 25	30.111 30.148 30.236 30.315 30.050	38.0 37.3 33.6 31.9 32.0	27.0 26.7 26.8 26.2 22.4	11.0 10.6 6.8 5.7 9.6	32.8 32.0 31.0 28.7 28.6	- 6.0 - 6.8 - 7.9 -10.2 -10.5	31.0 29.9 29.3 27.3 27.5	28. 1 26. 5 26. 5 24. 8 25. 6	4.7 5.5 4.5 3.9 3.0	12.8 14.7 6.8 6.7 3.8	1.6 2.2 1.3 1.9 0.9	82 77 81 83 86	60.9 69.1 51.0 49.0 51.0	18.5 15.9 21.7 19.5 10.6	43.8 43.8 43.7 43.6 43.2	0.000 0.005* 0.003 0.002 0.007	0.4 2.9 1.2 0.1 0.1	8.5 8.6 8.7 8.7 8.8
26 27 28 29 30	29. 792 29. 934 29. 826 29. 818 29. 640	31.5 29.5 28.8 25.8 29.7	25.7 26.0 14.0 11.3 15.2	5.8 3.5 14.8 14.5 14.5	28. 2 28. 0 24. 7 18. 6 23. 4	-11.1 -11.5 -14.9 -21.1 -16.3	27.7 26.9 23.8 17.7 22.3	26.9 25.0 21.7 15.2 19.8	1.3 3.0 3.0 3.4 3.6	3. 2 7. 7 3. 7 5. 7 5. 5	0.0 0.0 0.8 1.3 1.0	94 86 88 85 84	44. 4 64. 1 58. 6 61. 2 68. 3	24.6 24.6 5.3	42.9 42.6 42.6 42.3 42.2	0.057 0.029 0.178 0.000 0.000	0.0 1.8 0.2 5.4 1.3	8.8 8.9 8.9 9.0 9.0
31	29.536	35.0	25.0	10.0	30.2	- 9.5	29.3	27.7	2.5	5.6	1.0	90	57.0	19.3	42.0	0.100	0.3	9.1
Means	29.823	40.1	30. 1	10.0	35.4	- 3.2	34.0	31.7	3.8	7.4	1.3	85.5	58.2	24.6	43.6	Sum 1.632	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 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 January 3 and 22 are derived from hoarfrost.

The mean reading of the Barometer for the month was 29.823 in., being 0.022 in. higher than the average for the 65 years, 1841-1905. TEMPERATURE OF THE AIR

The highest in the month was 54°.2 on January 16; the lowest in the month was 11°.3 on January 29, and the range was 42°.9. The mean of all the highest daily readings in the month was 40°.1, being 3°.0 lower than the average for the 65 years, 1841-1905. The mean of all the lowest daily readings in the month was 30°.1, being 4°.1 lower than the average for the 65 years, 1841-1905. The mean of the daily ranges was 10°.0, being 1°.1 greater than the average for the 65 years, 1841-1905.

The mean for the month was 35°.4, being 3°.2 lower than the average for the 65 years, 1841-1905.

					TABLE XVII.	- DAILY RE	SULTS	OF THE	METEC	ROLOGICAL	OBSERVATIONS		
			OF THE IT SKY		SEL	WIND AS DEDUC F-REGISTERING	ED FROM	í Ters					
	Pol	aris	δ t MIN	TRSAE ORIS		OSLER'S			Robin- son's		CLOUDS A	ND WEATHER	
Month and Day	1on	n of posure	1on	n of posure	General I	Direction	on	ssure the re Foot	1 Move— the Air				
	Duration	Fraction of Total Exposure	Duration	Fraction of Total Exposure	A.M.	P.M.	Greatest	Mean of 24 Hourly Measures	Horizontal Move- ment of the Air	$ ho^{ m h}$ to $ ho^{ m h}$	6 ^h to 12 ^h	12 ^h to 18 ^h	18 ^h to 24 ^h
Jan.1 2 3 4 5	nours 3.9 12.1 5.1 5.4 10.1	0.28 0.88 0.37 0.40 0.73	3.0 8.6 2.8 1.7 8.5	0.22 0.63 0.20 0.13 0.62	WSW: SW SSW: W SSE: S SSE SE	S: SSW Calm; SSW S: SSE SE: ESE ESE: SE	1bs. 1.6 3.6 3.5 1.5 5.0	1bs. 0.05 0.08 0.15 0.12 0.49	miles 222 208 255 204 316	bx crrcb bxcm cbcx	b Cicu ff b ff c m bc Acu bc c Stcu Cicu c Ast Stcu	b f bc Cist m b Ci m F c Acu Ci c Ast c Stcu b	lu-ha x c f b x m c bc lu-ha c b lu-ha
6 7 8 9 10	0.0 0.0 8.1 12.3 0.0	0.00 0.00 0.59 0.90 0.00	0.0 0.0 7.9 11.2 0.0	0.00 0.00 0.57 0.82 0.00	SE: ESE Calm: SE Calm: SE SSW SW: SSW	ese: Calm ese: Calm sse: s: Ssw sw s: Sse	3.5 1.6 4.5 1.7 1.6	0.21 0.07 0.20 0.09 0.08	212 150 200 245 210	bc csom cff bxmo bx	c Nbst s s c Nbst m c St f m c Cicu mo b f x bc Cist so-ha	ss c Nbst c Nbst rs c ro c Stcu mo b mo Cist Acu f bc c Nbst ro c	c roc rrcb cfb crorr
11 12 13 14 15	8. 2 4. 3 6. 5 0. 8 12. 3	0.62 0.33 0.49 0.06 0.93	7.5 2.5 5.1 0.0 12.0	0.57 0.19 0.38 0.00 0.91	SSE: SW: S SW: W SW: WSW SW: SSW SW	S: WSW SSW: SW WSW WSW: SW SW	6.6 10.0 21.0 13.5 13.5	0.34 0.90 2.00 0.93 1.64	293 436 574 459 507	croc bcqR bcqRc bc cdo	c rof c Ast b c Ast Acu b Frcu Ci y c Nbst 1r do c roc Stcu	c Nost rod c Acu Cu c gale roqb c Nost 1doc c Ast Stcu	rocb crb b c
16 17 18 19 20	4.2 13.3 5.8 0.6 6.1	0.32 1.00 0.45 0.05 0.47	3.4 13.3 4.0 0.3 4.9	0.26 1.00 0.31 0.02 0.38	SSW: S WSW: SW Calm E: Calm	E. Calm E: Calm E: Calm	8.0 5.5 2.0 0.2 1.1	0.54 0.50 0.13 0.01 0.05	336 367 258 114 140	bw circ bxm cbxc fcw	b c b c Freu b Ci m c St f F f c Freu	b Ci b c Stcu b b Ci F f c Stcu	bcr bc ff cbcf
21 22 23 24 25	4.1 2.2 5.3 6.0 1.1	0.32 0.17 0.41 0.46 0.09	1.3 1.3 4.9 3.0 0.6	0.10 0.10 0.38 0.23 0.05	Calm Calm: ENE: E E: NE NE Calm	Calm E: NE NE NE NE	0.0 1.7 4.0 1.4 2.2	0.00 0.05 0.23 0.11 0.09	58 147 281 214 170	cbxf bfxcm csoc cisoc cbx	b c Stcu ff c x m b c Acu c b c Stcu c so c Frcu x c so c Cist f	F g c Stcu f c 1s, c Stcu c 1s, c Acu c Stcu b x s, c Nbst	ff x c c b c x c
26 27 28 29 30	0.3 0.2 8.9 10.7 7.2	0.03 0.02 0.69 0.84 0.56	0.0 0.1 8.1 9.8 5.4	0.00 0.01 0.64 0.77 0.42	NE NE: ENE NNE: NE ESE E: ESE	NE ENE: NE NE: ESE E E: ENE	11.7 6.6 2.7 1.6 2.6	0. 88 0. 65 0. 23 0. 07 0. 22	438 363 260 184 227	cssc cs _o cs _o c cb bxm	c Nbst iso c Nbst s so c Frcu Cu b Acu c Cist prha b m	so c Nbst so c Freu b c c Nbst so s g c 1so b b bc Cist prha c m	c c is c b c b b m
31	3.1	0.24	2.9	0.23	E; ENE	ENE: NE: E	1.3	0.16	228	csis _o m	c so c Acu m	c Ast so s	S So C
Means	5.4	0.41	4.3	0.33	••	••		0.36	267				
No. of Col. for Ref.	19	20	21	22	23	24	25	26	27	28	29	30	31
Ref.					_				<u></u>	<u> </u>			<u> </u>

The mean Temperature of Evaporation for the month was 34°.0, being 3°.2 lower than

The mean Temperature of the Dew Point for the month was 31°.7, being 3°.4 lower than

The mean Degree of Humidity for the month was 85.5, being 1.3 less than

The mean Blastic Force of Vapour for the month was 0.178 in., being 0.027 in. less than

The mean amount of Cloud for the month (a clear sky being represented by 0 and an overcast sky by 10) was 6.8.

The mean proportion of *Sunshine* for the month (constant sunshine being represented by 1) was 0.170. The maximum daily amount of *Sunshine* was 6.5 hours on January 16.

the average for the 65 years, 1841-1905.

The highest reading of the Solar Radiation Thermometer was 88°.1 on January 16; and the lowest reading of the Terrestrial Radiation Thermometer was 5°.3 on January 30.

The *Proportions of Wind* referred to the cardinal points were N.10, E.27, S.26, W.20, calm or nearly calm conditions 17, the whole month being represented by 100.

The Greatest Pressure of the Wind in the month was 21.0 lbs. on the square foot on January 13. The mean daily Horizontal Movement of the Air for the month was 267 miles; the greatest daily value was 574 miles on January 13, and the least daily value was 58 miles on January 21.

Rain (0.005 in. or over) fell on 16 days in the month, amounting to 1.632 in., as measured by gauge No.6 partly sunk below the ground; being 0.249 in. less than the average fall for the 65 years, 1841-1905.

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				TABLE	XVII.	- DAILY	RESUL	TS OF T	HE MET	EOROLOG	GICAL	OBSER	VATIONS					
	BAROMETER			Т	EMPERATU	RE							TE	MPERATUR	E	g, .,		
Month and	Hourly rrected 1 to 32 e1t)			Of the A	ir		Of Evapo- ration	Of the Dew Point	the Ai	rence be r Temper Dew Poi mperatur	rature int	Degree of Humidity (Saturation = 100)	Of Radi	lation	Of the Earth 4 ft.	Rain collected in Gauge No.6, whose receiving surface is 5 inches above the Ground	Daily Dura- tion of	Sun above
Day 1947	Mean of 24 Hourly Values (corrected and reduced to 32 Fahrenhelt)	Highest	Lowest	Daily Range	Mean of 24 Hourly Values	Excess above Average of 65 Years	Mean of 24 Hourly Values	Deduced Mean Daily Value	Mean	Great- est	Least	Degree (Saturat	Highest in Sun's Rays	Lowest on the Grass	below the surface of the Soil	Rain colle No.6, who surface above	Sun- shine	Horizon
	in.	0	0	۰	0	٥	0	0	0	0	0		0	0	٥	in.	hours	hours
Feb. 1 2 3 4 5	29. 561 29. 262 28. 855 29. 053 29. 556	33.3 34.2 36.7 38.5 31.8	25.3 28.8 33.4 29.8 28.2	8.0 5.4 3.3 8.7 3.6	30.7 32.7 35.0 35.6 29.8	- 8.9 - 6.8 - 4.5 - 3.9 - 9.8	29. 5 31. 8 34. 4 35. 1 28. 8	27.5 30.4 33.3 34.2 27.0	3. 2 2. 3 1. 7 1. 4 2. 8	6. 2 6. 2 2. 2 2. 1 5. 4	1.3 0.0 0.0 0.0 0.0	86 90 94 95 88	63.2 37.8 42.3 44.3 42.2	23.5 22.0 31.8 29.8 29.2	41.8 41.7 41.7 41.7 41.4	0.000 0.120 0.295 0.092 0.159	0.9 0.0 0.0 0.0 0.0	9.1 9.2 9.3 9.3 9.3
6 7 8 9 10	29.729 29.616 29.309 29.346 29.496	29.2 30.0 30.8 34.8 35.7	27.6 27.4 28.2 28.2 28.2 33.1	1.6 2.6 2.6 6.6 2.6	28.7 28.9 29.7 32.2 34.1	-10.9 -10.6 - 9.6 - 6.9 - 4.8	28.1 27.9 28.8 31.6 33.9	27.1 26.2 27.2 30.7 33.5	1.6 2.7 2.5 1.5 0.6	2.4 4.4 3.3 3.4 1.6	0.0 0.5 0.8 0.6 0.0	93 87 89 93 98	37.2 38.0 46.6 46.8 38.8	28. 5 27. 5 26. 1 29. 0 32. 6	41.4 41.3 41.1 41.2 41.2	0. 247 0.004 0. 120 0. 295 0. 000	0.0 0.0 0.0 0.0 0.0	9.4 9.5 9.5 9.6 9.6
11 12 13 14 15	29.677 29.749 29.756 29.843 30.012	33.8 26.9 29.4 32.1 31.8	25.0 24.5 25.3 27.7 27.8	8.8 2.4 4.1 4.4 4.0	28.7 25.5 27.5 29.9 30.0	-10.1 -13.3 -11.5 - 9.4 - 9.4	28.1 24.8 26.9 29.3 29.3	27.1 23.3 25.8 28.4 28.2	1.6 2.2 1.7 1.5 1.8	2. 2 2. 9 2. 7 3. 6 2. 8	0.6 0.0 0.8 0.0 0.0	93 90 93 93 92	32.4 32.2 32.0 35.9 45.0	25.1 24.6 25.8 27.7 27.1	41.0 40.8 40.8 40.7 40.7	0.000 0.000 0.000 0.002 0.002	0.0 0.0 0.0 0.0 0.1	9. 7 9. 8 9. 8 9. 9 10. 0
16 17 18 19 20	30.048 29.858 29.710 29.735 29.593	28.7 27.2 29.3 29.7 30.9	25.7 25.8 25.1 26.8 26.8	3.0 1.4 4.2 2.9 4.1	27.5 26.6 27.5 28.6 28.7	-12.0 -13.0 -12.0 -10.9 -10.8	26.8 25.6 26.1 27.5 27.8	25.5 23.5 23.2 25.6 26.3	2.0 3.1 4.3 3.0 2.4	2.7 4.0 6.8 6.7 4.1	0.4 2.5 1.7 0.6 0.0	91 87 83 86 89	36.4 33.8 37.5 49.2 40.8	26. 1 25. 4 25. 0 26. 8 26. 2	40.6 40.3 40.3 40.2 40.0	0.000 0.000 0.000 0.001 0.010	0.0 0.0 0.0 0.0 0.0	10.0 10.1 10.1 10.2 10.3
21 - 22 - 23 - 24 - 25	29. 230 29. 323 29. 743 29. 839 29. 787	29.4 28.8 31.1 25.5 36.0	24.2 24.5 14.8 9.0 10.0	5. 2 4. 3 16. 3 16. 5 26. 0	27.3 26.4 25.6 18.4 24.1	-12.3 -13.3 -14.2 -21.6 -16.0	26.4 25.6 24.7 18.0 22.5	24.7 23.9 22.7 17.0 18.6	2.6 2.5 2.9 1.4 5.5	2.7 5.9 7.1 3.2 11.6	0.0 1.3 0.6 0.0 0.0	88 89 88 93 77	37.5 44.3 88.5 27.7 80.9	26.3 21.7 11.5 5.7 4.2	39.8 39.7 39.7 39.4 39.5	0.184 0.029 0.000 0.009 0.500	0.0 0.0 5.3 0.0 2.5	10.3 10.4 10.5 10.5 10.6
26 27 28	29. 633 29. 380 29. 341	41.3 37.3 33.4	29.1 30.4 28.2	12.2 6.9 5.2	34.1 33.7 32.1	- 6.1 - 6.7 - 8.2	31.3 31.0 30.1	26. 7 26. 8 26. 8	7.4 6.8 5.3	17.1 14.0 8.1	2.7 2.1 1.8	72 74 79	96. 1 59. 3 46. 5	24.6 27.5 24.0	39.6 39.3 39.2	0.000 0.000 0.011	7.6 0.1 0.0	10.7 10.7 10.8
Means	29. 573	32.1	25.7	6.3	29.3	-10.3	28.3	26.5	2.8	5.2	0.7	88.2	46.2	24.5	40.6	Sum 1.569	0.6	9,9
																E .		. ,

The mean reading of the Barometer (Column 1) and the mean temperatures of the Air, and Evaporation (Column 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 29.573 in., being 0.236 in. lower than the average for the 65 years, 1841-1905.

TEMPERATURE OF THE AIR

No. of Col. for Ref.

The highest in the month was 41°.3 on February 26; the lowest in the month was 9°.0 on February 24; and the range was 32°.3. The mean of all the nighest daily readings in the month was 32°.1, being 12°8 lower than the average for the 65 years, 1841-1905. The mean of all the lowest daily readings in the month was 25°.7, being 9°.0 lower than the average for the 65 years, 1841-1905. The mean of the daily ranges was 6°.3, being 3°.9 less than the average for the 65 years, 1841-1905.

The mean for the month was 29°.3, being 10°.3 lower than the average for the 65 years, 1841-1905.

					TABLE XVII.	- DAILY RE	SULTS	OF THE	METEC	OROLOGICAL (DBSERVATIONS		
	,		OF THE TSKY		SEL	WIND AS DEDUC F-REGISTERING							
	Pol	aris	δ MIN	URSÆ IORIS		OSLER'S			Robin- son's		CLOUDS AN	D WEATHER	
Month and Day 1947	1on	n of posure	.1on	tion of Exposure	General 1	Direction	on	ssure the e Foot	1 Move- the Air				
	Duration	Fraction of Total Exposure	Duration	Fracti Total Ex	A. M.	P.M.	Greatest	Mean of 24 Hourly Measures	Horizontal Move- ment of the Air	O ^h to 6 ^h	6 ^h to 12 ^h	12 ^h to 18 ^h	18 ^h to 24 ^h
	hours		hours				lbs.	lbs.	miles				
Feb.1 2 3 4 5	2.3 0.0 0.0 0.1 0.0	0.19 0.00 0.00 0.01 0.00	1.8 0.0 0.0 0.0 0.0	0.15 0.00 0.00 0.00 0.00	ese: e ese e: ese e ne	E:ESE SE:E E ENE:NE NE	2.5 4.3 2.3 4.6 1.6	0.08 0.34 0.17 0.22 0.20	187 276 276 275 323	cbcm c cd _o m od _o rof oss _o	c m b c Stcu Cist c soso rs Nbst do rs r m Nbst o St f m c Stcu Ast 1s	c Stcu so c rs c Nbst rs o rm f o St m c Nbst is	c c o os _o s _o s _o ss
6 7 8 9 10	0.0 2.5 0.0 0.0 0.0	0.00 0.20 0.00 0.00 0.00	0.0 1.3 0.0 0.0 0.0	0.00 0.11 0.00 0.00 0.00	ENE: E ESE E NE: Calm E	e: ese e: ese ene e ene	0.7 3.6 8.8 0.7 2.7	0.05 0.21 1.24 0.03 0.24	187 251 486 144 279	ss m c m _o c m _o ss fe fe	ss c Nbst m c o St so mo c Stcu ss o St so fe fe fe fe	s s _o c Nbst m _o o St m _o c Stcu o St fe fe fe o St m	c mo c mo o ss fe fe o mo
11 12 13 14 15	0.0 0.0 0.0 0.0 0.0	0.00 0.00 0.00 0.00 0.00	0.0 0.0 0.0 0.0 0.0	0.00 0.00 0.00 0.00 0.00	ENE ENE: NE NE NE: ENE	ENE: NE NE NE: NE ENE: NE	4.0 2.5 0.4 0.6 2.9	0.48 0.25 0.07 0.04 0.26	378 305 200 187 330	omocmocmocm	o c St mo c Stcu mo c Stcu mo c Stcu m c Stcu	c St mo c St m so c St m c Stcu m c Stcu	c mo c mo c m c mo do c
16 17 18 19 20	0.0 0.0 0.0 0.0 0.0	0.00 0.00 0.00 0.00 0.00	0.0 0.0 0.0 0.0 0.0	0.00 0.00 0.00 0.00 0.00	NE ENE NE: NE NE: Calm	NE: ENE NE: ENE NNE: NE ENE: E	3.0 2.0 3.5 6.5 1.5	0.34 0.23 0.30 0.32 0.09	374 307 336 329 190	cm _o cm _o cm _o c	c Nbst 1s _c m _o c Nbst 1s _o c Stcu c Stcu c Nbst s _o s _o m	c Nbst c St c Stcu c Nbst 1s _o Nbst 1s _o	c c c c c
21 22 23 24 25	0.0 4.9 11.0 10.8 0.1	0.00 0.45 1.00 0.98 0.01	0.0 3.8 3.4 3.7 0.0	0.00 0.35 0.31 0.33 0.00	E: ENE NNE NNW: N: NNE Calm Calm	ENE: NNE NNE: N NNE: Calm Calm ESE: SE	5.2 1.6 0.4 0.0 1.2	0.44 0.18 0.03 0.00 0.03	368 276 161 83 126	cm c c b.fx ffx	c Nbst is m c.o Nbst s is c so c Stcu b Cu bf g f x ff x b Ci	Nost 1s m ss so c Stcu so b c Cu b ff x b c Cist So-ha c	ss c c b f ff x c
26 27 28	1.1 0.0 8.7	0.10 0.00 0.79	0.0 0.0 8.3	0.00 0.00 0.76	SSE:S Calm NNW:NW	S N NNW	6.3 1.2 4.0	0.69 0.07 0.52	351 153 350	c cm cis _o m _o	c b Ci y c Ast m c Nbst 1s _o g m _o	b bc Ci y c bc Cist so-ha mo c Ast 1so	bc lu-ha c bc c 1s _o c
Means	1.5	0.13	0.8	0.07	••	••	••	0. 25	267				
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 28°.3, being 9°.4 lower than

The mean Temperature of the Dew Point for the month was 26°.5, being 8°.5 lower than

The mean Degree of Humidity for the month was 88.2, being 4.6 greater than

The mean Elastic Force of Vapour for the month was 0.140 in., being 0.064 in. less than

the average for the 65 years, 1841-1905.

The mean amount of Cloud for the month (a clear sky being represented by 0 and an overcast sky by 10) was 9.0.

The mean proportion of Sunshine for the month (constant sunshine being represented by 1) was 0.059. The maximum daily amount of Sunshine was 7.6 hours on February 26.

The highest reading of the Solar Radiation Thermometer was 96°.1 on February 26; and the lowest reading of the Terrestrial Radiation Thermometer was 4°.2 on February 25.

The *Proportions of Wind* referred to the cardinal points were N.29, E.51, S.6, W.2, calm or nearly calm conditions 12, the whole month being represented by 100.

The Greatest Pressure of the Wind in the month was 8.8 lbs. on the square foot on February 8. The mean daily Horizontal Movement of the Air for the month was 267 miles; the greatest daily value was 486 miles on February 8, and the least daily value was 83 miles on February 24.

Rain (0.005 in. or over) fell on 11 days in the month, amounting to 1.569 in., as measured by gauge No.6 partly sunk below the ground; being 0.089 in. greater than the average fall for the 65 years, 1841-1905.

				TABLE	XVII.	- DAILY	RESUL	TS OF T	HE MET	EOROLOG	ICAL (OBSER	VATIONS					
	BAROMETER			T	EMPERATU	RE							TE	MPERATUR	E	80.50		
Month and	Hourly rrected 1 to 32° e1t)		,	Of the A	ir		Of Evapo- ration	Of the Dew Point	the A1 and	rence be r Temper Dew Poi mperatur	ature nt	of Humidity ation = 100)	Of Radi	ation	Of the Earth 4 ft.	cted in Gaug se receiving is 5 inches he Ground	Daily Dura- tion of	Sun above
Day 1947	Mean of 24 Hourly Values (corrected and reduced to 32º Fabrenhelt)	Highest	Lowest	Daily Range	Mean of 24 Hourly Values	Excess above Average of 65 Years	Mean of 24 Hourly Values	Deduced Mean Daily Value	Mean	Great- est	Least	Degree (Satura	Highest in Sun's Rays	Lowest on the Grass	below the surface of the Soil	Rain collected in Gauge No.6, whose receiving surface is 5 inches above the Ground	Sun- shine	Horizon
	in.	۰	0	0	0	0	٥	0	۰	0	0		٥	0	0	in.	hours	hours
Mar.1 2 3 4 5	29.628 29.798 29.845 29.606 29.238	35.7 39.0 38.0 34.7 32.5	23.7 23.9 21.7 29.8 30.7	12.0 15.1 16.3 4.9 1.8	30.2 31.0 29.9 32.0 31.9	-10.2 - 9.4 -10.6 - 8.7 - 9.0	28.3 28.9 28.0 30.3 31.2	24.9 25.1 24.6 27.5 30.1	5.3 5.9 5.3 4.5 1.8	11.5 17.0 13.8 9.0 2.1	2.4 1.7 0.0 0.0 0.0	78 77 78 82 92	87.3 65.3 89.5 50.4 42.5	19.4 16.5 11.8 27.7 30.9	39.3 39.1 39.1 38.9 38.8	0.000 0.000 0.000 0.438 0.349	6.5 6.2 3.8 0.0 0.0	10.9 10.9 11.0 11.1 11.1
6 7 8 9 10	29.315 29.631 29.753 29.909 29.432	33.0 35.4 40.2 47.5 44.6	29.0 21.6 23.4 31.0 32.8	4.0 13.8 16.8 16.5 11.8	30.6 27.8 33.5 38.4 38.8	-J0.4 -13.2 - 7.6 - 2.6 - 2.1	29.8 26.6 31.7 35.0 38.4	28. 5 24. 3 28. 9 29. 2 37. 9	2. 1 3. 5 4. 6 9. 2 0. 9	4.4 8.7 11.4 18.7 3.5	1.0 0.8 2.0 1.6 0.0	91 85 81 68 96	44.6 62.8 63.9 89.5 55.9	26.5 18.6 19.2 27.0 31.8	38. 8 38. 7 38. 7 38. 7 38. 4	0.110 0.000 0.023 0.045 0.755	0.0 2.0 1.2 7.6 0.0	11.2 11.3 11.3 11.4 11.4
11 12 13 14 15	29. 405 29. 814 29. 185 29. 373 29. 921	44.0 36.3 52.2 46.6 35.5	32.0 30.6 36.3 29.5 25.1	12.0 5.7 15.9 17.1 10.4	35.6 32.2 46.8 36.4 31.0	- 5.4 - 8.9 + 5.5 - 5.1 -10.7	34.7 31.0 45.9 34.8 29.9	33.1 29.0 44.8 32.1 28.2	2.5 3.2 2.0 4.3 2.8	4.4 5.0 4.4 6.1 8.8	0.6 1.3 0.9 0.9 0.0	91 87 93 84 87	42.0 40.8 83.9 49.6 47.4	31.6 30.6 35.7 23.5 18.5	38. 2 38. 2 38. 4 38. 3 38. 4	0.288 0.296 0.424 0.046 0.174	0.0 0.0 0.1 0.0 0.0	11.5 11.6 11.6 11.7 11.8
16 17 18 19 20	29.362 29.543 29.362 29.153 29.310	57.0 55.7 56.0 48.6 52.1	35.5 39.2 42.9 44.6 42.9	21.5 16.5 13.1 4.0 9.2	46. 2 46. 7 48. 6 46. 5 46. 7	+ 4.3 + 4.7 + 6.6 + 4.6 + 4.8	42.8 43.7 45.7 44.7 43.6	38.3 40.0 42.2 42.5 39.7	7.9 6.7 6.4 4.0 7.0	14.6 12.3 15.1 5.9 15.1	0.8 1.9 1.6 2.2 2.6	74 77 78 86 76	102.0 113.9 106.8 66.0 101.6	34.5 31.8 31.7 39.1 41.0	38. 7 38. 8 39. 0 39. 3 39. 7	0.284 0.020 0.010 0.133 0.030	1.9 3.7 3.7 0.1 1.3	11.8 11.9 12.0 12.0 12.1
21 22 23 24 25	29. 205 29. 129 29. 039 29. 276 29. 803	53.7 54.9 54.3 45.7 52.6	44.7 42.7 41.5 34.8 32.4	9.0 12.2 12.8 10.9 20.2	48.7 47.6 48.0 40.2 41.4	+ 6.8 + 5.6 + 5.8 - 2.2 - 1.3	46.8 45.4 44.6 38.5 37.6	44.7 42.9 40.3 36.1 31.5	4.0 4.7 7.7 4.1 9.9	12.3 11.3 16.9 8.0 20.3	0.8 1.6 3.5 2.4 1.7	86 83 74 85 67	88.5 102.8 115.7 53.8 110.5	32.0 26.2 35.0 30.0 27.0	40.0 40.4 40.8 41.0 41.3	0.135 0.216 0.040 0.031 0.000	1.0 2.0 3.4 0.0 7.0	12.2 12.2 12.3 12.4 12.4
26 27 28 29 30	29. 599 29. 393 29. 264 28. 908 28. 961	52.8 53.9 58.0 54.9 52.4	38.8 41.8 45.7 46.0 42.2	14.0 12.1 12.3 8.9 10.2	44. 2 47. 5 50. 8 49. 3 48. 0	+ 1.2 + 4.2 + 7.1 + 5.2 + 3.5	40.0 45.7 48.8 48.4 45.8	33.5 43.6 46.6 47.5 43.3	10.7 3.9 4.2 1.8 4.7	21.0 6.5 7.6 3.3 9.6	4.8 1.0 1.1 0.0 1.1	66 86 86 93 83	95.0 81.5 92.0 80.7 88.1	30.9 38.3 40.7 43.7 36.3	41.4 41.6 41.7 41.9 42.3	0.070 0.145 0.115 0.830 0.111	0.7 0.1 0.0 0.0 0.5	12.5 12.6 12.6 12.7 12.7
31	29.145	46.4	41.5	4.9	44.0	- 0.9	42.8	41.3	2.7	5.4	0.7	90	58.1	35.6	42.6	0.098	0.0	12.8
Means	29.429	46.6	34.8	11.8	40.3	- 1.6	38.4	35.6	4.8	10.1	1.3	82.6	76.5	29.8	39.7	Sum 5.216	1.7	11.8
No. of Col. for Ref.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18

The 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 29.429 in., being 0.324 in. lower than the average for the 65 years, 1841-1905. TEMPERATURE OF THE AIR

The mean of all the hignest daily readings in the month was 46°.6, being 2°.6 lower than the average for the 65 years, 1841-1905. The mean of the daily ranges was 11°.8, being 1°.8 less than the average for the 65 years, 1841-1905. The mean for the month was 40°.3, being 1°.6 lower than the average for the 65 years, 1841-1905.

	T				TABLE XVII.		_		METEC	ROLOGICAL	OBSERVATIONS		
	`	RECORD NIGH	OF THE T SKY		SEL	WIND AS DEDUC F-REGISTERING	LD FROM	TERS					
	Pol	aris	δι MIN	URSÆ IORIS		osler's			Robin- son's		CLOU	DS AND WEATHER	
Month and Day 1947	cion	n of posure	1on	n of posure	General D	irection	on	ssure the re Foot	ul Move— the Air	·			
	Duration	Fraction of Total Exposure	Duration	Fraction of Total Exposure	A. M.	P.M.	Greatest	Mean of 24 Hourly Measures	Horizontal Move- ment of the Air	\circ \circ \circ \circ \circ	e ^h to 12 ^h	12 ^h to 18 ^h	18 ^h to 24 ^h
Mar.1	hours 10.5 10.7	0.98 1.00	hours 10.5 9.8	0.98 0.91	NW: WNW WSW: W	MNW: W: WSW	1bs. 4.6 0.3	1bs. 0.47 0.04	miles 354 171	b b x m	b mo b Ci b bc Stcu y	b Ci be Steu be Steu b y	b x m b ff x
3 4 5	3.7 0.0 0.0	0.34 0.00 0.00	2.0 0.0 0.0	0.18 0.00 0.00	Calm E:ENE ENE	E: ENE ENE ENE: NE	1.3 10.7 5.8	0.13 1.19 1.05	190 431 429	b ff x c	b f b Cist so-ha c Ast c Nost 1h	b bc Cist Ci so-ha c Nbst so ss h c Nbst h rs	bc hu-ha ss c n rs ss
6 7 8 9	2.6 5.5 4.1 0.0 0.0	0.24 0.51 0.40 0.00 0.00	0.5 4.3 3.9 0.0 0.0	0.04 0.40 0.38 0.00 0.00	nne nnw:Calm SSW SW ESE:Calm	N Calm: S SW: WSW S: SSE: SE Calm: Var.	2.1 1.9 2.0	0.14 0.07 0.09	273 130 244 181 157	ss c c b x c c b f rs rr o	c Ast Steu b f be Freu m c Nost ir s b f be Freu Ci o St ff	c Stou be c Stou b m c be c Frou be Acu Ci y c c Nbst do F rr f	c hu-ha b x c c r s rr o r f
11 12 13 14 15	0.0 0.0 0.0 10.3 0.0	0.00 0.00 0.00 1.00 0.00	0.0 0.0 0.0 9.3 0.0	0.00 0.00 0.00 0.91 0.00	Calm: NNW ENE: E S: SSW WSW: N: NNE Calm	NNW: N: NNE ESE: SE SSW NNE SSE	4. 2 1. 0 3. 5 1. 5 3. 3	0.22 0.08 0.25 0.14 0.19	270 222 322 257 200	rr f c c m _o c rr c c d _o b x c f	c Stcu mo c Stcu c rr c Nbst ir c n s c Nbst c Stcu f c	c Stou mo c Nost ro ro c Nost ir do c Nost c Stou so s	c mo ro rr c c ir do b ss rr
16 17 18 19 20	7. 4 1. 3 1. 8 0. 0 0. 0	0.76 0.14 0.19 0.00 0.00	7.0 1.1 1.3 0.0 0.0	0.72 0.11 0.14 0.00 0.00	S: SSW SW: SSW Calm: SSW SSW WNW	SSW: SW: WSW S: SSE: ESE SW: SSW SW: WSW W: WSW: SW	35.0 15.0 9.0 9.0 3.8	3.07 0.50 0.62 0.65 0.22	627 285 344 403 301	rr c b c b c bc c c	c Cist Acu so-ha c Ast Frcu c Frcu Ci c r c r c Nbst c bc Stcu Frcu	c Cist so-ha c r c gale c b c Cu Acu bc c Frst Ci c Nbst ir bc c Ast Stcu	c gale b c r do c p bc bc c c ir
21 22 23 24 25	9.1 3.7 8.2 9.3 4.5	0.94 0.40 0.89 1.00 0.49	8.5 3.0 8.1 9.3 2.6	0.88 0.33 0.87 1.00 0.28	SSW: SW SSW SW: W SSW: W	SW SW: SSW SW: SSW WNW: NNW SW: SSW	9.0 7.0 16.0 9.7 4.3	0.82 0.77 1.97 0.60 0.26	419 421 563 376 302	c ir b x c b c p b c b x	ir c Nbstr c Nbstrro c p bc Frcu c ro do c Nbst b bc Cu y	ro c Frst po ro be Ci Acu so-ha c p be c Nbst p c c Stcu ro c rs be c Ci Cu y	b c r b c b c b bc b
26 27 28 29 30	0.0 2.0 0.0 0.0 4.6	0.00 0.22 0.00 0.00 0.53	0.0 1.1 0.0 0.0 4.3	0.00 0.12 0.00 0.00 0.49	SSW SSE: S S: Calm E: Calm SSW: SW	S S: SSW Calm: E Calm: S SSW	6.7 1.3 0.4 0.7 4.7	0.82 0.09 0.00 0.02 0.49	371 218 141 151 351	bc cir cbcd crcm Riro	c do c Stcu y ir c Ast rr do r Nost c Nost ro do ro ir c Frcu	c Stou y c ro c Stou Frst 1ro c Stou Acu po Nost r RR c Stou Frou bo	r c c rr c c d _o RR b c
31	5.0	0.57	3.3	0.38	S: SSW	SW: SSW	2.0	0.10	242	С	c Nost rorro	c Nost ido r	r c lu-ha bo
Means	3.4	0.34	2.9	0.29	• •	••		0.52	301				
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 35°.6, being the same as

The mean Degree of Humidity for the month was 82.6, being 4.5 greater than

The mean Elastic Force of Vapour for the month was 0.208 in., being 0.001 in. less than

the average for the 65 years, 1841-1905.

The mean amount of Cloud for the month (a clear sky being represented by 0 and an overcast sky by 10) was 7.9.

The mean proportion of Sunshine for the month (constant sunshine being represented by 1) was 0.144. The maximum daily amount of Sunshine was 7.6 hours on March 9.

The highest reading of the Solar Radiation Thermometer was 115°.7 on March 23; and the lowest reading of the Terrestrial Radiation Thermometer was 11°.8 on March 3.

The *Proportions of Wind* referred to the cardinal points were N.12, E.15, S.38, W.22, calm or nearly calm conditions 13, the whole month being represented by 100.

The Greatest Pressure of the Wind in the month was 35.0 lbs. on the square foot on March 16. The mean daily Horizontal Movement of the Air for the month was 301 miles; the greatest daily value was 627 miles on March 16, and the least daily value was 130 miles on March 7.

Rain (0.005 in. or over) fell on 26 days in the month, amounting to 5.216 in., as measured by gauge No.6 partly sunk below the ground; being 3.696 in. greater than the average fall for the 65 years, 1841-1905.

				TABLE	xvII.	- DAIL	Y RESUL	TS OF T	HE MET	EOROLOG	GICAL	OBSER	VATIONS					
	BAROMETER			7	TEMPERATU	RE							TE	MPERATUR	Œ			
Month and	Hourly wrected 1 to 32° elt)		1	Of the A	ir		Of Evapo- ration	Of the Dew Point	the Ai	rence be r Temper Dew Poi mperatur	ature nt	of Humidity ation = 100)	Of Radi	lation	Of the Earth 4 ft.	ted in Gauge e receiving s 5 inches ne Ground	Daily Dura- tion of	Sun above
Day 1947	Mean of 24 Hourly Values (corrected and reduced to 32º Fahrenheit)	Highest	Lowest	Daily Range	Mean of 24 Hourly Values	Excess above Average of 65 Years	Mean of 24 Hourly Values	Deduced Mean Daily Value	Mean	Great- est	Least	Degree of (Saturati	Highest in Sun's Rays	Lowest on the Grass	below the surface of the Soil	Rain collected in Gauge No.6, whose receiving surface is 5 inches above the Ground	Sun- shine	Horizon
	in.		0	0	0	0	0	0	0	0	0		0	0	0	in.	hours	hours
Apr.1 2 3 4 5	29. 277 29. 371 29. 372 29. 380 29. 897	56. 2 43. 4 47. 9 44. 8 50. 9	39. 2 36. 3 36. 2 38. 2 35. 8	17.0 7.1 11.7 6.6 15.1	46.9 41.0 41.6 41.5 44.3	+ 1.6 - 4.7 - 4.4 - 4.7 - 2.0	43.5 40.4 40.6 39.8 41.4	39. 2 39. 5 39. 3 37. 4 37. 4	7.7 1.5 2.3 4.1 6.9	17.5 2.8 7.7 12.9 14.4	0.4 0.0 0.8 1.7 2.0	74 95 91 85 76	129.6 54.2 73.7 70.7 91.5	27.7 30.0 35.6 32.0 28.5	42.8 42.8 43.0 43.0 43.3	0.000 0.260 0.082 0.257 0.215	5. 5 0. 0 0. 0 1. 6 2. 6	12.9 12.9 13.0 13.1 13.2
6 7 8 9 10	29.677 29.815 29.671 30.231 30.487	53.6 59.6 52.2 48.8 59.2	46.7 44.7 39.6 34.4 30.3	6.9 14.9 12.6 14.4 28.9	49.5 50.9 47.7 42.0 44.8	+ 3.2 + 4.6 + 1.6 - 4.0 - 1.1	46.1 45.8 44.1 37.3 39.6	42.0 39.4 39.5 29.4 31.5	7.5 11.5 8.2 12.6 13.3	13.2 27.3 14.9 20.0 24.5	4. 2 2. 7 2. 7 3. 7 0. 0	75 65 73 61 59	84.8 114.4 107.7 107.6 118.1	41.0 39.0 34.0 25.5 20.2	43. 2 43. 3 43. 4 43. 7 43. 8	0.009 0.030 0.025 0.000 0.000	0.0 5.4 1.6 6.9 10.3	13.2 13.3 13.3 13.4 13.5
11 12 13 14 15	30.385 30.326 30.231 30.109 30.186	61.4 61.4 63.7 66.7 52.6	33.2 37.6 37.7 42.2 49.3	28. 2 23. 8 26. 0 24. 5 13. 3	47.3 49.0 50.0 54.0 54.8	+ 1.5 + 3.1 + 3.9 + 7.6 + 8.0	41.3 43.1 44.7 47.4 51.2	32.3 34.9 37.8 39.5 47.7	15.0 14.1 12.2 14.5 7.1	30.6 28.4 23.3 33.3 13.9	0.8 2.1 2.1 5.4 2.7	55 58 63 58 76	124.1 118.6 124.1 131.2 122.6	23. 1 25. 1 22. 9 25. 4 39. 0	43.8 43.9 44.0 44.2 44.4	0.000 0.000 0.000 0.000 0.000	11.4 6.5 10.4 8.5 4.8	13.5 13.6 13.7 13.7 13.8
16 17 18 19 20	30.068 29.983 29.901 29.796 29.684	71.9 64.0 62.0 57.8 57.6	42.5 42.1 41.9 43.2 41.2	29.4 21.9 20.1 14.6 16.4	57.7 51.8 50.8 50.1 49.9	+10.5 + 4.2 + 2.8 + 1.8 + 1.4	51.5 47.4 47.1 47.1 47.1	45. 2 42. 4 42. 8 43. 6 43. 9	12.5 9.4 8.0 6.5 6.0	29.9 20.3 15.2 12.0 11.2	0.7 2.4 2.4 1.8 1.1	63 70 74 79 80	133.7 120.6 123.7 105.5 106.0	29. 4 29. 5 38. 4 35. 1 31. 5	44.8 45.0 45.3 45.3 45.7	0.000 0.000 0.000 0.000 0.032	11.7 8.5 8.6 0.6 1.7	13.9 13.9 14.0 14.1 14.1
21 22 23 24 25	29. 730 29. 559 29. 509 29. 863 29. 959	56.9 59.3 52.4 59.0 67.6	45.9 45.3 42.4 45.7 42.1	11.0 14.0 10.0 13.3 25.5	51.8 50.8 47.9 51.7 56.3	+ 3.1 + 2.1 - 0.7 + 3.1 + 7.7	47.5 46.5 44.7 45.1 50.2	42.6 41.5 40.7 36.4 43.6	9. 2 9. 3 7. 2 15. 3 12. 7	13.9 18.4 14.3 28.3 23.4	3.1 2.2 2.1 3.9 1.3	70 70 76 56 63	105.1 123.0 73.2 123.3 129.0	39.5 39.0 34.9 39.2 32.0	45.8 45.9 45.8 46.2 46.3	0.000 0.105 0.213 0.000 0.000	4.6 5.5 2.2 10.2 6.5	14.2 14.2 14.3 14.4 14.4
26 27 28 29 30	30.096 29.949 29.844 29.887 29.606	63.3 61.9 59.8 63.5 48.4	44.5 35.5 47.2 41.4 41.5	18.8 26.4 12.6 22.1 6.9	53.8 51.1 52.4 51.3 44.5	+ 5.2 + 2.4 + 3.6 + 2.3 - 4.6	46.7 44.7 45.9 45.7 42.4	37.9 36.2 37.7 38.6 39.6	15.9 14.9 14.7 12.7 4.9	26.4 30.8 29.6 26.8 8.5	6. 2 2. 2 5. 6 3. 3 2. 8	54 57 57 62 83	127.6 120.1 129.4 133.5 87.5	36.0 24.9 39.0 31.9 35.8	46.3 46.3 46.7 46.9 46.8	0.000 0.000 0.018 0.109 0.158	10.2 6.1 4.3 9.1 0.8	14.5 14.6 14.6 14.7 14.7
Means	29.862	57.9	40.8	17.1	49.2	+ 2.0	44.9	39.3	9.9	19.8	2.4	69.3	110.5	32.2	44.7	Sum 1.513	5.5	13.8
No. of Col. for Ref.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18

The 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 29.862 in., being 0.107 in. higher than the average for the 65 years, 1841-1905. TEMPERATURE OF THE AIR

The highest in the month was 71°.9 on April 16; the lowest in the month was 30°.3 on April 10; and the range was 41°.6. The mean of all the highest daily readings in the month was 57°.9, being 1°.8 higher than the average for the 65 years, 1841-1905.

The mean of all the lowest daily readings in the month was 40°.8, being 1°.3 higher than the average for the 65 years, 1841-1905.

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

The mean for the month was 49°.2, being 2°.0 higher than the average for the 65 years, 1841-1905.

					TABLE XVII.	- DAILY RE	SULTS	OF THE	METEO	ROLOGICA	L OBSERVATIONS		
	,		OF THE ISKY		SEL	WIND AS DEDUC F-REGISTERING							
	Pol	aris	δ t MIN	JRSÆ ORIS		OSLER'S			Robin- son's		CLOUDS A	AND WEATHER	
Month and Day 1947	1on	n of posure	1on	n of posure	General I	Direction	on	ssure the re Foot	1 Move— he Air				
	Duration	Fraction of Total Exposure	Duration	Fraction of Total Exposure	A. M.	P.M.	Greatest	Measures	Horizontal Move- ment of the Air	o ^h to e ^h	e ^h to 12 ^h	12 ^h to 18 ^h	18 ^h to 24 ^h
Apr. ₁ 2 3 4 5	nours 1.9 0.0 0.2 0.0 0.0	0.22 0.00 0.02 0.00 0.00	1.6 0.0 0.2 0.0	0.18 0.00 0.02 0.00 0.00	SSW: SW NNE: ENE ENE: E NE: N Calm: SSW	SW: SSW ENE E N SSW: SW	1bs. 0.4 2.7 2.6 7.0 20.5	1bs. 0.03 0.06 0.14 0.74 2.13	miles 167 189 234 354 476	bc cf ddomf crr	b bc Cumb Cu f c St 1do m d do f c Stcu c St b bc Cist so-ha c Ast	c Cumb Frou y c Nost do d rr m c Ast Acu ro c r c Stou b c Ast Nost q r	bc w rr d d _o m rr c c c c q gale r c
6 7 8 9 10	7.9 0.0 4.7 8.5 8.5	0.93 0.00 0.56 1.00	6.5 0.0 4.7 8.5 8.5	0.76 0.00 0.56 1.00	SW: WSW WSW: W SW: WSW NNW: N SE: Calm	SW: WSW WSW: SW WSW: W: NNW N: NNE: Calm SW: Calm	11.0 18.0 22.0 2.7 0.8	1. 98 2. 41 2. 82 0. 19 0. 01	548 549 591 219 127	c bc rroc cb bx	c Nbst c Cist Cicu y q c ro c b Frcu gale c Stcu y b zo y	c Nost ro c c Acu Ast y q b Frcu gale c Ast y c Stcu b y b zo y	cb crro bcp bx
11 12 13 14 15	8.5 8.0 7.4 0.6 8.0	1.00 1.00 0.93 0.07 1.00	8.5 8.0 7.4 0.3 8.0	1.00 1.00 0.92 0.04 1.00	Calm Calm: NE Calm SW: WSW WSW: SW	SE: Calm NE: E E: Calm: SSW W: WSW SW	0.6 2.7 0.6 3.4 3.0	0.03 0.07 0.03 0.27 0.21	105 149 109 284 283	b x b x z b x b bc x c	b y c Acu Ci z b z y c Acu bc Ci y c bc Frcu	b y bc Ci b z y b bc z ₀ y b bc Ci y b c Ci y bc c Frcu Stcu	b bc b bc c c b
16 17 18 19 20	7.9 2.0 1.3 7.3 6.4	0.99 0.25 0.16 1.00 0.89	7.9 1.7 1.3 7.3 5.9	0.99 0.21 0.16 1.00 0.81	SW: Calm: S Calm: NE E SW S: SSW	SSW: SW NE: E ESE: SW SSW: SW SSW: SW	2.7 2.4 1.8 2.5 13.0	0.10 0.18 0.20 0.20 1.15	210 223 238 233 428	bw bw cw cbc b	by bzy cb cCuStcu bcStcu	b bc Cist Cu so-ha y b y bc Stcu b bc Frcu c Nbst 1roc bc c Nbst ro	bc b bc b c c b r _o r _o b
21 22 23 24 25	5.5 7.3 3.3 5.4 5.4	0.75 1.00 0.46 0.74 0.75	5.5 7.3 2.3 3.6 4.3	0.75 1.00 0.31 0.50 0.59	SW SW: SSW WSW SSW	SW SW SSW: SW WSW: SW SSW: SW: W	27. 5 18. 3 34. 5 20. 5 4. 4	2. 57 1. 90 3. 27 1. 86 0. 53	635 505 675 560 309	b c q b w bc b q b c	b c Stcu Frcu c P c p _o c Nbst Frcu c Nbst ir q b c p _o bc Ci Cu y bc Ci Cist so-ha	c Ast Frcu gale p bc Frcu c q y c rr gale bc y q bc Ci Cu so-ha y bc Ci so-ha b y	c b q c b bc bc b
26 27 28 29 30	6.7 1.7 6.0 0.6 2.1	1.00 0.25 0.89 0.09 0.31	6.7 1.2 5.7 0.5 1.9	1.00 0.18 0.85 0.08 0.28	nw: nnw Wsw: sw Wsw: w W: Wsw Wsw: nnw	WBW: SW SW: WNW SW NNW	1.6 8.6 10.6 9.4 14.0	0.15 0.73 1.47 0.62 1.03	173 351 499 383 402	bc bx c b cir _o	c bc Frcu b y b c Ast y c p bc Cu y b Ci Acu y c Nbst ir	b Acu y c bc Ast Cist c y bc Freu Cu c y b bc Acu c r c Cunb Ci p P	b c do c bc b c c f r roc c bc c
Means	4.4	0.58	4.2	0.54	••	••		0.90	340				
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 44°.9, being 1°.0 higher than

The mean Temperature of the Dew Point for the month was 39°.3, being 0°.3 lower than

The mean Degree of Humidity for the month was 69.3, being 5.2 less than

The mean Elastic Force of Vapour for the month was 0.241 in., being 0.003 in. less than

the average for the 65 years, 1841-1905.

The mean amount of Cloud for the month (a clear sky being represented by 0 and an overcast sky by 10) was 5.9.

The mean proportion of Sunshine for the month (constant sunshine being represented by 1) was 0.401. The maximum daily amount of Sunshine was 11.7 hours on April 16.

The highest reading of the Solar Radiation Thermometer was 133°.7 on April 16; and the lowest reading of the Terrestrial Radiation Thermometer was 20°.2 on April 10.

The Proportions of Wind referred to the cardinal points were N.9, E.13, S.30, W.34, calm or nearly calm conditions 14, the whole month being represented by 100.

The Greatest Pressure of the Wind in the month was 34.5 lbs. on the square foot on April 23. The mean daily Horizontal Movement of the Air for the month was 340 miles; the greatest daily value was 675 miles on April 23, and the least daily value was 105 miles on April 11.

Rain (0.005 in. or over) fell on 13 days in the month, amounting to 1.513 in., as measured by gauge No.6 partly sunk below the ground; being 0.053 in. less than the average fall for the 65 years, 1841-1905.

<u> </u>				TABLE	XVII.	- DAILY	RESUL	TS OF T	HE MET	COROLOG	ICAL (OBSER	VATIONS					
	BAROMETER			1	EMPERATU	RE							TE	MPERATU	Æ	8)		
Month and	Hourly rrected to 32°		(Of the A	ir		Of Evapo- ration	Of the Dew Point	the Ai and	rence be r Temper Dew Poi mperatur	ature nt	f Humidity Ion = 100)	Of Radi	lation	Of the Earth 4 ft.	Rain collected in Gauge No.6, whose receiving surface is 5 inches above the Ground	Daily Dura- tion of	Sun above
Day 1947	Mean of 24 Hourly Values (corrected and reduced to 32° Fahrennelt)	Highest	Lowest	Daily Range	Mean of 24 Hourly Values	Excess above Average of 65 Years	Mean of 24 Hourly Values	Deduced Mean Daily Value	Mean	Great- est	Least	Degree of (Saturation	Highest in Sun's Rays	Lowest on the Grass	below the surface of the Soil	Rain colle No.6, whos surface above t	Sun- shine	Horizon
	in.	0	0	0	0	0	0	0	0	0	0		0	٥	0	in.	hours	hours
May 1 2 3 4 5	29.872 29.752 29.586 29.663 29.803	50.8 46.6 66.0 56.6 63.6	40.7 40.0 44.4 42.5 40.3	10. 1 6. 6 21. 6 14. 1 23. 3	43.8 42.7 55.0 50.2 52.6	- 5.5 - 6.8 + 5.2 + 0.2 + 2.3	41.5 40.8 49.4 48.3 47.9	38.4 38.0 43.3 46.2 42.6	5.4 4.7 11.7 4.0 10.0	10.7 6.4 27.3 10.0 19.7	2.8 1.6 1.9 1.4 0.7	81 84 65 87 69	100.6 72.8 134.1 119.0 134.6	35.2 36.8 41.4 35.0 31.7	46.8 46.8 47.0 46.9 47.2	0.060 0.025 0.184 0.251 0.008	1.8 0.0 11.2 3.0 6.0	14.8 14.8 14.9 14.9 15.0
6 7 8 9 10	29.895 29.860 29.757 29.703 29.749	65.3 73.0 70.8 75.3 61.4	45.0 48.3 52.2 50.8 47.0	20.3 24.7 18.6 24.5 14.4	54.5 60.5 60.8 63.1 57.0	+ 4.0 + 9.8 + 9.8 +11.9 + 5.5	51.4 53.8 55.5 56.7 53.6	48. 4 47. 4 50. 9 51. 2 50. 5	6.1 13.1 9.9 11.9 6.5	14.0 26.4 17.3 20.1 11.8	1.0 2.1 3.4 2.6 2.0	80 62 70 66 79	108.3 138.2 128.0 129.7 98.1	36.3 37.5 45.1 39.5 37.0	47.2 47.7 47.7 48.0 48.1	0.033 0.000 0.000 0.000 0.000	4.1 12.0 1.0 5.1 0.1	15.1 15.1 15.2 15.2 15.3
11 12 13 14 15	29.894 29.879 29.743 29.571 29.762	68.9 66.0 80.3 81.1 63.7	43.8 52.5 51.8 48.3 46.4	25.1 13.5 28.5 32.8 17.3	56.8 58.2 65.6 64.3 53.3	+ 5.0 + 6.1 +13.2 +11.7 + 0.5	50.7 54.1 60.2 56.8 48.6	44.3 50.5 56.1 50.4 43.4	12.5 7.7 9.5 13.9 9.9	24.5 10.9 20.7 26.0 24.4	1.5 2.2 0.6 2.4 3.8	63 76 72 61 69	136.0 117.0 132.2 142.1 123.2	31.6 41.1 47.1 45.1 43.0	48.6 48.7 49.0 49.3 49.6	0.000 0.001 0.098 0.038 0.099	9. 2 1. 2 6. 1 8. 9 7. 4	15.4 15.4 15.5 15.5 15.6
16 17 18 19 20	29.842 29.784 29.709 29.877 30.051	61.5 65.2 60.2 62.2 51.6	45.9 41.8 44.3 48.0 46.6	15.6 23.4 15.9 14.2 5.0	52.8 54.2 52.3 53.8 49.5	- 0.2 + 1.1 - 1.0 + 0.3 - 4.3	49.5 49.3 49.8 50.3 47.2	46.0 44.0 47.2 46.8 44.7	6.8 10.2 5.1 7.0 4.8	15.4 22.3 10.4 12.0 7.4	1.8 0.6 1.3 4.0 2.2	78 69 83 77 83	115.6 129.3 100.1 108.3 69.6	38.9 31.1 34.8 45.5 45.0	49.7 50.0 50.0 50.0 50.1	0.156 0.000 0.073 0.000 0.000	4.4 9.7 1.6 0.7 0.0	15.6 15.7 15.7 15.8 15.8
21 22 23 24 25	30.129 30.004 29.685 29.560 29.680	55.7 62.7 62.2 69.7 68.4	47.8 47.6 45.4 47.0 52.5	7.9 15.1 16.8 22.7 15.9	51. 2 53. 1 53. 1 58. 6 59. 7	- 3.0 - 1.5 - 1.8 + 3.3 + 4.2	48.9 50.1 51.0 53.2 54.5	46.5 46.9 49.0 48.0 49.8	4.7 6.2 4.1 10.6 9.9	6.4 16.6 8.5 20.8 18.7	1.9 1.0 1.6 0.7 1.6	84 80 85 68 70	72.8 123.0 95.0 147.3 144.3	46.4 43.3 41.1 35.1 43.1	50.3 50.3 50.3 50.4 50.6	0.000 0.000 0.070 0.012 0.005	0.0 6.2 0.5 9.9 9.0	15.9 15.9 16.0 16.0 16.0
26 27 28 29 30	29.739 29.949 29.995 29.938 29.914	75.3 70.8 74.7 85.1 85.7	52.0 50.9 47.7 53.6 58.5	23.3 19.9 27.0 31.5 27.2	63.3 60.6 62.2 71.0 71.9	+ 7.5 + 4.6 + 6.0 +14.6 +14.2	57.5 55.4 55.5 62.2 63.3	52. 7 50. 9 49. 4 55. 8 57. 3	10.6 9.7 12.8 15.2 14.6	17.7 19.8 27.2 27.4 26.2	2.9 1.4 1.2 2.7 2.3	69 70 63 59 60	141.1 138.9 142.6 145.3 144.8	42.8 39.7 32.9 41.4 46.5	50.8 51.0 51.3 51.8 52.0	0.055 0.015 0.000 0.000 0.000	7.9 8.9 14.8 14.3	16. 1 16. 1 16. 1 16. 2 16. 2
31	29.808	87.8	55.8	32.0	72.6	+15.5	62.7	55.5	17.1	35.2	1.7	55	145.7	40.9	52.3	0.000	11.7	16.3·
Means	29.811	67.4	47.7	19.6	57.4	+ 4.3	52.6	48. 1	9.2	18.1	1.9	72.2	121.9	39.7	49.3	Sum 1.183	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 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 29.811 in., being 0.010 in. higher than the average for the 65 years, 1841-1905.

TEMPERATURE OF THE AIR

The highest in the month was 87°.8 on May 31; the lowest in the month was 40°.0 on May 2; and the range was 47°.8.

The mean of all the highest daily readings in the month was 67.4, 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 47.7, being 3.5 higher than the average for the 65 years, 1841-1905.

The mean of the daily ranges was 19°.6, being 1°.6 greater than the average for the 65 years, 1841-1905.

The mean for the month was 57°.4, being 4°.3 higher than the average for the 65 years, 1841-1905.

					TABLE XVII.	- DAILY RE	SULTS	OF THE	METEO	ROLOGICAL	OBSERVATIONS		
			OF THE TSKY		SEL	WIND AS DEDUC F-REGISTERING							
Venth	Pol	aris		JRSÆ ORIS		OSLER'S			Robin- son's		CLOUDS AND	WEATHER	
Month and Day 1947	1 on	tion of Exposure	on	tion of Exposure	General I	Direction	on	ssure the re Foot	l Move— he Air				
	Durat1on	Fraction Total Exp	Duration	Fraction Total Exp	A.M.	P.M.	Greatest	Mean of 24 Hourly Measures	Horizontal Move- ment of the Air	O ^h to 6 ^h	e ^h to 12 ^h	12 ^h to 18 ^h	18 ^h to 24 ^h
May 1 2 3 4 5	nours 0.6 0.0 0.0 6.3 4.1	0.09 0.00 0.00 1.00 0.65	nours 0.3 0.0 0.0 6.3 4.1	0.05 0.00 0.00 1.00 0.65	NNW: N: NNE NE E: SE: S E: Calm: SW SSE: Calm: S	NNE: NE NE: ENE SSE: SE: ESE SSW: SSE S: SE	1bs. 3.5 14.6 10.6 1.3 3.0	1bs. 0.33 1.95 0.87 0.09 0.23	miles 318 593 336 156 228	bcir cciR croc bw	ir c Ast Nbst c Nbst ir c b Frcu y c Nbst rr b c Cu Frcu y	c Cranb Acu p c h t c c Nbst 1r c b bc Ci so-ha y r r c bc c Stcu y	bc c c c c c b c b c b c c c b c
6 7 8 9 10	4.8 4.4 4.3 2.8 5.7	0.77 0.74 0.69 0.45 0.99	4.5 2.6 3.8 2.3 5.7	0.72 0.41 0.61 0.38 0.99	SSE: Calm Calm: SSE Calm: NE: ENE Calm: WSW	S: Calm SE: E SW: Calm E: SE: SSW WSW	1.4 4.0 2.2 3.0 1.2	0.04 0.27 0.06 0.18 0.09	151 215 150 193 200	bcbccbcprhn	c Nbst r 1do b Acu y c Acu Nbst p c b bc Cist y c Acu Nbst 1r	1r o be Freu Ci prhn be Cist so-ha y c Ast Frst y be Cist so-ha c y c Steu	bc b bc c b c bc b
11 12 13 14 15	1.8 1.5 4.9 0.0 1.3	0.31 0.26 0.85 0.00 0.22	1.1 1.2 3.7 0.0 1.0	0.19 0.21 0.63 0.00 0.17	WSW: W Calm: ENE E: Calm Calm: SSW WSW	Calm E Calm: E SW: W SW	0.6 2.1 1.3 2.2 2.6	0.03 0.18 0.02 0.24 0.20	109 202 91 228 264	bw ciro crtlrc bwc cb	b bc Ci so-ha y c b c Ast Frcu c Cist Acu so-ha c ro c b Ci y b c Acu y	c Ast Frst y c Ast Frcu c b Ci Frcu bc y b y Cist Acu so—ha c c Cu Stcu y	croc cb bcb cror Rrc
16 17 18 19 20	4.6 4.7 0.0 0.0 0.0	0.80 0.90 0.00 0.00 0.00	4.5 4.5 0.0 0.0 0.0	0.77 0.85 0.00 0.00 0.00	WSW: Calm Calm: SW NNW: NW NNE	Var.: Calm Calm: E: S WSW: NNW NNW: NNE NNE: N	1.4	0.04 0.03 0.06 0.13 0.11	133 90 164 205 194	cb bwmc c c	c Cu Nbst ro c b c Cu Prcu y b c Ast Cu c iro c Ast c St	c NbstrtlcRc bc Cu Frcu y c Nbstrr _o c Acu Ast Z _o c Ast Stcu	c b bc b c r _o r c c
21 22 23 24 25	0.0 0.6 4.1 0.1 1.6	0.00 0.11 0.77 0.02 0.32	0.0 0.6 3.5 0.1 0.6	0.00 0.11 0.66 0.02 0.12	NNE: Calm Calm: E ENE: Calm SW: Calm Calm: SW	Calm E Calm S: Calm SW: S	0.0 0.6 0.2 0.8 1.7	0.00 0.05 0.00 0.05 0.12	113 146 86 144 192	c cm _o cm bw r _o c	c St c m, bc Frcu c Nost r, m b bc Ci Cu y bc c Cunb Ci	c St Frst m _o b y rr m c Nbst bc c Cu y c bc Frcu y	c mo b c m c b c 1ro bc
26 27 28 29 30	1.5 4.5 5.0 5.0 5.0	0.30 0.89 1.00 1.00	1.5 4.2 5.0 5.0 5.0	0.30 0.84 1.00 1.00	Calm: SW SW: WSW Calm: SE Calm: SE Calm: E	SW SW: Calm E SSE: Calm E: ESE	2.8 1.6 2.9 1.2 1.5	0.17 0.07 0.17 0.06 0.07	215 159 196 133 126	bc c r b c b w b w b Z _o	c Acu y c bc Frcu b Ci y b Ci y b Frcu z _o y	c p _o bc Acu Ci v y bc Frcu y b y b Ci y b y	b c rr b b b
31	4.5	1.00	4.5	1.00	Calm: E	SSE: Calm	1.1	0.06	110	b be z _o	bc Ci so-ha y	bc b Ci y	р
Means	2.7	0.49	2.4	0.44	••	• •	••	0.19	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 52°.6, being $3^{\circ}.6$ higher than

The mean Temperature of the Dew Point for the month was 48°.1, being 3°.3 higher than

The mean Degree of Humidity for the month was 72.2, being 1.7 less than

The mean Elastic Force of Vapour for the month was 0.337 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 10) was 6.7.

The mean proportion of *Sunshine* for the month (constant sunshine being represented by 1) was 0.394. The maximum daily amount of *Sunshine* was 14.8 hours on May 28.

the average for the 65 years, 1841-1905.

The highest reading of the Solar Radiation Thermometer was 147°.3 on May 24; and the lowest reading of the Terrestrial Radiation Thermometer was 31 .1 on May 17.

The Proportions of Wind referred to the cardinal points were N.10, E.20, S.20, W.15, calm or nearly calm conditions 35, the whole month being represented by 100.

The Greatest Pressure of the Wind in the month was 14.6 lbs. on the square foot on May 2. The mean daily Horizontal Movement of the Air for the month was 188 miles; the greatest daily value was 593 miles on May 2., and the least daily value was 86 miles on May 23.

Rain (0.005 in. or over) fell on 16 days in the month, amounting to 1.183 in., as measured by gauge No.6 partly sunk below the ground; being 0.732 in. less than the average fall for the 65 years, 1841-1905.

				TABLE	XVII.	- DAILY	RESUL	TS OF T	HE MET	EOROLOG	GICAL (DBSER	VATIONS					
	BAROMETER			Γ	EMPERATU	RE							TE	MPERATUR	E	ω		
Month and	Hourly rected to 32° 1t)		(Of the A	ir 		Of Evapo- ration	Of the Dew Point	the Ai	rence be r Temper l Dew Poi imperatur	rature int	Degree of Humidity (Saturation = 100)	Of Radi	ation	Of the Earth 4 ft.	ted in Gaug se receiving s 5 inches he Ground	Daily Dura- tion of	Sun above
Day 1947	Mean of 24 Hourly Values (corrected and reduced to 32° Fahrenhelt)	Highest	Lowest	Daily Range	Mean of 24 Hourly Values	Excess above Average of 65 Years	Mean of 24 Hourly Values	Deduced Mean Daily Value	Mean	Great- est	Least	Degree o (Saturat	Highest in Sun's Rays	Lowest on the Grass	below the surface of the Soil	Rain collected in Gauge No.6, whose receiving surface is 5 inches above the Ground	Sun- shine	Horizon
	in.	0	0	0	0	0	0	0	0	٥	0		0	٥	٥	in.	hours	hours
June 1 2 3 4 5	29. 788 29. 732 29. 639 29. 481 29. 402	87.9 90.1 93.0 75.8 64.4	59.1 65.3 63.6 56.6 47.8	28.8 24.8 29.4 19.2 16.6	75.2 77.9 78.0 66.7 55.9	+17.8 +20.1 +19.9 + 8.4 - 2.5	65.9 67.3 66.4 60.0 52.2	59.9 60.7 58.9 54.9 48.6	15.3 17.2 19.1 11.8 7.3	28.8 33.0 37.0 21.5 21.2	2.1 3.3 1.0 3.9 0.6	59 56 52 66 76	146.8 150.3 147.1 139.0 122.9	45.3 49.5 48.1 46.5 41.0	52.7 53.0 53.5 53.7 53.8	0.000 0.000 0.000 0.001 0.045	13.4 11.9 13.5 9.2 0.5	16.3 16.3 16.4 16.4 16.4
6 7 8 9 10	29.465 29.709 29.822 30.026 30.184	61.9 69.0 66.0 66.8 73.6	45.8 50.2 48.4 51.2 46.9	16.1 18.8 17.6 15.6 26.7	53.3 56.7 56.7 58.5 60.4	- 5.0 - 1.5 - 1.4 + 0.5 + 2.3	49.5 52.7 51.8 52.0 52.3	45.5 48.8 46.9 45.5 44.0	7.8 7.9 9.8 13.0 16.4	19.1 16.9 17.7 21.0 26.6	3.2 1.1 3.8 5.2 3.7	75 75 70 62 55	107.2 129.1 135.5 132.2 128.8	36.5 43.2 39.0 42.0 31.8	53.8 53.9 54.0 53.9 54.0	0.090 0.263 0.160 0.000 0.000	6. 2 5. 5 6. 9 7. 4 10. 8	16.4 16.5 16.5 16.5 16.5
11 12 13 14 15	29.980 29.853 29.745 29.419 29.460	72.9 62.6 62.1 61.0 62.0	46.5 47.8 44.7 48.0 49.3	26.4 14.8 17.4 13.0 12.7	61.0 55.4 53.0 53.4 54.7	+ 2.8 - 3.0 - 5.5 - 5.3 - 4.1	54.6 49.4 47.3 51.5 51.4	48.7 42.8 40.5 49.7 48.2	12.3 12.6 12.5 3.7 6.5	21.4 23.4 18.7 6.3 14.6	2. 2 4. 2 5. 6 1. 4 1. 4	64 62 63 87 79	129.5 130.9 134.9 97.6 122.8	33.5 40.0 35.6 40.9 39.0	54.0 54.0 54.0 54.0 53.9	0.000 0.000 0.013 0.226 0.157	7.6 13.8 8.0 1.1 1.5	16.5 16.6 16.6 16.6 16.6
16 17 18 19 20	29. 943 29. 936 29. 830 29. 852 29. 784	67.8 77.7 68.6 70.2 63.5	44.5 54.2 55.7 53.9 53.7	23.3 23.5 12.9 16.3 9.8	56.3 66.7 62.2 61.1 59.1	- 2.6 + 7.7 + 3.0 + 1.6 - 0.8	52.0 59.3 59.7 56.0 56.7	47. 8 53. 4 57. 9 51. 6 54. 8	8.5 13.3 4.3 9.5 4.3	19.4 22.7 10.5 18.5 6.5	0.6 3.9 2.1 1.2 2.0	73 62 86 71 86	134.9 146.6 124.0 142.6 84.7	29.5 46.2 42.5 43.5 44.7	54. 1 54. 3 54. 2 54. 4 54. 4	0.000 0.000 0.090 0.000 0.010	6.0 13.5 1.0 8.5 0.0	16.6 16.6 16.6 16.6 16.6
21 22 23 24 25	29.774 29.917 29.964 29.816 29.774	72. 0 66. 8 69. 0 78. 3 78. 2	53. 2 51. 4 47. 5 47. 0 56. 1	18. 8 15. 4 21. 5 31. 3 22. 1	61.1 59.5 59.1 64.6 66.6	+ 0.8 - 1.1 - 1.8 + 3.4 + 5.2	56.0 54.0 54.2 56.5 58.2	51.6 48.9 49.7 49.6 51.2	9.5 10.6 9.4 15.0 15.4	22.4 15.3 18.3 31.4 27.9	1.4 2.8 1.0 2.0 4.6	71 68 71 58 58	135.1 129.2 104.9 138.0 139.0	46.0 41.0 34.2 33.0 46.0	54.7 54.6 54.7 54.9 55.0	0.016 0.000 0.000 0.000 0.000	3.6 7.5 1.3 11.6 12.2	16.6 16.6 16.6 16.6 16.6
26 27 28 29 30	29. 827 29. 875 29. 897 29. 957 30. 058	87.0 79.8 75.2 71.9 67.0	51.9 63.7 62.3 59.3 58.0	35.1 16.1 12.9 12.6 9.0	71.7 70.9 69.0 65.2 62.1	+10.2 + 9.3 + 7.4 + 3.6 + 0.6	63.4 66.7 66.1 59.6 57.7	57.6 64.2 64.4 55.3 54.2	14.1 6.7 4.6 9.9 7.9	26. 4 15. 7 9. 5 18. 8 15. 9	1.8 0.8 1.3 2.8 2.4	61 79 85 71 75	147.6 107.3 133.3 136.5 98.7	40.0 55.0 48.9 57.0 54.0	55.1 55.3 55.9 56.2 56.2	0.000 1.668 0.066 0.000 0.122	12.4 4.8 4.2 5.3 0.0	16.6 16.6 16.6 16.6 16.6
Means	29. 797	72. 1	52.8	19.3	62.4	+ 3.0	56.7	51.9	10.5	20. 2	2.4	69.2	128.6	42.4	54.3	Sum 2.927	7.0	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 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 29.797 in., being 0.025 in. lower than the average for the 65 years, 1841-1905.

TEMPERATURE OF THE AIR

The highest in the month was 93°.0 on June 3; the lowest in the month was 44°.5 on June 16; and the range was 48°.5. The mean of all the highest daily readings in the month was 72°.1, being 3°.2 higher than the average for the 65 years, 1841-1905. The mean of all the lowest daily readings in the month was 52°.8, being 2°.4 higher than the average for the 65 years, 1841-1905.

The mean of the daily ranges was 19°.3, being 0°.8 greater than the average for the 65 years, 1841-1905.

The mean for the month was 62°.4, being 3°.0 higher than the average for the 65 years, 1841-1905.

					TABLE XVII.	- DAILY RE	SULTS	OF THE	METEC	ROLOGICAL	OBSERVATIONS		
			OF THE TSKY		SEL	WIND AS DEDUC F-REGISTERING							
16-m1h	Pol	aris	δι	URSÆ IORIS		OSLER'S			Robin- son's		CLOUDS .	AND WEATHER	
Month and Day 1947	1on	n of posure	1on	n of posure	General 1	Direction	on	ssure the re Foot	l Move- the Air				
	Duration	Fraction of Total Exposure	Duration	Fraction of Total Exposure	A. M.	P.M.	Greatest	Mean of 24 Hourly Measures	Horizontal Move- ment of the Air	O ^h to e ^h	6 ^h to 12 ^h	12 ^h to 18 ⁿ	18 ^h to 24 ^h
	hours		hours				lbs.	lbs.	miles				
June 1 2 3 4 5	4.2 4.5 4.5 1.2 4.5	0.93 1.00 1.00 0.26 1.00	3.2 4.5 4.5 1.1 4.5	0.70 1.00 1.00 0.24 1.00	Calm: SSW SSE: Calm Calm: SW SSE: SW: WSW	SSW: SSE SSE: Calm SSE: E SSW: S SSW: SW	1.7 1.3 1.6 11.0 13.0	0.07 0.05 0.08 0.52 0.90	137 129 136 282 389	bc bcz bcccir	b bc Ci Cu y b Ci y b Frcu y c q t ro bc Cunb Ci ro c r c Ast Cu y	bc b Acu Ci y b c Cist so-ha y b Frcu y bc c Cunb Ci v y c Nbst ir	bc b c b c c c c b c r bc b
6 7 8 9 10	2.1 3.5 1.5 4.5 4.5	0.46 0.79 0.33 1.00 1.00	1.0 3.0 0.7 4.5 4.5	0.21 0.67 0.16 1.00	SW WSW: SW WSW: W N: Calm	W: WSW W WSW WNW: NW: NNW Calm: S	7.1 7.8 9.0 6.5 1.0	0.76 0.77 0.96 0.49 0.05	396 407 458 367 101	b cr bcb bc b	crocNbstr rrcStcu cpcFrcuCi cStcuy bCiy	r t 1 c Cumb Ci p bc c Ci Frcu y c Ci Cumb p P c c Frcu y b c Frcu Acu y	p c bc bc bc b c b
11 12 13 14 15	0.0 4.5 0.0 0.9 4.5	0.00 1.00 0.00 0.20 1.00	0.0 4.5 0.0 0.9 4.5	0.00 1.00 0.00 0.20 1.00	S: Calm ENE NE: E Calm SSW: WNW	E ENE ESE SE: SSW WNW: WSW	3.7 4.5 2.9 2.7 4.7	0. 14 0. 62 0. 33 0. 13 0. 45	171 335 244 155 279	b c bc b bc c r _o r _o d _o c rr c	b zo c Stou y bc b Frou y bc c Cist Cu y c Nost rr c Cunb p c Stou	c Stcu b y b y c Cist so-ha c Acu y r r _o c Nbst c Stcu	bc b croc crobcr bcb
16 17 18 19 20	1.5 4.5 2.2 2.0 0.0	0.34 1.00 0.49 0.44 0.00	1.5 4.5 2.2 1.9 0.0	0.33 1.00 0.49 0.41 0.00	SW S: SSW Calm WSW SSW	SW: SSW S: Calm Calm: WSW SW SSW: Calm	1.7 1.2 0.5 1.5 1.9	0.10 0.09 0.02 0.10 0.13	208 165 104 198 197	b bc c b b w c z _o bc c d _o c	bc c Ast Cu b Cu Cicu y c Nbst ro ro r bc c Stcu Frcu c Nbst	c Stcu b Cu Ci y rr c r c Nbst c Stcu b y c Nbst r iro	cbc bw pbc bc 1dc
21 22 23 24 25	2.0 4.5 2.6 1.9 3.6	0.44 1.00 0.59 0.43 0.80	2.0 4.5 1.5 1.8 3.5	0.44 1.00 0.34 0.41 0.78	Calm: WSW NNW Calm: SW Calm: S Calm: WSW	NW NNW: Calm SW: S S WSW: S: Calm	1.5 2.7 1.3 3.2 2.4	0. 07 0. 16 0. 05 0. 20 0. 15	170 207 150 192 209	c b c b b c b c c b c	c b c Acu Stcu y b c Cu Frcu c Ast Stcu c b Acu Ci bc b Frcu y	c Cunb t 1 c r c c Cu Stcu c Ast Stcu y b Frcu y b Ci c y	c b c b c bc b b y c c bc
26 27 28 29 30	4.5 1.3 0.0 0.0	1.00 0.29 0.00 0.00	4.5 1.2 0.0 0.0	1.00 0.27 0.00 0.00	Calm: S Calm: NNW Calm: ENE W Calm	SSE: Calm WSW: Calm Var.: WSW W: WSW Calm	1.6 24.0 1.5 2.1 0.1	0.10 0.08 0.07 0.19 0.00	148 112 166 262 77	bcb c bw ctlc cm _o	b bc Ci y c R t 1 c G Q R t 1 c Acu Wbst c Frcu Stcu c Ast	bc c Cunb Acu t y r t 1 c Frcu b r R t 1 c Ast bc c Cu Frcu c Stcu	bcycb b cbctl c crr
Means	2.6	0.58	2.4	0.54	••	••		0.26	218				
No. of Col. for Ref.	19	20	21	22 -	23	24	25	26	27	28	29	30	31

The mean Temperature of Evaporation for the month was 56°.7, being 1°.8 higher than

The mean Temperature of the Dew Point for the month was 51°.9, being 1°.1 higher than

The mean Degree of Humidity for the month was 69.2, being 4.0 less than

The mean Elastic Force of Vapour for the month was 0.389 in., being 0.014 in. greater than

The mean amount of Cloud for the month (a clear sky being represented by 0 and an overcast sky by 10) was 6.1.

The mean proportion of Sunshine for the month (constant sunshine being represented by 1) was 0.422. The maximum daily amount of Sunshine was 13.8 hours on June 12.

the average for the 65 years, 1841-1905.

The highest reading of the Solar Radiation Thermometer was 150°.3 on June 2; and the lowest reading of the Terrestrial Radiation Thermometer was 29°.5 on June 16.

The Proportions of Wind referred to the cardinal points were N.7, E.12, S.28, W.27, calm or nearly calm conditions 26, the whole month being represented by 100.

The Greatest Pressure of the Wind in the month was 24.0 lbs. on the square foot on June 27. The mean daily Horizontal Movement of the Air for the month was 218 miles; the greatest daily value was 458 miles on June 8, and the least daily value was 77 miles on June 30.

Rain (0.005 in. or over) fell on 13 days in the month, amounting to 2.927 in., as measured by gauge No.6 partly sunk below the ground; being 0.889 in. greater than the average fall for the 65 years, 1841-1905.

		<u>-i-</u>		TABLE	XVII.	- DAIL	Y RESUL	TS OF T	не мет	EOROLO	GICAL	OBSER	VATIONS					
	BAROMETER			7	EMPERATU	RE				-			Ti	EMPERATUR	Œ	ψ.	-	
Month and	Hourly rrected 1 to 32° 1t)		ı	Of the A	ir		Of Evapo- ration	Of the Dew Point	the Ai	rence be r Temper l Dew Poi emperatur	ature nt	Humidity on = 100)	Of Rad	iation	Of the Earth 4 ft.	ted in Gauge e receiving s 5 inches ne Ground	Daily Dura- tion	Sun above
Day 1947	Mean of 24 Hourly Values (corrected and reduced to 32° Fahrenúelt)	H1ghest	Lowest	Daily Range	Mean of 24 Hourly Values	Excess above Average of 65 Years	Mean of 24 Hourly Values	Deduced Mean Daily Value	Mean	Great- est	Least	Degree of (Saturati	Highest in Sun's Rays	Lowest on the Grass	below the surface of the Soil	Rain collected in Gauge No.6, whose receiving surface is 5 inches above the Ground	of Sun- shine	Horizon
	in.	٥	0	٥	0	0	0	٥	0	0	0		0	0	٥	in.	hours	hours
July 1 2 3 4 5	30.041 29.974 29.898 29.764 29.606	67.1 73.8 72.7 76.4 64.6	55.2 56.8 56.4 55.8 51.5	11.9 17.0 16.3 20.6 13.1	61.8 64.2 64.7 63.7 59.3	+ 0.3 + 2.6 + 2.9 + 1.6 - 3.0	58.1 59.3 60.0 58.6 52.8	55. 2 55. 5 56. 5 54. 5 46. 5	6.6 8.7 8.2 9.2 12.8	12.5 14.7 15.6 22.8 23.3	1.3 2.0 1.8 1.5 4.6	79 74 75 72 62	107.0 134.8 138.0 146.0 121.3	49.2 50.5 47.0 41.9 42.5	56.4 56.6 56.6 56.7 56.5	0.003 0.017 0.000 0.107 0.009	0.1 1.6 4.7 4.8 7.1	16.6 16.6 16.5 16.5 16.5
6 7 8 9 10	29. 693 29. 494 29. 399 29. 358 29. 440	65.9 69.8 64.7 68.0 62.0	48.3 51.8 50.4 51.1 52.2	17.6 18.0 14.3 16.9 9.8	57.1 59.6 56.8 57.0 56.3	- 5.3 - 2.8 - 5.6 - 5.4 - 6.2	52.3 53.8 52.4 53.3 54.5	47.7 48.4 48.2 49.8 53.1	9.4 11.2 8.6 7.2 3.2	16.9 25.1 16.9 17.7 7.5	2.4 3.3 1.0 1.8 1.4	71 67 72 77 88	136.3 139.5 124.1 143.9 99.2	38. 2 45. 0 42. 5 44. 6 44. 1	56.7 56.8 56.8 56.7 56.6	0.003* 0.040 0.120 0.130 0.132	2.8 8.4 4.7 6.1 0.1	16.5 16.5 16.4 16.4 16.4
11 12 13 14 15	29.565 29.915 30.085 30.071 29.880	66.1 71.3 77.6 81.0 77.7	51.9 48.8 56.2 60.8 61.4	14.2 22.5 21.4 20.2 16.3	57.9 60.3 66.5 69.0 68.8	- 4.8 - 2.6 + 3.4 + 5.7 + 5.4	53.4 54.5 62.4 64.4 63.4	49.3 49.3 59.6 61.5 59.8	8.6 11.0 6.9 7.5 9.0	15.9 20.9 14.6 17.6 17.3	1.6 1.1 2.7 1.6 1.4	72 67 79 77 73	110.1 142.9 137.4 133.0 136.1	49.0 38.1 47.4 49.0 53.7	56.7 56.8 56.7 56.8 57.0	0.039 0.001* 0.000 0.000	1.5 9.2 3.2 3.6 11.5	16.3 16.3 16.3 16.3 16.2
16 17 18 19 20	29.726 29.815 29.772 29.670 29.709	83.2 67.8 72.6 77.0 74.8	61.4 60.6 60.2 57.7 56.4	21.8 7.2 12.4 19.3 18.4	70. 5 64. 5 65. 7 64. 3 62. 6	+ 7.1 + 1.1 + 2.4 + 1.1 - 0.6	64.9 62.3 62.9 61.5 57.1	61.3 60.8 61.0 59.5 52.5	9.2 3.7 4.7 4.8 10.1	20.9 6.3 9.8 18.3 19.8	1.7 1.2 0.7 0.0 3.1	72 88 85 85 70	139.3 101.7 94.9 145.7 134.6	52.4 57.7 50.6 52.5 53.8	57.1 57.2 57.3 57.7 57.7	0.010 0.415 0.101 0.091 0.000	6.3 0.0 0.1 3.4 4.2	16. 2 16. 1 16. 1 16. 1 16. 0
21 22 23 24 25	29. 753 29. 872 29. 955 29. 958 29. 899	74.5 78.5 78.9 78.0 86.6	57.5 61.0 56.7 53.5 58.4	17.0 17.5 22.2 24.5 28.2	66. 5 69. 5 67. 2 65. 9 71. 6	+ 3.3 + 6.4 + 4.2 + 3.0 + 8.9	60.7 64.0 60.8 59.9 63.8	56. 4 60. 4 56. 1 55. 3 58. 5	10. 1 9. 1 11. 1 10. 6 13. 1	15.3 16.9 19.5 20.5 25.5	4.4 2.3 2.0 1.9 2.3	70 73 68 69 64	142.5 142.4 143.1 136.9 144.1	51.4 52.4 45.9 38.7 46.4	57.8 57.9 58.3 58.2 58.5	0.000 0.000 0.000 0.000 0.000	1.3 11.5 4.8 6.2 6.5	16.0 16.0 15.9 15.9 15.8
26 27 28 29 30	29. 894 29. 890 29. 810 29. 819 29. 936	86.3 84.9 90.2 82.4 70.9	63.9 62.8 65.1 67.2 60.2	22. 4 22. 1 25. 1 15. 2 10. 7	74.8 73.2 76.3 73.5 65.9	+12.3 +10.8 +14.0 +11.2 + 3.6	67.7 67.2 70.2 66.1 62.3	63.5 63.6 66.9 61.5 59.9	11.3 9.6 9.4 12.0 6.0	23. 2 23. 4 23. 1 21. 1 9. 8	1.7 1.5 2.2 3.6 2.6	68 72 73 66 81	150.2 144.2 148.3 140.1 109.7	53.6 49.5 58.7 60.3 55.0	58.6 58.7 59.0 59.1 59.2	0.000 0.000 0.018 0.000 0.007	12.8 10.2 5.5 10.2 0.9	15.8 15.7 15.7 15.6 15.6
31	29. 938	75.4	60.0	15.4	65.9	+ 3.7	60.7	56.9	9.0	19.4	2.6	73	134.9	53.0	59.5	0.000	6.4	15.5
Means	29.794	74.9	57.1	17.7	65.2	+ 2.5	60.2	56.4	8.8	17.8	2.0	73.6	132.3	48.9	57.5	Sum 1.243	5.2	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 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 July 6 and 12 are derived from dew.

The mean reading of the Barometer for the month was 29.794 in., being 0.012 in. lower than the average for the 65 years, 1841-1905. TEMPERATURE OF THE AIR

The highest in the month was 90°.2 on July 28; the lowest in the month was 48°.3 on July 6; and the range was 41°.9. The mean of all the highest daily readings in the month was 74°.9, being 2°.8 higher than the average for the 65 years, 1841-1905. The mean of the daily ranges was 17°.7, being 0°.6 less than the average for the 65 years, 1841-1905. The mean for the month was 65°.2, being 2°.5 higher than the average for the 65 years, 1841-1905.

					TABLE XVII.	- DAILY RE	SULTS	OF THE	METEO	ROLOGICAL	OBSERVATIONS		
		RECORD NIGH	OF THE TSKY		SEI	WIND AS DEDUC F-REGISTERING	ED FROM	M ETERS					
Month	Pol	aris	δ MIN	URSÆ IORIS		OSLER'S			Robin- son's		CLOTINS	AND WEATHER	
and Day 1947	tion	on of sposure	ton	tion of Exposure	General :	Direction	on	ssure the re Foot	al Move- the Air		0110020	ALD NEATHER	
	Duration	Fraction of Total Exposure	Duration	Fracti Total Ed	A.M.	P.M.	Greatest	Mean of 24 Hourly Measures	Horizontal Move- ment of the Air	O ^h to 6 ^h	6 ^h to 12 ^h	12 ^h to 18 ^h	18 ^h to 24 ^h
July 1 2 3 4 5	0.0 2.3 4.5 0.0 4.4	0.00 0.52 1.00 0.00 0.93	0.0 2.2 4.5 0.0 4.4	0.00 0.49 1.00 0.00 0.92	Calm: N WSW Calm: SW Calm: SW SW: WNW	NNW: Calm WSW: SW WSW: SW SW: SSW W: WSW	1bs. 0.5 1.2 1.0 2.0 8.5	1bs. 0.02 0.07 0.05 0.14 0.93	miles 99 180 169 210 423	c m _o c r r _o c bc w b w c c r _o c	c Stcu Acu r ro c Ast bc c Cu Frcu c bc c Ast Ci y c bc c Cu v y	c ro c Ast c Acu c Stcu c Ci Ast y c Stcu v y	c c b c c b c ir bc b
6 7 8 9 10	4.3 1.8 2.6 0.0	0.91 0.38 0.54 0.00	4.3 1.3 2.3 0.0	0.91 0.26 0.48 0.00	WSW SW: WSW SSW: SW SW: W WSW: SW	WSW: SW SW SW WSW • SW: WSW	4.7 6.8 8.5 6.0 4.6	0. 47 0. 81 1. 13 0. 18 0. 36	307 373 417 223 305	bwc c bwc c cir _o	c Acu Stcu y c ir c Frcu v c D c Cu Ast c Cu Cunb Do c Nbst ir	c bc c Stcu y bc y Cu v c Nbst p c Cunb Ast R t l p c Nbst ir c	c D c bc b w c r r c bc c
11 12 13 14 15	3.4 2.0 4.7 2.6 3.8	0.71 0.38 0.90 0.50 0.73	3.3 1.9 4.7 2.2 3.2	0.69 0.36 0.89 0.41 0.61	WSW WSW SW: WSW: W Calm E	WSW: W WSW: SW W: Calm SE: E ESE: Calm	3.0 1.6 0.6 1.4 2.4	0.44 0.10 0.04 0.06 0.20	340 191 136 117 202	crc bw c bwc	c Nbst b c Frcu y c do c Acu c m c Stcu b	c Ast y c Stcu y c Acu Cu c Stcu Cu b c b	c c b c bc c b bc
16 17 18 19 20	1.3 0.0 0.6 0.0 0.9	0.25 0.00 0.12 0.00 0.15	1.2 0.0 0.6 0.0 0.8	0.23 0.00 0.11 0.00 0.13	Calm N: Calm Calm Calm WSW	WSW: W: NNW N: Calm Calm Var. SSW	2.0 0.5 0.3 1.0 1.6	0.08 0.02 0.00 0.02 0.08	149 121 51 104 171	bc w mo c t l rr mo c ro c mo c ff c	bc Ou Zor c Nost mo c Steu mo bc c t mo c Steu	bc c Frcu Ci c Nbst 1ro mo c Nbst t 1 r mo c Nbst Cunb ro c bc Stcu	crtlbc ciro mo bcmcf rroc bcc
21 22 23 24 25	1.8 5.4 5.7 3.1 2.6	0.32 0.94 1.00 0.54 0.45	1.8 5.0 5.7 3.0 2.3	0.32 0.87 1.00 0.53 0.39	S: SSE Calm: SSW Calm: WSW Calm Calm	S: SSE SSW: SW WSW: W SSW: Calm WSW: W: Calm	3.4 1.4 2.0 0.5 1.2	0. 17 0. 08 0. 07 0. 02 0. 04	195 164 141 104 115	c bc blwc bw c	c Nost ro bc c Cu b c po c Acu Ci y b c Cist mo c bc Acu y	c Ast 1ro c b Cu c Acu Cu D c c Cist so-ha c b y b Cu Ci c y	c b b 1 c b bc c
26 27 28 29 30	6.0 5.6 2.3 4.3 1.7	1.00 0.93 0.37 0.72 0.28	6.0 5.6 1.9 4.2 1.3	1.00 0.93 0.32 0.69 0.22	WSW: Calm Calm: ENE Calm: E: Var NNW: W NE: ENE	WSW: SW: Calm E Var. NW: NNW: N ENE: E	1.0 2.2 2.1 1.2 1.9	0.07 0.19 0.13 0.09 0.13	158 187 191 174 224	b c b b c t 1 c b c m	b bc Cu Frcu b bc c Stcu po y c b c Stcu y c b Frcu c St mo	bc Cu y c Cu b y c Stcu b bc Frcu Cu y c Acu mo p	bc b b bc b roctlr bc b c
31	4.5	0.75	4.1	0.69	ENE	E	1.3	0.15	211	рс с	c Freu	b Frcu y	bc
Means	2.7	0.51	2.6	0.48	••	••	••	0. 20	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 60°.2, being 2°.3 higher than

The mean Temperature of the Dew Point for the month was 56°.4, being 2°.3 higher than

The mean Degree of Humidity for the month was 73.6, being 0.4 greater than

The mean Elastic Force of Vapour for the month was 0.459 in., being 0.038 in. greater than

The mean amount of Cloud for the month (a clear sky being represented by 0 and an overcast sky by 10) was 6.9.

The mean proportion of Sunshine for the month (constant sunshine being represented by 1) was 0.319. The maximum daily amount of Sunshine was 12.8 hours on July 26.

the average for the 65 years, 1841-1905.

The highest reading of the Solar Radiation Thermometer was 150°.2 on July 26; and the lowest reading of the Terrestrial Radiation Thermometer was 38 .1 on July 12.

The Proportions of Wind referred to the cardinal points were N.7, E.12, S.21, W.31, calm or nearly calm conditions 29, the whole month being represented by 100.

The Greatest Pressure of the Wind in the month was 8.5 lbs. on the square foot on July 5 and 8. The mean daily Horizontal Movement of the Air for the month was 198 miles; the greatest daily value was 423 miles on July 5, and the least daily value was 51 miles on July 18.

Rain (0.005 in. or over) fell on 14 days in the month, amounting to 1.243 in., as measured by gauge No.6 partly sunk below the ground; being 1.156 in. less than the average fall for the 65 years, 1841-1905.

				TABLE	XVII.	- DAIL	RESUL	TS OF T	HE MET	EOROLOG	FICAL	OBSER	VATIONS					
	BAROMETER			7	EMPERATU	TRE .							TE	MPERATUR	Œ			
Month and	Hourly rrected 1 to 32° elt)		ı	Of the A	ir		Of Evapo- ration	Of the Dew Point	the Ai and	rence bet r Temper Dew Poi mperatur	ature nt	Degree of Humidity (Saturation = 100)	Of Rad	iation	Of the Earth 4 ft.	collected in Gauge 6, whose receiving urface is 5 inches above the Ground	Daily Dura- tion	Sun above
Day 1947	Mean of 24 Hourly Values (corrected and reduced to 32° Fahrenhelt)	H1ghest	Lowest	Daily Range	Mean of 24 Hourly Values	Excess above Average of 65 Years	Mean of 24 Hourly Values	Deduced Mean Daily Value	Mean	Great- est	Least	Degree o (Saturat	Highest in Sun's Rays	Lowest on the Grass		Rain collec No.6, whose surface i	of Sun- shine	Horizon
	in.	0	0	0	0	0	٥	0	0	0	0		٥	0	0	in.	hours	hours
Aug. 1 2 3 4 5	29. 990 29. 889 29. 858 29. 637 29. 531	77.0 73.0 79.8 78.3 70.0	57.2 62.2 59.0 57.9 59.2	19.8 10.8 20.8 20.4 10.8	66.3 65.6 69.0 67.3 63.0	+ 4.1 + 3.5 + 6.9 + 5.2 + 0.9	60.9 60.2 62.1 60.5 59.2	56. 9 56. 1 57. 2 55. 4 56. 3	9.4 9.5 11.8 11.9 6.7	19.8 19.1 25.4 23.2 13.3	1.8 1.7 1.4 3.7 2.1	72 72 66 66 79	137.0 134.4 140.7 135.2 123.5	47.7 52.0 47.1 45.7 49.0	59.7 59.5 59.7 59.7 59.5	0.009 0.045 0.000 0.001* 0.032	6.5 1.8 10.5 5.5 1.3	15.5 15.4 15.4 15.3 15.3
6 7 8 9 10	29. 735 29. 900 29. 913 29. 834 29. 871	73.8 71.0 76.8 75.7 70.0	57.6 53.0 46.8 52.0 53.6	16. 2 18. 0 30. 0 23. 7 16. 4	64.9 62.4 62.2 63.6 61.8	+ 2.7 + 0.2 - 0.1 + 1.3 - 0.5	58.7 54.2 54.9 56.9 57.2	53.8 46.3 48.2 51.2 53.5	11.1 16.1 14.0 12.4 8.3	21.1 24.8 25.8 24.9 16.6	3.5 6.2 1.6 1.5 1.3	67 55 60 64 74	134.9 136.7 120.1 132.3 115.5	50.9 42.0 33.2 36.3 37.8	59. 5 59. 5 59. 5 59. 6 59. 3	0.000 0.000 0.000 0.000 0.000	3.6 4.6 11.4 11.7 3.3	15. 2 15. 1 15. 1 15. 0 15. 0
11 12 13 14 15	29.989 30.036 30.025 30.017 29.973	75.6 77.8 80.8 82.2 88.0	54.2 54.2 54.2 57.7 59.4	21.4 23.6 26.6 24.5 28.6	64.0 64.8 67.5 68.3 71.9	+ 1.6 + 2.3 + 5.0 + 5.8 + 9.5	58.8 58.7 60.3 62.1 63.6	54.7 53.9 54.8 57.7 57.9	9.3 10.9 12.7 10.6 14.0	20.0 25.7 28.0 29.4 34.9	1.3 1.3 1.6 0.3 1.4	72 68 64 69 61	134. 2 137. 0 140. 0 136. 5 138. 9	40.4 37.6 40.0 46.2 50.1	59.3 59.6 59.6 59.4 59.7	0.000 0.000 0.000 0.001* 0.000	6.3 9.6 12.4 8.7 12.1	14.9 14.9 14.8 14.7 14.7
16 17 18 19 20	29. 991 30. 002 29. 933 29. 885 29. 930	89.7 88.4 88.3 81.3 83.3	60.2 62.4 62.8 62.7 56.6	29. 5 26. 0 25. 5 18. 6 26. 7	74.5 74.0 74.4 71.6 68.9	+12.2 +11.9 +12.5 + 9.9 + 7.4	65.2 65.3 65.3 62.3 62.0	59.1 59.7 59.3 55.5 57.1	15.4 14.3 15.1 16.1 11.8	28.4 26.7 29.2 30.1 30.6	3.5 3.6 3.9 5.6 0.9	59 61 60 57 66	139. 2 139. 8 144. 1 137. 7 136. 6	47. 2 49. 1 51. 5 55. 1 48. 8	59.7 59.7 60.0 60.0 60.1	0.000 0.000 0.000 0.000 0.000	12.4 9.5 11.6 10.8 8.7	14.6 14.6 14.5 14.4 14.4
21 22 23 24 25	29.835 29.835 29.979 30.090 30.102	80.1 77.8 81.2 78.3 79.3	62.4 61.8 59.6 56.3 57.7	17.7 16.0 21.6 22.0 21.6	69.4 69.0 67.6 66.8 67.3	+ 8.1 + 7.9 + 6.7 + 6.0 + 6.6	61.5 61.8 61.8 59.2 60.4	55. 7 56. 6 57. 7 53. 1 55. 2	13.7 12.4 9.9 13.7 12.1	31.7 20.9 28.3 28.3 24.2	2.7 3.9 1.9 2.2 2.4	62 65 71 61 65	138.1 135.5 140.3 142.9 135.2	57.4 56.1 55.3 41.5 44.3	60.3 60.4 60.4 60.6 60.5	0.000 0.000 0.002 0.000 0.000	3.8 8.6 5.6 9.6 8.9	14.3 14.3 14.2 14.1 14.1
26 27 28 29 30	30. 143 30. 129 30. 122 30. 064 29. 995	78.6 81.3 81.7 77.0 71.2	59.3 56.9 58.4 57.7 55.5	19.3 24.4 23.3 19.3 15.7	67.3 68.8 68.1 66.0 63.6	+ 6.6 + 8.2 + 7.7 + 5.7 + 3.5	60.7 59.9 60.1 60.2 57.8	55. 8 52. 9 53. 9 55. 8 53. 1	11.5 15.9 14.2 10.2 10.5	24.4 34.3 35.9 21.0 20.3	1.6 2.0 1.6 1.1 2.8	67 57 60 70 69	140.2 138.3 136.9 135.7 111.5	44.5 44.7 48.0 47.5 43.4	60.6 60.7 60.8 60.6 60.5	0.000 0.000 0.000 0.000 0.000	8.1 11.7 10.1 9.5 1.4	14.0 14.0 13.9 13.8 13.8
31	29.955	74.5	54.7	19.8	65.0	+ 5.1	56.4	48.7	16.3	36.8	1.2	55	136.4	38.8	60.6	0.000	11.0	13.7
Means	29.942	78.8	57.5	21.2	67.3	+ 5.6	60.3	54.9	12.3	25.9	2.3	65.0	135.0	46.1	60.0	Sum 0.090	8. 1	14.6
No.of Col.for Ref.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18

The 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 August 4 is derived from dew and that on August 14 from wet fog.

The mean reading of the Barometer for the month was 29.942 in., being 0.152 in. higher than the average for the 65 years, 1841-1905. TEMPERATURE OF THE AIR

The highest in the month was 89°.7 on August 16; the lowest in the month was 46°.8 on August 8; and the range was 42°.9.

The mean of all the highest daily readings in the month was 78°.8, being 8°.0 higher than the average for the 65 years, 1841-1905.

The mean of all the lowest daily readings in the month was 57.5, being 3.9 higher than the average for the 65 years, 1841-1905.

The mean of the daily ranges was 21°.2, being 4°.0 greater than the average for the 65 years, 1841-1905.

The mean for the month was $67^{\circ}.3$, being $5^{\circ}.6$ higher than the average for the 65 years, 1841-1905.

			OF THE T SKY		SEI	WIND AS DEDUC							
	Pol	aris	δι	URSÆ IORIS		OSLER'S			Robin- son's		CLOUDS AND	Lan Arturd	
Month and Day 1947	lon	tion of Exposure	1on	tion of Exposure	General 1	Direction	on	ssure the re Foot	1 Move- he Air		CLOUDS AND	WE'N TUDY	
	Duration	Fraction Total Exp	Duration	Fractic Total Ex	A. M.	P.M.	Greatest	Mean of 24 Hourly Measures	Horizontal Move- ment of the Air	O ⁿ to e ^h	6 ^h to 12 ^h	12 ^h to 18 ^h	18 ^h to 24 ^h
	hours		hours		<u> </u>		lbs.	lbs.	miles				
Aug. 1 2 3 4 5	3.5 3.2 3.3 0.1 2.5	0.58 0.49 0.51 0.02 0.38	3.4 2.8 2.8 0.1 2.5	0.56 0.43 0.44 0.02 0.38	Calm: E E SW: WSW Calm: SW Calm: WSW	E E: SW SW: Calm SW: Calm W: WSW	6.0 10.0 1.6 1.7 2.5	0. 33 0. 59 0. 12 0. 10 0. 18	236 276 192 173 211	bc w c b c c w c r c	c b Ci y c po c Ast Stcu c Acu b y v c Frcu Stcu c Nost iro	b Ci y c Acu po c Nbst p b Acu y v c Cu b y c bc Prcu	p b c p c b w c b c c
6 7 8 9 10	1. 3 6. 5 6. 5 6. 9 6. 6	0. 19 1. 00 1. 00 0. 98 0. 94	1.0 6.2 6.5 6.3 6.0	0.15 0.96 1.00 0.90 0.86	WSW: W NW Calm Calm ENE: NE	W: NW: WNW NW: WNW: Calm SSE: Calm E NE: E: Calm	2.4 2.0 0.5 2.0 1.4	0.35 0.15 0.01 0.11 0.07	290 205 92 166 166	c c b m b m b w	c Stcu c Stcu b Ci z y b bc Stcu y b c Stcu	c Cu Cicu y c bc Cu Acu y b z _o y bc b Cu y c Stou b	c b b b
11 12 13 14 15	6.9 7.0 6.6 5.0 7.0	0.99 1.00 0.94 0.71 1.00	6.7 7.0 6.1 4.9 7.0	0.96 1.00 0.87 0.70 1.00	Calm: NNE Calm: NE Calm: ENE E: NE Calm: NNE	NE: Calm E: Calm E ENE: E ENE: E	0.7 0.9 2.7 2.6 2.0	0.06 0.12 0.23 0.24 0.10	119 135 187 202 165	bwc bwcf bw bcfe bcbwm _o	c Stcu f c b Frcu y b Ci Frcu y fe c b y b y	bc b Cu y b Cicu y b Ci y b y b y b Frcu y	b b b b
16 17 18 19 20	7.5 2.9 7.3 7.5 3.1	1.00 0.38 0.98 1.00 0.42	7.5 0.9 7.2 7.5 2.7	1.00 0.12 0.96 1.00 0.37	Calm: NNE NNE: N Calm: NNE NNE: NE Calm: NE	NE: Calm NNE: E: Calm NE: ENE ENE: Calm NE: E: ENE	1.1 1.9 1.3 5.4 2.5	0.05 0.07 0.07 0.16 0.13	136 166 171 221 210	b c b z _o b bc b c f	by b Ci Acu y b Ci Cicu y c b Acu y f b Ci y	b y b c Acu Cicu y b Cicu y b Ci y b bc Ci c y	b c b c
21 22 23 24 25	2.5 4.8 4.7 5.0	0.33 0.64 0.59 0.63	0.9 3.6 3.9 4.9	0.12 0.48 0.49 0.62	ne: ene ne: ene ne: nne nne: ne nne: n	ENE: NE ENE: NE NNE: ESE: NE NNE: E: NE NNE: E: NE	5.6 4.0 1.4 3.3 1.6	0.54 0.30 0.06 0.17 0.11	349 294 165 216 181	c b <i>Ci Acu</i> b c c c b b c	c b Ci Acu bc Ci Frcu y c bc Ci Frst y b bc Cu y c b Cu y	bc c Acu Ci y bc Ci y b c Cu t y bc Cu b y b bc Cu y	c bcbc croc b
26 27 28 29 30	8.0 8.0 6.6 7.6 8.3	1.00 1.00 0.82 0.95 0.98	8.0 8.0 5.1 7.4 7.8	1.00 1.00 0.64 0.92 0.92	NE: NNE NE: Calm NE: Calm Calm: NE NE	NE: E: ENE NE: E E: Calm E: ENE ENE	1.5 3.5 2.0 1.7 1.8	0.13 0.15 0.08 0.11 0.13	195 210 173 181 203	bc bwc cm bcc	c b Frcu y b Frcu y c b Ci z c m b Cicu y c Cist so-ha c Stcu	b y b Frou y b Ci y b bc Cicu y c Stou	b b b lu-ha bc c bc
31	8.5	1.00	8.5	1.00	Calm: ENE	ENE: E	3.2	0.15	201	bc w	b Ci y	b Ci y	b so-ha b
Means	5.5	0.75	5.1	0.70	• •	••		0.17	196				
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 60°.3, being 2°.8 higher than

The mean Temperature of the Dew Point for the month was 54°.9, being 0°.6 higher than

The mean Degree of Humidity for the month was 65.0, being 11.8 less than

the average for the 65 years, 1841-1905.

The mean Elastic Force of Vapour for the month was 0.435 in., being 0.011 in. greater than

The mean amount of Cloud for the month (a clear sky being represented by 0 and an overcast sky by 10) was 4.0.

The mean proportion of Sunshine for the month (constant sunshine being represented by 1) was 0.553. The maximum daily amount of Sunshine was 12.4 hours on August 13 and 16.

The highest reading of the Solar Radiation Thermometer was 144°.1 on August 18; and the lowest reading of the Terrestrial Radiation Thermometer was 33°.2 on August 8.

The Proportions of Wind referred to the cardinal points were N.22, E.41, S.4, W.9, calm or nearly calm conditions 24, the whole month being represented by 100.

The Greatest Pressure of the Wind in the month was 10.0 lbs. on the square foot on August 2. The mean daily Horizontal Movement of the Air for the month was 196 miles; the greatest daily value was 349 miles on August 21, and the least daily value was 92 miles on August 8.

Rain (0.005 in. or over) fell on 3 days in the month, amounting to 0.090 in., as measured by gauge No.6 partly sunk below the ground; being 2.254 in. less than the average fall for the 65 years, 1841-1905.

				TABLE	XVII.	- DAILY	RESUL	TS OF T	HE MET	EOROLOG	ICAL (OBSER	VATIONS					
	BAROMETER			T	EMPERATU	RE	_						TE	MPERATUF	Œ	d)		
Month and	Hourly rected to 32°			Of the A	ir		Of Evapo- ration	Of the Dew Point	the Ai	rence bet r Temper Dew Poi mperatur	ature nt	Degree of Humidity (Saturation = 100)	Of Rad	iation	Of the Earth 4 ft.	Rain collected in Gauge No.6, whose receiving surface is 5 inches above the Ground	Daily Dura- tion	Sun above
Day 1947	Mean of 24 Hourly Values (corrected and reduced to 32° Fahrenhelt)	Highest	Lowest	Daily Range	Mean of 24 Hourly Values	Excess above Average of 65 Years	Mean of 24 Hourly Values	Deduced Mean Daily Value	Mean	Great- est	Least	Degree of (Saturat	Highest in Sun's Rays	Lowest on the Grass	below the surface of the Soil	Rain collec No.6, whos surface i above th	of Sun- shine	Horizon
	in.	0	0	0	٥	0	0	0	0	0	٥		0	0	٥	in.	hours	hours
Sept.1	29.920 29.949	74.7 73.6	52.8 55.1	21.9 18.5	64.0 63.9	+ 4.2 + 4.2	58.2 58.0	53.5 53.3	10.5 10.6	21.4 23.7	1.7 1.5	69 68	133.9 135.6	36.8 45.0	60.6 60.7	0.000	9.4 6.3	13.6 13.6
3 4	29.911 29.844	76.8 79.5	48.9 54.6	27.9 24.9	62.8	+ 3.2	56.5 58.9	51.1 54.1	11.7	28.7 25.9	0.8 2.0	66	127.3	34.7 42.4	60.6	0.000 0.000 0.000	4.7 3.6 9.4	13.5 13.5 13.4
5	29.867	80.7	51.2	29.5 19.8	65.6	+ 6.2	57.9	51. 4 48. 9	14.2 15.3	31.5	1.4 3.7	58	128.4	37.5 41.7	60.5	0.000	9.4	13.4
6 7 8	29.920 29.860 29.727	75.6 73.2 73.4	52.4	20.8	63.1	+ 4.1 + 5.8	58.3	54.5	8.6 8.2	17.6 15.8	2.4	74	137.9	38.3 43.0	60.1	0.003	4.0	13.3
9	29.803 29.894	72.7	45.8 57.0	26.9 21.8	60.5	+ 1.9	54.3	48.6	11.9	22.3	2.9	65	118.3 141.0	32.1 47.0	60.0	0.000	5.1 9.7	13.1 13.0
11 12 13 14 15	29. 821 29. 846 29. 774 29. 774 29. 816	83.7 69.4 73.5 70.8 81.7	50.3 60.0 51.4 50.7 58.5	33.4 9.4 22.1 20.1 23.2	67.4 65.1 62.4 60.1 68.8	+ 9.3 + 7.1 + 4.6 + 2.4 +11.2	60.1 62.9 59.3 57.3 63.3	54. 5 61. 5 56. 9 55. 0 59. 7	12.9 3.6 5.5 5.1 9.1	26.0 5.2 16.1 12.7 22.3	1.2 1.8 1.5 1.2 1.8	63 88 83 83 73	139. 2 87. 0 126. 2 106. 7 136. 3	36.8 52.0 40.0 37.4 50.4	60.3 59.9 60.0 59.8 60.1	0.000 0.042 0.028 0.000 0.002	9.7 0.4 1.5 0.6 8.5	13.0 12.9 12.9 12.8 12.7
16 17 18 19 20	29.697 29.971 29.881 29.747 29.763	82.3 73.0 65.2 75.2 72.3	54. 4 47. 5 55. 6 62. 8 55. 7	27.9 25.5 9.6 12.4 16.6	68.3 60.0 61.4 66.9 63.8	+10.8 + 2.8 + 4.5 +10.4 + 7.6	61.6 54.3 59.4 65.2 61.2	56.8 49.1 58.0 64.2 59.4	11.5 10.9 3.4 2.7 4.4	23. 1 27. 2 6. 5 10. 9 12. 0	4.1 1.3 0.8 0.6 0.9	67 67 88 91 86	135.6 129.9 85.2 105.9 118.9	43. 4 33. 8 44. 9 61. 9 48. 5	59.9 59.8 59.7 59.7 59.7	0.015 0.000 0.744 0.044 0.455	7.7 5.1 0.0 0.7 1.6	12.7 12.6 12.5 12.5 12.4
21 22 23 24 25	30.087 30.240 29.886 29.939 29.939	66.6 68.7 60.8 58.1 64.8	53.0 45.3 48.5 43.7 40.1	13.6 23.4 12.3 14.4 24.7	59.1 57.0 54.6 50.9 52.6	+ 3.2 + 1.4 - 0.8 - 4.4 - 2.6	54.3 52.0 49.4 46.2 48.5	49.9 47.1 43.8 40.5 44.0	9.2 9.9 10.8 10.4 8.6	22. 8 22. 0 19. 1 18. 0 22. 0	0.8 1.9 3.3 2.5 1.0	72 69 67 68 73	120.5 127.2 111.3 111.5 124.1	45. 4 33. 8 41. 5 34. 6 24. 7	59.7 59.7 59.3 59.2 59.1	0.035 0.072 0.002 0.000 0.000	6.3 9.1 3.3 6.1 6.7	12.3 12.3 12.2 12.2 12.2
26 27 28 29 30	29.937 29.973 29.977 29.972 30.255	66.6 66.7 63.4 65.0 58.9	51.4 48.6 51.2 49.6 40.5	15. 2 18. 1 12. 2 15. 4 18. 4	58. 2 55. 8 57. 3 57. 5 50. 0	+ 3.0 + 0.7 + 2.4 + 2.8 - 4.4	53.4 52.2 54.3 54.0 44.4	48.9 48.7 51.6 50.8 36.9	9.3 7.1 5.7 6.7 13.1	21.6 16.2 8.8 15.0 24.2	1.8 1.2 2.6 1.5 2.9	71 77 82 78 61	117.2 117.1 90.1 89.7 113.2	44. 4 39. 7 39. 6 42. 0 32. 5	59.0 58.7 58.5 58.6 58.3	0.000 0.000 0.000 0.011 0.000	6.0 4.7 0.3 1.0 8.7	12.0 11.9 11.9 11.8 11.8
Means	29.900	71.5	51.5	20.0	61.2	+ 4.0	56.4	52. 1	9.1	19.7	1.8	72.6	119.5	40.9	59.8	Sum 1.533	5.1	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 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 29.900 in., being 0.082 in. higher than the average for the 65 years, 1841-1905. TEMPERATURE OF THE AIR

The highest in the month was 83°.7 on September 11; the lowest in the month was 40°.1 on September 25; and the range was 43°.6. The mean of all the highest daily readings in the month was 71°.5, being 5°.3 higher than the average for the 65 years, 1841-1905. The mean of the daily ranges was 20°.0, being 3°.5 greater than the average for the 65 years, 1841-1905.

The mean for the month was 61°.2, being 4°.0 higher than the average for the 65 years, 1841-1905.

					TABLE XVII.	- DAILY RES	SULTS	OF THE	METEO	ROLOGICAL O	BSERVATIONS		
			OF THE TSKY		SEI	WIND AS DEDUC F-REGISTERING							
	Pol	aris	δ MIŅ	URSÆ KORIS		OSLER'S			Robin- son's		CLOUDS AND	WEATHER	
Month and Day 1947	1on	n of posure	lon	n of posure	General 1)irection	on	ssure the e Foot	1 Move— the Air				
	Duration	Fraction of Total Exposure	Duration	Fraction of Total Exposure	A. M.	P.M.	Greatest	Mean of 24 Hourly Measures	Horizontal Move- ment of the Air	O ^h to G ^h	6 ^h to 12 ^h	12 ^h to 18 ^h	18 ^h to 24 ^h
Sept.1 2 3 4 5	hours 8.5 8.5 0.0 7.6 6.4	1.00 1.00 0.00 0.90 0.75	hours 8.5 8.5 0.0 7.5 6.1	1.00 1.00 0.00 0.89 0.72	Calm: ENE NE: NNE Calm Calm Calm	E: ENE NE: ENE :Calm Calm Calm WSW: WNW	1bs. 3.0 1.5 0.3 0.3 0.6	1bs. 0.17 0.08 0.01 0.01 0.03	miles 209 178 63 79 114	b bw bwm cmf bw	bc Cu Frcu y b c Frcu y bc m b Acu y c f b Acu y b m b Z ₀ y	b Ci y c Stcu y b c Acu y bc c Acu Cu y b Frcu y	b c m f c b c b
6 7 8 9 10	1.7 1.3 7.8 9.0 9.0	0. 19 0. 14 0. 87 1. 00 1. 00	1.1 0.7 7.7 9.0 9.0	0.13 0.08 0.86 1.00 1.00	Calm: NNW Calm: SSW SW: WSW SW: WSW SW: WSW	Calm SSW WSW: NNW: NW WSW: SW WSW: SW	0.3 1.0 2.2 8.1 2.8	0.03 0.06 0.15 0.77 0.28	93 155 224 368 280	bccbcrcb	c b Ci y b c Stcu Cu c Stcu bc c Cist so-ha y c bc Frcu Ci y	b Frcu c y c Stcu c Stcu Frcu Ci c Ci so-ha be y be b Cu Ci y	c d c c b b
11 12 13 14 15	5. 5 6. 1 5. 3 9. 7 6. 9	0.62 0.68 0.55 1.00 0.71	4.9 5.1 5.0 9.7 6.4	0.55 0.57 0.52 1.00 0.66	SSW: Calm SW: SSW S: SSW: SW Calm: SSW SW: SSW	SW SW: SSW W: SW: Calm SW SSW: Calm	4.1 3.0 4.1 4.6 2.5	0. 20 0. 28 0. 25 0. 28 0. 19	231 273 252 233 209	bw bcc bc bc bc bc	c b y c Nost 1do c b c Ast do c Ast d b bc b Frcu y	b Ci b c prhn y c Nbst dorc c Nbst ir d c Acu bc b c Cu y	bc c b c b b c r _o c b
16 17 18 19 20	8.9 2.3 0.0 2.3 8.3	0.91 0.24 0.00 0.23 0.81	8.1 1.1 0.0 2.3 8.2	0.83 0.12 0.00 0.23 0.80	SSW Calm Var.: ENE Calm SSW	SW: WNW Calm ENE Calm: SE: S SSW	7.5 0.3 3.4 1.8 3.4	0.60 0.01 0.21 0.02 0.21	311 91 210 121 237	b w bc c t 1 R r c c o m f c ir	b bc Ci so-ha c y bc Cu Ci y c Nost o f m c Ast Nost	c Nbst p b y bc Cu Ci c y c Nbst ro r c mo Nbst r m c c Nbst p R c	b bcc c ctlrbc cb
21 22 23 24 25	9.8 1.6 9.4 9.3 6.0	0.96 0.15 0.92 0.91 0.59	9.3 1.2 8.7 9.2 4.9	0.91 0.12 0.85 0.90 0.48	SW: NW WSW W: NNW N Calm	NW: NNW WSW: SW NW: NNW N: NE: Calm NE: E	7.8 5.0 11.5 1.7 0.7	0. 57 0. 39 0. 48 0. 15 0. 03	326 290 326 198 109	bc b cdoc bmo bcbfx	c ro c bc Cu b Cist y c Cist so-ha c Stcu b mo c Stcu b Ci y	bc Frcu y b Cu Ci y c c Acu y b c Stcu bc b c Cu Stcu y	b c r do c b mo bc b f c b
26 27 28 29 30	7.9 3.2 1.2 9.4 10.5	0.77 0.30 0.11 0.89 1.00	7.7 1.3 1.1 9.2 9.4	0.75 0.12 0.10 0.88 0.89	NE NE: NNE WSW WSW NNW: Calm	NE Calm SW: WSW W: NNW Calm	11.0 2.0 2.0 3.0 2.0	0.78 0.06 0.14 0.22 0.06	378 141 235 274 133	c b f c b c iro b w	c bc Stcu y b f c bc Cu Cist b c Stcu c r _q c Stcu Ast b Ci y	b Ci y bc Cist c Stcu c bc c Stcu b z _o Ci y	b c b f bc c c b hu-ha b f
Means	6.1	0.64	5.7	0.60	••	••	••	0. 22	211				
No. of Col. for Ref.	19	20	21	22	23	24	25	26	27	28	29	30	31

The mean Temperature of Evaporation for the month was 56°.4, being 2°.3 higher than

The mean Temperature of the Dew Point for the month was 52°.1, being 1°.0 higher than

The mean Degree of Humidity for the month was 72.6, being 7.3 less than

The mean Flastic Force of Vapour for the month was 0.392 in., being 0.013 in. greater than

The mean amount of Cloud for the month (a clear sky being represented by 0 and an overcast sky by 10) was 5.6.

The mean proportion of Sunshine for the month (constant sunshine being represented by 1) was 0.399. The maximum daily amount of Sunshine was 9.7 hours on September 10 and 11.

the average for the 65 years, 1841-1905.

The highest reading of the Solar Radiation Thermometer was 141°.0 on September 10; and the lowest reading of the Terrestrial Radiation Thermometer was 24°.7 on September 25.

The Proportions of Wind referred to the cardinal points were N.16, E.9, S.22, W.25, calm or nearly calm conditions 28, the whole month being represented by 100.

The Greatest Pressure of the Wind in the month was 11.5 lbs. on the square foot on September 23. The mean daily Horizontal Movement of the Air for the month was 211 miles; the greatest daily value was 378 miles on September 26, and the least daily value was 63 miles on September 3.

Rain (0.005 in. or over) fell on 10 days in the month, amounting to 1.533 in., as measured by gauge No.6 partly sunk below the ground; being 0.615 in. less than the average fall for the 65 years, 1841-1905.

				TABLE	XVII.	- DAILY	RESUL	TS OF T	не мет	OROLOG	ICAL (BSER	VATIONS					
	BAROMETER			T	EMPERATU	RE							TE	MPERATUR	E	w .		
Month and	Hourly rrected to 32° elt)			Of the A	ir		Of Evapo- ration	Of the Dew Point	the Ai and	rence be r Temper Dew Poi mperatur	ature nt	of Humidity tion = 100)	Of Rad	iation	Of the Earth 4 ft.	Rain collected in Gauge No.6, whose receiving surface is 5 inches above the Ground	Daily Dura- tion of	Sun above
Day 1947	Mean of 24 Hourly Values (corrected and reduced to 32 ³ Fahrennelt)	Highest	Lowest	Daily Range	Mean of 24 Hourly Values	Excess above Average of 65 Years	Mean of 24 Hourly Values	Deduced Mean Daily Value	Mean	Great- est	Least	Degree o (Saturat	Highest in Sun's Rays	Lowest on the Grass	below the surface of the Soil	Rain collection No.6, whose surface above t	Sun- shine	Horizon
	in.	0	0	٥	0	0	٥	0	0	٥	0		0	0	0	in.	hours	hours
Oct. ₁ 2 3 4 5	30. 187 30. 140 30. 272 30. 230 30. 013	62.5 65.0 61.7 67.2 67.8	36.0 40.3 44.2 37.7 43.2	26. 5 24. 7 17. 5 29. 5 24. 6	48.9 53.3 53.1 51.4 51.2	- 5.2 - 0.4 - 0.2 - 1.6 - 1.6	44.5 50.0 48.1 47.5 48.6	38.9 46.6 42.5 43.1 45.8	10.0 6.7 10.6 8.3 5.4	22.3 13.9 22.1 22.9 19.4	1.4 0.7 1.7 1.1 0.4	68 78 67 73 82	105. 1 108. 7 117. 6 118. 2 105. 1	25. 1 28. 8 29. 1 24. 1 24. 0	58. 2 58. 0 57. 8 57. 7 57. 6	0.000 0.000 0.000 0.000 0.000	6.7 4.2 9.5 8.8 4.3	11.7 11.6 11.6 11.5 11.4
6 7 8 9 10	29. 918 29. 889 29. 843 29. 954 30. 101	71.2 69.3 67.3 68.0 69.0	41.2 48.3 53.0 46.2 53.3	30.0 21.0 14.3 21.8 15.7	55.4 58.7 58.9 57.0 60.0	+ 2.9 + 6.4 + 6.9 + 5.4 + 8.7	50.6 55.0 56.5 53.4 56.5	45. 7 51. 8 54. 6 50. 0 53. 5	9.7 6.9 4.3 7.0 6.5	23.6 15.9 10.6 21.4 15.5	1.0 1.4 0.8 0.4 1.2	70 78 85 77 79	111.5 103.0 95.3 120.1 105.0	28.0 35.2 42.7 30.8 41.1	57.4 57.0 56.8 56.8 56.9	0.000 0.000 0.000 0.000 0.004	7.4 2.8 0.2 5.7 1.5	11.4 11.3 11.3 11.2 11.1
11 12 13 14 15	30. 283 30. 264 30. 113 29. 998 29. 999	66.8 71.8 69.6 55.9 64.4	52.5 50.7 48.5 42.2 37.7	14.3 21.1 21.1 13.7 26.7	59.3 59.0 57.1 52.4 51.8	+ 8.4 + 8.4 + 6.8 + 2.3 + 1.9	56.5 55.8 54.5 50.8 48.1	54. 2 53. 2 52. 3 49. 2 44. 0	5.1 5.8 4.8 3.2 7.8	12.8 17.1 14.9 6.3 18.3	0.6 1.0 0.0 0.9 0.7	83 81 84 89 74	108. 3 124. 1 121. 0 59. 6 115. 1	38.6 39.6 34.1 33.0 23.8	56. 7 56. 8 56. 8 56. 7 56. 7	0.000 0.000 0.001* 0.009 0.000	0.9 5.9 2.5 0.0 4.9	11.0 11.0 10.9 10.9 10.8
16 17 18 19 20	30.048 30.113 30.234 30.265 30.101	59.9 59.7 57.0 57.2 52.6	50.8 47.5 42.9 37.7 33.3	9. 1 12. 2 14. 1 19. 5 19. 3	56. 3 53. 9 51. 8 47. 6 45. 5	+ 6.5 + 4.3 + 2.5 - 1.5 - 3.3	52.9 51.1 47.8 44.0 42.0	49. 7 48. 4 43. 3 39. 4 37. 1	6.6 5.5 8.5 8.2 8.4	10.7 11.8 14.0 18.2 16.3	1.6 0.8 4.9 1.5 1.6	78 81 73 73 73	70.3 86.3 79.9 95.3 101.6	42.0 36.0 33.0 23.9 24.0	56. 6 56. 4 56. 3 56. 2 56. 0	0.000 0.000 0.000 0.000 0.000	0.0 1.0 0.0 2.8 0.6	10.7 10.7 10.6 10.5 10.5
21 22 23 24 25	29. 910 29. 680 29. 713 29. 837 29. 906	58.7 60.2 61.6 57.6 57.9	29.3 44.1 44.8 43.3 44.7	29. 4 16. 1 16. 8 14. 3 13. 2	42.8 52.5 52.4 49.4 51.4	- 5.8 + 4.2 + 4.3 + 1.5 + 3.7	39.9 50.5 50.0 48.1 48.4	35. 7 48. 6 47. 5 46. 7 45. 2	7.1 3.9 4.9 2.7 6.2	18. 6 10. 4 12. 5 6. 7 12. 7	2.2 1.2 0.8 0.0 2.4	75 86 83 90 79	91.3 71.0 114.6 79.6 101.2	16.0 26.7 31.0 27.8 38.5	55.8 55.7 55.6 55.3 55.0	0.000 0.019 0.070 0.032 0.000	6.1 0.3 5.5 1.5 4.9	10.4 10.3 10.3 10.2 10.1
26 27 28 29 30	30.039 29.931 29.900 29.773 29.597	51.7 49.9 50.4 49.4 49.0	44.7 45.3 44.4 37.0 32.3	7.0 4.6 6.0 12.4 16.7	47.1 47.5 47.3 44.6 41.9	- 0.5 - 0.0 - 0.1 - 2.7 - 5.3	42.3 42.3 42.6 41.7 40.5	35. 5 34. 8 36. 1 37. 7 38. 6	11.6 12.7 11.2 6.9 3.3	21.3 14.9 15.8 13.4 8.2	4.2 9.9 8.9 1.3 0.0	64 61 65 76 88	103.5 99.1 89.0 76.7 66.7	39.0 41.4 40.8 19.9 16.1	55. 0 54. 8 54. 7 54. 4 54. 3	0.000 0.000 0.000 0.005 0.000	5.3 2.5 0.3 0.7 0.0	10.1 10.0 10.0 9.9 9.8
31	29.611	52.8	45.3	7.5	49.0	+ 1.9	46.1	42.6	6.4	9.1	3.4	79	59.8	35.0	54.0	0.000	0.0	9.8
Means	29.996	60.7	43.3	17.4	51.9	+ 1.9	48.6	44.9	7.0	15.2	1.9	77.2	96.9	31.3	56.3	Sum 0.140	3.1	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 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 October 13 is derived from wet fog.

The mean reading of the Barometer for the month was 29.996 in., being 0.268 in. higher than the average for the 65 years, 1841-1905.

TEMPERATURE OF THE AIR

The nighest in the month was 71°.8 on October 12; the lowest in the month was 29°.3 on October 21; and the range was 42°.5. The mean of all the highest daily readings in the month was 60°.7, being 3°.7 higher than the average for the 65 years, 1841-1905. The mean of all the lowest daily readings in the month was 43°.3, being 0°.5 lower than the average for the 65 years, 1841-1905. The mean of the daily ranges was 17°.4, being 4°.2 greater than the average for the 65 years, 1841-1905.

The mean for the month was 51°.9, being 1°.9 higher than the average for the 65 years, 1841-1905.

					TABLE XVII.	- DAILY RE	SULTS	OF THE	METE(OROLOGICAL	OBSERVATIONS		
		RECORD NIGH	OF THE IT SKY		SEL	WIND AS DEDUC F-REGISTERING	ED FROM	i Ters					
	Pol	aris	δ MIN	URSAE IORIS		OSLER'S			Robin- son's		CLOUDS AN	ID WEATH ER	
Month and Day 1947	1on	on of posure	.1on	tion of Exposure	General I	Direction	on	ssure the re Foot	ul Move- the Air				
	Duration	Fraction of Total Exposure	Duration	Fracti Total Ex	A. M.	P.M.	Greatest	Mean of 24 Hourly Measures	Horizontal Move- ment of the Air	O ^h to 6 ^h	e ^h to 12 ^h	12 ^h to 18 ^h	18 ^h to 24 ^h
Oct.1 2 3 4 5	hours 8.0 7.9 10.5 8.7 11.0	0.76 0.75 1.00 0.79 1.00	hours 7.9 7.5 10.5 8.5 11.0	0.76 0.71 1.00 0.77 1.00	Calm Calm:E Calm:E Calm Calm	Calm ENE E: Calm Calm :SW	1bs. 0.0 2.5 3.1 0.2 0.0	1bs. 0.00 0.15 0.13 0.01 0.00	miles 72 185 199 66 63	bfx bfx bx bxf bFe	b f bc Cist so-ha y b f m c Stcu b y b f b y F b f	bc Ci b zo c Stcu b y b y b m f	bcbf cdocb bw fbm
6 7 8 9 10	6.6 3.7 8.0 7.0 8.6	0.60 0.33 0.73 0.64 0.78	5.0 1.4 7.3 5.4 7.9	0.45 0.12 0.66 0.49 0.71	Calm:SW Calm SSW Calm:WSW SW	Calm Calm:SE:SSW SW:WSW SW WSW:SW	0.1 0.2 0.5 1.3 3.0	0.00 0.01 0.04 0.07 0.16	108 110 158 176 227	bmw cbm cbccmow bwf bwc	b bc Acu Ast y b f bc Cist so-ha y c Stou mo b f b Frou y c Ci Cist so-ha	b Ci z _o y bc so-ha c Acu m _o c Stcu m _o r _o b y c Stcu Acu c Acu r _o	bcfcm c cbm crocb cmb
11 12 13 14 15	7.8 7.7 0.8 10.7 0.0	0.68 0.67 0.07 0.93 0.00	6.3 5.7 0.2 10.5 0.0	0.55 0.49 0.02 0.91 0.00	SW: Calm Calm Calm:W Calm:W SW: WSW	SW:SSW Calm Calm NNW:Calm WSW	1.2 0.1 0.1 1.0 3.5	0. 03 0. 00 0. 00 0. 03 0. 20	156 100 78 125 277	bwc bwc fFe cdm _o f bxc	c Stcu c Stcu b Cu Fe bc Ci m c Nbst 1d m c bc Ci Acu	c Stcu b b y bc c Ast mo id c St b mo bc Ci c Stcu	bm bmf cm bmcb
16 17 18 19 20	4.0 0.0 10.5 10.5 11.9	0.35 0.00 0.88 0.87 0.99	0.8 0.0 10.3 8.6 5.7	0.07 0.00 0.86 0.72 0.48	WSW: W Calm: WSW NE: Calm Calm: SSE Calm: E	WSW: Calm W: NW: NE Calm ENE E: Calm	1.3 1.3 0.2 1.0 1.5	0.10 0.09 0.01 0.05 0.05	204 176 94 136 144	c m _o c w c m _o b x m b c b w	c Stcu Ast mo o c Stcu mo c Acu Stcu mo c f b c Stcu y c bc c Ast	c Stcu mo c bc c Stcu mo c Stcu mo c bc Ci so-ha b y c Acu b m	bc c m _o c m _o c b m b b bc x m
21 22 23 24 25	7.1 8.1 7.5 2.9 5.8	0. 59 0. 67 0. 63 0. 24 0. 47	4.8 7.3 7.3 2.8 5.2	0.40 0.61 0.60 0.23 0.43	Calm Calm: SE: S SSE: SE Calm NE: ENE	Calm S SE: E: Calm NE: Calm ENE: NE	0.0 3.0 2.2 0.4 4.0	0.00 0.13 0.09 0.01 0.23	88 214 185 102 281	bc m x f c b w c c ir b f Fe c d _o m	b f c Nbst ro r c bc Cu Ci so-ha Fe b f c b Cu	b m f ro c bc Cu Acu c b Cu m crg c Nbst p m b Ci c	cf bcbc bmf bbclu-hac cbc
26 27 28 29 30	0.4 0.7 0.0 10.3 1.7	0.03 0.06 0.00 0.84 0.14	0.3 0.2 0.0 3.5 0.8	0.02 0.01 0.00 0.28 0.06	ENE: E NE: ENE NE: ENE Calm: E	ENE ENE NE E:Calm E:ENE	9.7 10.5 7.0 1.6 3.4	1. 14 1. 64 0. 78 0. 14 0. 19	434 494 364 172 197	c c c d c b x f	c bc Stcu y c bc Frcu y c Stcu y c Stcu m Fe c Acu m	b Frst c y bc c Frcu y c Stcu c Stcu c Acu Ci mo	c c c b m x c hu-ha mo
31	7.6	0.62	5.3	0.44	NE: NNE	NNW: NW	1.2	0.13	207	c m	c St m	c St mo	c b bc
Means	6.3	0.55	5.1	0.45	••	••	••	0.18	180				
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 $48^{\circ}.6$, being $0^{\circ}.7$ higher than

The mean Temperature of the Dew Point for the month was 44°.9, being 0°.7 lower than

The mean Degree of Humidity for the month was 77.2, being 7.7 less than

The mean $\textit{Blastic Force of Vapour}\ \text{for the month was 0.299 in., being 0.009 in. less than}$

the average for the 65 years, 1841-1905.

The mean amount of Cloud for the month (a clear sky being represented by 0 and an overcast sky by 10) was 6.1.

The mean proportion of Sunshine for the month (constant sunshine being represented by 1) was 0.291. The maximum daily amount of Sunshine was 9.5 hours on October 3.

The highest reading of the Solar Radiation Thermometer was 124°.1 on October 12; and the lowest reading of the Terrestrial Radiation Thermometer was 16 .0 on October 21.

The Proportions of Wind referred to the cardinal points were N. 10, E. 24, S. 12, W. 13, calm or nearly calm conditions 41, the whole month being represented by 100.

The Greatest Pressure of the Wind in the month was 10.5 lbs. on the square foot on October 27. The mean daily Horizontal Movement of the Air for the month was 180 miles; the greatest daily value was 494 miles on October 27, and the least daily value was 63 miles on October 5.

Rain (0.005 in. or over) fell on 5 days in the month, amounting to 0.140 in., as measured by gauge No.6 partly sunk below the ground; being 2.642 in. less than the average fall for the 65 years, 1841-1905.

				TABLE	XVII	- DAILY	RESULT	S OF TH	E METE	OROLOGI	[CAL -O	BSERV	ATIONS					
	BAROMETER			1	EMPERATU	RE							TE	MPERATUF	Æ	g)		
Month and	Hourly rrected 1 to 328 e1t)		,	Of the A	ir		Of Evapo- ration	Of the Dew Point	the Ai	rence be r Temper Dew Poi mperatur	ature nt	f Humidity ion = 100)	Of Rad:	lation	Of the Earth 4 ft.	Rain collected in Gauge No.6, whose receiving surface is 5 inches above the Ground	Daily Dura- tion of	Sun above
Day 1947	Mean of 24 Hourly Values (corrected and reduced to 32 Fahrenhelt)	Highest	Lowest	Daily Range	Mean of 24 Hourly Values	Excess above Average of 65 Years	Mean of 24 Hourly Values	Deduced Mean Daily Value	Mean	Great- est	Least	Degree of (Saturation	Highest in Sun's Rays	Lowest on the Grass	below the surface of the Soil	Rain collection No.6, whose surface above t	Sun- shine	Horizon
	in.	0	0	0	0	0	0	٥	0	0	٥		0	0	0	in.	hours	hours
Nov.1	29.882 29.599	60.3 57.0	39.3 48.8	21.0 8.2	51.4 54.4	+ 4.4 + 7.6	49.0 52.1	46.5 49.9	4.9 4.5	8.0 8.9	0.7 2.0	83 85	80.0 70.2	26.5 40.0	54.0 53.9	0.000 0.037	0.0	9.7 9.7
3 4	29.643 29.848	60.6 54.6	45.2 44.0	15.4 10.6	50.7	+ 4.1 + 4.3	46.7	42.0 46.5	8.7 4.2	20.9 6.9	1.9	72 86	109.0 62.0	34.6 34.4	53.8 53.7	0.003	7.7 0.0	9.6 9.5
5	30.062	55.7	38.6	17.1	51.3	+ 5.2	48.2	44.9	6.4	14.3	0.0	78	86.0	30.5	53.7	0.041	6.0	9.5
6 7	30.194 30.130	44.9 55.7	34.6 34.0	10.3 21.7	39.4 45.3	- 6.4 - 0.1	39.1 43.5	38.7 41.2	0.7 4.1	1.6 12.4	0.0	97 86	50.0 85.0	26. 2 26. 5	53.6 53.5	0.000 0.001*	0.0 3.2	9.4 9.4
8 9	30.012 29.759	61.9 60.0	46.8 51.6	15.1 8.4	52.4 55.1	+ 7.4 +10.5	49.8 52.5	47.1 50.1	5.3 5.0	16.0 11.9	0.0 1.6	82 84	87.0 88.3	40.5 47.5	53.4 53.2	0.000 0.210	3.6 0.2	9.3
10	29. 722	58.2	49.0	9.2	52.8	+ 8.5	49.1	45.2	7.6	13.3	1.6	75	83.0	35.8	53.0	0.158	3.2	9.2
11 12	29.688 29.414	60.8 61.0	47.7 50.0	13.1 11.0	55.7 57.5	+11.7 +13.8	52. 2 54. 3	48.8 51.4	6.9 6.1	12.5 7.0	0.5	77 80	77.8 70.3	37.0 44.0	53.1 53.0	0.063 0.040	0.2	9.2 9.1
13	29.643 29.720	52.0 46.0	43.0	9.0 7.5	47.7	+ 4.2	43.3	37.4 38.0	10.3	17.0 7.1	7.3	68 84	82.4 52.8	36.0 29.5	53.0 53.0	0.000 0.180	1.9	9.0 9.0
14 15	29.720	44.3	35.0	9.3	40.9	- 2.2	38.0	33.3	7.6	17.2	0.7	74	61.0	27.0	52.9	0.041	0.8	8.9
16	29.862	41.7	31.6	10.1	36.0	- 6.8	33.9	30.2	5.8	11.5 12.7	1.3	79 81	51.7 50.0	21.6	52. 7 52. 4	0.001*	0.0	8.9 8.8
17 18	29.791 29.556	40.0 37.7	30.7 31.0	9.3 6.7	34.7 35.0	- 7.9 - 7.4	32.9 33.3	29.8 30.3	4.7	10.4	1.0	83	47.0	27.5	52.0	0.030	0.2	8.8 8.7
19 20	29.585 29.899	42.4 59.6	36.8 37.7	5.6 21.9	39.8 53.2	- 2.5 +11.0	38.7 51.8	37.1 50.5	2.7 2.7	6.2 4.9	1.0 0.5	90 91	43.9 68.0	28.8 33.0	51.8 51.4	0.202	0.0	8.7
21	29.984	60.8	58.0	2.8	59.3	+17.2	57.1	55.4	3.9	6.3	3.0	87	74.1	54.2	51.3	0.002	0.0	8.6
22 23	29.923 29.920	61.0 61.5	57.8 44.1	3.2 17.4	59.6 56.4	+17.5 +14.4	57.4	55.7 48.7	3.9 7.7	7.6 13.8	1.6 3.0	87 76	70.3 85.1	52.7 36.3	51.6 51.6	0.011 0.057	0.0 2.0	8.6 8.5
24 25	30.017 29.810	48.9 43.8	39.5 35.0	9.4 8.8	44.1	+ 2.1	40.3 36.5	34.6 29.7	9.5 10.9	15.6 18.4	3.9 5.1	69	75.1 71.2	31.5 28.0	51.7 51.7	0.000	5.6	8.5 8.4
26	29.695	38.7	29.6	9.1	34.4	- 7.4	30.9	25.0	9.4	16. 2	3.0	65	59.7	21.0	51.4	0.000	5.0	8.4
27 28	29. 553 29. 446	39.3 40.9	27.0 30.1	12.3	32.8 35.2	- 8.9 - 6.3	31.7	30.0 31.3	2.8 3.9	6.2	0.0	88 86	41.0 59.0	17.7 23.0	51.1	0.002 0.000	0.0	8.4 8.3
29	29.274	39.0	34.0	5.0	36.9 31.4	- 4.3 - 9.6	35.6 30.8	33.5	3.4 1.7	4.3	1.3	87 93	43.9 39.0	28.0 10.0	50.7	0.008	0.0	8.3
30	29.308	34.0	25.0	7.0	71.4	7.0	50.8	27.1		J.,						Sum	ļ	
Means	29.751	50.7	39.8	10.9	45.9	+ 2.4	43.5	40.4	5.5	10.6	1.6	81.2	67.5	31.7	52.4	1.100	1.5	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 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 November 7 and 16 are derived from frost.

The mean reading of the Barometer for the month was 29.751 in., being 0.014 in. lower than the average for the 65 years, 1841-1905. TEMPERATURE OF THE AIR

The highest in the month was 61°.9 on November 8; the lowest in the month was 25°.0 on November 30; and the range was 36°.9. The mean of all the highest daily readings in the month was 50°.7, being 1°.8 higher than the average for the 65 years, 1841-1905. The mean of all the lowest daily readings in the month was 39°.8, being 1°.4 higher than the average for the 65 years, 1841-1905. The mean of the daily ranges was 10°.9, being 0°.4 greater than the average for the 65 years, 1841-1905.

The mean for the month was 45°.9, being 2°.4 higher than the average for the 65 years, 1841-1905.

Nov.1 S.1 0.41 2.5 0.20 WSW:SW SW 1.0 0.07 197 bc m f x c f Acu mo c Rbst ro c Mbst ro c Rbst ro			OBSERVATIONS	ROLOGICAL (METEC	OF THE	SULTS	- DAILY RE	TABLE XVII.					
Month and Day 1947									SEL		OF THE TSKY	RECORD NIGH		
and Day 1947 g		ID WEATHER	CLOUDS A		Robin- son's			OSLER'S		URSÆ WORIS	δ MIN	laris	Pol	
Nov.1 5.1 0.41 2.5 0.20 WSW:SW SW 1.0 0.07 197 bc m f x c f Acu mo c Acu mo c Mbst ro rocal mo c Mbst rocal mo c Rocal mo	·				1 Move— the Air	the e Foot	on	Direction	General I	n of posure	1on	n of posure	1on	and
Nov.1	8 ^h to 24 ^h	12 ^h to 18 ^h	6 ^h to 12 ^h	O ^h to e ^h	Horizonta ment of t	Mean of 24 Hourly Measures	Greatest	P.M.	A. M.	Fractic Total Ex	Durat	Fractic Total Ex	Durat	·
7	lo	c Nbst rr cc Nbst Cu po bc c Nbst Ido prhn c	c Stcu b Frcu y c Nbst do	c id _o b w bc <i>lu-ha</i> c	197 352 322 217	1bs. 0.07 0.60 0.34 0.13	1.0 8.3 4.4 1.7	S:SW WSW SW	SSW SW: WSW WSW	0.80 0.64 0.02	2.5 10.0 8.0 0.3	0. 82 0. 72 0. 02	5.1 10.3 9.0 0.3	2 3 4
12 3.4 0.26 2.1 0.16 WSW: SW SW: WSW: NW 15.0 2.47 656 c q c Nbst 1r _o c r c Cu Ci b c Cist so-ha b	c b c Ast Cist oc Ci y b	c b c Acu f c bc Ci m c Nbst ir c p	cxf cm cir	144 234 320	0.06 0.11 0.35	2.2 1.8 4.2	SSW: SW SW WSW:SSW	Calm:SW WSW SW	0.03 0.33 0.00	0.4 4.3 0.0	0.08 0.39 0.00	1.0 5.1 0.0	7 8 9	
	rr	crcCuCi ccCistso-hab cNbstdordom	c Nost iro c b Frcu c Ast m	c q c b c b x c m	656 313 169	2.47 0.41 0.06	15.0 6.0 0.8	SW: WSW: NW WNW: W WSW: Calm	WSW: SW NW: W W:WSW	0.16 0.68 0.00	2.1 8.9 0.0	0. 26 0. 82 0. 00	3.4 10.7 0.0	12 13 14
18 0.0 0.00 0.0 0.00 Calm:E E:ENE 0.5 0.03 133 c s _o s s _o c Stcu m _o c Acu m _o c rs	cx sm _o fm	oc Cist so-ha c m	b bc Ci Frou f m s so c Stou mo rs o St mo	bxc cs _o rsrsm _o	182 133 176	0.07 0.03 0.23	1.1 0.5 3.7	NW: Calm E: ENE E: Calm	WSW: W Calm:E E: ESE	0.00 0.00 0.13	0.0 0.0 1.7	0.08 0.00 0.19	1.0 0.0 2.5	17 18 19
21		c Frst iro c Frcu q r c y c Stcu c po c	c Acu Frst c Acu Frst b bc Frcu	c 1d _o c b	532 478 390	1.46 1.13 0.66	14.8 20.4 5.4	SW: WSW WSW: NW W: WSW	SSW: SW WSW: SW W	0.17 0.87 0.44	2.3 11.8 5.9	0. 24 0. 89 0. 50	3.3 12.0 6.7	22 23 24
	<i>lu-ha</i> b x f c m c b	o be Cimo	bfcisf cStbCim cNbstiro	bx cxf cm	179 269 273	0.13 0.27 0.27	2.5 2.5 2.2	NNW: N NNE: N NNW	WSW: SW N: NNE N: NNW	0.44 0.13 0.29	6.0 1.7 4.1	0.96 0.38 0.54	12.9 5.2 7.4	27 28 29
Means 5.7 0.43 4.4 0.34 0.49 293					293	0.49	••	• •	••	0.34	4.4	0.43	5.7	Means
No. of Col. for Ref. 19 20 21 22 23 24 25 26 27 28 29 30	31	30	29	28	27	26	25	24	23	22	21	20	19	Col.for

The mean Temperature of Evaporation for the month was 43°.5, being 1°.6 higher than

The mean Temperature of the Dew Point for the month was 40°.4, being 0°.7 higher than

The mean $\textit{Degree of Humidity}\ \text{for}\ \text{the month was 81.2, being 5.4 less than}$

The mean Flastic Force of Vapour for the month was 0.252 in., being 0.006 in. greater than

The mean amount of Cloud for the month (a clear sky being represented by 0 and an overcast sky by 10) was 7.0.

The mean proportion of Sunshine for the month (constant sunshine being represented by 1) was 0.173. The maximum daily amount of Sunshine was 7.7 hours on November 3.

the average for the 65 years, 1841-1905.

The highest reading of the Solar Radiation Thermometer was 109°.0 on November 3; and the lowest reading of the Terrestrial Radiation Thermometer was 10 .0 on November 30.

The Proportions of Wind referred to the cardinal points were N.15, E.4, S.22, W.45, calm or nearly calm conditions 14, the whole month being represented by 100.

The Greatest Pressure of the Wind in the month was 20.4 lbs. on the square foot on November 23. The mean daily Horizontal Movement of the Air for the month was 293 miles; the greatest daily value was 656 miles on November 12, and the least daily value was 37 miles on November 6.

Rain (0.005 in. or over) fell on 14 days in the month, amounting to 1.100 in., as measured by gauge No.6 partly sunk below the ground; being 1.120 in. less than the average fall for the 65 years, 1841-1905.

No. of Col. for Ref.

D	80				GREEN	ICH ME	TEORO	LOGICA	L OBS	ERVAT	IONS,	194	7.					·····
				TABLE	XVII.	- DAIL	RESUL	TS OF T	HE MET	EOROLO	GICAL	OBSER	VATIONS			*		
	BAROMETER			7	EMPERATU	RE							TE	PERATUR	Œ	4)		
Month and	Hourly rrected 1 to 32° leit)		١	Of the A	ir		Of Evapo- ration	Of the Dew Point	the Ai	rence be r Temper Dew Poi mperatur	rature Int	Degree of Humidity (Saturation = 100)	Of Radia	tion	Of the Earth 4 ft.	Rain collected in Gauge No.6, whose receiving surface is 5 inches above the Ground	Daily Dura- tion of	Sun above
Day 1947	Mean of 24 Hourly Values (corrected and reduced to 32° Fahrenheit)	Highest	Lowest	Daily Range	Mean of 24 Hourly Values	Excess above Average of 65 Years	Mean of 24 Hourly Values	Deduced Mean Daily Value	Mean	Great- est	Least	Degree o (Saturat	Highest in Sun's Rays	Lowest on the Grass	below the surface of the Soil	Rain colle No.6, who surface above t	Sun- shine	Horizon
	in.	٥	٥	0	0	٥	0	٥	0	0	0		0	0	0	in.	hours	hours
Dec.1 2 3 4 5	29. 316 29. 234 29. 121 29. 120 28. 910	32.8 40.8 39.2 39.6 49.0	21.0 29.8 33.4 33.7 38.0	11.8 11.0 5.8 5.9 11.0	27.5 34.4 36.6 37.6 45.2	-13.4 - 6.5 - 4.5 - 3.7 + 3.7	26.8 32.7 35.7 37.2 42.8	25. 5 29. 8 34. 1 36. 7 39. 6	2.0 4.6 2.5 0.9 5.6	2.5 11.7 3.3 2.6 11.7	0.0 1.0 0.4 0.0 1.8	91 82 91 96 81	42.1 54.0 42.7 42.5 67.3	4.0 20.6 24.2 27.1 33.0	49.7 49.6 49.2 49.0 48.8	0.000 0.000 0.018 0.115 0.435	2.1 2.4 0.0 0.0 0.4	8.2 8.2 8.2 8.1 8.1
6 7 8 9 10	29. 152 29. 635 29. 655 30. 125 30. 413	45.7 44.7 46.0 45.5 44.7	39.7 36.5 36.4 40.6 32.8	6.0 8.2 9.6 4.9 11.9	42.9 41.8 42.4 42.9 40.8	+ 1.4 + 0.5 + 1.4 + 2.3 + 0.4	42.2 40.9 41.0 41.5 38.2	41.3 39.8 39.1 39.6 34.1	1.6 2.0 3.3 3.3 6.7	2.3 3.9 8.5 5.5 13.8	0.0 0.0 0.0 2.1 1.2	94 92 88 88 77	56.8 56.6 52.6 57.0 57.3	29.7 30.0 29.8 35.7 24.0	48.6 48.5 48.4 48.3 48.3	0.339 0.000 0.303 0.010 0.000	0.1 0.0 0.0 0.1 0.5	8.1 8.0 8.0 8.0 8.0
11 12 13 14 15	30.415 30.293 30.316 30.367 30.439	41.9 51.2 49.9 44.0 43.7	27.7 41.9 44.0 39.2 37.0	14.2 9.3 5.9 4.8 6.7	35.3 47.7 47.8 42.3 41.1	- 4.9 + 7.4 + 7.3 + 1.6 + 0.3	33.6 46.3 46.2 40.1 39.5	30.9 44.7 44.4 36.9 37.3	4.4 3.0 3.4 5.4 3.8	14.1 4.1 3.9 9.5 6.0	0.0 1.4 1.7 1.8 0.7	83 89 88 81 86	46.0 52.5 50.7 48.1 49.0	16.7 38.0 41.0 34.0 30.4	48.2 48.2 48.1 48.0 48.0	0.000 0.000 0.000 0.004 0.000	0.0 0.0 0.0 0.0	7.9 7.9 7.9 7.9 7.9
16 17 18 19 20	30.405 30.340 30.201 30.194 30.232	45.9 45.9 45.0 47.5 50.9	43.1 43.4 39.7 41.0 42.0	2.8 2.5 5.3 6.5 8.9	44.3 44.5 42.7 44.4 48.3	+ 3.6 + 4.1 + 2.7 + 4.9 + 9.3	42.6 43.0 42.0 42.4 46.5	40. 4 41. 1 41. 1 39. 8 44. 5	3.9 3.4 1.6 4.6 3.8	5.8 5.5 3.6 11.3 4.6	2.3 2.1 0.0 0.8 2.3	86 88 94 84 86	52.9 50.1 45.9 53.3 52.3	39.5 41.0 38.4 39.5 34.0	48.0 48.1 48.0 48.0 48.0	0.004 0.021 0.060 0.028 0.000	0.0 0.0 0.0 0.0	7.8 7.8 7.8 7.8 7.8
21 22 23 24 25	30. 271 30. 111 30. 106 29. 913 29. 533	49.5 50.2 49.6 51.0 52.0	40.3 45.4 43.9 44.0 36.5	9. 2 4. 8 5. 7 7. 0 15. 5	45.3 47.7 47.2 48.0 47.6	+ 6.6 + 9.3 + 9.0 + 9.8 + 9.2	42. 6 43. 9 43. 3 45. 7 45. 4	39.0 39.0 38.3 43.0 42.9	6.3 8.7 8.9 5.0 4.7	10. 5 11. 0 12. 3 8. 3 7. 6	1.5 5.0 5.0 2.6 1.9	79 72 70 83 83	54.9 58.4 58.0 54.9 66.7	28. 4 38. 8 39. 2 41. 7 32. 0	48.1 48.0 48.0 48.1 48.1	0.000 0.000 0.000 0.045 0.370	0.0 0.0 0.1 0.0 0.0	7.8 7.8 7.8 7.8 7.8
26 27 28 29 30	29. 577 29. 253 29. 071 29. 211 29. 333	45.5 55.8 50.2 40.8 36.0	36. 4 41. 4 39. 1 32. 3 29. 2	9.1 14.4 11.1 8.5 6.8	40.5 51.3 46.7 36.8 33.2	+ 1.9 +12.5 + 7.8 - 2.2 - 5.7	38. 2 48. 7 43. 1 33. 4 31. 9	34.7 45.9 38.5 27.3 29.9	5.8 5.4 8.2 9.5 3.3	12. 5 12. 1 10. 0 14. 0 6. 5	1.4 0.6 6.5 6.1 0.8	79 82 72 67 86	64.2 57.5 59.7 64.3 41.8	31.0 37.0 32.1 25.7 19.3	48.0 48.2 48.0 47.9 47.8	0.135 0.160 0.042 0.000 0.035	4.6 0.0 0.0 5.4 0.0	7.8 7.9 7.9 7.9 7.9
31	29.744	39.2	28.9	10.3	34.0	- 4.7	32.8	30.7	3.3	11.4	0.0	87	46.6	18.9	47.6	0.026	0.4	7.9
Means	29.807	45.6	37.4	8.2	42.2	+ 2.3	40.3	37.7	4.5	8.1	1.6	84.0	53.4	30.8	48.3	Sum 2.150	0.5	7.9

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.

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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.

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The mean reading of the Barometer for the month was 29.807 in., being 0.015 in. nigher than the average for the 65 years, 1841-1905. TEMPERATURE OF THE AIR

The highest in the month was 55°.8 on December 27; the lowest in the month was 21°.0 on December 1; and the range was 34°.8. The mean of all the highest daily readings in the month was 45°.6, being 1°.4 higher than the average for the 65 years, 1841-1905. The mean of all the lowest daily readings in the month was 37°.4, being 1°.9 nigher than the average for the 65 years, 1841-1905. The mean of the daily ranges was 8°.2, being 0°.5 less than the average for the 65 years, 1841-1905. The mean for the month was $42^{\circ}.2$, being $2^{\circ}.3$ higher than the average for the 65 years, 1841-1905.

					TABLE XVII.	- DAILY RE	SULTS	OF THE	METEO	ROLOGICAL (OBSERVATIONS		
			OF THE		SEL	WIND AS DEDUC F-REGISTERING							
	Pol	aris	δ U MIM	URSÆ IORIS		OSLER'S		-	Robin- son's		CLOUDS	AND WEATHER	
Month and Day 1947	1on	n of osure	ion	n of osure	General I	Direction	on	ssure the re Foot	l Move-		323323		
	Duration	Fraction of Total Exposure	Duration	Fraction of Total Exposure	A.M.	P .M.	Greatest	Mean of 24 Hourly Measures	Horizontal Move- ment of the Air	O ^h to 6 ^h	6 ^h to 12 ^h	12 ^h to 18 ^h	18 ^h to 24 ^h
Dec.1 2 3 4 5	hours 4.0 5.8 0.0 3.1 6.7	0. 29 0. 42 0. 00 0. 22 0. 48	hours 1.3 4.6 0.0 2.9 4.5	0.10 0.34 0.00 0.21 0.33	Calm Calm Calm Calm SE: SSE: S	Calm: ESE NE E: Calm SW: Calm: SE SW: SSW	1bs. 0.3 1.7 0.2 0.5 15.0	1bs. 0.01 0.05 0.00 0.01 1.12	miles 58 145 60 92 442	bfx cx bcrocf rocdm crorR	Fbfx bcbFrcuxf cNbstirofm drfgF RcpcStcu	b c Acu Ci ff x b Acu mo c 1ro do m F c b Stcu c m c Acu Most bc	fcx bmo cirom cbxcro bcciRr
6 7 8 9 10	1.2 0.5 1.5 1.7 9.3	0.08 0.03 0.11 0.12 0.67	1.0 0.3 0.6 1.6 4.3	0.07 0.02 0.04 0.11 0.31	SSE: SE W: NW: NNW Calm: SE: NW N: NNE NNE: Calm	SE: SW: WSW NW: Calm NW: N NNE Calm	3.4 1.4 4.7 4.6 0.4	0.17 0.05 0.25 0.47 0.01	223 150 266 309 82	c ir c c rr c mo c mo b x f	c Nost ir g c Stcu m ro c f c Acu Frst c Frcu mo c f c Frcu zo	c Nbst r ro c b c Stcu m f c Nbst ro c mo do ro c Nbst mo c Frcu zo b	bccfccrocmocmocbxf
11 12 13 14 15	0.0 0.4 0.8 5.5 0.0	0.00 0.03 0.06 0.39 0.00	0.0 0.0 0.4 4.1 0.0	0.00 0.00 0.03 0.29 0.00	Calm: SW Calm: NW NNW: N: NNE N: NNE NNE: N	Calm: WSW NW: NNW N: NNE NE N	0.1 1.0 3.6 1.4 2.0	0.00 0.04 0.16 0.15 0.12	126 154 233 247 207	b x ff c o ff c b c m _o c m _o bc c m	bcxff ocidoff cStcum crocStcum cstcum	c Stou ff c St f c mo c Nbst 1do mo c Stou mo c Stou m	c ff c m _o c m _o c ir _o m _o c m
16 17 18 19 20	0.4 0.0 0.0 0.3 7.6	0.03 0.00 0.00 0.02 0.54	0.1 0.0 0.0 0.1 3.0	0.01 0.00 0.00 0.01 0.21	N N N: NNE NNW NW: NNW	N N Calm NW: NNW NNW: NW	4.3 5.2 4.2 3.2 1.1	0.45 0.69 0.35 0.24 0.08	327 381 225 287 189	c ido mo c d do mo c do mo r m c mo c m	c Stcu mo c 1do Stcu mo c Nost do mo c Stcu mo c Stcu mo	c Frst do mo c Stcu ido mo c St do r o m c Ast Frcu m c St m	cdodomo crdomo crorm cm cbwm
21 22 23 24 25	0.4 2.7 0.4 3.1 3.5	0.03 0.20 0.03 0.22 0.25	0.3 1.5 0.1 3.0 2.9	0.02 0.10 0.01 0.21 0.21	Calm: WSW: NW NW: WNW WSW: NW WSW: SW SW: WSW	NW WNW: W: WSW WNW: W: WSW SW Var.: SW: W	4. 4 5. 9 4. 0 8. 6 15. 6	0. 30 0. 54 0. 54 0. 95 0. 98	276 358 342 438 420	bwcmf cm c c ircb	c bc Ast f m c Frou m _o c Stou c r c Stou c so-ha c Ast	bc Ast c m c Acu Frst c Frcu c Stcu c r c R t 1	c m c c c ir r c rr
26 27 28 29 30	2.2 0.4 13.5 13.2 11.4	0.15 0.03 0.98 0.96 0.83	0.0 0.0 13.0 12.7 10.3	0.00 0.00 0.95 0.93 0.75	NW: WSW SSW: SW WSW WSW WSW	WSW: SW SW: WSW SW: WSW WSW NW: Calm	9.5 14.0 14.3 9.0 2.2	0. 78 2. 16 1. 39 0. 95 0. 17	408 612 508 447 202	rr c b x rr r _o c c r b <i>lu-ha</i> x m b c x m	b Cu c Stcu r c bc Cist so-ha b m c so c r s m	b bc Cu c r ro c Stcu bc Cist so-ha c r c b Frcu y s c Stcu b m	bc lu-ha c ro c b b x b m
31	0.9	0.06	0.1	0.01	WSW	SW: SSW	0.7	0.04	177	bcsbm	b be Ci Freu f	c Ast Acu f m	cmr
Means	3.2	0.23	2.3	0.17	••	• •		0.43	271				
No.of Col.for Ref.	19	20	21	22	23	24	25	26	27	28	29	30	31
	1		1	L	I		1	I	1		1	1	l

The mean Temperature of Evaporation for the month was 40°.3, being 1°.8 higher than

The mean Temperature of the Dew Point for the month was 37°.7, being 1°.3 higher than

The mean Degree of Humidity for the month was 84.0, being 3.5 less than

The mean Elastic Force of Vapour for the month was 0.226 in. being 0.010 in. greater than

The mean amount of Cloud for the month (a clear sky being represented by 0 and an overcast sky by 10) was 8.0.

The mean proportion of Sunshine for the month (constant sunshine being represented by 1) was 0.066. The maximum daily amount of Sunshine was 5.4 hours on December 29.

the average for the 65 years, 1841-1905.

The highest reading of the Solar Radiation Thermometer was 67°.3 on December 5; and the lowest reading of the Terrestrial Radiation Thermometer was 4 .0 on December 1.

The *Proportions of Wind* referred to the cardinal points were N.30, E.6, S.15, W.29, calm or nearly calm conditions 20, the whole month being represented by 100.

The Greatest Pressure of the Wind in the month was 15.6 lbs. on the square foot on December 25. The mean daily Horizontal Movement of the Air for the month was 271 miles; the greatest daily value was 612 miles on December 27, and the least daily value was 58 miles on December 1.

Rain (0.005 in. or over) fell on 16 days in the month, amounting to 2.150 in., as measured by gauge No.6 partly sunk below the ground; being 0.323 in. greater than the average fall for the 65 years, 1841-1905.

TABLE 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., 1947.	Reading	U.T., 1947.	Reading	U.T., 1947.	Reading	U.T., 1947.	Reading	U.T., 1947.	Reading	U.T., 1947.	Reading
d. h. m.	in.	d. h. m.	in.	d. h. m.	in.	d. h. m.	in.	d. h. m.	in.	d. h. m.	in.
January		January		May		May		September		September	
1. 10, 50 3. 22, 30 7. 3. 20 8. 8. 0 10. 9. 40 12. 2. 5 12. 10. 55 14. 3. 5 16. 2. 45 18. 10. 25	29. 900 30. 028 29. 655 29. 651 29. 861 29. 353 29. 488 29. 579 29. 868 30. 307	2. 2. 0 6. 3. 30 7. 19. 40 8. 22. 0 11. 16. 10 12. 5. 10 13. 13. 40 14. 11. 45 16. 21. 55 20. 17. 0	29. 687 29. 487 29. 572 29. 339 29. 212 29. 273 29. 115 29. 470 29. 752 30. 061	1. 21. 20 6. 19. 45 8. 23. 55 11. 9. 30 16. 15. 40 21. 11. 0 28. 8. 0	29. 957 29. 944 29. 834 29. 921 29. 866 30. 144 30. 036	3. 4. 55 8. 4. 0 9. 17. 10 14. 14. 0 18. 4. 0 24. 16. 45	29. 461 29. 689 29. 597 29. 504 29. 684 29. 533	6. 8. 40 10. 20. 50 12. 20. 15 14. 0. 0 15. 9. 35 17. 9. 20 22. 7. 35 27. 9. 5 30. 11. 35	29. 948 29. 922 29. 869 29. 813 29. 875 30. 008 30. 386 30. 015 30. 310	8. 13. 50 11. 16. 35 13. 6. 40 14. 14. 45 16. 10. 0 19. 16. 20 23. 15. 30 29. 13. 5	29.686 29.762 29.731 29.733 29.596 29.683 29.853 29.911
24. 10. 30 27. 20. 0 29. 16. 0 February 1. 10. 25 6. 18. 10 15. 23. 45 24. 1. 40	30. 356 29. 975 29. 846 29. 595 29. 750 30. 093 29. 901	26. 4. 0 28. 15. 15 31. 5. 55 February 3. 16. 0 8. 16. 25 21. 17. 40 28. 5. 0	29. 764 29. 730 29. 508 28. 754 29. 224 29. 125 29. 243	5. 12. 50 10. 5. 0 16. 22. 45 22. 23. 40 26. 0. 15 27. 11. 20 27. 23. 20 30. 7. 35	29. 461 30. 244 29. 999 30. 000 29. 870 29. 994 29. 970 30. 085	5. 5. 0 5. 17. 50 15. 2. 10 20. 18. 0 25. 2. 40 26. 20. 50 27. 12. 45 28. 18. 15	29. 355 29. 366 29. 230 29. 745 29. 665 29. 786 29. 855 29. 806	October 3. 11. 30 11. 22. 5 19. 9. 40 26. 11. 0	30.300 30.315 30.304 30.068	October 2. 2. 50 8. 14. 45 15. 16. 0 23. 5. 45 31. 3. 10	30.092 29.814 29.957 29.628 29.489
March		March	27.245	July	30.009	July		November		November	
3. 0. 5 9. 12. 0 12. 9. 45 15. 9. 45 17. 11. 0 20. 20. 0 21. 19. 50 25. 11. 45	29. 869 29. 966 29. 908 30. 019 29. 649 29. 410 29. 231 29. 851	6. 0. 0 11. 2. 30 13. 23. 20 16. 17. 10 19. 16. 40 21. 11. 50 23. 5. 35 29. 17. 0	29. 163 29. 047 28. 962 29. 050 29. 069 29. 100 28. 979 28. 823	6. 8. 25 10. 7. 50 14. 7. 0 17. 22. 15 24. 8. 50	29.743 29.489 30.116 29.834 29.987	5. 5. 35 9. 4. 0 10. 17. 30 16. 12. 30 19. 14. 10 29. 3. 20	29. 499 29. 299 29. 381 29. 692 29. 631 29. 702	1. 11. 5 6. 8. 0 10. 20. 20 14. 10. 5 16. 11. 30 21. 10. 15 23. 2. 40 24. 9. 15	29.904 30.215 29.899 29.786 29.892 30.019 29.971 30.100	2. 18. 10 10. 2. 50 12. 14. 10 15. 4. 10 19. 5. 40 22. 17. 0 23. 16. 40 29. 14. 10	29.378 29.482 29.317 29.502 29.415 29.852 29.808 29.232
April		April		August		August					
3. 7. 45 5. 10. 0 7. 20. 20 10. 9. 0	29.477 30.025 29.884 30.524	4. 4. 0 6. 1. 33 8. 11. 20 14. 13. 5	29. 025 29. 620 29. 544 30. 083	1. 11. 10 8. 6. 0 12. 8. 20 17. 7. 5 20. 8. 55	30.032 29.946 30.078 30.034 29.975	5. 5. 25 9. 18. 0 15. 15. 10 19. 3. 40 21. 17. 20	29.469 29.801 29.935 29.863 29.785	December	29.359	December	29.039
15. 10. 25 18. 0. 0 21. 12. 15 23. 3. 10 25. 0. 10 26. 12. 0 29. 7. 15	30. 205 30. 037 29. 806 29. 695 30. 124 30. 174 30. 065	17. 3. 0 20. 18. 10 22. 5. 25 23. 16. 0 25. 18. 45 28. 4. 10 30. 3. 55	29. 937 29. 549 29. 502 29. 296 29. 788 29. 783 29. 427	26. 9. 5 September 2. 22. 50	29. 983	September 1. 15. 25 4. 17. 30	29.878 29.815	4. 18. 10 7. 17. 40 10. 21. 0 15. 10. 55 21. 3. 0 26. 10. 30 31. 16. 45	29.202 29.768 30.462 30.466 30.365 29.634 29.812	5. 12. 0 8. 5. 30 12. 14. 15 19. 17. 15 25. 21. 35 28. 5. 35	28. 738 29. 558 30. 251 30. 135 29. 277 29. 014

The readings in the above table are accurate, but the times are occasionally liable to uncertainty, as the barometer will sometimes remain at its extreme reading without sensible change for a considerable interval of time. In such cases the time given is the middle of the stationary period.

The time is Universal Time.

The height of the barometer cistern above mean sea level is 152 feet; no correction has been applied to the readings to reduce to sea level.

TABLE XVIII(B). - HIGHEST AND LOWEST READINGS OF THE BAROMETER IN EACH MONTH FOR THE YEAR 1947

	January	February	March	April	May	June	July	August	September	October	November	December
HIGHEST LOWEST RANGE	in. 30.356 29.115 1.241	in. 30.093 28.754 1.339	in. 30.019 28.823 1.196	in. 30.524 29.025 1.499	in. 30.144 29.461 0.683	in. 30.244 29.230 1.014	in. 30.116 29.299 0.817	in. 30.169 29.469 0.700	1n. 30.386 29.596 0.790	in. 30.315 29.489 0.826	in. 30.215 29.232 0.983	in. 30.466 28.738 1.728

The highest reading in the year was 30.524 ins. on Apr. 10. The lowest reading in the year was 28.738 ins. on Dec. 5. The range of reading in the year was 1.786 ins.

TABLE XIX. - MONTHLY RESULTS OF METEOROLOGICAL ELEMENTS FOR THE YEAR 1947

				T	EMPERATURE	OF THE AI	R					
MONTH 1947	Mean Reading of the Barometer	Highest	Lowest	Range in the Month	Mean of all the Highest	Mean of all the Lowest	Mean of the Daily Ranges	Monthly Mean	Excess of Mean above the Average of 65 Years	Mean Temperature of Evaporation	Mean Temperature of Dew Point	Mean Degree of Humidity (Saturatio = 100)
	in.	0	0	0	o	0	0	•		0	0	
January	29.823	54.2	11.3	42.9	40.1	30.1	10.0	35.4	- 3.2	34.0	31.7	85.5
February	29.573	41.3	9.0	32.3	32.1	25.7	6.3	29.3	-10.3	28.3	26.5	88.2
March	29.429	58.0	21.6	36.4	46.6	34.8	11.8	40.3	- 1.6	38.4	35.6	82.6
April	29.862	71.9	30.3	41.6	57.9	40.8	17.1	49.2	+ 2.0	44.9	39.3	69.3
May	29.811	87.8	40.0	47.8	67.4	47.7	19.6	57.4	+ 4.3	52.6	48.1	72.2
June	29.797	93.0	44.5	48.5	72.1	52.8	19.3	62.4	+ 3.0	56.7	51.9	69.2
July	29.794	90.2	48.3	41.9	74.9	57.1	17.7	65.2	+ 2.5	60.2	56.4	73.6
August	29.942	89.7	46.8	42.9	78.8	57.5	21.2	67.3	+ 5.6	60.3	54.9	65.0
September	29.900	83.7	40.1	43.6	71.5	51.5	20.0	61.2	+ 4.0	56.4	52.1	72.6
October	29.996	71.8	29.3	42.5	60.7	43.3	17.4	51.9	+ 1.9	48.6	44.9	77.2
November	29.751	61.9	25.0	36.9	50.7	39.8	10.9	45.9	+ 2.4	43.5	40.4	81.2
December	29.807	55.8	21.0	34.8	45.6	37.4	8.2	42.2	+ 2.3	40.3	37.7	84.0
		Highest	Lowest	Annual Range								
Means	29.790	93.0	9.0	84.0	58.2	43.2	15.0	50.6	+ 1.1	47.0	43.3	76.7

		Mean		R.A	AIN						WIN	D				
	Mean	Tempera- ture of the	Mean		Amount collected				Fro	m Osler	's Anem	ometer				From Robin- son's Anemo-
MONTH 1947	Elastic Force of Vapour	Earth 4 feet below the	Amount of Cloud (0-10)	Number of Rainy Days	in Gauge No.6, whose receiving	ì		of Hours	· -		e of ea	ch Windzimuth	l	of Calm or Calm Hours	Mean Daily Pressure	meter
		Surface of the Soil		(0.005 in. or over)		N.	N.E.	E.	S.E.	S.	s.W.	W.	N.W.	Number of Nearly Ca	on the Square Foot	Mean Daily Horizontal Move- ment of the Air
	in.	o			in.	h	h	h	h	h	h	h	h	h	lbs.	miles
January	0.178	43.6	6.8	16	1.632	11	125	97	83	70	160	68	4	126	0.36	267
February	0.140	40.6	9.0	- 11	1.569	45	272	189	42	19	2	1	21	81	0.25	267
March	0.208	39.7	7.9	26	5.216	48	47	65	40	160	209	43	37	95	0.52	301
April	0.241	44.7	5.9	13	1.513	45	28	69	18	70	271	99	18	102	0.90	340
May	0.337	49.3	6.7	16	1.183	41	56	93	58	62	111	43	21	259	0.19	188
June	0.389	54.3	6.1	13 14	2.927	26	18	59	39	106	149	99 112	34	189	0.26	218
July	0.459	57.5 60.0	4.0	3	1.243 0.090	27 50	29 205	70 198	12	37 5	219	32	25	213 181	0.20 0.17	198 196
August September	0.455	59.8	5.6	10	1.533	53	69	27	7	53	212	47	53	199	0.17	211
October	0.392	56.3	6.1	5	0.140	15	104	115	25	27	90	42	19	307	0.18	180
November	0.252	52.4	7.0	14	1.100	56	8	24	3	32	257	148	91	101	0.49	293
December	0.226	48.3	8.0	16	2.150	141	59	4	24	24	156	86	99	151	0.43	271
Sums	••	••		157	20. 296	558	1021	1010	357	665	1:878	820	447	2004		••
Means	0.296	50.5	6.7	••	••										0.35	244

The greatest recorded pressure of the wind on the square foot in the year was 35.0 lbs. on March 16.

The greatest recorded daily horizontal movement of the air in the year was 675 miles on April 23.

The least recorded daily horizontal movement of the air in the year was 37 miles on November 6.

TABLE XX. - MONTHLY MEAN READING OF THE BAROMETER AT EVERY HOUR OF THE DAY

AS DEDUCED FROM THE PHOTOGRAPHIC RECORDS

		T			, 				,		·		
Hour, Universal Time	January	February	March	April	May	June	July	August	September	October	November	December	Yearly Means
	in.	in.	in.	in.	in.	in.	in.	in.	in.	in.	in.	in.	in.
o ^h	29.820	29.583	29,440	29.855	29.820	29.802	29.801	29.952	29.903	30.011	29.768	29.810	29, 79
1	29.817	29.580	29.435	29.852	29.813	29.798	29.798	29.947	29.898	30.007	29.759	29.805	29. 79
2	29.822	29.576	29.429	29.851	29.808	29.793	29.791	29.944	29.898	30.001	29.755	29.804	29.78
3	29.822	29,570	29,421	29, 852	29.805	29.789	29.786	29.941	29.893	29.995	29.750	29.800	29. 78
. 4	29.817	29.566	29.420	29.853	29.804	29.788	29.786	29,941	29.890	29.993	29.744	29.793	29.78
5	29.814	29.563	29.422	29.855	29.807	29. 791	29.788	29.944	29.893	29.991	29.742	29.790	29.78
6	29.816	29.563	29.423	29.864	29.812	29.793	29.792	29.947	29.899	29.994	29.743	29.790	29.78
7	29.822	29.565	29.428	29.873	29.816	29.799	29.796	29.952	29.904	30.001	29.748	29.792	29.79
8	29.832	29.571	29.435	29.877	29.819	29.800	29.800	29.956	29.911	30.006	29.755	29.799	29.79
9	29.842	29.574	29.435	29.882	29.818	29.800	29.800	29.957	29.911	30.011	29.757	29.809	29.80
10	29.846	29.577	29.438	29.883	29.818	29.799	29.800	29.955	29.912	30.009	29.760	29.817	29.80
11	29.842	29.578	29.437	29.878	29.816	29.799	29.799	29.950	29.908	30.005	29.757	29.813	29.79
12	29.831	29.574	29.434	29.871	29.812	29.800	29.796	29.944	29.900	29.996	29.750	29.804	29.79
13	29.824	29.567	29.430	29.868	29.810	29.798	29.793	29.939	29.894	29.988	29.746	29.798	29.78
14	29.817	29.562	29.424	29.859	29.805	29.794	29.790	29.933	29.889	29.982	29.740	29.797	29.78
15	29.818	29.563	29.419	29.850	29.801	29.792	29.790	29.925	29.884	29.977	29.739	29.800	29.78
16	29.819	29.564	29.419	29.849	29.800	29.790	29.786	29.921	29.882	29.977	29.741	29.806	29.77
17	29.818	29.569	29.419	29.846	29.799	29.788	29.782	29.919	29, 883	29.982	29.745	29.810	29.78
18	29.818	29.577	29.426	29.848	29.800	29.788	29.783	29.922	29.889	29.988	29.750	29.813	29.78
19	29.819	29.581	29.432	29.851	29.807	29.794	29.788	29.928	29.900	29.991	29.754	29.817	29.78
20	29.819	29.581	29.435	29.859	29.816	29.800	29.795	29.937	29.909	29.994	29.757	29.820	29.79
21	29.819	29.582	29.436	29.865	29.821	29.809	29.800	29.944	29.913	29.998	29.760	29.823	29.79
22	29.817	29.582	29.434	29.867	29.823	29.812	29.802	29. 949	29.914	29.998	29.759	29.825	29.79
23	29.817	29.582	29.432	29.870	29.823	29.813	29.802	29.951	29.914	29.998	29.755	29.826	29.79
24	29.815	29.582	29. 431	29.873	29.820	29.811	29.800	29.950	29.914	29.996	29.752	29.823	29.79
∫ 0 ^h -23 ^h	29.823	29.573	29.429	29.862	29.811	29.797	29.794	29.942	29.900	29.996	29.751	29.807	29.79
leans { 1 h-24 h	29. 823	29.573	29.429	29.862	29.811	29.797	29.793	29.942	29.900	29.995	29.751	29.807	29.79
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	0	0	o	0	0	0	٥	0	0	0	0	۰
o ^h	34.6	28.6	38.2	45.2	51.4	56.9	60.3	61,5	57.2	48.0	44.2	40.6	47.2
1	34.4	28.4	38.1	44.5	50.7	56.1	59.6	60.7	56.6	47.3	43.9	40.6	46.7
2	34.1	28.3	37.9	43.9	49.9	55.2	59.0	59.9	55.8	46.9	43.8	40.7	46.3
3	33.7	27.9	37.8	43.4	49.3	54.7	58.4	59.0	55.3	46.4	43.6	40.8	45.9
4	33.4	27.6	37.6	42.9	49.0	54.2	58.1	58.4	54.6	45.9	43.3	41.0	45.5
5	33.1	27.6	37.2	42.4	49.1	54.8	58.5	58.4	54.0	46.1	43.5	41.1	45.5
6	33.5	27.6	37.5	43.0	51.3	57.3	59.9	59.1	54.1	46.5	43.8	41.1	46.2
7	33.6	27.7	37.8	45.1	54.0	59.9	61.9	61.3	55.8	47.2	44.1	41.2	47.5
8	33.9	28.1	38.7	47.7	57.2	62.6	64.1	64.8	58.7	48.8	44.5	41.5	49.2
9	34.4	29.1	40.3	50.5	59.8	65.5	66.6	68.3	62.5	51.3	45.7	41.9	51.3
10	35.7	30.0	41.8	52.4	61.4	67.2	68.2	71.4	64.9	54.4	47.2	42.7	53.1
11	36.9	30.6	42.8	53.8	63.0	67.8	69.6	73.8	67.1	56.4	48.3	43.5	54.5
12	37.9	31.1	43.5	55.0	63.7	68.3	70.8	75.4	68.2	58.2	49.3	44.2	55.5
13	38.3	31.3	44.1	55.8	64.4	69.1	71.8	76.8	69.2	59.4	49.8	44.6	56.2
14	38.3	31.4	44.4	56.4	65.0	69.4	72.3	77.2	69.5	59.7	50.0	44.5	56.5
15	37.9	31.1	44.3	56.0	65.6	69.2	72.1	77.3	69.2	59.3	49.4	44.2	56.3
16	37.3	30.8	43.5	55.4	65.0	68.8	71.7	76.6	67.8	58.3	48.6	43.8	55.6
17	36.6	30.4	42.7	54.7	63.9	68.2	70.8	74.8	66.5	56.6	47.6	43.3	54.7
18	36.1	29.9	41.7	52.8	62.4	67.0	69.5	72.6	64.4	54.6	46.9	43.0	53.4
19	35.6	29.5	40.6	50.7	59.9	65.2	67.7	69.5	62.5	53.0	46.2	42.5	51.9
20	35.3	29.2	40.0	49.3	57.6	62.9	65.7	66.8	60.7	51.8	45.5	42.0	50.6
21	35.3	28.9	39.6	48.0	55.6	60.7	63.9	64.8	59.2	50.8	44.8	41.7	49.4
22	35.2	28.6	39.3	46.9	54.4	59.0	62.5	63.5	58.3	49.8	44.3	41.6	48.6
23	34.9	28.6	38.9	46.0	53.1	57.8	61.3	62.3	57.5	48.8	43.9	41.3	47.9
24	34.6	28.4	38.7	45.1	52.1	56.7	60.4	61.4	56.7	48.2	43.5	41.1	47.2
Means $\left\{ \frac{0^{h}-23^{h}}{}\right\}$	35.4	29.3	40.3	49.2	57.4	62.4	65.2	67.3	61.2	51.9	45.9	42.2	50.6
(1 ^h -24 ^h	35.4	29.3	40.3	49. 2	57.4	62.4	65.2	67.3	61.2	51.9	45.9	42.2	50.6
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	0	o	٥	0	0	0	0	0	0	0	0	٥
o ^h	33.5	27.8	36.9	43.0	49.3	54.1	57.8	58.4	54.8	46.4	42.5	39.1	45.3
1	33.5	27.7	36.9	42.4	48.7	53.6	57.3	57.9	54.4	46.0	42.4	39.2	45.0
2	33.1	27.5	36.8	41.9	48.4	53.1	57.1	57.4	53.8	45.7	42.4	39.5	44.7
3	32.9	27.4	36.8	41.5	48.0	52.8	56.9	56.9	53.5	45.2	42.2	39.7	44.5
4	32.6	27.1	36.6	41.3	47.9	52.6	56.8	56.6	53.2	44.9	42.1	39.7	44.3
5	32.4	26.9	36.4	41.1	47.8	52.8	57.0	56.3	52.8	44.6	42.1	39.7	44.2
6	32.5	27.0	36.4	41.3	49.2	54.4	57.8	56.8	52.5	44.7	42.3	39.6	44.5
7	32.5	27.1	36.5	42.5	50.9	55.7	58.8	58.1	53.7	45.3	42.4	39.7	45.3
8	32.6	27.5	37.4	44.0	52.7	57.1	59.9	59.9	55.6	46.6	42.7	39.9	46.3
9	33.2	28.2	38.7	45.5	54.2	58.4	61.0	61.5	57.6	48.7	43.5	40.2	47.6
10	34.1	29.0	39.6	46.3	54.9	59.1	61.5	62.7	58.4	50.6	44.5	40.7	48.4
11	35.1	29.4	40.1	47.0	55.5	59.4	62.0	63.1	59.4	51.4	44.9	41.1	49.0
12	35.6	29.6	40.3	47.6	55.8	59.5	62.5	63.0	59.6	52.1	45.5	41.4	49.4
13	36.0	29.7	40.6	48.0	56.1	59.5	62.9	63.3	60.0	52.6	45.6	41.8	49.7
14	36.0	29.7	40.8	48.3	56.6	59.5	63.2	63.4	59.9	52.8	45.7	41.9	49.8
15	35.7	29.6	40.7	48.3	56.8	59.6	63.2	63.5	59.6	52.6	45.4	41.7	49.7
16	35.2	29.3	40.2	48. Q	56.4	59.5	63.2	63.4	59.0	52.2	44.9	41.3	49.4
17	34.7	29.0	39.8	47.6	56.0	59.3	62.8	62.7	58.6	51.5	44.4	41.0	48.9
18	34.4	28.8	39.1	47.0	55.2	58.9	62.3	62.0	57.7	50.6	44.0	40.8	48.4
19	34.0	28.5	38.6	46.1	54.0	58.2	61.6	61.2	56.9	49.7	43.6	40.4	47.7
20	34.0	28.2	38.2	45.5	52.9	57.1	60.7	60.5	56.2	49.1	43.2	40.1	47.1
21	34.0	28.0	37.9	44.8	52.1	56.2	59.8	59.9	55.6	48.5	42.8	39.9	46.6
22	33.9	27.8	37.7	44.2	51.3	55.3	59.1	59.3	55.0	47.8	42.4	39.8	46.1
23	33.7	27.7	37.5	43.6	50.6	54.6	58.5	58.7	54.7	47.0	42.1	39.6	45.7
24	33.5	27.7	37.4	42.9	49.9	54.0	57.9	58.3	54.3	46.6	41.9	39.5	45.3
$M_{eans} \left\{ \frac{0^{h}-23^{h}}{1} \right\}$	34.0	28.3	38.4	44.9	52.6	56.7	60.2	60.3	56.4	48.6	43.5	40.3	47.0
neans lin-24h	34.0	28.3	38.4	44.9	52.6	56.7	60.2	60.3	56.3	48.6	43.5	40.3	47.0
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	0	0	0	0	٥	۰	۰	۰	٥	٥	0	٥
o ^h	31.6	26.5	34.9	40.1	47.1	51.6	55.8	56.0	52.8	44.6	40.3	37.1	43.2
1 1	32.0	26.6	35.0	39.6	46.5	51.4	55.5	55.7	52.6	44.5	40.5	37.3	43.1
2	31.3	26.2	35.0	39.3	46.7	51.2	55.6	55.3	52.1	44.3	40.6	37.9	43.0
3	31.5	26.6	35.1	38.9	46.6	51.0	55.7	55.2	51.9	43.7	40.4	38.3	42.9
4	31.3	26.2	34.9	39.1	46.8	51.1	55.7	55.1	52.0	43.7	40.5	38.0	42.9
5	31.2	25.7	35.1	39.3	46.4	50.9	55.8	54.6	51.7	42.7	40.3	37.8	42.6
6	30.8	25.9	34.6	38.9	47.0	51.9	56.2	55.0	51.0	42.5	40.4	37.6	42.6
7	30.7	26.1	34.5	39.0	47.8	52.1	56.4	55.6	51.9	43.1	40.2	37.7	42.9
8	30.4	26.6	35.5	39.3	48.5	52.5	56.8	56.3	53.0	44.2	40.4	37.7	43.4
9	31.1	26.7	36.5	39.3	49.1	52.6	56.9	56.6	53.6	45.9	40.7	37.8	43.9
10	31.3	27.2	36.4	38.7	48.9	52.6	56.7	56.5	53.2	46.8	41.3	37.8	43.9
11	32.1	27.4	36.1	38.7	48.7	52.7	56.5	55.3	53.3	46.3	40.6	37.7	43.8
12	31.7	27.3	35.7	38.7	48.7	52.5	56.5	53.9	52.8	46.1	40.9	37.6	43.5
13	32.1	27.1	35.5	38.5	48.7	51.7	56.6	53.3	52.7	45.8	40.5	37.9	43.4
14	32.1	26.9	35.5	38.5	49.1	51.4	56.9	53.1	52.3	45.9	40.5	38.4	43.4
15	32.0	27.3	35.4	39.1	49.1	51.8	57.0	53.3	51.8	45.9	40.5	38.3	43.5
16	31.6	26.9	35.4	39.2	48.7	52.0	57.2	53.7	51.9	46.2	40.3	37.9	43.4
17	31.4	26.7	35.5	39.1	49.0	52.2	57.1	53.7	52.2	46.3	40.4	37.7	43.4
18	31.5	26.8	35.1	40.0	48.6	52.4	57.2	54.0	52.2	46.6	40.5	37.6	43.5
19	31.2	26.7	35.7	40.6	48.6	52.4	57.2	55.0	52.2	46.2	40.3	37.4	43.6
20	31.7	26.5	35.6	40.9	48.5	52.2	57.1	55.8	52.4	46.2	40.2	37.4	43.7
21	31.7	26.5	35.4	40.8	48.7	52.4	56.8	56.3	52.6	46.0	40.1	37.4	43.7
22	31.6	26.5	35.4	40.9	48.3	52.2	56.5	56.2	52.1	45.6	39.9	37.3	43.5
23	31.6	26.2	35.5	40.6	48.1	51.7	56.3	55.9	52.3	45.0	39.8	37.2	43.4
24	31.6	26.6	35.5	40.0	47.7	51.6	55.9	55.9	52.3	44.8	39.8	37.3	43.3
$Means \left\{ \frac{0^{h}-23^{h}}{h} \right\}$	31.5	26.6	35.4	39.5	48.1	51.9	56.5	55.1	52.4	45.2	40.4	37.7	43.4
1 h-24 h	31.5	26.6	35.4	39.5	48.1	51.9	56.5	55.1	52.3	45.2	40.4	37.7	43.4

TABLE XXIV. - MONTHLY MEAN DEGREE OF HUMIDITY (SATURATION = 100) AT EVERY HOUR OF THE DAY,

AS DEDUCED FROM THE CORRESPONDING AIR AND EVAPORATION TEMPERATURES

		·	,								7		,
Hour, Universal Time	January	February	March	April	May	June	July	August	September	October	November	December	Yearly Means
o ^h	89	90	88	83	85	83	85	82	85	88	86	87	86
1	91	91	89	83	86	85	86	83	86	90	87	87	87
2	90	90	90	84	89	86	89	85	87	91	88	89	88
3	92	94	91	84	90	88	91	87	88	91	88	90	89
4	92	94	91	86	92	89	92	89	91	92	90	89	91
5	93	91	92	89	90	87	91	87	92	88	88	88	90
6	90	93	90	85	85	82	87	86	89	86	87	87	87
7	88	93	88	80	79	75	82	82	86	85	86	87	84
8	86	93	88	72	72	70	77	74	81	83	85	86	81
9	87	90	86	65	68	63	71	66	73	82	83	85	77
10	84	88	81	60	64	59	67	59	66	75	79	83	72
. 11	82	86	77	56	59	59	63	52	61	69	74	80	68
12	78	83	74	54	58	57	61	47	58	64	73	77	65
13	78	82	72	52	57	54	58	44	56	61	70	77	63
14	78	81	71	51	57	53	58	43	55	60	69	79	63
15	79	83	71	53	55	54	59	43	54	61	71	80	64
16	80	83	73	54	55	55	60	45	57	64	73	80	65
17	81	84	75	55	58	57	62	48	60	69	76	81	67
18	83	87	78	62	60	59	65	52	65	74	78	81	70
19	84	88	82	68	66	64	69	60	69	78	80	82	- 74
20	87	88	84	73	71	68	74	68	74	81	82	83	78
21	87	89	85	76	77	74	77	74	79	84	84	84	81
22	87	90	86	79	80	78	81	77	80	86	85	84	83
23	87	89	87	81	83	80	84	80	83	86	85	85	84
24	89	92	88	83	85	83	85	82	85	88	87	86	86
∫ 0 ^h -23 ^h	86	88	83	70	72	70	75	67	74	79	81	84	77
Means { 1 h-24 h	86	88	83	70	72	70	75	67	74	79	81	84	77

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 1947

				Ro	egiste:	red du	ration	of Su	nshine	in th	e Hour	ending	g : –				Total Registered	Corre- sponding aggregate	Pro-	titude of n at Noon
MONTH 1947	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	Duration of Sunshine in each Month	Period during which the Sun was above the Horizon	portion of Sun- shine	Mean Altitu the Sun at
	h	h	h	h	h	h	h	h	h	h	h	h	h	h	h	h	h	h		0
January	_	_	-	0.1	2.1	8.4	8.4	8.4	7.3	6.2	3.1	0.2	_	-	-	_	44.2	260.3	0.170	18
February	-	-	-	0.2	1.0	1.4	2.1	2.8	3.4	3.0	1.9	0.7	-	-	-	-	16.5	278.2	0.059	26
March	_	-	0.5	3.2	4.7	5.9	5.3	7.1	6.9	7.7	6.0	4.0	1.4	0.1	-	-	52.8	367.0	0.144	36
Apr11	0.2	2.4	9.6	14.3	14.7	15.5	14.4	15.7	15.8	15.7	13.5	12.2	13.4	8.3	0.4	-	166.1	414.7	0.401	48
May	1.0	7.7	13.7	15.9	17.2	15.2	14.7	13.4	13.6	14.3	15.6	14.6	13.0	13.1	6.9	0.5	190.4	483.1	0.394	57
June	3.1	14.1	14.9	15.4	17.1	17.2	15.0	13.9	15.5	15.2	13.2	14.1	13.3	12.0	12.8	2.4	209.2	496.1	0.422	62
July	0.2	5.4	9.2	9.9	14.0	12.8	12.1	12.4	13.3	13.7	11.4	12.1	12.1	11.9	7.9	1.3	159.7	500.3	0.319	60
August	-	1.2	8.6	14.5	18.7		23.5	23.0	24.3	22.8	23.4	23.4	20.8	19.1	5.2	-	250.6	453.0	0.553	52
September	-	-	3.3	10.2	15.1			15.3	16.8	17.2	15.2	13.5	10.5	3.4	-	i -	151.9	381.0	0.399	42
October	-	-	-	0.8	5.9	11.0	13.1	14.4	13.9	13.3	12.2	8.7	3.5	-	-	-	96.8	332.6	0.291	30
November	-	-	-	0.3	1.5	4.9	6.9	7.0	9.7	8.4	6.3	1.2	0.1	-	-	-	46.3	268.0	0.173	20
December	-	-	_	-	0.3	1.7	2.4	2.8	3.9	3.8	1.2	_	_	_	_	-	16.1	245.7	0.066	16
For the Year	4.5	30.8	59.8	84.8	112.3	131.4	134.0	136.2	144.4	141.3	123.0	104.7	88.1	67.9	33.2	4.2	1400.6	4480.0	0.313	

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 21¹) Dry-Bulb Thermometers, Dry-bulb Thermometers, Wet-Bulb Thermometers, Wet-Bulb Thermometers. 4 ft. above the Ground 4 ft. above the Ground 4 ft. above the Ground 4 ft. above the Ground Day Day of the of the Maxi-Mini-9^h 12^{h} $\epsilon 1^{\rm h}$ 9^h $\epsilon 1^{\text{h}}$ 9ħ 12^h 15^h $\epsilon 1^{h}$ Month. 15^h 12h 21^h Month Max1-Mini 12^h ₉h 15^h 15^h mam mum mum mum MARCH JANUARY 32.°6 36°9 35°7 31.6 30°3 40.°3 32.°2 33.°6 38.°9 37.6 39.°0 36.°5 38.4 23.7 28°7 34.4 34.°5 26°5 32.0 30°3 1 1 30.5 2 44.8 30.5 37.5 41.0 41.8 31.0 36.5 38.7 38.2 2 39.0 23.9 29.8 37.2 38.4 30.0 28.8 32.3 32.7 28.9 28.8 37.0 40.7 36.0 38.0 21.7 29.4 36.9 36.6 30.7 28.0 32.2 32.5 29.7 3 44.0 35.2 43.2 38.8 33.2 37.3 29.7 37.4 32.4 35.0 37.0 36.4 32.4 33.9 35.1 31, 2 34.7 29.8 33.1 33.8 32.7 30.7 31.1 30.5 30.4 36.3 29.8 31.6 34.2 36.2 33.4 32.0 34.7 31.8 32.5 30.7 32.0 32.2 32.3 32.1 31.6 31.5 31.5 31.6 6 24.7 27.4 26.9 27.2 27.3 25.3 25.8 25.6 26.0 33.0 29.0 30.3 31.8 32.3 30.0 29.5 30.8 31.1 29.2 33.4 32.3 21.6 25.3 33.2 33.2 23.5 24.7 30.0 31.6 22.5 34.6 27. 3 32.3 33.1 33.2 34.6 31.7 32.5 34.5 35.4 43.0 40.2 22.8 33.3 35.3 39.5 37.0 32.1 34.0 36.0 8 36.0 35.4 37.9 42.5 8 34.7 43.0 33.8 38.4 34.4 34.6 31.0 43.9 36.0 40.8 41.0 47.5 38.3 46.0 38.3 38.5 40.0 45.8 37.7 39.6 44.3 43.7 37.7 38.4 36.4 34.5 10 29.5 32.0 42.9 31.5 41.2 41.5 42.7 10 44.4 32.8 36.2 41.6 41.6 44.4 35.8 40.1 41.1 44.3 44.5 42.3 43.3 32.6 33.7 11 50.0 40.3 40.8 45.0 47.3 44.8 40.3 43.4 45.8 41.8 11 44.6 34.3 34.4 32.6 33.0 33.1 32.9 31.5 12 48.0 39.4 42.1 44.6 46. 5 48.0 39.4 41.6 43.8 46.9 12 33.5 30.6 32.4 32.8 32.7 32.4 30.7 31.3 31.4 31.6 13 48.7 42.3 43.0 46.3 44.2 40.8 39.9 40.5 39.9 37.5 13 52. 2 32.4 47.6 51.0 48.6 47.4 46.7 49.1 47.7 46. 9 14 53.0 37.0 46.0 50.3 53.0 52.4 44.8 49.1 51.4 49.0 14 47.4 31.3 34.6 34.3 34.6 31.3 33.3 32.7 32.4 29.7 15 45.8 50.8 51.9 50.2 46.0 47.6 47.9 47.0 44.2 15 35.3 25.1 31.1 34.9 34.7 32.4 30.4 31.9 31.6 31.9 52.4 48.0 57.0 50.0 47.0 52.6 16 54.2 43.9 45.5 53.0 50.4 43.4 46.5 47.2 16 32.4 55.6 46.3 44.5 46.4 48.8 40.3 39.2 39.2 44.9 17 51.9 41.2 44.4 47.0 48.2 41.2 42.3 43.3 43.1 17 55.7 54.8 53.6 45.0 43.4 49.4 48.9 43.6 18 47.6 35.3 38.1 46.8 40.9 36.9 42.4 42.8 39.4 18 56.0 42.9 50.7 51.5 53.5 47.0 47.2 47.3 47.8 44.7 45.5 19 41.1 35.2 37.1 37.2 37.9 37.3 36.9 19 48.6 44.9 46.6 47.9 48.6 46.0 45.6 46.7 46.4 43.4 38.1 37.6 36.6 37.3 52.1 42.9 49.4 51.0 42.1 45.2 20 39.1 36.6 35.2 34.8 20 45.1 47.0 39.7 33.3 39.3 34.4 44.3 45.5 34.7 29.0 21 45.2 50.6 29.8 32.3 28.8 53.7 53.0 46.0 49.7 50.9 47.9 44.0 21 38.0 27.6 30.0 36.7 36.4 34.3 53.6 32.0 32.2 29.4 54.9 42.7 49.9 47.3 22 37.3 26.7 32.7 36.0 36.4 31.4 31.2 22 54.6 46.8 47.3 46.1 49.2 44.2 23 33.6 28.0 30.9 33.3 32.6 28.0 29.5 30.7 30.3 26.6 23 54.3 43.8 49.0 54.0 50.5 43.8 46.2 47.1 45.0 41.6 24 31.9 26.2 27.5 30.2 31. 2 28.0 26.8 28. 7 28.8 27.0 24 45.7 36.3 44.5 41.6 38.6 37.8 43.4 39, 1 36.3 34.8 41.3 31.3 22.4 26, 4 29.3 31.0 31.3 26.1 28.3 29. 5 30.5 25 52.6 32.4 42.3 48.4 52.0 40.4 38.7 44.3 38.2 25 26 25.7 29.3 27.6 26.0 27.2 28.4 26.9 25.6 26.7 26 52.8 38.6 42.7 48.4 50.0 42.7 39.4 41.1 41.8 40.0 32.0 29.5 26.4 29.3 27.9 27.8 26.8 28.8 26.6 25.5 27 53.9 41.8 47.4 50.3 52.4 48.8 46.4 48.5 49.9 47.4 27 25.4 19.0 19.0 18.0 47.9 50.8 49.6 49.3 28 28.8 27.4 28.6 26.8 26.7 27.5 26.0 28 58.0 45.7 57.7 52.0 47.3 53.7 19.0 29 25.8 11.3 19.6 24.0 20.0 18.5 22.3 23.8 29 54.9 46.3 50.9 54.4 52.0 47.0 49.9 52.7 51.3 46.2 30 29.7 15.2 23.2 28.6 29.7 25.4 21.9 26.7 28.2 24.9 30 52.4 43.8 49.1 51.6 51.5 43.8 46.8 47.9 47.5 42.6 35.0 32.0 29.1 32.0 31.0 31 41.5 31 24.8 29.6 34.0 32.8 31.2 46.4 45.3 44.8 46.1 43.6 43.8 43.5 43.7 42.4 34.0 40.3 39.6 38.7 40.3 40.7 37.9 40.1 30.8 37.9 37.9 33.2 35.6 35.7 Means 34.8 43.5 Means 34.4 35.3 46.5 44.3 FEBRUARY APRIL 30°4 25°3 30.°5 33.3 30°.1 28°9 56°2 39°2 44.8 46.5 47.2 46.9 32.6 31.4 29.8 28. 5 49.8 55.0 53.6 42.4 1 1 34.2 28.8 33.7 33.8 33.6 33.7 32.2 33.2 33.1 33.0 2 44.8 38.8 40.9 42.5 42.6 38.8 40.5 41.5 42.1 38.3 2 47.9 36.7 33.4 34.9 35.0 35.3 36.2 34.6 34.4 34.8 35.5 3 36.2 39.7 46.5 47.4 43.6 39.2 44.3 45.0 42.5 29.8 38.0 39.2 39.7 40.0 38.5 38.4 38.3 37.3 29.8 38.0 37.1 29.2 44.9 40.2 40.5 39.5 38.4 38.0 37.8 31.8 28.2 30.2 31.6 31.4 29.0 29.2 29.6 29.7 28.3 50.9 35.8 46.2 50.3 49.0 46.6 40.6 44.8 44.4 45.4 28.6 27.6 29.2 29.0 29.0 28.5 28.5 28.3 53.6 51.2 47.9 47.4 29.2 28.1 46.6 53.1 47.4 46.2 45.4 44.4 29.1 28.3 59.6 49.8 46.9 29.8 27.4 29.1 29.2 29.8 28. 1 27.5 28, 2 44.7 52.0 56.4 58.8 46.5 48.0 46.3 29.5 28.2 29.6 29.2 8 52.2 50.4 44.7 42.5 41.5 R 30.8 30.6 29. 8 29.0 28.4 29.5 44.7 49.3 48.6 47.4 44.0 37.0 9 34.8 28.2 30.0 33.6 34.8 34.8 29.6 32.3 34.1 34.6 9 48.8 36.4 43.8 44.9 48.8 40.8 37.8 38.3 41.0 10 35.7 33.1 35.1 34.3 33.5 33.5 34.9 34.1 33.0 33.0 10 59.2 30.3 48.2 57.0 58.6 44.0 41.0 46.5 48.0 41.0 33.8 11 25.3 29.2 28.8 27.9 25.3 28. 5 28.0 27.2 24.6 11 61.4 33.2 50.6 58.3 60.0 45.7 43.0 46.9 47.5 42.3 12 26.9 24.5 26.5 26.9 25.6 25.2 26.0 26.0 24.4 12 61.4 37.6 50.0 58.2 60.5 47.8 45.0 48.1 50.0 42.5 24.7 27.1 28.2 29.2 27.7 63.7 37.7 49.0 63.0 49.6 50.1 52.0 13 29.4 25.2 28.3 26.6 27.4 28.2 13 60.4 44.2 45.6 30.3 29.7 42.2 54.9 14 32.1 27.7 31.8 30.4 28.4 29.4 30.8 30.4 14 66.7 63.3 66.1 55.5 47.2 49.5 55.0 50.5 15 31.8 28.0 31.3 31.3 30,0 28.0 30.3 30.3 29.0 27.0 15 62.6 52.0 53.5 59.2 59.0 52.0 50.3 53, 2 53.5 49.6 16 28.7 25.7 27.8 28.4 28.5 25.9 27.3 27.4 27.5 25.2 16 71.9 42.5 61.4 68.3 70.8 50.6 55.4 55.4 57.8 56.8 25.8 26.6 27.2 26.6 17 64.0 44.5 56.0 62.5 17 27.2 26.0 25.5 25.9 25.6 25.2 59.6 44.5 50.0 52.6 52.3 42.8 27.5 29.3 27.5 62.0 41.9 52.6 27.4 60.2 18 25.1 27.0 26.4 18 56.6 48.8 47.9 53.0 50.5 47.4 29.3 26.9 25.6 29.6 29.6 57.8 51.5 27.6 28.6 43.4 54.7 55.0 49.8 19 29.7 26.8 26.9 27.2 28.1 28.1 19 47.4 48.5 49.5 45.4 20 30.0 30.8 27.8 41.2 57.0 30.9 26.8 28, 2 27.7 28.9 29. 2 26.9 20 57.6 53.6 55.6 50.6 50.9 50.0 50.6 48.3 29.4 27.6 21 29.4 24.6 28.4 24.6 27.7 28.4 27.3 24.3 21 56.9 45. 9 54.2 54.3 56.4 52.0 48.3 49.5 49.8 47.0 22 28.8 24.2 27.0 28.2 28. 2 25.8 26.3 27.0 26.5 25.3 22 59.3 45.3 49.1 53.4 55.9 47.2 45.6 50.2 47.7 44.5 23 31.1 22.2 26.0 30.9 30.4 22.2 25.4 28.4 28.8 21.7 52.4 42.4 51.9 46.0 49.5 49.2 47.4 47.9 44.2 23 44.0 17.0 24.2 25.2 20.8 49.8 24 25.5 9.0 16.7 23.7 24.2 20.2 59.0 45.7 52.6 56.8 57.5 45.3 47.5 46.5 25 10.0 33.6 35.0 29.8 36.0 15.4 14.9 30.1 31.3 28.6 25 67.6 42.1 57.6 63.9 67.5 58.4 50.1 53.4 56.4 53.4 40.4 39.7 33.0 26 41.3 29.1 34.6 31.5 34.4 31.0 26 46.7 52.5 58.6 62.8 50.1 45.5 48.4 50.8 34.4 63.3 44.6 27 37.3 30.4 32.6 35.0 36.7 33.4 29.7 31.5 27 35.5 54.9 60.7 61.7 52.0 49.7 48.6 32.3 31.6 61.9 44.7 47.8 32.8 32.6 33.3 31.0 28 31.0 31.3 33.4 30.5 48.6 56.9 57.4 50.8 30.3 28.5 28 59.8 48.4 46.0 46.4 45.5 44.5 29 63.5 41.4 51.6 59.9 62.6 50.6 44.5 48.3 51.6 49.0 30 51.4 41.7 42.2 46.5 46.9 42.4 40.6 43.5 44.0 40.7

29, 1

26.1

Means

32.1

31.1

31.1

28.9

28.2

29.6

29.6

28.0

Means

58.1

41.4

50.5

55.0

56.0

48.0

45.5

47.6

48.3

44.8

		TABLE XXVI READINGS OF THE THERMOMETERS (The readings of the maximum and minim					OF THE	THERM	OMETER	RS IN	THE STE	VENSO	N SCRE	EN IN	THE C	iristi	E ENCL	OSURE			
				(The 1	reading	s of t	he max	imum ar	nd mini	mum th	ermomet	ers app	oly to	the 24	hours	ending	21 ^h)			······································	
Day				ermomet the Gr				Bulb Th			Day			Bulb The above						ermomete the Gr	
of the Month	Maxi- mum	Mini- mum	9 ^h	12 ^h	15 ^h	21 ^h	9h	12 ^h	15 ^h	21 ^h	of the Month	Maxi- mum	Mini- mum	9 ^h	12 ^h	15 ^h	21 ^h	9 ^h	12 ^h	15 ^h	21 ^h
					MAY											JULY					
1 2	50.8 46.6	40.9 40.0	43.5 41.6	45. 2 43. 7	47.7 44.6	42.2 43.4	41.7 39.9	42.3 41.5	44.7 42.4	40.2 42.7	1 2	67.1 73.8	55.2 56.8	63.5 64.3	65.5 69.0	66.3 71.6	62.2 64.0	59.4 60.1	59.7 61.9	59.3 63.0	59.2 58.0
3 4	66.0	43.4	58.0	63.3	64.4 55.2	54.6 46.1	52.5 49.3	52.7 47.7	52.3 51.5	50.1 44.4	3 4	72.7 76.4	56.4 55.8	66.0 64.5	69.5 73.0	71.5 72.2	65.6 61.6	61.0 59.5	62.6 61.3	63.3 62.2	61.0 57.6
5	63.6 65.3	40.3 45.0	58. 2 52. 9	60.5 55.9	60.9 61.9	53.2 55.0	51.7 51.2	51.7 52.1	51.4 56.4	48. 4 52. 3	5 6	64.6 65.9	56.0 48.3	60.6 58.0	60.0	63.4 63.7	56.0 58.4	50.1 51.3	51.3 52.9	52.9 55.5	51.0 54.7
7 8	73.0 70.8	48.3 52.2	68.0 66.6	72.5 68.6	69.0 67.0	55.0 57.6	58.4 59.4	58.6 60.9	57.4 57.7	51.6 52.8	7 8	69.8 64.7	54.6 50.4	57.1 61.4	66.7 64.2	66.6 62.0	55.5 55.3	55.0 54.1	55. 2 55. 4	54. 4 56. 0	51.5 51.8
9 10	75.3 62.9	50.8 51.4	64.4 60.0	71.8 59.2	73.2 59.2	62.9 51.4	57.4 55.6	61.5 55.4	62.7 54.7	57.7 49.7	9 10	68.0 62.0	51.1 52.2	59.5 54.6	63.6 55.9	59.7 59.8	56.0 58.3	53. 9 52. 4	56.3 54.8	56.5 58.4	52.0 55.0
11 12	68.9 66.0	43.8 52.9	60.3 57.6	65.0 64.5	65.8 65.4	58.0 55.6	53.2 52.7	54.2 59.0	55. 2 59. 4	52.0 53.6	11 12	66.1 71.3	51.9 48.8	58.4 63.2	60.0 67.4	62.5 69.0	58.6 59.7	54.0 56.5	53.1 57.7	54.5 59.0	53.2 55.3
13 14	80.3 81.1	51.8 53.0	68.0 75.3	72.4 79.5	80.3 76.6	66.6 53.0	63.4 62.7	66.4 64.9	68.7 63.9	60.0 47.2	13 14	77.6 81.0	56. 2 60. 8	63.3	71.4 75.8	76.2 76.8	69.0 66.0	60.9 66.3	65.4 68.5	68.3 67.8	65.3
15 16	63.7 61.5	46.4 45.9	55.6 55.8	57.0 55.3	63.7 61.5	50.8 50.7	49.9 50.7	49.4 50.7	52. 1 53. 7	48.7 49.2	15 16	77.7 83.2	61.4	70.7 72.7	76.1 79.4	76.4 79.0	66.5 70.0	62. 7 66. 6	66.8	65. 9 68. 4	63.0
17 18	65. 2 60. 2	41.8	59.0 54.9	62. 4 59. 4	64. 2 56. 5	52. 5 50. 8	52.1 51.9	53.3 54.4	55.0 53.8	49.0 49.6	17 18	70.0 72.6	60.6	65.1 68.2	67.0 70.1	65.8 71.5	63.0	62.9	63.2 64.8	63.4	60.5
19 20	62. 2 56. 0	48.0 46.6	50.3 49.4	54.4 51.3	61.8 50.6	56.0 49.8	48.0 46.8	51.6 47.8	55.5 48.0	52. 5 47. 5	19 20	77.0 74.8	59.7 56.4	67.8	75. 2 69. 0	66.6 71.0	59.7 60.5	63.8 56.0	66.7	62.9	58.1
21 22	55.7 62.7	47.8 48.4	50.3 50.8	53.0 57.0	53.8 62.0	51.8 49.3	47.5 48.9	50.5 52.5	51.0 54.0	50.5 48.0	21 22	74.5 78.5	57.5 61.8	68.3	69. 2 75. 8	71.9 75.2	67.8 65.2	62.2	61.4	62.9	62.8
23 24	62. 2 69. 7	45.4 47.0	50.3 62.1	54. 2 67. 0	60.0 69.0	55.8 58.0	48.5 55.5	51.6 56.4	56. 8 58. 2	53.6 54.0	23 24	78.9 78.0	56.7	69.5	77.4	75.8	66.0	61.9	65.7	64.9	59.5 61.2
25 26	68. 4 75. 3	52.9 52.0	62.6 69.6	66.4 72.1	67.0 73.0	57.0 59.3	55.6 62.5	57.7 62.8	57.4 62.8	54.0 55.5	25 26	86.6	58.4	72.0 75.3	79.9 79.6	86.3 85.4	73. 2 73. 4	61.8	66.6	70.3	68.2
27 28	70.8 74.7	50.9 47.7	60.3 68.6	67.6 74.0	69.9 73.5	59.4 58.8	55.1 59.4	59.3 59.5	59.1 61.0	55.8 54.8	27 28	84.9 90.2	62.8	79.0 80.2	79.1 87.0	82.9 82.9	69.4 77.0	70.8 72.4	68.9 73.4	71.2	65.6
29 30	85. 1 85. 7	53.6 58.5	76. 2 77. 6	83.4 83.0	84.5 83.6	71.0 67.8	65.5 66.9	68.1 67.2	68. 8 68. 6	64.5	29 30	82.4 72.0	67.2	73.9 67.5	77.3 67.3	80.6 70.8	71.6 62.5	67.3 64.2	67.5	68.0 65.1	59.8
31 Means	87. 8 67. 6	55.8 48.2	76.8 59.8	63.7	65.6	69. 5 55. 6	54.2	67.6 55.8	56.8	52. 1	31 Means	75.4	57.6	66.6	72.3	74.6	63.9	62.1	63.2	63.3	59.4
		A			JUNE											AUGUST					
1	87.9	59.1	79.8	85.5	87.4	75.2	68.8	70.1	70.7	66.8	1	77.0	57. 2 62. 4	70.3 70.7	76.6 71.0	75.0 65.0	64.0 64.6	62.3 60.9	64.9 61.7	64.2 61.0	60.5 62.6
3	90.1	65.3	82.9 84.4	87.6 91.4	89.6 92.4	74.0 70.7	70.4	69.9 70.3	70.4	66.5 62.7	3	73.0 79.8	60.2	71.3	76.6 74.3	79.6 75.3	64.3 64.0	65. 2 64. 7	62.6 65.3	64.8	58.7 58.7
5	75.8 64.4	50.9	73.0 60.5	74.0 62.2	72.0 55.3	62. 2 50. 9	64.6 55.5	63.5 52.9	60. 2 52. 4	56. 2 48. 3	5	78.3 70.0 73.8	57.9 59.2 57.6	60.9 64.7	61.8	69.6	61.8	57. 9 60. 4	59.5 60.7	61.9	58.3
7	61. 9	45.8	51.3	53.8	61.4	54.3	49.3 52.9	51.6 60.0	52. 2 58. 3	51.1	6 7	71.0	55.9	62.7	67.6	70.2 75.4	59.0 62.0	55.5 55.7	56.6 59.2	57.3 61.4	53.0
9	66.8	48.4 51.2	59.0 59.5	64.0 64.0	58.8 64.9	54.8 58.3	52.5 52.4	55.7 55.3 56.0	55.0 54.7	51.6 51.8 52.6	8 9 10	75.7 70.0	46.8 52.0 53.6	64.5 68.7 63.9	73.0	74.0 68.8	61.0	60.3 57.9	61.5	60.4 59.8	56.7
10 11	73.6 72.9	46. 9 46. 5	62.0 68.5	69. 2 72. 2	73.5	58.6 57.6 50.0	51.0 58.3	60.5	59.3 60.3 50.5	55. 6 45. 3	10 11 12	75.6 77.8	54.2	64.6	67.7	74.7	63.0	58.6 58.7	60.4	63.5	59.8
12	62.6	50.0 44.7	57.1 56.5	61.5	61, 2 59, 5	51.3	50.0 49.1	51.4 54.5	50.8 51.6	47.8 51.9	13 14	80.8 82.2	54.2	70.8 64.4	79.0 77.0	79.6 81.5	65.0 67.2	64.8	65.0 65.8	64.4 65.0	59.0 63.2
14 15	61.0	48.0 50.6	57.3 58.6	56. 2 54. 4	52.6 56.0	53.4 54.4	54.5 54.0	50.7	50.4	49.4	15 16	88. 0 89. 7	59.4 60.2	71.5	83. 4 86. 3	86.7 89.6	69.3 71.0	65.4 65.5	68. 6 70. 4	69.4 71.6	62.5
16 17	67.8 77.7	44.5 54.2	60.7 70.6	63.9 75.8	60.6 77.3	58.0 65.0	54.3 62.1	55.3 63.5	55.6 64.1	60.0	17 18	88.4 88.3	62.4	72.5 74.6	84. 2 84. 0	88.4 87.2	72.0 72.4	65.3 66.4	70.0 68.5	71.4	64.0
18 19	68.6 70.2	55.7 53.9	66.8	66.5	65. 2 67. 4	60.8 58.2	56.9	64.0 57.9	62.5 58.4	59.3 53.9	19	81.3	62.8	74.5 67.6	80.6	80.7 82.8	66.8	64.0	64.4	64.6 65.1	58.4
20 21	63.5	53.7	61.0	63.2	61.6	59.5 60.0	57.8 57.5	59.7 57.9	58.9 57.3	58. 2 55. 0	20 21	83.3 80.1 77.8	62.4	70.5	80.0 76.6	74.1 75.3	69.0 66.2	64. 2 64. 1	62.5	61.4	60.5
22 23	66.8	52.9 47.5	61.9	63. 2 66. 6	65. 2 65. 8	58.5 58.0	55.9 57.4	55.7 58.6	57.5 57.3	54.8 54.0 59.2	22 23 24	81. 2 78. 3	59.6	65.4 68.6	75.4 74.0	77.5	67.0 62.4	61.6	64. 4 61. 7	65.0 61.7	63.0
24 25	78.3 78.2	47.0 59.3	70.2 66.4	75.3 74.0	77.4	65.0 61.4	57.9	60.6	61.3	56.0 69.0	25 26	79.3 78.6	57.7	67.6	75.6 74.3	77.6	64.2	60.9	63. 4 62. 8	63.8 63.6	60.0
26 27	87.0 79.8	51.9 63.7	74.3	80.6 63.6	86.8 73.9	76.0 68.2	64.3 69.4	68.1 63.1	70.3 69.2	65.7	26 27 28	81.3 81.7	56. 9 58. 4	71.9	79.1	80.2 81.0	65.8	61.0	62.4 62.3	61.7	60.5
28 29	75. 2 71. 9	62.3 59.3	69.8 64.0	72.7 66.8	72.5 71.1	69.0 62.4	58.4 59.0	67.5 59.4	69.0 60.6 58.2	65.8 56.4 58.2	28 29 30	77.0	57.7	67.2	74.7	76.0 70.8	61.5	61.2	62.9 59.9	63.9	58.0
30	67.0	59.3	63.7	63.4	65.4	60.0	59.0	58.3	JO. 2		31	74.5	54.7	68.7	73.6	74.3	62.0	60.7	55.9	56.6	56.0
Means	72.1	53.3	65.5	68.3	69.2	60.7	58.4	59.5	59.6	56.2	Means	78.8	57.7	68.3	75.4	77.3	64.8	61.5	63.0	63.5	59.9

	TABLE XXVI READINGS OF THE THERMOMETE (The readings of the maximum and min																E ENCIng 21 ^h)				
Day	-			ermomet the Gr			11		ermomet the Gr		Day		- •	Bulb Th above				Wet-		ermomet the Gr	-
of the Month	Maxi- mum	Mini- mum	9 ^h	12 ^h	15 ^h	21 ^h	9 ^h	12 ^h	15 ^h	21 ^h	of the Month	Maxi- mum	Mini- mum	9 ^h	12 ^h	15 ^h	21 ^h	9 ^h	12 ^h	15 ^h	21 ^h
				SE	PTEMBE	R									N	OVEMBE	R				
1	74.7	52.8	69.2	73.4	72.9	62.2	61.7	61.4	62.3	58.6	1	60.3	39.3	49.2	60.2	60.2	53.9	46.9	55.9	56.2	52.6
3	73.6 76.8	55.1 48.9	65.8 62.3	73.6 73.9	73.0 75.9	60.0 63.7	60.3 58.5	60.6	61.5 60.4	57.0 59.0	2 3	57.0 60.6	51.6 45.2	55.7 51.2	57.0 57.3	54.8 54.2	52.8 49.0	53.5 47.0	52.7 49.5	50.4 47.8	50.0 45.6
4 5	79.5 80.7	54.6 51.2	63.4 63.8	75.2 76.1	75.3 79.9	64.0 65.0	58.9 58.5	63.4	62.9 62.5	59.5 57.7	5	54.6	44.0	49.0 52.0	52.0 54.9	54.6	54.3 44.0	46.4 48.5	49.1 48.6	52.6 47.5	53.0 42.0
6	75.6 73.2	55.8 52.4	63.4	70.3 68.2	75.6 68.5	61.0 63.4	55.6 60.4	57.0 60.7	60.0 61.7	54.5 61.8	6 7	44.9	34.6 34.0	38.9 44.0	42.3 53.0	44.9 53.4	38.8 50.2	38.7 42.9	41.6 49.0	44.6 47.7	38.8 48.9
8	73.4	61.0	63.6	70.8	70.3	61.0	61.3	63.7	61.3	52.4	8	61.9	46.8	47.3	56.6	60.6	49.6	46.4	51.5	52.8	48.1
9 10	72.7 78.8	45.8 57.5	63.6 67.3	67.3 76.3	72.3 78.2	61.8 61.2	55.6 60.8	56.8 63.5	60.5 64.7	57.8 57.4	9 10	60.0 58.2	49.6 49.0	56.9 52.0	60.0 54.4	57.4 54.0	52.0 49.0	55.7 47.2	57.9 48.3	52.2 47.9	50.4 46.6
11 12	83.7 69.4	50.3	69.8 66.6	81.9 68.6	83.0 66.0	66.0 62.0	62.3 64.9	67.2 65.4	67.7 64.4	61.4 59.5	11 12	60.8	47.7 54.6	58.6 59.6	60.3 59.6	59.8 59.6	56.7 54.8	55.3 56.4	55.3 57.4	53.4 56.4	52.5 52.0
13	73.5	55.0	69.3	71.0	63.5	55.0	63.7	63.2	58.0	54.0	13	54.8	45.3	47.0	50.0	49.7	46.6	42.1	43.6	44.2 43.2	43.2
14 15	70.8 81.7	50.7 58.5	61.0	64.7 76.7	70.3 80.0	62.0 69.7	58.0 62.8	62.0 65.7	62.8 67.6	59.4 66.9	14 15	46.6	38.5 37.1	42.0 44.3	45.3 43.0	45.8 42.0	42.0 37.1	39.7 41.4	42.3 37.5	36.2	41.5 34.0
16 17	82.3 73.0	60.3 47.5	77.9 63.4	75.8 68.7	74.0 69.8	60.3 58.0	65.7 56.1	65.6 57.3	63.3 57.8	56.6 54.7	16 17	41.7	31.6	34.6 33.9	40.5 38.9	41.0 38.9	34.0 31.3	33.0 32.4	37.4 35.4	36.7 35.2	32.5 30.8
18	65.2	55.6	58. 2	64.1	65.0 71.8	64.6 66.4	56.3 64.1	61.9	63.5 66.9	63.3 64.4	18 19	37.7 42.4	30.7 35.7	34.6 39.6	36.3 41.4	37.3 42.1	35.8 38.8	33.8 39.1	34.7 40.5	35.0 40.9	33.2 38.0
19 20	75.2 72.3	62.8 57.8	65.2 64.7	68.0 69.2	69.0	57.8	62.6	64.5	62.5	57.0	20	59.5	36.8	54.0	58.8	59.2	59.4	52.8	56.1	57.4	57.3
21 22	66.6 68.7	54.3 45.3	62.4 58.0	63.1 66.9	66.0 67.2	56.0 56.3	60.6 52.7	56.9 56.1	54.6 57.0	49.8 55.0	21 22	60.8	58.0 58.3	58.8 60.0	60.4 60.6	59.7 58.8	59.2 60.3	56.8 57.7	57.5 57.4	57.1 56.3	57.2 57.3
23 24	60.8 58.1	51.2 43.7	54.0 52.0	56.0 56.7	58.4 56.5	51.2 49.8	48.7 46.0	49.4 48.8	49.6 48.5	46.5 46.4	23 24	61.5 49.3	49.3 39.5	57.8 41.9	60.6 47.3	58.9 48.3	49.3 42.8	55.3 38.9	55.8 42.0	53.6 42.3	44.8
25	64.8	40.1	53.1	61.9	61.9	54.8	49.3	52.8	52.7	51.8	25	43.8	37.6	40.9	43.4	42.5	37.6	37.4	37.1	36.0	33.4
26 27	66.6	51.4 48.6	60.6 51.5	64.2 63.4	66.1 64.9	54.4 53.4	56.9 50.0	55.5	55.7 56.9	51.1 50.9	26 27	38.7 39.3	31.2 27.0	33.6 30.0	36.9 34.3	38.5 39.0	31. 2 34. 8	29.8 29.7	31.7 32.1	33.0 36.9	29.5 34.0
28 29	63.4 65.0	51.2 52.0	56.7 58.8	61.0 61.9	62.6 60.1	58.0 52.0	54.2 57.3	56.7 59.1	58.1 54.5	55.7 46.2	28 29	40.9 39.0	30. 1 34. 5	32.9 37.1	39.6 39.0	40.3 38.5	35.5 36.3	31.5 35.7	37.1 37.3	38.3 36.8	35.0 35.3
30	58.9	43.4	49.9	57.2	57.3	46.0	44.5	46.9	47.0	42.5	30	36.3	26.5	32.4	34.0	33.6	26.5	31.8	32.7	32.6	26.1
Means	71.5	52.6	62.5	68.2	69.2	59.2	57.6	59.6	59.6	55.6	Means	50.9	40.6	45.7	49.3	49.4	44.8	43.5	45.5	45.4	42.8
	0		۰٦	0	CTOBER	0			0	0					D	ECEMBE	R	0	0	0	0
1 2	62.5 65.0	36.0 40.3	49.2 54.3	58.8 63.0	62.5 63.5	49.7 56.5	45.0 49.8	50.0 56.3	51.9 57.0	47.3 53.3	. 1	32.8 40.8	21.0 29.5	24.2 31.6	30.3 38.3	31.6 39.7	29.6 35.3	24.0 30.9	29.4 34.1	31.2 36.7	29.2 33.5
3	61.7	45.4	56.3	60.6	60.0	50.6	50.6	51.3	50.0	47.4	3	39.2	33.4	36.9	38.3	38.8	37.5	35.8	37.0	37.8	37.1
5	67.2 67.8	37.7 43.2	49.6 46.1	63.0 61.6	66.5	51.4 48.2	47.8 45.9	54.0 55.0	55.0 57.3	50.0 47.0	4 5	39.6 49.0	34.1 33.7	38.4 47.5	39.1 48.5	38.6 47.6	34.1 45.0	38.1 45.5	38.6 45.7	37.6 43.1	33.5 41.8
6 7	71.2 69.3	41.2	52. 2 56. 9	67.3 67.0	70.8 68.5	55.0 58.0	49. 4 53. 4	56.6 58.3	59.0 61.5	52.7 56.7	6 7	45.7 44.7	39.7 37.7	44.1	43.5 44.0	44.0 43.0	42.0 38.7	43.4 42.7	42.5	43.3	41.5 38.2
8	67.3	53.0 46.2	59.4 53.6	61.8	65.2	58.5	57.4	58.9	60.0 56.9	56.5	8	46.0	36. 4 40. 6	41.8 43.0	44.9	45.6	42.5 43.0	40.6 41.2	42.2 43.1	42.3 42.9	41.2
9 10	68.0 69.0	53.3	61.3	64.3 67.7	65.4 67.1	58.0 58.0	52.3 56.9	55.7 59.1	60.2	56.0 56.5	10	45.5	36.5	40.4	45.5	44.4 42.6	36.5	39.2	39.0	38.5	34.5
11 12	66.8 71.8	53.7	60.4 58.4	65.8 67.5	66.5 71.6	55.2 53.6	58.4 56.4	59.6	59.5 61.8	53.9 52.6	11 12	41.6 51.2	27.7 41.6	29.6 46.3	37.8 48.3	41.0 51.0	41.6 50.7	29.4 44.8	32.9 47.6	37.9 49.5	39.0 49.2
13 14	69.6 57.8	48.5 46.8	53.4 55.3	68.5 55.2	65.3 54.0	57.8 46.8	52.9	61.0	59.5 51.4	55.1 44.8	13 14	50.7 45.3	45.3 40.0	48.1 42.8	47.8 43.0	47.5 42.4	45.3 40.0	46.3 41.1	46.0 39.8	46.5 39.0	43.8
15	64.4	37.7	52.3	61.3	60.7	56.3	54. 4 49. 0	53.6 54.1	53.5	53.1	15	43.5	37.0	41.0	43.2	42.8	43.5	39.9	40.9	40.5	41.0
16 17	59.9 59.7	52.0 47.5	56.6 51.4	59.5 55.2	59.9 58.4	52.0 55.7	52.8 50.4	54.4 51.5	54.3 52.7	50.7 51.4	16 17	45.9 45.9	43.1	45.0 44.2	45.7 45.4	45.4 45.4	43.6	42.7 42.7	43.7	42.9	42.4
18	57.0	47.7	50.5 48.4	54.3 56.5	57.0 54.7	47.7 46.6	46.5	48.1	50.3 47.6	45.2	18 19	45.0 47.0	39.7 39.9	44.5 43.4	44.2 44.1	41.7 45.1	39.9 46.2	43.5 40.7	43.3 39.7	41.2	39.8 44.8
19 20	57.2 52.6	37.7 38.3	46.6	51.8	51.4	38.3	46.5	48. 4 46. 0	45.4	43.6 36.6	20	50.9	45.2	49.6	50.2	50.9	45.2	47.9	48.0	49.1	43.7
21 22	58. 7 60. 2	29.3 44.1	40.0 56.5	54.3 56.4	55.4 60.2	46.0 52.4	37.5 54.9	47.0 54.2	49.9 54.7	44.5 50.9	21 22	49.5	40.3	42.6	48.0 49.3	49.0 49.8	47.6 45.7	41.3	45.4 44.8	45.0 45.3	43.2
23	61.6	48.0 43.3	53.2 46.9	59.0 54.0	58.6 57.0	48.0 49.8	51.9 46.4	54.2 51.4	52.3 54.2	47.0 48.8	23 24	49.6 51.0	44.3 43.9	48.7 47.7	49.4 49.2	49.3 50.1	44.3 50.8	44.3 44.9	44.3 46.3	44.0 47.6	40.2
24 25	57.6	47.7	50.9	56.5	55.7	47.7	48.5	51.0	50.2	45.2	25	52.0	42.7	49.2	50.6	45.5	43.0	46.9	47.1	44.0	41.2
26 27	51.7	44.7	46.4	50.4 47.5	50.0 48.6	47.3 48.3	42.5	43.6 41.5	42.5 43.0	42.0 43.5	26 27	45.5 55.8	36.4 40.4	39.8 54.0	44.6 55.8	44.0 54.5	40.4 51.4	37.3 51.5	39.9 53.2	40.0 52.0	39.0 46.0
28 29	50.4 49.4	45.3 41.2	47.9 44.9	49.9 47.4	48.8 48.0	45.3 41.2	43.4 42.1	43.4 43.4	43.7 43.0	41.5	28 29	51.4 42.2	42. 2 32. 3	46.6	47.5 39.2	47.7 39.5	42.2 36.0	43.0 30.3	43.3 34.2	43.6 35.7	38.6
30	49.4 49.0 52.8	32.3	37.6	47.0	48.6 52.5	46.0 49.6	37.4 46.0	44.4	45.1	44.3	30 31	36.4 38.5	31.8	33.4	34.3	34.5	31.8	31.7	33.6 32.3	33.3 35.0	30.5
31		45.3	48.3	51.3	12. D. I	47.01	40.0	48.1	48.2	46.3	. 41	. 48 5	28.9	30.6	36.3	37.6	36.4				35.7

Table XXVII. - Readings of thermometers at $9^{\rm h}$ on the revolving open stand (formerly called 'ordinary') in the new site in the christie enclosure

			,									
1947	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.
	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0
1	45.4 31.7	35.7 24.0	33.9 22.8	50.7 37.9	50.4 39.7	90.6 57.8	68.7 54.1	78.4 55.4	78.6 51.2	58.9 35.6	53.0 38.4	34.6 19.0
2	44.9 32.9	34.0 26.5	36.7 23.0	56.9 40.0	53.7 39.5	90.2 63.8	68.8 56.5	80.0 61.5	78.5 53.4	63.0 39.5	61.0 48.5	33.0 23.8
3	41.8 28.7	35.0 33.1	40.2 20.5	44.1 35.9	59.0 41.1	92.7 61.5	75.8 55.7	75.6 58.8	77.0 47.6	67.2 42.8	57.2 44.6	41.1 31.0
4	44.7 32.9	38.3 34.0	38.9 29.3	48.2 39.2	67.6 48.9	95.7 58.6	74.4 54.9	81.8 57.3	78.8 52.8	63.4 36.2	60.4 43.2	39.7 36.5
5	37.8 28.9	38.8 27.8	35.2 29.6	46.9 35.5	59.2 39.8	77.1 54.6	78.2 56.0	79.0 58.5	80.5 49.9	69.0 42.2	54.7 49.4	47.6 32.6
6	36.9 26.3	32.2 27.4	32.8 28.9	52.0 45.8	65.0 44.9	66.9 45.5	66.7 47.9	72.3 57.1	81.7 54.2	69.0 40.7	55.9 34.3	49.8 40.2
7	32.6 24.9	29.6 27.1	32.9 19.7	54.4 44.1	69.2 45.9	63.3 49.9	67.7 54.4	76.6 54.4	77.8 50.2	71.1 46.8	44.9 33.9	46.0 38.9
8	35.3 32.2	30.4 28.0	37.0 23.2	61.6 45.6	74.8 50.6	70.8 48.1	71.2 49.8	74.2 45.5	74.2 60.5	70.7.52.6	55.7 44.0	45.8 36.3
9	46.6 34.2	31.3 28.0	41.1 30.6	53.2 34.9	72.5 49.0	67.8 50.9	66.3 50.6	79.9 50.0	75.7 45.4	69.4 44.6	61.7 47.2	46.1 40.2
10	44.9 29.0	36.0 29.5	48.9 32.8	50.7 29.0	76.9 53.5	68.7 45.2	70.3 51.6	79.0 51.2	73.8 56.9	68.2 52.4	61.0 51.0	45.9 36.2
11	45.4 32.3	35.4 28.4	44.9 32.8	60.0 32.9	64.0 42.6	75.2 45.9	64.4 51.7	73.7 52.0	79.2 49.6	69.6 53.0	58.7 47.5	45.7 27.3
12	50.1 38.8	29.3 24.4	35.1 30.5	63.0 35.9	72.2 51.4	75.6 49.9	68.0 48.2	79.3 52.0	83.8 62.5	67.8 52.0	60.8 56.3	46.0 28.0
13	49.2 40.6	27.3 24.9	48.0 31.3	63.3 35.0	70.3 50.9	66.7 43.2	73.4 55.7	81.8 52.0	70.7 57.4	72.3 47.6	61.3 44.5	51.1 45.7
14	46.8 36.5	30.0 26.5	53.4 32.8	65.8 40.9	83.7 52.8	66.0 47.9	79.9 59.0	83.4 56.2	75.6 49.9	70.7 50.9	52.4 37.9	48.3 41.5
15	54.0 45.9	32.4 29.1	35.7 24.5	69.0 51.7	82.2 46.1	64.2 49.9	83.8 60.0	85.0 57.2	71.9 57.9	55.8 36.9	46.5 40.8	43.4 35.2
16	51.9 43.5	31.8 26.6	47.9 31.0	63.6 41.6	66.3 45.4	64.7 43.8	59.9	90.2 57.8	82.3 63.5	64.7 52.4	44.3 30.9	45.3 40.4
17	53.9 43.2	29.3 25.6	57.7 38.5	73.0 42.4	63.8 40.5	72.6 53.8	85.3 60.0	92.3 59.7	82.6 46.7	60.2 46.0	42.2 31.1	46.2 43.2
18	48.7 34.8	28.4 25.6	57.6 41.6	66.0 41.0	68.3 43.3	80.3 54.2	70.3 61.8	92.2 60.3	73.4 54.8	61.3 49.4	40.7 30.2	45.9 43.4
19	47.8 34.3	29.7 25.0	56.3 44.8	63.8 42.6	61.9 47.8	69.3 53.1	75.3 59.1	91.9 61.2	66.7 58.2	58.1 36.2	39.8 34.2	45.0 39.5
20	38.8 32.6	30.6 26.8	49.0 42.6	59.4 40.8	64.8 46.4	72.3 53.1	78.7 56.2	85.0 56.2	77.6 60.3	58.6 40.0	54.3 35.3	49.3 42.1
21	40.8 26.4	31.5 26.5	53.8 44.9	58.0 45.5	52.7 47.5	67.3 52.6	75.7 56.9	86.6 61.5	74.0 53.6	54.3 28.6	59.9 53.8	51.2 39.2
22	39.0 26.1	29.6 23.8	54.3 42.0	57.7 45.5	56.2 48.5	75.0 51.9	77.0 60.9	82.8 60.9	68.0 44.3	58.1 39.7	61.3 57.8	49.8 42.0
23	38.1 27.6	29.8 21.0	55.7 45.1	60.2 41.8	67.3 44.9	69.9 46.8	80.6 55.8	81.2 58.9	69.2 50.8	60.9 47.3	61.7 55.9	50.8 44.5
24	34.2 25.5	32.9 9.9	54.3 39.3	54.6 45.2	65.0 46.3	72.2 46.4	80.7 51.9	84.8 53.5	61.7 42.3	62.7 41.1	61.6 38.7	50.0 44.0
25	32.6 20.9	26.5 9.3	46.2 31.8	61.0 40.8	72.3 51.9	80.8 58.8	80.3 57.3	81.7 57.2	60.3 38.0	59.3 45.6	49.0 38.2	52.0 46.6
26	32.3 25.7	37.3 16.9	53.5 38.4	68.8 44.9	72.0 51.3	80.9 51.0	87.9 63.0	82.7 58.2	66.4 49.8	59.7 43.4	43.8 30.6	51.3 35.9
27	29.6 25.5	41.3 29.8	53.6 41.5	66.2 35.6	77.3 50.1	89.7 65.8	89.2 61.1	82.8 54.1	67.1 47.0	52.8 45.1	38.7 26.2	54.0 38.9
28	29.4 25.5	37.9 30.9	55.3 45.3	63.8 47.8	73.7 45.9	80.7 60.4	88.3 63.5	85.2 56.0	67.9 51.0	51.6 45.6	39.7 29.6	55.8 45.3
29	29.7 9.8		58.7 45.8	63.2 40.6	79.4 51.0	78.1 59.4	91.5 65.5	85.6 56.7	64.0 55.9	52.2 41.9	41.3 32.8	48. 2 31. 7
30	26.6 13.9		55.8 45.8	64.8 41.7	88.4 57.4	74.7 58.7	85.3 62.2	80.2 53.1	65.8 41.8	50.5 30.4	39.6 29.4	40.8 31.2
31	30.3 22.5		53.3 41.5		88.8 53.9		73.6 59.0	74.7 52.7		49.8 37.7		36.3 28.0
Means	40.6 30.1	32.6 25.6	47.0 34.6	59.5 40.7	69.0 47.4	75.3 52.7	76.6 56.8	81.9 56.0	73.5 51.9	62.0 43.4	52.1 40.5	46.3 37.0

MADIE	15 15 15 T T T	AMOTTATO	ΔE	DATM	COLLEGMED	T 3.7	DAOII	MANIMIT	ΛĦ	MITTE.	TOTAL D	10477
INDPD	VV A I I I +	 ALIOUNI	UF	UNTIN	COLLECTED	T 1/4	PACU	TONIA	υr	Tur	IDAL	104/

the Grour	Monthly Amount of Rain collected in each Gauge														Height of Receiving Surface	
partly sunk below the Christie Enclu	Number of Gauge	January	February	March	April	May	June	July	August	September	October	November	December	Sums	Above the Ground	Above Mean Sea Level
		1n.	in.	in.	in.	in.	in.	in.	in.	in.	in.	in.	in.	in.	ft.in.	ft. in.
s pa	6	1.632	1.569	5. 216	1.513	1.183	2.927	1.243	0.090	1.533	0.140	1.100	2. 150	20.296	0 5	149 6
Gauges 1n	8	1.642	1.612	5. 187	1.481	1.152	2. 909	1.240	0.083	1.530	0.139	1.067	2, 097	20. 139	1 0	150 1
Numb	, 1	16	11	26	13	16	13	14	3	10	5	14	16	157		

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

Hour Ending	January	February	March	April	May	June	July	August	September	October	November	December	Mean for the Year
h	miles	miles	miles	miles	miles	miles	miles	miles	miles	miles	miles	miles	miles
1	10.6	9.9	11.4	11.0	6.1	7.4	6.6	6.9	7.5	5.9	10.6	10.5	8.7
2	10.3	9.9	11.4	11.9	6.5	6.9	6.6	6.9	7.4	6.1	10.6	10.4	8.7
3	9.5	9.9	11.2	11.5	6.0	7.0	6.7	6.3	7.1	6.2	10.6	10.1	8.5
4	9.3	10.4	11.3	10.9	6.5	6.6	6.5	6.1	7.1	6.1	11.3	10.6	8.6
5	9.4	10.5	11.3	11.1	6.2	6.6	7.0	6.4	7.1	6.3	12.0	10.8	8.7
6	10.0	10.7	11.0	11.4	6.0	6.9	7.0	6.9	7.5	6.6	11.8	10.6	8.9
7	10.5	11.4	11.3	12.0	5.7	7.9	7.0	7.4	7.5	6.1	12.3	10.9	9.2
8	10.5	11.1	11.7	13.1	6.3	8.5	7.9	6.8	8.0	6.5	12.0	11.2	9.5
9	10.5	11.6	11.9	13.7	7.4	9.2	8.2	7.6	8.5	6.3	12.7	11.6	9.9
10	11.0	10.8	11.9	15.0	8.4	10.0	8.3	8.1	9.2	7.2	12.3	11.3	10.3
11	11.2	11.3	13.2	15.8	9.2	10.5	9.1	9.1	10.1	8.5	13.0	11.7	11.1
12	12.1	11.3	14.2	16.4	9.7	11.1	9.1	9.7	10.4	8.6	13.5	12.0	11.5
13	11.9	11.9	14.5	16.5	9.0	11.5	9.4	10.2	10.2	9.8	14.1	12.5	11.8
14	12.2	12.5	15.1	17.9	9.8	11.6	10.0	10.7	11.3	9.9	15.0	12.9	12.4
15	12.5	12.6	14.7	18.5	10.4	11.7	10.5	11.1	11.8	9.5	14.5	12.6	12.5
16	12.2	12.3	15.0	17.5	10.0	10.8	10.5	10.8	11.1	9.2	13.6	11.7	12.1
17	11.7	12.6	14.5	17.4	9.8	11.2	10.2	10.6	10.3	8.7	12.8	11.5	11.8
18	11.9	12.0	14.2	16.8	9.5	10.8	10.0	9.7	10.1	8.7	12.3	11.5	11.5
19	12.4	10.7	12.4	15.3	8.5	10.6	9. 2	9.1	8.8	8.2	12.1	11.3	10.7
20	12.4	11.5	12.3	14.5	8.1	9.4	8.7	7.9	8.9	7.8	11.5	10.8	10.3
21	11.9	10.6	12.1	13.8	8.0	8.6	8.0	7.0	8.4	7.5	11.1	11.5	9.9
22	11.9	10.6	12.1	13.2	7.6	8.1	7.7	7.1	8.2	7.3	11.4	11.6	9.7
23	10.9	10.9	11.7	13.1	7.2	7.6	7.4	6.8	8.0	6.8	11.0	11.0	9.4
24	10.3	10.4	11.0	12.1	6.6	7.8	7.0	7.1	7.0	6.5	10.5	10.2	8.9
Means	11.1	11.1	12.6	14.2	7.9	9.1	8.3	8.2	8.8	7.5	12.2	11.3	10.2
Greatest Hourly Measures	40	26	52	43	31	27	26	19	25	30	35	33	••

^{*} The measures are derived from the motion of the cups by the formula V = 2.7v where v is the hourly motion of the cups in miles. See Introduction p. xvii.