METEOROLOGICAL OFFICE

THE OBSERVATORIES' YEAR BOOK

1960

Comprising the geophysical results obtained from autographic records and eye observations at the Lerwick, Eskdalemuir, and Kew Observatories

LONDON: HER MAJESTY'S STATIONERY OFFICE 1962



PREFACE iii

The Observatories' Year Book was published for the years 1922 to 1937 in continuation of Part III Section II and Part IV of the British Meteorological and Magnetic Year Book for the period 1908 to 1921. Further publication was resumed eventually after a long interruption because of the 1939-45 war but in an abridged form as outlined in the next paragraph.

The General Introduction to the Meteorological Tables and the parts of the Sectional Introductions which dealt with site, instruments, procedure and tabulations included in the volume for 1938 served as the standards of reference up to 1956; only important departures from these standards were mentioned explicitly in subsequent Year Books. The space devoted to the discussion of observations was reduced and the monthly tables of individual hourly values of meteorological elements were discontinued, but summaries of the daily mean values (or totals), monthly means (or totals) of the hourly values and some maximum and minimum values were given. The diary of cloud, weather and visibility, and, after 1939, the aerological and seismological tables were also discontinued but no major changes were made in the tables of atmospheric electricity and terrestrial magnetism.

Another major review of the contents of the Observatories' Year Book was then carried out and a number of important changes made, commencing with the volume for 1957. The meteorological data for Kew and Eskdalemuir were omitted; a punched card system of recording such data centrally, at the Meteorological Office, Bracknell, has been adopted. It was also decided to omit all mention of the seismological work at Kew. Full details of the seismological measurements are given in the Kew Seismological Bulletin distribution of which was resumed in 1947 after a break of seven years, and are also communicated to the International Seismological Summary. There were also some changes in the terrestrial magnetism and atmospheric electricity tables; full details of the new tables are given in the Introduction to this volume.

It may be of assistance to those who make use of the data in this volume to know the full range of the other work now carried out at the three Observatories and this is detailed below. Requests for information about this other work should be addressed to the Director-General, Meteorological Office, London Road, Bracknell, Berkshire.

Lerwick Observatory

Full hourly synoptic observations of the weather. Continuous recording and hourly tabulations of pressure, wind, rainfall, sunshine, temperature, humidity, total and diffuse solar radiation on a horizontal surface, daylight illumination on a horizontal surface. Daily measurements of evaporation and atmospheric pollution.

Routine radio sonde and radar wind upper air measurements (twice and four times daily respectively). Regular measurements, normally several times a day, of the total amount of ozone. Chemical sampling of the air and rain water.

Eskdalemuir Observatory

Full hourly synoptic observations 06-21h. G.M.T. Continuous recording and hourly tabulations of pressure, wind, rainfall, sunshine, temperature, humidity, total and diffuse solar radiation on a horizontal surface, daylight illumination on a horizontal surface. Daily measurements of evaporation, atmospheric pollution and soil temperatures (at depths of 30 and 122 cm.). Regular measurements, several times a day, of the total amount of ozone and occasional umkehr measurements of the vertical distribution. Chemical sampling of the air and

rain water. Sampling for radioactivity of particulate matter in the air near the surface.

Kew Observatory

Three-hourly synoptic observations 06-21h. G.M.T. Continuous recording and hourly tabulations of pressure, wind, rainfall, sunshine, temperature, humidity, total and diffuse radiation on a horizontal surface, solar radiation at normal incidence, daylight illumination on a horizontal surface, net flux of radiation. Daily measurements of evaporation, atmospheric pollution and soil temperatures (at depths of 10, 20, 30 and 122 cm.). Records from a set of Galitzin seismographs (3 components) and a short period vertical seismograph.

CONTENTS

| | reface |
|----|---|
| | rrata in previous volumes |
| Ι | ntroduction |
| | LERWICK OBSERVATORY |
| | Terrestrial magnetism |
| Į. | 3 |
| L | Hourly values of horizontal component; hourly, daily and monthly sums and means |
| ? | Hourly values of declination; hourly, daily and monthly sums and means |
| } | Hourly values of vertical component; hourly, daily and monthly sums and means |
| | Daily extremes of magnetic elements, magnetic character figures ((K and C) and tempera- |
| | ture in magnet house |
| | Mean monthly and annual values of magnetic elements |
| | Monthly, seasonal and annual means of daily range |
| | Frequency distribution of daily range |
| | Diurnal inequalities of the magnetic elements, all days; monthly, seasonal and annual |
| | means |
| | Diurnal inequalities of the magnetic elements, international quiet days; monthly, |
| | seasonal and annual means |
| | Diurnal inequalities of the magnetic elements, international disturbed days; monthly, |
| | seasonal and annual means |
| | Range of mean diurnal inequalities for the months, seasons and year |
| | Average departure of diurnal inequalities from daily mean |
| | Monthly, seasonal and annual values of non-cyclic changes of horizontal component, |
| | declination and vertical component |
| | Average range of diurnal inequality 1932-53 with 1960 as a percentage of this |
| | Ratio of range of inequality at Lerwick to that at Eskdalemuir |
| | Noteworthy magnetic disturbances recorded at Lerwick |
| | Aurora |
| | Auroral log |
| | General auroral table - British Isles |
| | Atmospheric Electricity |
| | Hourly values of potential gradient, reduced to open-level surface; hourly, daily, |
| | monthly and annual means |
| | Electrical character of each day and approximate duration of negative potential gradien |
| | |
| | ESKDALEMUIR OBSERVATORY |
| | Terrestrial magnetism |
| | Hourly values of horizontal component; hourly, daily and monthly sums and means |
| | Hourly values of declination; hourly, daily and monthly sums and means |
| | Hourly values of vertical component; hourly, daily and monthly sums and means |
| | Daily extremes of magnetic elements, magnetic character figures (K and C) and tempera- |
| | ture in magnet house |

ESKDALEMUIR OBSERVATORY - continued

| TABLES | | PAGE |
|--------|--|----------|
| 25 | Mean monthly and annual values of magnetic elements | 86 |
| 26 | Monthly, seasonal and annual means of daily range | 86 |
| 27 | Frequency distribution of daily range | 86 |
| 28 | Diurnal inequalities of the geographical components of magnetic force, all days; hourly, seasonal and annual means | 00 |
| 00 | seasonal and annual means | 88 |
| 29 | | |
| 30 | Diurnal inequalities of the geographical components, international quiet days; hourly, seasonal and annual means | 89 90 |
| 31 | Diurnal inequalities of the magnetic elements, international quiet days; hourly, seasonal and annual means | 91 |
| 32 | Diurnal inequalities of the geographical components, international disturbed days; hourly, seasonal and annual means | 92 |
| 33 | Diurnal inequalities of the magnetic elements, international disturbed days; hourly, seasonal and annual means | |
| 24 | | 93 |
| 34 | | 94 |
| 35 | Monthly, seasonal and annual values of non-cyclic changes of horizontal component, | 04 |
| | declination and vertical component | 94 |
| 36 | Average range of diurnal inequality 1932-53 with 1960 as a percentage of this | 94 |
| 37 | Harmonic components of the diurnal inequality of magnetic force | 95 |
| 38 | Noteworthy magnetic disturbances recorded at Eskdalemuir | 96 |
| 39 | Atmospheric electricity Hourly values of potential gradient, reduced to open-level surface; hourly, daily | |
| | monthly and annual means | 98 |
| 40 | Electrical character of each day and approximate duration of negative potential | 104 |
| | gradient | 104 |
| | KEW OBSERVATORY | |
| | Atmospheric electricity | |
| 41 | Hourly values of potential gradient, reduced to open-level surface; hourly, daily, monthly and annual means | 106 |
| 42 | Electrical character of each day and approximate duration of negative potential | |
| | gradient | 112 |
| 43 | Values of potential gradient, air-earth current and conductivity measured by the Wilson apparatus together with monthly and annual means | 113 |
| | Atmospheric pollution | |
| 44 | Monthly, seasonal and annual means for each hour | 114 |

| | Between pages | | | | | | | | |
|--------|--|--|-----------|--|--|--|--|--|--|
| Figure | 1. | Contour map of surroundings | 18 and 19 | | | | | | |
| | 2. | General view from the south - Loch Trebister in the foreground, July 1961 | " " | | | | | | |
| | 3. | Site Plan, 1961 | " " | | | | | | |
| | 4. View from the north-west, showing instruments and huts, July 1961 | | | | | | | | |
| | | | | | | | | | |
| | | ESKDALEMUIR OBSERVATORY | | | | | | | |
| | 5. | Contour map of surroundings | 18 and 19 | | | | | | |
| | 6. | The Observatory and Davington village looking westwards from Dumfedling Hill, July 1961 | " " | | | | | | |
| | 7. | Site Plan | | | | | | | |
| | 8. | General view of the Observatory looking northwards (on the left) to south-eastwards (on the right) | " " | | | | | | |
| | | KEW OBSERVATORY | | | | | | | |
| | 9. | Contour and built-up area map | 18 and 19 | | | | | | |
| | | Aerial view, February 1961 | " | | | | | | |
| | 11. | | " " | | | | | | |
| | 12. | General view from south-south-west, August 1961 | " " | | | | | | |

ERRATA IN PREVIOUS VOLUMES

Observatories' Year Books 1947 and 1948

Page 39. Table 63. For entries under North component substitute the following:-

| | 1947 | 1948 |
|-------|-------|-------|
| | γ | γ |
| Jan. | 14086 | 14098 |
| Feb. | 14085 | 14096 |
| Mar. | 14071 | 14094 |
| Apr. | 14090 | 14099 |
| May | 14097 | 14098 |
| June | 14098 | 14112 |
| July | 14102 | 14112 |
| Aug. | 14089 | 14094 |
| Sept. | 14072 | 14099 |
| Oct. | 14078 | 14087 |
| Nov. | 14091 | 14106 |
| Dec. | 14099 | 14119 |
| Year | 14088 | 14101 |

Observatories' Year Book, 1953

Page 39. Table 63. Heading of Declination. For "110 +" read "100 +".

Observatories' Year Book, 1955

read "a,".

Page 6. Table 5(c). Heading of last column. For "Flare of S.F.E." read "Flare or S.F.E."

Observatories' Year Book, 1957

Page 7. Introduction, line 16. For "On" at beginning of line and in following mathematical expression

Page 7. Introduction, line 16. For $||\delta_n||$ read $||\alpha_n||$

Page 7. Introduction, line 17. For ${}^{11}\delta n^{11}$ read ${}^{11}\alpha_n{}^{11}$

Page 7. Introduction, line 18. For "δn" read "αn"

Page 10. First complete para. line 3. For "1938" read "1933"

Page 12. Second table. Heading. Below "Eskdalemuir Z-Abinger Z" add "or Hartland"

Page 18. First complete para. Line 3. After "1430" add "h."

Page 20. Table 2. Heading. After "LERWICK" add "(D)"

Page 29. Footnote. After "quiet" insert "day"

Page 44. Table 5. Heading. For "N, W," read "X, -Y,"

Page 49. Table 10. Above second table insert "DECLINATION"

Page 72. Table 22. Heading. After "ESKDALEMUIR" add "(H)"

Page 90. Table 26. Heading. For "N" read "X"

Page 97. Heading. For "Diurnal Inequalities of the Geographical Components of Magnetic Force" read "Diurnal Inequalities of the magnetic elements, Declination, Inclination and Horizontal Force"

Pages 98 and 99. These two pages should be transposed

Page 100. Table 37. Footnote. For "may" read "May"

Page 113. Table 45. Footnote, last line. Before "of days" insert "is the number".

ERRATA

ix

ERRATA IN PREVIOUS VOLUMES - continued

Observatories' Year Book 1958

Page vi, Contents, Kew Observatory, Table 47. Last word. For "changes" read "charges"

Page 15. First line. After "volts" insert "per metre"

Page 17. Line 28. For "10¹⁸" read "10⁻¹⁸"

Page 44. Table 5. Heading. For "N, W," read "X, -Y,"

Page 44. Table 6. Heading to table. Delete "absolute"

Page 92. Below Table 22 insert "751 at 0-1h. January 1, 1959"

Page 92. Below Table 23 insert "35.0 at 0-1h. January 1, 1959"

Page 94. Table 26. Heading. For "N, W," read "X, -Y,"

Page 94. Table 27. Heading to table. Delete "absolute"

Page 105. Table 33. Heading. For "DISTURBED" read "QUIET"

Observatories' Year Book 1959

Page 18. Line 16 For "10¹⁸" read "10⁻¹⁸"

Page 88. Table 25. Heading. For "N, W," read "X, -Y,".

| | · | | | |
|--|---|---|--|--|
| | | | | |
| | | | | |
| | | | | |
| | | • | | |
| | | | | |

INTRODUCTION

DESCRIPTION OF OBSERVATORIES

Lerwick Observatory, Shetland (60°08'N, 1°11'W)

The Observatory is set on a ridge of high ground about 85 m. above M.S.L. and about 2½ km. to the south-west of the port of Lerwick (population about 6000). The surrounding country is desolate moorland.

Views of the station are given in Figs. 2 and 4, together with a contoured map of the surroundings, Fig. 1, and a site plan Fig. 3.

An account of the history of the Observatory is given by W.G. Harper (Met. Mag., London 79, 1950, p.309).

Eskdalemuir Observatory, Dumfriesshire (55°19'N, 3°12'W)

The Observatory is situated on a rising shoulder of open moorland about 245 m. above M.S.L. in the upper part of the valley of the River White Esk in the Southern Uplands of Scotland. It is surrounded by open grass covered hills rising within 8 km. to the northwest to nearly 700 m. above M.S.L.

General views of the observatory and its neighbourhood and of the observatory grounds are given in Figs. 6 and 8 respectively; Fig. 7 is a site plan and Fig. 5 is a contour of the surrounding country. The history of the Observatory is described by M.J. Blackwell in a paper marking the fiftieth anniversary of the commencement of observations (Net. Mag., London 87, 1958, p.129), and by J. Crichton (Net. Mag., London 79, 1950, p.337).

Kew Observatory, Richmond, Surrey (51°28'N, 0°19'W)

Kew Observatory lies in the centre of an area of parkland about 16 km. west of the centre of London. The ground level is about 5 m. above M.S.L. Outside the parkland within 1 km., the area is extremely built-up, with a number of small factories within a few kilometres to the north and east.

Figs. 9, 10, 11 and 12 are respectively a plan of the surrounding country (shading indicates built-up areas), an aerial photograph of the Observatory, a site plan and a photograph of the Observatory and instrument lawn.

For the early history of the Observatory reference may be made to papers by G. Rigaud¹, R.H. Scott², C. Chree³, O.J.R. Howarth⁴, R.S. Whipple⁵, F.J.W. Whipple⁶ and A.J. Drummond⁷.

^{1.} RIGAUD, G.: Dr. DEMAINBRAY and the King's Observatory at Kew. Observatory, London 5, 1882, p. 279.

^{2.} SCOTT, R.H.: The history of the Kew Observatory. Proc. roy. Soc. London, 39, 1885, p.37.

^{3.} CHREE, C.: Description of the Kew Observatory, Old Deer Park, Richmond, Surrey. Rec. roy. Soc., London, 1st. edn., 1897, p.137.

^{4.} **HOWARTH**, O.J.R.: The British Association for the Advancement of Science: a retrospect 1831-1921. London, 1922.

^{5.} WHIPPLE, R.S.: An old catalogue and what it tells us of the scientific instruments and curios collected by Queen Charlotte and King George III. Proc. opt. Conv., London. Pt. II. 1926.

^{6.} WHIPPLE, F.J.W.: Some aspects of the early history of Kew Observatory. Quart. J.R. met. Soc., London, 63, 1937, p.127.

^{7.} DECUMBIOND, A.J.: Kew Observatory. Weather London, 1947, p.69.

TERRESTRIAL MAGNETISM

Regular recording of the earth's magnetic field commenced at Kew in 1857. By the beginning of the twentieth century however, the extension of London's electric railway and tramway system had caused so much magnetic disturbance that it was decided to establish another magnetic observatory in an area considered unlikely to be similarly affected. This led to the building of Eskdalemuir Observatory which was opened in 1908, but magnetic observations were also continued at Kew up to 1924.

Comparisons of the magnetic results obtained at Kew and Eskdalemuir showed, however, that it would be very desirable to obtain magnetic records as far north as possible in the British Isles, and this resulted in the establishment of Lerwick Observatory in 1921. Recording of the magnetic field has been continuous at Lerwick since January 1923.

The principal magnetographs at Lerwick and Eskdalemuir are La Cour instruments, each set consisting of H, D and Z variometers. The H and D magnets are about 1 cm. long and each is supported by a single quarts fibre. The Z magnet is larger: it is supported by knife-edges resting on agates and is enclosed in a sealed vessel. Detailed descriptions of these variometers are given in publications of the Danish Meteorological Institute Communications Magnétiques, No.11 (for H) and No.8 (for Z) and in Observations Faites á Thule: Première Partie: Magnétisme Terrestre (for D).

The recording apparatus is so designed that three elements are recorded on one sheet of photographic paper with a single electric lamp as source of light. Time marks are made by a second lamp, the circuit of which is closed by a clock contact every five minutes. The width of paper is 10 cm. for each element, but the effective range of the variometer is increased by a number of small prisms which reflect light from the lamp into the variometers, producing a series of virtual light sources.

Scale values of H and Z are measured by passing a current through Helmholtz-Gaugain coils placed over the variometers, the resulting deflections being recorded on the photographic paper. The current is measured by a milliammeter which is periodically calibrated. It is thought that the scale values adopted, about $4\gamma/\text{mm}$. for H and about $6\gamma/\text{mm}$. for Z at both Observatories, are accurate to about 1 per cent. The scale value of D depends on the geometry of the system, with a small correction for torsion, but it may also be checked by means of a Helmholtz-Gaugain coil. It is about 1'/mm. The H and Z variometers are capable of accurate compensation for temperature.

In addition to the La Cour standard magnetograph each Observatory also has a La Cour quick run magnetograph. This is similar to the standard set but has a time scale twelve times as great and a more complicated optical system.

Complete sets (H, D and Z) of supplementary magnetographs with lower sensitivity are also operated to provide information during any breaks in the standard magnetograph records and also to provide information when rapid magnetic disturbance renders the traces of the standard magnetograph indecipherable. Betails of these instruments can be found in the 1938 volume of the Observatories' Year Book.

The magnetograph house at Lerwick, which contains the La Cour magnetographs, is above ground and is made of non-magnetic concrete: its internal dimensions are 4.9 m. by 3 m. and the walls are 76 cm. thick. An electric heater, controlled by a thermostat, enables the temperature to be kept reasonably constant for periods of up to a few months at a time but the power is insufficient to maintain the same temperature throughout the year. The thermostat is re-set by several degrees at a time, so as to reduce the number of changes to a minimum. The time for a cycle of temperature changes (that is, the time between successive operations of the thermostat contacts) is of the order of one hour and a small oscillation of the temperature of the magnetograph is evident from the records, but the amplitude is only about one degree Celsius. The supplementary magnetographs are housed in a wooden hut.

At Eskdalemuir the magnetographs are placed in an underground chamber constructed throughout of non-magnetic material. Within the outer shell of stone and concrete and separated therefrom, and from each other, by corridors and vaultings are two similar rooms of approximate internal dimensions - length 7.6 m., width 6.1 m., height 3.0 m. The ceilings of the rooms are slightly below the undisturbed level of the surrounding ground. The roof portion of the outer containing shell is covered with a thick layer of earth which forms a mound. Electrical heating, thermostatically controlled, was introduced in 1936 but, although the diurnal range in temperature is normally negligible, there is an annual range of temperature of about 4°C.

The temperature in the magnetograph house at both Lerwick and Eskdalemuir is read daily at 09h. and the readings are given in Table 4 (for Lerwick) and Table 24 (for Eskdalemuir).

Absolute measurements of each element of the magnetic field are made three times weekly and from these the base line values of the magnetograms are computed, using the mean ordinate of the variometer curve at the times of the absolute observation. The adopted values of the baseline are obtained by a graphical smoothing process. Normally one value is adopted for the whole of one day (0-24h, G.M.T.) except for known instrumental discontinuities, but at Lerwick the temperature compensation of the Z variometer is not quite perfect and a baseline change of 2 or 3γ may occur when the room thermostat is altered. Since the magnetograph record shows that the temperature change is substantially complete in 24 hours, the adopted baseline is on these occasions changed in 1γ steps at eight or twelve hourly intervals.

TABULATIONS

Table 1 and 21 give, for Lerwick and Eskdalemuir respectively, mean values of the horizontal component (H) of magnetic force for periods of 60 minutes ending at the exact hour G.M.T. together with hourly, daily and monthly sums and means. Tables 2 and 22, give similar information for declination (D) and Tables 3 and 23 for the vertical component (Z). Tables 4 and 24 contain the values of the daily extremes of each component, the range during the day and the magnetic character figures K and C, together with the 09h. temperature in the magnetograph house.

Tables 1-4 are subdivided into monthly sections and the same monthly parts of each table are grouped together on facing pages. Tables 21-24 are treated similarly. The days selected by the International Association of Geomagnetism and Aeronomy (I.A.G.A.) as being typical "quiet" and "disturbed" days are marked by the letters "q" and "d" respectively.

In general the declination (D) is measured to the west, and is considered to increase with increasing westerly declination, in accordance with the convention adopted in previous volumes. There is, however, an important exception in Tables 16 and 38 entitled "Noteworthy Magnetic Disturbances" (see below). In these two tables a movement of D to the east (that is, decreasing westerly declination) is regarded as positive, in order that the data in the tables may agree in every respect with data already supplied to I.A.G.A.

The magnetic character figures K and C are derived in the conventional way (see for example, I.G.Y. Instruction Manual Part IV Geomagnetism - Part I). The lower limit for K - 9 is 1000y for Lerwick and 750y for Eskdalemuir.

Tables 5 (for Lerwick) and 25 (for Eskdalemuir) give the mean monthly and annual values of the magnetic elements H, D and Z together with the values of the North Component (X), West Component (Y), Inclination (X) and Total Force (Y). The values for Y, Y and Y are also given for the international quiet and disturbed days.

Tables 6 and 7 (for Lerwick) and 26 and 27 (for Eskdalemuir) give monthly, seasonal and annual means and frequency distributions of the daily range for each component (H, D and Z). For this purpose "Winter" is defined as the four months November to February; "Equinox" as March, April, September and October, "Summer" as May to August.

The next set of tables (8-15 for Lerwick and 28-36 for Eskdalemuir) gives data on the diurnal inequalities of each magnetic element. As recommended by a resolution of the Commission for Terrestrial Magnetism and Atmospheric Electricity and approved by the Conference of Directors at Warsaw in 1935, the diurnal inequalities are all uncorrected for non-cyclic change, but the values of the non-cyclic change are also given separately in Tables 13 and 35.

Some information is given for Eskdalemuir but not for Lerwick. This includes the diurnal inequalities of the North (X) and West (-Y) components and the Inclination (I), and values of the first four harmonic components of the diurnal inequalities of the north, west and vertical components.

The inequalities of X, $\neg Y$ and I have been computed from those of H, D and Z by means of the formulae:

$$\delta X = \cos D \cdot \delta H - \frac{\pi}{180 \times 60} H \sin D \cdot \delta D$$

$$-\delta Y = \sin D \cdot \delta H + \frac{\pi}{180 \times 60} H \cos D \cdot \delta D$$

$$\delta I = \frac{180 \times 60}{\pi} \cos I \left[\frac{\delta Z \cos I - \delta H \sin I}{H} \right]$$

in which δD and δI are expressed in minutes of arc, and H, D and I for any given month are the respective mean values for that month as published in Table 25.

The results of harmonic analysis of the mean diurnal inequalities of X, -Y and Z for the months, seasons and year are to be found in Table 37, in which are given the values of a_n , b_n , c_n and a_n in the two equivalent series $\sum (a_n \cos 15nt^\circ + b_n \sin 15nt^\circ)$ and $\sum c_n \sin (15nt^\circ + a_n)$. In the former series t is reckoned in hours from midnight G.M.T., whilst the published values of a_n refer to local mean time. The harmonic coefficients have been computed from the inequalities as given in Tables 28-33 but for this purpose the non-cyclic change has been eliminated. A correction has been applied where necessary, because the hourly values are not instantaneous but are mean values; the factors by which the coefficients have to be multiplied (see Report of the British Association, 1883, p.98) are 1.00286 for a_1 , b_1 and c_1 ; 1.01152 for a_2 , b_2 and c_2 ; 1.02617 for a_3 , a_3 and a_3 ; and 1.04720 for a_4 , a_4 and a_4 . The values were obtained to two decimal places and finally were rounded off to 0.1 a_4 .

Tables 16 and 38 are entitled "Noteworthy Magnetic Disturbances". These were revised in content in 1947 and now include all the disturbances which would have been included in the previous type of tables, with, however, additional disturbances with sudden commencement (ssc) and those which can be recognised as being solar flare effects (sfe). The tables are divided into three parts:

- (a) Disturbances noteworthy for some reason (usually, but not always, range) and without a sudden commencement.
- (b) Well marked sudden commencements whether followed by a large disturbance or not.
- (c) Disturbances accompanying a solar flare or other known solar flare effect.

The time given of commencement and ending of disturbances in (a) must depend on an arbitrary judgement. The list of sudden commencements under (b) will usually be a little shorter than that given in the I.A.G.A. bulletins because a somewhat stricter meaning has been given to the words "well marked". The (c) table has been made as complete as possible by a careful scrutiny of the magnetograms at the time of any known solar flare or solar flare effect, but a small "crochet" can easily be masked by other disturbances. Doubtful cases are not included. The signs given to the movements of H, D and Z are positive for increasing H, Z and an increase of force towards the east (that is, a decreasing westerly declination). Particulars of the same disturbances are given in both the Lerwick and Eskdalemuir tables, even if the disturbances at one of the stations is relatively small.

The details of irregular changes in declination at Eskdalemuir which previously were given (for example, see Tables 40 and 41 of 1958 Observatories' Year Book) were prepared for the benefit of mine surveyors but were no longer required by them after 1958 and have therefore been omitted.

NOTES ON THE RESULTS

Comparing mean values on all days of 1960 with those of 1959 at Lerwick H increased by 15 γ , D (west) decreased by 5' and Z increased by 28 γ . The changes deduced in X, Y, I and F are +18 γ , -18 γ , -0.5' and +31 γ . The ranges between the extreme values recorded during 1960 were H 3835 γ , D 8°17.8' and Z 2114 γ . The range of 8°17.8' in declination corresponded to a range of 2106 γ in the component of force perpendicular to the magnetic meridian.

Similarly at Eskdalemuir H increased by 19γ , D (west) decreased by 6' and Z increased by 26γ . The changes deduced in X, Y, I and F are $+24\gamma$, -25γ , -0.7' and $+29\gamma$. The ranges between the extreme values recorded during 1960 were H 3283γ ; D $4^{\circ}30.4$ ' and Z 1151γ . The range of $4^{\circ}30.4$ ' in declination corresponded to a range of 1320γ in the component of force perpendicular to the magnetic meridian.

ABSOLUTE STANDARDS OF MAGNETIC FORCE AT LERWICK AND ESKDALEMUIR

Vertical Component

The standard instrument in use at Lerwick from 1940 to 1952 was the Copenhagen Balance Magnetometer B.M. No.8 and a detailed account of its history up to 1947 is given in the 1938 Observatories' Year Book (p.20). Difficulties with its clamping mechanism were however often experienced and in 1952 the mechanism was unfortunately broken. Upon the advice of the Observatory at Rude-Skov it was replaced with a modern instrument, B.M.Z. No.83, in 1953. Since that date B.M.Z. No.83 has been used as the Lerwick standard using the original Rude-Skov calibration.

B.M.Z. No.83, on its arrival in 1953, was found to give close agreement with the existing Z standard which had been carried over from B.M. No.8, by the use of the Eskdalemuir B.M.Z. No.35 in the interim period.

On November 24, 1957, the instrument suffered an accidental knock and its readings immediately afterwards were found to be 150y lower than previously. On September 28, 1958, the instrument suffered a further slight jar and a further change in reading was found; the 150y correction now became 126y. These additive corrections have been applied to the observed readings since the appropriate dates.

Measurements of vertical component at Eskdalemuir are also made regularly with a Copenhagen Balance Magnetometer (B.M.Z. No.35). Details of various inter-Observatory comparisons using a B.M.Z. as an intermediary instrument were given in the Introduction to the 1958 Observatories' Year Book. These, however, were not very satisfactory because of the

liability of the B.M.Z. instruments to changes in calibration.

Until June, 1960, the standard instrument for determining vertical component at Eskdalemuir was a Schulze Dip Inductor (No.102), the use of which is described in the 1959 Observatories' Year Book, (pp.7,8).

During 1960 proton (sometimes called nuclear) precession magnetometers were installed at Lerwick and at Eskdalemuir. The proton magnetometer replaced the Schulze dip inductor for deduction of the absolute standard of vertical component at Eskdalemuir. The principle of these instruments has been described by Packard and Varian and Waters and Francis.

They enable the free precession frequency (f) of the proton to be measured; this is related to the total magnetic field F at the proton sample by the relation

$$f = \frac{\gamma_p F}{2\pi}$$

where f is in cycles per seconds and γ_p is the gyromagnetic ratio of the proton. The value adopted for γ_p is 2.67513 x 10⁴ radians gauss⁻¹ $\sec^{-1}(5)$; this is the value as measured by Driscoll and Bender (s,4) and recommended provisionally at the meeting of the International Association of Geomagnetism and Aeronomy in Helsinki in 1960(5).

The proton sample used at Lerwick and Eskdalemuir is distilled water contained in a polythene bottle placed on the axis of a solenoid. This solenoid serves firstly to provide a strong polarising field and then as a pick-up coil to detect the small precession signal. After amplification the signal is passed to a counter unit to enable its periodicity to be determined. This is done by measuring the time, in units of 10 microseconds, for a given number of cycles of precession. Usually 2048 cycles are counted; this gives an accuracy of 1 part in 10^5 (or 0.5γ) when measuring the total field or the vertical component in the British Isles, because the value of f for these fields is close to 2000 cycles per second and the counting time is therefore about 1 second.

The amplifier unit used must be placed within about 8 m. of the pick-up coil to avoid excessive attenuation in the precession signal but a careful investigation of the field due to this amplifier was made, and at the distances finally used (about 5.5 m. at Lerwick and 6.1 m. at Eskdalemuir) the effect of the disturbing field at the coil was completely negligable ($<0.1\gamma$). The power supplies and counter unit were placed at a great distance (at Eskdalemuir in the main office building, 230 m. away; at Lerwick in the East hut, 100 m. away). It was also proved by experiment that there was no magnetic effect associated with the pick-up coil.

The instruments have been used initially to measure the total field F, and from that to deduce the vertical component assuming the Observatory H record is correct. The equation used is

$$Z = \sqrt{F^2 - H^2}$$

^{1.} PACKARD, M. and VARIAN, R.; Free nuclear induction in the Earth's magnetic field. Phys. Rev., 93, p.941, 1954.

^{2.} WATERS, G.S. and FRANCIS, P.D.; A nuclear magnetometer. J. Sci. Instr., 35, pp.88-93, 1958.

^{3,} DRISCOLL, R.L. and BENDER, P.L.; Proton gyromagnetic ratio, Phys. Rev. Letters, 1, pp.413-414, 1958.

^{4.} BENDER, P.L. and DRISCOLL, R.L.; A free precession determination of the proton gyromagnetic ratio. I.R.E. Trans. on Instrumentation, 1-7, pp. 176-180, 1958.

^{5.} NELSON, J.H.; The gyromagnetic ratio of the proton. J. Atmosph. Terr. Phys., 19, p.292, 1960.

and it is easily shown that the error ΔZ in Z caused by an error ΔH in the H measurements is given by

$$\Delta Z = -\left(\frac{H}{Z}\right) \Delta H$$

The ratio (H/Z) at Eskdalemuir and Lerwick is about %. Since we believe that the systematic errors in H do not exceed 6γ (and may well be much less) the corresponding error in Z is small $(2\gamma$ or less). The 1960 comparison over a period of two months (May-June, Eskdalemuir; June-July Lerwick) of the proton magnetometer Z values (denoted here by $Z_{\rm pm}$) with the Z values obtained by using the Schulze dip inductor (Eskdalemuir, denoted here $Z_{\rm DIP}$) and B.M.Z.83 (Lerwick) yield the following mean results.

Eskdalemuir
$$Z_{pm} - Z_{DIP} = 0$$

Lerwick
$$Z_{\text{pm}} - Z_{\text{BMZ83}} = -8.5\gamma$$

As a test before installation at Eskdalemuir and Lerwick the proton magnetometer was taken to Hartland in April 1960. The total field as measured with this instrument was compared with the total field as computed from measurements with the Hartland H and Z standard instruments (Schuster-Smith and Dye coils respectively). The mean result obtained (after testing of the instrument, one day only was available for measurement but it was magnetically quiet) was as follows:-

$$F_{\rm DM} - F_{\rm Hartland} = 5\gamma$$

An upper limit to the magnitude of the random errors of the proton magnetometer can be estimated from the constancy of the Z baseline measurements. Over a period of 2 months at Lerwick comprising observations on 33 days the standard deviation of a single observed Z baseline about a mean value was 1.7γ . This of course includes the variability of both the Z and H baselines of the variometers and the errors in reading two sets of ordinates from the charts; the effect of these cannot be estimated accurately but must certainly account for the greater part of the observed variability of the baseline measurements. It is seen that the random error of the proton magnetometer appears to be limited solely by the short term random error of the frequency measuring apparatus (1 part in 10^5 , as mentioned earlier).

The instrument is now being developed further into a proton vector magnetometer, by the construction of a Helmholtz-Gaugain coil system at the centre of which the water bottle is placed. The final form of this will enable the coils to be rotated about a horizontal axis through the centre of the coil system and perpendicular to the main axis. In this way an artificial magnetic field of adjustable magnitude and direction can be created at the bottle, and in particular it can be arranged that either the horizontal or the vertical component can be exactly cancelled. In these cases the proton magnetometer will then measure the remaining field, that is, either the vertical or horizontal component respectively.

A full description of this instrument and the results obtained will be given in a later volume of the Observatories' Year Book but results have been obtained at Eskdalemuir with an experimental instrument which had only a fixed Helmholtz-Gaugain coil with a horizontal axis. This could be used for measuring Z directly; over a period 3 months the difference between Z as measured directly by the proton magnetometer (Z_{pvm}) and Z as measured using the total field measurement in conjunction with the Eskdalemuir H standard (Z_{pm}) was zero within a probable error of 1γ ; that is,

$$Z_{\text{pvm}} = Z_{\text{pm}} \pm 1\gamma$$

The first proton magnetometer (and proton vector magnetometer) measurements at Eskdalemuir thus do not confirm the tentative suggestion (at the top of p.12 in the 1958 Observatories' Year Book) that there was an error of some 14-16y in the Eskdalemuir Z measurements, possibly caused by an error of 6y in the H measurements. The interpretation of the previous comparisons with Hartland and Abinger must be that the B.M.Z. is not a suitable instrument to use when the accuracy desired is of the order 1-2y.

It is seen that the difference (Eskdalemuir Z - Lerwick Z) in 1960 was in fact -8.5γ . When this is compared with the first table on p.11 of the 1958 Observatories' Year Book the unreliability of B.M.Z. comparison is again suggested.

It seems probable that the proton vector magnetometer will be designated the standard absolute instrument at Lerwick and Eskdalemuir; the decision as to what, if any, discontinuities in the magnetic field measurements this will involve and the exact relation between the Eskdalemuir and Lerwick Z standard on the one hand and the Hartland Z standard on the other will be made later after full trials of the instruments.

Horizontal Component

Since January 1, 1934, the standard absolute instrument for the measurement of the horizontal component at Eskdalemuir has been a Schuster-Smith coil magnetometer. A complete description of this instrument and of the method of using it is given in the *Philosophical Transactions of the Royal Society*. A.223, 1922, p.175. Essentially the instrument consists of a Helmholtz-Gaugain system of two coils of wire accurately wound on a hollow marble cylinder, and a small magnet suspended at the centre of the coil system. Current from a 100 volt storage battery (kept solely for this purpose) can be passed through the coils and can be very accurately adjusted to a series of known values by means of a potentiometer and a standard cell. A horizontal magnetic field is set up at the centre of the coil, of a magnitude slightly greater than H and approximately opposed to it in direction. The coil is then rotated in azimuth until the resultant horizontal field, as indicated by the alignment of the small magnet at the centre, is found to be exactly at right angles to the earth's field. In this postion, if a is the angle between the direction of the earth's field and that set up by the coil system, A the constant of the coil (that is, the field due to unit current through the coil) and i the current, then

$H = Ai \cos \alpha$

Since 1939 at Lerwick the standard instrument has been a Smith portable coil magnetometer reconstructed to operate as a Schuster-Smith instrument.

In addition, three Copenhagen Quartz Horizontal Magnetometer instruments (Q.H.M's) are available for intercomparison of the H standards at each Observatory and for use as standby absolute instruments.

The coil constant of the Eskdalemuir Schuster-Smith instrument was obtained by a direct comparison with the original instrument of this type at Abinger. Its potentiometer was calibrated at the National Physical Laboratory in 1933 and again in 1938 and 1953. The recalibrations showed negligible change in the resistances.

The constant of the Lerwick coil instrument was determined in 1932 by comparison with the Schuster-Smith coil at Abinger and this constant has since been used unchanged. During the magnetometer's modification to act as a Schuster-Smith instrument, however, a small amount of magnetic material was removed from near the suspended magnet. A comparison with the Schuster-Smith magnetometer at Eskdalemuir then showed that the Lerwick instrument read 13γ low. This was generally confirmed when it was installed at Lerwick in 1939 as it then gave results 11γ below those obtained with the unifilar magnetometer currently in use as a standard. It was decided that the Lerwick standard of H should be (Coil values + 11γ) and there was no discontinuity in the published values of H, the term "Coil value" meaning the results obtained using the original value of the coil constant as determined in 1932.

However, in 1946 comparisons between Lerwick and Abinger using Q.H.M. No.89 indicated that the Lerwick Coil Magnetometer (uncorrected by any addition) gave results which were only 5 γ lower than the Abinger Schuster-Smith Coil; that is, values of H according to the Lerwick standard (Coil value + 11γ) were 6γ greater than the values given by the Abinger standard.

In 1947 it seemed desirable to assimilate the standard of H at Lerwick to that at Abinger so that the revised H standard at Lerwick became (Coil value + 5y). This assimilation was back-dated to January 1, 1934; where necessary, corrections have been published (see, for example, 1938 Observatories' Year Book, p.21).

The potentiometer in use with the Coil magnetometer had been calibrated at the National Physical Laboratory in 1938 and this was sent for recalibration in 1953. It was then found that the resistances had changed slightly and that the effect of this, when the new values were used, was to lower the values of H observed by 7γ . The time of this change could not be identified with certainty and it was decided that no discontinuity should be introduced and that the Lerwick H standard should be altered from June 1, 1953 to (Coil value + 12γ), using the new calibration of the potentiometer. Although this avoided a discontinuity, it established a new standard for H at Lerwick which was 7γ higher than the Abinger standard.

Comparisons were made fairly frequently between 1948 and 1957 between Lerwick and Eskdalemuir using Q.H.Ms, but it was found that reliable results (to an accuracy of 1 or 2γ) could not be obtained by using only one Q.H.M. or by using Q.H.Ms sent through the post. It has been found necessary to use at least three instruments, carried personally by a responsible person, with comparisons at one station made both immediately before and immediately after the travelling.

The results of what appear to be the most reliable comparisons between Lerwick and Eskdalemuir Coil instruments are given below, (the figure for the Lerwick Coil is that obtained from the use of the original coil constant without the addition of any constant factor and using the 1938 potentiometer calibration up to 1953 and the 1953 potentiometer calibration after that).

| Date | Instruments used for comparison | Difference Eskdalemuir H - Lerwick H | | |
|-----------------|---------------------------------|---|--|--|
| | | γ | | |
| Dec. 1938 | Direct | +13 | | |
| Sept. 1946 | Q.H.M. 89 | +11 | | |
| Apr. 1948 | Q.H.M. 89 | +13.5 | | |
| June-Sept. 1950 | Q.H.M. 90,91,92 | +12 | | |
| May-June 1957 | Q.H.M. 119A, 120, 121A | +15 | | |
| Apr. 1959 | Q.H.M. 119A, 120, 121A | +11 | | |
| June 1960 | Q.H.M. 119A, 120 | +14 | | |

*uncorrected coil values.

This evidence suggests that there has been no detectable change in the relationship between the two coils and suggests also that the change in the Lerwick potentiometer resistances occurred between 1950 and the recalibration in 1953, and that the standards currently in use at the two Observatories are in good agreement.

Comparisons between the H standards at Eskdalemuir and Abinger (1954 and earlier) and between Eskdalemuir and Hartland (1959) are given below. The table shows the difference Eskdalemuir minus Abinger (or Hartland). The comparison in 1933 has however a much higher probable error than the later observations.

| Date | Instruments used for comparison | Difference Eskdalemuir H - Abinger H or Hartland | | |
|---------------|---------------------------------------|--|--|--|
| | | γ | | |
| Dec. 1930 | Direct at Abinger | 0 | | |
| Jan. 1933 | Travelling Kew instrument | - 5 | | |
| Sept. 1946 | Q.H.M. 89 | +6 | | |
| Apr. 1948 | Q.H.M. 89 | +6 | | |
| May-Nov. 1950 | Q.H.M. 91,92 | +10 | | |
| July 1954 | Q.H.M. 120 | +5 | | |
| May 1959 | Q.H.M. 119A, 120, 477, 478, 479 | +4 | | |
| Apr. 1960 | Q.H.M. 119A,120 | +6 | | |

There is therefore no reliable evidence of a change in the relationship between the Eskdalemuir and Abinger/Hartland Schuster-Smith coil instruments over the last 13 years at least, although a change of some 6γ is indicated following the installation of the coil instrument at Eskdalemuir. When compared with the results shown for the comparison between Lerwick and Eskdalemuir, these seem to indicate that all three coil instruments have remained in a very constant relationship to each other over the past 13 years and possibly therefore since they were installed in their respective Observatories. There remains, however, the difference of some 6γ between Abinger (and later Hartland) H standard on the one hand, and Lerwick and Eskdalemuir H standards on the other.

Further evidence about the accuracy of the Eskdalemuir H standard can be obtained from the preliminary measurements made by the proton magnetometer mentioned above. From the measurements of $Z_{\rm pvm}$ and the total field F it is possible to calculate H by means of the equation

$$H = \sqrt{F^2 - Z^2}$$

The results show that the two ways of measuring H agree within a probable error of $\pm 3\gamma$; that is,

$$H_{Esk} = H_{pm \pm 3\gamma}$$

The improved Helmholtz-Gaugain system to enable H to be measured directly should enable more precision to be obtained.

These preliminary proton magnetometer and proton vector magnetometer measurements do not confirm the tentative suggestion on p.12 of the 1958 Observatories' Year Book that the Eskdalemuir Schuster-Smith coil reads 6γ high.

Declination

The declination is measured at each Observatory by a Kew pattern unifilar magnetometer. The azimuths of both the fixed marks were remeasured by the Ordance Survey in 1948 and since that date the values then obtained have been used.

The 1948 determination of the azimuth of the Lerwick fixed mark confirmed that the azimuth in use up to that time (based on a determination in October 1922) was in error. From a survey of the results obtained from five determinations made at intervals from 1923 to 1948 it was concluded that (i) the original determination was in error by about 3½ and (ii) an apparently uniform small drift of about 1' occurred between 1923 and 1948. Values of westerly declination published previous to 1948 are too large by amounts ranging from 3.5' in 1923 to 4.4' in 1948. The corrections for 1938 and previous years are given in the 1938 Observatories' Year Book (p.21) and for subsequent years in succeeding volumes. Since 1948 the correct fixed mark azimuth has been used and no corrections to the tabulated values are required.

The observation of the azimuth of the fixed mark at Eskdalemuir in 1948 gave results negligibly different from previous observations and no changes were required in the tabulations.

AURORA

A special watch for Aurora is kept at Lerwick Observatory. Up to 2200hr. each evening observations of the northern horizon and general meteorological conditions are made at intervals of 15 to 20 minutes; if any aurorae are seen continuous observations are made and details of the phenomena observed are noted. If necessary a second observer is called. Elevations of significant points are measured with a simple alidade.

Any aurorae which commence after 2200hr. are also noted by the staff making regular synoptic observations and upper air soundings, but these staff may not be able to devote long periods solely to recording the detailed aurorae changes.

A brief account of the results obtained is given in Table 17. All dates, on which the sky remained completely overcast throughout the night and on which, therefore, no opportunity arose of determining whether or not aurora occurred, have been omitted. Those nights on which aurora was actually observed are indicated by the symbol Φ ; other nights on which no aurora was observed, despite at least an occasional interval of more or less clear sky, are indicated by the symbol \cdots In the latter case also, remarks on the weather are added to assist the reader in judging how far the fact of no observation of aurora may be taken as showing that, in fact, there was no aurora. Each night is described by a letter code which has the following significance:-

- a = Conditions favourable for seeing aurora
- b = Unfavourable for faint aurora (because of moonlight, mist, thin cloud etc.), but not such as to mask bright aurora
- c = Cloudy, but aurora not seen in clear intervals
- ca,cb = Cloudy, but with conditions a or b respectively, in the intervals.

 Changing conditions are indicated by a hyphen; for example, a-c

The detailed observations are available in manuscript and have also been sent to Mr. J. Paton of the Balfour Stewart Auroral Laboratory, University of Edinburgh [I.G.Y. World Data Centre C (Visual observations)].

Table 18 is a general auroral table giving a summary of the observations of aurorae in the British Isles. It is compiled from the detailed observations received at the Balfour Stewart Auroral Laboratory. A detailed examination of the tables for 1957 and 1958 has been made by B. McInnes and K.A. Robertson in a paper published in the Journal of Atmospheric and Terrestrial Physics, 19, 1960, p.115.

ATMOSPHERIC ELECTRICITY

The programme at Lerwick and Eskdalemuir is to maintain a continuous record of atmospheric electric potential gradient as it exists over open level country in the immediate neighbourhood at the height of one metre. This is also done at Kew Observatory but there, in addition, regular measurements are made on fine afternoons of the air-earth current. These latter are expressed as mean values covering the period of observation which is normally about 20 minutes centred on about 1430 G.M.T.

Continuous Potential Gradient measurements

The instruments used for the recording of the potential gradient are similar in principle at all three Observatories. An insulated boom projects through the wall of the building and is caused to take up the potential of the air because a small radioactive collector is fitted to its tip. The potential of the boom is recorded by an electrostatic voltmeter.

The collectors are of polonium deposited on a copper rod about 4 cm. long by 0.5 cm. diameter; these are recoated periodically by arrangement with the Government Chemist and a fresh collector is brought into use each quarter. Tests at Kew Observatory in 1959 showed that the strength of a new collector is usually between 80 and 200 micro-curies. A note about the supply of the collectors and of the techniques used in plating them is given in Nature 1955, 175, p.965.

The potential of the boom is of course affected by the presence of buildings, although it is assumed that this potential is always proportional to the potential gradient in the open. Standardising measurements have therefore to be made of the true potential gradient at a suitable open site. The ratio of the potential gradient in the open to the potential of the boom is called the exposure factor and is expressed in the units (metre⁻¹).

The methods of making the standardisation measurements of potential gradient are different at each Observatory.

At Lerwick an insulated wire with a polonium collector fixed to its centre is stretched horizontally between two stout wooden posts 9 m. apart. The centre of the wire is exactly 1 m. above a levelled piece of ground. The potential of this wire is observed at 1 minute intervals for a period of 10-20 minutes using a Wulf electrometer, the times of observation being chosen to coincide with the minute dots on the electrograph. From the mean value of the observed potential and the mean reading of the electrograph an exposure factor is calculated. Observations are made in fine weather and as many as possible are made. Smoothed monthly means of the factors so obtained are used in the reduction of the records.

At Eskdalemuir absolute observations of potential gradient are made with a Wulf electrometer using a small pit about 50 yards from the main building. The electrometer is placed inside the pit and from the electrometer a thin metal rod (0.4 cm. in diameter) projects vertically upwards through a hole in the metal lid covering the pit. A polonium collector is fixed to the rod at exactly one metre above the ground level. It has been shown experimentally that the potential of the rod is the same (within experimental error) as that of a stretched wire at one metre exposed to the same potential gradient.

The observer shuts himself in the pit and takes readings of the electrometer every half minute until 15-30 readings have been obtained. As at Lerwick observations are made in fine weather and at least six per month are aimed at. From the mean potential of the Wulf electrometer over the period and the corresponding mean value of the record, the exposure factor of the electrograph is obtained.

For any given month a mean exposure factor is used and this is a smoothed running mean using observations made during the preceding and following months.

The absolute measurements at Kew are made with the Wilson apparatus in the underground laboratory; these are described below.

At Lerwick the boom potential is recorded by a Benndorf electrograph which, since 1926, has been installed in the west corner of the Office Block. Though there is distortion of the equipotential surfaces by adjacent houses etc. and though the site is a comparatively large distance (236 m.) away from the ground where absolute determinations are made, the values of the reduction factor suggest that these disadvantages are less serious than might be anticipated.

The collector is screwed into the end of a tube which projects about 120 cm. through a window in the north-west wall about 190 cm. from the corner of the building and 476 cm. above ground. The inner end of the tube is supported from a wooden framework by metal rods embedded in cast sulphur insulators; an electrical heater, which is situated below the tube, keeps the insulation dry even in wet weather. Draughts through the hole in the window are practically eliminated by a system of baffles.

A detailed description of the electrometer is to be found in the *Physikalische Zeitschrift*, Leipzig for 1906 (p.98) whilst the general principle is described in Mathias' "Traité d'électricité atmosphérique et tellurique" (p.54) and in Chauveau's "Electricité atmosphérique (p.61).

The scale value of the record has varied from time to time following adjustments but has usually been kept between 25 and 30 volts per millimetre, which, combined with an exposure factor of between 1.0 and 1.3, permits a range from about +1500 to -1500 volts per metre in

the open to be recorded. Tests of the scale value of the record are made daily with the aid of batteries after removing the collector from the boom; the insulation is also tested regularly. Considering the climatic difficulties, the behaviour of the instrument in the matter of insulation has been satisfactory, especially since electrical heating was installed in the room. The rate of leak has been small and normally was such that the instrument would lose half its potential in 20-30 minutes.

Tests of the rate of rise of potential of the Benndorf recorder and electrograph boom with a polonium collector fitted, after being earthed, have been made frequently. It was found that with a freshly plated collector the potential rose from zero to half the final value in about 4-6 seconds, but that this time increased after the collector had been in use. This loss of efficiency was found to depend almost as much on the weather as on the radio active decay of the polonium. The regular use of fresh collectors ensures that the time taken for the Benndorf to reach half its final potential is not allowed to exceed 7 seconds. The rate of leak is thus so very much less than the rate of charging that the difference between the potential of the boom and that of the air surrounding it is negligible.

The electrograph at Eskdalemuir consists essentially of quadrant electrometer with a small mirror on the vane which reflects a light spot on to a sheet of bromide paper wrapped around a drum rotated by clockwork. From 1936 until 1954 the electrograph boom projected through a pipe in the North wall a few feet to the West of its present position; it now projects through a small wooden door in the wall of a room.

The boom is supported on insulators, formerly of sulphur but, since October 1957, of polythene. Tests of the insulation of the boom and electrograph are made frequently (about 3 times per week). The insulation was in general very satisfactory throughout the year.

The scale value of the record was approximately 1.6 volts per millimetre during 1960 and this, combined with an exposure factor of about 9, means that one millimetre on the record corresponded to approximately 14 volts per metre in the potential gradient over an open level surface.

The Kew electrograph, which is also a quadrant electrometer recording photographically, was moved in April 1940 from a low building known as the Clinical House to a room in the main Observatory Building; the new position is 18 m. to the East of the former position. In March 1941 a metal fire escape was erected on this wall above the boom and this reduced the recorded potential by nearly 50%. This was compensated by increasing the sensitivity of the recorder by an approximately similar amount. The radioactive collector is now 90 cm. from the window of the building through which the boom projects and 360 cm. above ground level.

The scale value of the electrograph has been fixed at about 17 volts per metre per millimetre.

The electrograph became unreliable in May 1953 and from then until the end of 1955 the continuous records of potential gradient have not been published. Reliable recording started again on January 1, 1956.

Valve voltmeters were constructed on the pattern described by A.W. Brewer (Journal of Scientific Instruments, 30, 1953, p.91) and have been recording continuously at Kew since May, 1958, at Eskdalemuir since April 1959 and at Lerwick since June 1959. These give pen records and will eventually replace existing electrographs.

Air-earth current and conductivity measurements at Kew

Measurements of the air-earth current and potential gradient are made in an underground laboratory using a modified Wilson apparatus. From these observations the conductivity can

be calculated. The apparatus was devised by C.T.R. Wilson* and is described in detail by F.J. Scrase†. Briefly, it consists of an insulated brass plate, mounted with its top surface flush with the ground level, and connected to a sensitive electrometer. The test plate can be covered when necessary with an earthed cylindrical cover, and can be maintained at any desired potential (usually zero) by a small charged variable capacitor (called the compensator). The method of using the instrument at Kew differs slightly from that adopted by Wilson, who used the readings of the position of the Compensator to obtain the charge on the test plate. At Kew the compensator is used merely to keep the plate at zero potential, and the charge is measured by reading the deflection of the electrometer. The potential gradient is measured by the charge induced on the plate when it is exposed to the earth's field, and the air-earth current is measured by finding the charge collected by the plate during a known period (usually five minutes).

The potential gradient F is given in volts per centimetre by the formula

$$F = 4\pi (9 \times 10^{11}) \text{ Cv/A}$$

where C is the capacity, in farads, of the system (when shielded), v is the potential acquired by the test plate after being exposed to the field, earthed and then shielded, and A is the area of the test plate. The potential gradient found in this way is, to a close approximation, equal to that found by measuring the potential at a height of 1 m. in the open part of the grounds with a stretched wire apparatus.

The air-earth current is given in amperes per square centimetre by the formula

$$i = C\delta v/At$$

where δv is the potential acquired by the plate in t seconds. The value of δv used is the mean result from four observations, each lasting five minutes. The observations of the current are sandwiched between measurements of the field strength, and from the mean values of i and F the conductivity λ is deduced. This conductivity is that due to positive ions only since measurements are made only with positive fields. No observations are made in precipitation and fog.

From July 1, 1949 to the end of 1955 trouble was experienced with the Wilson test plate apparatus and the observations of air-earth current and conductivity during the period have subsequently been found to be unreliable. These observations have not therefore been published. The observations of the potential gradient with this apparatus during this time were checked, however, on a number of occasions by simultaneous observations of the potential of a stretched wire at one metre above the ground level; the differences between the two methods of observations occasionally reached 15 per cent but the mean difference was only 4 per cent, the Wilson measurements being the greater. In view of the trouble with the apparatus it was decided that from July 1949 onwards until the end of 1955 the stretched wire observations should be the standard and that, before being used for electrograph standardisations, the Wilson observations should be corrected to allow for the differences between the two. Throughout this doubtful period the observations of potential gradient with the Wilson apparatus have been considered of sufficient value to publish, but the differences found between these observations and those made with the stretched wire apparatus must be borne in mind.

The instrument was overhauled late in 1955 and from January 1, 1956 the records and tabulations are considered reliable.

WILSON C.T.R.: Camb. Proc. Phil. Soc. 13, 1906, pp.184 and 363
SCRASE, F.J.: London, Met. Off. Geophys. Mem. VII, No.60, 1934
In practice, at present, half the potential gradient observations are made by a slightly different procedure, less desirable in principle, but giving negligibly different results; the plate is shielded, earthed and then exposed to the field and its potential measured.

TABULATIONS

Table 19 (for Lerwick), 39 (for Eskdalemuir) and 41 (for Kew) contains the mean value of the potential gradient for periods of 60 minutes ending at exact hours G.M.T. The entry for these hours, however, for which the mean is indeterminate because of large fluctuations, is made according to the following code: - Z+ means an indeterminate but positive value, Z-an indeterminate but negative value and Z± an hour when the gradient was indeterminate in both magnitude and sign. In addition the entry for hours when precipitation is observed or recorded is marked with an asterisk.

Mean values and sums are given for each hour and for the months and year, using only hours without precipitation and for which the entry is not Z. The number of hours used for each mean is given. Estimated values are entered in brackets and are included in the sums and means. Besides this the monthly and annual mean potential gradient are given, using only the entries for 0a days (or for "selected quiet days" at Kew Observatory). The definition of 0a days is given in the next paragraph; the definition of "selected quiet days" at Kew is as follows:- normally 10 quiet days are selected in each month, these being calendar days characterised by no negative potential gradient, no large irregular movements, no indication of inferior insulation and no large non-cyclic change. When there are not 10 calendar days in a month the number can sometimes be made up by using other spells of 24 hr. The purpose of these entries is to enable comparison to be made with previous years for which corresponding information has been published.

In Tables 20, 40 and 42 (for Lerwick, Eskdalemuir and Kew respectively) the duration of negative potential is tabulated and an electrical character figure is assigned to each day.

At Kew the following scheme is used for the latter entries:-

- O denotes a day during which, midnight to midnight, no negative potential was recorded.
- 1 denotes the existence of negative potential at one or more times during the same period but with a total duration of less than three hours.
- 2 denotes negative potential extending in the aggregate to three hours or more during the same period.

Besides allocating each day a number as done at Kew, Lerwick and Eskdalemuir Observatories also allocate to each day a symbol, either "a", "b" or "c". The definition of these is as follows:-

- a denotes that within the 24 periods of 60 minutes for which an estimate of the mean potential gradient has to be made there was in no case a range of potential gradient in the open exceeding 1000 volts per metre.
- b denotes that a range of 1000 volts per metre or more was reached in one hour at least but in fewer than six individual hours.
- c denotes that a range of 1000 volts per metre or more was reached in at least six individual hours.

During periods of defective record the sign of the gradient is assumed positive when no precipitation was recorded. If precipitation was recorded for less than one hour during such defective periods, an approximate value for the duration of negative potential for that hour has been assigned and the total for the day is given in brackets. If this cannot be done the entry for any day with a defective record is -. When, because of oscillating gradients, there is uncertainty as to the times of change of sign, half the total duration of doubtful sign is accounted negative.

Table 43 contains the results of the measurements of the potential gradient, air-earth current and conductivity due to positive ions made with the Wilson apparatus at Kew. Each entry is the mean value for a period of twenty minutes centred about 1430 h. on the date in question. Monthly and annual means are also given.

It should be pointed out that the unit of potential gradient is volts per centimetre (not volts per metre as in the other tables); the unit of air-earth current is 10^{-18} ampere per square centimetre and the unit of conductivity is 10^{-18} per ohm per centimetre.

NOTES ON THE RESULTS

While no detailed discussion of the results is attempted here, it is perhaps of interest to point out various marked changes which have occurred since around 1950. Most obvious is the large and continuing fall in the potential gradient at Eskdalemuir. At Kew the air-earth current and conductivity are now about twice the previous long term average but the potential gradient is almost unchanged. At Lerwick the potential gradient has fallen slightly. These changes appear to be linked with the deposition on the ground of radioactive debris from nuclear weapon tests; they are discussed by K.H. Stewart in the Quarterly Journal of the Royal Meteorological Society, 86, 1960, p.399.

ATMOSPHERIC POLLUTION

The Owens atmospheric pollution recorder at Kew Observatory was originally installed in 1926 in the Building known as the Clinical House. It was transferred in July 1953 to a site in the large Calibration but some 25 m. to the South-west. The level of the intake is about two metres above that of the adjacent ground.

The instrument is described in the Report on observations in the year 1917-18, London Meteorological Office, Advisory Committee on Atmospheric Pollution. Briefly, it consists of a device for passing a fixed volume of air through a filter paper clamped between two halves of a circular orifice; the density of the black stain is then taken as being proportional to the weight of suspended solid matter in unit volume of air. In the Kew instrument each sample of air (6.4 litres) takes about twenty minutes to flow through the filter paper and a sample is taken approximately once an hour.

The density of the stain is measured by comparing it visually with a standard set of shades. The standard set now in use was originally supplied by the Department of Scientific and Industrial Research (D.S.I.R.) in 1942 and was recalibrated in 1948 and 1958.

In addition to the Owens recorder, from which of course the diurnal variation of pollution can be measured, D.S.I.R. have installed daily smoke filters at Kew, Lerwick and Eskdalemuir. These consist of an electrically operated pump which draws air through a filter paper continuously, an air meter being used to measure the volume of air. They are used to obtain the mean daily pollution concentration.

A summary of the results obtained at Kew with the Owens filter is given in Table 44. In this table are hourly means of the concentration of suspended matter, in milligrams per cubic metre, for each month, the seasons and the years. Winter is taken as the months January, February, November and December, Spring as March and April, Summer as May to August and Autumn as September and October.

The data from this instrument are also published in a different form in the various Reports of the Atmospheric Pollution Research Committee, (D.S.I.R., "The Investigation of Atmospheric Pollution", H.M.S.O. published yearly). The results of the observations made

with the daily smoke filters are also published in these volumes.

During 1960 the highest estimate of pollution was 1.7 mg.m⁻³, this value occurring on January 7, from 07h. to 08h. There were four days on which the mean hourly concentration of pollution reached 1.0 mg.m⁻³; the number of hours credited with 1.0 mg.m⁻³ or more was eleven, of which ten were in January and one in December.

NOTE ON THE TABLES: Where figures are in italics they are maximum and/or minimum values.

| i ä _{n.} | | | | |
|-------------------|--|--|--|--|
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |

| , | | | |
|---|--|--|--|
| | | | |
| | | | |
| | | | |
| | | | |

LERWICK OBSERVATORY



FIG.1 - Contour map of surroundings

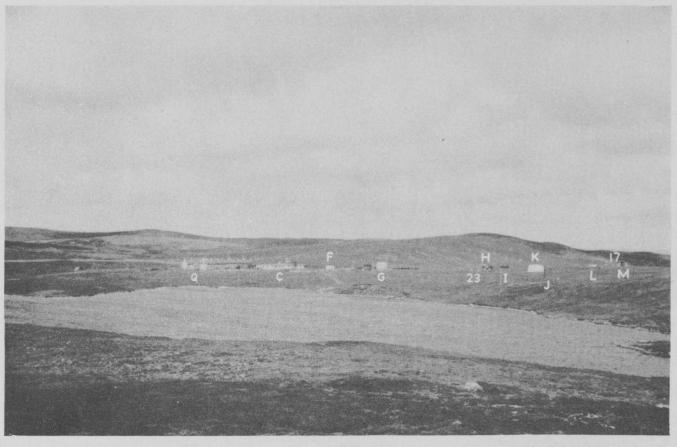


FIG. 2 - General view from the south - Loch Trebister in the foreground, July 1961

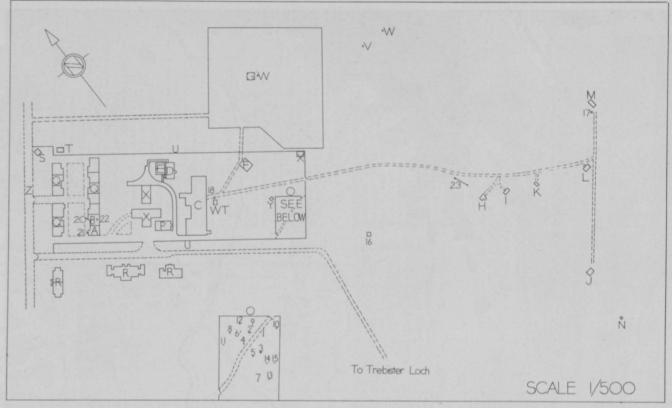


FIG. 3 - Site plan, 1961



FIG.4 - View from the north-west, showing instruments and huts, July 1961

INSTRUMENTS

- Small thermometer screen

- 1. Small thermometer screen
 2, Rain-gauge
 3. Sunshine recorder (Campbell-Stokes type)
 4. Recording rain-gauge
 5. Large thermometer screen
 6. Grass minimum thermometer
 7. Total radiation solarimeter
 8. Diffuse radiation solarimeter
 9. Meteorological Office tiltingsiphon rain recorder
 10. Apparatus for the chemical
 sampling of air and
 precipitation
 11. Daylight illuminometer
 12. Evaporation pan (American
 class 'A' type) with watersurface maximum and minimum
 thermometers
 12. Evaporation recorder

- thermometers

 13. Bi-metallic radiation recorder

 14. Rain-gauge (turf walled)

 15. Gravity Station

 16. Electrical (cup generator)
 anemograph (from 4 May, 1961)

 17. Cloud searchlight

- Alidade for cloud searchlight
 Boom for electrograph[†]
 Boom for electrograph[†]
 Boom for Benndorf electrograph[†]
 Direct-reading pressure-tube anemograph
 Site for absolute measurements of electrical potential gradient

BUILDINGS

- A. Observatory offices†
 B. Radio-sonde offices†
 C. New Observatory building (constructed 1960-61)*
 D. Boiler house

- D. Boiler house
 (constructed 1961)
 E. Fuel tanks
 (constructed 1961)
 F. Radar house
 G. Balloon filling shed
 H. Old absolute hut containing
 declinometer and proton
- magnetometer

 I. New absolute hut containing
 Schuster-Smith coil

 J. West hut containing B.M.Z.

- K. Magnetograph house containing standard and quick-run La Cour variometers
 L. Old magnetograph hut containing supplementary variometers
 M. East hut containing spectrophotometer for ozone measurements, and atmospheric pollution meter
 N. Azimuth pillar
 O. Instrument enclosure
 P. Power house containing emergency generators

- P. Power house containing
 emergency generators
 Q. Residential quarters
 R. Site of residential quarters to be
 constructed 1961-62
 S. Aurora hut
 T. Transformer house
 U. Fence
 V. Floodlight
 WT. Water tower
 W. Radio-sonde launching masts
 X. Various sheds for stores, etc.
 Y. Underground petrol store
 Z. Main road NE to Lerwick,
 SW to Sumburgh

- WT. W. X. Y.
- *From 13 July, 1961 *Up to 13 July. 1961

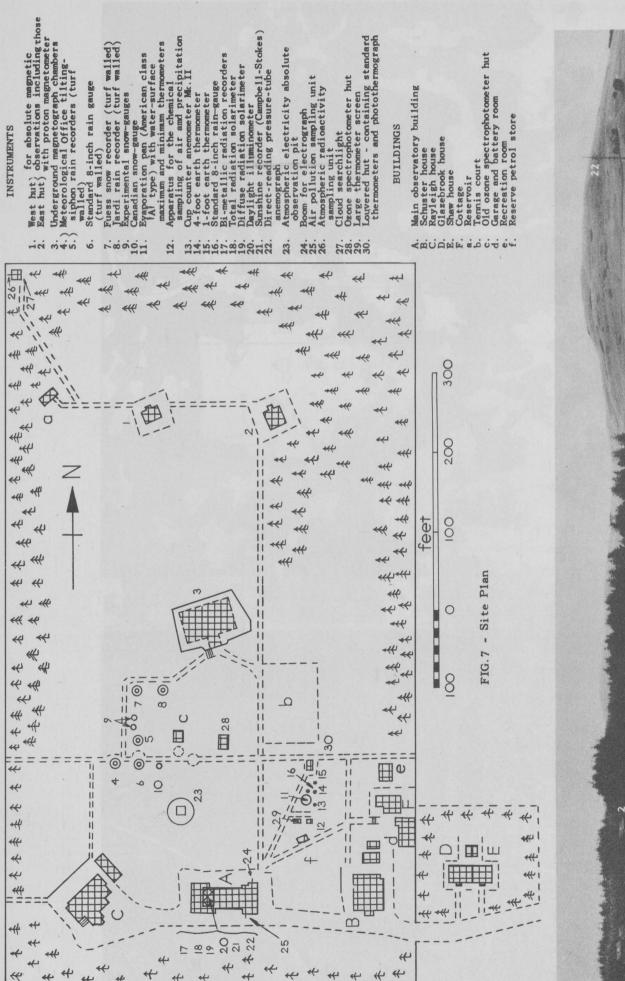
ESKDALEMUIR OBSERVATORY



FIG.5 - Contour map of surroundings



FIG.6 - The Observatory and Davington village looking westwards from Dumfedling Hill, July 1961



the left) to south-eastwards (on the right), July 1961 (ou the Observatory looking northwards view of General 00 FIG.

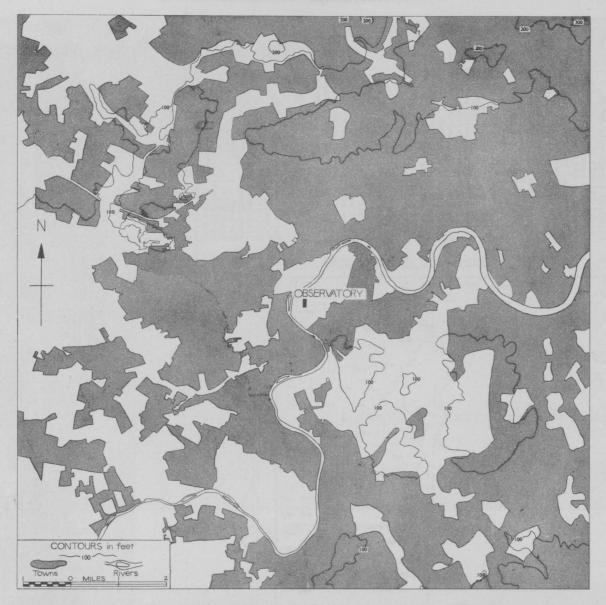


FIG. 9 - Contour and built-up area map



FIG. 10 - Aerial view, February 1961

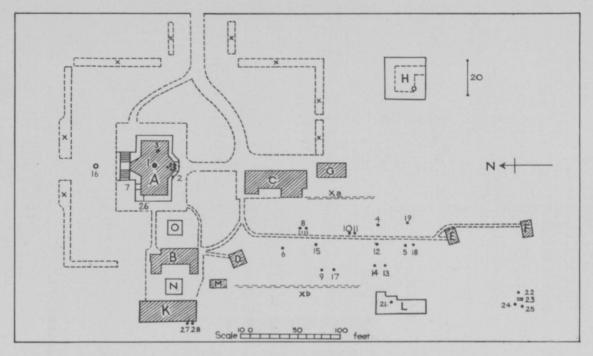


FIG. 11 - Site plan, 1961

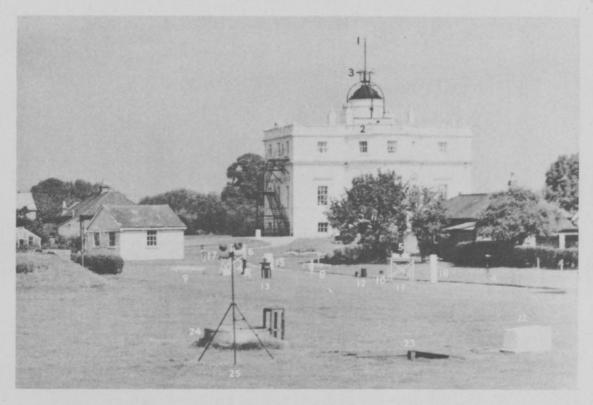


FIG. 12 - General view from south-south-west, August 1961

INSTRUMENTS

- 1. Direct-reading pressure-tube
- anemograph

 2. Sunshine recorder (Campbell-Stokes
- 2. Sunshine recorder (Campbell-Stokes type)
 3. Solarimeters and Daylight illuminometers (Installed in this position 1954)
 4. Radiation balance meter (Installed 1953)
 5. Bi-metallic radiation recorders (Installed 1948)
 6. Large thermometer screen
 7. North-wall screen
 8. Earth thermometers
 9. Grass minimum thermometer
 10. 8-inch rain-gauge
 11. 5-inch rain-gauge
 12. Meteorological Office tiltingsiphon rain recorder
 13. Storm gauge
 14. Rainfall chronograph
 15. Pillar

- 16. Modified Jardi rate of rainfall recorder (Modified 1951)
 17. Experimental recording resistance psychrometer
 18. Theodolite pillar
 19. Pollution gauge
 20. Posts for stretched wire apparatus
 21. Photobarograph
 22. Meteorological Office evaporation tank recorder
 23. Meteorological Office standard evaporation tank
 24. Evaporation Pan (American Class 'A' Type) with water-surface maximum and minimum thermometers
 25. Cup counter anemometer
 26. Electrograph collector (Moved from Clinical house 1939)
 27. Owen's air filter and pollution gauge (Moved from Clinical house 1953)
 28. Smoke filter (Installed 1948 removed from Clinical house 1953)

PUILDINGS

- EVILDINGS

 A. Main observatory building
 B. Clinical house
 C. Workshops
 D. Experimental hut
 E. Store
 F. Atmospheric electricity
 laboratory
 G. Carpenter's shop
 H. Underground laboratory
 K. Calibration hut
 (Erected 1941)
 L. Underground seismological house
 M. Greenhouse
 N. Hot water storage cylinders
 (Erected 1953)
 O. Static water tank (Erected 1942)
 X. Shrubberies, or hedges
 thickness, length and
 height reduced
 considerably in 1949-50

| | | | · | |
|--|--|--|---|--|
| | | | | |
| | | | | |
| | | | | |



1 LERWICK (H) 14,0007 (0.14 C.G.S. unit) + JANUARY 1960

| 1 L1 | RWICK | (H) | | | | | | | | | 14, | 000% (0 | · 14 C.(| 3.S. ur | nit) + | | | | | | | | | | JANUA | ARY 1960 |
|----------------|-------------|---------------|-----|-----|-----|-----|-----|-----|-----|------|-------|---------|----------|---------|--------|-------|-------|-------|-------|--------------|-------------|---------|-------|------------------|-------|-------------------------|
| | Hour 0-1 | G.M.T. 1-2 | 2-3 | 3-4 | 4-5 | 5-6 | 6-7 | 7-8 | 8-9 | 9-10 | 10-11 | 11-12 | 12-13 | 13-14 | 14-15 | 15-16 | 16-17 | 17-18 | 18-19 | 19-20 | 20-21 | 21 - 22 | 22-23 | 23-24 | Mean | Sum 12,000+ |
| | γ | γ | γ | γ | γ | γ | γ | γ | γ | γ | γ | γ | γ | γ | γ | γ | γ | γ | γ | γ | γ | γ | γ | γ | γ | + |
| 1 q | 544 | 543 | 543 | 546 | 551 | 549 | 555 | 549 | 547 | 538 | 528 | 525 | 526 | 524 | 526 | 532 | 539 | 543 | 542 | 541 | 543 | 543 | 541 | 5 4 0 | 540 | 958 |
| 2 q | 542 | 543 | 541 | 544 | 548 | 549 | 557 | 558 | 555 | 543 | 532 | 522 | 513 | 522 | 529 | 535 | 532 | 539 | 538 | 534 | 539 | 539 | 537 | 539 | 539 | 930 |
| 3 | 538 | 536 | 535 | 535 | 547 | 559 | 561 | 559 | 557 | 544 | 532 | 528 | 529 | 527 | 535 | 541 | 536 | 538 | 545 | 548 | 550 | 548 | 545 | 547 | 543 | 1020 |
| 4 | 542 | 535 | 540 | 543 | 552 | 550 | 547 | 551 | 554 | 554 | 545 | 543 | 549 | 539 | 547 | 549 | 547 | 551 | 552 | 551 | 551 | 547 | 546 | 548 | 547 | 1133 |
| 5 | 544 | 539 | 529 | 526 | 523 | 560 | 560 | 550 | 540 | 520 | 521 | 515 | 509 | 517 | 531 | 528 | 529 | 538 | 539 | 546 | 551 | 557 | 564 | 533 | 536 | 869 |
| 6 | 527 | 528 | 518 | 520 | 525 | 532 | 533 | 534 | 533 | 533 | 533 | 535 | 533 | 532 | 532 | 527 | 532 | 538 | 538 | 543 | 542 | 544 | 540 | 536 | 533 | 788 |
| 7 | 538 | 537 | 535 | 535 | 541 | 543 | 550 | 548 | 540 | 535 | 536 | 527 | 532 | 533 | 536 | 541 | 546 | 553 | 549 | 545 | 545 | 545 | 545 | 544 | 541 | 979 |
| 8 | 543 | 543 | 539 | 540 | 540 | 541 | 543 | 545 | 544 | 543 | 542 | 536 | 531 | 532 | 535 | 539 | 546 | 549 | 552 | 555 | 551 | 548 | 539 | 543 | 542 | 1019 |
| 9 q | 543 | 542 | 543 | 543 | 543 | 547 | 547 | 547 | 549 | 549 | 547 | 544 | 544 | 547 | 547 | 547 | 550 | 550 | 550 | 550 | 551 | 548 | 541 | 542 | 546 | 1111 |
| 10 d | 541 | 542 | 546 | 546 | 550 | 553 | 561 | 556 | 551 | 540 | 521 | 508 | 516 | 529 | 548 | 555 | 776 | 550 | 522 | 544 | 574 | 510 | 502 | 510 | 548 | 1151 |
| 11 d | 519 | 490 | 504 | 493 | 522 | 525 | 529 | 527 | 502 | 499 | 512 | 517 | 520 | 526 | 560 | 537 | 548 | 545 | 535 | 532 | 533 | 534 | 532 | 538 | 524 | 579 |
| 12 | 514 | 506 | 531 | 533 | 535 | 535 | 536 | 530 | 532 | 532 | 529 | 525 | 518 | 516 | 523 | 529 | 525 | 527 | 532 | 535 | 514 | 524 | 518 | 525 | 526 | 624 |
| 13 | 528 | 529 | 533 | 529 | 538 | 545 | 545 | 543 | 535 | 531 | 529 | 532 | 532 | 530 | 527 | 528 | 529 | 532 | 532 | 543 | 532 | 540 | 533 | 537 | 534 | 812 |
| 14 d | 532 | 410 | 430 | 506 | 516 | 540 | 550 | 556 | 536 | 532 | 540 | 533 | 524 | 533 | 536 | 535 | 535 | 544 | 562 | 670 | 613 | 412 | 333 | 538 | 521 | 516 |
| 15 d | 543 | 361 | 335 | 404 | 513 | 521 | 532 | 533 | 529 | 516 | 510 | 510 | 510 | 515 | 519 | 519 | 513 | 521 | 526 | 523 | 524 | 529 | 529 | 526 | 503 | 61 |
| 16 | 530 | 532 | 531 | 530 | 529 | 535 | 535 | 532 | 529 | 526 | 527 | 528 | 531 | 526 | 524 | 525 | 528 | 529 | 537 | 542 | 540 | 539 | 525 | 510 | 530 | 720 |
| 17 | 524 | 531 | 536 | 543 | 546 | 541 | 547 | 546 | 542 | 541 | 539 | 533 | 541 | 558 | 549 | 552 | 545 | 552 | 554 | 558 | 562 | 560 | 558 | 554 | 546 | 1112 |
| 18 | 549 | 545 | 550 | 553 | 556 | 562 | 562 | 576 | 538 | 514 | 532 | 525 | 511 | 532 | 536 | 528 | 532 | 533 | 536 | 533 | 539 | 526 | 526 | 520 | 538 | 914 |
| 19 | 518 | 528 | 538 | 543 | 545 | 550 | 543 | 541 | 540 | 531 | 525 | 523 | 525 | 528 | 530 | 538 | 538 | 544 | 545 | 546 | 54 8 | 548 | 554 | 548 | 538 | 917 |
| 20 | 544 | 547 | 549 | 552 | 560 | 560 | 551 | 543 | 550 | 544 | 539 | 515 | 525 | 533 | 541 | 556 | 531 | 534 | 539 | 5 4 8 | 542 | 535 | 537 | 540 | 542 | 1015 |
| 21 d | 529 | 445 | 452 | 499 | 526 | 539 | 547 | 533 | 532 | 529 | 525 | 515 | 536 | 518 | 531 | 529 | 549 | 635 | 592 | 610 | 504 | 500 | 498 | 518 | 529 | 691 |
| 22 | 497 | 509 | 494 | 510 | 510 | 528 | 540 | 531 | 528 | 514 | 513 | 493 | 513 | 520 | 530 | 535 | 524 | 530 | 534 | 539 | 542 | 544 | 535 | 537 | 523 | 550 |
| 23 | 534 | 536 | 537 | 535 | 533 | 542 | 543 | 538 | 533 | 528 | 517 | 520 | 518 | 516 | 536 | 531 | 541 | 542 | 534 | 535 | 528 | 520 | 529 | 530 | 531 | 756 |
| 24 | 528 | 526 | 528 | 535 | 545 | 540 | 535 | 535 | 525 | 522 | 511 | 515 | 529 | 534 | 539 | 536 | 534 | 540 | 544 | 536 | 535 | 533 | 540 | 542 | 533 | 787 |
| 25 | 539 | 544 | 544 | 541 | 543 | 546 | 543 | 544 | 537 | 531 | 526 | 524 | 527 | 530 | 522 | 533 | 540 | 541 | 543 | 542 | 545 | 547 | 544 | 547 | 538 | 923 |
| 26 | 550 | 545 | 543 | 543 | 542 | 547 | 548 | 545 | 546 | 532 | 523 | 528 | 526 | 524 | 529 | 531 | 540 | 538 | 542 | 543 | 547 | 547 | 543 | 544 | 539 | 946 |
| 27 | 543 | 541 | 544 | 548 | 544 | 545 | 555 | 552 | 548 | 539 | 528 | 525 | 524 | 524 | 528 | 528 | 533 | 539 | 544 | 548 | 550 | 550 | 547 | 543 | 540 | 970 |
| 28 | 541 | 546 | 546 | 550 | 550 | 550 | 550 | 549 | 547 | 540 | 529 | 524 | 524 | 519 | 527 | 533 | 536 | 542 | 549 | 554 | 555 | 554 | 554 | 554 | 543 | 1023 |
| 29 | 558 | 558 | 562 | 548 | 550 | 547 | 550 | 555 | 566 | 552 | 543 | 526 | 520 | 535 | 532 | 535 | 539 | 542 | 545 | 552 | 558 | 557 | 551 | 552 | 547 | 1133 |
| 30 q | 551 | 550 | 551 | 551 | 554 | 557 | 558 | 557 | 553 | 541 | 524 | 515 | 517 | 524 | 531 | 538 | 543 | 547 | 551 | 554 | 557 | 556 | 554 | 552 | 545 | 1086 |
| 31 q | 550 | 550 | 552 | 554 | 558 | 563 | 563 | 563 | 560 | 547 | 535 | 525 | 526 | 532 | 541 | 547 | 549 | 550 | 554 | 556 | 557 | 558 | 558 | 558 | 550 | 1206 |
| Mean | 536 | 523 | 525 | 531 | 540 | 545 | 548 | 546 | 541 | 533 | 529 | 524 | 525 | 528 | 534 | 536 | 545 | 544 | 544 | 550 | 546 | 537 | 532 | 539 | 537 |] |
| Sum 16,000+ | 623 | 217 | 259 | 478 | 735 | 901 | 976 | 926 | 778 | 540 | 393 | 234 | 279 | 375 | 557 | 617 | 885 | 856 | 857 | 1056 | 922 | 642 | 498 | 695 | | Grand Total 399, 299 |

| 2 LE | RWICK | (D) | | | | | | | | | | 9° | · + | | | | | | | | | | | | JANUA | PY 1960 |
|---------------|--------------|---------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|---------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------------------|
| | Hour 0 | G.M.T. 1-2 | 2-3 | 3-4 | 4-5 | 5-6 | 6-7 | 7-8 | 8-9 | 9-10 | 10-11 | 11-12 | 12-13 | 13-14 | 14-15 | 15-16 | 16-17 | 17-18 | 18-19 | 19-20 | 20-21 | 21-22 | 22-23 | 23-24 | Mean | Sum 1000 · 0+ |
| | ' | , | , | , | • | • | • | • | • | , | • | • | 1 | , | • | • | , | , | , | • | • | • | • | , | | |
| 1 q | 45.7 | 48.4 | 47 · 2 | 45.2 | | | | | | | | | 48.8 | | | 48.6 | 47.9 | | 46 · 9 | | 45.9 | 45.0 | 44 · 2 | | 46 · 5 | 115.9 |
| 2 q 3 | 44·6 42·0 | 45·5 47·1 | 46·1 47·7 | 46·1 46·5 | 46·5 45·1 | | 46·3 45·1 | | 45·2 44·9 | | | | 48·4 51·0 | | 50·0 52·7 | 49·0 54·5 | 49·4 55·4 | | 47·9 48·4 | | 45·2 46·0 | 44·8 45·5 | 43·1 45·3 | 42·9 44·2 | 46 · 5 | 116 · 4 |
| 4 | 41.7 | 42.2 | 39.4 | 41.7 | | | | | 43.8 | | | | 50.9 | | | 53.2 | | | | | 46 • 2 | | 42.5 | | 45.6 | 139·6 94·8 |
| 5 | 40.9 | 42.9 | 42.7 | 31.9 | 37 · 7 | 41.7 | 43 · 3 | | 43.6 | 44 · 6 | 47.7 | 50.3 | 52.3 | 55.5 | - | 52.9 | 50.8 | | 50.7 | | 49.6 | 47.0 | 44.3 | 30.9 | 45.8 | 99.2 |
| 6 | 39 · 4 | 43.9 | 40-1 | 41.0 | 43.4 | 44 · 4 | 45 · 5 | 45.5 | 46 · 5 | 47.3 | 47.7 | 48.4 | 49.8 | 49.7 | 49.6 | 49.2 | 48.8 | 50.7 | 49.4 | 47.5 | 46 · 5 | 45.5 | 44 · 1 | 43 · 4 | 46 · 1 | 107.3 |
| 7 | 44.6 | 43.8 | 43.9 | 42.5 | 43.6 | 42.7 | 43.6 | 45.9 | 46 · 5 | 46 · 5 | 46 · 8 | 46 · 2 | 48.1 | 50.0 | 49.4 | 49.9 | 49.4 | 52.1 | 52.5 | 50.8 | 49.4 | 47.0 | 46.3 | 45.5 | 47.0 | 127.0 |
| 8 | 43.6 | 39.6 | 39.7 | 43 · 1 | 44.6 | 46.0 | | | 45.5 | | | | 47.5 | | | 48.6 | 48.9 | | | | 49 • 4 | 45.9 | | 44 · 1 | 46.0 | 104.7 |
| 9 q | 43.9 | 43.6 | 43.8 | 44.8 | | | | | 45.9 | | | | 49.2 | | | 49.0 | 50.0 | | 48.7 | | 47.8 | 47.2 | | | 47.0 | 126.9 |
| 10 d | 45.1 | 44.6 | 46 · 0 | 46 · 0 | 47 · 0 | 46 · 0 | 46 · 5 | | 46 · 7 | 47 · 7 | 49.5 | | 52.7 | | 54 · 5 | 56 · 9 | 52.8 | 47.9 | 48 · 9 | | 18 · 2 | 23.5 | 31 · 9 | 38.5 | 45.3 | 88.0 |
| 11 d | 39.5 | 40.0 | 42.0 | 43.1 | | 45.5 | | ., . | 46 · 7 | 49·8 46·2 | | | 49.4 | | | 49.4 | 47.9 | 48 1 | | | 46 · 7 | 46·1 29·7 | 45.3 | | 46.6 | 118.6 |
| 12 13 | 47·7 44·3 | 47·9 45·9 | 43·9 47·2 | 43·3 48·2 | 44·8 46·0 | 45·0 45·9 | | | 45·2 46·7 | 48.1 | | | 47.7 | | 47·0 48·6 | 39·8 49·1 | 46·0 48·4 | 48·3 47·3 | 46·0 44·6 | 44·0 37·7 | 42·7 35·7 | 38.5 | 40·7 39·1 | 42·7 42·7 | 44.6 | 70.5 |
| 14 d | 45.9 | 50.5 | 34 · 7 | 34.6 | 38.4 | | | 43.6 | 46.7 | 46.8 | | | 50.8 | | 49.4 | 47.7 | 47.7 | 48.8 | 51.7 | 58.0 | 46 · 5 | 28.3 | 35.0 | | 44.9 | 91·5 77·6 |
| 15 d | 37.9 | 39.1 | 18.9 | 24 · 1 | 35.9 | | 42.7 | 44.6 | 47.0 | 44.9 | | | 47.0 | | 47.5 | 48 • 4 | 47.7 | 48.7 | 47.9 | | 44.3 | 43.1 | 44.2 | 44 · 2 | 42.7 | 23.6 |
| 16 | 43.1 | 44 · 1 | 43.6 | 45.2 | 46 · 5 | 45.5 | 45 · 1 | 44 · 4 | 44 · 8 | 45.1 | 45.5 | 45.9 | 47 - 7 | 46 • 9 | 46 · 2 | 46 · 1 | 47 · 1 | 45.3 | 46.0 | 46 · 5 | 46 · 7 | 45.5 | 44.8 | 35.9 | 45.1 | 83.5 |
| 17 | 40.7 | 44.0 | 42.3 | 43.1 | 44.6 | 47.8 | 48 · 1 | 46.8 | 45.9 | 47.5 | 48.4 | 48.4 | 50.8 | 54 · 4 | 51 · 1 | 52.7 | 52.3 | 51 · 5 | 51 · 1 | | 48.1 | 48 · 4 | 47.5 | 46.7 | 48.0 | 151.1 |
| 18 | 45.5 | 45.1 | 45.9 | 46 · 5 | 46 · 9 | 47 · 7 | 47 · 5 | | 47 · 9 | 53 · 2 | 50.6 | | 51.5 | | 48 • 9 | 46.5 | 46 · 5 | 46 · 9 | 48 • 4 | 45.9 | 45 • 9 | 40.3 | 39 • 4 | 42.2 | 47.0 | 129.0 |
| 19 | 43.6 | 39.2 | 40.4 | 41.0 | 43.3 | 44.6 | 45.1 | | 45.2 | _ | | | 49.6 | | | 48.9 | 48.8 | 47 · 3 | 46.0 | | 46 · 8 | | 46 · 7 | 45.5 | 45.7 | 95.9 |
| 20 | 44 · 4 | 42.2 | 44 · 0 | 42.7 | 44 · 9 | 44 · 6 | 46 • 0 | 44 · 6 | 46 · 7 | 48 · 1 | 49-4 | 52.3 | 50.3 | | 49.7 | 52 · 5 | 57 · 5 | 52.3 | 47.1 | 46 · 0 | 46 · 7 | 44.2 | 41 · 4 | 45.7 | 47.2 | 132.2 |
| 21 d | 44 · 5 | 25.1 | 38 · 8 | 41.1 | 42.2 | 44 · 4 | 48 • 2 | 52 · 9 | 50.0 | 48.9 | 49.7 | | 53.6 | 50.1 | 51.9 | 50.0 | 50.1 | 38 · 5 | 44 · 2 | 33.3 | 38 · 1 | 39.2 | 33.3 | 37.4 | 44 · 1 | 59·1 |
| 22 | 39.0 | 41.2 | 46.8 | 45.7 | 47.8 | 47·5 48·4 | 48·1 45·3 | 47·2 45·7 | 48.7 | 50.7 | 51·3 47·9 | | 50·6 52·1 | 50·0 53·6 | 50·4 51·8 | 48.9 | 47.3 | 46 · 9 | 47·1 44·8 | 45·3 43·0 | 44·0 35·7 | 38.8 | 41·9 32·1 | 40.9 | 46.4 | 114.5 |
| 23 24 | 44·2 43·2 | 46·1 47·8 | 45·1 45·5 | 45·1 42·5 | 44·6 47·5 | 45.4 | 45.3 | 47.2 | 44·6 47·9 | 45·8 46·9 | 47.9 | | 50.3 | 50.3 | 44 • 4 | 47·8 46·8 | 45·3 46·2 | 39·6 37·7 | 44.2 | 44.8 | 42 • 4 | | 43.2 | 39·8 45·5 | 44·8 45·5 | 76·1 93·2 |
| 25 | 45.8 | 46.1 | 46.5 | 44.6 | 45.5 | 44.6 | 45.5 | 46 · 2 | 44.6 | 44 · 1 | 45.9 | | 48.7 | 49.9 | 48.0 | 46 · 2 | 46.0 | 41.7 | 40.3 | 46.0 | 46.0 | 45.9 | | 43.8 | 45.5 | 93.2 |
| 26 | 45.1 | 44 · 8 | 45.3 | 45.5 | 46 · 7 | 45.5 | | 45.9 | 45.1 | 44 · 2 | 46 · 0 | | 48.4 | 49.4 | 49.6 | 47.7 | 47 · 8 | 47.3 | 46 · 5 | 45.1 | 44.6 | 43.4 | 45.0 | | 46.2 | 108-4 |
| 27 | 46 - 5 | | 43.2 | 42.7 | 41.7 | 45.8 | 46 · 1 | 44.9 | 43.9 | 43.1 | 44.8 | | 48.4 | 50.5 | 49.7 | 47.7 | 46 · 5 | 47.5 | 47.7 | | 46.0 | | 45.1 | 43.9 | 45.8 | 100.1 |
| 28 | 45.2 | 47.5 | 49.6 | 46 · 2 | 45.8 | 46 · 2 | 45.5 | 45 · 1 | 43.8 | 43.0 | 44 · 9 | 46 · 8 | 48.7 | 49.4 | 50.5 | 49.8 | 48.0 | 47.7 | 47.5 | 46.5 | 43 · 1 | 45.4 | 45.7 | 44.3 | 46.5 | 116-2 |
| 29 | 45.8 | 45.9 | 44 · 1 | 41.9 | 41.1 | 43.3 | 44 · 1 | 43.9 | 44 · 4 | 44 · 1 | 46.5 | | 48 8 | 52 · 7 | 52 · 3 | 51 · 1 | 48.9 | 48.0 | 47.7 | 46 · 8 | 46 · 1 | | 43.1 | 43.0 | 46 1 | 106.6 |
| 30 q | 44 · 6 | 45.3 | 45.8 | 46 · 0 | 46 · 0 | 46 · 0 | 45.5 | 45.0 | 43.8 | 43.0 | 44 · 1 | 45.5 | 47.5 | 48.8 | 49 · 1 | 48 · 8 | 47.8 | 47 · 7 | 47 · 5 | 46 · 8 | 45 · 8 | 45.5 | 45.2 | 45.3 | 46 · 1 | 106.4 |
| 31 q | 45.3 | 45.0 | 45.5 | 45.8 | 45.9 | 45.7 | | | 44 · 6 | 44.5 | 44.8 | 46 · 3 | 49.4 | 49.9 | 50.8 | 49.6 | 48.7 | 48.9 | 48 · 2 | 47.7 | 46.9 | | 45.7 | 45.5 | 46 · 7 | 121.3 |
| Mean | 43.7 | 43.9 | 43 · 1 | 42.8 | 44 · 2 | 45.2 | 45.6 | 45.7 | 45.7 | 46 · 1 | 46.9 | 48.3 | 49.7 | 50 · 5 | 49.7 | 49.3 | 48.9 | 47.5 | 47.5 | 46.3 | 44.3 | 42.6 | 42.6 | 42.7 | 46.0 | |
| Sum 300·0+ | 53 · 3 | 60.3 | 35·7 | 27 · 7 | 70.2 | 100-7 | 112·6 | 116.6 | 117·8 | 130 · 4 | 154 · 8 | 196 · 0 | 240.4 | 267 · 0 | 239 · 7 | 227 · 3 | 214.8 | 173 · 7 | 174 · 0 | 135.0 | 73.0 | 21 · 7 | 21 · 3 | 24 · 2 | | Grand Total 34188 · 2 |

TANUARY 1960

3 LERWICK (Z) 47,000y (0.47 C.G.S. unit) + 4-5 5-6 2-3 3-4 6-7 7-8 8-9 9-10 10-11 11-12 12-13 13-14 14-15 15-16 16-17 17-18 18-19 19-20 20-21 21-22 22-23 23-24 6000+ 0-1 Mean 8 3Ó1 304 3 4 5 301 314 335 7 296 295 294 294 295 296 291 11 d 252 13 3.37 318 8 15 307 309 320 320 320 337 342 341 336 337 320 26.3 1328 17 300 294 323 19 302 309 314 22 23 24 25 305 318 339 345 337 334 311 280 285 289 287 296 305 312 318 316 314 316 307 266 280 293 27 285 282 277 296 29 31 g Mean Grand Total 1528 1580 1733 1777 1918 2041 1895 1782 1480 1323 1199 1152 1088 1180 1246 1306 8000+ 223,323

DAILY EXTREMES OF TERRESTRIAL MAGNETIC ELEMENTS, MAGNETIC CHARACTER FIGURES (K AND C) AND TEMPERATURE IN MAGNET HOUSE

| | | | | | | TER | RESTRIAL | MAGNE' | TIC ELE | MENTS | , | | | | | ł | | Magnetic | Temperatus |
|------------|----------------|------------|------------|------------------|------------|----------------|--------------|--------------|----------------|--------------|----------------|------------|------------|----------------|------------|--|---------------------|------------------------|----------------|
| | | Ногіз | ontal | force | | | De | clinat | ion | | | Vert | ical | force | | 3-hr. range indices | Sum of K indices | character of day, C | in magne |
| | Maxi 14,00 | | | nimum 1000y + | Range | | imum + | | imum + | Range | Max i | | | imum 1007 + | Range | K | lidices | (0-2) | house 200 + |
| | h. m. | γ | γ | h. m. | γ | h. m. | , | 1 | h. m. | 1 | h. m. | γ | γ | h. m. | γ | | | | °A. |
| 1 q | 06 44 | 557 | 522 | 11 51 | 35 | 14 07 | 50.3 | 43.4 | | 6.9 | 18 55 | 314 | 283 | 01 50 | 31 | 2,1,1,1,1,1,1,1 | 9 | 0 | 79·1 |
| 2 q | 06 51 | 560 | | 12 14 | 49 | 13 44 | 51.9 | 41.7 | | 10.2 | | 326 | 279 | 24 00 | 47 | 1,0,1,2,2,1,1,2 | 10 | 0 | 78.8 |
| 3 | 06 30 | 564 | 523 | 13 50 | 41 | 16 31 | 56.6 | 40.0 | | 16.6 | 17 27 | 328 | 261 | 01 44 | 67 | 2,2,0,2,1,2,1,1 | 11 | 0 | 78.3 |
| 4 5 | 08 41 22 47 | 564 591 | 528 492 | 01 03 12 58 | 36 99 | 15 33 13 36 | 56·5 57·3 | 37.8 | | 18·7 33·7 | 16 43 22 42 | 316 359 | 279 225 | 02 22 05 30 | 37 134 | 2,1,2,2,2,2,1,2 3,3,3,2,3,3,2,4 | 14 23 | 0 1 | 78·9 79·1 |
| 6 | 21 03 | 547 | 510 | 00 00 | 37 | 17 57 | 51 · 8 | 32.5 | 00 09 | 19.3 | 00 02 | 327 | 287 | 03 43 | 40 | 3,2,1,1,2,1,2,1 | 13 | 0 | 78 · 8 |
| 7 | 17 35 | 559 | 524 | 11 49 | 35 | 17 50 | 54 · 5 | 41.5 | | 13.0 | 20 37 | 322 | 291 | 07 02 | 31 | 1,1,2,1,1,2,2,1 | 11 | ő | 78.8 |
| 8 | 19 46 | 559 | 529 | 12 32 | 30 | 20 14 | 50.8 | 38 · 5 | | 12.3 | 21 07 | 318 | 291 | 03 48 | 27 | 2, 2, 1, 1, 1, 1, 2, 2 | 12 | ŏ | 78.9 |
| 9 q | 20 23 | 555 | 536 | 24 00 | 19 | 13 24 | 50.4 | 42.9 | 02 23 | 7.5 | 24 00 | 313 | 290 | 09 05 | 23 | 1,1,1,0,1,0,0,1 | 5 | 0 | 78-8 |
| 0 d | 16 40 | 1367 | 483 | 21 11 | 884 | 16 52 | 70 - 9 | 2.8 | 21 17 | 68.1 | 16 32 | 490 | 165 | 21 18 | 325 | 1,1,1,3,4,8,5,5 | 30 | 2 | 78 · 3 |
| l d | 16 51 | 623 | 474 | 01 30 | 149 | 14 14 | 63.8 | 34 · 4 | 00 11 | 29.4 | 16 52 | 446 | 267 | 23 58 | 179 | 3,3,3,3,4,4,2,3 | 25 | 1 | 78-4 |
| 2 | 06 37 | 543 | 488 | 21 00 | 55 | 13 16 | 54 4 | 22.1 | 21 08 | 32.3 | 15 28 | 342 | 216 | 01 21 | 126 | 3, 2, 1, 2, 2, 3, 3, 4 | 20 | 1 | 78 • 4 |
| 3 | 22 06 | 562 | 516 | 22 41 | 46 | 03 20 | 51 6 | 31.6 | 20 36 | 20.0 | 20 45 | 330 | 242 | 22 37 | 88 | 2, 2, 1, 1, 2, 1, 3, 4 | 16 | 1 | 78 - 2 |
| 4 d 5 d | 20 10 00 35 | 844 571 | 166 128 | 22 48 01 22 | 678 443 | 19 30 01 42 | 61·1 69·0 | 9·3 6·2 | 21 50 02 25 | 51·8 62·8 | 23 45 01 14 | 389 372 | 46 147 | 02 01 03 01 | 343 225 | 6,4,3,3,2,2,7,7 7,5,2,2,2,2,2,2 | 34 24 | 2 1 | 78·1 78·0 |
| , | 21 23 | 547 | 494 | 23 08 | 53 | 22 29 | 50.3 | 32.5 | 23 20 | 17.8 | 17 50 | 319 | 265 | 22 52 | 54 | 1,1,0,0,1,1,1,3 | 8 | 0 | 78.0 |
| , | 13 05 | 579 | 515 | 00 05 | 64 | 13 07 | 60.4 | 37 · 3 | 02 41 | 23 · 1 | 19 31 | 308 | 253 | 02 38 | 55 | 3, 3, 2, 1, 3, 2, 1, 1 | 16 | 1 | 77.9 |
| 3 | 07 35 | 587 | 494 | 09 11 | 93 | 09 58 | 55.4 | 35.9 | 21 50 | 19.5 | 12 35 | 328 | 275 | 07 45 | 53 | 1, 1, 4, 3, 2, 1, 2, 3 | 17 | 1 | 77.5 |
| • | 22 15 | 560 | 494 | 00 08 | 66 | 12 45 | 51 · 5 | 36 · 3 | 01 07 | 15.2 | | 318 | 187 | 01 02 | 131 | 4, 2, 1, 1, 1, 1, 2, 1 | 13 | 0 | 76 · 5 |
|) | 04 44 | 573 | 500 | 11 29 | 73 | 16 12 | 62.0 | 39.2 | 22 39 | 22.8 | 16 44 | 347 | 289 | 05 12 | 58 | 2,2,2,3,2,3,2,2 | 18 | 1 | 77.6 |
| d | 19 45 | 810 | 318 | 01 26 | 492 | 01 23 | 64.2 | | 19 50 | 73.4 | 17 10 | 533 | 22 | 01 48 | 511 | 6,3,3,3,3,5,6,4 | 33 | 2 | 77.6 |
| : | 21 34 | 557 | 470 | 11 06 | 87 | 10 00 | 58.6 | 33.9 | 21 30 | 24 · 7 | 11 28 | 343 | 231 | 00 01 | 112 | 3, 3, 3, 3, 2, 2, 2, 3 | 21 | 1 | 78.0 |
| } | 19 46 | 563 | 494 | 13 51 | 69 | 13 06 | 57.6 | 28 · 2 | | 29.4 | 17 26 | 353 | 260 | 22 00 | 93 | 2, 3, 3, 2, 3, 3, 3, 3 | 22 | 1 | 78 · 5 |
| • | 18 02 | 558 | 497 | 10 50 | 61 | 13 26 | 53 · 4 | 31.9 | 17 40 | 21.5 | 17 50 | 342 | 244 | 02 37 | | 3,3,2,2,3,3,2,2 | 20 | 1 | 78 • 4 |
| 5 | 04 57 | 555 | 517 | 14 15 | 38 | 02 04 | 51 · 7 | 33.3 | 18 01 | 18.4 | 18 14 | 323 | 274 | 02 31 | 49 | 2, 2, 1, 1, 2, 3, 3, 1 | 15 | 1 | 78·6 |
| | 21 57 | 557 | 517 | 13 02 | 40 | 11 54 | 51 · 2 | 41·9 37·5 | 21 59 04 03 | 9·3 14·9 | 15 43 15 45 | 313 311 | 285 256 | 06 04 01 12 | 28 | 1,1,1,2,2,2,1,2 | 12 | 0 | 78.5 |
| . | 06 55 | 560 | | 12 55 | 40 | 13 06 02 30 | 52·4 52·6 | 41.8 | 20 10 | 10.8 | 16 58 | 307 | | 01 12 | | 3, 2, 1, 1, 1, 1, 1, 1 2, 2, 1, 1, 2, 1, 2, 1 | 11 12 | 0 | 78-2 |
| , | 19 22 02 10 | 566 | 517 512 | 13 32 12 20 | 49 58 | 13 55 | 54.6 | 39.1 | 04 46 | 15.5 | 16 06 | 309 | 266 | 04 11 | | 2, 2, 1, 1, 2, 1, 2, 1 | 16 | 0 1 | 78.0 |
| 9 | 06 53 | 570 560 | | 12 20 | 51 | 15 25 | 49.7 | 42.9 | 09 08 | | 04 21 | 297 | | 13 30 | 15 | 0,0,1,2,1,1,1,0 | 6 | 0 | 78·1 78·0 |
| q | 05 52 | 567 | | 12 01 | 47 | 14 35 | 51 · 5 | | 10 06 | 7.4 | 10 46 | 298 | | 14 26 | 16 | 0,1,0,2,1,0,1,1 | 6 | 0 | |
| Ч | UD 32 | 307 | 520 | 12 01 | 7/ | 17 33 | 31.3 | 77 1 | 10 00 | , 4 | -0 10 | 250 | 202 | AT 20 | 10 | 0, 1, 0, 2, 1, 0, 1, 1 | ا | U | 77.6 |

a denotes an international quiet day and d an international disturbed day.

FEBRUARY 1960 14,000y (0.14 C.G.S. unit) + 1 LERWICK (H) Sum Hour G.M.T. 9-10 10-11 11-12 | 12-13 13-14 14-15 15-16 16-17 17-18 18-19 19-20 20-21 21-22 22-23 23-24 12,000 Mean 2-3 3-4 4-5 5-6 6-7 7-8 8-9 539 518 544 526 547 576 535 532 538 540 527 535 537 534 540 550 540 534 529 515 512 518 536 554 558 529 696 539 538 4 5 536 537 539 512 547 551 561 547 548 555 543 545 534 515 540 5 24 535 552 549 560 550 548 0 5 7 8 9 550 545 561 551 548 564 548 547 557 552 550 551 551 563 547 543 548 539 549 532 529 531 539 545 551 555 554 558 559 547 1128 557 10 q 552 563 532 543 552 419 544 556 498 538 544 559 529 539 554 566 547 538 547 562 554 535 536 543 552 370 549 554 538 529 541 537 543 538 542 548 555 552 549 527 538 545 541 543 539 14 d 15 523 522 525 533 534 528 532 528 541 541 547 545 545 541 545 540 466 547 522 541 536 520 564 543 435 530 548 544 534 566 526 560 544 527 541 544 549 518 521 537 542 541 536 535 549 575 551 564 572 563 529 1039 16 d 17 d 536 508 536 497 547 544 542 547 547 546 537 536 523 526 538 528 542 526 529 551 512 558 18 d 534 509 873 20 495 541 550 549 543 552 552 547 540 545 538 545 547 551 548 547 552 555 554 545 539 545 549 21 d 22 23 24 q 25 q 544 553 560 552 551 550 550 548 552 547 556 555 550 550 547 532 540 545 540 542 548 539 551 554 549 557 555 552 551 558 548 548 532 529 526 524 531 547 550 542 551 531 528 531 539 550 563 561 554 544 554 27 28 539 509 529 567 541 540 0 557 553 Mean Grand Total 1029 1237 15,000 376,885

MAGNETIC DECLINATION (WEST)
Mean values for periods of sixty minutes ending at exact hours, G.M.T.

| 2 LE | RWICK (| D) | | | | | | | | | | 90 | ' + | | | | | | | | | | | | FEBRUA | RY 1960 |
|---------------|--------------|---------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|------------------|--------------|--------|--------------------------|
| | Hour (| 3.M.T. 1-2 | 2-3 | 3-4 | 4-5 | 5-6 | 6-7 | 7-8 | 8-9 | 9-10 | 10-11 | 11-12 | 12-13 | 13-14 | 14-15 | 15-16 | 16-17 | 17-18 | 18-19 | 19-20 | 20-21 | 21-22 | 22-23 | 23-24 | 1 | Sum 1000·0+ |
| 1 | 46 · 1 | 46.0 | 46 2 | 46.5 | 47.8 | 46.0 | 44.8 | 44.8 | 44.9 | 45.5 | 48.8 | 52.0 | 53.0 | 52.9 | 52.0 | 52.3 | 50.3 | 48.9 | 47 · 7 | 47.0 | 45.5 | 45·1 | 45·3 | 45.5 | 47.7 | 144.9 |
| 2 | 45.3 | 44.2 | 43.9 | 43.9 | 45.0 | 43.9 | 43.1 | 43.2 | 43 · 4 | 44 · 2 | 47 . 0 | 47.8 | 51.5 | 54 · 0 | 54 · 9 | 56 · 3 | 61.7 | 62.1 | 58.6 | 59.4 | 45 · 1 | 44.9 | 41.2 | 33.7 | 48.3 | 158 · 3 |
| 3 | 39.8 | 42.6 | | | 41 · 2 | 39.5 | 41 · 7 | 42.6 | | 43.3 | | 50.5 | 51.8 | 51 · 8 | | | 51 · 3 | | 52 · 3 | | 44 · 3 | | 43 · 4 | 36 · 9 | 45.8 | 99.0 |
| 4 | 35 · 4 | 40.9 | | 42.3 | 40.8 | 46 · 7 | 40.9 | 42.0 | 43.0 | 47.1 | | | 50.1 | | 49.4 | 48.8 | 48 · 4 | | 52 · 7 | | 47.3 | | | 45.1 | 45.3 | 86 · 7 |
| 5 | 45.3 | 45.3 | 44 · 6 | 44 · 8 | 43.9 | 43.6 | 43.1 | 43.9 | 44 · 7 | 43.1 | 48 • 4 | 49.9 | 56.6 | 59 · 7 | 59 · 7 | 58 · 2 | 53 · 8 | 51 · 9 | 51 · 8 | 51 · 3 | 48 · 4 | 43 · 4 | 32.3 | 31 · 5 | 47.5 | 139 · 2 |
| 6 | 35 · 2 | 34 · 6 | 39.0 | | 33 · 7 | 34 · 0 | 39 · 5 | 46 · 3 | 48 · 1 | 43.8 | | | 50.8 | | 54 • 4 | | | | 50 · 7 | 47 · 2 | 45.3 | 45.3 | 45 · 2 | 45.0 | 45.4 | 90.6 |
| 7 q | 43.3 | 44 · 1 | 46 · 5 | 47.5 | 45.7 | 45.7 | 45.7 | 46 · 0 | 44.6 | 43.5 | | 47.0 | 48.1 | 49.0 | | 49.0 | | | 46 · 5 | 46 · 5 | 45.9 | 45.7 | 45.7 | 45.7 | 46 · 3 | 111-1 |
| 8 | 45.6 | 45.5 | 45 · 7 | 45.7 | 45.3 | 45.1 | 44 · 1 | 44 · 9 | | | 44 · 8 | 49.2 | 51.0 | | 51 · 6 | 50.8 | 50.0 | | | | 46 · 9 | 45.5 | 45.3 | 45.2 | 47.1 | 129 · 2 |
| 9 9 | 41 · 4 | 40.2 | | 43.9 | 44 · 3 | | 43.8 | 43.6 | | | 44.6 | 47.0 | 49.4 | | 50.1 | | 50.3 | | | 46.9 | 46 · 5 | 46 · 5 | 45.9 | 46 · 5 | 46 1 | 105 · 4 |
| 10 q | 46 · 5 | 46 · 3 | 46 · 9 | 47 · 7 | 47 · 1 | • • • | 46 · 1 | 45.8 | 44 · 8 | 44 · 6 | | 50 · 1 | 50.9 | | 50.6 | 48.7 | 47 · 5 | 46 · 7 | 46 · 7 | 46 · 2 | 46 · 0 | 45.5 | 45.3 | 45.3 | 47.0 | 129 · 1 |
| 11 | 46 · 0 | 46 · 5 | 46 · 2 | 45.8 | 45.7 | 45.5 | 45.1 | 44 · 6 | 44 · 1 | 44 · 1 | | 46 · 9 | 48.7 | 49.6 | 49.8 | 49.4 | 49.7 | 50.5 | | 45.7 | 43 · 3 | 39 • 4 | 42.4 | 44 · 6 | 46 · 3 | 110-1 |
| 12 | 42.2 | | 38 · 3 | 45.5 | 46 · 5 | 46 · 2 | 45.5 | 44 · 1 | 43.4 | 44.0 | | 47.5 | 48.9 | | 49.6 | 48.7 | | 46 · 8 | | 46 · 1 | 45.7 | | 45.5 | 45.3 | 45.4 | 90 · 4 |
| 13 | 45.5 | 45.5 | | 45.7 | 45.7 | 45.5 | 45.3 | 45.1 | 44.3 | 43.8 | 44 · 8 | 47.0 | 48.9 | 49.4 | 49.7 | 49.1 | 47.7 | 46 · 5 | | | 47 - 1 | 41.7 | 25.9 | 25.8 | 44.6 | 70.5 |
| 14 d | 32.9 | 43·1 43·3 | 44·3 44·0 | 40·5 44·2 | 36·4 43·4 | 43·1 43·7 | 47·1 43·6 | 45.5 | 45·3 43·6 | 46·0 43·8 | | 52·0 45·8 | 53·9 48·4 | 55·5 51·3 | 56·1 53·7 | 57.5 | 52.7 | 50·1 39·5 | 50.8 | 49.0 | 27.5 | 37.9 | 34.5 | 37.4 | 45.3 | 87 · 1 |
| 15 | 42 · 2 | | | | | | | 43.6 | | | | | | | | 49.7 | - | | | 47 · 7 | 47.0 | 46 · 5 | 46.0 | 44 · 3 | 45.7 | 96 · 4 |
| 16 d | 41 · 4 | 45.7 | 37 · 9 | 38.6 | 40.4 | 43.0 | 41.3 | 41.9 | 42.1 | 43.3 | | 50.6 | 48.7 | 52.9 | 54.6 | 55.5 | 49.2 | 50 · 1 | 47.5 | 47.5 | 46 · 5 | 44.6 | 49.4 | 46 · 0 | 46 · 1 | 106 · 4 |
| 17 d | 42.3 | 42.5 | 40.4 | 41.7 | 42.2 | 42.9 | 45.0 | 46 1 | 43.9 | 46.9 | | 52 · 3 | 53.1 | 52.8 | 52.5 | 49.9 | 50.0 | 54 · 9 | 53.0 | 54 · 2 | 52 · 1 | 46.0 | | 37.6 | 47.1 | 131 · 2 |
| 18 d 19 | 36·4 40·1 | 40·0 43·6 | 40·2 43·3 | 39·2 42·7 | 37·6 43·3 | 48·2 43·1 | 52·7 43·2 | 47·1 44·1 | 45·1 46·5 | 48·6 46·7 | | 52·5 50·6 | 52·7 49·4 | 51·8 49·0 | 49·7 48·9 | 48·6 50·6 | 46·2 49·7 | 46·1 38·8 | 37·4 31·1 | | 44·6 33·1 | 45.3 | 44.6 | 41.7 | 45.1 | 81 · 8 |
| 20 | 28 · 1 | 44.9 | 33 · 1 | 39.1 | 39.8 | 43.3 | 46 · 2 | 46.8 | 46.7 | 47.2 | | 48.8 | 49.4 | 49.0 | 49.8 | 49.4 | 43.6 | 38·8 44·9 | 46.0 | | 45.5 | 26·0 44·8 | 34 · 4 40 · 2 | 45.5 | 42.6 | 23 · 5 |
| | | | | | | | | | | | | | 1 | | | | | | | | | | | 45.1 | 44.4 | 66 5 |
| 21 d | 43.1 | 43.4 | 46.8 | 43.4 | 43.5 | 41·0 44·0 | 46·0 44·0 | 48 · 8 | 46.5 | 48.0 | | 48.9 | 49.5 | 50.1 | 49.4 | 47.7 | 41.1 | 38.6 | 46.6 | 44.5 | 36 · 7 | 42.0 | 44 · 2 | 44.9 | 45.1 | 82.6 |
| 22 | 45.0 | 45·5 44·8 | 45·0 46·2 | 44·9 43·1 | 44·9 43·9 | 45.5 | 46 · 4 | 44·7 45·2 | 44·6 44·1 | 44·5 43·9 | | 48·5 47·9 | 49.4 | 48·6 49·6 | 50·1 50·8 | 49·2 48·6 | 48·3 45·8 | 47·0 37·0 | | 45·5 46·5 | 34 · 6 | 40.5 | 44 · 1 | 45.6 | 45.5 | 92 · 0 |
| 23 24 g | 45·2 45·2 | 44.9 | 44.7 | 45.4 | 46.1 | 46.0 | 45.2 | 44.9 | 44.6 | 43.9 | - | 47.1 | 49.2 | | 50.0 | 48.4 | 47.2 | | 46 · 6 | | 46.2 | 43·0 46·0 | 43·2 45·1 | 44.9 | 45.5 | 92.0 |
| 25 q | 43.0 | 43.4 | 44 · 2 | 44 · 1 | 44.3 | 44 · 1 | 43.4 | 43.0 | 42.6 | 42.9 | | 47.5 | 49.4 | 51.5 | 51 · 3 | 49.4 | 47.8 | 47.7 | | 46.6 | 46.6 | 45.2 | 43.8 | 45·1 45·2 | 46.3 | 110.5 |
| - 1 | | | | | | | | | | | | | 1 | | | | | | | | | | | | 45 8 | 98 · 5 |
| 26 27 | 45·5 40·5 | 45·5 40·0 | 45·1 40·7 | 45·0 43·1 | 44·5 44·2 | 44·1 41·7 | 43·4 40·7 | 43·0 41·6 | 43·0 42·7 | 43·3 43·1 | 45·7 46·5 | 49·5 50·7 | 50.5 | 51·9 56·6 | 52·2 53·7 | 52·7 51·8 | 52·5 48·2 | 50·9 47·7 | 39.7 | 47·7 44·1 | 46·7 46·5 | 46.0 | 44.3 | 43.4 | 46.9 | 125 · 3 |
| 28 | 45.3 | 45.8 | | 45.3 | 44 • 4 | | 44.0 | 43.9 | 43.6 | 44 1 | | 49.3 | 52.3 | 52.8 | 52.3 | 49.8 | 47.9 | 48.7 | | 47.1 | | 44·6 45·8 | 44·1 45·3 | 45.8 | '' ' | 91 · 5 |
| 29 | | | | | 41.4 | | | 40.2 | | | 44 · 5 | | 51.7 | 51.6 | | | | | 48-9 | | | | | 45·5 41·5 | 46·7 | 120.2 |
| | | <i>3,</i> 1 | ., 5 | | | | 10 5 | 10 2 | | 0 | 5 | ., 0 |) J. / | 31 0 | <i>3,</i> 3 | 50 5 | J | 50 5 | 10) | 75 1 | 7, , | 37 6 | 37 6 | 41.3 | 45.9 | 100.7 |
| Mean | 41.9 | 43 · 1 | 43.5 | 43.6 | 43.2 | 43.8 | 44 · 4 | 44 · 4 | 44.2 | 44.6 | 46 · 3 | 49.0 | 50.7 | 51.6 | 52 · 1 | 51 · 3 | 49-4 | 48 · 3 | 47 · 7 | 46 · 7 | 44.6 | 43.3 | 42.2 | 42.6 | 45.9 | 15 164 |
| Sum 200·0+ | 16.0 | 50.5 | 60.0 | 65·4 | 53 · 0 | 71 · 2 | 87 · 8 | 87 · 3 | 81 · 9 | 92 · 1 | 142.8 | 220.5 | 270 · 5 | 296 · 6 | 309 · 8 | 288 · 4 | 233·4 | 200 · 3 | 182 · 3 | 153 · 4 | 92.8 | 54 · 7 | 24 · 4 | 35.6 | | Grand Total 31970 · 7 |

3 LERWICK (Z) 47,000y (0.47 C.G.S. unit) + FEBRUARY 1950

| J 2 | 22411 2 022 | \- / | | | | | | | | | , | , (- | | | / | | | | | | | | | - | | |
|----------------------------------|--|--|--|--|---|--|---|--|---|---|---|--|--|--|---|--|---|--|--|--|--|--|--|--|--|---|
| | Hour 0-1 | G.M.T. 1-2 | 2-3 | 3-4 | 4-5 | 5-6 | 6-7 | 7-8 | 8-9 | 9-10 | 10-11 | 11-12 | 12-13 | 13-14 | 14-15 | 15-16 | 16-17 | 17-18 | 18-19 | 19-20 | 20-21 | 21-22 | 22-23 | 23-24 | Mean | Sum 6000+ |
| 1 2 3 4 5 | γ 286 291 302 244 309 | 287 294 305 267 296 | γ 287 294 304 263 301 | 287 293 292 285 301 196 | γ 285 296 270 292 303 236 | γ 276 296 282 260 302 | γ 279 296 297 272 302 274 | γ 283 296 302 285 299 | γ 288 298 308 294 303 268 | y 291 297 308 287 301 280 | γ 295 295 308 292 296 290 | 9 292 294 306 301 309 | 7 290 287 312 302 311 | γ 298 287 317 301 309 | 9 304 289 317 304 316 305 | γ 311 294 332 308 359 | γ 321 298 348 307 368 316 | γ 319 364 347 312 338 | 318 412 376 328 350 | γ 312 381 348 340 359 | 302 392 336 346 351 | γ 295 353 322 381 344 | γ 292 318 283 349 334 | 9 292 287 196 321 304 | γ 295 313 309 302 319 | 1090 1502 1418 1241 1665 |
| 6 7 q 8 9 q 10 q | 294 298 299 287 295 291 | 293 294 298 274 297 291 | 263 288 299 274 293 291 | 283 297 276 288 291 | 236 277 297 288 286 290 | 258 283 294 293 284 287 | 287 292 292 282 285 | 276 290 291 292 282 282 | 297 287 293 285 282 | 303 290 296 287 282 | 304 297 299 287 283 | 295 305 295 299 289 287 | 303 301 306 293 290 291 | 305 301 308 293 293 291 | 305 301 309 294 299 291 | 311 297 313 294 302 294 | 299 323 292 300 299 | 336 299 337 290 298 308 | 333 297 345 292 294 351 | 322 300 333 292 293 349 | 315 301 315 293 290 353 | 313 301 308 293 289 349 | 308 300 304 292 291 333 | 302 301 302 296 290 309 | 291 296 306 291 291 303 | 992 1107 1339 977 984 1260 |
| 11 12 13 14 d 15 | 289 292 226 298 | 262 291 239 295 283 | 259 293 222 301 240 | 275 292 197 304 263 | 283 291 232 304 280 | 287 290 251 301 284 | 290 284 257 301 284 | 288 284 280 299 287 | 290 282 284 298 287 | 295 282 287 298 280 | 294 284 287 298 271 | 293 283 294 298 275 | 293 280 296 294 280 | 298 282 307 301 283 | 295 285 331 325 306 | 298 289 358 341 356 | 297 297 294 364 338 338 | 294 293 360 360 321 | 293 291 381 349 313 | 291 297 416 347 306 | 335 335 360 320 304 | 291 315 261 305 311 | 292 272 283 299 251 | 292 266 294 297 | 289 289 294 311 286 | 930 947 1067 1471 874 |
| 16 d 17 d 18 d 19 20 | 298 209 290 280 163 | 264 309 290 171 | 286 214 293 181 | 294 150 292 243 | 295 187 292 240 | 292 188 292 266 | 292 220 289 288 | 289 257 289 295 | 277 282 288 294 | 271 297 290 297 | 276 299 293 296 298 | 282 301 296 299 312 | 289 308 296 300 | 303 319 296 305 309 | 315 314 302 305 326 | 318 324 316 312 332 | 311 332 325 327 | 317 330 340 321 | 392 362 340 310 | 389 362 354 306 | 373 312 335 303 | 369 304 237 304 | 356 300 256 275 | 290 281 247 263 | 306 285 297 278 | 1349 842 1128 664 |
| 21 d 22 23 24 q 25 q | 276 290 290 297 292 | 282 289 290 297 292 | 255 290 288 294 290 | 228 291 286 290 291 | 239 291 286 289 290 | 261 291 284 282 288 | 270 292 277 280 286 | 266 288 279 282 286 | 277 290 284 284 290 | 281 291 288 285 290 | 290 288 284 286 | 292 289 288 286 | 311 295 290 284 284 | 290 295 283 286 | 292 300 289 287 292 | 294 299 292 290 | 349 297 316 292 292 | 335 297 332 291 289 | 295 312 289 288 296 | 305 298 299 289 288 | 294 314 296 290 289 | 288 288 298 291 295 | 292 296 297 295 279 | 292 296 297 294 278 | 291 293 294 289 288 | 988 1037 1060 931 912 |
| 26 27 28 29 | 284 259 270 279 | 290 247 287 262 | 290 230 291 280 | 290 203 291 276 | 290 235 289 284 | 289 237 288 282 | 288 225 288 265 | 288 241 286 261 | 290 265 291 277 | 286 277 292 284 | 281 281 291 287 | 280 288 287 284 | 284 288 288 282 | 286 294 295 287 | 309 295 292 | 298 309 298 316 | 304 309 295 315 | 298 305 295 309 | 328 294 315 | 293 315 293 313 | 290 302 291 346 | 292 300 289 357 | 294 271 288 342 | 287 257 286 341 | 290 274 290 297 | 960 575 958 1136 |
| Mean | 279 | 281 | 274 | 27 1 | 276 | 278 | 281 | 284 | 287 | 289 | 291 | 293 | 294 | 297 | 303 | 312 | 316 | 318 | 326 | 324 | 319 | 308 | 298 | 284 | 295 | 0 |
| Sum 7000+ | 1078 | 1136 | 954 | 845 | 1017 | 1068 | 1134 | 1223 | 1333 | 1393 | 1430 | 1499 | 1528 | 1622 | 1789 | 2055 | 2166 | 2235 | 2454 | 2390 | 2239 | 1943 | 1642 | 1231 | | Grand Total 205,404 |

DAILY EXTREMES OF TERRESTRIAL MAGNETIC ELEMENTS, MAGNETIC CHARACTER FIGURES (K AND C) AND TEMPERATURE IN MAGNET HOUSE

| | DAI | LYEX | IKEME | SUFI | EKKES | IKIAL I | indivisi . | IC EUD | MENIO, | MIT GIVE | | | DK 11 | CORLS | (a nii | D C) AND LEMPE | MIUKE IN | MAGNEI A | OUSE |
|---|--|--|---|--|--|--|--|--|--|---|---|---|---|--|---|---|--|--|---|
| 4 | LERWIC | K | | | | | | | | | | | | | | | | FEBRU | ARY 1960 |
| | | | | | | TERR | ESTRIAL | MAGNET | IC ELEM | ENTS | | | | | | | | Magnetic | T |
| | | Horiz | ontal | force | | | De | clinati | on | | | Vert | ical f | orce | | 3-hr. range indices | Sum of K | character of day, C | Temperature in magnet house |
| | Maxii 14,00 | | | imum 007 + | Range | Maxi 9° | mum + | Min: 9° | imum + | Range | Maxi 47,00 | | | imum 00y+ | Range | K | indices | (0-2) | 200 + |
| 1 2 3 4 4 5 6 7 9 9 9 10 9 11 12 13 14 d 15 16 d d 19 20 d 22 23 24 9 25 9 26 | h. m. 05 27 19 42 17 51 19 10 16 02 16 27 07 22 08 06 18 25 04 31 17 03 19 43 21 08 20 04 23 12 22 17 22 11 00 36 19 15 52 25 7 20 54 21 03 16 05 66 22 48 15 24 | y + y 575 890 568 8607 559 569 569 634 734 569 670 603 587 559 561 565 569 573 573 573 573 573 573 573 573 573 573 | γ 507 478 419 503 497 336 519 503 527 534 521 516 269 351 516 480 494 368 404 368 404 368 525 518 525 518 526 525 | h. m. 14 00 22 51 23 19 13 02 11 39 02 57 12 33 10 51 12 28 21 02 13 13 13 23 45 00 01 16 00 02 11 24 00 00 00 13 23 11 30 12 30 11 30 12 30 11 30 12 31 13 13 13 13 13 14 5 16 00 17 10 18 10 19 1 | 7 688 412 1499 104 94 251 39 35 47 44 365 383 33 120 102 302 199 212 80 56 42 28 43 | 13 08 19 12 18 06 12 40 15 17 16 49 14 50 11 57 11 57 18 29 13 35 21 10 15 45 14 40 15 18 03 06 19 11 20 01 37 07 14 11 54 14 00 13 48 15 25 | 57.6 66.9 64.2 55.1 65.5 58.6 50.1 54.2 54.2 54.2 54.6 60.1 55.5 67.2 57.5 52.2 55.1 52.2 53.1 52.3 50.7 52.5 55.1 | 31·0 25·6 30·0 27·0 31·3 42·2 38·3 43·7 37·5 29·7 19·4 7·5 37·0 33·8 32·6 29·0 18·8 17·7 27·6 30·3 34·1 43·2 43·5 44·2 44·2 45·2 46·2 47·5 4 | 08 28 23 05 23 47 00 00 00 22 54 05 14 00 15 10 08 01 05 09 30 21 51 01 26 23 52 20 30 17 27 19 05 20 51 16 56 20 20 17 19 09 17 22 44 23 23 | 14·6 35·9 38·6 25·1 38·5 12·4 12·5 10·5 16·7 20·5 35·2 52·6 18·5 33·4 33·4 33·4 37·4 24·6 22·8 18·2 7·5 13·0 | h. m. 16 31 18 36 18 18 18 21 21 16 14 17 33 11 48 18 14 11 10 15 24 18 35 00 02 20 55 20 04 17 23 15 45 18 39 18 59 17 44 16 46 16 52 20 18 17 17 17 17 18 16 16 16 52 21 36 16 40 | 7 324 439 393 387 340 307 349 303 304 367 364 462 369 375 430 392 376 335 325 339 370 325 339 307 | γ 275 263 156 213 292 275 283 257 280 281 1248 293 155 173 128 175 2281 277 277 277 277 277 275 | h. m. 05 20 22 47 23 12 20 00 77 10 40 03 30 04 31 08 08 01 42 06 25 10 43 02 00 02 256 03 33 01 51 23 38 00 03 24 24 00 00 28 03 09 21 18 06 52 22 34 24 00 | 7 49 176 237 186 95 181 32 66 46 24 86 56 56 57 274 76 220 257 264 201 198 158 44 621 28 | 0,1,1,2,3,2,2,1 1,1,0,2,3,4,6,4 2,2,2,3,3,3,4,5 3,3,3,2,2,2,4,4 1,0,1,3,3,3,2,4 5,5,3,2,2,3,2,1 2,2,1,1,1,0,0 0,0,1,2,2,2,1 3,2,0,1,0,1,1,1 0,1,1,2,1,1,0 0,0,2,1,2,3,3 3,2,1,1,1,1,0,0 0,0,2,1,1,3,6 5,3,3,2,3,3,6,3 1,0,1,3,3,3,1 4,2,2,3,4,4,2,5 4,2,3,2,3,3,4,4 6,4,4,2,2,3,4,2 2,1,2,2,4,4,5 5,3,2,1,2,3,1,3 3,3,3,3,2,4,3,3 1,1,2,2,2,2,3,3 1,2,1,2,2,4,4,5 5,3,2,1,2,3,1,3 1,2,2,2,2,3,3 1,2,1,2,2,3,4,2 1,1,0,1,1,1,0 1,0,1,2,1,1,1,2 | 12 21 24 23 17 23 7 10 9 7 11 9 14 28 13 26 25 27 22 20 24 16 15 6 9 | 0 1 1 1 1 0 0 0 0 0 0 1 1 1 1 1 1 1 | *A. *77.5 *77.9 *78.4 *78.8 *78.8 *78.9 *78.8 *78.7 *79.0 *79.1 *78.4 *77.6 *77.7 *77.6 *77.7 *77.6 *77.7 *77.7 *77.9 |
| 27 28 29 | 07 04 23 37 06 48 | 580 566 576 | 518 | 04 08 11 08 10 53 | 94 48 66 | 13 15 13 31 14 32 | 57·8 53·8 59·3 | 32·8 42·5 33·6 | 18 40 08 04 21 43 | 25·0 11·3 25·7 | 18 37 15 30 21 55 | 341 301 375 | 177 254 246 | 03 05 00 00 06 51 | 164 47 129 | 4,3,3,3,2,2,3,3 3,1,2,2,1,1,1,0 3,3,3,2,2,2,3,3 | 23 11 21 | 1 0 1 | 78·0 78·2 78·8 |
| Mean | | 597 | 474 | | 123 | | 56 · 4 | 32.5 | | 23 · 8 | | 354 | 231 | | 122 | ~ | - | 0.55 | 78.0 |

 $^{{\}it q}$ denotes an international quiet day and ${\it d}$ an international disturbed day.

| 1 LE | RWICK | (H) | | | | | | | | | 14, | 000γ (0 |)·14 C. | G . S. u | mit) + | + | | | | | | | | | MARC | н 1960 |
|------------|------------|---------------|------------|------------|------------|------------|-------------------|------------|-----------------|------------|------------|------------|------------|-----------------|------------|-----------------|------------------|-------------|------------|------------|------------|------------|------------------|-------------------|------------|----------------|
| | | G.M.T. 1-2 | 2-3 | 3-4 | 4-5 | 5-6 | 6-7 | 7-8 | 8-9 | 9-10 | 10-11 | 11-12 | 12-13 | 13-14 | 14-1 | 5 15-16 | 16-17 | 17-18 | 18-19 | 19-20 | 20-21 | 21-22 | 22-23 | 23-24 | Mean | Sum 11,000+ |
| 1 | γ 549 | γ 538 | γ 534 | γ 533 | γ 552 | γ 546 | γ 5 4 5 | γ 553 | γ 546 | γ 534 | γ 530 | γ 535 | γ 529 | γ 517 | γ 527 | γ 547 | γ 56 0 | γ 561 | γ 589 | γ 611 | γ 563 | γ 544 | γ 54 8 | γ 5 5 0 | γ 548 | 2141 |
| 2 d | 543 | 523 | 513 | 540 | 536 | 531 | 535 | 539 | 511 | 515 | 517 | 520 | 510 | 516 | 515 | 547 | 563 | 558 | 571 | 551 551 | 551 548 | 548 546 | 547 547 | 538 555 | 535 541 | 1838 1992 |
| 3 d | 531 543 | 544 534 | 542 543 | 538 545 | 531 545 | 541 547 | 549 544 | 525 543 | 535 537 | 519 533 | 509 527 | 528 516 | 522 516 | 554 520 | 555 563 | 545 596 | 543 577 | 568 585 | 566 546 | 543 | 552 | 543 | 540 | 530 | 545 | 2068 |
| 5 | 544 | 543 | 541 | 537 | 532 | 540 | 550 | 532 | 529 | 534 | 528 | 527 | 527 | 534 | 525 | 552 | 560 | 564 | 569 | 567 | 559 | 527 | 534 | 563 | 542 | 2018 |
| 6 | 547 | 544 | 544 | 548 | 542 | 548 | 562 | 556 | 548 | 536 | 521 | 532 | 531 | 535 | 539 | 550 | 560 | 547 | 555 | 548 | 544 | 542 | 550 | 548 | 545 | 2077 |
| 7 q | 548 | 549 | 551 | 551 | 556 | 558 | 558 | 555 | 547 | 532 | 523 | 519 | 523 | 533 | 540 | 544 | 544 | 549 | 557 | 559 | 562 | 559 | 560 | 559 | 547 | 2136 |
| 8 | 560 | 559 553 | 560 555 | 562 554 | 565 554 | 569 560 | 546 555 | 553 554 | 555 549 | 536 539 | 522 519 | 515 516 | 518 518 | 515 527 | 529 545 | 522 530 | 523 543 | 533 557 | 541 534 | 547 537 | 556 559 | 554 558 | 551 555 | 549 555 | 543 545 | 2040 2078 |
| 10 | 552 556 | 554 | 559 | 556 | 558 | 556 | 556 | 556 | 523 | 466 | 483 | 503 | 510 | 507 | 522 | 536 | 548 | 539 | 555 | 543 | 543 | 547 | 552 | 553 | 537 | 1881 |
| 11 d | 545 | 540 | 546 | 545 | 549 | 534 | 559 | 559 | 542 | 527 | 524 | 481 | 501 | 518 | 534 | 541 | 587 | 596 | 544 | 535 | 547 | 541 | 538 | 535 | 540 | 1968 |
| 12 | 533 | 535 | 540 | 542 | 545 | 547 | 548 | 537 | 528 | 513 | 513 | 515 | 513 | 520 | 531 | 537 | 541 | 543 | 548 | 554 | 553 | 553 | 556 | 549 | 537 | 1894 |
| 13 q | 545 | 545 | 544 | 549 | 552 | 549 | 555 | 542 | 533 | 518 | 504 | 504 | 510 | 520 531 | 530 | 542 557 | 545 | 556 | 553 | 557 | 556 | 550 567 | 559 566 | 556 571 | 541 | 1974 2186 |
| 14 15 | 550 562 | 554 562 | 552 559 | 551 558 | 552 555 | 558 557 | 556 559 | 551 556 | 543 547 | 520 534 | 514 526 | 520 524 | 523 539 | 547 | 539 566 | 588 | 551 597 | 561 616 | 564 699 | 567 617 | 568 579 | 595 | 579 | 482 | 549 567 | 2603 |
| 16 d | 318 | 189 | 216 | 293 | 284 | 336 | 525 | 542 | 513 | 514 | 509 | 509 | 506 | 498 | 513 | 521 | 568 | 564 | 610 | 672 | 566 | 538 | 399 | 480 | 466 | 183 |
| 17 | 530 | 501 | 512 | 495 | 517 | 543 | 546 | 532 | 507 | 520 | 511 | 505 | 502 | 514 | 524 | 533 | 550 | 548 | 547 | 546 | 551 | 543 | 544 | 547 | 528 | 1668 |
| 18 | 545 | 541 | 529 | 540 | 540 | 539 | 531 | 553 | 543 | 531 | 527 | 521 | 521 | 516 | 531 | 542 | 546 | 551 | 551 | 553 | 555 | 558 | 563 | 558 | 541 | 1985 |
| 19 20 q | 545 554 | 553 547 | 546 548 | 545 548 | 549 547 | 553 543 | 556 554 | 556 553 | 546 546 | 522 536 | 512 524 | 503 524 | 513 529 | 522 536 | 530 542 | 543 546 | 521 548 | 543 553 | 551 557 | 554 558 | 553 561 | 556 561 | 556 559 | 556 559 | 541 547 | 1984 2133 |
| 21 | 559 | 557 | 556 | 552 | 555 | 557 | 559 | 556 | 547 | 539 | 528 | 521 | 530 | 530 | 531 | 537 | 548 | 553 | 554 | 557 | 558 | 552 | 552 | 554 | 548 | 2142 |
| 22 q | 550 | 545 | 546 | 550 | 554 | 558 | 556 | 545 | 541 | 529 | 518 | 521 | 526 | 524 | 539 | 546 | 551 | 556 | 559 | 561 | 560 | 561 | 561 | 560 | 547 | 2117 |
| 23 q | 564 | 558 | 559 | 556 | 555 | 553 | 559 | 554 | 543 | 531 | 515 | 514 | 522 | 532 | 541 | 552 | 554 | 556 | 559 | 561 | 564 | 565 | 570 | 559 | 550 | 2196 |
| 24 25 | 555 553 | 541 555 | 553 555 | 568 558 | 568 560 | 568 565 | 566 567 | 558 564 | 545 556 | 535 539 | 522 525 | 520 528 | 523 531 | 533 532 | 541 539 | 578 543 | 561 546 | 562 554 | 574 571 | 575 565 | 559 562 | 569 561 | 568 563 | 558 565 | 554 552 | 2300 2257 |
| 26 | 531 | 547 | 549 | 554 | 554 | 555 | 560 | 555 | 556 | 524 | 522 | 526 | 531 | 530 | 539 | 546 | 551 | 556 | 567 | 566 | 567 | 565 | 565 | 564 | 549 | 2180 |
| 27 | 562 | 558 | 563 | 561 | 548 | 553 | 559 | 559 | 538 | 523 | 512 | 505 | 509 | 518 | 526 | 533 | 542 | 550 | 559 | 566 | 568 | 567 | 566 | 563 | 546 | 2108 |
| 28 | 560 | 560 | 559 | 559 | 557 | 566 | 566 | 560 | 546 | 522 | 509 | 500 | 504 | 528 | 539 | 559 | 574 | 541 | 568 | 597 | 564 | 556 | 556 | 523 | 549 | 2173 |
| 29 | 434 | 426 | 482 | 501 | 530 | 543 | 551 | 525 | 511 | 525 527 | 514 | 506 515 | 507 533 | 516 523 | 524 | 333 603 | 541 | 555 | 561 | 561 | 560 | 564 | 562 | 566 | 525 | 1598 |
| 30 | 521 | 561 | 547 | 551 500 | 551 523 | 545 523 | 546 | 548 504 | 541 489 | 527 492 | 510 480 | 430 | 526 | 523 | 560 564 | 603 633 | 642 1080 | 613 1010 | 642 816 | 622 838 | 597 734 | 545 | 473 | 511 | 555 | 2327 |
| 31 d | 504 535 | 513 530 | 491 532 | 537 | 539 | 543 | 522 552 | 548 | 537 | 525 | 516 | 513 | 519 | 525 | 537 | 551 | 570 | 574 | 575 | 572 | 565 | 403 550 | -2 530 | -306 526 | 534 542 | 1806 |
| Mean | 333 | | | 331 | | J73 | | | | J23 | | | 1 319 | 323 | 337 | JJ 1 | 3/0 | 3/4 | 3/3 | 312 | 303 | 330 | | 320 | | Grand Total |
| .5,000+ | 1593 | 1429 | 1494 | 1640 | 1716 | 1841 | 2100 | 1975 | 1641 | 1265 | 998 | 903 | 1103 | 1285 | 1643 | 2082 | 2665 | 2798 | 2837 | 2739 | 2519 | 2038 | 1437 | 1310 | | 403,051 |

| 2 LE | ERWICK | (D) | | | | | | | | | | 9 | · + | | | | | | | | | | | | MAR | CH 1960 |
|----------------|-------------|---------------|--------|---------|--------|--------|--------|--------|---------|---------|--------|---------------|---------|---------|---------|---------|---------|--------|--------------|---------|---------|---------------|--------|----------|--------|------------------------|
| | Hour 0-1 | G.M.T. 1-2 | 2-3 | 3-4 | 4-5 | 5-6 | 6-7 | 7-8 | 8-9 | 9-10 | 10-11 | 11-12 | 12-13 | 13-14 | 14-15 | 15-16 | 16-17 | 17-18 | 18-19 | 19-20 | 20-21 | 21-22 | 22-23 | 23-24 | Mean | Sum 800·0+ |
| | | • | • | , | , | , | , | , | , | , | , | • | · | , | , | , | , | , | -, | , | · · | , | , | -,- | 1. | |
| 1 | 44.2 | 43.2 | 41.8 | 40.5 | 39 · 1 | 38 · 5 | 43.7 | 42 · 1 | 44 · 1 | 43 · 9 | 46 · 1 | 50 · 1 | 51.6 | 51.2 | 51.9 | 53.5 | 53 · 8 | 51 · 8 | 57 • 4 | 49.9 | 37 · 1 | 38 · 7 | 39 · 4 | 44 · 0 | 45.7 | 297 · 6 |
| 2 d | 43.6 | 39 · 5 | 25 · 7 | 39 · 4 | 40 · 1 | 41 · 4 | 43 · 2 | 43.6 | 45 · 3 | | 47 · 1 | 52 · 1 | 53.5 | 54 · 7 | 51.7 | 52.5 | 52.6 | 46 · 9 | 46.7 | 45.0 | 45.0 | 43.7 | 33 · 8 | 40.5 | 44.8 | 275.4 |
| 3 d | 40.6 | | | 36 · 8 | 42 · 1 | 40 · 0 | | | 48 · 3 | | 47 · 7 | 52 · 5 | 53.5 | 55 · 1 | 56 · 5 | 55.6 | 49 • 4 | | 42.7 | 46.0 | 43.9 | 44 · 1 | 44 · 0 | 36 · 4 | 45.7 | 296 · 2 |
| 4 | 39 · 2 | | | 41.2 | 43.5 | 43 - 4 | 42.2 | | | | | 49.6 | 51.8 | 54 · 7 | 59.7 | 52.5 | 57 · 5 | | 50.0 | 45 · 8 | 44 · 2 | 45 · 9 | 40.0 | 39 · 3 | 46.5 | 315.6 |
| 5 | 40.1 | 40.5 | 41 · 4 | 41.1 | 42.2 | 41 · 2 | 39 · 4 | 41.3 | 46 · 3 | 45 · 5 | 47 · 7 | 50.8 | 52.7 | 56 · 2 | 53 · 5 | 53.0 | 52.7 | 51 · 2 | 51.5 | 50 · 2 | 44.0 | 47 · 0 | 41.9 | 39.0 | 46.3 | 310.4 |
| 6 | 41.0 | 42.8 | 42.2 | 42.0 | 44 • 0 | 45 · 9 | 44 · 3 | 43.3 | 42.9 | 44 · 2 | 45.3 | 47 · 7 | 51.7 | 52.6 | 51.7 | 49.8 | 48.9 | 47 · 4 | 46.0 | 41.4 | 33.7 | 43 · 1 | 45 · 1 | 43.9 | 45.0 | 280 · 9 |
| 7 q | 43.9 | 45 · 1 | 45.0 | 45 · 1 | 44 · 2 | 43 • 9 | 43.8 | 42.6 | | 42.0 | 44.7 | 48.9 | 51.8 | 53 · 2 | 53 · 1 | 50 - 7 | 48.6 | 48 - 0 | 48 · 1 | 47 · 4 | 47.0 | 46.0 | 45.0 | 45.3 | 46.5 | 314 · 8 |
| 8 | 46.0 | 45 · 7 | | 45 · 4 | 45.0 | 43 · 1 | | 49 · 8 | | | | 50 · 7 | 56.5 | 56 · 7 | 56 · 5 | 53.0 | 49 · 8 | 47 · 6 | 46.3 | 45.9 | 46.0 | 45.6 | 43 · 4 | 39.3 | 47.5 | 338 · 8 |
| 9 | 42.2 | | | 45 · 9 | 45.9 | 43.9 | | 43.9 | | | | | 52 · 1 | | 53.7 | | 48 · 8 | 47 · 7 | 47.0 | 46 · 7 | 46.3 | 45 • 4 | 44 • 9 | 45 · 8 | 46.6 | 317 · 3 |
| 10 | 46.3 | 45 · 9 | 45 · 6 | 44 · 8 | 43.6 | 43 · 1 | 42.7 | 43 · 1 | 42 · 1 | 46 · 3 | 51.3 | 51.0 | 53.9 | 54 · 2 | 52 · 9 | 52 · 8 | 49 · 7 | 45.9 | 45 · 1 | 32 · 4 | 39.8 | 43 · 3 | 45 · 3 | 46 · 4 | 46.1 | 307 · 5 |
| 11 d | 45 - 2 | 47 · 8 | 41 · 2 | 42.7 | 43.3 | 49 · 1 | 46 · 7 | 46.0 | 44 · 9 | 44 · 2 | 47.5 | 47 - 7 | 50.8 | 53.0 | 53.8 | 50.8 | 49 · 4 | 44 · 6 | 39 · 1 | 44 . 9 | 42.9 | 44 · 1 | 45.0 | 47 · 0 | 46.3 | 311.7 |
| 12 | 47 - 1 | 48.9 | 46 · 3 | 45.0 | 42.7 | 42 · 3 | 42.3 | 42.9 | 44 · 1 | 45 · 0 | 45.9 | 49 · 2 | 51.7 | 51.9 | 50.8 | 49.9 | 45.7 | 43.8 | 46.9 | 46.0 | 46.0 | 44 . 8 | 41 · 1 | 42.5 | 45.9 | 302 · 8 |
| 13 q | 43.8 | 44 · 2 | | 45.0 | 44.5 | 44 · 2 | | 41 · 7 | 40·1 | 40 · 2 | 42 · 2 | 46 · 8 | 51.1 | 53.0 | 51.8 | 49.6 | 46 · 2 | 45.0 | 42.3 | 44 · 4 | 43.5 | 44 · 4 | 43.2 | 45 - 1 | 45 · 1 | 282 · 2 |
| 14 | 45.9 | | | 44 · 2 | 44 · 1 | 44 · 1 | | 42·1 | 40 · 8 | 42 · 7 | 46 · 2 | 48 · 7 | 51.8 | 52.8 | 51.7 | 51.6 | 48 · 7 | 48.3 | 47 · 9 | 47 • 9 | 47 · 6 | 46.5 | 45.9 | 45.5 | 46.6 | 318.0 |
| 15 | 45.0 | 44 · 5 | 44 · 2 | 44 · 1 | 43.9 | 43 · 6 | 42.7 | 41 · 1 | 40.0 | 40 · 2 | 42.8 | 47 · 1 | 52.7 | 55 · 5 | 58 · 1 | 60 · 2 | 64 • 9 | 59 · 7 | 60 · 5 | 41.5 | 49.0 | 45.8 | 43.8 | • 35 • 3 | 47 · 8 | 346 · 2 |
| 16 d | 19-1 | 16.7 | -9.2 | -17 · 1 | 11.7 | 17 · 5 | 41.4 | 40.7 | 41 · 1 | 46.6 | 47.7 | 48.9 | 52 · 1 | 51.7 | 51.9 | 49 · 8 | 48.9 | 46 · 1 | 45.5 | 41.1 | 33 · 3 | 37 · 9 | 36 · 4 | 48 - 9 | 35.4 | 48 · 7 |
| 17 | 42.2 | 46 · 1 | 45 · 2 | 45.0 | 46.0 | 42 · 2 | 41 · 1 | 40.3 | 41 · 2 | 40.5 | 44 · 6 | 48 · 4 | 51.1 | 52.4 | 53.0 | 52.6 | 48.3 | 47.0 | 44 · 8 | 41.7 | 34 · 8 | 38 · 7 | 43.3 | 45 · 3 | 44.8 | 275.8 |
| 18 | 46 · 1 | | | 44 · 9 | 41.0 | 43 · 3 | 45.6 | 42.9 | 42.0 | 40 · 7 | 42.9 | 46 · 7 | 49.8 | 51 · 1 | 50·1 | 48 · 2 | 46.1 | 45 · 2 | 45.8 | 45.6 | 45.6 | 45 · 1 | 43 · 6 | 37 · 8 | 45.3 | 286 · 2 |
| 19 | 46 · 4 | | | 42 · 1 | 42 · 9 | 43 · 1 | 42 · 9 | 42 · 1 | 40 · 7 | 44 · 1 | | 48.8 | 52.5 | 54 · 9 | 54 · 7 | 54 · 2 | 50.8 | 47 · 2 | 45.7 | 44.8 | 44 · 1 | 45.9 | 46 · 1 | 46 • 0 | 46 · 4 | 314 · 2 |
| 20 q | 45.9 | 46 · 2 | 45 · 0 | 44 · 0 | 44 · 1 | 44 · 4 | 43.8 | 41 · 4 | 40.3 | 41.5 | 43.6 | 46 · 7 | 49.3 | 50 · 8 | 50.0 | 48 · 2 | 47 · 1 | 46 · 0 | 46 ·0 | 46 • 0 | 45 · 5 | 45 · 3 | 45 · 7 | 45.9 | 45.5 | 292 · 7 |
| 21 | 44.9 | 45.0 | 44.7 | 43.9 | 43.8 | 42.7 | 42 · 1 | 40.3 | 39.2 | 41 · 1 | 42.8 | 45.9 | 51.3 | 50.8 | 50.9 | 49.9 | 48 · 6 | 47.0 | 46 · 5 | 45.9 | 45.3 | 45 · 3 | 45.3 | 45 · 1 | 45.3 | 288 · 3 |
| 22 g | 44 · 7 | 44 · 7 | 44 · 3 | 43.9 | 44.9 | 42 · 7 | 41.9 | 40.5 | 39 · 9 | 40 · 2 | 41.8 | 46 · 1 | 50⋅8 | 51 · 7 | 50.8 | 49.8 | 48 · 8 | 47 - 7 | 46.9 | 46.9 | 45.8 | 45.4 | 45 · 1 | 47.5 | 45.5 | 292.8 |
| 23 q | 48 · 1 | 45.8 | 44 · 1 | 43.0 | 43.0 | 43 · 2 | 43.0 | 41.8 | 41.6 | 42 · 4 | 45.0 | 48 · 8 | 52.5 | 54.7 | 53.5 | 51.8 | 49.9 | 48 · 1 | 47 · 7 | 47 · 1 | 46.9 | 46.3 | 39.2 | 41.1 | 46.2 | 308.6 |
| 24 | 42 · 1 | | | 39 · 5 | 40.0 | 39.0 | 40.5 | 40 · 6 | 42 · 1 | 43 · 7 | 45 · 5 | 48 · 7 | 51.1 | 52 · 4 | 52.0 | 53.6 | 50.3 | 47 · 8 | 49.0 | 43 · 7 | 43.7 | 45.5 | 47 · 1 | 45.5 | 45.8 | 299 · 2 |
| 25 | 45.3 | 44 · 6 | 44 · 8 | 44 · 7 | 43.5 | 42 · 7 | 42.6 | 41.1 | 41 · 4 | 41.7 | 44 · 3 | 47 · 8 | 51 · 1 | 52.0 | 49.6 | 47 · 9 | 45 · 8 | 44 · 5 | 44 · 4 | 44 · 3 | 45.0 | 45 · 0 | 45.6 | 40.0 | 45.0 | 279 · 7 |
| 26 | 38.0 | 39.5 | 44 · 4 | 42.6 | 42.0 | 41.6 | 40.6 | 39.9 | 40.5 | 42.7 | 43.8 | 47.6 | 50 · 2 | 52 · 1 | 49.9 | 49.2 | 46 · 6 | 47 - 2 | 46.6 | 45.8 | 46.2 | 46 · 2 | 46 · 0 | 44 · 8 | 44.7 | 274.0 |
| 27 | 44 · 4 | 44 · 3 | 43.8 | 41.7 | 42.6 | 42 · 7 | 41.5 | 39.0 | 38 · 7 | 40 · 1 | 43.8 | 48.6 | 52.8 | 53.8 | 53.3 | 51.2 | 49 - 2 | 47 · 4 | 46 · 7 | 46 · 4 | 46.2 | 46 · 4 | 46 · 1 | 45.6 | 45.7 | 296.3 |
| 28 | 45.0 | 44 • 0 | 43.6 | 43 · 1 | 42 · 4 | 41.6 | 42 · 1 | 41 · 4 | 40.6 | 42 · 4 | 46.8 | 54 · 8 | 55 · 2 | 55.2 | 54.8 | 54.6 | 53 · 1 | 48 - 1 | 48.2 | 48 - 1 | 31.0 | 31.5 | 38.6 | 39.0 | 45.2 | 285 · 2 |
| 29 | 36 · 7 | 28 · 2 | 36 · 9 | 35 · 4 | 39 · 3 | 42 · 4 | | 38.0 | 41.9 | 42.7 | 43.0 | 46 · 5 | 50 · 1 | 51 · 7 | 51 · 4 | 49.5 | 47 · 4 | 46 · 5 | 45.5 | 46.5 | 47.3 | 46 · 4 | 47.0 | 51.7 | 43.8 | 251 · 5 |
| 30 | 45 · 6 | 39 · 4 | 38 · 5 | 40.8 | 39 · 5 | 38 · 9 | 41 · 1 | 39.6 | 38 · 5 | 40 • 4 | 44 · 4 | 48 · 7 | 55 · 1 | 54 · 7 | 56 · 8 | 55·1 | 54 · 6 | 53 · 2 | 56 · 2 | 51.0 | 49.1 | 38 · 1 | 33 · 7 | 36.6 | 45.4 | 289-6 |
| 31 d | 30 · 1 | 23 · 2 | 23 · 4 | 27.3 | 34 · 4 | 34.6 | 38 · 8 | 40.7 | 39:5 | 38 · 9 | 36.8 | 35 · 8 | 55 · 7 | 61.0 | 68 · 4 | 73 · 1 | 91.5 | 55.8 | 66 · 2 | 75.2 | 60 · 7 | 52 · 1 | 32 · 3 | 21.8 | 46 · 1 | 307.3 |
| Mean | 42.5 | 42.4 | 40.6 | 40 · 3 | 41.6 | 41.6 | 42.5 | 41.9 | 42.0 | 42.9 | 45.0 | 48 · 1 | 52 · 2 | 53 · 5 | 53.5 | 52.4 | 51 · 4 | 48.4 | 48.0 | 46.3 | 44 · 1 | 44 · 2 | 42.7 | 42.5 | 45.4 | |
| Sum 1200·0+ | 118.7 | 113-9 | 58.9 | 48.0 | 89·3 | 90.3 | 116.0 | 98.9 | 101 · 0 | 130 · 0 | 193.9 | 290·6 | 417 · 9 | 458 · 9 | 458 · 5 | 424 · 0 | 393 · 7 | 301.5 | 289 · 2 | 235 · 5 | 166 · 5 | 169·5 | 122.9 | 117 · 9 | G | Grand Total 33805·5 |

47,000y (0.47 C.G.S. unit) + 3 LERWICK (Z) MARCH Hour G.M. T Sum 2-3 3-4 4-5 5-6 6-7 7-8 8-9 9-10 10-11 11-12 12-13 13-14 14-15 15-16 16-17 17-18 18-19 19-20 20-21 21-22 22-23 23-24 0-1 Mean 5000+ 198 280 377 19 336 355 352 2 d 3 d 4 5 288 309 315 294 293 292 2001 289 307 300 298 298 298 303 310 301 292 282 2195 257 304 11 d 13 q 298 294 294 326 15 295 299 308 16 d 17 278 299 311 267 298 19 300 299 298 304 304 299 298 301 301 299 297 294 303 20 q 290 244 293 325 292 322 287 1889 23 24 25 262 269 277 280 279 277 278 291 319 297 289 27 284 287 284 294 225 29 -72 31 d Mean Grand Total 904 1002 1091 1098 1852 2298 1971 1764 1378 1138 218,783 8000+

DAILY EXTREMES OF TERRESTRIAL MAGNETIC ELEMENTS, MAGNETIC CHARACTER FIGURES (K AND C) AND TEMPERATURE IN MAGNET HOUSE

| 4 | LERWI | CIK | | | | | | | | | | | | | | | | МА | RCH 1960 |
|--------------------------------|--|--------------------------------------|--------------------------------------|--|------------------------------------|--|--------------------------------------|---------------------------------------|--|---------------------------------------|--|--------------------------------------|--|--|--------------------------------------|--|----------------------------|-----------------------|---|
| | | Hori | zontal | force | | TER | | L MAGNET | | MENTS | | Vert | tical f | огсе | | 3-hr. range | Sum of K | Magnetic character | Temperature in magnet |
| | | imum 00y + | | imum 00y + | Range | Max 9° | imum + | Min 9° | imum + | Range | Maxi 47,00 | | | imum 00γ + | Range | indices K | indices | of day, C (0-2) | house 200 + |
| 1 2 d 3 d 4 5 | h. m. 20 02 18 50 23 18 14 51 20 59 | 7 714 593 577 615 593 | 7 504 487 494 506 510 | h. m. 03 04 02 01 10 09 23 11 21 47 | γ 210 106 83 109 83 | h. m. 18 53 13 28 15 08 17 48 13 46 | 64·3 57·4 61·4 66·8 58·4 | 29·2 21·5 27·6 31·3 34·5 | h. m. 20 18 02 10 23 15 22 38 22 57 | 35·1 35·9 33·8 35·5 23·9 | h. m. 20 03 19 20 18 33 18 07 20 52 | γ 443 391 384 453 366 | 232 179 223 223 223 217 | h. m. 03 19 02 17 05 05 05 06 22 08 | 7 211 212 161 230 149 | 3, 3, 2, 2, 3, 3, 5, 3 4, 3, 3, 3, 2, 3, 3, 4 3, 3, 3, 3, 3, 3, 3, 3 2, 2, 2, 2, 4, 4, 4, 4 2, 2, 3, 1, 3, 2, 3, 4 | 24 25 24 24 20 | 1 1 1 1 | °A. 79·0 79·0 79·0 79·0 78·8 |
| 6 7 q 8 9 10 | 16 55 20 43 05 44 20 51 16 08 | 566 564 572 572 574 | 515 515 508 508 446 | 10 08 11 50 11 47 11 18 09 41 | 51 49 64 64 128 | 13 47 13 44 12 37 14 34 09 57 | 53·3 54·2 58·5 55·6 56·4 | 30·8 40·7 35·9 38·2 30·6 | 20 25 08 20 23 42 00 01 19 52 | 22·5 13·5 22·6 17·4 25·8 | 20 00 15 55 15 48 15 10 19 24 | 338 304 332 311 389 | 247 288 271 281 282 | 00 15 13 31 08 00 05 42 10 12 | 91 16 61 30 107 | 3,2,2,2,2,2,3,2 1,1,1,2,1,1,1,0 0,1,2,2,2,2,2,2 2,1,2,2,2,3,2,2 1,2,3,4,2,3,4,2 | 18 8 13 16 21 | 1 0 0 0 1 | 78·8 78·7 78·3 78·0 78·0 |
| 11 d 12 13 q 14 15 | 17 39 22 19 21 02 23 15 19 06 | 641 566 574 574 745 | 438 509 500 510 321 | 11 40 13 22 11 03 10 00 24 00 | 203 57 74 64 424 | 12 04 13 12 13 35 15 28 18 48 | 56·1 53·5 53·7 53·7 70·5 | 31·4 40·0 39·2 38·3 23·0 | 18 01 22 43 08 42 08 09 23 57 | 24·7 13·5 14·5 15·4 47·5 | 17 42 16 32 18 05 16 03 19 00 | 467 334 317 309 516 | 222 251 272 284 264 | 01 31 01 41 22 50 00 00 23 39 | 245 83 45 25 252 | 3,3,3,4,3,5,5,3 3,1,2,2,2,2,2,2 2,1,1,1,1,2,2,2 1,1,2,1,1,3,0,1 1,0,1,1,2,4,5,6 | 29 16 12 10 20 | 1 0 0 0 1 | 78·2 78·2 78·3 78·3 78·7 |
| 16 d 17 18 19 20 q | 20 02 15 58 23 02 14 43 21 06 | 713 590 587 566 563 | 45 472 510 487 522 | 01 50 03 36 13 38 11 49 10 42 | 668 118 77 79 41 | 23 16 14 21 13 34 13 51 13 18 | 63·0 54·6 52·0 57·1 51·5 | -48·6 20·3 34·2 39·2 38·7 | 03 49 20 12 23 28 08 39 08 49 | 111·6 34·3 17·8 17·9 12·8 | 18 52 20 05 16 05 16 03 10 13 | 450 362 323 344 307 | -64 215 258 264 287 | 04 16 00 08 23 09 01 33 00 07 | 514 147 65 80 20 | 6,6,5,2,3,4,5,6 3,3,3,3,2,3,4,3 2,2,3,2,2,1,0,3 3,1,1,2,3,3,1,1 1,1,2,0,1,1,0,1 | 37 24 15 15 7 | 2 1 0 0 | 78·4 78·8 78·5 78·5 78·5 |
| 21 22 q 23 q 24 25 | 05 58 23 02 22 20 15 45 23 48 | 563 566 578 613 587 | 512 511 514 | 13 01 13 20 10 29 10 54 10 26 | 62 54 67 99 67 | 13 39 12 59 13 55 01 45 13 12 | 54·9 53·8 55·0 59·0 53·4 | 38·2 37·8 36·3 37·6 32·1 | 08 31 09 18 22 45 03 58 23 48 | 16·7 16·0 18·7 21·4 21·3 | 13 56 08 42 21 22 19 09 01 03 | 322 308 298 338 298 | 289 277 262 210 240 | 01 43 23 50 23 53 02 23 23 53 | 33 31 36 128 58 | 1,1,1,2,3,2,0,0 0,0,0,1,2,1,1,2 2,1,0,1,0,1,0,3 4,3,2,1,1,4,3,2 1,1,1,1,2,1,2,3 | 10 7 8 20 12 | 0 0 0 1 | 78·7 78·8 78·7 78·7 79·0 |
| 26 27 28 29 30 | 18 54 20 13 19 50 23 10 18 27 | 572 569 623 585 654 | 470 393 | 00 26 11 08 24 00 00 52 22 36 | 59 74 153 192 211 | 13 35 13 33 16 05 23 36 14 41 | 53·2 54·3 56·5 55·0 58·0 | 33·5 37·6 21·6 19·4 23·4 | 00 01 08 19 20 21 01 42 23 28 | 19·7 16·7 34·9 35·6 34·6 | 16 40 01 40 19 41 18 27 19 09 | 301 293 365 303 456 | 246 276 202 150 150 | 00 00 13 28 23 52 01 06 00 24 | 55 17 163 153 306 | 3,1,1,2,2,1,1,1 1,2,2,2,1,1,0,1 1,1,2,3,2,3,5,4 4,4,3,2,1,2,1,4 4,2,2,2,3,4,4,5 | 12 10 21 21 26 | 0 0 1 1 | 78·8 78·8 78·8 78·9 78·5 |
| 31 d Mean | 16 41 | 1488 628 | -843 430 | 23 49 | 2331 197 | 16 44 | 121·8 58·9 | -45·7 27·3 | 23 32 | 167 · 5 31 · 6 | 22 35 | 743 370 | -459 211 | 23 39 | 1202 159 | 4,3,3,5,4,8,7,9 | 43 - | 2 0·58 | 78·6 |

q denotes an international quiet day and d an international disturbed day.

| 1 LE | RWICK | (H) | | | | | | | | | 14, | 000γ (0 | ·14 C. | G.S. u | mit) + | | | | | | | | | | APR | IL 1960 |
|----------------|-------------|---------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|--------------|-------------|-------------|-------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------------------|
| | Hour 0-1 | G.M.T. 1-2 | 2-3 | 3-4 | 4-5 | 5-6 | 6-7 | 7-8 | 8-9 | 9-10 | 10-11 | 11-12 | 12-13 | 13-14 | 14-15 | 15-16 | 16-17 | 17-18 | 18-19 | 19-20 | 20-21 | 21-22 | 22-23 | 23-24 | Mean | Sum 9000+ |
| | γ | γ | γ | γ | γ | γ | γ | γ | γ | γ | γ | γ | γ | γ | γ | γ | γ | γ | γ | γ. | γ | γ_ | γ | γ | γ | 0554 |
| 1 d | -114 | 308 | 491 | -363 | -147 | 429 | 521 | 516 | 542 | 617 | 578 | 719 | 1229 538 | 1197 504 | 1424 502 | 1246 497 | 946 490 | 660 494 | 391 512 | 174 522 | -41 527 | 57 526 | 80 527 | 94 529 | 481 427 | 2554 1250 |
| 2 | -13 | -106 | 321 | 407 | 376 | 377 | 406 306 | 385 411 | 414 508 | 503 516 | 489 492 | 523 489 | 482 | 484 | 494 | 503 | 530 | 538 | 547 | 534 | 528 | 522 | 519 | 518 | 461 | 2074 |
| 3 d | 531 519 | 324 516 | 400 521 | 323 521 | 219 518 | 356 522 | 523 | 522 | 513 | 497 | 488 | 488 | 481 | 497 | 497 | 532 | 526 | 575 | 565 | 540 | 539 | 353 | 516 | 537 | 513 | 3306 |
| 5 | 536 | 528 | 540 | 557 | 530 | 531 | 530 | 534 | 529 | 500 | 494 | 486 | 489 | 510 | 568 | 730 | 664 | 591 | 566 | 532 | 535 | 532 | 537 | 535 | 545 | 4084 |
| - | 1 | 529 | 527 | 527 | 524 | 526 | 522 | 522 | 512 | 504 | 497 | 501 | 509 | 516 | 537 | 518 | 552 | 565 | 552 | 568 | 564 | 536 | 537 | 531 | 529 | 3708 |
| 6 7 | 532 513 | 506 | 495 | 524 | 518 | 533 | 536 | 527 | 518 | 505 | 497 | 498 | 504 | 515 | 533 | 572 | 574 | 685 | 777 | 690 | 563 | 521 | 504 | 537 | 548 | 4145 |
| 8 | 527 | 483 | 433 | 454 | 515 | 535 | 529 | 515 | 514 | 495 | 501 | 503 | 497 | 511 | 521 | 538 | 563 | 570 | 550 | 559 | 553 | 549 | 548 | 548 | 521 | 3511 |
| 9 a | 553 | 525 | 514 | 491 | 523 | 536 | 536 | 536 | 520 | 511 | 517 | 513 | 501 | 511 | 515 | 522 | 529 | 546 | 556 | 560 | 556 | 557 | 557 | 556 | 531 | 3741 |
| 10 | 552 | 555 | 559 | 561 | 552 | 548 | 559 | 553 | 536 | 518 | 508 | 507 | 507 | 511 | 531 | 552 | 552 | 574 | 608 | 581 | 549 | 400 | 136 | 72 | 503 | 3081 |
| 11 | 420 | 456 | 502 | 542 | 540 | 544 | 540 | 540 | 524 | 510 | 494 | 490 | 496 | 518 | 545 | 573 | 549 | 578 | 602 | 581 | 559 | 543 | 513 | 454 | 526 | 3613 |
| 12 | 366 | 410 | 458 | 507 | 528 | 530 | 530 | 514 | 461 | 497 | 497 | 495 | 509 | 530 | 513 | 531 | 530 | 585 | 582 | 563 | 554 | 548 | 563 | 561 | 515 | 3362 |
| 13 | 537 | 530 | 453 | 507 | 531 | 491 | 508 | 517 | 505 | 509 | 500 | 496 | 505 | 521 | 522 | 534 | 545 | 571 | 571 | 566 | 565 | 556 | 549 | 533 | 526 | 3622 |
| 14 | 500 | 505 | 543 | 549 | 541 | 545 | 549 | 543 | 526 | 511 | 499 | 490 | 494 | 515 | 522 | 541 | 552 | 568 | 585 | 573 | 566 | 554 | 560 | 561 | 537 | 3892 |
| 15 | 559 | 529 | 536 | 558 | 521 | 469 | 545 | 542 | 538 | 518 | 510 | 498 | 507 | 515 | 531 | 552 | 556 | 571 | 578 | 574 | 567 | 563 | 558 | 561 | 540 | 3956 |
| 16 | 546 | 536 | 541 | 541 | 546 | 553 | 556 | 549 | 534 | 518 | 506 | 507 | 531 | 597 | 675 | 675 | 731 | 718 | 602 | 571 | 576 | 547 | 539 | 419 | 567 | 4614 |
| 17 | 484 | 522 | 383 | 463 | 529 | 547 | 547 | 538 | 521 | 489 | 485 | 483 | 498 | 521 | 521 | 539 | 567 | 591 | 623 | 622 | 594 | 536 | 511 | 536 | 527 | 3650 |
| 18 | 516 | 298 | 441 | 533 | 553 | 548 | 524 | 523 | 530 | 512 | 481 503 | 485 500 | 494 511 | 497 514 | 514 516 | 543 529 | 568 542 | 590 550 | 566 554 | 561 558 | 556 555 | 556 552 | 555 553 | 562 551 | 521 534 | 3506 3826 |
| 19 q | 547 | 545 | 537 | 537 550 | 533 552 | 542 552 | 541 545 | 530 530 | 518 518 | 508 507 | 496 | 496 | 507 | 517 | 525 | 537 | 547 | 553 | 556 | 559 | 559 | 556 | 555 | 557 | 539 | 3926 |
| 20 q | 551 | 551 | 550 | | | | | | | | | | | | | | | | | | | | | | í | ī |
| 21 q | 556 | 556 | 556 | 556 | 553 | 552 | 546 556 | 537 552 | 524 543 | 512 531 | 510 529 | 504 526 | 507 530 | 518 538 | 535 549 | 544 553 | 556 556 | 571 564 | 572 574 | 574 572 | 570 571 | 568 568 | 571 567 | 575 567 | 547 555 | 4123 4320 |
| 22 q | 571 567 | 562 567 | 560 563 | 559 563 | 559 559 | 563 559 | 556 | 552 542 | 529 | 516 | 515 | 518 | 525 | 540 | 545 | 557 | 571 | 573 | 581 | 597 | 597 | 564 | 473 | 235 | 538 | 3912 |
| 23 24 d | 109 | -123 | 27 | 155 | 218 | 448 | 494 | 487 | 506 | 504 | 508 | 492 | 528 | 627 | 623 | 613 | 597 | 640 | 715 | 598 | 451 | 203 | 276 | 297 | 416 | 993 |
| 25 | 69 | 280 | 415 | 533 | 533 | 497 | 501 | 515 | 477 | 468 | 497 | 482 | 496 | 556 | 673 | 662 | 715 | 662 | 629 | 598 | 472 | 389 | 438 | 466 | 501 | 3023 |
| | 448 | 414 | 505 | 545 | 553 | 545 | 528 | 512 | 496 | 486 | 491 | 493 | 508 | 527 | 544 | 585 | 616 | 616 | 609 | 583 | 556 | 544 | 529 | 496 | 530 | 3729 |
| 26 27 | 511 | 545 | 542 | 544 | 533 | 524 | 523 | 515 | 514 | 505 | 499 | 496 | 511 | 530 | 548 | 556 | 559 | 567 | 584 | 582 | 559 | 468 | 284 | -2 | 500 | 2997 |
| 28 d | -181 | 22 | -2 | 120 | 454 | 499 | 409 | 284 | 378 | 415 | 482 | 544 | 595 | 681 | 687 | 733 | 818 | 892 | 900 | 627 | 550 | 524 | 463 | 388 | 470 | 2282 |
| 29 | 279 | -64 | 448 | 516 | 394 | 240 | 407 | 420 | 484 | 485 | 499 | 504 | 523 | 510 | 550 | 549 | 586 | 568 | 609 | 575 | 530 | 530 | 522 | 403 | 461 | 2067 |
| 30 d | 444 | 501 | 76 | 113 | 424 | 506 | 458 | 449 | 485 | 491 | 497 | 491 | 565 | 972 | 1331 | 1050 | 1023 | 578 | 617 | 645 | 513 | 459 | 507 | 433 | 568 | 4628 |
| Mean | 418 | 410 | 448 | 450 | 476 | 505 | 511 | 505 | 507 | 505 | 502 | 507 | 536 | 567 | 603 | 605 | 607 | 597 | 594 | 565 | 530 | 496 | 485 | 454 | 516 | |
| Sum 12,000+ | 535 | 31 0 | 1435 | 1493 | 2282 | 3147 | 3331 | 3160 | 3217 | 3158 | 3059 | 3217 | 4077 | 5000 | 6091 | 6166 | 6210 | 5904 | 5833 | 4939 | 3893 | 2881 | 2547 | 1610 | | Grand Total 371,495 |

| 2 LE | RWICK | (D) | | | | | | | | | | 90 | + | | | | | | | | | | | | APRI | ıL 1960 |
|--------|--------|-----------|--------|--------|--------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|--------|---------|---------|---------|---------|---------|---------|--------|-------------------|
| | Hour (| 1-2 | 2-3 | 3-4 | 4-5 | 5-6 | 6-7 | 7-8 | 8-9 | 9-10 | 10-11 | 11-12 | 12-13 | 13-14 | 14-15 | 15-16 | 16-17 | 17-18 | 18-19 | 19-20 | 20-21 | 21-22 | 22-23 | 23-24 | - | Sum 800 · 0 |
| 1 d | -33.9 | , 16·0 | 31.1 | -20-4 | -9·3 | 22.0 | 20.8 | 21.5 | 21.0 | 29.0 | 51.2 | 38.0 | 19.8 | 20.0 | 22.0 | 49.7 | 80.6 | 132.7 | 66·1 | 60·2 | 92 · 1 | 52.0 | 22.9 | 41-1 | 35.3 | 46 · 2 |
| 2 | 6.9 | 30.3 | 7.8 | 29.0 | 50 · 5 | 47 · 9 | 41 · 4 | 42.8 | 37.5 | 31 · 1 | 31.9 | 36 · 9 | 42 · 1 | 47 · 6 | 47 · 6 | 45.5 | 44 · 5 | 43 · 1 | 42 · 1 | 42.6 | 43 · 1 | 43.1 | 41.5 | 42.5 | 38 · 3 | 119.3 |
| 3 d | 39.7 | 10.9 | 32.0 | 34.9 | 33.0 | 30 · 2 | 55.0 | 49 · 3 | 40.5 | 40.0 | 42.8 | 43.7 | 47.9 | 47 • 4 | 46.2 | 43.8 | 45.3 | 44.0 | 45.6 | 44 · 4 | 44 · 2 | 42.7 | 42.1 | 41.8 | 41.1 | 187 · 4 |
| 4 | 41.2 | 40 · 6 | 40.0 | 39 · 6 | | | | | | 39 · 2 | | | 46.8 | 47 · 7 | | 46.3 | 44 · 0 | 42.6 | | 44 · 4 | 44 · 0 | 40.7 | 35 · 6 | 40 · 6 | 41.5 | 195-3 |
| 5 | 43.7 | 45.0 | 37 · 5 | 40 · 8 | 40 · 4 | 41 · 2 | 40 · 2 | 35.9 | 37 · 7 | 41.0 | 43 · 7 | 47 · 9 | 50.1 | 53 · 2 | 53.6 | 39 · 2 | 47 · 5 | 50 · 0 | 48 · 1 | 46 · 5 | 47 - 4 | 45 · 0 | 43.8 | 43.6 | 44.3 | 263 · 0 |
| 6 | 44.0 | 42.9 | 41.6 | 40.7 | 39.9 | 39 · 1 | 39 · 2 | 37 · 8 | 38 · 7 | 40.7 | 43 · 4 | 46 · 9 | 50.4 | 50.8 | 50 · 1 | 47.9 | 47 · 2 | 47.3 | 46 · 4 | 45 · 4 | 38 · 3 | 29.6 | 39.7 | 45.8 | 43.1 | 233 - 8 |
| 7 | 46 · 4 | 45.0 | 39.6 | 37 · 7 | 36 · 4 | 38.3 | 35 · 9 | 36 · 6 | 36 · 8 | 38 · 9 | 42 - 1 | 45.8 | 49 - 2 | 51.0 | 51.7 | 52.1 | 51.9 | 53 · 2 | 58 · 2 | 41.4 | 37 · 3 | 39 · 2 | 31.3 | 40.7 | 43.2 | 236 · 2 |
| 8 | 43.1 | 44.5 | 43.6 | 44 · 7 | 39 · 6 | 36 · 7 | 36 · 6 | 38 · 8 | 36.8 | 40 · 7 | 43.9 | 49.8 | 51.7 | 51.9 | 50.5 | 47 · 8 | 43.6 | 37 · 7 | 43.5 | 44 · 4 | 44 · 5 | 44 · 8 | 44 · 4 | 43 · 1 | 43.6 | 246 |
| 9 q | 42.1 | 40.5 | 44 · 3 | 44 • 4 | 43.8 | 41.8 | 44 · 5 | 41 · 4 | 41.4 | 45.5 | 44 · 6 | 48 · 4 | 50.3 | 51 · 1 | 49.3 | 47 - 3 | 45 · 8 | 44 · 7 | 45.0 | 45.5 | 45 · 4 | 45 · 0 | 45 · 2 | 45.0 | 45.1 | 282 |
| 10 | 43.6 | 44 · 3 | 40.9 | 38 · 8 | 37 · 3 | 36 · 6 | 41 · 2 | 43.6 | 41.8 | 44 · 4 | 47 · 9 | 50.3 | 54.0 | 56 · 2 | 60.9 | 58.6 | 52.9 | 50 · 2 | 38.0 | 33.4 | 42.0 | 30.3 | 34 · 2 | 4 · 2 | 42.7 | 225 |
| 11 | 27.9 | 30 · 2 | 33.8 | 34 · 9 | 39.6 | 44.0 | 42 · 1 | 38 · 0 | 38.9 | 40.6 | 44.3 | 46.9 | 50.5 | 52.1 | 52 · 1 | 50.8 | 47 · 4 | 47 · 4 | 43.5 | 41.9 | 44 · 3 | 40 - 2 | 42.4 | 36 · 2 | 42.1 | 210- |
| 12 | 42.0 | 32.2 | 33.5 | 34 · 7 | 37 · 1 | 38.9 | 38 · 7 | 42 · 4 | 41.7 | 40.4 | 41.4 | 45.0 | 49.0 | 48.5 | 48.9 | 47.8 | 45 · 4 | 45 · 5 | 42.8 | 43.5 | 45.3 | 39.9 | 40.0 | 47 - 2 | 42.2 | 211. |
| 3 | 41.4 | 40.9 | 46.0 | 40.8 | 39-2 | 48.9 | 51 · 4 | 52 · 2 | 45 · 8 | 41.9 | 43.8 | 47.5 | 49.8 | 49-4 | 47.9 | 46.7 | 46.0 | 44 · 7 | 46.7 | 44 . 0 | 43 · 1 | 45.0 | 45 · 4 | 46.9 | 45.6 | 295 |
| 4 | 47.9 | 43.8 | 40 · 7 | 40 · 2 | 41.4 | 39.9 | 42.3 | 39 · 8 | 37 · 6 | 37 · 7 | 40 · 7 | 45.6 | 48.8 | 50 · 4 | 49.6 | 48 · 4 | 47.1 | 44 - 2 | 41.2 | 44.7 | 45.6 | 40.2 | 43.6 | 42.6 | 43.5 | 244 |
| .5 | 38 · 0 | 39.2 | 42.6 | 40 · 2 | 46 · 0 | 53 · 2 | 38 · 7 | 35 · 9 | 37 · 8 | 39 · 2 | 42.6 | 47.3 | 50.0 | 52.2 | 51.3 | 51 · 1 | 48 · 4 | 47.9 | 48 - 1 | 48 - 2 | 46 . 5 | 46 · 2 | 45.0 | 43 · 5 | 45.0 | 279 |
| 6 | 43.6 | 41 · 4 | 42.4 | 40.6 | 39 · 7 | 38 · 7 | 39 · 2 | 37.0 | 36.8 | 39 · 7 | 44.0 | 49.3 | 54-1 | 58 · 2 | 53.0 | 57.9 | 58 · 2 | 49 - 2 | 50.3 | 49.2 | 38 · 7 | 41.7 | 45 - 4 | 39 · 2 | 45.3 | 287 · |
| 7 | 35.9 | 41.6 | 40.7 | 36 · 1 | 36 · 7 | | | | 37.8 | 40.6 | 43.7 | | 51.0 | 54.0 | 52.9 | 51.2 | 51.2 | | | | | | | | 43.4 | 240 |
| 8 | 43 · 1 | 49.2 | 38 · 3 | 41.7 | 40.9 | 39.6 | | | 39.7 | 40.7 | 44 · 4 | | 50.2 | | | 49.1 | | | 44.0 | | | | | 42.9 | 44.5 | 268 |
| 9 a | 43.5 | 43.5 | 42.5 | 42 · 4 | 42.3 | 39.2 | 36 · 8 | 35 · 4 | 36.0 | 38.3 | 41.2 | 43.8 | 47.9 | 49.2 | 48.4 | 47.4 | 46.3 | | 44 - 8 | 44 · 7 | | 44.6 | 44.0 | 43.7 | 43.2 | 236 · |
| 0 q | 43 · 1 | 43 · 1 | 43.1 | 42.0 | 41.0 | 40.0 | 36 · 8 | 35 · 9 | 35.8 | 36.9 | 40.5 | 44.5 | 48.9 | 50.4 | 49.6 | 48.6 | 47 . 9 | 47 - 1 | 46.3 | 45 · 7 | 45.5 | 45.0 | 44 · 4 | 43.8 | 43.6 | 245 |
| 1 a | 43.5 | 43.0 | 42.6 | 41.6 | 40.5 | 38 · 8 | 36 · 7 | 34 · 9 | 35 · 7 | 37 · 7 | 41.4 | 45.6 | 50.2 | 51.7 | 51.2 | 50.3 | 50 · 1 | 48.5 | 47 - 4 | 47.4 | 46 · 8 | 46 - 2 | 46 · 0 | 44 · 8 | 44.3 | 262 |
| 2 a | 41.6 | 43.6 | 42.6 | 41.9 | 40.7 | | 40.7 | 40.2 | 41.8 | 43.6 | 46.9 | | 51.3 | 52.2 | 50.3 | | 46.3 | | 46 · 2 | ••• | | | | 46.4 | 45.2 | 284 |
| 3 | | 44.8 | 43.6 | 41.7 | 41.2 | 37.0 | 34 · 2 | 33 · 7 | 35.9 | 40.7 | 46.9 | 50.3 | 51.9 | 53.0 | 51.5 | 50.4 | 48.6 | | 46.8 | | | | 33.5 | 34 . 2 | 43.9 | 254 |
| 4 d | 4.7 | -32.7 | 9.9 | 15.1 | 24.6 | 29.6 | 28 · 1 | 28 . 9 | 33.3 | 39 · 4 | 45.4 | 51.7 | 55 · 8 | 57 · 1 | 53 · 1 | 55 - 1 | 53.3 | | 51.0 | 47.9 | | 44 - 5 | 28.5 | 24 · 3 | 35.4 | 50. |
| 5 | 28.3 | 21 · 2 | 20.5 | 34.9 | 35 · 8 | 34 · 1 | 40.7 | 38 · 1 | 34.0 | 44 · 2 | 48 · 4 | 49.3 | 54.9 | 58 · 1 | 53.2 | 57 · 7 | 52.9 | 50.3 | 53.2 | 51 · 3 | 47 · 7 | 42.9 | 40 · 4 | 33 · 7 | 42.7 | 225 · |
| 6 | 46.4 | 36.0 | 34 · 0 | 34 . 9 | 40.4 | 39 · 7 | 40.2 | 41.0 | 45.0 | 45.5 | 45.5 | 49.3 | 52.4 | 54 · 1 | 54.0 | 51.3 | 51 · 2 | 50.3 | 47 · 4 | 45.5 | 43.5 | 41.9 | 42.3 | 48 - 4 | 45.0 | 280 - |
| 7 | 44.5 | 42.5 | 43.4 | 41.8 | 39.9 | 38.3 | 36 · 4 | 35.9 | 36.8 | 39.6 | 45.5 | | 53.2 | 55.2 | 54 · 5 | 53.2 | 49.8 | | 46.6 | 45.5 | | 51.7 | 37.7 | 19.4 | 44.1 | 258 |
| 8 d | -2.6 | 10.7 | -9.6 | -7.7 | 28.0 | 33.0 | | 38 · 8 | 33.9 | 45.8 | 46.3 | | 52.3 | 54 - 4 | | 66.7 | 71 5 | | 89.1 | | | | 44.7 | | 41.3 | 192 |
| 9 | | 45.4 | 17 · 1 | 33.9 | | 41.8 | 42.8 | | 41.9 | 43.7 | 44.9 | | 45.9 | | 51.5 | | | 47 · 8 | 48.1 | | | | 41.0 | 44.6 | 43.6 | 246 |
| 0 d | 42 · 1 | 38 · 3 | 6.3 | 11-4 | 17.8 | 33.0 | 26 · 0 | 27 · 5 | 32.3 | 34 · 5 | 38 · 2 | | 21.4 | 37 · 2 | 39.5 | | | 132.6 | 89.2 | | | | 40.5 | | 46.7 | 320 |
| an | 35 · 4 | 35.3 | 33.7 | 33 · 8 | 36 · 6 | 38 · 7 | 38 · 7 | 37 · 8 | 37 · 5 | 40.0 | 43.7 | 46.7 | 48 · 4 | 50 · 5 | 50.0 | 50.9 | 52 · 2 | 53 · 7 | 49.9 | 47 · 8 | 47 · 2 | 42.5 | 40 · 4 | 39.7 | 43.0 | |
| o · 0+ | 61.7 | 57 · 9 | 12 · 4 | 13 · 3 | 97·3 | 160 · 2 | 160 · 2 | 135 · 0 | 125 · 4 | 201 · 2 | 309 · 8 | 400 · 1 | 451 · 8 | 515 · 2 | 500 · 9 | 526 · 0 | 566 · 5 | 609.6 | 497 • 4 | 433 · 9 | 415 · 4 | 276 · 3 | 211 · 8 | 192 · 3 | | Grand To 30931 |

27

| 3 LEI | RWICK | (Z) | | | | _ | | | | | 47, | 000) (0 |)·47 C. | G.S. u | nit) + | | | | | | | | | | APRI | L 1960 |
|--------------|-------------|----------------------|------------|-------------|------------|------------|-----------------|------------|------------|------------|------------|-----------------|------------|---------------------|------------|------------|------------|----------------|------------|------------|------------------|-----------------|------------|-----------------|------------|------------------------|
| | Hour 0-1 | G.M.T. 1-2 | 2-3 | 3-4 | 4-5 | 5-6 | 6-7 | 7-8 | 8-9 | 0-10 | 10.11 | 11-12 | 12.12 | 12.14 | 14 15 | 15 16 | 16 17 | , 17 10 | 10 10 | 10.20 | 0 20-21 | 21 22 | 22 22 | 22 24 | Mean | Sum 5000+ |
| | | | | | | | | | | | | | ├ | | | | | | | | | | | | | 3000 |
| 1 d | γ 354 | $\frac{\gamma}{325}$ | γ 337 | γ 534 | γ 264 | γ 161 | γ 291 | γ 310 | γ 282 | γ 244 | γ 262 | γ 294 | γ 164 | γ 63 | γ 199 | γ -142 | γ -130 | γ +6 | γ 208 | γ 394 | γ 63 6 | γ 543 | γ 402 | γ 256 | γ 262 | 1297 |
| 2 | 219 | 239 | 151 | 199 | 234 | 240 | 262 | 316 | 334 | 374 | 405 | 403 | 372 | 349 | 332 | 333 | 336 | 336 | 338 | 335 | 333 | 332 | 316 | 292 | 307 | 2380 |
| 3 d | 246 | 224 | 219 | 171 | 101 | 155 | 198 | 210 | 289 | 300 | 316 | 330 | 339 | 333 | 326 | 325 | 323 | 329 | 329 | 335 | 327 | 323 | 321 | 322 | 279 | 1691 |
| 4 | 317 | 319 | 319 | 318 | 321 | 322 | 322 | 321 | 320 | 325 | 327 | 322 | 322 | 319 | 325 | 329 | 345 | 352 | 359 | 344 | 315 | 202 | 250 | 290 | 317 | 2605 |
| 5 | 306 | 268 | 250 | 259 | 252 | 266 | 296 | 307 | 306 | 313 | 316 | 318 | 321 | 313 | 327 | 416 | 402 | 386 | 387 | 369 | 329 | 324 | 306 | 309 | 319 | 2646 |
| 6 | 309 | 315 | 315 | 316 | 315 | 314 | 313 | 310 | 312 | 310 | 309 | 305 | 313 | 330 | 333 | 329 | 313 | 317 | 318 | 314 | 341 | 314 | 309 | 313 | 316 | 2587 |
| 7 | 279 | 262 | 251 | 256 | 261 | 276 | 295 | 306 | 312 | 314 | 309 | 306 | 302 | 301 | 306 | 322 | 357 | 425 | 415 | 414 | 373 | 286 | 264 | 294 | 312 | 2486 |
| 8 | 309 | 288 | 214 | 214 | 260 | 299 | 303 | 299 | 299 | 308 | 320 | 317 | 317 | 313 | 316 | 323 | 351 | 373 | 339 | 318 | 321 | 315 | 311 | 299 | 305 | 2326 |
| 9 q | 289 | 274 | 262 | 255 | 230 | 254 | 262 | 271 | 290 | 302 | 305 | 309 | 311 | 310 | 310 | 313 | 314 | 311 | 312 | 312 | 315 | 313 | 307 | 305 | 293 | 2036 |
| 10 | 299 | 299 | 295 | 303 | 303 | 299 | 294 | 289 | 294 | 295 | 295 | 297 | 310 | 332 | 333 | 346 | 363 | 373 | 419 | 363 | 331 | 220 | 382 | 274 | 317 | 2608 |
| 11 | 130 | 196 | 239 | 279 | 299 | 313 | 317 | 321 | 323 | 322 | 329 | 325 | 329 | 319 | 317 | 334 | 351 | 339 | 377 | 364 | 349 | 312 | 256 | 188 | 301 | 2228 |
| 12 | 111 | 74 | 99 | 163 | 206 | 266 | 289 | 290 | 303 | 307 | 310 | 314 | 321 | 349 | 353 | 341 | 335 | 335 | 365 | 351 | 331 | 294 | 237 | 196 | 273 | 1540 |
| 13 | 244 | 254 222 | 221 276 | 234 293 | 262 301 | 219 301 | 210 299 | 209 302 | 262 309 | 290 315 | 299 314 | 302 316 | 305 318 | 310 315 | 321 317 | 322 318 | 324 322 | 325 331 | 319 339 | 321 338 | 324 321 | 315 308 | 310 279 | 268 260 | 282 302 | 1770 2240 |
| 14 15 | 226 265 | 276 | 278 | 273 | 282 | 150 | 214 | 264 | 282 | 292 | 298 | 305 | 299 | 307 | 307 | 318 | 331 | 325 | 314 | 313 | 313 | 311 | 313 | 295 | 289 | 1925 |
| | | 230 | 254 | 268 | 293 | 299 | 301 | 301 | 301 | 300 | 299 | 300 | 309 | 343 | 399 | 452 | 500 | 455 | 409 | 362 | 362 | 309 | 289 | 188 | 325 | 2796 |
| 16 17 | 273 148 | 254 | 166 | 152 | 242 | 260 | 280 | 307 | 317 | 327 | 333 | 316 | 305 | 301 | 305 | 307 | 313 | 331 | 365 | 387 | 374 | 342 | 289 | 292 | 292 | 2013 |
| 18 | 262 | 91 | 119 | 220 | 262 | 286 | 296 | 302 | 303 | 313 | 329 | 336 | 329 | 327 | 325 | 327 | 333 | 351 | 339 | 327 | 319 | 311 | 307 | 284 | 292 | 1998 |
| 19 g | 291 | 297 | 296 | 305 | 308 | 310 | 315 | 317 | 316 | 317 | 312 | 308 | 307 | 307 | 305 | 299 | 301 | 304 | 303 | 307 | 307 | 309 | 309 | 309 | 307 | 2359 |
| 20 q | 309 | 307 | 305 | 306 | 305 | 305 | 308 | 307 | 301 | 298 | 297 | 295 | 293 | 294 | 294 | 294 | 296 | 298 | 299 | 302 | 305 | 306 | 305 | 304 | 301 | 2233 |
| 21 a | 305 | 304 | 303 | 304 | 303 | 304 | 304 | 305 | 304 | 305 | 299 | 291 | 283 | 286 | 286 | 290 | 289 | 294 | 297 | 295 | 301 | 301 | 299 | 298 | 298 | 2150 |
| 22 q | 292 | 295 | 296 | 297 | 298 | 295 | 295 | 292 | 292 | 292 | 286 | 282 | 282 | 286 | 292 | 303 | 307 | 309 | 304 | 305 | 300 | 299 | 299 | 299 | 296 | 2097 |
| 23 | 300 | 300 | 302 | 300 | 299 | 294 | 292 | 292 | 292 | 288 | 281 | 276 | 274 | 280 | 288 | 288 | 295 | 305 | 306 | 300 | 303 | 291 | 249 | 295 | 291 | 1990 |
| 24 d | 264 | 347 | 460 | 332 | 258 | 210 | 248 | 277 | 303 | 315 | 321 | 337 | 330 | 387 | 404 | 379 | 363 | 377 | 411 | 373 | 307 | 124 | 81 | 101 | 305 | 2309 |
| 25 | 216 | 113 | 114 | 218 | 274 | 273 | 289 | 308 | 319 | 321 | 321 | 351 | 346 | 361 | 403 | 390 | 421 | 365 | 373 | 398 | 318 | 211 | 177 | 177 | 294 | 2057 |
| 26 | 143 | 174 | 186 | 226 | 266 | 284 | 299 | 313 | 326 | 321 | 321 | 316 | 313 | 321 | 343 | 375 | 394 | 404 | 394 | 373 | 353 | 330 | 305 | 182 | 303 | 2262 |
| 27 | 217 | 284 | 309 | 316 | 319 | 315 | 315 | 317 | 313 | 310 | 304 | 295 | 294 | 307 | 325 | 349 | 362 | 354 | 344 | 349 | 309 | 375 | 349 | 190 | 313 | 2521 |
| 28 d | 121 | 390 | 200 | 105 | 257 | 305 | 292 | 239 | 253 | 308 | 341 | 358 | 369 | 418 | 431 | 439 | 478 | 464 | 441 | 423 | 368 | 336 | 290 | 200 | 326 | 2826 |
| 29 | 131 | -18 | 154 | 265 -119 | 234 65 | 203 103 | 176 184 | 242 223 | 276 236 | 302 271 | 313 300 | 334 320 | 365 353 | 359 4 5 6 | 363 481 | 363 388 | 361 223 | 377 130 | 373 143 | 322 199 | 327 319 | 333 540 | 286 362 | 179 361 | 276 234 | 1620 609 |
| 30 d | 147 | 192 | -8 | -119 | 05 | 103 | 104 | 223 | 230 | 2/1 | 300 | 340 | 333 | 430 | 401 | 300 | 443 | 130 | 140 | 177 | 319 | 370 | 302 | 301 | 234 | 609 |
| Mean | 244 | 247 | 239 | 252 | 263 | 263 | 279 | 289 | 299 | 307 | 312 | 316 | 313 | 320 | 332 | 326 | 329 | 325 | 341 | 340 | 338 | 314 | 292 | 261 | 298 | |
| Sum 7000+ | 322 | 395 | 182 | 562 | 874 | 881 | 1359 | 1667 | 1969 | 2199 | 2371 | 2478 | 2395 | 2596 | 2966 | 2770 | 2873 | 2761 | 3239 | 3207 | 3131 | 2429 | 1759 | 820 | | Grand Total 214,205 |

DAILY EXTREMES OF TERRESTRIAL MAGNETIC ELEMENTS, MAGNETIC CHARACTER FIGURES (K AND C) AND TEMPERATURE IN MAGNET HOUSE

| | 1 | | | TERRESTRI | AL MACNETIC ELE | MENTS | | | | i | | Magnetic | Temperatur |
|--|---|--|--|---|--|--|---|---|--|---|---|--|--|
| | Но | rizontal force | | | Declination | | Ver | tical force | | 3-hr. range indices | Sum of K | character of day, C | in magnet |
| | Maximum 14,000γ | Minimum 14,000y + | Range | Maximum 9°+ | Minimum 9°+ | Range | Maximum 47,000γ + | Minimum 47,000y + | Range | K | indices | (0-2) | house 200 + |
| 1 d 2 3 d 4 5 6 7 8 9 q 10 11 12 13 14 15 16 17 18 19 q 2 2 q 2 23 24 d 2 26 | h. m. 14 07 17 12 20 5 18 40 5 17 53 5 15 38 8 16 30 6 18 55 5 18 40 6 17 44 6 17 58 5 18 42 5 18 41 5 16 56 8 20 33 6 17 37 6 | γ h. m1408 03 51 -295 01 24 8 17 01 39 94 131 21 32 11 476 13 00 98 488 11 39 98 488 12 39 98 47 411 02 40 47 03 37 -460 23 09 17 257 00 12 18 27 00 12 18 26 27 02 47 19 493 10 42 19 496 11 24 19 496 11 24 19 497 11 42 | 7 3176 861 561 463 345 120 390 186 89 1091 342 350 168 128 268 561 385 385 63 69 90 63 450 1067 923 | h. m. / 16 58 189 01 36 73 06 12 69 21 29 86 15 06 57 12 41 51 18 10 60 12 12 21 53 13 00 51 14 21 62 15 18 53 29 51 05 11 67 13 40 55 01 20 61 12 42 50 13 48 51 13 43 52 13 20 52 13 20 52 13 20 52 13 20 53 13 50 55 55 13 50 10 66 69 13 50 55 55 13 50 55 55 13 50 50 10 66 69 13 50 55 55 13 50 55 55 55 13 50 55 55 55 13 50 55 55 55 55 55 55 55 55 55 55 55 55 | 4 -29·4 00 17 5 -54·1 01 40 16·8 21 15 0 16·8 21 15 0 22·2 15 30 3 24·9 21 38 7 22·8 22 26 1 32·8 17 27 7 34·6 05 03 7 -19·7 23 05 3 36·1 04 20 3 1·2 21 55 3 3·1 06 38 5 22·3 23 59 1 1·1 00 17 3 30·3 30·3 32 31 34·7 07 50 3 34·8 08 09 1 34·4 07 56 3 10·2 24 00 1 31·2 24 00 1 31·2 21 55 3 3·1 06 38 | 34·8 26·4 37·9 20·3 17·1 82·4 42·7 33·2 19·7 19·8 34·4 43·2 44·7 31·5 15·3 16·3 17·7 14·0 43·2 44·7 | 15 41 462 20 50 360 19 41 444 17 17 388 16 12 318 23 13 633 18 47 393 18 27 378 19 49 331 18 09 344 16 46 337 16 45 519 19 33 413 | 65 02 35 18 04 56 -12 21 29 198 01 59 293 21 42 198 22 09 202 02 20 217 04 45 58 24 00 53 00 04 48 01 50 185 02 32 198 01 02 113 05 40 81 03 08 | 7 1709 354 329 378 264 67 250 183 101 575 340 327 146 146 224 399 332 350 35 20 27 33 172 648 468 | 9, 9, 5, 7, 8, 9, 8, 8 8, 5, 4, 4, 4, 2, 2, 3 7, 7, 6, 3, 3, 3, 4, 4, 7 4, 4, 3, 1, 5, 6, 3, 2 1, 1, 2, 2, 2, 4, 4, 4 3, 3, 2, 1, 2, 5, 6, 4 4, 4, 2, 2, 3, 3, 3, 2 3, 3, 3, 2, 1, 2, 1, 0 2, 2, 2, 1, 3, 4, 5, 8 5, 4, 3, 2, 3, 3, 3, 4 6, 5, 4, 3, 3, 3, 4, 3, 3 4, 2, 2, 3, 2, 2 3, 3, 2, 2, 5, 4, 6 6, 5, 4, 3, 3, 2, 2, 2 3, 3, 2, 2, 5, 5, 4, 6 6, 5, 3, 3, 2, 2, 2 3, 3, 2, 2, 5, 2, 3, 4, 6 6, 4, 3, 3, 2, 3, 2, 2 2, 2, 2, 1, 2, 2, 0, 1 0, 1, 1, 1, 1, 1, 0 0, 1, 1, 1, 2, 2, 1, 1 1, 2, 2, 2, 2, 2, 2, 7 7, 7, 4, 3, 5, 4, 7, 5 5, 4, 3, 2, 3, 3, 3, 5 | 63 32 34 28 28 28 20 26 23 15 27 29 33 25 20 24 30 29 25 12 7 | 2 2 2 1 1 1 1 1 1 1 1 1 1 1 1 1 0 0 0 0 | °A. 79.0 78.8 78.8 78.5 78.9 79.1 79.2 79.1 79.2 79.0 79.5 79.0 79.5 79.0 79.7 79.0 79.7 79.0 79.7 79.0 79.7 79.0 79.7 79.0 79.7 79.0 79.0 |
| 27 28 d 29 30 d | 20 03 65 18 10 95 19 34 65 14 35 17 | 66 -470 00 18 69 -371 01 19 | 826 1426 1030 2083 | 23 11 82· 18 45 97· 01 09 98· 16 52 186· | -54·5 02 45 -2·9 02 10 | 106·8 151·8 101·3 211·8 | 21 45 454 01 44 574 18 57 384 21 30 690 | -92 23 11 -87 00 09 -126 01 18 -352 17 37 | 546 661 510 1042 | 5,2,1,2,3,2,5,8 8,7,5,5,5,5,7,5 8,6,5,4,4,4,5,5 8,8,4,4,9,9,7,6 | 28 47 41 55 | 2 2 2 2 | 79·3 79·5 81·0 81·2 |

 ${\it q}$ denotes an international quiet day and ${\it d}$ an international disturbed day.

MAY 1960 1 LERWICK (H) 14,000y (0.14 C.G.S. unit) + Sum Hour G.M.T Mean 12-13 13-14 14-15 15-16 16-17 17-18 18-19 19-20 20-21 21-22 22-23 23-24 11,000+ 4-5 5-6 6-7 7-8 8-9 9-10 10-11 11-12 2-3 3-4 0-1 1-2 γ 530 516 560 **0**5 547 548 547 550 546 585 542 546 551 557 559 551 517 570 539 542 559 975 1366 571 519 537 3480 521 544 526 522 544 533 514 514 548 558 569 589 573 568 545 542 497 530 529 541 501 504 493 0 580 66 13 14 15 550 546 551 553 546 533 522 562 564 570 550 569 565 563 558 510 530 574 574 573 539 556 555 555 547 544 531 497 493 552 555 542 540 554 553 562 564 565 567 567 17 575 528 522 525 571 574 575 546 551 563 536 534 537 577 588 575 568 564 520 551 561 554 564 513 528 551 556 550 563 18 q 19 q 558 550 512 537 552 558 572 571 575 569 571 571 554 574 589 595 564 577 565 577 509 526 593 577 579 2418 544 520 22 23 24 25 577 580 577 548 525 508 532 532 603 584 591 606 604 587 559 563 521 520 514 455 507 523 540 533 573 539 579 27 521 547 556 553 566 536 619 547 29 d **5**8 Mean Grand Total 983 1218 1595 1667 1647 1626 1478 1039 1190 1680 2518 3469 3415 3272 3317 2993 2773 2182 1700 1623 15,0004 404,725

MAGNETIC DECLINATION (WEST) Mean values for periods of sixty minutes ending at exact hours, G.M.T.

| 2 LE | RWICK | (D) | | | | | | | | | | 90 | , + | | | | | | | | | | | | 1 | MAY 1960 |
|---------------|-------------|---------------|---------|--------|--------|--------|----------------|--------|--------|---------|---------|---------|---------|---------|--------|---------|---------|--------|---------|---------|--------|---------|--------|---------|--------|------------------------|
| | Hour 0-1 | G.M.T. 1-2 | 2-3 | 3-4 | 4-5 | 5-6 | 6-7 | 7-8 | 8-9 | 9-10 | 10-11 | 11-12 | 12-13 | 13-14 | 14-15 | 15-16 | 16-17 | 17-18 | 18-19 | 19-20 | 20-21 | 21-22 | 22-23 | 23-24 | Mean | Sum 800·0+ |
| | , | • | • | , | , | , | , | • | • | • | , | • | 1 | , | • | , | , | , | , | • | , | , | , | • | • | |
| 1 d | 35 · 7 | 28 · 3 | 34 · 4 | 29 · 4 | 28.9 | 24.9 | 25 · 1 | 25.6 | 25 · 1 | 35 · 2 | 37 · 1 | 41.3 | 44 · 1 | 43.8 | 45.3 | 45.6 | 43.4 | 41.9 | 40 · 6 | 38.0 | 38 · 9 | 39 · 1 | 42.9 | 41.8 | 36.5 | 76 - 4 |
| 2 | 42.4 | 44 · 7 | 46 · 3 | 42 . 8 | 39.9 | 37 · 1 | 36 · 2 | 33 · 2 | 34 • 4 | 35 · 1 | 39.0 | 42 · 2 | 45.3 | 47 • 2 | 46 · 8 | 46 · 3 | 44 · 3 | 43 · 4 | 42.9 | 41.5 | 37 · 3 | 41.9 | 43.6 | 43.9 | 41.6 | 197 - 7 |
| 3 | 42.9 | 42.6 | 42.6 | 42 · 6 | 42.0 | 40 · 9 | 39 · 2 | 38 · 6 | 41.5 | 42.9 | | 44 · 8 | 48.5 | 50 · 1 | 49 · 6 | 48 · 6 | 47 · 2 | 44 · 7 | 44 · 3 | 44 · 1 | 43.8 | 44 · 3 | 44 · 5 | 43 · 4 | 44.0 | 255 · 6 |
| 4 q | 43 · 4 | | | | | | 37 · 1 | 37 · 1 | 37 · 0 | 38 · 1 | | 42.8 | 45.8 | 48.7 | 49 · 5 | 49 · 1 | | | 44 · 9 | | | | | | | 221 · 2 |
| 5 | 42.8 | 43.2 | 42.4 | 40 - 5 | 39.0 | 38.6 | 36 · 7 | 37 · 2 | 37 · 0 | 38 · 1 | 41.8 | 45 · 8 | 48.4 | 49.7 | 49 · 1 | 49.5 | 48 • 2 | 46 · 7 | 45.6 | 44 · 8 | 39 · 3 | 38.5 | 42.6 | 41 · 1 | 42.8 | 226.6 |
| 6 d | 41.8 | 42.9 | 40.9 | 43 - 2 | 38.0 | 37 · 1 | 34 · 9 | 37 · 1 | 37 · 1 | 41.0 | 44 · 8 | 54 · 5 | 59.2 | 59.5 | 60.2 | 60.3 | 59.9 | 60.7 | 49.5 | 49.0 | 45.7 | 55 · 1 | 32 · 1 | 26 · 7 | 46.3 | 311 · 2 |
| 7 d | 25 · 3 | 41.3 | 30 · 4 | 29 · 4 | 29.5 | 32.8 | 34 · 7 | 33 · 8 | 32.6 | 37 · 0 | 42.9 | 46 · 3 | 48.8 | 51 · 1 | 49.0 | 50 · 7 | 56 · 8 | 50.9 | 44 · 8 | 42.8 | 43.9 | 45 · 8 | 43.7 | 47 · 5 | 41.3 | 191 · 8 |
| 8 d | 44 - 7 | 43 · 8 | 41.7 | 41 · 7 | 49.5 | 40.5 | 40 · 5 | 39 · 2 | 40.0 | 31.8 | 50.6 | 51.5 | 54 · 4 | 43.9 | 31 · 4 | 23 · 2 | 64 • 9 | 58.5 | 50.2 | 53 · 7 | 51 · 8 | 46 · 8 | 42 · 4 | 54 • 9 | 45.5 | 291.6 |
| 9 | 44 · 1 | | | | | | 36 · 6 | 39 · 5 | 41.0 | 45 · 7 | | 53 · 7 | 52.6 | 49 · 1 | 47 · 6 | 46 · 5 | 43.9 | 44 · 1 | 44 · 8 | 45.7 | 44 · 3 | 44 · 1 | 44 · 2 | 44 · 3 | 43.8 | 251.9 |
| 10 | 44.3 | 44 · 1 | 45 · 4 | 42 - 4 | 39 · 9 | 38 · 2 | 38 · 1 | 39 · 8 | 41 · 7 | 41.7 | 44 · 8 | 48 · 2 | 48 · 7 | 48 · 7 | 50.5 | 47 · 5 | 45 · 2 | 45 · 8 | 44 · 7 | 43.6 | 45 · 3 | 46 · 6 | 43 · 1 | 42 • 4 | 44 · 2 | 260 · 7 |
| 11 | 42.1 | 41 · 8 | 43-4 | 38 · 8 | 42.0 | 51.3 | 45.3 | 50.5 | 51 · 1 | 50 · 1 | 46.3 | 47 · 4 | 47.2 | 48.5 | 47 · 7 | 44 • 9 | 44 · 8 | 45.0 | 45 · 8 | 46 · 0 | 44 · 3 | 45 · 8 | 44 · 7 | 39.9 | 45.6 | 294 · 7 |
| 12 | 40-2 | 41.0 | 39 · 9 | 39.3 | 40.8 | 43.4 | 41.3 | 38 · 4 | 37 · 1 | 38 · 2 | 37 · 1 | 44 · 7 | 46.0 | 46 · 5 | 48 · 2 | 48 · 9 | 49.6 | 48 · 5 | 47.0 | 47 · 4 | 47.2 | 45.6 | 46.3 | 44 . 3 | 43.6 | 246.9 |
| 13 | 41.3 | 41 · 2 | 39 · 5 | 40.0 | 40.0 | 38 · 1 | 39 · 1 | 40 · 1 | 40.0 | 42.0 | 47 · 5 | 49.6 | 51.5 | 52 · 4 | 51 · 7 | 50 · 2 | 47 · 6 | 48.6 | 47.7 | 45.8 | 43.2 | 43 · 4 | 36 · 1 | 36 · 1 | 43.9 | 252 · 7 |
| 14 | 40.5 | 41.8 | 44 · 8 | 44 · 6 | 43.8 | 46.5 | 44 · 3 | 44 · 3 | 43.6 | 43.9 | 47 · 0 | 50.5 | 53 · 4 | 53.3 | 52.5 | 51 · 4 | 48.6 | 47 - 2 | 46.7 | 46.3 | 45.8 | 42.1 | 44 · 8 | 45 · 5 | 46 . 4 | 313 - 2 |
| 15 | 45.0 | 44 · 7 | 44 · 1 | 44 · 1 | 40.5 | 37 · 4 | 35 · 4 | 34 · 7 | 36 · 5 | 38 · 8 | 42.0 | 46.3 | 52.3 | 53.3 | 51 · 7 | 49 · 6 | 45.9 | 42.8 | 43 · 4 | 44 · 1 | 44 · 8 | 45.5 | 45.5 | 45.3 | 43.9 | 253 · 7 |
| 16 | 45.3 | 43 · 4 | 42.0 | 40.5 | 39.3 | 38.6 | 37 · 8 | 37 · 1 | 37.0 | 39.0 | 42.7 | 46.6 | 51.5 | 53.0 | 58 · 4 | 59 · 7 | 71.7 | 54 · 9 | 49.4 | 49.5 | 48 · 0 | 47 - 4 | 48.7 | 44 - 7 | 46.9 | 326 · 2 |
| 17 | 45 · 8 | 44 · 8 | 42.8 | 41.8 | 40.5 | 38 · 7 | 36 · 9 | 36 · 7 | 34 · 3 | 36 · 7 | 41.0 | 45 · 2 | 49.1 | 51.3 | 49.1 | 48.5 | 45.9 | 44 · 2 | 44 - 7 | 44 . 8 | 44.9 | 44 · 6 | 42.9 | 43.8 | 43.3 | 239.0 |
| 18 q | 44 · 1 | 43.6 | 44 · 8 | 42.4 | 40 · 1 | 39.0 | 37 · 2 | 35 · 7 | 36 · 1 | 37 · 2 | 40.0 | 42.7 | 45.3 | 46.7 | 47 - 1 | 46.5 | 45.8 | 45.6 | 45.7 | 45 · 1 | 45.7 | 46 - 5 | 46.3 | 45.3 | 43.1 | 234 · 5 |
| 19 q | 43 · 7 | 42.8 | 41.7 | 39.0 | 36 · 9 | 35.7 | 36 · 9 | 36 · 1 | 39 · 1 | 40.9 | 41.7 | 45 · 1 | 47 · 2 | 48.2 | 46 · 7 | 45.3 | 43.8 | 42 · 2 | 42.9 | 44 · 3 | 44 · 1 | 44 · 8 | 46.9 | 46 · 8 | 42.6 | 222 · 8 |
| 20 g | 46 · 3 | 45 · 3 | 43.9 | 41 • 9 | 42.2 | 38.0 | 3 4 · 7 | 35 · 2 | 37 · 0 | 40 · 8 | 42.9 | 46 · 7 | 49 · 1 | 49.0 | 48 · 2 | 46 · 8 | 45 · 1 | 43.9 | 43.9 | 44 · 3 | 44 · 3 | 45.0 | 45.8 | 46 · 3 | 43.6 | 246 · 6 |
| 21 | 46 - 7 | 45 · 3 | 42 · 1 | 40 · 3 | 39 · 1 | 37 · 2 | 38 · 9 | 40.5 | 41.1 | 44 · 7 | 46.8 | 50.9 | 53.3 | 53.0 | 50 · 7 | 48 · 5 | 46.5 | 45.7 | 46.3 | 46 · 7 | 46.5 | 45.3 | 44 · 7 | 43.7 | 45.2 | 284 · 5 |
| 22 g | 43.3 | 43.2 | 42.4 | 41.3 | 40.0 | 37 · 8 | 37.0 | 36 · 7 | 37 · 2 | 39.7 | 44.0 | 48.5 | 51.6 | 52.4 | 52.6 | 53 · 5 | 50 · 1 | | | | 46 · 5 | 45.5 | | 44 · 3 | 44.7 | 273.5 |
| 23 | 44 · 6 | 42.8 | 41.9 | 40.9 | 39 · 4 | 38.0 | 37 · 1 | 37.0 | 38.6 | 42.1 | 46.5 | 51 · 1 | 53.5 | 55.3 | 56.3 | 56 · 1 | 53.3 | | 47 - 0 | | | | | 43 - 7 | 45.9 | 302 · 6 |
| 24 | 47.6 | 37 · 6 | 34 · 3 | 43 · 4 | 44 · 3 | 43.9 | 47 - 7 | 47.6 | 41.9 | 43 · 2 | 45.8 | 50.8 | 53.5 | 54 · 4 | 55 · 4 | 53.8 | 50.6 | 49.6 | 50 · 1 | 41.9 | 37 · 6 | 43.6 | 38 · 3 | 32 · 1 | 45.4 | 289.0 |
| 25 | 34 · 7 | 33.8 | 35 · 0 | 34 · 3 | 37 · 6 | 36 · 9 | 36 · 6 | 36 · 2 | 36 · 2 | 39 · 7 | 45.2 | 49.8 | 54 · 5 | 56 · 1 | 55.0 | 53 · 5 | 52.5 | 51 · 5 | 45.6 | 46 · 3 | 48 · 8 | 48 · 9 | 47 · 0 | 41.8 | 44 · 1 | 257 · 5 |
| 26 | 44 · 8 | 33 · 7 | 31.8 | 33.8 | 36 · 1 | 36.2 | 34.0 | 37 • 0 | 39.0 | 39 · 7 | 41.7 | 45.0 | 49.1 | 49.6 | 50.5 | 48 - 8 | 47 - 9 | 41.8 | 44 · 7 | 46 · 7 | 45.8 | 41.9 | 40.9 | 36 · 9 | 41.6 | 197 · 4 |
| 27 | 41.0 | 30 · 3 | 37 · 1 | 20.8 | 34 · 7 | 35.2 | 34.3 | 34 · 5 | 36 · 5 | 38 · 8 | 42.7 | 46.5 | 49.6 | 50.6 | 50.0 | 49 - 1 | 48 · 2 | | 47.6 | 42.9 | 44.7 | | | 37 . 2 | 41.2 | 187 · 8 |
| 28 | 40.8 | 39.3 | 41.9 | _ | | 37.3 | 37.0 | 38 · 2 | 40.9 | 42 · 1 | 45.1 | 48.2 | 50.4 | 51.1 | 51.4 | 50 · 7 | 48.9 | | 46 · 3 | 46 · 3 | 40.9 | | 44 · 1 | 44.3 | 43.9 | 254 · 4 |
| 29 d | 36 · 9 | 27 · 3 | -6.9 | 24 - 2 | 32.3 | 31.3 | 32 · 4 | 34.9 | 36 · 9 | 39.8 | 43 · 4 | 46.7 | 50.3 | 53 · 4 | 51.9 | 50 · 1 | 48.6 | 46 7 | 48.9 | 49.1 | 48.7 | 45.0 | | 46 · 1 | 40.2 | 164 · 6 |
| 30 | 45.0 | 43 · 4 | 43 · 1 | 41.8 | 39.3 | 39.5 | 39 · 1 | 41.9 | 44.0 | 48 - 4 | 47 - 1 | 45.3 | 45.1 | 47.0 | 44 · 1 | 40.9 | 43.2 | 43 • 4 | 43.9 | 45.0 | | 47.9 | 47.5 | 46.6 | 44 · 1 | 259 · 3 |
| 31 | 44 · 3 | 44 · 6 | 47.6 | 47 · 3 | 44 · 1 | 41.0 | 36 · 3 | 35 · 7 | 37 · 4 | 38 · 1 | 42.3 | 46 · 5 | 50 · 7 | 53 • 4 | 54 · 4 | 51 · 1 | 50.7 | 49 · 4 | 48 · 8 | 48 · 2 | 48.6 | 41-4 | 43.0 | 42.3 | 45 · 3 | 287 · 2 |
| Mean | 42.3 | 40.9 | 39 · 4 | 39 · 1 | 39.3 | 38 · 3 | 37 · 4 | 37 · 7 | 38.3 | 40.3 | 43.6 | 47 · 3 | 50.0 | 50 · 7 | 50 · 1 | 48.9 | 49 · 4 | 47 · 4 | 46.0 | 45.6 | 44.9 | 44 · 6 | 43.5 | 42 - 7 | 43.6 | |
| Sum 100·0+ | 211 · 4 | 166 · 9 | 122 · 1 | 111.9 | 116·7 | 86 · 3 | 58 · 4 | 70 · 1 | 88.9 | 150 · 5 | 250 · 9 | 365 · 2 | 450 · 0 | 470 · 3 | 452.6 | 415 · 2 | 430 · 9 | 368.6 | 325 · 4 | 312 · 4 | 292.6 | 281 · 5 | 249.9 | 224 · 1 | | Grand Total 32472.8 |

values for periods of sixty minutes ending at exact hours, G.M.T.

47,000y (0.47 C.G.S. unit) + 3 LERWICK (Z) MAY Hour G.M.T 2-3 3-4 4-5 5-6 6-7 7-8 8-9 9-10 10-11 11-12 12-13 13-14 14-15 15-16 16-17 17-18 18-19 19-20 20-21 21-22 22-23 23-24 6000+ Mean 340 **4**3 **5**8 3 4 q 5 317 320 304 272 359 323 321 373 346 13 14 15 310 311 17 309 304 304 306 318 325 18 q 19 q 310 306 294 289 291 295 20 q 22 q 23 306 303 299 296 290 280 288 291 300 234 177 25 1126 775 1244 311 292 29 d Mean Grand Total 936 1247 1217 1322 1396 1459 1434 1419 1392 1542 1914 2377 2413 2795 2937 2606 2329 2014 1694 8000+ 230, 132

DAILY EXTREMES OF TERRESTRIAL MAGNETIC ELEMENTS, MAGNETIC CHARACTER FIGURES (K AND C) AND TEMPERATURE IN MAGNET HOUSE

| _ 4 | LERWIC | | IKEMES U | ILKKL | JIKIAL | MINGNET | IC DDD | iiDiv10, | MAGNET | | | | • | | , | | | MAY 1960 |
|---|---|--|---|----------------------------|---|---|--|---|--|---|--|--|--|--|---|--|--|---|
| | | | | | TE | RRESTRIA | L MAGNET | ric elem | ENTS | | | | | | | | Magnetic | Temperature |
| | | Horiz | ontal for | ce | | D | eclinati | ion | | | Vert | cal fo | гсе | | 3-hr. range indices | Sum of K | character | in magnet |
| | Maxi 14,00 | | Minimu 14,000y | | | aximum 9°+ | | nimum ° + | Range | Maxi 47,00 | | | imum 100y + | Range | K | indices | of day, C (0-2) | house 200 + |
| 1 d 2 3 4 q 5 5 6 d 7 d 8 d 9 10 11 12 13 14 15 16 17 18 q q 19 q | h. m. 05 12 16 13 16 31 19 22 18 26 17 40 17 57 15 20 16 53 19 42 19 35 16 22 19 17 16 04 18 24 15 42 01 02 16 58 | 7 648 582 579 594 587 815 764 1639 595 609 618 609 578 751 588 594 | 233 01 442 04 486 10 503 10 501 10 16 21 157 01 250 09 476 09 494 12 377 08 437 04 469 22 | 40 282 00 104 13 86 | 02 02 03 13 4 13 5 13 2 17 4 16 3 16 2 00 0 14 3 05 2 16 0 13 3 3 12 4 12 4 | 55 54·3 3 49·5 0 50·9 22 49·8 8 00 51·1 00 77·8 8 62·6 62·6 6 77·8 86·8 6 70 86 6 | 2·7 30·4 37·3 31·4 33·3 15·5 16·0 -10·5 30·4 35·3 33·3 33·3 33·3 33·8 32·5 34·6 28·2 34·3 33·3 | 21 54 21 09 | 51·6 19·1 13·6 18·4 17·8 62·3 46·6 97·3 28·1 15·8 26·4 19·7 20·6 15·7 21·8 41·4 25·2 13·6 15·1 | h. m. 01 05 16 43 17 38 20 28 19 31 21 46 17 52 14 36 14 44 16 36 16 03 14 34 16 07 17 01 17 16 16 43 18 05 20 23 | 7 397 349 340 335 328 547 528 622 379 374 360 372 343 364 354 466 360 329 325 | 7 190 288 308 303 243 176 124 140 295 272 195 239 244 259 305 266 264 302 278 | h. m. 01 58 03 49 09 04 23 24 24 00 23 33 23 29 05 17 00 03 24 00 06 28 06 17 23 23 06 12 10 17 21 07 01 08 10 52 00 50 | 7 207 61 32 32 85 371 404 482 84 102 165 133 99 105 49 200 96 27 47 | 6,6,3,4,4,3,2,4 3,4,2,2,3,3,3,2 1,1,2,2,2,2,1 1,0,1,1,2,1,2,3 1,2,2,2,2,2,3,3 3,3,2,4,4,5,6,5 4,6,5,6,8,9,5,5 4,6,5,6,8,9,5,5 4,6,5,6,8,9,5,5 4,3,3,3,3,3,2,2 2,2,2,3,2,3,3 3,5,5,3,3,3,3,4 2,4,4,3,4,3,2,2 3,2,1,2,3,3,2,4 3,3,3,2,2,3,1,2 0,2,2,3,3,2,3,1,2 0,2,2,3,3,2,2,3 1,1,2,2,4,5,4,4 3,2,3,3,4,3,2,1 2,2,2,1,1,2,2,1 2,1,2,1,1,2,1,1,2 | 32 22 13 11 17 34 39 48 23 19 29 24 20 19 14 23 21 13 | 2 1 0 0 0 2 2 2 1 1 1 1 1 1 0 0 | °A. 81·0 81·4 80·5 80·8 81·0 81·4 81·7 82·0 82·0 82·3 82·5 82·8 82·8 82·8 84·2 84·4 |
| 19 q 20 q | 19 28 19 10 | 594 578 | 518 09 | | 12 3 | | 34.3 | 06 03 | 15.4 | 02 06 | 313 | 288 | 10 43 | 25 | 1,2,1,1,1,1,1,1 | 12 9 | 0 | 84·2 84·0 |
| 21 22 q 23 24 25 | 19 01 19 03 14 49 14 57 18 03 | 595 600 726 630 640 | 519 09 503 11 529 20 391 06 405 00 | 23 97 36 197 33 239 | 12 5 14 4 15 1 06 5 14 0 | 55·0 58·9 3 58·1 | 36·5 36·1 34·9 25·1 20·7 | 05 35 07 17 07 12 23 24 00 56 | 17·8 18·9 24·0 33·0 37·4 | 17 24 03 04 18 55 17 23 18 17 | 312 307 358 403 415 | 276 273 206 133 102 | 12 23 12 42 20 56 22 56 00 20 | 36 34 152 270 313 | 2,1,1,2,3,2,2,1 0,1,1,1,3,2,1,1 1,1,1,2,5,4,5,4 4,4,5,3,4,3,5,4 4,3,2,2,3,3,4,4 | 14 10 23 32 25 | 0 0 1 1 | 84·1 84·3 84·2 84·0 83·8 |
| 26 27 28 29 d 30 | 17 37 18 36 20 22 15 18 15 35 | 643 611 657 651 683 | 380 23 352 02 504 09 -147 01 510 08 | 48 259 46 153 18 798 | 00 3 13 2 20 2 13 1 09 1 | 7 51·5 2 53·7 8 56·1 | 27·3 14·2 32·0 -20·4 37·6 | 02 24 03 32 20 42 02 15 04 39 | 26·4 37·3 21·7 76·5 13·9 | 17 23 19 29 17 02 00 29 16 12 | 376 346 318 393 438 | 91 70 247 -137 288 | 24 00 02 52 24 00 01 15 09 46 | 285 276 71 530 150 | 5,4,3,2,2,4,3,5 5,5,2,2,2,2,2,3 2,2,2,1,2,2,2,4 8,5,3,3,4,4,3,3 2,2,2,3,4,4,3,2 | 28 23 19 33 22 | 1 1 0 2 1 | 83·4 84·0 83·9 84·0 84·0 |
| 31 | 21 28 | 628 | 510 11 | 33 118 | 14 24 | 55.3 | 34.9 | 07 56 | 20 · 4 | 07 53 | 309 | 270 | 12 23 | 39 | 2,2,2,2,3,3,2,3 | 19 | 0 | 84 · 1 |
| Mean | | 664 | 410 - | - 253 | - | 56 · 4 | 27.0 | | 29 • 4 | | 379 | 219 | | 160 | - | - | 0.81 | 82.9 |

q denotes an international quiet day and d an international disturbed day.

| 1 LE | RWICK | (H) | | | | | | | | | 14, | 000γ (0 | ·14 C. | G.S. u | nit) + | | | | | | | | | | JUNE | E 1960 |
|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|
| | Hour 0-1 | G.M.T. 1-2 | 2-3 | 3-4 | 4-5 | 5-6 | 6-7 | 7-8 | 8-9 | 9-10 | 10-11 | 11-12 | 12-13 | 13-14 | 14-15 | 15-16 | 16-17 | 17-18 | 18-19 | 19-20 | 20-21 | 21-22 | 22-23 | 23-24 | Mean | Sum 11,000+ |
| 1 2 q 3 4 d 5 6 7 | γ 562 561 562 520 468 507 548 559 493 | 7 549 556 559 533 424 489 541 545 451 | γ 520 555 555 515 343 399 503 527 540 | γ 528 557 555 540 364 456 520 495 545 | γ 542 559 555 432 391 489 558 436 471 | γ 469 559 551 397 468 521 561 530 480 | 7 498 550 545 401 455 511 554 527 519 | γ 497 537 538 435 484 517 551 525 524 | 7 472 529 533 501 490 511 542 514 508 | γ 439 521 521 530 466 514 521 529 512 | γ 468 511 518 535 478 501 525 520 503 | 7 484 516 523 527 480 484 542 511 503 | γ 536 521 536 540 531 539 526 534 537 | γ 551 526 540 549 520 551 542 556 576 | γ 558 544 546 573 533 535 538 570 563 | γ 555 553 552 562 568 574 549 562 571 | γ 563 563 563 592 603 555 564 568 566 | γ 572 579 610 581 579 561 587 601 588 | γ 578 585 613 604 587 559 614 633 637 | γ 592 579 621 569 606 570 613 630 605 | γ 581 573 606 574 595 575 603 593 578 | 7 578 570 588 584 565 575 591 547 563 | y 567 567 551 548 565 572 577 495 559 | γ 562 562 536 574 556 568 564 529 555 | γ 534 551 557 530 505 526 556 543 539 | 1821 2233 2377 1716 1119 1633 2334 2036 1947 |
| 10 q 11 q 12 q 13 14 15 | 553 560 564 572 578 570 | 548 557 560 567 581 572 | 542 537 563 565 574 561 | 549 559 563 565 578 570 | 552 565 563 567 576 572 | 549 557 556 568 567 570 | 540 541 552 563 557 557 | 530 523 538 559 549 551 562 | 514 518 524 548 546 520 547 | 506 516 511 535 535 525 534 | 506 515 504 531 527 533 523 | 512 524 511 522 552 536 518 | 519 537 534 519 528 536 517 | 534 548 539 534 560 527 523 | 551 548 549 553 542 542 542 | 566 561 560 550 558 563 559 | 571 576 570 572 563 600 570 | 580 578 590 606 578 602 589 | 592 588 607 603 582 605 575 | 578 591 599 617 611 577 | 596 578 579 591 601 594 575 | 577 570 576 578 586 581 573 | 558 567 575 572 578 581 572 | 558 565 576 576 578 587 574 | 550 553 556 563 566 565 558 | 2203 2266 2355 2515 2591 2566 |
| 16 q 17 18 19 20 | 571 574 566 574 543 | 565 553 553 580 538 | 569 549 553 580 539 | 562 562 570 566 540 | 565 563 568 567 556 | 560 562 548 556 530 | 559 555 538 551 | 552 548 534 541 529 | 547 547 537 514 523 505 | 536 518 507 509 | 525 521 527 508 499 | 523 505 528 517 512 | 528 529 540 545 526 | 532 555 586 562 552 | 549 545 569 558 563 | 577 558 570 571 589 | 578 578 586 564 601 | 582 612 615 581 620 | 572 602 637 592 650 | 577 598 633 597 | 576 603 601 592 | 581 589 578 586 585 | 578 592 562 576 554 | 573 582 548 570 555 | 560 562 566 555 557 | 2362 2436 2499 2588 2315 2359 |
| 21 22 23 24 25 | 563 560 473 559 572 | 560 554 474 553 553 | 568 551 521 559 563 | 543 539 553 554 560 | 502 553 548 562 562 | 543 549 558 553 | 533 543 555 548 543 | 536 549 530 530 | 522 535 526 519 | 515 522 536 511 | 515 515 540 516 | 530 533 524 532 | 541 551 536 550 | 535 574 539 563 | 547 555 534 584 | 562 589 568 635 | 559 601 582 665 | 569 610 615 714 | 575 602 610 695 | 594 595 624 660 | 600 586 607 639 | 595 574 583 544 | 569 572 578 493 | 552 566 566 519 | 552 554 562 574 | 2259 2302 2491 2775 |
| 26 27 d 28 d 29 d 30 d | 504 533 580 517 93 | 457 544 577 512 265 | 459 505 567 482 18 | 503 252 564 476 137 | 542 304 566 543 461 | 513 300 565 535 555 | 491 478 567 538 578 | 507 525 540 497 553 | 515 523 524 523 522 | 521 484 511 524 510 | 520 506 522 512 496 | 518 506 516 506 515 | 534 513 496 507 530 | 539 521 513 515 525 | 553 541 525 536 541 | 569 558 540 554 585 | 576 641 593 572 632 | 607 698 666 599 703 | 611 672 654 594 646 | 600 673 646 614 633 | 604 608 579 631 618 | 586 503 533 617 580 | 575 381 504 443 559 | 559 537 491 129 571 | 540 513 556 520 493 | 1963 1306 2339 1476 826 |
| Mean Sum 15,000+ | 532 959 | 529 870 | <i>513</i> 382 | 514 425 | 526 790 | 530 901 | 533 1001 | 530 891 | 522 652 | 514 415 | 514 420 | 517 510 | 531 916 | 543 1287 | 549 1482 | 566 1988 | 584 2517 | 606 3172 | 609 3274 | 607 3224 | 595 2838 | 575 2236 | 551 1540 | 545 1338 | 547 | Grand Total 394,028 |

$\label{eq:MAGNETIC DECLINATION (WEST)} \\ \text{Mean values for periods of sixty minutes ending at exact hours, G.M.T.}$

| | | . | | | | | | | | | | o ^c | · + | | | | | | | | | | | | **** | E 1960 |
|------------------|--------------|---------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|----------------|--------------|------------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|----------------|
| | RWICK | <u> </u> | | | | | | | | | | | · | | | | | | | | | | | | אינ | |
| | Hour 0-1 | G.M.T. 1-2 | 2-3 | 3-4 | 4-5 | 5-6 | 6-7 | 7-8 | 8-9 | 9-10 | 10-11 | 11-12 | 12-13 | 13-14 | 14-15 | 15-16 | 16-17 | 17-18 | 18-19 | 19-20 | 20-21 | 21-22 | 22-23 | 23-24 | Mean | Sum 900·0+ |
| | 0-1 | | | <u> </u> | | . | | | | | | | 1 | | | | | | | | | | | 45 47 | mean. | 300 0. |
| | l | | 20.5 | 20.0 | 20.7 | 22.0 | 4= 2 | 40.0 | 20.0 | 20.0 | 44.0 | 45.0 | 45.5 | 40.1 | 47 0 | | | | 40.5 | 40.0 | 45.0 | | , , , | 44.0 | 1 | |
| 1 2 a | 41.8 | | | 39·8 40·5 | 29·7 39·0 | 33·8 37·1 | 45·3 36·2 | 42·0 35·3 | 39·2 34·9 | 38·2 37·5 | 44·0 41·2 | | 47.7 | 48·1 49·5 | 47·8 49·3 | 52·5 48·7 | 52·3 48·6 | | 49·5 47·7 | 48·2 46·7 | 46·3 45·9 | 44.9 | 45·9 44·8 | 44·8 44·6 | 43.8 | 152.3 |
| 2 q 3 | 43·4 43·8 | | | 40.5 | 39.1 | 37 · 1 | 35 · 7 | 34.3 | 34 · 5 | 37.8 | 41.9 | | 47.7 | | 50.6 | 50.7 | 50.5 | | | 51.1 | | 45·0 41·7 | | 44.7 | 43 · 4 | 141·4 160·5 |
| 4 d | 40.5 | | | | 14.9 | 12.7 | 20 · 7 | 18.7 | 46.3 | 39.8 | 47 · 4 | | 50.8 | | 53.6 | 55.8 | 54.9 | | | | | 49.4 | 44 . 8 | 46.8 | 41.1 | 85 · 3 |
| 5 | 35.7 | | | 43.9 | 38.8 | 42.8 | 40.0 | 42.0 | 43.9 | 41.9 | 40 5 | | 45.5 | | 51.1 | 51 · 1 | 48.5 | | 47 · 7 | 43.1 | 46 · 1 | 48 · 6 | 48.2 | 48.2 | 43.8 | 151 · 1 |
| 6 | 40.2 | | 38 · 2 | 43 · 4 | 37.6 | 34 · 7 | 35.2 | 33 · 4 | 37 · 1 | 39.0 | 42.4 | 46 · 8 | 51.5 | 51 · 5 | 50.6 | 49.7 | 45.9 | 44.8 | 44 · 7 | 45.7 | 44 · 1 | 45.3 | 46 · 3 | 47.5 | 43.4 | 140.9 |
| 7 | 41.5 | | | 37 · 6 | 34.7 | 35 · 1 | 34 · 7 | 35.0 | 34 · 4 | 38.3 | 46.3 | | 49.6 | | 49.4 | 49.6 | 48.7 | 46.7 | 45.7 | 41.8 | 46.7 | 47 · 2 | 45.9 | 45.3 | 43.3 | 140 - 1 |
| 8 | 44.8 | | | 44 · 3 | 43.8 | 39 • 1 | 33.8 | 32.3 | 37 • 1 | 40.9 | 42.8 | | 49.3 | | 51.4 | 51.5 | 49.6 | | 46.6 | 44 .8 | 45.8 | 42.9 | 37 - 2 | 38-6 | 43.8 | 151.2 |
| ğ | 41.9 | | | 42.9 | 44 · 7 | 44.3 | 39.3 | 36.0 | 35.7 | 40.9 | 42.3 | | 49.6 | 52.0 | 50.4 | 50 · 1 | 47 - 2 | | 43.8 | 41.5 | 45.7 | 45 - 7 | 45.3 | 44 · 7 | 43.9 | 153.8 |
| 10 q | 44.0 | 43.6 | 42.9 | 39.5 | 38.1 | 37 · 0 | 35 · 3 | 35 · 2 | 35 · 4 | 38 · 4 | 42.8 | 47 · 8 | 49.7 | 48.8 | 48 · 4 | 47 - 2 | 48 · 2 | 46.6 | 46.7 | 46 · 7 | 46 · 3 | 43.9 | 45.7 | 45.8 | 43.5 | 144 · 0 |
| 11 a | 45.5 | 46.3 | 45.3 | 38 · 6 | 37.6 | 35.2 | 34 · 9 | 35.6 | 36 · 7 | 40.5 | 45 · 5 | 49 · 1 | 51.1 | 50.6 | 50.4 | 49 · 8 | 49 · 4 | 47 · 7 | 47 - 7 | 45.9 | 45.9 | 45.9 | 46 · 1 | 45.7 | 44.5 | 167 • 0 |
| 12 a | 44.3 | | | 40.5 | 38.3 | 36.2 | 36 · 1 | 36.5 | 37 · 4 | 39.2 | 42.8 | 46.3 | 48.7 | 50 · 1 | 50.6 | 50.6 | 50.6 | 50.6 | 50.6 | 48.2 | 45.8 | 45.5 | 45.3 | 45.3 | 44.3 | 164 · 1 |
| 13 | 44.7 | 45 · 8 | 42.9 | 39 · 1 | 35 · 3 | 35.2 | 35 · 4 | 35.7 | 38 · 2 | 37 · 5 | 39.7 | 42.9 | 45 · 7 | 47 • 7 | 48 · 5 | 48.6 | 49 · 4 | 51 · 4 | 49 · 1 | 48.6 | 47.7 | 47 · 5 | 46.6 | 46 · 5 | 43.7 | 149 - 7 |
| 14 | 45.4 | 47 · 5 | 46 • 0 | 40.5 | 37 · 2 | 37.6 | 40 · 1 | 42.9 | 40.5 | 40.0 | 41.0 | 42 · 7 | 45.6 | 47 · 9 | 52.0 | 52.0 | 51 · 1 | 49 · 4 | 47 · 6 | 45.8 | 47 · 2 | 45 - 2 | 46 · 6 | 45.8 | 44.9 | 177 - 6 |
| 15 | 45.1 | 47 · 3 | 45 · 7 | 40.8 | 38 · 1 | 36 · 4 | 36.0 | 38 ⋅ 6 | 39 · 1 | 42.9 | 44 · 8 | 46 · 9 | 48.8 | 51.5 | 51 · 1 | 50・4 | 48 · 7 | 47 · 2 | 47 · 8 | 46.6 | 45.8 | 45 · 8 | 45.9 | 47 · 2 | 44.9 | 178 • 5 |
| 16 q | 46.6 | 44 · 8 | 44 · 6 | 44 · 8 | 40.8 | 38.6 | 40.1 | 38.6 | 37 · 6 | 38.2 | 40 · 9 | 44.3 | 46.0 | 45.7 | 46.3 | 47 · 7 | 46 · 5 | 44.3 | 44.9 | 46.2 | 45.9 | 45 - 7 | 45 · 8 | 46 · 5 | 43.8 | 151 · 4 |
| 17 | 46.6 | 45.3 | 40 · 1 | 39 · 1 | 38.9 | 38.0 | 37 · 1 | 37 · 2 | 37 · 0 | 38.0 | 41 · 1 | 45 · 7 | 48.6 | 49 • 5 | 49 · 3 | 47 • 6 | 46.5 | 43 · 1 | 45.9 | 46 · 8 | 47 · 7 | 47 • 2 | 47 · 5 | 45 · 3 | 43.7 | 149-1 |
| 18 | 45.9 | | | 41.6 | 39 · 1 | 39 · 8 | 38 · 1 | 37.0 | 36 · 7 | 39.7 | 41 · 1 | | 50.5 | | 51 · 4 | 49.5 | 48.8 | 48 · 5 | 46 • 5 | 47· 0 | 46 · 8 | 46 · 8 | 46 · 8 | 46 · 4 | 44.9 | 177 · 8 |
| 19 | 43.1 | | | 37 · 9 | 36 · 1 | 36.3 | 41.8 | 45 · 7 | 43 · 4 | 43 · 1 | 43.7 | | 49.7 | - | 48 · 8 | 48 · 6 | 46 · 6 | | 46.0 | 47.0 | 45 · 7 | 41.8 | 45.6 | 42.4 | 44 · 5 | 169.0 |
| 20 | 40.9 | 40 · 0 | 40 · 1 | 44 · 8 | 39.0 | 35.7 | 34 · 9 | 35 · 2 | 34 · 7 | 38 · 2 | 42 · 1 | 45.8 | 48.2 | 50.6 | 50 · 7 | 47 · 6 | 44 · 3 | 44 · 8 | 45.8 | 47 · 1 | 47 - 0 | 47 · 9 | 45 · 7 | 44 · 1 | 43 · 1 | 135 · 2 |
| 21 | 40.5 | | | 40.9 | 43 • 4 | 38 • 4 | 40.0 | 39.5 | 39.0 | 42 · 4 | 44 · 8 | 50.5 | 53 · 4 | 55 · 1 | 54 · 7 | 53 · 5 | 51.3 | | 50.6 | 48.6 | 50 · 1 | 51 · 3 | 47 · 7 | 42.4 | 45.9 | 200 · 6 |
| 22 | 41.1 | | | 41.0 | 31.5 | 32.8 | 37.8 | 37.0 | 38 · 1 | 41.2 | 44 · 8 | | 53.5 | 54 · 5 | 54 · 5 | 51.9 | 50.0 | 48 · 2 | | 48.7 | 46 · 7 | 44 · 8 | 44 • 0 | 44 · 4 | 44 · 2 | 159 · 8 |
| 23 | 31.2 | | | 30.5 | 30.2 | 31.7 | 34 · 2 | 35.3 | 37.3 | 39.3 | 42.0 | | 50.3 | 53.0 | 53 · 2 | 54 · 3 | 50.6 | 49.8 | 50.3 | 49.5 | 48 · 4 | 46 · 6 | 46 · 6 | 45.7 | 42.3 | 114 · 1 |
| 24 | 42.0 | | | 36.2 | 35·2 37·1 | 33·3 34·6 | 32·3 35·2 | 35·1 35·9 | 39·1 39·1 | 39·9 42·7 | 42·6 44·8 | 45·9 47·7 | 48.9 | 51·5 52·6 | 50·6 54·5 | 50·7 57·2 | 50·1 | 50·7 54·9 | 49.3 | 43.4 | 43 · 1 | 46.9 | 44 · 8 | 39.0 | 43.0 | 131.6 |
| 25 | 32.6 | | | 38.8 | | | | | | | | ••• | 1 | | | | | | 55.9 | 56 · 1 | 52.5 | 51.5 | 51 · 1 | 37.5 | 45 · 5 | 191 · 8 |
| 26 | 35 · 5 | 35 · 3 | | 31.9 | 31.5 | 31.1 | 38 · 6 | 37 .0 | 35 · 2 | 40 · 9 | 42.2 | | 46.7 | 46.7 | 47.8 | 48 · 7 | 49 · 7 | 49.5 | 48.7 | 48.5 | 45.3 | 42 · 4 | 43.2 | 43.8 | 41.8 | 102.9 |
| 27 d | 45.6 | | | 17.0 | 37 · 1 | 28.6 | 38.0 | 32.5 | 29.5 | 31.4 | 36·1 40·0 | | 41.9 | | 46.6 | 48.1 | 51.7 | 54.2 | | 49.5 | 45.8 | 47 · 2 | 42.1 | 32.3 | 40.8 | 79.9 |
| 28 d 29 d | 36·5 41·5 | | 34·7 42·9 | 36·0 36·7 | 35·7 36·1 | 34·2 36·1 | 30·4 33·5 | 29·5 31·6 | 29·5 36·1 | 39·1 37·1 | 40.5 | 43·9 44·1 | 52·0 47·4 | 54 · 4 48 · 7 | 53·9 48·9 | 52·2 48·2 | 51·6 47·4 | 51·7 46·9 | 47·8 45·8 | 46·0 48·5 | 45·6 52·4 | 41·0 48·0 | 38·1 45·3 | 41.1 | 41.7 | 101-1 |
| 30 d | | | 36 · 2 | 24.9 | 39.3 | 33.5 | 33.3 | 32.3 | 35 · 2 | 39.2 | 40.9 | 41.9 | 46.6 | | 50.5 | | 50.6 | | 52.5 | 52.7 | 51 - 3 | 44 . 7 | | 31·3 42·9 | 42·2 39·7 | 113·2 52·2 |
| 30 u | 20-1 | 23 3 | 50 2 | , | 5, 5 | 55 5 | 55 5 | J. J | JJ 2 | J 2 | .5 9 | ,,, | | ,,, | 55 5 | Ja 7 | 55 0 | 31 3 | J2 J | 32-1 | 31.3 | 44.1 | 44.1 | 74.9 | 35.1 | 32.2 |
| Mean | 41 · 1 | 39 · 4 | 40.1 | 37 · 8 | 36.6 | 35 · 2 | 36 · 1 | 35.8 | 37 · 3 | 39 · 4 | 42.4 | 45.8 | 48.9 | 50 · 4 | 50.6 | 50 · 5 | 49 · 3 | 48.6 | 48.3 | 47 · 3 | 47 · 1 | 45.9 | 45 · 3 | 43.5 | 43.5 | |
| Sum 1000 · 0+ | | | | | | | | | | | | 373 · 1 | | | | | | 458 · 9 | | | | | | | | Grand Total |

3 LERWICK (Z)

47,000γ (0·47 C.G.S. unit) +

JUNE 1960

| J 14 | EK#1CH | (2) | | | | | | | | | 7, | ,000, (| 0.47 C | . u. s. | шіт () | ' | | | | | | | | | 101 | 4F 1300 |
|---------------------------|--------------------------------------|--------------------------------------|--------------------------------------|--------------------------------------|------------------------------------|-------------------------------------|--------------------------------------|--------------------------------------|---------------------------------|--------------------------------------|---------------------------------|--------------------------------------|--------------------------------------|--------------------------------------|--------------------------------------|--------------------------------------|--------------------------------------|---------------------------------|---------------------------------|--------------------------------------|--------------------------------------|---------------------------------|---------------------------------|--------------------------------------|--------------------------------------|--------------------------------------|
| | Hour 0-1 | G.M.T. 1-2 | 2-3 | 3-4 | 4-5 | 5-6 | 6-7 | 7-8 | 8-9 | 9-10 | 0 10-11 | 11-12 | 12-13 | 13-14 | 14-15 | 15-16 | 16-17 | 17 - 18 | 18-19 | 19-20 | 20-21 | 21-22 | 22-23 | 23-24 | Mean | Sum 5000+ |
| 1 2 q 3 4 d 5 | γ 268 304 305 262 249 | 9 214 308 305 249 193 | γ 196 309 308 240 118 | 7 133 309 308 171 138 | 7 155 310 307 82 88 | 7 180 311 309 78 135 | 9 202 312 310 154 192 | 7 242 312 313 186 233 | 272 309 309 199 249 | γ 270 310 303 249 279 | 293 310 302 277 323 | γ 321 303 297 315 360 | γ 347 301 296 348 388 | γ 371 297 295 344 386 | γ 373 300 297 370 355 | γ 323 303 296 364 340 | 9 309 303 296 374 380 | 304 305 290 392 394 | 309 307 306 382 370 | γ 315 311 320 363 380 | γ 321 310 325 343 348 | 325 309 312 316 330 | 317 308 277 291 322 | γ 308 305 283 314 313 | γ 278 307 303 278 286 | 1668 2366 2269 1663 1863 |
| 6 | 263 | 283 | 197 | 158 | 168 | 236 | 273 | 296 | 310 | 313 | 326 | 346 | 346 | 368 | 346 | 332 | 352 | 341 | 337 | 326 | 320 | 320 | 320 | 310 | 299 | 2187 |
| 7 | 271 | 273 | 223 | 203 | 258 | 288 | 302 | 298 | 302 | 314 | 303 | 303 | 314 | 314 | 332 | 337 | 335 | 336 | 344 | 356 | 334 | 327 | 322 | 318 | 304 | 2307 |
| 8 | 311 | 310 | 290 | 213 | 198 | 223 | 277 | 296 | 308 | 306 | 306 | 308 | 296 | 303 | 308 | 314 | 316 | 315 | 334 | 348 | 313 | 293 | 214 | 223 | 288 | 1923 |
| 9 | 216 | 124 | 212 | 247 | 243 | 221 | 263 | 293 | 305 | 299 | 302 | 303 | 303 | 324 | 356 | 346 | 338 | 326 | 310 | 306 | 310 | 315 | 314 | 312 | 287 | 1888 |
| 10 <i>q</i> | 310 | 308 | 307 | 303 | 311 | 310 | 308 | 307 | 310 | 301 | 294 | 293 | 294 | 300 | 309 | 321 | 322 | 318 | 314 | 314 | 315 | 316 | 310 | 300 | 308 | 2395 |
| 11 q | 300 | 299 | 275 | 279 | 300 | 312 | 315 | 314 | 308 | 305 | 297 | 288 | 283 | 288 | 295 | 302 | 312 | 312 | 306 | 308 | 309 | 307 | 304 | 303 | 301 | 2221 |
| 12 q | 305 | 309 | 308 | 308 | 308 | 309 | 310 | 317 | - 314 | 303 | 290 | 277 | 271 | 276 | 283 | 294 | 303 | 307 | 310 | 318 | 319 | 310 | 303 | 300 | 302 | 2252 |
| 13 | 300 | 298 | 292 | 290 | 299 | 303 | 306 | 309 | 307 | 296 | 294 | 293 | 290 | 286 | 289 | 308 | 316 | 321 | 328 | 322 | 316 | 310 | 303 | 299 | 303 | 2275 |
| 14 | 298 | 295 | 296 | 296 | 303 | 303 | 298 | 296 | 296 | 298 | 298 | 297 | 318 | 340 | 357 | 336 | 324 | 316 | 316 | 319 | 326 | 326 | 318 | 308 | 312 | 2478 |
| 15 | 307 | 309 | 301 | 302 | 307 | 312 | 310 | 304 | 306 | 293 | 296 | 295 | 298 | 301 | 300 | 307 | 320 | 335 | 347 | 350 | 337 | 323 | 316 | 306 | 312 | 2482 |
| 16 q | 305 | 301 | 294 | 291 | 277 | 287 | 296 | 298 | 303 | 303 | 305 | 300 | 295 | 292 | 294 | 298 | 302 | 308 | 316 | 312 | 314 | 312 | 308 | 304 | 301 | 2215 |
| 17 | 288 | 277 | 281 | 293 | 300 | 306 | 342 | 307 | 306 | 306 | 304 | 301 | 299 | 296 | 292 | 305 | 319 | 356 | 342 | 320 | 310 | 307 | 308 | 305 | 307 | 2370 |
| 18 | 301 | 288 | 257 | 269 | 296 | 305 | 303 | 311 | 309 | 304 | 300 | 301 | 290 | 302 | 325 | 318 | 308 | 302 | 322 | 312 | 306 | 303 | 298 | 298 | 301 | 2228 |
| 19 | 300 | 292 | 277 | 249 | 237 | 252 | 249 | 243 | 252 | 263 | 273 | 292 | 300 | 311 | 338 | 351 | 350 | 350 | 341 | 338 | 337 | 336 | 310 | 285 | 297 | 2126 |
| 20 | 281 | 263 | 261 | 227 | 235 | 258 | 270 | 284 | 295 | 296 | 295 | 289 | 296 | 313 | 318 | 324 | 330 | 322 | 317 | 322 | 327 | 320 | 302 | 294 | 293 | 2039 |
| 21 | 277 | 262 | 263 | 260 | 193 | 189 | 215 | 239 | 255 | 262 | 267 | 261 | 270 | 283 | 292 | 308 | 329 | 368 | 364 | 365 | 337 | 320 | 294 | 277 | 281 | 1750 |
| 22 | 285 | 296 | 292 | 247 | 258 | 282 | 283 | 296 | 298 | 292 | 290 | 290 | 296 | 305 | 298 | 296 | 302 | 302 | 304 | 298 | 312 | 322 | 308 | 280 | 293 | 2032 |
| 23 | 229 | 202 | 246 | 285 | 292 | 282 | 272 | 279 | 288 | 290 | 287 | 287 | 293 | 302 | 308 | 300 | 329 | 348 | 345 | 335 | 320 | 307 | 302 | 291 | 292 | 2019 |
| 24 | 288 | 279 | 279 | 285 | 292 | 298 | 301 | 298 | 289 | 288 | 292 | 294 | 294 | 308 | 298 | 298 | 310 | 316 | 340 | 334 | 300 | 297 | 288 | 283 | 298 | 2149 |
| 25 | 270 | 285 | 288 | 290 | 301 | 304 | 306 | 308 | 306 | 297 | 283 | 280 | 292 | 310 | 322 | 331 | 362 | 327 | 342 | 356 | 338 | 272 | 180 | 237 | 299 | 2187 |
| 26 | 215 | 164 | 110 | 150 | 197 | 237 | 251 | 269 | 295 | 307 | 309 | 296 | 298 | 316 | 322 | 317 | 314 | 302 | 303 | 310 | 315 | 310 | 270 | 270 | 269 | 1447 |
| 27 d | 272 | 243 | 136 | -39 | 32 | 72 | 165 | 248 | 276 | 306 | 309 | 312 | 306 | 304 | 301 | 304 | 297 | 326 | 348 | 366 | 341 | 279 | 131 | 201 | 243 | 836 |
| 28 d | 271 | 296 | 305 | 310 | 314 | 313 | 300 | 300 | 300 | 288 | 282 | 303 | 323 | 315 | 310 | 322 | 335 | 368 | 366 | 331 | 297 | 263 | 263 | 257 | 305 | 2332 |
| 29 d | 255 | 257 | 242 | 201 | 250 | 249 | 275 | 296 | 289 | 298 | 302 | 302 | 303 | 306 | 308 | 312 | 315 | 323 | 330 | 322 | 316 | 239 | 136 | 260 | 279 | 1686 |
| 30 d | 110 | 64 | -33 | -14 | 92 | 215 | 300 | 324 | 324 | 322 | 331 | 346 | 326 | 325 | 316 | 319 | 338 | 340 | 333 | 327 | 305 | 306 | 277 | 289 | 258 | 1182 |
| Mean | 274 | 261 1846 | 246 1370 | 232 | 240 1203 | 256 1679 | 275 2260 | 287 | 293 2789 | 295 2861 | 298 2940 | 302 3053 | 306 3174 | 313 3381 | 317 3512 | 317 3526 | 325 3740 | 329 | 331 | 330 | 321 3621 | 308 | 284 | 288 | 293 | Grand Total |
| 6000+ | 2216 | 1840 | 13/0 | 962 | 1203 | 10/9 | 2200 | 2616 | 2/09 | 2001 | 4940 | 2022 | 31/4 | 2301 | 3312 | 3320 | 3/40 | 3870 | 3933 | 3904 | 3021 | 3232 | 2514 | 2633 | | 210,835 |

DAILY EXTREMES OF TERRESTRIAL MAGNETIC ELEMENTS, MAGNETIC CHARACTER FIGURES (K AND C) AND TEMPERATURE IN MAGNET HOUSE

4 LERWICK

JUNE 1960

| Temperatu | Magnetic | | 1 | | | | | , | ENTS | IC ELEM | MAGNET | RESTRIAL | TER | | | | | | |
|-------------|--------------------|---------------------|------------------------|----------|--------------|---------------|------------|----------------|--------|----------------|--------------|--------------|----------------|------------|------------------|------------|-----------------|----------------|----------|
| in magne | character | Sum of K indices | 3-hr. range indices | | ce | cal fo | Vert. | | | on | clinati | De | | | force | ontal | Horiz | | |
| house 200 + | of day, C (0-2) | indices | K | ange | | Mini 47,00 | | Maxi 47,00 | Range | imum + | Min. 9° | imum + | Max 9° | Range | nimum 1000y + | | imum 30γ + | Max 14,0 | |
| °A. 84·2 | 1 | 25 | 4,4,4,4,3,3,2,1 | γ 280 | . m. 3 37 | 105 | γ 385 | h. m. 14 07 | 27 · 7 | h. m. 04 32 | 25.5 | 53·2 | h. m. 03 16 | γ 182 | h. m. 09 25 | γ 417 | γ 599 | h. m. 19 44 | 1 |
| 84 · 1 | 0 | 9 [| 1,0,1,1,2,2,2,0 | | 3 59 | | 314 | 19 50 | 16 · 2 | 08 10 | 34 · 2 | 50-4 | 13 33 | 78 | 10 51 | 510 | 588 | 18 31 | 2 q |
| 84 · 5 | 0 | 14 | 0,0,1,2,2,3,2,4 | 67 | 2 02 | | 328 | 21 33 | 19.6 | 07 46 | 33.3 | 52.9 | 17 49 | 120 | 11 10 | 512 | 632 | 17 49 | 3 |
| 85 · 1 | 1 | 32 | 3,6,5,4,4,4,3,3 | 405 | 4 55 | | 400 409 | 14 54 | 62.5 | 04 53 01 05 | -3·4 18·8 | 59 · 1 | 16 04 | 335 | 00 50 | 302 | 637 | 14 33 | 4 d |
| 85 · 3 | 1 | 32 | 6,5,4,4,3,4,3,3 | 353 | 1 15 | 56 | 409 | 12 47 | 34 · 7 | 01 05 | 18.8 | 53 · 5 | 03 47 | 412 | 02 13 | 220 | 632 | 20 04 | 5 |
| 85.6 | 1 | 27 | 5,5,3,3,4,3,2,2 | 230 | 3 35 | 150 | 380 | 13 38 | 23.9 | 07 37 | 30-4 | 54.3 | 13 03 | 269 | 02 45 | 337 | 606 | 15 52 | 6 |
| 86 · 7 | 1 | 23 | 4,4,2,3,3,2,3,2 | 197 | 2 50 | | 368 | 19 12 | 20.8 | 08 55 | 32 · 2 | 53.0 | 13 16 | 164 | 02 54 | 466 | 630 | 18 38 | 7 |
| 86 · 4 | 1 | 28 | 3,5,3,3,3,3,5 | 193 | 2 28 | | 365 | 19 24 | 24.9 | 07 54 | 28.6 | 53 · 5 | 14 03 | 252 | 04 37 | 399 | 651 | 18 28 | 8 |
| 86 · 3 | 1 | 27 | 5,4,4,2,4,3,4,1 | | 1 19 | | 366 | 14 50 | 24 · 1 | 01 33 | 29.3 | 53.4 | 13 10 | 274 | 01 10 | 384 | 658 | 18 40 | 9 |
| 86 · 2 | 0 | 12 | 1,0,1,2,2,2,2,2 | 38 | 2 10 | 290 | 328 | 16 11 | 17 · 3 | 08 06 | 33 · 3 | 50 · 6 | 12 24 | 110 | 09 54 | 501 | 611 | 20 03 | 10 q |
| 86 · 4 | 0 | 15 | 3, 3, 2, 2, 1, 2, 1, 1 | 57 | 2 53 | 261 | 318 | 06 22 | 17 · 7 | 06 42 | 33 · 8 | 51.5 | 12 34 | 83 | 10 42 | 509 | 592 | 18 33 | 11 q |
| 86.3 | ō | 13 | 1,1,2,2,1,3,2,1 | | 2 26 | 269 | 322 | 20 06 | 16.5 | 06 12 | 35.0 | 51.5 | 17 35 | 113 | 10 43 | 501 | 614 | 18 26 | 12 q |
| 86.3 | 0 | 14 | 2,2,1,1,2,3,2,1 | | 3 30 | | 334 | 18 11 | 18 · 8 | 04 32 | 34 · 7 | 53.5 | 17 29 | 113 | 12 27 | 513 | 626 | 17 28 | 13 |
| 86 · 2 | 1 | 20 | 1,2,2,3,4,3,3,2 | | ເ 33 | | 372 | 14 01 | 17 · 1 | 05 04 | 36 · 4 | 53 · 5 | 14 41 | 125 | 14 01 | 504 | 629 | 19 59 | 14 |
| 86 · 1 | 0 | 18 | 2,1,3,2,3,3,2,2 | 67 | 17 | 290 | 357 | 18 36 | 16.4 | 08 20 | 35 · 1 | 51.5 | 13 40 | 141 | 08 35 | 503 | 644 | 19 06 | 15 |
| 86.0 | 0 | 12 | 2, 2, 2, 1, 1, 2, 1, 1 | 46 | 1 15 | | 318 | 18 47 | 11.9 | 08 22 | 36 · 2 | 48 · 1 | 02 11 | 83 | 12 13 | 513 | 596 | 17 32 | l6 q |
| 86.0 | 0 | 14 | 2,1,1,1,2,3,3,1 | | L 47 | | 362 | 17 37 | | 08 45 | 36 · 1 | 49.9 | 14 08 | 105 | 11 17 | 522 | 627 | 16 48 | 17 |
| 86.0 | 0 | 22 | 3,3,2,3,3,3,3,2 | | 42 | | 334 | 14 36 | | 08 51 | 35 · 1 | 54 · 4 | 13 55 | 142 | 11 30 | 491 | 633 | 17 40 | 18 |
| 85 · 9 | 0 | 23 | 3,3,2,3,3,3,3,3 | | 42 | | 355 | 16 01 | | 04 52 | 33 · 4 | 52.6 | 13 39 | 145 | 09 38 | 498 | 643 | 18 32 | 19 |
| 86.0 | 0 | 18 | 3,3,2,1,3,3,1,2 | 124 | 3 38 | 214 (| 338 | 15 53 | | 08 21 | 34 · 0 | 51 · 7 | 14 07 | 99 | 09 56 | 502 | 601 | 19 22 | 20 |
| 85 · 5 | 0 | 23 | 3,4,3,2,2,3,3,3 | | 52 | | 376 | 19 15 | | 04 48 | 33 · 2 | 56 · 1 | 13 46 | 196 | 04 20 | 469 | 665 | 18 52 | 21 |
| 86.0 | 0 | 19 | 2,3,2,2,2,2,3,3 | | 38 | | 328 | 21 27 | | 04 53 | 30 · 3 | 55 · 4 | 14 02 | 102 | 10 12 | 505 | 607 | 20 44 | 22 |
| 86 · 2 | 0 | 20 | 4,2,2,2,3,3,2,2 | | 11 | | 351 | 17 26 | | 02 04 | 22.5 | 55 · 4 | 15 34 | 193 | 01 07 | 425 | 618 | 16 21 | 23 |
| 86.3 | 0 | 22 | 2,2,2,3,3,3,4,3 | | 00 | | 350 384 | 19 43 20 33 | | 19 53 22 08 | 27·5 26·4 | 53·2 75·7 | 13 31 22 43 | 132 349 | 12 02 22 53 | 508 380 | 640 729 | 17 42 17 07 | 24 25 |
| 86.2 | 1 | 27 | 3,2,2,3,3,4,5,5 | 284 | 41 | 100 2 | | | ł | | 20.4 | i | | | | 380 | | | (3 |
| 86 · 2 | 1 | 25 | 5,5,3,2,2,3,2,3 | | 38 | | 324 | 15 12 | | 05 08 | 27 · 6 | 51.5 | 21 12 | 230 | 02 50 | 399 | 629 | 17 51 | 6 |
| 86 · 4 | 1 | 37 | 6,5,5,3,2,5,5,6 | | 19 | | 396 | 19 59 | | 05 11 | 3.6 | 61.9 | 18 58 | 586 | 05 12 | 166 | 752 | 17 19 | |
| 86 · 1 | 1 | 29 | 4,3,3,4,2,5,4,4 | | 02 | | 390 | 18 00 | | 08 24 | 21.7 | 57 · 1 | 17 28 | 213 | 11 57 | 477 | 690 | 17 26 | |
| 86.0 | 1 | 29 | 4,4,3,2,2,3,3,8 | | 49 | | 452 | 23 44 | | 23 32 | 2.6 | 75·5 84·4 | 23 44 02 36 | 702 | 23 51 | -45 | 657 | 21 06 | |
| 85.7 | 2 | 40 | 8,8,4,3,3,5,5,4 | 533 | 50 | -179 (| 354 | 21 06 | 119.6 | 01 2/ | -35 · 2 | 84.4 | 02 30 | 1129 | 02 16 | -361 | 768 | 17 55 | 10 d |
| 85.9 | | | | 100 | | 177 | 250 | | 30.2 | | 25.7 | 55.0 | | 220 | | 401 | 640 | | _ |
| | 0 - 50 | - | - | 182 | - | 177 | 359 | | 30 · 2 | | 25 · 7 | 55.9 | | 239 | | 401 | 640 | | lean |

q denotes an international quiet day and d an international disturbed day.

| 1 LE | RWICK | (H) | | | | | | | | | 14, | 000γ (0 | ·14 C. | G.S. u | nit) + | + | | | | | | | | | JULY | 1960 |
|----------------|-------------|---------------|------------|------------|-----------------|------------|------------|-----------------|-------------|------------|------------|------------|------------|------------|------------------|-----------------|------------|------------|------------|------------|------------------------|------------|-----------------|------------|------------|--------------------------|
| | Hour 0-1 | G.M.T. 1-2 | 2-3 | 3-4 | 4-5 | 5-6 | 6-7 | 7-8 | 8-9 | 9-10 | 10-11 | 11-12 | 12-13 | 13-14 | 14-15 | 5 15-16 | 16-17 | 17-18 | 18-19 | 19-20 | 20-21 | 21-22 | 22-23 | 23-24 | Mean | Sum 10,000+ |
| 1 | γ 565 | γ 547 | γ 480 | γ 483 | γ 547 | γ 559 | γ 511 | γ 494 | γ 546 | γ 525 | γ 510 | γ 504 | γ 517 | γ 531 | γ 54 8 | γ 537 | γ 566 | γ 579 | γ 665 | γ 662 | γ 602 | γ 572 | γ 553 | γ 550 | γ 548 | 3153 |
| 2 | 536 | 504 | 545 | 536 | 544 | 548 | 552 | 533 | 553 | 544 | 521 | 509 | 511 | 549 | 541 | 566 | 565 | 577 | 593 | 590 | 581 | 577 | 565 | 555 | 550 | 3195 |
| 3 | 553 | 553 | 553 | 548 | 552 | 557 | 552 | 547 | 543 | 529 | 517 | 508 | 540 | 551 | 553 | 567 | 592 | 603 | 607 | 623 | 608 | 570 | 568 | 559 | 561 | 3453 |
| 4 | 557 | 493 | 541 | 544 | 524 | 530 | 544 | 540 | 527 | 512 | 502 | 503 | 509 | 533 | 552 | 558 | 633 | 611 | 619 | 601 | 602 | 578 | 566 | 563 | 552 | 3242 |
| 5 | 557 | 555 | 534 | 546 | 565 | 576 | 565 | 542 | 529 | 497 | 498 | 514 | 516 | 527 | 529 | 573 | 571 | 582 | 602 | 623 | 606 | 583 | 570 | 558 | 555 | 3318 |
| 6 | 527 | 511 | 530 | 551 | 559 | 564 | 555 | 540 | 520 | 498 | 477 | 472 | 506 | 537 | 534 | 547 | 573 | 578 | 583 | 583 | 577 | 566 | 559 | 558 | 542 | 3005 |
| 7 q | 556 | 559 | 559 | 560 | 560 | 556 | 548 | 535 | 520 | 509 | 506 | 516 | 529 | 532 | 551 | 562 | 571 | 591 | 592 | 590 | 589 | 578 | 575 | 570 | 555 | 3314 |
| 8 q | 565 | 563 | 558 | 557 | 561 | 561 | 552 | 541 | 530 | 519 | 515 | 522 | 528 | 543 | 551 | 566 | 581 | 589 | 594 | 593 | 587 594 | 578 | 572 | 569 580 | 558 | 3395 |
| 9 q | 565 | 565 568 | 566 552 | 570 558 | 572 568 | 571 574 | 567 573 | 554 565 | 542 552 | 526 546 | 528 533 | 520 518 | 528 523 | 535 540 | 545 557 | 560 564 | 575 555 | 585 585 | 592 604 | 596 616 | 59 4 609 | 591 594 | 587 576 | 564 | 563 565 | 3514 3570 |
| 10 | 576 | | | | | | | - | | | | | 1 | | | | | | | | | | | | | |
| 11 | 564 | 554 | 553 | 563 | 572 574 | 576 | 579 | 569 553 | 559 557 | 551 541 | 534 536 | 530 531 | 537 557 | 546 557 | 552 576 | 573 565 | 594 570 | 587 578 | 607 587 | 606 592 | 611 589 | 584 589 | 569 579 | 572 570 | 568 566 | 3642 3594 |
| 12 | 573 576 | 571 560 | 563 554 | 568 561 | 565 | 570 565 | 548 567 | 572 | 553 | 530 | 530 527 | 538 | 548 | 555 | 562 | 569 | 604 | 583 | 596 | 594 | 609 | 587 | 580 | 575 | 568 | 359 4 3630 |
| 13 14 d | 570 | 564 | 565 | 566 | 569 | 554 | 569 | 566 | 541 | 515 | 509 | 524 | 548 | 565 | 566 | 600 | 620 | 728 | 661 | 625 | 650 | 630 | 599 | 607 | 584 | 4011 |
| 15 d | 596 | 587 | 589 | 594 | 582 | 578 | 563 | 562 | 550 | 524 | 527 | 552 | 586 | 628 | 763 | 945 | 975 | 782 | 673 | 526 | 217 | 268 | -98 | -153 | 538 | 2916 |
| 16 d | -298 | -179 | 141 | 35 | 403 | 463 | 391 | 370 | 400 | 461 | 496 | 516 | 611 | 567 | 590 | 670 | 795 | 728 | 660 | 602 | 548 | 532 | 456 | 385 | 431 | 343 |
| 17 | 223 | 235 | 411 | 465 | 472 | 485 | 477 | 473 | 458 | 478 | 486 | 497 | 503 | 523 | 537 | 573 | 626 | 653 | 608 | 587 | 558 | 561 | 536 | 495 | 497 | 1920 |
| 18 | 522 | 517 | 516 | 524 | 550 | 535 | 526 | 523 | 522 | 510 | 506 | 522 | 502 | 530 | 575 | 572 | 557 | 558 | 573 | 574 | 578 | 576 | 567 | 557 | 541 | 2992 |
| 19 d | 554 | 554 | 558 | 559 | 560 | 552 | 537 | 488 | 473 | 441 | 487 | 487 | 549 | 533 | 538 | 561 | 543 | 590 | 611 | 639 | 565 | 552 | 554 | 497 | 541 | 2982 |
| 20 | 480 | 514 | 515 | 537 | 549 | 548 | 541 | 521 | 509 | 491 | 496 | 497 | 520 | 542 | 584 | 569 | 572 | 592 | 636 | 625 | 574 | 552 | 563 | 531 | 544 | 3058 |
| 21 | 540 | 537 | 544 | 542 | 499 | 480 | 531 | 528 | 512 | 502 | 501 | 501 | 528 | 541 | 538 | 559 | 570 | 586 | 579 | 573 | 569 | 566 | 565 | 569 | 539 | 2933 |
| 22 | 560 | 554 | 547 | 541 | 519 | 516 | 528 | 529 | 522 | 515 | 514 | 515 | 528 | 543 | 550 | 556 | 556 | 580 | 589 | 601 | 595 | 575 | 556 | 541 | 547 | 3130 |
| 23 | 479 | 546 | 547 | 554 | 550 | 548 | 538 | 535 | 535 | 524 | 514 | 515 | 526 | 532 | 542 | 545 | 557 | 564 | 569 | 581 | 571 | 569 | 569 | 567 | 545 | 3077 |
| 24 | 569 | 560 | 559 | 559 | 546 | 546 | 552 | 547 | 54 8 | 552 | 546 | 544 | 526 | 517 | 517 | 526 | 544 | 561 | 581 | 587 | 588 | 574 | 570 | 568 | 554 | 3287 |
| 25 q | 558 | 558 | 556 | 553 | 553 | 556 | 556 | 546 | 532 | 521 | 513 | 523 | 535 | 544 | 554 | 561 | 561 | 569 | 579 | 577 | 581 | 576 | 568 | 567 | 554 | 3297 |
| 26 | 562 | 560 | 559 | 561 | 562 | 560 | 553 | 548 | 539 | 528 | 529 | 541 | 546 | 552 | 546 | 560 | 567 | 577 | 599 | 605 | 589 | 577 | 537 | 514 | 557 | 3371 |
| 27 q | 538 | 557 | 563 | 565 | 567 | 559 | 549 | 540 | 535 | 526 | 513 | 509 | 511 | 518 | 522 | 531 | 546 | 563 | 574 | 577 | 579 | 575 | 574 | 570 | 548 | 3161 |
| 28 | 564 | 563 | 564 | 564 | 563 | 557 | 548 | 539 | 534 | 529 | 532 | 545 | 534 | 533 | 544 | 557 | 571 | 578 | 585 | 601 | 598 | 590 | 585 | 590 | 561 | 3468 |
| 29 | 584 | 560 | 525 | 485 | 502 | 510 | 541 | 559 | 549 | 535 | 524 | 525 | 527 | 550 | 563 | 653 | 733 | 787 | 716 | 677 | 605 | 581 | 579 | 554 | 580 | 3924 |
| 30 | 377 | 400 | 510 | 552 | 536 | 550 | 556 | 555 | 545 | 541 | 539 | 545 | 515 | 541 | 569 | 589 | 585 | 586 | 583 | 590 | 587 | 577 | 578 | 571 | 545 | 3077 |
| 31 d | 548 | 480 | 354 | 552 | 545 | 515 | 494 | 504 | 481 | 474 | 489 | 507 | 541 | 557 | 558 | 580 | 647 | 653 | 612 | 578 | 573 | 561 | 551 | 535 | 537 | 2889 |
| Mean | 509 | 509 | 523 | 531 | 545 | 546 | 541 | 533 | 526 | 516 | 514 | 518 | 532 | 543 | 558 | 581 | 602 | 609 | 607 | 600 | 577 | 566 | 543 | 529 | 548 | |
| Sum 15,000+ | 797 | 770 | 1211 | 1453 | 1890 | 1919 | 1763 | 1518 | 1316 | 994 | 925 | 1050 | 1485 | 1825 | 2307 | 3014 | 3675 | 3863 | 3829 | 3594 | 2889 | 2539 | 1828 | 1408 | | Grand Total 407,861 |

$\label{eq:MAGNETIC DECLINATION (WEST)} \textbf{Mean values for periods of sixty minutes ending at exact hours, G.M.T.}$

| 2 LE | RWICK | (D) | | | | | | | | | | 9 |)° + | | | | | | | | | | | | JU | JLY 1960 |
|-----------------|-------------|---------------|---------|--------|---------------|--------------|--------------|--------|----------------|--------------|--------------|---------|---------|--------------|--------------|--------------|--------------|--------------|---------|---------|---------|---------------|--------------|---------|--------|------------------------|
| | Hour 0-1 | G.M.T. 1-2 | 2-3 | 3-4 | 4-5 | 5-6 | 6-7 | 7-8 | 8-9 | 9-10 | 10-11 | 11-12 | 12-13 | 13-14 | 14-15 | 15-16 | 16-17 | 17-18 | 18-19 | 19-20 | 20-21 | 21-22 | 22-23 | 23-24 | Mean | Sum 800·0+ |
| | | , | , | • | • | , | • | - | , | , | , | , | | | | , | , | , | • | • | • | | , | , | , | |
| 1 | 43.9 | 41.2 | 43.9 | 39 · 2 | 33 · 6 | 36 · 4 | 38 · 1 | 38 · 1 | 41.0 | 38.9 | 39 · 1 | 41.9 | 46.5 | 48 · 2 | 46.3 | 41.8 | 40 · 5 | 41 · 7 | 46.8 | 45.3 | 44.3 | 45 · 1 | 43.3 | 44 - 3 | 42.1 | 209 · 4 |
| 2 | 47 - 2 | 44 - 2 | 44 · 7 | 44 · 8 | 43.2 | 43 · 1 | 40.5 | 38.9 | 38 - 9 | 36 · 5 | 38.0 | 41.0 | 45.3 | 48 · 1 | 49.6 | 48 · 2 | 46 · 5 | 44 · 7 | 44.6 | 44 · 8 | 45.2 | 44 · 0 | 45.2 | 43.8 | 43.8 | 251.0 |
| 3 | 43.7 | 44.3 | 44 · 3 | 44 · 8 | 41.5 | 38 · 6 | 39.0 | 35 · 7 | 35 · 2 | 36 · 7 | 38.6 | 43.0 | 44.3 | 46 · 5 | 48.3 | 47 · 5 | 45 · 2 | 44 · 8 | 46 · 7 | 47 · 3 | 47 · 3 | 39.9 | 43.7 | 43.8 | 42.9 | 230 · 7 |
| 4 | 45 · 7 | 39 · 1 | 35 · 8 | 39 · 1 | 41.5 | 40.9 | 39 · 9 | 34 · 3 | 38 · 6 | 35 · 2 | 42.0 | 44 · 1 | 47 · 8 | 49 · 6 | 49.9 | 50.6 | 50.6 | 47 · 2 | 47 · 6 | 46 · 6 | 46 • 0 | 45 · 9 | 46 · 5 | 44 · 3 | 43.7 | 248.8 |
| 5 | 47 · 2 | 47 · 5 | 41.5 | 33 · 8 | 35.7 | 35 · 4 | 38 · 4 | 42 · 4 | 41.5 | 41.8 | 45.3 | 46 • 4 | 49.0 | 50 · 1 | 50.8 | 49.5 | 46 · 5 | 44 · 7 | 44 · 8 | 44 • 9 | 44 · 1 | 44 · 3 | 44.0 | 42 · 7 | 43.8 | 252.3 |
| 6 | 42 · 2 | 34 · 3 | 31.5 | 35 · 7 | 35.6 | 34 · 7 | 34 · 3 | 35.2 | 37 · 7 | 40 - 9 | 42.9 | 51.0 | 54.2 | 52 · 4 | 50.1 | 46.3 | 45 · 4 | 45.0 | 45 · 7 | 47 - 0 | 46 · 9 | 45.9 | 44 • 9 | 44 · 7 | 42.7 | 224 · 5 |
| 7 q | 43.0 | 42.4 | 41.3 | 40 · 5 | 40.5 | 39.5 | 36 · 7 | 37 · 1 | 37 · 5 | | 44 - 4 | 46 · 4 | 48 · 7 | 49.5 | 48 · 2 | 46·1 | 45 · 8 | 46 · 7 | | 47 · 2 | 46.7 | 46 · 5 | 45.3 | 43 · 1 | 43.8 | 250 · 8 |
| 8 q | 43.9 | 43 - 7 | 41.5 | 38 • 6 | 36 · 1 | 34 · 5 | 33 · 4 | 34 · 1 | 37 · 1 | 40 · 5 | 42 · 4 | 45.6 | 49.5 | | 51 · 1 | 50.6 | 49・6 | | | | | 45 · 2 | 45 ·8 | 45 • 4 | 43.5 | 244 · 4 |
| 9 q | 44 · 8 | | 44 · 8 | 41 · 5 | 38.3 | 35 · 2 | | 35 · 5 | 37 · 7 | 40.5 | 43.8 | 49.0 | 51.6 | | 54 · 3 | 52.0 | 49 - 5 | | | 45.8 | | 46 · 5 | 46 · 7 | 44.5 | 44.8 | 274 · 1 |
| 10 | 41 · 7 | 42.9 | 45.8 | 39 - 2 | 36.6 | 35.6 | 35 · 2 | 36 · 2 | 37 · 3 | 38 · 6 | 40 · 9 | 44 · 8 | 50.5 | 53.9 | 55 · 4 | 55 · 1 | 52 · 3 | 48.9 | 46 · 8 | 47 · 5 | 46 · 6 | 46.5 | 47 - 4 | 45 · 9 | 44.7 | 271.6 |
| 11 | 43.9 | 41 . 9 | 38 · 6 | 35 · 6 | 32.6 | 30 · 9 | 34 · 1 | 33 · 8 | 35.3 | 38 · 4 | 41.0 | 45 · 8 | 50.5 | 52.5 | 52 · 4 | 50.0 | 49.0 | 47 · 7 | 46 · 7 | 45 • 4 | 46 · 4 | 39 · 1 | 44 • 9 | 44 · 8 | 42.6 | 221.3 |
| 12 | 43.6 | | 44 · 3 | 42.9 | 39.9 | 41.5 | 43 · 3 | 41.5 | 38 · 1 | 39 · 0 | 39.5 | 45 · 3 | 48.9 | 49 · 6 | 51.3 | 49.0 | 47 · 6 | | | 45 · 8 | | 46 · 1 | 46 · 2 | 46 · 5 | 44.8 | 275.9 |
| 13 | 46 · 4 | | 39 · 9 | 37 · 8 | 35 · 2 | 39.9 | 40 · 5 | 39.9 | 39.5 | | 43.0 | 46 • 0 | 49.1 | | 52.6 | 51.5 | 51 · 7 | | | 46 · 7 | 46 · 8 | 43 · 1 | 45.3 | 46 · 3 | 44.7 | 273 · 7 |
| 14 d | 46.5 | | 42.9 | 40 · 1 | 40.9 | 46 · 7 | 43.8 | 39 · 1 | 38 · 1 | 42.8 | 43.7 | 45.9 | 48.6 | 51.5 | 48.8 | 48.6 | 49.6 | | | 52.5 | | 52.6 | 48 · 2 | 44 · 7 | 46.6 | 318 · 9 |
| 15 d | 41.0 | 39 · 2 | 40.3 | 43.0 | 47 · 2 | 45.9 | 44 · 7 | 47 · 4 | 46 · 3 | 47 · 2 | 49 · 1 | 45.3 | 34 · 4 | 36 · 5 | 38.3 | 47.0 | 68 · 9 | 63 · 7 | 60.2 | 53.0 | 56 · 8 | 42 · 1 | 22.8 | -26 · 3 | 43 · 1 | 234 · 0 |
| 16 d | -23 · 6 | 6.7 | 30 · 7 | 32 • 1 | 30.9 | 35 · 2 | 33 · 4 | 35 · 2 | 36 · 2 | 38 • 6 | 41 · 5 | 41.5 | 39.8 | 45.8 | 47.2 | 48 · 2 | 52 · 5 | 51.5 | 50.6 | 48.9 | 42.9 | 40-1 | 32 · 4 | 33 · 7 | 36.3 | 72.0 |
| 17 | 34 · 5 | 31.9 | 42.8 | 37 · 5 | 37 · 1 | 33.8 | 39 · 8 | 36.7 | 35 · 7 | 41.7 | 43 · 2 | 44.7 | 46.9 | 48.5 | 49.6 | 49.5 | 48 · 2 | 45 · 5 | 48 · 1 | 46 · 3 | 46 · 8 | 47 · 0 | 43.8 | 48 • 2 | 42.8 | 227 · 8 |
| 18 | 39 · 8 | | 38 · 1 | 37 · 2 | 35.5 | 33.8 | 34 · 3 | 40.0 | 38 · 6 | 38 · 8 | 42.9 | 44.9 | 46.9 | 50 · 6 | 53.0 | 47 · 7 | 49.1 | | 47 · 7 | 48.0 | | 44 · 5 | 44 · 8 | 43.6 | 42.8 | 227 · 9 |
| 19 d | 41.5 | | 39 · 1 | 38 · 2 | 36 · 2 | 37 · 1 | 38 · 3 | 43.6 | 42.8 | | | 48.9 | 54.3 | 56.3 | 56.1 | 52.3 | 49.5 | | | 39 · 1 | | 45.9 | 43.9 | 48.5 | 44.9 | 276 · 7 |
| 20 | 47 · 7 | 41.5 | 36 • 2 | 34 • 0 | 34 · 0 | 33.5 | 32.5 | 33 · 2 | 3 4 · 7 | 39.9 | 43.9 | 47 · 7 | 50.5 | 50.6 | 53.0 | 49.9 | 47 · 2 | 48.9 | 46 · 1 | 45.3 | 44 · 8 | 46 · 7 | 37 · 6 | 41.7 | 42.5 | 221 · 1 |
| 21 | 40 · 2 | | 39 · 1 | 37 ⋅ 8 | 36 · 9 | 36 · 7 | 35 · 2 | 35 · 7 | 37 · 6 | | 43 · 8 | 45.9 | 48 · 2 | 50 · 1 | 47 · 7 | 45 · 7 | 45 · 8 | | 41.9 | 44 · 7 | 46 · 5 | 46 · 1 | 45 · 8 | 44 · 3 | 42.6 | 221.9 |
| 22 | 42.8 | | 38 · 1 | 38 · 1 | 38.6 | 39.8 | 42.3 | 39 · 7 | 39.8 | 40 · 8 | 42.9 | 47 - 2 | 51.5 | 53 · 5 | 53 · 3 | 51 · 5 | 49.6 | | | | | 46 · 7 | 46 · 3 | 45.3 | 44.9 | 278 · 5 |
| 23 | 36 · 9 | | 37 · 1 | 37 · 1 | 35.3 | 33.8 | 33.4 | | 35.7 | 39.0 | 41.9 | 44 · 3 | 47.4 | 48.9 | 49.2 | 47.8 | 46 · 3 | | | 44 · 1 | | | 44 · 8 | 43.9 | 41.4 | 193 · 8 |
| 24 | 47 · 4 | | 41.8 | 39 · 7 | 39.0 | 38.3 | 37.0 | 35 · 7 | 36 · 2 | | 43.9 | 47.5 | 48.6 | 51 · 1 | 51.3 | 50.4 | 50 · 2 | | | 44 · 2 | | 43.1 | 41.1 | 41.0 | 43.8 | 250 · 3 |
| 25 q | 41 · 5 | 41.9 | 41.0 | 39•9 | 38 · 1 | 37 · 6 | 37 · 1 | 36 · 3 | 36 · 9 | 38 · 9 | 41.5 | 44 · 5 | 47 · 5 | 49 · 1 | 49.7 | 49.6 | 48 · 6 | | 46 · 6 | 45.6 | 44 · 9 | 43.9 | 42.9 | 42 · 7 | 43.1 | 233 · 5 |
| 26 | 41 · 9 | | 40.9 | 40.0 | 40 · 9 | 39 · 1 | 38 · 1 | 38.0 | 38.0 | 41.0 | 44 · 8 | 48 · 5 | 52.0 | 52 · 2 | 52.4 | 53.5 | 52 · 2 | | 45.8 | 46 · 3 | 45.7 | 46 · 5 | 38 · 2 | 35.9 | 44.3 | 262 · 4 |
| 27 q | 37 · 2 | | 38 · 6 | 35.3 | 34 · 4 | 33.8 | 31.9 | 35.2 | 38 · 8 | 38 · 7 | 40.5 | 44.2 | 46.9 | 48.0 | 48.4 | 46.9 | 44.5 | | 43.6 | 44.5 | | 44 · 8 | 44 · 3 | 43.2 | 41.3 | 191.0 |
| 28 | 42.0 | | 40.5 | 39 · 8 | 37 · 6 | 34 · 4 | 33.0 | 34 · 9 | 36.9 | 39.0 | 42.9 | 47 · 2 | 50.4 | 50.6 | 51.8 | 53.9 | 52.0 | | | | | 45.1 | 45.2 | 40.2 | 43.9 | 253 · 1 |
| 29 | 38 · 8 | | 42.0 | | 42·6 45·7 | 49·4 41·5 | 42·8 39·3 | 37 · 4 | 37.6 | 40·9 40·2 | 45·3 40·5 | 47 · 2 | 49.6 | 52·3 50·1 | 53·0 50·1 | 52·6 49·8 | 53·4 47·5 | 61·0 46·8 | | 55.4 | | 50.4 | 49.6 | 46.0 | 47.5 | 339.6 |
| 30 | 32.4 | | 24 · 9 | 38.6 | | | | 37 · 1 | 38 · 2 | | | 43 · 4 | 45.7 | | | | | | 45.3 | 43.0 | 45.8 | 44 · 8 | 45.6 | 44 · 7 | 41.9 | 205 · 7 |
| 31 d | 43 · 1 | | 17 · 4 | 29.9 | 37 · 1 | 38.9 | 36 · 1 | 40.5 | 39 · 7 | 44 · 3 | 42.8 | 47 · 2 | 48.6 | 47 · 0 | 50.0 | 48.6 | 49 · 1 | 44.6 | 45.3 | | | | 42 · 4 | 44 · 8 | 41.7 | 199-8 |
| Mean | 40.3 | 39.3 | 39.0 | 38 · 5 | 38.0 | 37 · 9 | 37 · 4 | 37 · 5 | 38 · 2 | 40 · 0 | 42.5 | 45 · 7 | 48 · 2 | 49.9 | 50 · 4 | 49 · 4 | 49.2 | 48 · 2 | 47 · 2 | 46 · 6 | 46.5 | 45 · 0 | 43.5 | 41.5 | 43.3 | |
| Sum 100 · 0+ | 148 · 8 | 120 • 0 | 109 · 4 | 94 · 5 | 78.3 | 75 · 5 | 60 · 7 | 62.6 | 83 · 2 | 140.0 | 216 · 8 | 316 · 3 | 393 · 7 | 448 · 2 | 463 · 2 | 431-7 | 424 · 4 | 393 · 3 | 362 · 3 | 343 · 7 | 339 · 8 | 295.0 | 248 · 9 | 186 · 2 | | Grand Total 32236·5 |

3 LERWICK (Z) 47,000γ (0·47 C.G.S. unit) + JULY Hour G.M.T Sum 7000+ 4-5 5-6 6-7 0-1 2-3 3-4 7-8 8-9 9-10 10-11 11-12 12-13 13-14 14-15 15-16 16-17 17-18 18-19 19-20 20-21 21-22 22-23 23-24 Mean 327 309 323 323 3<u>5</u>6 295 294 294 298 305 332 302 272 222 40 193 7 8 9 10 307 303 308 300 300 306 280 288 295 296 301 306 302 297 302 297 320 299 299 289 292 287 12 13 14 d 15 d 287 309 307 291 313 311 311 312 333 279 299 309 379 233 339 311 388 307 303 305 288 296 303 297 305 311 357 344 74 86 734 284 291 16 d 17 18 -24 176 153 434 592 325 273 292 295 303 330 355 332 319 319 310 20 258 292 325 323 323 317 326 330 327 344 251 273 286 303 290 279 289 299 297 305 309 311 319 325 269 303 232 113 301 22 23 24 25 309 297 291 286 299 297 202 27 217 305 286 280 291 289 299 271 304 304 Mean Grand Total Sun 1561 1240 966 1081 1633 1845 2019 2226 2365 2427 2471 2558 2898 3109 3333 3494 3563 3414 3213 2929 2615 2183 1970 7000+ 225.851

DAILY EXTREMES OF TERRESTRIAL MAGNETIC ELEMENTS, MAGNETIC CHARACTER FIGURES (K AND C) AND TEMPERATURE IN MAGNET HOUSE

| 4 | Γ | | | | | TER | ESTRIAL | MAGNET | IC ELE | ENTS | | | | | | T | | | JULY 1960 |
|----------|---------------|-------|-------|----------------|-------|-----------|-----------|-----------|-----------|---------|---------------|------|--------|----------------|-------|------------------------|----------|--------------------|--------------------------|
| | | Horiz | ontal | force | | | | clinati | | | | Vert | ical f | огсе | | 3-hr. range indices | Sum of K | | Temperature in magnet |
| | Maxi 14,00 | | | imum 100y + | Range | Max 9° | imum + | Min 9° | imum + | Range | Maxi 47,00 | | | imum 100y + | Range | K | indices | of day, C (0-2) | house 200 + |
| | h. m. | γ | γ | h. m. | γ | h. m. | • | • | h. m. | • | h. m. | γ | γ | h. m. | γ | | | | °A. |
| 1 | 18 45 | 684 | 417 | 02 51 | 267 | 18 33 | 50 · 7 | 30.9 | 04 02 | 19.8 | 15 48 | 362 | 179 | 03 05 | 183 | 5, 5, 4, 2, 3, 3, 4, 3 | 29 | 1 | 85 · 3 |
| 2 | 18 32 | 608 | 474 | 01 09 | 134 | 00 42 | 54 • 4 | 33.3 | 09 10 | 21.1 | 12 18 | 332 | 194 | 01 08 | 138 | 4, 3, 3, 3, 3, 2, 2, 2 | 22 | 0 | 85 · 7 |
| 3 | 16 51 | 632 | 498 | 11 26 | 134 | 19 35 | 49.0 | 33.8 | 08 07 | 15.2 | 18 19 | 341 | 256 | 04 17 | 85 | 2,3,2,2,2,3,3,3 | 20 | 0 | 85.3 |
| 4 | 16 56 | 660 | 446 | 01 29 | 214 | 16 38 | 52.5 | 29 · 4 | 01 53 | 23 · 1 | 17 36 | 380 | 135 | 01 32 | 245 | 5,3,3,3,3,4,3,2 | 26 | 1 | 85.5 |
| 5 | 19 45 | 636 | 473 | 09 59 | 163 | 13 11 | 52.1 | 31.8 | 03 57 | 20.3 | 16 21 | 336 | 210 | 03 07 | 126 | 4,3,3,3,3,2,3,3 | 24 | 0 | 85 · 7 |
| 6 | 18 19 | 586 | 458 | 11 07 | 128 | 12 18 | 54·8 | 28 · 4 | 02 16 | 26 · 4 | 10 38 | 334 | 179 | 01 58 | 155 | 4,3,2,3,3,2,2,1 | 20 | 0 | 85 · 7 |
| <i>'</i> | 17 45 | 600 | 504 | 10 20 | 96 | 13 19 | 49 · 7 | 35.6 | 06 46 | 14 · 1 | 02 03 | 314 | 288 | 14 06 | 26 | 1,2,1,2,1,2,1,1 | 11 | 0 | 85 · 9 |
| q | 18 29 | 597 | 512 | 10 33 | 85 | 15 02 | 51 · 5 | 32.4 | 06 50 | 19.1 | 02 50 | 312 | 277 | 11 07 | 35 | 1,1,1,1,1,1,1,1 | 8 | 0 | 85.9 |
| P | 19 35 | 599 | 515 | 11 29 | 84 | 14 22 | 54 · 8 | 33.7 | 06 07 | 21 · 1 | 18 10 | 310 | 263 | 12 33 | 47 | 1, 2, 1, 2, 1, 2, 1, 1 | 11 | 0 | 86.0 |
| 9 | 19 52 | 625 | 515 | 11 27 | 110 | 14 40 | 55 · 6 | 33.8 | 06 58 | 21.8 | 16 12 | 328 | 264 | 03 13 | 64 | 3,3,1,2,2,3,2,2 | 18 | 0 | 86 · 0 |
| | 16 53 | 628 | 525 | 11 23 | 103 | 13 30 | 53 · 8 | 29.4 | 05 03 | 24 • 4 | 17 28 | 338 | 248 | 01 29 | 90 | 3, 2, 1, 2, 2, 3, 2, 3 | 18 | 0 | 86 · 1 |
| | 19 09 | 601 | 525 | 10 52 | 76 | 14 05 | 54 • 4 | 35 · 2 | 08 44 | 19.2 | 15 22 | 356 | 283 | 02 34 | 73 | 2,2,3,2,3,2,1,2 | 17 | 0 | 86 · 2 |
| | 20 28 | 624 | 520 | 10 30 | 104 | 16 23 | 54 · 6 | 33.9 | 04 36 | 20.7 | 17 17 | 366 | 240 | 00 28 | 126 | 3, 2, 2, 2, 2, 3, 3, 2 | 19 | 0 | 86 · 2 |
| a | 17 20 | 822 | 494 | 10 03 | 328 | 17 22 | 67 · 0 | 36 · 2 | 08 59 | 30-8 | 17 51 | 423 | 282 | 06 27 | 141 | 2, 3, 3, 3, 3, 5, 4, 4 | 27 | 1 | 86 · 2 |
| d | 16 29 | 1251 | -628 | 23 53 | 1879 | 16 40 | 111 · 8 | -67 · 6 | 23 52 | 179 · 4 | 14 58 | 580 | ~36 | 20 49 | 616 | 2,3,2,4,6,7,8,8 | 40 | 2 | 86 · 3 |
| d | 16 12 | 849 | -733 | 00 38 | 1582 | 01 56 | 72 · 7 | -58.3 | 00 48 | 131.0 | 16 12 | 623 | -131 | 03 35 | 754 | 9,8,4,4,4,6,5,6 | 46 | 2 | 86 · 3 |
| ' | 17 13 | 674 | 113 | 01 14 | 561 | 23 08 | 55 · 2 | 23.2 | 01 32 | 32.0 | 16 49 | 404 | 111 | 01 13 | 293 | 6,4,3,3,2,4,3,4 | 29 | 1 | 86 · 2 |
| . (| 15 00 | 620 | 490 | 12 21 | 130 | 14 51 | 54 · 1 | 31.6 | 05 54 | 22.5 | 15 38 | 383 | 256 | 00 01 | 127 | 2, 3, 2, 3, 4, 4, 2, 1 | 21 | 1 | 86 · 4 |
| d | 19 37 | 685 | 410 | 23 46 | 275 | 12 00 | 60.0 | 32.4 | 19 36 | 27.6 | 11 53 | 384 | 147 | 23 59 | 237 | 1,2,3,4,4,4,5,5 | 28 | 1 | 86 · 2 |
| ' | 18 43 | 651 | 446 | 00 00 | 205 | 00 11 | 56 · 4 | 17.5 | 22 28 | 38.9 | 15 46 | 359 | 145 | 00 01 | 214 | 4,3,2,2,4,4,4,4 | 27 | 0 | 86 · 1 |
| - | 17 14 | 604 | 434 | 05 03 | 170 | 13 50 | 51.5 | 33.8 | 07 11 | 17.7 | 18 23 | 342 | 219 | 05 22 | 123 | 3,4,3,1,3,2,2,2 | 20 | 0 | 86.0 |
| ı | 19 38 | 604 | 498 | 24 00 | 106 | 13 23 | 55 · 2 | 36.2 | 03 06 | 19.0 | 18 28 | 329 | 238 | 23 59 | 91 | 2, 3, 2, 2, 2, 2, 2, 4 | 19 | 0 | 86 - 2 |
| - 1 | 19 25 | 585 | 419 | 00 31 | 166 | 14 08 | 50 · 4 | 21 · 4 | 00 54 | 29.0 | 18 06 | 320 | 153 | 00 48 | 167 | 5, 2, 2, 1, 2, 1, 2, 1 | 16 | 0 | 86 · 1 |
| ٠ ١ | 19 02 | 605 | 502 | 13 28 | 103 | 13 48 | 53.3 | 33.2 | 08 12 | 20.1 | 18 58 | 325 | 262 | 01 03 | 63 | 3, 2, 2, 2, 3, 3, 2, 2 | 19 | 0 | 86.0 |
| q | 21 01 | 592 | 510 | 10 26 | 82 | 15 29 | 50.5 | 34 · 8 | 05 15 | 15.7 | 07 37 | 312 | 284 | 12 09 | 28 | 2, 1, 1, 1, 1, 1, 1, 2 | 10 | 0 | 86 · 1 |
| - [| 19 18 | 618 | 502 | 23 13 | 116 | 15 18 | 54 · 1 | | 23 18 | 19.7 | 19 39 | 331 | 249 | 23 54 | 82 | 1,1,1,2,2,2,2,4 | 15 | 0 | 86 · 0 |
| q | 19 07 | 581 | | 12 04 | 74 | 14 05 | 48.9 | 29.5 | 06 35 | 19.4 | 06 50 | 321 | 252 | 00 01 | 69 | 3, 2, 3, 1, 2, 1, 1, 0 | 13 | 0 | 86 · 0 |
| - 1 | 19 32 | 607 | | 13 04 | 93 | 15 46 | 54.3 | 31.9 | 06 55 | 22.4 | 21 18 | 317 | 273 | 23 24 | 44 | 0, 1, 2, 2, 2, 1, 2, 3 | 13 | 0 | 86 · 0 |
| | 17 47 | 829 | 464 | 02 54 | 365 | 17 34 | 65.1 | 34 · 1 | 04 13 | 31.0 | 17 58 | 485 | 122 | 03 12 | 363 | 5,4,4,2,3,5,5,4 | 32 | 1 | 86 · 3 |
| - 1 | 15 03 | 616 | 210 | 00 20 | 406 | 15 15 | 51 · 5 | | 01 23 | | 12 09 | 350 | 52 | 00 14 | 298 | 6, 4, 2, 3, 4, 3, 2, 2 | 26 | 1 | 86.3 |
| đ | 17 13 | 686 | 262 | 02 15 | 424 | 22 40 | 53 · 3 | 0.9 | 02 53 | 52-4 | 17 34 | 436 | -22 | 02 11 | 458 | 6,5,4,4,3,4,3,3 | 32 | 1 | 86.3 |
| 1 | | 663 | 381 | | 283 | | 56 · 6 | 24.0 | | 32.6 | | 369 | 189 | | 179 | - | _ | 0.42 | 86 • 0 |

q denotes an international quiet day and d an international disturbed day.

TERRESTRIAL MAGNETIC FORCE: HORIZONTAL COMPONENT Mean values for periods of sixty minutes ending at exact hours, G.M.T. 14,000y (0.14 C.G.S. unit) +

| 1 LE | RAICK | (H) | | | | | | | | | 14, | 000γ (| 0·14 C. | G.S. u | nit) † | • | | | | | | | | | AUGU | ST 1960 |
|----------------|-------------|---------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|-------------|------------|------------|------------|------------------------|
| | Hour 0-1 | G.M.T. 1-2 | 2-3 | 3-4 | 4-5 | 5-6 | 6-7 | 7-8 | 8-9 | 9-10 | 10-11 | 11-12 | 12-13 | 13-14 | 14-15 | 15-16 | 16-17 | 17-18 | 18-19 | 19-20 | 20-21 | 21-22 | 22-23 | 23-24 | Mean | Sum 10,000+ |
| | γ | γ | γ | γ | γ | γ | γ_ | γ | γ | γ | γ | γ | γ. | γ_ | γ | γ | γ | γ | γ | γ | γ | γ | γ | γ | γ | 2044 |
| 1 | 522 | 541 | 552 | 552 | 525 | 535 | 545 | 531 | 529 | 533 | 528 | 518 | 544 | 551 540 | 580 552 | 549 545 | 561 | 574 614 | 591 609 | 584 579 | 578 571 | 571 571 | 568 557 | 549 534 | 550 550 | 3211 3193 |
| 2 | 544 | 526 546 | 541 556 | 524 561 | 524 559 | 557 553 | 560 540 | 546 530 | 525 524 | 528 522 | 520 521 | 528 526 | 526 542 | 543 | 561 | 551 | 572 579 | 590 | 582 | 579 581 | 572 | 563 | 559 | 555 | 552 | 3193 3258 |
| 3 | 542 550 | 544 | 558 | 560 | 557 | 549 | 555 | 552 | 534 | 505 | 507 | 518 | 531 | 536 | 556 | 560 | 566 | 577 | 578 | 581 | 573 | 565 | 558 | 555 | 551 | 3225 |
| 4 q 5 a | 560 | 559 | 557 | 556 | 558 | 555 | 550 | 548 | 541 | 532 | 529 | 533 | 546 | 556 | 561 | 555 | 563 | 566 | 579 | 573 | 573 | 567 | 566 | 566 | 556 | 3349 |
| 5 q | | | | | | | | | | | | | 1 | | | | | | - | | | | | | 1 1 | |
| 6 | 564 | 565 | 562 | 566 | 566 | 565 | 562 | 557 | 541 | 521 | 523 | 526 | 541 | 553 | 562 | 581 | 590 | 574 | 573 | 581 | 583 | 582 | 575 | 571 | 562 | 3484 |
| 7 | 573 | 559 | 544 | 566 | 563 | 563 | 562 | 558 | 543 | 529 | 528 521 | 528 520 | 528 | 536 553 | 552 | 563 609 | 575 636 | 573 | 581 608 | 581 601 | 582 573 | 576 534 | 573 | 571 474 | 559 558 | 3407 |
| 8 | 571 | 570 | 569 | 569 560 | 567 560 | 566 | 561 | 525 | 508 | 517 | 524 | 520 506 | 544 | 520 | 566 528 | 545 | 583 | 628 571 | 580 | 566 | 567 | 562 | 492 559 | 566 | 538 | 3382 |
| 9 | 423 569 | 544 568 | 561 569 | 575 | 575 | 508 565 | 497 561 | 513 539 | 525 505 | 526 525 | 545 | 532 | 539 | 536 | 538 | 547 | 558 | 622 | 529 | 607 | 588 | 571 | 561 | 561 | 562 | 2903 3485 |
| 10 | | | | | | | _ | | | | | | 1 | | | | | | | | | | | |] -] | |
| 11 | 558 | 557 | 552 | 477 | 480 | 553 | 563 | 547 | 526 | 512 | 512 | 493 | 521 | 530 | 584 | 566 | 552 | 558 | 597 | 590 | 582 | 573 | 570 | 575 | 547 | 3128 |
| 12 | 572 | 557 | 555 | 566 | 567 | 516 | 524 | 497 | 505 | 509 | 513 | 513 | 497 | 489 | 525 | 544 | 550 | 567 | 568 | 580 | 585 | 578 | 572 | 565 | 542 | 3014 |
| 13 | 562 | 557 | 553 | 558 | 558 | 557 | 555 | 544 | 523 | 499 | 489 | 491 | 504 | 520 | 546 | 562 | 564 | 569 | 571 | 576 | 569 | 569 | 562 | 545 | 546 | 3103 |
| 14 | 547 | 550 | 547 | 537 | 552 | 561 | 556 | 545 557 | 530 | 513 | 504 516 | 501 513 | 507 527 | 513 533 | 535 538 | 558 548 | 566 | 611 572 | 635 | 620 | 611 582 | 585 579 | 579 577 | 576 | 556 | 3339 |
| 15 | 536 | 565 | 561 | 556 | 569 | 569 | 567 | | 540 | 517 | | | | | | | 555 | | 581 | 577 | | | | 574 | 555 | 3309 |
| 16 d | 579 | 569 | 564 | 562 | 564 | 559 | 553 | 550 | 542 | 527 | 516 | 509 | 516 | 540 | 675 | 829 | 985 | 935 | 841 | 646 | 549 | 525 | 532 | 485 | 611 | 4652 |
| 17 d | 169 | 91 | 117 | 95 | 309 | 154 | 492 | 452 | 361 | 439 | 484 | 498 | 512 | 561 | 520 | 618 | 828 | 938 | 759 | 628 | 524 | 485 | 288 | 480 | 450 | 802 |
| 18 | 553 | 530 | 539 | 544 | 548 | 530 | 512 | 501 | 491 | 469 | 471 | 492 | 503 | 519 | 531 | 543 | 555 | 553 | 569 | 571 | 564 | 556 | 555 | 552 | 531 | 2751 |
| 19 | 550 | 543 | 542 | 547 | 550 | 544 | 535 | 524 | 506 | 489 | 480 | 493 | 516 | 540 | 534 | 525 | 569 | 598 | 627 | 630 | 568 | 525 | 427 | 535 | 537 | 2897 |
| 20 | 544 | 551 | 554 | 551 | 532 | 477 | 412 | 433 | 471 | 500 | 493 | 495 | 525 | 526 | 530 | 539 | 562 | 596 | 596 | 600 | 574 | 559 | 547 | 537 | 529 | 2704 |
| 21 d | 510 | 531 | 530 | 532 | 532 | 541 | 532 | 518 | 482 | 470 | 510 | 526 | 539 | 558 | 566 | 561 | 572 | 627 | 647 | 607 | 562 | 561 | 558 | 558 | 547 | 3130 |
| 22 | 521 | 422 | 527 | 543 | 542 | 539 | 536 | 522 | 503 | 493 | 507 | 522 | 530 | 530 | 533 | 539 | 569 | 561 | 570 | 588 | 562 | 558 | 554 | 542 | 534 | 2813 |
| 23 | 529 | 547 | 551 | 540 | 548 | 552 | 545 | 539 | 530 | 513 | 502 | 502 | 510 | 527 | 539 | 549 | 572 | 562 | 572 | 561 | 561 | 561 | 561 | 559 | 543 | 3032 |
| 24 q | 558 | 549 | 553 | 558 | 563 | 558 | 545 | 521 | 511 | 502 | 507 | 524 | 526 | 541 | 550 | 564 | 578 | 584 | 574 | 569 | 566 | 563 | 559 | 559 | 549 | 3182 |
| 25 q | 559 | 561 | 559 | 558 | 556 | 550 | 542 | 527 | 513 | 501 | 498 | 502 | 511 | 530 | 551 | 571 | 566 | 572 | 570 | 577 | 575 | 573 | 573 | 571 | 549 | 3166 |
| 26 a | 571 | 569 | 569 | 566 | 564 | 561 | 553 | 541 | 528 | 513 | 505 | 507 | 526 | 537 | 553 | 561 | 561 | 557 | 572 | 585 | 581 | 568 | 571 | 564 | 553 | 3283 |
| 27 | 562 | 557 | 554 | 566 | 568 | 568 | 566 | 548 | 534 | 525 | 520 | 523 | 535 | 551 | 568 | 575 | 597 | 631 | 610 | 587 | 577 | 583 | 571 | 571 | 564 | 3547 |
| 28 | 567 | 564 | 558 | 522 | 511 | 526 | 536 | 532 | 529 | 511 | 502 | 502 | 525 | 521 | 526 | 534 | 560 | 578 | 567 | 567 | 565 | 563 | 562 | 561 | 541 | 2989 |
| 29 d | 567 | 563 | 581 | 595 | 578 | 447 | 505 | 525 | 523 | 514 | 503 | 496 | 506 | 511 | 546 | 568 | 581 | 582 | 590 | 598 | 562 | 49 8 | 401 | 441 | 533 | 2781 |
| 30 d | 262 | 410 | 370 | 204 | 374 | 326 | 351 | 409 | 444 | 493 | 508 | 521 | 602 | 613 | 621 | 625 | 583 | 596 | 596 | 565 | 557 | 559 | 550 | 542 | 487 | 1681 |
| 31 | 530 | 535 | 537 | 481 | 520 | 554 | 540 | 541 | 511 | 487 | 497 | 504 | 504 | 522 | 523 | 539 | 542 | 555 | 572 | 561 | 559 | 562 | 550 | 550 | 532 | 2776 |
| Mean | 527 | 529 | 534 | 524 | 537 | 525 | 533 | 525 | 512 | 507 | 509 | 512 | 525 | 537 | 553 | 569 | 592 | 606 | 603 | 588 | 571 | 559 | 541 | 547 | 544 | |
| Sum 15,000+ | 1324 | 1400 | 1542 | 1247 | 1639 | 1258 | 1513 | 1272 | 878 | 734 | 783 | 862 | 1292 | 1636 | 2150 | 2623 | 3350 | 3791 | 3694 | 3217 | 2695 | 2345 | 1787 | 1944 | | Grand Total 404,976 |

$\label{eq:Magnetic Declination (WEST)} \textbf{Mean values for periods of sixty minutes ending at exact hours, G.M.T.}$

| 2 LEI | RWICK | (D) | | | | | | | | | | 99 | · + | | | | | | | | | | | | AUGU | ST 1960 |
|---------------|--------------|---------------|---------|---------|---------|---------|------------------|------------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|---------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|------------------------|
| | Hour 0-1 | G.M.T. 1-2 | 2-3 | 3-4 | 4-5 | 5-6 | 6-7 | 7-8 | 8-9 | 9-10 | 10-11 | 11-12 | 12-13 | 13-14 | 14-15 | 15-16 | 16-17 | 17-18 | 18-19 | 19-20 | 20-21 | 21-22 | 22-23 | 23-24 | Mean | Sum 900 · 0+ |
| | | • | • | • | • | • | • | • | • | • | • | • | 1 | • | • | • | , | • | • | , | , | • | • | • | | |
| 1 | 45.3 | | | | | | 37 · 9 | 38.6 | 38 · 1 | 39 · 4 | 39 · 8 | 44 · 7 | 49 · 1 | 48.0 | 46.3 | 48 · 2 | 48 · 6 | | 46 · 6 | 44.9 | 45.3 | 45.0 | 40 · 5 | 42.1 | 43 · 4 | 141.3 |
| 2 | 40.5 | | | | | | 37.6 | 37.6 | 41.4 | 40.6 | 41.9 | 44 · 1 | 48.7 | 51 · 3 | 51.7 | 49.8 | 47 · 7 | 46 · 8 | 44.7 | 44.7 | 44.9 | 44 · 1 | 37 · 9 | 41.1 | 43.8 | 151.0 |
| 3 4 q | 36·3 45·7 | | | | | | 37·8 37·7 | 38·9 | 40·0 39·2 | 40·5 40·5 | 43·4 43·4 | 45·9 44·4 | 47.7 | 48·7 49·0 | 48·9 48·9 | 47·7 47·0 | 44·3 45·9 | | 45·4 44·8 | 45·7 45·5 | 45·3 44·6 | 43.8 | | 45 · 4 | 42.9 | 130.8 |
| 5 q | 42.3 | | | | | | | 38 · 4 | 39 1 | 41.5 | 43.9 | 46 · 7 | 49.4 | 50.0 | 47.5 | 46.7 | 45.8 | | 44 · 6 | 44.7 | 44.8 | 44·6 45·0 | 43·1 45·2 | | 43.6 | 146·8 147·3 |
| 6 | 44.9 | 43 · 1 | 41.7 | 40.8 | 39 - 2 | 38 · 2 | 39 · 2 | 39 · 3 | 39 · 1 | 40.5 | 44 · 2 | 46.8 | 50 · 1 | 52 · 2 | 49 · 8 | 48 · 2 | 47 · 1 | 44 · 5 | 44 · 8 | 46 · 5 | 45.3 | 43.9 | 41.0 | 41.8 | 43.8 | 152 · 2 |
| 7 | 43.8 | | | | 36 · 4 | 36.5 | 37 · 3 | 37.2 | 37 · 8 | 40.1 | 41.4 | 43.3 | 47.4 | 50.9 | 51.7 | 50.4 | 48.9 | | 46 4 | 46.5 | | 45.1 | | | 43.9 | 153 - 7 |
| 8 | 43.5 | | 43.6 | 41.8 | 39 · 2 | | 36 · 3 | 35.9 | 40.5 | 39 · 1 | 43.3 | 49.0 | 50.7 | 53.9 | 52.0 | 52.6 | 51.3 | 48.0 | 46.0 | 43.2 | 40.8 | 40.5 | 45.3 | 41.8 | 44.1 | 157 - 8 |
| 9 | 41.8 | | | | | | 53 · 7 | 46 · 8 | 37 · 3 | 37 · 3 | 41 · 1 | 43.2 | 46 · 0 | 49.0 | 48.9 | 46 · 6 | 44 · 9 | | | 43.8 | 44 · 8 | 45 · 2 | | 44 · 8 | 44 · 1 | 158 · 8 |
| 10 | 44.6 | 38.3 | 40 · 1 | 39 - 0 | 36 · 3 | | 36 · 7 | 37 · 4 | 40.8 | 44 · 7 | 45 · 0 | 48 - 7 | 50.8 | 52.3 | 52 · 0 | 50 · 4 | 46 · 9 | 47 · 1 | 47 · 9 | 46 · 6 | 43.6 | 46 · 7 | 44 · 8 | 44 · 3 | 44-2 | 161-2 |
| 11 | 42.2 | | | | 35 · 1 | | 32.6 | 33.8 | 37 · 5 | 39.9 | 44 · 7 | 47 · 8 | 49.0 | 52.6 | 54 · 1 | 51 · 8 | 50 · 3 | | 48.8 | 44.9 | 46.3 | 45.8 | 44 - 9 | 46.3 | 44 · 4 | 164 · 5 |
| 12 | 40 5 | | | | | | 41.8 | 43.0 | 48.9 | 45.9 | 42.8 | 44 · 9 | 48.0 | 51.5 | 51.7 | 49.5 | 45.7 | 43.7 | | 45.2 | | 43.6 | 40.5 | 40.5 | 43.9 | 154 · 3 |
| 13 14 | 41 · 8 | | | | | | 35·7 36·4 | 34 · 1 33 · 8 | 35·4 34·5 | 39·7 38·0 | 44·1 41·5 | 48·6 44·9 | 52·8 49·3 | 52·9 52·9 | 51·3 51·8 | 48·9 51·3 | 45·9 49·0 | | | 44·8 49·7 | 45·1 43·2 | 45·7 43·7 | | 42·1 45·9 | 43.7 | 148 - 1 |
| 15 | 45.6 | | | | | | 36 · 5 | 34 · 2 | 35.7 | 42.4 | 44 · 7 | 47 . 8 | 49.1 | 49.8 | 47.9 | 45.1 | 43.2 | | 44.0 | 44.8 | 46.0 | 44.5 | 44.5 | 44 · 1 | 43.4 | 164 · 0 140 · 5 |
| 16 d | 44.0 | 42.3 | 41.2 | 39 · 3 | 37 · 8 | 36 · 3 | 35.7 | 35.6 | 37 - 4 | 41.5 | 45.0 | 48.9 | 52.5 | 54 · 3 | 54 · 3 | 52.0 | 55 · 2 | 58 · 2 | 61.7 | 55 · 4 | 44 · 5 | 44 · 1 | 45.9 | 47.7 | 46 · 3 | 210.8 |
| 17 d | 51.5 | 14 · 5 | 9.3 | 6.0 | 35 · 9 | 39 · 3 | 37 · 3 | 33.0 | 41.8 | 48.9 | 45.9 | 48 · 6 | 49.7 | 49.5 | 50.8 | 48.7 | 48 . 2 | | 56 · 4 | 52 · 4 | 47.2 | 45.6 | 28.3 | 36.0 | 41.0 | 83.5 |
| 18 | 39.0 | | | | | | 39 · 7 | 42.0 | 41.7 | 43.0 | 48 · 2 | 50.6 | 51.5 | 51 · 4 | 49.7 | 46 · 8 | 44 · 2 | | | 44 - 7 | 44 · 8 | 45.6 | 44 · 5 | 43 · 4 | 43.6 | 146 · 4 |
| 19 | 41.9 | | | | | | 34·5 45·8 | 34 1 | 34 . 7 | 39.8 | 45.6 | 49.5 | 53.8 | 54.9 | 52.7 | 50.5 | 49.7 | | 46 · 5 | 48.6 | | 43.0 | | 41.5 | 43.4 | 140.9 |
| 20 | 42.0 | | | • | | | | 37 · 6 | 34 · 7 | 37 · 1 | 42.4 | 45.9 | 48 · 7 | 48 · 1 | 47 · 4 | 45.8 | 45.5 | | 44 · 8 | 40.9 | 44 8 | 41.9 | 41.8 | 38.0 | 41.7 | 100 · 4 |
| 21 d | 37 · 8 | | | | | | 36 · 2 | 38 · 1 | 38.6 | 44.7 | 48 · 7 | 51.8 | 53.9 | 53.9 | 52.5 | 47.8 | 46.8 | | | 46 · 7 | | 44 · 8 | 44.8 | 46 · 3 | 43.2 | 136 · 0 |
| 22 | 38·9 43·6 | 41·1 41·9 | | | | | 34 · 5 34 · 7 | 35·0 34·6 | 36·0 35·2 | 40·1 37·5 | 44·3 41·2 | 50·7 46·8 | 53·9 51·1 | 53·3 51·3 | 49·5 50·1 | 46·7 48·6 | 44·8 46·3 | | 43·2 36·7 | 36·5 41·7 | | 44·0 42·6 | 44·1 43·3 | 46 · 5 | 42.3 | 115.9 |
| 23 24 a | 45.0 | | | | | | 35.3 | 35.2 | 35 1 | 38.5 | 45.5 | 51 · 1 | 51.7 | 52 · 1 | 50.3 | 48.2 | 45.9 | | | 43.6 | | 43.9 | 43.3 | 43·8 42·6 | 42·1 43·3 | 110·1 138·8 |
| 25 q | 42.4 | 41.9 | | | 39.0 | 37 · 1 | 35.2 | 34 · 6 | 34 · 6 | 37 · 8 | 43.3 | 48 · 8 | 51.3 | 52.0 | 51.3 | 49.8 | 47.2 | 47 · 0 | 48 · 4 | 48.4 | 46.9 | 44 · 8 | 44 · 8 | 43.8 | 43.8 | 151.7 |
| 26 a | 42.8 | 42.2 | 41.5 | 40.5 | 39 · 3 | 37 · 6 | 36 · 3 | 35 · 7 | 36 · 3 | 39.5 | 44 · 3 | 50 · 7 | 54.4 | 54 · 3 | 51.5 | 48 · 2 | 45.8 | 44 · 6 | 44 · 7 | 45.8 | 45.3 | 45.8 | 44 · 8 | 42.4 | 43.9 | 154 · 3 |
| 27 | 39.0 | 37 · 1 | | 36.6 | 34 · 3 | 33.8 | 34 · 2 | 36 · 2 | 37 · 0 | 40.1 | 45.8 | 50.5 | 53.7 | 55.3 | 55 · 1 | 53.9 | 52.4 | 47 · 2 | 44 · 7 | 46.8 | 39.9 | 40.0 | 43.4 | 43.9 | 43.3 | 140.2 |
| 28 | 42.3 | 41 · 3 | | 45.8 | 40.3 | | 34 · 1 | 33.9 | 36 · 5 | 39.3 | 42.2 | 46 · 5 | 51.6 | 51 · 9 | 51.8 | 48.9 | 42.4 | 43 · 6 | 43.6 | 44.0 | 44 · 7 | 45.3 | 45.0 | 44.2 | 43 · 2 | 137 · 1 |
| 29 d | 47.9 | 38 · 9 | | | 41.8 | 40.2 | 26.3 | 30.7 | 36 · 4 | 39 · 3 | 43.9 | 46 · 7 | 47.9 | 48 · 2 | 47 · 2 | 47 · 7 | 47 · 4 | 45.3 | 42.9 | 38 · 1 | 38 · 8 | 35.7 | 22.6 | 32 · 7 | 39.9 | 56.8 |
| 30 d | 36 · 6 | 12.3 | | 32 · 4 | 46 · 7 | | 50 · 1 | 38 • 9 | 39.0 | 43.9 | 46 · 3 | 47 · 2 | 46.7 | 44 · 7 | 46.3 | 45.8 | 42.9 | 41 · 9 | 38 · 1 | 41.0 | 40.0 | 37 · 2 | 40.5 | 39 · 4 | 41.6 | 98•4 |
| 31 | 45.7 | 37 · 6 | | | 41 8 | 40 · 2 | 41.0 | 38 · 1 | 40.0 | 44 · 2 | 46.3 | 47 · 4 | 48.7 | 49-2 | 48 - 7 | 46 · 7 | 44.9 | 42 · 6 | 42 · 1 | 45 · 1 | | 36 • 4 | 41.3 | 42.2 | 43.2 | 135 · 7 |
| Mean | 42.7 | 39 · 4 | 39 · 4 | 38.8 | 38 · 9 | 38 · 9 | 37 · 7 | 36 · 8 | 38 · 1 | 40.8 | 44.0 | 47 · 5 | 50.2 | 51.3 | 50 · 4 | 48.7 | 46 · 9 | 45.9 | 45 · 3 | 45.2 | 44 · 4 | 43.5 | 42.0 | 42.8 | 43 · 3 | |
| Sum 100·0+ | 222 · 5 | 121.6 | 121 · 1 | 103 · 7 | 107 · 6 | 104 · 3 | 67.0 | 40 · 3 | 80.3 | 165·3 | 264 · 1 | 372.5 | 455 · 5 | 489-4 | 463.7 | 410 · 3 | 355 · 1 | 324 · 1 | 305-3 | 301-2 | 277 · 6 | 247 · 9 | 202 · 3 | 226 · 6 | | Grand Total 32229·3 |

3 LERWICK (Z)

47,000γ (0·47 C.G.S. unit) +

AUGUST 1960

| 3 LI | ERWICK | (Z) | | | | | | | | | 4/ | ,0009 (| 0.4/ C | .u.s. | unit) | τ | | | | | | | | | AUGUS | T 1960 |
|--------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------------------|
| | Hour | G.M.T. | | | | | | | | | | | | | | | | | | | | | | | | Sum |
| | 0-1 | 1-2 | 2-3 | 3-4 | 4-5 | 5-6 | 6-7 | 7-8 | 8-9 | 9-10 | 10-11 | 11-12 | 12-13 | 13-14 | 14-15 | 15-16 | 16-17 | 17-18 | 18-19 | 19-20 | 20-21 | 21-22 | 22-23 | 23-24 | Mean | 6000+ |
| 1 | γ | γ | γ | γ | γ | γ | γ | γ | γ | γ | γ | γ | γ | γ | γ | γ | γ | γ | γ | γ | γ | γ | γ | γ | γ | 4004 |
| 2 | 274 284 | 274 264 | 295 259 | 292 253 | 271 212 | 252 245 | 272 277 | 281 298 | 290 303 | 303 305 | 313 308 | 319 311 | 309 317 | 325 319 | 343 325 | 325 337 | 310 332 | 311 335 | 313 357 | 325 345 | 325 331 | 319 313 | 301 270 | 292 266 | 301 299 | 1234 1166 |
| 3 | 252 | 264 | 285 | 293 | 304 | 305 | 306 | 306 | 306 | 305 | 310 | 310 | 305 | 317 | 319 | 325 | 331 | 332 | 331 | 325 | 323 | 319 | 315 | 305 | 308 | 1394 |
| 4 q | 291 | 270 | 250 | 270 | 280 | 274 | 282 | 293 | 299 | 310 | 303 | 307 | 310 | 311 | 314 | 323 | 326 | 325 | 325 | 317 | 317 | 313 | 313 | 314 | 302 | 1237 |
| 5 q | 311 | 309 | 311 | 313 | 311 | 311 | 305 | 305 | 303 | 300 | 296 | 293 | 297 | 299 | 309 | 315 | 315 | 315 | 314 | 316 | 315 | 311 | 310 | 309 | 308 | 1393 |
| 6 | 309 | 306 | 311 | 311 | 311 | 306 | 303 | 299 | 301 | 299 | 296 | 293 | 291 | 298 | 300 | 308 | 311 | 319 | 311 | 301 | 305 | 311 | 317 | 310 | 305 | 1327 |
| 7 | 305 | 303 | 266 | 258 | 270 | 276 | 279 | 285 | 291 | 291 | 291 | 292 | 299 | 301 | 305 | 311 | 311 | 315 | 314 | 309 | 305 | 303 | 303 | 303 | 295 | 1086 |
| 8 | 304 | 305 | 304 | 302 | 303 | 299 | 301 | 307 | 298 | 280 | 279 | 280 | 283 | 293 | 315 | 319 | 370 | 416 | 420 | 382 | 350 | 305 | 200 | 143 | 307 | 1358 |
| 9 | 98 | 205 | 280 | 305 | 305 | 272 | 212 | 236 | 274 | 295 | 300 | 323 | 325 | 308 | 309 | 316 | 331 | 345 | 338 | 337 | 323 | 311 | 306 | 301 | 290 | 955 |
| 10 | 280 | 255 | 282 | 298 | 311 | 307 | 299 | 306 | 307 | 289 | 281 | 285 | 284 | 296 | 310 | 322 | 337 | 351 | 393 | 385 | 353 | 319 | 322 | 311 | 312 | 1483 |
| 11 | 307 | 305 | 301 | 256 | 160 | 232 | 277 | 295 | 305 | 306 | 298 | 312 | 325 | 313 | 315 | 347 | 345 | 328 | 314 | 335 | 331 | 323 | 312 | 300 | 302 | 1242 |
| 12 | 249 | 230 | 252 | 269 | 260 | 251 | 258 | 282 | 284 | 285 | 300 | 325 | 345 | 350 | 351 | 349 | 343 | 332 | 312 | 312 | 318 | 323 | 311 | 300 | 300 | 1191 |
| 13 | 307 | 307 | 300 | 292 | 306 | 308 | 316 | 322 | 321 | 317 | 313 | 3 06 | 315 | 327 | 333 | 339 | 336 | 324 | 312 | 316 | 323 | 319 | 312 | 310 | 316 | 1581 |
| 14 15 | 305 | 306 | 306 | 299 | 293 | 298 | 309 | 316 | 317 | 316 | 312 | 314 | 316 | 318 | 325 | 330 | 329 | 318 | 342 | 352 | 343 | 350 | 336 | 312 | 319 | 1662 |
| | 247 | 283 | 287 | 283 | 300 | 313 | 319 | 329 | 326 | 329 | 325 | 317 | 305 | 310 | 319 | 321 | 325 | 319 | 319 | 319 | 312 | 313 | 313 | 313 | 310 | 1446 |
| 16 d | 305 | 299 | 305 | 311 | 312 | 316 | 312 | 312 | 310 | 299 | 299 | 296 | 291 | 304 | 308 | 403 | 420 | 390 | 428 | 415 | 321 | 319 | 325 | 300 | 329 | 1900 |
| 17 d | 66 | 279 | -217 | 259 | 99 | 64 | 141 | 264 | 295 | 274 | 291 | 312 | 336 | 338 | 336 | 340 | 403 | 388 | 352 | 368 | 452 | 350 | 223 | 205 | 259 | 218 |
| 18 19 | 279 | 291 | 299 | 318 | 318 313 | 321 | 306 320 | 306 | 312 | 327 319 | 319 330 | 318 323 | 330 319 | 342 314 | 363 329 | 364 | 369 325 | 371 364 | 357 365 | 338 375 | 331 | 321 313 | 310 | 310 278 | 326 | 1820 1642 |
| 20 | 303 | 305 319 | 310 325 | 312 325 | 325 | 318 300 | 226 | 320 181 | 320 224 | 268 | 292 | 293 | 299 | 322 | 319 | 326 318 | 319 | 339 | 355 | 373 | 345 351 | 327 | 196 312 | 305 | 318 305 | 1316 |
| | | | | | | | | | | | | | | | | | | | | | | | | | | ł |
| 21 d 22 | 271 | 257 | 270 | 278 | 278 302 | 308 318 | 316 325 | 316 325 | 319 321 | 325 312 | 317 300 | 312 293 | 310 293 | 316 297 | 338 307 | 361 317 | 357 328 | 371 336 | 392 331 | 348 336 | 335 323 | 312 313 | 281 311 | 224 282 | 313 296 | 1512 1113 |
| 23 | 200 | 154 286 | 208 300 | 281 307 | 302 | 317 | 318 | 317 | 313 | 303 | 293 | 293 | 294 | 294 | 300 | 306 | 316 | 336 | 339 | 323 | 311 | 308 | 305 | 304 | 307 | 1359 |
| 24 q | 268 297 | 292 | 292 | 297 | 304 | 307 | 312 | 310 | 300 | 298 | 292 | 285 | 285 | 287 | 297 | 300 | 312 | 321 | 329 | 319 | 313 | 307 | 305 | 305 | 303 | 1266 |
| 25 q | 305 | 304 | 306 | 312 | 313 | 313 | 312 | 312 | 310 | 301 | 299 | 292 | 287 | 291 | 299 | 306 | 313 | 312 | 310 | 306 | 312 | 312 | 305 | 304 | 306 | 1336 |
| 26 g | 304 | 304 | 305 | 307 | 310 | 312 | 313 | 315 | 312 | 303 | 291 | 278 | 272 | 279 | 292 | 306 | 312 | 310 | 304 | 308 | 314 | 319 | 309 | 289 | 303 | 1268 |
| 27 | 221 | 212 | 234 | 257 | 285 | 299 | 300 | 302 | 302 | 299 | 293 | 293 | 288 | 286 | 299 | 306 | 318 | 367 | 411 | 371 | 360 | 312 | 313 | 306 | 301 | 1234 |
| 28 | 305 | 305 | 299 | 282 | 224 | 246 | 279 | 299 | 302 | 306 | 306 | 306 | 306 | 323 | 331 | 338 | 351 | 342 | 331 | 326 | 320 | 313 | 310 | 305 | 306 | 1355 |
| 29 d | 266 | 214 | 265 | 279 | 272 | 122 | 123 | 237 | 278 | 286 | 306 | 309 | 309 | 311 | 311 | 317 | 332 | 338 | 355 | 381 | 324 | 252 | 157 | 186 | 272 | 530 |
| 30 d | 102 | 36 | -77 | -83 | -23 | 27 | 157 | 247 | 304 | 331 | 353 | 374 | 376 | 409 | 436 | 454 | 395 | 378 | 390 | 363 | 338 | 303 | 308 | 310 | 259 | 280 |
| 31 | 277 | 264 | 275 | 238 | 203 | 241 | 270 | 285 | 307 | 323 | 321 | 323 | 324 | 323 | 336 | 336 | 336 | 336 | 334 | 322 | 320 | 316 | 293 | 295 | 300 | 1198 |
| Mean | 264 | 268 | 258 | 277 | 269 | 270 | 279 | 294 | 302 | 303 | 304 | 306 | 308 | 314 | 322 | 332 | 337 | 341 | 345 | 340 | 331 | 315 | 294 | 287 | 302 | |
| Sum 7000+ | 1192 | 1307 | 988 | 1574 | 1340 | 1378 | 1645 | 2108 | 2354 | 2405 | 2427 | 2487 | 2545 | 2721 | 2993 | 3285 | 3458 | 3584 | 3698 | 3547 | 3244 | 2749 | 2104 | 1897 | | Grand Total 225,030 |

DAILY EXTREMES OF TERRESTRIAL MAGNETIC ELEMENTS, MAGNETIC CHARACTER FIGURES (K AND C) AND TEMPERATURE IN MAGNET HOUSE

4 LERWICK

AUGUST 1960

| 4 | LERWIC | ERWICK | | | | | | | | | | | | | | AUG | JUST 1960 | | |
|-----|---------------|------------------|------|----------------|-------|------------|-----------|-----------|-----------|---------|---------------|------------|------|----------------|------------------------|------------------------|------------------------|-----------|-------------|
| | | | | | | TERR | ESTRI AL | MAGNET | IC ELEN | IENTS | | | | | | | | Magnetic | Temperature |
| | | Horizontal force | | Т | | | clinati | | Τ | | | ical f | | 1 | 3-hr. range indices | Sum of K | character of day, C | in magnet | |
| | Maxi 14,00 | | | imum 100γ + | Range | Max. 9° | imum + | Min 9° | imum + | Range | Maxi 47,00 | | | imum 100y + | Range | K | | (0-2) | 200 + |
| | h. m. | γ | γ | h. m. | γ | h. m. | • | , | h. m. | | h. m. | γ | γ | h. m. | γ | | | | °A. |
| 1 | 14 06 | 620 | 508 | 00 46 | 112 | 13 00 | 51.5 | 35.6 | 06 01 | 15.9 | 14 23 | 349 | 241 | 05 14 | 108 | 3, 3, 2, 2, 4, 3, 2, 2 | 21 | 0 | 86.8 |
| 2 | 18 07 | 643 | 481 | 04 08 | 162 | 04 09 | 54.4 | 32.5 | 22 27 | 21.9 | 18 41 | 364 | 195 | 04 23 | 169 | 2,4,3,2,2,4,3,3 | 23 | 0 | 86.7 |
| 1 | 17 55 | 594 | 517 | 10 31 | 77 | 14 07 | 49.9 | 32 · 5 | 00 32 | 17 - 4 | 16 26 | 333 | 244 | 00 22 | 89 | 3, 2, 1, 1, 2, 2, 2, 2 | 15 | 0 | 86 · 5 |
| q | 17 42 | 585 | 496 | 09 36 | 89 | 13 42 | 49.9 | 35 · 7 | 06 59 | 14 · 2 | 16 43 | 330 | 245 | 02 33 | 85 | 3, 2, 2, 2, 1, 1, 1, 1 | 13 | 0 | 86 · 8 |
| q | 18 52 | 580 | 528 | 10 09 | 52 | 13 10 | 50.6 | 37 · 5 | 06 50 | 13 · 1 | 17 01 | 317 | 292 | 11 04 | 25 | 1, 1, 1, 0, 2, 1, 1, 0 | 7 | 0 | 86.8 |
| 5 | 16 40 | 596 | 517 | 09 31 | 79 | 13 18 | 52.6 | 37 · 5 | 05 59 | 15.1 | 17 41 | 322 | 291 | 12 03 | 31 | 1,0,1,1,1,3,2,2 | 11 | 0 | 86 · 9 |
| ' | 16 51 | 613 | 522 | 12 01 | 91 | 14 19 | 52.6 | 35.3 | 04 23 | 17 · 3 | 17 33 | 319 | 249 | 03 20 | 70 | 3, 2, 2, 1, 2, 3, 1, 0 | 14 | 0 | 86 · 7 |
| ;] | 16 12 | 655 | 425 | 23 52 | 230 | 13 48 | 56 · 2 | 32.4 | 23 04 | 23.8 | 18 16 | 438 | 77 | 24 00 | 361 | 1,2,3,2,3,4,4,5 | 24 | 1 | 86.6 |
| , | 16 58 | 600 | 380 | 00 33 | 220 | 05 41 | 63.2 | 33 · 4 | 01 08 | 29 - 8 | 17 26 | 351 | 55 | 00 12 | 296 | 5,4,4,3,2,3,2,2 | 25 | 1 | 86.6 |
|) | 17 43 | 641 | 491 | 08 36 | 150 | 14 05 | 53 · 2 | 34 · 3 | 06 03 | 18.9 | 18 46 | 405 | 244 | 01 20 | 161 | 3,2,3,3,3,4,3,2 | 23 | 0 | 86.6 |
| . | 18 40 | 618 | 424 | 03 42 | 194 | 03 40 | 55.8 | 28 · 8 | 04 40 | 27 · 0 | 15 41 | 359 | 123 | 04 09 | 236 | 2,5,3,3,4,4,3,2 | 26 | 1 | 86 · 5 |
| | 20 50 | 593 | 470 | 13 29 | 123 | 14 00 | 53 · 2 | 31.5 | 00 52 | 21.7 | 14 49 | 357 | 210 | 00 58 | 147 | 3,4,3,3,3,3,2,2 | 23 | 0 | 86 · 4 |
| . 1 | 19 01 | 583 | 481 | 11 09 | 102 | 12 55 | 54 · 2 | 32 · 5 | 08 06 | 21.7 | 15 51 | 344 | 284 | 03 21 | 60 | 2,2,2,2,2,2,2,2 | 16 | 0 | 86 · 1 |
| . | 18 35 | 645 | 495 | 13 11 | 150 | 15 19 | 55 · 2 | 32 · 2 | 08 19 | 23.0 | 19 20 | 356 | 285 | 23 56 | 71 | 2,2,2,1,2,4,3,3 | 19 | 0 | 85.9 |
| • | 18 09 | 587 | 508 | 11 11 | 79 | 00 16 | 52.8 | 33.3 | 07 40 | 19.5 | 09 05 | 331 | 215 | 00 37 | 116 | 3, 3, 2, 1, 2, 2, 1, 1 | 15 | 0 | 86-0 |
| d | 17 11 | 1207 | 118 | 23 59 | 1089 | 23 59 | 72.3 | 30.0 | 20 25 | 42.3 | 15 51 | 500 | 177 | 23 59 | 323 | 1,1,1,2,5,7,7,7 | 31 | 1 | 85.9 |
| d | 17 28 | 1114 | -794 | 02 56 | 1908 | 00 34 | 106 · 2 | -64 · 2 | 02 54 | 170 · 4 | 20 54 | <i>573</i> | -561 | 02 51 | 1134 | 9,8,6,5,4,7,7,7 | 53 | 2 | 86.0 |
| Ì | 19 22 | 576 | 453 | 10 00 | 123 | 12 33 | 52 · 4 | 33 · 2 | 05 27 | 19.2 | 17 24 | 376 | 259 | 00 00 | 117 | 3, 2, 2, 3, 3, 2, 2, 1 | 18 | 0 | 85.9 |
| . | 18 53 | 640 | 346 | 22 11 | 294 | 22 56 | 60∙3 | 18.3 | 22 19 | 42.0 | 19 10 | 384 | 160 | 22 21 | 224 | 1,0,2,2,3,4,4,6 | 22 | 1 | 85.9 |
| | 19 08 | 626 | 391 | 06 22 | 235 | 06 26 | 58 · 2 | 23.6 | 07 52 | 34.6 | 19 52 | 389 | 161 | 07 07 | 228 | 3,4,5,3,3,3,3,3 | 27 | 1 | 86 · 0 |
| d | 18 57 | 662 | 456 | 09 37 | 206 | 13 08 | 56.4 | 27 · 3 | 04 37 | 29 · 1 | 18 24 | 411 | 198 | 24 00 | 213 | 3,3,3,4,3,4,4,4 | 28 | 1 | 86.0 |
| | 19 28 | 611 | 342 | 01 31 | 269 | 12 37 | 54.9 | 28 · 5 | 19 17 | 26 · 4 | 19 08 | 354 | 130 | 01 20 | 224 | 5,3,2,3,2,3,3,3 | 24 | 1 | 86.0 |
|] | 16 25 | 581 | 492 | 10 48 | 89 | 12 31 | 52 · 4 | 32 · 3 | 06 39 | 20 · 1 | 18 01 | 345 | 265 | 00 04 | 80 | 3, 2, 2, 2, 1, 3, 3, 1 | 17 | 0 | 86 · 1 |
| a | 17 09 | 591 | 497 | 09 46 | 94 | 11 47 | 52 · 9 | 34 · 0 | 08 07 | 18.9 | 18 41 | 331 | 283 | 12 49 | 48 | 1,1,2,3,1,2,2,1 | 13 | 0 | 86 · 3 |
| q | 15 32 | 586 | 497 | 10 40 | 89 | 13 33 | 52.3 | 33 · 5 | 08 04 | 18.8 | 16 15 | 317 | 284 | 12 39 | 33 | 0,1,1,2,2,2,2,1 | 11 | 0 | 86 · 4 |
| a | 19 36 | 589 | 503 | 10 50 | 86 | 12 45 | 55∙6 | 35 · 2 | 07 06 | 20.4 | 21 26 | 323 | 271 | 12 32 | 52 | 0,0,1,2,2,2,2,3 | 12 | 0 | 86.6 |
| . " | 17 45 | 656 | 510 | 11 03 | 146 | 13 14 | 56 · 1 | 32 · 2 | 05 45 | 23.9 | 18 30 | 436 | 192 | 01 00 | 244 | 4,3,2,2,2,4,4,3 | 24 | 1 | 86 · 5 |
| | 17 03 | 589 | 497 | 04 17 | 92 | 03 36 | 54 · 2 | 28 · 5 | 06 33 | 25 · 7 | 16 42 | 353 | 213 | 04 26 | 140 | 2,4,3,1,2,3,1,1 | 17 | 0 | 86 · 5 |
| d | 19 06 | 617 | 263 | 24 00 | 354 | 00 50 | 54 · 2 | 11 · 2 | 22 45 | 43.0 | 19 36 | 396 | 62 | 05 35 | 334 | 4,6,5,3,3,3,4,6 | 34 | 1 | 86.6 |
| d | 15 05 | 654 | -52 | 03 30 | 706 | 05 20 | 71.8 | -1.8 | 01 17 | 73.6 | 15 14 | 474 | -196 | 03 28 | 670 | 6,7,6,4,4,4,4,2 | 37 | 2 | 86 · 4 |
| ı | 21 40 | 579 | 440 | 03 45 | 139 | 03 56 | 51.6 | 28 · 5 | 21 35 | 23 · 1 | 17 58 | 342 | 186 | 04 10 | 156 | 3,4,3,2,2,2,2,3 | 21 | 0 | 86 · 4 |
| an | | 646 | 394 | | 253 | | 57.0 | 26 · 9 | | 30 · 1 | | 374 | 172 | | 201 | - | - | 0 · 45 | 86 · 4 |

 $[\]boldsymbol{q}$ denotes an international quiet day and \boldsymbol{d} an international disturbed day.

| 1 LE | RWICK | (H) | | | | | | | | | | 14,000> | (0.14 | C.G.S | . unit | :) + | | | | | | | | SE | PTEMBER | 1960 |
|-----------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|-----------------------|
| | Hour 0-1 | G.M.T. 1-2 | 2-3 | 3-4 | 4-5 | 5-6 | 6-7 | 7-8 | 8-9 | 9-10 | 10-11 | 11-12 | 12-13 | 13-14 | 14-15 | 5 15-16 | 16-17 | 17-18 | 18-19 | 19-20 | 20-21 | 21-22 | 22-23 | 23-24 | Mean | Sum 9000+ |
| 1 q 2 3 d | γ 546 554 370 | γ 546 554 297 | γ 545 552 529 | 7 543 550 547 | γ 542 549 510 | γ 539 544 471 | γ 534 543 433 | γ 527 534 504 | 7 520 517 521 | γ 519 510 519 | γ 520 515 518 | γ 524 518 518 | γ 531 549 523 | γ 531 564 544 | γ 535 572 536 | γ 535 564 543 | γ 539 578 562 | γ 546 571 573 | γ 555 596 574 | γ 560 576 572 | γ 562 574 563 | γ 561 568 557 | γ 562 448 553 | γ 556 427 554 | y 541 543 516 | 3978 4027 3391 |
| 4 d | 548 | 552 | 556 | 570 | 554 | 556 | 541 | 431 | 436 | 440 | 488 | 545 | 568 | 568 | 670 | 561 | 567 | 698 | 694 | 429 | 429 | 43 | 114 | -97 | 478 | 2461 |
| 5 d | -349 | 4 | 24 | 155 | 179 | 279 | 373 | 336 | 245 | 351 | 448 | 544 | 539 | 543 | 614 | 687 | 620 | 621 | 641 | 571 | 552 | 525 | 344 | 407 | 386 | 253 |
| 6 | 368 | 480 | 501 | 500 | 526 | 508 | 402 | 453 | 486 | 493 | 485 | 482 | 490 | 503 | 521 | 541 | 534 | 546 | 552 | 560 | 553 | 545 | 490 | 356 | 495 | 2875 |
| 7 d | 521 | 521 | 522 | 535 | 538 | 529 | 517 | 511 | 508 | 505 | 501 | 518 | 542 | 550 | 616 | 539 | 567 | 585 | 581 | 560 | 539 | 538 | 544 | 533 | 538 | 3920 |
| 8 | 517 | 526 | 520 | 523 | 530 | 542 | 543 | 523 | 493 | 488 | 489 | 494 | 524 | 558 | 551 | 558 | 612 | 580 | 557 | 566 | 557 | 555 | 556 | 554 | 538 | 3916 |
| 9 | 558 | 553 | 512 | 482 | 502 | 535 | 532 | 520 | 512 | 495 | 491 | 487 | 515 | 526 | 540 | 555 | 561 | 579 | 576 | 557 | 557 | 554 | 545 | 545 | 533 | 3789 |
| 10 | 550 | 549 | 552 | 555 | 554 | 546 | 542 | 541 | 528 | 513 | 498 | 482 | 491 | 509 | 532 | 583 | 597 | 590 | 597 | 580 | 557 | 555 | 549 | 536 | 545 | 4086 |
| 11 | 532 | 516 | 509 | 547 | 554 | 561 | 558 | 546 | 534 | 524 | 509 | 504 | 515 | 504 | 524 | 526 | 576 | 580 | 584 | 561 | 567 | 556 | 522 | 523 | 539 | 3932 |
| 12 | 526 | 519 | 538 | 549 | 549 | 554 | 551 | 525 | 509 | 495 | 494 | 498 | 497 | 506 | 540 | 539 | 544 | 552 | 565 | 564 | 560 | 554 | 557 | 561 | 535 | 3846 |
| 13 | 559 | 550 | 535 | 533 | 475 | 560 | 535 | 511 | 503 | 490 | 477 | 482 | 513 | 516 | 526 | 544 | 541 | 549 | 554 | 572 | 566 | 545 | 513 | 485 | 526 | 3634 |
| 14 | 403 | 521 | 547 | 546 | 520 | 548 | 554 | 535 | 523 | 505 | 500 | 491 | 506 | 513 | 529 | 525 | 538 | 554 | 561 | 568 | 565 | 558 | 557 | 555 | 530 | 3722 |
| 15 q | 554 | 552 | 554 | 553 | 554 | 549 | 552 | 544 | 528 | 511 | 507 | 503 | 513 | 518 | 537 | 547 | 555 | 557 | 561 | 566 | 570 | 565 | 564 | 566 | 545 | 4080 |
| 16 q | 563 | 565 | 564 | 559 | 558 | 556 | 551 | 539 | 523 | 513 | 504 | 502 | 505 | 519 | 536 | 551 | 555 | 557 | 567 | 568 | 569 | 568 | 561 | 561 | 546 | 4114 |
| 17 | 562 | 562 | 564 | 558 | 558 | 551 | 546 | 539 | 528 | 517 | 508 | 507 | 516 | 527 | 538 | 536 | 556 | 570 | 572 | 582 | 597 | 579 | 555 | 519 | 548 | 4147 |
| 18 | 454 | 451 | 439 | 532 | 532 | 542 | 541 | 536 | 520 | 507 | 495 | 514 | 522 | 528 | 546 | 542 | 555 | 557 | 562 | 565 | 561 | 558 | 554 | 561 | 528 | 3674 |
| 19 q | 557 | 550 | 549 | 551 | 549 | 547 | 544 | 535 | 523 | 511 | 504 | 505 | 514 | 522 | 532 | 538 | 550 | 555 | 561 | 564 | 564 | 563 | 562 | 561 | 542 | 4011 |
| 20 | 561 | 558 | 557 | 557 | 556 | 555 | 551 | 542 | 528 | 517 | 509 | 509 | 516 | 527 | 539 | 546 | 547 | 552 | 562 | 567 | 573 | 580 | 576 | 563 | 548 | 4148 |
| 21 | 565 | 568 | 563 | 560 | 561 | 559 | 557 | 547 | 536 | 523 | 510 | 509 | 513 | 512 | 540 | 554 | 556 | 555 | 565 | 566 | 560 | 563 | 561 | 560 | 548 | 4163 |
| 22 | 546 | 546 | 549 | 550 | 544 | 551 | 547 | 546 | 533 | 518 | 506 | 507 | 521 | 528 | 553 | 569 | 569 | 569 | 568 | 580 | 569 | 560 | 561 | 535 | 547 | 4125 |
| 23 | 502 | 509 | 524 | 566 | 559 | 554 | 562 | 539 | 532 | 532 | 513 | 510 | 512 | 517 | 522 | 542 | 551 | 557 | 569 | 573 | 573 | 568 | 573 | 574 | 543 | 4033 |
| 24 | 529 | 510 | 385 | 475 | 558 | 562 | 529 | 496 | 502 | 488 | 487 | 503 | 518 | 514 | 529 | 541 | 584 | 577 | 550 | 551 | 566 | 554 | 550 | 551 | 525 | 3609 |
| 25 <i>q</i> | 547 | 547 | 546 | 546 | 546 | 546 | 544 | 539 | 526 | 514 | 503 | 504 | 510 | 521 | 530 | 542 | 551 | 556 | 565 | 565 | 558 | 558 | 555 | 558 | 541 | 3977 |
| 26 | 555 | 542 | 544 | 557 | 560 | 559 | 560 | 551 | 532 | 520 | 512 | 512 | 518 | 528 | 539 | 551 | 557 | 562 | 568 | 574 | 564 | 546 | 492 | 394 | 537 | 3897 |
| 27 | 344 | 420 | 510 | 532 | 532 | 558 | 550 | 524 | 513 | 513 | 506 | 503 | 504 | 509 | 520 | 535 | 542 | 558 | 568 | 556 | 551 | 550 | 554 | 558 | 521 | 3510 |
| 28 | 555 | 553 | 551 | 554 | 556 | 558 | 558 | 558 | 550 | 523 | 510 | 512 | 521 | 532 | 543 | 535 | 547 | 557 | 558 | 554 | 558 | 557 | 557 | 552 | 546 | 4109 |
| 29 | 554 | 554 | 554 | 554 | 556 | 557 | 555 | 549 | 537 | 529 | 525 | 527 | 529 | 554 | 533 | 510 | 551 | 554 | 565 | 564 | 561 | 509 | 443 | 430 | 536 | 3854 |
| 30 d | 399 | 482 | 471 | 520 | 543 | 567 | 563 | 542 | 532 | 520 | 520 | 522 | 539 | 530 | 564 | 572 | 565 | 591 | 594 | 575 | 524 | 452 | 528 | 535 | 531 | 3750 |
| Mean | 485 | 505 | 512 | 529 | 530 | 538 | 532 | 521 | 509 | 503 | 502 | 508 | 519 | 527 | 547 | 550 | 561 | 570 | 575 | 562 | 557 | 535 | 520 | 502 | 529 | |
| Sum 14,000+ | 550 | 1157 | 1366 | 1859 | 1904 | 2143 | 1968 | 1623 | 1278 | 1103 | 1052 | 1236 | 1574 | 1821 | 2407 | 2511 | 2827 | 3108 | 3242 | 2866 | 2719 | 2044 | | 1073 | - | rand Total 381,031 |

| 2 LE | RWICK | (D) | | | | | | | | | | g | · + | | | | | | | | | | | | SEPTE | BER 1960 |
|------------------|--------------|---------------|------------------|--------------|--------------|---------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|---------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|------------------------|
| | Hour (| G.M.T. 1-2 | 2-3 | 3-4 | 4-5 | 5-6 | 6-7 | 7-8 | 8-9 | 9-10 | 10-11 | 11-12 | 12-13 | 13-14 | 14-15 | 15-16 | 16-17 | 17-18 | 18-19 | 19-20 | 20-21 | 21 - 22 | 22-23 | 23-24 | Mean | Sum 600·0+ |
| | , | • | , | • | , | , | , | • | • | , | , | , | , | | , | • | , | | • | , | | • | • | • | | |
| 1 q 2 | 41·9 42·6 | 40·9 42·1 | 40·2 41·7 | 40·1 40·3 | 39·3 | | 37·2 36·9 | 36·9 37·3 | 38·1 38·2 | 39·3 41·6 | | 45·5 50·2 | 48·2 53·7 | 47·9 56·1 | 47·3 56·2 | 45·5 50·7 | 44·3 46·8 | | | 43·9 43·0 | 43·9 46·2 | 42·3 47·9 | 40·3 38·2 | 41·7 15·1 | 42·2 43·5 | 411·8 445·2 |
| 3 d | 28.7 | 31.6 | 31.8 | 30.5 | 37 · 4 | | 41.9 | 49.4 | 38.8 | 38.0 | | | 49.9 | 50 · 1 | 47 · 5 | 45 · 1 | 42.4 | | | | | | 41.9 | 42.6 | 41.3 | 390.7 |
| 4 d 5 d | 40·8 -8·8 | 39·2 -40·6 | 39·9 -22·0 | 35·7 | 39·8 10·0 | | 43·5 34·1 | 37·8 34·0 | 43·9 31·4 | 42·9 32·8 | 48·7 42·8 | 52·5 47·6 | 51·3 52·6 | 51·8 52·3 | 54·9 52·8 | 47·7 43·2 | 43·7 44·1 | | 33.3 | | | 58·8 44·3 | 38·5 31·9 | 12·2 17·3 | 43·1 28·4 | 433·6 82·4 |
| 6 | 24.2 | 38.9 | 38 · 1 | 31 · 4 | 33.7 | | 44.8 | 48.7 | 41 . 9 | 40.4 | 41.8 | 45.9 | 48.0 | 48 · 2 | 47.2 | 44.7 | 42.9 | | | | | | | • | 1 1 | † |
| 7 d | 38.0 | 36.9 | 40.3 | 38 · 5 | 37 · 9 | | | 37 · 1 | 38 · 1 | 40.5 | | | 51.7 | 46.9 | 49.7 | 44 · 1 | 44.8 | | 40·8 32·3 | 37·0 41·9 | 42·4 41·9 | 44·8 35·7 | 48·6 41·7 | 44·1 42·7 | 41.7 | 400·3 388·4 |
| 8 | 31.7 | 32 · 1 | 39.0 | | 38 · 1 | | | 38.3 | 38.9 | 42.0 | | 46.7 | 50-4 | 52.0 | 48.9 | | 42.0 | | | | | 43.9 | 43.8 | 42.4 | 42.1 | 411.5 |
| 9 | 39.1 | 31 · 1 | 34 · 8 | 36 · 1 | 38.6 | 37 · 1 | 36 · 7 | 38 · 2 | 39 · 2 | 42.0 | 45.8 | 48.8 | 52.0 | 53 · 5 | 49.6 | 46 · 4 | 42.9 | | | | | 39.3 | 42.9 | 40.7 | 41.8 | 403.6 |
| 10 | 38 · 4 | 41 · 3 | 40 · 0 | 38 · 8 | 36 · 1 | 37 · 0 | 37 · 1 | 38.0 | 37 · 8 | 40 · 5 | 44 · 1 | 46 · 9 | 49.4 | 50.6 | 50.6 | 48 · 2 | 44 · 0 | 43.7 | 44 · 0 | 42 · 0 | 43.0 | 43 · 2 | 41 · 1 | 36 · 3 | 42 · 2 | 412.1 |
| 11 | 41.5 | 43.2 | 32 · 1 | 34 · 4 | 37 · 1 | 36 · 3 | 36.9 | 34.1 | 34 · 1 | 37 · 1 | 39.6 | 42.9 | 48.7 | 48.6 | 48 - 9 | 45.8 | 44 · 2 | 42.5 | 44.2 | 44 · 2 | 44.3 | 35.2 | 35 · 9 | 38 · 4 | 40-4 | 370.2 |
| 12 | 41.4 | 45.0 | 43 · 2 | 40.1 | 38 · 6 | | 38.6 | 40.5 | 42.7 | 43.9 | 43.0 | 45.8 | 48 · 7 | 49.7 | 49.8 | 45 · 1 | 44 · 7 | | | | | 43.7 | 44 · 5 | 44 · 2 | 43.3 | 438 · 7 |
| 13 | 44.3 | 44 · 7 | 32.1 | 33.3 | | | | 40.0 | 39 · 2 | 40.5 | | 46 · 8 | 49.6 | 50.8 | 46.8 | 43.8 | 42.1 | | 41.5 | | | 34 · 5 | 35.2 | 30.9 | 40.7 | 376 · 9 |
| 14 15 q | 34·1 42·6 | 34·3 41·8 | 38 · 4 41 · 1 | 37·1 40·7 | 43·9 41·0 | | 37·8 40·0 | 37·7 38·5 | 37·1 36·0 | 41·0 36·5 | 44·7 39·9 | 48·5 43·5 | 50·7 47·1 | 50·8 48·2 | 48·7 47·7 | 44·9 46·5 | 43·2 45·7 | | 42·5 44·3 | | 42·9 45·6 | 42·3 43·7 | 42·2 42·7 | 42·8 43·6 | 42.1 | 410·6 427·4 |
| | | 42.7 | 40.3 | 40.0 | • | | 37.8 | | | | | | | | | | | | | | | | | | 42.8 | |
| 16 q 17 | 42·1 41·8 | 41.1 | 40.5 | 41.2 | 40·0 39·4 | | 37.4 | 36·2 36·7 | 35·7 35·6 | 37·1 36·7 | 41·0 39·8 | 44·6 43·8 | 47·5 | 49·4 49·6 | 49·6 50·6 | 48·7 49·1 | 46·9 48·1 | | 46·5 45·8 | | 44·8 41·8 | 43·9 29·2 | 42·8 31·5 | 41·9 31·4 | 42·9 41·2 | 430·5 389·2 |
| 18 | 27.5 | 20.6 | 28 · 4 | 33.3 | 35.8 | | 38 · 2 | 37.3 | 36.9 | 39 · 2 | 42.7 | 45.9 | 49.5 | 49.6 | 49.7 | 46 · 3 | 45.3 | | 45.3 | | 45.5 | 44.1 | 42.9 | 40.9 | 40.7 | 377.3 |
| 19 q | 40.1 | 39 · 2 | 38.8 | 38.6 | 37 · 9 | 38.0 | 38 · 2 | 37.5 | 37 · 1 | 39.0 | | 45.5 | 47.5 | 47 · 4 | 46 · 4 | 44 · 8 | 44.9 | | 45.0 | | | 43.6 | 42.8 | 42.1 | 42.1 | 410.8 |
| 20 | 41.7 | 41 · 5 | 41.0 | 40 · 2 | 39.9 | 39 · 3 | 38 · 4 | 37.6 | 37.6 | 39.9 | 43.8 | 46 · 6 | 48.6 | 48 · 8 | 48 · 2 | 46 · 5 | 45.5 | 43.7 | 43.6 | 44 · 1 | 44 · 7 | 45.2 | 43 · 1 | 46.5 | 43.2 | 436 · 0 |
| 21 | 42.1 | 39.3 | 39 · 1 | 38.6 | 38 · 3 | 38 · 7 | 38 · 0 | 37 · 4 | 36.8 | 39.9 | 45.0 | 49.7 | 52.6 | 52.6 | 54 · 4 | 52.6 | 51.6 | 47 · 7 | 46.0 | 39 · 7 | 42.9 | 41.5 | 38 · 2 | 33.4 | 43.2 | 436 · 1 |
| 22 | 29 · 7 | 36 · 2 | 38 · 9 | 38 · 5 | 39 · 7 | 38.6 | | 39 · 1 | 38 · 0 | 39 · 2 | | 45.9 | 48.9 | 49.6 | 52 · 2 | 52.6 | 50.9 | 51.0 | 48 · 8 | | 41 · 4 | 40.0 | 36 · 9 | 31 · 3 | 42.3 | 416 · 1 |
| 23 | 26.3 | 24 · 5 | 24.8 | 31 · 2 | 36 · 2 | | 37.6 | 40.7 | 48 • 4 | 46 · 0 | 43.7 | 44.8 | 48.2 | 49.1 | 48.0 | 48 · 2 | 46-8 | | 46.6 | | 45.0 | 44 · 3 | 42.7 | 30.5 | 41.0 | 383.6 |
| 24 25 a | 23·5 40·7 | 23·5 40·5 | 25·6 40·0 | 32·9 39·9 | 32·4 39·5 | | 36·4 38·2 | 44·1 37·2 | 46·9 36·7 | 41·7 38·0 | 44·3 40·9 | 43·6 44·8 | 48·2 47·5 | | 50·1 46·6 | 49·6 45·3 | 50·6 44·8 | | 45·9 44·6 | | 37·6 36·7 | 39.3 | 39.9 | 41·0 41·3 | 40.4 | 370.4 |
| | | | | | | | | | | | | | | | | | | | | | | | | • | 41.5 | 396 · 7 |
| 26 27 | 41·7 31·3 | 43·0 27·6 | 41·8 17·0 | 39·8 33·2 | 39·5 37·9 | | 38·6 39·5 | 38·6 38·1 | 41·7 41·9 | 43·8 42·9 | 43·8 44·1 | 46·7 45·4 | 47·9 46·8 | 47·8 47·6 | 48·6 47·2 | 46·9 45·8 | 45·6 43·8 | | | | | 36·0 39·1 | 29·3 41·9 | 30·5 42·7 | 41.9 | 404 · 4 360 · 2 |
| 28 | 42.1 | 41.9 | 42.4 | 41.0 | 40.0 | | 39.0 | 39.5 | 40.4 | 41.0 | 46.6 | 47.5 | 46.9 | 47.5 | 48.2 | 46 · 4 | 44.1 | | 42.8 | 43.4 | 42.4 | 41.7 | 41.5 | 39.4 | 40.0 | 427·6 |
| 29 | 42.4 | 43.0 | 41 8 | 41.5 | 40.8 | | 39.3 | 39.0 | 39.5 | 43.0 | 44.0 | 46.8 | 47.9 | 51 · 7 | 52.5 | 48 · 1 | 46 9 | | 43.6 | 40.9 | 39.8 | 30.9 | 17.9 | 26.4 | 41.4 | 392.5 |
| 30 d | 38 · 3 | 28 · 4 | 31 · 5 | 32 · 3 | 26 · 9 | 35 · 1 | 37 · 4 | 37 · 3 | 37.0 | 41 · 0 | 44 · 5 | 48.9 | 51 · 1 | 53 · 3 | 54 · 1 | 50 · 1 | 48 · 4 | 47-6 | 44 · 3 | 37.6 | 23 · 7 | 27.6 | 39 · 0 | 43.6 | 40.0 | 359.0 |
| Mean | 35 · 7 | 34 · 5 | 34 · 7 | 35 · 8 | 37 · 0 | 38.6 | 38 · 3 | 38.8 | 38 · 9 | 40.3 | 43 · 4 | 46 · 6 | 49.3 | 49.9 | 49.8 | 47 · 0 | 45 · 4 | 44.6 | 43.0 | 42.7 | 42 · 1 | 40.9 | 39·3 | 36 · 6 | 41 · 4 | |
| Sum 1000 · 0+ | 71.8 | 35.5 | 42.6 | 75.0 | 109 · 0 | 157 · 2 | 149·1 | 162.8 | 165.6 | 207 • 4 | 303 · 1 | 396 · 9 | 478.6 | 498 · 2 | 493 · 0 | 410.5 | 362.0 | 338 · 6 | 290.0 | 281 · 1 | 261.8 | 226 · 4 | 179 · 7 | 97.9 | | Grand Total 29793.8 |

3 LERWICK (Z) 47,000y (0.47 C.G.S. unit) + SEPTEMBER Hour G.M.T. Sum 0-1 1-2 2-3 3-4 4-5 5-6 6-7 7-8 8-9 9-10 10-11 11-12 12-13 13-14 14-15 15-16 16-17 17-18 18-19 19-20 20-21 21-22 22-23 23-24 6000+ 1 q 3 d 4 d 5 d -28 -11515 q 16 a 313 03 25 q 3.30 30 d Mean Grand Total 788 1153 1287 1580 1865 2043 2280 2377 2435 2450 2492 2719 2916 3225 3167 3286 3305 3046 2792 2289 1480 7000+ 218.714

DAILY EXTREMES OF TERRESTRIAL MAGNETIC ELEMENTS, MAGNETIC CHARACTER FIGURES (K AND C) AND TEMPERATURE IN MAGNET HOUSE

SEPTEMBER 1960 4 LERWICK TERRESTRIAL MAGNETIC ELEMENTS Temperature 3-hr. range Vertical force Declination Horizontal force character in magnet indices indices of day, C house Maximum Minimum Maximum Minimum Maximum Minimum K Range Range 200 + Range (0-2)14,000y 9° + 47,000y +47,000y + 14,000y °A. 09 26 12 33 48.8 36.6 07 24 12.2 07 45 12 37 1.1.1.2.1.1.0.2 86 - 1 1 q 2 22 49 01 32 23 01 1, 1, 2, 2, 3, 3, 3, 6 14 02 62 · 1 22 51 18 16 1116 19.9 7.4.5.3.3.3.3.2 01 05 07 12 58.2 01 35 38 - 3 14 22 85.7 22 10 22 10 -249 17 49 21 46 00 14 00 34 81.2 -77 - 4 01 43 158 · 6 00 02 01 29 8.7.6.6.4.5.5.7 85.5 15 30 -710 23 05 62.3 1.6 00 04 60.7 16 16 23 33 6,4,5,2,2,2,3,6 85.3 20 04 00 03 34.0 00 11 14 33 00 00 12 05 56 · 7 22 · 7 18 31 18 27 4, 2, 2, 3, 4, 3, 4, 3 85 · 4 26·5 25·7 27·1 28·7 4, 3, 3, 3, 3, 4, 3, 1 4, 4, 2, 2, 2, 2, 3, 3 09 46 13 08 53 · 6 00 33 16 55 00 17 16 25 17 39 03 37 13 51 54 - 4 02 06 19 35 04 22 85.3 00 17 18 · 2 3, 1, 1, 2, 3, 4, 3, 3 52 . 2 34.0 23 36 18 43 86 · 1 17 59 14 56 11 37 50 · 2 27 · 5 21 30 22 · 7 18 52 02 18 4, 4, 2, 1, 2, 3, 3, 4 86 · 0 14 08 18 26 02 19 10 21 50.6 35.5 00 01 15·1 24·7 15 35 00 01 3, 2, 2, 2, 3, 2, 2, 1 4, 5, 4, 2, 2, 2, 2, 5 86.0 27 · 4 05 23 03 45 13 15 52 · 1 86.0 19 54 23 58 00 14 19 16 16.8 00 59 34 . 9 15 23 00 10 6.3.3.2.1.2.1.1 85.0 09 13 13.9 18 18 23 32 1, 1, 2, 1, 2, 1, 1, 1 15 q 20 13 11 23 13 20 49.4 35.5 86.2 09 01 01 28 2,0,1,1,2,1,1,1 14 19 50.4 35 · 1 07 51 15.3 86 - 1 20 04 11 15 20 54 01 09 1, 1, 1, 1, 2, 2, 4, 4 4, 3, 2, 2, 2, 1, 1, 2 23 56 14 22 52.3 00 06 23 59 20 39 01 06 15 07 19 29 02 16 14 19 51.4 15.0 36 · 4 86.2 12.2 00 12 19 q 19 08 10 57 10 58 13 49 49.3 36.0 07 48 13 · 3 17 14 23 58 1, 0, 1, 1, 1, 1, 1, 4 86.4 54 . 7 4, 1, 1, 2, 2, 2, 3, 4 3, 1, 1, 1, 2, 2, 3, 3 14 03 27 - 1 23 43 27 . 6 16 56 00 05 n 86.0 19 46 00 01 24 00 15 13 54 . 3 28 · 4 25.9 19 40 10 58 86.0 00 41 08 55 52.5 21·3 18·9 02 15 31.2 17 10 23 59 3, 3, 3, 3, 1, 2, 1, 5 86 · 2 23 40 32.9 25 q 51.8 03 20 6.5.3.3.2.4.4.2 16 53 02 44 16 51 10 53 48.3 30.2 20 46 18 - 1 20 05 00 01 0,0,1,1,1,1,3,2 n 20 50 22.6 22 28 23 48 2, 2, 2, 2, 1, 1, 3, 6 19 43 23 36 14 02 48.9 26 · 3 6,3,3,2,1,2,2,2 0,1,1,2,1,2,1,1 00 36 12 55 49.2 11 · 2 02 39 38 . 0 19 52 -33 00 46 85.7 23 27 22 21 10 48 48 · 8 03 05 07 02 11 01 14 2 19 02 1,0,2,1,4,3,3,5 23 20 14 01 54 . 5 40.3 23 12 85.6 55 · 6 12.1 85.6 14 48 5, 4, 3, 2, 3, 3, 5, 5 30 d 18 57 00 32 38 · 8 - -0.47 - -56.9 18 · 1 85.9 Mean

q denotes an international quiet day and d an international disturbed day.

Mean

Sun

14,000

475 491

742 1229

1421 1989

TERRESTRIAL MAGNETIC FORCE: HORIZONTAL COMPONENT Mean values for periods of sixty minutes ending at exact hours, G.M.T.

14,000y (0.14 C.G.S. unit) + OCTOBER 1 LERWICK (H) Hour G.M.T. 9-10 10-11 11-12 12-13 13-14 14-15 15-16 16-17 17-18 18-19 19-20 20-21 21-22 22-23 23-24 2-3 3-4 4-5 5-6 6-7 7-8 8-9 Mean 9000+ 1 d 2 480 527 545 554 494 517 537 542 546 444 563 549 540 556 550 557 550 543 527 517 547 461 508 536 527 6 d 7 d -20 -323 529 527 525 532 478 500 526 526 534 551 2838 -193 -114 573 546 490 483 508 516 524 537 499 443 466 521 535 535 526 506 529 541 541 531 531 500 517 543 555 560 560 542 551 552 577 557 562 564 639 12 q 13 q 542 556 560 542 557 560 549 546 558 550 548 558 543 551 556 534 542 545 503 501 515 506 525 538 537 534 542 544 551 562 556 562 574 560 540 531 527 560 531 523 557 562 565 567 563 562 551 15 554 514 552 522 554 566 558 558 524 550 547 541 544 525 550 500 550 521 514 508 514 539 540 548 602 663 525 513 531 529 3702 547 543 541 537 547 548 547 552 546 526 538 552 533 535 547 551 554 547 528 539 553 560 559 547 556 562 859 554 563 559 562 566 659 50 **2**8 8 560 558 543 562 556 550 562 558 521 565 646 635 22 q 23 q 24 25 d 565 551 547 528 533 439 556 551 554 577 573 560 256 565 556 *5*76 562 556 549 531 413 530 4834 489 445 548 463 493 543 482 517 414 26 d 27 510 3231 594 555 544 508 600 597 536 440 29

MAGNETIC DECLINATION (WEST) Mean values for periods of sixty minutes ending at exact hours, G.M.T.

2346 2353 2286 1920 1707

513 507

2572 3192 4009 4379

4708 3671

3075 1701 1801

Grand Total

392,502

| 2 LE | RWICK | (D) | | | | | | | | | | 9° | + | | | | | | | | | | | | остовн | R 1960 |
|-----------------|--------------|---------------|--------------|--------------|---------|---------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------|--------------|--------------|---------|--------------|--------------|--------------|--------|------------------------|
| | Hour 0-1 | G.M.T. 1-2 | 2-3 | 3-4 | 4-5 | 5-6 | 6-7 | 7-8 | 8-9 | 9-10 | 10-11 | 11-12 | 12-13 | 13-14 | 14-15 | 15-16 | 16-17 | 17-18 | 18-19 | 19-20 | 20-21 | 21-22 | 22-23 | 23-24 | Mean | Sum 600·0+ |
| | , | , | , | | , | , | , | • | , | · | , | | , | · · | , | · | , | , | , | , | • | , | , | , | 1 | |
| 1 d | 35 · 2 | | | | | | | 51.8 | | | | | 49.6 | | | | | | 37 · 5 | 36.0 | | 23 · 4 | | 35.0 | 41.1 | 386 · 9 |
| 2 | 31·9 40·6 | | 33·8 40·0 | | | | | 57·9 42·4 | | 45·8 41·8 | 46·2 41·7 | 47·7 46·6 | 43·9 46·8 | 46·8 48·1 | 39·6 47·7 | 41·7 45·5 | 38·6 42·7 | | 34·7 42·7 | 42·3 42·5 | | 42·4 38·6 | | 35·7 40·4 | 41.8 | 403·9 414·3 |
| 4 | 37 · 2 | | 41.4 | 41.6 | | | | 42.5 | | 42.6 | 44.3 | 47 · 3 | 50.2 | | 53 · 6 | 49.2 | 56 · 4 | | 33.9 | 47.9 | | 41.5 | | 44 6 | 44.7 | 472.4 |
| 5 | 34 · 1 | 38 · 9 | 43.9 | 35 · 7 | 38 · 5 | 49 · 4 | 42 · 1 | 42.0 | 40 · 7 | 39.3 | 42.3 | 45 · 8 | 47 - 4 | 49 · 2 | 48 • 5 | 48 · 1 | 44 · 4 | 35 · 8 | 42 · 2 | 44 · 6 | 43 · 6 | 41 · 7 | 26 · 9 | 21.3 | 41.1 | 386 · 4 |
| 6 d | 33 · 7 | | 38 · 6 | | | | | 42.5 | | 45 · 3 | | 48 - 5 | 51 · 1 | | 40.3 | 57 · 8 | 75 • 4 | | 20 · 2 | 60.3 | | 25 · 0 | | -47 · 5 | 42.7 | 425 · 7 |
| 7 d | -40 - 3 | | | | -15.0 | | | 40.0 | | 45.0 | 50.0 | | 50.5 | | 38.5 | 35.7 | 43.6 | | 40.4 | 41.7 | | 36 · 7 | | 29 · 1 | 27.0 | 48.2 |
| 8 9 | 29.0 | | 40·7 25·6 | | | | 37·5 46·8 | 36·9 43·4 | 35·8 38·1 | 39·5 40·4 | 40·2 42·6 | | 48·0 46·8 | | 43·6 46·1 | 44·8 39·9 | 42·6 43·9 | | 40·0 42·7 | 27·1 32·8 | | 27·7 35·7 | | 36·5 29·0 | 38 · 2 | 317·1 332·1 |
| 10 | 30.9 | | 29.5 | | | | | 38.5 | 37.6 | 38 · 7 | 40.4 | 43.9 | 46.0 | | | 43.7 | 42.2 | | 39 · 1 | 40.5 | | 31.6 | | 33.5 | 38.5 | 323 · 8 |
| 11 | 44 - 4 | 40-0 | 39 · 1 | 36 · 4 | 35.7 | 42 · 3 | 41.8 | 45.6 | 44 · 5 | 40.4 | 42.4 | 46 · 1 | 48.7 | 51.8 | 50.6 | 49.8 | 47 · 3 | 43.9 | 42.9 | 43 · 1 | 38 · 1 | 34.0 | 40.5 | 42.0 | 43.0 | 431 · 4 |
| 12 q | 41.5 | 42.2 | 41.5 | 41.5 | 40.5 | 40.8 | 40.2 | 38.6 | 37.6 | 39 · 1 | 41.5 | 46.3 | 47.8 | 49.0 | 48 - 1 | 46 · 8 | 45 · 3 | 45.3 | 45 · 4 | 44 - 4 | 44 · 4 | 40.5 | 33.5 | 43.2 | 42.7 | 425.0 |
| 13 q | 41.5 | | 41.0 | | | | | 39 · 1 | | 37 · 8 | | 42.0 | 44.7 | | | 47 · 4 | | | | 44 · 2 | | 43.3 | | 42.4 | 42.6 | 421 · 6 |
| 14 q | 41.5 | | 41·5 39·1 | 41·4 40·0 | | | | 39·6 | 38·4 38·6 | 37·7 39·5 | 40·5 43·1 | 44·1 48·2 | 47·3 50·8 | 48·7 54·0 | 48·5 52·8 | 47·1 54·1 | 45 • 4 | | 44.6 | 44·3 44·8 | | 43·5 35·4 | | 42.4 | 42.9 | 430 · 8 |
| 15 | | | | | ••• | | | | | | | | | | | | 58 · 4 | | 55.0 | | | : | | 34 · 3 | 43.9 | 453 · 7 |
| 16 17 | 35·7 36·2 | | 37·5 40·5 | 40·1 40·4 | ••• | | | 38·9 39·8 | 38·1 38·4 | 38·6 39·8 | 40·6 42·2 | 44·4 44·8 | 49·0 46·5 | | 48 · 2 | 46·3 45·3 | 45·0 44·0 | | 43·9 43·8 | 43·4 40·0 | | 43·1 41·5 | | 38·5 37·6 | 42.0 | 408·1 403·1 |
| 18 | 36.8 | | 39.8 | | | 41.6 | | 45.0 | | 42.0 | | 47.2 | 49.3 | | 51.4 | 47.2 | | | 49.2 | 40.5 | | 31.9 | | 35 · 2 | 41.5 | 394 · 8 |
| 19 | 35 · 6 | | 39 · 1 | 38.6 | 40.5 | 42.4 | | 38.6 | | 38 · 7 | 42.0 | 46.3 | 47.0 | 47 · 7 | 46.8 | 45.3 | 43.7 | | | 41.2 | | 25 · 3 | | 38.3 | 40.3 | 367.6 |
| 20 | 41.3 | 41.5 | 42-3 | 42.6 | 40.8 | 38 · 6 | 41 · 6 | 40 · 0 | 41.3 | 41.0 | 44 · 3 | 48 · 1 | 50⋅2 | 51 · 1 | 51 · 2 | 52.5 | 47 · 1 | 44 · 6 | 42.5 | 41.5 | 41.7 | 38.6 | 28 · 5 | 34 · 8 | 42.8 | 427 · 7 |
| 21 | 37 · 2 | 39.7 | 40 · 5 | 39 · 7 | 40.0 | 39.6 | 39 · 8 | 39.6 | 42.0 | 42.9 | 43.9 | 45.9 | 47.0 | 48 · 1 | 45.8 | 44 · 1 | 42.7 | | 43.4 | 43.3 | 40.3 | 31 · 9 | 37 · 4 | 40.5 | 41.6 | 398 · 4 |
| 22 q | 41.1 | | 41.6 | 41.3 | | 41.7 | | 39 · 1 | | 38.6 | 42.0 | 44 · 7 | 47.0 | 48 · 2 | | 45.8 | 44 · 6 | | | 43.6 | | 42.4 | | 42.0 | 42.8 | 426 · 6 |
| 23 q | 41.5 | | 40.7 | | | 40.7 | | 39.8 | 39.3 | | 42.0 | 45·3 47·0 | 47.7 | | 47·0 49·5 | | | 44 8 | 45·9 47·2 | | 42.9 | 41.7 | • | 40.7 | 42.9 | 428 · 7 |
| 24 25 d | 39·8 | | 40·1 40·6 | 40·0 41·0 | | | | 39·7 60·4 | 39·4 52·5 | 40·2 46·0 | 43·3 52·1 | 50.0 | 49·1 50·0 | 56.6 | 52.7 | 50·0 46·5 | 57 · 3 | | 78 - 4 | 44·8 40·7 | | 38·6 24·7 | 39·8 31·6 | 38·6 32·4 | 43.4 | 442·6 534·4 |
| 26 d | 20.6 | | 20.6 | 30.7 | 41.0 | | | 45.3 | 46.3 | 44.4 | 45 · 1 | 47.2 | 47.1 | | 49.2 | 42.3 | 44 · 5 | | 41.0 | 39.4 | | 37 · 4 | 38.5 | 36.8 | 40.3 | 368 · 2 |
| 27 | 30.6 | | 37.7 | 34 - 7 | | | | 41.7 | 39.8 | 41.5 | 41.5 | 42.6 | 47.7 | 47.4 | 47.1 | 41.2 | | | 32.6 | 41.4 | 29 - 1 | 28.5 | 39.9 | 30.5 | 38.7 | 329 · 0 |
| 28 | 39.0 | 41.2 | 43.4 | 30 · 1 | 38.5 | 41.6 | 54.8 | 49.2 | | 45.0 | 45.6 | 43.5 | 45.8 | 45.4 | 49.4 | 49.5 | 44 · 6 | 32.2 | 35.7 | 42.2 | | 38 · 2 | | 42.8 | 42.7 | 424 · 8 |
| 29 | 35 · 2 | | 39.7 | 39.6 | | | | 47-3 | | 43.1 | 44.6 | 43.7 | 49.3 | 47 - 2 | 43 · 1 | 47.0 | | | 33 · 8 | 37 · 8 | | 39.8 | 40.0 | 34.6 | 41.3 | 392.3 |
| 30 | 39 · 1 | 45.3 | 49.5 | 42-4 | | 40 · 7 | 43 · 4 | 44 · 6 | 41.7 | 42 · 4 | 42 · 1 | 41.6 | 49 · 2 | | 46 · 5 | 47.9 | 37 · 4 | | 41.5 | 34.8 | 30.0 | 35 · 2 | 37 · 8 | 45 · 8 | 41.9 | 406 · 5 |
| 31 | 42.4 | | 37 · 4 | 40.9 | | | 41.7 | | 42.0 | 42.5 | 44 · 5 | 43.4 | 49.3 | | 43.4 | 45.8 | 41.8 | | 22 · 1 | 40.2 | | 38 · 8 | 38 · 4 | 40.7 | 40.4 | 368 · 6 |
| dean | 34.1 | 37.5 | 30.0 | 35.7 | 38.2 | 40.2 | 42.6 | 42.9 | 41.0 | 41.5 | 43.0 | 45.8 | 48.1 | 48.9 | 47.2 | 40.5 | 40.2 | 45.6 | 41.8 | 41.8 | 39.3 | 30.1 | 37 · 2 | 34.6 | 41.4 | |
| Sum 100 • 0+ | 58 · 7 | 160.8 | 135 · 6 | 106 · 1 | 184 · 2 | 256 · 7 | 320 · 1 | 331 · 3 | 271.8 | 287 · 8 | 350 · 9 | 419-6 | 490 · 8 | 515 · 6 | 464 · 3 | 442.0 | 431 · 9 | 413-6 | 295 · 8 | 297 · 0 | 217 · 6 | 118.6 | 152.5 | 71.4 | | Grand Total 30794·7 |

3 LERWICK (Z) 47.000y (0.47 C.G.S. unit) + OCTOBER 1960 Hour G.M.T. 4-5 5-6 6-7 7-8 8-9 9-10 10-11 11-12 12-13 13-14 14-15 15-16 16-17 17-18 18-19 19-20 20-21 21-22 22-23 23-24 Mean 6000+ 194 30 0 334 339 322 313 298 304 318 355 377 354 334 291 151 442 388 -52 -82 396 463 487 375 377 222 209 1004 75 335 351 314 350 389 317 797 340 332 336 325 327 315 324 317 12 q 13 q 14 q 15 319 320 325 320 315 309 307 311 313 318 320 323 322 319 325 324 322 320 315 313 313 313 315 324 334 457 445 368 320 281 258 2058 326 320 322 340 378 339 306 324 330 337 335 331 341 389 355 330 237 327 309 1831 258 326 311 326 330 308 299 312 322 324 330 332 332 351 346 347 341 306 19 22 q 23 q 24 25 d 316 318 318 318 316 322 318 320 324 430 142 253 275 406 1740 26 d 27 30 Mear Grand Total Sum 808 1401 1709 2004 2451 2804 3187 3474 3959 4406 4441 4470 4174 3866 2420 1600 233,554

DAILY EXTREMES OF TERRESTRIAL MAGNETIC ELEMENTS, MAGNETIC CHARACTER FIGURES (K AND C) AND TEMPERATURE IN MAGNET HOUSE

| 4 | LERWIC | :K | | | | | | | | | | | | | | | | осто | BER 1960 |
|-------------|--------|--|---------|-------|------|----------------|----------|-------------|----------------|--------------|----------------|------------|----------|----------------|------------|------------------------------------|----------|--------------------|----------------|
| | | | | | | TER | RESTRIAL | MAGNET | IC FLEM | TENTS | | | | | | | | Magnetic | Temperature |
| | | Hori | zon tal | force | | | De | clinati | on_ | · | | Vert | ical f | orce | , | 3-hr. rænge indices | Sum of K | character | in magnet |
| | | Maximum Minimum Range Maximum 9° + | | | | | | | | Range | Max 47,00 | | | imum 100y + | Range | K | indices | of day, C (0-2) | house 200 + |
| | h. m. | γ | γ | h. m. | γ | h m. | , | | h. m. | | h. m. | γ | γ | h. m. | γ | | | _ | ° A . |
| 1 d | 16 16 | 638 | 362 | 03 45 | 276 | 06 54 | | 6·9 22·8 | 21 24 17 43 | 51·7 39·7 | 14 32 16 47 | 451 503 | 68 71 | 21 20 02 51 | 383 432 | 4,5,4,3,4,4,5,5 | 34 | 1 | 85.2 |
| 2 | 16 48 | 795 | | 02 49 | 406 | 06 55 | | | 24 00 | 12.9 | 10 47 | 358 | 239 | 00 02 | 119 | 5, 4, 4, 4, 5, 5, 4, 3 | 34 | 1 | 85.3 |
| 3 | 20 01 | 561 | 478 | 10 12 | 83 | 14 21 23 20 | | 36·1 2·7 | 18 21 | 76.9 | 17 11 | 561 | -44 | 22 57 | 605 | 4,2,2,3,2,2,1,3 | 19 29 | | 85.6 |
| 4 | 18 07 | 989 | 65 | 22 42 | 924 | 05 30 | | 7.8 | 23 07 | 62.7 | 17 31 | 392 | -6 | 22 20 | 398 | 3,0,1,2,3,6,7,7 4,4,3,2,3,3,3,7 | | 2 1 | 85.7 |
| 5 | 17 06 | 590 | 144 | 22 22 | 446 | 05 30 | 34.9 | -/.8 | 23 07 | 02.7 | 1/ 31 | 392 | -0 | 22 20 | 390 | 4,4,3,2,3,3,3,7 | 29 | 1 | 85.9 |
| 6 d | 16 25 | 1396 | -1431 | 22 40 | 2827 | 22 53 | 211.6 | -129-5 | 23 37 | 341 · 1 | 22 41 | 1080 | -403 | 18 01 | 1483 | 7,6,6,5,7,9,9,9 | 58 | 2 | 85.9 |
| 7 d | 14 52 | 1115 | -840 | 00 32 | 1955 | 01 15 | | -136 · 6 | 01 37 | 400 · 5 | 01 18 | 990 | -206 | 03 06 | 1196 | 9, 8, 6, 6, 7, 7, 6, 7 | 56 | 2 | 85.9 |
| 8 | 18 41 | 560 | 10 | 01 11 | 550 | 01 30 | 63.4 | 18.3 | 19 30 | 45.1 | 19 20 | 398 | -49 | 02 09 | 447 | 7, 4, 3, 3, 3, 3, 5, 4 | 32 | 1 | 85 · 8 |
| 9 | 15 13 | 621 | 270 | 22 32 | 351 | 06 40 | 51 · 2 | 12 · 1 | 23 11 | 39 · 1 | 15 12 | 428 | 81 | 02 29 | 347 | 5,5,4,2,4,4,4,6 | 34 | 1 | 85.5 |
| 10 | 17 42 | 552 | 403 | 02 56 | 149 | 13 30 | 47 · 2 | 22 · 4 | 01 41 | 24.8 | 19 59 | 371 | 173 | 02 35 | 198 | 4,4,1,1,0,1,2,4 | 17 | 0 | 85 · 7 |
| 11 | 14 15 | 572 | 492 | 00 43 | 80 | 14 00 | 54 · 9 | 25 · 3 | 21 15 | 29.6 | 14 40 | 382 | 197 | 01 13 | 185 | 4,3,3,2,3,3,3,3 | 24 | 0 | 85-3 |
| 12 q | 22 12 | 584 | 497 | 11 18 | 87 | 13 23 | 49.2 | 28 · 5 | 22 00 | 20.7 | 19 57 | 347 | 288 | 23 30 | 59 | 2,0,2,2,0,2,2,3 | 13 | 0 | 84 · 9 |
| 13 q | 21 55 | 573 | 513 | 11 25 | 60 | 14 34 | 49.0 | 36 · 8 | 08 40 | 12 · 2 | 08 52 | 327 | 303 | 00 00 | 24 | 2, 1, 1, 1, 1, 1, 0, 1 | 8 | 0 | 84 · 5 |
| 14 q | 21 35 | 569 | 516 | 11 02 | 53 | 14 26 | 49-1 | 37 · 2 | 09 33 | 11.9 | 09 28 | 328 | 311 | 13 40 | 17 | 1,0,1,1,0,1,0,1 | 5 | 0 | 84 · 9 |
| 15 | 19 10 | 765 | 487 | 22 26 | 278 | 18 42 | 69 · 2 | 21.3 | 22 42 | 47.9 | 17 26 | 493 | 242 | 22 58 | 251 | 1,1,1,2,3,5,6,4 | 23 | 1 | 84.8 |
| 16 | 22 41 | 564 | 504 | 10 57 | 60 | 13 24 | 55 · 2 | 32 · 3 | 00 15 | 22.9 | 13 52 | 344 | 279 | 00 00 | 65 | 3,1,1,1,2,2,0,2 | 12 | 0 | 84.9 |
| 17 | 06 22 | 561 | 510 | 13 07 | 51 | 13 26 | | 34.0 | 01 02 | 16.2 | 14 51 | 345 | 302 | 00 27 | 43 | 2,1,1,1,2,1,2,2 | 12 | 0 | 84 · 8 |
| 18 | 18 49 | 732 | 233 | 20 30 | 499 | 18 09 | 56.9 | 5.8 | 20 51 | 51 · 1 | 17 57 | 495 | 99 | 21 00 | 396 | 4,4,3,2,3,5,7,5 | 33 | 1 | 84 7 |
| 19 | 07 39 | 553 | 503 | 12 04 | 50 | 12 47 | 49 1 | 21 · 1 | 21 25 | 28.0 | 19 32 | 360 | 285 | 06 00 | 75 | 2,3,3,2,1,1,3,4 | 19 | 0 | 84 - 7 |
| 20 | 15 11 | 559 | 507 | 12 08 | 52 | 15 33 | 54 · 0 | 22.9 | 22 10 | 31.1 | 16 28 | 402 | 296 | 24 00 | 106 | 1, 2, 1, 2, 2, 3, 2, 3 | 16 | 0 | 84 - 7 |
| 21 | 21 23 | 569 | 518 | 11 18 | 51 | 13 19 | 49 · 5 | 26 · 6 | 21 19 | 22.9 | 19 30 | 341 | 284 | 00 29 | 57 | 3, 1, 2, 1, 2, 1, 2, 3 | 15 | 0 | 84 · 7 |
| 22 q | 21 01 | 565 | 517 | 11 29 | 48 | 13 07 | 48 • 9 | 37 · 7 | 08 30 | 11.2 | 04 47 | 327 | 313 | 00 06 | 14 | 1,0,1,1,0,1,0,0 | 4 | 0 | 85 · 0 |
| 23 q | 20 54 | 584 | 524 | 11 11 | 60 | 12 14 | 48 · 8 | 38.0 | 20 56 | 10.8 | 19 48 | 324 | 307 | 20 57 | 17 | 1,0,0,0,1,1,2,2 | 7 | 0 | 84 · 6 |
| 24 | 17 26 | 971 | 523 | 11 43 | 448 | 16 56 | 69 · 2 | 30.0 | 20 11 | 39 · 2 | 16 44 | 514 | 285 | 17 33 | 229 | 0,0,0,1,3,7,5,3 | 19 | 1 | 84.7 |
| 25 d | 16 04 | 1592 | -181 | 20 40 | 1773 | 18 10 | 141 · 2 | -27 · 8 | 20 29 | 169.0 | 15 00 | 488 | -196 | 16 08 | 684 | 2, 2, 4, 5, 5, 8, 9, 7 | 42 | 2 | 84-6 |
| 26 d | 14 35 | 737 | -107 | 01 15 | 844 | 14 25 | 60 · 2 | -11-3 | 01 09 | 71.5 | 14 50 | 504 | -71 | 01 03 | 575 | 7,5,4,5,5,4,5,5 | 40 | 2 | 84 · 5 |
| 27 | 16 44 | 722 | 267 | 22 01 | 455 | 14 04 | 54 · 8 | 4.5 | 20 54 | 50.3 | 16 50 | 517 | 138 | 01 59 | 379 | 5,4,2,3,3,5,5,6 | 33 | 1 | 84.9 |
| 28 | 17 12 | 730 | 440 | 06 00 | 290 | 06 04 | 61.3 | | 18 03 | 44.9 | 15 52 | 537 | 121 | 02 30 | 416 | 5, 5, 4, 4, 4, 5, 4, 3 | 34 | 1 | 84.9 |
| 29 | 16 24 | 723 | 376 | 00 51 | 347 | 13 12 | 54 · 7 | | 18 31 | 31.9 | 16 24 | 536 | 126 | 01 32 | 410 | 5,2,3,3,4,5,4,5 | 31 | 1 | 84 · 5 |
| 30 | 14 29 | 600 | 356 | 23 58 | 244 | 23 55 | 59.5 | 23 · 3 | 20 12 | 36⋅2 | 16 22 | 430 | 154 | 23 58 | 276 | 3, 3, 3, 4, 4, 3, 4, 5 | 29 | 1 | 84 · 2 |
| 31 | 14 43 | 567 | 377 | 00 00 | 190 | 00 00 | 52.8 | 11.7 | 17 53 | 41 · 1 | 17 47 | 432 | 115 | 00 17 | 317 | 5,3,3,3,5,5,3 | 30 | 1 | 84-1 |
| lean | | 716 | 265 | | 451 | | 70.3 | 9.2 | | 61.1 | | 461 | 133 | | 329 | - | - | 0.74 | 85.0 |

q denotes an international quiet day and d an international disturbed day.

| 1 LE | ERWICK | (H) | | | | | | | | | 14 | ,000γ (| 0·14 C | .G.S. | unit) | + | | | | | | | | N | OVEMBE | R 1960 |
|----------------------------------|----------------------------------|--------------------------------------|----------------------------------|--------------------------------------|--------------------------------------|--------------------------------------|--------------------------------------|--------------------------------------|--------------------------------------|--------------------------------------|--------------------------------------|--------------------------------------|--|--------------------------------------|---------------------------------|---------------------------------|---------------------------------|---------------------------------|--------------------------------------|--|--------------------------------------|--------------------------------------|--|--|--|--|
| | Hour 0-1 | G.M.T. 1-2 | 2-3 | 3-4 | 4-5 | 5-6 | 6-7 | 7-8 | 8-9 | 9-1 | 0 10-11 | 11-12 | 12-13 | 13-14 | 14-15 | 15-16 | 16-17 | 17-18 | 18-19 | 19-20 | 20-21 | 21-22 | 22-23 | 23-24 | Mean | Sum 8000+ |
| 1 2 3 4 d | 533 547 516 264 502 | γ 532 546 501 391 547 | 538 542 536 234 546 | γ 538 551 540 381 517 | γ 534 555 556 521 527 | γ 547 561 558 478 552 | γ 559 562 564 512 551 | γ 546 547 558 524 547 | γ 540 521 540 537 532 | γ 533 514 519 494 534 | 7 525 511 513 489 524 | 7 520 517 524 514 526 | 525 529 539 526 | γ 537 525 521 556 542 | 549 533 530 642 557 | 538 542 535 627 558 | 543 541 549 568 556 | 550 543 548 566 553 | γ 553 549 554 573 549 | γ 553 548 551 532 | 7 546 552 557 531 547 | 7 517 563 501 527 547 | 536 533 361 506 | 7 547 526 375 430 | γ 539 540 523 497 | 4939 4958 4546 3923 |
| 5 7 q 8 q 9 q 10 | 549 553 558 556 557 | 549 540 558 547 557 | 551 538 558 554 558 | 552 550 561 552 560 | 553 557 565 551 564 | 557 563 568 565 565 | 558 564 566 565 566 | 550 562 562 559 570 | 548 553 554 558 571 | 537 541 540 547 559 | 536 534 530 541 537 | 535 527 527 530 531 | 532 534 523 530 532 533 | 529 526 540 539 540 | 545 534 544 543 551 | 551 542 551 551 559 | 552 546 555 556 566 | 555 551 558 557 569 | 556 555 558 560 577 | 547 551 558 559 561 576 | 561 558 558 560 579 | 547 559 550 558 576 | 546 551 559 540 554 576 | 548 550 559 546 555 570 | 541 548 548 551 552 561 | 4987 5157 5152 5236 5251 5467 |
| 11 12 13 d 14 d 15 d | 570 545 172 -121 469 | 566 551 164 -39 501 | 572 555 63 452 505 | 572 560 22 511 522 | 582 565 105 514 522 | 587 568 -136 522 512 | 587 566 -684 514 508 | 565 561 -765 519 504 | 560 555 344 520 520 | 557 548 760 511 516 | 537 544 1093 511 520 | 512 540 632 505 524 | 520 544 586 498 520 | 537 551 593 517 644 | 540 593 720 514 716 | 546 579 364 531 776 | 549 587 698 528 947 | 552 758 663 547 844 | 555 1009 733 541 733 | 561 896 595 507 500 | 564 758 562 521 491 | 562 111 354 490 426 | 555 96 148 491 217 | 551 328 311 463 31 | 557 561 379 461 540 | 5359 5468 1097 3067 4968 |
| 16 d 17 18 q 19 q 20 | -489 496 517 545 559 | -454 478 518 545 552 | -739 502 544 547 559 | ~331 518 530 549 561 | 214 527 528 551 568 | 503 534 533 559 568 | 476 537 535 559 554 | 476 542 535 559 553 | 444 536 529 559 546 | 461 531 524 549 534 | 527 531 523 549 540 | 549 536 527 553 538 | 568 535 530 548 547 | 634 542 531 548 548 | 598 545 537 543 531 | 601 534 543 547 549 | 537 560 545 549 546 | 534 548 548 553 555 | 530 520 551 556 555 | 538 536 551 558 556 | 535 537 550 559 556 | 538 533 549 562 556 | 534 529 547 559 553 | 518 521 545 559 555 | 346 529 536 553 552 | 302 4708 4870 5265 5239 |
| 21 22 23 24 25 | 556 469 545 511 522 | 557 424 543 517 528 | 559 387 545 537 522 | 560 493 544 550 449 | 559 528 554 560 504 | 551 514 558 564 551 | 563 541 546 568 560 | 523 541 552 555 554 | 537 518 545 554 510 | 521 527 543 551 534 | 534 522 534 548 526 | 538 511 529 543 522 | 547 521 534 547 539 | 550 530 541 551 550 | 579 540 538 551 551 | 656 550 546 557 565 | 795 543 552 562 567 | 785 549 547 561 537 | 797 540 548 563 524 | 605 543 549 565 531 | 533 545 540 561 487 | 521 546 544 543 454 | 431 546 540 472 479 | 483 540 519 508 522 | 577 519 543 546 525 | 5840 4468 5036 5099 4588 |
| 26 27 28 29 30 | 540 560 496 554 550 | 537 554 526 538 544 | 540 549 543 552 549 | 540 551 557 554 550 | 515 557 545 557 566 | 542 561 544 559 567 | 549 562 560 563 563 | 541 560 551 564 562 | 515 549 540 555 559 | 524 551 524 551 550 | 531 543 534 544 546 | 539 541 536 530 544 | 526 541 539 537 544 | 541 545 541 545 544 | 546 529 555 553 548 | 541 545 550 550 549 | 549 555 555 553 557 | 551 586 555 560 560 | 554 554 560 562 550 | 552 534 557 555 568 | 528 546 555 550 570 | 544 546 552 551 514 | 543 522 551 547 467 | 550 530 550 545 532 | 539 549 545 551 548 | 4938 5171 5076 5229 5153 |
| Mean Sum 13,000+ | 457 701 | 464 918 | 467 998 | 489 1664 | 520 2604 | 526 2775 | 510 2294 | 503 2077 | 532 2949 | 539 3185 | 549 3477 | 533 3000 | 536 3074 | 548 3438 | 562 3855 | <i>591</i> 4733 | 579 4366 | 581 4443 | 587 4619 | 563 3893 | 553 3597 | 515 2441 | 486 1589 | 496 1867 | 529 | Grand Total 380,557 |

$\label{eq:Magnetic Declination (WEST)} Mean values for periods of sixty minutes ending at exact hours, G.M.T.$

| 2 LE | RWICK | (D) | | | | | | | | | | 9° | , + | | | | | | | | | | | | NOVEMBE | R 1960 |
|------------------|-------------|---------------|--------|---------|--------|--------|--------|--------|--------|-----------------------|--------|--------|---------|--------|--------|--------|--------|--------|--------|--------|--------|--------------|--------------|--------------|--------------|------------------------|
| | Hour 0-1 | G.M.T. 1-2 | 2-3 | 3-4 | 4-5 | 5-6 | 6-7 | 7-8 | 8-9 | 9-10 | 10-11 | 11-12 | 12-13 | 13-14 | 14-15 | 15-16 | 16-17 | 17-18 | 18-19 | 19-20 | 20-21 | 21-22 | 22-23 | 23-24 | Mean | Sum 400 · 0+ |
| | | • | • | , | | • | • | • | • | • | • | | | • | , | , | • | • | • | • | • | , | • | • | 1 | |
| 1 | 39.6 | 38 · 9 | 41 · 5 | 41.6 | 41 · 4 | 42 · 4 | 42 · 2 | 40.5 | 39 · 6 | 40 · 4 | 43 · 4 | 46 · 3 | 47.9 | 47 · 3 | 47 · 8 | 45 · 8 | 44 · 5 | 44 · 4 | 43 · 1 | 43 · 1 | 40.0 | 40.5 | 35-4 | 36.6 | 42.3 | 614 - 2 |
| 2 | 41.0 | | | 42 · 3 | 38 · 3 | 40.5 | 39.9 | 41.6 | 43 · 2 | 42.8 | 43 · 7 | | 50 · 4 | 48 • 4 | 46 · 4 | 45.8 | 43.6 | 43.1 | 42.3 | 40 · 6 | 36 · 2 | 30 · 9 | 34 · 5 | 35.6 | 41.8 | 603 · 6 |
| 3 | 38.3 | | | | 38 · 1 | 40 · 5 | 39.8 | 38 · 8 | 39 · 1 | 4 0 · 7 | 42.4 | | 47.0 | 47 · 5 | 47 · 6 | | 43 · 4 | 44 • 2 | 43 · 2 | 42 · 4 | 29.5 | 29 · 7 | 29.0 | 12.7 | 39.4 | 545 · 9 |
| 4 d | 29.5 | | | 29 · 3 | 40 · 2 | 36 • 4 | 45 · 3 | 39 · 7 | 38 · 9 | 40 · 0 | 49 · 4 | | 47 · 0 | 50 · 1 | 52 · 8 | 31.8 | 50.9 | 47 · 2 | 33 · 9 | 34 · 7 | 35 · 7 | 35 · 4 | 31 · 9 | 31 · 9 | 38 · 5 | 522 · 8 |
| 5 | 40.5 | 40 · 5 | 40 · 5 | 45.1 | 44 · 4 | 40 · 5 | 41 · 5 | 42 · 4 | 42.9 | 43 · 5 | 43.3 | 45 · 3 | 46.0 | 44 · 5 | 44 · 4 | 41 · 3 | 41.5 | 41.6 | 41 · 4 | 41.0 | 40 · 4 | 41.0 | 40 · 4 | 40 · 4 | 42.3 | 614 · 3 |
| 6 | 41.0 | 41 · 2 | 41.5 | 41.5 | 42.3 | 40.9 | 41.6 | 42.9 | 41.5 | 40.0 | 42.4 | 46 · 4 | 46 · 2 | 44 · 7 | 44 · 1 | 43 - 1 | 42.0 | 41.0 | 41.0 | 42 · 7 | 37.8 | 36 · 7 | 39 · 7 | 40.3 | 41.8 | 602 · 5 |
| 7 q | 40.5 | 40.3 | 42.9 | 40 · 1 | 40.5 | 41.5 | 45.3 | 42.4 | 40 · 5 | 40.0 | 42.4 | 43.7 | 44.8 | 45 · 1 | 44.2 | 42.5 | 41.5 | 42.0 | 41.6 | 41.5 | 41.3 | 41.0 | 41.0 | 41.3 | 42.0 | 607.9 |
| 8 q | 41.5 | 41 · 7 | 42.0 | 42.2 | 41.5 | 41 · 2 | 41.0 | 39 · 5 | 38 · 8 | 39.0 | 41.0 | 43 · 1 | 44 · 8 | 45.3 | 44 · 8 | 44 · 4 | 43.5 | 43.7 | 42.9 | 42.9 | 42.4 | 40.5 | 37.6 | 35 · 7 | 41.7 | 601.0 |
| 9 q | 37.6 | 39 · 1 | 40.5 | 41.5 | 42.3 | 40 · 7 | 39.6 | 41 · 2 | 41 · 5 | 41.0 | 43.6 | 44 - 4 | 46 · 1 | 47 - 1 | 46 · 5 | 44 · 8 | 43.9 | 43.4 | 43 · 2 | 42.5 | 42.0 | 38 · 1 | 38 · 6 | 39.8 | 42.0 | 609.0 |
| 10 | 41 · 4 | 41 · 5 | 41.6 | 41 · 7 | 41 - 5 | 41.0 | 40.3 | 39.6 | 38 · 9 | 39.6 | 42 · 4 | 47 · 2 | 49.6 | 52.0 | 51.8 | 52.6 | 48 · 1 | 46.6 | 46 · 7 | 45.0 | 43 · 4 | 42.3 | 41.5 | 40.5 | 44.0 | 656 · 8 |
| 11 | 41.4 | 41.0 | 43 · 1 | 42.4 | 42.0 | 42.3 | 41.6 | 42.0 | 39.6 | 40.6 | 44.5 | 48 · 9 | 46.0 | 46.8 | 45.8 | 44.8 | 43.5 | 43.3 | 42.4 | 42.9 | 43 · 2 | 42.3 | 41.3 | 33.6 | 42.7 | 625 · 3 |
| 12 | 32.7 | 38 · 5 | 40.6 | 40.5 | 41 · 4 | 41.3 | 41.6 | 41.4 | 40 · 4 | 40.5 | 41.5 | | 43.4 | 47.4 | 53 · 1 | 50 · 9 | 52.1 | | -18.5 | 78.3 | 61.0 | 85.7 | 46.0 | 32.4 | 44.7 | 672 - 7 |
| 13 d | 40.0 | 11.0 | 1.6 | 31 · 4 | 27 · 3 | 13 · 1 | | -55.9 | -1.4 | -7.1 | -35.6 | 6.8 | 18.6 | 45 - 4 | | 30.4 | 34.8 | | 25 · 4 | 26.4 | 43.1 | 33.8 | 41.8 | 34 · 1 | 18.7 | 49-8 |
| 14 d | 20.4 | 35 · 1 | 35 · 2 | 40.5 | 39.5 | 38 · 6 | 37 · 2 | 37 · 6 | 37 · 4 | 36 · 6 | 37 · 5 | 39.3 | 39.5 | 42.9 | 42.0 | 38 · 1 | | | 25 · 3 | 44.3 | 38 · 1 | 40.7 | 38.6 | 38 · 1 | 37.4 | 498 - 5 |
| 15 d | 40.3 | 36 · 2 | 35.6 | 39.9 | 40.7 | 40.3 | 43.1 | 40.4 | 37 · 4 | 37 · 2 | 37 · 4 | 41.4 | 43.2 | 46.8 | 51.8 | 51.6 | 55.6 | 42.5 | 54.6 | 47 · 1 | 41.5 | 31.9 | 28 · 1 | 41.4 | 41.9 | 606 · 0 |
| 16 d | -0.1 | -7 · 1 | 12.3 | 24 · 8 | 32.8 | 31.9 | 33.0 | 28.8 | 31 · 4 | 38 · 7 | 38 · 5 | 38 · 1 | 41.0 | 41.5 | 41.5 | 37 · 6 | 41.5 | 40 - 4 | 39 · 4 | 31.9 | 33.5 | 38 · 1 | 38.6 | 42.0 | 32.1 | 370 · 1 |
| 17 | 46.8 | 47.1 | 44.8 | 40.5 | 40.4 | 41.0 | 40.0 | 40.3 | 39 · 1 | 40 · 4 | 42.2 | | 42.0 | 41.0 | | 39.7 | 32.4 | 29.5 | 30.9 | 40.4 | 42.4 | 37.8 | 35.3 | 38 · 1 | 39.9 | 557 · 0 |
| 18 a | 37.0 | | 42.2 | | 39.6 | 38 · 1 | 38.5 | 38.6 | 38 · 3 | 38 · 3 | 40.3 | 41.8 | 43.5 | 43.2 | - | 41.9 | 42.0 | | 41.0 | 40.9 | 40.5 | 40.4 | 40.3 | 40.2 | 40.5 | 571.2 |
| 19 a | 40.4 | 40 · 4 | 40.4 | | | 41.0 | 40.8 | 40.4 | 40.0 | 39.6 | 41.5 | | 44.6 | 44.3 | | 42.7 | 42.2 | | 41.3 | 41.0 | | 41.0 | 41.0 | 41.4 | 41.5 | 595 · 5 |
| 20 | 42.3 | 43.4 | 42.9 | 43.4 | 43.5 | 43 · 4 | 43.4 | 43.4 | 41.5 | 43 · 4 | 45.9 | 45 · 1 | 46.1 | 45.8 | 44.4 | 42.2 | | 42.7 | 41.4 | 41.2 | | 40.5 | 40.5 | 39 · 1 | 42.9 | 629 - 2 |
| 21 | 38 · 7 | 40.0 | 41.0 | 41.3 | 41 · 4 | 48 · 7 | 54 · 4 | 47 · 7 | 38 · 1 | 41 · 5 | 43.9 | 44.5 | 48.3 | 46.8 | 50.8 | 50.6 | 48 · 1 | | 47 · 1 | 34.6 | 36 · 6 | 38 · 7 | 36 · 2 | 28 · 0 | 42.8 | 626 • 6 |
| 22 | 30.9 | 34 · 9 | 53.0 | 32.6 | 35.0 | 39.4 | 43.4 | 44.8 | 40.9 | 39.4 | 40.8 | 43.4 | 45.3 | 46 · 1 | 46.2 | 49.6 | 47.0 | | 41.4 | 40.3 | 40.3 | 37 · 2 | 42.9 | 37 · 4 | 41.5 | 597 · ú |
| 23 | 40.1 | 41.5 | 43.1 | 40.3 | 39.6 | 40.5 | 45.8 | 47.3 | 44 . 2 | 42.9 | 43.9 | | 46.2 | 45.4 | 45.0 | 43.2 | 42.3 | | 39.9 | 39.6 | 37.0 | 38 · 8 | 36.7 | 35.2 | 41.9 | 606 • 4 |
| 24 | 35.0 | 36.2 | 43.9 | 41.5 | 40.0 | 40.5 | 41.5 | 40.7 | 41.2 | 42.3 | 43.9 | 45.0 | 45.4 | 46 · 3 | | 44.8 | 44.6 | | 42.5 | 41.4 | 40.4 | 40.0 | 24.7 | 23 · 1 | 40.5 | 573.0 |
| 25 | 35.2 | 37.8 | 40.0 | 45.8 | 48.7 | 47 . 2 | 41.5 | 42.3 | 41.5 | 40.2 | 42.2 | 49.0 | 45.0 | 46 · 3 | | 44.3 | 38 · 3 | 30.9 | 38.6 | 35.8 | 32.8 | 35.7 | 34 · 7 | 28 . 9 | 40.3 | 566 • 0 |
| 26 | 37.6 | 39 · 1 | 42.5 | 41.6 | 44 · 4 | 42.2 | 43 · 1 | 42.2 | 45.0 | 45.2 | 45.6 | 45.5 | 46.8 | 45 · 4 | 46 · 0 | | 41.5 | | 40.5 | 41.0 | 36.7 | | | | | |
| 27 | 38.9 | 38.8 | 38.6 | 38.9 | | 42 - 3 | 41.0 | 42.0 | 40 7 | 40.5 | 44 · 1 | 44.0 | 44.0 | 45.2 | | 46.8 | 43.3 | 32.6 | 24.5 | 38.8 | 34.8 | 37·2 27·8 | 36·6 28·9 | 39·1 38·1 | 42·0 39·3 | 609·1 542·0 |
| 28 | 41.4 | 36.5 | 37.6 | 37 · 4 | | 45 · 2 | | 47.4 | 44.8 | 42.3 | 43.1 | 45.8 | 46.8 | 42.2 | | 43.7 | | | 42.4 | 42.2 | 41.0 | 39.8 | 39.5 | 37.5 | 42.2 | 542·0 611·8 |
| 29 | 33.8 | 38 · 5 | 41.4 | 40.0 | 39 · 1 | 38.6 | 39.7 | 41.8 | 41.0 | 41.0 | 42.4 | 44.4 | 44.8 | 46.2 | 46.8 | 44.8 | 44.3 | 43.4 | 43 1 | 42.4 | 37.9 | 37.6 | 35.6 | 37.7 | 41.1 | 586 · 3 |
| 30 | 38.7 | | 38 · 3 | | | | | | 40.9 | 42.2 | 42.4 | 44.8 | 45.8 | 45.9 | | | | 44-8 | | | 36.2 | 32.6 | 29.0 | 45.5 | 41.1 | 585·2 |
| Mean | 36.7 | 36.8 | 38.3 | 39.4 | 40.3 | 40.0 | 40.4 | 38 · 1 | 38 · 9 | 39-1 | 40.0 | 43.3 | 44.5 | 45.8 | 45.8 | 43.8 | 43.6 | 42 · 1 | 38 · 1 | 41.6 | 39.6 | 39 - 1 | 36.9 | 36 · 2 | 40.4 | |
| Sum 1000 · 0+ | | | | 183 · 3 | | | | | | | | | 336 · 1 | | | | | | | | | | | | | Grand Total 29056·7 |

3 LERWICK (Z) 47,000y (0.47 C.G.S. unit) + NOVEMBER Hour G.M.T. 0-1 2-3 3-4 4-5 5-6 6-7 7-8 8-9 9-10 10-11 11-12 12-13 13-14 14-15 15-16 16-17 17-18 18-19 19-20 20-21 21-22 22-23 23-24 Mean 333 347 373 356 347 346 335 330 326 222 675 7 317 316 524 313 313 306 311 309 318 317 318 319 277 -14 138 252 325 -143 345 -166 359 367 366 367 365 357 371 363 374 927 14 d 15 d -15 16 d 323 320 329 339 343 344 345 345 351 353 352 339 18 a 19 q 20 322 320 317 322 326 325 329 343 357 355 354 341 327 334 218 418 375 24 25 335 333 334 333 339 337 339 344 346 337 27 319 362 339 898 Mean Sun Grand Total 537 1274 1734 1804 2076 2294 2404 2604 2846 2974 3135 2975 2177 1843 2155 444 1020 233,878 8000+

DAILY EXTREMES OF TERRESTRIAL MAGNETIC ELEMENTS, MAGNETIC CHARACTER FIGURES (K AND C) AND TEMPERATURE IN MAGNET HOUSE

4 LERWICK NOVEMBER 1960

| | <u> </u> | | | | | TEPRE | STRIAL | MAGNETI | C ELEMP | NTS | | | | | | | 1 | T., | Temperature |
|--|--|---|---|---|---|--|--|---------------------------------------|---|--|--|--|--|--|---|--|--|---|---|
| | | Horizo | ntal f | orce | 1 | | De | clinatio | n | · · · · · · · · | | Verti | cal fo | rce | , | 3-hr. range indices | Sum of K | Magnetic character | in magnet |
| | | mximum Minimum ,000y + 14,000y + | | | Range | Max 9° | imum + | Min 9° | imum + | Range | Maxi 47,00 | | | imum 00γ + | Range | K | indices | of day, C (0-2) | 200 + |
| 1 2 3 4 d 5 6 7 q 9 q 10 11 12 13 d 14 d 15 d | h. m. 06 38 21 19 20 12 14 50 15 40 20 37 05 13 05 51 06 49 20 09 06 11 18 30 10 24 19 01 16 44 | γ 563 587 580 781 564 574 568 569 568 581 600 1191 2240 594 1347 | 7 468 504 234 130 417 524 520 521 525 501 -350 -745 -176 | h. m. 21 57 11 34 23 50 00 24 3 00 01 13 25 11 13 11 59 12 03 12 00 22 31 07 09 01 00 23 41 | 95 83 346 651 147 50 48 48 42 56 99 1541 3835 1339 1523 | h. m. 12 13 12 51 12 25 14 52 03 54 11 36 02 54 13 57 13 26 15 15 11 51 19 12 03 39 19 03 18 50 | 49·3 53·8 49·4 58·5 48·2 47·2 46·8 46·2 49·0 56·1 51·8 118·7 88·0 66·2 151·6 | 34·3 36·5 37·6 29·0 -17·8 | 02 05 00 16 20 84 03 30 23 11 21 45 08 41 23 40 18 06 10 50 00 34 | 18·3 31·0 47·7 62·4 11·8 17·0 8·5 11·9 12·5 18·5 22·8 136·5 216·4 70·6 168·9 | h. m. 15 12 13 27 11 46 15 06 14 26 20 12 15 48 22 07 18 18 21 19 23 02 21 51 00 49 00 48 16 35 | 360 375 353 486 372 337 329 329 325 325 327 597 1130 491 603 | 7 247 254 146 75 178 309 255 288 280 298 295 -356 -463 4 -168 | h. m. 21 57 24 00 23 48 01 59 00 12 24 00 03 18 24 00 00 26 14 13 23 29 19 01 05 57 01 35 18 50 | 7 113 121 207 411 194 28 74 41 45 27 32 953 1593 487 771 | 3, 2, 2, 2, 2, 2, 4, 2, 2, 3, 2, 3, 3, 3, 2, 3, 3, 2, 3, 2, 3, 3, 4, 5, 5, 5, 5, 3, 2, 2, 2, 2, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, | 19 20 25 41 18 12 11 7 11 9 18 34 67 33 40 | 0 0 0 1 0 0 0 0 0 0 0 0 0 0 2 2 2 1 2 | °A. 84·3 83·8 84·3 82·0 81·8 81·4 81·0 80·8 80·5 80·8 81·5 81·8 81·9 82·0 |
| 16 d 17 18 q 19 q 20 | 13 22 16 28 02 17 21 50 05 40 | 736 589 567 568 574 | -1404 464 495 535 525 | 02 57 01 22 01 11 12 23 14 14 | 2140 125 72 32 49 | 02 27 00 34 02 31 12 12 10 36 | 147·3 51·2 46·2 46·0 47·5 | -90·0 22·4 35·0 38·7 38·4 | 02 12 17 11 00 08 08 23 23 27 | 237·3 28·8 11·2 7·3 9·1 | 02 58 18 32 15 10 01 21 16 06 | 1596 395 354 346 362 | -273 244 314 323 314 | 01 10 00 55 02 35 11 39 05 27 | 1869 151 40 23 48 | 9,9,4,5,5,5,3,3 3,2,2,2,2,4,4,2 3,2,6,1,0,1,0,1 0,1,1,1,2,1,0,1 1,1,1,1,2,2,1,1 | 43 21 8 7 10 | 2 0 0 0 0 | 81 · 9 81 · 6 81 · 3 81 · 1 81 · 2 |
| 21 22 23 24 25 | 18 23 22 23 05 11 19 25 16 25 | 940 567 561 575 592 | 381 315 497 407 313 | 22 32 01 56 24 00 22 40 20 17 | 559 252 64 168 279 | 18 39 02 18 06 55 12 55 04 45 | 73·2 66·5 51·0 47·3 59·5 | 27 · 2 34 · 2 6 · 0 | 23 26 03 39 24 00 23 11 16 56 | 51·1 39·3 16·8 41·3 43·0 | 15 56 17 45 16 49 20 12 16 33 | 638 423 362 364 454 | 125 132 301 164 56 | 22 45 02 44 24 00 23 28 03 50 | 513 291 61 200 398 | 1,3,4,3,4,6,7,6 5,5,3,2,2,3,3,4 2,2,3,1,2,1,2,3 3,2,2,1,1,2,2,5 3,5,4,4,3,5,6,5 | 34 27 16 18 35 | 1 1 0 0 | 81·1 81·1 81·2 81·6 81·7 |
| 26 27 28 29 30 | 24 00 17 18 06 26 00 09 19 13 | 574 633 572 573 596 | 494 498 473 522 313 | 04 21 24 00 00 49 11 41 22 34 | 80 135 99 51 283 | 04 26 15 55 00 44 14 31 23 00 | 49·1 48·2 57·7 47·3 58·7 | 20·6 29·8 | 00 03 18 13 00 12 00 40 22 05 | 16·1 36·1 37·1 17·5 51·1 | 20 27 17 19 14 01 20 16 23 09 | 386 489 380 351 381 | 264 231 158 298 238 | 00 00 23 56 00 48 23 16 22 25 | 122 258 222 53 143 | 3,3,3,2,2,2,3,3 3,2,2,2,4,5,4 5,4,3,2,3,2,0,1 3,1,1,2,1,1,2,3 2,2,1,0,1,1,3,6 | 21 24 20 14 16 | 0 1 0 0 | 81·8 81·1 81·0 81·2 80·9 |
| ean | | 704 | 228 | | 476 | | 62.6 | 12.7 | | 49.9 | | 467 | 151 | | 316 | - | - | 0.47 | 81.6 |

q denotes an international quiet day and d an international disturbed day.

14,000y (0.14 C.G.S. unit) + DECEMBER 1960 1 LERWICK (H)

| | Hour (| G.M.T. 1-2 | 2-3 | 3-4 | 4-5 | 5-6 | 6-7 | 7-8 | 8-9 | 9-10 | 10-11 | 11-12 | 12-13 | 13-14 | 14-15 | 15-16 | 16-17 | 17-18 | 18-19 | 19-20 | 20-21 | 21-22 | 22-23 | 23-24 | Mean | Sum 11,000 |
|---------------------|------------|---------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|-----------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------------|
| f | γ | γ | γ | γ | γ | γ | γ | γ | γ | γ | γ | γ | γ | γ | γ | γ | γ | γ | γ | γ | γ | γ | γ | γ | γ | |
| 1 d | 581 | 540 | 494 | 155 | 470 | 433 | 497 | 476 | 527 | 507 | 503 | 503 | 561 | 572 | 628 | 886 | 1001 | 739 | 651 | 575 | 495 | 416 | 283 | 410 | 538 | 1903 |
| 2 d | 486 | 510 | 491 | 510 | 524 | 535 | 532 563 | 539 557 | 532 543 | 520 526 | 507 525 | 527 526 | 545 531 | 548 532 | 542 543 | 543 549 | 539 548 | 541 549 | 551 552 | 549 551 | 558 553 | 554 553 | 535 551 | 535 552 | 531 543 | 175 204 |
| 3 | 540 552 | 541 552 | 540 551 | 533 554 | 526 558 | 558 561 | 560 | 557 | 543 555 | 520 554 | 525 550 | 544 | 544 | 535 | 551 | 5 44 | 545 | 549 549 | 549 | 544 | 552 | 549 | 548 | 551 | 550 | 220 |
| 4 q | 551 | 550 | 550 | 550 | 549 | 562 | 566 | 561 | 558 | 558 | 556 | 544 | 528 | 539 | 545 | 542 | 551 | 547 | 558 | 555 | 558 | 559 | 560 | 561 | 552 | 225 |
| 6 | 561 | 561 | 563 | 566 | 566 | 566 | 580 | 573 | 565 | 553 | 549 | 557 | 556 | 546 | 563 | 573 | 648 | 741 | 725 | 648 | 547 | 406 | 525 | 538 | 574 | 277 |
| 7 | 535 | 536 | 532 | 538 | 534 | 556 | 562 | 555 | 547 | 535 | 532 | 532 | 530 | 519 | 545 | 545 | 539 | 538 | 562 | 576 | 576 | 462 | 515 | 513 | 538 | 191 |
| 8 | 516 | 493 | 501 | 499 | 500 | 541 | 558 | 564 | 552 | 545 | 528 | 528 | 536 | 543 | 551 | 548 | 551 | 551 | 555 | 555 | 555 | 554 | 556 | 554 | 539 | 193 |
| 9 | 553 | 550 | 540 | 541 | 556 | 548 | 543 556 | 550 556 | 545 550 | 529 549 | 535 543 | 531 537 | 538 538 | 549 541 | 549 545 | 558 548 | 551 552 | 551 546 | 545 555 | 560 553 | 545 556 | 541 569 | 547 561 | 561 559 | 547 551 | 211 221 |
| 10 | 558 | 544 | 539 558 | 550 558 | 554 561 | 554 565 | 562 | 564 | 557 | 548 | 544 | 540 | 543 | 535 | 541 | 539 | 556 | 561 | 561 | 562 | 550 | 544 | 540 | 545 | 552 | 221 |
| 11 <i>q</i> 12 | 557 564 | 555 548 | 552 | 551 | 555 | 563 | 568 | 561 | 559 | 548 | 549 | 533 | 530 | 537 | 533 | 545 | 551 | 569 | 547 | 513 | 543 | 530 | 517 | 460 | 543 | 202 |
| 13 | 504 | 516 | 522 | 526 | 550 | 548 | 545 | 550 | 547 | 540 | 542 | 539 | 527 | 533 | 545 | 551 | 552 | 549 | 550 | 552 | 551 | 554 | 555 | 557 | 542 | 200 |
| 14 9 | 557 | 558 | 561 | 563 | 564 | 567 | 569 | 572 | 566 | 566 | 564 | 571 | 572 | 570 | 568 | 562 | 561 | 561 | 561 | 560 | 554 | 561 | 565 | 567 | 564 | 254 |
| 15 d | 569 | 576 | 575 | 577 | 577 | 566 | 554 | 543 | 538 | 541 | 543 | 549 | 571 | 610 | 770 | 818 | 867 | 852 | 704 | 582 | 437 | 177 | 75 | 119 | 554 | 229 |
| 16 d | 128 | 180 | 129 | 289 | 454 | 450 | 457 | 474 | 510 | 491 | 491 | 509 | 559 | 553 | 544 | 548 | 545 | 550 | 551 | 552 | 556 | 546 | 538 | 542 | 464 | 14 |
| 17 q | 545 | 544 | 543 | 545 | 547 | 550 | 540 542 | 550 520 | 553 554 | 551 | 547 520 | 545 546 | 544 | 545 549 | 545 559 | 544 576 | 549 612 | 553 591 | 557 562 | 553 519 | 547 542 | 550 535 | 551 535 | 552 541 | 548 | 215 227 |
| 18 | 557 535 | 558 537 | 553 548 | 564 549 | 566 553 | 565 567 | 564 | 549 | 551 | 549 549 | 536 | 539 | 561 543 | 552 | 547 | 552 | 542 | 554 | 557 | 557 | 542 549 | 535 576 | 559 | 541 547 | 553 551 | 227 |
| 19 20 | 533 | 544 | 539 | 539 | 541 | 567 | 563 | 554 | 544 | 524 | 535 | 540 | 554 | 555 | 554 | 555 | 549 | 553 | 557 | 549 | 566 | 510 | 516 | 542 | 545 | 208 |
| 21 | 506 | 443 | 532 | 561 | 562 | 557 | 555 | 556 | 563 | 561 | 561 | 564 | 566 | 565 | 566 | 529 | 541 | 555 | 560 | 557 | 549 | 563 | 529 | 558 | 548 | 215 |
| 22 | 517 | 531 | 545 | 552 | 549 | 556 | 553 | 561 | 555 | 546 | 546 | 550 | 558 | 556 | 561 | 551 | 532 | 544 | 554 | 557 | 558 | 567 | 565 | 517 | 549 | 218 |
| 23 | 533 | 553 | 546 | 553 | 555 | 555 | 553 | 555 | 554 | 551 | 548 | 544 | 548 | 538 | 561 | 553 | 554 | 554 | 554 | 556 | 565 | 566 | 563 | 555 | 553 | 226 |
| 24 | 551 | 553 | 553 | 557 | 563 | 561 | 561 | 562 | 562 | 558 | 560 | 565 | 565 | 550 | 545 | 557 | 561 | 536 | 547 | 561 | 558 | 550 | 567 | 543 | 556 | 234 |
| 25 q | 552 | 539 | 553 | 561 | 561 | 562 | 561 | 563 | 560 | 557 | 553 | 559 | 561 | 560 | 554 | 557 | 560 | 561 | 557 | 557 | 563 | 558 | 557 | 560 | 558 | 238 |
| 26 | 543 | 535 | 553 | 565 | 573 574 | 563 581 | 581 574 | 573 565 | 559 576 | 557 561 | 565 561 | 568 550 | 553 534 | 558 549 | 558 583 | 561 833 | 561 633 | 568 780 | 571 857 | 573 446 | 576 544 | 575 395 | 570 497 | 566 516 | 564 582 | 252 |
| 27 d | 565 509 | 564 509 | 558 532 | 572 535 | 541 | 550 | 553 | 544 | 534 | 527 | 528 | 531 | 547 | 560 | 540 | 545 | 560 | 539 | 541 | 558 | 538 | 540 | 546 | 547 | 540 | 296 195 |
| 28 | 529 | 515 | 526 | 541 | 550 | 556 | 557 | 546 | 549 | 548 | 535 | 542 | 552 | 549 | 557 | 565 | 567 | 555 | 548 | 546 | 547 | 550 | 549 | 548 | 547 | 212 |
| 30 | 554 | 550 | 549 | 552 | 546 | 554 | 564 | 561 | 544 | 535 | 538 | 532 | 545 | 538 | 539 | 543 | 553 | 549 | 542 | 544 | 552 | 560 | 555 | 555 | 548 | 215 |
| 31 | 557 | 553 | 556 | 551 | 552 | 540 | 555 | 559 | 538 | 541 | 545 | 543 | 539 | 545 | 560 | 543 | 554 | 561 | 567 | 554 | 556 | 556 | 550 | 556 | 551 | 223 |
| an | 529 | 527 | 529 | 528 | 546 | 550 | 553 | 551 | 550 | 543 | 540 | 541 | 548 | 549 | 561 | 579 | 583 | 582 | 578 | 554 | 548 | 523 | 522 | 527 | 548 | |
| um 000+ | 398 | 338 | 384 | 357 | 931 | 1057 | 1148 | 1070 | 1047 | 825 | 739 | 788 | 979 | 1031 | 1392 | 1963 | 2085 | 2047 | 1908 | 1174 | 996 | 226 | 180 | 327 | | Grand T 407.3 |

MAGNETIC DECLINATION (WEST)
Mean values for periods of sixty minutes ending at exact hours, G.M.T.

| 2 LE | RWICK (| (D) | | | | | | | | | | 9' | ٠ + | | | | | | | | | | | | DECEMB | ER 1960 |
|---------------|--------------|-----------------|--------------|--------------|--------|--------------|--------------|--------------|---------------|--------------|--------------|---------|--|--------------|--------------|--------------|--------------|--------|--------|--------------|--------------|--------------|--------------|--------------|--------|------------------------|
| | Hour (| G. M. T. 1-2 | 2-3 | 3-4 | 4-5 | 5-6 | 6-7 | 7-8 | 8-9 | 9-10 | 10-11 | 11-12 | 12-13 | 13-14 | 14-15 | 15-16 | 16-17 | 17-18 | 18-19 | 19-20 | 20-21 | 21-22 | 22-23 | 23-24 | Mean | Sum 800 · 0+ |
| | , | • | • | , | , | • | , | , | -, | - | · | , | | - | • | , | , | | | • | • | | · | | | |
| 1 d | 41.6 | 36.3 | 30 · 1 | -6 · 7 | 39.5 | 47 · 6 | 36.8 | 40.6 | 38 · 2 | 39 · 2 | 39 · 7 | 43 · 3 | 48.8 | 41.5 | 47 · 5 | 52.8 | 62.8 | 58 · 2 | 45 · 4 | 31 · 3 | 21 · 7 | 35 · 3 | -9.5 | 16.9 | 36.6 | 78.9 |
| 2 d | 37 · 7 | 39 · 7 | 40 · 4 | 41.6 | 38.8 | 40 - 7 | 39 · 2 | 40.5 | 40 · 2 | 40.5 | 39 · 1 | 45.3 | 45.0 | 42.2 | 48.3 | 48 · 8 | 44.6 | 42.2 | | 37 · 7 | 33.8 | 31 · 1 | 37 - 7 | 35.2 | 40.3 | 167 - 2 |
| 3 | 39.9 | 40.5 | 41.8 | 42.8 | 46 · 1 | 42.3 | 42.5 | | | 41.3 | 41 · 3 | 43.7 | 45.3 | 44 - 4 | 44 · 6 | 43 · 2 | 41 · 8 | 39.0 | | | 40.9 | 40 · 2 | 40 · 1 | 38 · 4 | 42.0 | 208 · 6 |
| 4 q | 39 · 8 | 41.6 | 41.6 | 41.7 | | | | | 40 · 3 | 41.3 | | | 45.0 | 44 · 5 | 46 · 1 | | | | | | 39 · 8 | 39.5 | 40 · 3 | 40 · 3 | 41.7 | 201 · 7 |
| 5 | 39 · 4 | 40 · 8 | 41.5 | 41.0 | 43 · 2 | 43.7 | 43.7 | 43 · 7 | 42.8 | 44 · 2 | 45.0 | 45 · 5 | 46.9 | 45 · 6 | 48 · 6 | 45 · 1 | | | 43 · 1 | 43 · 2 | 42 · 7 | 41.8 | 40 · 3 | 40 · 1 | 1 | 240 · 9 |
| 6 | 40 · 7 | 40.9 | 40 - 8 | 41.3 | | | | | 43.2 | 44 · 2 | 46.0 | | 52.4 | 47 · 6 | 49 · 5 | 56.2 | | | | | 41.7 | 35 · 1 | 35 · 0 | 37 · 7 | 45.7 | 297.9 |
| 7 | 37.9 | 38.9 | 40.8 | 38 · 9 | | | | | 41.3 | 40.8 | 42.7 | | 45.6 | 44.9 | 46 · 5 | | | | | | 28 · 1 | 28 - 2 | | | , | 178 · 8 |
| 8 | 37·5 41·3 | 38·7 41·2 | 37·5 41·0 | 39·8 44·7 | | | 46·9 41·7 | | 43·8 43·2 | | 40·3 44·7 | | 42·9 46·1 | 43·8 43·7 | 46·2 42·6 | 44·0 40·1 | | | | 41·7 31·2 | 40·7 37·9 | 41·3 38·6 | 41·1 37·1 | | | 210·6 183·5 |
| 10 | 39.9 | 38 · 4 | 39.4 | 44 - 5 | | 41.8 | 41 · 3 | | 41.5 | 41.7 | 41.8 | | 42.3 | 44.2 | | 43.6 | | | | 40 · 1 | 30.3 | 36.0 | 42.1 | | 1 1 | 182.4 |
| | 41.8 | 41.9 | 41.8 | 41.3 | | 41.7 | 42.6 | | 42.3 | 41.3 | 42.3 | | 44.9 | 47.0 | 45.7 | 44 · 2 | | 43.0 | | | 37 · 8 | 29.8 | 36.5 | 35.6 | 1 | 198.8 |
| 11 q 12 | 38 · 8 | 37.9 | 37.7 | 37.7 | | | | | 44.2 | | 43.6 | | 47.1 | 47.3 | 46.6 | 45.6 | | | | | 38.9 | 31.2 | 25 · 5 | 23.6 | | 176.7 |
| 13 | 37 · 2 | 39.9 | 43.2 | 37.0 | | | | | 41.9 | 44.5 | | | 46.2 | 44.7 | 44.3 | 42.3 | | | 41.3 | | | 40.5 | 40.9 | 40.9 | | 197 - 1 |
| 14 9 | 41.8 | 41.9 | 42.1 | 42.3 | | | | | 42.1 | | 42.3 | | 47.3 | 46 - 7 | | | | | | | 39.8 | 40.2 | 41.1 | 41.0 | 42.5 | 221.1 |
| 15 d | 41.8 | 38 · 3 | 40.8 | 43 - 2 | 43.8 | 45 · 5 | 46 · 2 | 43 · 2 | 40.9 | 41.3 | 43.8 | 48.9 | 49.9 | 49 · 7 | 42.6 | 57 · 0 | 59 · 3 | 68 · 4 | 58 · 9 | 45.6 | 37 · 3 | 22.6 | 19 · 7 | 8.9 | 43.2 | 237 · 6 |
| 16 d | 5.6 | 6.1 | 8 · 1 | 6 · 2 | 18.9 | 48 · 6 | 46 · 6 | 46 · 3 | 45.1 | 43.7 | 46 · 1 | 42.6 | 43.8 | 43 · 2 | 44 - 7 | 44 · 6 | 44 · 9 | 45 · 1 | 43.7 | 41.2 | 41.8 | 40.8 | 35.9 | 37 · 1 | 36.3 | 70.7 |
| 17 q | 39 · 2 | 40.3 | 40.5 | 40 · 2 | 39.6 | 40.8 | 41 · 1 | 42.3 | 44.0 | 42.3 | 42 · 2 | 42.5 | 43 · 2 | 43 · 3 | 44 • 0 | 43 · 1 | 42.5 | 42.5 | 42.7 | 42 · 1 | 38 · 8 | 40.8 | 39.9 | 38 · 4 | 41.5 | 196.3 |
| 18 | 40 · 3 | 39 · 2 | 41 · 2 | 39 · 4 | | | | | 43.7 | 43 · 2 | 51 · 4 | 50 · 9 | 48 · 7 | 45 · 1 | 46 · 3 | | | | | | 33 · 2 | 39.0 | 37 · 1 | 43.3 | 42.6 | 222 · 4 |
| 19 | 36 · 5 | | 39.9 | 37.9 | | | | | | | | | 44.2 | 44.9 | 44.3 | 42.7 | 39 · 4 | | 42.7 | | | 22.6 | 35 · 9 | 39.8 | 40.7 | 176.0 |
| 20 | 37 · 5 | 39 · 9 | 37 · 5 | 43 · 2 | 43.0 | 42.5 | 42 · 8 | 43 · 2 | 43.0 | 44 · 2 | 43 · 7 | 44 · 2 | 45.5 | 44 · 1 | 42 · 7 | 40 · 7 | 39.8 | | _ | _ | 23 · 7 | 36 · 5 | 34 · 2 | 40.3 | 39.7 | 152.6 |
| 21 | 39 · 4 | 36 · 8 | 40 · 3 | 38 · 7 | | | | | 43.6 | 43 · 2 | | | 43.7 | 44 · 2 | 45.6 | 42.5 | 41.9 | | | | 25 · 4 | 23.5 | 41.6 | 42.6 | 40.9 | 181 · 4 |
| 22 | 43.5 | 43 · 7 | 37 · 8 | 37.0 | | 43 · 2 | | | 42.5 | 44.0 | 42.6 | | 43.7 | 41.9 | 40.9 | 40.8 | 37.9 | 39 · 4 | | | 37 · 1 | 34.0 | 37 · 8 | 45.3 | | 191 · 4 |
| 23 | 41·8 39·2 | 38·0 38·7 | 37·9 40·7 | 37·0 40·2 | | 42·8 42·6 | | | 46·4 44·1 | 46·3 44·8 | 46·7 44·6 | | 45·1 44·9 | 42·6 43·7 | 42·8 42·4 | | 42·3 43·2 | | | | 40·1 42·6 | 41·8 38·9 | 40 · 1 | 40.7 | 42.2 | 213.9 |
| 25 a | 37.0 | 38.5 | 40.5 | 38.0 | | 40.8 | 41.4 | 41.8 | 42.8 | 43.9 | 43.2 | | 42.8 | 41.4 | 41.2 | 41.8 | 42.5 | | | | 41.4 | 41.3 | 39·6 38·3 | 39·0 39·5 | 41.8 | 203·2 188·8 |
| 1 | | | 36.6 | 39.2 | | | | | | 46.5 | | | 45.7 | 43.9 | 42.0 | 42.1 | | | | | | | | | | |
| 26 27 d | 41·5 39·9 | 31·5 38·8 | 30.0 | 40.9 | | 45·6 39·7 | 40·2 45·4 | 46·5 52·6 | 46·8 53·2 | 46.7 | 45.7 | | 48.6 | 48.7 | 52.9 | 38 · 6 | 47.5 | 37.8 | | 42·0 39·5 | 42·7 33·9 | 43·2 32·6 | 42·7 28·5 | 41·3 29·8 | 42.5 | 220·4 207·4 |
| 28 | 26.9 | 37 · 7 | 40.1 | 41.8 | | 41.2 | | | 44 9 | 44.6 | 44.7 | | 42.9 | 45.5 | 46.5 | 38.9 | 47.2 | | | 28.5 | 36 · 1 | 37.7 | 39.1 | 39.8 | 40.6 | 173.4 |
| 29 | 36.9 | 34.7 | 34 · 6 | 37.0 | | 40 · 1 | | | 44 5 | | | | 46.2 | | 44.7 | 42.5 | | | | | 40.4 | 39.9 | 40.7 | 37.7 | 40.7 | 176.9 |
| 30 | 37 · 3 | 39 · 2 | 40 · 4 | 39.6 | 40 · 2 | 39.9 | 40 · 5 | 41 · 4 | 42 · 4 | 43.2 | 44.8 | 44 · 6 | 44.2 | 44 · 6 | 43.9 | 43.5 | 42.5 | 36.0 | 30.5 | 43.7 | 40.6 | 39.3 | 42.2 | 39.9 | 41.0 | 184 · 4 |
| 31 | 40 · 3 | 38 · 9 | 42.0 | 41.5 | 41.5 | 45.9 | 42 · 3 | 44.7 | 44.9 | 43 · 6 | 43.8 | 45 · 3 | 46 · 2 | 44 · 7 | 44.0 | 39.6 | 45.3 | 41.3 | 39 · 2 | 37 · 3 | 38 · 8 | 37 · 7 | 38 · 6 | 39 · 4 | 41.9 | 206 · 8 |
| lean | 38 · 1 | 37 · 9 | 38 · 6 | 37 · 7 | 40.0 | 42.7 | 42.9 | 43.0 | 43.3 | 43 · 1 | 43.7 | 44.6 | 45.7 | 44.6 | 45 · 1 | 44 · 2 | 44.8 | 44.3 | 42.4 | 39 · 1 | 37.0 | 36 · 2 | 36 · 1 | 36 · 7 | 41.3 | |
| Sum , 000+ | 79.9 | 76 · 4 | 97 · 6 | 68 · 9 | 140.9 | 223 · 1 | 231 · 6 | 233 · 2 | 243 · 7 | 236 · 9 | 254 · 1 | 281 · 3 | 315 · 1 | 283 · 1 | 297 · 8 | 269.6 | 289 · 3 | 273.6 | 214.8 | 112-1 | 47.9 | 21.0 | 18 · 2 | 37 · 7 | | Grand Total 30747.8 |

Mean values for periods of sixty minutes ending at exact hours, G.M.T.

| 3 LE | ERWICK | (Z) | | | | | | | | | 47 | , 000γ | (0·47 C | .G.S. | unit) | + | | | | | | | | 1 | DECEMBE | R 1960 |
|---|---|--|--|---|---|--|--|--|---|--|--|---|---|--|--|--|--|--|--|--|--|--|--|--|--|--|
| | Hour 0-1 | G.M.T. 1-2 | 2-3 | 3-4 | 4-5 | 5-6 | 6-7 | 7-8 | 8-9 | 9-10 | 10-11 | 11-12 | 12-13 | 13-14 | 14-15 | 15-16 | 16-17 | 17-18 | 18-19 | 19-20 | 20-21 | 21-22 | 22-23 | 23-24 | Mean | Sum 6000+ |
| 1 d 2 d 3 4 q 5 6 7 8 9 10 11 q 12 13 | γ 355 258 314 330 324 331 339 299 301 327 312 233 | γ 340 292 320 329 327 331 337 268 328 312 331 324 247 | y 299 286 323 332 330 331 320 266 321 307 326 317 276 | 3 325 318 333 330 329 317 244 302 299 327 311 258 | 7 61 318 300 333 330 329 319 252 286 312 327 316 276 | 7 121 312 300 329 310 323 303 243 302 319 324 317 286 | 9 204 337 315 329 310 313 313 270 318 324 327 318 290 | γ 230 340 320 329 317 315 322 294 319 329 323 325 301 | 289 344 359 325 318 317 327 312 320 331 325 331 322 | 9 305 347 332 322 318 319 331 326 327 335 331 331 335 | 336 354 337 325 320 319 329 336 331 337 332 331 | 357 349 340 329 325 324 331 337 333 337 336 337 348 | 7 397 375 339 335 330 351 331 332 339 336 336 339 | y 424 409 337 341 333 366 357 337 355 336 343 345 351 | 7 454 377 343 343 351 375 355 339 384 338 345 355 350 | 7 451 382 346 359 356 399 357 336 382 338 357 357 341 | 9 456 395 348 367 360 494 367 337 367 344 347 377 339 | 7 513 397 350 370 377 533 368 338 368 344 337 398 339 | 7 510 375 343 369 372 484 357 336 364 341 335 405 339 | y 405 359 343 369 364 477 391 335 344 341 336 381 335 | 7 352 317 339 355 347 354 386 334 327 345 342 384 337 | y 242 280 335 347 336 246 348 334 333 327 364 345 335 | γ 208 280 330 337 330 304 211 333 307 327 331 258 334 | γ 204 307 330 327 330 333 278 333 297 332 309 299 334 | 7 313 338 332 340 335 358 333 311 333 329 334 335 317 | 1516 2115 1961 2164 2045 2597 1994 1471 1983 1892 2018 2043 1607 |
| 14 q 15 d 16 d 17 q 18 19 20 | 332 301 42 350 339 272 333 265 | 331 292 -12 347 338 290 329 185 | 331 285 41 347 333 318 319 238 | 326 281 55 343 293 328 315 304 | 324 285 75 338 292 333 299 324 | 324 296 89 335 299 326 307 327 | 324 304 180 333 293 325 319 333 | 324 312 215 325 300 326 325 333 | 327 322 264 317 303 321 326 331 | 327 329 302 319 321 328 334 331 | 329 337 310 323 341 339 337 331 | 322 356 319 327 375 346 338 332 | 319 390 351 333 380 343 351 333 | 324 432 341 339 377 349 358 331 | 324 493 337 345 385 347 355 339 | 327 501 343 343 433 345 359 404 | 329 463 350 341 490 354 364 404 | 326 380 346 339 459 352 361 381 | 327 386 346 338 437 337 359 373 | 327 424 345 344 390 336 359 357 | 331 467 345 358 350 339 289 361 | 327 309 356 357 339 327 276 323 | 320 138 366 350 336 314 233 313 | 313 32 359 346 286 319 282 327 | 326 338 253 339 354 330 326 328 | 1815 2115 65 2137 2489 1914 1827 |
| 22 23 24 25 q 26 27 d | 287 266 333 323 293 333 | 266 286 326 311 288 331 | 308 307 319 302 313 326 | 316 314 325 313 317 298 | 318 323 325 320 311 290 | 306 323 327 323 293 303 | 317 321 328 327 280 299 | 319 325 332 329 295 284 | 325 362 333 331 309 262 | 333 333 334 333 319 287 | 338 333 333 333 323 305 | 342 341 332 333 329 326 | 340 353 333 333 334 366 | 340 371 349 333 332 393 | 346 368 355 334 326 422 | 347 364 347 334 326 466 | 367 353 347 333 327 516 | 362 347 378 333 325 493 | 351 347 369 334 325 401 | 345 346 345 335 325 278 | 347 337 341 333 329 343 | 334 327 345 333 333 192 | 326 331 327 331 333 182 | 303 335 303 317 334 254 | 328 334 337 328 317 331 | 1883 2013 2086 1861 1619 1950 |
| 28 29 30 31 | 246 310 324 338 | 278 292 328 332 | 301 255 335 328 | 329 292 332 333 | 338 316 330 322 | 333 324 328 312 | 333 324 326 313 | 341 332 328 322 | 344 336 335 334 | 356 343 338 336 | 365 348 338 339 | 388 348 343 336 | 371 350 348 349 | 363 352 351 366 | 384 355 358 362 | 420 391 357 392 | 428 479 353 385 | 404 428 358 392 | 375 380 396 362 | 348 369 389 362 | 345 357 364 362 | 340 349 355 359 | 335 343 344 359 | 330 330 339 353 | 350 346 346 348 | 2395 2303 2297 2348 |
| Mean Sum 9000+ | 301 | 297 | 301 340 | 294 110 | 297 | 299 264 | 308 547 | 731 | 323 1002 | 328 1162 | 333 1331 | 339 1516 | 348 1776 | 356 2035 | 363 2244 | 373 2560 | 383 2881 | 381 2796 | 370 2473 | 358 2104 | 349 1817 | 324 1053 | 305 471 | 303 405 | 331 | Grand Total 246,403 |

345 at 0-1h. January 1, 1961.

DAILY EXTREMES OF TERRESTRIAL MAGNETIC ELEMENTS, MAGNETIC CHARACTER FIGURES (K AND C) AND TEMPERATURE IN MAGNET HOUSE

4 LERWICK DECEMBER 1960 TERRESTRIAL MAGNETIC ELEMENTS Magnetic Temperature 3-hr. range Sum of A Horizontal force Declination Vertical force character in magnet indices of day, C (0-2) indices house Maximum Minimum Maximum Minimum Minimum Maximum Range Range Range 200 + 47,000y + 14,000y 14,000 γ + o٥ 9° + $47.000\gamma +$ °A. 81·4 h. m. 03 21 h. m. 18 08 γ 733 h. m. 03 19 1410 135 · 6 -185 03 18 548 7,8,5,4,5,7,6,6 -214 16 08 -45 · 1 ď 16 15 1196 90.5 02 08 04 07 20·2 37·7 21 03 17 24 30·6 13·3 13 10 16 55 243 284 00 00 04 43 3,3,3,3,4,3,4,4 2,3,2,1,1,2,1,1 20 129 50.8 434 191 27 0 16 81 · 8 3 4 q 5 511 51.0 355 71 06 18 567 56 04 12 13 0 81 - 3 36 44 05 563 16 00 17 49 375 321 09 11 1,0,1,1,2,2,2,2 11.6 19 46 569 525 12 19 14 18 50 · 4 38 · 8 00 45 17 53 386 305 05 41 81 1, 2, 1, 2, 2, 2, 3, 1 14 0 81.0 17 30 20 49 15 39 0,2,1,2,3,5,7,6 21 20 21 51 46 · 4 21 15 18 01 796 253 543 18 08 68.9 22.5 20 36 544 153 391 26 1 81 · 1 59.9 20 58 427 22 05 251 22 10 -3.9 63.8 118 309 2, 3, 2, 2, 3, 2, 5, 6 25 20 43 638 387 81.0 580 457 04 24 09 34 123 06 45 51.3 31.4 00 01 19.9 345 228 05 09 117 4,4,3,3,2,2,0,1 19 ō 80.9 49 · 1 23.8 18 58 25 · 3 419 04 40 10 29 138 2, 3, 2, 3, 4, 3, 4, 3 24 17 0 19 34 577 514 63 81.0 10 20 59 527 12 09 60 03 25 46.6 20 · 5 20 55 26 · 1 20 38 349 286 00 00 63 3, 2, 1, 1, 1, 2, 4, 3 0 81 · 1 13 10 47 · 8 24 · 6 21 26 23.2 21 39 18 21 371 298 23 38 73 0,0,1,1,2,2,3,3 0 11 g 05 29 567 532 13 30 35 80.9 12 13 443 446 23 59 00 00 153 115 55·5 49·4 11.5 22 14 44.0 23 42 228 3,2,1,2,2,3,4,5 4,3,3,2,2,1,1,1 00 30 596 16 42 444 216 22 17 80.5 12 34 00 00 23 · 5 12 32 364 221 00 00 561 81 - 1 23 26 0,0,1,2,2,1,1,2 3,2,2,3,6,6,7,7 14 15 20 24 23 54 20 03 10.5 12 57 584 553 31 12 54 49 · 4 38.9 20 26 333 308 23 50 25 0 2 80 · 9 17 19 112.7 20 07 103 23 38 36 1118 90.8 15 40 988 -130 80.8 07 00 -21 · 8 01 43 76 · 7 22 00 371 -98 01 44 6,6,5,3,3,2,1,3 54.9 469 0 16 d 12 23 576 0 00 54 576 29 80.8 45·1 56·9 36·5 20·8 20 40 19 59 1,1,2,3,2,1,2,2 3,3,3,3,3,4,4,4 17 08 20 8.6 21 04 365 315 08 30 50 561 533 q 36 · 1 16 30 503 24 00 258 16 29 21 18 140 10 55 245 18 625 485 19 40 27 81.6 00 20 22 39 19 20 590 524 66 110 48·8 47·5 12.9 21 15 19 57 35.0 16 55 19 32 365 377 245 214 120 23 25 45.0 22 14 12 28 2.5 1 20 22 589 479 163 3, 3, 3, 3, 2, 2, 5, 4 80.8 15 48 21 23 41 579 404 01 52 175 15 05 52.0 15.5 21 20 36 · 5 438 156 01 29 282 5, 3, 2, 2, 2, 4, 4, 4 26 26 1 80-6 52.4 24 · 1 373 247 01 3,3,3,2,2,3,3,4 3,2,2,2,3,2,2,2 2,2,1,1,3,3,3,4 22 587 505 00 17 82 06 33 126 22 42 80.3 23 24 49·5 51·4 01 12 576 512 00 39 64 13 10 34.8 14 - 7 13 40 383 260 00 43 123 18 80 - 1 93 391 125 22 35 616 523 23 19 19 0 80.8 25 20 07 574 524 01 38 50 10 50 44.8 35 · 2 01 21 9.6 20 04 337 303 23 45 34 2, 2, 1, 1, 2, 0, 2, 2 12 80.6 26 00 58 68 05 28 49.0 27 . 9 01 26 21 · 1 12 46 336 270 06 00 66 3, 3, 3, 2, 2, 1, 1, 1 0 80.8 06 35 588 **52**0 16 16 49 16 30 560 1,3,3,3,4,7,8,6 4,2,2,3,3,3,4,2 3,3,2,2,2,5,3,2 15 26 16 32 19 26 11 15 19 08 69.6 -12-2 477 27 d 1113 170 943 19 18 81.8 83 19 23 35 23 0 81.0 28 92 16 45 51 · 4 22.4 00 48 29.0 440 237 00 08 203 80.0 484 576 29 30 15 59 592 480 01 53 112 17 02 49.2 26 · 3 16 09 22.9 16 25 514 244 02 22 270 22 0 80.0 11 50 41 14 12 46.5 22.6 18 20 23.9 18 20 413 321 01 09 92 20 ō 80.0 21 44 528 2, 2, 2, 1, 2, 4, 4, 3 569 20 · 1 30.5 18 12 1, 2, 2, 2, 2, 3, 3, 2 16 27 50.6 18 02 405 304 05 35 101 17 0 31 18 15 600 526 12 47 74 80 · 1 - -54 · 1 18 · 4 35.7 415 212 203 0.48 Mean 641 419 _ _ 222 80.8

q denotes an international quiet day and d an international disturbed day.

For all, a, quiet, q, and disturbed, d, days for H, D and Z and for all days for X, -Y, I and F

5 LERWICK

| | Hor | izonta force | , | Dec | linatio (west) | | Ve | tical force | | North | West | | nation (I) | Total |
|-----------|-----|-----------------|-----|--------|-------------------|--------|-----|----------------|-----|------------------------|-------------------------|----|-----------------|--------------------|
| | a | q | ď | а | q | d | a | q | d | component (X) all days | component (-Y) all days | | orth) 1 davs | force (F) all days |
| | 1 | 4,000γ | + | | 9° + | | 4 | 7,000y | + | | | | | |
| | γ | γ | γ | • | , | , | γ | γ | γ | γ | γ | ٥ | , | γ |
| January | 537 | 544 | 525 | 45.9 | 46 · 6 | 44 · 7 | 300 | 295 | 308 | 14326 | 2466 | 72 | 55.0 | 49484 |
| February | 541 | 547 | 536 | 45.9 | 46 · 3 | 45 · 7 | 295 | 291 | 293 | 14331 | 2467 | 72 | 54 · 6 | 49480 |
| March | 542 | 546 | 523 | 45.4 | 45 · 8 | 43 · 7 | 294 | 294 | 286 | 14331 | 2464 | 72 | 54 · 5 | 49479 |
| April | 516 | 541 | 479 | 43.0 | 44 · 3 | 40.0 | 297 | 299 | 281 | 14308 | 2450 | 72 | 56.3 | 49475 |
| May | 544 | 551 | 535 | 43.7 | 43.3 | 42.0 | 309 | 306 | 317 | 14335 | 2457 | 72 | 54 · 7 | 49494 |
| June | 547 | 554 | 522 | 43 · 5 | 43 · 9 | 41 · 1 | 293 | 304 | 273 | 14338 | 2457 | 72 | 54 · 1 | 49480 |
| July | 548 | 556 | 527 | 43.3 | 43.3 | 42.5 | 304 | 300 | 314 | 14339 | 2457 | 72 | 54 · 3 | 49490 |
| August | 544 | 552 | 525 | 43.3 | 43 · 7 | 42.4 | 303 | 304 | 286 | 14335 | 2456 | 72 | 54 · 5 | 49488 |
| September | 529 | 543 | 490 | 41 · 4 | 42 · 3 | 38.8 | 304 | 310 | 298 | 14322 | 2445 | 72 | 55 · 6 | 49485 |
| October | 528 | 549 | 485 | 41 · 4 | 42.8 | 39 · 7 | 314 | 320 | 285 | 14320 | 2445 | 72 | 55 · 9 | 49494 |
| November | 529 | 548 | 445 | 40 · 4 | 41 · 5 | 33.7 | 325 | 324 | 331 | 14322 | 2441 | 72 | 56 · 0 | 49505 |
| December | 548 | 554 | 534 | 41 · 3 | 41 · 7 | 39 · 7 | 331 | 333 | 315 | 14340 | 2448 | 72 | 54.9 | 49516 |
| Year | 538 | 549 | 511 | 43 · 2 | 43.8 | 41.2 | 306 | 307 | 299 | 14329 | 2454 | 72 | 55-0 | 49489 |

DAILY RANGE AND MEAN MONTHLY VALUES

6 LERWICK

| | | Me | an dai | ly ran | ige | | | | | expre yearly | | |
|-----------|-----|------|--------|--------|-------|------|-----|------|-----|-----------------|-------|------|
| | | 1960 | | Mean | n 193 | 2-53 | | 1960 | | Mea | n 193 | 2-53 |
| | Н | D | Z | H | D | Z | H | D | Z | H | D | Z |
| | γ | γ | γ | γ | γ | γ | % | % | % | % | % | % |
| January | 130 | 100 | 101 | 100 | 102 | 104 | 45 | 62 | 48 | 63 | 90 | 78 |
| February | 123 | 101 | 122 | 124 | 113 | 123 | 42 | 62 | 58 | 78 | 100 | 92 |
| March | 197 | 134 | 159 | 216 | 149 | 176 | 68 | 83 | 75 | 135 | 132 | 132 |
| April | 607 | 307 | 364 | 204 | 120 | 163 | 209 | 190 | 173 | 128 | 106 | 122 |
| May | 253 | 124 | 160 | 195 | 111 | 141 | 87 | 77 | 76 | 122 | 98 | 106 |
| June | 239 | 128 | 182 | 150 | 94 | 109 | 82 | 79 | 86 | 94 | 83 | 82 |
| July | 283 | 138 | 179 | 158 | 96 | 110 | 97 | 85 | 85 | 99 | 85 | 83 |
| August | 253 | 127 | 201 | 178 | 111 | 135 | 87 | 78 | 95 | 111 | 98 | 101 |
| September | 255 | 164 | 216 | 209 | 133 | 170 | 88 | 101 | 102 | 131 | 118 | 128 |
| October | 451 | 258 | 329 | 188 | 129 | 164 | 155 | 159 | 156 | 118 | 114 | 123 |
| Novembe r | 476 | 211 | 316 | 107 | 101 | 112 | 164 | 130 | 150 | 67 | 89 | 84 |
| December | 222 | 151 | 203 | 89 | 93 | 96 | 76 | 93 | 96 | 56 | 82 | 72 |
| Winter | 238 | 141 | 185 | 105 | 103 | 109 | 82 | 87 | 88 | 66 | 91 | 82 |
| Equinox | 377 | 216 | 267 | 204 | 134 | 168 | 130 | 133 | 127 | 128 | 119 | 126 |
| Summe r | 257 | 129 | 181 | 170 | 103 | 123 | 88 | 80 | 86 | 106 | 91 | 92 |
| Year | 291 | 162 | 211 | 160 | 113 | 133 | - | - | - | - | - | _ |

"Winter" comprises the four months January, February, November, December: "Equinox" the months March, April, September, October: and "Summer" May to August.

FREQUENCY DISTRIBUTION OF DAILY RANGE

7 LERWICK

| | | umber ses, | | | Р | ercentag | e distribu | tion | |
|------------|----------|---------------|-----|--------|--------------|----------|--------------|------|---------------------|
| Range | н | D | z | 1960 | Н 1932-53 | 1960 | D 1932-53 | 1960 | <i>z</i> 1932-53 |
| γ | † | | | % | % | % | % | % | % |
| 0 - 9 | 0 | 0 | 0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.3 |
| 10 - 19 | 1 | Ó | 9 | 0.3 | 1.4 | 0.0 | 0.4 | 2.5 | 6.8 |
| 20 - 29 | 2 | 2 | 24 | 0.6 | 4.9 | 0.6 | 2.3 | 6.6 | 10.5 |
| 30 - 39 | 14 | 9 | 24 | 3.8 | 6.3 | 2.5 | 4.0 | 6.6 | 9.3 |
| 40 - 49 | 22 | 13 | 21 | 6.0 | 7 · 5 | 3.6 | 7 · 3 | 5.7 | 7 · 2 |
| 50 - 59 | 23 | 27 | 16 | 6.3 | 9.3 | 7.4 | 10.0 | 4.4 | 6.2 |
| 60 - 69 | 27 | 26 | 17 | 7.4 | 9 · 1 | 7 · 1 | 12.3 | 4.6 | 5 · 1 |
| 70 - 79 | 19 | 37 | 9 | 5.2 | 8.6 | 10.1 | 10.5 | 2.5 | 4.4 |
| 80 - 89 | 24 | 35 | 16 | 6.6 | 7 · 4 | 9.6 | 9.2 | 4.4 | 3⋅9 |
| 90 - 99 | 20 | 27 | 12 | 5.5 | 5.8 | 7 - 4 | 7.0 | 3.3 | 3.4 |
| 100 - 109 | 13 | 27 | 8 | 3.6 | 4.3 | 7 · 4 | 5.6 | 2.2 | 3.3 |
| 110 - 119 | 14 | 17 | 6 | 3.8 | 3.5 | 4.7 | 4.0 | 1.7 | 2.9 |
| 120 - 129 | 14 | 11 | 16 | 3.8 | 2.9 | 3.0 | 3.6 | 4.4 | 2.6 |
| 130 - 139 | 9 | 13 | 6 | 2.5 | 2 · 2 | 3.6 | 3 · 1 | 1.7 | 2.6 |
| 140 - 149 | 11 | 18 | 12 | 3⋅0 | 2.4 | 4.9 | 2.9 | 3.3 | 2.3 |
| 150 - 159 | 5 | 14 | 9 | 1.4 | 1.6 | 3.8 | 1.8 | 2.5 | 2.0 |
| 60 - 169 | 9 | 10 | 9 | 2.5 | 1.5 | 2.7 | 1.9 | 2.5 | 1.8 |
| 170 - 179 | 4 | 6 | 5 | 1.1 | 1.1 | 1.7 | 1 · 4 | 1.4 | 1 · 4 |
| 80 - 189 | 2 | 9 | 6 | 0.6 | 1.1 | 2.5 | 1.5 | 1.7 | 1 · 4 |
| 90 - 199 | 7 | 4 | 7 | 1.9 | 1.0 | 1.1 | 1.1 | 1.9 | 1.5 |
| 900 + | 126 | 61 | 134 | 34 · 4 | 18 · 3 | 16.7 | 10.1 | 36.6 | 21 · 1 |
| ys omitted | 0 | 0 | 0 | - | - | - | - | - | - |

DIURNAL INEQUALITIES OF THE TERRESTRIAL MAGNETIC ELEMENTS

ALL DAYS

Departures from the mean of the 24 hourly values (uncorrected for non-cyclic change)

| Q | LERWICK |
|---|---------|

| 8 LE | RWICK | | | | | | | | | | | | | | | | | | | | | | | |
|-------------------|----------------|-----------------|-----------------|----------------|----------------|----------------|-------------------|----------------------------|----------------------------|--------------------|----------------|----------------|----------------|----------------|-------------------|--------------------|----------------|--------------|--------------------|----------------|----------------|----------------|----------------|----------------------------|
| | Hour (| J.M.T. 1-2 | 2-3 | 3-4 | 4-5 | 5-6 | 6-7 | 7-8 | 8-9 | 0-10 | 10-11 | 11-12 | 12-13 | 13.14 | 14-15 | 15.16 | 16-17 | 17-19 | 18-10 | 10.20 | 20.21 | 21-22 | 22-23 | 23-24 |
| | | | | | | | | | | 3-10 | 10-11 | 11-12 | 12-13 | 13-14 | 14-13 | 15-10 | 10-17 | | 10-13 | 19-20 | 20-21 | 21-22 | | |
| | Ì | | | | | | | | | | HORT 70 | NTAL FO | DCF. | | | | | | | | | | | |
| | _ | ~ | v | ν | ν | γ | γ | γ | γ | γ | γ | ν γ | ι γ | ~ | ν | γ | γ | ν | ~ | γ | γ | ~ | γ | γ |
| Jan. Feb. | -0·5 -4·7 | -13·5 -0·7 | -12·2 -10·5 | -5·2 -3·8 | +3·1 +2·6 | +8·5 +5·3 | +11·0 +7·1 | +9·3 +7·2 | +4·5 +3·3 | -3 · 2 | -∕7·9 10·4 | -12·9 14·5 | -11·6 -14·4 | -8·5 -8·8 | -2·6 -3·2 | -0·7 +0·7 | +8·1 +2·7 | +7·0 +6·9 | +7·1 +11·2 | +13·5 +18·4 | +9·2 +9·3 | +0·2 +5·1 | -4·5 +1·2 | +1·8 -5·9 |
| Mar. Apr. | -6.4 | -11·8 -105·7 | -9.6 | -5·0 -66·2 | -2.5 | +1·6 -11·0 | +9·8 -5·0 | +5·9 -10·7 | -4·9 -8·7 | -17 · 1 | -25·6 -13·9 | -28·8 -8·8 | -22·2 -20·0 | -16.5 | -4.8 | +9·3 +89·5 | +28.0 | +32 · 4 | | +30 · 4 | +23·4 +13·9 | +7·9 -20·0 | -11·6 -31·0 | |
| May June | -29.8 | -28·2 -18·2 | -20·7 -34·6 | -8·7 -33·0 | -6·4 -21·0 | -7.0 | | | | | -35·1 33·3 | -32·2 -30·2 | -21·8 -16·8 | -5·9 4·3 | +21 · 2 +2 · 1 | | +50.0 | | +46 · 9 | | +29·4 +47·3 | +10·3 +27·3 | -5·3 +4·0 | -7·7 -2·7 |
| July | 1 | -39.5 | -25.3 | -17 · 4 | -3·4 | -2.4 | -7.5 | -15·4 | -21.9 | -32.3 | -34 · 5 | -30 · 4 | -16·4 | -5.5 | +10 · 1 | +32 · 9 | | +60 · 3 | +59 · 2 | | +28 · 9 | +17 · 6 | -5·4 | -18.9 |
| Aug. Sept. | -44-2 | -15·3 -24·0 | | -20·3 -0·6 | -7·6 +0·9 | +8.8 | -11·6 +3·1 | -19·4 -8·4 | -32·1 -19·9 | -36 · 8 -25 · 8 | -35·2 -27·5 | -21.3 | -18·8 -10·1 | | +17 · 7 | +24 · 2 +21 · 2 | +31 · 7 | | +45 · 5 | +33.0 | +28 · 1 | +15·2 +5·6 | | +2·3 -26·8 |
| Oct. Nov. | -71.9 | -52·1 -64·6 | -62.0 | | -11·8 -8·4 | | -0·2 -18·7 | | | +11.0 | -20·9 +20·6 | -7·9 +4·8 | +7 · 2 | +19-4 | +33 · 2 | | +50-4 | +52 · 8 | +58 · 8 | +34.6 | +24 · 6 | -17·9 -13·8 | -42.3 | -32.9 |
| Dec. | -18.6 | -20.5 | -19·1 | -20·0 | -1·3 | +2·6 | +5·6 | +3·1 | +2·3 | -4.9 | -7·5 | -6 · 1 | +0·1 | +1.9 | +13 · 4 | +31 · 9 | +35 · 9 | +34 · 6 | +30 · 1 | +6.5 | +0.7 | -24 · 2 | -25.6 | -20.9 |
| Year | -32.6 | -32.8 | -27 · 2 | -20.8 | -8.0 | -3·3 | -2·3 | -7.0 | ~10.7 | -17 · 2 | -19-3 | -18·4 | -8·1 | +3·3 | +19 · 7 | +34 • 0 | +43·3 | +46 · 4 | +44 · 5 | +33·3 | +18 · 3 | +1 - 1 | -15.5 | -20.6 |
| Winter | -23.9 | -24 · 8 | -25.9 | -17 · 2 | -1.0 | +3·4 | +1.3 | -1.6 | +3·3 | -0.3 | -1 · 3 | -7.2 | -4.7 | +1-0 | +10 · 2 | +23 · 6 | +24 · 3 | +25 · 3 | +26 · 8 | +18 · 3 | +10 · 9 | -8.2 | -17·8 | -14.5 |
| Equinox | í | -48 · 4 | | | -14-4 | -1.6 | +1.9 | -3·3 | | | -22.0 | | l . | +14-9 | | | | +57 · 5 | | +33-8 | | | -26 · 4 | |
| Summer | -25.4 | -25·3 | -22.8 | -19·9 | -9.6 | -11·6 | -10 · 2 | -16.2 | ~26 · 5 | -34 .5 | -34.5 | -31.4 | ~18·5 | -5.9 | +10-6 | +32 · 0 | +47 · 1 | +56 · 4 | +30 • 7 | +47.9 | +33 · 0 | +17·6 | -2·4 | -6·7 |
| | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | DEC | LINATIO | N | | | | | | | | | | | |
| _ | | • | • | , | , | , | , | , | , | ,0.40 | , 0, 00 | | | , , | , 2, 70 | ,2,20 | , 0.01 | , | , , | ,0,24 | , | , | , | , |
| Jan. Feb. | -4.01 | -2·08 -2·81 | -2.49 | -2.30 | -1·75 -2·73 | -2.10 | | -1.54 | -0·21 -1·74 | +0 · 18 | +0·98 +0·36 | +3.05 | +4 - 77 | +5.68 | +6 · 12 | +3·32 +5·39 | +3 · 49 | +2.36 | +1.73 | +0.74 | -1 · 36 | -3·32 -2·66 | -3.72 | -3.33 |
| Mar. Apr. | -7.57 | -7.70 | -9 · 21 | -9.18 | -6.38 | -4.29 | | -5.13 | -5.45 | | -0·48 +0·70 | +3.71 | +5-43 | +7.55 | +7.07 | +6·95 +7·91 | +9 • 26 | +10 - 69 | +6.95 | +4 · 84 | +4 · 22 | -1·26 -0·42 | -2.57 | -3 · 22 |
| May June | -1·35 -2·38 | -2·77 -4·07 | -4·23 -3·33 | -4·55 -5·63 | -4·40 -6·85 | -5·37 -8·22 | -6·28 -7·33 | -5·89 -7·69 | -5·30 -6·17 | | -0·07 -1·02 | | | | | +5·24 +7·10 | | | | | | +0·92 +2·49 | | |
| July Aug. | -3.05 | | | | -5·32 | | | -5·83 -6·54 | -5·16 -5·25 | -3·33 -2·50 | | | | | | | | | | | | +1·68 +0·16 | | |
| Sept. Oct. | -5.65 | -6·86 -3·94 | -6.63 | -5.55 | -4 · 41 | -2.81 | -3.08 | -2.62 | -2·53 -0·36 | -1 · 13 | +2.06 | +5 · 17 | +7 · 91 | +8 • 56 | +8 · 39 | +5.64 | +4.02 | +3 · 24 | +1.62 | +1.32 | +0.68 | -0·50 -5·31 | -2.06 | -4.78 |
| Nov. Dec. | -3.60 | -3.52 | -2.09 | -0.91 | -0.01 | -0.34 | +0.05 | -2 · 27 | -1·46 +2·03 | -1 · 23 | -0.36 | +3.00 | +4 · 18 | +5-42 | +5 • 47 | +3 · 40 | +3 · 22 | +1 · 71 | -2.22 | +1-24 | -0.78 | -1·24 -5·17 | -3 · 49 | -4 · 17 |
| | 3 27 | 3 30 | 2 05 | | | | | | | | | | | | | | | | | | | | | |
| Year | -3.67 | -4.01 | - 4 · 28 | -4.59 | -3.71 | -3.09 | -2.88 | -3·17 | -2.92 | -1.68 | +0.55 | +3·33 | +5.61 | +6.60 | +6 · 35 | +5·37 | +4 · 85 | +3.85 | +2 · 24 | +1 · 54 | +0 · 21 | -1.22 | -2·23 | -3.03 |
| Winter | -3 · 29 | -2.95 | -2.53 | -2-49 | -1.45 | | | -0.59 | | -0.15 | | |] | | | | | | | | | -3 · 10 | | |
| Equinox Summer | -5·84 -1·86 | | -6·35 -3·95 | | | -2·94 -5·87 | | -2·43 -6·49 | -2·95 -5·47 | -1·61 -3·29 | | | 1 | +7·92 +7·13 | | | +6·01 +5·27 | | | | | -1·87 +1·31 | | |
| | - 55 | • • • • | | , | | | | | | | | | • | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | VERTI | CAL FOR | CE | | | | | | | | | | | |
| Jan. | γ -9·1 | γ -20:5 | γ -22·6 | γ | γ -15·6 | γ -12·6 | γ -10·1 | $\frac{\gamma}{-7\cdot 0}$ | $\frac{\gamma}{-4\cdot 0}$ | γ -1·9 | γ +0·1 | γ +3·5 | γ +7·3 | γ +8·8 | γ +13·9 | γ +15·2 | γ +19·7 | γ +23·8 | γ +19·0 | γ +15·3 | γ +5·7 | γ +0·5 | γ -3·4 | $\frac{\gamma}{-5\cdot 0}$ |
| Feb. Mar. | -16.5 | -14.6 | -20.8 | -24 · 6 | -18·7 -19·5 | -17.0 | -14·6 | -11·5 -6·9 | -7·8 -3·6 | -5·8 -0·8 | -4·4 -0·6 | -2·0 -0·8 | -1·0 +2·4 | +2·1 +6·1 | | +17·1 +18·0 | | | +30 · 9 +38 · 1 | | +23·5 +21·0 | +13·2 +8·4 | | -11·3 -29·8 |
| Apr. May | -53.4 | -51.0 | -58 · 2 | -45.4 | -35·0 -11·0 | -34 · 8 | -18·9 -8·6 | -8·6 -6·2 | +1·4 -4·2 | +9·1 -5·0 | +14·9 -5·5 | +18·4 -6·3 | | | | +28·2 +26·6 | | | | | | +16·8 +3·4 | -5·5 -11·5 | |
| June | -19.0 | -31 · 3 | -47 · 1 | -60 · 8 | -52.7 | -36 · 8 | -17·6 | -5.6 | +0.2 | +2.5 | +5.2 | +9.0 | +12-9 | +19-9 | +24 · 3 | +24 · 6 | +31・9 | +36 · 2 | +38 · 2 | +37 · 3 | +27·9 | +14.8 | -9.0 | -5.0 |
| July Aug. | -38 · 2 | -34.5 | -44.7 | -25.9 | -25·1 -33·5 | -32 · 1 | -23.6 | -6·0 -8·7 | -1·5 -0·7 | +0.6 | +1.6 | +4.8 | +5.4 | +11-1 | +20.0 | +29·7 +29·3 | +34.9 | +39.0 | +42.6 | +37 · 7 | +28 · 1 | +6·6 +12·0 | -7·3 -8·8 | -15.5 |
| Sept. Oct. | -46.5 | -57.9 | -65.8 | -62.0 | -27·6 -42·9 | -33 · 1 | -8·3 -23·4 | -2·4 -9·0 | +5·6 +2·4 | +14 · 6 | +10·7 +24·0 | +33 · 1 | +36 · 9 | +39 · 5 | +54.0 | +37·0 +55·2 | +56 · 1 | +46 · 5 | +36 · 6 | +36 · 0 | +9・6 | -10-1 | | -57.3 |
| Nov. Dec. | -26·2 -33·1 | -43·3 -33·5 | -24·1 -29·8 | -30·4 -37·1 | -51·3 -33·6 | -40·2 -32·2 | -15·8 -23·1 | -0·3 -17·1 | +2·0 -8·5 | +11·0 -3·2 | +18·3 +2·2 | +22·4 +8·2 | | | | +40·9 +41·9 | | | | | +13·7 +17·8 | | -28·6 -25·6 | |
| | | | | | | | | | | | | | | | | | | | | | | | | |
| Year | -31 · 4 | -36 · 3 | -38 • 4 | -35·3 | -30.5 | -25.5 | - 15·8 | -7·4 | -1.6 | +2·6 | +5·7 | +8·8 | +11 · 6 | +17·5 | +25 · 7 | +30-3 | +35·4 | +35 · 9 | +33·9 | +28 · 1 | +20·0 | +5•4 | -12.8 | -25.9 |
| Winter Equinox | ı | | | | ~29·8 | | | -9∙0 -6∙7 | -4·6 +1·5 | 0·0 +7·9 | +4·1 +12·3 | +8·0 +15·5 | 1 | | | +28·8 +34·6 | | | | | | | -13·7 | |
| Summer | -43·3 -29·6 | | | | -31·3 | | | -6.6 | -1.5 | -0.3 | +0.8 | +2.8 | 1 | | | +27.5 | | | | | +23·3 +21·6 | +5·2 +9·2 | -15·6 -9·1 | |
| | | | | | | | | | | | | | • | | | | | | | | | | | |

"Winter" comprises the four months, January, February, November, December; "Equinox" the months March, April, September, October; and "Summer" May to August.

DIURNAL INEQUALITIES OF THE TERRESTRIAL MAGNETIC ELEMENTS INTERNATIONAL QUIET DAYS

Departures from the mean of the 24 hourly values (uncorrected for non-cyclic change)

| 9 I | ERWICK | | | | | | | | | | | | | | | | | | | | | | | |
|----------------------|----------------------|----------------------|-----------------------|----------------------|-----------------------|----------------------|-----------------------------|-----------------------|------------------------|-------------------------|-------------------------|-----------------------|--|-------------------------|-----------------------|-----------------------|-----------------------|-----------------------|----------------------|----------------------|-------------------------|----------------------|----------------------|-----------------------|
| | Hour (| G.M.T. 1-2 | 2-3 | 3-4 | 4-5 | 5-6 | 6-7 | 7-8 | 8-9 | 9-10 | 10-11 | 11-12 | 12-13 | 13-14 | 14-15 | 15.16 | 16-17 | 17-18 | 18-10 | 10-20 | 20-21 | 21-22 | 22-22 | 23-24 |
| | 0-1 | | | | | | | | | | | | 12-15 | 13-14 | 14-13 | 13-10 | 10-17 | 17-18 | 10-19 | 19-20 | 20-21 | | 22-23 | 23-24 |
| | | | | | | | | | | | HORIZ | ONTAL FO | RCE | | | | | | | | | | | |
| Jan. | γ +1·9 +2·0 | γ +1·5 +1·6 | γ +1·9 -0·6 | γ +3·5 +1·8 | γ +6·7 +3·2 | γ +9·0 +4·0 | γ +11·9 +7·5 | γ +10·7 +8·4 | γ +8·7 +2·4 | γ -0⋅5 -5⋅2 | | γ -17·9 -15·4 | $\begin{vmatrix} \gamma \\ -18.9 \\ -15.6 \end{vmatrix}$ | γ -14·3 -11·8 | γ -9·3 -8·4 | γ -4·3 -5·8 | γ -1·5 -1·8 | γ +1·8 +1·7 | γ +2·9 +5·2 | γ +2·9 +7·2 | γ +5·3 +7·4 | γ +4·7 +6·8 | γ +2·1 +9·2 | γ +2·1 +7·8 |
| Feb. Mar. | +5·9 +14·5 | +2·5 +6·7 | +3·3 | +4.5 | +6·5 +2·9 | +5·9 +7·8 | +10.1 | +3.5 | -4·3 | -17·1 -27·3 | -29·5 | -29 · 9 | -24.3 | -17·3 -21·5 | -7·9 -13·2 | -0·3 -4·1 | +2 • 1 | | +10·7 +21·3 | +12.9 | +14.3 | +12-9 | +15·5 +19·5 | +12.3 |
| Apr. May June | +6·3 +8·2 | +3.4 | +0.7 | +1·2 +4·3 | +3·6 +7·1 | +1·7 +4·8 | | -14.6 | -24 · 9 | -33·8 -36·1 | -38 · 9 | -37·2 -37·5 | -28.7 | -15·2 -19·7 | -2·5 -7·8 | | | +25 · 5 | +30.8 | +31 · 2 | | +16 · 4 | +12.7 | +14.0 |
| July | +0.7 | +4 · 7 | +4 · 7 | +5·3 | +6·9 | +5.0 | -1.3 | -12.5 | -23.8 | -35.5 | -40 · 7 | -37·6 | -29.5 | -21 · 3 | -11.0 | +0·3 | +11-1 | +23.8 | +30 · 5 | +30 · 9 | +30 · 4 | +23.9 | +19·5 | +15.5 |
| Aug. Sept. | +7.9 | +4·7 +9·0 +5·7 | +7·5 +8·6 +6·1 | +7·9 +7·4 +6·4 | +7·9 +6·8 +8·1 | +2·8 +4·4 +5·6 | -2·7 +2·0 +6·5 | -13·9 -6·2 +4·3 | -26·3 -19·0 -4·8 | -41·1 -29·4 -19·1 | -42·5 -35·4 -28·6 | -35 · 4 | | -11·7 -20·8 -19·9 | +2·5 -9·0 -10·4 | +10·5 -0·4 -5·1 | +15·1 +7·0 +1·9 | | +18·8 +13·9 | +21 · 6 | +21·9 +21·6 +15·6 | +20.0 | +17.8 | +17 · 4 |
| Oct. Nov. Dec. | +6·2 -2·3 -1·8 | -6·5 -4·9 | 0·0 ~1·2 | +0·3 +1·8 | +2·3 | +9.5 | +9.7 | +7·3 +6·8 | +2·4 +3·8 | -7·9 +0·7 | -12·7 -2·8 | -15·3 -2·6 | | -11·3 -5·5 | -8·0 -2·6 | -1·3 -5·2 | +2.1 | +5·3 +2·5 | +7·9 +2·6 | +9.3 | +8·8 -1·2 | +7·5 -2·1 | +3·7 -2·2 | +13·1 +4·7 +0·6 |
| Dec. | | , , | | | | | | | | • | | | | | - 0 | 0 - | ٠. | | , - 0 | | | | | |
| Year | +5.0 | +2·7 | +2·7 | +3·5 | +5.5 | +5.6 | +3·3 | -2.2 | | | -27 · 1 | | | -15.9 | -7·3 | 0.0 | | +12 · 7 | +16 · 9 | +17 · 5 | +16 · 4 | +13·3 | +11-9 | +11.0 |
| Winter Equinox | -0·1 +9·3 | -2·1 +6·0 | 0·0 +5·1 | +1·9 +3·9 | +4·0 +6·1 | +7·3 +5·9 | +8·3 +5·6 | +8·3 -0·6 | +4·3 -11·2 | -3·2 | | -12·8 -32·7 | 1 | -10·7 -19·9 | -7·1 -10·1 | -4·1 -2·5 | -0·3 +4·0 | +2·8 +10·6 | +4·7 +16·2 | +5·1 +17·9 | +5·1 +18·1 | +4·2 +16·9 | +3·2 +17·5 | +3·8 +15·7 |
| Summer | +5·8 | +4 · 1 | +3·1 | +4 · 7 | +6 • 4 | +3·6 | -3.9 | -14 · 2 | -25.5 | -36.6 | -41.0 | -36.8 | -27.5 | -17 · 0 | -4·7 | +6 · 7 | +15-4 | +24 · 6 | +30 · 0 | +29 · 7 | +25 · 9 | +18 · 8 | +15.0 | +13·5 |
| | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | |
| | , | , | , | | | , | | , | , | , | DECI | INATION , | , | , | , | , | , | , | , | , | , | , | , | , |
| Jan. Feb. | -1·74 -2·41 | -0·99 -2·51 | -0·88 -0·78 | -0·98 -0·57 | -0·62 -0·79 | -0·63 -0·93 | | | -1·66 -2·30 | -1·81 -2·67 | -1·42 -1·25 | +0·02 +1·45 | +2.10 | +3·37 +4·05 | | | +2·20 +1·83 | +1·99 +1·37 | +1·28 +0·79 | +0·40 +0·19 | -0·24 -0·04 | -0·85 -0·51 | -1·54 -1·13 | -1·62 -0·73 |
| Mar. Apr. | -0.48 | -0.56 | -0.76 | -1 · 56 | -1.62 | | -2.60 | -4 · 16 | -5·10 -6·12 | -4 · 50 | | +1.70 | +5.34 | +6·92 +6·65 | +6.08 | +4 · 26 | +2.36 | | +0・44 | +0.60 | -0·02 +1·52 | -0.28 | -2.12 | -0.78 |
| May June | +0·84 +0·86 | +0·52 -0·06 | -0·21 -0·60 | -2·20 -3·12 | | | 6·74 -7·38 | -7·16 -7·66 | -6·05 -7·50 | -3·98 -5·14 | -1·64 -1·26 | +1·84 +2·70 | +4·48 +4·94 | +5·68 +5·04 | +5·49 +5·10 | +4·92 +4·90 | +3·20 +4·76 | +1·90 +3·49 | +1·50 +3·62 | +1·76 +2·84 | +1·69 +2·06 | | +1 · 26 +1 · 64 | +1·44 +1·68 |
| July Aug. | | | -1·85 -1·82 | | -5·80 -4·66 | -7·16 -5·03 | -8·60 -6·98 | -7·64 -7·28 | | -3·52 -4·09 | -0·76 +0·42 | | | +6·90 +7·83 | | | | +3·00 +1·45 | | | | | | |
| Sept. | -0·83 -1·35 | -1·29 -1·12 | -2·23 -1·51 | -2·45 -1·57 | -2·77 -1·91 | -3·35 -2·04 | -4·03 -2·49 | -5·05 -3·53 | -5·59 -4·55 | | -1·25 -1·69 | +1.71 | | +5 • 40 | +5·21 +5·09 | .+3·85 +3·71 | +3·01 +2·41 | +2·45 +2·16 | +2·51 +2·19 | +2.37 | +0.81 | +0.25 | -0.61 | -0.19 |
| Nov. Dec. | | | | | | -1·04 -0·37 | | | | | | | | | | | | +0·96 +1·15 | | | -0·09 | | | |
| V | 0.08 | -0.05 | -1.02 | -2.02 | -2.57 | -3.29 | -3.80 | -4.30 | -4.27 | -3.20 | -0.95 | +2.08 | +4 - 46 | +5.33 | +4.00 | +3.67 | +2.62 | +1.93 | +1.60 | +1 - 21 | +0.65 | -0:02 | -0.40 | -0:30 |
| Year Winter | | -1.33 | | | | -0.74 | | -0.87 | -1.27 | | -0.41 | | i | +3.43 | | | | +1.37 | | | -0.64 | | | |
| Equinox | -1.04 | -1·13 | -1 · 43 | -1.85 | -2.23 | -2.91 | -3.57 | -4.86 | -5 · 34 | -4 · 22 | -1.65 | +2.03 | +5.05 | +6 · 19 | +5-47 | +3.96 | +2.70 | +1-95 | +1-70 | +1 · 55 | +0.76 | +0-15 | -1.01 | -0.28 |
| Summer | +0.12 | -0.10 | -1.12 | -3.29 | -4.81 | -6·21 | -7 • 43 | -7.43 | -6.21 | -4·18 | -0.81 | +2.97 | +5-49 | +6.30 | +5.97 | +4・97 | +3-69 | +2·46 | +2.31 | +2-25 | +1.83 | +1.31 | +1.30 | +0.85 |
| | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | VERT | ICAL FOR | RCE | | | | | | | | | | | |
| Jan. | γ -2·5 | γ -2·0 | $-2 \cdot 1$ | γ +0·4 | γ -0·7 | -0·8 | $-\frac{\gamma}{2} \cdot 7$ | -2·2 | ~2·9 | γ -2·8 | γ -1·3 | γ -0·8 | -2·3 | -4·4 | $-2 \cdot 1$ | γ +1·4 | γ +4·3 | γ +5·2 | γ +6·3 | γ +7·2 | γ +4·5 | γ +2·0 | γ +0·7 | γ -2·4 |
| Feb Mar. | +2·9 -7·7 | -0·2 -4·0 | -3·1 -1·7 | -5·3 -0·2 -5·6 | -4·9 -0·1 -10·2 | -5·0 -0·4 -5·3 | -5·5 -1·1 -2·2 | -4·5 +1·6 -0·6 | -1·1 +4·5 +1·7 | +1·2 +4·0 +3·8 | +1·1 +3·5 +0·9 | +2·5 -1·6 -2·0 | -0·5 -3·7 -3·7 | +0·2 -2·2 -2·4 | +3·1 +1·3 -1·5 | +4·1 +4·2 +0·8 | +4·1 +4·7 +2·4 | +2·4 +3·6 +4·3 | +1·1 +3·1 +4·0 | +1·5 +2·8 +5·2 | +1·7 +2·7 +6·7 | +2·8 +0·2 +6·6 | +0·5 -4·9 +4·9 | +0·9 -8·6 +4·0 |
| Apr. May June | -1·7 +0·4 +1·0 | -3·6 +0·4 +1·3 | -6·5 +2·6 -5·2 | +3·4 -5·7 | +4 • 4 | +2·2 +2·0 | +2.4 | +1·4 +5·9 | -1·2 +5·0 | -5·6 +0·7 | -9·0 -4·6 | -10·6 -11·5 | -11-4 | -9·2 -13·1 | -3·4 -7·6 | -1·0 -0·1 | +2.2 | +5·4 +6·2 | +6.0 | +7·8 +8·9 | +8·2 +9·6 | +5·6 +7·1 | +0·4 +2·8 | -1·4 -1·3 |
| July | -2·6 | +5.0 | +7.6 | +8 • 8 | +8 • 2 | +6 · 1 | +5.6 | +5.4 | +3.8 | -8.8 | -13.6 | -17.0 | -18 · 2 | -13-4 | -8.2 | -2.0 | +3·2 | +6 · 1 | +7 · 2 | +6·6 | +4-8 | +3.6 | +0-8 | +1.0 |
| Aug. Sept. | -2·5 -3·8 -4·5 | -8·4 -1·1 -1·8 | -11·4 +0·1 +1·1 | -4·3 +1·0 +1·6 | -0·6 +1·1 +2·0 | -0·8 +2·1 +2·9 | +0·7 +1·2 +1·8 | +2·8 +3·3 +2·8 | +0·6 +5·7 +5·1 | -1·7 +4·6 +5·8 | -8·0 +1·1 +3·3 | -13·2 -2·5 -1·2 | -13·9 -5·6 -4·1 | -10·8 -5·7 -6·4 | -2·0 -4·1 -4·9 | +5·9 -1·4 -1·6 | +11·4 +0·1 +0·4 | +12·4 +1·1 -0·3 | +12·3 0·0 0·0 | +9·0 +0·7 +2·4 | +10·0 +2·1 +2·9 | +8·3 +1·8 +1·2 | +4·2 +0·5 -3·5 | 0·0 -2·3 -5·0 |
| Oct. Nov. Dec. | -4·5 -7·3 -0·9 | -8·6 -3·5 | -11·4 -5·7 | -12·5 -4·9 | -5·6 -4·9 | -5.0 | -4·1 -5·3 | -2·8 -7·3 | -0·2 -8·3 | +1.9 | +1·2 -4·9 | +1·2 -3·9 | +2·1 -2·1 | +3·6 +2·7 | +6·8 +4·9 | +8 • 7 | +8·2 +10·1 | +6·6 +7·8 | +5·7 +7·3 | +4 • 2 | +3.6 | +3·5 +12·3 | +2·4 +0·5 | -2.2 |
| | | | J - | - | - | = | - | | | | | | | | | | | | | | | | - | |
| Year | -2·4 | -2·2 | -3.0 | -1.9 | -1·1 | -0.7 | -0.4 | +0.5 | +1·1 | -0.3 | -2.5 | -5·1 | -6.5 | -5·1 | -1.5 | +2.5 | +4.7 | +5·1 | +5.0 | +5.4 | +5.6 | +4 · 6 | +0.8 | -2·3 |
| Winter Equinox | -1·9 -4·4 | -3·6 -2·6 | -5·6 -1·7 | -5·6 -0·8 | -4·0 -1·8 | -4·3 -0·2 | -4·4 -0·1 | -4·2 +1·8 | -3·1 +4·3 | -1·7 +4·5 | -1·0 +2·2 | -0·3 -1·8 | -0·7 -4·3 | +0·5 -4·2 | +3·2 -2·3 | +6·2 +0·5 | +6·7 +1·9 | +5·5 +2·2 | +5·1 +1·8 | +5·5 +2·8 | +5·1 +3·6 | +5·1 +2·5 | +1·0 -0·7 | -3·7 -3·0 |
| Summer | -0.9 | -0.4 | -1.6 | +0·5 | +2·4 | +2 · 4 | +3·3 | +3·9 | +2·1 | -3·9 | -8.8 | -13·1 | -14.6 | -11.6 | -5·3 | +0.7 | +5·4 | +7·5 | +8 · 1 | +8 · 1 | +8 • 1 | +6·1 | +2·1 | -0.4 |

[&]quot;Winter" comprises the four months January, February, November, December; "Equinox" the months March, April, September, October; and "Summer" May to August.

DIURNAL INEQUALITIES OF THE TERRESTRIAL MAGNETIC ELEMENTS INTERNATIONAL DISTURBED DAYS

Departures from the mean of the 24 hourly values (uncorrected for non-cyclic change)

10 LERWICK

| Hour (| G. M. T. | | | | | | | | | | | 1 | | | | | | | | | | | |
|--------------------------------------|--------------------------------------|--------------------------------------|--|--|--|--|--|---|---|---|--|---|---|---|--|--|---|--|--|--|---|--|--|
| 0-1 | 1-2 | 2-3 | 3-4 | 4-5 | 5-6 | 6-7 | 7-8 | 8-9 | 9-10 | 10-11 | 11-12 | 12-13 | 13-14 | 14-15 | 15-16 | 16-17 | 17-18 | 18-19 | 19-20 | 20-21 | 21-22 | 22-23 | 23-24 |
| | | | | | | | | | | HORIZ | ONTAL FO | RCE | | | | | | | | | | | |
| -19·3 -35·0 -321·6 -158·5 | -1·2 -61·5 -273·1 -156·1 | -33·1 -61·6 -281·0 -84·0 | -10·3 -40·0 -409·8 -39·7 | +4·9 -38·6 -245·8 -24·7 | +1 · 8 -30 · 3 -31 · 9 -10 · 3 | +1·5 +14·8 -41·8 +6·7 | -0·3 +10·6 -50·0 +2·9 | +2·5 -5·2 +4·4 -15·8 | +0·8 -9·9 +29·1 -46·1 | -5·1 -15·4 +32·0 -31·3 | -9·5 -29·6 +67·6 -18·5 | -10·2 +200·4 +0·9 | +2·0 +1·7 +312·7 +15·5 | +1·3 +13·0 +432·4 +114·4 | +0·5 +34·2 +349·6 +215·5 | -1·5 +145·0 +303·4 +145·5 | +12·6 +135·9 +182·1 +105·3 | +11·9 +98·2 +154·6 +95·9 | +20 · 1 +106 · 2 +36 · 2 +39 · 1 | +13·7 +66·0 -79·2 +29·0 | +7·0 -8·1 -126·5 -41·9 | +6·3 -117·4 -110·4 -83·3 | +1 · : -162 · : -133 · : -60 · : |
| -108·0 -192·0 -194·9 -385·7 | -92·6 -118·6 -181·3 -332·0 | -92·9 -69·4 -136·0 -341·7 | -127 · 8 -24 · 4 -163 · 7 -223 · 6 | -54·0 -25·0 -109·9 -69·4 | -120·0 -9·3 -70·9 -68·9 | -38·8 -4·4 -18·1 -179·4 | -34·6 -25·0 +0·9 -193·0 | -54·9 -41·4 +6·0 +28·3 | -36 · 8 -22 · 8 -19 · 3 +103 · 8 | -21 · 2 +5 · 2 -6 · 7 +183 · 3 | +39·6 +53·9 +100·2 | +9·6 +52·4 +83·1 +94·9 | +31·2 +57·2 +156·9 +144·2 | +60·3 +110·2 +259·8 +193·3 | +114·8 +90·6 +293·9 +335·2 | +184·4 +86·4 +357·7 +211·0 | +210 · 2 +123 · 9 +233 · 9 +186 · 1 | +161 · 2 +127 · 0 +94 · 5 +177 · 4 | +83·4 +51·6 +59·1 +89·8 | +25·5 +31·6 -146·4 +83·3 | +0·2 -66·8 -76·3 +22·4 | -59·6 -73·2 -189·1 -65·5 | -24 · 2 -103 · 4 -287 · 1 -94 · 0 |
| -140 · 1 | -126 · 0 | -120·4 | -115·1 | -52·6 | -32·9 | -23·1 | -27·3 | -9.1 | -5.5 | +7·7 | +13·0 | +39·6 | +66 · 6 | +114 · 7 | +151 · 5 | +162·3 | +140·0 | +108-4 | +59·7 | +8·1 | -34 · 2 | -86·3 | -98.9 |
| -185 • 9 | -158·6 | -137·0 | -159·5 | -104 · 8 | -35·6 | -12·4 | -15.9 | -9·1 | -5·7 | +3.8 | +32 · 9 | +81 · 4 | +132-1 | +203-9 | +192 · 1 | +223 · 1 | +169-0 | +118·6 | +63 · 3 | -32.0 | -69・4 | -122·5 | -171 - 7 |
| , | , | , | | , | , | , | , | , | , | DECLI | NATION | | | , | | | | | , | , | | , | , |
| -6·52 -7·94 -29·97 -5·09 | -2·81 -9·92 -31·33 -5·24 | -3·82 -19·96 -26·03 -13·86 | -5·06 -17·84 -33·31 -8·39 | -5·72 -9·34 -21·15 -6·32 | -2·11 -7·15 -10·40 -8·64 | +0.68 -1.60 -7.05 -8.45 | +0·14 -0·84 -6·77 -7·84 | -1·16 +0·16 -7·77 -7·62 | +0.81 +1.58 -2.23 -4.01 | +3·26 +1·70 +4·81 +1·80 | +5·52 +1·74 +5·11 +6·10 | +5·84 +9·46 -0·53 +9·39 | +6·87 +11·44 +3·25 +8·38 | +6·72 +12·80 +4·07 +5·60 | +6·10 +12·70 +16·07 +4·01 | +2·10 +14·70 +30·87 +12·76 | +2·21 +5·03 +47·64 +8·78 | +1 · 32 +4 · 38 +28 · 23 +4 · 83 | +0·48 +6·78 +19·65 +4·56 | -4·26 +1·50 +19·81 +3·84 | -2·59 +0·72 +3·61 +4·39 | -3·78 -5·36 -4·23 -0·42 | -4·22 -4·74 -2·35 +1·44 |
| +1·18 -11·39 -21·93 -7·70 | -13·50 -19·68 -10·80 -13·79 | -11·98 -14·49 -17·95 -13·15 | -13·10 -12·70 -18·28 -0·54 | -3.66 -8.38 -8.35 +2.37 | +0.63 +0.89 -2.84 -1.67 | -5·26 -0·02 +4·53 -1·78 | -7·12 +0·34 +8·30 -15·61 | -3·74 -0·95 +3·71 -4·99 | +1·28 +0·26 +6·12 -4·64 | +3·58 +5·67 +8·97 -8·29 | +6·26 +9·98 +9·28 +1·01 | +7·76 +12·53 +9·97 +4·14 | +7·74 +12·10 +10·14 +11·63 | +7·84 +13·01 +5·87 +11·37 | +6·02 +7·26 +6·44 +4·18 | +5·72 +5·90 +13·05 +11·13 | +8·09 +6·25 +21·84 +8·43 | +5·64 -2·40 +3·81 +2·00 | +4·34 +0·48 +3·92 +3·15 | +1·10 +0·03 +1·39 +4·65 | -0·90 +2·60 -10·26 +2·26 | -5·96 -0·19 -4·39 +2·07 | -1·96 -7·10 -22·54 +3·77 |
| -9.58 | -11 · 98 | -12·45 | -12·56 | -6.72 | -3·41 | -2·37 | -3.00 | -1.95 | +0.07 | +2 · 46 | +5·18 | +6 · 78 | +8.08 | +7.93 | +7.82 | +11 · 20 | +11·76 | +6 · 26 | +4.75 | +2·51 | -0.76 | -4.09 | -5.96 |
| -17 · 81 | -17·93 | -19-61 | -20 · 53 | -11.81 | -4.87 | -1 · 03 | +0.26 | -1 · 21 | +1 · 43 | +5-29 | +6 · 53 | +7.86 | +9 · 23 | +8 · 94 | +10-62 | +16 · 13 | +20 · 19 | +8.51 | +7·71 | +5.68 | -0.83 | -3.54 | -9-18 |
| | | | | | | | | | | | | | a | | | 24 | • | - | 24 | ~ | | | |
| -32·8 -8·3 -54·7 -70·7 | -17·3 -28·6 -14·5 -98·3 | -49·3 -53·2 -39·5 -100·9 | -66 · 2 -61 · 3 -76 · 5 -59 · 1 | -46 · 1 -64 · 4 -92 · 1 -36 · 3 | -19·5 -37·5 -70·2 -94·3 -34·6 | -28·0 -46·9 -38·5 -14·1 | -16·9 -14·2 | -9·8 -11·3 -2·8 -8·5 -3·9 +5·1 | -3·3 -9·4 +6·9 +6·5 +2·9 | -0·3 -6·5 +10·4 +26·9 -0·7 | +8·1 +0·1 +21·6 +46·7 -5·9 | +26·1 +4·2 +40·3 +29·9 +6·1 | +26·9 +11·5 +41·6 +50·3 +34·1 | +43·6 +25·7 +34·8 +87·1 +82·7 | +39·1 +45·0 +40·9 -3·3 +59·1 | +58·7 +46·1 +23·4 -29·7 +81·3 | +39·9 +17·0 -63·9 +95·8 | +59·0 +90·7 +25·3 +63·1 | +62·9 +28·4 +63·7 +35·3 | -9·0 +35·9 +35·4 +110·3 +30·5 | -19·7 +14·0 +31·5 +92·1 +16·1 | -26·7 +3·7 +28·0 +10·1 -25·3 | -26 · 7 -101 · 0 -33 · 1 -51 · 7 |
| -84 · 4 -87 · 4 -28 · 2 | -69·4 -145·5 -47·4 | -177 · 2 -127 · 2 -117 · 2 · | -77·6 -79·3 -159·8 -65·5 | -98·8 -83·9 -125·0 -202·1 | -119·0 -59·6 -104·4 -149·2 | -76·6 -31·5 -67·4 -22·3 | -11·2 -11·1 -20·4 +38·7 | +14·8 +12·2 +7·4 +16·4 | +16·6 +23·1 +41·4 +49·7 | +26 · 8 +34 · 4 +52 · 6 +79 · 0 | +34·2 +39·9 +87·2 +80·3 | +38·0 +53·2 +98·2 +59·2 | +49·2 +76·5 +110·6 +77·5 | +59·4 +90·2 +150·2 +105·0 | +88·6 +114·7 +115·8 +103·3 | +95·0 +81·1 +53·4 +116·1 | +86 · 6 +86 · 2 +11 · 8 +91 · 2 | +97 · 0 +95 · 3 +8 · 2 +51 · 5 | +88·6 +44·9 +53·0 -38·9 | +67·6 +37·0 +15·0 -12·0 | +20·8 -11·3 -8·2 -35·5 | -27·6 -76·8 -9·4 -91·0 | -41 · 4 -75 · 1 -117 · 4 -117 · 3 |
| -39·1 | -59·2 | -85 · 2 | -90 · 6 | -89.9 | -76 · 0 | -38.0 | -12.0 | -0.7 | +12·8 | +22.9 | +33·9 | +43 · 2 | +56 · 7 | +75 · 9 | +71 · 0 | +65·1 | +58 · 8 | +64 · 5 | +44 · 2 | +33·7 | +2·7 | -34·6 | -60-1 |
| | | | | - | -74 · 1 | | -7·4 | -5·8 +2·1 | +9·1 | +21 · 5 | +28 · 8 | t . | +50-3 | +69·1 +90·6 | | +85 · 5 | +80·3 | +62 · 9 | +28 · 3 | +16 · 3 | -20.0 | -48.5 | -62 · 5 |
| | 0-1 | 7 | 0-1 1-2 2-3 \[\begin{array}{cccccccccccccccccccccccccccccccccccc | 0-1 1-2 2-3 3-4 | 0-1 1-2 2-3 3-4 4-5 \(\begin{array}{cccccccccccccccccccccccccccccccccccc | 0-1 1-2 2-3 3-4 4-5 5-6 \[\begin{array}{cccccccccccccccccccccccccccccccccccc | 0-1 1-2 2-3 3-4 4-5 5-6 6-7 \[\begin{array}{cccccccccccccccccccccccccccccccccccc | 0-1 1-2 2-3 3-4 4-5 5-6 6-7 7-8 ***P*** | 0-1 1-2 2-3 3-4 4-5 5-6 6-7 7-8 8-9 77 77 77 77 77 77 77 77 77 77 77 77 77 | 0-1 1-2 2-3 3-4 4-5 5-6 6-7 7-8 8-9 9-10 7 | 0-1 1-2 2-3 3-4 4-5 5-6 6-7 7-8 8-9 9-10 10-11 **BORIZO** **T-8 -75.4 -71.5 -35.4 +0.4 +10.6 +18.8 +16.0 +5.1 -1.8 -3.4 +1.9 +1.5 +1.5 +1.5 +1.5 +1.5 +1.5 +1.5 +1.5 | 0-1 1-2 2-3 3-4 4-5 5-6 6-7 7-8 8-9 9-10 10-11 11-12 ***Part | 1-12 2-3 3-4 4-5 5-6 6-7 7-8 8-9 9-10 10-11 11-12 12-13 | 0-1 1-2 2-3 3-4 4-5 5-6 6-7 7-8 8-9 9-10 10-11 11-12 12-13 13-14 1-2 | 0-1 1-2 2-3 3-4 4-5 5-6 6-7 7-8 8-9 9-10 10-11 11-12 12-13 13-14 14-15 Part | 0-1 1-2 2-3 3-4 4-5 5-6 6-7 7-8 8-9 9-10 10-11 11-12 12-13 13-14 14-15 15-16 | 0-1 1-2 2-3 3-4 4-5 5-6 6-7 7-8 8-9 9-10 10-11 11-12 12-13 13-14 14-15 15-16 16-17 1-1 | Color 1-2 2-3 3-4 4-5 5-6 6-7 7-8 8-9 9-10 10-11 11-12 12-13 13-14 14-15 15-16 16-17 17-18 | Column C | Color 1-12 2-3 3-4 4-5 5-6 6-7 7-8 8-9 9-10 10-11 11-12 12-13 13-14 14-15 15-16 16-17 17-18 18-15 19-10 19-1 | 14 15 15 15 15 15 15 15 | 14 15 15 15 15 15 15 15 | 14 15 15 15 15 15 15 15 |

"Winter" comprises the four months January, February, November, December; "Equinox" the months March, April, September, October; and "Summer" May to August.

The ranges are derived from the diurnal inequalities printed in Tables 8-10

Arithmetical average of diurnal inequalities in Tables 8-10 taken regardless of sign 12 LERWICK

| 11 u | ERWICK | | | | | | | | | 12 LEF | WICK | | | | | | | | |
|---------|---------|----------|---------|--------|----------|--------|---------|----------|---------|---------|--------|---------|--------|------|---------|-----|---------|----------|--------|
| | 1 | All days | | Ç. | uiet day | s | Dis | turbed o | days | | A | ll days | | Ón | iet day | s | Dis | turbed d | lays |
| | Н | D | z | H | D | Z | н | D | Z | | H | D | Z | H | D | Z | H | D | Z |
| | γ | , | γ | γ | , | γ | γ | • | γ | | γ | • | γ | γ | , | γ | γ | • | γ |
| Jan. | 27.0 | 7 · 92 | 46 • 4 | 30.8 | 5.18 | 11.6 | 134.6 | 15.06 | 148 · 7 | Jan. | 6.9 | 2.11 | 11 · 1 | 6.5 | 1 · 41 | 2.7 | 22.9 | 4.31 | 31 · 3 |
| Feb. | 32.9 | 10.13 | 55 · 5 | 24.8 | 6.72 | 9.6 | 53 · 2 | 13.39 | 129 · 1 | Feb. | 6.7 | 2.81 | 14.2 | 6.3 | 1.64 | 2.5 | 7.3 | 3.50 | 29.0 |
| Mar. | 62.5 | 13.25 | 67.9 | 45.4 | 12.02 | 13.3 | 307 · 8 | 34.66 | 191 · 7 | Mar. | 15.2 | 3.75 | 14.9 | 10.9 | 2.41 | 3.0 | 52.1 | 7 · 06 | 37.6 |
| Apr. | 196 · 7 | 19.90 | 102.0 | 56.9 | 13 · 36 | 16.9 | 842 · 2 | 80.95 | 204.6 | Apr. | 46 · 7 | 5.69 | 29.0 | 15.2 | 3.01 | 3.8 | 175-4 | 15.26 | 46.9 |
| May | 87 · 3 | 13 · 29 | 78.6 | 70.1 | 12.84 | 19.6 | 374.0 | 26.62 | 196.7 | May | 24 · 3 | 3.71 | 18 · 2 | 16.8 | 3.10 | 4.4 | 64 · 2 | 6.32 | 42.3 |
| June | 96 · 4 | 15.33 | 99.0 | 77 · 5 | 12.76 | 24 · 6 | 255.7 | 24 · 26 | 226 · 0 | June | 26 · 4 | 4.73 | 23.7 | 18.4 | 3.74 | 5.5 | 50∙8 | 7 · 44 | 52.7 |
| July | 99.8 | 12.98 | 83.7 | 71.6 | 15.65 | 27.0 | 341.9 | 24.84 | 195-4 | July | 26 · 2 | 4.15 | 20.0 | 17.8 | 3.92 | 7.0 | 71.9 | 5.67 | 47.8 |
| Aug. | 98 · 7 | 14 · 49 | 87 · 3 | 67.8 | 15.11 | 26 · 3 | 338 · 0 | 21.59 | 274 · 2 | Aug. | 24.0 | 3.63 | 22.2 | 16.4 | 3 · 39 | 6.5 | 73.4 | 5.60 | 65.3 |
| Sept. | 89 · 7 | 15.42 | 95.0 | 57 · 0 | 11 · 38 | 11 · 4 | 319.0 | 32.69 | 260.2 | Sept. | 19.7 | 4 · 05 | 25.5 | 15.3 | 2.83 | 2.2 | 64.6 | 6 • 44 | 65.7 |
| Oct. | 140.8 | 14 · 74 | 121 · 9 | 49 · 1 | 9.95 | 12.2 | 644 · 8 | 44 · 38 | 310.0 | Oct. | 31 · 4 | 3.71 | 37 · 0 | 12.3 | 2.43 | 2.8 | 133.3 | 9.78 | 67 · 1 |
| Nov. | 134 · 5 | 9.64 | 97 · 7 | 25.2 | 5.60 | 21 · 2 | 720.9 | 27 · 24 | 318 · 2 | Nov. | 31 · 9 | 2 · 31 | 25.1 | 6.7 | 1 · 34 | 5.0 | 162.8 | 6.01 | 72.9 |
| Dec. | 61.5 | 9 · 58 | 89.3 | 12.3 | 6.33 | 23 · 2 | 339 · 9 | 29.36 | 243.6 | Dec. | 14 · 1 | 2.99 | 25.9 | 2.8 | 1 · 36 | 6.3 | 67.0 | 7.20 | 68.5 |
| Year | 79 · 2 | 11 · 19 | 74 · 3 | 44.9 | 9.72 | 12.1 | 302 · 4 | 24.32 | 166 · 5 | Year | 20.3 | 3.37 | 21.7 | 11.2 | 2 · 38 | 2.9 | 72.6 | 6 · 23 | 48.8 |
| Winter | 52 · 7 | 8.72 | 64.6 | 21 · 2 | 5.45 | 12.3 | 267 · 0 | 16.12 | 184 · 1 | Winter | 12.4 | 2.27 | 18.4 | 5.2 | 1 · 38 | 3.7 | 61 · 1 | 4 · 26 | 47 · 1 |
| Equinox | 106.9 | 14 · 33 | 87 · 4 | 50.8 | 11.53 | 8.9 | 409.0 | 40.72 | 184.8 | Equinox | 26.0 | 4.16 | 26 · 3 | 13.2 | 2.63 | 2.3 | 101 - 7 | 9.03 | 50.6 |
| Summer | 91 · 2 | 13.62 | 81.8 | 71.0 | 13.79 | 22.7 | 271 · 3 | 20.69 | 202.6 | Summer | 25 · 1 | 4.01 | 20.7 | 17.3 | 3.49 | 5.1 | 63.4 | 6.10 | 50.7 |

NON-CYCLIC CHANGE

13 LERWICK

| | Γ | All day | | 0 | uiet da | vs | Dis | turbed o | lavs |
|---------|----------|---------|--------|-------|---------|--------|----------|----------|---------|
| | ' н | D | z | H | D | z | н | D | , z |
| | <u>"</u> | υ | | "- | υ | | | <i>v</i> | |
| | γ | • | γ | γ | • | γ | γ | • | γ |
| Jan. | +0.5 | +0.01 | -0.1 | -0.3 | +0.12 | -2 · 1 | -11.8 | -1.30 | -13.7 |
| Feb. | -0.3 | -0.10 | +1 · 2 | +3.7 | +0.83 | -4.0 | +28 • 4 | +1.87 | +10.9 |
| Mar. | +24 · 5 | -1 · 58 | -5.8 | +5.3 | +0.05 | -5.8 | -125.0 | +1.62 | -50.6 |
| Apr. | +20.6 | +1 · 46 | +7.0 | +3·2 | +0.89 | +4.0 | +131 · 8 | +13.22 | +44 · 8 |
| May | +4 • 8 | +0.14 | -2.3 | +6.4 | +0.41 | -5.3 | +59 · 2 | +3.47 | +11 · 0 |
| June | +0.3 | +0.04 | +0.2 | +3-1 | +0.08 | -4.3 | +3.0 | -0.53 | +4.6 |
| July | -1.3 | +0.05 | -0.2 | +12.7 | +1 · 27 | +5.7 | -53 · 3 | -1.12 | -42.7 |
| Aug. | +0.6 | -0.10 | +0.7 | +3·4 | -0.80 | -6・9 | -14-4 | -1 · 07 | -27.0 |
| Sept. | ~0.4 | -0.09 | -1 · 2 | +4.7 | +0.26 | +1 · 6 | -39.3 | +0.41 | +34 · 4 |
| Oct. | -0.4 | +0.02 | +0.4 | +5.5 | -0.07 | +2-7 | -46 · 7 | -1 · 96 | -35.4 |
| Nov. | +1 · 1 | +0-11 | +2.7 | +8.9 | +0.87 | -1 · 7 | +75.7 | +4.66 | -38.6 |
| Dec. | -0.3 | -0.10 | -0.2 | +4.3 | -0.06 | -13.9 | -19.3 | -2.30 | -16.0 |
| Year | +4 • 1 | -0.01 | +0-2 | +5·1 | +1 · 07 | -2.5 | +5·6 | +1 · 41 | -9.9 |
| Winter | +0.3 | -0.02 | +0.9 | +4·1 | +0-44 | -5.4 | +18-3 | +0.73 | -14-3 |
| Equinox | +11-1 | -0.02 | +0.1 | +4.7 | +2.53 | +0.6 | -0.1 | +3.32 | -1 · 7 |
| Summer | +1 · 1 | +0.03 | -0.4 | +6·4 | +0.24 | -2.7 | -1 · 4 | +0.19 | -13.5 |

AVERAGE RANGE OF DIURNAL INEQUALITY 1932-53 WITH 1960 AS PERCENTAGE OF THIS

14 LERWICK

| | | | All day | s | | ternatio uiet day | | | ternation turbed | |
|---------|---------|--------|---------|--------|--------|----------------------|------|---------|---------------------|---------|
| | | H | D | Z | H | D | Z | H | D | Z |
| | | γ | • | γ | γ | • | γ | γ | | γ |
| Year | 1932-53 | 49 4 | 9 · 36 | 53.3 | 37 · 4 | 8.68 | 10.3 | 131.6 | 14 · 22 | 131 · 1 |
| | 1960(%) | 160 | 120 | 139 | 120 | 112 | 117 | 230 | 171 | 127 |
| Winter | 1932-53 | 24 · 4 | 7 · 87 | 41 · 1 | 15-1 | 4.65 | 7.7 | 85.0 | 13.84 | 116.6 |
| i | 1960(%) | 216 | 111 | 157 | 140 | 117 | 160 | 314 | 116 | 158 |
| Equinox | 1932-53 | 59 · 2 | 10.94 | 68.8 | 42.3 | 9 · 54 | 12.9 | 193-4 | 18.89 | 168.9 |
| | 1960(%) | 181 | 131 | 127 | 120 | 121 | 69 | 211 | 216 | 109 |
| Summer | 1932-53 | 72.6 | 12.72 | 53.0 | 57.5 | 12.77 | 17.0 | 156 · 9 | 15.61 | 134 · 0 |
| - | 1960(%) | 126 | 107 | 154 | 123 | 108 | 134 | 173 | 133 | 151 |

"Winter" comprises the four months January, February, November, December: "Equinox" the months March, April, September, October: and "Summer" May to August.

RATIO OF RANGE OF INEQUALITY AT LERWICK TO THAT AT ESKDALEMUIR 1960

15 LERWICK

| Type of day | Ele- ment | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. | Oct. | Nov. | Dec. |
|----------------|--------------|------|------|------|------|--------|------|------|------|-------|------|------|--------|
| q | H | 0·97 | 1·03 | 1·09 | 1·16 | 1 · 34 | 1·12 | 1·17 | 1·16 | 1·04 | 1·02 | 0·91 | 0·69 |
| d | H | 2·90 | 1·99 | 2·47 | 1·88 | 4 · 01 | 2·22 | 2·83 | 2·34 | 3·32 | 2·45 | 2·09 | 5·21 |
| q | D | 0·93 | 1·00 | 1·04 | 1·04 | 1·05 | 1·02 | 1·09 | 1·08 | 1·02 | 0·98 | 0·92 | 1 · 24 |
| d | D | 1·23 | 1·27 | 1·46 | 1·59 | 1·61 | 1·31 | 1·83 | 1·30 | 1·77 | 1·78 | 1·73 | 1 · 58 |
| q | Z | 0·93 | 0·81 | 0·86 | 0·70 | 0·73 | 0·81 | 0·87 | 0·87 | 0·55 | 0·87 | 2·26 | 1·73 |
| d | Z | 2·30 | 2·60 | 1·15 | 0·70 | 1·34 | 1·84 | 1·30 | 1·36 | 1·65 | 1·10 | 1·14 | 1·33 |

16 LERWICK

(a) Disturbances without sudden commencement

| Serial | | Fron | ı | | То | | | Range (| (γ) | |
|--------|-------|------|------|-------|----|------|------|---------|------|-------|
| Number | Dat | е | Hour | Dat | е | Hour | Н | D | Z | Notes |
| 1a | Jan. | 20 | 01 | Ţan. | 23 | 01 | 492 | 310 | 511 | |
| 2a | Mar. | 15 | 12 | Mar. | 18 | 18 | 700 | 504 | 580 | |
| 3a | Mar. | 29 | 08 | Apr. | 2 | 19 | 3176 | 1789 | 1709 | |
| 4a | Apr. | 23 | 03 | Apr. | 27 | 02 | 1067 | 805 | 643 | |
| 5a | May | 5 | 16 | May | 8 | 01 | 799 | 264 | 423 | |
| 6a | July | 28 | 22 | Aug. | 3 | 03 | 619 | 272 | 507 | |
| 7a | Sept. | 2 | 09 | Sept. | 6 | 13 | 1577 | 988 | 997 | |
| 8a | Sept. | 29 | 08 | Oct. | 3 | 24 | 478 | 235 | 449 | |
| 9a | Oct. | 4 | 11 | Oct. | 10 | 09 | 2827 | 1694 | 1483 | |
| 10a | Nov. | 3 | 20 | Nov. | 5 | 16 | 651 | 264 | 411 | |
| 11a | Nov. | 21 | 04 | Nov. | 22 | 24 | 625 | 216 | 513 | |
| 12a | Dec. | 14 | 24 | Dec. | 16 | 24 | 1118 | 477 | 715 | |
| 13a | Dec. | 27 | 02 | Dec. | 30 | 24 | 943 | 346 | 477 | |

(b) Disturbances with a sudden commencement (ssc)

| Serial | Dat | e | Time of sudden | | End o | | | h init | | | gnitude in str | | | Range of followin disturbance (γ) | | | | | |
|------------|------|----|-------------------|------|-------|------|-----|--------|------------|------|-------------------|------|------|--------------------------------------|-----|--|--|--|--|
| Number | | | commence- ment | Date | H | lour | H | D | Z . | H | D | Z | H | D | Z | | | | |
| | | | | | | | | | | γ | γ | γ | | | | | | | |
| 1b | Jan. | 10 | 07.19 | Jan. | 12 | 04 | Yes | Yes | Yes | +45 | +37 | +20 | 893 | 288 | 325 | | | | |
| 2b | Jan. | 13 | 19.00 | Jan. | 15 | 24 | Yes | No | Yes | +12 | +14 | +6 | 716 | 266 | 343 | | | | |
| 3 b | Apr. | 2 | 23.13 | Se | ee 4b | | No | Yes | Yes | +24 | -16 | -7) | 804 | 596 | 474 | | | | |
| 4 b | Apr. | 5 | 12.59 | Apr. | 5 | 24 | Yes | Yes | Yes | +47 | -12 | +195 | | | | | | | |
| 5 b | Apr. | 7 | 15.11 | - | | - | Yes | Yes | Yes | +56 | -14 | +10 | l | Sma11 | | | | | |
| 6b | Apr. | 10 | 01.28 | Apr. | 18 | 20 | No | Yes | - | +9 | -10 | 0 | 1327 | 369 | 62 | | | | |
| 7b | Apr. | 27 | 20.00 | Se | ee 8b | • | Yes | No | Yes | +60 | -16 | -20) | 2220 | 1018 | 104 | | | | |
| 8b . | Apr. | 30 | 01.32 | May | 2 | 24 | No | No | No | +26 | -24 | -27) | | | | | | | |
| 9b ' | May | 8 | 04.22 | May | 9 | 19 | Yes | Yes | Yes | -86 | -142 | -56 | 1389 | 412 | 48 | | | | |
| 10b | May | 11 | 04.35 | May | 12 | 24 | No | Yes | Yes | +35 | - 65 | -14 | | Small | | | | | |
| 11b | May | 16 | 13.51 | May | 17 | 20 | Yes | Yes | Yes | +69 | -41 | +23 | | Small | | | | | |
| 12b | May | 28 | 20.19 | May | 30 | 22 | No | No | Yes | +78 | -32 | -33 | 830 | 324 | 57 | | | | |
| 13b | June | 27 | 01.45 | | ee 14 | | No | No | - | +22 | -36 | 0) | 1129 | 506 | 163 | | | | |
| 14b | June | 29 | 19.39 | July | 2 | 22 | No | No | Yes | +36 | -24 | -10) | | | | | | | |
| 15b | July | 14 | 04.48 | - | | - | No | Yes | - | +8 | -17 | 0) | 1984 | 759 | 75 | | | | |
| 16b | July | 14 | 17.01 | July | 18 | 23 | Yes | Yes | | +158 | -37 | -20) | | | | | | | |
| 17b | Aug. | 16 | 14.09 | Aug. | 19 | 01 | Yes | Yes | | +173 | -59 | +39 | 2001 | 721 | 113 | | | | |
| 18b | Aug. | 19 | 16.16 | - | | - | Yes | Yes | Yes | +73 | -22 | -23 | | Small | | | | | |
| 19b | Aug. | 29 | 00.22 | Aug. | 31 | 23 | Yes | Yes | Yes | +59 | -30 | -26 | 706 | 311 | 67 | | | | |
| 20b | Oct. | 24 | 14.51 | Nov. | 1 | 03 | Yes | Yes | Yes | +40 | -32 | +8 | 1773 | 715 | 73 | | | | |
| 21ь | Nov. | 12 | 13.49 | ı | e 22 | | Yes | Yes | | +81 | -85 | 0) | 3835 | 1184 | 205 | | | | |
| 22b | Nov. | 15 | 13.04 | Nov. | 17 | 04 | Yes | Yes | No | +110 | +53 | +31) | | | | | | | |
| 23b | Nov. | 30 | 19.10 | Dec. | 3 | 06 | No | No | Yes | +37 | -8 | -17 | 1410 | 574 | 73 | | | | |
| 24b | Dec. | 7 | 18.04 | Dec. | 8 | 18 | Yes | No | Yes | +30 | - 6 | -13 | 251 | 270 | 30 | | | | |

(c) Disturbances due to solar flare (sfe)

| Serial Number | Date | Commence- ment | Max. | End | Mov H | ement D | (γ) Z | K | K' | Notes |
|------------------|---------|-------------------|-------|-------|----------|---------|-----------------|---|----|--------------------|
| 1c | Apr. 6 | 11.32 | 11.38 | 11.45 | -9 | 0 | +3 | 2 | 2 | S.E.A. |
| 2c | Aug. 5 | 14.29 | 14.32 | 14.55 | +11 | -3 | -3 | 2 | 2 | From I.A.G.A. list |
| 3c | Aug. 14 | 13.10 | 13.11 | 13.20 | -11 | -10 | +7 | 2 | 2 | S.E.A. |

S.E.A. = Sudden enhancement of atmospherics

17 LERWICK

| c | Night ommencin | g | | c | Night ommencin | g | | C | Night ommencin | g | |
|------------------|-------------------|----------|--|----------|-------------------|-------|---|----------|-------------------|-------|---|
| | | | JANUARY | | | | FEBRUARY (contd.) | | | | APRIL (contd.) |
| 1 2 3 | c-a c c | | Partly cloudy soon becoming clear Mainly cloudy Cloudy | 19 | a-b-cb | ф | Variable cloud becoming mainly cloudy. Faint diffuse surface visible 22h. to 03h., obscured by cloud at times. Spasmodic | | c-cb c-a-c | ф | Variable cloud. Faint ray, with no activity observed at 24h. Faint diffuse surface 01h. Variable cloud |
| 4 | cb-ca | Ф | Mainly cloudy with occasional breaks. Glow observed 22h., 00h., 02h., 05h., 06h. Variable cloud becoming cloudy | | | | ray activity observed throughout, rayed arcs occasionally being formed | 21 23 | c-a-c | ф | Variable cloud Cloudy Cloudy at first soon becoming clear. |
| 6 | cb-a | •• | Cloudy becoming fair Variable cloud | 20 21 | cb cb | • • | Cloudy Variable cloud | 1 | c-a | φ | Faint homogeneous arc 23h. Cloudy at first, clearing, then |
| 8 | cb cb | • • | Mainly cloudy | 22 | c-a-b | • • | Cloudy soon becoming partly cloudy | | • | 7- | clouding over again. Rays observed at 22h.50m. but mostly obscured by |
| 9 | b-cb | •• | Clear soon becoming cloudy. Moonlight | 23 | a | • • | Variable cloud | | | | cloud. Very active rays of moderate |
| 10 11 | cb cb | | Cloudy Cloudy | 24 27 | a-c cb | | Partly cloudy becoming cloudy Cloudy | | | | brightness observed at 00h.03m. filling whole sky and shooting up |
| 13 14 | cb cb | • • | Mainly cloudy. Moonlight Cloudy | 28 | cb | •• | Cloudy | | | | to form corona. Display very active but showing little change in basic form |
| 15 | cb | •• | Mainly cloudy. Moonlight Variable cloud. Moonlight | | | | | | | | when increasing cloud cover obscured it by 01h.27m. |
| 16 17 | e-cb a-cb | •• | Clear soon becoming cloudy | | | | MARCH | 28 | c-a-c | ф | Cloudy at first, clearing, then clouding over again. Faint glow 00h.10m. |
| 18 19 | a-cb a-b | ф | Fair becoming cloudy. Moonlight Partly cloudy becoming fair. | 1 | cb | •• | Cloudy, clearing towards dawn | | | | with rays rising to form an incomplete |
| | | | Moonlight. Rayed arc, green with slight activity observed 23h.50m. | 3 | cb cb-a | ф | Mainly cloudy Cloudy at first, clearing. Very faint rayed arc 02h. Faint glow | | | | corona. Glow persisting till 01h.05m. then fading rapidly, but ray activity increasing, flaming at times, and forming |
| 20 | a-b | Ф | Fair becoming partly cloudy. Glow to north partly obscured by cloud | 5 | cb-b | | 03h. Mainly cloudy | | | | rayed arc of moderate brightness across zenith by 01h.05m. Rayed arc fading |
| 22 | c-cb | | 22h. to 24h. Cloudy | 8 18 | cb c-cb | • • • | Variable cloud. Moonlight Cloudy | | | | rapidly 01h.15m. to 01h.25m., but flaming rays and partial corona persisting until |
| 23 | a-c-cb | Ф | Clear soon becoming cloudy. Faint glow 20h. | 19 | c-a-b | •• | Cloudy at first soon clearing Moonlight | 29 | cb-c | | obscured by cloud 02h. Cloudy |
| 24 | a-b | • • | Clear throughout | 23 24 | c-a | •• | Cloudy at first soon clearing Mainly clear, clouding over | | cb-c | •• | Mainly cloudy |
| 26 | a-b a | | Little cloud Clear | | а-с | | towards dawn | | | | |
| 27 2 8 | C-8-C | | Variable cloud Cloudy becoming partly cloudy | 25 | c-a | ф | Cloudy at first soon becoming partly cloudy. Faint glow | | | | AUGUST |
| 29 30 | c C | • • | Partly cloudy becoming cloudy Cloudy | | | | visible through broken cloud 22h. Faint surface 01h. | 11 | ь | ф | Mainly clear. Moonlight. Faint white |
| 50 | • | | o.c.o.o.y | 26 | a-c | •• | Clear at first, quickly clouding | 16 | a-b | ф | rays with faint glow 01h. Variable cloud. Moderately bright rays, |
| | | | FEBRUARY | 28 | ca | ф | Mainly cloudy. Faint glow 23h. to 03h. Greenish, flaming, | | | | very active, 23h.45m. becoming bright and forming rayed band by 00h.15m. and |
| | | | | | | | seen through cloud breaks, 01h. | | | | corona by 00h.30m. Display bright, active and flaming. Corona disappear- |
| 2 | cb-c | क | Mainly cloudy. Moonlight. Quiet homogeneous arc 21h.38m. to | | | | Observations hampered consider- ably by cloud | | | | ing by 01h.05m. but active rays persist |
| | | | 22h.10m., greenish white. Arc observed with difficulty through | 29 | a-c | Φ | Partly cloudy becoming cloudy. Glow visible 21h.30m. to 02h.30m. | 17 | c-cb | ф | ing until dawn Mainly cloudy. Glow and suggestion of |
| | | | cloud 22h.10m. Active green rays of moderate brightness at 22h.30m. | | | | when increasing cloud cover prevented further observation. | 18 | cb | ф | rays visible through cloud 23h. Mainly cloudy. Glow visible to north |
| | | | Aurora of indistinguishable form observed 23h. Observations | | | | Glow greyish white becoming greenish white. Active rays | 20 | а-с | Φ | through cloud at 23h. Clear becoming cloudy. Faint glow |
| | | | hampered throughout by cloud, mist, | | | | observed 22h.40m., 00h.30m. and 00h.45m. | | а-с | ф | 23h. Clear at first soon becoming cloudy. |
| 3 | cb-c | •• | and moonlight Cloudy | 30 | c | ф | Mainly cloudy. Pronounced ray | | | Ċ | Glow behind cloud 22h. Cloudy. Glow observed through cloud |
| 4 5 | b-c b-a | ф | Variable cloud. Moonlight Little cloud. Moonlight. | | | | activity 21h.20m. to 22h.45m. Moderate rays, very active, | 26 | | Φ | breaks 01h. |
| | | | Homogeneous arc 22h. disintegrating and fading to form faint rays by | | | | green in colour, forming partial corons at 21h.20m. building up | 27 | cb-a-cb | # | Cloudy at first, clearing, but soon clouding over again. Faint glow |
| | | | 22h.05m. Quiet rayed band 22h.15m. to 22h.25m. Rays, faint to moderate | | | | to multiple rayed arcs, green with red patch to south west, | | | | observed through cloud 22h. and 23h. |
| | | | visible 02h.50m. to 03h.35m., quiet at first becoming active, flaming | | | | 21h.40m. Partial corona persisting. Rays still active at 22h.05m. but | | | | |
| | | | occasionally reaching zenith. Rayed band 03h.05m. to 03h.15m. | | | | fading and becoming indistinct by 22h.25m. Faint glow observed to | | | | SEPTEMBER |
| | | | Display fading into a faint glow, | | | | north from 23h.40m. to 03h.10m. when increasing cloud cover | | cb cb-a | Φ | Cloudy becoming partly cloudy Cloudy becoming partly cloudy. Moonlight. |
| 6 | b-a | • • • | last observed 06h. Little cloud. Moonlight | | | | prevented further observation. A | 1 | CD-a | * | Moderately bright active rays observed through cloud breaks at 23h. Moderate |
| 9 10 | cb-c cb | • • | Mainly cloudy. Moonlight Mainly cloudy. Moonlight | | | | sudden active ray reaching 86° elevation was noted 23h.50m. | | | | homogeneous band 01h. Pulsating rays |
| 11 | cb | •• | Cloudy soon becoming partly cloudy. Moonlight | 31 | cb-c | Ф | Mainly cloudy. Moderate rays, greenish white, filling practic- | 3 | | | 02h. Faint glow 03h. Variable cloud. Moonlight |
| 12 14 | | ф | Variable cloud. Moonlight Mainly cloudy. Moonlight. Green | | | | ally the whole sky and reaching zenith, observed 22h.20m. and | 4 | cb | Ф | Mainly cloudy. Moonlight. Long yellowish-white rays, faint to |
| • • | CD | ~ | rays seen faintly through cloud breaks 20h.01m. Rayed band of | | | | 00h.17m. Corona formed 00h.20m. fading by 00h.24m. and reforming | | | | moderate, reaching zenith, 20h.48m. to 23h.40m. Little activity noted. |
| | | | moderate brightness, green with | | | | 00h.28m. to 00h.30m. Cloud cover, | | | | Faint rays rising to form corona 01h.40m. to 01h.44m. Detailed observation rendered |
| | | | red tinges on lower edge visible 20h.06m. Diffuse glow visible | | | | which had hampered observation throughout, increasing and obscur- | | | | impossible by cloud cover and bright |
| | | | through cloud breaks 20h.10m. to 20h.46m. Observational conditions | | | | ing sky completely by 01h.25m. | 5 | b | ф | moonlight Bright moonlight throughout |
| 15 | cb | | poor Mainly cloudy. Moonlight | | | | | | | | rendering detailed observation impossible, but rays, estimated |
| | cb | ф | Cloudy. Moonlight. Rays visible through cloud breaks 23h. | | | | | | | | to be very bright, reaching up to zenith, 22h.30m. to 23h.05m. |
| | | | Green homogeneous arc | | | | APRIL | 7 | b-cb | ф | Clear at first, quickly clouding over. Faint scattered rays, |
| | | | observed through cloud breaks 02h. observational conditions very | | cb-c | | Cloudy | | | | observed through cloud breaks |
| 17 | cb | ф | poor Mainly cloudy. Moonlight. Faint | 3 6 | cb-c cb-c | | Mainly cloudy Partly cloudy becoming clear. | 8 | cb | | 21h.30m. to 22h. Cloudy |
| • | | | glow visible through cloud breaks 19h. to 21h. Moderate ray | 9 | b-cb | | Moonlight Variable cloud at first becoming | 9 10 | cb cb | ф | Cloudy Mainly cloudy. Faint rayed |
| | | | activity occasionally visible through cloud breaks 01h. to | | cb-b | | cloudy. Moonlight Cloudy becoming partly cloudy. | | | | band 22h.25m. to 22h.30m., bright green in places |
| | | | 02h.30m. Poor observational conditions | 14 | cb cb | | Moonlight Mainly cloudy. Moonlight | | | | otherwise greenish white, little activity |
| 18 | c-cb | • • | Cloudy | | c-cb | •• | Variable cloud. Moonlight | 11 | c-cb | •• | Cloudy becoming partly cloudy |

17 LERWICE (contd.)

| Night commencir | ng | | | Night ommenci | ng | | ۰ | Night ommencin | g | 1 |
|--------------------|----------|--|----------|------------------|-----|---|-------|-------------------|-----|--|
| | | SEPTEMBER (contd.) | \vdash | | | OCTOBER (contd.) | - | | | NOVEMBER (contd.) |
| 12 cb-b | ф | Cloudy becoming partly cloudy. Distinct greenish white rayed | 17 | а | Ф | Little cloud. Faint glow 22h. 04h. Occasional faint rays | 16 | c-a | ф | Cloudy at first clearing later. Faint surface 01h.00m. to 02h.40m. |
| | | arc with some activity, 03h.05m. | 10 | _ | φ | observed 00h.45m. Little cloud. Ray activity | 17 | • | ф | Occasional ray activity Partly cloudy becoming clear. Very |
| | | to 03h.15m. Suspicion of a homogeneous arc 03h.30m.; bright | 18 | a | Ф | faint to moderate observed | 1 | a | + | faint rays 20h. |
| | | moonlight making all observed | | | | 18h.42m. to 22h., greenish | 18 | | • • | Variable cloud |
| | | aurora seem faint | | | | white, pulsating at times and | | c-a | • • | Cloudy becoming partly cloudy |
| 15 c-a-cb | •• | Cloudy at first, quickly clearing, | | | | occasionally showing red tinges. Faint corona 21h.31m. Faint glow | 20 | c cb-c | | Mainly cloudy Cloudy |
| 16 c | | clouding over later | | | | persisting until 22h.48m. | | cb-c | | Cloudy |
| 18 c | | Cloudy | 20 | c | • • | Mainly cloudy | | cb-c-a | ф | Variable cloud. Glow observed 20h. |
| 20 c | • • | Variable cloud at first becoming | 21 | | • • | Mainly cloudy | l | | | and 23h. Slight ray activity noted 19h.50m. and 20h.30m. |
| | ф | cloudy later Mainly cloudy. Faint glow | 22 | c b-a | | Mainly cloudy Variable cloud | 26 | b-a | | Partly cloudy |
| 22 c | ф | observed intermittently through | | cb-c | Φ | Mainly cloudy. Faint indefinable | 27 | b-cb-c | | Variable cloud |
| | | cloud breaks 20h. to 04h. | | | · | aurora visible through cloud | | b-a | • • | Little cloud |
| 23 cb | •• | Cloudy | | | | breaks 20h. to 22h. Faint glow | | cb-c | | Mainly cloudy Cloudy |
| 24 cb-c | Ф | Variable cloud. Faint glow 20h. to 22h. Slight ray activity | 1 | | | with occasional rays 22h.10m. to 02h.45m. | 30 | cb-c | | Croddy |
| | | 2011. to 2211. Stright ray activity 20h. | 28 | cb-c | | Cloudy | 1 | | | |
| 25 cb-c | ф | Mainly cloudy. Faint glow | 29 | b-a | ф | Little cloud. Bright moonlight. | | | | |
| | | visible through cloud 20h. | | | | Suspicion of a glow 19h. to 21h. | i | | | DECEMBER |
| 27 cb-a | φ | Cloudy at first clearing later Variable cloud. Faint diffuse rays | 1 | | | Very slight ray activity barely visible 21h.43m. to 22h. | 1 | cb-b | | Cloudy becoming partly cloudy |
| 28 cb-a | Ф | observed through cloud breaks | 31 | cb-c | Φ | Mainly cloudy. Bright moonlight | 2 | cb | •• | Mainly cloudy |
| | | 21h.25m. Faint glow 22h., 23h. | | | | Bright rays, green in colour, | 3 | cb | • • | Mainly cloudy |
| 29 b-a | Ф | Little cloud. Bright rays rather | | | | visible through cloud breaks 20h.10m. 20h.12m. and 20h.15m. | 5 | cb cb | • • | Variable cloud Mainly cloudy |
| | | long and greenish yellow observed at 21h.30m., then fading and | 1 | | | 2011.10m. 2011.12m. and 2011.13m. | 6 | cb | Φ | Mainly cloudy. Faint ray, active, |
| | | becoming more diffuse, disappear- | 1 | | | | _ | | | through cloud break 17h.40m. |
| | | ing by 21h.55m. Rays re-appearing | | | | | 7 | c-cb | • • | Mainly cloudy |
| | | 22h., moderate brightness, forming | 1 | | | NOVEMBER | 8 | c-cb a-b | ф. | Cloudy Variable cloud. Greenish white glow |
| | | rayed arc by 22h. 05m., gradually | 1, | cb | | Cloudy | , | 8 -10 | 44 | observed through cloud break 22h. |
| | | fading with spasmodic activity, disappearing by 02h.40m. | 3 | cb | | Cloudy | 11 | c-cb | • • | Mainly cloudy |
| 30 cb-a | ф | Cloudy, clearing later. Moonlight | 4 | cb | • • | Variable cloud | 12 | c-cb | Ф | Mainly cloudy. Faint glow visible |
| - | * | Indistinguishable green aurora | 5 | b-cb | • • | Partly cloudy becoming cloudy | ĺ | | | through cloud breaks 23h.30m. to 01h.30m. |
| | | observed through cloud breaks, | 6 7 | c-cb a-b | | Variable cloud Partly cloudy | 13 | c-cb | | Variable cloud |
| | | 20h.20m. to 20h.37m. Faint pulsating rayed band 01h.20m. to | | c-cb | Φ | Mainly cloudy. Faint glow | 14 | a | • • | Partly cloudy |
| | | 02h.30m. Faint band with flaming | | | | observed through cloud breaks 00h. | 15 | c | Ф | Cloudy. Faint rays visible above |
| | | activity 03h.10m. to 04h.24m., | | c-cb | | Cloudy Cloudy | 17 | a-c | | cloud 16h.48m. to 16h.50m. Clear at first quickly clouding |
| | | fading rapidly and disappearing | | c-cb c-cb | | Cloudy | 1 ~ | | | over |
| | | 04h.31m. | | c-cb | Φ | Cloudy. Suspicion of a glow visible | 18 | a-c-a | ф | Partly cloudy, becoming mainly |
| | | | | | | through cloud breaks at 23h. | | | | clear. Faint yellow rays, fairly |
| | | | 13 | c-cb | Ф | Mainly cloudy. Faint glow observed through cloud breaks 19h. and 22h. | 1 | | | well defined observed at 17h. Faint glow visible through cloud |
| | | OCTOBER | 1 | | | Active aurora visible through | 1 | | | breaks at 18h. and 21h. Faint |
| 1 cb-b-a | ф | Cloudy at first clearing later. | ł | | | cloud breaks 00h.20m. to 02h., | 1 | | | surface at 01h. and 02h. |
| | ~ | Moonlight. Homogeneous arc, | 1 | | | suggestion of ray activity and band | 19 | а | Ф | Mainly clear. Faint glow 01h. to |
| | | moderate in brightness 01h., | 1 | | | formations, but accurate observations impossible | 20 | а | Φ | 03h. Mainly clear. Three homogeneous |
| 6 ch | | fading by 02h. Flaming aurora 03h. Mainly overcast | 14 | c-cb | ф | Mainly cloudy. Moderate rayed band | | | | arcs visible 19h.18m., fading to |
| 6 cb 7 cb | ф | Overcast Bright moonlight | | | • | green in colour with moderate | | | | form single arc by 19h.25m. Glow |
| | т | Auroral flashes penetrating | 1 | | | activity, visible 20h.10m. to 21h.18m. Very faint glow visible | | | | with spasmodic ray activity visible until 20h., disappearing, then |
| | | complete cloud layer, showing marked activity, observed first at | 1 | | | to north 21h. to 23h. | | | | re-appearing 23h. to 05h. |
| | | 19h.38m. and becoming obscured by | 15 | а | Φ | Partly cloudy. A faint glow noted | 21 | c-a | Φ | Cloudy becoming clear later. Glow |
| | | thickening cloud cover. Observa- | | | • | at 18h. then prolonged and | | | | 23h. to 03h. with moderate rays, |
| | | tions through cloud in bright | 1 | | | brilliant display observed in good conditions commenced at | ļ | | | greenish white in colour and acti- at times visible 23h, to 01h, 30m. |
| | | moonlight suggests a display of | | | | 18h.50m. with bright active rays | 22 | b-c | | Partly cloudy becoming cloudy |
| 9 cb | Φ | singular brilliance Cloudy. Faint glow through cloud | 1 | | | shooting up to form corons. Forms | 23 | cb-c | • • | Cloudy |
| , | * | breaks 19h.25m. to 20h. Faint | | | | rapidly changed through red glow, | 24 | cb-c | Ф | Mainly cloudy. Faint surface observ |
| | | single ray 19h.31m. | | | | rayed bands, rays flaming to corona, all pulsating brightly but | 26 | cb-c | | through cloud breaks at 02h. Mainly cloudy. Moonlight |
| 10 c-cb | ٠. | Variable cloud | | | | fading at 19h.18m. A very faint | | b-a | ф | Variable cloud. Moonlight. Rays |
| ll a-cb | <u>ф</u> | Variable cloud. Faint glow 20h. Clear becoming cloudy. Faint | 1 | | | diffuse surface persisted until | ļ - ' | | 7- | greyish white occasionally green |
| 12 a-cb | * | glow observed 21h.20m. to 22h. | 1 | | | 22h.20m. with slight ray activity | | | | observed 18h.50m. to 21h.24m., |
| | | Slight ray activity 21h.29m. to | 1 | | | 21h. to 21h.30m. Bright, green rays at 22h.20m. began a prolonged | | | | forming unstable coronae at times with associated glow rendered yer |
| | | 21h.40m. | 1 | | | display with ray activity, corona | | | | faint by moonlight |
| 14 a-cb | • • | Partly cloudy at first quickly clouding over | 1 | | | and band formation, flaming and | | cb | | Mainly cloudy. Moonlight |
| 15 c-cb | Φ | Cloudy. Faint glow visible | | | | pulsating at times, finally fading | | cb-b | • • | Cloudy becoming partly cloudy. |
| | + | through cloud breaks 00h. | 1 | | | to form diffuse glow and disappear- |] ,, | ah | | Moonlight |
| | | Mainly cloudy | 1 | | | ing by 06h.50m. | LCI | cb | • • | Mainly cloudy. Moonlight |

In the interests of brevity there have been omitted from Table 17 all dates on which the sky throughout the night emained completely overcast and on which therefore, no opportunity arose of determining whether or not aurora occurred. The nights on which aurora was actually seen are indicated by the symbol \$\Phi\$. The nights on which aurora was not seen despite at least an occasional interval of more or less clear sky, are indicated by the symbol \$\cdot\$; in the latter case also, remarks on the weather are added to assist the reader in judging how far the fact of no observation of aurora may be taken as indicating that there was not actual

The letters a, b, c, have the following significance:-

- a = Conditions favourable for seeing aurora

- a = Conditions tavourable for seeing aurora
 b = Unfavourable for faint aurora (because of moonlight, mist, thin cloud
 etc.), but not such as to mask bright aurora
 c = Cloudy, but aurora not seen in clear intervals
 ca,cb = Cloudy, but with conditions a or b respectively, in the intervals
 Changing conditions are indicated by a hypen; for example, a-c.

18 BRITISH ISLES

| BRITISH IS | LES | | | | | | | | | · · · · · · · · · · · · · · · · · · · | | | | |
|---|--|---|---|--|---|--|---|--|----------------|---|--|--|--|----------|
| Date | Φ1 | Forms | Time | Φ2 | Date | Φ1 | Forms | Time | Φ2 | Date. | Φ1 | Forms | Time | Φ2 |
| JANUARY | | | | | APRIL (contd.) | | | | | SEPTEMBER (contd.) | | | | |
| 4-5 | 57 | G,S,R | 0055-0700 | 65 | 29-30 | 54 | HA.RA | 2150-0300 | 57 | 29-30 | 59 | HA,RA,RB | 2045-0350 | 66 |
| 5-6 | 57 | | 1800-0455 | | 30-1 | 51 | RA | 2100-0300 | 54 | 30-1 | 59 | HA, RA, RB | 2050-0450 | 65 |
| 10-11 | 60 | | 2345 | | | 1 | | | | | - 1 | 1 | | ł |
| 13-14 | 60 | | 2345 | 1 | | 1 | | | 1 1 | | 1 | 1 | | l |
| 14-15 | 56 | | 1730-0255 | 62 | | 1 | | | 1 1 | | | | | ł |
| 16-17 | 61 | | 2200-2325 | 1 02 | MAY | 1 | | i | 1 1 | OCTOBER | 1 | 1 | | l |
| 18-19 | 62 | | 2240 | 1 | | ĺ | | i | 1 1 | | | | | ł |
| 19-20 | 62 | | 2350 | 1 1 | 1-2 | 61 | G | 2240-0040 | 1 | 1-2 | 61 | HA,F | 1940-0350 | 66 |
| 20-21 | 61 | | 2300-0055 | | 6-7 | 55 | HA.RA | 2130-0140 | 59 | 4-5 | 58 | HA, RB | 1925-2230 | 64 |
| 21-22 | 59 | | 2245-0545 | i i | 7-8 | 58 | R | 2130-2310 | " | 6-7 | 51 | HA, RA, PA, F | 1905-0430 | 56 |
| | 62 | | 2300-0045 | 1 1 | 10-11 | 60 | Ĝ | 2215 | | 7-8 | 58 | RA | 1950-0050 | |
| 22-23 | 60 | | 2155-0255 | 1 : | 16-17 | 58 | HA | 2130-2330 | | 8-9 | 63 | R | 0100-0400 | Į. |
| 23-24 24-25 | 60 | | 2040-2315 | | 23-24 | 59 | G | 2300-0200 | | 9-10 | 59 | R | 1925-2245 | 1 |
| 24-23 | ۱۰۰ | 4 | 2010 2323 |] | 24-25 | 60 | Ğ | 2335 | | 10-11 | 60 | G | 2050-2340 | l |
| | - 1 | ļ | 1 | 1 1 | 26-27 | 60 | Ğ | 2335 | 1 1 | 11-12 | 63 | G | 1940 | Ì |
| | - 1 | | } | 1 1 | 28-29 | 52 | HA, RA | 2340-0240 | 62 | 12-13 | 59 | R | 2050-0001 | ŀ |
| FEBRUARY | - 1 | į | Į. | 1 1 | 29-30 | 59 | G | 2345 | | 13-14 | 56 | HA, RA | 2050-2315 | ŀ |
| FEBRUARI | 1 | - | ł | 1 1 | 1 25 55 | " | 1 | | | 15-16 | 57 | HA, RA | 1825-2220 | 65 |
| 2-3 | 56 | HA,RA,RB | 1755-2350 | 63 | ł | 1 | | | | 17-18 | 63 | R | 2140-0340 | |
| 3-4 | 60 | | 2140-0550 | 00 |] | | | | | 18-19 | 60 | RA, RB, F | 1842-2340 | 63 |
| | 61 | | 1910-2240 | 68 | JUNE | 1 | | | | 19-20 | 62 | G | 2000-0350 | |
| 4-5 | | | 2120-0600 | 64 | JONE | | | { | | 20-21 | 61 | Ğ | 2240-0140 | Į. |
| 5-6 | 58 57 | | 1800-2030 | 04 | 4-5 | 60 | R | 2300 | | 24-25 | 58 | HA . RA | 1800-0050 | |
| 13-14 | | | 1820-0150 | 62 | 26-27 | 59 | Ĝ | 0150 | 1 1 | 25-26 | 56 | HA, RA | 1950-0450 | 62 |
| 14-15 | 58 | HA, HB, RB | | 63 | 27-28 | 59 | Ğ | 0001-0200 | Ιİ | 26-27 | 59 | RA | 2250 | 66 |
| 15-16 | 61 | | 2250-2259 2015-0200 | 64 | 27-28 | 55 | G,R | 0050 | 1 | 27-28 | 56 | R | 2145-2310 | ١٠٠ |
| 16-17 | 60 | | 1900-0540 | | 29-30 | 33 | U, K | 0030 | j l | 41-40 | 1 30 | 1 ~ | and 0450 | 1 |
| 17-18 | 58 | | | 64 | l | 1 | | | 1 1 | 28-29 | 62 | R | 0050-0150 | \ |
| 18-19 | 61 | | 2200-0100 | امما | | | | 1 | | 29-30 | 59 | R | 1825-2152 | 63 |
| 19-20 | 57 | | 2000-0500 | 64 | l | 1 | | İ | i i | 30-31 | 62 | R | 0005 | |
| 20-21 | 60 | | 2140-0400 | ii | JULY | 1 | , | | 1 1 | 31-1 | 61 | | 2010-2017 | l |
| 26-27 | 59 | | 0300 | | 1 | ١., | D4 DD D | 2250 0200 | 57 | 31-1 | 10, | | 2010-2017 | l |
| 27-28 | 60 | | 2050-0300 | 66 | 15-16 | 51 | RA,RB,F | 2250-0200 | 3/ | | ì | l | | l |
| 28-29 | 61 | | 2300-0200 | 1 1 | 17-18 | 60 | RB | 0030-0130 | | | 1 | | | i |
| 29-1 | 58 | G | 0001-0400 | 1 1 | 26-27 | 60 | G | 2320-2330 | 1 | | 1 | İ | ' | 1 |
| | i | | | 1 1 | 28-29 | 58 | G | 0115 | | NOVEMBER | | | | |
| | 1 | | 1 | | 29-30 | 56 | RA | 2210-2350 | 1 | 2.4 | 1 | _ | 2000 0050 | 65 |
| | 1 | 1 | 1 | 1 1 | 30-31 | 58 | G | 2315 | | 3-4 | 59 | R | 2000-0050 | 65 |
| MARCH | i | İ | | 1 1 | | 1 | | | 1 1 | 6-7 | 61 | G | 1940 | ļ |
| | - 1 | | 1 | 1 1 | } | 1 | | |]] | 8-9 | 62 | RA | 2350 | ļ |
| 1-2 | 59 | HA | 1905-0600 | 67 | | 1 | | | | 11-12 | 58 | G | 1800-2400 | |
| 2-3 | 59 | R | 1900-0500 | 1 1 | AUGUST | 1 | | | 1 1 | 12-13 | 50 | HA, RA, F | 1733-0500 | 53 |
| 3-4 | 60 | RA | 2300-0200 | 67 | | 1 | | | | 13-14 | 52 | HA, RA, F | 1730-0550 | 60 |
| 4-5 | 62 | G | 0500 | 1 1 | 11-12 | 63 | R | 0025-0115 | 1 | 14-15 | 54 | HA,R | 1940-0540 | |
| 15-16 A | uroral | activity completed | ly obscured | by | 14-15 | 58 | G | 2050-2345 | | 15-16 | 51 | HA, RA, F | 1750-0600 | 57 |
| 0 | vercast | skies over whole | region. Act | tive | 16-17 | 53 | RA, RB | 2100-0305 | 61 | 16-17 | 60 | HA, R | 1750-0350 | } |
| 8 | urora s | een in geomagnetic | latitude ! | 52° | 17-18 | 54 | RA | 2115-0150 | | 17-18 | 60 | HA | 1840-0440 | } |
| i | n Weste | rn Atlantic. | ł | 1 1 | 19-20 | 57 | R | 2115-0250 | | 21 - 22 | 60 | G | 1815-2350 | l . |
| 16-17 | 61 | R | 2240-2400 | 1 1 | 20-21 | 59 | HA | 2110-0150 | 65 | 22-23 | 61 | G | 2040-2240 | |
| 25-26 | 63 | G | 2200 and | | 21-22 | 63 | R | 0230 | H | 23-24 | 60 | G | 1925-0340 | ł |
| | l | Į | 0100 | 1 1 | 24-25 | 63 | G | 2150 | 1 1 | 24-25 | 60 | G,R | 2140-0540 | ۱ |
| 28-29 | 59 | HA, RA, F | 1930-0400 | | 26-27 | 63 | G | 0050 | | 25-26 | 60 | HA,R,F | 1950-2250 | 63 |
| 29-30 | 60 | | 2130-0253 | 65 | 27-28 | 61 | G | 2150-2250 | | 27 - 28 | 59 | G,R | 1715-1905 | 1 |
| 30-31 | 58 | HA, RA, S, F | 2040-0400 | 62 | 28-29 | 59 | G | 2143-0150 | | | 1 | | and | İ |
| 31-1 | 52 | HA, RA, S, F | 2015-0400 | 57 | 29-30 | 54 | R | 2100-2330 | [] | | 1 | \ | 2010-2400 | ۱ |
| |] | 1 | 1 | l | | | | | | 30-1 | 61 | K | 2150 | 65 |
| | - | i | | | | Į | | | | | 1 | | | } |
| | | i | 1 | 1 1 |] | 1 | | | l | | 1 | i | | l |
| | i i | i | | 1 1 | SEPTEMBER | l | | | | | | | | 1 |
| | | | 1 | | | 1 | • | t i | | | | l | i i | f |
| APRIL | | | | 1 | Joi 12-22 | 1 | | | | ממפאימטמט | l l | | | |
| | | | 2025 2222 | | | 60 | מס סיט | 2200-0200 | 64 | DECEMBER | l | | | 1 |
| 1-2 | 52 | | 2025-0300 | 56 | 2-3 | 60 | HB,RB | 2200-0300 | 64 | | 50 | c | 1720-1724 | |
| 1-2 2-3 | 55 | G,R | 0050-0500 | | 2-3 4-5 | 56 | RA, RB | 2015-0250 | 60 | 1-2 | 58 56 | G G | 1720-1724 1750-2400 | |
| 1-2 2-3 6-7 | 55 60 | G,R HA,HB,R,F | 0050-0500 2055-0200 | 56 62 | 2-3 4-5 5-6 | 56 59 | RA,RB RA,RB,F | 2015-0250 2100-0040 | 60 63 | 1-2 6-7 | 56 | G | 1750-2400 | 62 |
| 1-2 2-3 6-7 7-8 | 55 60 59 | G,R HA,HB,R,F G | 0050-0500 2055-0200 2045-2100 | 62 | 2-3 4-5 5-6 7-8 | 56 59 60 | RA, RB RA, RB, F R | 2015-0250 2100-0040 2130 | 60 | 1 - 2 6 - 7 7 - 8 | 56 57 | G HA,RA | 1750-2400 1940-0140 | 62 |
| 1-2 2-3 6-7 7-8 10-11 | 55 60 59 57 | G,R HA,HB,R,F G RA,RB,S | 0050-0500 2055-0200 2045-2100 2000-0300 | | 2-3 4-5 5-6 7-8 10-11 | 56 59 60 63 | RA, RB RA, RB, F R RB | 2015-0250 2100-0040 2130 2225-2230 | 60 63 | 1-2 6-7 7-8 9-10 | 56 57 61 | G HA,RA G | 1750-2400 1940-0140 1740-0340 | 62 |
| 1-2 2-3 6-7 7-8 10-11 11-12 | 55 60 59 57 58 | G,R HA,HB,R,F G RA,RB,S R | 0050-0500 2055-0200 2045-2100 2000-0300 2035-2210 | 62 62 | 2-3 4-5 5-6 7-8 10-11 11-12 | 56 59 60 63 59 | RA, RB RA, RB, F R RB HA, RA | 2015-0250 2100-0040 2130 2225-2230 2050-0040 | 60 63 64 | 1-2 6-7 7-8 9-10 10-11 | 56 57 61 61 | G HA,RA G G | 1750-2400 1940-0140 1740-0340 1750-1950 | 62 |
| 1-2 2-3 6-7 7-8 10-11 11-12 13-14 | 55 60 59 57 58 60 | G,R HA,HB,R,F G RA,RB,S R HB | 0050-0500 2055-0200 2045-2100 2000-0300 2035-2210 2300-0100 | 62 62 | 2-3 4-5 5-6 7-8 10-11 11-12 12-13 | 56 59 60 63 59 61 | RA, RB RA, RB, F R RB HA, RA RA | 2015-0250 2100-0040 2130 2225-2230 2050-0040 0250-0330 | 60 63 | 1-2 6-7 7-8 9-10 10-11 11-12 | 56 57 61 61 60 | G HA,RA G G G | 1750-2400 1940-0140 1740-0340 1750-1950 1950-0050 | 62 |
| 1-2 2-3 6-7 7-8 10-11 11-12 13-14 14-15 | 55 60 59 57 58 60 57 | G,R HA,HB,R,F G RA,RB,S R HB G | 0050-0500 2055-0200 2045-2100 2000-0300 2035-2210 2300-0100 2100-2300 | 62 62 | 2-3 4-5 5-6 7-8 10-11 11-12 12-13 13-14 | 56 59 60 63 59 61 60 | RA, RB RA, RB, F R RB HA, RA RA HA, RA | 2015-0250 2100-0040 2130 2225-2230 2050-0040 0250-0330 0010-0125 | 60 63 64 | 1-2 6-7 7-8 9-10 10-11 11-12 12-13 | 56 57 61 61 60 60 | G HA,RA G G G G | 1750-2400 1940-0140 1740-0340 1750-1950 1950-0050 1700-0550 | 62 |
| 1-2 2-3 6-7 7-8 10-11 11-12 13-14 14-15 15-16 | 55 60 59 57 58 60 57 60 | G,R HA,HB,R,F G RA,RB,S R HB G | 0050-0500 2055-0200 2045-2100 2000-0300 2035-2210 2300-0100 2100-2300 2040-0249 | 62 62 64 | 2-3 4-5 5-6 7-8 10-11 11-12 12-13 13-14 17-18 | 56 59 60 63 59 61 60 61 | RA, RB RA, RB, F R RB HA, RA RA HA, RA HA | 2015-0250 2100-0040 2130 2225-2230 2050-0040 0250-0330 0010-0125 2350-0050 | 60 63 64 | 1-2 6-7 7-8 9-10 10-11 11-12 12-13 | 56 57 61 61 60 60 | G HA,RA G G G G G | 1750-2400 1940-0140 1740-0340 1750-1950 1950-0050 1700-0550 0150 | 62 |
| 1-2 2-3 6-7 7-8 10-11 11-12 13-14 14-15 | 55 60 59 57 58 60 57 60 58 | G,R HA,HB,R,F G RA,RB,S R HB G G G HA,RA | 0050-0500 2055-0200 2045-2100 2000-0300 2035-2210 2300-0100 2100-2300 2040-0249 2140-0159 | 62 62 | 2-3 4-5 5-6 7-8 10-11 11-12 12-13 13-14 17-18 20-21 | 56 59 60 63 59 61 60 61 60 | RA, RB RA, RB, F R RB HA, RA RA HA, RA HA, RA HB, RB | 2015-0250 2100-0040 2130 2225-2230 2050-0040 0250-0330 0010-0125 2350-0050 2245-0030 | 60 63 64 | 1-2 6-7 7-8 9-10 10-11 11-12 12-13 14-15 | 56 57 61 61 60 60 62 57 | G HA, RA G G G G G R | 1750-2400 1940-0140 1740-0340 1750-1950 1950-0050 1700-0550 0150 1648-0340 | 62 |
| 1-2 2-3 6-7 7-8 10-11 11-12 13-14 14-15 15-16 | 55 60 59 57 58 60 57 60 58 58 | G,R HA,HB,R,F G RA,RB,S R HB G G G HA,RA | 0050-0500 2055-0200 2045-2100 2000-0300 2035-2210 2300-0100 2100-2300 2040-0249 2140-0159 2005-2350 | 62 62 64 64 | 2-3 4-5 5-6 7-8 10-11 11-12 12-13 13-14 17-18 20-21 21-22 | 56 59 60 63 59 61 60 61 60 | RA, RB RA, RB, F R RB HA, RA RA HA, RA HB, RB G | 2015-0250 2100-0040 2130 2225-2230 2050-0040 0250-0330 0010-0125 2350-0050 2245-0030 2150-0250 | 60 63 64 | 1-2 6-7 7-8 9-10 10-11 11-12 12-13 14-15 15-16 18-19 | 56 57 61 61 60 60 62 57 58 | G HA,RA G G G G G R HA,R,S | 1750-2400 1940-0140 1740-0340 1750-1950 1950-0050 1700-0550 0150 1648-0340 1650-0350 | 62 |
| 1-2 2-3 6-7 7-8 10-11 11-12 13-14 14-15 15-16 | 55 60 59 57 58 60 57 60 58 | G,R HA,HB,R,F G RA,RB,S R HB G G G HA,RA G | 0050-0500 2055-0200 2045-2100 2000-0300 2035-2210 2300-0100 2100-2300 2040-0249 2140-0159 2005-2350 2120-0345 | 62 62 64 64 56 | 2-3 4-5 5-6 7-8 10-11 11-12 12-13 13-14 17-18 20-21 21-22 22-23 | 56 59 60 63 59 61 60 61 60 60 59 | RA, RB RA, RB, F R RB HA, RA RA HA, RA HB, RB G HA | 2015-0250 2100-0040 2130 2225-2230 2050-0040 0250-0330 0010-0125 2350-0050 2245-0030 2150-0250 2000-0400 | 60 63 64 | 1-2 6-7 7-8 9-10 10-11 11-12 12-13 14-15 15-16 18-19 | 56 57 61 61 60 60 62 57 58 60 | G HA,RA G G G G G G R HA,R,S | 1750-2400 1940-0140 1740-0340 1750-1950 1950-0050 1700-0550 0150 1648-0340 1650-0350 2050-0300 | 62 |
| 1-2 2-3 6-7 7-8 10-11 11-12 13-14 14-15 15-16 16-17 17-18 | 55 60 59 57 58 60 57 60 58 58 | G,R HA,HB,R,F G RA,RB,S R HB G G G HA,RA G HA,RA | 0050-0500 2055-0200 2045-2100 2000-0300 2035-2210 2300-0100 2100-2300 2040-0249 2140-0159 2005-2350 2120-0345 2130-0300 | 62 62 64 64 64 56 61 | 2-3 4-5 5-6 7-8 10-11 11-12 12-13 13-14 17-18 20-21 21-22 22-23 23-24 | 56 59 60 63 59 61 60 61 60 59 56 | RA, RB RA, RB, F RB HA, RA RA HA, RA HB, RB G HA | 2015-0250 2100-0040 2130 2225-2230 2050-0040 0250-0330 0010-0125 2350-0050 2245-0030 2150-0250 2000-0400 1915-0350 | 60 63 64 | 1-2 6-7 7-8 9-10 10-11 11-12 12-13 14-15 15-16 18-19 19-20 20-21 | 56 57 61 61 60 60 62 57 58 60 58 | G HA,RA G G G G G R HA,R,S G | 1750-2400 1940-0140 1740-0340 1750-1950 1950-0050 1700-0550 0150 1648-0340 1650-0350 2050-0300 1750-0500 | 62 |
| 1-2 2-3 6-7 7-8 10-11 11-12 13-14 14-15 15-16 16-17 17-18 23-24 | 55 60 59 57 58 60 57 60 58 58 58 | G,R HA,HB,R,F G RA,RB,S R HB G G HA,RA G HA,RA,RB RA,RB | 0050-0500 2055-0200 2045-2100 2000-0300 2035-2210 2300-0100 2100-2300 2040-0249 2140-0159 2005-2350 2120-0345 2130-0300 2145-0200 | 62 62 64 64 64 56 61 | 2-3 4-5 5-6 7-8 10-11 11-12 12-13 13-14 17-18 20-21 21-22 22-23 23-24 24-25 | 56 59 60 63 59 61 60 61 60 59 56 | RA, RB RA, RB, F R RB HA, RA RA HA, RA HB, RB G HA G R | 2015-0250 2100-0040 2130 2225-2230 2050-0040 0250-0330 0010-0125 2350-0050 2245-0030 2150-0250 2000-0400 1915-0350 2000-2150 | 60 63 64 | 1-2 6-7 7-8 9-10 10-11 11-12 12-13 14-15 15-16 18-19 19-20 20-21 21-22 | 56 57 61 61 60 60 62 57 58 60 58 | G HA,RA G G G G G G R HA,R,S G G,HA G,HA | 1750-2400 1940-0140 1740-0340 1750-1950 1950-0050 1700-0550 0150 1648-0340 1650-0350 2050-0300 1750-0500 1715-0518 | 62 |
| 1-2 2-3 6-7 7-8 10-11 11-12 13-14 14-15 15-16 16-17 17-18 23-24 24-25 | 55 60 59 57 58 60 57 60 58 58 53 | G,R HA,HB,R,F G RA,RB,S R HB G G G HA,RA G HA,RA RB HA,RA,RB | 0050-0500 2055-0200 2045-2100 2000-0300 2035-2210 2300-0100 2100-2300 2040-0249 2140-0159 2005-2350 2120-0345 2130-0300 2145-0200 | 62 62 64 64 64 56 61 65 | 2-3 4-5 5-6 7-8 10-11 11-12 12-13 13-14 17-18 20-21 21-22 22-23 23-24 24-25 25-26 | 56 59 60 63 59 61 60 61 60 59 56 | RA, RB RA, RB, F RB HA, RA RA HA, RA HB, RB G HA | 2015-0250 2100-0040 2130 2225-2230 2050-0040 0250-0330 0010-0125 2350-0050 2245-0030 2150-0250 2000-0400 1915-0350 2000-2150 2000 and | 60 63 64 | 1-2 6-7 7-8 9-10 10-11 11-12 12-13 14-15 15-16 18-19 19-20 20-21 21-22 24-25 | 56 57 61 61 60 60 62 57 58 60 58 58 | G HA,RA G G G G G R HA,R,S G G,HA G,HA | 1750-2400 1940-0140 1740-0340 1750-1950 1950-0050 1700-0550 0150 1648-0340 1650-0350 2050-0300 1750-0500 1715-0518 2200-0100 | |
| 1-2 2-3 6-7 7-8 10-11 11-12 13-14 14-15 15-16 16-17 17-18 23-24 24-25 | 55 60 59 57 58 60 57 60 58 58 58 53 | G,R HA,HB,R,F G RA,RB,S R HB G G HA,RA, G HA,RA,RB HA,RA,RB HA,R,PS HA,RA,RB HA,RA,RB | 0050-0500 2055-0200 2045-2100 2000-0300 2035-2210 2300-0100 2100-2300 2040-0249 2140-0159 2005-2350 2120-0345 2130-0300 2145-0200 | 62 62 64 64 64 56 61 65 | 2-3 4-5 5-6 7-8 10-11 11-12 12-13 13-14 17-18 20-21 21-22 22-23 23-24 24-25 25-26 | 56 59 60 63 59 61 60 61 60 59 56 | RA, RB RA, RB, F R RB HA, RA RA HA, RA HB, RB G HA G R | 2015-0250 2100-0040 2130 2225-2230 2050-0040 0250-0330 0010-0125 2350-0050 2245-0030 2150-0250 2000-0400 1915-0350 2000-2150 | 60 63 64 | 1-2 6-7 7-8 9-10 10-11 11-12 12-13 14-15 15-16 18-19 19-20 20-21 21-22 | 56 57 61 61 60 60 62 57 58 60 58 | G HA,RA G G G G G R HA,R,S G G,HA G,HA | 1750-2400 1940-0140 1740-0340 1750-1950 1950-0050 1700-0550 0150 1648-0340 1650-0350 2050-0300 1750-0500 1715-0518 | |

The above table was compiled in the Balfour Stewart Auroral Laboratory of the University of Edinburgh from all data available for the longitude of the British Isles, using mainly observations made at British Meteorological Office stations and by British voluntary observers, but including also some of the data from the Faroes, from Ireland and from France. Acknowledgements are made to the Directors of the Meteorological Services of Denmark (for the Faroes data), Ireland and France.

In the table, Φ_1 is the lowest geomagnetic latitude from which aurora was seen in the longitudes considered. On any night, if more than a horizon glow was seen from the British Isles, the other forms reported are listed and the period of time (G.M.T.) during which the display was observed from the British Isles is stated. The standard abbreviations are used for the forms and types of activity: G = horizon glow: HA = homogeneous arc: RA = rayed arc:

Because of varying observing conditions, these data are in somes cases incomplete; aurora may have been overhead in latitudes lower than those listed, and other forms may have occurred. Fuller details may be obtained from the Laboratory on request.

| , | | | |
|---|--|--|--|
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |

19 LERWICK Factor 0.89 (metre 1)

| 19 | LERWI | CK | | | | | | | | | F | actor (|).89 (m | etre ⁻¹ |) | | | | | | | | | JANUAR | y 196 | 0 |
|----------|-------------|---------------|------------|-------------|------------|------------------|------------------|------------|-------------|-------------|-------------|--------------|-------------|--------------------|--------------|--------------|------------|-------------|-------------|-------------|-------------|-------------|--------------|-------------|------------|-------------------------|
| | Hour (| G.M.T. 1-2 | 2-3 | 3-4 | 4-5 | 5-6 | 6-7 | 7-8 | 8-9 | 9-10 | 10-11 | 11-12 | 12-13 | 13-14 | 14-15 | 15-16 | 16-17 | 17-18 | 18-19 | 19-20 | 20-21 | 21 -22 | 22-23 | 23-24 | Me | an |
| - | | | | | | | | | | | vo. | lts per | | | | | | | | | | | | | | |
| 1 | -* | | - | - | - | | | - | _ | - | 75 | 50 | 100 | 100 | 75 | 75 | 75 | 75 | 75 | 75 | 50 | 25 | 50 | 50 | 68 | (14) |
| 2 | 50 0* | 50 25* | 50 | 50 50* | 25 | 0 | 50 | 75 | 100 | 100 | 100 | 75 | 75 | 100 | 100 | 75 | 75 | 75 | 75 | 75 | 75 | 75 | 25* | -25* | 69 | (22) |
| 4 | | 25+ # | 25* ~* | 50+ | 50 | 50 | 50 100 | 100* 75 | 100* 100 | 125* 125 | 150* | 150* 100* | 150 75* | 150 100* | 150* 100* | 150* | 125* | 125* | 150* | 125 -+ | 125* Z+* | -* 250* | -+ Z±≠ | 100+ | 96 | (6) |
| 5 | -25* | 150* | Z±* | 50* | 50* | Z+* | 100* | Z+* | Z+ | 150 | 150* | Z+* | 150* | Z+* | 150 | 125 | 200* | 100* | 125 | 125 | 100 | 125 | 100* | 100* 75* | 100 129 | (4) (7) |
| 6 | 75* | 50* | 75* | 0* | 50 | 75* | 100* | 100* | 100* | 100* | 100* | 125 | 125 | 125 | 125 | 100* | 100* | 125* | 100 | 100 | 100* | 75* | 100* | 50* | 107 | (7) |
| 7 | 75* | 50* | 75 | 75* | 75* | 75 | 75* | 100 | 100 | 100 | 100 | 100 | 50* | 50* | 100 | 75* | 50* | 100* | 125 | 125 | 125 | 125 | 125 | 100 | 105 | (Ì4) |
| 8 | 100 | 100 | 75 | 75 | 75* | 100* | 100 | 125 | 175 | 100* | 125 | 150* | 100* | 125* | 125* | 125* | 50* | 0* | 25* | 125* | 150* | 125 | 125 | 125 | 114 | (11) |
| 9 10 | 115 75 | 115 100 | 90 100 | 90 100 | 70 100 | 70 75 | 90 75* | 140 25* | 160 50* | 160 50* | 25* | 255 50 | 21 0 75 | 140 100* | 160 -75* | 115 -225* | 70 100* | 70 75* | 70 75* | 90 50* | 90 100* | 90 75 | 90 125* | 90 125* | 115 83 | (23) (9) |
| 11 | 100* | 100* | 75* | 100* | 125 | 125 | 125 | 125* | 100* | 100* | 125 | 100* | 125* | 125* | 125* | 75* | 100* | 75* | 100* | 150* | 150* | | 125 | 100 | 125 | (7) |
| 12 | 100 | 75 | 75* | 75* | 125* | 125* | 100 | 125* | 200* | 250* | 300* | 300* | 200* | 150* | 125* | Z+* | Z+* | Z+* | Z+* | -125* | 25* | | -125* | 100* | 92 | (3) |
| 13 | 125* | 125 | 150 | 150 | 150* | 175* | Z+ | Z+* | Z+* | Z+* | 225* | 175 | 200 | 200 | 200* | 225 | ~* | - | - | 225 | 200 | 225 | 175* | 75* | 187 | (Ì0) |
| 14 | 75* | 100 | 100 | 100 | 150* | 150* | 150 | 175 | 200 | 200 | 200 | 175 | 200 | 200 | 200 | 150 | 175 | 175 | 150 | 125 | 125* | 250 | 125 | 100 | 163 | (20) |
| 15 | 75 | 100 | 100 | 100 | 1 00 | 125 | 125 | 100* | 125* | 125* | 100* | 125* | 75* | 125 | 125 | 75 | 100* | 100* | 150 | 150 | 150 | 150 | 100* | 75* | 118 | (14) |
| 16 | 125* | 125* | 125* | Z+* | Z+* | 175 | 150 | Z+ | 125 | 125 | 125* | 125* | 125* | 125 | 100 | 75 | 100 | 125 | Z+* | 100* | -200* | Z+* | 100 | 100* | 120 | (10) |
| 17 | 100 | 100* | 125* | 75 | 100 | 100 | 100 | 100 | 75* | 50* | 200* | 100* | 225* | 100* | 100* | 100* | 125* | 125 | 125 | 125 | 100 | 100 | Z+* | 200* | 105 | (11) |
| 18 | 90 * | 90 90 | 70 | 70 90 | 45 | 70 | 115 | 140 | 115 | 90 | 160 | 90 | 115 | 140 | 160 | 185 | 205 | 140 | 140 | 140 | 115 | 115 | 115 | 90 | 118 | (23) |
| 19 20 | 90 | 70 | 70 70 | 70 | 70 70 | 70 4 5 | 70 4 5 | 70 45 | 70 45 | 90 70 | 115 70 | 115 70 | 140 90 | 140 115 | 140 90* | 115 90 | 115 70 | 115 45 | 115 70 | 140 90 | 140 140 | 115 140 | 115 115 | 90 90 | 103 79 | (24) (23) |
| 21 | 100 | 75 | 75 | 100 | 75 | 100 | 75 | 75* | 75 | 100 | 75 | 75* | 75* | 175* | 125* | 125* | 225* | ~50* | -75* | -25* | 25* | 75* | 25* | 75* | 85 | (10) |
| 22 | 75* | 150* | 175* | 75* | 175* | 275* | 300* | 275* | 250* | 225* | 175 | 125 | 125 | 150* | 150* | 150 | 275 | 325 | 350 | 450 | 425* | 300* | -25* | 350* | 218 | `(7) |
| 23 | 275* | 175 | 175 | 50* | Z-* | 125* | Z-* | 175* | 400 | 200* | Z-* | Z-* | Z-* | 125* | 175 | 175 | 250 | 250 | 275 | Z+ | 525 | 225 | 250 | 300 | 265 | (12) |
| 24 | 275 | 400 | 375 | 400 | 150 | 100* | 50* | 50* | 75 | 75 | 75 | 75 | 100 | 75 | 75 | 75* | 100 | 100 | 100 | 100 | 125 | 100 | 125 | 75 | 149 | (20) |
| 25 | 75 | 50 | 50 | 50 | 50 | 75 | 75 | 75 | 75 | 75 | 75 | 50 | 75 | 75 | 150* | 100* | 75* | 150 | 125 | 125 | 75 | 75 | 75 | 75 | 77 | (21) |
| 26 | 75 | 50 | 50 | 50 | 50 | 50 | 75 | 75 | 100 | 100 | 100 | 100 | 75 | 75 | 100 | 100* | 100 | 100 | 125 | 125 | 75* | 125 | 100 | 75 | 85 | (22) |
| 27 | 75 | 75 | 75 | 75 | 50 | 50 | 75 | 75 | 75 | 75 | 75 | 100 | 100 | 125 | 175 | 75 | 100 | 125 | 175 | 200 | 175 | 175 | 175 | 125* | 108 | (23) |
| 28 29 | Z-+ 100 | 75 125 | 100 125 | 100 100* | 100 100 | 75 100 | 100 Z+ | 100 125 | 150 Z+* | 125 Z+* | 150 150* | 125 175* | 150 | 175 | 200* | Z-* | 125* | 125 | 100 | 125 | 125 Z+* | 125* Z+* | 100* | 100 | 117 | (18) |
| 30 | 100 | 100 | 100 | 100 | 100 | 75* | -75 * | 25* | 150* | 100* | 125* | 150* | 125* 150 | 175* 150* | 150 150* | 175 125 | 150 125 | 100* 125 | 125 175* | 125* 75* | 100* | _ | -75* 150* | 125 Z+* | 127 114 | (11) (9) |
| 31 | Z+* | Z++ | Z+* | 125 | 100 | 100 | 100 | 100 | 75* | 75* | 125* | 75* | 125* | 125* | 125 | 125* | 125* | 100* | 125* | 125* | 125* | 150* | 200* | 175* | 108 | (9) (6) |
| | 98 | 107 | 104 | 104 | 79 | 81 | 93 | 100 | 126 | 110 | 112 | 109 | 125 | 129 | 131 | 125 | 132 | 132 | 135 | 126 | 144 | 129 | 121 | 106 | | (421) |
| Mean | (16) | (20) | (20) | (19) | (20) | (19) | (20) | (16) | (17) | (16) | (16) | (17) | (18) | (17) | (17) | (16) | (15) | (17) | (20) | (19) | (16) | (20) | (15) | (15) | 114 | (741) |
| | | | | | | | _ | | | | | | | | | | | | | | T | Mean | for 0a | days | [104 | (4)] |

POTENTIAL GRADIENT (reduced to open level surface)
Mean values for periods of sixty minutes between exact hours

| 2 225 140° 85° 140° 85° 140° 110 110° 170′ 140 140° 110° 170° 195° 170° 85° 170° 85° 170° 85° 170° 85° 170° 170° 170° 170° 170° 170° 170° 170 | UARY 1960 | FEBRU | | | | | | | | | ') | etre - | .00 (m | actor 1 | F | | | | | | | | | CK. | LERWIC | 19 |
|--|--|---|-----------------------------|-------------------------|------------------------|-------------------------------|------------------------------|--------------------------|-------------------------|------------------------|--------------------------|---------------------------------|---------------------------------|---------------------------------|---|--------------------------------|--------------------------|-------------------------------|------------------------------|-------------------------|-------------------------------|-------------------------------|------------------------------|--------------------|--------------------------------|------------------|
| 1 250* 250* 365* 24* 2** 2** 420* 2** 420* 2** 2** 2** 5** 45* 8\$* 110* 2** 0** 110* 170* 195* 365* 310* 2 2 25* 140* 85* 140* 110* 110* 110* 110* 110* 110* 110 | 4 Mean | 23-24 | 22-23 | 21 -22 | 20-21 | 19-20 | 18-19 | 17-18 | 16-17 | 15-16 | 14-15 | 13-14 | 12-13 | 11-12 | 10-11 | 9-10 | 8-9 | 7-8 | 6-7 | 5-6 | 4-5 | 3-4 | 2-3 | | 1 | |
| 9 85 110 110 110 110 140 140 140 140 140 140 | 120 (22) | 250 420 - 170 85 75 125 | 335 - 170 85 75 | 365 170 85 100 | 420 -* 195 85 | 310* - 170 85 100 | Z-* - 140 85 100 | Z-+ 170 110 125 | Z-* 170 85 125 | Z-* - 170 110 | Z-* -* 170 110* | -85* -* 170 85* 125 | 85* 170* -* 170 170 | 55* 195* -* 170 140 | Z-* 170* -* 170 170 125* | 110* -* -* 170 75* | 140* 30* -* 140 | 140 -30* - 140 75 | 170 Z-+ - 140 75 | 110* Z-* - 140 | 110 225* - 110 75 | 140* 365 - 110 75 | 85* 450 - 110 75 | 140* 505 -* 140 75 | 225* 475 -* 140 75 | 2 3 4 5 |
| 13 27 250 110 27 27 27 27 27 27 27 2 | 133 (24) 123 (19) | 75 110 110* | 100 110 | 125 110 | 125 110 | 150 110 | 150 110 | 150 30* | 150 85* | 175 55* | 200 110* | 175 170* | 175 140 | 150 140 | 140 | 170 | 125 140 | 140 | 140 | 140 | 110 | 110 | 125 110 | 110 | 85 | 9 |
| The second secon | 260 (14) 137 (16) | Z+* 225 0* Z+* 170 | 280 225* Z+* | 335 Z+* Z+* | 335 280* 365 | 390 140* 505 | 310 250* | 250 280* -* | 250 195* -* | 225 170 -* | 195 170 -+ | 195* 170 -* | Z+* 170 -* | 195* 140 -* | 280 170 * | 31 0 85 Z+* | 140 85 85* | Z+* 110 140* | 225* 110 140* | 170* 110 225* | Z+* 110 615* | Z+ 110 Z+* | 110 110 Z±* | 250* 140 Z±# | Z+* 225 85* | 12 13 14 |
| 22 | • - (0) • 287 (10) 220 (7) | 390* Z+* Z±* 225 Z±* | Z+* Z+* 195 | Z+* 85* 250 | Z+* 250 310 | Z+* 225 280 | 195* 195* 225 | 250* 310 55 | 335* 645 Z+* | 310* 590 140* | Z+ 195 Z+* | Z+ 170 Z+* | Z+ 110* Z+* | Z+* 310* -170* | Z+* -225* 170* | Z+* 195* -30* | Z+* 170 Z+* | Z+* 170 Z+* | Z+* 140* Z+* | Z+* Z+* Z+* | 11 0* 11 0* Z±* | Z+* 85* Z+* | Z+* 110* Z+* | Z+* 140 Z±* | Z+* Z+* 110* | 17 18 19 |
| 27 | 190 (15) 82 (24) 128 (21) 101 (24) 154 (8) | 170 75 110 175 Z±* | 75 140 150 | 75 280 150 | 75 225 200 | 75 140 150 | 50 195 125 | 75 170* 75 | 75 170* 75 | 50 140* 100 | 75 170 75 | 75 140 75 | 50 85 75 | 75 85 100 | 75 85 175 | 100 110 125 | 75 110 100 | 100 110 75 | 125 110 50 | 125 85 50 | 100 85 50 | 100 85 50 | 75 110 75 | 100 110 75 | 100 110 75 | 22 23 24 |
| media | 116 (6) 130 (20) | 110* 85 85 55* | 110 85 | 110 110 | Z+* 140 | Z* 170 | Z-* 140 | Z±* 140 | -30* 170 | 110 170 | 140 170 | 140 170 | 170* 170 | Z-* 140 | Z-* 110 | -225* 110 | Z-* 110 | Z-* 110 | Z±* 110 | -335 * 110 | -475 * 85 | -30* 0* | 170* -55* | 110* Z±* | 110* 85* | 27 28 |
| (15) (15) (15) (17) (17) (17) (17) (17) (17) (17) (18) (19) (19) (19) (19) (19) (19) (19) (19 | 160 (349) | 155 (17) | | 188 (17) | 202 (19) | 197 (16) | 183 (14) | 159 (14) | 191 (13) | 181 (15) | 161 (14) | 157 (14) | 150 (14) | 147 (15) | 166 (16) | 159 (12) | 127 (13) | 143 (15) | 146 (14) | 107 (11) | 112 (14) | 117 (11) | 152 (16) | 154 (14) | 153 (13) | Mean |

The potential gradient is reckoned as positive when the potential increases upwards. The symbol Z indicates either that the trace fluctuates rapidly so that estimation of a mean value is impracticable, or that the trace is limited by the range of the instrument (see Introduction); and the suffix +, - or i indicates that the mean value is plainly positive, plainly negative, or indeterminate in sign. The occurrence of precipitation of any sort is indicated by an asterisk. Round brackets round any hourly mean indicates that the record during that hour is somehow imperfect.

19 LERWICK

Factor 1.06 (metre-1)

MARCH 1960

| | Hour C | Y. M. T | | | | | | | | | | | | | | | | | | | | | | | | |
|-----|--------|---------|------|------|-------|------|------|-------------|------|------|-------|---------|-------|-------|-------|-------|-------|-------|-------|--------|-------|---------|--------|-------|------|------|
| - 1 | | | | | | | | | | | | | | | | | | | | | | | | | 1 | |
| | 0-1 | 1-2 | 2-3 | 3-4 | 4-5 | 5-6 | 6-7 | 7-8 | 8-9 | 9-10 | 10-11 | 11-12 | 12-13 | 13-14 | 14-15 | 15-16 | 16-17 | 17-18 | 18-19 | 19-20 | 20-21 | 21 - 22 | 22-23 | 23-24 | Me | an |
| | | | | | | | | | | | vo. | its per | metre | | | | | | | | | | | | 1 | |
| 1 | -180* | 30* | 180* | 0* | 240* | -90* | 150 | 120* | 120* | 150 | 120* | 150* | 120* | 180 | 150 | 150 | 180* | 1 80 | 120* | 90* | 120* | 30* | 150* | 60* | 160 | (6) |
| 2 | 90* | -90* | 30* | 30 | 30 | 30* | 30* | 30 | 60 | 60 | 30 | 0 | 30 | 30 | 60 | 60 | 60 | 90 | 60 | 90 | 120 | 150 | 150 | 150 | 68 | (19) |
| 3 | 150 | 120* | Z-+ | Z±* | -120* | 90 | 90 | 120 | 150 | 90 | 90 | 90 | 90 | 60* | 90* | 90 | 90 | 90 | 90 | 90 | 90 | 90 | 60 | 60 | 95 | (18) |
| 4 | 110 | 85 | 85 | 85 | 55 | 55 | 55 | 55 | 85 | 85 | 110 | 85 | 110 | 110 | 110 | 140 | 140 | 140 | 140 | 140 | 140 | 110 | 110* | 85* | 101 | (22) |
| 5 | 110* | 140* | 170 | 195 | 250 | 280 | 310 | 280 | 335 | 335 | 310 | 390 | 475 | 505 | 505 | 420 | 310 | 280 | 335 | 390 | 250 | 195 | 225 | 170 | 314 | (22 |
| 5 | 170 | 170 | 140 | 140 | 140 | 140 | 170 | 170 | 140 | 140 | 110 | 140 | 140 | 140 | 140 | 140 | 170 | 170 | 170 | 170 | 195 | 140 | 140 | 170 | 152 | (24 |
| 7 | 170 | 170 | 140 | 140 | 140 | 140 | 140 | 140 | 140 | 140 | 140* | 170 | 170 | 170 | 170 | 195 | 140 | 140 | 140 | 170 | 170 | 140 | 140 | 140 | 153 | (23 |
| В | 140 | 140 | 140 | 110 | 140 | 140 | 140 | 140 | 110 | 110 | 110* | 140* | 140 | 170* | 170* | 170* | 170 | 170 | 170* | 170* | 170 | 140 | 140 | 140 | 140 | (17 |
| 9 | 150 | 150 | 120* | 90* | 90* | 90* | 150* | 150* | 150 | Z+ * | Z++ | Z+* | Z+* | Z+* | Z+* | 180* | 180* | 240* | 240* | 150* | 150* | 180 | 180* | 210* | 157 | (4 |
| 0 | 170 | 140* | 195 | 140* | 195* | 195* | 195* | 195* | 170* | 140* | 170* | 170 | 170 | 170 | 110 | 140 | 140 | 140 | 110* | 140* | 140 | 140 | 110 | 110 | 147 | (Ì3 |
| ιl | 90* | 60* | 120* | 90 * | 90* | 180* | 330* | 390* | 300* | 210* | 180* | 210* | 150* | 150* | 150 | 150 | 120 | 180 | 210 | 300 | 300 | 210* | 180 | 240 | 203 | (9 |
| 2 | 150 | 120 | 150 | 150 | 150 | 120 | 150 | 150 | 180 | 120 | 120* | 90+ | 150* | 150* | 180+ | 180 | 150+ | 150+ | 150 | 120 | 150 | 90+ | 120* | 90 | 142 | (15 |
| 3 | 60* | 90* | 90 | 60 | 60 | 60 | 30 | 60 | 120 | 150 | 210 | 210 | 240 | 240 | 240 | 180 | 120 | 150* | 210 | 120 | 150+ | 180 | 210* | 210* | 143 | (18 |
| • | 120* | 150 | 150* | 150* | 150* | 210* | 120* | 120* | 30* | 90 | 150 | 120 | 120* | 120+ | 150 | 150* | 180 | 240 | 180 | 180* | 270* | 270 | 210+ | 390* | 170 | (10 |
| 5 | Z+* | 210* | 180* | 150 | 180* | 180* | 210 | 180 | 240 | 150 | 180 | 210 | 240 | 240 | 270 | 210 | 180 | 270 | 240 | 210 | 240 | 180* | 180* | 150 | 210 | (17 |
| 5 | 140* | 140* | 140* | 170* | 140* | 170* | 140* | 140* | 140* | 140* | 170* | 140* | 170 | 170* | 170* | 195* | 195* | 195* | 170+ | 1 70* | 170* | 140* | 140+ | 110 | 140 | (2 |
| 7 | 140* | 110 | 110 | 140* | 140* | 110* | 140* | 140 | 110 | 140* | 170* | 140* | 140* | 170* | 170* | 170+ | 195* | 195* | 195 | 195* | 225 | 225 | 195 | 195 | 167 | (9 |
| 3 | 195 | 140 | 195 | 170 | 170 | 170 | 140 | 140 | 140 | 170 | 140 | 140 | 170 | 195 | 195 | 195 | 170 | 170 | 195 | 195 | 195 | 195 | 170 | 170 | 172 | (24 |
| , | 140 | 140 | 140 | 170 | 140 | 140 | 170 | 170 | 140 | 140 | 140 | 140 | 170 | 140 | 140 | 170 | 195 | 195 | 225 | 225 | 195 | 195 | 195 | 170 | 166 | (24 |
| 0 | 150 | 150 | 1 50 | 150 | 180 | 1 50 | 150* | 150* | 150* | 120* | 90* | 120* | 120* | 150* | 150* | 90* | 150+ | 60* | 150* | 180* | 90* | 30* | 150+ | 90* | 155 | (6 |
| ιĺ | 120* | 90* | 90* | 120* | 150* | 120* | | -120* | 60* | -60* | 0* | -60* | 30* | 90* | 120* | 150* | 180* | 150* | 150 | 150* | 120* | 210* | 210+ | 270 | 210 | (2 |
| 2 ∣ | 270 | 270 | 270 | 240 | 240 | 270 | 270 | 210 | 150 | 1 50 | 150 | 180* | 180* | 60* | -90* | 120* | 240 | 300 | 300 | 300 | 150* | 90* | 120* | 270 | 244 | (16 |
| 3 | 270 | 270 | 270 | 150 | Z+* | 300* | 270* | 270* | Z+* | 330 | 330 | 300 | 360 | 360 | 360 | 360 | 390 | 390 | 450 | 450 | 480 | 420 | 360 | 360 | 351 | (19 |
| | 365 | 365 | 365 | 335 | 310 | 280 | 250 | 280 | 280 | 280 | 280 | 280 | 280 | 225 | 280 | 280 | 250 | 365 | 335 | 390 | 450 | 335 | 310 | 250 | 309 | (24 |
| 5 | 195 | 195 | 195 | 195 | 195 | 195 | 195 | 225 | 225 | 225 | 225 | 195 | 195 | 195 | 225 | 225 | 225 | 250 | 250 | 250 | 225 | 250 | 250 | 225 | 218 | (24 |
| 5 | 140 | 140 | 140 | 110 | 110 | 110 | 110 | 85 | 110 | 110 | 110 | 110 | 140 | 140 | 140 | 170 | 195 | 110 | 110 | 110 | 85 | 85 | 85 | 85 | 118 | (24 |
| 7 | 60 | 60 | 0 | 0* | 30* | 30* | 30 | 60 | 90 | 60 | 120 | 120 | 120 | 120* | 120 | 60 | 120 | 120 | 120 | 120* | 90* | 90 | 60* | 60* | 84 | (16 |
| В | 30* | 30 | 30* | 60* | 60* | 60 | 90 | 90 | 90 | 90* | 90 | 30* | 120* | 150 | 120 | 120 | 120 | 120 | 60* | -1 50* | 120* | 120* | 120* | 90 | 97 | (12 |
| 9 | 90 | 90* | 90 | 90 | 60 | 60 | 90* | 12 0 | 90 | 120 | 120 | 90 | 30* | 90 | 90 | 120 | 120 | 150 | 180 | 1 50 | 1 50 | 150 | 1 50 | 120 | 114 | (21 |
| · | 90 | 90 | 120 | 120* | 120* | 120 | 150 | 150* | 150* | 120 | 120 | 120 | 120 | 120 | 90* | 90* | 60 | 120 | 120 | 90 | 90* | 120* | 120 | 90* | 112 | (15 |
| | 90* | 60 | 60* | 60* | 90* | 90* | 90 | 90 | 120 | 120 | 120 | 90 | 120 | 150 | 120 | 120 | 90 | 90 | 60 | 60 | 90 | 120 | 90 | 60 | 98 | (19 |
| an | 167 | 150 | 158 | | 148 | 143 | 147 | 140 | 148 | 150 | 157 | 159 | 183 | 187 | 1 83 | 176 | 166 | 186 | 192 | 201 | 203 | 1 81 | 1 71 | 165 | 168 | (493 |
| | (19) | (20) | (20) | (18) | (16) | (18) | (20) | (21) | (22) | (23) | (20) | (20) | (20) | (19) | (21) | (22) | (24) | (24) | (24) | (20) | (20) | (21) | (18) | (23) | | |
| | | | | | | | | | | | | | | | | | | | | | | Mean | for Oa | days | [177 | (13 |

POTENTIAL GRADIENT (reduced to open level surface)
Mean values for periods of sixty minutes between exact hours

| 19 | LERWIC | K | | | | | | | | | Fac | ctor 1 | 07 (me | tre ⁻¹) | | | | | | | | | | APRI | L 196 | 50 |
|----------------------------|-----------------------------------|----------------------------------|------------------------------------|-----------------------------------|--|-----------------------------------|----------------------------------|----------------------------------|-----------------------------------|----------------------------------|------------------------------------|---|--|--|------------------------------------|--------------------------------------|-----------------------------------|------------------------------------|-----------------------------------|---------------------------------|----------------------------------|----------------------------------|------------------------------------|-----------------------------------|---------------------------------------|--|
| | Hour (| 3. M. T. 1-2 | 2-3 | 3-4 | 4-5 | 5-6 | 6-7 | 7-8 | 8-9 | 9-10 | 10-11 | 11 -12 | 12-13 | 13-14 | 14-15 | 15-16 | 16-17 | 17-18 | 18-19 | 19-20 | 20-21 | 21 - 22 | 22-23 | 23-24 | Me | an |
| 1 2 3 4 5 | 30 90 -180* 150 150* | 30 120 210* 150 150* | 30 120 270 150 150 | 30 120 300 150 -90* | 55* 90 270 150 120* Z-* | 85 90 270 150 30* | 110 90 270 150 60* | 180 | 140 120 390 150 -240* | 110 120 330 120 150* | 110 150 240 120 180* | 1ts per 110 150 210 90 210 | 85 150 210 120* 300 390 | 85 150 180 -30* 360 420 | 85 120 150 60* 360 | 85 120 150 -30* 390 | 55 60 120 360* 360 | 55 90 150 150* 390 | 85 90 180 90* 360 | 85 120 210 120* 420 | 110 60* 210 150* 420 | 85 -60* 210 180* 300 | 55 -360* 210 150* 210* | 55 -150* 180 120* 30* | 79 113 229 137 335 235 | (23) (20) (22) (12) (12) (17) |
| 7 8 9 10 | 85 -60* 150* 90 | 85 -120* 150* 120 | 85 180* 120* 120 | 85 180 180* 120 | 85 180 240* 90 | 85 270 90* 120 | 110 300 -30* 120 | 195 300 ~270* 120 | 110 300 -120* 150 | 110 360 -240* 150 | 110 420 (-360)* 240 | 140 480 (-480)* 240 | 140 300* Z-* 270 | 140 210* Z-* 240 | 90* -300* 120 | 110 150* 120* 120 | 140 240 120 90 | 110 300 150 120 | 110 300 150 120 | 310 210* 150 Z+* | 390 240* 120 -540* | 280 120 150 Z-* | 250* 180* 150 Z-* | 110* 180* 120 -360* | 142 288 139 145 | (22) (13) (8) (19) |
| 11 12 13 14 | -960* 90 Z-* Z+* 150* | -780* 90 60* 60* Z+* | -840* 90 -360* 90* Z+* | -600* 60 Z-* 90* 180* | -870* 60 -30* 60* 150* | -360* 90 90* 180* Z+* | -180* 120 120 120 120 | 0* 150 150 120 Z+* | -30* 120 150 120 240* | 0* 150 120 120* 120 | 30 150 90 120 120* | 30* -60* 120* 120 120* | 30* -450* Z±* 120 120 | -90* -90* 120* 150 120 | -150* 120* 60 270* 120 | -180* 150 (60) 210* 150* | -330* 150 90 90* 120* | -270* 150 90 330* 120* | -750* 150 90 180* 120 | -90* 180 60* 150* 120 | 90 180 120* 300* 120 | 90 120* 120* 60* 150 | 90 Z-* 60* 90* 150 | 90 Z-* 60* 60* 120 | 78 125 102 124 126 | (5) (17) (10) (7) (10) |
| 16 17 18 19 20 | 120* 140 250 140 180 | 120 140 195 140 180 | 120 140 170 110 180 | 120 140 140 110 60* | 120* 140 140 85 60* | 120 140 110* 85 -510* | 120 140 140 85 120* | 120* 140 110 85 120* | 120* 170 110 110 Z±* | 120 170 110 110 360* | (120)* 140 110 110 Z+* | (180) 110 110 140 -180* | (150) 110 85 140 180* | (150) 140 85 110 270* | (150) 140 110 110 150* | (150) 170 170 85 150 | (150) 195 195 110 150 | 150 195 170 170 150 | 120 225 170 170 150 | 120 225 195 225 150 | 120 225 225 250 120* | 150 195 195 140 120* | 180 195 170 170 150* | 180 195 170 195 120* | 141 163 153 133 161 | (19) (24) (23) (24) (8) |
| 21 22 23 24 25 | 120 85 150* 85 60* | 90* 85 90* 85 60* | 120* 85* 120* 85 60 | 90* 110* 120 85 90* | 90 110 90* 85 30* | 90* 110 90* 85 120* | -30* 110 120* 85 90* | 30* 110 150* 85 90* | 90* 110 90* 85 90 | 60* 110 90 110* 150 | 60* 110 60 110 180 | 60* 110 60 110 180 | 60* 110 90 140 180 | 90* 110* 90 140 180 | 90* 110 120 110 150 | 90* 110 90 110 150 | 90* 110 90 110 120* | 90* 140 90 110 120* | 150* 140 90 110 90* | 150* 140 90* 85 30* | 120* 110 90* 85 60* | 120* 85* 60* 55 30* | 120 110* 90 55 90* | 120 110 90 55* 120* | 113 112 90 95 147 | (4) (19) (13) (22) (9) |
| 26 27 28 29 30 | 60* 90 120 85 60 | 120* 120 90* 85 60 | 120 90 60* 85 -270* | 150 90 60* 140 -210* | 120 60 60 310 -30* | 120 60 60 250 90* | 90 90 170 90 | 90 90 110 90 | 90 90 140 90* | 90 120 90 140 90 | 0* 90 60 140 90 | 90* 90 60 110 90 | 90* 90 60 85 90* | 120 120 60 85 120* | 120* 120 30 110 90* | 0* 90 90 140 330* | 120* 120 60 110 90* | 150 120 60 55 270* | 150 120 60 85 90 | 120 150 90 110 Z+* | 120 150 90 85 120* | 120 150 120 85 150* | 120 120 90 85* 90* | 90 150 120 85 Z+* | 124 107 79 122 83 | (16) (24) (21) (23) (8) |
| l ean | 111 (17) | 113 (16) | 121 (18) | 126 (17) | 125 (17) | 140 (18) | 139 (22) | 138 (21) | 151 (21) | 146 (23) | 143 (23) | 156 (22) | 151 (20) | 156 (20) | 136 (20) | 137 (21) | 135 (21) | 144 (22) | 145 (25) | 166 (20) | 169 (19) | 149 (18) | 128 (16) | 127 (17) | 141 | (474) |
| | | | | | | | | | | | | | | | | | | | | | L | Mean | for Oa | days | [125 | (8) |

Daily, monthly and annual means are computed excluding hours with precipitation and, of course, all indeterminate entries. The number of hours or days used in computing each mean is shown in round brackets. Entries in square brackets are means for 0a days (see Introduction) and the figure in round brackets is the number of days used in computing this mean.

MAY 1960

Mean for 0a days [160 (6)]

| 125 310* 175 580 465 230 465 30 60 | 95 95* | 2-3 125 60 -185* 95 30* 145 230 435 260 350 | 3-4 125* 95 30* 155 -185* 145 230 495 320 350 | 95* 60 30* 250 -60* 115 350 280 290 | 95* 95 280* 185 250* 115 435 370 | 95* 95 2+* 185 280* 260 290 | 125* 125 60* 525 125 | 340* 95 0* 620 185 | 9-10 125 -60* 215* 370 185 | | | 12-13 metre 95 -30* 185 | 60 * 95 | 14-15 60* 60 | 95* 60* | 95* 60* | 17-18 125* 60* | 95* 95 | 95* 30 | 125 | 125 -250* | 95* | 95 | 1 04 82 | |
|---|---|--|---|--|--|---|--|---|---|--|---|---|--|---|---|---|--|--|---|---|--|---|---|------------|---|
| 250* -495* 125 310* 175 580 465 230 465 30 60 | 95* -435* 125 215* 115 405 525 230 405 | 60 -185* 95 30* 145 230 435 260 | 95 30* 155 -185* 145 230 495 320 | 60 30* 250 -60* 115 350 280 | 95 280* 185 250* 115 435 | 95 Z+* 185 280* | 125 60* 525 125 205 | 95 0* 620 185 | -60* 215* 370 | 95 -215* 155 340 | 60 -370* 155 | 95 -30* | 60 * 95 | | | | | | | | | | | | |
| 250* -495* 125 310* 175 580 465 230 465 30 60 | 95* -435* 125 215* 115 405 525 230 405 | 60 -185* 95 30* 145 230 435 260 | 95 30* 155 -185* 145 230 495 320 | 60 30* 250 -60* 115 350 280 | 95 280* 185 250* 115 435 | 95 Z+* 185 280* | 125 60* 525 125 205 | 95 0* 620 185 | -60* 215* 370 | -215* 155 340 | -370* 155 | -30* | 95 | | | | | | | | | | | | |
| -495* 125 310* 175 580 465 230 465 30 60 | -435* 125 215* 115 405 525 230 405 | -185* 95 30* 145 230 435 260 | 30* 155 -185* 145 230 495 320 | 30* 250 -60* 115 350 280 | 280* 185 250* 115 435 | Z+* 185 280* | 60* 525 125 205 | 0* 620 185 | 215* 370 | 155 340 | 155 | | | 60 | 60* | 60± | 60+ | 0= | 30 | -215# | -250* | -620*- | 1 055* | 82 | |
| 125 310* 175 580 465 230 465 30 60 | 125 215* 115 405 525 230 405 | 95 30* 145 230 435 260 | 155 -185* 145 230 495 320 | 250 60* 115 350 280 | 185 250* 115 435 | 185 280* 260 | 525 125 205 | 620 185 | 370 | 340 | | 185 | | | | JU- | 0v* | 95 | | | | | | | (1 |
| 310* 175 580 465 230 465 30 60 | 215* 115 405 525 230 405 | 30* 145 230 435 260 | -185* 145 230 495 320 | -60* 115 350 280 | 250* 115 435 | 280* 260 | 125 205 | 185 | | | 310 | | 340 | 310 | 310 | 215 | 155* | 95* | 125* | 95* | 125* | 125 | 155 | 217 | `(|
| 175 580 465 230 465 30 60 | 115 405 525 230 405 | 145 230 435 260 | 145 230 495 320 | 115 350 280 | 115 435 | 260 | 205 | | 185 | 250 | | 185 | 560 | 465 | 185 | 310 | 495* | 525* | 435* | 340* | 405* | 310* | 340* | 294 | |
| 580 465 230 465 30 60 | 405 525 230 405 | 230 435 260 | 230 495 320 | 350 280 | 435 | | | 200 | | 200 | 215 | 155 | 185 | 155 | 215 | 215 | 185* | 155* | 155* | 155* | 280 | 310 | 155 | 202 | |
| 465 230 465 30 60 | 525 230 405 | 435 260 | 495 320 | 280 | | 290 | | 290 | 375 | 495 | 520 | 520 | 665 | 665 | 665 | 755 | 640 | 580 | 495 | 640 | 465 | 465 | 580 | 420 | |
| 230 465 30 60 | 230 405 | 260 | 320 | | 370 | | 260 | 290 | 405 | 405 | 520 | 405 | 495 | 665 | 810 | 870 | 610 | 665 | 520 | 520 | 435 | 260 | 350 | 459 | |
| 465 30 60 | 405 | | | 290 | | 650 | Z+ | 775 | 650 | Z+ | Z+ | 775 | 590 | 495 | 525 | 680 | 405 | 405 | 340 | 95 | 125 | 185 | 185 | 450 | (2 |
| 30 60 | | 350 | 3 50 | | 290 | 320 | 405 | 465 | (405) | 375 | 320 | 320 | 260 | 260 | 290 | 230 | 230 | 260 | 405 | 725 | 840 | 610 | 495 | 368 | |
| 60 | £Λ | | 330 | 290 | 260 | 260 | 175 | 175 | 205 | 260 | 205 | 230 | 320 | 320 | 320 | 290 | 175 | 145 | 145 | 115 | 85 | 85 | 60 | 237 | (2 |
| | | 60 | 60 | 60 | 60 | 85 | 115 | 175 | 175 | 175 | 230 | 205 | 205 | 205 | 260 | 320 | 145 | 145 | 145 | 145 | 115 | 115 | 85 | 141 | (2 |
| | 30 | 85 | 85 | 85 | 85 | 115 | 145 | 175 | 175 | 205 | 230 | 260 | 290 | 290 | 230 | 205 | 175 | 115 | 115 | 115 | 115 | 115 | 85 | 149 | |
| 60 | 60 | 60 | 60 | 60 | 465 | 620 | 435 | | (280) | (215) | (215) | (250) | | (250) | | (280) | 280 | 310 | 310 | 340 | 310 | 310 | 280 | 262 | (2 |
| 280 | | | | | | | | | | | | | | | | | | | | | | _ | | | |
| Z+ | Z+ | 960 | 590 | 370 | 435 | Z±* | 525 | Z+* | 370 | 370 | 310 | 310 | 370 | 340 | 310 | 340 | 185 | 185 | 215 | 185 | 95 | 95 | 125 | 334 | (2 |
| 155 | -95 | 125 | 185 | 125 | 250 | 215 | 185 | 155 | 155 | 125 | 155 | 185 | 215 | 185 | 250 | 185 | 125 | 95 | 125 | 280 | 405 | 650 | 650 | 212 | |
| | | | | | | | | | | | | | | | | | | | - | - | | | | | |
| - | - | | | | | | | | | | | _ | | | | | | | | | | - | | | |
| | | | | | | | | | | | | - | | - | | | - | | | | | | | | |
| 30 | | 60* | | 60 | 30 | | | 95 | | ••• | 60* | 60* | 30* | 60* | 60* | 95 | 60* | 95* | 60 | 60 | 60 | 60 | 60 | 63 | (1 |
| 30* | 30* | 0* | 30 | 60 | 60 | 95 | 60* | 30* | 60 | 95* | 95* | 95 | 95 | 125 | 125 | 155 | 155 | 125 | 95* | 95* | 95* | 95 | 60 | 95 | (1 |
| 60 | 30 | 30 | 60 | 60 | 60 | 30 | 60 | 60 | 60 | 95 | 60 | 95 | 155 | 215 | 250 | 310 | 250 | 340 | 215 | 125 | 125 | 125 | 95* | 125 | (2 |
| 60* | 125* | 435 | -280* | -125* | 0* | 155* | 125 | 125 | 125 | 125 | 185* | 60* | -250* | 155* | 155* | 185* | -60* | -405 * | -435* | -280* | Z-* | Z-+ | -560* | 187 | (|
| 185* | -95* | -95* | -60* | -310* | -155* | -125* | 125* | 95* | (95) | 125* | 215* | 155 | 155 | 155* | 125* | 125 | 125 | 125 | 125 | 155 | 125 | 125 | 95 | 131 | (1 |
| 95* | 30* | 95 | 155 | 155 | 125 | 60 | 95 | 125 | 125 | 125 | 125 | 125 | 185 | 215 | 215 | 215 | 215 | 185 | 185 | 215 | 155 | 155 | 125 | 153 | (2 |
| 125 | 125 | 125 | 155 | 125 | 125 | 155 | 185 | 280 | 310 | 310 | 310 | 370 | 340 | 155* | 185 | 155* | 95* | 250 | 465 | 435 | 370 | 250* | 250* | 250 | (1 |
| Z+* | 680* | 280* | 620 | 930 | 745 | 310* | 30* | 185* | (95) | (30) | 30* | 60 | 95 | 95 | 95 | 95 | 60 | -95* | -30* | 95* | 60 | 95 | 60 | 224 | (1 |
| 60* | 60* | 60 | 60 | 60 | 60 | 60 | 60 | -30* | 60* | 60* | 60 | 60 | 95 | 95 | 95 | 95 | 95 | 95 | 30 | 0 | 30 | 30 | 30 | 62 | (1 |
| 60 | 60 | 60 | 60 | 60 | 60 | 60 | 115 | 115 | 115 | 115 | 85 | 85 | 85 | 85 | 85 | 85 | 85 | 85 | 60 | 30 | 60 | 85 | 60 | 77 | (2 |
| 60 | 60 | 60 | 60 | 60 | 60 | 95 | 60 | 95 | 95 | 95 | 60 | 60 | 60 | 60 | 90 | 60 | 60 | 30 | 30 | 30* | 0* | 30 | 30 | 62 | (2 |
| 30 | 30 | 30 | 30 | 30 | 30 | 60 | 60 | 60 | 60 | 60 | 60 | 60 | 30 | 60 | 60 | 60 | 85 | 85 | 85 | 85 | 60 | 60 | 85 | 56 | (2 |
| 179 | 150 | 183 | 190 | 182 | 201 | 186 | 183 | 219 | 203 | 191 | 189 | 203 | 231 | 233 | 246 | 256 | 203 | 213 | 210 | 235 | 197 | 172 | 161 | 201 | (58 |
| (20) | (21) | (25) | (25) | (20) | (20) | (24) | (25) | (24) | (27) | (24) | (23) | (27) | (27) | (26) | (26) | (26) | (22) | (23) | (23) | (22) | (23) | (25) | (25) | | |
| -1 | 280 Z+ 1.55 520 30 30 30* 60 60* 1.85* 95* 1.25 Z+* 600* 60 60 60 | 280 | 280 280 280 27 27 960 27 29 29 29 29 29 29 29 29 29 29 29 29 29 | 280 280 250 Z+ Z+ 960 590 L55 -95 125 185 S20 495 290 375 30 30 60 60 30 30 60 60* 60* 30* 30* 0* 30 60 60* 125* 435 -280* L85* -95* -95* -60* L25* 125 125 155 L25* 125* 125* 155 L25* 125* 125* 155* L25* 125* 125* 125* 155* L25* 125* 125* 125* 125* L25* 125* 125* 125* 125* L25* 125* 125* 125* 125* L25* 125* 125* 125* 125* L25* 125* 125* 125* 125* L25* 125* 125* 125* 125* L25* 125* 125* 125* 125* L25* 125* 125* 125* 125* L25* 125* 125* 125* 125* L25* 125* 125* 125* 125* L25* 125* 125* 125* 125* L25* 125* 125* 125* L25* 125* 125* 125* L25* 125* 125* 125* L25* 125* 125* 125* L25* 125* 125* 125* L25* 125* 125* 125* L25* 125* 125* 125* L25* 125* 125* 125* L25* 125* 125* 125* L25* 125* 125* L25* 125* 125* L25* 125* 125* L25* 125* 125* L25* 125* 125* L25* 125* 125* L25* 125* 125* L25* 125* 125* L25* 125* 125* L25* 125* 12 | 280 280 250 215 Z+ Z+ 960 590 370 1.55 -95 125 185 125 520 495 290 375 495 30 30 60 60 30 30 60 60 60 60 30 30 60 60 60 30 30 60 60 60 60 30 30 60 60 60 60 125* 435 -280* -125* 185* -95* -95* -60* -310* 195* 30* 95 155 155 125 125 125 125 125 125 Z+* 680* 280* 620 930 60* 60* 60* 60 30 30 30 30 30 179 150 183 190 182 | 280 280 250 215 280 Z+ Z+ 960 590 370 435 L55 -95 125 185 125 250 S20 495 290 375 495 465 30 30 60 60 60 30 30 30 60 60 60 60 30 30 60 60 60 60 60 30 30 30 60 60 60 60 60 30 30 60 60 60 60 60 30 30 60 60 60 60 60 125* 435 -280* -125* 0* 185* -95* -95* -60* -310* -155* 95* 30* 95 155 155 125 L25 125 125 125 125 125 Z+* 680* 280* 620 930 745 60* 60* 60 30 30 30 30 30 30 179 150 183 190 182 201 | 280 280 280 250 215 280 250 215 280 250 27 27 28 280 250 370 435 27 28 280 250 370 435 27 28 280 250 370 435 27 28 280 250 37 28 28 28 28 28 28 28 28 28 28 28 28 28 | 280 280 280 250 215 280 250 250 Z+ Z+ 960 590 370 435 Z±* 525 1.55 -95 125 185 125 250 215 185 250 495 290 375 495 465 320 115 30 30 60 60 30 30 60 60 30 30 60 60 60 60 60 60 30* 30* 0* 30 60 60 95 60* 60 30 30 60 60 60 95 60* 60* 30 30 60 60 60 30 60 60* 125* 435 -280* -125* 0* 155* 125 185* -95* -95* -60* -30* 0* 95 125 125 | 280 280 280 250 215 280 250 250 310 Z+ Z+ 960 590 370 435 Z±* 525 Z±* 1.55 -95 125 185 125 250 215 185 155 250 495 290 375 495 465 320 115 85 30 30 60 60 30 30 60 60 95 30 30 60 60 60 60 60 60 95 95 30* 30* 0* 30 60 60 95 60* 30* 60 30 30 60 60 95 60* 30* 60 30 30 60 60 95 60* 30* 60 30 30 60 60 95 60* 30* 60* 125* <td>280 280 280 250 215 280 250 250 310 250 27 27 27 960 590 370 435 27 525 27 370 250 250 310 250 27 27 27 960 590 370 435 27 525 27 370 250 250 495 290 375 495 465 320 115 85 85 30 30 60 60 60 60 60 60 60 60 60 60 60 60 60</td> <td>280 280 280 250 215 280 250 250 310 250 280* Z+ Z+ P50 S90 370 435 Z±* 525 Z±* 370 370 1.55 -95 125 185 125 250 215 185 155 155 125 250 215 185 155 155 125 280* 290 375 495 465 320 115 85 85 85 30 30 60 60 60 60 95 95 60 30 30 60 60 60 60 60 60 60 60 30 30 60 <t< td=""><td>280 280 280 250 215 280 250 250 310 250 280* 60* Z+ Z+ 960 590 370 435 Z+* 525 Z+* 370 370 310 1.55 -95 125 185 125 250 215 185 155 155 125 125 520 495 290 375 495 465 320 115 85 85 85 30 30 60 60 60 30 30 60 60 95 95 60 60 30 30 60 60 60 60 60 60 60 60 60 60 60 30 0 30 60 60* 60* 60* 60 0 95 95 60 60* 60* 60* 60* 60* 60* 60* 60* 60*</td><td>280 280 280 250 215 280 250 250 310 250 280* 60* -95* 27* 77* 960 590 370 435 72* 525 72* 370 370 310 310 155 -95 125 185 125 250 215 185 155 155 125 155 185 120 495 290 375 495 465 320 115 85 85 85 85 175 30 30 60 60 60 30 30 60 60 95 95 60 60 60 30 30 60 60 60 60 60 60 60 60 60 60 60 60 60</td><td>280 280 280 250 215 280 250 250 310 250 280* 60* -95* 185* 27* 27* 960 590 370 435 27* 525 27* 370 370 310 310 370 310 370 310 370 310 370 310 370 370 310 370 310 370 310 370 310 370 310 370 310 370 370 310 370 310 370 370 310 370 310 370 370 310 370 370 310 370 370 310 370 370 310 370 370 370 370 370 310 370 370 370 370 370 370 370 370 370 37</td><td>280 280 280 250 215 280 250 250 310 250 280 60 60 60 60 95 185 255 215 185 125 125 125 125 125 125 125 125 125 12</td><td>280 280 280 250 215 280 250 250 310 250 310 250 280* 60* -95* 185* 250 340' 27* 7* 960 590 370 435 72* 525 72* 370 370 310 310 370 340 310 155* 125 125 125 125 125 125 125 125 125 125</td><td>280 280 280 250 215 280 250 250 310 250 280 8 60 60 60 60 30 30 0 0 30 30 60 60 60 60 60 60 60 60 60 60 60 60 60</td><td>280 280 280 250 215 280 250 215 280 250 310 250 280* 60* -95* 185* 250 340 250 215 25 250 370 435 21* 525 25* 21* 370 370 310 310 370 340 310 340 185 155 155 125 125 125 125 125 125 125 12</td><td>280 280 280 250 215 280 250 215 280 250 310 250 280 8 60 4 -95* 185* 250 340 250 215 435 Z+ Z+ 960 590 370 435 Z+ 525 Z+ 370 370 310 310 370 340 310 340 185 185 155 -95 125 185 125 250 215 185 155 155 125 185 155 125 185 250 185 125 95 290 375 495 465 320 115 85 85 85 85 175 85 85 145 85 60 60 30 30 60 60 30 30 60 60 60 60 60 60 60 60 60 60 60 60 60</td><td>280 280 280 250 215 280 250 215 280 250 310 250 280 8 60 4 -95* 185* 250 340 250 215 435 620 27</td><td>280 280 280 250 215 280 250 215 280 250 310 250 280 8 60 60 60 60 50 50 370 435 Zt 525 Zt 370 370 310 310 370 340 310 340 185 185 215 185 185 185 215 185 185 215 185 185 215 185 185 215 185 185 215 185 185 215 185 185 215 185 185 215 185 185 215 185 185 215 185 185 215 185 185 215 185 185 215 185 185 215 185 185 215 185 185 215 185 185 215 215 215 215 215 215 215 215 215 21</td><td>280 280 280 250 215 280 250 215 280 250 310 250 280 8 60 60 60 60 590 370 435 Z± 525 Z+ 370 370 310 310 370 340 310 340 185 185 215 185 95 1.55 -95 125 185 125 250 215 185 155 155 155 125 185 215 185 215 185 250 185 125 95 125 280 405 280 495 290 375 495 465 320 115 85 85 85 85 85 175 85 85 145 85 60 60 60 30 30 30 60 60 60 30 30 60 60 95 95 60 60 60 60 60 60 60 60 60 60 60 60 60</td><td>280 280 280 250 215 280 250 250 310 250 280* 60* -95* 185* 250 340 250 215 435 620 650 Z+ Z+ Z+ Z+ 960 590 370 435 Z+* 525 Z+* 370 370 310 310 370 340 310 340 185 185 215 185 95 95 125 125 125 185 185 125 125 125 185 185 125 125 185 185 125 125 185 185 125 125 185 185 125 125 185 185 125 125 185 185 125 125 185 185 125 125 125 185 185 125 125 125 185 185 125 125 125 125 125 125 125 125 125 12</td><td>280</td><td>280 280 280 250 215 280 250 250 310 250 280 604 604 7-954 1856 250 340 250 215 435 620 650 Z+ Z+ Z+ Z+ Z+ Z+ Z+ Z+ Z+ Z+ Z+ Z+ Z+</td></t<></td> | 280 280 280 250 215 280 250 250 310 250 27 27 27 960 590 370 435 27 525 27 370 250 250 310 250 27 27 27 960 590 370 435 27 525 27 370 250 250 495 290 375 495 465 320 115 85 85 30 30 60 60 60 60 60 60 60 60 60 60 60 60 60 | 280 280 280 250 215 280 250 250 310 250 280* Z+ Z+ P50 S90 370 435 Z±* 525 Z±* 370 370 1.55 -95 125 185 125 250 215 185 155 155 125 250 215 185 155 155 125 280* 290 375 495 465 320 115 85 85 85 30 30 60 60 60 60 95 95 60 30 30 60 60 60 60 60 60 60 60 30 30 60 <t< td=""><td>280 280 280 250 215 280 250 250 310 250 280* 60* Z+ Z+ 960 590 370 435 Z+* 525 Z+* 370 370 310 1.55 -95 125 185 125 250 215 185 155 155 125 125 520 495 290 375 495 465 320 115 85 85 85 30 30 60 60 60 30 30 60 60 95 95 60 60 30 30 60 60 60 60 60 60 60 60 60 60 60 30 0 30 60 60* 60* 60* 60 0 95 95 60 60* 60* 60* 60* 60* 60* 60* 60* 60*</td><td>280 280 280 250 215 280 250 250 310 250 280* 60* -95* 27* 77* 960 590 370 435 72* 525 72* 370 370 310 310 155 -95 125 185 125 250 215 185 155 155 125 155 185 120 495 290 375 495 465 320 115 85 85 85 85 175 30 30 60 60 60 30 30 60 60 95 95 60 60 60 30 30 60 60 60 60 60 60 60 60 60 60 60 60 60</td><td>280 280 280 250 215 280 250 250 310 250 280* 60* -95* 185* 27* 27* 960 590 370 435 27* 525 27* 370 370 310 310 370 310 370 310 370 310 370 310 370 370 310 370 310 370 310 370 310 370 310 370 310 370 370 310 370 310 370 370 310 370 310 370 370 310 370 370 310 370 370 310 370 370 310 370 370 370 370 370 310 370 370 370 370 370 370 370 370 370 37</td><td>280 280 280 250 215 280 250 250 310 250 280 60 60 60 60 95 185 255 215 185 125 125 125 125 125 125 125 125 125 12</td><td>280 280 280 250 215 280 250 250 310 250 310 250 280* 60* -95* 185* 250 340' 27* 7* 960 590 370 435 72* 525 72* 370 370 310 310 370 340 310 155* 125 125 125 125 125 125 125 125 125 125</td><td>280 280 280 250 215 280 250 250 310 250 280 8 60 60 60 60 30 30 0 0 30 30 60 60 60 60 60 60 60 60 60 60 60 60 60</td><td>280 280 280 250 215 280 250 215 280 250 310 250 280* 60* -95* 185* 250 340 250 215 25 250 370 435 21* 525 25* 21* 370 370 310 310 370 340 310 340 185 155 155 125 125 125 125 125 125 125 12</td><td>280 280 280 250 215 280 250 215 280 250 310 250 280 8 60 4 -95* 185* 250 340 250 215 435 Z+ Z+ 960 590 370 435 Z+ 525 Z+ 370 370 310 310 370 340 310 340 185 185 155 -95 125 185 125 250 215 185 155 155 125 185 155 125 185 250 185 125 95 290 375 495 465 320 115 85 85 85 85 175 85 85 145 85 60 60 30 30 60 60 30 30 60 60 60 60 60 60 60 60 60 60 60 60 60</td><td>280 280 280 250 215 280 250 215 280 250 310 250 280 8 60 4 -95* 185* 250 340 250 215 435 620 27</td><td>280 280 280 250 215 280 250 215 280 250 310 250 280 8 60 60 60 60 50 50 370 435 Zt 525 Zt 370 370 310 310 370 340 310 340 185 185 215 185 185 185 215 185 185 215 185 185 215 185 185 215 185 185 215 185 185 215 185 185 215 185 185 215 185 185 215 185 185 215 185 185 215 185 185 215 185 185 215 185 185 215 185 185 215 185 185 215 185 185 215 215 215 215 215 215 215 215 215 21</td><td>280 280 280 250 215 280 250 215 280 250 310 250 280 8 60 60 60 60 590 370 435 Z± 525 Z+ 370 370 310 310 370 340 310 340 185 185 215 185 95 1.55 -95 125 185 125 250 215 185 155 155 155 125 185 215 185 215 185 250 185 125 95 125 280 405 280 495 290 375 495 465 320 115 85 85 85 85 85 175 85 85 145 85 60 60 60 30 30 30 60 60 60 30 30 60 60 95 95 60 60 60 60 60 60 60 60 60 60 60 60 60</td><td>280 280 280 250 215 280 250 250 310 250 280* 60* -95* 185* 250 340 250 215 435 620 650 Z+ Z+ Z+ Z+ 960 590 370 435 Z+* 525 Z+* 370 370 310 310 370 340 310 340 185 185 215 185 95 95 125 125 125 185 185 125 125 125 185 185 125 125 185 185 125 125 185 185 125 125 185 185 125 125 185 185 125 125 185 185 125 125 185 185 125 125 125 185 185 125 125 125 185 185 125 125 125 125 125 125 125 125 125 12</td><td>280</td><td>280 280 280 250 215 280 250 250 310 250 280 604 604 7-954 1856 250 340 250 215 435 620 650 Z+ Z+ Z+ Z+ Z+ Z+ Z+ Z+ Z+ Z+ Z+ Z+ Z+</td></t<> | 280 280 280 250 215 280 250 250 310 250 280* 60* Z+ Z+ 960 590 370 435 Z+* 525 Z+* 370 370 310 1.55 -95 125 185 125 250 215 185 155 155 125 125 520 495 290 375 495 465 320 115 85 85 85 30 30 60 60 60 30 30 60 60 95 95 60 60 30 30 60 60 60 60 60 60 60 60 60 60 60 30 0 30 60 60* 60* 60* 60 0 95 95 60 60* 60* 60* 60* 60* 60* 60* 60* 60* | 280 280 280 250 215 280 250 250 310 250 280* 60* -95* 27* 77* 960 590 370 435 72* 525 72* 370 370 310 310 155 -95 125 185 125 250 215 185 155 155 125 155 185 120 495 290 375 495 465 320 115 85 85 85 85 175 30 30 60 60 60 30 30 60 60 95 95 60 60 60 30 30 60 60 60 60 60 60 60 60 60 60 60 60 60 | 280 280 280 250 215 280 250 250 310 250 280* 60* -95* 185* 27* 27* 960 590 370 435 27* 525 27* 370 370 310 310 370 310 370 310 370 310 370 310 370 370 310 370 310 370 310 370 310 370 310 370 310 370 370 310 370 310 370 370 310 370 310 370 370 310 370 370 310 370 370 310 370 370 310 370 370 370 370 370 310 370 370 370 370 370 370 370 370 370 37 | 280 280 280 250 215 280 250 250 310 250 280 60 60 60 60 95 185 255 215 185 125 125 125 125 125 125 125 125 125 12 | 280 280 280 250 215 280 250 250 310 250 310 250 280* 60* -95* 185* 250 340' 27* 7* 960 590 370 435 72* 525 72* 370 370 310 310 370 340 310 155* 125 125 125 125 125 125 125 125 125 125 | 280 280 280 250 215 280 250 250 310 250 280 8 60 60 60 60 30 30 0 0 30 30 60 60 60 60 60 60 60 60 60 60 60 60 60 | 280 280 280 250 215 280 250 215 280 250 310 250 280* 60* -95* 185* 250 340 250 215 25 250 370 435 21* 525 25* 21* 370 370 310 310 370 340 310 340 185 155 155 125 125 125 125 125 125 125 12 | 280 280 280 250 215 280 250 215 280 250 310 250 280 8 60 4 -95* 185* 250 340 250 215 435 Z+ Z+ 960 590 370 435 Z+ 525 Z+ 370 370 310 310 370 340 310 340 185 185 155 -95 125 185 125 250 215 185 155 155 125 185 155 125 185 250 185 125 95 290 375 495 465 320 115 85 85 85 85 175 85 85 145 85 60 60 30 30 60 60 30 30 60 60 60 60 60 60 60 60 60 60 60 60 60 | 280 280 280 250 215 280 250 215 280 250 310 250 280 8 60 4 -95* 185* 250 340 250 215 435 620 27 | 280 280 280 250 215 280 250 215 280 250 310 250 280 8 60 60 60 60 50 50 370 435 Zt 525 Zt 370 370 310 310 370 340 310 340 185 185 215 185 185 185 215 185 185 215 185 185 215 185 185 215 185 185 215 185 185 215 185 185 215 185 185 215 185 185 215 185 185 215 185 185 215 185 185 215 185 185 215 185 185 215 185 185 215 185 185 215 185 185 215 215 215 215 215 215 215 215 215 21 | 280 280 280 250 215 280 250 215 280 250 310 250 280 8 60 60 60 60 590 370 435 Z± 525 Z+ 370 370 310 310 370 340 310 340 185 185 215 185 95 1.55 -95 125 185 125 250 215 185 155 155 155 125 185 215 185 215 185 250 185 125 95 125 280 405 280 495 290 375 495 465 320 115 85 85 85 85 85 175 85 85 145 85 60 60 60 30 30 30 60 60 60 30 30 60 60 95 95 60 60 60 60 60 60 60 60 60 60 60 60 60 | 280 280 280 250 215 280 250 250 310 250 280* 60* -95* 185* 250 340 250 215 435 620 650 Z+ Z+ Z+ Z+ 960 590 370 435 Z+* 525 Z+* 370 370 310 310 370 340 310 340 185 185 215 185 95 95 125 125 125 185 185 125 125 125 185 185 125 125 185 185 125 125 185 185 125 125 185 185 125 125 185 185 125 125 185 185 125 125 185 185 125 125 125 185 185 125 125 125 185 185 125 125 125 125 125 125 125 125 125 12 | 280 | 280 280 280 250 215 280 250 250 310 250 280 604 604 7-954 1856 250 340 250 215 435 620 650 Z+ Z+ Z+ Z+ Z+ Z+ Z+ Z+ Z+ Z+ Z+ Z+ Z+ |

POTENTIAL GRADIENT (reduced to open level surface) Mean values for periods of sixty minutes between exact hours

| 19 | LERWIC | :K | | | | | | | | | Fe | ctor 1 | ·02 (m | tre ⁻¹ |) | | | | | | | | | JUN | E 196 | 50 |
|------|--------|-------------|------|-------------|-------|-------|-------|-------|-------|-------|-------|---------|--------|-------------------|-------|-------|-------|-------|-------|-------|-------|---------|---|-------|-------|-------|
| | Hour C | 2 M T | | | | | | | | | | | | | | | | | | | | | | | Γ | |
| | 0-1 | 1-2 | 2-3 | 3-4 | 4-5 | 5-6 | 6-7 | 7-8 | 8-9 | 9-10 | 10-11 | 11-12 | 12-13 | 13-14 | 14-15 | 15-16 | 16-17 | 17-18 | 18-19 | 19-20 | 20-21 | 21 - 22 | 22-23 | 23-24 | Me | an |
| | t | | | | | | | | | | νο. | Ite ner | metre | | | | | | | | | | | | - | |
| 1 | 115 | 115 | 115 | 85 | 60* | 115* | 175 | 175 | 205 | 230 | 145 | 115 | 1 85 | 175 | 465 | 640 | 320 | 115 | 115 | 115 | 115 | 115 | 115 | 115 | 180 | (22) |
| 2 | 85 | 115 | 60 | 30 | 60 | 175 | 145 | 175 | 175 | 175 | 230 | 350 | 495 | 290 | 375 | 350 | 290 | 30 | 30 | 85 | 60* | 60* | 60* | 85* | 186 | (20) |
| 3 | 105 | 80 | 80 | 80 | 80 | 80 | 80 | 80 | 130 | 180 | 180 | 180 | 180 | 235 | 210 | 310 | 260 | 285 | 285 | 675 | 805 | 600 | 570 | 440 | 258 | (24) |
| 4 | 340 | 310 | 310 | (260) | (260) | (260) | (210) | (130) | (80) | 105 | 105 | 105 | 130 | 105 | 105 | 105 | 105 | 130 | 130 | 130 | 180 | 210 | 210 | 210 | 176 | (24) |
| 5 | 155 | 80 | 80 | 105 | 130 | 130 | 130 | 130 | 180 | 180 | 235 | 235 | 180 | 260 | 285 | 260 | 235 | 260 | 210 | 235 | 210 | 285 | 235 | 155 | 191 | (24) |
| 6 | 260 | 350 | 230 | (175) | (175) | (175) | (205) | (260) | 230 | (230) | 205 | 205 | 205 | 115 | 85 | 85 | 30 | 0* | 30 | 145 | 205 | 85 | 30* | 60* | 175 | (21) |
| 7 | 175* | Z+* | -30* | ~60* | -320* | -205* | Z-* | Z+* | 260 | 230 | 145* | 115* | 115* | 115 | 30 | 60 | 30 | 60* | 85* | 115 | 60 | 115 | -115* | -30* | 113 | (9) |
| 8 | 60 | 60 | 60 | 60 | 60 | 85 | 85 | 85 | 145 | 145 | 145* | 85* | 175* | 85* | 30* | -405* | -260* | -290* | -350* | 115* | 145* | 205 | 205 | 290 | 119 | (13) |
| ğ | 375 | 405 | 405 | 320 | 350 | 350 | Z+* | Z+* | -115* | -60* | 60* | Z±.* | Z-* | 230* | 350 | 175 | 465 | 85 | 175 | 115 | 60* | 145* | 60 | 115 | 267 | (14) |
| 10 | 115 | -30* | -30* | 290+ | 260* | 375* | 350 | -30* | 230 | 405 | 320 | Z+ | Z+ | 145 | 85 | 0* | 30* | ő | 30 | -30 | -30* | 60* | 30* | 60* | 165 | (10) |
| 11 | 30* | 0* | 30 | 30 | 30 | 60 | 85 | 85 | 85 | 85 | 85 | 60 | 115 | 115 | 85 | 115 | Z-* | Z-* | 85* | Z-+ | 60* | 60* | 175* | 60* | 76 | (14) |
| 12 | 115 | 60* | 60 | 85 | 145 | 290* | 145* | 145 | 115 | 115 | 145 | 205 | 230 | 175 | 175 | 145 | 145* | Z+* | Z-* | Z-+ | Z-* | 0* | 115* | 115* | 143 | (13) |
| 13 | 85* | 60* | 85* | 85 | 115 | 145 | 115 | 145 | 115 | 85 | 85* | 115 | 115* | Z±* | 85* | Z± * | Zt.* | Z-* | 175* | 145 | 85* | 85* | 85* | 85* | 116 | (9) |
| 14 | 60* | 60* | 30* | 60* | 85 | 115 | 85 | 85 | 85 | (85) | (85) | (85) | 85 | 115 | 145 | 115 | 145 | 115 | 85 | 85 | 85 | 85 | 60 | 60 | 95 | (20) |
| 15 | -30 | 30* | 30* | 30 | 60 | 85 | 115 | 115 | 115 | 115÷ | 115 | 85 | 85 | 60 | 85 | 115 | 115 | 145 | 175 | 205 | 260 | 290 | 375 | 495 | 147 | (21) |
| 16 | 465* | 350* | Z-* | 320* | 290* | 175* | 85* | 290* | Z+ | 85 | 115 | 145 | 115 | 175 | 115* | 145* | 85* | 405* | 85* | 85* | 115 | 115* | 115* | 85* | 125 | (6) |
| 17 | 115* | 115 | 115 | 85* | 85* | 145* | 205 | 175 | 145 | 85 | 145 | 145* | 115 | 375* | 85* | 60* | -60* | -30 | 30 | 30 | 30 | 30 | -10 | 30 | 81 | (15) |
| 18 | 30 | 30 | 30* | 30* | 60* | 60 | 30* | 0* | 60* | 60* | 85* | 60 | 85* | 85* | 0* | 30* | -85* | 0* | 0* | -30+ | 0* | 30* | 60 | 115 | 59 | (6) |
| 19 | 115* | 115* | 85 | 115 | 85 | 85 | 115* | 30* | 0* | -145* | -30* | 30* | -60* | 115* | 85* | 60* | 60* | 60* | 60* | 30* | 30* | 30* | 30* | 30* | 93 | (4) |
| 20 | 30* | 30* | 30* | 30* | 30* | 30* | 30* | 0* | (30)* | (30)* | (60)* | | 60* | 0* | 30* | 30 | 30* | 0* | 30* | 30* | 85* | 85* | 60* | 30* | 30 | (i) |
| 21 | 30* | 30* | 60* | 60* | 30* | 30* | 30 | 0 | 115 | (85) | (85) | 85 | 115 | 85 | 145 | 145 | 145 | 145 | 145 | 115 | 115 | 85 | 85 | 85 | 101 | (18) |
| 22 | 50 | 50 | 80 | 105 | 155 | 235 | 180 | 180 | | | (130) | 155 | 130 | 130 | 180 | 235 | 155 | 180 | 130 | 105 | 130 | 130* | 130 | 180 | 143 | (23) |
| 23 | 130 | 105 | 155 | 180 | 210 | 155 | 155 | 155 | 285 | 105 | 50 | 50 | 50 | 50 | 50 | 80 | 50 | 25 | 50 | 50 | 105 | 130 | 80 | 50 | 104 | (24) |
| 24 | 50 | 50 | 50 | 50 | 80 | 340 | 570* | Z+* | Z+* | 600 | 310 | 180 | 155 | 210 | 180 | 155 | 180 | 180 | 180 | 210 | 260 | 285 | 260 | 415* | 198 | (20) |
| 25 | 435* | 465* | 465 | 465* | 495* | 640* | 580* | 435 | 290 | 290 | 230 | 115 | 60 | 85 | 115 | 85 | 145 | 60 | 85 | 85 | 30 | 60 | 60 | 60 | 153 | (18) |
| 26 | 105 | 80 | 130 | 80 | 105 | 105 | 80 | 80 | 80 | 80 | 80 | 80 | 80 | 80 | 105 | 105 | 80 | 105 | 105 | 80 | 80 | 80 | 80 | 80 | 89 | (24) |
| 27 | 85 | 85 | 85 | 85 | 85 | 85 | 85 | 85 | 60 | 85 | 85 | 85 | 60 | 115 | 85 | 115 | 115 | 115 | 115 | 85 | 115 | Z+* | 60* | 145* | 91 | (21) |
| 28 | 30* | Z-* | Z-* | 85 | 85 | 85 | 85* | 85* | 85* | 30* | 30* | 30 | 60 | 60* | 60 | 85 | 30 | 60 | 85 | 85 | 85 | 60 | 60 | 60 | 68 | (15) |
| 29 | 60 | 30* | 60* | 60+ | 60 | 60 | 85 | 85 | 60* | 60* | 60* | 60+ | 60 | 60 | 60 | 60* | 60* | 60 | 60 | 60* | 85* | 85 | 60 | 30* | 66 | (12) |
| 30 | 60* | 30* | 30* | 30* | 30* | 85 | 85 | 85 | 85 | 85 | 85 | 85 | 85 | 115 | 85 | 85 | 85 | 60 | 85 | 85 | 60 | 30* | 30 | -85* | 81 | (17) |
| | | | | | | | | | | - | | - | | | 00 | 0.0 | 00 | • | 00 | 00 | ••• | 30. | - | 00 | • | (**) |
| | 122 | 125 | 144 | 100 | 101 | 1.41 | 124 | 120 | 150 | 1.00 | 1 -1 | 100 | 101 | | | 1.50 | | | | | | | • | 4.50 | | |
| Mean | (18) | 135 (15) | (18) | 108 (19) | 121 | 141 | 134 | 138 | 153 | 169 | 151 | 128 | 131 | 137 | 154 | 163 | 157 | 106 | 111 | 134 | 160 | 165 | 144 | 159 | 140 | (482) |
| | L (10) | (13) | (18) | (19) | (20) | (21) | (20) | (21) | (22) | (23) | (21) | (22) | (22) | (22) | (23) | (22) | (19) | (20) | (21) | (22) | (19) | (17) | (19) | (16) | | |

The potential gradient is reckoned as positive when the potential increases upwards. The symbol Z indicates either that the trace fluctuates rapidly so that estimation of a mean value is impracticable, or that the trace is limited by the range of the instrument (see Introduction); and the suffix +, - or t indicates that the mean value is plainly positive, plainly negative, or indeterminate in sign. The occurrence of precipitation of any sort is indicated by an asterisk. Round brackets round any hourly mean indicates that the record during that hour is somehow imperfect.

Factor 1.01 (metre⁻¹)

| 19 | LERWI | CK | | | | | | | | | | | | | | | | | | | | | | JULY | 196 | 50 |
|----------|---------------------|---------------|-----------|------------|--------------|--------------------------|------------|-------------------|------------|--------------|------------|--------------------|-------------------------|-------------------|--------------------|------------|------------|--------------------|------------|--------------------|--------------------|--------------------|------------|-------------|------------|--------------|
| | Hour (| 3.M.T. 1-2 | 2-3 | 3-4 | 4-5 | 5-6 | 6-7 | 7-8 | 8-9 | 9-10 | 10-11 | 11-12 | 12-13 | 13-14 | 14-15 | 15-16 | 16-17 | 17-18 | 18-19 | 19-20 | 20-21 | 21-22 | 22-23 | 23-24 | М | ean |
| | | | | | | | | | | | vo. | ts per | metre | | | | | | | | | | | | | |
| 1 | 30* | -85* | 55* | 85 50* | 85 50* | 85 70* | 85 70* | 85 | 55 | 55 | 55 | 55 | 55 | 55 | 55 | 55 | 55* | 55 | 55 | 85 | 85 | 85 | 85 | 85 | 70 | (20) |
| 2 | 70 70 | 70 50 | 70 50 | 50* | 50* | 70 - | 50 | 70 * 50 | 50 70 | 50 70 | 95 70 | 95 70 | 70 70 | 95 70 | 120 95 | 120 95 | 120 70 | 120 95 | 120 95 | 120 95 | 70 120 | 70 120 | 70 120 | 70 95 | 88 77 | (19) (24) |
| 4 | 95 | 95 | 95 | 95 | 70 | 95 | 95 | 95 | 95 | 70 | 70 | 70 | 70 | 70 | 70 | 70 | 70 | 70 | 95 | 70 | 95 | 95 | 70 | 70 | 81 | (24) |
| 5 | 85 | 55 | 55 | 55 | 85 | 85 | 85 | 110 | 140 | 110 | 110 | 110 | 110 | 140 | 140 | 140 | 140 | 170 | 170 | 30 | 0* | -110* | 55* | 0* | 106 | (20) |
| 6 | 140 | 110 | 110 | 85 | 110 | 110 | 55* | 55* | 110* | 85 | 55 | 85 | 170 | 140 | 110 | 170 | 170 | 170 | 170 | 170 | 170 | 110 | 85 | 55 | 123 | (21) |
| 7 | 55 | 30 | 30 | 55 | 30 | 55 | 55 | 55 | 110 | 140 | 140 | 170 | 140 | 110 | 170 | 55 | 55 | 55* | 55* | 110* | -30* | 110* | 110* | 110+ | 86 | (17) |
| 8 9 | 85 85 | 85* 85 | 55* 85 | 110* 85 | 110 85 | 170 55 | 170* 85 | 365* 85 | 195 85* | 85 85* | 55 110 | 55 110 | 30 55* | 55 * 30 | 30* 85 | 85 85 | 85 140 | 110 170 | 110 140 | 110 85 | 110 55 | 85 55 | 85 85 | 85 110 | 97 91 | (17) (21) |
| 10 | 70 | 95 | 95 | 70* | 50 | 50 | 70 | 95 | 95 | 95 | 70 | 95 | 70 | 95 | 95 | 95 | 70 | 120 | 120 | 95 | 70 | 95 | 95 | 170 | 90 | (23) |
| 11 | 70 | 95 | 95 | 190 | 145 | 120 | 70 | 145 | 145 | 145 | 120 | 70 | 70 | 70 | 70 | 70 | 95 | 70 | 70 | 120 | 70 | 70 | 50 | 70 | 96 | (24) |
| 12 | 55 | 55 | 55 | 55 | 55 | 55 | 55 | 55 | 55* | 55* | 85* | 85* | 85 | 85* | 85* | 110 | 85 | 85 | 110 | 170 | 195 | 195 | 170 | 170 | 101 | (18) |
| 13 | 120 | 95 475 | 95 670 | 95 755 | 120* 225* | 170 * 505* | 215 700 | 265 390 | 410 250 | 265 195 | 310 280 | 865 225 | 530 310 | 890 225 | 790 280 | 670 250 | 505 170 | Z+ 55* | 240 55 | 145 * 55 | 265* 85 | 290* 195 | 335 110 | 310* 110 | 394 289 | (17) |
| 14 15 | 335 * 140 | 475 140 | 110 | 30 | 0 | 140 | 450 | 225 | 225 | 225 | 195 | 250 | 450 | 225 | 310 | 390 | 365 | 280 | 390 | 310 | 250 | 195 | 225 | 420 | 247 | (24) |
| 16 | 385 | 530 | 505 | 385 | 310 | 410 | 430 | 550 | 670 | 290 | 310 | 310 | 410 | 215 | 120 | 145 | 145 | 335 | 335 | 240 | 170 | 120 | 145 | 265 | 322 | (24) |
| 17 | 195 | 225 | 195 | 140 | 170 | 110 | 85 | 85 | 85 | 55* | 30* | 55* | -30* | 0* | 195 | -30* | 170* | 390* | 420* | 310* | -110+ | -140* | 170* | 280* | 149 | (10) |
| 18 | 335* | 365 | 365 | 225* | 195* | 110 | 170 | 140 | 85* | 85 | 85 | 225 | 310 | 280 | 170* | -110* | 0* | 30* | 30 | 30* | 55* | 30* | 30* | 30* | 197 | (11) |
| 19 20 | 30* 85 | 0* 85 | 30* 55 | 30* 55 | 0* 55* | 30* 85* | 195 140 | 365 110* | 140 30* | 85 170 | 55* 170 | 55 110 | 55 * | 55* 170 | 30 * 140 | 55* 170 | 85 170 | 85 * 140 | 85* 110 | 110 110 | 85 * 110 | 110 * 85 | 85 85 | 55 85 | 131 118 | (9) (20) |
| | | | | | | | 280 | 250 | 195 | 140 | 140 | 140 | 85 | 170 | 170 | 250 | 225 | 140 | 140 | 85 | 110 | 85 | 55* | 30* | 157 | (22) |
| 21 | 85 2+* | 85 85 | 85 85 | 110 85 | 195 85 | 280 85 | 110 | 110 | 85 | 85 | 110 | 110 | 110 | 110 | 85 | 110 | 85 | 110 | 140 | 110 | 85 | 85 | 85 | 110 | 98 | (23) |
| 23 | 110 | 55 | 0 | 55 | 85 | 140 | 140 | 140 | 170 | 140 | 110 | 85 | 85 | 85 | 55 | 85 | 85 | 85 | 85 | 85 | 85 | 110 | 140 | 140 | 98 | (24) |
| 24 | 110 | 110 | 110 | 140 | 140 | 140 | 250 | 280 | 225 | 195 | 195* | 420* | 85* | 55* | 85* | 250* | 195* | -55* | 85* | 55* | 85 | 85 | 85 | 85 | 146 | (14) |
| 25 | 85 | 85 | 110 | 110 | 110 | 110 | 280* | 450* | 250 | (195) | 170 | 195 | 140 | 110 | 110 | 110 | 140 | 85 | 140 | 140 | 140 | 85 | 30 | 55 | 123 | (22) |
| 26 | 30 | 30 | 30 | 55 | 55 | 55* | 85* | 225* | 170* | 225 | 170 | 140 | 170 | 140 | 140 | 170 | 140 | 140 | 170 | 170 | 170 | 140 | 110 | 85 | 124 | (20) |
| 27 | 70 | 70 | 50 | 70 | 95 | 120 | 95 | 95 | 95 335 | 190 (280) | 170 280 | 95 * 280 | 120 * 250 | 120 250 | 145 110 | 145 55 | 145 110 | 170 140 | 170 85 | 190 110 | 240 110* | 190 -* | 145 -* | 120 | 132 205 | (22) |
| 28 29 | 110 | 170 -+ | 195 | 225 | 250 -* | 335 -* | 250 | 280 335 | 310 | 335 | 280 | 365 | 365 | 785 | 810 | 615 | 505 | 475 | 7* | 505 | 505 | 505 | 310 | 170* | 467 | (20) (15) |
| 30 | 170 | 120 | 70 | 70 | 265* | 240 | 310 | 290 | 265 | 310 | 335 | 310 | 290 | 310 | 430 | Z+ | Z+ | Z+ | Z+ | Z+ | Z+ | 265 | 170 | 120 | 240 | (17) |
| 31 | 145 | 145 | 170 | 145 | 120* | 120* | 50 | 95* | 95* | (120) | 120 | 215 | 120 | 170 | 310 | 310 | 215 | 240 | 265 | Z+ | 265 | 290 | 240 | 120 | 192 | (19) |
| | 109 | 134 | 135 | 131 | 108 | 137 | 181 | 191 | 194 | 158 | 155 | 180 | 180 | 197 | 200 | 178 | 161 | 155 | 144 | 140 | 145 | 142 | 129 | 120 | 155 | (601) |
| ean | (25) | (27) | (27) | (25) | (22) | (23) | (25) | (24) | (24) | (28) | (27) | (27) | (26) | (26) | (26) | (26) | (26) | (23) | (25) | (24) | (23) | (24) | (25) | (23) | | |
| | | | | | | | | | | | | | | | | | | | | | | Mean | for Oa | days | [146 | (9) |

POTENTIAL GRADIENT (reduced to open level surface) Mean values for periods of sixty minutes between exact hours

Factor 1.01 (metre-1)

| | Hour (| G.M.T. 1-2 | 2-3 | 3-4 | 4-5 | 5-6 | 6-7 | 7-8 | 8-9 | 9-10 | 10-11 | 11-12 | 12-13 | 13-14 | 14-15 | 15-16 | 16-17 | 17-18 | 18-19 | 19-20 | 20-21 | 21-22 | 22-23 | 23-24 | _M | lean |
|-----|------------|---------------|------------|------------|-------------|------------|------------|-------------|-------------|-------|------------|---------------|----------|------------|------------|-------------|------------|----------|-------------|-------------|-------------|------------|------------|---------|---------------|------|
| | 0-1 | 1-2 | 2-3 | 3-4 | | | | | | | | | L | | | | | | | | | | | | - | |
| . 1 | | | 80 | 50 | 50 | 50 | 235 | 285 | 365 | Z+ | Z+ | lts per Z+ | 1 285 | 210 | 105 | 105* | -50* | -105* | 0* | -25* | -80* | 130* | 235* | 155 | 154 | (13 |
| 1 2 | 80 155* | 50 180* | 105* | 50* | 25* | 50 | 50 | 80 | 130 | (105) | 105 | 80 | 80 | 105 | 80 | 105 | 155 | 180 | 155 | 235 | 105 | 50 | 80 | 50 | 104 | à |
| 3 | 80 | 80 | 80 | 105 | 80 | 210 | 235 | 365 | 210 | 130 | 130 | 180 | 130 | 105 | 80 | 25 | 50 | -50 | 25 | 50 | 155 | 50 | 25 | 25 | 106 | (2 |
| ? | 25* | 105* | 25 | 0 | 50 | 50 | 50 | 235* | 50* | -* | 50* | -210* | -310* | Z+* | 310* | -130 | Z* | 130 | 80* | 260* | 155* | 155* | 130 | 50 | 39 | `(|
| ; | -25 | -25 | 0 | 50 | 50* | 80* | 210* | 180 | 80 | 50 | 50 | 50 | 25 | 25 | 25 | 50* | 50* | 25* | 25* | 0 | 0 | 25 | 25* | 0* | 34 | (|
| | 25* | 25* | 0* | 25* | 50* | 50 | 50 | 50 | 155 | 130 | 80 | 25 | 50 | 25 | 50 | 80 | 105 | 105 | 105 | 25 | 25 | 0 | 0* | 0* | 65 | (1 |
| ' | 25* | 50* | 50 | 50 | 50 | 80 | 155 | 105 | 105 | 105 | 105 | 130 | 105 | 105 | 80 | 80* | 80* | 130 | 105 | 105 | 25 | 25 | 25* | 25* | 90 | (1 |
| 3 | 0* | -25* | -25* | -25 | 0 | 25 | 105 | 80 | 80 | 130 | 130 | 130 | 105 | 155 | 105 | 105 | 80 | 50 | 50 | 105* | 80* | 130 | 50 | 50 | 81 | (1 |
| 9 | 50 | 80 | 80 | 50 | 80 | 180 | 180 | 180 | 25* | 80 | 80 | 50 | 80 | 105 | 130 50 | 155 -50* | 155 0 | 155 | 80 | | | ~- | -* | -* | 108 | (1 |
| 0 | - | - | - | - | - | -+ | -* | * | * | 50* | 25* | 0 | 25 | -25 | 50 | -50+ | U | 25 | 25 | 0 | 0 | 25 | 25 | 25 | 15 | (1 |
| 1 | 50* | 25* | 50* | 50 | 50* | 50* | 80 | 80 | 105* | (105) | (105)4 | (105)* | (105)* | 105* | 105 | 80* | 130* | 130 | 25* | 105* | 80 | 105* | 105 | 105 | 93 | (|
| 2 | 105 | 80 | 80 | 80 | 50 | 50 | 80 | 105 | 105* | 105 | 105* | 105 | 105 | 105 | -105* | -25* | 50* | 0* | 50 | 50 | 50 | 50 | 25 | 25 | 72 | (ì |
| 3 | 50 | 50 | 25 | 50 | 50 | 50 | 50 | 80 | 80 | 105 | 80 | 80 | 80 | 80 | 105 | 130 | 80 | 80 | 50* | 50* | 105 | 105 | 80* | 50 | 75 | (2 |
| 4 | 80 | 80 | 50 | 50 | 50 | 50 | 105 | 105 | 105 | 130 | 130 | 105 | 130 | 155 | 130 | Z+ | Z+* | Z±* | 130 | 130 | 155 | 105 | Z-* | Z-* | 104 | à |
| 5 | 155 | 180 | 105 | 80 | 80 | 105 | 180 | 180 | 105 | 80 | 80 | 80 | 80 | 80 | 50* | -25* | 50* | 80* | 155* | 155* | 105 | 105 | 80 | 50 | 106 | (1 |
| 6 | 80 | 80 | 80 | 80 | 80 | 130 | 105 | 105 | 105 | 105 | 105 | 105 | 105 | 105 | 105 | 80 | 105 | 80 | 80 | 80 | 80 | 80 | 80 | 50 | 91 | (2 |
| 7 | 50 | 50 | 50 | 80 | ~25* | 80* | 105* | 130 | 80 | 50 | 50 | 80 | 50* | 80* | 80 | 50* | 50* | 50* | 50* | 25 | 50 | 50 | 50 | 50 | 62 | (1 |
| 18 | 50 | 50 | 50 | 50 | 50 | 50 | 80 | 80 | 50 | 80 | 80 | 50 | 25 | 50 | 80 | 80 | 50 | 80 | 50 | 50* | 25* | 0* | 25* | 50* | 60 | (1 |
| ا و | 50 | 50 | 50* | 25* | 25* | 25* | 50 | 50 | 80 | 50* | 50* | 105 | 80* | 80* | 50* | 25* | 25* | 80 | 50 | 25 | 50 | 50 | 50 | 50 | 57 | (1 |
| 0 | 50 | 50 | 50 | 50* | 25* | 50* | 80 | 105 | 105* | 80* | 470* | 80 | 50 | 50 | 50 | 80 | 80 | 50 | 80 | 50* | 50 | 50 | 50 | 50 | 62 | (1 |
| 1 | 50 | 50 | 50 | 50 | 50 | 50 | 50 | 80 | 50 | 50 | 50 | 50 | 50 | 50 | 80 | 80 | 80 | 130 | 130 | 130 | 130 | 105 | 155 | 105 | 77 | (2 |
| 2 | 285 | 260* | 260* | 130* | 180 | 155* | 0* | -25* | 50* | 80* | 50 | 180 | 310 | | | -285* | 105 | Z+ | 675 | 390 | 235 | 155 | 80 | 80 | 227 | (1 |
| 23 | 50 | 80 | 105 | 180 | 130 | 105* | 80* | 25* | 105* | 105 | 155 | 130 | 130 | 130 | 130 | 155 | 155 | 180 | 180 | 210 | 180 | 130 | 105 | 130 | 137 | (2 |
| 4 | 110 | 110 | 110 | 90 | 65 | 45 | 65 | 90 | 110 | 130 | 175 | 130 | 155 | 175 | 155 | 155 | 155 | 155 | 155 | 175 | 175 | 175 | 155 | 110 | 130 | (2 |
| 5 | 90 | 65 | 65 | 65 | 65 | 65 | 65 | 90 | 90 | 90 | 110 | 90 | 90 | 110 | 110 | 90 | 90 | 90 | 45 | 65 | 90 | 90 | 65 | 45 | 80 | (2 |
| 26 | 25 | 25 | 25 | 0* | 0* | 25 | 0 | 25* | 50* | 50* | 50* | 25* | 50* | 50* | 50* | 25* | 25* | 25* | 25* | 25* | 25* | 50* | 50 | 50 | 29 | (|
| 27 | 80 | 80 | 50 | 50 | 50 | 50 | 50 | 50 | -50* | (50)* | 50 | 50* | 25* | 80* | 155 | 105 | 180 | 180 | 365 | 310 | 260 | 180 | 105 | 105 | 129 | (1 |
| 8 | 45 | 45 | 45 | 20 | 90 | 175 | 175 | 175 | 200 | 175 | 130 | 110 | 155 | 130 | 155 | 110 | 110 | 110 | 90 | 90 | 110 | 90 | 65 | 90 | 112 | (2 |
| 9 | 155 | 80 | 25 | 25 | 25 | 25 | 25 | 50 | 80 | 80* | 50* | 50* | 50 | 50* | 50* | 50 | 50 | 50 | 80 | 105 | 80 | 105 | 105 | 105 | 67 | (1 |
| 0 | 80 | 105 | 50* | 25* | 80 | 80* | 80* | 105* | 105* | 105 | 50* | 80 | 80* | 130 | 130 | 130 | 130* | 130* | 130 | 130 | 130 | 105* | 105 | 130 | 113 | (1 |
| 1 | 90 | 90 | 90 | 65 | 90 | 65 | 90 | 90 | 90 | 65* | 65* | 65* | 90* | 90* | 65 | 90* | 65 | 90 | 90* | 130* | 110* | 110 | 110 | 90 | 86 | (1 |
| en | 80 | 69 (23) | 60 (23) | 58 (23) | 68 (22) | 74 (22) | 96 (25) | 119 (25) | 117 (20) | 102 | 96 (20) | 92 (24) | 104 (23) | 98 (22) | 97 (24) | 88 (18) | 97 (19) | 100 (22) | 129 (22) | 117 (20) | 101 (24) | 85 (24) | 80 (23) | 73 (25) | 91 | (53 |

Daily, monthly and annual means are computed excluding hours with precipitation and, of course, all indeterminate entries. The number of hours or days used in computing each mean is shown in round brackets. Entries in square brackets are means for 0a days (see Introduction) and the figure in round brackets is the number of days used in computing this mean.

| 19 | LERWI | CK | | | | | | | | | Fact | or 0.9 | 9 (met | e ⁻¹) | | | | | | | | | SEP | TEMBE | 196 | 50 |
|-----|--------|-------|------|------|------|------|------|------|------|-------|-------|--------|--------|-------------------|-------|-------|-------|-------|------------|-------|-------|-------|-------|-------|-----|------------|
| | Hour (| | 2-3 | 3-4 | 4-5 | 5-6 | 6-7 | 7-8 | 8-9 | 9-10 | 10-11 | 11-12 | 12-13 | 13-14 | 14-15 | 15-16 | 16-17 | 17-18 | 18-19 | 19-20 | 20-21 | 21-22 | 22-23 | 23-24 | M | lean |
| | | | | | | | | | | | vol | ts per | metre | | | | | | | | | | | | | |
| 1 | 110* | 80* | 80 | 55* | 80 | 80 | 80 | 110 | 80* | 80 | 80* | 80* | 80 | 110 | 110 | 110 | 110 | 135 | 80* | 110* | 25* | 80 | 80 | 80* | 95 | (14 |
| 2 | 65 | 65* | 65* | 65 | 65* | 65* | 90 | 65* | 65 | 65 | 65 | 65 | 45 | 45 | 45 | 90 | 90 | 65 | 90 | 130 | 45 | 45 | 45 | 45 | 66 | (19 |
| 3 | 45 | 45 | 45 | 45 | 45 | 45 | 90 | 130 | 110 | 110 | 110 | 110 | 110 | 130 | 130 | 110 | 130 | 90 | 90 | 65 | 65 | 65 | 65 | 65 | 85 | (24 |
| 4 | 80 | 80 | 80 | 80 | 80 | 55* | Z+* | 0* | 160 | 55* | 110* | 80 | 110* | 80* | 80* | Z-* | 55* | 80* | 80 | 80 | 80* | 110 | 80 | 80* | 90 | |
| 5 | 80 | 80 | 80 | 80* | 80* | 80* | 55* | 25* | 80* | (55)* | 80* | 80 | 80 | 80 | 110* | 110* | 135* | 135* | 110 | 135 | 135 | 110 | 135 | 110 | 101 | (1: |
| 6 | 90 | 65 | 65 | 65 | 65 | 65 | 130 | 200 | 200 | 110 | 65 | 65 | 90 | 110 | 130 | 110 | 110 | 90 | 90 | 90 | 90 | 110 | 155 | 110 | 103 | (24 |
| 7 | 80 | 25* | 25 | 25 | 55 | 55 | 80 | 110 | 135 | 135 | 80 | 110 | 80 | 80 | 110 | 135 | 110 | 55 | 80 | 110 | 135 | 190 | 190 | 135 | 100 | (2 |
| 8 | 190 | 160 | 80 | 135 | 160 | 190 | 135* | 160* | 160* | 110* | 135 | 215 | 380 | 350 | 405 | Z+ | Z+ | Z+ | Z + | Z+ | Z+ | 245 | 245 | 55* | 222 | (1 |
| 9 | -215* | -215* | 160* | 80 | 55 | 55 | 110 | 80 | 80* | 80 | 80 | 80 | 110 | 135 | 135 | 135 | 135 | 135 | 160 | 190 | 160 | 135 | 135 | 135 | 116 | (2 |
| 10 | 65 | 90 | 65 | 65 | 65 | 45 | 45 | 45 | 90* | 110* | 175 | 155 | 240 | 200 | 220 | 265 | 440 | Z+ | Z+ | Z+ | Z+ | Z+ | Z+ | 130 | 144 | (1 |
| 11 | 110 | 80* | 80* | 25* | 80* | 160 | 215* | 215* | 160* | 160 | 80* | 110* | 110* | 25* | 55* | 80 | 80* | 55* | 25* | 0* | -80* | -55* | -55* | 80* | 127 | (|
| 12 | 110 | 160 | 160 | 160 | 160 | 160 | 215 | 160 | 135 | 110 | 110 | 110 | 110 | 135 | 135 | 135 | 160 | 190 | 215 | 215 | 160 | 80* | 55* | 80* | 153 | (2 |
| 13 | 110* | 80 | 80 | 80 | 80 | 80 | 135* | 80* | 160* | 135 | 135 | 160 | 135 | 135 | 135 | 135 | 135 | 135 | 135 | 135 | 160 | 215 | 160 | 160 | 130 | (2 |
| 14 | 325 | 245 | 430 | 405 | 350 | 190* | -25* | 325* | 215* | -+ | 110* | 190* | 295* | 215* | 245* | 190* | 190* | 190* | 160* | 245* | Z+* | 190* | 190* | 215* | 351 | (|
| 15 | 215* | 245 | 245 | 160 | 160 | 215 | 135* | -55* | 110* | 80* | 160 | 110* | Z+* | 25* | -25* | 190* | 110* | 110* | 190 | 190 | 350 | Z+ | 270 | 245 | 221 | (1 |
| 16 | 215 | 135 | 80 | 80 | 110* | 110* | 160 | 135 | 160* | 55* | 110* | 135 | 110* | 135* | 80 | 135 | 135 | 135 | 80 | 80 | 135 | 190 | 215 | 215 | 138 | (1 |
| 17 | 215 | 215 | 215 | 215 | 160 | 135 | 190 | 135 | 190 | 160 | 160 | 135 | 160 | 190 | 190 | 160 | 160 | 190 | 160 | 80 | 80* | 80* | 110* | 80* | 171 | (2 |
| 18 | 90* | 155* | 130* | 130* | 130* | 130 | 175 | 175 | 285 | 285 | 350 | 440 | 550 | 460 | 395 | 485 | 550 | 530 | 375 | 330 | 265 | 310 | 220 | 200 | 343 | (1 |
| 19 | 205 | 90 | 45 | 205 | 275 | 160 | 205 | 185 | 160 | 255 | 160 | 115 | 90 | 160 | 25 | 25 | 25 | 25 | 25 | 25 | 25 | 25 | 25 | 25 | 107 | (2 |
| 20 | 25 | 25 | 25 | 25 | 25 | 25 | 25 | 25 | 25 | -45 | -90 | -45 | -25 | 0 | 0 | 25 | 45 | 45 | 45 | 70 | 70 | 45 | 45 | 45 | 18 | (2 |
| 21 | 25 | 25 | 25 | 25 | 25 | 25 | 45 | 45* | 70* | 70* | 45* | 45* | 45* | 45 | 0 | 0* | 25 | 25 | 25 | 25 | 45 | 45 | 45* | 70* | 29 | (1 |
| 22 | 25* | 70* | 25* | 25* | 90* | 70* | 160 | 115 | 115 | 140* | 185 | 230 | 160* | 25* | 160* | 205* | 185 | 70 | 70 | 70 | 70 | 45 | 45 | 25 | 107 | (1 |
| 23 | 20 | 20 | 45 | 45 | 20 | 20 | 65 | 110 | 130 | 90 | 90 | 90 | 110 | 90 | 90 | 90 | 90 | 110 | 155 | 130 | 155* | 155* | 155* | 90* | 81 | (2 |
| 24 | 70* | 90* | 70* | 70* | 0* | -90* | 25* | 0* | -45* | -45* | 0* | -25* | -45* | -45* | -25* | -45* | -25* | -25* | 0* | 25* | 70 | 45* | 90 | 140* | 80 | (|
| 25 | 80* | 105 | 80* | 80* | 80 | 80 | Z-* | 105 | 105* | 105 | 130* | 130* | 130 | 130 | 130 | 130 | 130 | 130 | 130 | 155 | 130 | 105 | 105 | 105 | 117 | (1 |
| 6 | 65 | 45 | 45 | 45 | 45 | 45 | 45 | 65* | 90* | 130* | 110 | 110 | 110 | 110 | 110 | 130 | 110* | 155 | 155 | 200 | 220 | 130 | 110 | 130 | 106 | (2 |
| 27 | 110 | 110 | 110 | 90 | 90 | 90 | 110 | 130 | 130 | 130 | 130 | 130 | 130 | 130 | 130 | 130 | 130 | 130 | 130 | 155 | 155 | 155 | 130 | 110 | 124 | (2 |
| 28 | 110 | 110 | 110 | 90 | 65 | 110 | 130 | 110 | 110 | 130 | 130 | 130 | 110 | 110 | 110 | 130 | 155 | 130 | 130 | 130 | 130 | 110 | 65 | 45 | 112 | (2 |
| 29 | 50 | 50 | 50 | 50 | 50 | 50 | 50 | 105 | 235 | 130 | 130 | 130 | 130 | 130 | 155 | 130 | 105 | 105 | 105 | 180 | 130 | 210 | 210 | - | 116 | (2 |
| 30 | - | - | - | - | - | - | - | 130 | 130 | 110 | 130 | 130 | 130 | 130 | 110 | 110 | 130* | 155 | 175 | 200 | 200 | 155 | 175 | 110 | 143 | (16 |
| ean | 109 | 104 | 99 | 102 | 100 | 92 | 110 | 121 | 145 | 123 | 124 | 129 | 140 | 139 | 134 | 136 | 150 | 129 | 125 | 132 | 134 | 129 | 130 | 112 | 123 | (51 |
| | (21) | (21) | (22) | (22) | (22) | (22) | (20) | (19) | (16) | (19) | (21) | (23) | (22) | (23) | (23) | (22) | (21) | (22) | (24) | (24) | (22) | (22) | (23) | (19) | | |
| | | | | | | | | | | | | | | | | | | | | | | | | days | | (|

POTENTIAL GRADIENT (reduced to open level surface)
Mean values for periods of sixty minutes between exact hours

| 19 | LERWI | CK. | | | | | | | | | Facto | or 0.90 |) (metr | e ⁻¹) | | | | | | | | | | остовы | R 19 | 50 |
|------|------------|---------------|------------|------------|--------------|------------|---------------|-------------|-------------|-------------|----------|-------------|-------------|-------------------|-------------|-------------|-------------|-------------|-------------|-------------|----------------|-------------|-------------|-------------|------|-------|
| | Hour (| G.M.T. 1-2 | 2-3 | 3-4 | 4-5 | 5-6 | 6-7 | 7-8 | 8-9 | 9-10 | 10-11 | 11-12 | 12-13 | 13-14 | 14-15 | 15-16 | 16-17 | 17-18 | 18-19 | 19-20 | 20-21 | 21-22 | 22-23 | 23-24 | М | lean |
| - | | | | | | | | | | | vol | ts per | metre | | | | | | | | | | | | | |
| 1 | 155 | 65 | 90 | 65 | 45 | 65 | 65 | 200 | 175 | 110 | 130 | 130 | 130 | 110* | 110* | -200* | -200* | 200 | 155 | 155 | 155 | 130 | 130 | 110 | 123 | (20) |
| 2 | 110 | 110 | 110 | 110 | 110 | 130 | 130 | 130 | 110 | 130 | 130 | 130 | 130 | 130 | 130 | 110 | 110 | 130 | 130* | -45* | 90* | 130 | 130 | 155* | 122 | (20) |
| 3 | 65* | 90* | 90* | 130* | 110* | 110* | 130 | 130* | 90* | 90* | 110* | 110* | 45* | -110* | Z±* | 45* | 90* | -45* | Z-* | Z+* | Z±* | 155* | 200 | 130* | 165 | (2) |
| 4 | 200* | 175 | 130 | 130 | 130 | 155 | 175 | 310 | 220 | 175 | 220 | 200 | 155 | 90 | 65 | 45* | 45* | 45 | 60 | -110* | 0* | 20* | 45 | 65 | 141 | (18) |
| 5 | 90* | 65 | 0* | -45* | -65 * | -20* | -20* | 0* | 0* | 20* | 0* | 45* | 45* | 65* | 65* | 65* | 65* | 65* | 90 | 45 | 65 | 65 | 20 | 20 | 53 | (7) |
| 6 | 20 | 20 | 20 | 20 | 45 | 45 | 45* | 45 | 65 | 110 | 110 | 90 | 65 | 65 | 45 | 45 | 45 | 45 | 45 | 65 | 110 | 65 | 90* | 65 | 57 | (22) |
| 7 | 45 | 20 | 20 | 20 | 20 | 45 | 45 | 65 | 90 | 65 | 65 | 65 | 45 | 65 | 65 | 65 | 90 | 90 | 65 | 65 | 65* | 90 | 65 | 65 | 58 | (23) |
| 8 | 45 | 20 | 20 | 20 | 20 | 20 | 45 | 65 | 65 | -20* | 20* | 90* | 110 | 110 | 110 | 130 | 155 | 130 | 65 | Z-* | Z-* | -175* | 110* | 65* | 71 | (16) |
| 9 | 45* | -45 * | 45* | 65 | 90* | 90* | 90 | 90* | 110 | 90 | 90 | 90 | 90 | 90* | 90* | 90* | 90 | 65 | 110 | 130 | 110 | 90 | 90 | 25* | 94 | (14) |
| 10 | -25* | 75* | 75* | 50* | 75* | 75* | 75* | 50* | 75* | 50* | 50* | 50* | 75* | 75* | 75 | 100 | 100* | 100* | 100* | 100* | 75 | 75 | 75 | 75* | 80 | (5) |
| 11 | 75 | 50 | 25* | 25* | 75* | 75 | 75* | 75* | 50* | 100 | 100 | 50* | 100* | 100 | 150 | 150 | 125 | 125 | 150* | 125* | 125* | 125 | 100* | 100* | 107 | (11) |
| 12 | 25* | 100 | 125* | 75* | 100* | 75* | 75 | 125 | 125 | 100 | 75* | 25* | 100* | 100* | 100 | 100 | 75 | 100 | 100 | 100* | 125 | 125 | 100 | -25* | 104 | (13) |
| 13 | -100* | -100* | -25* | -225* | -200* | -25* | 50* | 75* | 125 | 125 | 100 | 75 | 75* | 50 | 100* | 75* | 75* | 50* | 100 | 100 | 75 | 100 | 75* | -25* | 94 | (9) |
| 14 | 50* | 50* | 50* | 75 | 50 | 50* | 75* | 75* | 75* | 100 | 100* | 50* | 75* | 75* | 125 | 125 | 150 | 150* | 125* | 125 | 100 | 100 | 100 | 75 | 100 | (12) |
| 15 | 65 | 65 | 65 | 65 | 65 | 65 | 65 | 90 | 90 | 65* | 90 | 65 | 90 | 90 | 90 | 90 | 90 | 65 | 65 | 90 | 110 | 90 | 65 | 110 | 80 | (23) |
| 16 | 100 | 75 | 50 | 75 | 50* | 25 | 25* | 50* | 100 | 125 | 75 | 75 | 100 | 100 | 100 | 100 | 100 | 75 | 100 | 100 | 100 | 125 | 100 | 75* | 90 | (20) |
| 17 | 90* | 90 | 90 | 90 | 90 | 90 | 65 | 90 | 90 | 90 | 90 | 90 | 110 | 110 | 155 | 130 | 130 | 130 | 155 | 155 | 155 | 155 | 130 | 110 | 113 | (23) |
| 18 | 110 | 130 | 130 | 110 | 130 | 130 | 130 | 155 | 155 | 155 | 155 | 130 | 130 | 155 | 155 | 175 | 200 | 200 | 200 | 175 | 175 | 155 | 155 | 155 | 152 | (24) |
| 19 | 130 | 130 | 130 | 110 | 90 | 110 | 130 | 110 | 110 | 110 | 110 | 110 | 110 | 130 | 155 | 175 | 155 | 130* | 155* | 155 | 90 | 90* | 45* | 65 | 121 | (20) |
| 20 | 75 | 75 | 75* | 75 | 75 | 100 | 125* | 50* | 25* | 100* | 100 | 125 | 150 | 150 | 175 | 175 | 150 | 125 | 200 | 100 | 125* | 150 | 100 | 125 | 124 | (18) |
| 21 | 125 | 100 | 50* | 75* | 75* | 100* | 125 | -450* | -200* | 100* | 125* | 175 | 175 | 175 | 200 | 200 | 225 | 225 | 225 | 250 | 225 | 175 | 175 | 150 | 183 | (16) |
| 22 | 125 | 125 | 125 | 125 | 150 | 0* | 25* | 100* | -25* | 75* | 175 | 150 | 175 | 150 | 175 | 200 | 200 | 175 | 175 | 175 | 50* | 100* | 250* | 175 | 161 | (16) |
| 23 | 130 | 130 | 130 | 130 | 130 | 130 | 130 | 130 | 130 | 130 | 155 | 155 | 175 | 155 | 155 | 155* | 155* | 175 | 155 | 155 | 155 | 155 | 155 | 130 | 144 | (22) |
| 24 | 100* | 125* | 125 | 150 | 125* | 100 | -75* | -25* | 25* | 100* | 100* | 100* | 75* | 150 | 175 | 175 | 150 | 225 | 150 | 150 | 175 | 200 | 150 | 75* | 160 | (13) |
| 25 | 75* | 50* | -150* | -125* | -275* | -350* | -625 * | -125* | -25* | 50* | 50 | 50* | 75* | 75* | 75* | 75* | 100* | 50* | -150*(| -125) | *-100 * | -150* | -225* | -125* | 50 | (1) |
| 26 | -25* | 0* | -50* | 75* | 75* | 100 | 50* | 25* | 50* | 75* | 50* | 50* | 50 | 50 | 50 | 25* | -425* | -150* | 50* | 100* | 125* | 100* | 100* | 100* | 62 | (4) |
| 27 | 150* | 125* | 75* | 25* | 50* | 100* | 50* | 100* | 150* | -50* | 100 | 125 | 100 | 125 | 125 | 125 | 150 | 125 | 150 | 200 | 175 | 175 | 175 | 150 | 143 | (14) |
| 28 | 75 | 75 | 75 | 75 | 50 | 50 | 75 | 100 | 175 | 200 | 100 | 100 | 125 | 125 | 150 | 125 | 125 | -25* | 150* | 250* | 175* | 225 | 200 | 125 | 117 | (20) |
| 29 | 110 | 65 | 65 | 90 | 110 | 90 | 65 | 65 | 65 | 65 | 65 | 65 | 90 | 65 | 65 | 110 | 65 | 110 | 110 | 175 | 220 | 155 | 155 | 175 | 101 | (24) |
| 30 | 150 | 100 | 100 | 75 | 100 | 100 | 125 | 100 | 125 | 100 | 125 | 150* | 125* | 50* | 50* | 100* | 125 | 125 | 100 | 150 | 150 | 150 | 50* | 125 | 118 | (18) |
| 31 | 125 | 125 | 150 | 175* | 150* | -325* | 150* | 150 | 125 | 125 | 125 | 150 | 150 | 150 | 175 | 175 | 175 | 175 | 200 | 175 | 175 | 175 | 175 | 150 | 156 | (20) |
| Mean | 98 (18) | 87 (22) | 90 (18) | 84 (20) | 83 (17) | 86 (19) | 98 (17) | 121 (16) | 116 (20) | 116 (19) | 112 (22) | 115 (20) | 117 (21) | 113 (22) | 124 (24) | 132 (21) | 131 (22) | 130 (22) | 126 (22) | 138 (21) | 136 (20) | 133 (24) | 122 (22) | 113 (19) | 114 | (488) |
| | | | | | | | | | | | | | | | | | | | | | | Mean | for 0s | days | [103 | (8)] |

The potential gradient is reckoned as positive when the potential increases upwards. The symbol Z indicates either that the trace fluctuates rapidly so that estimation of a mean value is impracticable, or that the trace is limited by the range of the instrument (see Introduction): and the suffix +, - or ± indicates that the mean value is plainly positive, plainly negative, or indeterminate in sign. The occurrence of precipitation of any sort is indicated by an asterisk. Round brackets round any hourly mean indicates that the record during that hour is somehow imperfect.

19 LERWICE

| 19 | LERWI | CK | | | | | | | | | Fa | ctor 0 | 83 (me | tre ⁻¹) | | | | | | | | | N | OVEMBER | 196 | 50 |
|----|--------|------|-------|-------|-------|---------------|-------|-------|-------|--------|-------|---------|--------|---------------------|--------|-------|-------|-------|-------|-------|-------|-------|--------|---------|-----|-------|
| | Hour (| | | | | | | | | | | | Ī | | | | | | | | | | | | | |
| | 0-1 | 1-2 | 2-3 | 3-4 | 4-5 | 5-6 | 6-7 | 7-8 | 8-9 | 9-10 | 10-11 | 11-12 | 12-13 | 13-14 | 14-15 | 15-16 | 16-17 | 17-18 | 18-19 | 19-20 | 20-21 | 21-22 | 22-23 | 23-24 | M | ean |
| ı | | | | | | | | | | | vo. | lts per | metre | | | | | | | | | | | | | |
| 1 | 140* | 140 | 140 | 115 | 115* | 115* | 140 | 140 | 115 | 70* | 45* | 25* | -45* | -25* | -45* | 45* | 70* | 90* | 115* | 90 | 70* | -25* | -25* | -90* | 126 | (7) |
| 2 | -70* | Z+* | -185* | -45* | -25* | -25* | 25* | 25* | 25* | 90* | (90) | , | | | '(115) | * 115 | 140 | 205 | 205 | 160 | 160 | 160 | -230* | Z-* | 164 | (7) |
| 3 | -160* | -45* | -185* | -115* | -255* | -90* | 25* | 25* | -25* | 45* | 45* | -45* | 70* | 115* | 160 | 185 | 185 | 230 | 255 | 275 | 255 | 205 | 255 | 160* | 223 | (9) |
| 4 | 140 | 140 | 140 | 140* | 115* | ~320 * | 90* | Z+* | -45* | 90 | 115 | 90 | 115 | 90* | -45* | 90* | 115* | 25* | 90* | 90 | 115 | 115 | 90 | 70 | 109 | (12) |
| 5 | 70 | 70 | 45* | 115* | 90 | 90 | 90 | 115* | 90* | 70* | 70* | 45* | 0* | 70* | 70* | -115* | 160* | 160* | 115 | 255 | 140 | 140* | 90 | 70 | 108 | (10) |
| 6 | 115* | 90* | 25* | 25* | 115* | 115 | 275* | 90* | 90* | 90 | 70 | 70* | 70 | 90 | 90* | 115 | 70 | 140 | 115 | 140 | 115* | 115 | 115 | 90 | 103 | (13) |
| 7 | 80 | 60 | 60 | 60 | 80 | 80 | 60 | 80 | 80 | 100 | 100 | 80 | 80 | 100 | 80 | 100 | 140 | 100 | 120 | 180 | 120 | 80 | 80 | 60 | 90 | (24) |
| 8 | 40 | 40 | 40 | 40 | 40 | 40 | 20 | 40 | 40 | (60) | (60) | 80 | 80 | 100 | 120 | 100 | 100 | 160 | 120 | 120 | 120 | 100 | 80 | 40 | 74 | (24) |
| 9 | 25 | 25 | 25 | 45 | 70* | 25* | -90* | -25* | -255* | 70* | 0* | 90 | 90 | 140 | 140* | Z+* | Z+* | 370 | 370 | Z+* | Z+* | Z+* | 90 | 90* | 127 | (10) |
| 10 | 140 | 90* | 90* | 70* | 90 | 90* | 70* | 70* | 115 | (90)* | 115* | 140 | 160 | 185 | 205 | 205 | 160* | 230 | 255 | 230 | 185 | 185* | 90* | 90* | 178 | (12) |
| 11 | 45* | -70* | 115* | 185 | 160 | 185 | 185 | 230* | 160 | 185 | 185* | 185* | 185 | 185 | 70* | 90* | 140* | 0* | 25* | 230 | 205 | 230 | 230 | Z±* | 194 | (12) |
| 12 | Z±* | Z+ | 205 | 230 | 230 | 230 | 255 | 255 | 230* | Z±* | Z+* | Z+* | 230 | 230 | 255 | 185* | 230 | 230 | 205 | 230 | 230* | 230 | 205* | 160* | 232 | (14) |
| 13 | 185* | 185* | 185 | 90* | 115* | Z+* | 140 | Z±* | Z+* | 185 | 155* | 45* | 140* | 160* | 160 | 160 | 205 | 230 | 255 | 275 | 300 | 230* | 160* | -+ | 209 | (10) |
| 14 | | | | - | -* | ~* | -* | -* | 90* | | 185* | 205 | 160 | 185 | 185 | 255 | 230 | 205 | 230 | 230 | 230 | 185 | 160 | 140 | 200 | (13) |
| 5 | 205 | 205 | 205 | 185 | 205 | -45* | Z±* | 0* | 230 | 230 | 185 | 160 | 160 | 160 | 160 | 160 | 160 | 185 | 185 | 185 | 185 | 185 | 115* | 115 | 183 | (20) |
| 6 | Z+ | 185 | 230 | -45 | 205 | (205) | (230) | (185) | | 160 | 185 | 115* | 230* | 320* | Z+* | 205* | 370 | Z+* | -320* | -230* | 25* | 70* | 255 | 160* | 197 | (11) |
| 7 | 90 | 90 | 70 | 115* | 115 | 140 | 205 | 255 | Z±* | Z±* | Z+ | -90* | Z+* | -415* | 70* | 140 | -300* | 25* | 160 | 185 | 205 | 185 | 185 | 140 | 155 | (14) |
| 18 | 140 | 160 | 160 | 140 | 255 | 255 | 320 | 255 | 230* | - | - | - | 140* | -90 | 255* | Z+ | 370 | Z+* | 185 | 140 | 140 | 140 | 140 | 140 | 178 | (16) |
| 19 | 115 | 140 | 115 | 115 | 300* | 115* | 115 | 115 | 115 | 90 | 140 | 160 | 185 | 185 | 160* | 90* | 185 | 185 | 185 | 140 | 140 | 140 | 90 | 115 | 139 | (20) |
| 90 | 115 | 70 | 70 | 70 | 70 | 70 | 70 | 70 | 255 | Z±* | Z±* | -45* | 185 | 230 | 230 | 140 | 140 | 140 | 185 | 160 | 140 | 90* | Z+* | Z+* | 134 | (18) |
| 1 | 115* | 90* | 115 | 115 | 90 | 70 | 90* | 45* | 70 | (-45)* | -160* | -140* | -230* | -230* | 45* | 45* | 25* | 70 | 70 | 45 | 45 | 45* | 0* | -115 | 57 | (10) |
| 2 | 45* | 45* | -90* | -45* | -90* | -160* | -300* | -70* | 25* | (0)* | 25* | 45* | 70* | 0* | 70 | 45 | 45* | 25* | -25* | 70* | 160* | 300* | 140* | -115* | 57 | (2) |
| 3 | -300* | 0* | 115* | 140 | 140 | 160 | 160 | 90* | 185 | 205 | 205* | 185* | 140* | 160 | 205 | 230 | 255 | 320* | 230* | 255* | 140* | 45* | 70* | 70* | 184 | (10) |
| 4 | 45* | 70 | 70 | 90 | 115 | 115 | 115 | 140 | 140 | (140) | 140 | 140 | 160 | 205 | 300 | 230 | 230 | 230 | 230 | 255* | 230* | 300* | 275 | 275 | 171 | (20) |
| 5 | 255 | 140 | 160 | -140* | 70 | -25* | -90* | -115* | -140* | 70* | 90* | -205* | -25* | 115* | 90* | 115 | -115* | 70* | -115* | 140 | 140 | 70 | 90 | 45 | 123 | (10) |
| 6 | 70 | 45 | 45 | 25 | 70 | 45 | 45 | 25 | 90 | 90 | 45* | 115 | 70 | 90* | 90 | 90 | 115 | 275 | 115 | 115 | Z+ | Z+* | 140* | 70* | 85 | (18) |
| 7 | 90 | 45* | 45* | 230* | 185* | Z+* | 205* | Z+ | 115* | Z+* | 185 | 205 | 370 | 115 | 255* | 255* | 205* | 90 | 90 | 90* | 115 | 345* | 45* | 25* | 157 | (8) |
| 8 | 140* | 90* | Z+ | 115 | Z+* | Z+* | Z±* | Z+* | 115* | Z+* | Z+* | Z+* | -25* | 115 | -70* | 25* | 115 | 115 | 45 | 115 | 115 | 90 | 90 | 90 | 101 | (10) |
| 9 | 90 | 70 | 45 | 70 | 70 | 45 | 45 | 25 | 45 | 70 | 115 | 115 | 160 | 185 | 140 | 115 | 115 | 115 | 90* | -70* | -185* | -160* | -160* | 115* | 91 | (18) |
| 0 | 160* | 160 | 140 | 90 | 90 | -140* | -275* | 90* | 115 | 90 | 70 | -45* | 25* | 255 | 230 | 185 | 300 | 390 | 390 | 300 | 205 | 230 | 185* | 205* | 203 | (16) |
| + | 111 | 106 | 117 | 99 | 121 | 123 | 137 | 132 | 125 | 127 | 124 | 132 | 154 | 152 | 173 | 149 | 192 | 195 | 186 | 175 | 163 | 154 | 145 | 91 | 144 | (398) |
| an | (15) | (17) | (19) | (18) | (18) | (15) | (16) | (12) | (14) | (14) | (11) | (12) | (16) | (18) | | (18) | (19) | (20) | (22) | (23) | (20) | (16) | (16) | (14) | | (550) |
| | | | | | | | | | | | | | · | | | | | | | | | Mean | for 0a | davs | [82 | (2) |

POTENTIAL GRADIENT (reduced to open level surface) Mean values for periods of sixty minutes between exact hours

| 19 | LERW | ICK | | | | | | | | | Fact | or 0.85 | 5 (metr | e ⁻¹) | | | | | | | | | DE | CEMBER | 196 | 0 |
|--------|-------------|---------------|-------|-----------|-------|-------|----------|-------|-------|-------|--------|---------|---------|-------------------|-------|-------|-------|-------|-------|-------|----------|-------|--------|--------|-------|-------|
| | Hour 0-1 | G.M.T. 1-2 | 2-3 | 3-4 | 4-5 | 5-6 | 6-7 | 7-8 | 8-9 | 9-10 | 10-11 | 11-12 | 12-13 | 13-14 | 14-15 | 15-16 | 16-17 | 17-18 | 18-19 | 19-20 | 20-21 | 21-22 | 22-23 | 23-24 | М | ean |
| | | | | | | | | | | | vo | lts per | metre | | | | | | | | | | | | | |
| 1 | 145 | 95 | 95 | 95 | 95 | 70 | 95 | 95 | 95 | 95 | 120 | 50* | 50 | 70 | 145* | 95* | 120* | Z+* | -145* | -240* | -25* | -50* | 70* | -50* | 93 | (13) |
| 2 | 95 | 95 | 70* | 70 | 76* | 70* | 50 | 70 | 50 | 50 | 50 | 70 | 70 | 95 | 95 | 70 | 70 | 95 | 95 | 120 | 120* | 70* | 95 | 95 | 79 | (19) |
| 3 | 50 | -50* | -215* | -310* | -265* | 25* | 145 | 50* | 50* | 170 | Z+* | Z+* | 385 | Z+* | Z+* | Z+ | Z+* | 290 | Z+ | 505 | 170 | 95 | 190* | Z+* | 226 | (8) |
| 4 | Z+ | Z+* | 2+* | Z+* | Z+* | Z+* | 120 | 190 | Z+ | 120* | -* | -* | 120* | 120* | 170* | Z+* | 190* | 120* | 120* | 145 | 170 | 120 | 95 | 120 | 137 | (7) |
| 5 | 70 | 70 | 70 | 95 | 95 | 70* | 95 | 120 | 95 | 95 | -95* | 70 | 95 | 120 | 145 | 145 | 120 | 120 | 120 | 120 | 95 | 95 | 70 | 70 | 100 | (22) |
| 6 | 70 | 70 | 70 | 50 | 50 | 50 | 50 | 50 | 70 | 70 | 120 | 120 | 190 | 215 | 170 | 145 | 385 | 530 | 625 | 430 | 240 | 70* | 95* | 170* | 180 | (21) |
| 7 | 145 | 120 | 95 | 70 | 95 | 95 | 95 | 95 | 70* | 70* | 120 | 120 | 190* | Z±* | 95* | Z+* | 70* | 455 | Z+* | Z+* | 215 | 145 | Z+* | Z+* | 143 | (13) |
| 8 | Z+* | 120 | 120 | 95 | 50* | 25* | 95 | 95 | 70 | 95 | 95 | 120 | 120 | 145 | Z+* | 215* | 145 | 170 | 145 | 145 | 145 | 145 | 120 | 120 | 121 | (19) |
| 9 | 105 | 85 | 85 | 105 | 105 | 105 | 105 | 85 | 85 | 105 | 85 | 105 | 105 | 125 | 125 | 125 | 125 | 125 | 125 | 125 | 125 | 125 | 105 | 105 | 108 | (24) |
| 10 | 120 | 120 | 120 | 95 | 95 | 50 | 50 | 50 | 50 | 70 | 95 | 70 | 120* | 190 | 190 | 190 | 215 | 190 | 145 | 190 | 190 | 145 | 145 | 145 | 127 | (23) |
| 11 | 65 | 105 | 85 | 65 | 85* | 65* | 85* | 85 | 85 | 85 | 85 | 85 | 105 | 125 | 105 | 105 | 105 | 105 | 65 | 65 | 85 | 105 | 85 | 105* | 90 | (20) |
| 12 | Z+* | -385* | 50* | 50* | 70* | 265 | 95 | 265* | 95 | 95 | 70 | 95 | 215* | 120 | 120 | 120 | 120* | 120* | 170 | - | - | -* | -* | - | 125 | (10) |
| 13 | - | - | -* | -* | - | - | - | _ | - | - | 145 | 145 | 215 | 240 | 385 | 430 | 360 | 410 | 480 | 335 | 170* | 265* | 170 | 120 | 286 | (12) |
| 14 | -* | - | - | 95 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 95* | 145* | 145 | 170* | -* | Z+* | 95 | Z+ | Z+* | 335* | 170 | 120* | 122 | (12) |
| 15 | 95 | 25* | 120 | 145* | 95* | 120 | 120 | 120 | 120 | 120 | 120 | 145 | 145 | 145 | 145 | 120* | 145* | 95 | 120 | - | - | -* | -* | -+ | 124 | (14) |
| 16 | -* | * | -+ | | -* | -* | - | - | -* | 145 | 145 | 145 | 145 | 145 | 145 | 170 | 170 | 145 | 95 | 95 | 70* | 70* | 50 | 95* | 133 | (12) |
| 17 | 120* | 120* | 95* | 120* | 95* | 25* | 25 | 50 | 50 | 0 | -* | - | - | - | -* | - | - | - | - | 95 | 120 | 120* | 95 | 95 | 66 | (8) |
| 18 | 120* | 120* | 95* | 95 | 145 | 170 | Z+* | Z+* | 70* | 120 | 145 | 215 | 170 | 290* | 190* | 170* | Z+* | 145* | Z+* | Z±* | Z+* | Z+* | Z+* | -25* | 151 | (7) |
| 19 | 70 | 70 | Z+ | Z+* | 70 | 95 | 95 | 120 | 95 | 170 | 215 | 240 | 215 | 120 | 120 | 120 | 120 | 145 | 120 | 120 | 70 | 95 | 120 | 120 | 124 | (22) |
| 20 | 95 | 95 | 95 | 95 | 70 | 95 | -50* | 95* | 95 | 120 | 120 | 120 | 120 | 145 | 145 | 145 | 145 | 120 | 120 | 120 | 120 | 145* | 120* | 120 | 115 | (20) |
| 21 | 95 | 70 | 95 | 70 | 70 | 0* | 0* | 120 | 145 | 120 | 95 | 95 | 95 | 95 | 95 | 70* | 70* | 170 | Z+* | 25* | Z+* | 385* | 170* | 95 | 102 | (15) |
| 22 | 95 | 95 | 240 | 25* | 70 | 190 | -25* | 95 | 120 | Z±* | Z+* | 95* | 120 | 70 | 190* | 335 | 95 | 95 | 120 | 95 | 170 | 265 | 240 | 120* | 148 | (17) |
| 23 | -50* | -215* | -360* | -480* | -550* | -480* | Z-* | -70* | 120* | 190 | 240 | 170 | 170 | 170 | 170 | 120 | 95* | 95* | 70* | -120* | -25* | -25* | 70* | 95* | 176 | (7) |
| 24 | 95* | 95 | 70 | 70 | 95 | 95 | 95 | 70 | 50* | 50* | 95* | 170* | 360 | 190* | 215* | 145 | 190 | 145* | 95 | 120 | 95 | 120* | -70* | -25* | 123 | (13) |
| 25 | -335* | 25* | -120* | -120* | 95* | 120 | 120 | 95* | 145 | 145 | 215* | Z+* | 170* | 145 | 170 | Z+* | 120* | 95* | 120* | -120* | 0* | 70* | 190* | 95 | 134 | (7) |
| 26 | 215 | 170 | 265 | -360* | 95* | 50* | 120 | 95 | 120 | 120 | 120 | 145 | 145 | 120 | 145 | 170 | 145* | 120* | 145* | 120 | 120* | 70* | 95* | Z+* | 148 | (14) |
| 27 | 70* | Z+* | Z+* | 410* | 170* | 170 | 360* | Z+* | Z+* | 145* | 145* | 145 | 145 | 170 | 170 | 145 | 145 | 215* | 170 | 145 | 145 | 145 | 120 | 95 | 147 | (13) |
| 28 | 95 | 95 | 95 | 95 | 120 | 120* | 145* | 170 | 215 | 170 | 170 | 265 | 265 | 240 | 240 | 190 | 190 | 215 | 335 | Z+* | 480* | Z+* | 120 | Z±* | 183 | (18) |
| 29 | Z±* | 95 | Z+* | Z±* | Z±* | Z±* | Z±* | 95* | 145 | 70 | 190 | 240 | Z+* | 310* | 190* | Z+* | 360* | 410 | 215 | 240 | 265 | 190* | 215* | 170 | 204 | (10) |
| 30 | Z+ | Z+* | 190* | 170* | 190* | 95* | 0* | 25* | -145* | -95* | -170* | -190* | -120* | 0* | Z+* | Z±* | 240 | 310 | 430 | 360 | 575 | Z+* | 190 | 170 | 325 | (7) |
| 31 | 215 | 190 | 170 | 170 | 215 | 215 | 240 | 215 | 170 | 170* | (215)* | 335* | 145 | Z+* | 170* | 215* | Z+* | Z+* | 290 | 240 | 265 | Z+ | 290 | 310 | 223 | (15) |
| Mean | 108 | 103 | 118 | 89 | 101 | 127 | 102 | 105 | 106 | 110 | 127 | 138 | 163 | 143 | 159 | 169 | 176 | 221 | 199 | 187 | 181 | 135 | 134 | 128 | 140 | (442) |
| | (17) | (18) | (16) | (16) | (15) | (16) | (19) | (20) | (21) | (23) | (21) | (22) | (22) | (21) | (19) | (17) | (16) | (19) | (21) | (21) | (18) | (11) | | (16) | | |
| | | | | | | | | | | | | | | | | | | | | | | Mean | for 0a | days | [99 | (2)] |
| Annua1 | 119 | 116 | 124 | 114 | 113 | 123 | 132 | 138 | 147 | 142 | 140 | 141 | 152 | 156 | 158 | 160 | 164 | 155 | 157 | 160 | 164 | 148 | 137 | 126 | 141 (| 5786) |
| Mean | (223) | (234) | (242) | (233) | (229) | (230) | (242) | (235) | (234) | (248) | (242) | (247) | (251) | (251) | (252) | (244) | (241) | (247) | (263) | (253) | (242) | (237) | (237) | (229) | | |
| | () | (231) | | (= 3 -) | , | | <u> </u> | | | | | | · | | | | | | | | Annuel | mean | for 0a | dave | [1 | 301 |
| | | | | | | | | | | | | | | | | | | | | | Laurua I | mean | 'O' ON | uays | [. | JU) |

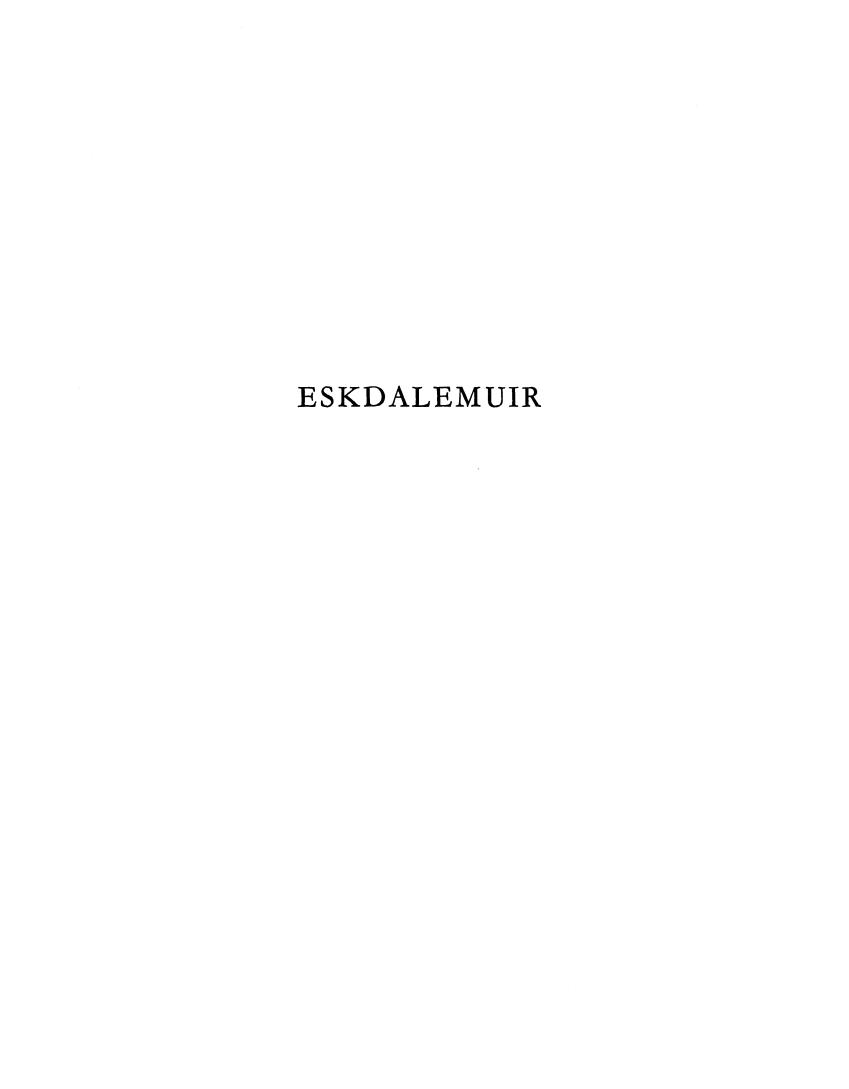
Daily, monthly and annual means are computed excluding hours with precipitation and, of course, all indeterminate entries. The number of hours or days used in computing each mean is shown in round brackets. Entries in square brackets are means for 0a days (see Introduction) and the figure in round brackets is the number of days used in computing this mean.

20 LERWICK

| | JANU | ARY | FEBR | UARY | MAI | КСН | API | RIL | M. | ιΥ | Ju | NE |
|---------------------|-----------|--|-----------|--|-----------|--|------------|--|------------|--|-----------|--|
| | Character | Duration of negative potential gradient | Character | Duration of negative potential gradient | Character | Duration of negative potential gradient | Character | Duration of negative potential gradient | Character | Duration of negative potential gradient | Character | Duration of negative potential gradient |
| | 1 | hr. | | hr. | | hr. | | hr. | | hr. | | hr. |
| 1 | 1a | (0.1) | 1c | 2.0 | 2b | 3 · 1 | 0a | 0.0 | 1ь | 0.5 | 1a | 0.1 |
| 2 | 1a | 1.1 | 2c | 5.2 | 1a | 1.3 | 1b | 2.4 | 2b | 7.1 | 1a | 0.4 |
| 3 | 1a | - | (2c) | - | 1b | 2 · 1 | 1a | 0.7 | 2c | 4.9 | 0a | 0.0 |
| 4 | 1b | | (1a) | _ | 0a | 0.0 | 1b | 1.1 | 1a | 0.1 | 0a | 0.0 |
| 5 | 1c | 2.0 | 1b | 0.2 | 0a | 0.0 | 1 b | 2.3 | 1b | 1 · 7 | 0a | 0.0 |
| 6 | 1a | 0.8 | 0a | 0.0 | 0a | 0.0 | 2c | 4.4 | 0a | 0.0 | 1a | 0.5 |
| 7 | 1a | 0.6 | 0a | 0.0 | 0a | 0.0 | 0a | 0.0 | 0a | 0.0 | 2c | 4.8 |
| 8 | la | (1.2) | 0a | 0.0 | 0a | 0.0 | 1 b | 1 · 4 | 1 b | 0.1 | 2b | 4 · 5 |
| 9 | Qa. | 0.0 | 1a | 0.2 | 1c | 1.7 | 2b | 7·9 | 0a | 0.0 | 2c | 4.0 |
| 10 | 1a | 2.3 | 1c | 1 · 2 | 0a | 0.0 | 2b | 4.0 | 0a | 0.0 | 2b | 4.5 |
| 11 | 1ь | 1.0 | 2c | 3.5 | 1a | 0.3 | 2a | 15-4 | Oa | 0.0 | 1b | 3.0 |
| 12 | 1b | 2.9 | 1c | 0.6 | 1a | 0.1 | 2b | 4.1 | 0a | 0.0 | 2b | 3.4 |
| 13 | 1b | (0.4) | 1c | 0.9 | 1a | 0.1 | 2b | (5.8) | 1a | 0.2 | 1ь | 2.8 |
| 14 | 1a | 0.1 | 1c | - | 1b | 0.5 | 1c | (2.2) | 1b | 0.9 | 1a | 0.3 |
| 15 | 1a | 0.5 | 1c | 1.4 | 1b | 0.4 | 1c | (1.6) | 1 b | 1.0 | 1a | 0.5 |
| 16 | 1ь | 1.1 | 1c | (2.3) | 0a | 0.0 | 1a | 0.1 | 1a | 1.2 | 1b | 1.1 |
| 17 | 1b | 0.6 | 1c | 1.6 | 0a | 0.0 | 0a | 0.0 | 0a | 0.0 | 1a | 2.3 |
| 18 | 0a | 0.0 | 1b | 1.9 | 0a | 0.0 | 0a | 0.0 | 1a | 0.5 | 2a | 4.1 |
| 19 | 0a | 0.0 | 2c | 5.2 | 0a | 0.0 | 0a | 0.0 | 1a | 2.5 | 2a | 4.7 |
| 20 | Oa | 0.0 | 1c | 2.5 | 1a | 0.3 | 1b | 2.1 | 1a | 0.1 | 1a | 0.5 |
| 21 | la | 2.7 | 1c | 1.9 | 2a | 3⋅6 | 1a | 0.8 | 1a | 0.5 | 1a | 0.7 |
| 22 | 1b | 0.6 | 0a | 0.0 | 1a | 1.6 | Qa | 0.0 | la | 0.1 | 0a | 0.0 |
| 23 | 2c | 4.3 | 1b | 0.3 | 1b | 0.1 | 1b | 0.3 | 2c | 8.9 | 0a | 0.0 |
| 24 | la la | 0.2 | 0a | 0.0 | 0a | 0.0 | 0a | 0.0 | 2b | 5.1 | 0b | 0.0 |
| 25 | 1a | 0.2 | 2c | 4.8 | 0a | 0.0 | 1a | 0.7 | 1a | 0.3 | la | 0.5 |
| 26 | 1a | 0.1 | 2b | 4.0 | 0a | 0.0 | 1a | (1.2) | 1b | 0.3 | 0a | 0.0 |
| 27 | 18 | 0.1 | 26 2c | 9.3 | la | 0.8 | la | 0.2 | 1b | 2.5 | 1b | 0.5 |
| 28 | 1b | 1.2 | 1b | 1.1 | 1a | 1.4 | la 1a | 0.3 | 1b | 0.8 | 1b | 1.8 |
| 28 | 1c | 0.7 | 1b | 1.6 | 1a 1a | 0.4 | 0a | 0.0 | Qa | 0.0 | la | 0.3 |
| 30 | 1c | 1.2 | 10 | • | la la | 0.3 | 1b | 2.5 | la | 0.4 | 1a | 2.1 |
| | | | | - | | 0.1 | | | | | | |
| 31 | 1b | 0.3 | | | 1a | | | | 0a | 0.0 | | |
| Total | | 26 · 3 | | 52.0 | - | 18 · 2 | _ | 61.5 | - | 39.7 | - | 47 · 4 |
| No. of days used | - | 29 | - | 26 | _ | 31 | _ | 30 | _ | 31 | - | 30 |
| Mean | _ | 0.9 | - | 2.0 | - | 0.6 | - | 2·1 | - | 1.3 | - | 1.6 |

| | J | ULY | AUG | GUST | SEPT | TEMBER | ОСТ | OBER | NOV | ember | DEC | EMBER |
|---------------------|------------|--|------------|--|-----------|--|-----------|--|------------|--|------------|--|
| | Character | Duration of negative potential gradient | Character | Duration of negative potential gradient | Character | Duration of negative potential gradient | Character | Duration of negative potential gradient | Character | Duration of negative potential gradient | Character | Duration of negative potential gradient |
| | | hr. | | hr. | | hr. | | hr. | | hr. | | hr. |
| 1 | 1b | 0.6 | 2b | 3.1 | 1a | 0.4 | 1b | 1.5 | 2a | 4.5 | 2b | 3.7 |
| 2 | 0a | 0.0 | 1a | 0.2 | 0a | 0.0 | 1a | 0.6 | 2b | 7 · 1 | 1ь | 0.5 |
| 3 | 0a | 0.0 | 1a | 1 · 1 | Oa | 0.0 | 2b | 4 · 2 | 2 b | 6.7 | 2c | 4 · 7 |
| 4 | 0a | 0.0 | 2c | 5·1 | 1b | 1.6 | 1a | 1.5 | 1b | 2.7 | 1c | 1.3 |
| 5 | 1a | 2 · 4 | 1a | 2 · 4 | 1a | 0.7 | 2a | 4.9 | 1b | 1.7 | 1a | 0.5 |
| 6 | 1a | 0.1 | 1a | 1.6 | 0a | 0.0 | 0a | 0.0 | 1 b | 1.1 | 1a | 0.4 |
| 7 | 1a | 0.5 | 1a | 0.6 | l 1a | 0.1 | 0a | 0.0 | 0a | 0.0 | 1c | 1.3 |
| 8 | 1b | 0 · 1 | 1a | 2.0 | 1ь | 0.2 | 1b | 2.8 | 0a | 0.0 | 1 b | 0.9 |
| 9 | 1a | 0·1 | 1a | | 1b | 2.1 | 1a | 0.8 | 2c | 3.4 | 0a | 0.0 |
| 10 | 0a | 0.0 | 2a | - | 0b | 0.0 | 1a | 1.0 | 1b | 1 · 1 | 1a | 0.1 |
| 11 | 0a | 0.0 | 1a | 0.5 | 1a | 2.9 | 1a | 1.6 | 1b | 2.5 | 0a | 0.0 |
| 12 | la | 0.1 | 1a | 1 · 4 | 1a | 0.5 | 1a | 1.5 | 1 b | 1.2 | (1b) | - |
| 13 | 0b | 0.0 | 1a | 0.1 | 1a | 0.1 | 2a | 4.5 | 1b | 1 · 3 | (1a) | - |
| 14 | 1b | 0.1 | 1ь | 1.9 | 1b | 2.0 | 1a | 0.2 | (1b) | - | (1b) | - |
| 15 | 1b | 0.6 | 1a | 0.5 | 2b | 3.8 | 0a | 0.0 | 1b | 1 · 2 | (1b) | - |
| 16 | 0a | 0.0 | 1a | 0-1 | 1a | 0.1 | 1a | 0.1 | 2c | 4.0 | (1b) | - |
| 17 | 2a | 3 · 7 | 1a | 0.5 | la | 0.1 | 0a | 0.0 | 2 b | 4.1 | (1a) | (0.8) |
| 18 | 1b | 1.7 | 1a | 0.4 | 0a | 0.0 | 0a | 0-0 | 1c | 1.9 | 1c | 2.8 |
| 19 | 1a | 1.9 | 1a | 0.1 | 1b | 1.0 | 0a | 0.0 | 1b | 0.3 | 1 b | 0.1 |
| 20 | 1a | 0.3 | 1b | 0 · 2 | 2a | 4.9 | 1a | 0.8 | 1 b | 1.5 | 1a | 0.3 |
| 21 | 1a | 0.3 | 1a | 0-1 | 1a | 1.3 | 1a | 2.1 | 2a | 6.4 | 1c | 1.9 |
| 22 | 1b | 0.1 | 1 b | 3.0 | 1a | 0.6 | 1b | 2.0 | 2b | 7.7 | 1b | 1.4 |
| 23 | 1a | 0.4 | 1ь | 0.5 | 0a | 0-0 | 0a | 0.0 | 1a | 1.8 | 2 b | 9.2 |
| 24 | 1b | 1.5 | 0a | 0.0 | 2a | 9.9 | 1a | 1 · 1 | 1a | 0.1 | 1a | 1.4 |
| 25 | 1b | 0.3 | 0a | 0.0 | 1ь | 0. 2 | 2a | 11.6 | 2b | 6.1 | 2c | 4 · 2 |
| 26 | 1b | 0 · 2 | 1a | 1 · 2 | 0a | 0.0 | 2b | 3.7 | 1Ь | 1.0 | 1 b | 1.9 |
| 27 | 0a | 0.0 | 1a | 0.3 | 0a | 0.0 | 1a | 1 · 2 | 1c | 2.3 | 1c | 0.9 |
| 28 | 1 b | - | 0a | 0.0 | 0a | 0.0 | 1a | 0.4 | 1c | 2.9 | 1b | 0.7 |
| 29 | (1b) | - | 1a | 0.1 | 1a | 0.1 | 0a | 0.0 | 2b | 3.2 | 2c | 4.6 |
| 30 | Oa Ó | 0.0 | 1a | 0.2 | 0a | 0.0 | 1a | 0.3 | 1a | 2·1 | 2c | 8.1 |
| 31 | 0a | 0.0 | 0a | 0.0 | | | 1b | 1 · 1 | | | 1 b | 0.2 |
| Total | - | 15.0 | - | 27 · 2 | - | 32.9 | - | 49.5 | 1 | 79.9 | | 52 · 2 |
| No. of days used | - | 29 | - | 29 | - | 30 | - | 31 | - | 29 | _ | 26 |
| Mean | - | 0.5 | _ | 0.9 | - | 1 · 1 | - | 1.6 | - | 2.8 | | 2.0 |

Annual values: Character 0 1 2 No. of days used 82 229 55 Duration: Total 501.8 hr. No. of days 351 Mean 1.43 hr.



TERRESTRIAL MAGNETIC FORCE: HORIZONTAL COMPONENT Mean values for periods of sixty minutes ending at exact hours, G.M.T.

21 ESKDALEMUIR (H) 16.000y (0.16 C.G.S. unit) + TANUARY 1960 Hour G.M.T 4-5 9-10 10-11 11-12 12-13 13-14 14-15 15-16 16-17 17-18 18-19 19-20 20-21 21-22 22-23 23-24 6-7 7-8 8-9 Mear 17,000+ 2-3 3-4 5-6 756 2 q 3 4 5 771 768 760 763 777 761 759 755 770 765 771 778 793 778 722 728 778 712 749 10 d 756 11 d 14 724 749 729 719 7 27 756 19 21 d 729 746 754 24 25 757 771 27 790 780 30 g 31 q Mean Grand Total Sun 23,000+ 564.021

MAGNETIC DECLINATION (WEST) Mean values for periods of sixty minutes ending at exact hours, G.M.T.

| 22 E | SKDALEI | MUIR (I |) | | | | | | | | | 1 | 0° + | | | | | | | | | | | | JANUAR | Y 1960 |
|---------------|--------------|---------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|---------------|
| | Hour 0 | G.M.T. 1-2 | 2-3 | 3-4 | 4-5 | 5-6 | 6-7 | 7-8 | 8-9 | 9-10 | 10-11 | | 12-13 | 13-14 | 14-15 | 15-16 | 16-17 | 17-18 | 18-19 | 19-20 | 20-21 | 21 - 22 | 22-23 | 23-24 | | Sum 600·0+ |
| 1 a | 28.4 | 30.7 | , 30·1 | 28.9 | 28.7 | 29.5 | 29.5 | 28.4 | 27.8 | 27.5 | 28 · 2 | 30.6 | 32.2 | 32.8 | 32.8 | 32.2 | 31.3 | 30.4 | 29.7 | 29.4 | 28 · 7 | 28 · 2 | 27·7 | 28.3 | 29.7 | 112-0 |
| 2 q | 28 2 | 28.7 | 29.5 | 29.7 | 30.3 | 29.9 | 29.3 | 28.6 | 27.8 | 27 · 1 | 27.9 | 29.3 | 31.9 | 34.0 | 33.0 | 32.5 | 32.3 | 32.0 | 30.8 | 29.4 | 28 · 4 | 28 1 | 26.9 | 26.5 | 29.7 | 112.1 |
| 3 | 26 · 1 | 29 · 4 | 30.3 | 30.2 | 28.9 | 27 · 7 | 27.9 | 28 · 1 | 27 · 4 | 26 · 6 | 28.0 | 31 · 2 | 33 · 4 | 34 · 9 | 35.5 | 35.7 | 36 · 4 | 34 · 2 | 31 · 5 | 29.8 | 29 · 1 | 28 · 3 | 28 · 1 | 27 · 5 | 30 · 3 | 126 · 2 |
| 4 | 25.2 | 26 · 4 | 24 · 4 | 25.9 | 25.0 | 26 · 7 | 27 · 4 | 27.6 | 26 · 9 | 26 · 9 | | 30.0 | 33.3 | 33 · 1 | 34 · 3 | 34 · 3 | | | 31 · 4 | 30 · 1 | | 28 · 3 | 26 · 4 | 24 · 3 | 28.6 | 87 · 5 |
| 5 | 24.6 | 25.8 | 25.8 | 19.3 | 23.9 | 24 · 7 | 26 · 4 | 26 · 9 | 26 · 9 | 28 · 2 | 30.6 | 32.7 | 34 · 1 | 37 - 5 | 35 · 2 | 34 · 8 | 32.9 | 32.6 | 32 · 7 | 31 · 4 | 30.5 | 29 · 1 | 26 · 2 | 15.9 | 28 · 7 | 88 · 7 |
| 6 | 23.9 | 26 · 8 | 24 · 1 | 24 · 3 | 26 · 7 | 27 · 7 | 28 · 4 | 28 · 7 | 29 · 2 | 30.3 | 30.5 | 31 · 7 | 32 · 8 | 32.8 | 32 · 8 | 32 · 4 | 31 · 8 | 32.9 | 32.0 | 30.4 | 29.6 | 28.6 | 27 · 4 | 27 · 1 | 29.3 | 102.9 |
| 7 | 27.8 | 27 · 4 | 27 · 2 | | 26 · 9 | 26 · 3 | 26.5 | 28.3 | 28.8 | 29.2 | | 29 · 1 | 31 · 5 | 32.8 | 32.2 | 32.3 | | 33.9 | 34 · 0 | 32.6 | 31 · 9 | 30.0 | 29.3 | 28 · 7 | 29.8 | 114 - 4 |
| 8 | 27.4 | 24 · 6 | 24 · 2 | 26 · 9 | 27 · 8 | 29.1 | 28 · 8 | 28.8 | 28 · 5 | 28 · 4 | 28 · 7 | 29.6 | 30.1 | 30.6 | 30.9 | 31 · 4 | 31 · 5 | | 31 · 5 | 31 · 5 | 31 · 1 | 28 · 9 | 27 · 7 | 27.6 | 29.0 | 96.9 |
| 9 q | 27·3 28·4 | 27·0 28·1 | 27·2 29·4 | 27·9 29·1 | 29·1 30·1 | 28·1 28·9 | 28·3 29·5 | 28·5 27·3 | 28·7 29·7 | 28.9 | 29·2 32·1 | 30·2 35·4 | 31·0 34·6 | 31·9 37·1 | 31·6 36·1 | 31·4 37·3 | 32·1 31·6 | 31·9 29·9 | 31·4 31·0 | 30·5 27·5 | 30·3 | 29·8 13·4 | 29·5 19·3 | 29·1 23·5 | 29.6 | 110.9 |
| 10 d | | | | | | | | | | | | | | | | | | | | | | | | | | 87.1 |
| 11 d | 24 · 7 | 26 · 0 | 26 · 5 | 28.2 | 28 · 4 | 29.2 | 29.1 | 30.2 | 29 · 2 | 32.0 | 32.4 | 33.0 | 32.6 | 35.2 | 30.8 | 31.5 | 30.8 | 30.5 | 30 2 | 30 · 2 | 29.4 | 29 · 1 | 28 · 4 | 27.6 | 29.8 | 115-2 |
| 12 13 | 29.3 | 29·4 28·7 | 27·3 29·7 | 27·1 30·9 | 28·1 28·9 | 28 · 2 | 28·2 28·8 | 27·6 28·4 | 27·6 29·0 | 28·3 30·3 | 29·6 30·2 | 29·3 31·6 | 30.6 | 31 · 3 | 30·2 31·3 | 25·9 31·9 | 28·9 31·3 | 31·0 30·2 | 29·0 27·7 | 27·4 22·5 | 25·7 20·4 | 17·8 22·0 | 24·5 22·6 | 26·4 26·1 | 27 · 9 | 68 · 7 |
| 13 14 d | 28.6 | 31.7 | 20.3 | 22.2 | 24 · 2 | 27 · 2 | 27.0 | 27.3 | 29.9 | 29.9 | 32.2 | 33.0 | 33.9 | 33.5 | 32.2 | 30.7 | 30.5 | | 33.4 | 35.7 | 27 - 4 | 15.5 | 17.5 | 21.0 | 28.2 | 83·4 76·0 |
| 15 d | 21.1 | 24.6 | 13.6 | 14.8 | 22.7 | 26 · 6 | 26.8 | 28.0 | 28.9 | 27.7 | 28 · 3 | 29.2 | 30.6 | 29.9 | 30.2 | 30.8 | 30.8 | 31.9 | 30.4 | 27.6 | 27 - 7 | 26.6 | 27 · 4 | 27.6 | 26.8 | 43.8 |
| 16 | 27.0 | 27 · 6 | 27 · 3 | 28 · 4 | 29 · 1 | 28 · 8 | 28 · 2 | 27 · 5 | 27 · 8 | 28.0 | 28 · 5 | 29.2 | 30.9 | 30.3 | 29.6 | 29.5 | 30.3 | 28.9 | 29.5 | 29 · 4 | 29.3 | 28.4 | 27 - 1 | 21.9 | 28.4 | 82.5 |
| 17 | 25.5 | 27 - 4 | 26 · 6 | 27.0 | 27.8 | 30.4 | 30.0 | 29.2 | 28.6 | 29.1 | 29.7 | 30.3 | 32.7 | 35.5 | 32.7 | 33.3 | 32.8 | 32.8 | 32.3 | 30.4 | 29.6 | 29.5 | 28.7 | 28 · 2 | 30.0 | 120.1 |
| 18 | 27.5 | | 28 · 1 | 28 · 4 | 29.1 | 29.6 | 29.2 | 30.6 | 30.1 | 34.8 | 32.0 | 31.3 | 33.3 | 33 · 4 | 31 · 1 | 29.2 | 29.3 | | 30.4 | 28.6 | 28.2 | 24 · 3 | 24.0 | 25.8 | 29.4 | 105.3 |
| 19 | 26 · 2 | 23 · 1 | 24 · 3 | 25.0 | 26 · 7 | 27.0 | 27.6 | 27 · 4 | 27 · 3 | 27.8 | 28.5 | 30.3 | 32.8 | 32.6 | 31.6 | 31.6 | 31 · 4 | 30.3 | 29 · 4 | 30.2 | 29 · 4 | 29.0 | 29 2 | 28.3 | 28.6 | 87 · 0 |
| 20 | 27 · 7 | 26 · 3 | 27 · 7 | 26 · 4 | 28 · 1 | 27 · 9 | 28.8 | 27 · 7 | 29.3 | 29 · 7 | 31.5 | 34 · 0 | 32.6 | 31 · 6 | 32.7 | 34 · 0 | 37.8 | 33.9 | 30.3 | 29 • 4 | 29 · 2 | 27.6 | 25.9 | 28 · 1 | 29.9 | 118-2 |
| 21 d | 27 · 2 | 11 · 2 | 24 · 9 | 26.0 | 27 · 1 | 28.0 | 30.4 | 34 · 3 | 31 · 6 | 32.2 | 32 · 4 | 36.0 | 37 · 2 | 33.5 | 34 · 7 | 32.5 | 32.7 | 24 · 4 | 27.0 | 16.8 | 23 · 2 | 23.5 | 19.2 | 21.9 | 27.8 | 67.9 |
| 22 | 23.8 | 25.4 | 30 · 1 | 29 · 1 | 31.0 | 29.8 | 30.0 | 29.5 | 31 · 1 | 31.8 | 32.6 | 31.8 | 33.9 | 33.2 | 33.3 | 31.6 | 30.2 | 30.2 | 30 · 2 | 28 • 4 | 27.5 | 24 · 1 | 25.6 | 25.7 | 29.6 | 109.9 |
| 23 | 27 · 8 | 29.0 | 28.3 | 28.0 | 28.0 | 29.5 | 27.5 | 28.6 | 27 · 4 | 28 · 5 | 30.5 | 32 • 4 | 34 · 7 | 35:4 | 33.7 | 30.3 | 28.3 | 24 · 0 | 28.0 | 26.0 | 26 · 1 | 22.9 | 19·1 | 24 · 2 | 28 · 3 | 78 • 2 |
| 24 | 26 · 9 | 30.0 | 27.6 | 25.7 | 28.9 | 28 · 2 | 29.0 | 29.2 | 29.9 | 29.1 | 29.6 | 31.0 | 33 · 4 | 34 · 0 | 29 · 1 | 29.7 | 29.1 | 23 · 1 | 27.8 | 27.9 | 26 · 5 | 25.5 | 27.5 | 28.6 | 28.6 | 87.3 |
| 25 | 28.7 | 29 · 0 | 29.0 | 27.5 | 28 · 2 | 27 · 4 | 28 • 4 | 28 · 4 | 27 · 4 | 27 · 2 | 28.6 | 30.2 | 31 · 6 | 33 · 2 | 31 · 7 | 29.9 | 29.2 | 25.8 | 25 · 2 | 29.0 | 28 · 7 | 28 · 5 | 27 · 1 | 27 · 2 | 28.6 | 87 · 1 |
| 26 | 27 · 7 | 27.9 | 28 · 4 | 28.9 | 29.4 | 28 · 2 | 28.9 | 28 · 1 | 27.6 | 26.6 | 28.0 | 29.4 | 30.5 | 32.2 | 32.0 | 30.3 | 30.3 | 29.7 | 29.2 | 28 · 1 | 27 · 5 | 26 · 6 | 26 · 5 | 28 · 1 | 28.8 | 90∙1 |
| 27 | 28.5 | | 26 · 5 | 25.9 | 26 · 0 | 28.6 | 28 · 2 | 27 · 3 | 26 · 3 | 25.7 | 27 · 1 | 29 1 | 31.2 | 33.0 | 32.7 | 31.3 | 30.1 | 30.5 | 30.3 | 29.5 | 28 · 7 | 28 · 3 | 27.9 | 26 · 9 | 28.6 | 87 · 0 |
| 28 29 | 28 · 0 | 29·4 28·1 | 31·1 27·0 | 28·9 26·0 | 28·7 24·8 | 28·7 27·0 | 28·3 27·2 | 27·6 27·2 | 26·6 26·8 | 25·5 26·0 | 27·1 28·4 | 29·3 | 31·4 31·6 | 32·4 34·6 | 33·4 34·3 | 32·5 33·5 | 30·6 | 30·2 30·5 | 30·2 30·2 | 29·3 29·5 | 27:0 | 28 · 2 | 28 · 2 | 27 · 2 | 29.2 | 99.8 |
| 30 a | 28.0 | | 28.4 | 28.6 | 28.7 | 28.8 | 28.3 | 27 · 7 | 26.8 | 24.9 | 26.4 | 27.9 | 30.0 | 31.5 | 31.7 | 31.1 | 30.2 | | 29.9 | 29.5 | 28·8 28·5 | 27·9 28·0 | 26·3 27·8 | 26·5 27·8 | 28 · 8 | 91·4 87·8 |
| 31 q | 27.8 | 27.9 | 28 · 5 | 28 · 7 | 28 7 | 28.5 | 28 · 4 | 28 · 1 | 27.3 | 26.6 | 27.0 | 28.9 | 31.8 | 32.7 | 33.2 | 31.8 | 31.3 | | 30.5 | 30.1 | 29.3 | 28 · 3 | 28 · 1 | 27.8 | 29.3 | |
| Mean | 26 · 9 | 27 · 1 | | | 27 - 7 | 28 · 2 | 28:4 | 28 • 4 | | | 29.4 | 30.9 | | | | | | 30.3 | | 29 · 0 | | 26 · 3 | | 26.2 | 28.9 | 102.4 |
| Sum 800·0+ | | 40.4 | | | | | | | | | | | 204 · 4 | | | | | | | | | | | 11.4 | | rand Total |

JANUARY 1960

TERRESTRIAL MAGNETIC FORCE: VERTICAL COMPONENT Mean values for periods of sixty minutes ending at exact hours, G.M.T. 45,000y (0.45 C.G.S. unit) +

Sum 2-3 3-4 4-5 0-1 1-2 5-6 6-7 7-8 8-9 9-10 10-11 11-12 12-13 13-14 14-15 15-16 16-17 17-18 18-19 19-20 20-21 21-22 22-23 23-24 8000+ **6**3 2 q 3 352 349 372 7 8 9 q 10 d 360 363 359 11 d 359 36.3 14 d 15 d 17 374 19 8 21 d 22 24 25 352 378

DAILY EXTREMES OF TERRESTRIAL MAGNETIC ELEMENTS, MAGNETIC CHARACTER FIGURES (K AND C) AND TEMPERATURE IN MAGNET HOUSE

360 366

352 355

1149 1187 1368 1437 1519 1563 1509 1542 1472 1358 1325 1295

370 366

Grand Total

269,383

352 353

| 24 | 4 esemalemuir | JANUARY | 1960 |
|----|---------------|---------|------|
| | | | |

| 24 | ESEDAI | EMUIR | | | | | | | | | | | | JAI | NUARY 1960 |
|------|---------------|------------|----------------------|-------------|--------------------------|--------------------------|--------|--------------------|----------|------------------------|----------|------------------------|---------------------|------------------------|--------------|
| | | | | | TERRESTRIA | MAGNETIC ELEM | CENTS | ····· | | | | | | Magnetic | Temperature |
| | | Horizo | ntal force | | | lination | | | | al force | | 3-hr. range indices | Sum of K indices | character of day, C | in magnet |
| | Maxi 16,00 | | Minimum 16,000y + | Range | Maximum 10°+ | Minimum 10°+ | Range | Maximum 45,000y | | Minimum 45,000y + | Range | K | andrees. | (0-2) | 200 + |
| | h. m. | γ | γ h. m | | h. m. ' | ' h. m. | 1 | | γ | γ h. m. | γ | | | | ° A . |
| 1 q | 06 43 | 781 | 737 12 1 | | 14 09 32.9 | 27.0 09 22 | 5.9 | | 66 | 350 12 00 | 16 | 1,1,1,2,1,1,1,1 | 9 | 0 | 82 · 5 |
| 2 q | 06 33 | 785 | 731 12 1 | | 13 16 34·3 16 31 36·9 | 26·1 23 10 25·0 00 18 | 8.2 | | 71 | 349 09 38 | 22 | 1,1,1,3,2,1,2,1 | 12 | 0 | 82 · 4 |
| 3 | 06 30 | 787 | 743 13 4 | | 16 31 36.9 | 22.8 00 36 | 11.9 | | 71 | 347 01 42 | 24 | 2,2,1,2,2,2,2,1 | 14 | 0 | 82 · 4 |
| 5 | 08 41 | 793 802 | 749 15 4 699 12 5 | | 13 22 39.6 | 12.8 23 38 | 26.8 | | 67 89 | 352 13 23 330 05 30 | 15 59 | 2,1,3,3,3,3,1,2 | 18 | 1 | 82.6 |
| 5 | 05 26 | 802 | 699 12 5 | 5 I I | 13 22 39.0 | 12.9 23 36 | 20.0 | 22 47 3 | ן עס | 330 05 30 | 39 | 3,4,3,2,3,3,3,4 | 25 | 1 | 82 · 4 |
| 6 | 19 10 | 773 | 726 00 1 | 0 47 | 14 19 34 2 | 19.3 00 10 | 14.9 | 00 00 3 | 78 | 359 12 20 | 19 | 3,2,1,1,2,2,2,2 | 15 | 0 | 82 · 5 |
| 7 | 17 20 | 779 | 742 11 0 | 9 37 | 18 04 35 2 | 25.4 03 39 | 9.8 | 20 40 30 | 68 | 353 08 49 | 15 | 1,1,2,2,1,2,1,1 | 11 | ō | 82 · 5 |
| 8 | 19 45 | 781 | 750 13 5 | 0 31 | 20 13 32 1 | 23.5 02 16 | 8.6 | 21 07 3 | 67 | 353 12 45 | 14 | 2, 2, 1, 1, 1, 2, 2, 2 | 13 | o l | 82.6 |
| 9 q | 09 05 | 780 | 759 23 5 | | 17 00 32 4 | 26 · 2 02 21 | 6.2 | | 56 | 349 12 52 | 17 | 1,1,2,1,1,1,1,1 | 9 | 0 | 82 · 5 |
| 10 d | 16 45 | 883 | 668 21 5 | 5 215 | 13 10 42.3 | -0.6 20 26 | 42.9 | 16 46 50 | 80 | 341 07 19 | 167 | 2,1,4,4,4,6,5,5 | 31 | 2 | 82.6 |
| 11 d | 23 45 | 791 | 690 09 1 | 1 101 | 14 07 41.8 | 20.9 01 09 | 20.9 | 14 35 4 | 12 | 354 03 53 | 58 | 3,2,4,4,4,4,3,3 | 27 | 1 | 82.6 |
| 12 | 00 24 | 793 | 713 20 5 | | 13 15 36.6 | 11 3 21 08 | 25.3 | 15 32 38 | | 336 00 22 | 51 | 3,2,2,2,3,3,3,4 | 22 | i | 82.6 |
| 13 | 22 19 | 782 | 721 20 2 | | 02 19 33 4 | 17.5 20 37 | 15.9 | | 82 | 351 23 27 | 31 | 2,2,1,1,2,1,3,3 | 15 | î | 82.6 |
| 14 d | 18 39 | 809 | 652 23 3 | 9 157 | 18 53 38 3 | 5.3 21 49 | 33.0 | 20 17 46 | 57 | 291 02 00 | 176 | 4,4,3,3,3,3,5,4 | 29 | 2 | 82.6 |
| 15 d | 22 04 | 766 | 622 02 0 | 1 144 | 14 42 33.7 | 9.7 02 10 | 24.0 | 00 02 43 | 33 | 285 02 55 | 148 | 5,4,3,3,3,3,2,2 | 25 | 1 | 82.6 |
| 16 | 22 24 | 769 | 718 23 0 | 7 51 | 13 01 31.6 | 19.9 23 15 | 11.7 | 17 42 37 | 75 | 364 22 50 | 11 | 1,1,0,1,1,2,2,3 | 11 | o | 82.6 |
| 17 | 13 04 | 806 | 738 00 0 | | 13 03 40 2 | 23.3 02 40 | 16.9 | 18 29 3 | | 347 06 13 | 24 | 3,3,2,2,4,3,2,2 | 21 | 1 | 82.5 |
| 18 | 07 46 | 821 | 710 12 3 | | 09 09 37 4 | 21.5 21 48 | 15.9 | 22 48 37 | | 351 07 44 | 28 | 2,1,4,3,3,2,3,3 | 21 | 1 | 82.5 |
| 19 | 22 14 | 788 | 736 12 1 | | 12 43 34 8 | 20.7 01 09 | 14.1 | | 70 | 335 00 59 | 35 | 3,2,1,2,2,2,1,2 | 15 | 0 | 82.5 |
| 20 | 04 44 | 799 | 717 11 2 | 2 82 | 16 11 40.7 | 24.5 22 38 | 16 · 2 | 16 19 37 | 76 | 352 12 57 | 24 | 1,3,2,4,3,3,2,2 | 20 | 1 | 82 · 4 |
| 21 d | 19 56 | 843 | 685 11 5 | 7 158 | 12 12 44.0 | -8.0 19 49 | 52.0 | 20 47 46 | 56 | 295 01 33 | 171 | 6,3,3,4,4,4,6,5 | 35 | 2 | 82 · 4 |
| 22 | 22 19 | 783 | 671 11 0 | 3 112 | 09 55 38 7 | 20.9 00 16 | 17.8 | 17 09 38 | 31 | 345 02 42 | 36 | 3,2,3,4,3,3,2,3 | 23 | ī | 82 · 3 |
| 23 | 05 55 | 795 | 709 13 5 | | 13 07 39 2 | 15.4 20 32 | 23.8 | 17 23 39 | 93 | 344 05 53 | 49 | 2,3,3,2,3,3,4,3 | 23 | ī | 82.3 |
| 24 | 04 31 | 784 | 714 10 5 | | 13 23 36 . 5 | 19.8 17 39 | 16 · 7 | 14 40 38 | | 341 02 38 | 42 | 2,3,3,3,3,3,2,2 | 21 | 1 | 82 · 1 |
| 25 | 04 58 | 783 | 737 14 14 | 1 46 | 13 41 34 2 | 20.0 17 56 | 14.2 | 18 17 37 | 73 | 348 02 30 | 25 | 2,2,2,2,2,3,3,1 | 17 | 1 | 82.0 |
| 26 | 23 59 | 796 | 741 10 3 | | 14 08 33-1 | 25.5 21 55 | 7.6 | 16 29 37 | | 352 06 02 | 18 | 1,1,1,2,2,2,2,2 | 13 | 0 | 82 · 1 |
| 27 | 00 02 | 797 | 740 10 1 | | 13 07 34 · 8 | 22.6 04 02 | 12.2 | 16 12 36 | | 347 01 08 | 17 | 3,3,1,2,2,2,1,2 | 16 | ō | 82 · 1 |
| 28 | 19 20 | 801 | 736 12 50 | | 14 55 34 7 | 24.6 09 29 | 10.1 | 16 41 36 | | 347 02 45 | 15 | 2,1,1,2,2,1,3,1 | 13 | 0 | 82.3 |
| 29 | 02 11 | 800 | 730 12 19 | | 14 42 36 3 | 23.7 04 45 | 12.6 | 22 42 36 | | 341 04 10 | 20 | 2,3,3,3,3,2,2,2 | 20 | 1 | 82 · 1 |
| 30 q | 07 15 | 786 | 738 11 4 | 48 | 14 24 32.0 | 24.6 09 29 | 7-4 | 01 30 35 | 56 | 337 12 39 | 19 | 0,0,1,2,1,1,1,0 | 6 | 0 | 81 · 7 |
| 31 q | 05 50 | 792 | 742 10 40 | 50 | 14 50 33.5 | 26 3 09 58 | 7 · 2 | 09 50 35 | 59 | 341 13 40 | 18 | 0,1,1,2,2,1,1,1 | 9 | 0 | 81 · 7 |
| ean | | 794 | 718 | 76 | 36·2 | 19.3 | 16.9 | 38 | 36 | 341 | 45 | - | - | 0.65 | 82.3 |

q denotes an international quiet day and d an international disturbed day.

23 ESEDALEMUIR (Z)

Mean

10,000

30 q

31 q

1242 1040

348 346

353 353

343 345

353 353

987 1013 1052 1090 1109 1123 1147

Mean

21,000+

1226 1279 1207 1300 1386

TERRESTRIAL MAGNETIC FORCE: HORIZONTAL COMPONENT Mean values for periods of sixty minutes ending at exact hours, G.M.T.

21 ESEDALEMUIR (H) 16,000y (0.16 C.G.S. unit) + FEBRUARY Hour G.M.T. Sum 9-10 10-11 11-12 12-13 13-14 14-15 15-16 16-17 17-18 18-19 19-20 20-21 21-22 22-23 23-24 3-4 4-5 5-6 6-7 7-8 8-9 Mean 17,000+ 774 756 761 775 771 747 747 769 756 723 731 776 751 744 763 760 756 765 743 769 738 764 750 761 757 761 753 744 752 760 756 757 756 749 755 770 749 765 755 789 762 764 761 769 769 767 772 775 747 785 1377 739 740 754 754 761 759 742 768 737 730 740 748 746 762 1073 781 778 776 788 772 783 775 779 757 775 763 774 752 758 755 769 747 739 759 766 754 754 766 767 763 753 778 765 766 762 779 772 771 767 777 780 777 773 767 774 776 774 747 751 747 760 757 769 760 775 773 776 775 774 770 772 773 768 788 777 766 780 782 782 785 792 785 787 767 769 762 775 780 779 778 777 751 771 762 745 767 784 770 759 775 790 769 763 774 788 759 765 779 793 768 761 772 792 776 757 757 782 764 752 750 772 751 749 747 767 752 751 755 767 743 739 758 768 743 739 766 768 743 743 773 776 754 737 779 743 736 769 778 721 741 772 774 765 775 748 777 778 755 780 775 1414 12 14 d 15 755 757 741 747 754 745 771 768 754 757 769 765 740 757 742 767 738 758 741 762 763 738 780 16 d 17 d 18 d 19 20 754 761 765 775 758 746 777 760 751 754 758 751 774 739 774 732 781 751 769 765 754 777 771 760 733 749 745 748 756 749 744 745 769 762 769 732 754 728 764 769 753 745 758 760 767 767 756 753 752 749 759 764 772 772 785 1157 734 752 757 775 781 782 781 765 758 766 772 761 746 767 772 768 755 771 775 21 d 22 23 24 q 25 q 771 775 776 776 769 772 776 772 769 777 775 776 772 771 782 779 771 775 784 782 759 757 765 757 755 753 771 758 760 772 774 782 780 769 772 778 773 775 779 779 774 776 771 778 769 760 1448 776 778 776 775 776 790 777 776 784 775 774 778 775 765 771 761 772 763 772 768 775 774 778 796 781 777 769 766 774 779 784 799 784 773 777 775 792 789 27 28 29 748 747 778 784 789 782 781 752 748 753 754 770 779 782 784 1557 775

MAGNETIC DECLINATION (WEST) Mean values for periods of sixty minutes ending at exact hours, G.M.T.

1012 1023 1165 1174 1256 1259 1214 1281 1255

1417 1468 1461 1337 1105

Grand Total

532,181

| 22 E | SEDALE | MUIR (| D) | | | | | | | | | 1 | 0° + | | | | | | | | | | | | FEBRUAI | ry 1960 |
|---------------|--------|---------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------|--------------|--------------|--------------|--------------|--------------|--------------|---------|--------------------------|
| | Hour (| G.M.T. 1-2 | 2-3 | 3-4 | 4-5 | 5-6 | 6-7 | 7-8 | 8-9 | 9-10 | 10-11 | | 12-13 | 13-14 | 14-15 | 15-16 | 16-17 | 17-18 | 18-19 | 19-20 | 20-21 | 21-22 | 22-23 | 23-24 | | Sum 600·0+ |
| | ' | • | • | • | • | • | • | • | • | • | • | • | 1 | • | • | • | | | | | • | | | | | |
| 1 | 28 · 3 | 28 · 4 | 28 · 8 | 29.1 | 30.0 | 28 · 2 | | 27 · 3 | 27.3 | 27.8 | | 33 · 4 | 34 - 4 | 34 · 1 | 34 · 1 | 34.6 | 32.7 | | 30.4 | 29 · 5 | | 27 · 9 | 28 · 1 | 28.3 | 30.0 | 120·7 128·6 |
| 2 3 | 28 · 1 | 27·4 26·2 | 27·0 25·6 | 26·9 24·3 | 28 · 1 | 27·1 23·5 | 26·4 25·6 | 26·4 25·9 | 26·0 25·5 | 25·9 25·8 | 29·1 28·0 | 30·1 32·5 | 33.8 | 36·3 34·6 | 36·3 | 37·6 37·6 | 40·2 33·4 | | 39·0 | 36·7 28·4 | 27·9 27·3 | 27·9 26·6 | 23·5 25·8 | 19·9 21·4 | 28.6 | 86 · 1 |
| 4 | 20.5 | 24 · 4 | 24 · 3 | 25.9 | 24 · 4 | 28 · 3 | 24.8 | 25.2 | 25.7 | 28.3 | 30.8 | 30.2 | 32.6 | 33.0 | 32.2 | 31.8 | 31.5 | | 33.8 | 30.1 | 30.2 | 24 · 4 | 26.8 | 27.9 | 28.3 | 80.2 |
| 5 | 28.1 | 28.0 | 27 . 7 | 27.9 | 27 · 3 | 27 · 1 | 26.9 | 27.0 | 27 - 4 | 26 · 1 | 30.1 | 32.3 | 38.4 | 40.3 | 40.3 | 39.0 | 35.5 | | 33.7 | 32.8 | 30.8 | 27.6 | 19.3 | 18.8 | 30.3 | 126.3 |
| 6 | 20.5 | 20.5 | 27 · 2 | 24 · 7 | 19-1 | 20.3 | 24 · 3 | 29.0 | 29.0 | 26 · 5 | 28 · 3 | 29.8 | 32.8 | 34 · 8 | 35.7 | 36 · 0 | 36 · 2 | 34 · 1 | 32 · 7 | 29.9 | 28.3 | 28 · 1 | 28 · 1 | 27.9 | 28.5 | 83 · 8 |
| 7 q | 26 · 7 | 27.3 | 29.4 | 30.0 | 28.6 | 28.6 | 28-4 | 28 · 4 | 27 · 4 | 26 · 4 | 27.7 | 29.4 | 31.3 | 32 · 3 | 32.9 | 31 · 9 | 31.0 | 30.2 | 29.6 | 29.4 | 29.1 | 28 · 7 | 28 · 5 | 28.6 | 29.2 | 101.8 |
| 8 | 28 · 4 | 28 · 7 | 28 · 8 | 28 · 8 | 28 · 3 | 28 · 1 | 27 · 3 | 27 · 7 | 27 · 5 | 26.8 | 27 · 1 | 30.8 | 32.3 | 32.5 | 33.8 | 33 · 4 | 32.3 | | | 30.0 | | 28 · 3 | 28 · 2 | 28.0 | 29.6 | 111.3 |
| 9 q | 25 2 | 23.7 | 27.9 | 27.1 | 27 · 7 | 27 · 4 | 27 · 1 | 27.0 | 26 · 6 | 26 · 4 | 27 · 5 | 29.6 | 31.8 | 33.1 | 33.0 | 32.8 | 32.8 | | 31.0 | 29.6 | 29.2 | 29.4 | 28.7 | 29.1 | 29.0 | 95 · 8 |
| 10 q | 29.2 | 29 · 2 | 29.6 | 30.4 | 29 · 5 | 29 · 5 | 28.6 | 28 · 0 | 27.0 | 26 · 8 | 28 · 1 | 32 • 2 | 32.8 | 33.0 | 32.7 | 31 · 4 | 30 · 4 | 29.6 | 29.3 | 28.8 | 28 · 7 | 28 · 5 | 28 · 2 | 28 · 3 | 29.6 | 109.8 |
| 11 | 28.8 | 29.2 | 29.0 | 28.8 | 28 · 7 | 28 · 4 | 27.9 | 27.6 | 27 · 0 | 26.8 | 27.9 | 29.3 | 31.2 | 32 · 4 | 32.5 | 32.2 | 31.9 | | 32.5 | 29.3 | 27.3 | 24 · 3 | 26 · 5 | 27.7 | 29.1 | 98.6 |
| 12 | 25.6 | 21 · 4 | 23.9 | 29·1 29·2 | 29·6 29·0 | 29·2 28·9 | 28·5 28·6 | 27·4 28·4 | 26·6 27·6 | 26·7 26·8 | 28·6 27·4 | 30·3 29·5 | 32·0 31·5 | 32·2 32·3 | 32.4 | 31·9 31·9 | 31·1 31·0 | 30·1 | 29·4 29·7 | 29·0 30·1 | 28·7 29·4 | 28·6 23·4 | 28·6 14·1 | 28·7 17·6 | 28.7 | 89·6 75·9 |
| 13 14 d | 28.9 | 27.3 | 28.0 | 24 · 2 | 22.3 | 27.9 | 29.3 | 28.6 | 28 - 4 | 28.6 | 29.9 | 33.8 | 36 · 1 | 36.1 | 36.8 | 37.4 | 34.5 | | 32.3 | 30.1 | | 22.6 | 20.9 | 23.2 | 28.6 | 86.9 |
| 15 | 26.3 | 26.8 | 27.7 | 27.9 | 27 · 4 | 27 · 3 | 27.2 | 27 · 1 | 26 . 9 | 26.6 | 27.4 | 29.0 | 31.8 | 33.9 | 35.6 | 32.6 | 31.8 | 25.2 | 30.4 | 30.5 | 30.0 | 29.3 | 29.1 | 27.7 | 29.0 | 95.5 |
| 16 d | 26.0 | 27.8 | 22.9 | 23.8 | 25.0 | 26 · 2 | 25 · 1 | 26 · 1 | 26 · 1 | 26 · 8 | 29 · 7 | 32.0 | 31.9 | 35.4 | 36 · 1 | 37 · 2 | 32.7 | 32.5 | 30.8 | 29 · 2 | 29 · 1 | 28 · 1 | 28 · 4 | 27.0 | 29.0 | 95.9 |
| 17 d | 25.6 | 27 · 1 | 27.0 | 26.8 | 27.0 | 27 · 4 | 28 · 3 | 28.9 | 27 · 4 | 28 · 5 | 33.0 | 33.8 | 34 · 7 | 34.6 | 34 · 3 | 33 · 1 | 32.9 | 35.9 | 34 · 4 | 35.6 | 34 · 3 | 29.1 | 23.0 | 23.0 | 30.2 | 125.7 |
| 18 d | 21 · 3 | 23.7 | 27 · 4 | 22.3 | 22.5 | 30.0 | 33.0 | 29.9 | 28 • 4 | 31 · 2 | 31 · 8 | 34 · 2 | 35-4 | 35.2 | 33 · 1 | 32.0 | 29.8 | 29.5 | 22 · 4 | 23.0 | | 28 · 7 | 28 · 2 | 25.4 | 29.0 | 86 · 9 |
| 19 | 25.1 | 27 · 7 | 27 · 4 | 27.0 | 27 · 4 | 27.3 | 27.0 | 28.0 | 29.2 | 29 · 1 | 29.5 | 32 · 5 | 31.8 | 32.3 | 32.0 | 32.8 | 32 · 4 | 23.9 | 18.8 | 19.7 | | 14.9 | 20.9 | 27.0 | 26 · 8 | 43.5 |
| 20 | 19.4 | 27.8 | 20.0 | 24 · 7 | 26 · 9 | 27 · 9 | 29 · 2 | 29 · 4 | 29 · 2 | 29.6 | 30.4 | 30.7 | 32.0 | 33 · 1 | 32.8 | 32 · 4 | 32 · 4 | 28 · 7 | 29.5 | 28 · 7 | 28.5 | 28 · 1 | 23.9 | 26.9 | 28.4 | 82.2 |
| 21 d | 27 · 1 | 27 · 2 | 29.6 | 27 · 1 | 26 · 3 | 25 · 1 | 28 · 5 | 30.3 | 28 · 4 | 29.7 | 30.2 | 32 · 4 | 32.1 | 32.1 | 31 · 5 | 30.7 | 26.0 | | 29.2 | 28 · 1 | 23.0 | 26 · 4 | 27 · 6 | 28.0 | 28.4 | 81 · 1 |
| 22 | 27.9 | 28 · 2 | 28.0 | 28.0 | 27.9 | 27 · 7 | 27 · 4 | 28.1 | 27.8 | 27 · 1 | 28·8 27·3 | 30.5 | 31·4 31·5 | 31 · 4 | 32.6 | 31 5 | 30.9 | 30.0 | 29·6 29·5 | 28·2 29·6 | 20-9 | 24 · 3 | 27 . 9 | 28 · 4 | 28.5 | 84 · 5 |
| 23 24 a | 28 · 0 | 27·7 27·9 | 28.9 | 26·8 28·6 | 27·4 29·1 | 28·7 28·4 | 29.0 | 27·8 27·5 | 27·0 27·3 | 26.6 | 27.5 | 30·2 29·9 | 31.6 | 32·1 31·7 | 33·4 32·0 | 31·8 31·1 | 28·8 30·0 | 23.3 | 29.3 | 28.9 | | 26 · 9 | 27·3 28·1 | 28·1 28·0 | 28.6 | 86·5 94·6 |
| 25 q | 26.6 | 26.8 | 27 · 3 | 27.4 | 27 · 4 | 27 · 2 | 26.6 | 26:1 | 25.3 | 24.9 | 26.6 | 29.6 | 31.9 | 33.8 | 33.8 | 32.3 | 30.4 | 30.5 | 30.1 | 29.4 | 29.1 | 28.2 | 27.3 | 28 · 2 | 28.6 | 86.8 |
| 26 | 28.3 | 28 · 3 | 28 · 2 | 28.0 | 27 - 8 | 27 · 5 | 26.9 | 26 · 3 | 25.9 | 25.2 | 27 · 3 | 31 · 4 | 32.9 | 34 · 1 | 34.9 | 34 · 6 | 34 2 | 33 · 2 | 31.2 | 30.3 | 29.4 | 28.8 | 27.8 | 26.8 | 29.6 | 109-3 |
| 27 | 24.3 | 24 · 4 | 26 · 6 | 27.4 | 29.1 | 26.5 | 24 · 1 | 24 · 7 | 25.6 | 25.8 | 28.4 | 33.0 | 34.7 | 38.0 | 36.2 | 34 · 4 | 31 · 3 | 30.2 | 24.6 | 27.9 | 29.0 | 27 · 4 | 27.2 | 27.9 | 28.7 | 88.7 |
| 28 | 28.0 | 28.7 | 28 · 5 | 28.4 | 27.8 | 27.3 | 27 · 1 | 26.3 | 25.7 | 26.6 | 29.7 | 31.5 | 34.6 | 35.6 | 35.7 | 32.9 | 31.0 | | 30.9 | 29.9 | 29.0 | 28 · 5 | 28.0 | 28 · 1 | 29.6 | 111.0 |
| 29 | 26.0 | 22·1 | 30.0 | 27.6 | 25.2 | 24 · 7 | 28 · 2 | 23·1 | 23.5 | 24 · 4 | 26 · 7 | 29.9 | 33 · 5 | 34.0 | 39.0 | 37 • 4 | 33.8 | 32.3 | 31.5 | 31 · 3 | 31 · 7 | 24 · 9 | 23.0 | 25.2 | 28.7 | 89.0 |
| Mean | 25.9 | 26 · 7 | 27 · 4 | 27 · 2 | 26.9 | 27 · 3 | 27.5 | 27.4 | 27.0 | 27.0 | 28.8 | 31 · 2 | 33.0 | 33.9 | 34.3 | 33 · 7 | 32 · 2 | 31.0 | 30.4 | 29.5 | 27.9 | 26 · 8 | 26.0 | 26 · 2 | 29.0 | |
| Sum 700·0+ | 51.0 | 72.9 | 93 · 7 | 88 · 2 | 80.6 | 91 · 7 | 96 · 6 | 93·5 | 82 · 7 | 84 · 3 | 135·7 | 203 · 8 | 256 · 5 | 284 · 3 | 295·8 | 276 · 3 | 232.9 | 198.9 | 180·7 | 154 · 4 | 109.5 | 78 · 5 | 53 · 0 | 61·1 | | Grand Total 20156 · 6 |

Grand Total 247,516

| 23 B | SKDALI | MUIR (2 | :) | | | | | | | | 45 | ,000y (| 0·45 C | .G.S. 1 | unit) | + | | | | | | | | 7 | EBRUARY | 1960 |
|---|---|---|---|---|--|---|---|--|--|---|--|---|---|---|---|---|---|---|---|--|---|---|---|---|---|---|
| | Hour 0-1 | G.M.T. 1-2 | 2-3 | 3-4 | 4-5 | 5-6 | 6-7 | 7-8 | 8-9 | 9-10 | 10-11 | 11-12 | 12-13 | 13-14 | 14-15 | 15-16 | 16-17 | 17-18 | 18-19 | 19-20 | 20-21 | 21-22 | 22-23 | 23-24 | Mean | Sum 8000+ |
| 1 2 3 4 5 6 7 q 8 9 q 10 q 11 12 13 14 d | 7 352 354 366 348 364 369 363 356 359 352 352 363 353 353 | γ 352 357 365 352 359 367 360 355 352 351 351 352 353 339 | γ 352 356 363 349 359 348 355 354 348 349 349 346 352 332 | γ 351 356 360 354 359 316 352 353 347 347 350 323 | γ 349 357 349 358 359 335 348 353 352 345 349 349 333 | γ 344 356 352 343 359 343 352 353 353 345 348 351 348 335 | γ 344 356 355 347 358 347 353 353 353 344 348 352 346 336 | γ 346 356 358 351 355 343 349 353 344 346 352 343 346 | γ 348 358 360 354 353 340 358 348 352 346 346 353 343 348 | γ 349 353 358 351 353 346 360 351 353 349 347 353 343 351 | 79 349 349 358 348 346 347 358 352 351 352 345 349 344 351 | y 348 347 355 352 353 347 352 349 346 349 347 345 338 349 | 7 352 343 358 351 352 349 348 342 349 348 344 338 348 | 7 352 344 360 351 358 353 350 348 343 349 348 348 341 358 | γ 352 349 363 355 361 356 352 354 347 353 349 352 343 370 | γ 360 349 375 360 380 360 353 360 348 354 354 354 347 382 | γ 369 355 386 363 389 368 356 369 348 355 359 355 351 386 | γ 370 375 382 366 378 375 358 375 349 355 364 354 353 386 | γ 368 399 389 371 382 375 358 377 350 353 378 353 352 392 | γ 365 433 385 379 386 372 359 374 353 353 381 353 354 406 | γ 362 411 381 381 382 371 359 368 353 353 353 376 413 | γ 358 387 374 393 382 369 358 364 353 353 389 353 387 366 | γ 355 378 364 383 365 357 363 353 353 353 380 353 385 369 | y 354 369 335 370 375 362 357 360 353 353 367 353 360 369 | 7 354 364 365 360 366 355 355 358 350 350 357 352 352 359 | 501 747 751 630 785 523 530 586 411 406 580 437 449 620 |
| 15 16 d 17 d 18 d 19 20 21 d 22 3 24 q 25 q 26 27 28 29 | 366 364 330 368 357 322 350 355 357 358 357 351 346 345 351 | 364 356 345 370 359 317 352 354 355 357 356 351 339 351 347 | 364 342 355 334 360 315 340 353 352 355 352 351 334 353 347 | 364 346 359 309 360 336 352 353 352 351 319 352 345 | 364 352 358 314 359 335 332 352 352 351 351 324 351 348 | 361 352 355 309 359 342 340 351 348 351 351 327 351 347 | 360 352 352 317 357 351 341 354 347 351 351 351 322 350 336 | 358 351 350 335 358 354 338 352 348 352 348 352 351 327 347 338 | 355 351 345 348 355 357 342 351 350 351 356 339 350 346 | 355 347 340 351 358 357 342 352 353 353 346 351 350 | 355 340 338 349 358 351 348 346 348 347 344 346 348 347 | 353 340 344 348 356 351 357 345 343 347 344 338 344 346 345 | 351 342 347 355 358 351 359 346 347 347 344 339 342 349 343 | 355 344 353 362 360 352 367 347 346 342 339 345 350 344 | 370 360 361 363 364 357 371 348 345 346 347 353 349 350 | 349 378 362 374 372 365 375 351 354 347 356 358 352 361 | 378 372 363 378 375 376 386 354 370 358 353 356 362 354 359 | 393 367 371 377 387 374 382 359 380 358 351 350 360 352 359 | 383 366 393 390 388 367 368 359 368 357 351 352 371 351 362 | 380 363 393 389 395 365 361 362 358 352 351 366 351 361 | 370 362 390 369 391 363 363 371 359 358 354 351 360 351 374 | 364 366 390 364 359 363 356 361 360 358 357 354 361 351 387 | 361 348 390 362 359 355 357 359 359 351 357 350 351 385 | 361 324 370 357 348 346 357 352 358 358 350 356 343 351 369 | 364 354 361 354 365 351 355 354 355 353 351 350 345 350 354 | 734 485 654 492 752 422 513 494 520 475 420 407 284 407 501 |
| Mean | 354 | 353 | 349 | 346 | 348 | 348 | 348 | 348 | 350 | 351 | 349 | 347 | 348 | 350 | 355 | 360 | 366 | 368 | 370 | 37 1 | 370 | 367 | 364 | 356 | 356 | |

DAILY EXTREMES OF TERRESTRIAL MAGNETIC ELEMENTS, MAGNETIC CHARACTER FIGURES (K AND C) AND TEMPERATURE IN MAGNET HOUSE

91 151

295

443 603

660 723

735

637

544 337

78

| Į | | | | | | TERI | ESTRIAL | MAGNET | IC ELEM | ENTS | · | | | | | | |] | Magnetic | Temperatur |
|-----|---------------|---------|-------------|---------------|-------|-------|------------|---------|-------------|--------|-------|----------------|--------|-----------------|-------|----------------------|--------|----------|-------------------------|----------------|
| | | Hor i z | ntal | force | | | De | clinati | on | | | Vert | ical f | orce | | 3-hr. rar indices | | Sum of K | character, of day, C | in magnet |
| | Maxi 16,00 | | | imum 00y + | Range | | imum °+ | | imum)°+ | Range | | ximum 000y+ | | imum 1000y + | Range | K | | indices | (0-2) | house 200 + |
| | h. m. | γ | γ | h. m. | γ | h. m. | • | ' | h. m. | | h. m | • | γ | h. m. | γ | | | | | °А. |
| ιİ | 05 10 | 801 | 731 | 14 02 | 70 | 13 07 | 38.6 | 26.0 | 09 00 | 12.6 | 16 5 | | 343 | 07 12 | 28 | 0,2,2,2,3,2 | | 14 | 0 | 81.6 |
| 2 | 16 05 | 801 | 717 | 20 00 | 84 | 19 13 | 43 · 4 | 17 . 7 | 23 21 | 25 · 7 | 19 4 | | 341 | | 121 | 1,1,1,2,3,4 | | 20 | 1 | 81 · 5 |
| 3 | 22 55 | 802 | 689 | 12 38 | 113 | 18 05 | 40.0 | 15.1 | 23 51 | 24 · 9 | 18 3 | | 326 | 23 18 | 64 | 2,2,2,3,3,3 | | 22 | 1 | 81 · 4 |
| • | 19 17 | 795 | 701 | 12 54 | 94 | 12 39 | 36 · 7 | 16.8 | 00 00 | 19.9 | 21 3 | | 336 | 05 40 | 62 | 3,3,2,2,2,2 | | 21 | 1 | 81 · 5 |
| 5 | 07 30 | 785 | 707 | 11 30 | 78 | 14 33 | 43 · 1 | 16.8 | 23 17 | 26.3 | 16 1 | 7 393 | 345 | 10 32 | 48 | 2,1,2,4,4,3 | 3,2,3 | 21 | 1 | 81 · 4 |
| 5 | 16 35 | 789 | 710 | 02 53 | 79 | 16 52 | 37 · 5 | 18.3 | 04 45 | 19-2 | 18 0 | | 309 | 03 16 | 67 | 3,4,3,1,2,3 | | 20 | 1 | 81 · 4 |
| 7 9 | 07 22 | 784 | 744 | 12 40 | 40 | 14 50 | 33 · 3 | 25.9 | | 7.4 | 00 3 | | 348 | 04 30 | 16 | 2,2,2,1,1,0 | | 9 | 0 | 81 · 5 |
| 3 j | 08 05 | 789 | | 12 28 | 68 | 14 27 | 36 · 6 | | 10 07 | 12.0 | 18 0 | | 347 | 13 10 | 30 | 1,1,2,3,3,2 | | 15 | 0 | 81 · 5 |
| 9 9 | 18 24 | 796 | 750 | 11 22 | 46 | 14 13 | 33 · 5 | 22.5 | 01 45 | 11.0 | 01 0 | | 341 | | 19 | 3,1,1,1,1,2 | | 12 | 0 | 81 · 6 |
|) q | 04 32 | 797 | 760 | 11 43 | 37 | 11 58 | 35 · 4 | 26.0 | 09 27 | 9.4 | 17 1 | 2 356 | 343 | 06 18 | 13 | 1,2,2,2,2,1 | , 1, 0 | 11 | 0 | 81 · 4 |
| ιÌ | 08 00 | 791 | 728 | 18 38 | 63 | 18 30 | 34 · 0 | 23.4 | 21 33 | 10.6 | 20 5 | | 343 | 10 43 | 47 | 0,0,1,2,1,3 | 3,3,3 | 13 | 0 | 81 · 6 |
| 2 | 01 39 | 785 | 741 | 13 13 | 44 | 13 34 | 33.0 | 18.5 | 01 23 | 14.5 | 00 0 | | 343 | 12 23 | 23 | 3,1,2,1,2,1 | | 11 | 0 | 81 · 7 |
| 1 | 07 50 | 799 | 669 | 22 28 | 130 | 14 38 | 33 · 3 | 12.1 | | 21.2 | 21 5 | | 332 | 23 47 | 65 | 0,0,1,2,2,1 | | 14 | 1 | 81 · 7 |
| d | 20 49 | 809 | 705 | 20 27 | 104 | 14 51 | 38 · 7 | 2.6 | 20 28 | 36 · 1 | 20 0 | | 318 | 03 32 | 130 | 4,3,2,3,3,3 | | 26 | 1 | 81 · 6 |
| · | 21 28 | 777 | 727 | 17 10 | 50 | 14 32 | 36 · 8 | 23.3 | 17 35 | 13.5 | 17 3 | 5 396 | 349 | 12 40 | 47 | 1,0,1,1,3,3 | 1,2,1 | 12 | 0 | 81.6 |
| d | 22 24 | 832 | 696 | 14 54 | 136 | 15 14 | 46 · 6 | 19-1 | 02 25 | 27 · 5 | 15 4 | | 318 | 23 47 | 63 | 4,2,2,3,5,4 | , 3, 4 | 27 | 1 | 81 · 7 |
| ď | 17 35 | 790 | 731 | 18 10 | 59 | 18 03 | 39 • 4 | | 22 15 | 20.2 | 22 0 | | 320 | 00 00 | 84 | 3,2,3,3,3,3 | ,3,4 | 24 | 1 | 81 · 5 |
| 1 d | 00 40 | 829 | 704 | 18 56 | 125 | 12 42 | 38 · 1 | 17.9 | 04 03 | 20.2 | 18 5 | | 302 | 03 27 | 103 | 5,4,3,3,3,3 | | 27 | 1 | 81.6 |
|) | 17 57 | 782 | | 20 18 | 63 | 11 45 | 34 · 0 | 10.9 | 20 48 | 23 · 1 | 17 4 | | 330 | 24 00 | 69 | 2,1,3,3,2,4 | | 23 | 1 | 81 · 7 |
| • | 22 16 | 803 | 719 | 16 24 | 84 | 13 09 | 35.4 | 13.6 | 00 41 | 21.8 | 16 4 | 3 378 | 306 | 01 52 | 72 | 4,3,2,2,3,3 | , 2, 3 | 22 | 1 | 81 · 8 |
| d | 04 30 | 802 | 707 | 16 37 | 95 | 12 03 | 34 · 6 | 17.9 | 16 55 | 16.7 | 16 5 | | 326 | 03 09 | 67 | 2,3,3,4,3,4 | , 3, 3 | 25 | 1 | 81.7 |
| : | 21 05 | 799 | | 12 16 | 52 | 11 53 | 34 · 5 | 18.6 | 20 16 | 15.9 | 20 3 | | 342 | 11 53 | 32 | 1,1,2,2,2,2 | | 16 | 0 | 81 · 7 |
| : | 08 40 | 784 | | 17 00 | 54 | 14 02 | 34 · 7 | 21.7 | 17 10 | 13.0 | 17 2 | | 342 | 11 12 | 40 | 2,2,2,2,2,3 | | 17 | 1 | 81 · 7 |
| q | 06 56 | 787 | | 11 33 | 24 | 14 19 | 32.7 | 26.0 | 08 53 | 6.7 | 22 40 | | 346 | 12 32 | 13 | 0,2,1,0,2,0 | | 6 | 0 | 81 · 6 |
| q | 22 29 | 795 | 75 6 | 12 23 | 39 | 14 17 | 34 · 9 | 24.0 | 09 19 | 10.9 | 21 40 | 358 | 341 | 13 30 | 17 | 1,0,0,0,1,1 | ,1,3 | 7 | 0 | 81.6 |
| | 15 25 | 801 | | 10 46 | 46 | 15 23 | 37 · 4 | 24 8 | 09 27 | 12.6 | 15 2 | | 334 | 11 00 | 24 | 0,0,0,2,2,3 | | 10 | 0 | 81 · 7 |
| - 1 | 06 10 | 815 | | 04 08 | 94 | 13 06 | 39.6 | 19.9 | 00 37 | 19.7 | 18 3 | | 316 | 03 07 | 59 | 3,4,3,3,3,3 | | 25 | 1 | 81 · 6 |
| | 23 20 | 792 | | 10 52 | 54 | 13 19 | 36 · 3 | 24.8 | 08 48 | 11.5 | 16 30 | | 341 | 00 00 | 14 | 2,2,2,2,2,2 | | 13 | 0 | 81 · 5 |
| | 06 40 | 812 | 731 | 10 29 | 81 | 14 22 | 40.3 | 19·4 | 01 42 | 20.9 | 22 02 | 392 | 333 | 06 48 | 59 | 4,2,3,2,3,2 | ,3,3 | 22 | 1 | 81 · 5 |
| + | | 797 | 725 | | 73 | | 37 · 0 | 19.6 | | 17.4 | | 385 | 333 | | 52 | | | | 0.55 | 81.6 |

 $^{{\}it q}$ denotes an international quiet day and ${\it d}$ an international disturbed day.

Sum 10,000+

260 238

119

47

80

102

159

175 112

Mean values for periods of sixty minutes ending at exact hours, G.M.

| 21 E | SKDALI | emuir (| (H) | | | | | | | | 1 | 6,0007 | (0.16 | c.g.s. | unit | + | | | | | | | | | MARC | и 1960 |
|--|--|--|--|---|--|---|--|--|--|---|--|---|---|---|---|--|--|---|---|---|--|---|---|--|---|--|
| | Hour 0-1 | G.M.T. 1-2 | 2-3 | 3-4 | 4-5 | 5-6 | 6-7 | 7-8 | 8-9 | 9-10 | 10-11 | 11-12 | 12-13 | 13-14 | 14-15 | 15-16 | 16-17 | 17-18 | 18-19 | 19-20 | 20-21 | 21-22 | 22-23 | 23-24 | Mean | Sum 17,000+ |
| 1 2 d 3 d 4 5 5 6 7 g 8 9 10 11 d 12 | 7 773 765 759 767 766 773 772 786 779 782 775 | 7 770 766 769 759 764 769 773 784 781 780 783 | 7 778 767 763 766 763 774 773 787 784 785 775 | 773 759 763 765 762 775 775 788 785 782 770 | 7 775 763 774 771 765 777 779 792 783 782 777 | 770 760 780 772 775 778 783 797 789 782 776 | 7 776 766 776 767 777 785 783 775 783 784 787 | 7 783 770 751 766 755 782 779 794 786 786 785 | 778 743 766 758 763 776 770 788 777 747 764 754 | 7 764 748 744 755 761 763 757 766 768 706 753 740 | 7 756 747 736 751 753 747 750 750 744 724 751 | 7 758 742 750 738 751 759 747 740 748 734 687 735 | 7 751 720 734 731 751 759 750 742 750 734 704 735 | 7 746 732 753 728 752 758 759 739 757 735 739 738 | 7 752 742 753 757 748 757 762 747 766 747 749 752 | 7 768 768 746 769 774 770 767 736 755 745 755 | 7 7711 7700 758 770 781 772 748 772 743 780 753 | 7 767 772 770 764 784 763 777 759 779 753 737 762 | 7 783 768 761 743 780 776 782 766 778 755 739 773 | 7 778 753 762 759 774 765 784 776 783 747 755 778 | 7 755 758 758 768 763 768 787 783 785 768 777 | 7 757 765 766 766 779 768 785 782 785 773 766 778 | 7 762 771 768 773 771 775 786 777 780 778 765 778 | 7 766 762 774 756 787 773 784 776 782 780 778 | 7 767 757 760 759 767 769 772 770 774 760 759 762 | 1410 1177 1234 1219 1399 1462 1536 1478 1579 1232 1227 |
| 13 q 14 15 16 d 17 18 19 | 773 775 790 674 752 769 775 | 768 779 787 666 746 770 783 | 772 777 785 644 753 762 772 | 775 777 784 703 751 766 771 | 776 780 782 720 757 766 776 | 776 785 784 713 763 766 782 | 782 784 787 755 769 766 785 | 768 779 785 737 758 785 787 | 761 772 773 735 731 771 778 | 747 747 761 719 740 759 756 | 734 744 751 710 726 751 743 | 731 753 746 705 720 741 728 | 736 750 759 698 714 741 739 | 748 759 767 705 728 739 742 | 756 766 776 723 736 751 751 | 764 783 792 735 746 762 753 | 766 779 786 755 755 767 747 | 775 788 790 736 766 775 770 | 778 791 778 751 763 778 778 | 780 795 774 731 766 778 780 | 778 795 759 740 774 781 778 | 781 793 763 751 764 782 782 | 786 793 759 751 769 790 783 | 781 799 724 766 774 786 782 | 766 777 773 722 751 767 768 | 1392 1643 1542 323 1021 1402 1421 |
| 20 q 21 22 q 23 q 24 25 26 27 | 780 783 784 793 783 779 769 787 | 776 783 780 785 787 780 773 785 | 775 780 777 785 795 782 777 790 | 775 778 781 781 801 785 781 787 | 773 781 785 781 795 787 780 777 | 773 782 784 782 792 792 782 785 | 783 785 785 787 792 794 786 787 | 782 783 778 785 786 795 783 786 | 776 775 771 778 776 785 765 766 | 763 769 758 764 766 765 754 759 | 750 758 749 747 750 754 752 742 | 749 752 754 748 756 759 757 739 | 754 748 756 754 761 761 758 738 | 758 744 751 763 766 764 772 751 | 754 766 773 772 771 761 757 | 769 765 775 781 793 774 774 762 | 773 776 780 784 769 775 776 770 | 778 780 783 782 783 781 784 777 | 782 784 786 788 797 792 786 | 784 783 786 786 795 785 791 791 | 785 784 784 789 781 789 792 793 | 785 785 786 792 797 787 791 | 784 785 787 795 793 790 791 791 | 785 783 793 791 780 792 790 787 | 773 774 776 779 782 780 776 | 1557 1578 1617 1692 1757 1723 1631 1584 |
| 28 29 30 31 <i>d</i> | 785 749 792 761 772 | 785 756 777 765 | 784 756 766 744 770 | 784 755 773 750 | 785 764 776 760 775 | 794 769 772 765 | 796 779 778 765 780 | 791 765 778 746 776 | 778 757 770 727 765 | 754 750 754 716 753 | 735 734 741 692 742 | 734 734 746 630 738 | 746 732 756 724 741 | 761 741 753 732 748 | 764 748 785 773 757 | 776 759 800 817 767 | 769 769 817 1075 780 | 753 779 786 1003 779 | 791 785 804 802 777 | 793 785 774 1041 784 | 791 785 759 811 | 786 789 749 718 775 | 778 796 731 538 770 | 774 820 761 562 | 774 765 771 767 | 1587 1356 1498 1417 |
| Sum 22,000+ | 1920 | | 1859 | 1924 | 2008 | 2076 | 2182 | | 1729 | 1326 | 1009 | 871 | 986 | 1180 | 1480 | 1786 | | 2156 | | 2312 | 2096 | | | 1922 | | Grand Total 570,977 |

${\tt MAGNETIC\ DECLINATION\ (WEST)}\\ {\tt Mean\ values\ for\ periods\ of\ sixty\ minutes\ ending\ at\ exact\ hours,\ G.M.T.}$

| 22 E | SKDALE | MUIR (1 | D) | | | | | | | | | : | 10° + | | | | | | | | | | | | MAR | CH 1960 |
|---------------|--------------|---------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|---------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|------------------------|
| | Hour 0-1 | G.M.T. 1-2 | 2-3 | 3-4 | 4-5 | 5-6 | 6-7 | 7-8 | 8-9 | 9-10 | 10-11 | 11-12 | 12-13 | 13-14 | 14-15 | 15-16 | 16-17 | 17-18 | 18-19 | 19-20 | 20-21 | 21-22 | 22-23 | 23-24 | | Sum 500·0+ |
| | 27.0 | 06.0 | 05.7 | 25.2 | 02.0 | 22.4 | 27.0 | 25 · 1 | 26 · 3 | 26 · 4 | 28 · 4 | 31.9 | 22.5 | 33 · 4 | 34 · 5 | 36 · 4 | 35.8 | 33.8 | 37·1 | 30.4 | 21.6 | , , | 23.9 | 07.0 | 20.6 | 187 · 4 |
| 1 2 d | 27 · 2 | | 25·7 14·9 | 25·2 23·7 | 23·2 24·1 | 23·4 25·1 | 26.5 | 25.8 | 26.8 | 29.3 | | | 33.5 | 36.8 | 34 · 4 | 35.0 | 33.8 | | 29.2 | | | 23 · 2 | 23.9 | 27·2 24·6 | 28.6 | 171 · 8 |
| 3 d | 25.0 | | 23.1 | 22.4 | 25.9 | | 23.3 | 26 · 5 | 29.0 | 30.2 | | | 35.9 | 37.8 | 38.6 | 36 · 7 | 31.8 | | 27.0 | | | 27 - 4 | 27.3 | 21.9 | 28.8 | 190.8 |
| 4 | 24 · 1 | 25.1 | 25.9 | | 27 · 2 | 26.6 | 26.0 | 25.6 | 25 · 7 | 26 · 4 | | | 34 · 2 | | 41 • 4 | 35.7 | 37.6 | | | | | | 23.0 | | 29.4 | 205.7 |
| 5 | 24 · 3 | 24.6 | 25.2 | 24 · 7 | 26 · 1 | 24 · 5 | 23.3 | 25.0 | 28 • 4 | 26 · 8 | 28 · 9 | 32.2 | 34.5 | 37 · 6 | 35.3 | 35 · 2 | 34 · 1 | 32.6 | 32.6 | 31 · 8 | 27 · 4 | 28 · 7 | 25 · 2 | 23 · 4 | 28.9 | 192 · 4 |
| 6 | 24 · 6 | 26.3 | 25.8 | 26 · 1 | 28 · 2 | 28.6 | 27 · 0 | 26 · 3 | 25.0 | 26 · 2 | | | 33 · 1 | | 34 · 5 | 32 · 7 | 31 · 5 | | 28.8 | 25 · 1 | 20.7 | 27 · 1 | 27 · 9 | | 28 · 1 | 174-9 |
| 7 q | 27 · 4 | | 27.9 | 27.9 | 27 · 5 | | 27 · 1 | 25.7 | 24 · 3 | 24 · 4 | 26.5 | | 33.8 | | 35.6 | 33.6 | | | 30.7 | 29.7 | 29.6 | 29.0 | 28 · 1 | | 29.2 | 201 · 4 |
| 8 | 28·5 26·2 | | 28·9 27·5 | 28.6 | 27·9 28·4 | 26·6 26·7 | 28·2 27·6 | 30·9 | 27·3 24·9 | 24·7 25·0 | 26·8 27·4 | | 37.9 | 37·9 35·4 | 37·9 35·9 | 35·3 32·8 | 32·7 32·0 | 30.1 | 29.5 | 28·8 29·1 | 28·7 28·8 | 28·7 28·4 | 26·9 28·0 | 24·1 28·5 | 29.9 | 217·3 200·3 |
| 10 | 28 · 8 | | 28.1 | 27.6 | 26.8 | 26.3 | 26 · 2 | 26 . 0 | 24 - 5 | 29.2 | 30.9 | | 35.6 | 36 · 3 | 36.0 | 35.6 | 32.6 | | 27.8 | 19.2 | 24 · 6 | 27 · 1 | 28 . 5 | 28.9 | 29.1 | 197 · 2 |
| 11 d | 28 · 2 | | 25.1 | 26 · 6 | 27 · 5 | 31.9 | 29.0 | 28.6 | 27 • 2 | 26 · 7 | 29.0 | 31 · 1 | 35.1 | 36 · 2 | 36 · 5 | 33.6 | 31 · 4 | | 23.8 | 27 · 8 | 26 · 4 | 27 · 5 | 27 · 7 | 28 · 3 | 29.2 | 200 · 2 |
| 12 | 28 7 | | 28.7 | 27.8 | 25.9 | 25.7 | 25.4 | 25.3 | 25.9 | 26 · 7 | 28.2 | | 34.0 | 34.7 | 33.7 | 32.8 | | | 29.7 | 28.8 | 28 · 7 | 27.8 | 25.0 | | 28.7 | 188 · 9 |
| 13 q | 26 · 8 | | 29.4 | 28.0 | | 27 · 3 | 26 · 5 | 24 · 8 | 22.9 | 22.6 | 24 · 5 | | 34 · 1 | 35.8 | 35.0 | 32.7 | | | | 27 · 4 | | 26.8 | 26 · 4 | | 28 · 1 | 173.9 |
| 14 | 28 · 6 | | 27.8 | 27.6 | 27 · 5 | 27 · 4 | 26 · 7 | 25.0 | 23.9 | 24 · 4 | 28.7 | | 34 · 1 | 35.0 | 34 · 1 | 34 · 1 | 31 · 4 | | 30.1 | 29.9 | 29.5 | | 28 · 2 | | 29.2 | 200.0 |
| 15 | 27 · 5 | 27 · 1 | 27 · 1 | 27 · 2 | 27 · 0 | 26 · 9 | 26 · 2 | 24.6 | 22.9 | 23.0 | 25.4 | | 34.3 | 37 · 1 | 38.6 | 40.5 | 43.0 | 38 · 7 | 32 · 3 | 23.7 | 30.3 | | 25 · 1 | 19.4 | 29.3 | 203 · 9 |
| 16 d | 8.6 | | 0.5 | -3.1 | 7.5 | 14.0 | 24 · 1 | 24.0 | 24 · 5 | 27.5 | 28 · 5 | | 33.7 | 34 · 5 | 35.3 | 33 · 2 | 31 · 9 | | 27 · 5 | 20.7 | 18.7 | 25.8 | 19.4 | 27.8 | 22.3 | 34 · 6 |
| 17 | 25·8 28·3 | | 28·9 30·0 | 29·7 28·2 | 29·0 25·9 | 26·0 27·6 | 25·5 29·9 | 24.8 | 24·6 24·7 | 24·0 23·7 | 26·8 24·7 | 31·1 28·4 | 34.6 | 35.9 | 36·4 33·3 | 35·4 31·8 | 31·9 29·9 | | 28 · 3 | 25·7 28·1 | 21·2 28·1 | 24·1 27·8 | 26.6 | 27·6 22·2 | 28 · 5 | 184·1 174·0 |
| 18 19 | 28.8 | | 25.8 | 25.9 | 26.4 | 26.5 | 26.5 | 25.2 | 23.5 | 25.9 | 27.1 | 30.0 | 33.6 | 36.5 | 36 · 4 | 35.5 | | | 28.2 | | | 28.2 | 28 • 4 | 28 · 1 | 28.9 | 192.7 |
| 20 a | 27 · 7 | 28 · 3 | 27.3 | 26.9 | 27.1 | 27 · 8 | 26 · 9 | 24.6 | 23.3 | 24 · 0 | 26.0 | | 32.2 | 33.3 | 32.9 | 31 · 7 | 30.4 | 29.0 | 28.9 | 28 · 9 | 28 · 5 | 28.2 | 28 · 4 | 28 · 2 | 28.3 | 179.5 |
| 21 | 27.6 | 27 · 7 | 27 · 5 | 27 · 2 | 27.0 | 26.3 | 25.9 | 24 · 0 | 22.9 | 23.6 | 25.0 | 28.4 | 32.5 | 33.5 | 33 · 7 | 32.9 | 31 · 4 | 29.6 | 28 · 9 | 28.7 | 28.0 | 28.0 | 28.0 | 27 · 9 | 28 · 2 | 176 · 2 |
| 22 g | 27 · 4 | 27.3 | 27 · 1 | 27.0 | 27 · 7 | 25.8 | 25.5 | 24 · 0 | 23 · 2 | 23.1 | 25 · 1 | 29.0 | 32.8 | 34.0 | 33.5 | 32.7 | 31.8 | 30.3 | 29.6 | 29.6 | 28 · 7 | 28 · 5 | 28 · 2 | 29.6 | 28.4 | 181.5 |
| 23 q | 29.3 | 28 · 3 | 27.0 | 26 · 4 | 26 · 6 | 26.9 | | 25.5 | 23 · 9 | 24 · 7 | 26 · 8 | | 33.9 | 36.6 | 35.8 | 34 · 1 | 31 · 9 | | 30.0 | 29.2 | | 28 · 7 | 24 · 0 | | 28.8 | 191 · 1 |
| 24 | 25.7 | | 27.5 | 23.8 | 23.1 | 23 · 1 | 24 · 0 | 23.8 | 24.6 | 25.3 | 26 · 7 | 29.7 | 32.0 | 34.5 | 34.6 | 35.0 | 32.7 | 30.9 | 31 · 3 | 27 · 1 | 27 · 2 | 28.6 | 29 · 3 | | 28.4 | 180.9 |
| 25 | 28 · 1 | | 28 · 0 | 27 · 7 | 27.0 | 26 · 9 | 26 · 7 | 25 · 2 | 24 · 7 | 24 · 4 | 26 · 8 | 30.9 | 34.0 | 34.9 | 33.2 | 31 · 4 | 29.2 | 28.0 | 27 · 3 | 27 · 1 | 27 · 8 | 27.9 | 28 · 4 | 23.9 | 28.2 | 177 • 4 |
| 26 | 23.7 | 24 · 5 | 27 · 7 | 26.3 | 25.5 | 25·8 26·2 | 24·6 25·2 | 23·6 22·6 | 23.5 | 25.0 | 26·9 26·1 | 30·7 30·9 | 33.3 | 35·4 36·9 | 33·4 36·7 | 32·6 34·8 | 30·1 32·5 | 29·9 31·0 | 29·5 29·8 | 28.6 | 28 · 7 | 28.5 | 28·5 28·7 | 27·7 28·3 | 28.1 | 174·4 190·7 |
| 27 28 | 27·5 27·8 | 27·3 27·1 | 26·9 26·9 | 25·7 26·4 | 26·5 25·8 | 25 2 | 25.2 | 24.1 | 22·2 22·7 | 22.9 | 30.0 | | 36.0 | 36.7 | 36 • 9 | 37.1 | 34.8 | 31.1 | 30.2 | 29·2 29·1 | 28·9 16·0 | 28·9 17·0 | 28.7 | 28.3 | 28.8 | 171.1 |
| 29 | 24 · 1 | 18.8 | 21.8 | 21.2 | | 25.9 | | 22.2 | 24.6 | 23.4 | 25.4 | 29.9 | 33.6 | 35.4 | 35.4 | 33.2 | | | 28.6 | 29.1 | 29.8 | 28.9 | 28.8 | 30-1 | 27.4 | 158 · 5 |
| 30 | 26 · 8 | | 23.1 | 25.2 | 24.0 | | 25.3 | 23.6 | 22 · 2 | 23.0 | 26 · 4 | 30.5 | 37 · 3 | 37 · 2 | 39-6 | 37.9 | 35.8 | | 33.8 | 30.1 | 29 · 1 | 20.4 | 19.7 | 20.3 | 28.0 | 171.0 |
| 31 d | 17.8 | 11-4 | 11 · 4 | 14.7 | 19.0 | 19.1 | 21.8 | 23.9 | 21.9 | 22 · 1 | 22.3 | 18.6 | 38 · 2 | 39.5 | 45.5 | 49.7 | 64 · 6 | 41.0 | 43.7 | 43.5 | 34 · 8 | 26.0 | 13.0 | 5.7 | 27.9 | 169 · 2 |
| Mean | 26 · 1 | 26 · 0 | 25.1 | 25.0 | 25.6 | 25.7 | 25.9 | 25 · 1 | 24.6 | 25.1 | 27 · 1 | 30.4 | 34 · 3 | 35.8 | 35.9 | 34.9 | 33.6 | 30.9 | 30.1 | 28.4 | 27 · 0 | 27 · 0 | 25.8 | 25.5 | 28-4 | |
| Sum 700·0+ | 107.9 | 104.9 | 78 - 5 | 76 · 3 | 93.6 | 95.0 | 103-6 | 78.8 | 62.0 | 78 · 5 | 139·4 | 243.7 | 364 · 1 | 409 · 9 | 414.6 | 381 · 7 | 341 · 8 | 258 · 8 | 231 · 7 | 180.8 | 138·2 | 137 · 8 | 99-7 | 91.7 | | Grand Total 21113.0 |

Mean values for periods of sixty minutes ending at exact hours, G.M.

350 347

843 766

867

349 351

| 3 E | SKDALE | MUIR (| Z) | | | | | | | | 45 | ,000γ (| 0.45 C | .G.S. | unit) | + | | | | | | | | | MARCH | 1960 |
|--------|-------------|---------------|-----|-----|-----|-----|-----|-----|-----|------|-------|---------|--------|-------|-------|-------|-------|-------|-------|-------|-------|-------|--------------|-------|-------|-------------|
| | Hour 0-1 | G.M.T. 1-2 | 2-3 | 3-4 | 4-5 | 5-6 | 6-7 | 7-8 | 8-9 | 9-10 | 10-11 | 11-12 | 12-13 | 13-14 | 14-15 | 15-16 | 16-17 | 17-18 | 18-19 | 19-20 | 20-21 | 21-22 | 22-23 | 23-24 | Mean | Sum 8000 |
| | γ | γ | γ | γ | γ | γ | γ | γ | γ | γ | γ | γ | γ | γ | γ | γ | γ | γ | γ | γ | γ | γ | γ | γ | γ | |
| 1 | 361 | 357 | 347 | 337 | 343 | 345 | 345 | 344 | 344 | 341 | 341 | 337 | 339 | 340 | 344 | 352 | 364 | 372 | 375 | 391 | 392 | 374 | 367 | 364 | 355 | 516 |
| 2 d | 361 | 352 | 330 | 340 | 346 | 344 | 342 | 342 | 346 | 346 | 344 | 337 | 346 | 350 | 350 | 356 | 369 | 375 | 383 | 391 | 386 | 378 | 370 | 359 | 356 | 543 |
| 3 d | 355 | 346 | 349 | 350 | 343 | 328 | 329 | 337 | 337 | 340 | 345 | 343 | 349 | 358 | 364 | 371 | 372 | 378 | 392 | 383 | 380 | 372 | 367 | 359 | 356 | 547 |
| } 5 | 355 | 355 | 352 | 355 | 355 | 352 | 353 | 357 | 360 | 360 | 355 | 349 | 350 | 357 | 368 | 401 | 392 | 402 | 410 | 396 | 384 | 376 | 363 | 353 | 367 | 810 |
| • | 353 | 355 | 355 | 356 | 352 | 341 | 340 | 345 | 343 | 346 | 349 | 346 | 345 | 346 | 350 | 357 | 361 | 362 | 366 | 374 | 381 | 361 | 342 | 340 | 353 | 466 |
| • | 341 | 351 | 348 | 350 | 343 | 340 | 345 | 352 | 355 | 356 | 355 | 346 | 340 | 344 | 355 | 358 | 366 | 366 | 362 | 367 | 372 | 361 | 357 | 356 | 354 | 486 |
| q | 355 | 353 | 353 | 353 | 352 | 351 | 352 | 356 | 357 | 357 | 353 | 346 | 345 | 345 | 350 | 356 | 357 | 352 | 351 | 351 | 352 | 354 | 352 | 352 | 352 | 455 |
| 3 | 350 | 350 | 348 | 347 | 345 | 345 | 348 | 341 | 343 | 346 | 348 | 343 | 342 | 348 | 353 | 363 | 367 | 367 | 364 | 360 | 356 | 356 | 359 | 356 | 352 | 445 |
| • | 355 | 352 | 352 | 350 | 349 | 348 | 349 | 349 | 351 | 350 | 348 | 338 | 338 | 339 | 346 | 355 | 352 | 356 | 355 | 355 | 355 | 354 | 356 | 352 | 350 | 404 |
|) | 350 | 349 | 348 | 348 | 348 | 349 | 349 | 350 | 355 | 352 | 343 | 339 | 340 | 343 | 347 | 362 | 382 | 380 | 384 | 393 | 373 | 362 | 3 5 6 | 352 | 356 | 554 |
| d | 351 | 335 | 338 | 346 | 348 | 340 | 339 | 345 | 354 | 350 | 345 | 350 | 360 | 357 | 359 | 366 | 382 | 421 | 411 | 386 | 368 | 360 | 360 | 345 | 359 | 616 |
| | 342 | 337 | 341 | 347 | 351 | 352 | 351 | 352 | 350 | 354 | 348 | 344 | 345 | 354 | 356 | 361 | 371 | 371 | 362 | 360 | 358 | 356 | 356 | 354 | 353 | 473 |
| q | 351 | 350 | 351 | 350 | 351 | 350 | 349 | 354 | 355 | 355 | 348 | 342 | 340 | 343 | 353 | 359 | 364 | 364 | 361 | 360 | 359 | 353 | 348 | 347 | 352 | 457 |
| | 349 | 351 | 353 | 354 | 351 | 347 | 350 | 354 | 351 | 349 | 346 | 344 | 345 | 348 | 352 | 355 | 355 | 351 | 350 | 349 | 349 | 350 | 351 | 349 | 350 | 403 |
| | 352 | 351 | 351 | 351 | 350 | 349 | 349 | 349 | 351 | 348 | 344 | 339 | 338 | 342 | 349 | 362 | 377 | 398 | 429 | 420 | 400 | 403 | 400 | 395 | 367 | 797 |
| đ | 377 | 309 | 266 | 252 | 225 | 239 | 287 | 343 | 360 | 364 | 370 | 377 | 381 | 380 | 378 | 379 | 393 | 410 | 424 | 452 | 429 | 396 | 361 | 325 | 353 | 477 |
| 1 | 345 | 348 | 352 | 345 | 344 | 356 | 360 | 365 | 366 | 365 | 362 | 360 | 362 | 366 | 368 | 371 | 385 | 382 | 382 | 375 | 373 | 367 | 361 | 355 | 363 | 715 |
| | 351 | 350 | 351 | 354 | 354 | 355 | 352 | 355 | 356 | 357 | 356 | 352 | 352 | 355 | 362 | 370 | 373 | 368 | 364 | 362 | 361 | 360 | 357 | 349 | 357 | 576 |
| | 348 | 345 | 351 | 354 | 355 | 354 | 352 | 353 | 351 | 349 | 348 | 345 | 344 | 345 | 356 | 368 | 368 | 368 | 366 | 363 | 362 | 354 | 356 | 354 | 355 | 509 |
| q | 355 | 355 | 354 | 356 | 356 | 356 | 356 | 359 | 362 | 360 | 356 | 354 | 354 | 356 | 359 | 363 | 362 | 361 | 359 | 356 | 356 | 356 | 356 | 355 | 357 | 572 |
| | 352 | 351 | 351 | 353 | 352 | 353 | 354 | 355 | 356 | 356 | 354 | 348 | 345 | 354 | 360 | 360 | 360 | 359 | 356 | 355 | 356 | 355 | 355 | 354 | 354 | 504 |
| q | 353 | 351 | 352 | 351 | 349 | 349 | 351 | 355 | 355 | 351 | 348 | 339 | 334 | 339 | 343 | 346 | 348 | 349 | 349 | 350 | 353 | 353 | 352 | 346 | 349 | 366 |
| q | 339 | 343 | 344 | 345 | 345 | 345 | 345 | 348 | 348 | 348 | 345 | 337 | 330 | 331 | 339 | 345 | 349 | 350 | 350 | 351 | 351 | 353 | 350 | 344 | 345 | 275 |
| | 342 | 334 | 318 | 320 | 325 | 331 | 336 | 342 | 343 | 338 | 337 | 328 | 325 | 331 | 339 | 349 | 366 | 365 | 364 | 369 | 366 | 358 | 351 | 355 | 343 | 232 |
| | 355 | 354 | 353 | 351 | 349 | 349 | 351 | 354 | 354 | 355 | 352 | 343 | 340 | 340 | 345 | 349 | 351 | 354 | 355 | 356 | 355 | 355 | 354 | 350 | 351 | 424 |
| - 1 | 344 | 347 | 348 | 349 | 350 | 350 | 351 | 354 | 354 | 345 | 339 | 332 | 335 | 344 | 351 | 351 | 355 | 351 | 351 | 351 | 349 | 349 | 349 | 350 | 348 | 349 |
| - 1 | 350 | 350 | 348 | 348 | 348 | 343 | 343 | 348 | 349 | 347 | 341 | 331 | 327 | 329 | 336 | 344 | 349 | 349 | 349 | 350 | 350 | 350 | 351 | 351 | 345 | 281 |
| | 352 | 354 | 354 | 354 | 351 | 349 | 348 | 349 | 348 | 344 | 337 | 333 | 332 | 3.36 | 344 | 357 | 378 | 378 | 368 | 377 | 368 | 352 | 345 | 340 | 352 | 448 |
| - 1 | 326 | 305 | 312 | 325 | 334 | 344 | 347 | 344 | 338 | 336 | 339 | 335 | 333 | 338 | 350 | 356 | 359 | 360 | 360 | 356 | 355 | 355 | 353 | 325 | 341 | 185 |
| ١ | 305 | 314 | 333 | 343 | 348 | 348 | 344 | 345 | 345 | 343 | 337 | 330 | 332 | 339 | 347 | 368 | 395 | 408 | 411 | 423 | 417 | 416 | 385 | 354 | 360 | 630 |
| d | 352 | 341 | 329 | 329 | 336 | 334 | 325 | 325 | 330 | 335 | 333 | 348 | 344 | 355 | 357 | 371 | 488 | 690 | 508 | 586 | 511 | 416 | 331 | 55 | 376 | 1029 |
| - | | | | | | | | | | | | | | | | | | | | | | | | | | |

DAILY EXTREMES OF TERRESTRIAL MAGNETIC ELEMENTS, MAGNETIC CHARACTER FIGURES (K AND C) AND TEMPERATURE IN MAGNET HOUSE

343

347

353 361

371

381

632 752 930 1181 1510 1817 1671 1768 1577 1315 1071

377

380 373

357

365

342 354

595

Grand Total 263,544

343

635

| 24 | ESKD/ | LEMUIR | | | | | | | | | | | | | | | | 1 | ARCH 1960 |
|---------------------------|--|--------------------------------------|---------------------------------|--|---------------------------------|--|--------------------------------------|---------------------------------------|--|--------------------------------------|--|--------------------------------------|--------------------------------------|--|---------------------------------|---|----------------------------|-----------------------|--|
| | Ĺ | | ~ | | | TERR | ESTRIAL | MAGNET | IC ELE | MENTS | | | | ~ | | | | Magnetic | Temperature |
| | | Horiz | ontal | force | | | De | clinati | on | | | Vert | ical f | orce | , | 3-hr. range indices | Sum of K | character | in magnet |
| | Max 16,00 | | | nimum 000y + | Range | Max 10 | imum + | | imum ° + | Range | Maxi 45,00 | | | imum 000y+ | Range | K | indices | of day, C (0-2) | house 200 + |
| 1 2 d 3 d 4 5 | h. m. 19 57 22 24 23 20 22 13 21 04 | 7 804 790 798 815 813 | 718 | h. m. 20 41 12 51 12 20 13 05 14 20 | 7 74 85 78 97 77 | h. m. 18 51 13 32 15 08 14 58 13 47 | 40·5 39·1 41·7 46·7 40·0 | 16·1 12·4 16·5 19·5 20·8 | h. m. 20 18 02 30 23 15 22 36 22 59 | 24·4 26·7 25·2 27·2 19·2 | h. m. 20 15 19 22 18 39 18 14 20 38 | y 408 392 396 413 383 | γ 334 328 328 349 338 | h. m. 03 19 02 20 05 07 12 22 23 28 | 7 74 64 68 64 45 | 2,3,3,2,3,3,5,3 4,3,3,3,3,3,3,4 3,3,3,3,3,3,3,3 2,2,2,2,4,4,3,4 2,2,3,1,3,3,3,4 | 24 26 24 23 21 | 1 1 1 1 | °A. 81·5 81·5 81·5 81·5 81·6 |
| 6 7 q 8 9 | 06 40 20 23 05 10 20 52 07 38 | 793 792 799 801 797 | 737 743 730 736 677 | 10 07 11 45 15 45 11 06 09 23 | 56 49 69 65 120 | 13 46 13 44 12 37 14 34 15 02 | 35·4 36·4 39·1 37·3 39·3 | 18·4 23·6 21·6 22·8 15·7 | 08 19 23 41 08 23 | 17·0 12·8 17·5 14·5 23·6 | 20 19 09 17 16 57 17 29 19 28 | 375 358 369 357 395 | 338 344 340 334 337 | 00 12 13 07 07 40 11 57 11 45 | 37 14 29 23 58 | 2,2,2,3,2,2,3,2 1,1,1,2,1,1,1,0 0,2,3,2,2,2,2,3 1,1,2,3,2,3,2,2 2,2,3,4,3,4,4,2 | 18 8 17 16 24 | 1 0 0 0 | 81 · 8 81 · 4 81 · 5 81 · 3 81 · 4 |
| 1 d 2 3 q 4 5 | 20 24 22 20 21 04 16 25 17 54 | 797 788 800 810 827 | 646 727 729 736 665 | 11 40 13 23 11 05 09 55 24 00 | 151 61 71 74 162 | 12 08 15 05 13 34 15 27 16 10 | 38·7 36·1 36·2 36·1 44·9 | 17·2 24·3 22·2 22·3 8·2 | | 21·5 11·8 14·0 13·8 36·7 | 17 53 17 10 17 09 16 02 19 11 | 434 373 366 356 454 | | 01 30 01 43 12 18 11 57 12 32 | 103 39 27 12 118 | 3,3,3,4,3,4,4,2 2,1,2,2,3,3,1,2 2,1,2,1,1,3,2,2 1,1,1,2,2,3,1,2 2,0,1,1,3,4,4,5 | 26 16 14 13 20 | 1 0 0 0 1 | 81 · 4 81 · 4 81 · 5 81 · 5 81 · 6 |
| 6 d 7 8 9 0 q | 23 07 20 26 23 05 07 14 21 07 | 812 804 816 793 789 | 592 700 732 716 746 | 02 33 12 10 12 42 11 50 11 31 | 220 104 84 77 43 | 14 43 13 59 13 59 13 50 13 18 | 36·8 37·6 34·2 38·7 33·7 | -14·4 13·5 19·9 21·9 21·7 | 02 44 20 09 23 28 08 37 08 46 | 51·2 24·1 14·3 16·8 12·0 | 20 04 16 12 16 05 15 52 15 29 | 473 388 373 372 365 | 213 339 348 343 351 | 04 18 04 03 23 09 11 22 12 02 | 260 49 25 29 14 | 5,5,3,3,3,3,5,4 3,3,3,3,3,3,4,3 2,2,3,2,3,1,1,3 2,1,2,3,3,3,1,1 1,2,2,1,2,2,0,1 | 31 25 17 16 11 | 1 1 0 0 | 81 · 5 81 · 6 81 · 4 81 · 5 81 · 5 |
| 1 2 q 3 q 4 | 22 30 23 30 00 15 15 40 23 50 | 789 797 805 832 814 | 742 743 | 13 20 10 28 | 72 57 63 89 63 | 13 38 14 02 13 57 15 39 13 12 | 36·3 36·8 38·0 36·1 | 22·0 21·6 22·2 21·7 17·3 | 08 29 09 18 22 43 03 56 23 47 | 14·3 14·4 14·6 16·3 18·8 | 14 23 07 51 21 20 19 21 19 20 | 361 355 354 372 357 | 316 | 12 01 12 12 13 11 02 11 13 10 | 17 22 26 56 20 | 1,1,1,2,3,2,0,1 1,1,1,2,3,1,1,2 2,1,0,1,1,2,1,2 4,2,2,2,2,4,3,3 1,1,2,2,2,1,2,3 | 11 12 10 22 14 | 0 0 0 1 | 81·5 81·5 81·6 81·5 81·4 |
| 6 7 8 9 | 18 36 02 21 19 52 23 13 00 00 | 796 799 817 834 829 | 744 727 722 722 712 | 09 52 11 07 11 08 10 57 22 40 | 52 72 95 112 117 | 13 33 13 31 16 03 14 21 14 40 | 36·2 37·2 38·3 36·6 40·6 | 18·9 21·4 12·6 15·2 12·0 | 00 00 08 17 20 26 01 41 21 44 | 17·3 15·8 25·7 21·4 28·6 | 16 20 24 00 19 41 17 28 21 42 | 356 352 383 355 427 | 331 327 331 298 302 | 11 45 13 00 12 32 01 07 00 28 | 25 25 52 57 125 | 3,1,1,2,2,1,1,0 1,2,1,2,2,1,0,1 0,1,1,3,3,4,4,4 4,3,3,3,2,2,2,3 4,2,1,2,3,4,4,4 | 11 10 20 22 24 | 0 0 1 1 | 81·5 81·5 81·4 81·5 81·3 |
| 1 d | 19 40 | 1249 | 253 | 23 50 | 996 | 16 38 | 79.5 | -31.9 | 22 28 | 111-4 | 17 15 | 772 | -70 | 23 46 | 842 | 4,3,3,6,5,8,8,8 | 45 | 2 | 81 · 3 |
| an | | 819 | 703 | | 116 | | 39.4 | 16.0 | | 23.3 | | 395 | 317 | | 78 | - | - | 0.55 | 81 · 4 |

q denotes an international quiet day and d an international disturbed day.

Mean 349

10,000+

827

343 344

345

343 343 345

695 632 663 648 636 692 821

TERRESTRIAL MAGNETIC FORCE: HORIZONTAL COMPONENT Mean values for periods of sixty minutes ending at exact hours, G.M.T.

21 BENDALEMUIR (H) 16,000y (0.16 C.G.S. unit) + APRIL 1960

| 21 E | SKUALE | MUIR (| H) | | | | | | | | 1 | 6,0009 | (0.10 | C.G.S. | unit |) + | | | | | | | | | AP | RIL 1960 |
|--------|------------|------------|------------|------------|------------|------------|------|------------|------------|------------|------------|------------|-------|------------|------------|------------|------------|------------|------------|------------|------------|---------------------|--------------------|------------|------------|--------------|
| | Hour | G.M.T. | | | | | | | | | | | Π | | | | | | | | | | | | T | Sum |
| | 0-1 | 1-2 | 2-3 | 3-4 | 4-5 | 5-6 | 6-7 | 7-8 | 8-9 | 9-10 | 10-11 | 11-12 | 12-13 | 13-14 | 14-1 | 5 15-16 | 16-17 | 17-18 | 18-19 | 19-20 | 20-21 | 21-22 | 22-23 | 23-24 | Mean | 16,000+ |
| | γ | γ | γ | γ | γ | γ | γ | γ | γ | γ | γ | γ | γ | γ | γ | γ | γ | γ | γ | γ | γ | γ | γ | γ | γ | |
| 1 d | 266 | 449 | 699 | 100 | 495 | | | 741 | 775 | 845 | 792 | 815 | 1134 | 1165 | 1205 | 1472 | 1467 | 1159 | 738 | 636 | 333 | 371 | 545 | 600 | 759 | 2206 |
| 2 . | 546 | 504 | 658 | 635 | 650 | | | 616 | 631 | 664 | 657 | 699 | 733 | 715 | 715 | 712 | 709 | 712 | 729 | 739 | 743 | 742 | 749 | 768 | 681 | 333 |
| 3 d | 780 | 683 | 713 | 710 | 671 | 667 | 661 | 700 | 729 | 732 | 711 707 | 693 | 680 | 693 | 706 | 718 | 746 | 751 | 757 | 747 | 747 | 738 | 738 | 738 | 717 | 1209 |
| 5 | 740 761 | 737 779 | 743 767 | 744 792 | 739 764 | 743 753 | | 744 758 | 736 754 | 719 721 | 710 | 706 699 | 701 | 718 726 | 720 753 | 747 803 | 737 800 | 771 766 | 760 756 | 757 751 | 768 761 | 718 7 5 6 | 759 760 | 757 759 | 738 754 | 1714 2105 |
| | | 751 | 751 | 751 | 749 | 751 | 751 | 750 | 739 | 738 | 726 | 726 | 725 | 726 | 749 | 741 | 788 | 783 | 773 | 788 | 769 | 753 | | | 1 | i |
| 6 7 | 756 761 | 754 | 753 | 761 | 756 | 763 | | 755 | 744 | 732 | 725 | 725 | 733 | 742 | 760 | 776 | 772 | 809 | 818 | 752 | 746 | 754 | 75 4 750 | 758 758 | 752 757 | 2046 2160 |
| 8 | 749 | 741 | 740 | 747 | 746 | 754 | 756 | 743 | 738 | 715 | 719 | 716 | 712 | 730 | 737 | 747 | 754 | 768 | 767 | 776 | 771 | 773 | 772 | 736 775 | 748 | 1946 |
| 9 a | 780 | 764 | 761 | 750 | 775 | 770 | | 770 | 749 | 736 | 738 | 732 | 741 | 731 | 739 | 744 | 752 | 764 | 775 | 779 | 776 | 780 | 780 | 780 | 760 | 2241 |
| 10 | 779 | 787 | 783 | 785 | 779 | 773 | | 784 | 764 | 749 | 739 | 733 | 726 | 725 | 752 | 763 | 758 | 775 | 781 | 788 | 790 | 759 | 660 | 677 | 758 | 2199 |
| 11 | 739 | 737 | 755 | 756 | 760 | 759 | 759 | 758 | 744 | 729 | 709 | 709 | 713 | 739 | 763 | 781 | 765 | 792 | 788 | 782 | 774 | 771 | 760 | 741 | 753 | 2083 |
| 12 | 754 | 768 | 749 | 773 | 758 | 757 | 757 | 749 | 707 | 728 | 718 | 713 | 716 | 726 | 733 | 751 | 755 | 790 | 778 | 770 | 772 | 780 | 803 | 798 | 754 | 2103 |
| 13 | 764 | 763 | 751 | 761 | 777 | 768 | 780 | 780 | 741 | 738 | 722 | 720 | 725 | 736 | 741 | 757 | 770 | 791 | 792 | 783 | 782 | 780 | 775 | 782 | 762 | 2279 |
| 14 | 776 | 764 | 770 | 775 | 770 | 772 | 783 | 772 | 753 | 734 | 715 | 706 | 714 | 731 | 746 | 762 | 770 | 778 | 792 | 785 | 787 | 780 | 792 | 791 | 763 | 2318 |
| 15 | 778 | 763 | 770 | 785 | 770 | 768 | 780 | 776 | 769 | 745 | 730 | 717 | 727 | 730 | 749 | 763 | 769 | 794 | 799 | 795 | 786 | 784 | 780 | 785 | 767 | 2412 |
| 16 | 781 | 777 | 773 | 769 | 771 | 782 | 788 | 780 | 768 | 749 | 733 | 725 | 736 | 752 | 795 | 781 | 779 | 783 | 765 | 775 | 762 | 772 | 769 | 751 | 767 | 2416 |
| 17 | 753 | 756 | 743 | 756 | 764 | 779 | 771 | 760 | 745 | 713 | 705 | 706 | 719 | 740 | 744 | 757 | 783 | 791 | 803 | 793 | 777 | 764 | 753 | 761 | 756 | 2136 |
| 18 | 771 | 754 | 752 | 774 | 780 | 771 | 755 | 753 | 761 | 728 | 696 | 695 | 711 | 718 | 733 | 756 | 777 | 788 | 781 | 783 | 782 | 782 | 779 | 785 | 757 | 2165 |
| 19 q | 773 | 772 | 768 | 764 | 765 | 768 | 766 | 758 | 746 | 740 | 731 | 728 | 735 | 737 | 745 | 757 | 771 | 776 | 780 | 781 | 779 | 776 | 777 | 775 | 761 | 2268 |
| 20 q | 776 | 775 | 776 | 776 | 777 | 779 | 771 | 765 | 758 | 746 | 731 | 730 | 737 | 744 | 754 | 766 | 776 | 780 | 783 | 784 | 783 | 780 | 780 | 783 | 767 | 2410 |
| 21 q | 781 | 782 | 783 | 782 | 780 | 780 | 773 | 767 | 756 | 741 | 742 | 737 | 742 | 752 | 767 | 776 | 788 | 794 | 796 | 798 | 791 | 791 | 795 | 796 | 775 | 2590 |
| 22 q | 796 | 787 | 785 | 785 | 784 | 789 | 785 | 784 | 776 | 767 | 761 | 762 | 768 | 773 | 777 | 776 | 778 | 787 | 795 | 792 | 795 | 793 | 791 | 793 | 782 | 2779 |
| 23 | 795 | 791 | 788 | 791 | 788 | 789 | 784 | 771 | 761 | 749 | 752 | 756 | 759 | 769 | 776 | 785 | 793 | 793 | 797 | 816 | 814 | 782 | 738 | 702 | 777 | 2639 |
| 24 d | 653 | 514 | 532 | 635 | 681 | 727 | 734 | 711 | 715 | 708 | 702 | 681 | 714 | 737 | 761 | 779 | 791 | 801 | 807 | 781 | 761 | 736 | 728 | 731 | 713 | 1120 |
| 25 | 651 | 756 | 735 | 753 | 758 | 732 | 726 | 726 | 685 | 684 | 695 | 667 | 695 | 734 | 768 | 793 | 801 | 830 | 798 | 773 | 744 | 736 | 751 | 752 | 739 | 1743 |
| 26 | 757 | 726 | 770 | 767 | 772 | 765 | 755 | 734 | 719 | 710 | 707 | 713 | 727 | 736 | 743 | 766 | 789 | 783 | 790 | 778 | 768 | 763 | 762 | 789 | 754 | 2089 |
| 27 | 762 | 763 | 763 | 766 | 761 | 753 | 749 | 737 | 736 | 726 | 724 | 723 | 738 | 748 | 759 | 763 | 771 | 777 | 794 | 788 | 821 | 780 | 753 | 660 | 755 | 2115 |
| 28 d | 600 | 541 | 612 | 624 | 713 | 719 | 695 | 618 | 632 | 632 | 657 | 698 | 713 | 755 | 771 | 789 | 817 | 865 | 836 | 757 | 746 | 748 | 740 | 755 | 710 | 1033 |
| 29 | 730 | 673 | 728 | 745 | 717 | 665 | 718 | 687 | 716 | 709 | 714 | 698 | 699 | 715 | 736 | 754 | 775 | 768 | 792 | 801 | 750 | 760 | 768 | 751 | 732 | 1569 |
| 30 d | 759 | 770 | 679 | 708 | 733 | 772 | 715 | 707 | 724 | 716 | 713 | 700 | 703 | 893 | 1004 | 901 | 1202 | 1399 | 876 | 1053 | 799 | 561 | 702 | 674 | 811 | 3463 |
| Mean | 729 | 723 | 738 | 727 | 743 | 751 | 750 | 742 | 736 | 728 | 719 | 718 | 736 | 755 | 773 | 791 | 810 | 817 | 787 | 783 | 759 | 745 | 752 | 751 | 753 | |
| Sum | | | | <u> </u> | | | | | | | | | | | | | | | | | | | | | | Grand Total |
| 1,000+ | 867 | 681 | 1150 | 820 | 1303 | 1519 | 1494 | 1254 | 1071 | 843 | 581 | 528 | 1079 | 1636 | 2201 | 2736 | 3303 | 3518 | 2596 | 2481 | 1777 | 1363 | 1563 | 1525 | | 541,889 |

$\label{eq:magnetic_declination} \textbf{Magnetic Declination (WEST)} \\ \textbf{Mean values for periods of sixty minutes ending at exact hours, G.M.T.}$

| 22 E | SKDALEN | UIR (I |)) | | | | | | | | | 1 | 10° + | | | | | | | | | | | | APR | IL 1960 |
|---------------|---------------|---------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|---------------|--------------|--------------|--------------|--------|--------------------------|
| | Hour (| i.M.T. 1-2 | 2-3 | 3-4 | 4-5 | 5-6 | 6-7 | 7-8 | 8-9 | 9-10 | 10-11 | 11-12 | 12-13 | 13-14 | 14-15 | 15-16 | 16-17 | 17-18 | 18-19 | 19-20 | 20-21 | 21-22 | 22-23 | 23-24 | Mean | Sum 400·0+ |
| | | ٠. | , | | | | | | | , | | , | 1 | , - | , . | | | | | | | | | | | |
| 1 d | -39·9 12·6 | 3·4 22·3 | 12·3 6·3 | -6·6 18·0 | 13·7 32·6 | | | 13·7 30·2 | 10·7 25·9 | 16·2 20·0 | 32.8 | 29·3 25·2 | 27.4 | 25·5 31·5 | 22·4 31·5 | 31·9 29·5 | | 62·3 27·5 | 27·2 26·5 | 23·4 26·5 | 54·6 26·6 | 15·9 26·6 | 15·5 25·5 | 18·1 26·6 | 20.3 | 87·5 206·9 |
| 3 4 | 24.0 | 12.1 | 24.5 | 28.4 | 31.1 | 24.3 | 42.2 | 33.2 | 24 · 4 | 24 · 0 | 25.6 | 26.6 | 29.7 | 30.2 | 29.2 | 28.2 | 28 - 7 | 27.5 | 28 · 1 | 27.8 | 27.5 | 26 · 6 | 26.0 | 25.9 | 27.3 | 255 · 8 |
| 4 | 25.3 | 24 · 8 | 24 · 3 | 23.7 | 24 · 0 | 23.6 | 22.5 | 20.3 | 19.4 | 22 · 4 | 25.4 | 28.0 | 29.7 | 31.5 | 30.5 | 30.4 | 27 · 7 | | 25.5 | 28.0 | 26 · 6 | 23.9 | 21.6 | 25.1 | 25.4 | 210-5 |
| 5 | 27.5 | 27 · 3 | 22 · 4 | 24 · 4 | 25.3 | 25 · 4 | 24 · 7 | 20.4 | 21 · 6 | 23.0 | 26 · 2 | 30.2 | 33.3 | 36 · 4 | 37 • 4 | 26 · 1 | 29 · 0 | 30.2 | 29 · 7 | 29.9 | 30.1 | 28 · 2 | 27.0 | 27 · 0 | 27.6 | 262 · 7 |
| 6 | 27 · 2 | 26 · 4 | 25 · 7 | 25 · 1 | 24 · 5 | 24.0 | 23.7 | 21.6 | 21 · 7 | 24.0 | 26 · 3 | 30.5 | 34 · 1 | 34 · 4 | 33.3 | 30.9 | 30.5 | 29.9 | 28 · 1 | 27.9 | 22.5 | 16.8 | 24 · 3 | 28 · 8 | 26.8 | 242 · 2 |
| 7 | 28 · 9 | 28 · 4 | 23.6 | 22.0 | 21.6 | 22.3 | 20.5 | 20.8 | 20.6 | 22 · 2 | 25.3 | 29.0 | 32.8 | 34 · 3 | 35 · 4 | 35.2 | 33.6 | 32.0 | 30.6 | 18.1 | 20.0 | 22.8 | 18.0 | 25 · 2 | 26.0 | 223 · 2 |
| 8 | 26.9 | 28 · 8 | 28 · 2 | 29.0 | 24.5 | | 22.3 | 23.4 | 21.5 | 23 · 2 | | 32.6 | 34 · 4 | 34 · 9 | 33 · 7 | 31 · 8 | 27 · 7 | 23.3 | 26 · 8 | 26 · 9 | 27 · 3 | 27 · 7 | 27 · 5 | 26 · 4 | 27 · 4 | 258 · 7 |
| 9 q | 25.2 | 24 · 5 | 27.9 | 29.9 | 27.2 | | 27.0 | 24.2 | 24 · 4 | 27 . 5 | 27 · 4 | 31 4 | 33.8 | 34 · 7 | 33 · 2 | 31 · 5 | 30.1 | 28 · 9 | 28 · 4 | 28.3 | 28 · 2 | 28 · 2 | 28 · 4 | 28 · 0 | 28.5 | 283 · 9 |
| 10 | 26.8 | 27.6 | 24.6 | 23.7 | 22.3 | 22.6 | 25.2 | 25.4 | 23 · 4 | 25.6 | 28 · 4 | 31 · 9 | 36 · 4 | 39.0 | 41.7 | 39.6 | 35 0 | 32.5 | 23 · 0 | 19.4 | 24 · 4 | 16.0 | 16.0 | 12.9 | 26.8 | 243 · 4 |
| 11 | 16·4 27·2 | 17·8 21·2 | 20·0 18·4 | 20.6 | 25·2 23·1 | 28 · 2 | 26 · 2 | 22.4 | 22·1 24·7 | 22·7 22·5 | 26·5 23·7 | 29.5 | 33.6 | 35.8 | 35.8 | 33.9 | 31 · 0 | 30.0 | 26 · 1 | 25.6 | 27.6 | 23.9 | 25.3 | 23.3 | 26.2 | 229 · 5 |
| 12 13 | 24.9 | 25.3 | 31 · 1 | 26.6 | 25.2 | 26·5 32·1 | 23·1 32·6 | 25·0 32·5 | 27.5 | 24.6 | 26.4 | 27·3 30·7 | 32.3 | 34.1 | 32·2 33·1 | 30·9 31·5 | 28.8 | 27·9 28·2 | 25·7 28·8 | 26·5 26·9 | 28·3 26·4 | 24·1 27·8 | 23 · 2 | 26·9 28·5 | 25.9 | 222·5 296·4 |
| 14 | 30.9 | 28 · 5 | 25 · 1 | 24.8 | 26.0 | 24 · 4 | 25.7 | 22.6 | 20.4 | 20.6 | 24.0 | 29.1 | 31.9 | 34.2 | 33.7 | 32.4 | 30.9 | 28 · 0 | 25.5 | 27.6 | 28 · 1 | 24 · 5 | 27 · 1 | 25.5 | 27.1 | 251 · 5 |
| 15 | 22.6 | 24.3 | 26 · 4 | 24.0 | 31.0 | 35.9 | 22.5 | 20.9 | 20.9 | 21.8 | 24.9 | 29.5 | 32.9 | 34 · 8 | 35 · 3 | 34.8 | 32 · 2 | 30.8 | 30.2 | 29.9 | 29.0 | 28.9 | 28 · 1 | 26 · 8 | 28.3 | 278 - 4 |
| 16 | 27.0 | 25 · 1 | 26.0 | 25.0 | 25.4 | 24 · 4 | 23 · 7 | 20.9 | 20.6 | 22 · 2 | 26 · 3 | 32.0 | 37.4 | 41.2 | 38 · 1 | 42 · 2 | 40.1 | 29.5 | 30.8 | 30.1 | 22.5 | 25 · 8 | 27.8 | 24 · 8 | 28.7 | 288 · 9 |
| 17 | 21 · 2 | 26 · 1 | 29 · 1 | 24 · 1 | 22.9 | 23.8 | 22.2 | 20.1 | 20.8 | 23 · 1 | 26 · 3 | 29 · 2 | 33.8 | 37 · 1 | 36 · 3 | 34.8 | 34 · 2 | 33 · 2 | 30.3 | 28 · 4 | 27 · 4 | 20.3 | 21.5 | 25.3 | 27 · 1 | 251 · 5 |
| 18 | 27.6 | 34 · 4 | 25.2 | 26 · 2 | 24 · 7 | 23.8 | 25.8 | 25.7 | 23 · 0 | 23.9 | 27 · 7 | 30.3 | 33.7 | 35 · 1 | 34 · 5 | 32.8 | 31 · 3 | 27.5 | 27.0 | 28.0 | 28 · 1 | 28 · 0 | 27 · 3 | 25.8 | 28 · 2 | 277 - 4 |
| 19 q | 26 · 2 | 26.6 | 26 · 1 | 26 · 2 | 26 · 7 | 23.7 | 21 · 4 | 19.8 | 19.7 | 21.4 | 24.3 | 27.2 | 31.2 | 32.7 | 32.5 | 31 · 1 | 30.1 | 28.8 | 28.0 | 27.9 | 28 · 1 | 28.0 | 27.7 | 27 · 2 | 26.8 | 242.6 |
| 20 q | 26.9 | 26.6 | 26 · 5 | 25.9 | 25.1 | 24 · 1 | 21 · 1 | 20.0 | 18.8 | 19.6 | 22.7 | 27 · 8 | 32.1 | 33.8 | 33 · 2 | 32 · 4 | 31 · 3 | 29 · 7 | 28.8 | 28 · 2 | 28 · 1 | 28.0 | 27.5 | 27 · 2 | 26.9 | 245 · 4 |
| 21 q | 26.8 | 26 · 3 | 26 · 1 | 25.3 | 24.5 | 23.0 | 20.6 | 19.4 | 19.4 | 21.5 | 25.1 | 28.7 | 33.1 | 34 · 7 | 34 · 3 | 33.5 | 33 · 1 | 30.9 | 29.7 | 29.8 | 29.5 | 28 · 9 | 28 · 8 | 27.8 | 27.5 | 260.8 |
| 22 q 23 | 25·3 28·3 | 26·7 27·7 | 26·2 26·9 | 25·8 25·9 | 25·1 25·5 | 25·0 21·6 | 24·5 18·9 | 23·3 18·1 | 24·0 19·4 | 25·2 23·6 | 28·1 28·7 | 31·4 31·9 | 33·4 34·4 | 34·8 35·7 | 33·4 34·4 | 31·3 33·3 | 30·0 31·6 | 28·7 29·7 | 28·5 29·6 | 28·2 30·4 | 28·9 29·8 | 28·9 25·8 | 28·3 19·3 | 28·9 20·9 | 28 · 1 | 273·9 251·4 |
| 24 d | | -14·8 | 1.7 | 14.5 | 21.8 | 17.2 | 14.8 | 14.7 | 18.7 | 21.9 | 29 1 | 33.8 | 38.6 | 40.8 | 37 · 1 | 36 · 7 | 34 · 1 | 33.4 | 27.2 | 23.9 | 25.4 | 23 · 1 | 16.5 | 17.1 | 22.0 | 128 · 7 |
| 25 | 24.7 | 16.4 | 15.6 | 21.0 | 20.5 | 20.1 | 26.0 | 21.6 | 20.2 | 25.8 | 30.0 | 32.6 | 36.9 | 40.9 | 38 · 1 | 38.5 | 34 · 1 | 28.5 | 30.2 | 29.3 | 27.3 | 26 · 1 | 23.3 | 19.7 | 27.0 | 247 · 4 |
| 26 | 27.8 | 23 · 7 | 21 · 2 | 21 · 1 | 24 · 5 | 23.3 | 24 · 3 | 24 · 3 | 26 · 9 | 27.3 | 27 · 1 | 30.7 | 35.0 | 36 · 8 | 37.0 | 35 · 1 | 33.9 | 31.9 | 28 · 9 | 26 · 5 | 25.6 | 25 · 1 | 26.0 | 28 · 7 | 28.0 | 272- 7 |
| 27 | 26.8 | 26 · 3 | 26.9 | 26.0 | 24 · 4 | 23 · 1 | 21.0 | 20.8 | 21:2 | 22.8 | 27.8 | 31.6 | 35.4 | 38.0 | 37 · 7 | 35.9 | 33 · 1 | 30.0 | 28.9 | 27.8 | 30.8 | 27.5 | 16.1 | 8.4 | 27.0 | 248.3 |
| 28 d | 2 · 2 | 6.2 | 5.8 | 2.7 | 17.5 | 18.7 | 21 · 4 | 28 · 1 | 22 · 1 | 32.6 | 33.0 | 33.9 | 38.3 | 39 · 2 | 41.9 | 47 · 4 | 46 · 4 | 43.3 | 42.6 | 28 · 1 | 22.5 | 28 · 8 | 27.9 | 25.9 | 27 · 4 | 256 · 5 |
| 29 | 28 · 4 | 26.6 | 12.4 | 19.9 | 24.4 | 34 · 1 | 24 · 6 | 25.5 | 25 · 4 | 26.9 | 27 · 3 | 29.3 | 31 · 2 | 32.5 | 35.0 | 34 · 4 | 33.0 | | 29 · 1 | 29.9 | 26 · 7 | 28 · 1 | 24 · 9 | 28.8 | 27.9 | 269 · 5 |
| 30 d | 25·4 | 23.7 | 14.3 | 11.0 | 11.6 | 18.3 | 14.6 | 17.1 | 18.3 | 18.0 | 22 · 1 | 26.9 | 19.5 | 37 · 3 | 39 · 1 | 56 · 2 | 86 · 2 | 101 · 4 | 44.0 | 45.0 | 41 · 1 | 30.0 | 22.5 | 25.8 | 32 · 1 | 369 · 4 |
| Mean | 21 · 7 | 22.3 | 21 · 7 | 21.8 | 24 · 1 | 24 · 2 | 23.5 | 22.5 | 21.6 | 23 · 2 | 26.6 | 29.9 | 32.9 | 35 · 2 | 34 · 7 | 34.5 | 34 · 5 | 33 · 4 | 29 · 1 | 27.8 | 28.3 | 25.5 | 24 · 2 | 24.6 | 27 · 0 | |
| Sum 600·0+ | 52 · 5 | 70.3 | 50.8 | 54 · 4 | 121 · 9 | 127·1 | 104.0 | 76.0 | 47 · 7 | 69·1 | 196 · 9 | 298 · 1 | 388.0 | 454 · 7 | 441.0 | 434 · 2 | 435 • 4 | 402 • 9 | 273.8 | 234 · 2 | 249 ·0 | 164.3 | 126 · 9 | 137·3 | | Grand Total 19437 · 5 |

Mean values for periods of sixty minutes ending at exact hours, G.M.

23 ESEDALEMUIR (Z)

45.0007 (0.45 C.G.S. unit) +

| 23 E | SKUALE | MUIR (2 | د) | | | | | | | | 45 | , 000γ | (0.45 (| C. G. S. | unit) | + | | | | | | | | | APRII | 1960 |
|-----------|------------|------------|------------|------------|------------|------------|------------|------|------|------|-------|--------|---------|----------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|--------------------|
| | | G.M.T. | | | | | | | | | | | | | | | | | | | | | | | | Sum |
| | 0-1 | 1-2 | 2-3 | 3-4 | 4-5 | 5-6 | 6-7 | 7-8 | 8-9 | 9-10 | 10-11 | 11-12 | 12-13 | 13-14 | 14-15 | 15-16 | 16-17 | 17-18 | 18-19 | 19-20 | 20-21 | 21-22 | 22-23 | 23-24 | Mean | 8000+ |
| | γ | γ | γ | γ | γ | γ | γ | γ | γ | γ | γ | γ | γ | γ | γ | γ | γ | γ | γ | γ | γ | γ | γ | γ | γ | |
| 1 d | 33 | 256 211 | 364 | 99 | 90 | 288 | 366 | 367 | 352 | 351 | 355 | 393 | 506 | 513 | 574 | 623 | 536 | 565 | 496 | 394 | 167 | 280 | 294 | 310 | 357 | 572 |
| 2 | 281 355 | 321 | 309 324 | 351 | 337 | 325 | 345 | 368 | 381 | 412 | 431 | 434 | 423 | 401 | 394 | 393 | 394 | 391 | 393 | 390 | 390 | 389 | 385 | 372 | 371 | 900 |
| 3 d | 383 | 383 | 381 | 284 382 | 246 383 | 278 | 279 | 287 | 336 | 363 | 371 | 378 | 379 | 381 | 380 | 383 | 385 | 389 | 389 | 389 | 385 | 384 | 383 | 384 | 351 | 433 |
| 5 | 372 | 358 | 355 | 362 347 | 341 | 383 349 | 385 365 | 384 | 382 | 379 | 375 | 368 | 367 | 368 | 372 | 378 | 390 | 401 | 408 | 391 | 384 | 352 | 365 | 371 | 380 | 1115 |
| - | | | | | | | | 371 | 368 | 373 | 374 | 367 | 367 | 365 | 380 | 441 | 444 | 427 | 417 | 400 | 385 | 382 | 377 | 374 | 379 | 1099 |
| 6 | 374 | 377 | 378 | 378 | 378 | 378 | 377 | 375 | 372 | 362 | 366 | 361 | 371 | 374 | 382 | 381 | 377 | 378 | 377 | 377 | 392 | 395 | 382 | 376 | 377 | 1038 |
| 7 | 363 | 356 | 349 | 350 | 350 | 356 | 365 | 371 | 371 | 365 | 356 | 354 | 353 | 354 | 359 | 376 | 391 | 427 | 476 | 494 | 433 | 389 | 377 | 374 | 380 | 1109 |
| 8 | 375 | 366 | 334 | 329 | 349 | 368 | 372 | 371 | 367 | 365 | 360 | 362 | 364 | 362 | 370 | 379 | 393 | 404 | 389 | 378 | 379 | 377 | 374 | 371 | 369 | 858 |
| 9 q | 366 | 359 | 351 | 345 | 335 | 344 | 345 | 352 | 358 | 362 | 361 | 356 | 355 | 357 | 361 | 366 | 367 | 368 | 370 | 371 | 372 | 371 | 368 | 368 | 359 | 628 |
| 10 | 366 | 364 | 362 | 364 | 366 | 362 | 361 | 360 | 361 | 355 | 349 | 348 | 348 | 362 | 367 | 374 | 385 | 394 | 420 | 408 | 395 | 367 | 305 | 211 | 361 | 654 |
| 11 | 305 | 332 | 345 | 360 | 364 | 366 | 371 | 377 | 376 | 374 | 376 | 370 | 367 | 368 | 373 | 383 | 388 | 387 | 404 | 401 | 389 | 383 | 365 | 342 | 369 | 866 |
| 12 | 297 | 287 | 285 | 303 | 316 | 339 | 350 | 351 | 354 | 358 | 359 | 357 | 360 | 378 | 379 | 379 | 379 | 385 | 400 | 393 | 381 | 373 | 356 | 331 | 352 | 450 |
| 13 | 343 | 348 | 331 | 333 | 343 | 322 | 311 | 310 | 331 | 345 | 350 | 351 | 359 | 362 | 366 | 369 | 372 | 375 | 377 | 377 | 378 | 374 | 373 | 359 | 352 | 459 |
| 4 | 343 | 339 | 358 | 364 | 366 | 368 | 367 | 372 | 373 | 368 | 363 | 360 | 360 | 362 | 366 | 369 | 374 | 379 | 386 | 385 | 375 | 371 | 359 | 353 | 366 | 780 |
| 5 | 354 | 355 | 355 | 351 | 355 | 297 | 322 | 345 | 354 | 355 | 356 | 354 | 348 | 354 | 360 | 367 | 374 | 374 | 372 | 368 | 367 | 367 | 367 | 363 | 356 | 534 |
| 16 | 357 | 340 | 344 | 349 | 357 | 361 | 364 | 365 | 362 | 360 | 353 | 348 | 349 | 364 | 405 | 420 | 449 | 477 | 433 | 402 | 406 | 380 | 369 | 338 | 377 | 1052 |
| 17 | 321 | 346 | 312 | 305 | 338 | 348 | 355 | 367 | 368 | 368 | 366 | 359 | 354 | 354 | 358 | 366 | 373 | 385 | 404 | 410 | 406 | 396 | 375 | 369 | 363 | 703 |
| 18 | 359 | 286 | 290 | 326 | 343 | 356 | 360 | 361 | 362 | 365 | 363 | 366 | 363 | 366 | 371 | 381 | 387 | 399 | 391 | 382 | 377 | 374 | 371 | 363 | 361 | 662 |
| 19 g | 362 | 365 | 364 | 367 | 368 | 372 | 375 | 377 | 368 | 363 | 359 | 356 | 355 | 355 | 356 | 359 | 362 | 366 | 366 | 367 | 367 | 367 | 366 | 366 | 365 | 748 |
| 20 q | 366 | 366 | 366 | 366 | 366 | 366 | 367 | 365 | 359 | 354 | 345 | 343 | 339 | 342 | 350 | 355 | 360 | 362 | 365 | 367 | 367 | 367 | 367 | 366 | 360 | 636 |
| 21 g | 366 | 366 | 365 | 364 | 365 | 366 | 366 | 364 | 359 | 352 | 343 | 337 | 328 | 331 | 340 | 345 | 348 | 355 | 359 | 359 | 360 | 361 | 361 | 360 | 355 | 520 |
| 2 q | 357 | 356 | 356 | 357 | 359 | 360 | 359 | 356 | 353 | 348 | 339 | 331 | 331 | 336 | 348 | 358 | 362 | 366 | 364 | 364 | 361 | 360 | 360 | 359 | 354 | 500 |
| 23 | 359 | 359 | 360 | 359 | 359 | 355 | 355 | 355 | 351 | 345 | 334 | 325 | 327 | 334 | 344 | 349 | 355 | 360 | 361 | 355 | 363 | 369 | 370 | 325 | 351 | 428 |
| 24 d | 274 | 187 | 201 | 257 | 236 | 297 | 326 | 342 | 356 | 359 | 364 | 371 | 370 | 402 | 420 | 418 | 411 | 420 | 450 | 442 | 398 | 279 | 281 | 293 | 340 | 154 |
| 25 | 234 | 218 | 277 | 327 | 347 | 345 | 352 | 369 | 370 | 366 | 362 | 372 | 372 | 383 | 424 | 432 | 458 | 448 | 437 | 435 | 409 | 352 | 344 | 337 | 365 | 770 |
| 26 | 318 | 320 | 324 | 336 | 348 | 358 | 364 | 373 | 375 | 373 | 368 | 365 | 362 | 369 | 381 | 398 | 412 | 422 | 423 | 416 | 403 | 390 | 379 | 336 | 371 | 913 |
| 27 | 337 | 359 | 367 | 371 | 371 | 370 | 371 | 371 | 366 | 362 | 351 | 341 | 344 | 356 | 369 | 381 | 389 | 391 | 390 | 391 | 375 | 369 | 343 | 233 | 361 | 668 |
| 28 d | 152 | 144 | 166 | 195 | 302 | 354 | 344 | 308 | 315 | 333 | 360 | 377 | 397 | 443 | 451 | 469 | 505 | 528 | 544 | 494 | 443 | 408 | 385 | 351 | 365 | 768 |
| 9 | 314 | 201 | 307 | 350 | 327 | 274 | 291 | 310 | 333 | 348 | 357 | 366 | 353 | 384 | 393 | 393 | 402 | 407 | 415 | 402 | 389 | 386 | 374 | 333 | 350 | 409 |
| 10 d | 315 | 328 | 227 | 153 | 241 | 267 | 299 | 316 | 327 | 340 | 344 | 347 | 364 | 446 | 608 | 558 | 541 | 299 | 518 | 511 | 535 | 492 | 520 | 454 | 390 | 1350 |
| an | 323 | 318 | 327 | 324 | 331 | 342 | 351 | 355 | 359 | 361 | 360 | 361 | 365 | 374 | 390 | 398 | 402 | 401 | 410 | 400 | 384 | 373 | 367 | 348 | 364 | |
| um 00+ | 701 | 553 | 807 | 722 | 946 | 1272 | 1529 | 1660 | 1760 | 1823 | 1810 | 1817 | 1935 | 2226 | 2701 | 2943 | 3063 | 3029 | 3294 | 3013 | 2531 | 2204 | 1995 | 1442 | - 1 | Grand To 261,77 |

DAILY EXTREMES OF TERRESTRIAL MAGNETIC ELEMENTS, MAGNETIC CHARACTER FIGURES (K AND C) AND TEMPERATURE IN MAGNET HOUSE

| 24 | ESKDALEMUIR | APRIL 1960 |
|----|-------------|------------|

| | | | | | | 1 | ERRESTRIAL | MAGNET | IC ELEM | ENTS | | | | | | | T T | | |
|--------------------|-------------------------|-------------------|-------------------|-------------------------|-------------------|----------------|-----------------|---------------|----------------|--------------|----------------|------------|------------|----------------|-----------------|---|---------------|------------------------------------|-----------------------------------|
| | | Horiz | | | Т | | | clinati | | 1 | | | cal fo | | | 3-hr. range indices | Sum of K | Magnetic character of day, C | Temperature in magnet house |
| | | imum 007 + | | imum 1000y + | Range | | Maximum 10°+ | | nimum 0°+ | Range | Maxi 45,00 | | | imum 00y + | Range | K | | (0-2) | 200 + |
| 1 d | h. m. 16 57 | γ 203 0 | γ -562 | h. m. 03 47 | γ 2592 | h. 16 | 50 86.5 | -69.7 | h. m. 00 15 | 156 · 2 | h. m. 15 50 | γ 778 | γ -231 | h. m. 03 46 | γ 1009 | 9,9,6,6,7,8,9,8 | 62 | 2 | °A. 81·2 |
| 2 3 d | 23 20 00 15 | | 455 568 | 01 28 04 20 | 328 | 04 06 | | -4.5 | 02 27 01 40 | 41·4 55·1 | 11 43 18 49 | 439 394 | 182 228 | 01 26 04 48 | 257 166 | 7,5,4,5,4,3,3,3 6,6,5,4,3,3,4,3 | 34 34 | 2 2 | 80·9 81·0 |
| 4 5 | 17 53 15 52 | 781 847 | 641 692 | 21 32 11 20 | 140 155 | 21 14 | | 13·6 17·1 | 21 50 07 57 | 21·7 22·1 | 18 13 15 45 | 412 470 | 316 337 | 21 33 04 31 | 96 133 | 2,3,2,3,4,4,3,5 4,4,3,2,4,5,3,2 | 26 27 | 1 1 | 80·9 81·0 |
| 6 | 16 32 17 50 | 858 842 | 711 721 | 13 00 10 33 | 147 121 | 13 15 | | 12·7 14·6 | 21 37 22 30 | 22·3 23·2 | 20 58 19 06 | 401 517 | 360 347 | 11 25 03 50 | 41 170 | 1,1,2,2,3,5,4,4 3,3,1,1,3,4,5,3 | 22 23 | 1 1 | 80·8 80·8 |
| 8 9 q | 17 42 03 34 | 793 791 | 699 719 | 12 32 12 12 | 94 72 | 13 | 41 35.3 | 19·4 20·0 | 08 24 05 03 | 15·9 15·1 | 17 27 20 28 | 406 373 | 325 332 | 03 29 04 37 | 81 41 | 3,3,2,2,3,3,2,2 | 20 19 | î 1 | 80·7 80·7 |
| 10 | 19 17 | 805 | 584 | 23 12 | 221 | 14 | | 4.9 | 23 42 | 38 · 7 | 18 42 | 433 | 147 | 23 10 | 286 | 3,3,2,2,3,3,4,6 | 26 | î | 80.9 |
| 11 12 | 17 48 22 49 | 815 849 | 692 683 | 10 07 08 16 | 123 166 | 13 00 | 01 37.9 | 9·0 11·8 | 00 00 02 19 | 28·9 26·1 | 18 49 18 25 | 412 401 | 285 269 | 00 00 02 07 | 127 132 | 4,4,2,3,3,3,3,4 5,4,4,3,2,3,3,4 | 26 28 | 1 1 | 81·0 80·8 |
| 13 14 | 06 52 22 07 | 815 806 | 714 696 | 11 16 11 50 | 101 110 | 06 13 | 28 34 · 7 | 23·2 19·0 | 04 19 08 58 | 12·4 15·7 | 19 52 18 48 | 379 388 | 304 332 | 06 48 01 02 | 75 56 | 3,4,4,2,2,3,3,2 3,2,3,3,2,2,2,3 | 23 20 | 1 1 | 80·7 80·8 |
| 15 | 05 37 | 815 | 700 | 05 07 | 115 | 05 | | 18.8 | 07 46 20 40 | 29·7 29·6 | 16 44 17 11 | 376 494 | 286 310 | 05 29 03 59 | 90 | 3,5,3,3,3,3,3,2 | 25 | 1 | 81 · 4 |
| l6 17 | 16 53 18 32 | 818 819 | 708 697 | 13 08 09 45 | 110 122 129 | 15 13 01 | 34 38.7 | 8·7 22·2 | 00 17 08 12 | 30·0 16·2 | 19 42 17 33 | 414 400 | 278 264 | 02 58 01 43 | 184 136 | 2,3,2,2,4,4,4,4 5,3,3,3,3,4,4,3 | 25 28 | 1 | 80·7 80·7 |
| l8 l9 q 20 a | 17 38 00 32 19 20 | 805 785 785 | 676 727 727 | 10 52 11 22 11 45 | 58 58 | 13 13 | 53 33.1 | 18·9 18·3 | 07 50 09 12 | 14·2 15·8 | 07 11 06 56 | 378 367 | 354 337 | 12 44 12 32 | 136 24 30 | 4,2,3,4,2,3,2,3 2,2,1,1,2,2,0,0 0,1,1,1,2,1,0,1 | 23 10 7 | 1 0 0 | 80·8 80·8 80·8 |
| 21 q | 23 50 | 811 | 734 | 11 40 | 77 46 | 13 13 | | 19·0 21·9 | 07 55 07 24 | 16·0 13·4 | 00 41 17 23 | 367 366 | 327 331 | 12 50 11 57 | 40 35 | 1,0,0,1,1,2,1,2 | 8 | . 0 | 80.7 |
| 22 q 23 | 18 32 20 09 | 801 824 | 755 689 | 11 03 23 15 | 135 | 13 12 | 18 36.0 | 11·6 -29·5 | 24 00 | 24 · 4 | 22 11 | 378 | 305 | 23 39 | 73 | 2,1,1,2,1,3,1,1 1,2,2,2,2,2,3,5 | 12 19 | 0 | 80·6 80·8 |
| 24 d | 22 15 17 10 | 835 853 | 343 600 | 01 53 00 45 | 492 253 | 14 | | 10.0 | 01 44 01 29 | 73·0 35·0 | 19 01 16 52 | 458 469 | 133 182 | 01 43 01 00 | 325 287 | 7,6,3,3,4,3,4,5 6,4,4,4,5,4,5,4 | 35 36 | 2 2 | 80·7 80·9 |
| 26 27 | 23 20 20 06 | 827 884 | 702 513 | 01 34 23 30 | 125 371 | 13 4 14 | | 19·8 -11·3 | 03 28 23 37 | 18·3 49·8 | 18 01 17 11 | 424 393 | 310 194 | 01 08 23 20 | 114 199 | 4,2,3,2,3,3,3,4 2,2,2,1,2,3,5,6 | 24 23 | 1 1 | 80·8 80·6 |
| | 17 56 19 52 | 891 893 | 428 629 | 01 46 05 42 | | 15 01 | | -9·2 3·5 | 02 49 02 08 | 60·9 38·0 | 18 27 18 47 | 562 419 | 72 160 | 01 48 01 24 | 490 259 | 6,5,6,5,4,5,5,3 6,5,4,4,4,4,5,4 | 39 36 | 2 | 80·8 80·9 |
| | 17 02 | 2010 | 284 | 21 00 | 1726 | 17 | | | 12 47 | 164.6 | 14 37 | 744 | | 17 14 | 617 | 6,5,4,4,8,8,8,8 | 51 | 2 | 80.8 |
| an | | 902 | 597 | | 305 | | - 44.8 | 7:3 | | 37.5 | | 440 | 250 | | 190 | | | 1.10 | 80.8 |

q denotes an international quiet day and d an international disturbed day.

70

| 21 E | SKDALI | MUIR (| H) | | | | | | | | 16 | , 000 y (| 0·16 C | .G.S. | unit) | + | | | | | | | | | M | AY 1960 |
|-------------------------|-------------------|-------------------|-------------------|-------------------|-------------------|----------------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|----------------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|--------------------------|------------------------|
| | Hour 0-1 | G.M.T. 1-2 | 2-3 | 3-4 | 4-5 | 5-6 | 6-7 | 7-8 | 8-9 | 9-10 | 10-11 | 11-12 | 12-13 | 13-14 | 14-15 | 15-16 | 16-17 | 17-18 | 18-19 | 19-20 | 20-21 | 21-22 | 22-23 | 23-24 | Mean | Sum 17,000+ |
| 1 d | γ 635 737 | γ 624 733 | γ 689 731 | γ 673 725 | γ 694 695 | γ 713 733 | γ 726 736 | γ 722 733 | γ 714 729 | γ 696 716 | γ 698 715 | γ 688 697 | γ 677 728 | γ 703 738 | γ 733 736 | γ 733 768 | γ 726 761 | γ 734 766 | γ 742 766 | γ 737 772 | γ 738 766 | γ 760 761 | γ 730 759 | γ 735 759 | γ 709 740 | 20 760 |
| 3 4 q | 761 771 | 759 773 | 760 768 | 761 767 | 759 768 | 763 770 | 758 767 | 746 762 | 742 756 | 737 751 | 720 742 | 727 739 | 731 741 | 740 744 | 753 754 | 766 771 | 788 781 | 778 787 | 783 793 | 784 798 | 776 790 | 774 774 | 773 769 | 771 771 | 759 767 | 1210 1407 |
| 5 6 d 7 d | 772 799 714 | 773 790 722 | 773 772 729 | 776 786 714 | 780 788 742 | 780 784 750 | 776 773 766 | 768 763 771 | 757 743 764 | 751 733 745 | 745 728 739 | 743 753 749 | 745 774 772 | 743 761 744 | 760 788 737 | 768 814 768 | 785 824 827 | 791 885 796 | 795 914 799 | 784 803 780 | 797 772 768 | 786 727 763 | 776 700 765 | 791 691 771 | 771 778 758 | 1515 1665 1195 |
| 8 <i>d</i> 9 10 | 763 748 767 | 768 746 767 | 763 748 766 | 753 752 763 | 763 753 758 | 779 7 4 8 758 | 780 745 755 | 784 737 748 | 768 732 735 | 691 728 736 | 730 727 736 | 759 717 731 | 723 715 736 | 724 736 741 | 806 732 754 | 976 747 753 | 884 765 769 | 753 776 775 | 744 763 787 | 754 771 798 | 732 767 785 | 749 767 789 | 741 764 775 | 786 765 777 | 770 748 761 | 1473 949 1259 |
| 11 12 13 | 776 762 779 | 771 760 775 | 762 756 769 | 775 748 772 | 798 717 771 | 753 726 764 | 794 743 759 | 768 738 753 | 702 729 749 | 763 725 743 | 762 702 737 | 748 712 737 | 736 722 751 | 712 737 767 | 716 745 773 | 736 748 773 | 762 783 793 | 785 779 803 | 803 789 796 | 802 798 798 | 780 789 796 | 789 785 777 | 783 785 753 | 765 787 751 | 764 753 768 | 1341 1065 1439 |
| 14 15 | 764 778 | 765 778 | 778 778 | 779 777 | 774 774 | 772 771 | 773 769 | 771 759 | 742 744 | 721 724 | 723 723 | 713 711 | 727 707 | 728 731 | 753 741 | 777 754 | 779 769 | 785 769 | 793 785 | 790 786 | 786 784 | 786 780 | 783 775 | 780 776 | 764 760 | 1342 1243 |
| 16 17 18 <i>q</i> | 776 801 782 | 771 801 778 | 771 788 770 | 775 788 770 | 774 789 774 | 768 783 773 | 762 781 768 | 758 781 761 | 755 769 757 | 732 753 750 | 716 739 743 | 729 738 741 | 736 735 747 | 751 742 759 | 810 735 769 | 860 769 785 | 827 766 794 | 774 784 801 | 808 797 800 | 815 788 792 | 830 786 792 | 842 785 791 | 846 782 789 | 826 784 791 | 784 773 774 | 1812 1564 1577 |
| 19 q 20 q | 788 788 801 | 777 786 | 774 784 789 | 773 788 788 | 780 791 790 | 776 789 789 | 769 779 780 | 761 768 771 | 758 759 764 | 751 759 762 | 748 757 766 | 749 757 775 | 754 766 784 | 767 775 801 | 781 779 778 | 786 785 789 | 794 786 | 791 792 797 | 799 793 | 799 796 | 791 796 | 789 792 | 792 796 | 788 796 | 776 782 | 1635 1757 |
| 21 22 q 23 | 788 807 | 797 787 803 | 788 800 | 789 802 | 791 805 | 789 806 | 781 798 | 770 785 | 764 774 | 755 774 | 750 773 | 753 779 | 764 787 | 772 793 | 791 813 | 799 848 | 793 804 810 | 809 808 | 806 815 799 | 803 815 812 | 798 813 834 | 793 808 801 | 789 802 800 | 789 804 792 | 787 788 <i>800</i> | 1892 1901 2203 |
| 24 25 | 743 | 798 749 762 | 781 766 762 | 774 760 766 | 799 762 752 | 788 770 760 | 729 769 757 | 777 758 744 | 767 742 751 | 745 742 736 | 746 747 730 | 743 746 721 | 742 749 730 | 759 759 741 | 777 7 4 7 755 | 784 786 772 | 767 790 798 | 781 817 | 799 804 | 794 795 | 808 772 | 782 784 | 783 775 | 791 760 | 776 766 | 1625 1392 |
| 26 27 28 | 766 783 781 | 753 776 | 762 773 | 757 783 | 761 782 | 760 769 | 746 758 | 728 747 | 710 737 | 706 734 | 709 739 | 720 742 | 733 741 | 746 749 | 75 4 757 | 775 769 | 777 776 | 808 795 787 | 808 809 789 | 809 799 796 | 796 797 848 | 785 793 816 | 781 788 816 | 773 784 808 | 765 760 774 | 1363 1245 1573 |
| 29 <i>d</i> 30 31 | 739 805 778 | 744 807 778 | 786 797 781 | 776 796 783 | 762 789 789 | 753 784 789 | 749 774 780 | 736 770 774 | 731 750 772 | 736 761 766 | 742 759 765 | 747 750 757 | 761 739 766 | 778 773 770 | 773 788 782 | 777 806 778 | 770 793 795 | 797 788 803 | 830 784 819 | 823 776 820 | 821 780 817 | 774 778 819 | 778 778 804 | 789 778 788 | 770 779 | 1472 1703 |
| Mean | 770 | 767 | 768 | 767 | 769 | 768 - 768 | 765 | 759 | 747 | 739 | 737 | 738 | 743 | 751 | 763 | 785 | 793 788 | 790 | 797 | 793 | 791 | 784 | 778 | 788 778 | 786 768 | 1873 |
| Sum 22,000+ | 1863 | 1771 | 1814 | 1789 | 1824 | 1810 | 1700 | 1512 | 1166 | 922 | 856 | 871 | 1019 | 1284 | 1670 | 2320 | 2436 | 2494 | 2711 | 2587 | 2505 | 2299 | 2130 | 2117 | | Grand Total 571,470 |

| 22 E | SKDALE | UIR (I |) | | | | | | | | | 10 |)° + | | | | | | | | | | | | MA | Y 1960 |
|--------|--------|---------------|--------|---------|--------|--------|-------------|--------|---------------|--------|---------|--------------|--------|--------|-------------|-------------|-------------|--------|--------|---------|---------|-------------|-------------|---------|--------|----------------|
| | Hour (| G.M.T. 1-2 | 2-3 | 3-4 | 4-5 | 5-6 | 6-7 | 7-8 | 8-9 | 9-10 | 10-11 | 11-12 | 12-13 | 13-14 | 14-15 | 15-16 | 16-17 | 17-18 | 18-19 | 19-20 | 20-21 | 21 - 22 | 22-23 | 23-24 | Mean | Sum 500 · 0 |
| | , | • | , | • | | , | | | , | | | , | - | • | | | | - | • | · · | | | | | , | |
| 1 d | 26.3 | 23 · 3 | 21 · 3 | 19-1 | 17.9 | 15.2 | 13.8 | 13.2 | 13.4 | 19-5 | 21 · 9 | 26.0 | 28 · 7 | 28.9 | 29 · 1 | 28 · 7 | 27 · 4 | 26 · 4 | 24 · 8 | 22.0 | 22.4 | 21.6 | 26.0 | 25.7 | 22.6 | 42.6 |
| 2 | 26.3 | 27.9 | 28.6 | 26.7 | 25.8 | | | | 19.6 | 19.8 | 23.4 | 26.6 | 29.4 | | 29.9 | 29.2 | 27 - 1 | | | 24 5 | 22.0 | 25.4 | 26.7 | 26.6 | 25.5 | 112.4 |
| 3 | 26 · 1 | 25.8 | 25.8 | | | | | | 24 · 7 | 25.2 | 25.2 | | 31 - 4 | | 32.9 | 31 · 4 | 29.4 | | | 26.5 | 26.8 | 27.3 | 27.3 | 26.5 | 27.1 | 149.9 |
| 4 q | 26 · 3 | 27.0 | 25 · 7 | 25 · 2 | 24.0 | 22.8 | 21 · 5 | 20.7 | 20.4 | 20.5 | 21.6 | 25 · 4 | 28.6 | 30.7 | 31.6 | 31.6 | 30.5 | | | | 26.9 | 22.5 | 23.3 | 25 · 1 | 25.7 | 115.7 |
| 5 | 26 · 2 | 26 · 3 | 25.8 | 24 · 5 | 23.7 | 23 · 2 | 20.9 | 20.5 | 20.2 | 21 · 5 | 25.1 | 28 · 9 | 31.9 | 32.7 | 31 · 8 | 31 · 3 | 30.5 | 28.8 | 27 · 7 | 27 · 9 | 23.6 | 22.8 | 25.9 | 24.5 | 26 · 1 | 126 - 2 |
| 6 d | 24 · 5 | 25.4 | 24.6 | 26 · 2 | 21 · 7 | 21 · 2 | 19.8 | 21 · 3 | 20.6 | 22.8 | 28 · 4 | 34 · 4 | 40-4 | 41.0 | 41.2 | 39.6 | 38 · 7 | 36 · 5 | 24 · 2 | 22.7 | 22.8 | 24 · 2 | 15.6 | 19.2 | 27.4 | 157 • 0 |
| 7 d | 19.5 | 32.9 | 21.8 | 21 · 4 | 18 · 1 | 18 - 2 | 19.5 | | 18.0 | 20.0 | 25.3 | | 31.5 | | 32.5 | 33.8 | 35.7 | 31.0 | | | 25 · 2 | 27.6 | 30.5 | 29.1 | 25.8 | 119.7 |
| 8 d | 28 · 1 | 26.3 | 25.5 | 26 · 2 | 32.8 | 25 · 2 | 24.6 | 23 · 4 | 21.8 | 21 · 7 | 30.9 | 31.0 | 35.7 | | 32.7 | 24 · 4 | 39.3 | | | 32.6 | 32.2 | 29.0 | 26 · 2 | | 29.3 | 202 · 3 |
| 9 | 26 · 5 | 24.0 | 22.8 | 22 · 2 | 22.9 | 21 · 3 | 20.1 | 22.2 | 23.9 | 26.8 | 30.1 | 34.0 | 34 · 5 | 32.9 | 31 · 4 | 30.1 | 27 · 7 | 26.6 | 27 · 1 | 27.6 | 26 · 9 | 26.9 | 27 · 1 | 27.0 | 26.8 | 142-6 |
| 10 | 27 · 2 | 27 · 1 | 27 · 8 | 26 · 0 | 23.9 | 22 · 7 | 21 · 8 | 22.5 | 23 · 7 | 24 · 0 | 27 · 1 | 30.8 | 31 · 9 | 32 · 2 | 33.0 | 30.5 | 28.3 | 28 · 2 | 26 · 6 | 25.5 | 26.8 | 27.6 | 25.7 | 25.3 | 26 · 9 | 146 - 2 |
| 11 | 24.6 | 25.1 | 26 · 7 | 23 · 2 | 26 · 1 | 33.0 | 26 · 2 | 30.1 | 31 · 1 | 29 · 1 | 27.0 | 28 · 5 | 29.3 | 30.6 | 30.1 | 28 · 7 | 28.3 | 28 · 1 | 27.9 | 26 · 9 | 26 · 3 | 26.8 | 25 · 4 | 23.7 | 27.6 | 162-8 |
| 12 | 24 · 4 | 24.8 | 24.3 | 24 · 2 | 27 · 1 | 28.0 | 24 · 3 | 21.3 | 19.6 | 20.1 | 21.5 | 27.8 | 29.6 | 31 · 7 | 31.6 | 32.2 | 31.8 | 30.5 | 29 · 1 | 28.9 | 28.8 | 27.7 | 28 · 2 | 26 · 6 | 26 8 | 144 - 1 |
| 13 | 24 · 6 | 25.1 | 23.9 | 24 · 4 | 23.8 | 22.6 | 22.6 | 22.7 | 22 · 1 | 24 · 0 | 28.6 | 30.7 | 33.3 | 33.9 | 33.9 | 32.5 | 30.7 | 29.9 | 28 · 9 | 27 · 2 | 25.5 | 25.3 | 21 · 0 | 21.8 | 26.6 | 139- |
| 14 | 24 · 8 | 25.8 | 28 · 2 | 27 · 5 | 27.6 | 29 · 2 | 26 · 2 | 25.5 | 24 · 9 | 25.9 | 28 · 7 | 32.2 | 36 · 2 | 35.9 | 34 · 9 | 33.9 | 31 · 4 | 30.0 | 29 · 1 | 28 · 5 | 28 · 2 | 25.9 | 27 · 4 | 27.8 | 29.0 | 195-1 |
| 15 | 27.5 | 27 · 5 | 27 · 1 | 27 · 1 | 24 · 8 | 21 · 8 | 19.3 | 18.6 | 19.4 | 22 · 2 | 25 · 1 | 29 · 1 | 34 · 5 | 36 · 0 | 35 · 4 | 33 · 2 | 30.0 | 26.8 | 26 · 3 | 26 · 9 | 27 · 3 | 27 · 9 | 28 · 0 | 27 · 9 | 27 · 1 | 149 - 7 |
| 16 | 27.5 | 26.6 | 26 · 2 | 24.9 | 24 · 3 | 23 · 3 | 21.9 | 19.9 | 18.9 | 20.0 | 24 · 8 | 28.8 | 33.2 | 35.6 | 40.7 | 41.0 | 49.2 | 34.9 | 31.0 | 31.0 | 29 · 1 | 28.3 | 30.0 | 26.3 | 29.1 | 197 · 4 |
| 17 | 27 · 4 | 26 · 3 | 25.6 | 25.7 | 24 · 2 | 22 · 8 | 20.1 | 19.7 | 17.3 | 19.9 | 24 · 1 | 28 · 1 | 31.6 | 33 · 4 | 32.0 | 31 · 4 | 29.6 | 27.8 | 27.3 | 27 · 4 | 27.8 | 27.5 | 26 · 5 | 27.0 | 26.3 | 130- |
| 18 q | 26 · 9 | 27.0 | 28 · 2 | 26 · 4 | 24 · 8 | 22.7 | 21.0 | 19.8 | 20.0 | 20.7 | 23 · 3 | 25.7 | 28 · 7 | 30.4 | 29.7 | 29.3 | 28 · 2 | 28 · 2 | 28.0 | 27 · 2 | 27 · 9 | 28.6 | 28 · 4 | 27 · 7 | 26 · 2 | 128 - 8 |
| 19 q | 26 · 5 | 26.0 | 25 · 3 | 23.8 | 22 · 4 | 20.4 | 20.7 | 19.7 | 21 · 1 | 22.5 | 24 · 2 | 27 · 4 | 29.6 | 31 · 4 | 30.6 | 28 · 8 | 26 · 9 | 25.6 | 25.8 | 26 · 9 | 27 · 2 | 27.5 | 28 • 9 | 29.0 | 25 · 8 | 118- |
| 20 q | 28 · 7 | 28 · 1 | 27 · 3 | 26 · 1 | 25.9 | 21 · 5 | 19.0 | 18.7 | 20.3 | 23 · 1 | 26 · 1 | 29.9 | 32.9 | 33 · 1 | 31.8 | 30.3 | 28.6 | 27 · 1 | 27 · 0 | 27 · 3 | 27 · 2 | 27 · 5 | 28 · 3 | 28 · 7 | 26.9 | 144 - 5 |
| 21 | 29.0 | 27.8 | 25 · 7 | 24 · 9 | 23.8 | 21 · 9 | 22.6 | 23 · 4 | 23.9 | 26 · 1 | 29 · 1 | 31 · 8 | 34 · 7 | 35.0 | 32.3 | 30.5 | 28 · 5 | 27 · 5 | 27.8 | 28 · 4 | 28 · 5 | 27.8 | 27.5 | 26.9 | 27 - 7 | 165-4 |
| 22 q | 26.6 | 26 · 7 | 26 · 2 | 25.4 | 24 · 4 | 22.4 | 20.8 | 20.7 | 21.3 | 23.0 | 27 · 2 | 30.2 | 33.3 | 35.0 | 35.4 | 35.6 | 32 · 4 | 30.3 | 29.0 | 28.6 | 28 · 5 | 27.8 | 27.8 | 27 · 4 | 27 · 7 | 166 · (|
| 23 | 27 · 7 | 26 · 3 | 26 · 1 | 25.1 | 23 · 7 | 21 · 9 | 21 · 2 | 21.5 | 22.0 | 24 · 9 | 28 · 7 | 31 · 9 | 35.3 | 37 · 2 | 38 · 1 | 37 · 1 | 34 · 5 | 32.3 | | 28 · 1 | 29.0 | 25 · 1 | 26 · 9 | 26 · 1 | 28 · 3 | 179 : 5 |
| 24 | 28.3 | 20.5 | 19.9 | 28 · 5 | 26 · 5 | 25.5 | 31 · 9 | 27 · 9 | 25.3 | 27 · 2 | 28.9 | 33.6 | 37 · 1 | 37 · 1 | 37.6 | 35 · 4 | 33 · 2 | 32.0 | 30.9 | 23.7 | 21.8 | 25.7 | 22 · 1 | 17.2 | 28 · 2 | 177 - 8 |
| 25 | 19.5 | 21.0 | 20.9 | 20.5 | 24 · 7 | 22 · 4 | 20.6 | 19.6 | 19·1 | 21 · 8 | 26.9 | 31 · 2 | 36 · 4 | 38 · 6 | 37 · 7 | 36 · 2 | 34 9 | 32 · 4 | 26 · 9 | 27.3 | 29.0 | 29 · 2 | 28 · 3 | 25.3 | 27 · 1 | 150-4 |
| 26 | 27.5 | 19.0 | 19.7 | 19 · 1 | 22.6 | 20.7 | 18.5 | 20.1 | 21 · 2 | 21 · 2 | 24 · 1 | 27 · 7 | 32.6 | 33.6 | 33.6 | 32.3 | 30.6 | 25.7 | 26 · 2 | 27 · 7 | 27 · 2 | 24.6 | 24 · 1 | 23 - 1 | 25.1 | 102 - 7 |
| 27 | 23.9 | 18.1 | 23 · 7 | | 20.7 | 20.0 | 19.0 | 18.3 | 19-3 | 21.6 | 25.3 | 29.0 | 32 · 1 | 33.5 | 33.3 | 32.8 | 31 · 4 | 30.6 | | 25.8 | 26.3 | 27 · 1 | 25 · 1 | 22.5 | 25 · 1 | 103 - 1 |
| 28 | | 23.9 | 26.6 | 25.5 | 23.6 | 21.6 | 20.6 | 21.8 | 23.2 | 24 · 7 | 27.6 | 30.6 | 33.4 | 34 · 3 | 34 · 7 | 34.0 | 32.5 | 31 · 2 | | 28 · 4 | 25.0 | 24 · 4 | 26.6 | 27 · 5 | 27.3 | 155-2 |
| 29 d | 30.7 | | -3.0 | 13.0 | 17.7 | 16.6 | 18.3 | 19.1 | 20.6 | 23.2 | 25.9 | 29 · 1 | 33.2 | | 34.6 | 33.2 | 31 · 7 | 29.9 | | 29.5 | 26.6 | 26 · 4 | 28 · 7 | 28.6 | 24.6 | 89 · 7 |
| 30 | 27 · 9 | 26 · 8 | 27 · 0 | 25.6 | 23.5 | 23.0 | 22 · 1 | 23.6 | 26 · 2 | 29 · 2 | 29 · 2 | 29 · 4 | 29.9 | 31 · 8 | 29.3 | 26.6 | 27 · 7 | 26 · 8 | 26 · 4 | 27 · 1 | 28 · 9 | 29.3 | 29 · 3 | 29.0 | 27.3 | 155 · 6 |
| 31 | 27.6 | 27.8 | 30 · 1 | 29.9 | 26 · 9 | 24 · 4 | 20.2 | 19.3 | 20.4 | | 24 · 2 | | 32 · 7 | | 35.6 | 33.0 | 32.6 | | 30 · 4 | 29.6 | 29 · 7 | 24 · 5 | 25 · 5 | 25 · 3 | 27 · 7 | 164 - 5 |
| ean | 26 · 2 | 25.0 | 24 · 4 | 24 · 1 | 24 · 1 | 22 · 7 | 21 · 4 | 21.2 | 21 · 4 | 23.0 | 26 · 1 | 29.5 | 32 · 7 | 33.7 | 33.2 | 32.2 | 31.6 | 29 · 5 | 27.8 | 27 · 2 | 26 · 8 | 26 · 5 | 26 · 4 | 26 · 0 | 26.8 | |
| 0 · 0+ | 213-1 | 176 · 3 | 155·4 | 148 · 7 | 145.9 | 103-2 | 64.3 | 56 · 2 | 63.5 | 113.0 | 209 · 5 | 312.8 | 413.6 | 445.9 | 439 · 0 | 398 · 9 | 379.3 | 316.0 | 261.0 | 243 · 0 | 231 · 4 | 219.8 | 218 · 3 | 207 · 1 | (| Grand To |

TERRESTRIAL MAGNETIC FORCE: VERTICAL COMPONENT Mean values for periods of sixty minutes ending at exact hours, G.M.T.

23 ESEDALEMUIR (Z) 45,000y (0.45 C.G.S. unit) + MAY 1960 3-4 4-5 5-6 6-7 7-8 9-10 10-11 11-12 0-1 8-9 12-13 13-14 14-15 15-16 16-17 17-18 18-19 19-20 20-21 21-22 22-23 23-24 Mean 8000+ 1 d 2 3 4 q 5 0 0 12 10 4Ó9 377 372 362 366 379 384 389 385 383 374 374 377 374 372 371 364 360 362 360 371 377 379 378 371 298 360 385 343 351 371 380 375 371 371 369 386 425 465 477 367 335 383 385 385 384 382 382 382 377 367 359 363 368 384 397 403 398 399 386 390 383 404 375 371 359 349 354 363 379 351 367 361 898 798 12 13 14 15 344 349 356 366 373 374 371 367 362 358 344 351 352 366 375 383 385 383 384 365 350 355 373 373 373 375 374 373 368 366 361 378 387 389 385 379 378 373 372 925 17 18 q 19 q 20 q 364 356 355 358 355 354 345 348 355 349 356 357 354 356 360 373 377 379 378 371 368 348 362 373 388 385 383 383 379 377 369 378 371 363 367 350 367 366 365 373 378 374 371 361 363 371 378 379 379 378 374 831 367 362 327 355 336 345 373 368 358 359 344 345 354 22 23 24 25 577 362 344 347 361 339 367 366 379 362 362 366 367 365 336 336 352 364 383 391 386 367 781 354 355 344 342 349 385 390 402 419 404 388 369 344 345 378 369 371 27 28 29 30 321 349 346 365 340 722 Mean 60 Grand Total Sum 1171 1039 1091 1251 1359 1350 1390 1384 1308 1165 1021 1000 1293 1672 2121 2233 2296 2263 2102 1936 1671 1498 275,903 10,000+

DAILY EXTREMES OF TERRESTRIAL MAGNETIC ELEMENTS. MAGNETIC CHARACTER FIGURES (K AND C) AND TEMPERATURE IN MAGNET HOUSE

| 2 | 4 ESKDALEMUI | R | | | | | | | | | • | | MAY 1960 |
|---|---|---|---|---|---|--|---|---|--|--|--|---|---|
| | | | | TERRESTRIA | L MAGNETIC ELEMI | ENTS | | | | | 1 | Magnetic: | Temperature |
| | Hor i | zontal force | | D | eclination | | Vert | ical force | | 3-hr. range indices | Sum of K | character | in magnet |
| | Maximum 16,000y + | Minimum 16,000y + | Range | Maximum 10°+ | Minimum 10°+ | Range | Maximum 45,000y + | Minimum 45,000y + | Range | K | indices | of day, C (0-2) | house 200 + |
| 1 d 2 3 4 q 5 6 d 7 d 8 d 9 | h. m. γ 02 33 789 15 57 793 19 01 795 19 19 813 20 40 806 18 00 962 16 29 875 15 06 1055 16 56 793 19 43 819 | 672 04 18 712 10 22 734 12 18 735 10 40 654 22 19 | 7 257 121 83 79 71 308 199 586 99 103 | h. m. 01 08 38-2 13 27 31-6 13 42 33-8 15 03 32-5 13 19 33-6 17 38 45-3 16 31 39-5 16 28 52-2 12 01 36-1 14 34 34-0 | h. m. -0·7 05 11 16·7 09 19 22·0 07 23 18·1 21 52 18·9 06 40 4·6 21 57 12·2 09 31 0·1 09 18 16·6 05 12 19·8 06 33 | 38·9 14·9 11·8 14·4 14·7 40·7 27·3 52·1 19·5 14·2 | h. m. y 06 19 433 20 02 401 17 20 390 19 56 387 18 48 379 17 57 475 18 22 488 15 20 778 17 02 406 16 32 402 | γ h. m. 355 02 48 368 04 27 362 12 39 373 23 27 355 24 00 284 22 00 263 01 58 301 05 17 355 10 33 365 11 09 | 7 78 33 28 14 24 191 225 477 51 37 | 6,6,5,3,4,4,3,4 2,4,3,3,3,3,3,2 1,2,2,2,3,2,1 1,1,1,2,2,1,2,3 2,2,2,2,2,3,3 3,3,2,4,3,5,6,5 4,4,3,4,6,5,4,5 2,5,6,7,7,7,5,6 3,3,3,4,3,3,2,2 2,2,2,2,2,2,3,3 | 23 15 13 18 31 35 45 23 | 2 1 0 0 0 1 2 2 1 | *A. 80.8 80.8 81.0 80.9 81.1 80.8 80.9 81.2 80.9 80.9 |
| 11 12 13 14 15 | 04 37 837 16 25 807 20 35 820 16 00 802 18 20 801 | 650 08 17 691 10 49 732 11 03 706 11 49 689 12 00 | 187 116 88 96 112 | 05 29 40·3 16 08 33·7 13 33 35·9 13 09 37·2 13 07 36·8 | 19·6 04 35 16·1 08 48 20·0 23 29 23·3 06 39 17·1 06 50 | 20·7 17·6 15·9 13·9 19·7 | 20 09 391 15 11 397 20 15 388 16 53 394 16 58 390 | 315 06 21 337 05 43 339 11 08 344 06 50 351 12 23 | 76 60 49 50 39 | 4,5,5,3,4,4,4,3 2,3,3,3,4,4,2,2 2,2,2,2,3,3,3,3,3 2,2,3,3,3,3,3,2,2 0,2,2,4,3,3,2,1 | 23 20 | 1 1 1 1 0 | 81·2 81·2 81·2 81·2 81·3 |
| 16 17 18 q 19 q 20 q | 15 43 955 01 01 827 16 56 809 19 30 808 23 42 802 | 689 14 53 709 13 49 734 11 12 742 10 06 754 11 26 | 266 118 75 66 48 | 16 32 52·9 13 09 36·9 13 45 30·8 13 31 32·1 13 29 33·5 | 17·5 08 22 13·0 06 33 18·9 07 52 18·1 07 31 18·2 07 15 | 35·4 23·9 11·9 14·0 15·3 | 17 38 429 16 45 390 17 40 384 17 45 381 17 55 372 | 339 11 55 344 11 58 352 11 37 349 12 09 341 11 40 | 90 46 32 32 31 | 2,1,2,2,5,6,6,5 3,2,3,4,4,3,2,2 2,2,2,2,2,2,2,2 2,1,2,2,1,2,2,2 1,2,1,1,1,2,1,2 | 16 | 1 1 0 0 | 81 · 2 81 · 4 81 · 3 81 · 6 81 · 5 |
| 21 22 q 23 24 25 | 18 58 816 14 45 831 14 50 965 20 20 835 17 44 830 | 758 09 31 746 10 23 764 21 50 684 06 23 723 00 32 | 58 85 201 151 107 | 13 34 35·6 14 46 38·0 14 45 42·3 14 55 38·9 13 28 39·8 | 21·2 05 29 20·2 07 14 19·6 07 12 13·4 23 29 14·3 01 00 | 14·4 17·8 22·7 25·5 25·5 | 18 11 373 05 18 368 18 45 394 19 27 414 18 22 423 | 337 12 22 326 12 10 333 11 59 304 07 01 314 00 26 | 36 42 61 110 109 | 2,1,1,2,3,2,2,1 1,1,0,1,3,2,2,2 1,1,2,2,5,5,4,3 4,4,5,3,3,4,4,3 4,3,2,2,3,4,3,3 | | 0 0 1 1 | 81·5 81·5 81·6 81·5 81·6 |
| 26 27 28 29 <i>d</i> 30 | 17 39 832 18 37 816 20 22 940 18 20 859 15 30 824 | 709 11 05 701 10 07 732 08 33 698 01 20 725 12 35 | 123 115 208 161 99 | 13 02 34·2 13 32 34·4 20 32 36·9 00 30 48·2 13 51 32·6 | 16·2 01 49 11·8 03 31 18·8 20 53 -8·8 02 20 20·7 06 58 | 18·0 22·6 18·1 57·0 11·9 | 18 10 405 19 28 394 05 28 374 20 48 402 16 30 440 | 312 00 32 286 02 57 338 12 10 164 01 19 344 10 42 | 93 108 36 238 96 | 4,3,3,3,2,4,2,3 4,3,2,2,3,3,3,2 2,1,1,2,2,2,5,4 6,4,3,3,5,5,4,4 3,2,3,4,3,3,2,2 | 24 22 19 34 22 | 1 1 1 2 1 | 81·5 81·7 81·6 81·7 81·7 |
| 31 Veen | 21 28 837 | 746 12 51 699 | 91 144 | 14 22 36·2 | 18·3 07 55 15·3 | 17·9 22·2 | 00 00 373 | 338 12 19 | 35 85 | 2,2,2,2,3,4,3,3 | 21 | 0.84 | 81·8 81·2 |

q denotes an international quiet day and d an international disturbed day.

TERRESTRIAL MAGNETIC FORCE: HORIZONTAL COMPONENT Mean values for periods of sixty minutes ending at exact hours, G.M.T.

| 21 E | SKDALI | EMUIR (| H) | | | | | | | | 16 | ,000% (| 0·16 C | .G.S. | unit) | + | | | | | | | | | Ju | NE 1960 |
|---|---|--|---|---|--|---|---|---|---|---|---|--|--|--|--|---|---|---|---|---|---|---|---|---|---|--|
| | Hour 0-1 | G.M.T. 1-2 | 2-3 | 3-4 | 4-5 | 5-6 | 6-7 | 7-8 | 8-9 | 9-10 | 10-11 | 11-12 | 12-13 | 13-14 | 14-15 | 15-16 | 16-17 | 17-18 | 18-19 | 19-20 | 20-21 | 21-22 | 22-23 | 23-24 | Mean | Sum 18,000+ |
| 1 2 q 3 4 d 5 6 7 8 9 10 q 11 q | 7 798 786 784 766 769 761 789 785 767 778 | 7 796 780 782 773 744 754 777 777 769 775 787 | 781 779 779 767 750 754 778 778 780 777 783 | 7 805 780 779 816 739 772 774 784 782 777 | 7 788 782 779 766 770 756 782 755 736 778 787 | 7 737 780 777 743 770 759 780 773 750 779 774 787 | γ 769 774 773 704 735 752 777 755 745 771 760 777 | 7 744 767 768 712 745 747 778 753 747 756 745 759 | 7 724 761 763 757 735 742 768 745 732 742 740 749 | 7 712 751 757 747 711 741 746 761 734 737 739 745 | 7 706 739 753 730 694 714 754 757 727 736 743 742 | 7 704 745 754 718 687 699 761 747 730 742 751 | 7 728 749 757 718 707 747 746 766 757 748 763 | 7 735 752 769 727 714 741 756 776 775 758 770 | 7 750 768 774 747 743 749 751 786 761 772 777 | 7 774 781 782 751 782 782 770 781 782 782 786 788 | 7 789 789 791 769 778 763 780 784 780 797 | 7 796 800 829 773 770 776 795 813 806 800 804 811 | γ 801 807 828 796 794 777 808 826 845 810 813 824 | 7 808 797 831 789 795 792 820 828 814 815 800 806 | 7 797 794 820 791 805 798 816 808 790 810 798 797 | 7 796 792 806 803 789 796 807 784 782 793 792 800 | 7 791 791 785 780 788 794 801 773 781 782 790 801 | 7 786 788 773 786 788 797 789 775 779 785 788 802 | 7 767 776 783 760 754 761 779 778 769 775 777 783 | 415 632 793 229 102 263 703 670 451 600 655 793 |
| 12 q 13 14 15 16 q 17 | 788 802 785 788 801 792 | 783 798 807 790 790 783 787 | 793 801 783 792 775 793 | 791 792 802 785 787 782 793 | 792 793 802 783 788 788 783 | 797 795 799 778 790 783 789 | 777 790 790 775 778 780 778 | 782 781 771 778 774 768 | 775 773 749 772 768 760 | 743 765 762 755 754 760 750 | 756 759 759 740 752 745 | 751 767 758 741 748 730 | 753 745 761 743 750 759 | 776 766 751 758 753 758 773 | 774 754 777 768 775 764 | 785 775 778 792 783 792 781 | 796 793 805 790 810 | 820 803 806 803 779 827 | 818 808 806 794 786 806 | 818 825 811 797 798 819 | 810 810 807 795 797 817 | 802 795 797 793 801 809 | 799 795 798 794 798 814 | 802 803 792 803 797 796 805 | 788 787 783 779 780 785 | 793 922 894 792 708 729 846 |
| 19 20 21 22 23 24 25 | 797 772 797 784 767 783 794 | 805 774 791 780 772 786 777 | 811 776 793 786 764 784 792 | 800 791 777 795 777 783 785 | 799 788 784 782 777 787 786 | 778 777 786 772 780 782 778 | 780 771 778 766 782 772 766 | 783 761 766 753 769 762 749 | 753 747 736 747 757 760 742 | 745 739 735 746 744 763 741 | 757 738 737 747 742 766 749 | 749 746 749 759 758 753 763 | 758 765 755 765 769 758 760 | 774 770 771 759 785 757 763 | 766 775 782 777 780 769 791 | 769 782 795 788 807 788 831 | 789 784 799 790 803 794 832 | 808 797 799 791 808 819 895 | 829 807 826 798 804 807 868 | 826 807 808 817 802 828 840 | 803 805 807 813 801 818 836 | 784 802 797 806 790 799 784 | 782 797 785 791 797 799 787 | 778 796 786 790 792 795 756 | 784 778 781 779 780 784 790 | 823 667 739 702 727 812 965 |
| 26 27 d 28 d 29 d 30 d | 763 774 787 766 727 | 768 786 790 755 736 | 746 828 780 755 712 | 775 677 775 754 720 | 775 712 775 787 774 | 740 698 786 782 772 | 736 747 791 759 764 | 734 753 768 736 751 | 733 736 751 755 728 | 736 698 747 754 714 | 731 707 738 743 693 | 740 710 709 734 699 | 748 738 703 727 728 | 746 732 727 732 728 | 758 753 744 753 746 | 776 771 749 768 783 | 791 846 785 786 808 | 820 858 821 805 871 | 821 871 816 809 837 | 815 845 839 836 838 | 812 810 805 847 838 | 801 782 775 871 795 | 803 771 751 794 781 | 783 784 749 727 785 | 769 766 769 772 764 | 451 387 461 535 328 |
| Mean Sum 22,000+ | 781 1431 | 1372 | 779 1358 | 778 1333 | 778 1336 | 773 1174 | 767 995 | 759 760 | 750 500 | 743 289 | 739 154 | 738 153 | 748 442 | 755 646 | 765 965 | 782 1449 | 793 1806 | 2303 | 815 2440 | 815 2464 | 809 2255 | 797 1923 | 790 1693 | 785 1553 | 776 | Grand Total 558,794 |

${\color{blue} \textbf{MAGNETIC DECLINATION (WEST)}} \\ {\color{blue} \textbf{Mean values for periods of sixty minutes ending at exact hours, G.M.T.}} \\$

| | Hour | CMT | | | | | | | | | | | 1 | | | | | | | | | | | | Т | Sum |
|-----|---------|--------|---------|---------|--------|---------|--------|--------|---------|--------|---------|---------|---------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|----------|
| | 0-1 | 1-2 | 2-3 | 3-4 | 4-5 | 5-6 | 6-7 | 7-8 | 8-9 | 9-10 | 10-11 | 11-12 | 12-13 | 13-14 | 14-15 | 15-16 | 16-17 | 17-18 | 18-19 | 19-20 | 20-21 | 21-22 | 22-23 | 23-24 | Mean | 500·0 |
| | | | • | • | • | • | • | , | • | • | • | , | , | • | • | • | • | , | , | • | , | , | , | • | • | |
| 1 | 24.0 | 21.8 | 18.5 | 20.7 | 15.3 | 21 · 1 | 27 · 2 | 25.2 | 23.7 | 23.5 | 28.6 | 31 · 2 | 32.6 | 32.7 | 31 · 9 | 34 · 1 | 33.6 | 33 · 1 | 31 · 5 | 29.6 | 28 · 2 | 27 · 7 | 28 · 2 | 27.4 | 27 · 1 | 151 - 4 |
| 2 9 | 26.6 | 25.7 | 25.7 | 24.8 | 23.5 | 21 · 8 | 20.1 | 19.0 | 18.7 | 20.8 | 23.6 | 27.3 | 30.4 | 31 · 5 | 31 · 9 | 31 · 8 | 31 · 4 | 30.5 | 30.0 | 28.9 | 28 · 5 | 27.8 | 27 · 8 | 27 · 2 | 26.5 | 135-3 |
| 3 | 26 · 7 | 26 · 1 | 25.4 | 24 · 7 | 23.3 | 21.5 | 19.7 | 18.5 | 18 · 4 | 21 · 4 | 24.6 | 28 · 1 | 30.6 | 32.8 | 33 · 4 | 33 · 2 | 32.6 | 33 · 2 | 31.6 | 31 · 7 | 30.6 | 23.9 | 27 · 3 | 27 · 1 | 26 · 9 | 146 - 4 |
| d | 24.3 | 20 · 2 | 19•1 | 12.1 | 9.2 | 9.1 | 10.5 | 10.0 | 26 · 5 | 22 · 4 | 28 • 2 | 30.0 | 33.2 | 34.6 | 36 · 9 | 37 · 2 | 35.9 | 33.9 | 33 · 1 | 31 · 4 | 29 · 1 | 29 · 4 | 26 · 5 | 28 · 7 | 25.5 | 111. |
| 5 | 21 · 3 | 19·4 | 21 · 6 | 30.5 | 22.7 | 25 · 2 | 24 • 4 | 26 · 4 | 27 · 1 | 25.5 | 24 · 7 | 26 · 6 | 30.3 | 33 · 7 | 33 · 2 | 32 · 5 | 30.6 | 29 · 4 | 29 · 1 | 25 · 2 | 27 · 1 | 29.5 | 29 · 1 | 29.6 | 27.3 | 154 |
| . (| 23.4 | 29.0 | 24.9 | 24.5 | 20.6 | 19.5 | 19.8 | 18.4 | 21.5 | 22.7 | 27 · 1 | 31.6 | 35.4 | 34.9 | 33.5 | 33 · 1 | 29.6 | 27 · 7 | 27.5 | 27.9 | 26.8 | 27.5 | 28 · 3 | 29.3 | 26.9 | 144 |
| ٠ ا | 24.6 | 27 · 1 | 24.6 | 22 · 1 | 19.5 | 19.9 | 19.6 | 18.6 | 18.6 | 21 · 3 | 27 · 4 | 30.2 | 32.7 | 34 · 6 | 32.8 | 32 · 4 | 31.6 | 29 · 4 | 27.8 | 24 · 5 | 27 · 4 | 27.6 | 27 · 4 | 27 · 4 | 26 · 2 | 129 · |
| - 1 | 27 · 0 | 26 · 8 | 27 · 7 | 28 · 0 | 29.3 | 21 · 4 | 18.6 | 17.5 | 20.8 | 24.0 | 26.8 | 30.5 | 31 · 4 | 33 · 2 | 33.6 | 33.8 | 32.0 | 30 · 1 | 27.6 | 25.5 | 25.2 | 24 · 2 | 21 · 5 | 23.6 | 26 · 7 | 140- |
|) | 27 · 2 | 23 · 5 | 24 · 2 | 26 · 5 | 28 · 9 | 27.8 | 24.0 | 19.3 | 20.1 | 23 · 1 | 27 · 0 | 30.2 | 33 · 1 | 35.6 | 34 · 7 | 33 · 5 | 30.7 | 28.8 | 25.3 | 23 · 4 | 27.0 | 27.8 | 27 · 9 | 27.5 | 27 · 4 | 157 |
| q | 27 · 4 | 26 · 9 | 26 · 9 | 24 · 0 | 23.0 | 20.8 | 19.3 | 19·1 | 19.6 | 22 · 1 | 26 · 2 | 29.9 | 31.7 | 32 · 4 | 32 · 4 | 31 · 2 | 30.6 | 28 · 9 | 28 · 7 | 27.9 | 27 · 2 | 25.6 | 27.6 | 27 · 9 | 26.6 | 137 |
| q l | 27.9 | 28 · 7 | 28.0 | 23.5 | 22.6 | 20.0 | 19.1 | 19.0 | 19.7 | 23.0 | 27.3 | 31 · 4 | 33.4 | 33.9 | 33 · 5 | 32.7 | 31 · 4 | 29.6 | 28.9 | 27.9 | 28 · 1 | 28.0 | 28 · 3 | 28 · 1 | 27.3 | 154 |
| q | 27 · 2 | 26 · 4 | 25.9 | 25.2 | 23.4 | 21.0 | 20.1 | 20.1 | 20.3 | 21.8 | 24 · 5 | 27 · 2 | 30.7 | 32 · 1 | 33.8 | 33 · 4 | 33 · 1 | 32.5 | 32.2 | 29.9 | 28 · 2 | 28.0 | 27 . 9 | 27.9 | 27.2 | 152 · |
| | 27 · 4 | 28 · 1 | 25.8 | 23 · 7 | 20.9 | 20 · 4 | 19.8 | 19.6 | 20.7 | 20.4 | 23.0 | 26 · 4 | 28 · 1 | 30.0 | 30.7 | 31.0 | 31 · 8 | 32.9 | 31 · 1 | 29.6 | 29.1 | 29.0 | 28.3 | 28.8 | 26.5 | 136 · |
| - 1 | 28 · 0 | 29 · 1 | 28 · 6 | 24 · 5 | 22.3 | 21 · 7 | 23.2 | 24.6 | 21 · 9 | 22.5 | 23.9 | 26 · 4 | 29.3 | 32.2 | 34 · 5 | 33.7 | 33.0 | 31 · 4 | 29 · 4 | 27.3 | 28 · 1 | 26 · 9 | 28 · 2 | 27.6 | 27.4 | 158 |
| - 1 | 27.6 | 29 · 1 | 28 · 4 | 25.0 | 22.7 | 20.8 | 20.1 | 21.7 | 22.8 | 25.3 | 26 · 4 | 28.9 | 31.7 | 33 · 2 | 33 · 1 | 32 • 4 | 31 · 2 | 30-1 | 29.7 | 28 · 4 | 27 · 4 | 27 · 7 | 28 · 3 | 28.9 | 27.5 | 160 |
| 9 | 28 · 5 | 27 · 2 | 27 · 2 | 28 · 4 | 24 · 5 | 22 · 4 | 23.3 | 21 · 2 | 20.5 | 20.9 | 23.6 | 26 · 9 | 28 · 7 | 28 · 7 | 29.6 | 30.4 | 29 · 4 | 27.5 | 27.5 | 28.3 | 28.2 | 28.0 | 28 · 6 | 28 · 7 | 26.6 | 138- |
| - 1 | 27 · 8 | 27 · 6 | 24 · 5 | 24 · 1 | 23.5 | 22.5 | 21.6 | 21 · 3 | 20.8 | 21 · 9 | 25.2 | 28 · 7 | 31.8 | 32.5 | 32.5 | 30.9 | 29 · 5 | 27 · 3 | 29 · 1 | 28 · 9 | 29.3 | 29.3 | 29 · 4 | 28.0 | 27.0 | 147 · |
| - 1 | 28.6 | | | 25 · 1 | 22.8 | 23.5 | 22 · 1 | 20.7 | 20.8 | 22.7 | | 28 · 7 | 33.5 | 34 · 1 | 33.6 | 32.1 | 31 · 1 | 29 · 8 | 28.9 | | | 28 · 7 | 29 · 1 | 28 • 4 | 27 - 7 | 164 · |
| - 1 | 26.5 | | | 22.0 | 20.3 | 21 · 7 | 24 · 5 | 26.3 | 24 · 9 | 25.3 | 26 · 4 | 29 · 7 | 32.3 | 33.8 | 32.5 | 31 · 7 | 29.9 | 27 · 8 | 27 · 2 | 27 · 3 | | 24 · 2 | 27 · 5 | 25.9 | 27 · 1 | 150- |
| | 24 · 4 | 24 · 3 | 24 · 9 | 27 · 2 | 22.5 | 19.5 | 18•4 | 18.6 | 18.5 | 21 · 6 | 25 · 7 | 28.9 | 32.3 | 34 · 3 | 33.9 | 31 · 5 | 28.6 | 28 · 1 | 27 · 9 | 28 · 8 | 28.9 | 29 · 4 | 28.0 | 27.0 | 26 · 4 | 133・ |
| | 24 · 4 | 23.0 | | 24 · 7 | 26 · 3 | 22.5 | 22 · 4 | 21 · 7 | 21 · 5 | 24.6 | 27.8 | 31 · 5 | 34 · 1 | 36 · 4 | 36 · 2 | 35.2 | 32.9 | 30.8 | 31.6 | 29.2 | 30.5 | 30.9 | 29.3 | 25.6 | 28 · 2 | 175. |
| - 1 | 24 · 7 | 23 · 1 | | 24 • 4 | 17-1 | 18.3 | 21 · 2 | 20.6 | 21 · 9 | 25.5 | 28 · 3 | 32.2 | 35.5 | 36 · 8 | 35.8 | 34 · 3 | 32.0 | 30 · 7 | 30.4 | 30.6 | 28 • 4 | 27 · 3 | 26 · 5 | 26 · 7 | 27 · 3 | 154 |
| - 1 | 19.8 | 19·2 | | 18.3 | 17.5 | 17 • 4 | | 19·2 | 20.8 | 22.6 | 24 · 6 | 28.6 | 33 · 2 | 36 · 1 | 35 · 2 | 35 · 2 | 32.5 | | 31 · 6 | 30.8 | 29 · 7 | 28 · 3 | 28 · 5 | 27 · 5 | 25.9 | 122 · |
| | 25 7 | | | 21.6 | 21.0 | 18 • 4 | | 19.7 | 21 · 8 | 22.5 | 26 · 1 | 28 · 3 | 31 · 7 | 33.9 | 32.8 | 33 · 1 | 32.6 | 32.5 | 31 · 1 | 26 · 0 | 25.8 | 28 · 5 | 27 • 4 | 23.6 | 26 · 3 | 130 |
| | 18.6 | 20 · 4 | 26 · 1 | 23.3 | 22.3 | 19·1 | 19.3 | 19-9 | 22 · 1 | 25 · 4 | 27.5 | 30.8 | 35 · 2 | 35.8 | 36 · 6 | 37 · 8 | 32 · 7 | 33 · 4 | 33 · 4 | 33.0 | 29.9 | 30.4 | 27・9 | 23.4 | 27 · 7 | 164 |
| | 21.8 | 22 · 2 | | 18.0 | 17.6 | 18 • 4 | 23.0 | 20.6 | 19.8 | 23.0 | 24.9 | 27.8 | 29.6 | 30.3 | 31.0 | 32.0 | 32.2 | 31 · 4 | 30.8 | 29.9 | 27 · 1 | 24.8 | 25.6 | 26 · 9 | 25.4 | 110. |
| d | 28 · 6 | | | 15.2 | 24 · 2 | 22 · 1 | 22 · 2 | 18.1 | 15.6 | | 19·8 | 22 · 1 | 25.6 | 28 · 5 | 30.1 | 31.0 | 34 · 3 | 34 · 2 | 33.6 | 27.9 | 26 · 2 | 29 · 2 | 26.0 | 19.2 | 25 · 1 | 103 · |
| d | 21.6 | | | 21.8 | 21.2 | 20.0 | 15.9 | 14.3 | 14.5 | | 24 · 2 | 28 · 3 | 33.7 | 36.8 | 36 · 7 | 35.0 | 34 • 4 | 32.9 | 28 · 5 | 25.4 | 24.9 | 22.5 | 22 · 7 | 25.6 | 25 · 2 | 103 |
| d | 25 · 2 | | | 22 · 7 | 21.2 | 20.2 | | 17.8 | 19.7 | 20.8 | 23.6 | 26 · 9 | 29.9 | 32 · 1 | 32.7 | 32 · 2 | 30.2 | 29.7 | 28 · 7 | 30.2 | 32.5 | 29.8 | 26 · 4 | 20.7 | 25.9 | 122. |
| d | 15.3 | 3.6 | 24 · 6 | 17.5 | 23.3 | 19-0 | 17.3 | 17.2 | 19·1 | 22.5 | 24 · 0 | 26 · 4 | 29.5 | 31 · 7 | 32.6 | 34 · 6 | 32.5 | 32.8 | 31 · 8 | 32.8 | 29.9 | 25.4 | 26 · 7 | 26 · 0 | 24.8 | 96 · |
| | 25 · 1 | 24.3 | 24.6 | 23·1 | 21 · 7 | 20.6 | 20.4 | 19.8 | 20.8 | 22.6 | 25.5 | 28 · 7 | 31.7 | 33 · 3 | 33 · 4 | 33·1 | 31 · 8 | 30.7 | 29.9 | 28.6 | 28 · 1 | 27.6 | 27 · 4 | 26 · 7 | 26 · 7 | |
| 0+ | 252 · 1 | 230.6 | 238 · 6 | 194 · 1 | 152.5 | 117 · 0 | 111-3 | 94 · 2 | 122 · 7 | 178.6 | 265 · 7 | 361 · 7 | 451 · 2 | | | | | | | | | | | | | Grand To |

TERRESTRIAL MAGNETIC FORCE: VERTICAL COMPONENT Mean values for periods of sixty minutes ending at exact hours, G.M.T.

23 ESEDALEMUIR (Z) 45,000y (0.45 C.G.S. unit) + JUNE 1960

| | | G.M.T. | | | | | | | | | | | I | | | | | | | | | | | | | Sum |
|---------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|-------------|
| | 0-1 | 1-2 | 2-3 | 3-4 | 4-5 | 5-6 | 6-7 | 7-8 | 8-9 | 9-10 | 10-11 | 11-12 | 12-13 | 13-14 | 14-15 | 15-16 | 16-17 | 7 17-18 | 18-19 | 19-20 | 20-21 | 21-22 | 22-23 | 23-24 | Mean | 8000+ |
| _ | γ | γ | γ | γ | γ. | γ | γ | γ | γ | γ | γ | γ | γ | γ | γ | γ | γ | γ | γ | γ | γ | γ | γ | γ | γ | |
| 1 | 357 | 335 | 328 | 300 | 304 | 304 | 304 | 322 | 329 | 307 | 323 | 344 | 363 | 379 | 383 | 374 | 373 | 373 | 373 | 378 | 378 | 375 | 372 | 368 | 348 | 346 |
| 2 q | 368 | 369 368 | 369 | 371 | 374 368 | 374 | 372 | 367 | 365 | 365 | 358 | 355 | 351 | 355 | 357 | 360 | 364 | 372 | 372 | 373 | 372 | 369 | 368 | 367 | 366 | 787 |
| 3 4 d | 367 356 | 352 | 368 346 | 368 319 | 283 | 369 249 | 368 271 | 367 288 | 364 291 | 359 | 350 | 343 | 346 | 350 | 354 | 356 | 357 | 359 | 373 | 379 | 381 | 380 | 363 | 361 | 363 | 718 |
| 5 | 362 | 345 | 299 | 296 | 268 | 288 | 307 | 321 | 333 | 316 336 | 344 350 | 357 368 | 368 | 381 402 | 394 404 | 395 399 | 403 415 | 409 420 | 407 413 | 395 417 | 389 403 | 383 390 | 378 384 | 379 380 | 352 362 | 453 691 |
| - | | | | | | | | | | | | | 1 | | | | | | | | | | | | | |
| 6 7 | 367 361 | 367 357 | 324 338 | 303 329 | 305 349 | 334 364 | 349 369 | 360 367 | 369 365 | 368 365 | 364 357 | 369 355 | 375 | 387 | 382 | 384 | 393 | 390 | 387 | 380 | 378 | 376 | 375 | 372 | 365 | 758 |
| 8 | 374 | 374 | 366 | 333 | 316 | 330 | 349 | 357 | 361 | 360 | 349 | 333 346 | 357 351 | 366 359 | 374 368 | 378 374 | 380 | 386 | 394 | 401 | 390 | 385 | 379 356 | 376 | 368 | 842 |
| 9 | 341 | 310 | 332 | 342 | 337 | 329 | 350 | 361 | 364 | 367 | 362 | 357 | 358 | 368 | 384 | 385 | 375 384 | 379 382 | 393 386 | 398 386 | 395 380 | 385 377 | 375 | 348 374 | 362 362 | 696 691 |
| 10 g | 373 | 371 | 369 | 369 | 372 | 372 | 370 | 370 | 367 | 362 | 356 | 347 | 345 | 357 | 367 | 376 | 376 | 377 | 375 | 378 | 380 | 380 | 375 | 369 | 369 | 853 |
| 11 q | 369 | 368 | 358 | 361 | 368 | 373 | 374 | 373 | 372 | 364 | 350 | 345 | 346 | 350 | 359 | 365 | 370 | 370 | 370 | 369 | 369 | 369 | 368 | 368 | 365 | 748 |
| 12 q | 369 | 369 | 369 | 369 | 368 | 369 | 371 | 373 | 370 | 360 | 340 | 323 | 327 | 339 | 347 | 359 | 367 | 369 | 370 | 373 | 373 | 369 | 367 | 364 | 361 | 674 |
| 13 | 364 | 363 | 362 | 362 | 364 | 365 | 366 | 367 | 364 | 364 | 356 | 346 | 341 | 344 | 348 | 358 | 365 | 372 | 380 | 376 | 372 | 368 | 364 | 364 | 362 | 695 |
| 14 | 364 | 363 | 363 | 365 | 368 | 366 | 365 | 365 | 368 | 363 | 353 | 350 | 364 | 375 | 381 | 384 | 381 | 381 | 381 | 385 | 386 | 384 | 374 | 370 | 371 | 899 |
| 15 | 369 | 368 | 368 | 369 | 372 | 374 | 370 | 366 | 363 | 358 | 357 | 351 | 352 | 355 | 360 | 367 | 380 | 390 | 395 | 396 | 387 | 380 | 373 | 369 | 370 | 889 |
| 16 q | 368 | 366 | 364 | 363 | 359 | 364 | 365 | 364 | 363 | 357 | 356 | 353 | 347 | 345 | 351 | 361 | 363 | 370 | 373 | 369 | 373 | 370 | 368 | 365 | 362 | 697 |
| 17 | 360 | 356 | 358 | 364 | 368 | 371 | 372 | 370 | 369 | 366 | 361 | 353 | 351 | 351 | 351 | 364 | 375 | 391 | 385 | 373 | 369 | 368 | 369 | 367 | 366 | 782 |
| 18 | 364 | 361 | 347 | 353 | 361 | 364 | 363 | 365 | 365 | 358 | 352 | 349 | 345 | 357 | 367 | 364 | 365 | 370 | 379 | 370 | 369 | 366 | 363 | 363 | 362 | 680 |
| 19 | 363 | 361 | 354 | 346 | 341 | 344 | 339 | 334 | 335 | 337 | 341 | 345 | 351 | 365 | 376 | 387 | 391 | 397 | 398 | 402 | 399 | 395 | 379 | 368 | 365 | 748 |
| 20 | 364 | 358 | 351 | 337 | 341 | 350 | 353 | 356 | 356 | 352 | 350 | 346 | 350 | 361 | 363 | 369 | 375 | 375 | 375 | 378 | 380 | 377 | 370 | 368 | 361 | 655 |
| 21 | 359 | 352 | 351 | 349 | 320 | 315 | 320 | 329 | 330 | 332 | 333 | 327 | 335 | 350 | 358 | 368 | 377 | 397 | 404 | 405 | 392 | 383 | 370 | 364 | 355 | 520 |
| 22 | 363 | 364 | 362 | 341 | 346 | 352 | 350 | 353 | 353 | 355 | 353 | 358 | 357 | 358 | 358 | 359 | 363 | 367 | 368 | 367 | 375 | 378 | 376 | 367 | 360 | 643 |
| 23 | 356 | 341 | 351 | 361 | 366 | 359 | 358 | 358 | 359 | 349 | 341 | 345 | 350 | 354 | 353 | 354 | 374 | 383 | 385 | 381 | 376 | 369 | 367 | 363 | 361 | 653 |
| 24 | 363 | 357 | 357 | 358 | 358 | 362 | 360 | 358 | 352 | 354 | 357 | 348 | 353 | 359 | 358 | 362 | 368 | 374 | 387 | 386 | 378 | 370 | 363 | 362 | 363 | 704 |
| 25 | 359 | 362 | 358 | 359 | 363 | 363 | 362 | 363 | 359 | 357 | 347 | 339 | 344 | 359 | 365 | 375 | 393 | 395 | 403 | 405 | 400 | 374 | 336 | 346 | 366 | 786 |
| 26 | 345 | 322 | 293 | 298 | 316 | 333 | 335 | 347 | 355 | 358 | 351 | 347 | 352 | 363 | 370 | 374 | 371 | 370 | 370 | 371 | 377 | 376 | 359 | 355 | 350 | 408 |
| 27 d | 354 | 343 | 300 | 216 | 227 | 229 | 268 | 319 | 340 | 347 | 354 | 358 | 358 | 358 | 364 | 369 | 374 | 397 | 403 | 417 | 412 | 378 | 309 | 336 | 339 | 130 |
| 28 d | 363 | 369 | 371 | 374 | 377 | 377 | 369 | 365 | 354 | 344 | 339 | 340 | 351 | 357 | 364 | 370 | 381 | 409 | 419 | 410 | 391 | 374 | 365 | 358 | 370 | 891 |
| 29 d | 353 | 355 | 343 | 323 | 341 | 337 | 350 | 351 | 354 | 350 | 345 | 347 | 351 | 360 | 367 | 372 | 376 | 384 | 386 | 382 | 377 | 358 | 324 | 277 | 353 | 463 |
| 30 d | 226 | 258 | 202 | 173 | 248 | 316 | 360 | 375 | 375 | 377 | 374 | 374 | 371 | 371 | 376 | 381 | 400 | 405 | 405 | 390 | 391 | 387 | 369 | 370 | 345 | 274 |
| vie an | 357 | 353 | 344 | 336 | 338 | 343 | 349 | 354 | 355 | 354 | 351 | 349 | 353 | 361 | 367 | 371 | 378 | 384 | 387 | 386 | 383 | 376 | 365 | 362 | 361 | |
| Sum 0.000+ | 721 | 604 | 321 | 71 | 148 | 296 | 479 | 631 | 664 | 607 | 523 | 485 | 601 | 835 | 1003 | 1143 | 1329 | 1513 | 1609 | 1590 | 1492 | 1293 | 958 | 858 | | Grand Total |

DAILY EXTREMES OF TERRESTRIAL MAGNETIC ELEMENTS, MAGNETIC CHARACTER FIGURES (K AND C) AND TEMPERATURE IN MAGNET HOUSE

| | | | | | | 1 | ERRESTR I AI | , MAGNET | IC ELE | ENTS | | | | | | | | Magnetic | Temperatur |
|------|----------------|-------|-------|---------------|------------|----------|-----------------|----------|----------------|--------------|----------------|------------|------------|----------------|----------|------------------------|----------|------------------------|------------------|
| | | Horiz | ontal | force | | | De | clinati | on | | | Vert | ical f | orce | | 3-hr. rænge indices | Sum of K | character of day, C | in magnet |
| | Maxi 16,00 | | | imum 00y + | Range | ۱ | Maximum 10°+ | | imum + | Range | Maxi 45,00 | | | imum 100y+ | Range | K | Indices | (0-2) | 200 + |
| | h. m. | γ | γ | h. m. | γ | h. | | | h. m. | , | h. m. | γ | γ | h. m. | γ | | | | °A. |
| 1 | 03 29 | 829 | 690 | 09 25 | 139 | 13 | | 12.2 | 04 20 08 09 | 23·2 14·6 | 14 21 | 386 375 | 294 | 03 59 | 92 | 3,5,3,3,3,2,2,1 | 22 | 1 | 81.6 |
| 2 q | 18 12 | 811 | 736 | 10 50 | 75 | 14 | | 17.9 | 08 09 | 16.4 | 06 00 21 29 | 3/5 384 | 350 340 | 12 30 11 53 | 25 44 | 2,1,2,1,3,2,2,1 | 14 | 0 | 81.6 |
| 3 | 17 50 | 859 | 746 | 11 07 | 113 | 17 | | 2.5 | 04 51 | 37.3 | 17 01 | 413 | 241 | 05 38 | 172 | 0,0,2,2,2,4,3,4 | 17 | 1 | 81.8 |
| 4 d | 21 25 | 855 | 664 | 06 55 | 191 179 | 14 03 | | 12.2 | 00 49 | 25.7 | 17 12 | 424 | 259 | 04 06 | 165 | 4,5,3,4,3,4,4,2 | 35 29 | i | 81 · 8 82 · 2 |
| 5 | 20 07 | 836 | 657 | 11 15 | 1/9 | 03 | 4/ 3/-9 | 12.2 | 00 49 | 23 / | 17 12 | 727 | 239 | 04 00 | 103 | 7,3,3,4,3,4,7,2 | 1 29 | | 62.2 |
| 6 | 19 53 | 803 | 660 | 11 15 | 143 | 12 | 24 37.0 | 16 · 1 | 07 27 | 20.9 | 16 11 | 396 | 299 | 04 12 | 97 | 4,3,3,4,3,3,3,2 | 25 | 1 | 81 · 9 |
| 7 | 19 25 | 827 | 732 | 14 22 | 95 | 13 | 07 35.4 | 16.4 | 07 50 | 19.0 | 19 16 | 403 | 326 | 02 50 | 77 | 3,3,3,3,3,3,3,2 | 23 | 1 | 81.9 |
| 8 | 19 45 | 855 | 723 | 11 16 | 132 | 14 | 02 35.6 | 13.9 | 07 52 | 21 · 7 | 19 28 | 401 | 315 | 04 42 | 86 | 2,4,3,4,3,3,4,3 | 26 | 1 | 81 · 8 |
| 9 | 18 41 | 866 | 715 | 10 59 | 151 | 13 | | 17.1 | 08 03 | 19.0 | 19 13 | 390 | 303 | 01 24 | 87 | 3,4,3,2,4,3,4,1 | 24 | 1 | 82 · 1 |
| 0 q | 20 05 | 824 | 734 | 09 54 | 90 | 14 | 00 33.0 | 17.8 | 08 04 | 15.2 | 21 10 | 383 | 342 | 12 08 | 41 | 1,1,1,2,2,3,2,2 | 14 | 0 | 82 · 2 |
| 1 a | 10.04 | 818 | 735 | 09 28 | 83 | 13 | 49 34 4 | 18-1 | 06 40 | 16.3 | 05 51 | 375 | 345 | 11 27 | 30 | 2,1,2,2,2,2,2,1 | 14 | 0 | 82.1 |
| 2 a | 18 04 18 25 | 832 | 738 | 10 37 | 94 | 14 | | 19.1 | 06 10 | 15.0 | 20 06 | 375 | 322 | 11 50 | 53 | 1,1,2,2,2,3,3,1 | 15 | l ŏ l | 82.2 |
| 3 | 17 29 | 845 | 747 | 12 27 | 98 | 17 | | 19.1 | 07 06 | 15.2 | 18 19 | 380 | 339 | 12 41 | 41 | 1,2,1,2,2,4,2,1 | 15 | ŏ | 82.2 |
| 4 | 19 59 | 833 | 709 | 13 47 | 124 | 14 | | 20.9 | 05 03 | 14.5 | 19 54 | 387 | 346 | 11 12 | 41 | 2,2,2,3,4,3,3,1 | 20 | ĭ | 82.3 |
| 5 | 18 56 | 827 | 733 | 08 32 | 94 | 14 | 02 33 7 | 19.0 | 08 14 | 14.7 | 18 33 | 397 | 349 | 11 36 | 48 | 2,1,3,3,3,3,3,2 | 20 | Ō | 82.4 |
| 6 a | 17 26 | 810 | 736 | 11 20 | 74 | 15 | 12 30.6 | 19.8 | 08 20 | 10.8 | 17 59 | 375 | 344 | 13 12 | 31 | 2,2,3,2,2,2,1,2 | 16 | ا ما | 82.5 |
| 7 | 16 31 | 823 | 746 | 11 36 | 77 | 14 | 23 32 7 | 20.4 | 08 43 | 12.3 | 17 30 | 392 | 348 | 13 53 | 44 | 3,1,2,1,3,4,3,2 | 19 | ŏ | 82.5 |
| 8 | 17 33 | 841 | 718 | 11 13 | 123 | 13 | | 19.8 | 08 10 | 16.0 | 18 37 | 379 | 341 | 12 27 | 38 | 3,2,2,3,3,3,3,3 | 22 | l i l | 82.6 |
| 9 | 18 32 | 839 | 738 | 09 37 | 101 | 13 | 39 35.8 | 18.3 | 04 51 | 17.5 | 19 41 | 403 | 331 | 07 36 | 72 | 3,3,3,3,3,4,3 | 25 | 1 | 82.5 |
| 0 | 19 21 | 811 | 733 | 09 57 | 78 | 14 | 01 35.0 | 17.6 | 08 19 | 17.4 | 20 28 | 380 | 334 | 03 35 | 46 | 3,3,1,1,3,3,1,1 | 16 | 0 | 82.7 |
| 1 | 18 50 | 834 | 727 | 08 40 | 107 | 14 | 47 37 0 | 19.8 | 04 47 | 17.2 | 19 03 | 414 | 310 | 05 00 | 104 | 3,4,3,3,3,3,3,3 | 25 | 1 | 82.6 |
| 2 | 19 32 | 827 | 739 | 10 13 | 88 | 13 | 34 37.5 | 16.2 | 04 53 | 21.3 | 21 33 | 381 | 335 | 03 39 | 46 | 3,3,1,3,3,3,3,3 | 22 | 1 | 82.5 |
| 3 | 15 37 | 829 | 735 | 10 36 | 94 | 13 | 40 36.8 | 13.6 | 02 05 | 23 · 2 | 18 06 | 385 | 340 | 01 10 | 45 | 4,3,3,2,3,4,2,2 | 23 | 1 | 82.5 |
| 4 | 20 01 | 847 | 735 | 13 49 | 112 | 13 | 30 36.0 | 16.1 | 06 55 | 19.9 | 19 52 | 389 | 347 | 11 49 | 42 | 2,2,2,3,3,3,4,3 | 22 | 1 | 82.7 |
| 5 | 17 22 | 918 | 715 | 23 00 | 203 | 14 | 20 38-8 | 16.1 | 01 10 | 22.7 | 19 11 | 408 | 319 | 22 47 | 89 | 3,2,2,3,3,5,4,5 | 27 | 1 | 82.6 |
| 5 | 17 52 | 842 | 719 | 07 59 | 123 | 15 | 31 33 4 | 15.3 | 05 06 | 18·1 | 20 46 | 381 | 282 | 02 47 | 99 | 4,4,3,2,3,4,3,3 | 26 | 1 | 82.5 |
| 7 d | 18 43 | 917 | 626 | 04 59 | 291 | 16 : | | 10.3 | 03 50 | 26 · 8 | 20 03 | 426 | 209 | 03 32 | 217 | 5,5,4,3,2,5,5,4 | 33 | 2 | 82.6 |
| 3 d | 19 23 | 870 | 672 | 11 57 | 198 | 13 ! | | 8 • 4 | 08 23 | 29.3 | 18 43 | 421 | 335 | 10 36 | 86 | 3,3,4,4,4,4,4,3 | 29 | 1 | 82.7 |
| 9 d | 21 49 | 917 | 696 | 23 56 | 221 | 21 (| | 11.9 | 07 02 | 25.2 | 18 10 | 388 | 243 | 23 52 | 145 | 3,4,4,2,3,4,5,6 | 31 | 1 | 82 · 7 |
|) d | 17 47 | 923 | 653 | 03 10 | 270 | 17 : | 24 36 · 1 | -4.9 | 01 30 | 41.0 | 18 07 | 412 | 141 | 03 17 | 271 | 6,5,3,3,3,5,5,3 | 33 | 2 | 82.7 |
| | | | | | | | | | | | | | | | | | | | |
| an I | | 846 | 714 | | 132 | - | - 35.5 | 15.3 | | 20.2 | | 393 | 311 | | 83 | - | - | 0.77 | 82-3 |

q denotes an international quiet day and d an international disturbed day.

TERRESTRIAL MAGNETIC FORCE: HORIZONTAL COMPONENT Mean values for periods of sixty minutes ending at exact hours, G.M.T.

| 21 E | SKDALE | MUIR (| H) | | | | | | | | 16, | 000γ (0 |)·16 C. | G.S. u | nit) + | · | | | | | | | | | n | nly 1960 |
|---|--|--|--|--|--|--|--|---------------------------------|--|--|---------------------------------|---------------------------------|---------------------------------|---------------------------------|---------------------------------|---------------------------------|---------------------------------|---------------------------------|---------------------------------|---------------------------------|---------------------------------|---------------------------------|---------------------------------|---------------------------------|---------------------------------|--------------------------------------|
| | Hour 0-1 | G.M.T. 1-2 | 2-3 | 3-4 | 4-5 | 5-6 | 6-7 | 7-8 | 8-9 | 9-10 | 10-11 | 11-12 | 12-13 | 13-14 | 14-15 | 5 15-16 | 16-17 | 17-18 | 18-19 | 19-20 | 20-21 | 21-22 | 22-23 | 23-24 | Mean | Sum 16,000+ |
| 1 2 | γ 796 783 | γ 785 765 | γ 770 777 | γ 763 774 | γ 775 776 | γ 783 785 | γ 744 784 | γ 751 766 | γ 773 779 | γ 7 44 765 | γ 724 744 | γ 718 726 | γ 729 732 | γ 741 765 | γ 748 759 | γ 736 783 | γ 766 777 | γ 780 788 | 9 860 803 | γ 8 44 799 | γ 799 796 | γ 780 791 | γ 774 784 | γ 778 778 | γ 769 774 | 2461 2579 |
| 3 4 5 | 778 791 791 | 781 786 793 | 783 774 786 | 788 780 786 | 786 764 791 | 781 775 794 | 778 779 788 | 768 762 771 | 764 745 751 | 751 730 728 | 741 731 728 | 731 733 739 | 758 736 733 | 768 743 741 | 772 755 744 | 779 766 778 | 792 816 778 | 803 800 795 | 815 825 810 | 827 810 828 | 818 808 813 | 789 787 795 | 788 786 794 | 784 787 784 | 780 774 777 | 2723 2569 2639 |
| 6 7 q 8 q 9 q | 775 779 789 791 | 771 781 787 793 | 766 781 783 796 | 775 783 782 798 | 779 786 785 799 | 784 785 786 799 | 774 772 776 793 796 | 755 759 767 780 788 | 735 744 757 768 780 | 717 735 751 763 778 | 689 731 746 763 760 | 706 741 751 757 745 | 738 753 763 768 753 | 764 759 767 771 766 | 763 775 773 780 776 | 765 782 789 791 785 | 785 795 801 797 778 | 791 813 808 804 809 | 801 812 814 810 818 | 803 809 812 813 830 | 798 805 805 813 823 | 785 796 799 810 811 | 781 796 797 810 801 | 782 791 794 805 791 | 766 778 783 791 790 | 2382 2663 2782 2972 2957 |
| 10 11 12 13 14 d | 800 797 797 803 795 | 794 791 796 791 791 | 788 785 795 786 790 | 791 791 797 791 791 | 795 800 799 793 796 809 | 801 804 794 795 789 803 | 804 775 796 801 791 | 794 781 795 788 792 | 783 778 780 766 782 | 780 763 760 752 759 | 763 756 757 736 766 | 751 749 758 743 759 | 758 766 766 751 740 | 770 761 771 761 747 | 775 775 778 769 783 | 786 773 785 805 852 | 806 781 802 815 917 | 795 791 789 875 907 | 816 805 803 824 854 | 817 808 807 823 788 | 825 807 830 826 763 | 798 809 799 843 730 | 795 801 800 828 603 | 797 796 799 832 581 | 791 786 789 795 783 | 2981 2853 2934 3090 2793 |
| 15 d 16 d 17 18 19 d | 821 524 691 760 778 764 | 814 496 696 753 777 763 | 811 655 760 754 779 755 | 821 656 757 770 782 758 | 731 737 773 785 762 | 725 729 764 784 759 | 791 647 730 755 752 750 | 636 707 752 723 736 | 782 638 679 740 710 718 | 739 664 712 728 678 710 | 686 705 731 696 713 | 679 710 736 690 704 | 712 713 726 738 725 | 705 722 745 752 753 | 732 731 765 750 782 | 788 759 762 740 762 | 856 781 762 738 782 | 814 816 777 781 804 | 814 808 792 800 825 | 804 790 794 850 822 | 768 775 794 797 779 | 750 783 789 765 758 | 724 762 783 779 799 | 710 770 780 771 763 | 705 743 762 758 760 | 914 1823 2285 2195 2246 |
| 20 21 22 23 24 25 <i>a</i> | 763 790 777 805 782 | 765 779 783 789 782 | 765 771 772 782 782 | 765 765 765 774 784 781 | 752 756 774 774 782 | 750 754 772 776 783 | 758 761 760 777 779 | 743 750 761 775 767 | 724 742 762 779 757 | 717 742 747 786 755 | 720 733 736 775 749 | 723 732 737 773 755 | 738 747 748 766 762 | 733 761 758 756 768 | 760 769 764 758 781 | 781 776 771 766 789 | 789 777 780 784 786 | 796 796 782 788 794 | 787 802 787 807 801 | 789 812 796 808 799 | 791 808 789 806 802 | 786 794 790 790 799 | 787 786 793 792 794 | 795 787 791 794 792 | 762 770 771 783 780 | 2277 2490 2504 2790 2721 |
| 25 q 26 27 q 28 29 30 | 788 769 790 810 775 | 786 782 789 817 738 | 786 785 790 792 777 | 786 790 790 786 782 | 789 792 792 778 780 | 788 785 786 787 784 | 783 769 777 802 785 | 778 766 769 794 781 | 766 754 767 777 774 | 761 746 768 768 771 | 757 746 766 749 765 | 764 747 769 748 750 | 769 753 758 748 734 | 771 757 765 766 759 | 772 760 780 777 786 | 790 772 790 830 795 | 800 781 802 847 785 | 800 792 806 851 792 | 813 805 809 830 790 | 817 807 822 830 797 | 809 804 817 785 799 | 808 800 812 796 797 | 770 800 812 800 802 | 760 796 817 794 800 | 784 777 789 794 779 | 2811 2658 2943 3062 2698 |
| 31 d | 794 | 785 771 | 752 775 | 794 778 | 785 780 | 765 779 | 741 | 742 761 | 713 751 | 720 743 | 715 | 724 | 734 746 | 737 | 751 766 | 775 781 | 822 796 | 802 805 | 808 811 | 793 811 | 790 801 | 785 791 | 787 784 | 772 780 | 766 774 | 2386 |
| Mean Sum 22,000+ | 776 2046 | 1899 | 2028 | 2131 | 2175 | 2149 | 1877 | 1597 | 1285 | 1049 | 877 | 848 | 1115 | 1403 | 1743 | 2201 | 2678 | 2939 | 3148 | 3148 | 2842 | 2524 | 2308 | 2171 | //4 | Grand Total 576,181 |

${\bf MAGNETIC\ DECLINATION\ (WEST)}$ Mean values for periods of sixty minutes ending at exact hours, G.M.T.

| 22 E | ESKDALE | MUIR (I |)) | | | | | | | | | 10 | ° + | | | | | | | | | | | | Ju | nly 1960 |
|--------------------------------|--------------------------------------|--------------------------------------|--------------------------------------|--------------------------------------|--------------------------------------|--------------------------------------|--------------------------------------|--------------------------------------|--------------------------------------|--------------------------------------|--------------------------------------|--------------------------------------|--------------------------------------|--------------------------------------|--------------------------------------|--------------------------------------|--------------------------------------|----------------------|--------------------------------------|--------------------------------------|------------------------------|--------------------------------------|----------------------|--------------------------------------|--------------------------------------|--|
| | Hour (| G.M.T. 1-2 | 2-3 | 3-4 | 4-5 | 5-6 | 6-7 | 7-8 | 8-9 | 9-10 | 10-11 | 11-12 | 12-13 | 13-14 | 14-15 | 15-16 | 16-17 | 17-18 | 18-19 | 19-20 | 20-21 | 21-22 | 22-23 | 23-24 | Mean | Sum 500·0+ |
| 1 2 | 26·3 29·1 | 27 · 8 | 29·5 27·6 | 28 · 1 | 26 · 8 | 22·0 27·4 | 22·8 23·2 | 22·5 22·9 | 22·6 22·0 | 20·8 20·7 | 21·8 21·9 | 23·8 24·7 | 29·3 28·1 | | 29·8 31·9 | 26·5 31·2 | 25·8 30·1 | 28.3 | 27·8 27·5 | 24·9 27·2 | 25·0 27·4 | 27·2 26·8 | 27 · 5 | 26·8 26·6 | 25·4 26·9 | 108·7 144·9 |
| 3 4 5 | 26·9 27·6 29·0 | 27·1 23·0 28·7 | 27·5 21·6 24·5 | 27·5 23·6 19·9 | 26 · 2 | 23·4 25·0 20·3 | 23·1 22·8 22·1 | 19·8 19·0 25·1 | 19·1 21·8 23·2 | 19·8 20·0 23·8 | 22 · 1 19 · 4 27 · 1 | 25·5 25·6 28·5 | 26·7 30·7 32·1 | 28 · 8 32 · 8 32 · 8 | 30·3 33·1 33·1 | 30·4 33·3 31·9 | 28·8 33·0 29·2 | 29·4 27·3 | 29·2 28·8 27·4 | 28 · 4 28 · 0 26 · 5 | 27·2 27·7 25·5 | 23·0 27·1 26·4 | 26·2 28·3 26·5 | 26·7 27·5 26·1 | 25·9 26·5 26·6 | 120·4 135·3 138·1 |
| 6 7 q 8 q | 26·3 26·5 26·9 | 20·3 26·3 26·9 27·9 | 19·7 25·7 25·7 28·0 | 21·9 25·2 23·5 25·7 | 24 · 7 | 19·4 23·5 19·4 20·3 | 19·0 20·0 18·5 19·1 | 19·3 20·4 18·5 19·3 | 21·6 20·9 20·3 20·7 | 24·3 22·1 22·2 23·0 | 28·0 25·7 24·4 26·1 | 34·7 28·3 28·3 30·5 | 36·5 31·1 32·4 32·9 | 35·3 32·2 34·0 35·5 | 32·9 32·0 33·7 36·5 | 30·2 29·4 33·0 34·3 | 29·3 28·2 32·5 32·1 | 28·3 30·0 | 28·3 28·3 28·3 29·0 | 28·4 28·3 27·2 28·1 | 28·6 28·3 26·8 27·8 | 28·0 28·3 27·3 28·2 | | 27·3 26·5 28·0 27·0 | 26·5 26·6 26·5 27·6 | 136·0 138·4 137·1 161·6 |
| 9 q 10 11 12 | 27·5 25·2 25·4 26·2 | 26·4 24·7 | 29·1 23·2 26·5 | 23·1 21·3 26·3 | 22·1 18·8 | 21·1 16·7 25·3 | 20·3 18·5 26·2 | 20·8 18·1 24·1 | 20·5 18·5 21·6 | 20·3 20·1 22·5 | 22·6 23·0 23·5 | 28·0 27·5 27·5 | 32·4 31·3 31·0 | 35·5 33·3 32·7 | 37·3 33·9 33·5 | 37·0 32·5 31·9 | 35·1 31·6 30·9 | 32·0 31·1 | 29·5 28·3 28·6 | 28·5 27·5 27·9 | 27·3 27·5 | 27·5 22·6 28·3 | 28 · 1 | 27·5 26·7 28·1 | 27·4 25·4 27·5 | 157 · 2 109 · 1 160 · 1 |
| 13 14 d 15 d | 27·8 28·2 24·4 | 27 · 9 | 23·9 26·1 23·5 | 22·9 24·3 26·1 | 21 · 4 | 25·3 29·3 27·1 | | 23·8 21·8 28·9 | 21·7 21·1 27·6 | 22·9 24·7 28·1 | 26·1 25·4 30·8 | 28·3 28·1 29·6 | 30·9 30·1 25·2 | 32·4 33·0 28·6 | 33·3 30·6 32·5 | 32·9 30·3 33·1 | 33·4 31·0 36·9 | 30·6 35·0 | 29·3 30·1 32·3 | 28·7 30·8 28·3 | 28·0 30·7 26·0 | | | 28·2 27·2 -4·5 | 27·4 28·2 26·3 | 157·9 177·7 131·4 |
| 16 d 17 18 19 d 20 | -8·5 20·7 23·4 25·1 29·3 | 16·7 23·5 20·6 24·1 24·7 | 25·3 24·7 22·8 23·3 20·7 | 26·1 23·1 21·1 22·8 20·3 | 17·8 22·1 20·3 20·7 19·5 | 20·5 21·1 19·1 20·8 18·4 | 22·6 23·5 18·9 21·3 17·6 | 23·8 21·1 22·6 25·7 17·1 | 22·7 21·5 21·1 25·4 19·0 | 22·8 23·2 21·3 25·4 22·7 | 26·0 25·1 24·3 25·4 26·9 | 27·0 27·1 27·2 31·9 31·1 | 28·1 30·1 29·0 34·1 33·7 | 32·4 31·9 33·7 35·9 33·4 | 31·9 32·4 36·0 36·0 34·7 | 32·4 32·3 32·1 33·8 31·6 | 28·0 31·6 31·6 31·5 29·8 | 27·1 29·8 29·7 | 28·7 27·9 29·3 27·4 26·5 | 25·3 27·5 29·1 21·2 25·6 | | 22·5 28·0 26·8 27·4 27·5 | | 21·7 28·6 26·5 32·8 24·4 | 23·5 26·2 25·9 27·3 25·4 | 63·3 128·4 120·6 154·4 110·2 |
| 21 22 23 | 23·7 24·6 25·2 | 23·5 22·8 19·1 | 23·1 22·3 21·8 | 21·9 23·0 21·9 | 22·0 23·9 20·3 | 21·9 23·6 18·7 22·9 | 19·3 24·4 18·5 | 20·1 22·5 18·4 19·9 | 20·8 22·1 19·2 | 23·8 23·1 22·0 | 27·8 26·0 24·2 25·7 | 29·3 30·0 27·6 28·9 | 31·7 34·7 30·7 | 32·5 36·1 32·2 33·3 | 30·5 35·0 32·9 | 28·9 33·5 31·1 | 29·3 31·5 28·9 | 28·5 31·1 27·0 | 25·7 30·2 26·5 | 27·3 28·5 26·2 | 28·0 28·0 26·5 26·1 | 28·0 27·6 26·7 | 27·6 28·3 26·7 | 25·7 27·9 26·2 | 25·9 27·5 24·9 | 120·9 160·7 98·5 |
| 24 25 q 26 | 27·7 24·6 24·7 | 25·7 24·7 24·4 | 24·6 24·1 23·9 | 23·1 23·5 23·9 | 23·4 22·3 24·4 | 21·2 22·6 | 21·3 20·7 21·4 | 19.9 | 19·9 19·4 21·6 | 23·1 20·7 23·3 | 23·1 27·1 | 26·1 30·7 | 32·5 29·3 33·6 | 31·1 34·0 | 34·2 31·7 33·7 | 33·7 31·2 34·4 | 32·3 30·3 32·9 | 29 · 4 | 28·1 27·6 | 25·7 27·1 27·5 | 26·5 27·1 | 25·3 25·6 27·0 | 23·9 25·5 21·4 | 24·0 25·3 19·9 | 26·4 25·5 26·6 | 134·0 111·4 138·5 |
| 27 q 28 29 | 21·6 24·5 21·7 | 23·1 24·1 26·5 | 22·6 23·9 25·6 | 20·1 23·2 26·1 | 19·8 21·8 27·4 | 18·7 18·7 29·9 | 16·5 17·5 24·2 | 19·0 19·0 20·3 | 21·4 19·7 21·1 | 22·5 21·4 23·4 | 24·0 25·7 27·0 | 27·4 28·9 29·2 | 29·8 31·1 31·9 | 31·9 31·9 34·7 | 32·8 33·6 35·5 | 31·9 34·7 34·8 | 29·4 33·4 33·7 | 27·2 31·4 | 26·8 29·7 | 26·5 29·2 31·3 | 26·6 28·0 29·2 | 26·6 26·5 31·1 | 26·5 26·5 30·7 | 25·6 22·9 27·1 | 24·9 26·1 28·8 | 98·3 127·3 190·3 |
| 30 31 d | 19·8 26·3 | 13·8 18·2 | 13·6 17·2 | 24·1 16·2 | | 23·6 21·8 | 21·8 21·6 | 19·6 23·5 | 20·7 24·4 | 22·9 27·5 | 23·2 26·7 | 26·8 29·8 | 29·4 30·7 | 32·3 30·9 | 32·2 32·5 | 31·9 31·5 | 29·9 30·6 | 28 · 7 | 27·8 27·0 | 25·8 27·9 | 27·6 27·0 | 30·9 25·3 | 27·6 25·7 | 27·1 27·2 | 25·4 25·7 | 109·1 116·5 |
| Mean | 24 · 4 | 24.0 | 23 · 9 | 23 · 4 | 22 · 7 | 22 · 2 | 21 · 4 | 21 · 2 | 21 · 4 | 22.7 | 25.0 | 28.3 | 31.0 | 32.8 | 33.2 | 32 · 2 | 31 · 1 | 29·6 | 28 · 4 | 27 · 4 | 27 · 2 | 26 · 9 | 26 · 1 | 25-4 | 26 · 3 | Grand Total |
| 50m 600·0+ | 157 · 7 | 145.0 | 141 · 6 | 124 · 3 | 104 · 6 | 89.0 | 64 · 3 | 58 · 2 | 63 · 2 | 104 · 4 | 176 · 1 | 277.9 | 361 · 1 | 415 ·8 | 43 0·0 | 397 · 7 | 362.6 | 317 · 1 | 280 · 5 | 250 · 4 | 243 · 1 | 234 · 5 | 208 · 6 | 188 · 6 | | 19596 - 3 |

| 23 E | SKDALE | MUIR (| Z) | | | | | | | | 45, | 000γ (| 0·45 C. | G.S. u | nit) + | | | | | | | | | | JUL | y 1960 |
|----------------|------------|-----------------|------------|------------|------------|-------------|------------|------------|------------|------------|------------|------------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------------------|
| | Hour (| G.M.T. | | | | | | | | | | | | | | | | | | | | | | | | Sum |
| * | 0-1 | 1-2 | 2-3 | 3-4 | 4-5 | 5-6 | 6-7 | 7-8 | 8-9 | 9-10 | 10-11 | 11-12 | 12-13 | 13-14 | 14-15 | 15-16 | 16-17 | 17-18 | 18-19 | 19-20 | 20-21 | 21-22 | 22-23 | 23-24 | Mean | 8000+ |
| 1 | γ 366 | γ 362 | γ 342 | γ 325 | γ 354 | γ 363 | γ 362 | γ 358 | γ 358 | γ 365 | γ 371 | γ 36 9 | γ 368 | γ 368 | γ | γ | γ | y | γ | γ | γ | γ | γ | γ | γ | |
| 2 | 361 | 341 | 348 | 358 | 357 | 364 | 359 | 364 | 370 | 374 | 374 | 369 | 370 | 369 | 374 371 | 385 372 | 391 378 | 397 382 | 398 386 | 416 386 | 415 382 | 398 382 | 379 376 | 369 374 | 373 369 | 953 867 |
| 3 | 371 | 370 | 369 | 360 | 354 | 365 | 369 | 371 | 369 | 365 | 357 | 352 | 368 | 370 | 374 | 368 | 376 | 385 | 386 | 389 | 392 | 388 | 376 | 373 | 372 | 917 |
| 4 | 366 | 330 | 339 | 339 | 346 | 348 | 353 | 363 | 363 | 355 | 348 | 347 | 351 | 359 | 371 | 378 | 394 | 406 | 399 | 397 | 394 | 393 | 382 | 377 | 367 | 798 |
| 5 | 370 | 356 | 346 | 340 | 347 | 359 | 365 | 365 | 369 | 369 | 363 | 356 | 358 | 364 | 369 | 375 | 383 | 387 | 387 | 392 | 396 | 389 | 377 | 370 | 369 | 852 |
| 6 | 358 | 335 | 335 | 349 | 362 | 369 | 371 | 376 | 369 | 366 | 364 | 346 | 345 | 350 | 359 | 371 | 381 | 382 | 380 | 375 | 371 | 373 | 371 | 370 | 364 | 728 |
| 7 q | 370 | 370 | 371 | 371 | 370 | 370 | 369 | 368 | 365 | 362 | 354 | 346 | 345 | 348 | 354 | 365 | 370 | 370 | 370 | 371 | 370 | 370 | 370 | 370 | 365 | 759 |
| 8 q | 369 | 369 | 370 | 370 | 371 | 370 | 373 | 374 | 367 | 351 | 347 | 343 | 340 | 348 | 358 | 363 | 366 | 373 | 375 | 371 | 371 | 370 | 369 | 368 | 364 | 746 |
| 9 q | 366 | 365 | 364 | 365 | 369 | 3 68 | 365 | 364 | 359 | 348 | 340 | 331 | 323 | 328 | 336 | 346 | 359 | 370 | 375 | 373 | 370 | 369 | 365 | 365 | 358 | 583 |
| 10 | 365 | 365 | 363 | 357 | 362 | 364 | 365 | 365 | 359 | 356 | 353 | 346 | 341 | 346 | 357 | 363 | 370 | 370 | 377 | 376 | 377 | 376 | 368 | 363 | 363 | 704 |
| 11 | 357 | 348 | 352 | 358 | 359 | 358 | 358 | 362 | 364 | 363 | 360 | 357 | 354 | 349 | 356 | 365 | 372 | 380 | 380 | 381 | 377 | 381 | 370 | 364 | 364 | 725 |
| 12 | 363 | 363 | 358 | 358 | 360 | 366 | 369 | 370 | 373 | 373 | 369 | 370 | 371 | 374 | 380 | 392 | 394 | 389 | 382 | 381 | 377 | 371 | 370 | 368 | 373 | 941 |
| 13 | 359 | 358 | 359 | 359 | 361 | 363 | 365 | 365 | 364 | 359 | 353 | 351 | 358 | 368 | 370 | 374 | 382 | 393 | 392 | 384 | 377 | 376 | 371 | 369 | 368 | 830 |
| 14 d | 365 | 364 | 365 | 369 | 370 | 363 | 357 | 358 | 353 | 353 | 354 | 357 | 370 | 382 | 389 | 389 | 399 | 411 | 427 | 411 | 408 | 392 | 377 | 374 | 377 | 1057 |
| 15 d | 374 | 370 | 370 | 368 | 369 | 366 | 365 | 364 | 363 | 359 | 357 | 370 | 389 | 422 | 452 | 509 | 542 | 515 | 460 | 439 | 370 | 317 | 242 | 198 | 385 | 1250 |
| 16 d | 95 | 70 | 138 | 167 | 228 | 308 | 324 | 336 | 354 | 375 | 387 | 398 | 423 | 427 | 437 | 446 | 492 | 501 | 481 | 455 | 433 | 424 | 397 | 369 | 353 | 465 |
| 17 18 | 336 | 305 366 | 309 369 | 317 359 | 325 371 | 347 366 | 355 370 | 362 368 | 374 366 | 367 366 | 370 364 | 367 365 | 370 366 | 377 369 | 389 382 | 398 399 | 417 391 | 433 385 | 420 385 | 409 382 | 397 385 | 388 388 | 388 | 358 381 | 370 375 | 878 |
| 19 d | 365 380 | 300 378 | 377 | 376 | 374 | 372 | 374 | 373 | 365 | 366 | 369 | 368 | 381 | 378 | 383 | 402 | 409 | 411 | 415 | 405 | 377 | 381 | 384 371 | 357 | 3/5 | 992 1142 |
| 20 | 327 | 347 | 354 | 367 | 378 | 383 | 385 | 383 | 381 | 371 | 364 | 362 | 361 | 365 | 377 | 392 | 392 | 391 | 402 | 408 | 400 | 383 | 367 | 358 | 375 | 998 |
| 21 | | 365 | 369 | 375 | 365 | 335 | 351 | 366 | 372 | 369 | 365 | 357 | 361 | 366 | 366 | 373 | 378 | 383 | 389 | 385 | 375 | 374 | 372 | 368 | 368 | 840 |
| 22 | 361 360 | 362 | 363 | 368 | 365 | 361 | 358 | 362 | 357 | 352 | 358 | 358 | 358 | 363 | 365 | 373 | 373 | 378 | 381 | 385 | 384 | 380 | 373 | 363 | 367 | 798 |
| 23 | 334 | 334 | 350 | 363 | 370 | 374 | 376 | 375 | 371 | 367 | 363 | 358 | 358 | 359 | 364 | 365 | 370 | 376 | 377 | 380 | 376 | 373 | 370 | 370 | 366 | 773 |
| 24 | 361 | 357 | 363 | 366 | 369 | 366 | 369 | 368 | 365 | 362 | 352 | 345 | 347 | 347 | 354 | 365 | 369 | 376 | 380 | 382 | 379 | 380 | 374 | 369 | 365 | 765 |
| 25 q | 369 | 370 | 371 | 371 | 373 | 370 | 373 | 374 | 370 | 362 | 351 | 346 | 347 | 351 | 358 | 359 | 363 | 366 | 370 | 373 | 374 | 370 | 369 | 369 | 365 | 769 |
| 26 | 369 | 369 | 369 | 371 | 373 | 373 | 371 | 370 | 366 | 358 | 358 | 360 | 361 | 361 | 363 | 359 | 357 | 368 | 380 | 382 | 381 | 374 | 374 | 365 | 368 | 832 |
| 27 g | 363 | 370 | 371 | 374 | 376 | 376 | 377 | 376 | 373 | 367 | 363 | 358 | 353 | 353 | 361 | 367 | 371 | 376 | 374 | 371 | 370 | 369 | 369 | 370 | 369 | 848 |
| 28 | 370 | 370 | 371 | 371 | 374 | 373 | 371 | 367 | 360 | 357 | 350 | 346 | 342 | 345 | 350 | 353 | 359 | 364 | 367 | 370 | 371 | 374 | 370 | 363 | 363 | 708 |
| 29 | 360 | 342 | 323 | 299 | 311 | 310 | 309 | 324 | 341 | 340 | 345 | 350 | 352 | 359 | 370 | 386 | 427 | 467 | 473 | 447 | 430 | 400 | 388 | 382 | 368 | 835 |
| 30 | 335 | 324 | 325 | 341 | 351 | 360 | 363 | 364 | 364 | 359 | 359 | 364 | 367 | 370 | 377 | 386 | 390 | 391 | 391 | 390 | 384 | 377 | 372 | 369 | 366 | 773 |
| 31 d | 362 | 331 | 273 | 299 | 324 | 329 | 333 | 339 | 351 | 358 | 359 | 368 | 380 | 394 | 399 | 403 | 408 | 428 | 413 | 398 | 391 | 384 | 369 | 363 | 365 | 756 |
| Mean | 353 | 346 | 347 | 349 | 356 | 360 | 362 | 364 | 364 | 362 | 359 | 357 | 361 | 365 | 373 | 382 | 391 | 397 | 396 | 392 | 386 | 379 | 370 | 363 | 368 | |
| Sum 10,000+ | 927 | 726 | 746 | 830 | 1038 | 1159 | 1224 | 1294 | 1295 | 1214 | 1141 | 1080 | 1178 | 1329 | 1565 | 1839 | 2123 | 2304 | 2272 | 2164 | 1954 | 1764 | 1470 | 1246 | | Grand Total 273,882 |

DAILY EXTREMES OF TERRESTRIAL MAGNETIC ELEMENTS, MAGNETIC CHARACTER FIGURES (K AND C) AND TEMPERATURE IN MAGNET HOUSE

| | | | | | | TERRE | STRIAL | MAGNETI | C ELEME | NTS | | | | | | | l i | Magnetic | (Temperatur |
|--------|---------------|--------|-------|----------------|-------|-------|---------|------------|---------|--------|---------------|-------|--------|---------------|-------|------------------------|----------|------------------------|-----------------|
| | | Horize | ontal | force | т | | De | clinati | on | | | Verti | cal fo | гсе | | 3-hr. range indices | Sum of K | character of day, C | in magnet |
| | Maxi 16,00 | | | imum 100γ + | Range | | mm + | Min 10° | | Range | Maxi 45,00 | | | imum 00y + | Range | K | Indices | (0-2) | 200 + |
| | h. m. | γ | γ | h. m. | γ | h. m. | • | • | h.m. | | h. m. | γ | γ | h. m. | γ | | | | °A. |
| L | 18 39 | 879 | 710 | 11 33 | 169 | 12 46 | 32.4 | 17.1 | 04 01 | 15.3 | 20 06 | 422 | 317 | 03 04 | 105 | 4.3,4,3,3,3,4,3 | | 1 . | 82.7 |
| 2 | 18 31 | 817 | 708 | 11 18 | 109 | 14 05 | 32.6 | 18.0 | 08 10 | 14.6 | 18 59 | 387 | 340 | 01 09 | 47 | 3.3,3,4,3,2,3,1 | | 1 | 82.6 |
| 3 | 19 33 | 844 | 721 | 11 12 | 123 | 14 27 | 31 · 1 | 17.9 | | 13.2 | 20 42 | 394 | 351 | 11 02 | 43 | 2,2,3,3,3,3,3,3 | | 1 | 82 · 7 |
| 1 | 18 39 | 837 | 715 | 11 01 | 122 | 15 27 | 34 · 7 | 15.1 | | 19.6 | 17 22 | 409 | 319 | 01 37 | 90 | 3,3,3,3,4,3,2 | | 1 | 82.9 |
| 5 | 19 40 | 848 | 709 | 09 58 | 139 | 13 11 | 34 · 1 | 18.9 | 05 34 | 15.2 | 20 33 | 397 | 338 | 03 43 | 59 | 3,2,3,3,3,2,3,3 | 22 | 1 | 82.9 |
| , | 19 09 | 810 | 675 | 10 50 | 135 | 12 38 | 37 · 5 | 17 · 2 | 02 01 | 20.3 | 17 10 | 383 | 330 | 02 00 | 53 | 3, 3, 3, 3, 3, 3, 1, 1 | 20 | 0 | 82 · 7 |
| a | 17 33 | 823 | 729 | 10 37 | 94 | 14 10 | 32.4 | 19-4 | 06 44 | 13.0 | 17 54 | 373 | 343 | 11 59 | 30 | 1, 1, 2, 2, 2, 3, 2, 1 | 14 | 0 | 82 · 7 |
| 3 | 18 22 | 816 | 741 | 10 34 | 75 | 13 43 | 34.3 | 17 - 4 | 06 47 | 16.9 | 18 15 | 376 | 340 | 12 15 | 36 | 2, 1, 1, 1, 2, 2, 1, 1 | 11 | 0 | 82.8 |
| a | 20 40 | 817 | 753 | 11 31 | 64 | 14 19 | 37 · 1 | 18 · 7 | 06 05 | 18-4 | 18 30 | 375 | 320 | 12 24 | 55 | 1, 1, 1, 2, 2, 1, 2, 1 | 11 | 0 | 83 · 1 |
| , " | 19 56 | 842 | 741 | 11 17 | 101 | 15 06 | 37 · 8 | 18 · 5 | 07 03 | 19.3 | 18 45 | 380 | 340 | 12 19 | 40 | 3, 2, 1, 3, 2, 3, 3, 2 | 19 | 0 | 83.0 |
| | 20 10 | 839 | 748 | 11 22 | 91 | 14 18 | 34 · 7 | 15.8 | 05 18 | 18.9 | 21 30 | 382 | 346 | 01 29 | 36 | 3,3,1,3,2,3,3,3 | 21 | 1 | 83 · 1 |
| 2 | 19 09 | 817 | 738 | 13 10 | 79 | 14 03 | 35 · 4 | 19-4 | 08 43 | 16.0 | 16 13 | 396 | 357 | 03 28 | 39 | 2,3,3,2,3,3,2,2 | 20 | 1 | 83 · 2 |
| 5 | 20 37 | 847 | 752 | 10 30 | 95 | 16 23 | 35.2 | 20.5 | 04 27 | 14.7 | 17 29 | 394 | 351 | 11 14 | 43 | 3, 3, 3, 2, 3, 4, 3, 2 | 23 | 1 | 83.5 |
| | 17 21 | 1011 | 720 | 10 05 | 291 | 17 21 | 41.4 | 20 · 1 | 08 59 | 21.3 | 17 58 | 432 | 348 | 09 10 | 84 | 1,3,3,3,4,6,4,5 | 29 | 1 | 83 · 3 |
| d d | 16 36 | 1059 | 497 | 23 53 | 562 | 16 34 | 46 · 9 | -17 · 3 | 23 58 | 64 · 2 | 17 08 | 574 | 104 | 23 57 | 470 | 3,3,3,3,4,6,6,7 | 35 | 2 | 83 · 3 |
| 1 | 16 40 | 890 | 341 | 01 47 | 549 | 01 38 | 37 · 8 | -16.8 | 00 05 | 54 · 6 | 17 50 | 507 | -86 | 01 45 | 593 | 7,5,4,4,3,5,4,3 | 35 | 2 | 83 · 5 |
| d | 17 23 | 828 | 664 | 08 27 | 164 | 02 00 | 35 · 1 | 18-4 | 08 06 | 16.7 | 17 08 | 438 | 290 | 01 29 | 148 | 5,3,3,2,2,4,3,3 | 25 | 1 | 83 · 7 |
| | 20 50 | 801 | 708 | 12 13 | 93 | 14 50 | 36.9 | 17 · 3 | 05 52 | 19.6 | 15 31 | 404 | 353 | 03 26 | 51 | 2, 2, 2, 3, 3, 3, 2, 1 | 18 | 1 | 83.5 |
| | 19 41 | 912 | 643 | 11 31 | 269 | 14 06 | 38 · 5 | 16 · 5 | 19 35 | 22.0 | 19 09 | 422 | 323 | 24 00 | 99 | 1, 2, 3, 4, 4, 4, 5, 4 | 27 | 1 | 83 · 4 |
| ď | 22 34 | 859 | 690 | 11 54 | 169 | 14 50 | 36.5 | 9-4 | 22 26 | 27 · 1 | 18 55 | 414 | 318 | 00 11 | 96 | 3, 1, 2, 3, 4, 4, 4, 5 | 26 | 1 | 83.5 |
| | 17 17 | 811 | 716 | 13 08 | 95 | 13 38 | 33 · 4 | 18 · 2 | 07 11 | 15 · 2 | 18 31 | 392 | 330 | 05 21 | 62 | 2,3,2,2,3,3,2,2 | 19 | 1 | 83 · 4 |
| . | 19 37 | 817 | 717 | 10 58 | 100 | 13 23 | 37 · 1 | 20.7 | 07 50 | 16 · 4 | 19 48 | 397 | 350 | 09 17 | 47 | 3, 3, 2, 2, 3, 2, 2, 3 | 20 | 0 | 83.5 |
| | 01 03 | 820 | 733 | 10 41 | 87 | 14 01 | 33.8 | 12.0 | 00 55 | 21 · 8 | 19 22 | 382 | 324 | 00 45 | 58 | 4, 1, 2, 1, 2, 2, 2, 2 | 16 | 0 | 83 · 5 |
| | 19 03 | 825 | 740 | 13 28 | 85 | 14 37 | 35.3 | 17 · 4 | 08 10 | 17.9 | 19 13 | 383 | 342 | 11 42 | 41 | 3,2,3,2,4,3,3,2 | 22 | 1 | 83 · 6 |
| q | 21 03 | 813 | 747 | 10 41 | 66 | 14 20 | 31.9 | 18.9 | 07 15 | 13.0 | 20 13 | 375 | 346 | 11 50 | 29 | 1, 2, 1, 1, 1, 2, 2, 2 | 12 | 0 | 83 ⋅ 6 |
| ,] | 19 15 | 833 | 751 | 23 12 | 82 | 15 05 | 34.9 | 17 · 8 | 23 20 | 17 · 1 | 19 32 | 383 | 357 | 16 21 | 26 | 1,2,1,1,3,2,3,4 | 17 | 0 | 83 · 7 |
| 9 | 18 20 | 812 | 741 | 09 38 | 71 | 14 00 | 33.0 | 14.9 | 06 32 | 18 · 1 | 06 50 | 380 | 352 | 12 36 | 28 | 3,1,2,2,3,2,1,1 | 15 | 0 | 83 · 9 |
| ۱, | 23 08 | 829 | 744 | 13 02 | 85 | 15 34 | 35.0 | 16.7 | 06 53 | 18 · 3 | 05 01 | 375 | 342 | 12 36 | 33 | 0,1,2,2,3,2,2,3 | 15 | 0 | 84-0 |
| | 17 37 | 881 | 732 | 12 36 | 149 | 17 20 | 38 · 6 | 19.3 | 07 23 | 19.3 | 17 54 | 488 | 295 | 03 52 | 193 | 4,4,3,3,3,5,5,3 | 30 | 1 | 84 · 1 |
| | 00 12 | 829 | 713 | 12 08 | 116 | 15 03 | 33 6 | 9.3 | 01 20 | 24 · 3 | 19 30 | 393 | 317 | 01 52 | 76 | 4,4,2,4,4,3,3,3 | 27 | 1 | 84 • 2 |
| d | 16 23 | 838 | 690 | 08 46 | 148 | 15 10 | 34.9 | 6⋅3 | 02 55 | 28 · 6 | 17 34 | 433 | 265 | 02 18 | 168 | 5,4,3,4,3,4,3,4 | 30 | 1 | 84 · 2 |
| , 1 | | 849 | 701 | | 148 | | 35.6 | 14.6 | | 21.0 | | 408 | 312 | | 96 | | _ | 0.71 | 83.3 |

q denotes an international quiet day and d an international disturbed day.

TERRESTRIAL MAGNETIC FORCE: HORIZONTAL COMPONENT Mean values for periods of sixty minutes ending at exact hours, G.M.T.

| 21 F | SKDAL | EMUIR (| H) | | | | | | | | 16,0 | 100γ (0· | 16 C.G | .S. un | it) + | | | | | | | | | | AUGU | JST 1960 |
|----------------|-------------|---------------|------------|------------|------------|------------|------------|-------------|------------|------------|-------------------|------------|------------|------------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------------------|
| | Hour 0-1 | G.M.T. 1-2 | 2-3 | 3-4 | 4-5 | 5-6 | 6-7 | 7-8 | 8-9 | 9-10 | 10-11 | 11-12 | 12-13 | 13-14 | 14-15 | 15-16 | 16-17 | 17-18 | 18-19 | 19-20 | 20-21 | 21-22 | 22-23 | 23-24 | Mean | Sum 17,000+ |
| 1 | γ 768 | γ 772 | γ 777 | γ 781 | γ 769 | γ 779 | γ 781 | γ 766 | γ 759 | γ 757 | γ 7 4 7 | γ 740 | γ 764 | γ 76 0 | γ 776 | γ 773 | γ 787 | γ 797 | γ 807 | γ 798 | γ 795 | γ 793 | γ 795 | γ 780 | γ 776 | 1621 |
| 2 | 774 | 771 | 778 | 769 | 786 | 790 | 786 | 770 | 755 | 755 | 747 | 747 | 748 | 755 | 768 | 762 | 788 | 817 | 801 | 789 | 789 | 798 | 793 | 771 | 775 | 1607 |
| 3 | 774 | 773 | 781 | 783 | 781 | 779 | 770 | 763 | 753 | 748 | 747 | 753 | 769 | 764 | 778 | 773 | 793 | 801 | 795 | 799 | 793 | 789 | 788 | 787 | 776 | 1634 |
| 4 q | 786 | 787 | 793 | 788 | 785 | 786 | 778 | 777 | 761 | 735 | 746 | 748 | 758 | 763 | 776 | 778 | 786 | 796 | 797 | 802 | 793 | 789 | 783 | 783 | 778 | 1674 |
| 5 q | 788 | 786 | 784 | 781 | 784 | 783 | 780 | 774 | 764 | 761 | 766 | 769 | 775 | 784 | 788 | 780 | 784 | 789 | 797 | 793 | 795 | 793 | 793 | 792 | 783 | 1783 |
| 6 | 793 | 793 | 788 | 793 | 794 | 793 | 789 | 784 | 769 | 753 | 756 | 760 | 776 | 786 | 789 | 803 | 809 | 792 | 798 | 808 | 807 | 803 | 799 | 798 | 789 | 1933 |
| 7 | 802 | 794 | 796 | 799 | 791 | 791 | 788 | 783 | 769 | 763 | 760 | 758 | 756 | 761 | 772 | 786 | 800 | 791 | 803 | 806 | 806 | 801 | 799 | 797 | 786 | 1872 |
| 8 | 799 | 798 | 799 | 800 | 798 | 793 | 787 | 752 | 744 | 753 | 757 | 752 | 776 | 778 | 780 | 822 | 814 | 802 | 789 | 793 | 788 | 778 | 772 | 774 | 783 | 1798 |
| 9 | 766 | 778 | 781 | 780 | 791 | 773 | 764 | 75 8 | 749 | 756 | 745 | 714 | 735 | 751 | 753 | 766 | 788 | 781 | 791 | 784 | 793 | 789 | 787 | 794 | 769 | 1467 |
| 10 | 801 | 801 | 795 | 800 | 798 | 799 | 789 | 766 | 739 | 765 | 776 | 764 | 768 | 759 | 754 | 763 | 769 | 815 | 804 | 800 | 799 | 794 | 786 | 788 | 783 | 1792 |
| 11 | 784 | 784 | 787 | 761 | 773 | 789 | 789 | 771 | 749 | 739 | 740 | 726 | 736 | 750 | 792 | 764 | 766 | 786 | 817 | 803 | 804 | 797 | 796 | 803 | 775 | 1606 |
| 12 | 813 | 793 | 791 | 796 | 802 | 770 | 772 | 741 | 750 | 746 | 742 | 719 | 704 | 709 | 736 | 754 | 759 | 786 | 796 | 804 | 805 | 798 | 798 | 791 | 770 | 1475 |
| 13 | 789 | 786 | 789 | 788 | 788 | 788 | 783 | 769 | 753 | 731 | 721 | 714 | 719 | 731 | 764 | 776 | 785 | 793 | 802 | 800 | 794 | 796 | 789 | 776 | 772 | 1524 |
| 14 | 778 | 781 | 780 | 776 | 787 | 793 | 788 | 774 | 761 | 746 | 735 | 728 | 731 | 739 | 757 | 781 | 794 | 825 | 839 | 827 | 825 | 799 | 803 | 808 | 781 | 1755 |
| 15 | 796 | 789 | 789 | 791 | 791 | 793 | 788 | 775 | 761 | 741 | 738 | 746 | 762 | 765 | 765 | 770 | 774 | 794 | 802 | 800 | 808 | 803 | 802 | 798 | 781 | 1741 |
| 16 d | 804 | 795 | 790 | 786 | 788 | 784 | 780 | 777 | 770 | 759 | 753 | 745 | 748 | 763 | 856 | 901 | 896 | 886 | 858 | 804 | 754 | 739 | 749 | 751 | 793 | 2036 |
| 17 d | 742 | 672 | 682 | 676 | 684 | 704 | 747 | 679 | 619 | 692 | 705 | 698 | 705 | 746 | 730 | 784 | 865 | 969 | 867 | 816 | 744 | 736 | 749 | 751 | 740 | 762 |
| 18 | 769 | 767 | 757 | 768 | 766 | 764 | 748 | 735 | 722 | 690 | 696 | 716 | 720 | 733 | 731 | 746 | 756 | 753 | 776 | 787 | 784 | 782 | 783 | 781 | 751 | 1030 |
| 19 | 779 | 772 | 772 | 773 | 773 | 766 | 759 | 746 | 728 | 707 | 703 | 724 | 744 | 759 | 743 | 748 | 787 | 789 | 822 | 815 | 788 | 777 | 776 | 765 | 763 | 1315 |
| 20 | 773 | 774 | 778 | 776 | 769 | 733 | 731 | 716 | 729 | 729 | 728 | 728 | 747 | 732 | 752 | 762 | 784 | 794 | 789 | 779 | 781 | 779 | 776 | 772 | 759 | 1211 |
| 21 d | 772 | 767 | 769 | 768 | 765 | 763 | 756 | 742 | 707 | 696 | 739 | 757 | 766 | 778 | 773 | 760 | 784 | 811 | 814 | 806 | 784 | 786 | 792 | 807 | 769 | 1462 |
| 22 | 781 | 767 | 772 | 768 | 766 | 763 | 754 | 740 | 723 | 718 | 733 | 750 | 760 | 766 | 763 | 765 | 783 | 776 | 784 | 800 | 783 | 784 | 782 | 783 | 765 | 1364 |
| 23 | 770 | 778 | 778 | 770 | 776 | 775 | 768 | 763 | 754 | 746 | 738 | 739 | 744 | 761 | 769 | 775 | 791 | 776 | 786 | 783 | 786 | 785 | 786 | 785 | 770 | 1482 |
| 24 q | 789 | 781 | 784 | 788 | 788 | 783 | 769 | 749 | 740 | 733 | 742 725 | 753 730 | 762 | 773 761 | 778 777 | 791 791 | 799 788 | 798 | 789 | 790 | 790 | 788 | 784 | 783 | 776 | 1624 |
| 25 q | 783 | 785 | 783 | 783 | 781 | 777 | 769 | 753 | 738 | 731 | | | 742 | | | | | 796 | 795 | 803 | 801 | 798 | 797 | 796 | 774 | 1583 |
| 26 q | 796 | 794 | 794 | 791 | 788 | 785 | 775 | 764 | 754 | 744 | 740 | 746 | 760 | 769 | 780 | 783 | 784 | 784 | 800 | 808 | 804 | 790 | 797 | 793 | 780 | 1723 |
| 27 | 811 | 795 | 794 | 793 | 789 | 791 | 789 | 775 | 763 | 754 | 749 | 751 | 766 | 781 | 791 | 799 | 811 | 818 | 785 | 797 | 790 | 811 | 796 | 798 | 787 | 1897 |
| 28 | 794 | 793 | 789 | 776 | 774 | 766 | 765 | 756 | 757 | 736 742 | 728 724 | 726 | 742 | 732 731 | 738 761 | 749 781 | 776 791 | 792 791 | 787 788 | 786 | 788 | 789 | 789 | 788 | 767 | 1416 |
| 29 d 30 d | 824 727 | 806 762 | 807 771 | 823 681 | 808 765 | 789 714 | 774 669 | 753 657 | 746 666 | 691 | 687 | 719 699 | 727 743 | 737 | 752 | 747 | 791 766 | 791 773 | 788 767 | 776 770 | 767 773 | 748 781 | 728 769 | 741 766 | 769 735 | 1445 633 |
| | | | | | | | | | | | | | | | | | | | | | | | | | | ı |
| 31 | 776 | 764 | 772 | 757 | 784 | 787 | 767 | 766 | 729 | 708 | 716 | 727 | 732 | 741 | 741 | 754 | 761 | 771 | 789 | 786 | 781 | 787 | 781 | 777 | 761 | 1254 |
| Mean | 784 | 779 | 781 | 776 | 780 | 776 | 769 | 755 | 741 | 736 | 736 | 737 | 748 | 755 | 767 | 777 | 791 | 801 | 801 | 797 | 790 | 787 | 784 | 783 | 772 | |
| Sum 22,000+ | 2301 | 2158 | 2200 | 2063 | 2182 | 2043 | 1852 | 1394 | 981 | 825 | 829 | 846 | 1185 | 1418 | 1783 | 2087 | 2518 | 2842 | 2834 | 2712 | 2492 | 2380 | 2317 | 2277 | | Grand Total 574,519 |

| 22 E | SKDALE | MUIR (1 |)) | | | | | | | | | 1 | 0° + | | _ | | | | | | | | | | AUGU | ST 1960 |
|-----------------|-------------|---------------|------------------|-------------|---------------|--------------|------------------|---|----------------|--------------|--------------|--------------|--------------|--------------|----------------|---------------|--------------|-----------------|---------------|--------------|---------|--------------|-----------------|---------|---------|--------------------------|
| | Hour 0-1 | G.M.T. 1-2 | 2-3 | 3-4 | 4-5 | 5-6 | 6-7 | 7-8 | 8-9 | 9-10 | 10-11 | 11-12 | 12-13 | 13-14 | 14-15 | 15-16 | 16-17 | 17-18 | 18-19 | 19-20 | 20-21 | 21-22 | 22-23 | 23-24 | Mean | Sum 500·0+ |
| | - | | - , - | | -, | | - ; - | , , , , , , , , , , , , , , , , , , , | -,- | | | | , | | -,- | -, | - | -, - | -, | | | | ** , | | , mean, | |
| | 07.0 | 25.2 | 24.0 | 23 · 8 | 26.3 | 22 · 1 | 21.0 | 21.9 | 21.6 | 22.0 | 22.9 | 27 · 5 | 31 · 1 | 31 · 4 | 30 · 1 | 31.0 | 30.6 | 29 · 2 | 27 · 6 | 26 · 8 | 27 · 1 | 26 · 5 | 23 · 2 | 24 · 3 | 26.0 | 125 · 1 |
| 1 2 | 27.9 | | 24.6 | 28 1 | | 22.1 | 21.4 | 21.0 | 23.5 | 22.9 | 24 · 5 | | 31.0 | | 33.7 | 32.4 | 30.4 | | 26.2 | 26 · 1 | | 26.0 | 21 · 4 | 23.5 | 26.3 | 131 · 3 |
| 3 | 20.7 | 21.7 | 23 · 5 | 22.8 | 23.3 | 22.7 | 21.2 | 21.5 | 22.0 | 22.9 | 26 · 4 | 28 · 2 | 30.5 | | 31.8 | 30 · 1 | 26.8 | | 27.1 | 27 · 1 | | 26.4 | 26 • 4 | 27.0 | 25.7 | 116.8 |
| 3 4 q | 27.4 | 27 · 7 | 23 8 | 22.8 | 23 4 | 25 · 4 | | 21.3 | | 23 · 7 | | | 29.7 | | 32.0 | 30.2 | 28.5 | | 26 · 4 | 26 · 4 | | 26 · 2 | 25 9 | 25.6 | 26.1 | 127 · 5 |
| 5 a | 25.0 | | 24.0 | 23.6 | 22.8 | 22 · 3 | 21.7 | 21.1 | 21.8 | 23.8 | 25 · 2 | 28 · 2 | 30.9 | | 29.8 | 29.2 | 27.6 | | 26.2 | 26 · 4 | | 26 · 8 | 27 · 1 | 27 · 2 | 25.8 | 120 · 3 |
| - • | | | | | | | 22.0 | 21.6 | 21 · 4 | 22.9 | 26 · 4 | 29.7 | 32.8 | | 31.8 | 30 · 2 | | | | | | | | | | |
| 6 7 | 26.6 | | 24·5 28·9 | 23.8 | 22.8 | 21·7 20·1 | 20.2 | 19.4 | 19.8 | 21.8 | 22 · 9 | 25.3 | 29.7 | 33.3 | 33.6 | 32.3 | 28·9 31·0 | | 26·7 28·0 | 27·9 27·5 | | 25·9 26·5 | 24·1 26·0 | | 26.2 | 128·9 123·1 |
| • | 25.9 | 25.6 | 25.6 | 24.5 | 23.6 | 20.1 | 19.2 | 18 9 | 21.2 | 20.5 | | | 32.6 | | 34 · 1 | 34 · 2 | 32.4 | | 27.3 | 23.6 | | 20.3 | 25.6 | 23.6 | 26.1 | 125.1 |
| 8 9 | 25.8 | | 22.9 | 21.9 | 24.8 | 35 · 1 | 30.7 | 26.5 | 18.7 | 18.8 | 23 · 3 | 27 · 7 | 28.3 | 30.6 | 30.9 | 29 · 4 | 27.9 | | 26.9 | 26.4 | | 26.6 | 26.0 | 26.6 | 26.2 | 129-4 |
| 10 | 26.2 | | 23.2 | 22.7 | 20.6 | 20 - 1 | 19.7 | 19.2 | 21.4 | 24 · 5 | 26.0 | 28.6 | 31.5 | | 33.6 | 33 · 1 | 30.3 | | 29.1 | 26 - 9 | | 27.5 | 27.0 | 26.5 | 26 1 | 127 · 3 |
| | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 11 | 24.8 | 24.2 | 25 · 4 | 33.6 | 22.3 | 18.0 | 17 · 4 | 17.8 | 20 · 4 | 23 · 2 | | 31.2 | 33.0 | 34 · 2 | 35.6 | 33.7 | 32.7 | 31.6 | 30 · 3 | 27 - 3 | 28 · 2 | 27 · 5 | 27 · 1 | | 27.3 | 155-2 |
| 12 | 22.5 | | 20.5 | 22.0 | 23.4 | 27 · 1 | 24.7 | 25.8 | 29.2 | 26 · 0 | | 28 · 4 | 31.8 | | 33.8 | 31.8 | 28 · 8 | 27.6 | 27.8 | 27 · 1 | | 25 · 7 | 23 · 4 | 24 · 1 | 26.6 | 138 · 5 |
| 13 | 24.7 | 24 · 4 | 26.3 | 24.1 | 24.5 | 21.7 | 19.4 | 17.2 | 17·9 18·6 | 21.6 | 25.7 | 30·2 27·6 | 35·9 31·7 | 36.0 | 34 · 1 | 31.0 | 28.3 | 25 · 9 | 26.0 | 26 · 4 | | 27 · 2 | 25 · 3 | 24 · 7 | 26.1 | 125.4 |
| 14 | 25.6 | | 27·2 24·7 | 27.6 | 24 4 | 21·5 22·8 | 20·1 20·1 | 17·6 18·0 | 18.7 | 21·6 24·2 | 24·2 27·0 | 29.4 | 31.6 | 35·4 32·5 | 35·1 30·5 | 34·6 28·4 | 32·4 26·9 | | 28.5 | 29 · 3 | | 25.0 | 27.6 | 27.8 | 26.8 | 143 · 1 |
| 15 | 28 · 2 | | | 27 · 9 | 23 · 4 | | | | | | | • | | | | | | | 26 · 3 | 26 · 9 | 27.9 | 26 · 9 | 26 · 7 | 26 · 5 | 26 · 1 | 125 · 9 |
| 16 d | 25.9 | 24 · 9 | 24 · 1 | 23.3 | 22.0 | 20 · 2 | 19.1 | 19.3 | 20.8 | 23 · 8 | 26 · 9 | 31 · 6 | 35.7 | 37 · 3 | 38.0 | 36 · 2 | 34 · 7 | 30 · 2 | 28 · 8 | 27 · 4 | 20 · 2 | 25 · 1 | 27 · 4 | 30 · 4 | 27 · 2 | 153 · 3 |
| 17 d | 31.2 | | 7.9 | 9.3 | 26.9 | 28 · 2 | 16.6 | 17.8 | 27 · 7 | 30 · 2 | | 31.6 | 33.2 | 33 · 4 | 32 · 4 | 31.8 | 28 · 3 | 25.0 | 24 · 2 | | | 24.2 | 15 - 7 | | 24 · 4 | 85.9 |
| 18 | 22.8 | 25.9 | 22.8 | 22.5 | 20.1 | 19.9 | 22.2 | 24 · 2 | 23.8 | 25 · 6 | 30.5 | 31.7 | 32.9 | | 31.9 | 29 · 2 | 26.9 | | | 26 · 0 | | 26.9 | | | 26.0 | 125.0 |
| 19 | 24.0 | | 23.8 | 21.4 | 20.2 | 18 · 7 | 18 1 | 17.4 | 18.0 | 21.5 | 27.9 | 31.5 | 35 · 2 | | 35.5 | 33.3 | 32.4 | 26.0 | 26.9 | 26 · 7 | | 22.4 | 17.9 | 24 · 2 | 25.4 | 109 · 8 |
| 20 | 24.6 | 23.9 | 22.8 | 20.5 | 19.8 | 16 · 1 | 27 · 3 | 21.0 | 19.8 | 21 · 5 | 25 · 1 | 28 · 7 | 31 · 7 | 31 · 4 | 31.0 | 29 · 1 | 28 · 1 | 26 · 2 | 25.6 | 22 · 1 | 25 · 8 | 23.9 | 24 · 2 | 21.3 | 24.6 | 91.5 |
| 21 d | 24 · 2 | 20.4 | 19.0 | 18 · 4 | 17.0 | 20 · 6 | 19 · 7 | 20.6 | 23 · 2 | 28 · 2 | 32.0 | 33.6 | 35 · 0 | | 34 · 4 | 30 · 3 | 29 · 2 | 28 · 7 | 21 · 5 | 25 · 2 | | 26 · 9 | 26.0 | 25 · 2 | 25.9 | 122 · 7 |
| 22 | 21.7 | 27 · 2 | 20.6 | 20.5 | 20.0 | 20 · 7 | 18.6 | 18 • 4 | 19-4 | 23 · 7 | | 33 · 7 | 36⋅8 | 36 · 0 | 32.8 | 30 · 1 | 28 · 2 | 27 · 1 | 25 · 4 | 21.0 | 24 · 6 | 26 · 1 | 26 · 3 | 27 · 4 | 25.6 | 114 · 5 |
| 23 | 26.5 | 24 · 8 | 23 · 3 | 24 · 2 | 22.6 | 20 · 7 | 19 · 2 | 18.3 | 17.9 | 19.8 | 24 · 2 | 29.6 | 33 · 4 | 33.9 | 33.0 | 31.6 | 28 · 7 | 24 · 5 | 20.8 | 24 · 6 | 25 · 5 | 25 · 2 | 25.6 | 25 · 8 | 25 · 2 | 103 · 7 |
| 24 q | 26.3 | | 26 · 4 | 23.0 | 21.6 | 20 · 2 | 18.8 | 17.5 | 17.6 | 21.6 | 28 · 0 | 33 · 4 | 33 · 4 | 33.9 | 32.8 | 30 · 5 | 28 · 1 | | 25 · 1 | 25 · 6 | | 26 · 2 | 25.6 | | 25.8 | 118.6 |
| 25 q | 24.8 | 24 · 3 | 23 · 8 | 23.5 | 22.5 | 20.6 | 19.0 | 17.6 | 17 · 4 | 20 · 2 | 26 · 1 | 30.8 | 33.5 | 34 · 1 | 34 · 1 | 32.3 | 29 3 | 28 · 7 | 29 · 4 | 29 · 5 | 28 · 2 | 26 · 9 | 26 · 5 | 25 · 7 | 26 · 2 | 128 · 8 |
| 26 q | 26 · 1 | 24.6 | 24 · 2 | 23.8 | 22.8 | 21 · 2 | 20.1 | 19 · 1 | 19.4 | 22 · 2 | 27 · 7 | 33.5 | 36 · 1 | 35 · 4 | 33.6 | 30 · 7 | 27 · 9 | 26 · 9 | 27 · 7 | 26 · 9 | 26 · 6 | 26 · 7 | 26.3 | 24 · 5 | 26 · 4 | 134.0 |
| 27 | 21.3 | 19.7 | 22.5 | 20 · 2 | 18.9 | 17 · 9 | 17 · 7 | 18.8 | 19.5 | 22 · 7 | 27.9 | 32.7 | 35.5 | 35.9 | 37 · 7 | 35 · 8 | 33.5 | 28.0 | 26.0 | 28 · 3 | 23 · 3 | 23 · 2 | 25.8 | 25.7 | 25.8 | 118.5 |
| 28 | 24.7 | 23 · 9 | 23 · 7 | 28 · 4 | 24.0 | 20 · 4 | 18 · 1 | 18.2 | 19.8 | 22 · 3 | 25 · 7 | 30.0 | 34 · 2 | 34.5 | 34 · 5 | 31.6 | 26 · 1 | 26 · 1 | 25.8 | 26 · 1 | 26 · 6 | 27 · 0 | 26 · 7 | 26 · 4 | 26 · 0 | 124 · 8 |
| 29 d | 29.1 | 20.5 | 18.8 | 20.2 | 25.3 | 23 · 3 | 13 · 4 | 15.2 | 20 · 2 | 22 · 8 | 25.8 | 28.6 | 31.0 | 31.0 | 31.5 | 30.8 | 30 · 3 | 27 · 2 | 25 · 1 | 21 · 5 | 19.3 | 18 · 1 | 10.5 | 21.6 | 23.4 | 61 · 1 |
| 30 d | 25.1 | 8.0 | 21.6 | 28 · 7 | 29 · 2 | 40.8 | 35.0 | 23.8 | 24 · 1 | 26 · 5 | 29.6 | 31 · 4 | 31.5 | 30 · 3 | 30.5 | 29 · 2 | 26 · 4 | 23 · 3 | 19.8 | 23 · 3 | 23 · 1 | 20 · 9 | 23 · 4 | 23.0 | 26 · 2 | 128 · 5 |
| 31 | 26 · 8 | 21.8 | 22 · 1 | 28 · 7 | 23 · 2 | 22.0 | 22.0 | 20 · 1 | 22.3 | 26.6 | 27 · 6 | 29 · 7 | 31.0 | 32 · 2 | 31 · 2 | 29.8 | 28 · 1 | 26 · 1 | 25 · 1 | 27 · 0 | 26 · 5 | 20.8 | 24 · 3 | 24 · 7 | 25.8 | 119-7 |
| Mean | 25.3 | 23 · 1 | 23 · 1 | 23.5 | 22.9 | 22.4 | 20.8 | 19.9 | 20.9 | 23 · 2 | 26.5 | 30.0 | 32 · 7 | 33 · 6 | 33·1 | 31 · 4 | 29.3 | 27 · 3 | 26 · 2 | 26.0 | 25 · 7 | 25 · 3 | 24 · 5 | 25.3 | 25.9 | |
| Sum 600 · 0+ | 184 · 8 | 115.0 | 116 · 5 | 128 · 4 | 110.7 | 95 · 2 | 44.3 | 16 · 1 | 49-4 | 119-6 | 221 · 1 | 328 · 7 | 412.2 | 442.9 | 425 · 4 | 373 · 9 | 309 · 7 | 246 · 6 | 211.6 | 206 · 7 | 196 · 6 | 183 · 9 | 160 · 7 | 183 · 5 | | Grand Total 19283 · 5 |

23 ESKDALEMUIR (Z) 45,000y (0.45 C.G.S. unit) + AUGUST 1960 Hour G.M.T. 0-1 1-2 Sm 4-5 5-6 6-7 7-8 8-9 9-10 10-11 11-12 12-13 13-14 14-15 15-16 16-17 17-18 18-19 19-20 20-21 21-22 22-23 23-24 8000+ 352 63 **4**3 **4**8 **5**1 **5**2 376 375 370 366 368 377 359 388 371 385 379 379 376 375 376 371 373 371 370 360 371 377 350 357 358 359 360 358 330 372 354 355 388 397 413 411 399 381 374 374 982 12 13 14 15 392 376 377 378 375 371 718 369 363 366 371 374 368 362 370 376 376 374 389 374 391 929 361 363 357 367 374 382 388 385 350 348 354 370 370 367 204 377 381 125 229 277 344 377 386 377 392 387 373 400 382 394 421 409 390 411 400 383 377 412 409 386 389 1332 381 382 385 392 381 377 371 370 408 423 391 371 375 330 371 380 377 383 377 380 380 377 370 357 350 366 377 943 870 374 374 374 24 q 25 q 370 371 374 375 373 370 363 354 349 347 351 376 371 26 q 27 369 354 354 373 29 d 30 d Mean Grand Total 936 1108 1296 1308 1231 1127 1055 1118 1327 1619 1895 2192 2469 1875 1595 1466 10,000 275,284

DAILY EXTREMES OF TERRESTRIAL MAGNETIC ELEMENTS, MAGNETIC CHARACTER FIGURES (K AND C) AND TEMPERATURE IN MAGNET HOUSE

| | | | | | , | , | - DATE OF THE | mildive i | | |
|----|--------------|--|--|--|---|---|-------------------|---------------|--------|------|
| 24 | ESKDAI FMITP | | | | | | | | AUCHET | 1060 |

| 24 | ESKDALE | MUIR | | | | | | | | | | AU | GUST 1960 |
|--|--|---|---|--|---|--|---|---|---|---|--|--|--|
| | | | | TERRESTRI | AL MAGNETIC ELE | MENTS | | | | | | Magnetic | Temperature |
| | He | rizontal force | | D- | eclination | | Ver | ical force | | 3-hr. range indices | Sum of K | character | in magnet |
| | Maximum 16,000y | | Range | Maximum 10°+ | Minimum 10°+ | Range | Maximum 45,000γ + | Minimum 45,000γ + | Range | K | indices | of day, C (0-2) | house 200 + |
| 1 2 3 4 q 7 5 q 6 7 8 8 9 10 11 12 13 14 15 16 d 17 d 18 19 20 21 4 22 23 24 q 25 q 26 a | h. m. 18 05 8 21 59 8 16 46 8 17 38 8 14 32 7 20 54 8 15 26 8 24 00 8 17 43 8 18 43 8 00 53 8 18 44 8 18 02 8 17 04 9 17 29 10 19 18 7 16 18 8 17 31 8 18 59 8 19 31 8 16 24 8 17 08 8 | γ h. m., 110 727 13 18 138 738 10 57 7107 742 11 18 107 726 09 26 199 758 09 35 119 749 09 32 143 749 12 01 448 734 08 12 105 706 11 39 726 08 31 41 697 11 20 16 735 10 17 68 718 23 58 31 451 02 56 84 12 01 15 708 11 33 717 13 12 16 735 10 17 68 718 23 58 31 451 02 56 892 673 09 58 25 690 09 59 23 692 07 48 50 681 09 20 30 711 09 11 17 31 11 05 11 727 09 46 722 10 38 | 7 83 100 65 81 17 70 94 114 105 101 144 141 1107 133 81 250 580 119 162 131 169 119 70 84 | 10° + h. m. 13 00 33·5 04 04 36·6 14 05 32·8 14 18 32·6 13 08 31·9 13 17 34·4 14 15 34·8 13 47 37·6 05 40 39·6 14 05 35·0 14 36 37·2 14 00 35·6 12 53 37·3 15 16 38·8 00 14 33·7 14 17 46·5 00 01 44·5 00 01 43·7 13 07 37·7 13 06 34·5 11 45 35·0 14 52 34·4 12 43 37·1 | 10° + 19·3 06 00 17·7 22 25 18·2 00 30 19·2 06 58 20·6 07 30 20·4 05 57 18·6 07 45 17·0 07 11 16·8 08 55 18·2 07 03 14·6 07 24 15·8 00 56 15·5 08 06 16·4 08 15 17·1 08 10 6·4 20 23 -1·8 03 25 18·7 05 25 7·6 22 22 9·9 07 51 13·2 04 35 15·5 19 17 16·9 07 35 16·7 07 40 16·7 08 03 18·8 08 00 | 14·2 18·9 14·6 13·4 11·3 14·0 16·2 20·6 22·8 16·8 22·6 19·8 22·4 16·6 40·1 46·7 15·2 31·7 24·8 22·2 17·6 18·3 17·7 18·3 | h. m. y 20 00 386 18 22 406 18 02 389 18 29 386 17 27 379 17 13 382 17 40 377 18 18 434 17 12 397 18 48 416 15 30 388 16 30 393 16 30 388 21 12 394 07 53 389 17 22 638 17 36 597 17 20 416 20 03 429 19 23 426 18 39 438 19 14 399 18 22 397 17 59 388 15 50 377 21 22 381 | 45,000y + y h. m. 340 05 10 322 04 22 352 01 01 347 02 17 347 11 48 347 12 09 347 03 12 306 24 00 294 00 18 346 12 00 306 04 20 334 05 58 347 11 13 357 13 32 342 00 35 335 24 00 -13 03 23 370 11 46 357 22 45 323 07 38 346 24 00 296 01 42 348 11 49 347 10 54 346 13 00 331 11 58 | 76 46 84 37 39 32 35 30 128 103 70 82 59 41 37 47 303 610 46 72 103 49 41 31 50 | 2,3,2,3,4,3,2,3 2,4,2,2,3,4,3,4 3,2,1,2,3,3,2,1 2,3,1,3,2,2,2,1 1,2,1,2,2,2,1,1 1,1,2,2,2,3,3,3 3,2,1,2,2,4,2,0 1,2,3,3,4,4,3,3 3,5,4,3,3,3,3,2,2 2,4,3,3,4,4,3,3 3,4,4,4,4,3,3,2,2 2,2,2,2,3,2,2,2 2,3,2,2,3,2,1 2,1,1,3,6,5,5,5 7,6,6,4,4,7,6,5 3,2,3,3,3,3,2,1 2,1,1,3,6,5,5,5 7,6,6,4,4,7,6,5 3,2,3,3,3,3,2,1 2,1,1,2,3,2,3,3,3,3,3,2,2,2,1,2,3,3,3,3, | 22 24 17 16 12 17 16 23 24 26 24 26 25 17 22 18 45 21 24 26 29 22 18 15 12 | 1 1 0 0 0 0 0 1 1 1 1 0 1 0 1 0 1 1 1 1 | °A. 84-3 84-5 84-2 84-2 84-2 84-2 83-9 84-3 83-7 83-9 84-4 83-9 84-6 83-8 84-5 84-5 84-5 84-5 84-5 |
| 27 28 29 d 30 d | 17 45 8 00 38 8 00 29 8 04 29 8 | 739 11 00 06 720 11 00 38 682 22 39 | 104 86 206 214 | 14 22 38·1 14 27 35·4 14 36 36·5 05 30 44·7 | 16·4 06 44 13·7 06 31 6·2 22 46 5·3 01 42 | 21·7 21·7 30·3 39·4 | 18 29 427 16 52 397 19 53 416 15 31 458 | 334 01 02 335 04 49 271 05 55 167 03 44 | 93 62 145 291 | 3,2,2,2,2,4,4,3 2,3,3,2,3,3,1,2 5,5,3,3,5,4,3,4 5,6,5,4,4,3,3,2 | 22 19 32 32 | 1 1 1 1 | 84·7 84·7 84·7 84·7 |
| 31 | 21 49 80 | 704 09 05 | 103 | 13 30 33 2 | 16.4 21 35 | 16.8 | 18 12 390 | 325 04 12 | 65 | 3,3,3,3,4,4,3 | 26 | 1 | 85.1 |
| Mean | 8: | | 130 | 36.6 | 14.9 | 21.7 | 415 | 318 | 98 | - | | 0.65 | 84.3 |
| | L | - 1 | ا ــــــــــــــــــــــــــــــــــــ | | · | | | | | | | | <u> </u> |

q denotes an international quiet day and d an international disturbed day.

TERRESTRIAL MAGNETIC FORCE: HORIZONTAL COMPONENT Mean values for periods of sixty minutes ending at exact hours, G.M.T.

| 21 E | ESKDALI | EMUIR (| (H) | | | | | | | | 16,0 | 00) (0 | 16 C.G | .S. un | it) + | | | | | | | | | : | SEPTEM | BER 1960 |
|---------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|------------------------------|
| | Hour 0-1 | G.M.T. 1-2 | 2-3 | 3-4 | 4-5 | 5-6 | 6-7 | 7-8 | 8-9 | 9-10 | 10-11 | 11-12 | 12-13 | 13-14 | 14-15 | 15-16 | 16-17 | 17-18 | 18-19 | 19-20 | 20-21 | 21-22 | 22-23 | 23-24 | Mean | Sum 16,000+ |
| 1 q 2 | 775 778 | γ 775 778 | γ 774 775 | 7 774 777 | 774 774 | 7 765 770 | γ 762 767 | γ 757 762 | 7 754 746 | γ 747 744 | 7 746 754 | γ 755 756 | 760 780 | 760 780 | γ 759 777 | γ 757 769 | γ 762 788 | γ 769 798 | 778 800 | γ 780 782 | 7 782 801 | 7 780 805 | 7 782 774 | γ 778 742 | 7 767 774 | 2405 2577 |
| 3 d | 751 | 765 | 783 | 790 | 760 | 767 | 713 | 767 | 764 | 749 | 744 | 742 | 742 | 747 | 739 | 757 | 774 | 778 | 770 | 774 | 774 | 772 | 772 | 775 | 761 | 2269 |
| 4 d | 779 | 773 | 783 | 789 | 781 | 797 | 766 | 670 | 684 | 684 | 715 | 735 | 740 | 737 | 806 | 730 | 766 | 801 | 816 | 747 | 711 | 730 | 666 | 614 | 743 | 1820 |
| 5 d | 577 | 621 | 651 | 598 | 6 67 | 662 | 664 | 602 | 495 | 551 | 613 | 694 | 723 | 731 | 738 | 736 | 751 | 767 | 779 | 764 | 751 | 759 | 744 | 759 | 683 | 397 |
| 6 7 <i>d</i> 8 9 | 707 770 778 | 749 755 760 784 | 761 760 758 764 | 757 765 777 745 | 756 768 773 768 | 751 763 773 773 | 702 750 767 761 | 721 744 745 751 | 713 742 713 741 | 713 739 711 718 | 708 727 714 712 | 710 740 714 710 | 713 737 739 731 | 721 760 754 739 | 733 801 758 757 | 751 767 775 771 | 748 795 798 777 | 759 793 775 790 | 767 785 777 781 | 777 783 790 770 | 782 775 781 780 | 776 772 781 776 | 779 773 783 779 | 749 778 781 774 | 742 764 761 760 | 1803 2342 2275 |
| 10 11 12 | 787 780 769 766 | 776 778 767 | 776 773 780 | 779 772 783 | 779 773 772 | 773 773 782 778 | 770 782 780 | 766 766 755 | 752 752 752 741 | 736 735 729 | 719 730 719 | 700 721 719 | 718 718 732 721 | 731 730 730 | 750 746 753 | 771 752 745 | 778 782 758 | 777 776 772 | 782 779 786 | 771 776 783 | 775 772 781 | 779 779 787 781 | 779 779 764 784 | 767 766 776 788 | 762 764 761 | 2239 2284 2325 2271 |
| 13 | 789 | 802 | 779 | 787 | 758 | 808 | 767 | 750 | 731 | 712 | 701 | 709 | 732 | 730 | 744 | 759 | 765 | 775 | 781 | 794 | 784 | 773 | 760 | 745 | 760 | 2235 |
| 14 | 771 | 752 | 764 | 772 | 773 | 784 | 784 | 767 | 752 | 734 | 724 | 718 | 736 | 744 | 757 | 754 | 772 | 782 | 787 | 790 | 786 | 781 | 782 | 782 | 765 | 2348 |
| 15 q | 780 | 779 | 780 | 781 | 784 | 778 | 761 | 767 | 753 | 739 | 734 | 734 | 752 | 755 | 769 | 774 | 781 | 782 | 784 | 792 | 796 | 790 | 790 | 794 | 772 | 2529 |
| 16 <i>q</i> | 789 | 794 | 790 | 785 | 785 | 783 | 778 | 768 | 751 | 740 | 733 | 733 | 736 | 749 | 766 | 778 | 781 | 786 | 797 | 796 | 795 | 794 | 789 | 790 | 774 | 2586 |
| 17 | 790 | 789 | 792 | 789 | 785 | 778 | 772 | 767 | 761 | 752 | 741 | 741 | 750 | 757 | 765 | 769 | 787 | 795 | 798 | 807 | 816 | 812 | 788 | 770 | 778 | 2671 |
| 18 | 754 | 749 | 756 | 788 | 780 | 777 | 772 | 765 | 747 | 734 | 726 | 743 | 747 | 754 | 768 | 765 | 777 | 777 | 786 | 789 | 787 | 784 | 782 | 790 | 767 | 2397 |
| 19 <i>q</i> | 783 | 776 | 776 | 778 | 777 | 774 | 771 | 761 | 751 | 740 | 733 | 735 | 748 | 760 | 768 | 771 | 780 | 782 | 790 | 790 | 791 | 790 | 789 | 788 | 771 | 2502 |
| 20 | 787 | 786 | 785 | 784 | 784 | 782 | 777 | 770 | 758 | 747 | 742 | 746 | 752 | 761 | 769 | 774 | 773 | 779 | 792 | 797 | 803 | 808 | 803 | 814 | 778 | 2673 |
| 21 | 798 | 791 | 787 | 784 | 786 | 784 | 782 | 776 | 768 | 756 | 743 | 738 | 741 | 742 | 759 | 767 | 766 | 767 | 778 | 786 | 782 | 787 | 789 | 801 | 773 | 2558 |
| 22 | 773 | 774 | 777 | 777 | 775 | 775 | 774 | 772 | 762 | 748 | 739 | 737 | 749 | 757 | 781 | 790 | 787 | 787 | 790 | 801 | 792 | 784 | 784 | 777 | 773 | 2562 |
| 23 | 765 | 764 | 773 | 791 | 779 | 777 | 789 | 770 | 769 | 760 | 735 | 742 | 743 | 746 | 748 | 766 | 776 | 783 | 795 | 798 | 797 | 791 | 804 | 810 | 774 | 2571 |
| 24 | 779 | 759 | 754 | 778 | 774 | 783 | 759 | 746 | 747 | 722 | 722 | 729 | 738 | 735 | 752 | 763 | 782 | 755 | 766 | 773 | 787 | 778 | 774 | 775 | 760 | 2230 |
| 25 <i>q</i> | 771 | 771 | 770 | 770 | 771 | 771 | 770 | 764 | 752 | 736 | 724 | 725 | 733 | 743 | 754 | 767 | 775 | 780 | 788 | 785 | 779 | 781 | 779 | 781 | 764 | 2340 |
| 26 | 779 | 775 | 779 | 783 | 785 | 786 | 787 | 779 | 758 | 748 | 738 | 738 | 742 | 753 | 764 | 775 | 783 | 788 | 791 | 794 | 783 | 771 | 755 | 748 | 770 | 2482 |
| 27 | 737 | 748 | 756 | 772 | 765 | 786 | 775 | 745 | 744 | 743 | 730 | 720 | 726 | 730 | 744 | 757 | 765 | 779 | 782 | 767 | 769 | 772 | 778 | 782 | 757 | 2172 |
| 28 | 778 | 777 | 778 | 779 | 781 | 783 | 785 | 787 | 778 | 748 | 737 | 736 | 746 | 757 | 759 | 753 | 767 | 772 | 775 | 774 | 780 | 782 | 782 | 777 | 770 | 2471 |
| 29 | 779 | 781 | 780 | 780 | 782 | 782 | 783 | 778 | 769 | 765 | 758 | 759 | 760 | 768 | 743 | 743 | 768 | 767 | 773 | 769 | 776 | 755 | 736 | 731 | 766 | 2385 |
| 30 d | 764 | 769 | 772 | 788 | 789 | 794 | 788 | 765 | 754 | 746 | 747 | 740 | 751 | 737 | 756 | 751 | 761 | 767 | 770 | 759 | 755 | 737 | 770 | 775 | 763 | 2305 |
| Mean | 766 | 767 | 769 | 772 | 772 | 775 | 765 | 753 | 740 | 731 | 727 | 731 | 741 | 747 | 759 | 762 | 774 | 779 | 784 | 782 | 781 | 779 | 774 | 770 | 763 | <u></u> |
| Sum 21,000+ | 1983 | 2017 | 2086 | 2172 | 2158 | 2239 | 1958 | 1603 | 1202 | 926 | 808 | 919 | 1218 | 1398 | 1783 | 1857 | 2223 | 2358 | 2523 | 2458 | 2443 | 2368 | 2213 | 2111 | | Grand Total 549,024 |

MAGNETIC DECLINATION (WEST) Mean values for periods of sixty minutes ending at exact hours, G.M.T.

| 22 E | SKDALE | MUIR (| 9) | | | | | | | | | 10 | ı° + | | | | | | | | | | | | SEPTEME | ER 1960 |
|------------|--------|---------------|--------|--------|--------|--------------|--------|--------|--------------|--------|---------|---------|---------|---------|---------|---------|--------|--------------|---------|---------|---------|--------|--------|---------|---------|------------------------|
| | Hour (| 3.M.T. 1-2 | 2-3 | 3-4 | 4-5 | 5-6 | 6-7 | 7-8 | 8-9 | 9-10 | 10-11 | 11-12 | 12-13 | 13-14 | 14-15 | 15-16 | 16-17 | 17-18 | 18-19 | 19-20 | 20-21 | 21-22 | 22-23 | 23-24 | Mean | Sum 400·0+ |
| 1 q | 24.3 | 23.9 | 23.3 | 23 · 5 | 22.5 | 21.5 | 20.5 | 20.2 | 20.9 | 22.3 | 25.5 | 28.6 | 30.8 | 30.5 | 29.9 | 28.3 | 26.8 | 26 · 2 | 26 · 5 | 26 · 4 | 26 · 2 | 25.3 | 23.7 | 24.6 | 25.1 | 202 · 2 |
| 2 | 25.4 | 24 · 8 | 24 · 3 | 23 · 2 | 22.5 | 21.8 | 20.5 | 19.9 | 21 · 2 | 24-4 | | 32.0 | 36 · 1 | 37 · 4 | 37 · 1 | 32.3 | 29.7 | 30.2 | | 25.8 | 27 . 9 | 28 · 4 | | 9.4 | 26.2 | 229 · 4 |
| 3 d | 18.7 | 27 · 5 | 17 · 4 | 16 · 6 | 23 · 6 | 31 · 1 | 27.0 | 26 · 9 | 20 · 3 | 20.8 | 26 · 3 | 30 · 1 | 31.5 | | | 27 · 6 | | 24 · 2 | | 21.0 | 24 · 3 | 23.6 | 24 · 8 | 24.9 | 24.8 | 196 · 1 |
| 4 d | 22.8 | 22.6 | 22 · 9 | 20.1 | | 26 · 5 | | 22.2 | 28 · 5 | 28 · 1 | | | 35.6 | | | 31.0 | | | | 18 · 1 | 19.2 | 26 · 5 | 21.8 | 9.4 | 25 · 3 | 207 · 1 |
| 5 d | -0.8 | -7·8 | -4.0 | 1.9 | 12.2 | 21.5 | 23 · 4 | 22.3 | 24 · 4 | 25 · 1 | 32.0 | 33 · 8 | 36 · 5 | 35.0 | 35.3 | 29 · 2 | 26 · 1 | 27 · 6 | 13.8 | 18 · 1 | 25 · 4 | 26.0 | 16 · 1 | 9.6 | 20 · 1 | 82 · 7 |
| 6 | 17.5 | 23 · 5 | 23.0 | 18 · 4 | 19.4 | 23 · 4 | 28 · 5 | 27 · 3 | 22.5 | 23.0 | 25 · 3 | 29.3 | 30.5 | 30 · 9 | 30 · 4 | 28 · 0 | 26 · 4 | 25 · 1 | 24 · 2 | 21.3 | 24 · 5 | 26 · 6 | 29 · 6 | 27 · 4 | 25.3 | 206 · 0 |
| 7 d | 21.7 | 21.8 | 24 · 4 | 22 · 7 | 22 · 1 | 20.8 | 20.6 | 20.3 | 20 · 5 | 22.9 | 25 · 9 | 30.6 | 34 · 8 | 32 · 3 | 33 · 1 | 27 · 8 | 27 · 8 | 26.0 | 17 · 8 | 24 · 6 | 23 · 7 | 20.3 | 24 · 5 | .25 · 1 | 24 · 7 | 192 · 1 |
| 8 | 16.9 | 17 · 6 | 23 · 9 | 24 · 6 | 22.3 | 20.0 | 20 · 5 | 21 · 3 | 22.5 | 24 · 3 | | 30.6 | 34.5 | 35 · 3 | 32.2 | 30 · 6 | | 24 · 0 | | 26 · 4 | 26 · 4 | 25 · 9 | 25 · 5 | 24 · 7 | 25.3 | 208 - 1 |
| 9 | 21.4 | 16 · 2 | 19 · 4 | 23 · 8 | 23 · 2 | 20.8 | 19.6 | 19.7 | 20.8 | 23.3 | | 30 · 9 | 34.7 | 36.2 | | 29 · 4 | | 24 · 3 | 23 · 5 | 25 · 1 | 26 · 0 | 22 · 4 | 24 · 7 | 24 · 1 | 24.9 | 197-8 |
| 10 | 22.2 | 23.8 | 23 · 2 | 22 · 4 | 20.3 | 21 · 2 | 21 · 1 | 20.3 | 20 · 3 | 22.5 | 26 · 0 | 29 · 2 | 32.4 | 33 · 2 | 33 · 1 | 31.0 | 27 · 2 | 26 · 5 | 25 · 2 | 23 · 9 | 25 · 4 | 26.0 | 23 · 4 | 20.3 | 25.0 | 200 · 1 |
| 11 | 24.5 | 25 · 2 | 17 · 8 | 19 · 8 | 21 · 4 | 21.0 | 20.9 | 18.6 | 17 · 7 | 19.9 | 22.9 | 26 · 9 | 31 · 1 | 31.8 | 31 · 7 | 29.0 | 27 · 2 | 25 · 7 | 26 · 5 | 26 · 5 | 26 · 2 | 18.9 | 20 · 7 | 20.6 | 23.9 | 172.5 |
| 12 | 25.2 | 28.0 | 25 · 9 | 23 · 4 | 21.8 | 21.0 | 22 · 1 | 23.0 | 24 · 2 | 24 · 7 | 25 · 5 | 28 · 9 | 31.9 | 32 · 9 | 32.8 | 28 · 8 | | 26 · 2 | | 23 · 9 | | 26 · 1 | 26.6 | 26 · 5 | 26 · 1 | 226 · 7 |
| 13 | 26 · 3 | 26.0 | 18 · 6 | 19 · 1 | 23 · 4 | 19.6 | | 22.9 | 21 · 2 | 22.9 | | 28 · 7 | 32.7 | | 30 · 7 | 27 · 6 | | 24 · 6 | | 24 · 6 | | | 19.3 | 17.8 | 24 · 2 | 180 - 2 |
| 14 | 20.0 | 19.9 | 22 · 2 | | 26 · 5 | 22.2 | 20.6 | 19.9 | 19.7 | 23.0 | 27 · 1 | 30 · 7 | 33.0 | | | 28 · 3 | | 25.6 | 25.0 | 24 · 7 | 25 · 2 | | 25 · 4 | 25.5 | 25 · 2 | 203 · 9 |
| 15 q | 25 · 4 | 24 · 5 | 24 · 0 | 23.8 | 23 · 5 | 23 · 5 | 22.5 | 21 · 1 | 18.9 | 19.8 | 23 · 4 | 27 · 0 | 29.8 | 30.6 | 30 · 2 | 29.0 | 28 · 3 | 27.8 | 27 · 5 | 28 · 0 | 27 · 5 | 26 · 5 | 25.8 | 26 · 2 | 25.6 | 214 · 6 |
| l6 q | 25.1 | 24 · 9 | 23 · 4 | 23 · 1 | 23 · 2 | 22.7 | 21 · 2 | 19.3 | 18 · 7 | 19.9 | 23 · 9 | 27 · 5 | 30 · 1 | | 32.9 | 30 · 6 | 29 · 2 | | 28 · 3 | 27 · 7 | 26 · 9 | 26 · 5 | 25 · 7 | 25.6 | 25 · 7 | 216 · 5 |
| ١7 | 24 · 7 | 24 · 1 | 23 - 7 | 23.9 | 22 · 1 | 21.8 | 20.9 | 19.9 | 18.7 | 19.8 | 22.5 | 26 · 5 | 30 · 4 | 31.9 | 32.9 | 31.3 | | 28 · 3 | 27 · 8 | 27 · 6 | 22.9 | | 17 · 1 | 17.0 | 24 · 2 | 181 · 1 |
| 18 | 16 · 1 | 12.2 | 19.3 | 19.7 | 20.3 | 23.9 | | 20.3 | 19.5 | 22 · 1 | | 28 · 7 | 31 · 1 | | 31.9 | 29.3 | | | | 27 · 3 | | 26 · 5 | 25 · 6 | 24.0 | 24 · 3 | 184 · 2 |
| 9 q | 23.9 | 23.8 | 22.6 | 22.2 | 21.6 | 21.4 | 21.6 | 20.3 | 20.0 | 21.3 | 24 · 7 | 28 · 5 | 30 · 1 | 30 · 1 | 29 · 2 | 27 · 5 | | 27 · 2 | 27 · 5 | 27 · 3 | 26 · 8 | 26.0 | 26 · 5 | 25.0 | 25 · 1 | 202 · 3 |
| 10 | 24 · 5 | 24 · 4 | 23 · 9 | 23 · 4 | 23 · 1 | 22.6 | 22 · 1 | 21.0 | 20 · 7 | 22 · 4 | 26 · 4 | 29 · 7 | 31 · 1 | 31 · 5 | 30.9 | 29 · 1 | 28 · 0 | 26 · 6 | 26 · 5 | 26 · 5 | 26 · 7 | 27 · 3 | 25.9 | 27.5 | 25.9 | 221 · 8 |
| 21 | 23.9 | 22.9 | 22 · 4 | 22 · 4 | 22 · 1 | 22 · 1 | 21 · 1 | 20 · 1 | 19.3 | 22 · 1 | 26 · 5 | 31 · 1 | 33 · 8 | 34.0 | 35 · 4 | 34 · 5 | | 30 · 5 | 28 · 7 | 27 · 8 | 25 · 3 | 24 · 6 | 22.6 | 18.2 | 26.0 | 224 - 9 |
| 22 | 15.9 | 20.7 | 22.3 | 22.4 | 23.3 | 22 · 1 | 23.0 | 21.6 | 20 · 7 | 21 · 1 | 24 · 1 | 28 · 3 | 31.7 | 32.0 | 34 2 | 33.5 | | 32.2 | | 28 · 3 | | 24 · 5 | 21.3 | 17 · 1 | 25.3 | . 207 · 1 |
| 23 | 13.4 | 13 · 1 | 13.6 | 16.7 | 20.3 | 21 · 3 | 20.6 | 22.3 | 28 · 1 | 25 · 2 | 24.9 | 27 · 6 | 31 · 1 | | 31 · 4 | 31 · 1 | | 28.6 | | 27 · 5 | | 26 · 5 | 25.4 | 15.1 | 24 2 | 181 · 1 |
| 24 | 10.3 | 11.0 | 18.6 | 17.3 | 17.5 | 18.0 | 20 · 7 | 26.0 | 27 · 3 | 24 · 1 | 26.6 | 26 · 4 | 31.3 | | 32.7 | 31 - 9 | | 28 · 2 | | 26 · 9 | | 23.0 | 23 · 4 | 23.9 | 24 · 2 | 180 · 0 |
| 25 q | 23 · 7 | 23 · 7 | 23 · 3 | 23 · 1 | 23 · 0 | 22.8 | 22 · 1 | 20.6 | 19.7 | 20.2 | 23 · 4 | 27 · 6 | 31 · 1 | | 29.9 | 28 · 4 | | 27 · 5 | 27 · 3 | 25 · 3 | 21.6 | 23 · 3 | 23 · 6 | 24 · 4 | 24 · 8 | 194-3 |
| 26 | 24 · 6 | 26.3 | 25 · 3 | 23 · 2 | 22.9 | 22.4 | 22.1 | 21.6 | 23 · 5 | 24 · 4 | 24 · 5 | 28 · 3 | 30.2 | | 31 · 1 | 29 · 7 | 28 · 3 | 27 · 7 | 26.8 | 26 · 2 | | 20.4 | 17 · 2 | 17.5 | 25.0 | 199 · 1 |
| 27 | 18.2 | 15.3 | 10.4 | 18.0 | 22 · 2 | 21.1 | 22.1 | 21.7 | 24 · 7 | 24 · 3 | 26.0 | 27.5 | 29.3 | 30.9 | 31 · 1 | 29.3 | | 26 · 1 | 25 · 4 | 23 · 8 | 23 · 7 | 23 · 1 | 24 · 7 | 25.2 | 23.8 | 171.3 |
| 28 | 25.2 | 24.9 | 25 · 2 | 23.9 | 23 · 2 | 22.9 | 22.5 | | 22.6 | 23 · 4 | 29.0 | 29 · 1 | 29 4 | 30.5 | 31 · 1 | 29 1 | | 25.5 | | | | 24 · 7 | 24.6 | 23.4 | 25.7 | 216 · 4 |
| 9 | 25 · 2 | 25.0 | 24 · 2 | 24 · 2 | 23.9 | 23·4 19·4 | 22.9 | | 22·7 20·3 | 25.1 | | 29.3 | 30.4 | | 33.6 | 29.9 | 29.3 | 27·7 28·1 | 26 · 1 | | 22.6 | 17.3 | 9.1 | 15.3 | 24.7 | 193-6 |
| 10 d | 22.5 | 15 · 1 | 18 · 9 | 19.0 | 15.3 | 19.4 | 20.3 | 20.7 | 20.3 | 23 · 4 | 26 · 9 | 30.6 | 32.9 | 34 · 9 | 34 · 9 | 32 · 1 | 29.8 | 28.1 | 25 · 2 | 20.9 | 12-1 | 15.3 | 22.6 | 26 · 2 | 23-6 | 167 · 4 |
| a n | 21.0 | 20.8 | 20 · 8 | 20.9 | 21 · 7 | 22 · 1 | 21.9 | 21 · 5 | 21 · 7 | 22.9 | 26 · 1 | 29 · 3 | 32.0 | 32.7 | 32.5 | 29.8 | 28 · 0 | 26 · 9 | 25 · 2 | 25 · 0 | 24 · 5 | 23 · 7 | 22.9 | 21.4 | 24.8 | |
| um)•0+ | 28 · 7 | 24 · 9 | 23 · 4 | 28 · 5 | 52.6 | 63.8 | 55 · 7 | 45.7 | 50 · 1 | 85.8 | 184 · 4 | 279 · 8 | 359 · 9 | 381 · 4 | 374 · 3 | 295 · 2 | 240.7 | 206 · 7 | 154 · 8 | 151 · 1 | 133 · 8 | 111.9 | 85.9 | 41.5 | | Grand Tot 17860 • 6 |

TERRESTRIAL MAGNETIC FORCE: VERTICAL COMPONENT Mean values for periods of sixty minutes ending at exact hours, G.M.T.

23 ESKDALEMUIR (Z) 45,000y (0.45 C.G.S. unit) SEPTEMBER 1960 Sum 2-3 4-5 5-6 6-7 7-8 1-2 8-9 9-10 10-11 11-12 12-13 13-14 14-15 15-16 16-17 17-18 18-19 19-20 20-21 21-22 22-23 23-24 1 q 5 d 376 375 378 15 q 16 9 374 19 q 364 8 379 368 364 25 g 371 30 d

DAILY EXTREMES OF TERRESTRIAL MAGNETIC ELEMENTS, MAGNETIC CHARACTER FIGURES (K AND C) AND TEMPERATURE IN MAGNET HOUSE

372 380

393 396

990 1149 1399 1651 1718 1794 1870 1793 1653 1359 1109

361 371

Grand Total

266,898

24 ESKDALEMUIR SEPTEMBER 1960 TERRESTRIAL MAGNETIC ELEMENTS Magnetic 3-hr. range Horizontal force Vertical force am of A character. in magnet indices indices of day, C (0-2) Maximum Minimm Minimum Maximum K Range Range 200 + 16,000y + 10° + 10° 45,000y + 45.000y +°A. γ 46 у 21 07 37 15 07 19.9 22 28 18 11 10 06 12 31 31.3 11 51 1.1.2.2.1.2.1.1 n 1,2,2,2,3,3,4,5 4,5,5,4,3,3,3,2 -2·4 13·5 23 03 00 00 245 41.0 19 30 38.6 19 02 ã d 22.0 01 26 03 27 06 40 07 00 35.5 85.2 22 10 -2.6 23 59 01 58 52 · 1 18 14 74 21 57 21 29 84 . 9 15 43 00 23 19 01 09 09 12 54 38.0 -20 - 2 58 · 2 7,6,6,6,4,5,5,5 84 - 9 23 00 37.9 7 - 3 00 07 30.6 18 07 23 20 5, 3, 4, 4, 1, 2, 4, 4 20 05 00 07 84 . 9 3,4,4,4,5,3,4,4 4,3,4,4,4,3,2 4,3,3,2,2,2,3,3 26·7 24·0 11·5 13·6 359 12 03 38 · 2 14 19 12 37 85.5 00 29 00 32 16 25 08 20 13 04 37 . 6 16 54 13 50 17 39 11 01 85 - 1 17 52 11 23 13 54 34 - 7 18.6 23 34 16 · 1 18 55 12 00 2,2,1,3,3,3,3,3 4,3,2,2,3,3,3,3 02 03 11 14 14 08 33 · 2 15.3 02 38 17.9 18 41 02 17 85 · 2 24 00 05 23 11 04 14 29 33.5 20·3 14·4 00 01 13.2 16 05 01 50 3,2,3,2,2,3,2,2 4,4,3,3,3,2,3,4 84 - 7 10 51 13 14 35.0 23 23 20.6 21 11 05 14 85.0 801 72 00 47 00 22 00 08 11 12 13 30 33.7 11 · 4 22.3 21 37 4.3.2.2.2.2.1.1 18 · 7 14 12 31.5 08 29 12.8 07 50 12 14 1, 2, 2, 2, 2, 2, 2, 2 10 53 84.3 15 a 23 18 2,1,1,1,2,2,1,1 1,2,1,1,2,3,4,4 4,3,2,3,3,2,1,2 32 · 7 18 · 3 07 50 14-4 07 55 14 17 12 58 20 02 11 12 84 - 3 10 50 14 18 34.8 12.5 21 54 22.3 20 56 12 32 14 18 33.8 9.2 02 48 10 17 03 42 84 - 4 88 13 18 31.0 19.1 08 47 11.9 07 41 12 57 13 47 32 · 1 19.5 07 46 12.6 07 10 24 00 10 39 0,1,1,1,1,2,2,3 23 43 84.8 14 03 36 · 3 13.6 22.7 19 23 00 00 2,0,1,2,2,2,3,3 13 21 00 00 O 84 . 0 22 30 22 10 14 11 36 - 9 14.6 00 15 22.3 00 05 84.6 19 36 23.7 24 00 22 46 00 00 10 27 13 49 33.0 9.3 3, 3, 3, 3, 3, 2, 2, 3 84 - 7 359 8.7 25 - 5 17 32 02 59 18.0 20 31 20 46 13.8 12 55 31.8 12 36 18 41 11 21 1.1.1.2.1 1 3 2 22 28 18.9 21 03 2,1,2,2,1,2,3,3 14 00 31.5 12.6 23 54 19 33 11 13 84 - 7 12 54 13 49 02 09 01 00 00 35 23 · 5 05 18 4, 3, 3, 3, 1, 2, 3, 2 84.6 21.8 11 01 31.6 08 37 9.8 19 39 12 10 1, 1, 2, 3, 2, 2, 1, 1 14 51 13 59 1,1,2,2,4,3,2,4 84 . 5 21 36 14 42 36 · 6 4 . 8 20 30 31.8 19 09 00 46 - -11.6 - -23.3 - -- -_ -35.0 0.43 84 - 7 Mean

q denotes an international quiet day and d an international disturbed day.

Mean

Sum

10,000+

473 548

352 355

636 681

360 364 368

923 1034 1074 1042

966 929

TERRESTRIAL MAGNETIC FORCE: HORIZONTAL COMPONENT Mean values for periods of sixty minutes ending at exact hours, G.M.T.

| 21 E | SKDAL | EMUIR (| (H) | | | | | | | | 16 | ,000γ (| 0·16 C | .G.S. | unit) | + | | | | | | | | | остов | ER 1960 |
|----------------|-------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------------------|
| | Hour | G.M.T. | | | | | - | | | | | | | | | | | | | | | | | | | Sum |
| | 0-1 | 1-2 | 2-3 | 3-4 | 4-5 | 5-6 | 6-7 | 7-8 | 8-9 | 9-10 | 10-11 | 11-12 | 12-13 | 13-14 | 14-15 | 15-16 | 16-17 | 17-18 | 18-19 | 19-20 | 20-21 | 21-22 | 22-23 | 23-24 | Mean | 15,000+ |
| | y | γ | γ | γ | γ | γ | γ | γ | γ | γ | γ | γ | γ | γ | γ | γ | γ | γ | γ | γ | γ | γ | γ | γ | γ | |
| 1 d | 787 | 772 | 772 | 762 | 763 | 762 | 786 | 755 | 726 | 716 | 734 | 731 | 736 | 736 | 731 | 755 | 754 | 752 | 752 | 753 | 750 | 772 | 766 | 767 | 754 | 3090 |
| 2 | 766 | 749 | 761 | 782 | 793 | 777 | 747 | 728 | 725 | 699 | 702 | 719 | 737 | 756 | 789 | 770 | 766 | 767 | 743 | 751 | 758 | 761 | 774 | 769 | 754 | 3089 |
| 3 | 762 | 758 | 759 | 761 | 765 | 770 | 766 | 766 | 760 | 738 | 700 | 719 735 | 722 | 747 749 | 753 771 | 761 787 | 752 800 | 762 774 | 772 781 | 777 743 | 773 | 769 | 770 | 772 | 756 | 3154 |
| 4 5 | 771 | 770 755 | 771 759 | 776 763 | 777 751 | 779 747 | 780 753 | 772 765 | 763 749 | 751 748 | 737 744 | 747 | 749 | 744 | 753 | 757 | 766 | 768 | 778 | 781 | 736 784 | 742 783 | 742 747 | 782 723 | 764 756 | 3328 3146 |
| - | 747 | 754 | 734 | 807 | 785 | 726 | 715 | 729 | 744 | 756 | 741 | 675 | 688 | 790 | 830 | 883 | 937 | 1134 | 731 | 727 | 281 | 337 | 203 | 318 | 699 | 1772 |
| 6 d 7 d | -56 | 222 | 567 | 366 | 380 | 593 | 679 | 650 | 658 | 592 | 618 | 709 | 739 | 783 | 826 | 848 | 788 | 765 | 739 | 732 | 759 | 784 | 714 | 688 | 631 | 143 |
| g G | 726 | 700 | 745 | 752 | 747 | 744 | 737 | 737 | 716 | 718 | 684 | 705 | 710 | 722 | 721 | 732 | 739 | 742 | 753 | 740 | 734 | 727 | 734 | 759 | 730 | 2524 |
| ğ | 754 | 757 | 744 | 744 | 765 | 744 | 738 | 756 | 741 | 730 | 703 | 707 | 731 | 754 | 747 | 768 | 756 | 756 | 745 | 776 | 754 | 752 | 738 | 744 | 746 | 2904 |
| 10 | 742 | 748 | 735 | 741 | 752 | 753 | 752 | 751 | 745 | 734 | 726 | 724 | 732 | 740 | 748 | 749 | 753 | 761 | 752 | 754 | 749 | 759 | 764 | 750 | 746 | 2914 |
| 11 | 764 | 770 | 767 | 769 | 777 | 782 | 753 | 737 | 752 | 734 | 725 | 725 | 728 | 742 | 752 | 754 | 753 | 760 | 766 | 769 | 767 | 772 | 768 | 769 | 756 | 3155 |
| 12 q | 770 | 766 | 766 | 769 | 774 | 774 | 776 | 769 | 757 | 743 | 731 | 727 | 733 | 746 | 756 | 764 | 768 | 777 | 786 | 781 | 782 | 791 | 798 | 789 | 766 | 3393 |
| 13 q | 779 | 781 | 782 | 781 | 778 | 772 | 776 | 778 | 769 | 754 | 747 | 741 | 747 | 761 | 771 | 775 | 779 | 784 | 787 | 788 | 791 | 787 | 791 | 789 | 775 | 3588 |
| 14 q | 786 | 786 | 786 | 786 | 786 | 786 | 787 | 785 | 774 | 759 | 751 | 747 | 752 | 757 | 766 | 772 | 778 | 784 | 788 | 791 | 792 | 792 | 788 | 789 | 778 | 3668 |
| 15 | 785 | 785 | 786 | 786 | 791 | 792 | 796 | 797 | 791 | 783 | 769 | 761 | 742 | 747 | 740 | 764 | 775 | 769 | 771 | 763 | 768 | 769 | 780 | 773 | 774 | 3583 |
| 16 | 771 | 767 | 764 | 766 | 770 | 772 | 774 | 774 | 769 | 756 | 740 | 734 | 734 | 740 | 744 | 759 | 770 | 777 | 780 | 781 | 781 | 782 | 777 | 780 | 765 | 3362 |
| 17 | 774 | 769 | 776 | 776 | 778 | 780 | 785 | 781 | 769 | 756 | 742 | 739 | 737 | 747 | 748 | 765 | 769 | 776 | 772 | 771 | 776 | 780 | 781 | 776 | 768 | 3423 |
| 18 | 774 | 781 | 772 | 783 | 780 761 | 797 767 | 786 771 | 768 774 | 754 762 | 753 755 | 742 751 | 732 745 | 739 737 | 749 744 | 746 756 | 746 763 | 755 757 | 754 766 | 736 764 | 726 761 | 729 761 | 728 759 | 744 762 | 759 771 | 756 | 3133 |
| 19 20 | 760 | 761 772 | 759 772 | 757 768 | 778 | 773 | 775 | 778 | 770 | 751 | 747 | 738 | 737 | 742 | 751 | 756 | 742 | 759 | 775 | 779 | 780 | 770 | 757 | 7/1 756 | 759 762 | 3224 3299 |
| | 1 | | | | | | | | | | | 741 | 749 | 753 | 754 | 762 | 767 | 773 | | | | | | | | |
| 21 | 771 | 772 778 | 769 778 | 771 780 | 775 780 | 781 781 | 780 783 | 765 781 | 758 771 | 750 760 | 741 746 | 741 | 747 | 754 | 763 | 770 | 775 | 7785 | 767 788 | 770 789 | 771 789 | 782 788 | 765 788 | 773 786 | 765 | 3360 3581 |
| 22 q 23 q | 785 | 786 | 786 | 788 | 791 | 790 | 790 | 786 | 778 | 761 | 754 | 756 | 764 | 774 | 785 | 782 | 784 | 790 | 793 | 790 | 799 | 790 | 788 | 786 | 782 | 3776 |
| 24 | 782 | 783 | 781 | 782 | 785 | 785 | 785 | 782 | 775 | 766 | 760 | 756 | 757 | 765 | 778 | 783 | 787 | 784 | 753 | 746 | 776 | 762 | 763 | 771 | 773 | 3547 |
| 25 d | 768 | 774 | 778 | 777 | 778 | 775 | 753 | 763 | 725 | 691 | 679 | 708 | 715 | 760 | 752 | 811 | 917 | 871 | 780 | 691 | 675 | 716 | 700 | 704 | 753 | 3061 |
| 26 d | 694 | 712 | 668 | 708 | 751 | 743 | 708 | 725 | 704 | 677 | 691 | 704 | 712 | 746 | 729 | 740 | 725 | 734 | 754 | 781 | 749 | 753 | 760 | 758 | 726 | 2426 |
| 27 | 731 | 748 | 739 | 741 | 739 | 756 | 766 | 766 | 751 | 732 | 669 | 687 | 709 | 738 | 741 | 731 | 738 | 751 | 745 | 728 | 735 | 737 | 734 | 748 | 736 | 2660 |
| 28 | 758 | 755 | 780 | 768 | 773 | 757 | 744 | 739 | 731 | 709 | 699 | 700 | 721 | 733 | 736 | 730 | 728 | 746 | 734 | 740 | 771 | 760 | 781 | 761 | 744 | 2854 |
| 29 | 758 | 777 | 761 | 775 | 772 | 760 | 755 | 742 | 730 | 729 | 691 | 681 | 731 | 726 | 740 | 754 | 728 | 746 | 762 | 766 | 751 | 743 | 747 | 756 | 745 | 2881 |
| 30 | 763 | 751 | 754 | 758 | 771 | 762 | 751 | 733 | 733 | 726 | 710 | 710 | 721 | 739 | 752 | 735 | 751 | 765 | 753 | 747 | 752 | 762 | 763 | 766 | 747 | 2928 |
| 31 | 783 | 760 | 758 | 751 | 759 | 781 | 771 | 745 | 760 | 749 | 720 | 738 | 744 | 732 | 748 | 754 | 751 | 752 | 755 | 755 | 777 | 756 | 761 | 766 | 755 | 3126 |
| Mean | 737 | 746 | 756 | 755 | 759 | 763 | 762 | 757 | 749 | 735 | 722 | 725 | 733 | 749 | 757 | 767 | 771 | 780 | 763 | 760 | 747 | 751 | 743 | 748 | 751 | |
| Sum 22,000+ | 839 | 1119 | 1429 | 1394 | 1525 | 1661 | 1618 | 1477 | 1210 | 776 | 394 | 483 | 739 | 1216 | 1477 | 1780 | 1908 | 2184 | 1655 | 1547 | 1150 | 1265 | 1048 | 1198 | | Grand Total 559,091 |

$\label{eq:magnetic_declination} {\tt MAGNETIC\ DECLINATION\ (WEST)}$ Mean values for periods of sixty minutes ending at exact hours, G.M.T.

| 22 E | SKDALE | MUIR (I | o) | | | | | | | | | 10 | ۰ + | | | | | | | | | | | | остов | ER 1960 |
|---|---|--|---|---|--|---|--|--|--|--|--|--|--|--|--|--|--|--|---|--|---|--|---|--|--|---|
| | Hour (| 3.M.T. 1-2 | 2-3 | 3-4 | 4-5 | 5-6 | 6-7 | 7-8 | 8-9 | 9-10 | 10-11 | 11-12 | 12-13 | 13-14 | 14-15 | 15-16 | 16-17 | 17-18 | 18-19 | 19-20 | 20-21 | 21-22 | 22-23 | 23-24 | Mean | Sum 300·0+ |
| 1 d 2 3 4 5 6 d 7 d 8 9 10 | 20·9 17·4 23·1 20·9 18·5 18·8 -39·7 15·3 14·5 17·6 27·9 23·8 | 20·8 17·9 22·8 23·1 24·3 21·5 14·6 30·4 17·0 15·2 21·7 24·2 | 7·6 22·5 22·9 23·9 24·8 27·1 -6·4 23·3 15·5 18·8 21·8 24·1 | 20·6 17·9 24·2 24·4 19·9 21·7 -17·6 18·4 18·9 24·3 20·7 24·2 | 21·5 23·9 24·6 22·3 31·1 4·4 | 30·1 23·9 24·3 30·6 18·3 9·1 21·8 | 37·0 25·3 | 32·8 37·6 24·1 24·0 23·3 25·2 22·6 19·4 24·6 21·7 27·8 21·4 | 25·9 31·4 21·8 23·8 22·4 24·2 18·0 18·6 21·0 20·8 24·3 20·2 | 30·4 28·8 23·7 23·8 20·8 26·0 32·3 21·5 22·4 22·4 21·3 21·4 | 30·0 25·2 25·6 24·4 28·6 34·0 23·0 25·2 25·1 24·4 | 31·0 31·4 29·7 28·7 28·3 32·8 32·3 27·7 26·9 27·0 27·9 28·0 | 30·8 28·8 30·1 31·9 29·6 34·5 32·7 30·6 29·5 29·2 30·7 29·9 | 32·1 29·6 30·6 32·3 31·0 37·7 28·0 29·5 31·0 30·0 33·5 31·2 | 29·4 23·3 29·9 34·2 31·1 32·6 25·3 27·7 27·5 29·1 32·6 30·8 | 29·8 23·4 28·2 31·4 29·9 37·1 17·0 28·4 24·1 27·4 31·3 29·6 | 24·3 20·3 25·4 32·3 26·9 42·2 23·3 26·4 26·0 25·6 29·3 27·6 | 16·5 24·0 30·5 19·0 39·3 14·3 22·5 24·2 24·1 26·3 | 19·7 15·8 25·0 8·3 25·1 -0·6 19·7 22·4 24·9 22·5 25·6 27·2 | 20·4 25·0 24·6 23·5 26·3 26·9 22·2 14·1 17·0 23·1 25·4 26·0 | 20·2 25·5 24·1 15·8 25·4 4·4 26·2 16·2 19·2 21·7 22·4 26·3 | 9·8 25·0 22·6 22·6 23·3 8·1 18·3 14·3 18·9 17·7 19·2 24·1 | 21·2 24·3 22·7 19·4 13·0 13·9 9·4 18·8 22·8 16·8 23·6 18·1 | 19·4 19·6 22·6 24·9 9·9 -36·8 21·7 18·9 15·2 20·5 24·1 24·5 | 24·4 25·0 25·0 24·9 24·0 22·4 16·0 22·0 22·7 22·8 25·5 25·1 | 285·2 300·6 300·4 298·1 275·1 237·9 84·8 227·3 244·2 248·0 311·9 302·3 |
| 13 q 14 q 15 16 17 18 | 23·9 24·0 23·7 19·5 19·8 20·9 | 24·0 24·1 22·8 22·0 22·2 20·0 | 23·7 24·1 22·0 20·9 23·2 23·5 | 23·5 23·8 22·6 23·3 23·3 17·7 | 22·9 23·4 21·7 22·4 23·5 19·2 | 22·7 23·1 21·5 22·2 23·3 23·4 | 22·8 22·9 22·0 22·0 23·0 23·9 | | 19·7 20·3 20·7 20·3 20·4 24·1 | 19·7 19·7 20·9 20·8 21·2 24·3 | 21·5 22·6 23·8 22·8 23·3 26·6 | 24·3 26·0 28·6 26·9 26·0 29·0 | 27·6 29·6 31·8 30·5 28·3 31·0 | 29·9 30·9 35·1 32·9 31·4 32·3 | 30·4 31·0 33·3 30·5 29·8 33·0 | 29·1 29·3 34·6 29·2 28·4 28·8 | 27 · 6 27 · 6 36 · 1 27 · 5 26 · 5 26 · 5 | 26·7 32·8 26·8 25·9 28·7 | 26·4 26·4 33·3 26·0 25·4 28·9 | 26·0 26·0 23·8 25·6 23·4 22·2 | | 25·6 25·3 20·8 25·0 23·9 17·1 | | 24·6 24·6 17·1 21·6 21·2 19·6 | 24.3 | 295·2 304·0 309·6 288·3 283·8 283·8 |
| 19 20 21 22 q 23 q 24 25 d | 20·2 24·0 20·6 23·6 23·8 22·7 22·6 | 21·0 24·2 22·4 24·1 23·7 22·4 22·0 | 22·4 24·6 23·1 24·3 23·3 22·8 23·1 | 22·4 25·6 22·8 24·2 23·8 23·1 23·4 | 23·8 23·6 23·0 24·2 23·8 23·4 23·8 | 22·5 22·6 | 22·3 24·3 22·4 22·9 23·0 22·8 23·8 | 21·4 22·2 22·0 21·4 22·5 22·1 36·1 | 20·3 22·2 23·0 20·2 21·4 21·4 32·4 | 20·6 22·0 23·0 20·5 21·0 22·0 28·0 | 25·2 25·0 23·5 23·4 24·6 | 27·5 28·9 27·8 26·1 27·0 28·7 33·6 | 28·8 31·4 29·7 29·2 29·6 31·0 33·2 | 29·5 33·2 30·5 30·7 29·6 31·0 39·2 | 29·0 33·2 28·8 29·8 29·2 31·7 33·6 | 27·3 33·2 27·2 28·2 27·0 31·3 29·5 | 26·0 29·2 25·8 27·2 26·4 34·8 13·2 | 25·8 27·4 25·6 26·8 26·9 34·2 29·7 | 26·2 25·6 25·4 26·2 27·2 27·4 22·4 | 23·3 24·3 25·4 25·6 26·8 27·1 20·6 | 20·9 24·4 23·4 25·8 24·4 24·4 | 13·2 22·4 17·6 24·6 24·2 22·8 13·8 | 17·4 14·3 21·5 24·4 24·1 22·8 17·2 | 22·4 19·6 23·3 24·2 23·2 22·0 15·6 | 23·3 25·3 24·2 25·1 24·9 25·8 24·8 | 260·1 307·5 281·9 301·9 298·7 319·6 296·2 |
| 26 d 27 28 29 30 31 | 19·5 18·4 21·6 19·8 22·0 23·9 | 20·5 21·4 24·2 22·9 26·9 20·7 | 16·0 23·3 23·3 22·3 29·0 21·0 | 22·3 20·2 17·0 22·4 23·8 25·1 | 25·2 23·4 21·7 22·5 24·3 25·3 | 21·6 24·0 26·8 23·8 23·3 23·8 | 26·0 24·6 34·0 25·6 25·8 23·8 | 28·8 24·3 30·6 27·9 26·3 24·4 | 28·7 22·4 30·0 26·7 23·9 23·7 | 28·2 23·3 27·7 25·6 24·2 24·0 | 28·7 25·1 28·9 28·0 25·2 25·7 | 29·7 27·7 28·7 28·4 26·9 27·2 | 29·7 31·1 30·5 31·4 32·2 31·0 | 28·0 29·6 28·3 28·6 31·8 28·3 | 29·6 29·3 30·6 26·3 27·9 27·1 | 24·2 24·6 30·6 28·4 25·0 28·5 | 26·4 23·5 27·4 22·5 21·0 25·0 | 25·5 20·1 16·1 19·8 20·4 17·1 | 23·7 17·1 17·1 17·8 23·4 10·0 | 21·5 22·8 25·1 19·7 18·9 | 21.6 13.4 21.5 19.0 16.3 18.1 | 20·9 19·8 20·8 23·3 19·7 21·6 | 22·3 22·1 22·4 22·5 21·3 21·2 | 20·3 15·7 24·2 20·2 27·8 23·8 | 24·5 22·8 25·4 24·0 24·5 23·4 | 288 · 9 247 · 2 309 · 1 275 · 4 287 · 3 261 · 8 |
| Miean Sum 500·0+ | | | | | | | 24·7 265·0 | | | | | 380 · 7 | | | | | | 25·0 276·3 | | | | | | | 24 · 1 | Grænd Total 17916·1 |

23 ESEDALEMUIR (Z) 45,000y (0.45 C.G.S. unit) +

| 23 E | PEDALE | MUIK (| <i>c</i>) | | | | | | | | 45, | 000y (t | 0.45 C. | G.S. u | nit) + | | | | | | | | | | OCTOBE | R 1960 |
|----------------------------------|---------------------------------|--------------------------------------|--------------------------------------|--------------------------------------|--------------------------------------|--------------------------------------|--------------------------------------|--------------------------------------|--------------------------------------|--------------------------------------|--------------------------------------|--------------------------------------|---------------------------------|--------------------------------------|--------------------------------------|--------------------------------------|--------------------------------------|--------------------------------------|--------------------------------------|--------------------------------------|--------------------------------------|--------------------------------------|---------------------------------|--------------------------------------|--------------------------------------|--------------------------------------|
| | Hour 0-1 | G.M.T. 1-2 | 2-3 | 3-4 | 4-5 | 5-6 | 6-7 | 7-8 | 8-9 | 9-10 | 10-11 | 11-12 | 12-13 | 13-14 | 14-15 | 15-16 | 16-17 | 17-18 | 18-19 | 19-20 | 20-21 | 21-22 | 22-23 | 23-24 | Mean | Sum 8000+ |
| 1 d 2 3 4 5 | 363 358 357 371 351 | γ 343 338 369 373 338 | γ 338 296 376 376 349 | γ 307 288 376 376 365 | γ 297 304 376 376 364 | 9 303 315 376 375 352 | γ 308 318 376 376 361 | γ 323 325 381 377 369 | γ 346 340 383 380 372 | γ 364 368 380 379 375 | γ 362 384 389 377 374 | 7 373 393 389 375 372 | 381 431 389 371 376 | γ 400 435 387 371 385 | 7 425 469 387 382 398 | γ 427 462 388 419 404 | γ 439 459 392 458 400 | 7 422 438 389 503 414 | 7 421 417 382 513 399 | γ 404 394 380 448 388 | 7 389 384 381 458 387 | 7 346 381 383 431 381 | 365 376 382 353 322 | γ 366 362 377 320 328 | γ 367 376 381 397 372 | 812 1035 1145 1538 924 |
| 6 d 7 d 8 9 10 | 360 -48 292 354 357 | 363 202 250 331 350 | 284 220 301 301 337 | 209 104 332 298 341 | 186 138 353 305 366 | 247 176 367 326 380 | 286 263 382 335 388 | 323 323 388 349 392 | 354 365 391 375 393 | 364 381 386 383 392 | 372 386 391 387 389 | 408 415 391 390 384 | 433 437 394 391 380 | 451 465 440 406 379 | 553 519 420 422 384 | 614 564 417 437 392 | 687 559 418 427 396 | 655 499 426 430 399 | 487 444 419 423 403 | 467 432 421 406 406 | 231 370 396 394 406 | 230 359 379 383 394 | 132 342 358 327 378 | 50 292 345 331 366 | 364 342 377 371 381 | 746 207 1057 911 1152 |
| 11 12 q 13 q 14 q 15 | 354 381 376 381 382 | 342 383 378 380 381 | 364 385 380 380 381 | 373 387 381 379 380 | 376 387 382 379 377 | 373 387 383 379 377 | 379 387 381 377 376 | 381 389 382 378 375 | 383 391 382 380 375 | 387 388 380 383 374 | 383 381 376 375 370 | 380 375 371 370 370 | 381 375 370 366 371 | 385 372 368 366 376 | 400 376 368 371 377 | 403 380 372 376 379 | 399 383 377 379 396 | 395 383 379 379 438 | 395 384 380 380 446 | 394 388 381 381 464 | 395 389 381 381 424 | 392 387 380 381 399 | 387 378 380 382 388 | 384 371 381 382 375 | 383 383 378 378 390 | 1185 1187 1069 1065 1351 |
| 16 17 18 19 20 | 381 381 377 387 383 | 383 381 354 386 383 | 386 381 337 387 381 | 384 381 332 388 380 | 383 381 353 384 377 | 384 381 354 376 381 | 382 377 357 375 380 | 382 381 364 380 382 | 382 384 370 383 384 | 377 384 376 385 385 | 373 381 376 383 383 | 371 377 379 381 381 | 376 376 381 378 382 | 380 376 389 383 390 | 383 382 403 388 398 | 383 387 409 395 406 | 383 388 411 400 412 | 383 387 427 395 403 | 382 388 464 396 394 | 383 393 437 401 389 | 382 391 389 399 388 | 383 388 381 396 392 | 388 387 393 387 395 | 387 382 389 383 389 | 382 383 383 387 388 | 1161 1195 1202 1296 1318 |
| 21 22 q 23 q 24 25 d | 378 380 378 380 382 | 377 381 377 380 383 | 382 382 376 377 383 | 386 382 376 377 382 | 385 381 376 376 381 | 383 380 376 376 382 | 382 377 375 376 384 | 382 381 376 376 357 | 383 383 376 375 346 | 383 380 375 372 353 | 382 375 369 369 354 | 380 366 364 366 372 | 377 366 365 369 394 | 380 369 367 371 428 | 383 372 372 377 449 | 384 377 376 393 499 | 387 379 376 436 564 | 387 377 376 523 677 | 388 377 376 461 659 | 389 377 377 456 510 | 389 377 376 416 434 | 383 377 377 400 403 | 381 377 377 389 384 | 381 377 378 380 296 | 383 377 374 395 423 | 1192 1050 987 1471 2156 |
| 26 d 27 28 29 30 | 274 352 373 366 370 | 246 325 348 322 368 | 260 329 321 357 350 | 289 341 337 372 360 | 312 362 346 376 372 | 333 375 354 379 378 | 355 383 340 381 381 | 378 388 363 381 387 | 387 395 376 386 395 | 393 395 383 388 395 | 406 400 400 394 403 | 427 410 418 406 423 | 446 412 447 408 415 | 468 412 447 430 410 | 485 427 452 425 427 | 480 435 471 417 430 | 456 457 476 457 435 | 437 460 460 441 417 | 417 434 432 426 415 | 387 421 416 398 417 | 378 422 398 402 410 | 389 381 383 386 395 | 350 343 376 352 389 | 357 372 377 364 364 | 380 393 396 392 396 | 1110 1431 1494 1414 |
| Mean | 320 350 | 343 350 | 361 349 | 365 346 | 372 351 | 375 357 | 380 364 | 390 371 | 392 378 | 388 | 390 382 | 394 386 | 398 391 | 408 | 418 | 419 | 414 | 418 | 422 423 | 403 | 387 391 | 383 | 388 | 375 354 | 388 | 1303 |
| Sum 10,000+ | 851 | 858 | 818 | 728 | 883 | 1083 | 1278 | 1503 | 1707 | 1796 | 1834 | 1971 | 2136 | 2394 | 2792 | 3095 | 3400 | 3517 | 3124 | 2708 | 2104 | 1803 | 1306 | 981 | | Grand Total 284,670 |

DAILY EXTREMES OF TERRESTRIAL MAGNETIC ELEMENTS, MAGNETIC CHARACTER FIGURES (K AND C) AND TEMPERATURE IN MAGNET HOUSE

| | | | | | | T | ERRESTR | IAL | MAGNETI | C ELEME | NTS | | | | | | | | Magnetic | Temperatur |
|------|-------|-------|-------|----------------|-------|----|-----------------|------------|---------------|----------------|--------------|----------------|------------|------------|----------------|-------|------------------------|----------|--------------------|----------------|
| | | Horiz | ontal | force | | | | De | clinati | on | | | Vert | ical f | огсе | | 3-hr. range indices | Sum of K | character | in magnet |
| | Max: | | | imum 100γ + | Range | | Meximum 10°+ | | Mini 10 | imum + | Range | Maxi 45,00 | | | imum 100y + | Range | K | indices | of day, C (0-2) | house 200 + |
| | h. m. | γ | γ | h. m. | γ | h. | | | | h. m. | | h. m. | γ | γ | h. m. | γ | | | | °A. |
| 1 d | 06 30 | 808 | 678 | 09 52 | 130 | 14 | | 5 . 2 | -4.4 | 21 15 | 40.6 | 16 26 | 444 | 280 | 04 02 | 164 | 4,5,4,4,4,3,4,5 | 33 | 1 | 84.5 |
| 2 | 17 01 | 846 | 681 | 12 08 | 165 | 07 | | 3.9 | 8.2 | 17 43 | 30.7 | 14 20 16 53 | 480 395 | 277 | 02 52 00 29 | 203 | 3,4,4,3,5,5,4,3 | 31 | 1 | 84.7 |
| 3 | 23 49 | 786 | 685 | 10 24 | 101 | 13 | | ۱۰0 و٠ي | 19·2 -20·6 | 23 59 18 27 | 11·8 62·5 | 18 20 | 613 | 354 273 | 23 01 | 340 | 2,2,2,3,3,3,2,2 | 19 | 0 | 84.7 |
| 4 | 18 12 | 872 | 696 | 19 13 | 176 | 16 | | 1.0 | -0.5 | 23 11 | 34.5 | 17 38 | 421 | 303 | 22 46 | 118 | 2,1,2,2,3,5,6,5 | 26 28 | 2 | 84.6 |
| 5 | 22 10 | 800 | 669 | 22 54 | 131 | 05 | 10 3 | | -0.3 | 23 11 | 34.3 | 17 30 | 721 | 303 | 22 40 | 110 | 4,4,3,2,3,4,3,5 | 40 | 1 | 84 · 7 |
| 6 d | 17 56 | 1786 | -190 | 22 54 | 1976 | 22 | 55 8 | 5.7 | -62 · 2 | 18 06 | 147 · 9 | 16 43 | 801 | -313 | 22 55 | 1114 | 4,6,5,6,7,8,8,9 | 53 | 2 | 84 · 5 |
| 7 d | 14 57 | 987 | -1253 | 01 05 | 2240 | 01 | | 1.7 | -105.7 | 00 31 | 270 · 4 | 15 56 | 617 | -240 | 00 32 | 857 | 9,8,6,6,6,6,5,6 | 52 | 2 | 84 · 5 |
| 8 | 23 28 | 774 | 636 | 10 29 | 138 | 01 | | 5 1 | 8 · 5 | 19 30 | 26 · 6 | 19 18 | 428 | 234 | 01 22 | 194 | 5,2,3,4,3,3,4,4 | 28 | 1 | 84 · 5 |
| 9 | 19 37 | 823 | 685 | 10 49 | 138 | 06 | | ?∙2 | 7 · 2 | 23 13 | 25.0 | 15 12 | 445 | 295 | 03 07 | 150 | 3,4,3,3,4,3,4,5 | 29 | 1 | 84 · 5 |
| 10 | 22 29 | 777 | 723 | 11 20 | 54 | 13 | 29 3 |) · 2 | 12.5 | 01 40 | 17.7 | 19 58 | 407 | 331 | 03 07 | 76 | 3,3,2,0,1,1,2,3 | 15 | 0 | 84 · 4 |
| 11 | 21 19 | 787 | 712 | 11 12 | 75 | 14 | 17 3 | ;. g | 14.3 | 21 13 | 21.6 | 14 57 | 405 | 335 | 01 09 | 70 | 3,3,3,2,2,2,2,3 | 20 | 0 | 84 · 4 |
| 12 a | 22 14 | 811 | 723 | 11 42 | 88 | 13 | | .6 | 15.6 | 22 03 | 16.0 | 20 57 | 392 | 369 | 23 30 | 23 | 1,1,1,2,1,2,2,3 | 13 | ő | 84.6 |
| 13 a | 22 37 | 797 | 739 | 11 27 | 58 | 14 | | .1 | 18.9 | 09 50 | 12 · 2 | 05 49 | 383 | 367 | 13 02 | 16 | 1,2,1,2,2,0,1,1 | 10 | ŏ | 84.5 |
| 14 a | 21 36 | 797 | 741 | 11 01 | 56 | 14 | | .4 | 19.1 | 09 31 | 12.3 | 09 29 | 384 | 365 | 13 08 | 19 | 1,1,1,2,1,0,0,1 | 7 | Ŏ | 84.3 |
| 15 | 18 27 | 818 | 720 | 14 20 | 98 | 18 | 41 39 | 1 | 11.4 | 22 41 | 27 · 7 | 19 13 | 493 | 368 | 10 07 | 125 | 1,2,2,2,3,3,4,4 | 21 | 1 | 84.5 |
| 16 | 23 52 | 788 | 727 | 12 58 | 61 | 13 | 23 35 | . 6 | 17.2 | 00 01 | 18-4 | 22 30 | 388 | 370 | 11 29 | 18 | 2,1,2,2,2,2,0,2 | 13 | o | 84.5 |
| 17 | 06 23 | 789 | 731 | 12 19 | 58 | 13 | | . 3 | 18 · 7 | 01 00 | 13.6 | 19 52 | 393 | 374 | 13 13 | 19 | 2,1,1,2,2,1,2,2 | 13 | ő | 84.5 |
| 18 | 05 11 | 803 | 670 | 21 10 | 133 | 13 | | .6 | 7.0 | 20 54 | 27.6 | 18 54 | 491 | 327 | 03 08 | 164 | 3,3,3,2,3,3,5,5 | 27 | i | 84 · 4 |
| 19 | 07 38 | 778 | 727 | 12 02 | 51 | 12 | | . 5 | 10.0 | 21 25 | 20.5 | 19 32 | 403 | 371 | 06 00 | 32 | 2,3,2,3,2,2,2,4 | 20 | ō | 84 · 1 |
| 20 | 20 02 | 787 | 727 | 12 06 | 60 | 15 | 27 33 | . 7 | 12.5 | 22 10 | 21 · 2 | 16 19 | 415 | 377 | 04 32 | 38 | 1, 2, 2, 2, 2, 3, 2, 3 | 17 | 0 | 84.3 |
| 21 | 21 22 | 800 | 735 | 10 37 | 65 | 13 | 19 31 | ا و . | 12 · 4 | 21 19 | 19.5 | 20 38 | 391 | 376 | 01 18 | 15 | 2,1,2,2,2,0,2,4 | 15 | 0 | 84 · 4 |
| 22 a | 19 23 | 792 | 740 | 11 30 | 52 | 13 | | ٠o | 19.7 | 09 26 | 11.3 | 08 30 | 383 | 366 | 11 58 | 17 | 0,0,1,1,1,1,1,0 | 5 | ŏ | 84.3 |
| 13 a | 20 33 | 808 | 750 | 11 10 | 58 | 12 | | - 5 | 20 · 4 | 09 11 | 10 · 1 | 24 00 | 380 | 364 | 11 57 | 16 | 1,0,1,1,1,2,2 | 9 | Ō | 83.9 |
| 24 | 14 56 | 825 | 725 | 19 17 | 100 | 16 | | . 2 | 16.7 | 20 10 | 29.5 | 17 43 | 568 | 365 | 11 20 | 203 | 1,1,1,2,3,5,4,2 | 19 | 1 | 84 · 1 |
| 25 d | 16 06 | 1659 | 583 | 20 33 | 1076 | 16 | 08 59 | -6 | -18·7 | 20 31 | 78·3 | 17 16 | 754 | 265 | 23 58 | 489 | 2,2,4,4,5,8,7,5 | 37 | 2 | 84 · 2 |
| 26 d | 19 57 | 826 | 595 | 02 22 | 231 | 14 | 24 37 | . 3 | 5.3 | 00 31 | 32.0 | 14 58 | 520 | 232 | 01 35 | 288 | 6,5,4,4,4,4,4,3 | 34 | 2 | 84 · 1 |
| 7 | 21 24 | 781 | 654 | 10 48 | 127 | 14 | | .8 | 0.8 | 20 53 | 34.0 | 16 53 | 490 | 317 | 01 59 | 173 | 4,3,2,4,3,4,5,5 | 30 | ī | 84 · 4 |
| 8 | 17 45 | 826 | 680 | 10 53 | 146 | 06 | 02 39 | ۱ و ۰ | 3.0 | 18 04 | 36.9 | 17 19 | 495 | 312 | 02 25 | 183 | 3,5,3,4,3,5,4,3 | 30 | 1 | 83.8 |
| 9 | 01 08 | 827 | 646 | 10 52 | 181 | 13 | | · 0 | 9.9 | 18 32 | 25 1 | 16 31 | 479 | 314 | 01 33 | 165 | 4, 3, 3, 4, 4, 4, 4, 4 | 30 | 1 | 84.3 |
| 0 | 23 44 | 788 | 684 | 11 36 | 104 | 23 | 54 36 | 8 | 10-9 | 20 08 | 25.9 | 16 20 | 441 | 330 | 24 00 | 111 | 4,3,3,4,4,4,4,4 | 30 | 1 | 84 · 4 |
| 1 | 20 34 | 812 | 703 | 10 47 | 109 | 12 | 54 33 | · 1 | 2.5 | 17 53 | 30.6 | 17 48 | 432 | 314 | 00 24 | 118 | 4,3,3,3,3,5,5,3 | 29 | 1 | 84 · 4 |
| an | | 870 | 604 | | 266 | _ | - 41 | .3 | 2.9 | | 38 · 5 | | 469 | 289 | | 179 | _ | | 0.74 | 84.3 |

 ${\it q}$ denotes an international quiet day and ${\it d}$ an international disturbed day.

| ? | 22-23 | 23-24 | Mean | Sum 14,000+ |
|---|-------|-------|------|----------------|
| | - γ | γ | γ | |
| | 769 | 773 | 764 | 4342 |
| | 767 | 767 | 764 | 4339 |
| | 715 | 733 | 762 | 4281 |
| | 757 | 735 | 744 | 3858 |
| | 767 | 771 | 764 | 4329 |
| | 776 | 776 | 772 | 4518 |
| | 784 | 785 | 775 | 4592 |
| | 769 | 775 | 777 | 4638 |
| | 777 | 776 | 776 | 4632 |
| | 798 | 792 | 783 | 4794 |

NOVEMBER 1960

| | | | / | | | | | | | | | . , , | | | | | | | | | | | | | | |
|-------------------------|--------------------------------------|--------------------------------------|--------------------------------------|--------------------------------------|--------------------------------------|--------------------------------------|--------------------------------------|--------------------------------------|---------------------------------|--------------------------------------|--------------------------------------|--------------------------------------|--------------------------------------|--------------------------------------|--------------------------------------|--------------------------------------|--------------------------------------|--------------------------------------|--|--------------------------------------|--------------------------------------|--------------------------------------|---------------------------------|--------------------------------------|--------------------------------------|--------------------------------------|
| | Hour 0-1 | G.M.T. 1-2 | 2-3 | 3-4 | 4-5 | 5-6 | 6-7 | 7-8 | 8-9 | 9-10 | 10-11 | 11-12 | 12-13 | 13-14 | 14-15 | 15-16 | 16-17 | 17-18 | 18-19 | 19-20 | 20-21 | 21-22 | 22-23 | 3 23-24 | Mean | Sum 14,000+ |
| 1 2 3 4 d 5 | γ 770 771 779 712 774 | γ 764 772 788 745 768 | 7 770 779 774 683 769 | γ 774 783 767 763 759 | γ 765 783 782 799 768 | γ 755 790 783 747 779 | 7 787 787 789 767 774 | γ 767 772 783 750 771 | 761 747 764 714 758 | 7 755 732 741 707 757 | γ 747 728 735 718 744 | 7 744 736 737 721 740 | 7 747 737 749 723 740 | γ 757 736 748 749 740 | γ 762 749 755 762 757 | 7 753 758 760 785 767 | γ 764 760 773 754 772 | 7 772 768 769 747 772 | 778 778 773 775 755 770 | 7 772 770 770 757 771 | γ 768 780 772 752 771 | γ 768 794 740 756 770 | 769 767 715 757 767 | 7 773 767 733 735 771 | γ 764 764 762 744 764 | 4342 4339 4281 3858 4329 |
| 6 | 772 | 772 | 775 | 777 | 779 | 782 | 784 | 779 | 775 | 762 | 759 | 752 | 753 | 755 | 770 | 772 | 775 | 776 | 776 | 771 | 780 | 770 | 776 | 776 | 772 | 4518 |
| 7 q | 778 | 768 | 775 | 783 | 784 | 791 | 797 | 791 | 780 | 765 | 763 | 751 | 747 | 751 | 757 | 764 | 769 | 777 | 780 | 783 | 784 | 785 | 784 | 785 | 775 | 4592 |
| 8 q | 784 | 783 | 783 | 786 | 790 | 794 | 792 | 788 | 778 | 761 | 752 | 750 | 755 | 763 | 768 | 776 | 779 | 784 | 784 | 785 | 784 | 775 | 769 | 775 | 777 | 4638 |
| 9 q | 784 | 772 | 779 | 779 | 780 | 791 | 791 | 787 | 784 | 771 | 767 | 755 | 760 | 769 | 769 | 772 | 775 | 776 | 780 | 780 | 779 | 779 | 777 | 776 | 776 | 4632 |
| 10 | 778 | 777 | 779 | 782 | 786 | 787 | 790 | 797 | 791 | 781 | 758 | 749 | 754 | 763 | 779 | 779 | 790 | 791 | 799 | 797 | 799 | 798 | 798 | 792 | 783 | 4794 |
| 11 | 792 | 788 | 796 | 795 | 806 | 814 | 810 | 789 | 783 | 780 | 752 | 736 | 748 | 760 | 759 | 762 | 770 | 774 | 775 | 784 | 784 | 784 | 773 | 777 | 779 | 4691 |
| 12 | 765 | 769 | 774 | 780 | 785 | 789 | 789 | 783 | 778 | 772 | 766 | 760 | 764 | 780 | 805 | 800 | 809 | 850 | 1032 | 998 | 766 | 691 | 572 | 664 | 785 | 4841 |
| 13 d | 78 | 599 | 548 | 579 | 616 | 490 | 83 | -13 | 521 | 654 | 745 | 671 | 712 | 699 | 765 | 936 | 689 | 747 | 815 | 778 | 715 | 705 | 665 | 673 | 603 | 470 |
| 14 d | 538 | 603 | 679 | 717 | 717 | 719 | 721 | 723 | 724 | 714 | 717 | 706 | 707 | 725 | 712 | 734 | 734 | 737 | 748 | 737 | 738 | 726 | 725 | 718 | 709 | 3019 |
| 15 d | 722 | 729 | 739 | 740 | 735 | 733 | 733 | 725 | 733 | 734 | 735 | 732 | 726 | 774 | 787 | 801 | 800 | 766 | 772 | 740 | 744 | 692 | 736 | 621 | 740 | 3749 |
| 16 d | 227 | 501 | 270 | 496 | 663 | 702 | 698 | 670 | 660 | 697 | 718 | 725 | 721 | 746 | 747 | 748 | 744 | 738 | 740 | 749 | 751 | 753 | 747 | 752 | 665 | 1963 |
| 17 | 755 | 737 | 734 | 744 | 747 | 750 | 755 | 760 | 753 | 751 | 752 | 752 | 745 | 748 | 750 | 737 | 761 | 751 | 728 | 752 | 751 | 743 | 741 | 743 | 747 | 3940 |
| 18 q | 739 | 746 | 761 | 748 | 745 | 747 | 748 | 746 | 741 | 734 | 736 | 739 | 740 | 742 | 748 | 754 | 759 | 764 | 765 | 767 | 765 | 764 | 763 | 763 | 751 | 4024 |
| 19 q | 762 | 763 | 765 | 769 | 770 | 779 | 779 | 779 | 780 | 769 | 772 | 773 | 767 | 770 | 760 | 764 | 766 | 769 | 772 | 775 | 775 | 782 | 776 | 779 | 771 | 4515 |
| 20 | 778 | 773 | 780 | 782 | 788 | 787 | 776 | 774 | 764 | 756 | 760 | 757 | 764 | 763 | 748 | 762 | 762 | 771 | 772 | 774 | 775 | 772 | 771 | 775 | 770 | 4484 |
| 21 | 772 | 775 | 779 | 780 | 780 | 786 | 800 | 748 | 755 | 734 | 744 | 736 | 720 | 730 | 755 | 749 | 759 | 741 | 749 | 717 | 740 | 750 | 747 | 754 | 754 | 4100 |
| 22 | 729 | 719 | 744 | 740 | 751 | 739 | 760 | 760 | 752 | 744 | 737 | 718 | 725 | 732 | 743 | 749 | 741 | 746 | 751 | 762 | 766 | 766 | 793 | 760 | 747 | 3927 |
| 23 | 763 | 765 | 772 | 772 | 776 | 779 | 772 | 781 | 770 | 767 | 755 | 752 | 755 | 759 | 752 | 760 | 764 | 763 | 765 | 767 | 760 | 764 | 759 | 747 | 764 | 4339 |
| 24 | 752 | 753 | 769 | 767 | 779 | 784 | 788 | 772 | 774 | 771 | 767 | 763 | 767 | 770 | 769 | 779 | 780 | 780 | 783 | 784 | 782 | 767 | 729 | 782 | 771 | 4511 |
| 25 | 756 | 756 | 760 | 767 | 775 | 784 | 781 | 775 | 732 | 751 | 735 | 721 | 737 | 747 | 721 | 735 | 739 | 744 | 733 | 737 | 721 | 726 | 753 | 762 | 748 | 3948 |
| 26 | 757 | 761 | 770 | 770 | 752 | 769 | 767 | 760 | 737 | 737 | 745 | 748 | 733 | 748 | 757 | 756 | 765 | 769 | 771 | 764 | 739 | 759 | 762 | 770 | 757 | 4166 |
| 27 | 784 | 771 | 767 | 769 | 779 | 787 | 780 | 782 | 769 | 771 | 764 | 759 | 760 | 759 | 738 | 752 | 751 | 743 | 745 | 744 | 765 | 772 | 748 | 767 | 764 | 4326 |
| 28 | 765 | 752 | 761 | 776 | 771 | 786 | 783 | 776 | 763 | 741 | 752 | 755 | 753 | 745 | 762 | 766 | 772 | 774 | 779 | 774 | 774 | 771 | 771 | 768 | 766 | 4390 |
| 29 | 779 | 764 | 775 | 775 | 777 | 782 | 782 | 786 | 778 | 773 | 767 | 753 | 759 | 764 | 769 | 767 | 772 | 780 | 779 | 771 | 770 | 768 | 775 | 772 | 772 | 4537 |
| 30 | 775 | 769 | 769 | 771 | 791 | 785 | 787 | 782 | 779 | 772 | 767 | 767 | 766 | 765 | 765 | 765 | 774 | 775 | 763 | 782 | 776 | 759 | 763 | 762 | 772 | 4529 |
| ean Sum | 716 | 743 | 739 | 753 | 764 | 763 | 752 | 741 | 750 | 749 | 749 | 742 | 745 | 752 | 758 | 769 | 764 | 767 | 777 | 774 | 764 | 758 | 752 | 753 | 754 | Grand To |

$\label{eq:magnetic} \mbox{MAGNETIC DECLINATION (WEST)}$ Mean values for periods of sixty minutes ending at exact hours, G.M.T.

| 22 E | SKDALE | MUIR (| D) | | | | | | | | | 1 | 10° + | | | | | | | | | | | | NOVEMB | ER 1960 |
|---|--|--|---|--|--|--|--|--|--|--------------------------------------|--|--|--|--|--|--|--|--|--|---|--|--|--|---|--|---|
| | Hour (| G.M.T. 1-2 | 2-3 | 3-4 | 4-5 | 5-6 | 6-7 | 7-8 | 8-9 | 9-10 | 10-11 | 11-12 | 12-13 | 13-14 | 14-15 | 15-16 | 16-17 | 17-18 | 18-19 | 19-20 | 20-21 | 21-22 | 22-23 | 23-24 | Mean | Sum 400·0+ |
| 1 2 3 4 d 5 6 7 q 8 q | 21·6 23·5 22·4 18·4 22·4 22·6 21·4 22·8 | 26·0 14·4 22·2 22·8 22·0 23·1 | 23·1 24·2 23·6 | 24·2 21·7 17·9 26·9 23·3 22·1 23·7 | 24·1 21·6 21·7 21·0 25·8 23·7 22·7 23·3 | 22·8 22·6 23·2 23·1 | 22·1 22·1 26·2 22·8 22·7 25·4 22·7 | 23·3 20·9 21·5 23·3 23·4 23·1 21·2 | 23·6 21·7 21·3 20·2 | 22·8 20·4 20·0 19·9 | 25·6 23·9 29·6 23·3 22·7 22·5 21·8 | 28·8 26·1 29·2 26·3 26·4 23·9 24·5 | 29·7 31·6 27·8 28·7 27·4 27·3 25·7 26·4 | 28·6 31·3 26·6 26·1 26·4 27·4 | 29·7 28·8 29·0 32·2 26·2 25·5 25·8 26·5 | 27·8 28·2 26·8 16·7 23·0 24·2 24·6 25·7 | 25·1 28·6 22·7 23·6 23·7 24·9 | 25·2 24·8 27·0 22·8 22·7 23·7 24·6 | 24·3 17·6 22·7 22·3 23·5 24·0 | 23·5 18·5 22·5 23·6 23·1 23·9 | 22·6 19·7 13·6 18·5 22·0 19·9 22·8 23·6 | 22·5 19·4 22·6 22·0 | 18·5 13·8 16·2 22·2 21·8 22·5 20·2 | 8·6 18·9 22·1 22·0 22·6 18·8 | 24·6 24·2 22·1 22·2 23·7 23·1 23·3 23·2 | 189·8 180·4 130·6 132·5 167·7 153·8 158·8 |
| 9 q 10 11 12 13 d 14 d 15 d | 19·2 25·1 24·7 19·4 34·4 16·1 23·3 | 24·8 23·3 6·7 22·8 20·3 | 25·5 26·4 24·9 5·3 25·2 20·1 | 25·6 26·0 24·9 31·4 24·6 22·8 | 23·9 25·3 26·0 25·4 19·2 23·9 23·3 | 25·0 26·4 25·2 24·3 23·6 24·0 | 24·8 25·5 50·4 23·2 25·1 | 22·7 23·6 25·4 25·0 28·6 23·2 23·8 | 22·0 22·7 23·8 24·2 14·6 21·5 21·6 | 19·8 20·6 | 21 · 3 | 29·8 30·7 25·2 7·6 22·4 24·6 | 27·3 32·4 28·9 26·8 10·5 22·9 26·0 | 28·7 33·8 29·6 31·5 30·3 25·0 27·5 | 29·6 34·1 29·0 35·2 23·6 24·2 31·5 | 28·2 33·7 28·2 32·8 32·5 22·5 30·0 | 31·0 27·1 33·5 20·5 24·6 29·2 | 29·5 26·6 37·8 27·9 18·7 21·4 | 29·4 26·1 26·7 6·2 13·3 29·8 | 26·1 28·0 26·4 29·8 4·0 23·8 25·7 | 25·6 26·9 26·5 34·1 21·7 20·7 21·3 | 25·8 26·0 27·8 15·0 23·4 20·2 | 25·5 24·9 19·5 25·1 22·0 25·2 | 23·1 26·0 | 24·4 27·2 26·2 26·8 17·8 22·1 24·4 | 185·4 253·9 229·8 242·4 27·7 131·1 184·6 |
| 16 d 17 18 q 19 q 20 | 25·6 25·9 20·6 23·0 24·1 | 27·8 23·1 23·1 25·5 | 26·7 22·4 23·3 25·4 | 23·3 25·6 | 26·9 23·8 22·0 23·8 25·5 | 17·9 23·5 21·2 23·8 24·6 | 18·1 22·8 21·2 23·3 24·6 | 22·8 21·1 22·8 24·9 | 19·2 22·4 20·8 22·8 23·6 | 23·3 23·0 21·4 22·1 25·0 | 24·7 23·0 23·6 26·8 | 26·0 24·4 25·6 26·9 | 24·9 25·0 26·1 26·4 27·7 | 26·5 27·1 | 24·1 24·6 25·7 26·0 26·7 | 20·6 23·3 24·9 25·6 25·5 | 23·3 17·1 24·6 24·8 25·3 | 14·9 24·0 24·5 25·1 | 22·5 16·6 23·6 23·8 23·7 | 17·9 22·8 23·0 23·6 23·3 | 18·4 22·8 22·8 23·5 23·0 | 21·5 21·1 22·8 23·6 23·0 | 22·0 19·1 22·8 23·6 23·0 | 23·2 21·0 22·8 23·8 22·4 | 19·9 22·7 22·9 24·0 24·9 | 78·7 146·0 150·7 176·2 198·3 |
| 21 22 23 24 25 | 22·0 16·9 23·0 18·5 18·8 | 23·2 23·5 24·2 20·6 21·0 | 23·9 34·8 25·2 25·6 23·8 | 23·7 29·3 | 24·2 20·6 22·8 23·1 28·7 | 28·9 24·1 23·4 23·3 26·1 | 31·5 26·1 27·3 23·4 23·3 | 29·6 26·4 27·4 22·9 24·2 | 22·8 23·1 25·7 23·2 24·6 | 24·3 22·0 24·2 23·8 23·9 | 26·5 23·5 25·0 25·3 24·7 | 25·8 27·4 26·3 30·3 | 30·6 27·8 27·4 26·8 27·8 | 28·2 28·4 | 30·7 27·9 26·6 27·5 26·1 | 31·0 30·5 25·6 26·4 26·2 | 29·6 28·7 24·5 26·1 22·4 | 27 · 4 24 · 1 25 · 1 16 · 1 | 24·8 23·7 22·7 24·6 22·4 | 17·4 22·9 22·5 23·4 19·8 | 20·5 22·8 20·6 22·9 18·4 | 21·7 19·9 21·6 23·0 17·8 | 22·5 20·1 13·5 17·0 | 14·3 20·7 19·0 6·6 15·0 | 25·1 24·6 24·2 23·1 23·2 | 202·1 189·3 180·4 153·8 156·1 |
| 26 27 28 29 30 | 21·5 21·0 22·5 17·8 21·4 | 21·9 21·6 20·3 21·8 22·3 | 24·2 22·1 21·3 23·4 21·4 | 22·5 21·4 22·9 | 26·7 23·4 25·1 22·3 23·3 | 24·6 24·7 25·8 21·7 22·6 | 24·3 23·8 26·2 22·0 22·5 | 24·0 23·9 27·8 23·5 23·0 | 26·9 23·1 25·9 23·2 22·9 | 27·0 22·8 25·1 23·1 23·8 | 27·4 25·1 25·7 24·5 24·3 | 25·5 28·1 26·4 | 28·7 26·1 28·5 27·4 27·4 | 27·8 27·4 24·6 27·7 27·8 | 28·0 28·2 25·6 28·1 28·2 | 26·0 28·3 25·6 26·6 26·9 | 23·9 24·9 24·9 26·1 25·6 | 17·0 24·9 25·3 | 23·1 11·1 24·6 24·7 23·8 | 23·3 22·7 24·3 24·2 23·4 | 20·2 18·8 23·1 21·4 20·0 | 21·2 13·4 22·7 21·4 16·0 | 20·6 16·0 22·6 19·5 13·2 | 21·3 21·5 | 24·5 22·2 24·5 23·6 23·3 | 187·8 133·6 187·9 166·5 159·0 |
| Mean | 21.0 | 21 · 7 | 23 · 0 | 23 · 7 | 23.8 | 23 · 7 | 24 · 8 | 23.7 | 22.5 | 21.9 | 22 · 7 | 25 · 8 | 26 · 9 | 27 · 9 | 27 · 8 | 26.6 | 25.6 | 24 · 4 | 22.6 | 22 · 7 | 22.0 | 21.0 | 20.5 | 20 · 2 | 23.6 | - 17 11 |
| Sum 600·0+ | 28 · 7 | 51 · 4 | 90·8 | 110.3 | 113·1 | 111-3 | 143 · 2 | 112·3 | 75 · 2 | 55 · 5 | 80.8 | 174.6 | 208 · 0 | 238 · 0 | 234 · 9 | 197 · 9 | 166 · 8 | 131.0 | 77 · 7 | 81 · 2 | 58 · 7 | 31 · 2 | 15 · 4 | 4.8 | | Grand Total 16992.8 |

TERRESTRIAL MAGNETIC FORCE: VERTICAL COMPONENT Mean values for periods of sixty minutes ending at exact hours, G.M.T.

23 ESKDALEMUIR (Z) 45,000y (0.45 C.G.S. unit) + NOVEMBER 1960

| 1 2 3 4 d 5 | Hour 0-1 γ 371 385 354 | 1-2 γ 375 | 2-3 γ | 3-4 | 4-5 | 5-6 | 6-7 | | | | | | T | | | | | | | | | | | | | Sum |
|-------------------------|------------------------------------|-----------------|-------------|-----|-----|-----|-----|------|------|------|-------|-------|-------|-------|-------|-------|---------|-------|-------|-------|-------|-------|--------------|-------|------|------------------------|
| 4 <i>d</i> 5 6 | 371 385 | 375 | | | | | 0-7 | 7-8 | 8-9 | 9-10 | 10-11 | 11-12 | 12-13 | 13-14 | 14-15 | 15-16 | 16 - 17 | 17-18 | 18-19 | 19-20 | 20-21 | 21-22 | 22-23 | 23-24 | Mean | 8000+ |
| 4 <i>d</i> 5 6 | 385 | | | γ | γ | γ | γ | γ | γ | y | γ | γ | y | · · | γ | γ | γ | γ | γ | γ | γ | γ | γ | γ | γ | |
| 4 <i>d</i> 5 6 | | | 377 | 375 | 376 | 377 | 377 | 384 | 388 | 387 | 382 | 384 | 388 | 393 | 399 | 400 | 398 | 395 | 392 | 393 | 398 | 391 | 3 8 0 | 383 | 386 | 1263 |
| 4 <i>d</i> 5 | 354 | 385 | 381 | 371 | 372 | 372 | 372 | 376 | 381 | 385 | 387 | 384 | 391 | 398 | 395 | 396 | 398 | 392 | 389 | 391 | 393 | 378 | 373 | 372 | 384 | 1217 |
| 5 6 | | 325 | 331 | 358 | 368 | 372 | 375 | 377 | 381 | 382 | 383 | 388 | 393 | 389 | 388 | 388 | 389 | 392 | 392 | 396 | 400 | 399 | 373 | 348 | 377 | 1041 |
| 6 | 308 | 312 | 288 | 280 | 295 | 309 | 326 | 356 | 369 | 380 | 373 | 384 | 400 | 410 | 440 | 464 | 441 | 441 | 442 | 413 | 404 | 399 | 386 | 361 | 374 | 981 |
| | 345 | 377 | 383 | 377 | 366 | 372 | 375 | 376 | 382 | 385 | 386 | 389 | 396 | 410 | 418 | 415 | 407 | 399 | 395 | 392 | 389 | 388 | 389 | 388 | 387 | 1299 |
| 7 a | 387 | 388 | 387 | 387 | 386 | 383 | 383 | 381 | 381 | 381 | 377 | 380 | 387 | 387 | 389 | 392 | 391 | 389 | 391 | 391 | 391 | 391 | 387 | 384 | 386 | 1271 |
| | 381 | 380 | 371 | 366 | 372 | 372 | 371 | 372 | 376 | 381 | 377 | 381 | 383 | 384 | 387 | 388 | 389 | 387 | 385 | 384 | 383 | 382 | 382 | 382 | 380 | 1116 |
| 8 q | 382 | 382 | 383 | 382 | 383 | 383 | 383 | 385 | 388 | 383 | 377 | 376 | 376 | 378 | 383 | 387 | 386 | 385 | 383 | 383 | 383 | 387 | 388 | 383 | 383 | 1189 |
| 9 q | 377 | 377 | 376 | 383 | 377 | 377 | 378 | 381 | 383 | 380 | 377 | 374 | 371 | 371 | 377 | 380 | 384 | 383 | 383 | 382 | 383 | 383 | 385 | 380 | 379 | 1102 |
| 10 | 378 | 377 | 377 | 378 | 378 | 378 | 379 | 378 | 377 | 374 | 367 | 364 | 361 | 360 | 365 | 373 | 376 | 377 | 377 | 374 | 381 | 381 | 378 | 377 | 374 | 985 |
| 11 | 376 | 376 | 374 | 372 | 370 | 368 | 367 | 371 | 373 | 371 | 369 | 370 | 370 | 372 | 378 | 383 | 383 | 383 | 382 | 381 | 380 | 380 | 382 | 381 | 375 | 1012 |
| 12 | 381 | 377 | 377 | 377 | 376 | 376 | 376 | 376 | 377 | 376 | 377 | 379 | 379 | 378 | 376 | 375 | 372 | 419 | 613 | 646 | 544 | 241 | 279 | 334 | 395 | 1481 |
| 13 d | 338 | 311 | 269 | 228 | 160 | 110 | -29 | 62 | 364 | 541 | 663 | 545 | 490 | 485 | 493 | 717 | 559 | 496 | 514 | 425 | 458 | 410 | 322 | 348 | 387 | 1279 |
| 14 d | 251 | 191 | 338 | 391 | 410 | 415 | 417 | 416 | 416 | 417 | 415 | 415 | 411 | 407 | 413 | 421 | 417 | 423 | 423 | 389 | 397 | 394 | 398 | 389 | 391 | 1374 |
| 15 d | 382 | 393 | 3 89 | 392 | 399 | 398 | 390 | 396 | 396 | 396 | 392 | 393 | 396 | 432 | 482 | 508 | 565 | 561 | 523 | 427 | 427 | 400 | 318 | 219 | 416 | 1974 |
| 16 d | -90 | 38 | -19 | 105 | 210 | 335 | 370 | 387 | 388 | 377 | 393 | 413 | 423 | 458 | 458 | 468 | 439 | 426 | 421 | 420 | 412 | 404 | 406 | 402 | 335 | 44 |
| 17 | 379 | 365 | 375 | 388 | 394 | 400 | 399 | 400 | 401 | 399 | 394 | 394 | 403 | 411 | 412 | 418 | 425 | 422 | 425 | 416 | 406 | 412 | 412 | 407 | 402 | 1657 |
| 18 g | 404 | 398 | 395 | 394 | 396 | 399 | 399 | 400 | 399 | 398 | 398 | 399 | 402 | 404 | 406 | 406 | 406 | 403 | 401 | 400 | 400 | 400 | 400 | 400 | 400 | 1607 |
| 19 g | 399 | 399 | 398 | 398 | 396 | 394 | 393 | 391 | 390 | 389 | 386 | 383 | 383 | 387 | 393 | 394 | 395 | 395 | 395 | 394 | 394 | 393 | 393 | 392 | 393 | 1424 |
| 20 | 389 | 388 | 386 | 384 | 383 | 383 | 383 | 384 | 387 | 389 | 386 | 392 | 393 | 400 | 405 | 405 | 403 | 400 | 399 | 399 | 396 | 396 | 395 | 394 | 392 | 1419 |
| 21 | 394 | 393 | 392 | 391 | 389 | 377 | 359 | 369 | 381 | 390 | 393 | 399 | 418 | 423 | 431 | 469 | 519 | 534 | 546 | 483 | 433 | 410 | 371 | 352 | 417 | 2016 |
| 22 | 361 | 358 | 323 | 342 | 365 | 374 | 379 | 384 | 392 | 397 | 394 | 396 | 399 | 405 | 414 | 421 | 430 | 434 | 427 | 417 | 410 | 408 | 381 | 381 | 391 | 1392 |
| 23 | 388 | 390 | 387 | 383 | 386 | 387 | 385 | 379 | 382 | 388 | 389 | 388 | 394 | 400 | 406 | 407 | 410 | 406 | 405 | 403 | 404 | 400 | 399 | 393 | 394 | 1459 |
| 24 | 381 | 376 | 369 | 383 | 383 | 389 | 388 | 388 | 388 | 388 | 388 | 386 | 387 | 389 | 392 | 394 | 395 | 395 | 395 | 398 | 399 | 399 | 389 | 355 | 387 | 1294 |
| 25 | 353 | 361 | 362 | 327 | 302 | 314 | 341 | 358 | 372 | 380 | 387 | 398 | 401 | 408 | 429 | 444 | 447 | 439 | 428 | 427 | 418 | 399 | 377 | 367 | 385 | 1239 |
| 26 | 377 | 383 | 380 | 374 | 369 | 372 | 382 | 387 | 389 | 391 | 390 | 392 | 397 | 404 | 404 | 403 | 400 | 399 | 398 | 400 | 411 | 406 | 399 | 391 | 392 | 1398 |
| 27 | 378 | 377 | 383 | 386 | 385 | 381 | 381 | 383 | 387 | 387 | 384 | 387 | 389 | 395 | 404 | 411 | 422 | 446 | 439 | 420 | 411 | 394 | 388 | 382 | 396 | 1500 |
| 28 | 354 | 357 | 378 | 382 | 378 | 361 | 366 | 373 | 381 | 387 | 391 | 389 | 391 | 403 | 408 | 402 | 399 | 395 | 394 | 395 | 397 | 398 | 396 | 394 | 386 | 1269 |
| 29 | 388 | 388 | 383 | 385 | 387 | 386 | 385 | 384 | 384 | 383 | 382 | 383 | 387 | 389 | 394 | 395 | 394 | 392 | 392 | 396 | 401 | 399 | 394 | 385 | 389 | 1336 |
| 30 | 387 | 386 | 387 | 386 | 376 | 379 | 381 | 382 | 383 | 382 | 381 | 380 | 380 | 383 | 388 | 392 | 394 | 394 | 402 | 403 | 410 | 403 | 388 | 402 | 389 | 1329 |
| lean l | 355 | 356 | 356 | 361 | 363 | 366 | 364 | 371 | 385 | 391 | 395 | 393 | 395 | 400 | 408 | 421 | 418 | 417 | 422 | 411 | 407 | 391 | 380 | 374 | 387 | |
| Sum 0,300+ | 638 | 683 | 680 | 825 | 887 | 993 | 931 | 1136 | 1536 | 1744 | 1838 | 1785 | 1839 | 2013 | 2227 | 2616 | 2533 | 2502 | 2651 | 2338 | 2213 | 1725 | 1408 | 1226 | | Grand Tota. 278.967 |

DAILY EXTREMES OF TERRESTRIAL MAGNETIC ELEMENTS, MAGNETIC CHARACTER FIGURES (K AND C) AND TEMPERATURE IN MAGNET HOUSE

| | | | | TERRESTRIA | L MAGNETIC ELEM | ENTS | | | | | | İ | Magnetic | Temperature |
|---|--|--|---|--|--|--|--|--------|--|--|---|--|--|--|
| | Hor | izontal force | | D | eclination | | V | ertica | al force | | 3-hr. range indices | Sum of K | character | in magnet |
| | Maximum 16,000γ + | Minimum 16,000γ + | Range | Maximum 10°+ | Minimum 10°+ | Range | Maximum 45 ,000γ | | Minimum 45,000γ + | Range | K | indices | of day, C (0-2) | house 200 + |
| 1 2 3 4 d 5 6 7 q 9 q 10 11 12 13 d d 115 d 117 18 q q 20 122 23 24 22 5 22 6 22 7 22 8 9 | h. m. 7 06 40 79 20 55 81 01 47 82 06 01 78 20 40 79 20 88 06 51 79 20 08 80 06 13 82 20 1322 15 43 129 19 27 82 22 08 874 13 26 848 21 50 79 06 38 81 22 24 82 107 10 79 23 24 80 05 43 79 24 00 79 25 24 80 26 48 27 78 28 874 | 7 722 12 15 8 684 23 51 8 651 02 38 7 729 13 38 8 748 11 55 7 745 12 41 7 744 11 15 8 753 11 55 7 741 12 03 8 729 12 00 9 222 22 33 8 7817 07 18 8 422 00 45 526 23 58 8 718 00 45 705 18 14 728 00 34 755 14 04 740 14 06 680 15 36 698 01 56 740 24 00 702 22 34 678 20 18 722 12 25 710 17 21 728 13 30 | 95 118 172 58 45 52 41 62 95 1107 2107 404 348 1033 98 58 35 55 1138 123 52 114 126 76 92 66 59 | h. m. 12 13 31-1 12 50 34-0 12 25 30-4 14 51 35-2 03 51 28-8 12 44 27-8 13 40 27-0 13 55 28-0 13 27 30-0 15 14 37-3 11 50 33-0 21 11 57-4 00 50 96-8 19 37 38-0 14 44 44-0 02 54 71-0 01 40 30-2 12 20 26-7 12 12 27-9 13 15 28-4 07 01 39-7 02 17 43-2 12 20 26-7 12 12 27-9 13 15 28-4 07 01 39-7 02 17 43-2 06 50 30-5 13 38 29-6 03 13 34-7 12 48 30-1 14 43 29-6 05 02 35-4 14 30 28-8 14 30 28-8 14 27 29-0 | 1.9 23 14 6.5 01 58 20·2 00 36 15·8 20 33 19·1 09 30 17·9 23 10 18·4 00 30 20·9 08 55 16·3 23 40 -0·6 21 48 -105·5 10 50 5·4 18 19 7·7 22 55 | 14·5 23·5 28·5 28·7 8·6 12·0 7·9 10·1 11·6 16·4 16·7 58·0 202·3 29·6 36·3 95·4 19·5 7·9 6·6 7 30·2 28·4 12·4 34·2 27·0 12·5 27·9 24·9 13·4 24·3 | 15 08 4 16 09 4 120 10 3 16 30 308 21 3 16 11 3 21 13 3 16 11 3 21 13 3 16 11 3 21 13 3 16 11 3 21 13 3 16 11 44 8 17 38 4 16 54 6 15 08 4 16 09 4 15 31 4 16 04 4 18 24 6 17 39 4 16 29 4 20 11 4 4 20 33 4 18 09 4 14 14 4 20 50 | 04 | 7 h. m. 369 00 00 364 24 00 3615 01 55 253 02 57 330 00 09 366 40 3 15 367 10 35 367 11 02 377 21 33 309 06 48 367 21 33 309 06 48 377 22 3 42 372 02 48 380 11 42 381 05 29 381 05 29 3847 23 44 389 02 39 3880 11 42 381 05 29 3847 23 44 389 02 39 389 02 33 380 11 42 381 05 29 3847 23 44 389 02 39 389 02 39 389 03 52 386 02 39 387 23 52 386 00 49 381 23 52 366 00 49 381 23 16 | 7 335 36 86 231 91 18 25 16 17 25 19 676 1047 341 447 756 70 17 20 30 290 128 34 34 163 36 36 37 36 37 36 37 36 37 37 38 38 38 38 38 38 38 38 38 38 38 38 38 | 2, 2, 2, 2, 2, 2, 4, 2, 3, 3, 3, 2, 3, 3, 4, 5, 4, 4, 3, 3, 2, 2, 2, 1, 1, 0, 1, 1, 2, 2, 2, 2, 2, 2, 1, 1, 1, 1, 2, 2, 2, 2, 2, 2, 1, 1, 1, 1, 2, 2, 2, 2, 2, 2, 1, 1, 0, 1, 1, 2, 1, 1, 1, 2, 2, 2, 2, 2, 2, 1, 1, 0, 1, 1, 2, 1, 1, 1, 2, 2, 2, 2, 2, 2, 1, 1, 1, 4, 5, 7, 8, 8, 9, 7, 8, 7, 5, 7, 3, 4, 3, 3, 4, 5, 5, 5, 7, 9, 7, 4, 4, 6, 4, 3, 3, 3, 2, 2, 2, 3, 3, 4, 4, 2, 4, 1, 1, 2, 1, 1, 1, 0, 0, 2, 2, 2, 3, 3, 1, 2, 2, 2, 2, 2, 2, 2, 2, 2, 3, 2, 1, 2, 2, 2, 2, 2, 2, 2, 2, 2, 2, 2, 2, 2, | 18 20 22 33 14 13 11 9 13 12 22 29 60 32 35 40 23 11 13 16 31 25 16 20 29 21 24 23 16 21 | 0 1 1 2 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 | °A. 84·3 84·5 84·5 84·5 84·4 84·4 84·6 84·5 84·6 84·7 84·8 84·6 84·5 84·6 84·5 84·6 84·5 84·6 84·5 84·6 84·5 84·6 84·5 84·6 84·5 84·6 84·5 84·6 84·6 84·6 84·6 84·6 84·6 84·6 84·6 |

q denotes an international quiet day and d an international disturbed day.

21 ESKDALEMUIR (H) 16,000y (0·16 C.G.S. unit) + DECEMBER 1960

| | Hour | G.M.T. | | | | | | | | | | | T | | | | | | | | | | | | | Sum |
|-------------------------------------|---------------------------------|---------------------------------|---------------------------------|---------------------------------|---------------------------------|---------------------------------|---------------------------------|---------------------------------|---------------------------------|---------------------------------|---------------------------------|---------------------------------|---------------------------------|---------------------------------|---------------------------------|---------------------------------|---------------------------------|---------------------------------|---------------------------------|---------------------------------|---------------------------------|---------------------------------|---------------------------------|---------------------------------|---------------------------------|--------------------------------------|
| | 0-1 | 1-2 | 2-3 | 3-4 | 4-5 | 5-6 | 6-7 | 7-8 | 8-9 | 9-10 | 10-11 | 11-12 | 12-13 | 13-14 | 14-15 | 15-16 | 16-17 | 17-18 | 18-19 | 19-20 | 20-21 | 21-22 | 22-23 | 23-24 | Mean | 17,000+ |
| 1 d 2 d | 7 775 738 | γ 759 737 | γ 752 736 | γ 725 739 | γ 806 756 | γ 727 755 | γ 732 746 | γ 722 758 | γ 742 746 | γ 726 733 | γ 719 725 | γ 723 741 | γ 722 727 | γ 715 738 | γ 734 746 | γ 788 746 | γ 765 741 | γ 700 750 | γ 754 760 | γ 694 766 | γ 726 778 | γ 711 783 | γ 674 760 | γ 698 753 | γ 733 748 | 589 958 |
| 3 4 <i>q</i> 5 | 763 773 774 | 762 775 773 | 765 774 774 | 764 777 774 | 770 782 777 | 783 785 793 | 781 784 792 | 776 780 785 | 765 782 784 | 749 780 782 | 745 772 782 | 746 766 766 | 750 762 754 | 754 758 763 | 760 767 761 | 766 755 761 | 764 761 765 | 769 763 756 | 771 764 772 | 771 761 774 | 773 771 782 | 773 769 784 | 772 771 784 | 771 774 784 | 765 771 775 | 1363 1506 1596 |
| 6 7 8 9 10 | 784 758 755 777 779 | 786 762 760 775 770 | 788 769 760 770 769 | 792 769 754 783 781 | 792 766 762 789 777 | 799 790 796 772 778 | 808 784 794 770 778 | 800 779 793 782 778 | 790 769 775 773 773 | 779 762 762 761 768 | 776 761 750 766 765 | 775 760 755 765 760 | 763 756 762 757 762 | 758 735 765 762 764 | 755 757 769 747 763 | 757 759 772 770 767 | 756 755 775 764 771 | 741 761 774 767 768 | 728 786 779 762 777 | 734 767 780 786 771 | 762 761 781 771 773 | 731 746 780 765 793 | 757 783 781 776 782 | 759 759 778 785 782 | 770 765 771 771 773 | 1470 1354 1512 1495 1549 |
| 11 q 12 13 14 q 15 d | 779 785 767 782 796 | 778 769 763 784 802 | 781 776 763 787 802 | 782 775 772 789 806 | 784 779 774 790 804 | 788 788 774 792 792 | 787 793 778 794 787 | 791 784 774 798 772 | 782 784 765 792 779 | 770 775 763 793 762 | 767 774 762 789 758 | 759 760 757 799 755 | 761 759 744 803 754 | 755 760 757 795 760 | 760 753 768 795 746 | 757 763 771 784 771 | 780 761 773 797 754 | 784 768 770 785 782 | 784 749 774 784 739 | 784 733 777 784 675 | 771 755 776 780 652 | 763 760 777 787 647 | 768 768 779 791 663 | 772 745 782 792 676 | 774 767 769 790 751 | 1587 1416 1460 1966 1034 |
| 16 d 17 q 18 19 20 | 682 765 779 769 762 | 692 765 779 765 769 | 682 765 783 769 774 | 706 767 793 769 775 | 756 769 791 775 779 | 764 772 797 792 792 | 750 764 777 786 785 | 731 774 756 774 776 | 744 776 779 772 768 | 723 777 773 770 748 | 729 774 744 753 755 | 729 769 753 759 760 | 746 766 760 769 767 | 762 765 753 772 770 | 758 763 752 768 773 | 760 765 745 773 773 | 757 769 733 761 768 | 766 773 753 781 768 | 768 777 744 782 771 | 769 770 727 781 761 | 772 764 762 772 801 | 760 769 758 791 745 | 752 772 758 784 767 | 758 772 784 773 763 | 742 769 764 773 770 | 816 1462 1333 1560 1470 |
| 21 22 23 24 25 <i>q</i> | 765 767 776 777 779 | 749 775 777 779 772 | 772 766 770 784 781 | 776 777 776 782 784 | 780 779 777 789 784 | 777 780 780 787 787 | 777 780 780 786 786 | 777 783 782 785 787 | 783 775 778 784 784 | 780 766 774 777 780 | 779 765 773 784 776 | 781 770 760 791 781 | 790 779 765 788 784 | 787 776 749 768 784 | 780 784 769 769 781 | 737 771 764 780 781 | 764 750 770 780 782 | 770 765 773 749 783 | 778 777 777 773 779 | 775 781 780 787 780 | 763 777 788 784 787 | 774 789 791 773 784 | 749 785 785 805 781 | 772 773 779 765 784 | 772 775 775 780 782 | 1535 1590 1593 1726 1771 |
| 26 27 d 28 29 30 | 784 791 745 769 | 764 789 740 753 773 | 775 783 752 778 773 | 791 806 753 765 779 | 799 800 759 770 769 | 798 811 772 780 780 | 805 804 772 780 788 | 796 807 761 768 784 | 799 809 752 772 765 | 780 787 744 766 760 | 788 781 734 756 762 | 789 765 734 764 754 | 775 738 763 769 756 | 784 732 772 769 765 | 785 753 742 772 756 | 785 786 745 752 765 | 787 730 750 745 773 | 791 730 757 752 767 | 794 734 760 766 752 | 796 719 783 765 757 | 799 722 764 771 772 | 797 740 765 772 779 | 794 747 772 773 777 | 791 749 772 774 778 | 789 767 757 767 769 | 1946 1413 1163 1401 1461 |
| 31 | 781 | 777 | 780 | 777 | 784 | 776 | 779 | 783 | 763 | 758 | 762 | 764 | 750 | 754 | 766 | 740 | 756 | 757 | 781 | 766 | 764 | 764 | 765 | 769 | 767 | 1416 |
| Mean Sum 23,000+ | 769 853 | 767 773 | 769 853 | 773 958 | 780 1168 | 783 1257 | 781 1207 | 777 1096 | 1004 | 765 728 | 762 626 | 762 610 | 761 601 | 761 601 | 763 652 | 765 709 | 763 657 | 764 673 | 768 796 | 763 654 | 767 774 | 765 720 | 767 775 | 767 766 | 768 | Grand Total 571,511 |

765 at 0-1h. January 1, 1961.

| 22 E | SKDALE | UIR (D |) | - | | | | | | | | 10 |)° + | | | | | | | | | | | | DECEMBE | R 1960 |
|------------|--------------|---------------|--------------|--------------|--------------|--------|--------------|--------------|--------------|--------------|------------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|---------|-------------------|
| | Hour (| i.M.T. 1-2 | 2-3 | 3-4 | 4-5 | 5-6 | 6-7 | 7-8 | 8-9 | 9-10 | 10-11 | 11-12 | 12-13 | 13-14 | 14-15 | 15-16 | 16-17 | 17 - 18 | 18-19 | 19-20 | 20-21 | 21-22 | 22-23 | 23-24 | Mean | Sum 500·0+ |
| | • | , | | • | • | • | • | • | , | • | • | • | 1 | • | • | • | • | , | • | , | • | • | , | • | ' | |
| 1 d | 22.8 | 19.7 | 21.0 | 12 · 1 | 22.6 | | | 24 · 0 | 22 · 4 | 22.7 | | | 30 · 3 | 25.9 | 28.6 | 29.0 | 30 · 5 | | 23 · 8 | 12.6 | 9.4 | 16 · 6 | -7·8 | 8.8 | 21.0 | 5 · 1 |
| 2 d | 21.0 | 22 · 4 | 23.3 | 24 · 6 | 23 · 4 | | | 23 · 3 | 23 · 2 | 23 · 1 | | 26.9 | 27.5 | 26 · 1 | 29 · 1 | 29 · 1 | 26.3 | | | | 16.6 | 16 · 3 | 19.9 | 19.3 | 23.1 | 55.4 |
| 3 | 22.3 | 22.9 | 24 · 1 | 25 · 1 | 28 · 3 | | | 23.8 | 23 · 7 | 22.8 | | 25.7 | 27 · 1 | 26·4 26·1 | 26·6 27·2 | 25.3 | 23 · 9 | | 23 · 8 | 23.6 | 22.9 | 22.6 | 22 · 4 | 21.4 | 24 · 1 | 79.0 |
| 4 q 5 | 22.5 | 23.6 | 23·8 23·7 | 23·8 23·6 | 23·8 25·4 | | 22·9 24·7 | 22·5 24·7 | 22·4 24·6 | 22·8 25·6 | | 24·6 27·4 | 28.6 | 28 · 1 | 29.3 | 25·3 27·5 | 24·5 27·7 | 25·7 25·2 | 24·3 25·2 | 23·0 24·8 | 22·1 24·3 | 22·0 23·7 | 22·2 22·6 | 22 · 5 | 23.8 | 71 · 7 105 · 4 |
| - | | | | | | | | | | 26.0 | | | 1 | 29.2 | 30.5 | | | | | | | | | | | |
| 6 | 22.8 | 23 · 1 | 23·5 23·4 | 23·7 22·0 | 24·3 23·8 | | 24·6 22·3 | 25·4 23·8 | 24·8 22·8 | 20.0 | 26 · 4 24 · 5 | 27·2 26·1 | 32.3 | 27 · 4 | 28.9 | 33·3 29·6 | 37·8 28·2 | | 32·8 27·4 | 22 · 4 | 21·4 10·7 | 22·6 15·6 | 19·0 18·0 | 21·2 12·4 | 26.5 | 135·6 55·7 |
| é l | 21·2 18·8 | 20.1 | 21.3 | 22.0 | 25.3 | | | 26 · 4 | 25.1 | 24 · 8 | | 23 · 6 | 25.1 | 25.8 | 28.0 | 25 · 7 | 24 · 6 | | 24.0 | 23.5 | | 22.9 | 23.2 | | 1 1 | 78 - 7 |
| 9 | 23 · 4 | 23.5 | 23.8 | 26.3 | | _ | | 24.6 | 24 - 7 | 24.2 | | | 27.8 | 26 · 2 | 25.4 | 23 · 1 | 25 · 1 | | 19.8 | 17.0 | | | | | | 65.3 |
| ιó | 22 · 1 | 21.2 | 22.5 | 25 · 1 | 23.2 | | 23.6 | 23.4 | 23.2 | 23.7 | 24 · 4 | 24.6 | 25 · 1 | 27.0 | 27.6 | 26 · 7 | 24.8 | 24.6 | 25.0 | 23.9 | 17.9 | 20.9 | 24.8 | 24.9 | 23.9 | 74.0 |
| 1 0 | 24 · 6 | 24 · 6 | 24 · 4 | 24 · 4 | 25.0 | 24 · 4 | 25.3 | 26 · 1 | 24 · 4 | 23.8 | 25 · 2 | 25 · 7 | 27 · 3 | 28.8 | 28.7 | 27 · 0 | 26 · 7 | 25.8 | 25 · 2 | 24.9 | 21 · 2 | 16.2 | 20 - 4 | 20.0 | 24.6 | 90.1 |
| 2 | 21.2 | 21.8 | 21.6 | 21.9 | 24.6 | | | 25.5 | 25.8 | 26.0 | | 28.6 | 28 · 8 | 29.8 | 29.3 | 28.0 | 31.3 | 30.5 | 23 · 2 | 18.5 | 23 · 1 | 16.8 | 14.0 | 11.4 | 24 1 | 77 - 5 |
| 3 | 19.4 | 24.6 | 25.4 | 21.6 | 20.3 | 23 - 2 | 25.3 | 25 · 7 | 25.3 | 27 - 0 | 26 · 7 | 27.0 | 28 · 8 | 28 · 5 | 27.6 | 25.9 | 25.2 | 25.0 | 24 · 8 | 24.7 | 23.6 | 24 · 1 | 24 · 2 | 24.3 | 24.9 | 98-2 |
| 4 9 | 24 · 8 | 24.9 | 25.1 | 25.3 | 25.7 | 25 · 7 | 25.8 | 25.6 | 25.6 | 25.1 | 25.0 | 27 · 1 | 29.0 | 29.0 | 27 · 5 | 25 · 7 | 24 · 7 | 25.3 | 25.3 | 24.5 | 23.7 | 23 · 9 | 24.5 | 24.0 | 25.5 | 112.8 |
| .5 d | 24 · 4 | 21.7 | 23.8 | 25.3 | 26 · 1 | 27 · 7 | 28 · 8 | 26 · 6 | 25.9 | 25.6 | 27 · 0 | 30.9 | 31.7 | 31.6 | 26 · 7 | 34 • 4 | 33.0 | 35.8 | 25 · 4 | 19.9 | 19.8 | 6 · 1 | 9.2 | 1 · 1 | 24.5 | 88 · 5 |
| 6 d | 1 · 1 | -0.1 | 8.5 | 8.5 | 10.0 | 25 · 4 | 27 · 9 | 29.3 | 27 · 1 | 25 · 4 | 28 · 5 | 24 · 7 | 26.8 | 26.0 | 25 · 7 | 25.8 | 26 · 7 | 26.7 | 25.3 | 23 · 1 | 23 · 4 | 22.8 | 19.3 | 20.4 | 21.2 | 8.3 |
| 7 q | 21 · 9 | 22.3 | 22.7 | 22.5 | 22 · 2 | | 23 · 1 | 23 · 4 | 24 · 7 | 23.9 | 23 · 6 | 23.9 | 25 · 1 | 25.7 | 25 · 9 | 25 · 1 | 24 · 7 | 24 · 2 | 24 · 5 | 23.8 | 21 · 7 | 22.9 | 22.0 | 21.6 | 23.5 | 64 • 4 |
| 8 | 23.0 | 22.2 | 23.6 | 22 · 1 | 22.6 | | 29.0 | 29.6 | 25 · 4 | 25 · 4 | 30.0 | 30 · 9 | 29.5 | 27.0 | 27 · 1 | 25.4 | 24 · 6 | 25.0 | 18 · 2 | 14.7 | 17.6 | 21.5 | 21.0 | 22.7 | 24.3 | 84.0 |
| 9 | 19 · 2 | 20.9 | 22.3 | 21 · 4 | 24 · 2 | | | 25.9 | 24.8 | 24 · 7 | 23.5 | 25 · 4 | 25.5 | 26.6 | 25.9 | 25.0 | 22.6 | 22.6 | 24.3 | 24 · 1 | 21.9 | 12 · 4 | | | 23.1 | 53.2 |
| 0 | 20.8 | 22.0 | 20.9 | 24 · 9 | 25 · 1 | 24 · 1 | 24 · 1 | 24 · 1 | 24 · 4 | 25 · 4 | 25 · 7 | 26.3 | 27 · 0 | 25.3 | 24 · 6 | 23 · 4 | 22.7 | 22.9 | 21.9 | 8.5 | 8.7 | 18 • 4 | 17.6 | 23.0 | 22.2 | 31.8 |
| 1 | 22 · 7 | 23.3 | 22.7 | 21.9 | 23 · 1 | | | 24 · 2 | 25 · 1 | 24 · 6 | 24 · 4 | 24 · 9 | 25 · 7 | 25 · 1 | 25.8 | 22.7 | 23.6 | 30.0 | 27 · 7 | 24 · 1 | 13.0 | 10 · 4 | 20.0 | | 23.3 | 58 · 0 |
| 2 | 25 · 6 | 24 · 9 | 21.9 | 21.7 | 23.9 | | 28 · 3 | 25.6 | 25 · 4 | 26 · 4 | 26 · 2 | 26 · 4 | 26 · 4 | 24 · 7 | 24 · 2 | 23.8 | 22.0 | 22.8 | 24 · 0 | 23.3 | 21.5 | 17.6 | 22.0 | 26 · 2 | 24.2 | 80.2 |
| 3 | 23 · 7 | 21.5 | 21.5 | 21.5 | 22.3 | | 26 · 1 | 26.9 | 27 · 7 | 27.9 | | 27 · 1 | 27.9 | 25 · 1 | 25.5 | 26 · 2 | 25 · 3 | 24 · 8 | 24 · 5 | 23.5 | 23.3 | 23.9 | 23 · 2 | 23.3 | 24.8 | 96 · 3 |
| 4 | 22.3 | 22.0 | 22.9 | 23.3 | 23.7 | 24.7 | 24.9 | 25·1 24·1 | 26.2 | 26·8 26·3 | 26·9 25·7 | 28·2 26·6 | 27 · 4 | 25·6 24·6 | 24·6 23·8 | 24·1 24·5 | 25·5 25·1 | 20·9 25·0 | 24·8 24·9 | 25·4 24·3 | 24·8 24·2 | 22·8 23·7 | 20·3 22·2 | 21·5 22·1 | 24.4 | 84·7 81·3 |
| 5 q | 21 · 4 | 22.6 | 26.0 | 21.9 | 23.3 | | 24.0 | | 25.0 | | | | | | | | | | | | | | | | 24 · 2 | |
| 6 | 25 · 1 | 18.6 | 21.5 | 23.0 | 22.8 | | | 26.8 | 28.0 | 28.2 | 28 · 2 | 28.6 | 27.8 | 26.9 | 25.4 | 24 · 8 | 24.8 | 25.1 | 24 · 9 | 24.5 | 24 · 6 | 25.1 | 24.7 | 23.9 | 25.1 | 102.9 |
| 7 d | 22.9 | 22.3 | 22 · 4 | 22.9 | 20.1 | | | 32.0 | 30·6 27·4 | 27·9 27·7 | 27·7 27·9 | 28·7 26·4 | 30·6 26·7 | 31·8 28·3 | 33·9 27·7 | 21·0 23·1 | 28·5 28·9 | 23·1 26·3 | 26·2 21·1 | 17·6 15·3 | 17·4 20·2 | 18·5 21·5 | 13·4 22·5 | | 24.3 | 84·2 76·5 |
| 8 | 13·5 20·7 | 22·7 19·9 | 23·4 19·0 | 25·0 21·7 | 24·0 23·3 | | 25·0 25·5 | 25·0 26·9 | 26.4 | 26.6 | 27.9 | 28 · 1 | 28.5 | 26.3 | 27 · 2 | 26 4 | 28.9 | 29.0 | 25.9 | 24.5 | 23.6 | 21.5 | 23.6 | 21.0 | 24.7 | 92.2 |
| 9 | 21.5 | 22.5 | 23.7 | 22.9 | 23.7 | 23.4 | 23.3 | 23 · 4 | 24.0 | 25 · 2 | 26 · 5 | 27 · 1 | 27.4 | 28 · 2 | 26 · 5 | 26 · 5 | 25.2 | 21.9 | 17.0 | 26.3 | 23.4 | 23.0 | 24 · 4 | 23.0 | 24 2 | 79.8 |
| 1 | 23.3 | 22.7 | 24 · 3 | 24 · 2 | 24 · 4 | | | | 26.9 | 26.4 | 26.5 | 27 · 7 | 29.0 | 28 · 1 | 27 · 7 | 23.6 | 27.3 | 24 · 3 | 21.0 | 21.1 | 22 · 2 | 21.3 | 21.8 | 22.4 | 24.8 | 94 · 3 |
| an | 21.3 | 21.6 | | 22.5 | | | | 25.5 | | | | 26.7 | | 27 · 1 | 27 · 2 | 26.0 | | 25.8 | 24 · 1 | | 20.4 | 20.0 | 19.8 | | 24.0 | |
| ım · O+ | | 69.3 | 98.0 | | | | | | | | | | | | | | | | | | | | | | | Grand Tot |

24.1 at 0-1h. January 1, 1961.

| 23 E | SKDALE | MUIR (| Z) | | | | | | | | 4 | 5,000γ | (0-45 | C.G.S. | unit) |) + | | | | | | | | r | ECEMBE | r 1960 |
|----------------------|-------------------|---------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|------------------------|
| | Hour 0-1 | G.M.T. 1-2 | 2-3 | 3-4 | 4-5 | 5-6 | 6-7 | 7-8 | 8-9 | 9-10 | 10-11 | 11-12 | 12-13 | 13-14 | 14-15 | 5 15-16 | 16-17 | 17-18 | 18-19 | 19-20 | 20-21 | 21-22 | 22-23 | 23-24 | Mean | Sum 8000+ |
| 1 d 2 d | 405 374 | γ 400 383 | γ 378 382 | γ 200 390 | γ 264 390 | γ 292 388 | γ 327 396 | γ 336 399 | γ 359 400 | γ 376 401 | 386 401 | 394 401 | γ 418 420 | γ 445 432 | γ 469 422 | γ 549 423 | γ 567 425 | γ 530 423 | γ 523 418 | γ 508 412 | γ 436 400 | γ 389 384 | γ 378 381 | γ 367 389 | γ 404 401 | 1696 1634 |
| 3 4 q 5 | 389 393 394 | 390 393 393 | 389 394 392 | 384 393 391 | 378 393 388 | 379 390 382 | 384 390 381 | 388 389 382 | 389 388 384 | 393 385 383 | 393 385 383 | 394 386 386 | 395 391 389 | 394 395 393 | 397 399 399 | 401 408 401 | 403 411 405 | 403 412 412 | 400 412 411 | 399 412 407 | 398 407 399 | 397 404 395 | 395 399 393 | 395 394 392 | 393 397 393 | 1427 1523 1435 |
| 6 7 8 | 390 403 394 | 392 400 384 | 391 390 372 | 388 389 365 | 388 385 359 | 384 380 349 | 378 382 358 | 378 386 370 | 379 389 377 | 385 388 381 | 385 385 388 | 391 384 389 | 396 384 390 | 400 394 392 | 412 400 396 | 422 402 | 450 407 | 487 403 | 522 405 | 495 420 | 446 432 | 382 409 | 394 371 | 401 389 | 410 395 | 1836 1477 |
| 9 10 | 390 381 | 390 384 | 389 384 | 382 378 | 376 382 | 380 385 | 384 387 | 384 388 | 385 388 | 388 388 | 389 387 | 390 388 | 391 389 | 400 386 | 417 392 | 396 419 395 | 397 412 399 | 397 411 397 | 395 411 396 | 394 412 397 | 394 407 399 | 393 397 388 | 391 389 384 | 392 384 385 | 384 395 389 | 1213 1477 1327 |
| 11 q 12 13 | 386 388 366 | 388 389 363 | 388 388 370 | 388 387 365 | 387 387 371 | 386 386 372 | 386 387 373 | 385 386 377 | 386 387 388 | 386 388 390 | 388 386 395 | 389 388 397 | 391 384 397 | 394 390 397 | 397 400 397 | 403 405 399 | 400 412 399 | 396 419 397 | 394 428 397 | 394 428 396 | 401 424 395 | 409 412 394 | 398 385 393 | 391 370 390 | 392 396 387 | 1411 1504 1278 |
| 14 q 15 d 16 d | 389 376 279 | 389 370 271 | 387 366 262 | 385 363 264 | 384 364 282 | 384 369 282 | 384 375 306 | 384 381 332 | 385 384 358 | 385 389 367 | 387 396 368 | 381 405 376 | 376 421 390 | 382 439 393 | 385 503 391 | 388 527 396 | 387 533 396 | 388 593 396 | 387 632 399 | 388 536 400 | 389 460 400 | 388 429 404 | 384 321 412 | 380 282 408 | 385 426 355 | 1246 2214 |
| 17 q 18 19 | 403 394 374 | 399 393 378 | 398 388 382 | 394 374 387 | 392 371 386 | 390 371 385 | 389 367 384 | 385 370 383 | 380 372 384 | 382 381 385 | 384 385 392 | 384 394 390 | 385 405 390 | 390 416 396 | 393 426 394 | 394 442 395 | 394 459 400 | 394 447 397 | 394 442 389 | 396 430 | 401 412 | 401 402 | 399 400 | 397 382 | 392 401 | 532 1418 1623 |
| 20 21 | 389 367 | 389 3 3 9 | 385 350 | 379 375 | 373 383 | 374 384 | 380 386 | 382 388 | 383 388 | 387 389 | 388 390 | 390 389 | 394 389 | 402 390 | 403 396 | 403 421 | 405 423 | 404 410 | 403 407 | 390 408 402 | 393 382 409 | 394 375 394 | 384 362 388 | 385 371 389 | 388 388 389 | 1317 1311 1346 |
| 22 23 24 | 377 368 389 | 367 374 388 | 381 381 384 | 384 384 384 | 382 387 384 | 377 386 384 | 377 383 385 | 381 384 385 | 382 387 386 | 388 384 388 | 391 384 388 | 394 387 385 | 395 392 390 | 397 391 399 | 400 407 403 | 400 405 397 | 407 402 398 | 405 405 412 | 399 400 407 | 396 396 396 | 399 392 394 | 395 388 396 | 390 387 390 | 387 388 379 | 390 389 391 | 1351 1342 1391 |
| 25 q 26 27 d | 386 372 387 | 382 370 385 | 377 378 384 | 381 378 375 | 384 377 372 | 385 366 373 | 387 362 371 | 388 367 362 | 388 372 382 | 385 377 364 | 386 379 371 | 384 381 374 | 388 387 388 | 389 388 414 | 389 385 424 | 388 383 493 | 388 384 462 | 388 385 500 | 389 385 537 | 389 386 459 | 388 385 439 | 388 386 370 | 388 387 368 | 382 388 373 | 386 379 405 | 1267 1108 1727 |
| 28 29 30 | 368 386 390 | 372 378 389 | 378 365 389 | 388 373 389 | 392 381 388 | 390 385 385 | 390 385 375 | 395 386 388 | 398 390 392 | 405 395 393 | 412 399 392 | 417 398 391 | 411 399 393 | 411 401 397 | 420 404 389 | 434 408 397 | 433 447 396 | 423 431 391 | 417 417 418 | 407 412 412 | 401 377 406 | 398 403 404 | 394 397 399 | 393 393 395 | 402 396 394 | 1647 1510 1458 |
| 31 Mean | 393 382 | 390 380 | 388 378 | 388 | 383 375 | 376 374 | 380 377 | 384 380 | 388 | 391 386 | 396 388 | 393 390 | 396 394 | 404 | 404 | 420 | 417 | 419 | 409 | 407 | 406 405 | 407 | 406 | 404 384 | 398 393 | 1549 |
| Sum 11,000+ | 840 | 772 | 730 | 545 | 613 | 599 | 679 | 773 | 898 | 967 | 1039 | 1090 | 1224 | 1411 | 1613 | 1914 | 2018 | 2075 | 2143 | 1884 | 1571 | 1275 | 1007 | 915 | | Grand Total 292,595 |

399 at 0-1h. January 1, 1961.

DAILY EXTREMES OF TERRESTRIAL MAGNETIC ELEMENTS. MAGNETIC CHARACTER FIGURES (K AND C) AND TEMPERATURE IN MAGNET HOUSE

| | | | | | | TERR | ESTRIAL | MAGNET | IC ELEM | ENTS | | | | | | | ! ! | Magnetic | Temperature |
|----------|----------------|------------|-------|---------------|-------|-------------|---------|---------|-----------|--------|---------------|------|--------|---------------|-------|------------------------|----------|--------------------|----------------|
| | | Horiza | ontal | force | | | De | clinati | on | | | Vert | ical f | огсе | , | 3-hr. range indices | Sum of K | character | in magnet |
| | Maxi 16,00 | | | imum 00y + | Range | Махі 10° | | | imum + | Range | Maxi 45,00 | | | imum 00γ + | Range | K | indices | of day, C (0-2) | house 200 + |
| - | h. m. | γ | γ | h. m. | γ | h. m. | , | , | h. m. | • | h. m. | γ | γ | h. m. | γ | | | | °A. |
| 1 d | 15 38 | 853 | 612 | 22 49 | 241 | 16 09 | 43.9 | -17 · 0 | 22 34 | 60.9 | 16 16 | 611 | 157 | 03 18 | 454 | 5,6,5,4,4,6,5,6 | 41 | 1 | 84 · 4 |
| 2 d | 20 18 | 801 | 708 | 12 51 | 93 | 14 25 | 31 · 2 | 9.7 | 21 00 | 21.5 | 13 05 | 445 | 372 | 00 48 | 73 | 3,3,3,3,4,3,4,4 | 27 | 1 | 84 · 4 |
| 3 | 06 18 | 786 | 734 | 09 44 | 52 | 04 10 | 31.9 | 20.9 | 23 40 | 11.0 | 16 58 | 406 | 374 | 04 25 | 32 | 2, 3, 2, 2, 1, 2, 1, 1 | 14 | 0 | 84.5 |
| 4 q | 05 30 | 787 | 747 | 13 19 | 40 | 13 48 | 28 · 0 | | 15 57 | 6.7 | 18 30 | 413 | 382 | 10 58 | 31 | 1,0,1,2,2,2,2,1 | 11 | 0 | 84 · 4 |
| 5 | 05 39 | 796 | 750 | 12 19 | 46 | 14 18 | 30 · 3 | 21.6 | 00 44 | 8.7 | 17 52 | 416 | 377 | 05 35 | 39 | 1, 2, 1, 3, 2, 2, 3, 2 | 16 | 0 | 84 · 5 |
| 6 | 06 35 | 813 | 708 | 21 29 | 105 | 17 01 | 41.5 | 9.8 | 20 39 | 31.7 | 18 28 | 539 | 367 | 21 24 | 172 | 1,2,2,2,3,3,5,4 | 22 | 0 | 84-4 |
| 7 | 22 08 | 812 | 710 | 21 15 | 102 | 21 51 | 32.8 | -8.2 | 20 58 | 41.0 | 20 52 | 457 | 360 | 22 12 | 97 | 2, 3, 2, 2, 3, 1, 5, 6 | 24 | 1 | 84 · 4 |
| 8 | 06 01 | 816 | 735 | 03 37 | 81 | 06 45 | 30.6 | 15.8 | 00 01 | 14.8 | 20 50 | 456 | 343 | 05 12 | 113 | 3,4,3,3,2,2,1,2 | 20 | 0 | 84 - 4 |
| 9 | 23 36 | 808 | 723 | 14 29 | 85 | 12 56 | 30.0 | 12.7 | 18 55 | 17.3 | 14 54 | 434 | 372 | 04 28 | 62 | 2, 3, 3, 3, 3, 2, 4, 3 | 23 | 1 | 84 · 4 |
| ió | 21 00 | 811 | 750 | 20 33 | 61 | 13 51 | 28 · 3 | 11.6 | 20 45 | 16.7 | 20 33 | 401 | 377 | 03 31 | 24 | 2, 2, 2, 1, 1, 2, 4, 3 | 17 | 0 | 84 · 4 |
| 1 q | 07 36 | 793 | 750 | 15 11 | 43 | 13 55 | 29.6 | 13.8 | 21 26 | 15.8 | 21 34 | 412 | 382 | 09 08 | 30 | 1,1,1,2,2,3,3,3 | 16 | 0 | 84 · 4 |
| 2 | 00 31 | 813 | 687 | 19 04 | 126 | 06 40 | 34.6 | 7.8 | 22 17 | 26 · 8 | 18 26 | 436 | 367 | 23 59 | 69 | 3, 2, 2, 2, 2, 2, 4, 3 | 20 | 1 | 84.3 |
| 3 | 06 53 | 795 | 733 | 12 46 | 62 | 12 33 | 31.6 | | 00 01 | 19.3 | 12 33 | 400 | 358 | 00 52 | 42 | 4, 3, 3, 2, 3, 1, 1, 1 | 18 | 0 | 84 - 4 |
| 4 q | 11 02 | 814 | | 15 04 | 42 | 12 53 | 31 · 1 | 22.8 | 23 50 | 8.3 | 18 19 | 390 | 374 | 12 12 | 16 | 0,0,1,3,2,2,1,2 | 11 | 0 | 84 · 4 |
| 5 d | 17 53 | 872 | 606 | 20 59 | 266 | 15 38 | 48.7 | -11·4 | 22 05 | 60 · 1 | 18 18 | 708 | 243 | 23 54 | 465 | 3, 2, 2, 2, 5, 5, 6, 6 | 31 | 1 | 84 5 |
| 6 d | 05 08 | 786 | 638 | 00 06 | 148 | 06 55 | 33.5 | -4.8 | 00 23 | 38 · 3 | 22 52 | 412 | 249 | 00 01 | 163 | 4,4,3,3,3,2,1,3 | 23 | 1 | 84 - 4 |
| 7 a | 08 28 | 781 | 756 | 15 06 | 25 | 14 00 | 26.3 | | 20 39 | 6.5 | 20 58 | 405 | 378 | 08 30 | 27 | 1, 1, 3, 2, 2, 2, 2, 2 | 15 | 0 | 84 · 4 |
| , q 8 | 03 50 | 811 | | 19 44 | 113 | 10 55 | 34 · 4 | | 19 50 | 25.5 | 16 47 | 461 | 367 | 23 58 | 94 | 3, 3, 3, 4, 2, 3, 4, 3 | 25 | 1 | 84-3 |
| 9 | 22 00 | 807 | | 10 34 | 63 | 11 49 | 29.3 | | 21 14 | 23 · 5 | 16 52 | 405 | 367 | 00 03 | 38 | 3, 3, 3, 3, 2, 3, 3, 4 | 24 | 1 | 84.3 |
| 0 | 20 21 | 826 | | 19 30 | 97 | 12 28 | 29.0 | | 19 56 | 31.6 | 19 28 | 418 | 359 | 22 40 | 59 | 3,3,3,3,2,2,5,4 | 25 | 1 | 84 · 2 |
| | | | 723 | 15 25 | 73 | 15 06 | 30.8 | 5.3 | 21 16 | 25.5 | 16 00 | 430 | 334 | 01 52 | 96 | 4, 2, 2, 2, 3, 4, 4, 5 | 26 | 1 | 84 · 2 |
| 1 | 13 52 | 796 | | 16 23 | 75 | 06 31 | 32.3 | | 21 17 | 17 · 3 | 16 37 | 411 | 365 | 01 13 | 46 | 3,3,3,3,2,3,2,4 | 23 | 1 | 84 · 3 |
| 2 | 22 45 | 809 801 | | 13 17 | 74 | 10 00 | 30.3 | | 01 04 | 10.5 | 13 43 | 408 | 365 | 00 39 | 43 | 3, 3, 2, 3, 3, 2, 3, 2 | 21 | 0 | 84.2 |
| 4 | 21 14 22 39 | 867 | | 17 39 | 133 | 11 19 | 29.1 | | 22 05 | | 17 42 | 412 | 372 | 23 01 | 40 | 2,2,1,2,3,3,3,5 | 21 | 1 | 84 · 2 |
| 5 q | 20 07 | 807 | | 01 37 | 47 | 10 50 | 26.9 | 19.6 | 00 58 | 7.3 | 18 52 | 390 | 376 | 02 10 | 14 | 2, 2, 2, 2, 2, 1, 3, 2 | 16 | 0 | 84 · 2 |
| - 1 | | | 754 | 01 12 | 57 | 12 14 | 30.0 | 15.4 | 01 30 | 14-6 | 12 58 | 389 | 365 | 00 49 | 24 | 3, 3, 3, 2, 2, 2, 2, 2 | 19 | 0 | 84 · 2 |
| 6 7 d | 05 43 | 811 | | 19 18 | 165 | 15 13 | 41.3 | | 22 17 | 41.6 | 19 11 | 566 | 350 | 08 13 | 216 | 2,3,3,4,4,5,6,5 | 32 | 2 | 84 · 1 |
| 8 | 15 36 | 837 | | 11 13 | 118 | 16 45 | 30.7 | | 00 30 | 19.3 | 15 43 | 435 | 365 | 00 40 | 70 | 4,2,2,4,3,3,4,2 | 24 | 1 | 84 · 0 |
| 9 | 19 19 | 798 791 | | 15 44 | 84 | 17 16 | 29.9 | 15.3 | 16 07 | 14.6 | 16 46 | 455 | 361 | 02 25 | 94 | 3, 3, 3, 2, 2, 4, 2, 2 | 21 | 1 | 83.9 |
| 0 | 05 49 06 09 | 791 | | 18 15 | 62 | 13 49 | 29.1 | | 17 57 | 16 · 4 | 18 18 | 424 | 377 | 06 47 | 47 | 2,3,3,2,2,4,4,3 | 23 | 1 | 83.9 |
| | | | | 15 21 | 87 | 12 42 | 30-4 | 16.3 | 18 09 | 14 - 1 | 15 41 | 424 | 372 | 05 32 | 52 | 1,2,3,2,3,3,4,2 | 20 | 1 | 83.8 |
| 1 | 18 16 | 814 | 121 | 12 41 | 0' | ** ** | ٠ , , | | | | | | | | | | | 0.61 | 84.3 |

q denotes an international quiet day and d an international disturbed day.

For all, a, quiet, q, and disturbed, d, days for H, D and Z and for all days for X, -Y, I and F

25 ESKDALEMUIR

| | Hor | izonta forc | | Dec | linatio (west) | . , | Ver | tical force | (Z) | North | West | | tion (I) | Total |
|-----------|--------|----------------|--------|--------|-------------------|--------|--------|----------------|--------|------------------------|----------------------------|----|---------------|-----------------------|
| | a 1 | q 6,000γ | d + | a | q 10°+ | d | a 4 | q 5,000γ | d + | component (X) all days | component (-Y) all days | | orth) days | force (F) all days |
| | γ | γ | γ | · | | • | 7 | γ | γ | γ | γ | ۰ | • | γ |
| January | 758 | 768 | 740 | 28.9 | 29.4 | 28.3 | 362 | 355 | 371 | 16478 | 3049 | 69 | 43 · 5 | 48359 |
| February | 765 | 773 | 760 | 29.0 | 29 · 1 | 29.0 | 356 | 352 | 356 | 16485 | 3050 | 69 | 42.9 | 48355 |
| March | 767 | 773 | 753 | 28 · 4 | 28 · 6 | 27 · 2 | 354 | 351 | 360 | 16488 | 3048 | 69 | 42.6 | 48354 |
| April | 753 | 769 | 742 | 27.0 | 27.5 | 25.8 | 364 | 359 | 361 | 16475 | 3039 | 69 | 43.9 | 48358 |
| lay | 768 | 777 | 757 | 26.8 | 26 · 4 | 25.9 | 371 | 366 | 382 | 16490 | 3040 | 69 | 43.0 | 48370 |
| June | 776 | 778 | 766 | 26 · 7 | 26.8 | 25.3 | 361 | 365 | 352 | 16498 | 3041 | 69 | 42 · 2 | 48364 |
| July | 774 | 782 | 761 | 26.3 | 26 · 2 | 26.2 | 368 | 364 | 372 | 16497 | 3039 | 69 | 42.5 | 48370 |
| August | 772 | 778 | 761 | 25.9 | 26 · 1 | 25.4 | 370 | 368 | 368 | 16495 | 3037 | 69 | 42.7 | 48371 |
| September | 763 | 770 | 743 | 24.8 | 25.3 | 23.7 | 371 | 370 | 368 | 16486 | 3030 | 69 | 43.4 | 48368 |
| October | 751 | 775 | 712 | 24 · 1 | 25.0 | 22.4 | 383 | 378 | 375 | 16476 | 3024 | 69 | 44 · 4 | 48376 |
| November | 754 | 770 | 692 | 23.6 | 23.6 | 21.3 | 387 | 387 | 380 | 16479 | 3022 | 69 | 44 • 4 | 48381 |
| December | 768 | 77 7 | 748 | 24.0 | 24 · 3 | 22.8 | 393 | 390 | 398 | 16493 | 3027 | 69 | 43.6 | 48391 |
| Year | 764 | 774 | 745 | 26 · 3 | 26 · 5 | 25.3 | 370 | 367 | 370 | 16487 | 3037 | 69 | 43.2 | 48368 |

DAILY RANGE AND MEAN MONTHLY VALUES

26 ESKDALEMUIR

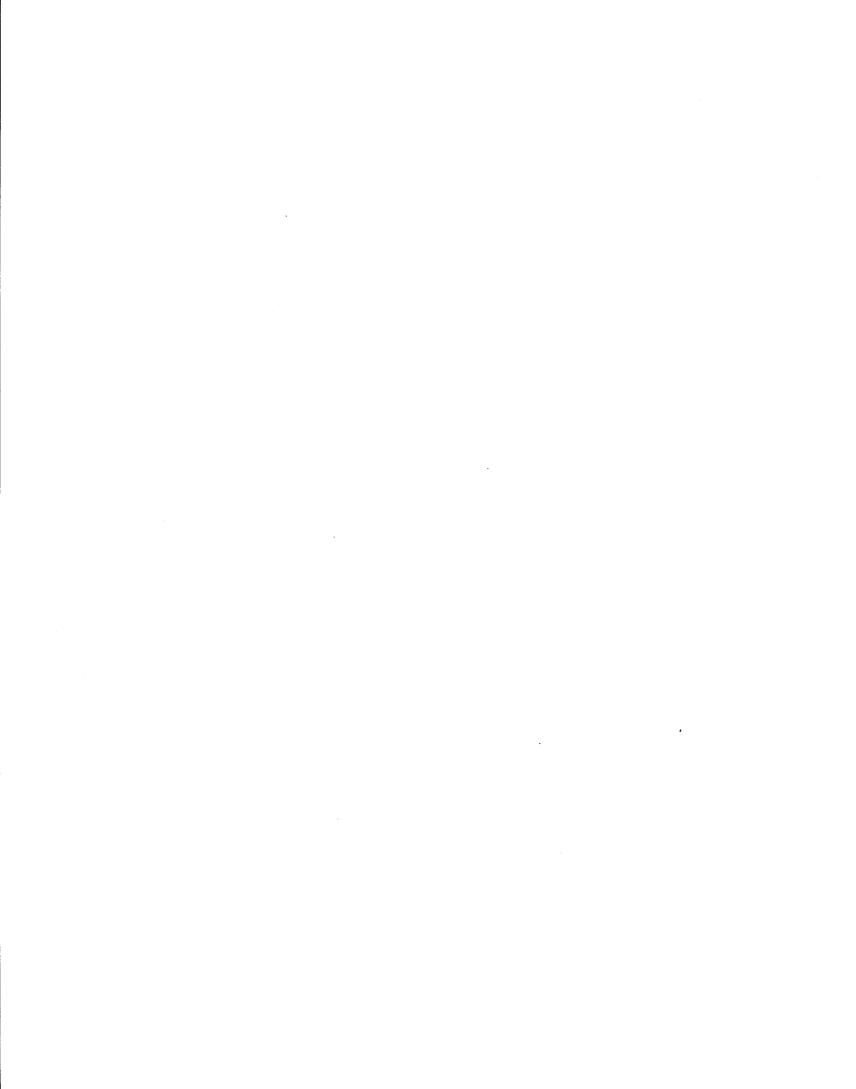
| | | Mea | n dai | ly rang | e | | | | | e èxpre yearly | | |
|-----------|-----|------|-------|---------|------|------|-----|------|-----|-------------------|-----|------|
| | | 1960 | | Mean | 1932 | - 53 | | 1960 | | Mean | 193 | 2-53 |
| | H | D | Z | H | D | Z | H | D | Z | H | D | Z |
| | γ | γ | γ | γ | γ | γ | % | % | % | % | % | % |
| January | 76 | 82 | 45 | 78 | 83 | 47 | 50 | 69 | 43 | 76 | 90 | 75 |
| February | 73 | 85 | 52 | 84 | 89 | 53 | 48 | 71 | 50 | 82 | 97 | 84 |
| March | 116 | 114 | 78 | 126 | 113 | 85 | 76 | 96 | 74 | 124 | 123 | 135 |
| April | 305 | 183 | 190 | 125 | 103 | 77 | 199 | 154 | 181 | 123 | 112 | 122 |
| May | 144 | 108 | 85 | 116 | 91 | 71 | 94 | 91 | 81 | 114 | 99 | 113 |
| June | 132 | 99 | 83 | 105 | 84 | 55 | 86 | 83 | 79 | 103 | 91 | 87 |
| July | 148 | 102 | 96 | 110 | 85 | 56 | 97 | 86 | 91 | 108 | 92 | 89 |
| August | 130 | 106 | 98 | 113 | 93 | 68 | 85 | 89 | 93 | 111 | 101 | 108 |
| September | 118 | 114 | 91 | 117 | 106 | 81 | 77 | 96 | 87 | 115 | 116 | 129 |
| October | 266 | 188 | 179 | 107 | 102 | 76 | 174 | 158 | 170 | 105 | 111 | 121 |
| November | 235 | 142 | 166 | 73 | 79 | 47 | 154 | 119 | 158 | 72 | 86 | 75 |
| December | 93 | 107 | 92 | 66 | 74 | 42 | 61 | 90 | 88 | 65 | 80 | 67 |
| Winter | 119 | 104 | 89 | 75 | 81 | 47 | 78 | 87 | 85 | 74 | 88 | 75 |
| Equinox | 201 | 150 | 135 | 119 | 106 | 80 | 131 | 126 | 129 | 117 | 115 | 127 |
| Summer | 139 | 104 | 91 | 111 | 88 | 63 | 91 | 87 | 87 | 109 | 96 | 100 |
| Year | 153 | 119 | 105 | 102 | 92 | 63 | _ | _ | _ | _ | - | - |

"Winter" comprises the four months January, February, November, December: "Equinox" the months March, April, September, October: and "Summer" May to August.

FREQUENCY DISTRIBUTION OF DAILY RANGE

27 ESKDALEMUIR

| | | lumber ses, | | L | P | ercentag | e distribu | tion | |
|-------------|----|----------------|----|------|--------------|----------|--------------|------|---------------------|
| Range | H | D | z | 1960 | # 1932-53 | 1960 | D 1932-53 | 1960 | <i>Z</i> 1932-53 |
| γ | | | | % | % | % | % | % | % |
| 0 - 9 | 0 | 0 | 0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 2.3 |
| 10 - 19 | 0 | 0 | 37 | 0.0 | 0.8 | 0.0 | 0.4 | 10.1 | 14 · 1 |
| 20 - 29 | 3 | 1 | 39 | 0.8 | 3.9 | 0.3 | 2.5 | 10.7 | 19.8 |
| 30 - 39 | 5 | 13 | 50 | 1.4 | 6.0 | 3.8 | 5∙ 0 | 13.7 | 16.0 |
| 40 - 49 | 23 | 11 | 45 | 6.3 | 7.8 | 3.0 | 7 · 4 | 12.3 | 10.2 |
| 50 - 59 | 34 | 25 | 26 | 9.3 | 10.4 | 6.8 | 12.1 | 7.1 | 7.5 |
| 60 - 69 | 27 | 32 | 20 | 7.4 | 11.7 | 8 · 7 | 12.9 | 5.5 | 5.6 |
| 70 - 79 | 37 | 52 | 19 | 10.1 | 10.6 | 14 · 2 | 12.3 | 5.2 | 3.6 |
| 80 - 89 | 37 | 42 | 13 | 10.1 | 9.0 | 11.5 | 10.7 | 3.6 | 3.0 |
| 90 - 99 | 30 | 26 | 19 | 8.2 | 7.3 | 7.1 | 8.3 | 5.2 | 2.4 |
| 100 - 109 | 29 | 31 | 11 | 7.9 | 5.8 | 8 · 5 | 5.9 | 3.0 | 2 · 1 |
| 110 - 119 | 24 | 25 | 7 | 6.6 | 5.1 | 6.8 | 4.0 | 1.9 | 1.7 |
| 120 - 129 | 19 | 22 | 8 | 5. 2 | 3.3 | 6.0 | 3.5 | 2.2 | 1.7 |
| 130 - 139 | 17 | 18 | 5 | 4.6 | 2.9 | 4.9 | 2.6 | 1.4 | 1.2 |
| 140 - 149 | 12 | 13 | 6 | 3.3 | 2.3 | 3.6 | 2 · 2 | 1.6 | 0.8 |
| 150 - 159 | 7 | 5 | i | 1.9 | 1.9 | 1.4 | 1.7 | 0.3 | 0.9 |
| 160 - 169 | 10 | 4 | 9 | 2.7 | 1.5 | 1.1 | 1.6 | 2.5 | 0.7 |
| 170 - 179 | 3 | | 6 | 0.8 | 1.5 | 1.6 | 1.2 | 1.6 | 0.4 |
| 180 - 189 | 2 | 6 5 7 | 2 | 0.5 | 0.9 | 1.4 | 1.0 | 0.5 | 0.6 |
| 190 - 199 | 3 | 7 | 4 | 0.8 | 0.9 | 1.9 | 0.8 | 1.1 | 0.5 |
| 200 + | 44 | 28 | 39 | 12.0 | 6.3 | 7.7 | 4.0 | 10.7 | 4.8 |
| ays omitted | 0 | 0 | 0 | _ | _ | _ | _ | _ | _ |



DIURNAL INEQUALITIES OF THE GEOGRAPHICAL COMPONENTS OF MAGNETIC FORCE ALL DAYS

Departures from the mean of the 24 hourly values (uncorrected for non-cyclic change)

28 ESEDALEMUIR

| | Hour (| i.M.T. 1-2 | 2-3 | 3-4 | 4-5 | 5-6 | 6-7 | 7-8 | 8-9 | 9-10 | 10-11 | 11-12 | 12-13 | 13-14 | 14-15 | 15-16 | 16-17 | 17-18 | 18-19 | 19-20 | 20-21 | 21-22 | 22-23 | 23-24 |
|-----------------------|------------------------|-----------------------|------------------------|-----------------------|------------------------|-------------------------|---|------------------------|-------------------------|-------------------------|-------------------------|-------------------------|-----------------------|------------------------|-------------------------|-------------------------|-------------------------|--------------------|-----------------------|-------------------------|------------------------|------------------------|------------------------|------------------------|
| | | | | | | | | | | | NORTI | COMPON | ENT | | | | | | , | | | | | |
| jan. | γ +2·7 | γ +2·3 | γ +1·2 | γ +5·1 | γ +6.8 | γ +11·8 | γ +13.0 | γ +12.1 | γ +6·3 | γ -2·0 | γ -8·9 | γ -16·2 | lγ | γ -15·3 | γ -11.4 | γ -9·3 | γ -7·2 | γ -2·1 | γ +2·3 | γ +5·0 | γ +6·8 | γ +5·5 | γ +3·3 | γ |
| Feb. Mar. | +4·5 +6·1 | +5·5 +5·7 | +2·6 +5·1 | +5·9 +7·1 | +9·0 +9·5 | +9·6 +11·5 | +11·4 +14·5 | +11·1 +11·5 | +7·3 +1·5 | -0·7 -11·8 | -8·6 -23·6 | -15·7 -31·0 | -16·7 -30·8 | -13·3 -26·1 | -11·5 -16·6 | -9·7 -5·9 | -8·0 +7·5 | -2·2 +9·3 | -1·3 +8·3 | +2·3 +16·5 | +3·9 +10·9 | +3·2 +9·2 | +6·3 +4·9 | +3·5 +5·2 +6·8 |
| Apr. May | -18·7 +2·2 +6·2 | -25·3 +0·6 +5·0 | -9·5 +2·1 +4·3 | -20·3 +1·6 +4·7 | -6·5 +2·8 +6·1 | +0·5 +3·6 +1·8 | +0·3 +1/2 -3·0 | -6·7 -4·5 -11·1 | | -20·7 -24·9 -29·0 | -32·3 -29·7 -36·0 | -37·0 -32·1 -39·0 | | -22.8 | +13·6 -10·5 -16·3 | +11.3 | +49·9 +15·6 +12·6 | +19-2 | | +28·9 +24·2 +36·0 | +5·2 +21·9 +30·5 | -5·7 +15·7 +20·1 | +1·9 +10·5 +12·8 | +0·4 +10·4 +8·8 |
| June July | +2.9 | -1 · 4 | +2·7 | +6.5 | +8.5 | +8.0 | +0.2 | -8.5 | -18.7 | -27 · 2 | -34.6 | -38·6 -38·3 | -32.4 | -24·8 -23·3 | -14.5 | +1 · 1 | +17·2 +15·4 | +26 · 6 | +34 • 4 | +35 · 2 | +25·7 | +15-9 | +9.8 | +6.0 |
| Aug. Sept. Oct. | +12·0 +6·9 -10·2 | +9·5 +8·0 -3·9 | +10·7 +10·4 +6·7 | +6·1 +13·1 +5·9 | +10·4 +11·9 +8·5 | +6·4 +14·2 +12·3 | +1·8 +5·3 +9·7 | -12·0 -6·1 +5·0 | -26·0 -19·3 -1·7 | | -35·7 -36·2 -30·1 | -35·3 -29·5 | -27·9 -23·3 | -22·7 -8·8 | -11·2 -9·8 +0·7 | -5.0 | | +13.9 | +20.9 | +24·5 +18·9 +8·6 | +18.9 | +14·6 +17·0 +2·4 | +13·2 +12·8 -4·5 | +11·3 +10·8 +1·1 |
| Nov. Dec. | -34·7 +3·6 | -8·6 +0·9 | -13·9 +2·6 | -0·9 | +9·8 +11·8 | +8·9 +13·5 | -3·1 +11·7 | -12·4 +7·8 | -3·0 +4·9 | -3·8 -3·8 | -4·4 -7·7 | -13·7 -8·8 | -12·2 -10·1 | -5·8 -9·5 | +0·3 -7·9 | +11·9 -5·0 | +18·4 -7·0 | +12·3 -6·0 | +23·5 -0·7 | +20·3 -3·0 | +11·6 +1·9 | +6·7 +0·7 | +0·5 +2·4 | +2·2 +1·6 |
| Year | -1.3 | -0.1 | +2·1 | +3·4 | +7•4 | +8.5 | +5·3 | -1·1 | -8·1 | -16·8 | -24 · 0 | -27.9 | -23.7 | -17.0 | -7.9 | +2·6 | +10·8 | +18·1 | +18 · 6 | +18 · 2 | +12·8 | +8•7 | +6·1 | +5·7 |
| Winter | -5.9 | 0.0 | -1.9 | +4 · 1 | +9•4 | +11.0 | +8•4 | +4·6 | +3·9 | -2.6 | | -13-6 | 1 | -11.0 | -7.7 | -3.0 | -3.5 | +0.5 | +6·0 | +6·2 | +6·0 | +4.0 | +3·1 | +3·2 |
| Equinox Summer | +28·3 +5·9 | +21·9 +3·4 | +33·6 +5·0 | +32·3 +4·7 | +26·0 +7·0 | +27·1 +5·0 | +23·8 -0·2 | +21·3 -9·1 | +18·7 -20·2 | -0·8 -28·4 | -33·2 -33·9 | -60·6 - <i>37·0</i> | -76·4 -31·2 | -76·3 -24·4 | -60·0 -13·1 | -38·3 +3·1 | | | +13·7 +31·3 | +17·5 +30·2 | | +21·2 +16·6 | +25·7 +11·6 | +31·6 +9·1 |
| | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | COMPONEN | | | | | | | | | | | | |
| Jan. Feb. | -9.5 -14.3 | | γ -10·0 -7·4 | γ -9·7 -7·7 | γ -4·7 -8·4 | γ -1·3 -6·4 | $\begin{array}{c} \gamma \\ -0 \cdot 1 \\ -5 \cdot 3 \end{array}$ | γ -0·3 -5·9 | γ -2·0 -8·4 | γ -2·3 -9·7 | γ +0·8 -2·3 | γ +6∙6 +8∙0 | | | | γ +12·7 +21·5 | | γ +6·6 +9·7 | γ +6·8 +6·7 | γ +1·1 +2·9 | γ -5·5 -4·5 | | γ -13·8 -13·5 | |
| Mar. Apr. | -10·4 -29·4 | -11·0 -27·7 | -15·3 -28·0 | -15·3 -29·4 | -12·1 -15·7 | -11·4 -13·6 | -9·4 -17·4 | -14·1 -23·4 | -18·5 -29·0 | 18·4 -22·6 | -10·8 -8·1 | +4·5 +7·8 | +25.4 | +39.5 | +40.6 | +31·2 +42·8 | +46 • 4 | +14.4 | +9·8 +16·3 | +3·2 +9·4 | -4·6 +7·4 | -8.6 | -11·9 -13·3 | -11.9 |
| May June | -2·4 -6·7 | -8·6 -10·5 | | -12·8 -16·6 | | -29·8 | -31.8 | | -29·7 -33·0 | -23·4 -25·3 | -8·9 -12·2 | +7·3 +3·1 | +19·2 | +28 · 1 | +30·4 | +29·0 +32·0 | +27·9 | +25·8 | +9·9 +22·3 | | +4·1 | +1·2 +8·3 | -0·1 +6·1 | -1·8 +1·7 |
| July Aug. | -0.8 | | -12.0 | | -12.9 | | -24·3 -25·2 -13·6 | -26·9 -32·2 17·4 | -27·9 -29·5 -19·1 | -23·0 -19·5 -15·1 | -12·8 -3·7 0·0 | +2·7 +13·0 +15·9 | +27.9 | +34.0 | +33.5 | +29·2 +27·3 +24·1 | +19·9 | +12.0 | +16·5 +6·5 +5·6 | +11·9 +5·0 +4·6 | +9·1 +2·2 +1·7 | +5·8 -0·4 -2·2 | +0·5 -4·4 -7·3 | -3·4 -1·1 -15·0 |
| Sept. Oct. Nov. | | -10.5 | -12·3 -5·4 | | -5·2 +2·6 | -1·1 +2·2 | +4·7 +5·2 | +4·7 -1·6 | -5·5 -5·9 | -5·3 -9·3 | +3·0 -5·3 | +16·0 +8·5 | +27·5 +14·3 | +33·6 +20·4 | +29·0 +21·0 | +23·7 +17·0 | +16·5 +11·2 | +9·8 +6·1 | -6·4 -0·7 | -2·0 -0·7 | -17·0 -6·0 | -18·8 -11·5 | -19·6 -15·2 | -23·9 -16·6 |
| Dec. | -12.5 | -11·8 | -7.0 | -6.6 | -1.0 | +6·2 | +6•6 | +8·7 | +7·1 | +5·8 | +8.0 | +11.9 | +16.7 | +13·8 | +14·2 | +9•1 | +10·1 | +7·7 | +0·2 | -11.8 | -17.7 | -19·7 | -20 · 4 | -17-7 |
| Year | -13·2 | -12·7 | -12·3 | -12.8 | -10.3 | -10.1 | -11·4 | -14 · 4 | -16·8 | -14.0 | -4·4 | +8.7 | +21 · 4 | +27 · 9 | +28 · 6 | +25.0 | +21 · 2 | +15·5 | +7·8 | +3·9 | -1.5 | -6 · 1 | -9-4 | -10.7 |
| Winter Equinox | -14·0 -20·9 | | -7·4 -18·4 | -5·9 -19·0 | -2·9 -11·5 | +0·1 -9·2 | +1·6 -8·9 | +0·2 -12·5 | -2·3 -18·0 | -3·9 -15·3 | +0·3 -4·0 | +8·7 +11·0 | 1 | | +18·8 +35·1 | +15·1 +30·5 | +11·5 +26·9 | +7·5 +19·9 | +3·3 +6·4 | -2·1 +3·8 | -8·4 -3·1 | -13·3 -8·6 | -15·7 -13·0 | -15·0 -15·9 |
| Summer | -4.7 | -10.8 | -11·1 | -13·5 | -16·4 | -21·2 | -26 · 9 | -31 · 0 | -30.0 | -22.8 | -9·4 | +6.2 | +22·2 | +29·9 | +31 · 7 | +29•4 | +25·2 | +19•0 | +13·8 | +9•9 | +7·1 | +3·7 | +0.5 | -1·1 |
| | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | VEDTIC | AL COMPO | NENT | | | | | | | | | • | | |
| | γ | γ | γ | γ | γ | γ | γ | γ | γ | γ | γ | γ | ιγ | γ | γ | γ. | γ | y | γ | γ | γ | γ | y | γ |
| Jan. Feb: Mar. | +0·5 -1·8 -5·0 | -5·9 -2·7 -9·2 | -6.7 | -9 · 2 | -7.9 | -8 · 1 | -6·8 -8·0 -9·4 | -5·6 -7·3 -5·1 | -5.3 | -3·6 -4·8 -4·5 | -6.9 | -8 · 1 | -2·5 -7·6 -11·2 | -5.7 | -0.6 | +4.5 | +9·5 +10·0 +17·0 | | +14-2 | | +8·0 +14·6 +19·3 | | +8.0 | +2·3 +0·8 -12·4 |
| Apr. May | -40-2 | -45.2 | -36·6 -13·0 | -39·5 -8·0 | -32·1 -4·4 | -21 · 2 -4 · 7 | -12·6 -3·5 | -8·3 | -4.8 | -2·8 -10·7 | -3·3 -15·3 | -3·0 -18·2 | +0·9 -16·1 | +10·6 -6·5 | +26 · 5 +5 · 7 | +34·5 +20·1 | +38·5 +23·8 | +37 · 4 +25 · 8 | +46 · 2 +24 · 7 | +36·8 +19·6 | +20·9 +14·2 | +9·9 +5·6 | +2·9 +0·1 | -15·5 -4·4 |
| June July | -3·4 | -7·3 | | -25 · 1 | | -17·7 -8·1 | -11·5 -6·1 | -6·4 -3·8 | | -7·2 -6·5 | -10·0 -8·7 | -11·3 -10·7 | -7·4 -7·6 | +0·4 -2·6 | | +10·6 +13·7 | | | | | | | +4·5 +1·9 | +1·1 -5·3 |
| Aug. Sept. | -12·0 -21·4 | -16·0 -21·6 | -18·6 -19·0 | -21·0 -16·2 | -16·9 -14·7 | -17·2 -10·4 | -11·7 -6·6 | -5·6 -2·9 | -5·2 -1·5 | -7·7 -2·6 | -11·1 -5·2 | -13·5 -6·4 | -11·4 -4·4 | -4·6 +0·9 | +4·8 +9·4 | +13·7 +17·7 | +23·3 +19·9 | +32·2 +22·4 | +33·2 +25·0 | +27·7 +22·4 | +20·6 +17·8 | +13·1 +7·9 | | -0·1 -10·1 -28·4 |
| Oct. Nov. Dec. | -32.8 | -31 · 4 | -31 · 4 | -26.7 | -24 · 5 | -25·1 -21·1 -19·0 | -23.0 | -16 · 3 | -2.9 | -2·1 +4·0 -7·2 | | +3·5 +5·3 -3·3 | | +17·2 +12·9 +7·2 | +20 · 2 | | +49·6 +30·4 +26·6 | +29 · 2 | +34 · 3 | +23.8 | | -2·0 +3·3 +2·8 | -7.1 | -13·3 -8·9 |
| pec. | * | | | | | | | | | | | | | | | | | | | | | | | |
| Year | | | | | | -14.3 | | -7·5 | | -4·6 -2·9 | -5·8 -2·0 | -6·6 -2·1 | -4·2 -0·5 | | | +18·7 +16·9 | | | | | | +7·8 +5·4 | -0·3 -0·5 | -7·9 -4·8 |
| Winter Equinox | -24.8 | -27 · 1 | -25·1 | -25.6 | -22.3 | -13·9 -16·9 | -11.9 | -6.9 | -3.7 | -3.0 | -4·1 | -4·3 | -1.5 | +5-3 | +16 · 1 | +24 · 6 | +31 · 3 | +35 · 1 | +33-6 | +27・9 | +16 · 5 | +6.7 | -3·1 | -16.6 |
| Summe r | -10-4 | -15.0 | -17 · 5 | -18 · 2 | -13·9 | -11.9 | -8.2 | -4.9 | -5·1 | -8.0 | -11.3 | -13.4 | -10.6 | -3·3 | +5.4 | +14 · 5 | +21 · 7 | +27 • 4 | +27 · 9 | +24 · 3 | +18 · 7 | +11.4 | +2·6 | |

"Winter" comprises the four months January, February, November, December; "Equinox" the months March, April, September, October; and "Summer" May to August.

ALL DAYS

Departures from the mean of the 24 hourly values (uncorrected for non-cyclic change)

| 29 | ESKDALEMUIR |
|----|-------------|

| : | Hour (| 1-2 | 2-3 | 3-4 | 4-5 | 5-6 | 6-7 | 7-8 | 8-9 | 9-10 | 10-11 | 11-12 | 12-13 | 13-14 | 14-15 | 15-16 | 16-17 | 17-18 | 18-19 | 19-20 | 20-21 | 21-22 | 22-23 | 23-24 |
|---|---|---|--------------------------------------|---------------------------------------|--------------------------------------|----------------------------------|--|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|---|--|-------------------------|----------------------------------|----------------------------------|---|--|--|----------------------------------|--|----------------------------------|----------------------------------|
| | | | | | | | | DEC | CLINATIO | ON (meas | sured po | sitive | towards | the wes | it) | | | | | | | | | |
| Y | -3.03 | -1·82 | -2:06 | , -2.15 | -1:20 | -0.70 | -0·54 | , -0, 51 | -0.63 | , -0, 30 | +0.40 | , +1.02 | 1 42.46 | +4 - 26 | , , , , , | , | , | , | , 41,20 | , 40. 04 | -1.27 | -2.66 | , -1.00 | 0.77 |
| Jan. Feb. Mar. Apr. May June | -3·06 -2·32 -5·24 -0·57 | -2·32 -2·42 -4·66 -1·75 -2·30 | -1·59 -3·26 -5·31 -2·43 | -1·78 -3·34 -5·18 -2·64 | -2·04 -2·78 -2·94 -2·74 | -1·66 -2·73 -2·76 -4·11 | -1·50 -2·43 -3·52 -5·37 | -1·60 -3·26 -4·47 -5·62 | -1·97 -3·79 -5·41 | -1·92 -3·27 -3·79 -3·79 | -0·14 -1·30 -0·44 | +2·20 +2·06 +2·95 +2·66 | +4·02 +5·95 +5·93 | +4 · 98 +7 · 42 +8 · 17 +6 · 95 | +5·38 +7·58 +7·70 | +4·71 +6·51 +7·47 +5·43 | +3·20 +5·23 +7·52 +4·79 | +2·04 +2·55 +6·43 +2·76 | +1 · 41 +1 · 67 +2 · 13 +0 · 97 | +0·50 +0·03 +0·82 +0·40 | -1·05 -1·33 +1·30 +0·02 | -2.66 -2.13 -1.35 -1.52 -0.34 +0.93 | -2·96 -2·58 -2·76 -0·40 | -2·72 -2·84 -2·42 |
| July Aug. Sept. Oct. Nov. | -0.60 -3.84 -4.93 -2.64 | -2·31 -2·86 -3·98 -1·98 -1·89 | -2·81 -4·03 -2·73 -0·57 | -2·42 -3·85 -3·19 +0·07 | -2·99 -3·06 -1·37 +0·17 | -3·48 -2·68 -0·68 +0·11 | -5·14 -2·94 +0·60 +1·17 | -6·05 -3·29 +0·77 +0·14 | -4·97 -3·14 -1·04 -1·09 | -2·71 -1·94 -0·48 -1·75 | +0·57 +1·34 +1·72 -0·91 | +4·04 +4·52 +4·32 +2·21 | +4-66 +6-73 +7-20 +6-43 +3-33 | +7·72 +7·90 +7·12 +4·33 | | +5·50 +5·04 +4·37 +3·00 | +3·43 +3·21 +2·69 +1·96 | +1·40 +2·08 +0·96 +0·77 | +0·26 +0·36 -1·77 -1·01 | +0·10 +0·23 -0·73 -0·90 | -0·22 -0·35 -3·38 -1·64 | -0.63 -1.07 -3.88 -2.56 | -1·38 -1·95 -3·79 -3·09 | -0.65 -3.43 -4.87 -3.44 |
| Dec. | | -2.42 | | | | | | | | | | | +3.74 | +3-14 | +3.16 | +2.02 | +2.30 | +1.77 | +0-07 | -2.26 | -3.63 | -4.00 | -4 · 20 | -3.63 |
| Yeer | | -2.56 | | | | | | -2·86 -0·13 | | | | | | +4 · 18 | | | | | | | | -1·55 -2·84 | | |
| Winter Equinox Summer | -4.08 | | -3.84 | -3.89 | -2.54 | 2 · 21 | -2·07 -5·42 | -2.56 | -3.35 | -2.37 | +0.33 | | | | +7 · 20 | +5.85 | +4.66 | +3 · 01 | +0.60 | +0.09 | -0.94 | -1·95 +0·13 | -2.77 | -3·39 |
| | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | INCL | NATION | | | | | | | | | | | | |
| Jan. | -0:05 | , -0·19 | , -0·19 | , -0·44 | , -0·59 | -0·95 | -1·08 | -0·93 | -0· 4 9 | +0.07 | | | +0.85 | | | | | | | | -0.18 | | +0.03 | |
| Feb. Mar. Apr. May June | -0·16 -0·40 +0·59 -0·37 | -0·30 -0·47 +0·88 -0·29 | -0·42 +0·06 -0·32 | +0·71 -0·15 | -0·74 -0·18 -0·13 | -0·89 -0·39 -0·12 | -0.88 -1.07 -0.12 +0.15 +0.36 | -0·51 +0·55 | +0·04 +1·01 +1·25 | +1·57 +1·65 | +1·51 +2·13 +1·68 | +1·70 +2·26 | +1-13 | +1 · 14 +0 · 13 +0 · 97 | -0.73 | +0·17 -1·72 -0·60 | -2·88 -0·76 | -0·12 -3·39 -0·83 | -1·12 -1·33 | -0·50 -1·10 -1·19 | -1 · 14 | -0·27 +0·73 -0·91 | -0·10 +0·11 -0·69 | -0.26 |
| July | -0.47 | -0·31 -0·87 | -0.57 | -0.73 | -0.65 | | | +0.79 | | +1.90 | | | +1 - 34 | | +0-45 | +0.02 | -0.67 | -1 - 16 | -1.11 | -0.99 | -0.69 | -0·84 -0·63 | -0.72 | -0.73 |
| Aug. Sept. Oct. Nov. Dec. | -0.77 +0.19 +1.70 | -0.87 -0.84 -0.42 -0.08 -0.25 | -0.93 -1.12 +0.20 | -1·06 -1·11 -0·60 | -0·99 -1·27 -1·28 | -1·06 -1·41 -1·13 | -0·35 -1·16 -0·43 | +0·54 -0·67 +0·43 | +1 · 46 +0 · 06 +0 · 20 | +2·05 +1·07 +0·46 | +2·25 +1·92 | +1·97 +1·83 +0·92 | +1.42 | +0·60 +0·45 | +0·34 +0·22 | -0·06 -0·17 | +0·09 -0·09 | -0·60 -0·16 | +0·23 -0·69 | +0·13 -0·74 | +0·50 -0·20 | -0.89 +0.02 -0.22 +0.26 | +0·09 -0·02 | -0·49 -0·27 |
| Year | -0·13 | -0.29 | -0.46 | -0.56 | -0.78 | -0.79 | -0.48 | +0.06 | +0.62 | +1 · 16 | +1 · 48 | +1·57 | +1-19 | +0.82 | +0.43 | -0.01 | -0.38 | -0.70 | -0.60 | -0.67 | -0.42 | -0.31 | -0.29 | -0.44 |
| Winter Equinox Summer | -0.10 | -0·20 -0·21 -0·46 | -0.61 | -0.50 | -0.80 | -0.94 | -0·91 -0·67 +0·14 | -0·57 -0·08 +0·85 | | +0·15 +1·39 +1·94 | +1.95 | +0·73 +1·94 +2·02 | +1 · 34 | | +0-17 | -0.29 | -0.91 | -1 · 15 | -0.46 | -0-55 | -0.11 | +0·03 -0·11 -0·85 | -0.16 | |
| | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | HORIZON | TAL FOR | CE | | | | | | | | | | | |
| Jan. | γ +1·0 | γ +0·7 | γ -0·6 | γ +3·3 | | | | γ +11·9 +9·9 | γ +5·8 +5·6 | γ -2·4 -2·5 | γ -8⋅6 -8⋅9 | γ -14·7 -14·0 | γ -13·6 -13·4 | γ -11·7 -9·0 | γ -8·4 -6·8 | -6·8 -5·6 | γ -5·2 -5·2 | γ -0·9 -0·4 | +3·5 0·0 | γ +5·1 +2·8 | γ +5·7 +3·0 | γ +3·2 +1·3 | γ +0·7 +3·7 | γ +1·1 +2·8 |
| Feb. Mar. Apr. May June | +1·8 +4·1 -23·7 +1·7 +4·9 | +3·5 +3·6 -29·9 -1·0 +3·0 | +1·2 +2·2 -14·4 0·0 +2·5 | +4·4 +4·2 -25·3 -0·7 +1·6 | +7·3 +7·1 -9·2 +0·4 +1·8 | | +10 · 2 +12 · 6 -2 · 8 -3 · 6 -9 · 6 | +8·7 -10·8 -9·6 | -1·9 -17·0 -20·9 | -15·0 -24·5 -28·7 | -25·2 -33·2 | -29·7 -35·0 -30·3 | -25·9 -16·6 -25·6 | -19·8 +1·9 | -10·0 +20·7 -4·7 | -0·1 +38·6 +16·4 | +12·4 +57·5 +20·2 | +64·7 +22·0 | +33·9 +29·0 | +16 · 8 +30 · 1 +25 · 0 +39 · 3 | | | +2·6 -0·5 +10·3 +13·7 | +4·3 -1·8 +9·9 +9·0 |
| July Aug. | +1·3 +11·7 | -3·5 +7·1 | +0·6 +8·4 | +4·0 +4·0 | +5·4 +7·9 | +4·5 +3·4 | -2.8 | -17.6 | -30.9 | -35.9 | | -37 · 5 -35 · 3 -31 · 9 | -24.3 | -19·5 -16·8 -16·0 | -8·6 -5·0 -3·1 | | | +29 · 2 | | +25.0 | +17-9 | | +9·7 +12·2 +11·3 | +5·3 +10·9 +7·9 |
| Sept. Oct. Nov. Dec. | +3·6 -14·8 - <i>37</i> ·6 +1·3 | +4·6 -5·7 -10·4 -1·2 | +7·0 +4·4 -14·6 +1·3 | +9·9 +3·1 -0·9 +4·7 | +7·4 +10·1 | +12·0 +11·9 +9·1 +14·4 | | +5·8 -12·5 +9·2 | | | -29·1 -5·3 | -26 · 1 | -18·0 -9·4 -6·9 | -2·6 -2·0 -6·8 | +5.9 | ÷15·6 | +19.7 | | +11.6 | +8 · 1 | -4·6 +10·3 -1·3 | -1·0 +4·5 -2·9 | -8·0 -2·3 -1·3 | -3·2 -0·8 -1·6 |
| Year | -3.7 | -2·4 | -0.2 | +1.0 | +5·4 | +6·5 | +3·1 | -3·7 | -11.0 | -19·1 | -24 · 4 | -25·9 | -19·4 | -11·7 | -2.6 | +7·1 | +14·5 | +20 · 6 | +19·7 | +18·6 | +12·3 | +7·5 | +4·3 | +3·7 |
| Winter | -8·4 | -1.9 | -3.2 | +2·9 | +8·7 | +10 · 8 | +8.6 | ÷4·6 | +3·4 | -3·3 | -7·2 | | -10·8 -20·6 | -7·4 -9·1 | -4·1 +3·4 | -0·2 +13·4 | -1·3 +25·3 | +1·9 +30·3 | +6·5 +19·3 | +5·7 +18·6 | +4·4 +7·7 | +1·5 +4·1 | +0·2 +1·3 | +0·4 +1·8 |
| Equinox Summer | -7.7 | -6·9 | -0·2 | -2·0 +2·2 | +3·7 +3·9 | +7·8 +1·1 | .+5·7 -5·1 | -14.5 | -11·0 -25·3 | -32 · 1 | -30·8 -35·1 | -35 · 2 | -26.7 | -18.6 | -7.2 | +8.3 | +19-5 | +28-8 | +33-3 | +31 · 5 | +24 • 9 | +17.0 | +11.5 | +8.8 |
| Wir | +4·9 | +1·4 | for fo | ur mont | hs Janu | ary, Fe | bruary, | Novemb | er, Dec | ember; | "Equino | x" the | months M | larch, A | pril, S | eptembe | r, Octo | ber; an | d "Summ | ner"Ma | y to Au | gust. | | . — |
| #11 | 0 | p. 1353 | | | • | | | | | | | | | | | | | | | | | | | |

DIURNAL INEQUALITIES OF THE GEOGRAPHICAL COMPONENTS OF MAGNETIC FORCE INTERNATIONAL QUIET DAYS

Departures from the mean of the 24 hourly values (uncorrected for non-cyclic change)

30 ESKDALEMUIR

| 30 E | SKDALEMU | | | | | | | | | | | | · · · · · · | | | ······································ | | | | | | | | |
|---|---|---|---|---|---|--|---|---|--|---|--|--|---|--|---|---|---|--|--|--|---|---|---|---|
| | Hour G 0-1 | .M.T. 1-2 | 2-3 | 3-4 | 4-5 | 5-6 | 6-7 | 7-8 | 8-9 | 9-10 | 10-11 | 11-12 | 12-13 | 13-14 | 14-15 | 15-16 | 16-17 | 17-18 | 18-19 | 19-20 | 20-21 | 21-22 | 22-23 | 23-2 |
| | | | | <u></u> | | | | | | | | | | | | | | | | | | | | |
| | γ | ~ | 2′ | ~ | ~ | v | ~ | ~ | γ | γ | NORTH | COMPONE | NT ι γ | ~ | v | v | γ | ~ | ~ | ~ | ~ | ~ | ~ | ~ |
| Jan. Feb. Mar. Apr. May June | +2·9 +2·7 +7·7 +13·3 +5·5 +5·6 | +2·5 +2·3 +3·7 +8·0 +2·4 +4·6 | +2·7 +0·6 +3·9 +6·3 -0·6 +5·6 | +4·5 +3·2 +5·2 +3·2 +1·0 +6·9 | +7·7 +4·2 +6·5 +8·6 +5·3 +10·1 | +10·5 +4·9 +7·6 +10·9 +5·9 +8·7 | +13·9 +9·3 +8·3 +9·0 +0·7 -0·5 | +13·2 +10·4 +27·9 +5·2 -6·9 -10·6 | +10·8 +5·0 +2·5 | +1·0 -3·0 -11·0 -18·6 | -9·3 -9·4 -24·4 -26·2 | -28.0 | -19·7 -14·7 -27·2 -28·6 -26·2 | -11·7 -23·0 | -10·8 -10·5 -14·0 -17·6 -7·2 -9·7 | -7·3 -8·7 -6·0 -9·0 +3·7 +1·1 | -5·2 -5·1 -0·6 +0·8 +11·7 +10·5 | | +15·5 +21·4 | +16 · 6 | +14·5 +17·8 | +4·4 +5·8 +12·6 +14·0 +13·0 +14·9 | +14.7 | +15· +11· |
| July Aug. Sept. Oct. Nov. Dec. | +1·0 +10·2 +10·4 +5·8 +1·3 -0·7 | +3·7 +8·5 +10·1 +5·1 -2·5 -1·9 | +4·6 +10·7 +10·0 +5·5 +3·0 +0·1 | +7·3 +10·3 +9·6 +6·6 +3·9 +2·9 | +10·6 +9·9 +10·5 +8·0 +4·1 +4·6 | +10·8 +8·1 +6·9 +6·8 +10·9 +7·5 | +2·6 +1·4 +1·9 +9·2 +11·8 +5·5 | -7·6 -8·6 -1·8 +7·4 +9·3 +8·5 | -20·2 -20·7 -12·2 -1·0 +4·5 +5·6 | -27·5 -33·5 -24·8 -15·4 -7·5 +2·4 | - <i>34⋅3</i> -34⋅2 | -32·5 -35·1 -33·1 -17·1 | -24·3 -28·0 -29·6 | -14·5 -21·0 -21·2 -13·8 | -11·3 -12·2 | -2·2 +2·3 -3·4 -5·7 -5·9 -10·0 | +6·5 +7·9 +3·8 -0·2 -1·7 -0·3 | +17·8 +13·1 +8·0 +7·0 +2·8 -0·6 | +16 · 3 | +24·9 +19·9 +17·1 +11·6 +7·5 -1·4 | +17·7 +18·2 | +12.6 | +16.0 | +11• |
| (ear | +5•4 | +3·9 | +4·3 | +5•4 | +7·5 | +8·3 | +6•4 | +2·3 | -5.3 | -15.5 | -22.8 | -25.9 | -22.8 | -18·2 | -10.7 | ÷4·3 | +2•4 | +8·2 | +12·6 | +13·2 | +12·8 | +11-1 | +11-1 | +10• |
| Winter Equinox Summer | +1·5 +9·3 +5·5 | +0·1 +6·7 +4·9 | +1·7 +6·4 +5 1 | +3·7 +6·1 +6·4 | +5·2 +8·4 +8·9 | +8·5 +8·1 +8·4 | +10·1 +8·2 +1·0 | +10 · 4 +4 · 8 -8 · 5 | +6·5 -4·2 -18·2 | -1·8 -17·4 -26·9 | -27 · 9 | -13·5 -32·1 -32·1 | -28-4 | -12·2 -23·2 -19·5 | -9·9 -13·5 -8·7 | -7·9 -6·0 +1·2 | -3·1 +0·9 +9·2 | | +2·3 +12·8 +22·7 | | | +4·3 +14·4 +14·6 | +4·3 +15·8 +13·0 | +5· +14· +12· |
| | | | | | | | | | | | WEST CO | DMPONENT | | | | | | | | | | | | |
| Jan. Feb. Mar. Apr. May June | γ -7·1 -9·0 -2·7 -4·9 +3·7 +4·5 | γ -4·1 -9·9 -2·9 -5·5 +3·0 +1·7 | γ -2·7 -3·0 -3·4 -3·8 +0·4 +0·7 | γ -2·2 -1·3 -5·6 -4·0 -5·1 -6·9 | γ 0·0 -2·3 -4·8 -7·5 -9·6 -15·1 | γ -0·1 -3·3 -6·2 -14·2 -21·1 -26·2 | -21.4 | | y -6·9 -10·7 -24·6 -32·4 -31·3 -38·4 | -14·9 -25·9 -25·8 -25·9 | γ -10·3 -9·6 -18·3 -15·0 -14·7 -15·4 | γ -3·3 +2·4 +0·2 +2·7 +0·8 +2·5 | +11·2 +18·8 +20·3 +15·9 | +16·3 +28·1 +27·7 +24·7 | | +12·4 +20·7 +20·2 +23·9 | +16 • 4 | 7 +8·6 +6·5 +6·5 +10·9 +10·9 +18·9 | γ +5·6 +4·5 +4·3 +8·4 +9·1 +18·3 | γ +2·3 +1·7 +3·9 +7·7 +9·0 +13·0 | γ -0·8 +0·8 +1·8 +7·7 +8·7 +9·6 | 7 -3·6 -0·9 +0·7 +6·8 +4·0 +6·0 | γ -6·4 -2·8 -4·8 +5·6 +6·5 +8·3 | 7 -6: -1: -1: +4: +7: |
| July Aug. Sept. Oct. Nov. Dec. | -3·8 +1·0 -1·9 -4·9 -10·6 -6·5 | -1·5 -0·5 -3·5 -4·0 -6·4 -4·0 | -4·1 -6·2 -7·7 -4·5 -1·8 +0·4 | -11·7 -11·7 -8·7 -4·3 -4·6 -3·2 | | -25·8 -19·1 -12·9 -6·8 -2·1 +0·1 | -35·6 -29·7 -17·9 -8·9 -1·4 +0·4 | -35·1 -35·1 -24·9 -14·5 -5·2 +1·6 | -31·9 -35·5 -30·1 -23·3 -9·9 +1·5 | -24.9 | -13·7 -3·8 -11·6 -16·3 -4·9 +1·5 | +3·4 +16·3 +6·4 +0·2 +2·5 +5·5 | +28·5 +20·3 +15·2 +10·5 | +29·1 +33·2 +23·9 +23·1 +14·3 +10·9 | +30·9 +23·7 +23·8 +13·3 | +22·8 +16·8 | +12-4 | +7.6 | +13·8 +7·4 +13·6 +10·4 +4·6 +2·4 | +10·6 +8·0 +11·5 +7·4 +3·2 -1·4 | +9·1 +5·6 +6·1 +5·3 +1·7 -8·9 | +8·1 +4·8 +4·4 +1·4 -2·3 -13·0 | +8·7 +3·2 +2·0 -5·5 -4·3 -10·1 | +3·8 -0·2 +2·6 -1·3 -4·2 -10·8 |
| ∕ear Winter Equinox Summer | -3·5 -8·3 -3·6 +1·4 | -3·1 -6·1 -4·0 +0·7 | -3·0 -1·8 -4·9 -2·3 | -5·7 -2·9 -5·7 -8·9 | -1·1 -7·1 | -1 · 4 | -1·6 -14·0 | -3·3 -21·5 | | -10·1 -26·0 | -5·8 -15·3 | +3·3 +1·8 +2·4 +5·8 | +9·9 +18·7 | +13·6 +25·7 | +25.0 | +9·3 +18·7 | +7·3 +13·5 | +6·4 | +8·5 +4·2 +9·2 +12·2 | +6·4 +1·4 +7·6 +10·1 | +3·9 -1·8 +5·2 +8·3 | +1·4 -5·0 +3·3 +5·7 | +0·1 -5·8 -0·7 +6·7 | 0·0 -5·9 +1·0 +4·8 |
| | | | | | | | | | | v | ERTICAL | COMPONI | ent | | | | | | | | | | | |
| fan. Feb. Mar. Apr. May June | γ +2·6 +5·8 -0·5 +4·8 +2·2 +4·8 | y +1·7 +3·2 -0·6 +3·8 +1·9 +3·9 | γ +0·6 -0·3 -0·3 +1·8 +2·9 +1·2 | γ +1·3 -1·8 0·0 +1·2 +4·4 +1·9 | 7 +0·4 -2·4 -0·4 0·0 +7·1 +3·5 | γ -0·7 -2·2 -0·9 +3·0 +5·9 +5·8 | γ -1·8 -2·4 -0·4 +3·8 +4·2 +5·7 | γ -2·1 -2·0 +3·4 +4·2 +2·5 +4·7 | 7 -1·4 +0·5 +4·3 +0·8 -2·3 +2·8 | 7 -1·7 +1·4 +3·2 -2·8 -8·8 -3·1 | 7 -3·2 -0·8 -1·1 -9·2 -13·7 -12·6 | γ -4·7 -4·4 -7·4 -14·0 -17·7 -20·1 | 7 -7·8 -5·8 -10·5 -17·0 -17·6 -21·4 | 7 -7·5 -6·0 -8·2 -14·4 -13·1 -15·5 | γ -3·6 -2·9 -2·3 -7·6 -5·5 -8·4 | γ +0·5 -0·8 +2·8 -2·0 -0·6 -0·5 | γ +1·2 +2·0 +5·0 +1·2 +4·7 +3·3 | γ +3·9 +2·2 +4·1 +4·8 +8·1 +7·0 | γ +4·4 +1·8 +3·0 +6·2 +9·0 +7·3 | γ +4·7 +3·0 +2·6 +7·0 +8·3 +7·7 | 7 +4·0 +3·3 +3·1 +6·8 +7·9 +8·8 | 7 +3·3 +3·8 +2·8 +6·6 +5·8 +6·7 | γ +3·4 +2·6 +0·5 +5·8 +3·5 +4·6 | +2·5 +2·2 -2·2 +5·2 +0·9 +1·9 |
| July Aug. Sept. Oct. Nov. Dec. | +3·2 +1·4 +3·1 +1·2 +1·6 +0·8 | +4·6 -1·0 +3·8 +1·8 +0·2 -0·3 | +5·2 -2·6 +3·5 +2·7 -2·3 -1·8 | +6·0 -0·6 +3·6 +3·0 -2·4 -2·3 | +7·6 +2·0 +4·0 +3·0 -2·2 -2·5 | +6·5 +2·9 +3·5 +3·0 -2·0 -3·6 | +7·2 +3·6 +3·4 +1·4 -2·2 -3·3 | +7·0 +3·6 +5·6 +3·2 -1·2 -4·3 | +2·6 +0·6 +4·7 +4·5 +0·3 -5·2 | -6·2 -4·4 +0·4 +3·2 -0·8 -5·9 | -13·2 -14·6 -6·7 -2·8 -4·0 -4·6 | -19·4 -20·0 -12·8 -8·8 -4·4 -5·7 | -22·6 -18·6 -15·3 -9·6 -4·0 -4·4 | -18·6 -13·8 -13·0 -9·6 -2·2 -0·5 | -10·8 -3·4 -6·9 -6·1 +2·3 +2·0 | -4·2 +5·2 -2·0 -1·8 +4·0 +5·7 | +1·6 +9·8 +0·8 +0·8 +5·0 +5·5 | +6·7 +10·3 +0·9 +0·8 +3·6 +5·0 | +8·6 +9·0 +1·2 +1·4 +2·4 +4·7 | +7·6 +6·8 +3·2 +2·8 +1·6 +5·3 | +6·8 +7·2 +4·5 +2·9 +1·7 +6·6 | +5·4 +7·0 +4·8 +2·4 +2·0 +7·5 | +4·2 +5·6 +3·9 +0·8 +2·6 +3·0 | +4·2 +4·0 +1·8 -0·2 +0·4 -1·7 |
| (ear Vinter Equinox | +2·6 +2·7 +2·1 +2·9 | +1·9 +1·2 +2·2 +2·3 | +0·9 -0·9 +1·9 +1·7 | +1·2 -1·3 +1·9 +2·9 | +1·7 -1·7 +1·7 +5·1 | +1·8 -2·1 +2·1 +5·3 | +1·6 2·4 +2·1 +5·2 | +2·1 -2·4 +4·1 +4·5 | +1·0 -1·5 +3·6 +0·9 | -2·1 -1·7 +1·0 -5·6 | -3·1 -4·9 | -11·6 -4·8 -10·7 -19·3 | -12·9 -5·5 -13·1 -20·1 | -4·1 -11·3 | -4·4 -0·5 -5·7 -7·0 | +0·5 +2·3 -0·7 0·0 | +3·4 +3·4 +1·9 +4·9 | +4·8 +3·7 +2·7 +8·0 | +4·9 +3·3 +2·9 +8·5 | +5·1 +3·7 +3·9 +7·6 | +5·3 +3·9 +4·3 +7·7 | +4·8 +4·1 +4·1 +6·2 | +3·4 +2·9 +2·7 +4·5 | +1·6 +0·9 +1·1 +2·7 |

INTERNATIONAL QUIET DAYS

Departures from the mean of the 24 hourly values (uncorrected for non-cyclic change)

| 31 | ESKDALEMUIR |
|----|-------------|

| | Hour G | | | | | | | | | | | | | | | | | | | | | | | |
|---|--|---|--|---|--|--|---|--|---|---|---|----------------------------------|---|--|--|---|---|---|--|---|---|---|---|---|
| | 0-1 | 1-2 | 2-3 | 3-4 | 4-5 | 5-6 | 6-7 | 7-8 | 8-9 | 9-10 | 10-11 | 11-12 | 12 13 | 13-14 | 14-15 | 15-16 | 16-17 | 17 - 18 | 18-19 | 19-20 | 20-21 | 21-22 | 22-23 | 23-24 |
| | | | | | | | | | DECLINA | TION (m | easured | l positiv | e towar | ds the | west) | | , | , | | , | , | , | | , |
| Jan. Feb. Mar. Apr. May June | -1·92 -0·84 -1·48 +0·55 +0·70 | -2·09 -0·72 -1·41 +0·52 +0·17 | -0.63 -0.83 -1.00 +0.10 -0.07 | -0·38 -1·32 -0·93 -1·07 -1·64 | -0·28 -0·61 -1·20 -1·84 -2·14 -3·41 | -0·42 -0·85 -1·54 -3·27 -4·48 -5·61 | -1·34 -2·04 -4·64 -5·85 -6·44 | -1·67 -3·64 -6·21 -6·52 -7·13 | -5·82 -7·05 | -2·88 -4·80 -4·51 -4·49 -5·10 | -2·78 -2·04 -1·96 -1·77 | +1·08 +1·75 +1·28 +1·73 | +2·80 +4·80 +5·16 +4·17 +4·16 | +3·71 +6·52 +6·59 +5·68 +4·91 | +3·81 +5·99 +5·76 +5·38 +5·43 | +2·82 +4·40 +4·41 +4·67 +5·08 | +4 - 37 | +1·35 +1·14 +1·85 +1·58 +2·99 | +0·78 +0·54 +1·12 +1·03 +2·64 | +0-40 +0-93 +1-02 +1-77 | -0·09 -0·05 +1·00 +1·10 +1·23 | -0·40 -0·32 +0·85 +0·33 +0·66 | +0·90 +1·23 | -0.63 -0.78 +0.27 +1.14 +1.15 |
| July Aug. Sept. Oct. Nov. Dec. | -0·15 -0·77 -1·20 -2·18 | -0·42 -1·09 -0·99 -1·19 | -1·64 -1·93 -1·12 -0·48 | -2·73 -2·11 -1·12 -1·07 | -3·46 -2·49 -1·48 -0·44 | -5·60 -4·14 -2·86 -1·63 -0·83 -0·25 | -6·03 -3·67 -2·14 -0·72 | -6·76 -4·95 -3·20 -1·39 | -5·61 -4·66 | -3·77 -4·55 -4·55 -2·69 | +0·50 -1·07 -2·30 -0·58 | +2·59 +1·26 +1·13 | +6·65 +5·13 +4·16 +2·80 | +7·22 +5·59 +5·45 +3·39 | +6·38 +5·17 +5·22 +3·14 | +4·51 +3·51 +3·62 +2·23 | 1 - 54 | +1·04 +2·16 +1·97 +1·21 | +1·66 +0·72 | +0.88 +1.69 +1.06 +0.37 | | +0·27 -0·25 -0·75 | | -0·46 -0·09 -0·80 -1·09 |
| Year Winter Equinox Summer | -1·73 -1·07 | -1·23 -1·05 | -0·42 -1·22 | -0·71 -1·37 | -0·42 -1·75 | -2·62 -0·59 -2·33 -4·96 | -0·70 -3·12 | -1·05 -4·50 | -1·55 -5·41 | -1·97 -4·60 | -0·87 -2·05 | +0·86 +1·67 | +2.53 | +3·20 +6·04 | +3·08 +5·53 | +2·17 +3·99 | +1·58 +2·69 | +1·30 +1·78 | +0·77 | +0·17 +1·02 | +0·31 -0·53 +0·51 +0·95 | -1·16 +0·14 | | -1 · 37 |
| | | | | | | | | | | | INCI | LINATION | | | | | | | | | | | | |
| Jan. Feb. Mar. Apr. | +0.08 | +0·05 -0·22 | -0·01 -0·22 | -0·24 -0·27 | -0·31 -0·38 -0·47 | -0·70 -0·33 -0·44 -0·47 | -0.61 -0.72 -0.24 | -0.66 -0.26 +0.12 | -0.66 -0.19 +0.24 +0.83 | +0·41 +1·11 +1·47 | +0.65 +0.71 +1.79 +1.67 | +1·09 +0·89 +1·65 +1·74 | +0.68 +1.29 +1.21 | +1.09 | +0·41 +0·53 +0·66 | +0·40 +0·21 +0·30 | +0·01 -0·23 | 10.05 -0.28 -0.62 | -0·53 -0·97 | -0·28 -0·64 -1·01 | 0·19 -0·37 -0·68 -0·88 -1·08 | -0·27 -0·77 -0·84 | -0·01 -0·50 -0·94 -0·89 -0·73 | -0·41 -0·95 -0·96 |
| May June July Aug. | -0·35 -0·30 +0·06 | -0·15 -0·22 -0·11 -0·58 | +0·11 -0·34 -0·13 -0·69 | +0·10 -0·32 -0·19 -0·55 | -0·06 -0·39 -0·29 -0·42 | +0·01 -0·11 -0·24 -0·23 | +0.40 +0.56 +0.44 +0.36 | +0.92 +1.26 +1.09 +1.08 | +1·76 +1·77 +1·80 | +1·39 +2·13 +1·96 +2·39 | +1·92 +2·24 +1·98 +1·93 | +1·65 +1·61 +1·44 | +1·04 +0·90 +0·79 | +0·79 +0·69 +0·21 | +0·13 +0·25 -0·19 | -0·39 -0·30 -0·30 | -0·89 -0·65 -0·43 | -1·52 -1·21 -0·70 | -1·91 -1·57 -0·94 | -1·46 -1·57 -1·23 | -1·16 -1·45 -1·05 -1·16 | -0·88 -1·14 -0·71 | -0·78 -1·08 -0·70 | -0·87 -0·83 -0·65 |
| Sept. Oct. Nov. Dec. | -0·58 -0·29 | -0·53 -0·24 | -0·47 -0·24 | -0·44 -0·31 | -0·47 -0·38 -0·31 | -0·21 -0·29 -0·74 -0·58 | +0·17 -0·46 -0·81 | -0·23 -0·58 | +1·28 +0·46 -0·17 -0·51 | +1·39 +0·65 | +1·88 +0·70 | +1·95 +0·99 | +1 · 53 | +0·88 +0·68 | +0·30 +0·70 | +0·12 +0·37 | -0·39 -0·10 +0·15 +0·11 | -0·57 -0·17 | -0·86 -0·35 | -0·78 -0·49 | -0·97 -0·45 +0·35 | -0·91 -0·42 | -1·02 -0·19 | -0·85 -0·36 |
| Year | -0.25 | -0.17 | -0.23 | -0.26 | -0.36 | -0.36 | -0.19 | +0-15 | +0.65 | +1 · 21 | +1 · 45 | +1 · 37 | l | | | | | | | | -0.76 | | | |
| Winter Equinox Summer | -0.51 | -n· 34 | -0:31 | -0.29 | -0.43 | -0·59 -0·35 -0·14 | -0.31 | +0.05 | +0.70 | +1 · 49 | | +1 · 81 | +1.31 | +0·53 +0·93 +0·58 | +0-44 | +0-15 | +0·20 -0·18 -0·71 | -0.53 | -0.87 | -0.91 | -0·16 -0·92 -1·18 | -0.89 | -0·14 -0·96 -0·82 | -0.95 |
| | | | | | | | | | | | HOR 1 Z | CONTAL FO | ORCE | | | | | | | | | | | |
| Jan. Feb. Mar. Apr. May June | y +1.6 +1.0 +7.1 +12.2 +6.1 +6.3 | γ +1·7 +0·5 +3·1 +6·9 +2·9 +4·8 | γ +2·2 0·0 +3·2 +5·5 -0·5 +5·6 | y +4·0 +2·9 +4·1 +2·4 +0·1 +5·5 | γ +7·6 +3·7 +5·5 +7·1 +3·5 +7·2 | γ +10·3 +4·2 +6·3 +8·1 +2·0 +3·8 | 7 +13·6 +8·3 +10·7 +5·0 -4·5 -6·3 | 7 +12·4 +9·1 +5·1 -0·3 -12·9 -17·2 | 79 +9·4 +3·0 -2·0 -12·1 -18·5 -25·4 | -5·7 -15·5 -23·0 -24·1 | γ -11·0 -11·0 -27·3 -28·5 -29·3 -38·2 | -14·9 -27·5 -31·3 -29·5 | -12·4 -23·3 -24·4 -22·9 | γ -12·3 -8·5 -17·5 -21·7 -13·9 -17·6 | γ -8·2 -7·2 -8·8 -12·7 -2·5 -5·0 | 7 -5·2 -6·3 -2·1 -5·2 +7·9 +5·7 | 7 -3·4 -3·5 +1·7 +3·9 +14·5 +14·6 | +0-1 0-0 -5-7 +11-1 +18-6 +25-4 | 7 +1·8 +3·9 +9·1 +16·8 +22·7 +31·3 | γ +2·0 +5·3 +10·7 +17·7 +22·7 +24·8 | y +4·4 +6·8 +11·4 +15·7 +19·1 +20·6 | +15·0 +13·5 | γ +1·4 +8·4 +14·3 +15·5 +12·3 +13·4 | +16·3 +12·7 |
| July Aug. Sept. Oct. Nov. Dec. | +0·3 +10·2 +9·9 +4·8 -0·6 -1·9 | +3·4 +8·3 +9·3 +4·3 -3·6 -2·6 | +3·8 +9·4 +8·4 +4·6 +2·6 +0·2 | +5·1 +8·0 +7·9 +5·7 +3·0 +2·3 | +7·2 +7·0 +8·5 +6·8 +3·8 +4·4 | +6·0 +4·5 +4·5 +5·5 +10·3 +7·4 | -3·9 -4·0 -1·3 +7·4 +11·4 +5·5 | -13·8 -14·8 -6·3 +4·7 +8·2 +8·6 | -25.6 -26.8 -17.4 -5.2 +2.6 +5.8 | -37·5 | -34·6 -34·4 -35·7 -29·2 -12·0 -1·8 | -29·0 -33·3 -32·5 -16·4 | -18·8 -23·9 -26·4 | -11.0 | -7·8 •1·6 -6·4 -6·8 -9·6 -4·2 | +2·9 +6·4 -0·3 -2·5 -4·0 -9·1 | +10·4 +10·0 +6·1 +1·8 -0·4 +0·4 | +20·6 +14·3 +10·1 +8·9 +3·9 +0·2 | +26·7 +17·4 +17·7 +13·4 +6·2 +0·1 | +26·4 +21·0 +18·9 +12·7 +8·0 -1·6 | +18 • 4 | +13-3 | +12·6 +16·1 | +11 · 2 |
| Year | +4 - 7 | +3·3 | +3·7 | +4 · 3 | +6 · 0 | +6 · 1 | +3.5 | -1 · 4 | -9.3 | -19·0 | -24 • 4 | -24.9 | -19.5 | -13·9 | -6.5 | -1.0 | +4·7 | | | | +13-3 | | | |
| Winter | 0.0 | -1.0 | +1 · 3 | +3·1 | +4.9 | +8 • 1 | +9.7 | +9·6 +0·8 | 75·2 | -3·6 -21·9 | -8·9 -30·2 | -13·0 -31·1 | -12·3 -24·5 | -9·5 -18·1 | -7·3 -8·7 | -6·1 -2·5 | -1·7 +3·4 | +1·1 +8·9 | +3·0 +14·3 | +3·4 +15·0 | +3·9 +15·4 | +3·3 +14·8 | +3·2 +15·4 | +3·8 +14·7 |
| Equinox Summer | +8·5 +5·7 | +5·9 +4·9 | +5·4 +4·6 | +5·0 +4·7 | +7·0 +6·2 | +6·1 +4·1 | +5·5 4·7 | -14.7 | -24 · 1 | -31 · 3 | -34 · 1 | -30.5 | -21.8 | -14.3 | -3.4 | +5.7 | | +19.7 | | | +20.6 | +15·4 | +14 · 0 | +12·9 |
| "Wir | nter" co | mprises | the fo | ur mont | hs Janu | iary, Fe | bruary, | Novemb | er, Dec | ember; | "Equino | ox" the | nonths h | garch, S | septembe | er, Octo | mer; ar | u "Summ | neı May | , LO AU | gual. | | | |

DIURNAL INEQUALITIES OF THE GEOGRAPHICAL COMPONENTS OF MAGNETIC FORCE INTERNATIONAL DISTURBED DAYS

Departures from the mean of the 24 hourly values (uncorrected for non-cyclic change)

| 32 | ESKDA | LEMUIR |
|----|-------|--------|

| ESKDALEMU | | | | | | | | | | | | | | | | | | | | | | | |
|------------------------------------|--|-----------------------------------|---|--|---|---|--|--|---|--|---|---|---|---|--|---|---|--|--|---|--|--|--|
| Hour C | i.M.T. 1-2 | 2-3 | 3-4 | 4-5 | 5-6 | 6-7 | 7-8 | 8-9 | 9-10 | 10-11 | 11-12 | 12-13 | 13-14 | 14-15 | 15-16 | 16-17 | 17-18 | 18-19 | 19-20 | 20-21 | 21 - 22 | 22-23 | 23-24 |
| | | | | | | | | | | Non | 001000 | | | | | | - | | | | | | |
| | • | ~ | ~ | • | ~, | • | • | ~ | • | | | | ~, | ~- | • | • | • | • | | • | | ٠. | |
| | +8·0 +3·0 -130·7 | +3·1 -3·6 -80·9 -2·0 | +11·3 +5·1 -169·4 -12·0 -10·9 | +14·7 +11·1 -76·0 -3·2 +1·5 | +9·1 +9·5 -21·9 +4·9 -3·5 | +6·4 +18·3 -31·8 +7·8 -5·6 | +2·9 +5·9 -41·8 +4·3 -13·2 | +10·8 +5·7 -4·9 -20·3 -6·5 -15·0 | +0·4 +3·7 -16·8 -12·3 -32·0 -29·8 | -4·6 -25·9 -28·8 -29·5 -42·1 | -14·0 -51·5 -27·9 -20·6 -52·6 | -12·5 -44·0 +41·8 -22·3 | -8·2 -29·1 +97·1 -21·9 | -15·7 -14·6 +137·8 +3·2 | -10·0 -20·1 +1·7 +174·2 +50·4 | -14·7 +63·0 +237·9 +40·9 | +224·3 +30·1 | +52·8 +47·3 | -2·7 +52·0 +48·6 +21·9 | +7·8 +15·5 -71·0 +9·2 | -108·5 -2·0 | +9·2 -29·0 -46·8 | +10·3 -19·4 -38·7 |
| +10·9 -8·5 -110·2 -229·5 | +6·9 +0·9 -62·3 -50·6 | -0·6 -102·9 | -9·3 +9·9 -20·7 -34·9 | +2·0 +13·8 -20·3 +12·2 | -11·2 +13·5 +9·2 -14·4 | -11·6 -6·0 +12·9 -96·7 | -33·5 -31·6 +5·9 -120·3 | -56 · 6 -53 · 3 -4 · 0 -20 · 0 | -45·1 -48·4 -31·4 | -41·7 -37·6 -27·1 | -42·1 -19·9 -15·2 | -29·9 -13·4 -3·2 +24·1 | -17·0 -9·5 +40·5 +40·0 | +6·0 +15·5 +53·5 +56·4 | +27·5 +0·2 +88·9 +104·1 | +54·4 +23·2 +106·9 +47·7 | +82·2 +36·1 +132·8 +52·0 | +58·0 +45·9 +42·9 +75·6 | +33·9 +25·0 +24·1 +61·9 | +5·0 +12·7 -61·5 +48·2 | -0·9 +12·3 -32·2 +35·0 | +0·5 +3·7 -77·5 +32·7 | +6.3 |
| -38 · 8 | -21·3 | -14·3 | -17·1 | +2·3 | +3·6 | -6.6 | -18.0 | -15·7 | -20.6 | -20.9 | -24 · 5 | -14.0 | -0.3 | +15 · 7 | +37 · 5 | +53 · 0 | +59·6 | +36 · 4 | +29·3 | +3·2 | -4.9 | -12·6 | -10.7 |
| -52·5 -56·8 -7·0 | -7·9 -47·3 -8·6 | -27·4 -17·9 +2·3 | -1·9 -43·8 -5·5 | +19·1 -17·8 +5·7 | +7·5 +2·6 +0·9 | | | | | | | I . | | +47・9 | +66・2 | +107·8 | +109 · 8 | +37 · 4 | +37 · 5 | -26 · 1 | +5·5 -32·0 +11·6 | +4·0 -37·5 -4·5 | +0·4 -27·0 -5·6 |
| | | | | | | | | | | | | | | | | | | | | | | | |
| - | | | | ٠. | • | • | • | ٠ | ۸. | | | | ~ | ~ | | • | • | <u></u> | • | | • | ~ . | ~ |
| -23·5 -29·4 -134·7 -5·4 | -10·1 -34·6 -121·7 -16·0 | -9·3 -61·2 -84·7 -39·4 | -18·4 -50·4 -109·5 -25·7 | -47·1 -21·8 | +1·7 -6·5 -20·3 -38·9 -32·0 | +6·3 +0·5 -7·9 -28·6 -31·9 | +9·9 -0·5 -6·1 -29·8 -32·6 | +10·0 -5·0 -7·6 -38·3 -36·1 | +10·3 +0·6 -3·4 -18·5 -28·1 | +15·1 +8·8 -2·7 +8·1 | +22·3 +18·6 +2·1 | +24·5 +22·8 +33·6 +31·9 +35·4 | +24·9 +26·8 +42·9 +61·3 +37·1 | +20·4 +23·8 +50·9 +65·7 +40·7 | +19·5 +21·6 +51·9 +102·7 +39·3 | +13·8 +8·2 +68·6 +158·3 +50·3 | +6·0 +10·3 +29·3 +178·8 +36·5 | +11·4 +2·8 +16·5 +49·3 +13·3 | -3·4 +1·0 +22·7 +27·9 +5·2 | -23·3 -13·5 +2·1 +28·6 +1·3 | -33·4 -9·1 -2·6 -24·6 -1·2 | -30·6 -14·9 -33·4 | 7 -19·9 -16·2 -31·1 -23·3 +5·0 -6·1 |
| +10·3 -34·9 -89·6 -61·6 | -41 · 4 -38 · 8 -24 · 1 -39 · 1 | -33·9 -36·1 -44·5 -39·7 | -28·7 -36·1 -45·2 +6·1 | -6·3 -18·7 -5·8 +10·0 | +3·9 +3·2 -9·2 +1·7 | -25·3 -4·0 +16·6 +18·4 | -36·4 -11·9 +34·1 -16·1 | -21·5 -14·3 +16·1 -11·6 | -4·0 -7·1 +26·6 -22·3 | +18·9 +38·1 -34·1 | +38·3 +44·0 +3·1 | +33·4 +49·8 +47·6 +10·9 | +36·8 +49·9 +59·7 +39·7 | +40·5 +55·2 +47·7 +39·2 | +36·0 +28·9 +41·4 +34·7 | +31·6 +20·8 +36·6 +28·2 | +22·4 +16·7 +45·5 +21·1 | +3·0 -22·0 -19·2 -3·0 | -0·1 -11·1 +3·8 -5·0 | -11·5 -50·6 +3·1 | -12·0 -4·5 -46·8 -1·4 | -23·9 -8·0 -42·1 +10·0 | -80·7 +7·8 |
| -37 · 3 | -35·8 | -34·7 | -33·2 | -15·8 | -10-4 | -8·2 | -10-9 | -11.8 | -6·1 | +4·3 | +17·2 | +29 · 0 | +38 · 1 | +40 · 0 | +40.0 | +44-2 | +39·1 | +10-2 | +5·1 | -5·9 | -12·7 | -21 · 5 | -22.8 |
| -72 · 1 | -54.8 | -56 · 6 | -60.3 | | | +9·9 -6·0 -28·7 | | | | +15·6 | +25·1 | +40-7 | +53·5 | +54 · 9 | +56 · 3 | +71 · 1 | +67·6 | | +10.8 | | -19·7 | -28 · 1 | -19·9 -39·5 -9·0 |
| | | | | | | | | | | VERTIC | AL COMPO | n en t | | | | | | | | | | | |
| -7·5 -0·9 -134·9 -39·8 | -4·0 -23·5 -113·4 -65·5 | -15·8 -37·7 -104·3 -53·0 | -22·9 -36·7 -163·0 -29·3 | -18·6 -40·5 -137·6 -21·9 | -18·2 -43·1 -63·9 -21·0 | -16·7 -35·7 -37·8 -9·9 | -12·4 -21·7 -36·6 -7·3 | -9·6 -14·7 -23·5 | -10·1 -13·1 -11·4 | -11·2 -12·7 -1·9 | | -16·6 | -0·6 -0·1 +76·4 -2·3 | +8·6 +1·5 +125·9 +27·8 | +17·9 +8·5 +129·6 +81·7 | +20·6 +40·7 +115·0 +65·2 | +20·2 +94·7 +79·5 +58·1 | +25·5 +63·5 +118·8 +56·3 | +26·8 +79·5 +85·4 +39·0 | +23·0 +54·7 +24·9 +32·5 | +24·3 +8·0 +4·1 | +11-9 | 7 +1·9 -1·0 -71·5 -2·2 -19·5 -7·8 |
| -39·8 -74·7 -109·0 -142·7 | -57·3 -80·0 -67·9 -131·4 | -80·4 -69·9 -78·2 -127·4 | -98·6 -55·8 -117·1 -101·3 | -66 · 4 -54 · 0 -112 · 5 -85 · 6 | -81·1 -44·3 -87·0 -67·0 | -52·2 -29·0 -56·1 -85·7 | -22·2 -15·8 -34·5 -57·0 | -12·6 -8·3 -15·6 +6·2 | -11·7 +0·6 -4·3 +41·7 | +0·8 +66·8 | +23.7 | +2·8 +22·3 +43·0 +43·5 | +14·7 +33·2 +67·1 +58·0 | +23·2 +48·3 +111·0 +76·8 | +44·6 +63·8 +141·5 +135·1 | +73·8 +55·8 +165·7 +103·8 | +103·3 +59·3 +162·8 +89·0 | +100·8 +77·6 +110·3 +84·1 | +80·4 +59·6 +64·7 +34·4 | +55·4 +44·9 -14·8 +39·2 | +30·5 +0·8 -29·9 +20·9 | +6·4 -21·5 -60·6 -14·4 | -36·6 |
| -54·8 | -57·3 | -62·5 | -71.8 | -59·9 | -47·8 | -35.8 | -23.9 | -12-3 | -5.8 | -0.6 | +3·7 | +13·4 | +26 · 1 | +45·3 | +66 · 8 | +71 · 8 | +76·6 | +73·5 | +55-3 | +31 · 2 | +8·7 | -10-9 | -29·1 |
| -79.9 | -71 · 2 | -72·3 | -93·1 | -86 • 1 | -59·6 | -39·7 | -27 · 1 | | +0·4 -7·1 -10·7 | | i i | +25.9 | +44 • 1 | +71 · 7 | +85-9 | +94 · 3 | +99 · 1 | +92 · 3 | +72·3 | +27 · 4 | | -18-1 | -52 · 3 |
| | Y +4.0 +3.6 -1.1 -107.7 -26.3 0.0 -12.5 +10.9 -8.5 -110.2 -229.5 +11.7 -38.8 -52.5 -56.8 -7.0 Y -10.4 -23.5 -29.4 -134.7 -5.4 -11.5 -37.5 +10.3 -34.9 -39.8 -72.1 -11.0 Y +4.6 -7.5 -0.9 -134.9 -39.8 -74.7 -10.9 -142.7 -34.1 -54.8 -44.9 -79.9 | # Hour G.M.T. 0-1 1-2 | # Hour G.M.T. 0-1 1-2 2-3 | Hour G.M.T. 0-1 1-2 2-3 3-4 \[\begin{array}{cccccccccccccccccccccccccccccccccccc | Hour G.M.T. 0-1 1-2 2-3 3-4 4-5 7 7 7 7 7 7 +4-0 -1-3 -14-7 +4-2 +11-3 +3-6 +8-0 +3-1 +11-3 +14-7 -1-1 +3-0 -3-6 +5-1 +11-1 -107-7 -130-7 -80-9 -169-4 -76-0 -26-3 -24-7 -2-0 -12-0 -3-2 0-0 +7-6 +3-8 -10-9 +1-5 -12-5 -24-5 -1-2 +9-9 +22-5 +10-9 +6-9 +8-9 -9-3 +2-0 -8-5 +0-9 +13-7 +9-9 +13-8 -110-2 -62-3 -0-6 -20-7 -20-3 -229-5 -50-6 -102-9 -34-9 +12-2 +11-7 +12-3 +5-1 +11-5 +37-5 -38-8 -21-3 -14-3 -17-1 +2-3 -52-5 -7-9 -27-4 -1-9 +19-1 -56-8 -47-3 -17-9 -43-8 -17-8 -7-0 -8-6 +2-3 -5-5 +5-7 -37-5 -26-3 -15-7 -13-5 -13-3 +10-3 -41-4 -33-9 -28-7 -6-3 -34-9 -38-8 -36-1 -36-1 -36-1 -18-7 -89-6 -24-1 -44-5 -45-2 -5-8 -61-6 -39-1 -39-7 +6-1 +10-0 -19-6 -25-7 -14-1 -18-5 -5-1 -37-3 -35-8 -34-7 -33-2 -15-8 -28-8 -23-7 -23-1 -12-7 -5-1 -37-3 -35-8 -34-7 -33-2 -15-8 -28-8 -23-7 -23-1 -12-7 -5-1 -37-3 -35-8 -34-7 -33-2 -15-8 -28-8 -23-7 -23-1 -12-7 -5-1 -37-3 -35-8 -34-7 -33-2 -15-8 -28-8 -23-7 -23-1 -12-7 -5-1 -72-1 -54-8 -56-6 -60-3 -25-3 -11-0 -28-8 -24-4 -26-8 -17-1 | Hour G.M.T. 0-1 1-2 2-3 3-4 4-5 5-6 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 | Hour G.M.T. 0-1 1-2 2-3 3-4 4-5 5-6 6-7 77 77 77 77 77 77 77 77 77 77 77 77 | Hour G.M.T. 0-1 1-2 2-3 3-4 4-5 5-6 6-7 7-8 77 77 77 77 77 77 77 77 77 77 77 77 78 44.0 -1.3 -14.7 4-2 +11.9 +16.7 +25.9 +22.1 +3.6 +8.0 +3.1 +11.3 +14.7 +9.1 +6.4 +2.9 -10.7 -130.7 -80.9 -169.4 -76.0 -21.9 -31.8 -41.8 -20.3 -24.7 -2.0 -12.0 -3.2 44.9 +7.8 +4.3 0.0 +7.6 +3.8 -10.9 +1.5 -3.5 -56 -13.2 -12.5 -24.5 -1.2 +9.9 +22.5 +13.5 -12.5 -23.6 +10.9 +6.9 +8.9 -9.3 +2.0 -11.2 -11.6 -33.5 -8.5 +0.9 +13.7 +9.9 +13.8 +13.5 -6.0 -31.6 -10.9 -1.5 -3.5 -56 -31.2 -12.5 -22.3 -6.0 -20.7 -20.3 +9.2 +12.9 +5.9 -22.9 5 -50.6 -102.9 -34.9 +12.2 -14.4 -96.7 -120.3 +11.7 +12.3 +5.1 +11.5 +37.5 +18.5 +13.0 +5.8 -22.9 5 -50.6 -102.9 -34.9 +12.2 -14.4 -96.7 -120.3 +11.7 +12.3 +5.1 +11.5 +37.5 +18.5 +13.0 +5.8 -22.4 -3.4 -6 -61.2 -50.4 -29.7 -20.3 -7.9 -6113.4 -12.1 -8.3 -12.5 -22.4 -3.4 -6 -61.2 -50.4 -29.7 -20.3 -7.9 -6113.4 -12.1 -8.3 -12.5 -22.4 -3.4 -6 -61.2 -50.4 -29.7 -20.3 -7.9 -6113.4 -12.1 -8.3 -13.5 -8.9 -15.3 -11.5 -13.3 -8.9 -15.3 -11.5 -13.3 -4.1 -4.3 -3.9 -28.7 -6.3 -3.9 -25.3 -36.4 -24.9 -22.9 -3.8 -30.1 -3.9 -28.7 -6.3 -3.9 -25.3 -36.4 -24.9 -29.9 -20.3 -7.9 -6111.5 -31.5 -8.4 -39.9 -27.0 -36.6 -235.5 -16.5 -22.4 -34.6 -61.2 -50.4 -29.7 -20.3 -7.9 -6113.4 -12.1 -8.4 -30.9 -27.0 -36.6 -235.5 -16.5 -22.4 -3.46 -61.2 -50.4 -29.7 -20.3 -7.9 -6113.4 -12.1 -8.4 -30.9 -27.0 -36.6 -24.3 -51.2 -3.9 -3.8 -36.1 -3.6 -1.1 -3.3 -3.8 -9.15.3 -11.5 -3.4 -3.9 -27.0 -3.6 -4.2 -3.5 -2.2 -3.5 -3.1 -3.5 -8.4 -3.9 -2.7 -0.7 -3.6 -6.2 -3.5 -3.5 -3.4 -3.9 -2.7 -0.9 -3.5 -3.3 -3.6 -3.9 -3.8 -36.1 -3.6 -1.1 -1.7 -3.2 -2.2 -3.5 -3.7 -3.6 -3.9 -3.7 -3.6 -1.6 -3.9 -3.7 -3.6 -3.9 -3.7 -3.6 -3.9 -3.7 -3.6 -3.9 -3.7 -3.6 -3.9 -3.7 -3.6 -3.9 -3.7 -3.6 -3.9 -3.7 -3.6 -3.9 -3.7 -3.6 -3.9 -3.7 -3.6 -3.9 -3.7 -3.6 -3.9 -3.7 -3.6 -3.9 -3.7 -3.6 -3.9 -3.7 -3.6 -3.9 -3.7 -3.6 -3.9 -3.7 -3.6 -3.9 -3.7 -3.6 -3.9 -3.7 -3.6 -3.9 -3.7 -3.0 -3.6 -3.9 -3.3 -3.0 -3.3 -3.3 -3.0 -3.3 -3.3 -3.3 | Hour G.M.T. 0-1 1-2 2-3 3-4 4-5 5-6 6-7 7-8 8-9 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 | Hour G.M.T. 0-1 1-2 2-3 3-4 4-5 5-6 6-7 7-8 8-9 9-10 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 | Hour G.M.T. | Blour C.M.T. | Rear G.M.T. | Biour G.M.T. | Blow G.M.T. | Beur C.N.T. 0-1 1-2 2-3 3-4 4-5 5-6 6-7 7-8 8-9 9-10 10-11 11-12 12-13 13-14 14-15 15-16 NORTH COMPONENT 1-1 1-2 2-3 3-4 4-5 5-6 6-7 7-8 8-9 9-10 10-11 11-12 12-13 13-14 14-15 15-16 NORTH COMPONENT 1-1 1-2 1-3 1-14-7 4-2 17 9 14-7 13-9 12-1 10-8 10-8 10-4 7-0 1-15-0 1-35-9 14-9 17-5 10-0 1-35-1 11-1 11-1 11-1 11-1 11-1 11-1 11 | BOAT C.M.T. | Boar G.M.T. | Bindr C.M.T. | Bind CM.T. | Sec. Col. | No. 1.2 2.3 3.4 8.5 5.6 6.7 7.8 8.9 9.40 10.11 11.12 12.13 13.14 44.15 13.16 16.17 17.18 18.10 19.20 20.22 21.22 | Second College Seco |

"Winter" comprises the four months January, February, November, December; "Equinox" the months March, April, September, October; and "Summer" May to August.

INTERNATIONAL DISTURBED DAYS

Departures from the mean of the 24 hourly values (uncorrected for non cyclic change)

| 33 E | ESKDALEM | JIR | | | | | | | | | | | | | | | | | | | | | | |
|-------------------|------------------|--------------|------------------|------------------------|----------------|----------------|----------------------------|----------------|----------------|----------------|-----------------------------|--------------------|----------------|------------|---------------------|-----------|---------------------|---------------|---------------|----------------|---------------|----------------|----------------|----------------|
| | Hour (| | | | | | | | | | | | | | | | | | | | | | | |
| | 0-1 | 1-2 | 2-3 | 3-4 | 4-5 | 5-6 | 6-7 | 7-8 | 8-9 | 9-10 | 10-11 | 11-12 | 12.13 | 13-14 | 14 15 | 15 16 | 16 - 17 | 17 - 18 | 18-19 | 19-20 | 20-21 | 21-22 | 22-23 | 23-24 |
| | | | | | | | | | DECLINA | ATION (r | neasure | l positi | ve towar | ds the | west) | | | | | | | | | |
| | , | | | | | | | | | • | , | • | , , | | | | | | | | | | | |
| Jan. Feb. | -4 · 87 | -2.35 | -1.99 | -4.13 | -4.35 | -1.66 | +0·31 -0·13 | -0.21 | -1 · 23 | -0.01 | +1 - 95 | +4 · 27 | 15.07 | +5-71 | +5+39 | +5-11 | | +2.06 | +0.85 | +0.31 | - 3 · 01 | -1.99 | -3.35 | -3.65 |
| Mar. Apr. | | | | | | | -2·28 -4·60 | | | | | | +4-89 | +8 - 78 | +8-13 | +14 - 26 | +11·50 +23·12 | +27 - 77 | +8 - 00 | +3.82 | +8-41 | -0.94 | -4-13 | -3.26 |
| May Tune | | | | | | | -6 ·73 -8·33 | | | | | | | | | | +8·63 +8·21 | | | | | | | +1·13 -1·27 |
| July | | | | | | | -2.63 | | | | | +3.09 | | | +6 · 50 • 7 · 93 | | +5·40 +4·35 | | | | | | | |
| Aug. Sept. | -6.73 | -7 · 87 | -7.80 | -7.65 | -4 · 29 | +0.15 | -4·67 -0·59 | -1 · 23 | -0.92 | +0.35 | +5.21 | +8 - 47 | 10.55 | 10.43 | +10 · 58 +7 · 65 | +5-83 | +3+35 +3+44 | 12:05 | -6.15 | 3 · 17 | -2.78 | -1 · 37 | -1.75 | -4-67 |
| Oct. Nov. | -14·02 -3·97 | -6.05 | -4.22 | +2.53 | +1 · 57 | +0.87 | +7 · 31 | +1 · 19 | -1.60 | -5.01 | -8 · 43 | 0.05 | +1 - 31 | 16.55 | +5.84 | +3-17 | +3-95 +6-15 | +2 · 35 | 3 41 | 3.31 | ~1 · 16 | -1 · 59 | +0-81 | +1-35 |
| Dec. | -4.40 | -5.65 | -3 · 04 | -4.17 | -2.41 | +2.90 | +2·49 | +4 · 19 | +3.00 | +2.09 | *3*04 | 74.01 | 10.34 | 15.43 | 13.30 | ,2,01 | ,0,12 | 13.10 | 11.33 | - 3. 93 | 3.32 | 0.79 | -12-04 | -9-67 |
| Year | -6·10 | -6·43 | -6 · 47 | -6 · 07 | -3 · 28 | -2.23 | -1 · 41 | -1 · 52 | -1.79 | -0.47 | +1-65 | +4+38 | +6 · 37 | •7 · 71 | +7 · 49 | 16.68 | 16.95 | 15.68 | +0.70 | -0.06 | - 1 - 31 | -2.39 | -3.87 | -4.20 |
| Winter | -3·87 | -4-49 | -3.64 | -2.49 | -1.73 | +0·46 | +2·49 | +1 · 59 | +0-45 | -0.21 | -0.05 | +3-47 | +4-61 | +5-82 | +5-43 | 14-40 | +3 -83 | 12.71 | 10.23 | -1-91 | -3.70 | -4 · 25 | -5 · 12 | -4.03 |
| Equinox | -12 · 46 | -9.31 | -10.77 | -10.55 | -4.45 | -3 · 39 | -1.15 | -0.12 | -1 · 46 | +0.89 | +4 · 26 | 16.13 | 1 | 19.88 | | | +10 · 35 +6 · 65 | 19:57 | -0-15 | | | | -4·29 -2·19 | -6·97 -1·61 |
| Summer | -1.96 | -5.49 | -5.00 | -5.19 | -3.66 | -3.75 | -5·59 | -6.03 | -4.37 | -2-09 | 70 70 | .3 32 | 1 .0 00 | 7 4.3 | ., ., | 0 73 | 0 03 | | - 00 | 0 2. | 0 0, | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | INCL | .INATION | | | | | | | | | | | | |
| | | | | | , | , | | | | | | | , | , | , | , | , | , | , | , | , | , 40.71 | , | , |
| Jan. Feb. | 0.14 | - 0. 50 | -0.40 | -1.00 | -1.10 | -0.06 | -2·10 -0·84 | -0.49 | -0.55 | -0.50 | -0.08 | +0 · 55 +0 · 48 | +0.76 | +0.20 | +0.90 | 11-49 | +1 ·00 +1 · 37 | +0-34 | +1-11 | +0.83 | +0.22 | +0.15 | ~0.20 | -0.51 |
| Mar. Apr. | +0.41 | -0.36 | +0.05 | -0.63 | -1.37 | -1·44 +0·34 | -1·99 +1·51 | -0·85 +2·20 | +0.05 | +0.82 | +1.75 | +1.94 | ·2·38 ·2·08 | -5-23 | 6 . 74 | -9-48 | 14.69 | - 14 - 92 | -1-14 | -1-43 | +4-93 | +7.61 | +3.71 | |
| May June | 10.01 | 10.00 | 70 | 40.20 | -0.07 | -0.45 | -0·37 +0·18 | -0.07 | +0.58 | +2.03 | 71'3Z | ,0,00 | | | 0·02 | | -1·68 -1·31 | | | | | | | -0·31 -0·19 |
| July | | 10.01 | -1.40 | -1.00 | -2:28 | -1 - 30 | +0.48 | +1 - 24 | +2 · 27 | +2.88 | +2.61 | +2.83 | +2-17 | | +1 · 27 -0 · 31 | | 2.63 | | | | | | | +0·90 -0·19 |
| Aug. Sept. | -1.82 | -1 · 36 | -2.15 | -1.47 | -1·69 | -1.31 | -0.22 | +2.09 | +3.67 | +3.28 | +2 · 38 | +1 · 18 | +0.83 | +0-84 | 0.49 | +1 - 21 | -0.40 | -1-11 | -0.84 | ~0·04 | +0-41 | -0.73 | -0.68 | -0·62 +1·83 |
| Oct. Nov. | | | 14.00 | -0.20 | -3.03 | -0.73 | -2·43 +4·01 | +6.68 | +1.00 | 70.43 | -0.03 | 0.03 | -0.64 | -1.66 | -2 · 27 | -3.91 | -0.90 | -1 · 46 | -2.85 | -3.15 | -2 · 23 | -1 · 77 | -2.62 | -1·41 +0·59 |
| Dec. | -1 · 37 | -1 · 39 | -1 · 25 | -2.50 | -3.97 | -2·84 | -2.09 | -1.23 | -1.5/ | -0.32 | 10.00 | .0 10 | 10 30 | • • • • | | 0 ., | - 00 | | | | | | | |
| Year | +1-65 | +0-42 | -0·18 | -0.25 | -1.43 | -1 · 29 | -0.35 | +0.73 | +0.87 | +1 · 28 | +1 · 31 | +1 - 49 | 1 | | | | | | | | | | | +0·26 |
| Winter | +2-69 | -0.39 | +0.73 | -1 - 15 | -2·36 | -1 · 51 | -0.25 | +0.70 | -0.41 | -0.20 | -0·19 | +0.29 | | | | | +0·83 5·61 | | | | 0·00 +2·48 | | | |
| Equinox Summer | +2.63 | +2 · 01 | +0.07 | +1·31 -0·88 | -0·64 -1·30 | -1·44 -0·93 | -0·80 +0·02 | +0·38 +1·11 | +1·11 | +2.45 | +2 · 38 | +2 · 36 | 1.88 | | | | | | | | | | | +0.05 |
| | 0 30 | 0 3, | 2 0. | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | HORIZO | NTAL FO | RCE | | | | | | | | | | | |
| | γ | γ | γ | γ | γ | γ_ | y | γ | γ | γ +2·3 | $-\frac{\gamma}{2} \cdot 2$ | γ -10·7 | γ -11·2 | γ -10·1 | γ -7·6 | γ -6·3 | γ - 4 ·0 | γ -1·9 | γ +6·2 | γ -0·5 | γ +6·4 | γ -8·9 | γ -13·2 | γ -5·9 |
| Jan. Feb. | +2·0 -0·7 | -4·9 +6·0 | -19·8 +1·3 | | +10·6 +11·0 | +7·7 | +26·6 +6·4 | +2.8 | +4.7 | +3.8 | -2·9 -26·0 | -10-4 | -8·1 -37·2 | -3.2 | -11 · 1 | -15 · 8 | -12·9 +74·4 | +2·4 +50·5 | -7·2 +11·0 | -2·5 +55·3 | +5·2 +15·6 | +2·2 +0·1 | +6·3 -34·6 | +7·2 -24·7 |
| Mar. Apr. | | -3.3 | -14·6 -94·9 - | | +5·6 -83·3 | | | +4·7 -46·5 | -26 · 9 | -15.4 | -26·9 -29·5 | - 24 · 5 | +46-9 4 | 106 · 6 | 147.5 | +189·9 | +262·7 +49·3 | +253 · 0 | +60-9 | +52.9 | | -111·2 -2·2 | | -42·3 -2·5 |
| May June | -26·9 -2·1 | | -9.1 | | -7·1 -3·4 | -1·0 -10·0 | +1·9 -13·1 | -22·2 | -12·9 -20·8 | | -44.0 | | -43.3 | -37 · 0 | -17·6 | -1.7 | +32-6 | +59 · 4 | +59 · 7 | +63 · 2 | +52 · 0 | +39 · 1 | +9·2 | 0.0 |
| July | -19·1 | -28 · 9 | -4.0 | | +19·7 +0·8 | +11·7 -10·3 | | | -59.6 | -45-1 | -41·7 -39·6 | -37 · 5 | | -10.1 | +13-2 | +33.5 | +68 · 1 +59 · 2 | +84 · 9 | +57 · 6 | +33 · 3 | +3 · 2 | -3.1 | -17·3 -3·8 | -28·3 +2·1 |
| Aug. Sept. | +12·6 -14·6 | -0·7 -6·1 | +7.0 | 20.5 | +10.2 | +13.9 | -6·6 +15·7 | -33·2 +12·0 | -55·0 -1·0 | -48·9 -26·1 | -33·6 -19·8 | -12·6 -7·0 | -4·2 +5·5 | +50-6 | +25·2 +61·2 | +94-9 | +26·6 +111·8 | +138 · 8 | +38 · 7 | | -69·6 | -40.1 | +2·2 -83·8 | -2·6 -65·4 |
| Oct. Nov. | -124·5 -236·7 | -56.8 - | 108 · 3 | -28·5 -33·2 +8·0 | +13.8 | -13.9 | -91.8 - | | -21 · 7 | | +34·5 -6·0 | +18·8 -5·8 | | | +62·5 -1·1 | | +52·0 +1·0 | +54·9 -2·8 | +73·8 +2·6 | +60·0 -23·8 | -18·5 | -20·2 | -29·2 | +7·6 -21·6 |
| Dec. | +8.0 | +7·4 | +2·5 | +8·0 | 0-00 | | | | | | | | | | | | | = | | | | | 4 | ••- |
| Year | -44.9 | -27 · 4 | -20·3 | -22.8 | -0.6 | +1 · 7 | -8.0 | -19·7 | -17.6 | -21 · 4 | | | -8.5 | | | | +60-1 | | | | +2·1 | | -16·3 | |
| Winter | -56 · 9 | | | -4 · 2 | | | -10.9 | | +2·7 -22·3 | +3·2 | | -2·0 -23·6 | -1·1 +2·7 | | | | +9·0 +118·9 | | | +8·3 +38·8 | | +1·8 -35·0 | -0·5 -41·9 | -3·2 -33·7 |
| Equinox | 68·9 8·0 | | | | -22·1 +2·5 | -0·4 -2·4 | -10.6 | -22.2 | -33.2 | -40 · 7 | -38 · 7 | -37.5 | -27 · 2 | -20.7 | +0-4 | +29 · 7 | +52 · 3 | +63 · 5 | +56 · 2 | +42 · 3 | +23.0 | | -6.5 | -7·2 |
| Summer | -8.8 | -13.7 | - Z · I | | | | ebruary, | | Dan | | (IV avine | wil the | | 1000h | lori l | Sent emb | er Oct | ober: a | nd "Sum | ner" Man | to Au | gust. | | |

34 ESKDALEMUIR

| | A | li day: | | Qu | iet day | | Dis | turbed o | lays | A | ll days | | Qu | iet day | 3 | Dis | turbed o | iays |
|-----------|--------|---------|----------------|--------|---------|--------|---------|----------|---------|---------|---------|--------|---------|---------|--------|---------|----------|---------|
| | N . | | z | N | 7 | z | N . | W | Z | D | I | H | D | I | H | D | I | H |
| | 1 7 | γ | γ | γ | γ | γ | 7 | γ | γ | • | • | γ | • | , | γ | , | • | γ |
| january | 30.4 | 32 · 1 | 20.3 | 33.6 | 24.9 | 12.5 | 41-8 | 58 · 3 | 64 6 | 7 · 16 | 2.00 | 28 • 4 | 5 · 57 | 2 · 04 | 31 · 8 | 12.22 | 3.10 | 46 · 4 |
| February | 28 · 1 | 38 · 8 | 24 · 8 | 26.0 | 31.9 | 11.8 | 34.8 | 50.3 | 49.7 | 8 · 44 | 1.61 | 24 · 2 | 6.69 | 1 · 55 | 24 · 0 | 10.58 | 2.68 | 26 · 8 |
| March | 47.5 | 53 · 1 | 39.4 | 55.9 | 54 · 0 | 15.5 | 114.5 | 129.8 | 166 · 2 | 11 · 37 | 2.77 | 46 · 5 | 11.57 | 3 · 38 | 41 · 8 | 23.73 | 7 · 09 | 124 · 7 |
| April | 94.9 | 75.8 | 91 - 4 | 48.9 | 60.1 | 24 · 0 | 407 - 3 | 313.5 | 292.6 | 13 · 58 | 5.65 | 99 · 7 | 12.89 | 2.75 | 49.0 | 50.96 | 23.35 | 449 · 2 |
| Mev | 59.8 | 61 - 1 | 44.0 | 51 · 5 | 59.0 | 26 · 7 | 82.4 | 89.7 | 147 2 | 12.57 | 3 · 01 | 59 · 8 | 12.20 | 2.93 | 52 · 2 | 16 · 52 | 3.93 | 93 · 3 |
| June | 75.9 | 68 · 0 | 51 · 3 | 64 · 5 | 63.8 | 30.5 | 111.0 | 97 · 4 | 123.0 | 13.58 | 4 · 25 | 77 · 1 | 12.56 | 4.15 | 69.5 | 18.52 | 6.62 | 115-4 |
| July | 73.8 | 59 · 5 | 50.9 | 57 · 5 | 68 · 4 | 31 · 2 | 115.3 | 75.8 | 150-6 | 12.01 | 4.10 | 74 · 3 | 14 - 39 | 3.55 | 61.3 | 13.60 | 5.85 | 121 · 2 |
| August | 66.5 | 66 · 2 | 54 · 2 | 54 · 2 | 68 · 7 | 30⋅3 | 138 · 8 | 81 · 9 | 201 · 9 | 13.77 | 3 · 37 | 65.1 | 13.98 | 3.62 | 58 · 5 | 16.64 | 6.79 | 144 · 5 |
| September | 57 - 1 | 55.4 | 46 · 6 | 53 · 3 | 54 · 0 | 20.9 | 99.2 | 94 · 0 | 157 · 6 | 11.93 | 3.31 | 57 · 2 | 11.20 | 3.40 | 54 · 7 | 18.45 | 5.66 | 96 · 2 |
| October | 57.5 | 59 · 9 | 89.9 | 50.0 | 49 · 2 | 14 · 1 | 243.0 | 149 · 3 | 282.8 | 12.05 | 3 · 33 | 57 · 8 | 10.11 | 2 · 97 | 48·1 | 24.96 | 10.87 | 263 · 3 |
| November | 58 - 2 | 40.4 | 67 · 1 | 30.2 | 29.0 | 9.4 | 333.6 | 101 · 3 | 277 · 8 | 7 · 77 | 2 · 98 | 60.6 | 6.08 | 1.80 | 27 · 8 | 15.74 | 16.17 | 345 · 3 |
| December | 23.6 | 37 · 1 | 51 · 6 | 18.5 | 24 · 5 | 13 · 4 | 57 · 4 | 92.5 | 183 · 4 | 7.94 | 2.43 | 21 · 3 | 5.10 | 1 · 43 | 17.7 | 18 · 58 | 7.15 | 65.2 |
| Year | 46 · 5 | 45.4 | 4 8 · 0 | 39·1 | 45 · 1 | 18 · 2 | 98·4 | 81 · 5 | 148 · 4 | 9.35 | 2 · 36 | 46 · 5 | 9 · 52 | 2 · 26 | 39.0 | 14-18 | 4.15 | 110-6 |
| Winter | 24.9 | 34 · 5 | 38 · 5 | 24.7 | 23 · 7 | 9.6 | 75.3 | 57 · 9 | 120 · 5 | 7 · 47 | 1 · 79 | 22.6 | 5.17 | 1 · 46 | 22.7 | 10.94 | 5.05 | 84 · 0 |
| Equinox | 110.0 | 56 · 0 | 62 · 2 | 47.9 | 53 · 3 | 17 · 4 | 166-6 | 143 · 2 | 192 · 2 | 11.73 | 3.10 | 61 · 1 | 11.45 | 2.85 | 46 · 5 | 22-81 | 8 · 24 | 189-1 |
| Summe r | 68.3 | 62.7 | 46 · 1 | 55.2 | 63.9 | 28 · 6 | 98 · 2 | 74 - 4 | 136 · 7 | 12.85 | 3 · 59 | 68 · 5 | 12.93 | 3 · 37 | 58 · 6 | 13.78 | 4.89 | 104 - 2 |

NON-CYCLIC CHANGE

35 ESKDALEMUIR

| ļ | | All de | ys | } (| Quiet da | ys | Di | sturbed | days |
|-----------|--------|-------------|--------|-------|----------|------|---------|-------------|---------|
| | H | D | Z | H | D | z | H | D | Z |
| | γ | | γ | γ | • | γ | γ | | γ |
| January | +0.5 | -0.01 | -0.2 | -0-1 | +0-06 | -1.2 | -6.7 | -1 · 03 | +0.3 |
| February | -0.4 | -0.06 | 10.4 | +3·1 | +0.66 | ~4.1 | +7 - 2 | +1 · 01 | +4 - 8 |
| March | -1 · 1 | -1-40 | -10-4 | +4.7 | +0.09 | -4-1 | -57 · 1 | -5.50 | +74 - 7 |
| April | +8 • 0 | +1 -44 | +13-1 | +3.4 | +0.84 | -1.0 | +29.9 | +12-66 | +97 · 8 |
| May | +4.5 | -0.05 | -2.5 | +6.6 | +0.39 | -2.8 | +15-4 | +0.82 | +5-1 |
| June | -0·1 | +0.05 | +0.3 | +5.0 | -0.06 | -3.3 | +4.0 | -0-46 | +5-1 |
| July | -0.7 | +0.05 | -0.3 | +10-5 | +0-84 | +0-2 | -27-0 | -0.18 | -11-7 |
| August | +0.2 | -0.10 | +0-3 | +4-2 | -0.69 | -2.5 | -10.8 | -1 · 19 | -2.0 |
| September | +0-2 | -0.03 | -0.1 | +3.8 | +0.34 | -1.9 | +7·7 | +0.12 | +15-0 |
| October | -0.4 | -0.03 | +0-2 | +5-1 | -0.06 | -0.4 | -13.5 | -0.79 | -16 - 7 |
| November | 0.0 | +0-03 | +1 - 0 | +7.5 | +1 · 30 | -3.7 | +82-9 | +1 - 41 | +15-9 |
| December | 0.0 | -0.01 | -0.1 | +7·6 | -0.19 | -4.6 | -17·4 | -2.98 | -0.8 |
| Year | +0-9 | -0.01 | +0·2 | +5·1 | +0.29 | -2·5 | +1 · 2 | +0·32 | +15-6 |
| Winter | 0.0 | -0.01 | +0.3 | +4.5 | +0-46 | -3·4 | +16 · 5 | -0.40 | +5-1 |
| Equinox | +1 · 7 | -0.01 | +0-7 | +4+3 | +0.30 | -1.9 | -8.3 | +1 -62 | +42 - 7 |
| Summer | +1 · 0 | -0.01 | -0.5 | +6.6 | +0-12 | -2·1 | -4.6 | -0.25 | -0.9 |

"Winter" comprises the four months January, February, November, December: "Equinox" the months March, April, September, October: and "Summer" May to August.

AVERAGE RANGE OF DIURNAL INEQUALITY 1932-53 WITH 1960 AS PERCENTAGE OF THIS

36 ESEDALEMUIR

| | | | All days | | | ternation quiet day | | | ternatio sturbed o | |
|---------|-----------|----------|----------|--------|--------|------------------------|------|--------|-----------------------|--------|
| | | <i>H</i> | D | Z | H | D | z | H | D | z |
| | | γ | • | 2' | γ | • | γ | γ | • | γ |
| Year | 1932-53 | 37 · 8 | 8 · 66 | 28 · 7 | 34 · 4 | 8.43 | 13.7 | 53.9 | 11.93 | 82 · 1 |
| | 1960(%) | 123 | 108 | 167 | 113 | 113 | 133 | 205 | 120 | 181 |
| Winter | 1932-53 | 19.3 | 6.95 | 21 · 2 | 16 · 2 | 4 · 44 | 5.9 | 34 · 4 | 11-45 | 66 · 5 |
| | 1960(年) | 117 | 107 | 182 | 140 | 116 | 163 | 244 | 96 | 181 |
| Equinox | 1932-53 | 43-1 | 10.18 | 37 · 1 | 39.7 | 9.69 | 14.8 | 75.4 | 15-11 | 108-9 |
| | 1960(%) | 142 | 115 | 168 | 117 | 118 | 118 | 251 | 151 | 177 |
| Summer | 1932 - 53 | 59.7 | 11.84 | 33.9 | 50-4 | 11 · 76 | 21.9 | 83-7 | 13.11 | 82 · 4 |
| | 1960(%) | 115 | 109 | 136 | 116 | 110 | 131 | 124 | 105 | 166 |

"Winter" comprises the four months January, February, November, December: "Equinox" the months March, April, September, October: and "Summer" May to August.

HARMONIC COMPONENTS OF THE DIURNAL INEQUALITY OF MAGNETIC FORCE Values of $a_{\rm R},\ b_{\rm R}$ in the series $\Sigma(a_{\rm RCOs}15nt+b_{\rm RS}inl5nt),\ t$ being reckoned in hours from midnight G.M.T. Longitude of Eskdelemuir Observatory, 3°12'W.

37 ESEDALEMUIR

| | 1 | | P | orth c | compone | nt | | | 1 | | W | est co | mponen' | t | | | | | Ver | tical | compon | ent | *** | |
|---------|---------|---------|--------|----------------|---------|--------|--------|----------------|---------|---------|--------|----------------|--------------|----------------|--------|--------------|------------|---------|----------|--------------|--------|--------------|--------------|--------------|
| | 81 | b1 | ag | b ₂ | a, | b. | 84 | b ₄ | 81 | b, | | b ₁ | | b ₀ | | b. | a 1 | b, | 41 | be | | b. | | b4 |
| | γ | γ | γ | γ | γ | γ | γ | γ | γ | γ | γ | γ | γ | γ | γ | γ | 7 | γ | γ | 7 | γ | γ | γ | γ |
| | 1 | | | | | | | | | | | ALL D | YS | | | | 1 | | | | | | | |
| Jan. | +7.9 | +5-3 | 3 -6.7 | -4.1 | +1.6 | -1 · 4 | -0.2 | +1 - 3 | -10-9 | -5.0 | -1·2 | | | -1.2 | 41.0 | +2 · 5 | | -8-9 | | | | | | |
| Feb. | +8.2 | +5.9 | -5.0 | -3.4 | +2.3 | | | +0.8 | | | | +7.5 | -1.2 | -2.4 | 10.3 | | | -10-3 | | | +1 - 4 | | | |
| Mer. | +15-0 | +0.9 | -13-2 | -2.4 | +4.3 | -0.1 | -0.4 | | | -19.1 | | +10-2 | +0.2 | | | | | -17.8 | | -3·2 -6·2 | | | -0.8 | -0.2 |
| Apr. | +1.2 | -20.9 | -21.7 | +6.8 | | | | -2.1 | | -25.9 | | +13-1 | -0.6 | -5.0 | | | | | -13-2 | | 0·0 | -0.5 | -1.2 | |
| May | +16.7 | -10-5 | -13-8 | +0.8 | +2.4 | -0.2 | 0.0 | 0.0 | | | | +11 - 3 | | | | | | | | | | -0.4 | -1 · 2 | +0.1 |
| June | +22.3 | -14-9 | -15.8 | -0.9 | | | | | | | | +9.2 | | | | | | | -5.0 | | | +0.8 | -1·1 -0·1 | -1·5 +3·0 |
| July | +19.7 | -13-3 | -17.7 | -0.2 | -0.7 | +0.5 | +1 · 2 | 0.0 | -6.0 | -23.8 | +1 · 7 | 19-4 | -2.2 | -4.0 | +0-2 | ٠0٠3 | 1 | | -10.8 | -5.1 | +1·3 | | +0.5 | |
| Aug. | +22 · 1 | -11.5 | -13.7 | | | | | 0.0 | | -20.0 | | - • | -4.0 | -4-5 | 11.9 | -0.5 | | -20-7 | | | +2.6 | -0·4 •1·8 | | -1.1 |
| Sept. | | | -12.8 | | | -2.6 | +1.0 | +0.4 | -15.3 | | +2.9 | +7.9 | 4.5 | -6.4 | +1 -3 | | | -16-5 | | -4.5 | +0.3 | -0.4 | -1.9 | +0.2 |
| Oct. | +7.0 | -4 - 5 | -15-7 | +5.6 | +4.9 | | -0.5 | -0.1 | -20.2 | | -1.4 | +9-1 | -0.9 | -4.8 | 1 6 | +3-1 | | | -12-4 | | +3-1 | +4.0 | +0.2 | -0.1 |
| Nov. | | | -11.5 | | | | | -4 · 2 | -11.2 | | | | +2.8 | -4.3 | 0.0 | | | | | | -1.0 | | | -2.4 |
| Dec . | | | -4.4 | | | | | | | | | | +1 -1 | | | | | -21.1 | | | 1.0 | | | +0.9 |
| | 1 | | | | | | | | | | | | | | - • | • | • • | | • | | | | | |
| Year | +12-3 | -6.0 | -12·7 | +0-5 | +1·7 | -0.6 | +0.5 | -0.1 | -11.8 | -14 · 9 | +0 · 5 | •8.9 | -1-7 | 3 · 7 | 11.3 | +1 - 0 | -4.6 | -19 - 2 | - 8 - 3 | -3·3 | +1+4 | +1 - 1 | ··0·7 | -0.2 |
| linter | +5.6 | +2 · 1 | -6.9 | -2.6 | +0.1 | -1.5 | -0.5 | -0.5 | -12-2 | -4.0 | -2.3 | +6 - 2 | -0.9 | -1-9 | +1 - 1 | •1 • 7 | -4-3 | -16-4 | -4.5 | -2-1 | +0:5 | +1-5 | -0.7 | -0.5 |
| Couinox | +40-9 | +16.8 | -19-1 | ~11.9 | +8 · 1 | +7.6 | -2.4 | -2.2 | -16-6 | -16.7 | -0.9 | +10-1 | -1-4 | - 5-6 | +2.0 | +1 - 2 | | | -11.0 | | | | | -0.2 |
| Summer | +20-2 | -12.5 | -15-2 | +1 · 0 | +0.5 | +0.6 | +1 - 3 | +0.2 | -6.6 | -23.8 | | +10-3 | | | | | | 18 3 | | .4.2 | | 0.4 | -0.2 | |
| | | | | | | | | | | | 0 | UIET D | AVS | | | | | | | | | | | |
| 'ear | +14-4 | -1.0 | -9.0 | -0.5 | +1-9 | -1 - 2 | +0-4 | +0-9 | -2.8 | -13-8 | | | | 3 · 4 | +1 - 1 | •1 • 6 | +5-2 | 2.0 | -4-4 | 1 · 7 | +2-1 | 10.3 | -1-1 | 0.5 |
| linter | ام مر | ^ | -5.6 | -2.8 | +2·1 | | -0.1 | اممد | .4.0 | -4-1 | -1-4 | | | -2 - 2 | | 11.9 | | • • | | | | | | |
| | | +5.0 | -9·7 | | | -1.7 | | +1 -2 | | -15-2 | | | -1·4 -3·8 | 5.4 | 11.9 | | 12.5 | 3.8 | | 1 1 | 1 1 | +0.1 | -0.7 | -0.6 |
| quinox | | | -11.8 | | | -1.2 | | +0.6 | | -22-1 | | +11.7 | | | | 12·3 10·7 | | . 0.1 | | | +2 - 2 | | | -0.5 |
| Lumne r | +18.0 | -7.3 | -11.8 | +2·9 | +0.3 | -1.2 | +1.3 | 70.0 | -1.2 | -22.1 | */-8 | *11.7 | -3.7 | - 2. 5 | •0.0 | •0.7 | *8·5 | . 1.8 | -7.9 | -1.7 | .3.0 | 0.0 | -1.0 | -0.4 |
| | | | | | | | | | | | DI | STURBE | D DAYS | | | | | | | | | | | |
| 'ear | -4.9 | -24 · 0 | -22.7 | +8 · 7 | +2·7 | +1 · 5 | +1 · 6 | -5 ⋅2 | -27 · 1 | -21 · 5 | -5.9 | 18.0 | •0-8 | -4-6 | *3 · 1 | - 2 - 4 | 28 - 5 | 51 · 7 | - 16 - 6 | .3.9 | 14.2 | +4-5 | 0.0 | +1 - 2 |
| inter | -5.3 | -3.9 | -8.6 | +1 · 0 | -6·1 | -1.1 | -4.7 | -7.6 | -22 · 2 | -5-2 | -5.7 | +7 - 3 | +0-9 | -4-7 | 12.9 | 10.6 | -24-1 | -45-7 | - 10-2 | 4 8 | +3.0 | +3-4 | -1:5 | -3.6 |
| ouinox | | | | +19-6 | | +1.2 | | | -44-3 | | | | | -6.0 | 13.8 | 4.6 | -42.9 | | | +2.7 | 14.9 | 8.4 | | +7.5 |
| Summer | | | | | | +4 1 | | -2.4 | | | | | | - 3 - 1 | 12.6 | -3.3 | -18-4 | | | | 14.7 | | +1 - 7 | |

HARMONIC COMPONENTS OF THE DIURNAL INEQUALITY OF MAGNETIC FORCE Values of c_n , a_n in the series $\Sigma c_n \sin(15nt+a_n)$, t being mean local time, reckoned in hours from midnight

37 ESEDALEMUIR

| | i | | N | orth o | compone | nt | | | | | We | st co | nponen t | t | | | 1 | | Vert | ical o | compone | ent | | |
|----------------|----------------|------------|--------|--------|---------|------------|-------|-----|--------|-----|-------|-------------------------|----------|-----|-------|-----|--------|-----|--------|--------|---------|-----|-------|-----|
| | C ₁ | a 1 | Cg | a, | C: | a , | C4 | ۵. | c, | α, | c, | α, | C: | a, | C4 | ۵. | C s | α, | C. | a. | C. | α, | C4 | α. |
| | γ | ۰ | γ | ۰ | γ | 0 | γ | • | γ | 0 | γ | o | γ | Ü | γ | 0 | γ | C | γ | 0 | γ | ۰ | γ | 0 |
| | ļ | | | | | | | | | | | ALI. 1 | AYS | | | | | | | | | | | |
| en. | 9.5 | 59 | 7.9 | 245 | 2.1 | 141 | 1.3 | 4 | 12.0 | 249 | 4.7 | 344 | 1 · 3 | 210 | 3 · 1 | 48 | 8.9 | 182 | 2 · 2 | 230 | 1.4 | 91 | 0.6 | 146 |
| eb. | 10.0 | 58 | 6.1 | 243 | 2.5 | 124 | 0.9 | 343 | 15.0 | 234 | 7 · 5 | 358 | 2 · 7 | 216 | 2 · 2 | 21 | 10.9 | 163 | 4 · 7 | 233 | 0.9 | 39 | 0.8 | 269 |
| er. | 15.0 | 90 | 13.4 | 266 | 4.3 | 101 | 1.0 | 352 | 22.8 | 217 | 10.2 | 5 | 6 · 2 | 188 | 2 · 4 | 51 | 17.9 | 178 | 10.7 | 241 | 2.3 | 9 | 1.4 | 257 |
| Df. | 21 . 0 | 180 | 22.7 | 294 | 9.1 | 99 | 3 · 1 | 144 | 31 · 7 | 219 | 13.9 | 347 | 5.0 | 196 | 3.7 | 121 | 31 · 0 | 212 | 14 · 2 | 255 | 1 · 7 | 119 | 1 · 2 | 289 |
| ley | 19.7 | 125 | 13.8 | 280 | 2.4 | 104 | 0.0 | 148 | 23 · 3 | 201 | 12.4 | 31 | 4 · 5 | 218 | 1 · 5 | 119 | 15.5 | 178 | 12.5 | 274 | 3.0 | 108 | 1.8 | 230 |
| une | 26.8 | 127 | 15.8 | 273 | 1.9 | 341 | 1.5 | 57 | 29.4 | 192 | 10.1 | 31 | 3 · 3 | 239 | 0.4 | 76 | 19.2 | 180 | 7 - 7 | 227 | 3.0 | 84 | 3.0 | 11 |
| uly | 23.7 | 127 | 17.7 | 276 | 0.8 | 319 | 1 · 2 | 104 | 24.6 | 197 | 9.6 | 17 | 4.6 | 218 | 0.4 | 39 | 17.9 | 191 | 12.0 | 251 | 1.4 | 118 | 1 · 2 | 171 |
| ug. | 24.9 | 121 | 14.3 | 294 | 1.1 | 81 | 3.0 | 103 | 22.0 | 208 | 13.5 | 39 | 6.0 | 231 | 2.0 | 119 | 20.7 | 182 | 11 · 1 | 247 | 3 · 2 | 65 | 0.2 | 8 |
| lept. | 22 · 1 | 110 | 13.1 | 289 | 2.6 | 198 | 1 · 1 | 83 | 22 · 7 | 226 | 8 · 4 | 27 | 7 · 8 | 225 | 1 · 7 | 61 | 17.3 | 201 | 10.5 | 251 | 0.5 | 150 | 1.9 | 277 |
| ct. | 8.3 | 126 | 16.7 | 296 | 5.1 | 118 | 0.6 | 269 | 20.9 | 259 | 9.3 | 357 | 4.9 | 200 | 3 · 5 | 41 | 37 · 0 | 216 | 12.4 | 279 | 5 · 1 | 47 | 0.3 | 127 |
| lov. | 8.7 | 178 | 11.6 | 267 | 4.1 | 261 | 4.7 | 218 | 11.7 | 255 | 9.0 | 342 | 5 · 1 | 223 | 1 · 5 | 11 | 29 - 4 | 214 | 7.8 | 247 | 2 · 2 | 343 | 3 · 5 | 239 |
| ec. | 8.2 | 44 | 4.5 | 265 | 2.5 | 176 | 0.4 | 95 | 15.4 | 281 | 5.5 | 336 | 1 · 1 | 91 | 2.7 | 88 | 21.9 | 199 | 6.0 | 280 | 3 · 3 | 27 | 0.9 | 21 |
| ear . | 13.7 | 119 | 12.7 | 279 | 1.8 | 120 | 0.5 | 119 | 19-0 | 222 | 8.9 | 9 | 4 · 1 | 213 | 1 · 7 | 67 | 19.8 | 197 | 8.9 | 255 | 1 · 7 | 61 | 0.7 | 266 |
| linter | 6.0 | 72 | 7.4 | 256 | 1.5 | 185 | 0.7 | 238 | 12.9 | 255 | 6.6 | 346 | 2 · 1 | 214 | 2 · 1 | 46 | 16.9 | 198 | 4.9 | 251 | 1.6 | 27 | 0.9 | 244 |
| quinox | 44.3 | 71 | 22.6 | 245 | 11.1 | 57 | 3.3 | 240 | 23.6 | 228 | 10.1 | 1 | 5.8 | 204 | 2.3 | 71 | 25.1 | 206 | 11.6 | 257 | 1.9 | 53 | 1.1 | 272 |
| rimmer | 23.8 | 125 | 15.3 | 280 | 0.8 | 49 | 1.3 | 94 | 24 · 7 | 199 | 11.3 | 31 | 4 · 5 | 226 | 1.0 | 107 | 18.3 | 183 | 10.4 | 252 | 2.4 | 89 | 0.3 | 322 |
| | | | | | | | | | | | | QUIET | DAYS | | | | | | | | | | | |
| ear | 14.5 | 97 | 9.0 | 273 | 2.3 | 131 | 1.0 | 36 | 14-1 | 195 | 9.8 | 25 | 4.5 | 231 | 2.0 | 47 | 5.6 | 114 | 4.7 | 255 | 2 · 1 | 91 | 1 · 2 | 258 |
| inter | 8-2 | 55 | 6.3 | 250 | 2.1 | 114 | 0.8 | 5 | 6-4 | 233 | 5.8 | 353 | 2.6 | 222 | 2 · 1 | 35 | 4.6 | 150 | 1.6 | 234 | 1.1 | 92 | 0.9 | 238 |
| quinex | 18.3 | 95 | 9.9 | 268 | 3.9 | 126 | 1.2 | 11 | 15.4 | 192 | 10.9 | 21 | 6.6 | 224 | 3.1 | 53 | 4.7 | 95 | 4.6 | 247 | 2.4 | 78 | 1.7 | 264 |
| Ummer Ummer | | | 12.1 | 290 | 1.2 | 177 | 1.4 | 77 | 22 · 1 | 186 | 14-1 | 40 | 4 · 5 | 246 | 0.9 | 53 | 8.6 | 105 | 8.0 | 265 | 3.0 | 100 | ī · i | 263 |
| | | | | | | | | | | | | 7 6 T T (DE) | ED DAY | | | | | | | | | | | |
| ear | 24 · 5 | 195 | 24 · 3 | 297 | 3·1 | 70 | 5.5 | 176 | 34.6 | 235 | 9.9 | 330 | 4·7 | 180 | 3.9 | 141 | 59.0 | 212 | 17 · 1 | 263 | 6.2 | 52 | 1 2 | 13 |
| | | | | | | | | | | | | | | | | | 1 | | | | | | | |
| nter | 6.6 | 237 | 8.6 | 283 | 6.3 | 269 | 9.0 | 225 | 22.8 | 260 | 9.2 | 329 | 4.8 | 179 | 3.0 | 91 | 51 · 7 | 211 | 11.3 | 251 | 4 · 5 | 50 | 3.9 | 215 |
| quinox | 48.0 | 213 | 39.0 | 307 | 12.9 | 94 | 8.2 | 144 | 53 · 3 | 239 | 14.0 | 309 | 6.7 | 162 | 6.0 | 153 | 72 · 3 | 220 | 21 · 7 | 284 | 9.7 | 40 | 7 · 5 | 12 |
| mer | 30.6 | 156 | 26 · 3 | 289 | 4.7 | 37 | 3.9 | 139 | 32 · 9 | 210 | 9·2 | 5 | 3.4 | 215 | 4 · 2 | 154 | 54 · 3 | 203 | 20.3 | 248 | 5.0 | 78 | 1 · 7 | 112 |

[&]quot;Winter" comprises the four months January, February, November, December; "Equinox" the months March, April, September, October; and "Summer" May to August.

38 ESKDALEMUIR

(a) Disturbances without sudden commencement

| Serial | | Fron | 1 | | То | | | Range (| γ) | |
|--------|-------|------|------|-------|----|------|------|---------|------|-------|
| Number | Dat | е | Hour | Dat | e | Hour | Н | D | Z | Notes |
| 1a | Jan. | 20 | 01 | jan. | 23 | 01 | 172 | 254 | 171 | |
| 2a | Mar. | 15 | 12 | Mar. | 18 | 18 | 235 | 289 | 260 | |
| 3a | Mar. | 29 | 08 | Apr. | 2 | 19 | 2592 | 762 | 1009 | |
| 4a | Apr. | 23 | 03 | Apr. | 27 | 02 | 510 | 364 | 336 | |
| 5a | May | 5 | 16 | May | 8 | 01 | 308 | 199 | 225 | |
| 6а | July | 28 | 22 | Aug. | 3 | 03 | 191 | 158 | 223 | |
| 7a | Sept. | 2 | 09 | Sept. | 6 | 13 | 500 | 340 | 475 | |
| 8a | Sept. | 29 | 08 | Oct. | 3 | 24 | 168 | 211 | 203 | |
| 9a | Oct. | 4 | 11 | Oct. | 10 | 09 | 3039 | 1320 | 1114 | |
| 10a | Nov. | 3 | 20 | Nov. | 5 | 16 | 172 | 163 | 231 | |
| 11a | Nov. | 21 | 04 | Nov. | 22 | 24 | 141 | 164 | 329 | |
| 12a | Dec. | 14 | 24 | Dec. | 16 | 24 | 266 | 293 | 465 | |
| 13a | Dec. | 27 | 02 | Dec. | 30 | 24 | 165 | 203 | 216 | |

(b) Disturbances with a sudden commencement (ssc)

| Serial | Dat | te | Time of sudden | Er dist | nd of urban | | Wit reve | h init | ial troke | Ma ma | gnitude in str | | | e of fol sturbanc | |
|--------------|------|----|-------------------|------------|----------------|------|-------------|--------|--------------|----------|-------------------|------|-------|----------------------|------|
| Number | | | commence- ment | Date | H | [our | H | D | Z | H | D | Z | Н | D | Ź |
| | | | | | | | | | | γ | γ | γ | | | |
| 1 b | Jan. | 10 | 07.19 | Jan. | 12 | 04 | Yes | Yes | No | +44 | +46 | +6 | 215 | 209 | 172 |
| 2 b | Jan. | 13 | 19.00 | Jan. | 15 | 24 | Yes | No | - | +13 | +16 | 0 | 187 | 161 | 182 |
| 3 b | Apr. | 2 | 23.13 | S€ | e 4b |) | No | Yes | No | +12 | -22 | -7) | 279 | 269 | 242 |
| 4 b | Apr. | 5 | 12.59 | Apr. | 5 | 24 | Yes | Yes | No | +58 | -15 | -35 | 213 | 209 | 242 |
| 5 b | Apr. | 7 | 15.11 | - | | - | Yes | Yes | No | +43 | -13 | -3 | 1 | Small | |
| 6 b | Apr. | 10 | 01.28 | Apr. | 18 | 20 | No | Yes | - | +11 | -9 | 0 | 265 | 213 | 347 |
| 7 b | Apr. | 27 | 20.00 | Se | e 8b | | Yes | No | No | +100 | -18 | -9) | 1726 | 823 | 672 |
| 8b | Apr. | 30 | 01.32 | May | 2 | 24 | No | No | No | +92 | -39 | -12) | 17.20 | 020 | 012 |
| 9 b | May | 8 | 04.22 | May | 9 | 19 | No | Yes | No | +92 | -140 | -11 | 586 | 254 | 477 |
| 10b | May | 11 | 04.35 | May | 12 | 24 | No | Yes | No | +50 | - 66 | -4 | | Small | |
| 11b | May | 16 | 13.51 | May | 17 | 20 | Yes | Yes | No | +79 | -31 | -6 | | Sma11 | |
| 12 b | May | 28 | 20.19 | May | 30 | 22 | No | No | No | +115 | -41 | -13 | 242 | 278 | 276 |
| 13b | June | 27 | 01.45 | | e 14 | b | No | No | - | +49 | -35 | 0) | 297 | 208 | 285 |
| 14b | June | 29 | 19.39 | July | 2 | 22 | No | No | No | +92 | -31 | -10) | | 200 | 200 |
| 15b | July | 14 | 04.48 | | | - | No | Yes | - | +10 | -18 | 0) | 718 | 313 | 660 |
| 16 b | July | 14 | 17.01 | July | 18 | 23 | Yes | Yes | No | +132 | -37 | -35 | | | |
| 17b | Aug. | 16 | 14.09 | Aug. | 19 | 01 | Yes | Yes | Yes | | -64 | -9 | 580 | 236 | 651 |
| 18b | Aug. | 19 | 16.16 | - | | - | Yes | Yes | No | +98 | -26 | -6 | | Small | |
| 19b | Aug. | 29 | 00.22 | Aug. | 31 | 23 | Yes | Yes | No | +102 | -35 | -11 | 298 | 192 | 291 |
| 20 b | Oct. | 24 | 14.51 | Nov. | 1 | 03 | No | Yes | Yes | +46 | -50 | -3 | 1076 | 382 | 522 |
| 21 b | Nov. | 12 | 13.49 | | e 22 | | Yes | Yes | Yes | +98 | -74 | -6) | 2146 | 987 | 1110 |
| 22 b | Nov. | 15 | 13.04 | Nov. | 17 | 04 | Yes | Yes | - | +73 | +42 | 0) | | | |
| 23b | Nov. | 30 | 19.10 | Dec. | 3 | 06 | No | No | No | +60 | -10 | -6 | 241 | 297 | 454 |
| 2 4 b | Dec. | 7 | 18.04 | Dec. | 8 | 18 | Yes | No | No | +42 | -8 | -3 | 106 | 200 | 114 |

(c) Disturbances due to solar flare (sfe)

| Serial Number | Date | Commence- ment | Max. | End | Mov H | ement D | (γ) Z | K | K' | Notes |
|------------------|---------|-------------------|-------|-------|----------|------------|-----------------|---|----|--------------------|
| 1c | Apr. 6 | 11.32 | 11.38 | 11.45 | i | 0 | 0 | 2 | 2 | S.E.A. |
| 2c | Aug. 5 | 14.29 | 14.32 | 14.55 | | -4 | 0 | 2 | 2 | From I.A.G.A. list |
| 3c | Aug. 14 | 13.10 | 13.11 | 13.20 | | -9 | +2 | 3 | 2 | S.E.A. |

S.E.A. = Sudden enhancement of atmospherics



39 ESKDALEMUIR

Factor 10.58 (metre

JANUARY 1960

| | | | | | | | | | | | rac | tor 10 | 30 (IIR | ette . | , | | | | | | | | | JANUA | | |
|--------|--------|----------------|-------------|---------|------|-------|-------|-------|------|-------|-------|---------|-----------|--------|-----------|-------|----------|----------|----------|-----------|-------|----------|-----------|----------|------|------|
| | Hour G | . M. T. 1-2 | 2-3 | 3-4 | 4-5 | 5-6 | 6-7 | 7-8 | 8-9 | 9-10 | 10-11 | 11-12 | 12-13 | 13-14 | 14-15 | 15-16 | 16-17 | 17-18 | 18-19 | 19-20 | 20-21 | 21 - 22 | 22-23 | 23-24 | 16: | ean |
| \neg | | | | | | | | | | | VO | its per | metre | | | | | | | | | | | | | |
| | 30+ | 50+ | -120+ | Z-+ | Z±* | ~260* | -115+ | 15 | 25 | 15 | 60 | 50 | 35 | 25 | 70 | 65 | 50 | 40 | 35 | 35 | 70 | 35 | 20 | 20 | 39 | (17 |
| . | | _ | | _ | | - | _ | - | _ | - | - | - | 35 | 50 | 60 | 50 | 60 | 50 | 45 | 50 | 40 | 30 | 25 | 25 | 43 | (1) |
| | 15 | 15 | 15 | 15 | 15 | 25 | 25 | 55 | 25 | 30 | 40 | 50 | 55 | 60 | 35 | -75* | 60* | 85* | 85* | 135* | 100* | 5* | 195 | 185 | 50 | (1 |
| - 1 | 120 | 120 | 75 | 75 | 75 | 80 | 85 | 100 | 115 | 155 | 150 | 170 | 165 | 160 | 190* | 95* | -85* | -230* | Z-* | Z-* | -185* | ~80* | 20* | 25* | 118 | (1 |
| - 1 | 35 | 55 | 40 | 50 | 35 | 75 | 90 | 85 | 90 | 105 | 120 | 125 | 145 | 170 | 140* | 140 | 150 | 170 | 160 | 150 | 180 | 165 | 95 | 115 | 111 | (2 |
| - 1 | | | | | | | | | | | | | | | | 00 | -00 | 4.5 | | 65 | 50 | 95 | 35 | 35 | 84 | C |
| - 1 | 115 | 65 | 110 | 80 | 80 | 70 | 50 | 60 | 105 | 135 | 110 | 115 | 135 95 | 125 | 90 100 | 90 | 80 35 | 45 30 | 75 35 | 40 | 45 | 95 40 | 30 30 | 35 30 | 89 | |
| - 1 | 30 | 55 | 35 | 30 | 25 | 25 | 35 | 40 | 30 | 50 | 65 | 85 | | 80 | | 60 | | 50* | 35 0* | 115* | 100 | -20 | -245* | 35 | | |
| ı | 25 | 20 | 15 | 25 | 20 | 15 | 20 | 30 | 35 | 25 | 50* | 40* | 60* | 135 | 65* | 40* | 40 | | - | | | | | | 35 | |
| Į | 40 | 20 | 15 | 15* | 25 | 35* | 40* | 40* | 100 | 120 | 85 | 150 | 140 | 105 | 105 | 165 | 55 | 55 | 80 | 70 245 | 65 | 60 | 60 390 | 50 | 78 | ٠, |
| - 1 | 55 | 50 | 50 | 40 | 80 | 85 | 75 | 80 | 105 | 150 | 145 | 115 | 125 | 145 | 110 | 150 | 105 | 120 | 210 | 245 | 330 | 375 | 390 | 300 | 151 | (|
| ľ | 325 | 130 | 75 | 135 | 110 | 160 | ~75* | -95* | -50* | 10* | -135* | -40* | 95* | 125 | 130 | 115 | 135 | 155 | 200 | 200 | 185 | 135 | 120 | 90 | 149 | (|
| | 60 | -35 | 20 | 25 | 20 | 60* | 10• | -30+ | 45* | 10* | 80* | -125* | -140* | 20* | -25* | -55* | -15* | -20* | 55* | 40* | -245* | -200* | -65* | -100* | 18 | ` |
| - 1 | -60* | 25* | 50+ | 85* | 70+ | 75+ | 95+ | 85 | 90 | 140* | 170+ | 200 | 160 | 230 | 190* | 195* | 195 | 245* | 100* | 230* | 310* | 130* | 125* | 100* | 160 | |
| | 350* | 85* | 90* | 5* | 30* | 225* | 0. | 70+ | 80* | 0+ | 85* | 225* | 340* | 185* | 265* | 150* | 110* | 130* | 160* | 170* | 160* | 155* | 75* | 50* | - | |
| - 1 | 70* | 165* | 45* | 5+ | 20* | 25* | 15* | 20+ | | -* | | | -= | -* | 305* | 305 | 475 | 415 | 350 | 405 | 350 | 320 | 300 | 375 | 366 | |
| - 1 | 70* | 1034 | 43* | 3* | 20+ | 23. | 13- | 20 | | | | | j | | 300 | 303 | 47.5 | 72.7 | 3.50 | 103 | 030 | 020 | 900 | 3.0 | | |
| - 1 | 285 | 160 | 170 | 185 | 220 | 205 | 160 | 70 | 185 | 260 | 230 | 245 | 300 | 245 | 280 | 240 | 210 | 160 | 175 | 140 | 120 | 125 | 120 | 160 | 194 | (|
| I | 200 | 200 | 180 | 135 | 150 | 125 | 110 | 35 | 45 | 70 | 90 | 95 | 110 | 105 | 110 | 85 | 100 | 225 | 225 | 185 | 225* | Z+* | 150* | 105* | 129 | (|
| - 1 | 100 | 135 | 45 | -90+ | 100* | 25* | Z-* | Z-+ | Z-+ | -115* | -125* | -290* | -215* | -330* | Z-* | Z-* | 100* | 125 | 160 | 165 | 135 | 115 | 50 | 50* | 114 | |
| - 1 | Z++ | Z+* | Z+* | Z+* | Z-* | Z-* | -330* | Z~* | Z-* | Z-* | Z± * | 115* | 185 | 165 | 300 | 340 | 170* | 165* | 2+* | 215* | 270 | 480 | 2+ | Z+* | 290 | |
| - | Z+* | 155 | 135 | 135 | 165 | 175 | 170 | 185 | 155 | 125 | 165 | 125 | 125 | 115 | 120 | 110 | 70 | 80 | 100 | 100 | 125 | 135 | 135 | 105 | 131 | (|
| - 1 | 120+ | -35* | 5• | 250* | Z++ | 220* | 180* | 100+ | 1206 | -275* | -890* | -705* | -35* | -20+ | 20* | -35* | -80* | -250* | -90* | -65* | -30 | -85* | 35* | 185* | -30 | |
| J | -70+ | -45+ | 80* | -90 | -85 | 180* | 300+ | -450* | | -105* | -125* | 20* | -15* | -30* | -25+ | 5* | -25* | -25* | -15* | 03* | -10* | -* | -* | -5* | -87 | |
| - 1 | 15+ | 35* | | -1 95 • | -10+ | 35 | 45 | 40 | 75 | 95 | 80 | 40+ | 20* | 10+ | 25* | 35* | 45* | 75* | 35* | - | -145* | Z-* | -390* | 15* | 62 | |
| | Z-+ | Z-+ | -60* | 20 | 40 | 40 | 15 | 15 | 10 | 5 | 10 | 15 | 30 | 50 | 40 | 55 | 80 | 30 | 40 | 100 | 35 | 15 | 15 | 15 | 32 | (|
| - } | 25 | 20 | 20 | 15 | 15 | 15 | 15 | 15 | 25 | 50 | 60 | 105 | 70 | 95 | 135 | 85 | 105 | 135 | 75* | 65* | 75 | 40 | | - | 56 | ~ |
| ı | 43 | 20 | 20 | 13 | 13 | 13 | 13 | 13 | 43 | 30 | 00 | 103 | / / / | 33 | 133 | 03 | 103 | 133 | 13. | 03. | /3 | 40 | - | | 30 | ` |
| - 1 | - | - | - | - | - | - | - | - | - | - | 50 | 70 | 85 | 95 | 80 | 75 | 20 | - | ~ | - | ~ | - | - | | 68 | |
| - 1 | - | - | - | - | - | - | - | - | - | - | _ | - | 85 | 95 | 100 | 100 | 75 | 50 | 35 | -10 | 0 | 80 | 85 | 75 | 64 | (|
| - [| 85 | 85 | 100 | 10 | 75 | 45 | 50* | 80 | 65* | 60+ | 95* | 35* | -45* | 35* | Z-* | -40* | 90* | 90* | 100* | 170* | 160* | 175* | 105 | 205* | 73 | |
| - 1 | 330* | 215* | 185* | 180 | 75 | 70 | 75 | 55 | 75 | 115 | 130 | 245 | 250 | 270 | 150 | 85 | 95* | 170* | 115* | 0.* | 0* | 60 | 30 | 20 | 118 | (|
| | 20 | 0 | 25 | 65 | 85* | 195* | 150* | 170+ | 415+ | 410* | 690* | 525* | 415* | 790* | 505* | 580* | 365* | 690* | Z+* | Z+* | Z+* | Zt * | Z-* | Z-* | 27 | |
| | Z-+ | Z-+ | Z-+ | Z-* | Z±* | Zi A | Z+ • | Z±* | Z-+ | -580+ | -95* | 150+ | 195* | 25* | 110* | -5* | 10* | 15* | 125* | 170 | 130 | 195 | 170 | 160 | 165 | |
| _ | 96 | 74 | 66 | 6.3 | 63 | 78 | 69 | 61 | 76 | 94 | 99 | 123 | 123 | 126 | 119 | 129 | 113 | 118 | 128 | 132 | 120 | 131 | 110 | 106 | 101 | /4 |
| nn | (16) | (17) | (17) | (18) | (18) | (16) | (14) | | (17) | | (16) | (16) | (19) | (21) | (17) | | | | (15) | | (19) | (19) | (18) | (17) | 1.01 | , ,, |
| | (20) | ·/ | \ <u></u> , | (-0) | (-0) | () | () | () | () | () | (-0) | (-0) | (**) | () | (*,) | (20) | (*0) | () | () | (-0) | () | () | (-0) | (-,) | | |

POTENTIAL GRADIENT (reducted to open level surface)
Mean values for periods of sixty minutes between exact hours

| 39 | ESEDAL. | EM UIR | | | | | | | | | - | | 10.17 (| | | ween e | | | | | | | | FEBRUAI | RY 19 | 960 |
|----------|---------------|-----------------|-------------|-------|-------|-------|-------|-------------|-------|-------|-------------|---------|-------------|-------------|-------------|-------------|-----------|-------------|-----------|-----------|-------------------|--------------|----------|---------------|-------|------|
| | Hour G 0-1 | i. M. T. 1-2 | 2-3 | 3-4 | 4-5 | 5-6 | 6-7 | 7-8 | 8-9 | 9-10 | 10-11 | 11-12 | 12-13 | 13-14 | 14-15 | 15-16 | 16-17 | 17-18 | 18-19 | 19-20 | 20-21 | 21 - 22 | 22-23 | 23-24 | Me | an |
| | | | | | | | | | | | vo | lts per | metre | | | | | | | | | | | | | |
| 1 | 95 | -180+ | -5• | 90+ | | -160* | 40+ | 115 | 95 | 170 | 145 | 80* | -+ | 50* | -250* | -155* | 90* | 110* | 260* | 190 | 180 | 260 | 100 | 185 | 153 | (10 |
| 2 | 220 | 175 | 145 | -80+ | -120* | -20+ | Z-• | Z-+ | Z-* | Z-* | Z-* | -15* | 250* | 165 | 180 | 190 | 240 | 315* | 180* | 355* | 130* | Z-* | Z-* | Z-* | 188 | (7 |
| 3 | ~480* | -480+ | -615+ | -855* | -150* | | -130* | -220* | -310+ | -50* | 60* | 95* | 25* | 135* | 80* | 100* | -390* | 70* | -40* | 60* | 110 | 80* | -60* | 75* | 110 | (1 |
| • | 10* | 50+ | 60* | 10* | 30* | -155* | -425* | -1 20* | Z-* | Z±* | Z-+ | 5* | 120 | 145 | 160 | 135 | 115 | 90 | 75 | 95 | 115 | 140 | 145 | 60 | 116 | (12 |
| 5 | 130 | 185 | 140 | 120 | 110 | 100 | 100 | 105 | 150 | 410 | 470 | 275 | 260 | 150 | 160 | 100 | 80 | 35 | 65 | 55 | 60 | 105 | 55 | 75 | 146 | (24 |
| s I | 90 | 95 | 60 | 60 | 45 | 50 | 55 | 60 | 90 | 130 | 140 | 140 | 135 | 80 | 105 | 140 | 50 | 70 | 100 | 95 | 100 | 105 | 95 | 85 | 91 | (24 |
| , | 90 | 90 | 80 | 70 | 50 | 60 | 60 | 60 | 80 | 75 | 70 | 85 | 110 | 100 | 90 | 105 | 70 | 65 | 60 | 40 | 50 | 60 | 110 | 65 | 75 | (24 |
| 3 | 70 | 65 | 60 | 60 | 55 | 35 | 65 | 205 | 245 | 225 | 120 | 145 | 140 | 130 | 140 | 145 | 80 | 90 | 80 | 60 | 65 | 135 | 135 | 105 | 111 | (24 |
| , | 90 | 60 | 60 | 60 | 45 | 50 | 45 | 55 | 80 | 95 | 100 | 105 | 125 | 135 | 110 | 120 | 65 | 50 | 60 | 70 | 55 | 55 | 75 | 70 | 76 | (24 |
| 0 | 80 | 90 | 75 | 60 | 65 | 70 | 40 | -30* | 50* | 130 | -25* | 5* | -175* | -275* | -245* | -40* | 50* | -5* | 10* | 40 | 65 | 115* | 110 | 145 | 81 | (12 |
| ιl | 235 | 205 | 130 | 120 | 125 | 110 | 120 | 150 | 150 | 160 | 175 | 165 | 180 | 155 | 135 | 120 | 155 | 145 | 145 | 150* | 35* | 155* | 165* | 30* | 152 | (19 |
| · | 105* | 75* | | -120+ | 185* | Z+* | 95* | | -65* | 135* | 200* | 280 | 240 | 215 | 210 | 185* | 130 | 180 | Z+* | 195 | 280 | 385 | 610 | 460* | 273 | (10 |
| 3 | 340* | 325* | 100+ | 120+ | 105* | 25* | 20+ | 65* | 45* | 210* | 225* | 65* | 140* | 135* | 185 | 160 | 130 | 165 | 160 | 150 | 120 | 95 | 100 | 85 | 135 | (10 |
| , 1 | 85 | 85 | 70 | 115 | 95 | 115 | 195 | 165* | 320* | 170* | Z* | 355* | 575 | 605 | 450 | 420 | 330 | 505 | 655 | 680 | 460 | 645 | 510 | 285 | 362 | (19 |
| 5 | 225 | 160 | 270 | 320 | 175 | 165 | 175 | 275 | 185 | 210 | 200 | 265 | 275 | 220 | 215 | 260 | 370 | 465 | 345 | 305 | Z+ | Z+ | Z+ | Z+ | 254 | (20 |
| 5 | 555 | 495 | 225 | 160 | 135 | 215 | 240 | 215 | 230 | 210 | 220 | 240 | 330* | 135* | Z± • | 210 | 190 | 205 | 200 | 305 | 315 | 335 | 260 | 240 | 257 | (21 |
| 7 | 250 | 280* | 245* | 240 | 180 | 150 | 160 | 245 | 165 | 260 | 245 | 240 | 300 | 280 | 240 | 255 | 260 | 210 | 280 | 295 | 205 | 180 | 165 | 140 | 225 | (22 |
| ś I | 140* | 180+ | Z++ | Z±* | Z+* | Z++ | Z-* | 55* | -75* | -235* | 155* | Z++ | Zt.* | Zt.* | Z+* | 325* | Zt 4 | ~85* | 115* | 225 | 465 | 530* | 470* | Z±* | 345 | (2 |
| او | 110* | 150* | 215 | 155 | 245 | 385 | 280 | 310 | 400 | 430 | 530 | 805 | 700 | 855 | 935 | 590+ | Z+* | Z+* | 315 | 290 | 275 | Z± * | Z±* | Z±* | 445 | (16 |
| ó | Z±* | Z±* | Z±* | 295* | 250 | 250 | 150 | 140 | 245 | Z-+ | 245* | 305* | Z±* | Z±* | 145* | 260+ | 140* | 405* | 295* | 345 | 305 | 285 | 240 | 245 | 246 | (9 |
| ιl | 185 | 160 | 260 | Z+ | 275 | 420* | _ | - | 95 | 140 | 240 | 430* | 230° | 205 | 270 | 280* | 280 | 340 | 320 | 290 | 230 | 275 | 285 | _ | 241 | (16 |
| 2 | - | - | 200 | _ | 135 | 145 | 130 | 155 | - | - | - | - | 230 | 203 | 270 | 2004 | 200 | 340 | 320 | 290 | 230 | 2/3 | 203 | _ | 153 | (5 |
| 3 | _ | _ | | _ | | _ | _ | _ | 175 | 225 | 220 | _ | - | _ | _ | - | 250 | 150 | 160 | 355 | 350 | 405 | 220* | 50* | 253 | (9 |
| • | Z+* | Z+* | Z+ * | -30* | Z±# | Z-* | 35 | 90 | 240 | 325 | 345 | 340 | 305 | 390 | 380 | 465 | 675 | Z+ | Z+ | Z+ | Z+* | 835* | Z±* | Z±* | 326 | (ìì |
| 5 | Z±* | Z±* | Z-+ | Z-+ | Z-+ | Z-+ | Z-+ | 0+ | 195+ | 110+ | 30* | -255* | -440* | Z-* | 2-+ | 55* | -190* | | -505* | -205* | 95* | 25* | 60* | -90* | - | `(0 |
| | 0 | 65 | 260 | 250 | 180 | 155 | 160 | 130 | 195 | 115 | 210 | 300 | 285 | 310 | 200 | 21.5 | 7 | -4054 | 7.4 | 7.4 | 7.4 | 7 . • | | 7 1. 4 | 207 | (16 |
| 7 | -120* | 20* | 5+ | 105* | 10* | 5* | 40 | 60* | 50 | 60 | 50 | 40 | 35 | 45 | 380 35 | 315 40 | Z~* 65 | -425* 90 | Z-* 90 | Z-* 80 | Z− * 50 | Z±.* | Z±# | Z±* -50* | 54 | (15 |
| <u>'</u> | -120* Z±* | _ | -360* | -50* | 140* | 40* | -10* | 60* | 155* | 205* | 245* | 265* | 165* | 180 | 145 | 160* | 170* | 155 | 90 | 110 | 245 | 245* | 130* | 100* | 154 | (6 |
| 9 | 60* | 60* | 45* | 40* | 45 | 15 | 20 | 35 | 55 | 95 | 145 | 135 | 185 | Z+* | 7±* | -185* | Z-# | Z-+ | 2~¢ | -55* | 185* | 80* | Z-# | Z-* | 81 | (9 |
| | 00 | 00 | | ,, | | •• | | Ų. | 55 | ,, | 145 | 133 | 200 | • | - | 103 | | 2 . | 2 . | 33, | 103 | 30 ÷ | 2 . | | · · | (- |
| an | 160 (15) | 148 (13) | 150 (15) | 138 | 130 | 129 | 115 | 147 (16) | 158 | 192 | 213 (17) | 237 | 248 (16) | 242 (18) | 238 (19) | 199 (16) | 196 | 177 (17) | 188 | 203 | 195 (21) | 219 (16) | 200 (15) | 137 | 183 | (397 |
| | (23) | (23) | (-5) | (23) | | (-0) | (20) | (-0) | (=// | (=0) | (-,, | (=3) | (10) | (20) | (23) | (20) | (*0) | (17) | (1/) | (21) | (21) | <u> </u> | <u> </u> | | | |
| | | | | | | | | | | | | | | | | | | | | | 1 | Mean | for 0a | days | [111 | (2 |

The potential gradient is reckoned as positive when the potential increases upwards. The symbol Z indicates either that the trace fluctuates rapidly so that estimation of a mean value is impracticable, or that the trace is limited by the range of the instrument (see Introduction); and the suffix +, - or ± indicates that the mean value is plainly positive, plainly negative, or indeterminate in sign. The occurrence of precipitation of any sort is indicated by an asterisk. Round brackets round any hourly mean indicates that the record during that hour is somehow imperfect.

1

Factor 9.81 (metre 1)

MARCH 1960

| | Hour (| G. M. T. 1-2 | 2-3 | 3-4 | 4-5 | 5-6 | 6-7 | 7-8 | 8-9 | 9-10 | 10-11 | 11-12 | 12-13 | 13-14 | 14-15 | 15-16 | 16-17 | 17-18 | 18-19 | 19-20 | 20-21 | 21 - 22 | 22-23 | 23-24 | Me | ean |
|-----|---------------|-----------------|------------|------------|------------|------------|------------|------------|------------|-------------|-------------|----------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|--|------------|------------|------------|------|-------|
| _ | 1 | | | | | | | | | | Vo | its per | metre | | | | | | | | | | | | 1 | |
| 1 | −250* | -575* | ~420* | -300* | -85* | 25* | 10* | 5* | -100+ | -105* | 15* | 65* | 55* | 35* | 30* | 50* | 60* | 35* | -160* | -305* | -270* | Z~* | Z-* | 75* | 1 - | (0 |
| 2 | -15* | 30 | 95 | 85 | 140 | 90 | 135 | 65 | 45 | Z-* | Z-+ | 95* | 100 | 120 | 0* | 75* | 70 | 85* | | Z-* | 100 | 105* | 435* | -25* | 90 | |
| 3 | 165 | 110 | -40* | -20* | 95* | 110 | 80 | 10+ | Z-* | Z-+ | Z-+ | Z-• | 45* | Z-+ | Z-+ | Z±* | 30* | 65+ | | -450+ | Z-* | Z-* | 20 | 70 | 93 | (6 |
| 4 | 85 | 70 | 50 | 45 | 45 | 50 | 45 | 55 | 75 | 80 | 90 | 55 | 80 | 100 | 145 | 120 | 105* | 35* | 70* | 65 | 85 | 80 | 40 | 40 | 71 | (21 |
| 5 | 75 | 75 | 110 | 85 | 45 | 85 | 145 | 130 | 95 | 1 70 | 180 | 200 | 200 | 205 | 190 | 145 | 85 | 45 | 60 | 10 | 45 | 70 | 60 | 70 | 107 | (24 |
| , | 85 | 90 | 100 | 70 | 80 | 80 | 55 | 50 | 65 | 55 | 65 | 110 | 110 | 85 | 105 | 90 | 70 | 85 | 135 | 125 | 125 | 75 | 45 | 50 | 84 | (24 |
| ' I | 90 | 85 | 60 | 60 | 55 | 100 | 65 | 60 | - | - | - | - | - | - | - | - | - | - | - | - | - | _ | - | - | 72 | (8 |
| . 1 | - | - | - | - | - | ~ | - | - | 70 | 55* | 70* | 75* | 130* | 125* | 95* | 115* | 95* | 90* | 25* | 80* | 15* | 20* | 20* | 20 | 45 | (2 |
|) | 45 | 60 | 75 | 80 | 80* | 30* | 40* | 25* | 85* | 85* | 135* | 110* | 130+ | 115 | 50 | 85 | 45* | -75* | -220* | -85* | 120* | 115* | 135* | 135 | 81 | (8 |
| - 1 | 145 | 215 | 195 | 160 | 170 | 200 | 1 60 | 180 | 5* | Z• | Z+* | 325 | 255 | 365 | 420 | 480 | 255 | 155 | 90* | 150* | 175* | 215* | 75 | 170 | 231 | (ì7 |
| | 20 | 30 | 20 | Z-* | Z+* | 110* | 50 | 55 | 65* | 20* | 90* | 85* | 95 | 195 | 230 | 215 | 265 | 150 | 300 | 300 | 165 | 310 | 130 | 95 | 1 54 | (17 |
| | 20 | 75 | 155 | 120 | 185 | 110 | 70 | 20 | 60 | 5* | 20* | 10 | 85 | 35 | 70 | 45 | 60 | 70* | 65* | 75* | 105 | 215* | 5 | 35 | 70 | (18 |
| - | 110 | 80 | 25 | -15 | -10 | 145 | 110 | 115 | | -130* | -30* | 80* | 205* | 215 | 195 | 190 | 145* | Zt. | Zt# | 115* | 60* | Z± * | 45 | 60 | 89 | (14 |
| - 1 | 30* | -100* | -60* | 60 | Z±* | 120 | 160* | 225* | 275 | 205 | 190 | 265 | 235 | 215 | 215 | 185 | 175 | 260 | 300 | 230 | Z+* | Z± * | 270 | 95 | 206 | (16 |
| - 1 | 100 | 110 | -120* | Z+* | Z-* | -80* | 110* | 105* | 140* | 270* | 195 | 100* | 70* | -90* | 40* | -15* | 5* | -130* | 155+ | 170* | 105 | 10 | 110 | 210 | 120 | (7 |
| | 150 | 320 | 0 | -5 | 125 | 0 | 30 | 105 | 25 | -10 | 40 | 15 | 35 | 85 | 190 | 75 | 185 | 65 | 5 | 25 | 70 | 1 65 | 95 | 115 | 79 | (24 |
| | 80 | 45 | -15 | -15 | 85 | 5 | 70 | 35 | 25 | 25 | 75 | 35 | 60 | 45 | 80 | 155 | -15 | 35 | 45 | 80 | 125 | 100 | 105 | 105 | 57 | (24 |
| - 1 | 105 | 80 | 95 | 85 | 75 | 80 | 80 | 85 | 95 | 100 | 95 | 110 | 160 | 155 | 125 | 95 | 85 | 70 | 85 | 70 | 65 | 65 | 30 | Z-* | 91 | (23 |
| - ! | Z-* | 55 | 105 | 50 | 25 | 20 | 5 | 15 | -20 | 45 | 65 | 80 | 120 | 100 | 115 | 125 | 125 | 140 | 145 | 145 | 100 | 45* | 5* | -15* | 78 | (20 |
| - | -15* | 45* | 65* | 55* | 50* | 75 | 85* | 40• | 50◆ | 90• | 130 | 155 | 200 | 235 | 225 | 215 | 225 | 115 | 90 | 60 | 80 | 95 | 65 | 60 | 135 | (15 |
| | 50 | 60 | 60 | 50 | 55 | 90 | 95 | 105 | 140 | 140 | 180 | 175 | 180 | 190 | 200 | 190 | 150 | 80 | 60 | 55 | 30 | 30 | 40 | 30 | 101 | (24 |
| - 1 | 35 | 35 | 30 | 30 | 45 | 50 | 45 | 50 | 100 | 140 | 165 | 205 | 205 | 230 | 185 | 185 | 125 | 90 | 20 | 50 | 65 | 100 | 35 | 80 | 96 | (24 |
| j | 115 | 125 | 80 | 95 | 100 | 140 | 100 | 50 | 130 | 125 | 215 | 260 | 295 | 250 | 180 | 155 | 115 | 110 | 35 | 30 | 105 | 80 | 65 | 75 | 126 | (24 |
| - 1 | 45 | 50 | 35 | 30 | 55 | 155 | 200 | 235 | 305 | 230 | 150 | 110 | 190 | 95 | 85 | 125 | 140 | 165 | 230 | 310 | 270 | 220 | 210 | 30 | 153 | (24 |
| | 95 | 155 | 125 | 80 | 100 | 115 | 175 | 185 | 105 | 145 | 100 | 115 | 135 | 130 | 170 | 150 | 135 | 150 | 1 60 | 140 | 110 | 100 | 110 | 80 | 128 | (24 |
| J | 70 | 75 | 85 | 60 | 70 | 55 | 75 | 50 | 50 | 65 | 65 | 45 | 40 | 90 | 35 | 65 | 85 | 100 | 80 | 75 | 70 | 115 | 130 | 105 | 73 | (24 |
| - 1 | 90 | 110 | 80 | 65 | 65 | 75 | 75 | 95 | 105 | 100 | 105 | 105 | 85 | 110 | 85 | 115 | 130 | 120 | 120 | 100 | 60 | 40 | 25 | 30 | 87 | (24) |
| - 1 | 30 | 10* | 15* | 20 | 30 | 20* | 25* | 25* | 30+ | 30 | 75◆ | 95+ | 65 | 105* | 100* | 100* | 125 | 125 | 45* | 35* | 30* | 35 | 35 | 45 | 54 | (10 |
| ŀ | 35 | 25* | 30 | 30 | 35 | 40 | 50 | 50 | 90 | 110 | 85 | 75 | 90 | 90 | 95 | 105 | 120 | 165 | 140 | 125 | 110 | 125 | 105 | 100 | 87 | (23 |
| 1 | 100 | 95 | 80 | 65 | 95 | 100 | 75 | 85 | 95 | 100 | 95 | 90 | 90 | 100 | 65 | 40+ | 15* | 55* | 60 | 75 | 70 | -15 | -45 | -5 | 70 | (21 |
| | -45 | 25 | 40* | -145* | -175* | -185* | 30* | 45 | -10* | 30+ | 25 | 15 | 30 | 45 | 25 | 25* | 5* | 25* | 30+ | -20 | 35 | 25 | 30 | 10 | 19 | (13 |
| an | 76 (25) | 90 (25) | 73 (23) | 58 (24) | 76 (22) | 87 (24) | 87 (23) | 83 (23) | 91 (21) | 103 (18) | 115 (20) | 122 (21) | 131 (24) | 144 (25) | 145 (24) | 150 (22) | 139 (21) | 117 (19) | 115 (18) | 103 (20) | 95 (22) | 91 (20) | 73 (25) | 73 (26) | 100 | (535) |
| | · · · · · · · | <u></u> | <u> </u> | | | | | | | | | | | | <u> </u> | | | | · · · · · | | - | Mana | for Oa | days | [107 | (2) |

POTENTIAL GRADIENT (reduced to open level surface) Mean values for periods of sixty minutes between exact hours

| 39 | ESEDAL | .EMU IR | | | | | | | | | F | ictor 9 | .83 (we | tre-1 |) | | | | | | | | | APRI | L 196 | i0 |
|------|--------|-----------------|-------|-------|-------|-------|-------|-------|------|-------|-------|---------|---------|-------|-------|-------|-------|-------|-------|-------|-------|---------|--------|----------------------|-------|-------|
| | Hour (| G. M. T. 1-2 | 2-3 | 3-4 | 4-5 | 5-6 | 6-7 | 7-8 | 8-9 | 9-10 | 10-11 | 11-12 | 12-13 | 13-14 | 14-15 | 15-16 | 16-17 | 17-18 | 18-19 | 19-20 | 20-21 | 21 - 22 | 22-23 | 23-24 | Me | an |
| | | | | | | | | | | | vo | lts per | | | | | | | | | | | | | T | |
| 1 | 25 | 15 | -45 | -10 | -35 | 30 | 0 | 25 | 55 | 0 | -20 | 10 | 30 | 30 | 30 | 50 | 55 | 65 | 60 | 35 | 30 | 30 | 15 | 20 | 21 | (24) |
| 2 | -15 | -55* | -50* | -70* | -345* | -70* | -95* | -25* | -90* | -30* | -185+ | -245• | -135* | 55* | 60* | 25* | -165* | -240+ | 55* | 100 | 55* | -100* | -55* | 40* | 43 | (2) |
| 3 | -170* | -25* | -90* | -240* | 105* | 5* | 10* | 110* | -70* | -325* | -220* | Z-• | Z-* | Z-* | -170* | -50* | -75* | -155* | 20* | -310* | -475* | -360* | -580* | 185* | - | (0) |
| 4 | 30 | 100 | 80 | 15 | 45 | 35 | -10 | 10* | 0 | 55* | 5* | 125* | 120* | 65 | 215 | 180 | 160 | 185 | 145 | 95 | 90 | 55* | -90* | -45* | 89 | (16) |
| 5 | 40* | 80* | 80* | 65 | -350* | -780* | Z-+ | -475* | 1 70 | 100 | 140 | 155 | 150 | 120 | 85 | 100* | -335* | -545* | 60* | 310* | 180* | 40* | -55* | 45* | 123 | (8) |
| 6 | -195* | -695* | Z-* | Z-* | Z-+ | Z-* | Z-+ | 50+ | 40* | 5* | Z-* | 25 | 125 | 75 | 75 | 150 | 145 | 115 | 65 | 75 | 110* | 125* | 130 | 90 | 97 | (11) |
| 7 | 85 | 105 | 100* | 165* | 125* | 160* | 30* | 10* | 60* | 70* | 60* | 110 | 120 | 125 | 140 | 110 | 105 | 110 | 70 | 80 | 85 | 70 | 70 | 45 | 95 | (15) |
| 8 | 45 | 65 | 80 | 70 | 85 | 60* | 110* | 75 | 85* | 160* | 190 • | 250* | 120* | 125* | 160* | 160* | 185* | 235* | 225* | 225* | 170* | 90+ | 175* | 110* | 70 | (6) |
| 9 | 85* | -160* | Z-* | Z-* | Z-* | Z-* | Z-* | Z-• | 40* | 85 | 65 | Z-* | Z-* | Z+• | 95 | 95* | 100 | Z±* | Z-* | 165* | 125 | 65 | 105 | 130 | 96 | (8) |
| 10 | 20* | Z-* | -140* | Z-* | Z±* | Z-* | Z-* | Z-* | Z-+ | -40• | 70* | Z+* | Z+* | Z+* | Zt* | Z+* | Z± * | Z±* | Z±# | Z-* | Z-* | Z-* | -260* | - 50 ≠ | - | (0) |
| 11 | 45* | 35 | 30 | 30 | 35* | 50* | 120* | 85* | 90 | 130 | 140 | 110 | 100 | 115 | 115 | 70 | 80* | 95 | 80 | 120 | 120 | 125 | 75 | 75 | 92 | (18) |
| 12 | 80 | 65 | 50 | 40 | Z-* | Z-* | Z-* | Z-* | Z-* | Z-* | Z-* | -625* | -375* | 50* | 130* | 115* | 155* | 95* | 120* | 70* | 155* | 130* | -145* | 95* | 59 | (4) |
| 13 | 150 | 110 | 55 | 10* | 160* | 170+ | 130* | -20* | Z-* | 90 | 110* | Z±* | Z-* | Zt* | 95• | 145* | 120 | 110 | Z-* | -25* | Z±* | Z-* | 30* | 75 | 101 | (7) |
| 14 | 75 | 80 | 45 | 25 | 35* | Z-* | -115* | -45* | Z-+ | Z+* | Z± A | 190* | Z++ | Z+* | 115* | 155 | 115* | 120+ | 125 | 120* | 25* | Z-+ | 100 | 100 | 88 | (8) |
| 15 | 85 | 70 | 65 | 95 | 90 | 70 | 80 | 110 | 75 | 85 | 150 | 145* | Z+* | Z± * | Z~ | Z±* | 255 | Z-* | Z±* | 35 | 30 | 30 | 55 | 65 | 85 | (Ì7) |
| 16 | 65 | 75 | 50 | 55 | 75 | 155 | 135 | 170 | 125 | 125 | 130 | 130 | 105 | 100 | 90 | 80 | 90 | 65 | 50 | 20 | 35 | 50 | 30 | 30 | 85 | (24) |
| 17 | 25 | 25 | 25 | 25 | 30 | 35 | 45 | 45 | 80 | 200 | 155 | 160 | 170 | 120 | 85 | 70 | 70 | 65 | 35 | 15 | 20 | 20 | 20 | 15 | 65 | (24) |
| 18 | 20 | 25 | 25 | 15 | 10 | 25 | 50 | 70 | 55 | 70 | 95 | 90 | 60 | 50 | 45 | 55 | 30 | 35 | 70* | 30 | 15 | 30 | 25 | 30 | 42 | (23) |
| 19 | 25 | 30 | 10 | 35 | 20 | 50 | 30 | 50 | 50 | 140 | 150 | 145 | 70 | 60 | 60 | 80 | 105 | 65 | 20 | 15 | 25 | 30 | 25 | 45 | 56 | (24) |
| 20 | 35 | 35 | 30 | 30 | 115 | 35 | -15* | 100 | 95 | 130* | 20* | 80 | 75 | 115 | 95 | 110 | 110 | 90 | 65 | 60 | 90 | 105 | 110 | 95 | 80 | (21) |
| 21 | 75 | 45 | 30 | 30 | 30 | 40 | 85 | 140 | 90 | 110 | 170 | 130 | 185 | 135 | 125 | 110 | 110 | 130 | 125 | 160 | 160 | 155 | 155 | 110 | 120 | (24) |
| 22 | 75 | 70 | 65 | 75 | 95 | 105 | 105 | 85 | 95 | 105 | 115 | 100 | 80 | 70 | 75 | 110 | 75 | 115 | 110 | 90 | 115 | 160 | 125 | 120 | 97 | (24) |
| 23 | 105 | 125 | 150 | 90 | 65 | 55 | 90 | 125 | 125 | 75 | 85 | 100 | 85 | 115 | 90 | 75 | 75 | 110 | 90 | 75 | 150 | 115 | 140 | 135 | 102 | (24) |
| 24 | 140 | 135 | 110 | 100 | 125 | 95 | 95 | 115 | 75 | 45 | 50 | 60 | 35* | 5* | 35* | 130 | 20* | 30* | 25* | -140* | 45* | 45 | 30 | 45 | 87 | (16) |
| 25 | 30 | 30 | 30 | 15 | 60 | 125 | 145 | 165 | 155 | 125 | 125 | 185 | 110 | 80 | 50 | 50 | 45 | 45 | 30 | 45 | 45 | 35 | 30 | 20 | 74 | (24) |
| 26 | 60 | 20 | 45 | 45 | 45 | 45 | 90 | 110 | 110* | 90* | 80 | 75 | 80 | 110 | 90 | 95 | 95 | 75* | 70 | 50 | 30* | 45* | 45 | 30 | 67 | (19) |
| 27 | 25 | 20 | 20 | 20 | 20 | 15 | 40 | 60 | 25 | 0. | 15* | 35* | 55 | 50 | 80 | 85 | 80 | 85 | 85 | 55 | 70 | 45 | 20 | 15 | 46 | (21) |
| 28 | 15 | 20 | 20 | 20 | 20 | 20 | 30 | 60 | 65 | 65 | 45 | 30 | 40 | 55* | 50* | 80 | 80 | 95 | 90 | 70 | 35 | 45 | 45 | 45 | 47 | (22) |
| 29 | 70 | 60 | 30 | 35 | 45 | 50 | 65 | 65 | 70 | 80 | 100 | 80 | 95 | 110 | 110 | 115 | 120 | 75 | 20 | 10 | 15 | 10 | 20 | 30 | 62 | (24) |
| 30 | 25 | 10 | 30 | 15 | 20 | 30 | 30 | 30 | 40 | 50 | 55 | 80 | 60 | 70 | 45* | 70* | 55* | -15* | 90* | 35* | 0* | 30* | 28* | 65* | 39 | (14) |
| | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Mean | 56 | 57 | 45 | 41 | 51 | 56 | 65 | 89 | 81 | 93 | 102 | 98 | 94 | 90 | 92 | 98 | 101 | 92 | 74 | 62 | 70 | 65 | 65 | 62 | 74 | (472) |
| | (24) | (24) | (23) | (23) | (19) | (18) | (17) | (18) | (19) | (18) | (18) | (19) | (19) | (19) | (19) | (20) | (20) | (18) | (18) | (20) | (18) | (18) | (21) | (22) | | |
| | | | | | | | | | | | | | | | | | | | | | | Mean | for Oa | days | [88] | (3)] |
| | | | | | | | | | | | | | | | | | | | | | - | | | | | |

Daily, monthly and annual means are computed excluding hours with precipitation and, of course, all indeterminate entries. The number of hours or days used in computing each mean is shown in round brackets. Entries in square brackets are means for 0a days (see Introduction) and the figure in round brackets is the number of days used in computing this mean.

39 ESEDALEMUIR

Factor 9.88 (metre 1)

MAY 1960

| | Hour G | . M. T. | | | | | | | | | | | | | | | | | | | | | 22 22 | 22.04 | | |
|------|--------|---------|------|------|------|------|------|------|----------|------|----------|---------|-------|-------|-------|-------|-------|-------|-------|-------|---------|----------|----------|----------|----------|----|
| | 0-1 | 1-2 | 2-3 | 3-4 | 4-5 | 5-6 | 6-7 | 7-8 | 8-9 | 9-10 | 10-11 | 11-12 | 12-13 | 13-14 | 14-15 | 15-16 | 16-17 | 17-18 | 18-19 | 19-20 | 20-21 | 21-22 | 22-23 | 23-24 | Me | an |
| | | | | | | | | | | | | lta per | | | | | | | | | 25 | 25 | 20 | 20 | 60 | |
| 1 | 60* | 70 | 60 | 45 | 70 | 100 | 65 | 85 | 65 | 60 | 80 | 80 | 95 | 85 | 60 | 65 | 60 | 80 | 50 | 35 | 25 5 | 25 | 30 15 | 30 20 | 62 | (2 |
| | 20 | 20 | 10 | 15 | 30 | 40 | 35 | 30 | 55 | 140 | 165 | 140 | 75 | 70 | 110 | 115 | 150 | 110 | 105 | 35 | _ | 10 15 | 12 | 20 | 63 54 | |
| 1 | -30 | 30 | 40 | -5 | 5 | 25 | 10 | 55 | 80 | 30* | 50* | 95 | 120 | 120 | 110 | 110 | 105 | 95 | 100 | 65 | 50 | | - | 30* | | (2 |
| 1 | - | - | - | - | - | - | - | -• | 15* | 15* | 25* | 30* | 30* | 140* | 195* | 70* | 95* | 55* | 55 | 75 | 35 | 30 | 20 | | 43 | (|
| | 25* | 10* | -60* | -65• | 75* | 130* | 110+ | 135* | 110* | 130+ | 75* | 110* | 105* | 110 | 150 | 180 | 150 | 155 | 120 | 115 | 50 | 195 | 210 | 15 | 132 | (1 |
| | 40 | 35 | 40 | 10 | 20 | 55 | 95 | 125 | 155 | 115 | 155 | 115 | 120 | 130 | 140 | 105 | 80 | 55* | 45* | 50 | 30 | 20 | 15 | 25 | 76 | (2 |
| , [| 20 | 50 | 65 | 60 | 30 | 75 | 45* | 110* | 45* | 85 | 100 | 95 | 125 | 150 | 165 | 170 | 1 60 | 165 | 150 | - | - | - | - | - | 104 | (1 |
| . 1 | - | - | - | - | - | - | - | - | - | 40* | 75* | 140 | 185 | 120 | 70 | 60 | 90 | 110 | 135 | 85 | 200 | 80 | -30 | Z* | 104 | (1 |
| | -20* | -10* | 20 | 20 | 50 | 65+ | 15* | 55* | 50 | 15 | 35 | 45 | 80 | 75 | 90 | 125 | 120 | 70 | 30 | 5 | 50 | 0 | -5 | 0 | 46 | (1 |
| | -15 | -15 | 30 | -15 | 50 | 120 | 70 | 35 | 15* | 35* | 55 | 70 | 130 | 130 | 145 | 150 | 140 | 140 | 160 | 120 | 100 | 60 | ~25 | 55 | 77 | (2 |
| | 80 | 100 | 75 | 100 | 100 | 135 | 90 | 110 | 120 | 110 | 110 | 105 | 115 | 115 | 115 | 110 | 85 | 50 | 45 | 40 | -25 | 15 | 40 | 5 | 81 | (2 |
| 1 | -15 | 10 | -5 | -15 | -5 | 5 | 40 | 55 | 80 | 75 | 80 | 70 | 155 | 140 | 150 | 130 | 40 | 60 | 7* | Z-* | Z-* | 65* | 30 | 30 | 55 | (2 |
| | 70 | 35 | Zt.* | Z±* | Z+• | Z++ | Zt# | Z±# | Zt+ | Z±* | Z-+ | Z-* | Z-* | Z-* | 7-* | Z+* | Zt * | 65* | 65 | 135 | 95 | 79 | 39 | 49 | 68 | (|
| ı | 35 | 30 | 50 | 110 | 45 | 125 | 105 | 150 | 120 | 165 | 120 | 70* | 95* | Z-* | Z+*. | 70 | 195 | 150 | 155 | 140 | 120 | 85 | 75 | 75 | 106 | (2 |
| | 90 | 65 | 45 | 50 | 45 | 65 | 70 | 70 | 95 | 80 | 75 | 95 | 95 | 95 | 105 | 120 | 120 | 120 | 100 | 65 | 65 | 60 | 45 | 50 | 79 | (2 |
| | 55 | 50 | 45 | 45 | 50 | 60 | 45 | 70 | 80 | 120 | 110 | 110 | 135 | 140 | 125 | 110 | 115 | 115 | 95 | 105 | 45 | 45 | 75 | 95 | 85 | (2 |
| | 45 | 35 | 15 | 60 | 225 | 510 | 265 | 75 | 100 | 95 | 120 | 120 | 105 | 110 | Z | Z | 95 | 106 | 110 | 95 | 95 | 50 | 135 | 75 | 120 | (2 |
| | 55 | 70 | 110 | 200 | 275 | 130 | 80 | 80 | 125 | 140 | 120 | 105 | 95 | 110 | 110 | 110 | 110 | 125 | 120 | 100 | 100 | 65 | 40 | 75 | 110 | Ċ |
| , [| 60 | 60 | 75 | 105 | 115 | 110 | 105 | 115 | 110 | 60 | 55 | 105 | 85 | 105 | 115 | 65 | - | _ | 105 | 125 | 120 | 130 | 105 | 100 | 97 | Ċ |
| | 120 | 75 | 120 | 125 | 125 | 120 | 130 | 125* | 115+ | 120 | 100 | 95 | 120 | 110 | 95 | 100 | 125 | 125 | 120 | 95 | 35 | -15 | 80 | 65 | 99 | Ċ |
| | 65 | 60 | 30 | 25 | 25 | 45 | 65 | 105 | 55 | 60 | 95 | 85 | 75 | 60 | 80 | 85 | 70 | 50 | 35 | 30 | 35 | 40 | 30 | 20 | 55 | C |
| ı | 30 | 40 | 70+ | 165* | 165* | 140• | 50 | 5 | 60 | 120 | 130 | 95 | 110 | 100 | 100 | 125 | 125 | 125 | 135 | 75 | 50 | 100 | 50 | 95 | 86 | à |
| - 1 | 60 | 40 | 55 | ~40• | 75+ | 115• | 115+ | 130+ | 65* | 110 | 110 | 90 | 100+ | 40+ | Z-+ | Z-+ | Z-+ | Z-+ | Z-+ | Z-* | Z-+ | 65* | 165 | Z- | 90 | `(|
|) | 140 | 125 | 115 | 120 | 15 | 185 | 145 | 145 | 130 | 120 | 125 | 130 | 120* | 130 | 150 | 150 | 155 | 140 | 130 | 35 | -5 | 30 | 20 | 35 | 107 | (2 |
| - 1 | 50 | 45 | 65 | 45 | 85 | 60 | 115 | 125 | 65 | 45 | 120 | 155 | 145 | 180 | 200 | 165 | 180 | 70* | 5+ | 25* | 5* | 10* | 20* | 40* | 109 | (1 |
| - { | 15* | 45• | 75* | 320+ | 280* | 310* | 170+ | 365* | 215* | 265* | 205* | 270+ | 225* | 210 | 260 | 120 | 120 | 155 | 135* | 120* | 140 | 75* | 45* | 110* | 167 | |
| - 1 | 105* | 160* | 70+ | 130 | 310 | 270 | 215 | 140 | 130+ | 95+ | 140 | 110 | 110 | 90 | 110* | -15* | 95 | 65 | 100 | 130 | 95 | 125 | 110 | 95 | 137 | (1 |
| 1 | 110 | 115 | 70 | 60 | 50 | 70 | 80 | 80 | 65 | 75 | | | l | _ | 65 | 60 | 60 | 45 | 35 | 35 | 30 | 25 | 30 | 35 | 60 | à |
| - 1 | 30 | 30 | 30 | 25 | 20 | 35 | 50 | 60 | 75 | 85 | 75 | 75 | 75 | 45 | 45 | 60 | 40 | 30 | -15 | -30 | 15 | 15 | 10 | 10 | 37 | Ċ |
| l | 10 | 15 | 10 | 5 | 10 | 15 | 20 | 15 | - | - | - | - | - | - | - | - | 65 | 35 | 45 | 30 | 0 | 5 | 15 | 10 | 19 | Ò |
| ı | 15 | 10 | 20 | 15 | 30 | 45 | 70 | 35 | 70 | 55 | 55 | 45 | 45 | 35 | 55 | 60 | 55 | - | 65 | 45 | 50 | 40 | 25 | 10 | 41 | (2 |
| an l | 47 | 48 | 50 | 56 | 74 | 104 | 88 | 80 | 88 | 93 | 101 | 99 | 109 | 111 | 117 | 109 | 108 | 101 | 90 | 71 | 59 | 51 | 48 | 43 | 80 | (5 |
| "" | (24) | (25) | (24) | (24) | (24) | (23) | (23) | (22) | (20) | (22) | (23) | (24) | (22) | (25) | (24) | (25) | (27) | (24) | (26) | (26) | (27) | (25) | (28) | (25) | 1 | |
| | | | | | | | | | <u> </u> | | <u> </u> | | | | | | | | | | | | | | [61 | |

POTENTIAL GRADIENT (reduced to open level surface)
Mean values for periods of sixty minutes between exact hours

| 145 60 70 5 -10* -5* 15 105* 120* 190* 245* 100* 90 100* 75* 35 190* 30* 105* 70 100 90 160 155 83 140 220 150 80 70 120 115 120 105 120 175 135 120 170 130 135 120 170 130 135 120 170 130 150 130 150 150 150 150 150 150 150 150 150 15 | 39 | ESKDAL | EMUIR | | | | | | | | | Fa | ctor 9 | 40 (me | tre ^{~1}) | | | | | | | | | | JUN | E 196 | 50 |
|--|----|--------|----------|----------|----------|----------|----------|----------|----------|----------|----------|-------|---------|--------|---------------------|-------|-------|-------|-------|-------|-------|----------------|---------|-------|----------|-------|-----|
| Volts per metre 15 50 50 15 20 25° 20° 75 115 110 115 130 100 115 110 145 150 140 135 130 120 120 50 70 95 145 60° 70 5 -10° -5° 15 105° 120 105 120 175 135 120 100 170 145 115 70 50 30 5 20 15 15 20 97 120 120 15 105° 120 175 135 120 170 145 115 70 50 30 5 20 15 15 20 97 120 120 15 5 -5 -20 5 25 25 20 40 60 65 50 85 80 75 75 80 70 21° 21° 21° 21° 21° 21° 21° 21° 21° 21° | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 15 50 50 15 20 25* 20* 75 115 110 115 130 100 115 110 145 150 140 135 130 120 120 50 70 145 15 60 70 5 -10* -5* 15 105* 120* 190* 245* 100* 90 100* 75* 33 190* 30* 105* 70 100 90 160 155 20 20 20 20 20 25 30 35 50 60 65 70 85 95 70 75 75 55 55 50 70 80 95 50 35 20 34 20 20 15 5 -5* -20 5 25 25 20 40 60 65 80 75 75 80 70 22* 22* 22* 22* 22* 30 35 50 60 65 70 85 95 70 75 75 75 80 70 20* 20* 20 15 5 -5* -20 5 25 25 20 40 60 65 80 75 75 80 70 22* 22* 22* 22* 30* 35* 30* 30* 30* 155 75 95 80 65 75 120 90 120 140 120 120 120 105 70 123 120 170 135* 120 170 135* 120 170 120 120 120 120 105 70 123 120 170 135* 120 170 135* 120 170 135* 130 130 120 120 120 105 70 123 120 170 135* 130 130 135* 130 120 120* 100 75 70 123 120 170 135* 130 130 135* 130 120 120 120 105 70 123 120 120 130 135* 130 120 120 120 120 105 70 123 120 120 130 135* 130 130 135* 130 130 130 130 130 130 130 130 130 130 | | 0-1 | 1-2 | 2-3 | 3-4 | 4-5 | 5-0 | 6-7 | 7-8 | 8-9 | 9-10 | 10-11 | 11-12 | 12-13 | 13-14 | 14-15 | 15-16 | 16-17 | 17-18 | 18-19 | 19-20 | 20-21 | 21 - 22 | 22-23 | 23-24 | Me | an |
| 145 60 70 5 -10* -5* 15 105* 120* 190* 245* 100* 90 100* 75* 35 190* 30* 105* 70 100 90 160 155 83 140 220 150 80 70 120 115 120 105 120 175 135 120 170 130 135 120 170 130 135 120 170 130 150 130 150 150 150 150 150 150 150 150 150 15 | | [| | | | | | | | | | vo | its per | metre | | | | | | | | | | | | | |
| 140 220 150 80 70 120 115 120 105 120 175 135 120 170 145 115 70 50 30 5 20 15 15 20 97 20 20 20 25 30 35 50 60 65 70 85 95 70 75 55 55 55 50 70 80 95 50 35 20 40 80 80 70 21 22 22 22 22 22 22 2 | 1 | 15 | 50 | 50 | 15 | 20 | 25* | 20* | 75 | | 110 | 115 | 130 | 100 | 115 | 110 | 145 | 150 | 140 | 135 | 130 | 120 | 120 | 50 | 70 | 95 | (2 |
| 20 | 2 | 145 | 60 | 70 | 5 | -10+ | -5• | 15 | 105* | 120 | 190+ | 245* | 100* | 90 | 100* | 75* | 35 | 190* | 30* | 105* | 70 | 100 | 90 | 160 | 155 | 83 | (1 |
| 20 20 15 5 -5 -20 5 25 25 20 40 60 66 80 75 75 80 70 21* 21* 21* 21* 21* 75* 30* 35 30 30 155 75 95 10 30 25 75 95 10 90 120 140 120 120 105 70 123 100 75 50 22* 65 22* 2** 2** 2** 2** 2** 2** 2** 2** 2* | 3 | 140 | 220 | 150 | 80 | 70 | 120 | 115 | 120 | 105 | 120 | 175 | 135 | 120 | 170 | 145 | 115 | 70 | 50 | 30 | 5 | 20 | 15 | 15 | 20 | 97 | (2 |
| 30 25 90 75 95 155 295 330 300 155 75 95 80 65 75 120 90 120 140 120 120 120 105 70 120 100 75 50 22* 65 22* 2** 2** 2** 2** 2** 2** 2** 2** 2* | • | | | | | | | | | | | | | | | | | | | | | | | | | | (2 |
| 100 75 50 Z±e 65 Z±e Zee Zee Zee Zee Zee Zee Zee Zee Zee | 5 | 20 | 20 | 15 | 5 | -5 | -20 | 5 | 25 | 25 | 20 | 40 | 60 | 65 | 80 | 75 | 75 | 80 | 70 | Z±* | Zł* | Z± * | Z±* | 75* | 30* | 36 | (|
| 24095 - 115 - 230 - 225 - 120 - 145 - 110 - 180 130 - 110 2 - 105 110 - 120 - 5 - 2 - 150 115 2 - 140 100 20 115 185 100 135 -5 - 80 - 55 - 50 20 - 70 - 90 115 - 80 110 - 35 - 135 170 135 150 160 150 160 135 120 145 110 100 100 70 7 | , | 30 | 25 | 90 | 75 | 95 | 155 | 295 | 330 | 300 | 155 | 75 | 95 | 80 | 65 | 75 | 120 | 90 | 120 | 140 | 120 | 120 | 120 | 105 | 70 | 123 | (2 |
| 185 100 135 -58 80 | 7 | 100 | 75 | 50 | Z± * | 65 | Z±* | Z+* | Z+* | Z-* | Z±* | Z-+ | Z-* | Z-* | Z±* | 105* | 190 | 175 | 150 | 150 | 145* | -40* | 20* | 155* | 60* | 119 | - (|
| 115 105 90 55 45 0° 20° 50 55 70 55 70 70 80 95 70 105 110 100 100 100 70 75 75 80 1 35 70 35 70 35° -35° 75° 160° 35° 120° 130 33° 12° 40° -10° 0° 60 45° 85° 75° 35 65 65 65 | | 240* | -95* | -115* | ~230* | -225* | 120* | 145* | 110* | 180 | 130* | 110 | Z+* | 105* | 110* | 120* | 5* | 7-+ | Z-* | 190* | 116* | Z-* | 140* | 190 | 205 | 171 | |
| 35 |) | 185 | 100 | 135 | -5* | 80* | 55* | 50* | 20* | 70* | 90* | 115* | 80* | 110* | 35* | 135 | 170 | 135 | 150 | 160 | 150 | 160 | 160 | 135 | 120 | 146 | (|
| |) | 115 | 105 | 90 | 55 | 45 | 0• | 20* | 50 | 55 | 70 | 55 | 70 | 70 | 80 | 95 | 70 | 105 | 110 | 100 | 100 | 100 | 70 | 75 | 75 | 80 | (|
| The color of the | | 35 | Z-+ | 35* | -35* | 75* | 160* | 35* | 120* | 130 | 35* | Z-* | 40* | ~10* | 0* | 60 | 45* | 85* | 75* | 35 | 65 | _ | - | _ | - | 65 | |
| 120 105 90 90 90 95 75 85 120 130 95 100 75 95 105 2-* 125* 95 75* 65 65 65 85 95 92 88 89 90 105* 205* 200* 225 185 160 155 180 220 225 210 180 140 140 140 140 120* -5* 2** 65* 45* 2-* 162 (22** 195* 190* 190* 225* 95* 125* 160* 220* 175* 340* 180 90* 110 125 80 100 120 130 115 90 105 165 150 123 (240 190 290 540 575 495 395 185* -20* 155* 270 150* 130 130 105 90* 95* 55* 85* 185 355 320 168 (240 190 290 540 575 495 395 185* -20* 155* 270 150* 130 130 105 90* 95* 55* 85* 185 355 320 168 (240 190 290 540 575 495 395 185* -20* 155* 270 150* 130 130 105 90* 95* 55* 85* 185 355 320 168 (240 190 290 540 575 495 395 185* -20* 155* 270 150* 130 130 105 90* 95* 55* 85* 185 355 320 168 (240 190 290 540 575 495 395 185* -20* 155* 270 150* 130 130 150 160 225 230 300 245 240 225 185 165 90 115 159 90 50 55 55 55 70 75 75 65 65 57 56 59 0105 95 100 90 65 40 25 15 35 75 45 66 150 115 159 100 190 150 145 135 125 135 159 100 190 150 145 135 150 100 100 100 100 100 100 100 100 10 | | - | | | -• | -• | | -• | | -• | | -• | Z+* | Z+* | Z+* | Z±# | Zt. | Z+* | -• | - | | Z±* | Z-* | Z-* | Z-* | - | |
| 85 90 90 165° 205° 200° 225 185 160 155 180 220 225 210 180 140 140 140 120° -5° 2+° 65* 45° 2-° 162 (21° 195° 190° 190° 225° 95° 125° 160° 220° 175° 340° 180 90° 110 125 80 100 120 130 115 90 105 165 150 135 95 90 110 105 125° 150° 175° 245 180 190 145 130 130 105 90° 95° 55° 85° 185 355 320 168 (240 190 290 540 575 495 395 185° -20° 155° 270 150° 130° 130° 135° 185 170 190 145 135 125 135 252 (120 125 105 90 90 120 125 130 130 135 180 130 150 160 225 230 300 245 240 225 185 165 90 115 159 (90 50 55 55 55 70 75 75 65 65 75 65 90 105 95 100 90 65 40 25 115 35 75 45 66 (50 70 70 55 60 155 115 75 110 120 145 145 185 130 80 85 90 45 30 25 25 20 20 20 80 (155 20 15 20 20 40 45 50 55 50 50 60 66 65 60 50 50 60 70 85 75 35 35 35 30 25 45 (35 35 35 15 60 105 100 65 70 115 185 270 155 190 180 155 115 140 160 165 125 100 100 105 105 115 (95 30 10 15 0 0 35 40 45 65 90 105 125 100 100 95 120 135 130 110 85 95 75 75 75 (65 70 75 270 150 60 55 130 40° 50° 70 95 40 70 95 40 70 50 75 80 65 85 55 50 45 65 55 -155° 41 (665 70 75 270 150 60 55 130 40° 50° 70 95 40 70 95 40 70 50 75 80 65 85 55 50 45 65 55 -155° 41 (665 70 75 270 150 60 55 130 40° 50° 70 95 40 70 95 40 70 50 75 80 65 85 55 45 65 60 60 70 81 65 125 100 100 105 105 178 (665 70 75 270 150 60 55 130 40° 50° 70 95 40 70 95 40 70 50 75 80 65 85 55 45 65 60 60 81 65 85 55 -155° 41 (665 60 55 55 90 125 130 135 100 65 95° -80° 85° 85° 105 90 60 55 55 45 50 45 55 75 75 76 (88 95 100 115 150 145 120 195 135 120 90 105 90 105 100 105 95 100 105 95 80 50 60 70 104 (88 75 77 91 92 112 113 104 114 103 120 115 111 110 110 111 116 113 113 199 88 89 99 99 102 (25 (24) (24) (24) (21) (21) (17) (19) (19) (22) (20) (22) (22) (22) (22) (24) (23) (22) (25) (25) (23) (24) (22) (23) (25) (24) | l | Z-• | | -• | | -• | -• | | -• | -• | | Z-* | 145 | Z+* | Z+* | Z-* | Z-* | Z-* | 110 | 105 | 85 | 120 | 160 | 125 | 135 | 130 | |
| 21* 195* 190* 190* 225* 95* 125* 160* 220* 175* 340* 180 90* 110 125 80 100 120 130 115 90 105 165 150 123 135 95 90 110 105 125* 150* 175* 245 180 190 145 130 130 105 90* 95* 55* 85* 185 355 320 168 (240 190 290 540 575 495 395 185* -20* 155* 270 150* 130 70 50* 70* 135* 185 170 190 145 135 125 135 125 125 120 120 125 105 90 90 120 125 130 130 135 180 130 150 160 225 230 300 245 240 225 185 165 90 115 159 90 50 55 55 55 55 70 75 75 65 65 75 65 90 105 95 100 90 65 40 25 185 165 90 115 159 90 90 50 55 55 55 70 75 75 65 65 75 65 90 105 95 100 90 65 40 25 185 165 90 115 159 90 105 95 100 90 65 40 25 185 165 90 115 159 90 105 95 100 90 65 40 25 185 165 90 115 159 90 105 95 100 90 65 40 25 185 165 90 115 159 90 105 95 100 90 65 40 25 185 165 105 100 100 100 120 145 145 185 130 80 85 90 45 30 25 25 20 20 20 80 115 20 15 20 20 40 445 50 55 50 50 50 60 65 60 50 50 60 70 85 75 35 35 35 30 25 45 135 15 60 105 100 65 70 115 185 270 155 190 180 155 115 140 160 165 125 100 100 105 105 115 155 | 1 | 120 | | | | | | | 85 | | | 95 | 100 | | 95 | 105 | Z-* | 125* | 95 | 75* | 65 | 65 | 65 | 85 | 95 | 92 | (|
| 135 95 90 110 105 125* 150* 175* 245 180 190 145 130 130 105 90* 95* 55* 85* 185 355 320 168 240 190 290 540 575 495 395 185* -20* 155* 270 150* 130 130 150 160 225 230 300 245 240 225 185 165 90 115 159 90 50 55 55 55 55 70 75 75 65 65 75 65 65 75 65 90 105 95 100 90 65 40 25 185 165 90 115 159 90 50 55 55 55 55 70 75 75 65 65 75 65 90 105 95 100 90 65 40 25 15 35 75 45 66 66 155 115 75 110 120 145 145 185 130 80 85 90 45 30 25 25 20 20 20 20 80 115 120 125 20 15 20 20 40 45 50 55 50 50 60 65 65 60 50 50 60 65 60 50 50 60 70 85 75 35 35 35 30 25 45 20 33 35 15 60 105 100 65 70 115 185 270 155 190 180 155 115 140 160 165 125 100 100 105 105 155 155 100 100 120 165 250 240 245 235 245 240 235 145 135 165 135 120 178 165 135 100 100 15 105 100 60 55 130 40* 50* 70 95 40 70 50 75 80 65 85 55 75 75 75 75 75 75 75 75 75 75 75 75 | i | 85 | 90 | 90 | 165* | 205* | 200* | 225 | 185 | 160 | 155 | 180 | 220 | 225 | 210 | 180 | 140 | 140 | 140 | 120* | -5* | Z+ * | 65* | 45* | Z-* | 162 | (|
| 240 190 290 540 575 495 395 185* -20* 155* 270 150* 130 70 50* 70* 135* 185 170 190 145 135 125 135 252 (120 125 105 90 90 125 130 130 130 135 180 130 130 150 160 225 230 300 245 240 225 185 165 90 115 159 90 50 55 55 55 70 75 75 65 65 75 65 90 105 95 100 90 65 40 25 15 35 75 45 66 66 66 50 50 50 50 60 70 85 75 35 35 30 25 45 66 155 15 20 15 20 20 40 45 50 55 50 50 60 65 60 50 50 60 70 85 75 35 35 30 25 45 65 155 ** 100 100 120 165 250 240 245 245 240 235 145 135 165 135 120 178 (155 ** 100 100 120 165 250 240 245 235 245 240 235 145 135 165 135 120 178 (155 ** 100 100 120 165 250 240 245 235 245 240 235 145 135 165 135 120 178 (155 ** 100 100 120 165 250 240 245 235 245 240 235 145 135 165 135 120 178 (155 ** 100 100 120 165 125 100 100 95 120 135 130 110 85 95 75 75 75 74 (155 ** 100 100 120 165 125 100 100 95 120 135 130 110 85 95 75 75 75 74 (155 ** 100 100 120 165 125 100 100 95 120 135 130 110 85 95 75 75 75 74 (155 | , | Z±* | 195* | 190+ | 190* | 225* | 95* | 125* | 160* | 220* | 175* | 340* | 180 | 90+ | 110 | 125 | 80 | 100 | 120 | 130 | 115 | 90 | 105 | 165 | 150 | 123 | C |
| 120 125 105 90 90 120 125 130 130 135 180 130 150 160 225 230 300 245 240 225 185 165 90 115 159 90 50 55 55 55 70 75 75 65 65 75 65 90 105 95 100 90 65 40 25 15 35 75 45 66 6 | • | 135 | 95 | 90 | 110 | 105 | 125* | 150* | 175* | 245 | 180 | 190 | 145 | 130 | 130 | 105 | 90* | 95* | 55* | 85* | 185 | - | - | 355 | 320 | 168 | Ċ |
| 90 50 55 55 55 70 75 75 65 65 75 65 90 105 95 100 90 65 40 25 15 35 75 45 66 6 50 70 70 55 60 155 115 75 110 120 145 145 185 130 80 85 90 45 30 25 25 20 20 20 20 80 15 20 15 20 20 40 45 50 55 50 50 60 65 66 50 50 50 60 70 85 75 35 35 35 30 25 45 35 35 15 60 105 100 65 70 115 185 270 155 190 180 155 115 140 160 165 125 100 100 105 105 115 155 100 100 120 165 250 240 245 235 245 240 235 145 135 165 135 120 178 195 30 10 15 0 0 35 40 45 65 90 105 125 100 100 95 120 135 130 110 85 95 75 75 74 10 100 100 120 165 100 100 95 120 135 130 110 85 95 75 75 74 10 100 100 100 100 100 100 100 100 100 | 3 | 240 | 190 | 290 | 540 | 575 | | | | -20* | | 270 | 150* | 130 | 70 | 50* | 70* | 135* | 185 | 170 | 190 | 145 | 135 | 125 | 135 | 252 | Ċ |
| 50 70 70 55 60 155 115 75 110 120 145 145 185 130 80 85 90 45 30 25 25 20 20 20 20 80 (15 20 15 20 20 40 45 50 55 50 50 60 65 60 50 50 60 70 85 75 35 35 30 25 45 (33 35 35 15 60 105 100 65 70 115 185 270 155 190 180 155 115 140 160 165 125 100 100 105 105 115 5 100 100 120 165 250 240 245 235 245 240 235 145 135 165 135 120 178 (95 30 10 15 0 0 35 40 45 65 90 105 125 100 100 95 120 135 130 110 85 95 75 75 75 74 (65 70 75 270 150 60 55 130 40* 50* 70 95 40 70 50 75 80 65 85 55 45 65 60 60 81 50 60 45 45 25 35 30 30 30 40 50 10 0 -25 50 65 60 55 75 50 45 65 55 -155* 41 (-60* 30 65 125 90 175 170 125 130 105 110 120 110 100 110 120 120 95 120 120 120 120 120 120 120 120 80 95 100 115 150 145 120 195 135 120 90 105 90 105 100 105 95 100 105 95 80 50 60 70 104 65 60 55 55 55 90 125 130 135 100 65 95* -80* 85* 65* 105 90 60 55 55 45 50 45 55 75 76 (25) (24) (24) (21) (21) (17) (19) (19) (22) (20) (22) (22) (22) (22) (24) (23) (22) (25) (23) (22) (25) (23) (24) (22) (23) (25) (24) |) | 120 | | | | | | | 130 | | 135 | 180 | 130 | 150 | 160 | 225 | 230 | 300 | 245 | 240 | 225 | 185 | 165 | 90 | 115 | 159 | (|
| 15 20 15 20 20 40 45 50 55 50 50 60 60 65 60 50 50 60 70 85 75 35 35 30 25 45 65 35 35 35 35 30 25 45 65 35 35 35 35 35 30 25 45 65 35 35 35 35 35 30 25 45 65 35 35 35 35 35 30 25 45 65 60 60 70 85 75 35 35 35 30 25 45 65 60 60 70 85 75 35 35 35 30 25 45 65 60 60 70 85 75 35 35 35 30 25 45 65 60 60 70 85 75 75 75 75 75 75 75 75 75 75 75 75 75 |) | 90 | 50 | 55 | 55 | 55 | 70 | 75 | 75 | 65 | 65 | 75 | 65 | 90 | 105 | 95 | 100 | 90 | 65 | 40 | 25 | 15 | 35 | 75 | 45 | 66 | (|
| 35 35 15 60 105 100 65 70 115 185 270 155 190 180 155 115 140 160 155 125 100 100 105 105 115 155 | | 50 | 70 | 70 | 55 | 60 | 155 | 115 | 75 | 110 | 120 | 145 | 145 | 185 | 130 | 80 | 85 | 90 | 45 | 30 | 25 | 25 | 20 | 20 | 20 | 80 | 0 |
| 155 100 100 120 165 250 240 245 235 245 240 235 145 135 165 135 120 178 (95 30 10 15 0 0 35 40 45 65 90 105 125 100 100 95 120 135 130 110 85 95 75 75 75 76 (65 70 75 270 150 60 55 130 40° 50° 70 95 40 70 50 75 80 65 85 55 45 65 60 60 81 (50 60 45 45 25 35 30 30 30 40 50 10 0 -25 50 65 60 55 75 50 45 65 55 -155* 41 (66 30 65 125 90 175 170 125 130 105 110 120 110 100 110 120 120 95 120 120 120 115 95 90 111 (80 95 100 115 150 145 120 195 135 120 90 105 90 105 100 105 95 100 105 95 80 50 60 70 104 (65 60 55 55 55 90 125 130 135 100 65 95* -80° 85* 65* 105 90 60 55 55 45 50 45 55 75 76 (88 75 77 91 92 112 113 104 114 103 120 115 111 110 110 111 116 113 113 99 88 89 99 99 102 (25) (24) (24) (24) (24) (21) (21) (21) (17) (19) (19) (22) (20) (22) (22) (22) (24) (23) (22) (25) (23) (24) (22) (23) (25) (24) | | 15 | 20 | 15 | 20 | 20 | 40 | 45 | 50 | 55 | 50 | 50 | 60 | 65 | 60 | 50 | 50 | 60 | 70 | 85 | 75 | 35 | 35 | 30 | 25 | 45 | Ò |
| 95 30 10 15 0 0 35 40 45 65 90 105 125 100 100 95 120 135 130 110 85 95 75 75 75 76 65 70 75 270 150 60 55 130 40° 50° 70 95 40 70 50 75 80 65 85 55 45 65 60 60 81 65 60 45 45 25 35 30 30 30 40 50 10 0 -25 50 65 60 55 75 50 45 65 55 -155° 41 65 60 80 95 100 115 150 145 120 195 130 105 110 120 110 100 110 120 120 95 120 120 120 115 95 90 111 80 95 100 115 150 145 120 195 135 120 90 105 90 105 100 105 95 80 50 60 70 65 60 55 55 90 125 130 135 100 65 95° -80° 85° 65° 105 90 60 55 55 45 50 45 55 75 76 60 70 104 65 60 55 77 91 92 112 113 104 114 103 120 115 111 110 110 111 116 113 113 99 88 89 99 99 102 (25) (24) (24) (24) (24) (21) (21) (21) (17) (19) (19) (22) (20) (22) (22) (22) (24) (23) (22) (25) (23) (24) (22) (23) (25) (24) | 1 | 35 | 35 | 15 | 60 | 105 | 100 | 65 | 70 | 115 | 185 | 270 | 155 | 190 | 180 | 155 | 115 | 140 | 160 | 165 | 125 | 100 | 100 | 105 | 105 | 119 | (|
| 65 70 75 270 150 60 55 130 40° 50° 70 95 40 70 50 75 80 65 85 55 45 65 60 60 81 6 50 60 45 45 25 35 30 30 30 40 50 10 0 -25 50 65 60 55 75 50 45 65 55 -155° 41 6 60° 30 65 125 90 175 170 125 130 105 110 120 110 100 110 120 120 95 120 120 120 115 95 90 111 80 95 100 115 150 145 120 195 135 120 90 105 90 105 100 105 95 100 105 95 80 50 60 70 104 65 60 55 55 55 90 125 130 135 100 65 95° -80° 85° 65° 105 90 60 55 55 45 50 45 55 75 76 60 104 60 105 105 105 105 105 105 105 105 105 10 | ļ | | - | - | - | - | - | | | | | | | | | 245 | 235 | 245 | 240 | 235 | 145 | 135 | 165 | 135 | 120 | | (|
| 50 60 45 45 25 35 30 30 30 40 50 10 0 -25 50 65 60 55 75 50 45 65 55 -155* 41 6 -60* 30 65 125 90 175 170 125 130 105 110 120 110 100 110 120 120 95 120 120 120 115 95 90 80 95 100 115 150 145 120 195 135 120 90 105 90 105 100 105 95 80 50 60 70 104 65 60 55 55 55 90 125 130 135 100 65 95* -80* 85* 65* 105 90 60 55 55 45 50 45 55 75 76 60 100 100 100 100 100 100 100 100 100 | ; | 95 | 30 | 10 | 15 | 0 | 0 | 35 | 40 | 45 | 65 | 90 | 105 | 125 | 100 | 100 | 95 | 120 | 135 | 130 | 110 | 85 | 95 | 75 | 75 | 74 | (|
| -60* 30 65 125 90 175 170 125 130 105 110 120 110 100 110 120 120 95 120 120 120 115 95 90 111 680 95 100 115 150 145 120 195 135 120 90 105 90 105 100 105 95 100 105 95 80 50 60 70 104 65 60 55 55 90 125 130 135 100 65 95* -80* 85* 65* 105 90 60 55 55 45 50 45 55 75 76 60 70 104 (25) (24) (24) (21) (21) (17) (19) (19) (22) (20) (22) (22) (22) (22) (24) (23) (22) (25) (23) (24) (22) (23) (24) (22) (23) (25) (23) (24) (22) (23) (25) (24) | ; | 65 | 70 | 75 | 270 | 150 | 60 | 55 | 130 | 40+ | 50* | 70 | 95 | 40 | | 50 | 75 | 80 | 65 | 85 | 55 | 45 | 65 | 60 | 60 | 81 | (|
| 80 95 100 115 150 145 120 195 135 120 90 105 90 105 100 105 95 100 105 95 80 50 60 70 104 (65 60 55 55 90 125 130 135 100 65 95* -80* 85* 65* 105 90 60 55 55 45 50 45 55 75 76 (76 60 70 104 104 104 104 104 104 105 105 105 105 105 105 105 105 105 105 | 7 | | | | | | | | | | | | | , - | | | | | | | | | 65 | | | | (|
| 65 60 55 55 90 125 130 135 100 65 95° -80° 85° 65° 105 90 60 55 55 45 50 45 55 75 76 60 76 60 77 91 92 112 113 104 114 103 120 115 111 110 110 111 116 113 113 99 88 89 99 99 102 (10 (25) (24) (24) (21) (21) (17) (19) (19) (22) (20) (22) (22) (22) (22) (24) (23) (22) (25) (23) (24) (22) (23) (25) (24) | 3 | ~60* | | | | | | | | | | | | | | 110 | 120 | 120 | 95 | 120 | 120 | 120 | 115 | 95 | 90 | | (|
| n 88 75 77 91 92 112 113 104 114 103 120 115 111 110 110 111 116 113 113 99 88 89 99 99 102 (5 (25) (24) (24) (21) (21) (17) (19) (19) (22) (20) (22) (22) (22) (22) (24) (23) (22) (25) (23) (24) (22) (23) (25) (24) |) | | | | | | | | | | | | | | | | | | | | | | | | | | (|
| " (25) (24) (24) (21) (21) (17) (19) (19) (22) (20) (22) (22) (22) (24) (23) (22) (25) (23) (24) (22) (23) (25) (24) |) | 65 | 60 | 55 | 55 | 90 | 125 | 130 | 135 | 100 | 65 | 95* | -80 | 85* | 65* | 105 | 90 | 60 | 55 | 55 | 45 | 50 | 45 | 55 | 75 | 76 | C |
| " (25) (24) (24) (21) (21) (17) (19) (19) (22) (20) (22) (22) (22) (24) (23) (22) (25) (23) (24) (22) (23) (25) (24) | _ | 88 | 75 | 77 | 91 | 92 | 112 | 113 | 104 | 114 | 103 | 120 | 115 | 111 | 110 | 110 | 111 | 116 | 113 | 113 | 99 | 88 | RO | 90 | 99 | 102 | (5. |
| | an | | | | | | | | | | | | | | | | | | | | | | | | | | , |
| | | | <u> </u> | <u>`</u> | <u> </u> | <u> </u> | <u>`</u> | <u> </u> | <u>`</u> | <u>`</u> | <u>`</u> | | | | | (= -/ | , | / | | ·/ | (=-,/ | -\ <u>-</u> -/ | | | <u> </u> | | |

The potential gradient is reckoned as positive when the potential increases upwards. The symbol Z indicates either that the trace fluctuates rapidly so that estimation of a mean value is impracticable, or that the trace is limited by the range of the instrument (see Introduction); and the suffix +, - or ± indicates that the mean value is plainly positive, plainly negative, or indeterminate in sign. The occurrence of precipitation of any sort is indicated by an asterisk. Round brackets round any hourly mean indicates that the record during that hour is somehow imperfect.

39 ESEDALEMUIR

Factor 8'84 (metre 1)

JULY 1960

| | Hour (| G.M.T. | | | | | | | | | | | т — | | | | | | | | | | | | T | |
|-----|--------|--------|------|------|------|------|------|------|------|------|-------|---------|-------|-------|-------|-------|-------|-------|-------|-------|-------|---------|-------------|-------|------|-----|
| | 0-1 | 1-2 | 2-3 | 3-4 | 4-5 | 5-6 | 6-7 | 7-8 | 8-9 | 9-10 | 10-11 | 11-12 | 12-13 | 13-14 | 14-15 | 15-16 | 16-17 | 17-18 | 18-19 | 19-20 | 20-21 | 21 - 22 | 22-23 | 23-24 | M | ean |
| | 1 | | | | | | | | | | vo | its per | metre | | | | | | | | | | | | | |
| | 55 | 65 | 65 | 55 | 45 | 60 | 80 | 80 | 105 | 90 | 100 | 125 | 1 170 | 185 | 110 | 95 | 100 | 105 | 105 | 65* | -50* | 55 | 25 | 35 | 87 | (2 |
| : | 30 | 45 | 40 | 10 | -15 | | | -* | | -• | - | | | - | _ | - | _ | _ | - | _ | - | - | - | _ | 22 | `(|
| | - | - | _ | - | - | - | - | _ | 70* | 95* | 90+ | 80 | 80 | 65 | 30 | 50* | 55* | 30+ | 45* | 55 | 45 | 25 | 20 | 25 | 47 | ì |
| | 15 | 5 | 15 | 25 | 20 | 25* | -5* | 55* | 80* | 35* | 100* | 55* | 205* | 320+ | 240* | 125 | 90 | 115 | 90 | 90 | 130 | 90 | 65 | 65 | 67 | (1 |
| | 20 | 5* | 30* | 45 | 40* | 40* | 50* | 110* | 40+ | 20* | 60* | -10+ | 100* | 205* | Z | 210* | 110* | Z-+ | 70+ | 55+ | 15* | Z+* | 30 | 5 | 25 | `(|
| - 1 | 45* | 15 | 5 | 20 | 25* | 45* | 125 | 45 | 45* | 25* | 15 | 40* | 75• | 40 | 45 | 40 | -20* | -15* | -20* | -10* | 80* | | * | - | 39 | (|
| - 1 | | - | -* | -+ | -+ | -* | | -• | 125* | -15* | 60* | 125* | 55* | 45* | 5* | 70 | 145 | 105 | 85 | 90 | 55 | 40 | 60 | 30 | 76 | Ċ |
| - 1 | 30 | 45 | 30 | 40 | 90 | 125 | 170 | 165 | 125 | 145 | 115 | 75* | 110* | 100 | 110 | 115 | 100 | 115 | 140 | 130 | 130 | 130 | 120 | 120 | 109 | (2 |
| - 1 | 100 | 70 | 65 | 65 | 40 | 30 | 40 | 45 | 70 | 80 | Z++ | 35* | 90 | 85 | 110 | 70 | -30* | 30* | -125* | -10+ | 65 | 35 | 20 | 25 | 61 | (I |
| ۱ | 30 | 40 | 60 | 40 | 70 | 180 | 135 | 140 | 250 | 260 | 205 | 90* | -5* | -120+ | -255* | -170* | -70• | -5* | 70* | 90* | -40* | -5* | 30* | 90 | 125 | (1 |
| ļ | 60+ | 90* | 15* | 25* | 105 | 180 | 110* | 20* | 60 | 40 | 30* | 25* | 20* | 40+ | 40* | 55* | 35* | 45* | 45* | 10* | 90+ | 120 | 75 | 40 | 89 | (|
| | 65 | 105 | 125 | 110 | 100 | 95 | 110 | 100 | 115 | 115 | 115 | 65 | 80 | 100 | 115* | 105 | 115* | 105 | 140 | 180 | 160 | 85 | 40 | 85 | 105 | C C |
| | 80* | Z±# | Z-* | 90* | -90* | -5* | 100* | 250* | 300* | Z* | 155* | 130* | 230* | 135* | 125 | 125 | 110 | 115 | 110* | Z-* | 75* | 135* | 55* | 30* | 119 | `(|
| i l | 155* | Z± * | Z-* | Z±* | 70* | 100* | 110 | 170 | 110 | 110* | 100+ | 30* | 110 | Z-+ | Z±# | Zt.* | Zt.* | Z± A | Z-+ | Z-+ | 115 | 145 | 190 | 210 | 145 | ì |
| · | 255* | 70 | 110 | 105 | 140 | 100 | 105 | 120 | 145 | 175* | 20* | 70* | 15• | 65* | 150+ | Z±* | Z-+ | 55* | 85* | 85 | 55 | - | - | - | 103 | (ì |
| ı | _ | - | - | _ | _ | _ | 100 | 115 | 135 | 155 | 150 | 130 | 155 | 155 | 110 | 150 | 185 | 160 | 170 | 155 | 40* | -5* | 5+ | 165* | 145 | (1 |
| , I | 155* | 65* | 50* | 55* | Z-* | Z+* | Z±* | Z-+ | 110* | 300* | 135* | 160* | 215* | 175* | 115 | 100* | 85* | 95 | 80* | 90* | 105* | 105* | - | - | 105 | Ò |
| , | - | - | - | - | - | _ | _ | - | _ | Z-• | Z-+ | Zt A | Z±# | Z++ | Z±# | Z++ | Z-* | Z±# | 80* | 115* | 115 | 105 | - | - | 110 | ì |
|) | - | - | _ | - | - | ~* | Z-+ | Z±* | Z-* | 275 | 180 | 185 | 125* | -15* | Z-+ | Z-+ | 115 | Z-* | Z-+ | 70* | 150 | 175 | 130 | 90 | 162 | ì |
| | 45 | 30 | 20 | 15 | 25 | 40 | 80 | 160 | 90 | 110 | 90 | 90 | 110 | - | - | - | 50* | -40+ | 70* | 110 | 95 | 115 | 110 | 100 | 80 | (ì |
| | 100 | 120 | 130 | 95 | 80 | 180 | 180 | 130 | 175* | Z-* | Z-• | Z-* | 30+ | Z-+ | 135+ | 120 | 115 | 120 | 150 | 120* | Z-* | 180 | 195 | 155 | 137 | (1 |
| 1 | 115 | 125* | 140 | 105 | 100 | 145 | 125 | 130 | 155 | 160 | 180 | Z-* | Z±# | Z-+ | Z-* | 70 | Z-* | 65 | 75 | 95 | 80 | 85 | 90 | 95 | 112 | (1 |
| . | 60 | 80 | 100 | 85 | 90 | 145 | 160 | 95 | 80 | 80 | 70 | 75 | 70 | 95 | 115 | 125 | 140 | 170 | 165 | 120 | 145 | 95* | 65* | 75* | 108 | (2 |
| - 1 | 75* | 65* | 140* | 80* | 115* | 100* | 190* | 290* | 225* | 95* | 330 | 120* | 115* | 55* | 55* | 125* | 145 | 130 | 105* | 130* | 160 | 100 | 170 | 135 | 167 | (|
| | 85* | 95* | 105 | 125 | 135* | 175* | 185 | 150 | 135 | 115 | 110 | 110 | 115 | 120 | 125 | 110• | Z-* | 120* | 150 | 1 60 | 200 | 200 | 20 0 | 150 | 144 | (1 |
| | 135 | 135 | 100 | 85 | 70 | 120 | 145 | 140 | 100* | Z-• | Z-• | z-• | Z-• | 110• | 125 | 125 | 115 | 120 | 135 | 125* | 145* | 175 | 165 | 130 | 126 | (1 |
| | 135 | 110 | 90 | 75 | 70 | 95 | 140 | 120 | 150 | 180 | 210 | 180 | 195 | 185 | 165 | 170 | 140 | 185 | 210 | 95 | 75 | 70 | 95 | 115 | 136 | (2 |
| - 1 | 90 | 60* | 105* | 60* | 115* | 205* | 250* | 220* | 295* | 315* | 235* | 1900 | 1150 | 255 | 140* | 205 | 175 | 195 | 170* | 145* | 140* | 195* | 210* | 290 | 202 | (|
| - 1 | 180* | 105 | 55 | 65* | 90* | 115 | 130 | 110* | 120* | 165 | 105* | 150 | 80* | 120 | 125* | 105* | 115+ | 135 * | 170 | 140* | 160* | 100 | 45* | 2-+ | 123 | (|
| - 1 | Z++ | Z-* | Z-* | Z-* | 35* | 100+ | Z-* | Z-• | Z±* | Z+• | Z-• | Z- | 105 | 125 | 145 | 170 | 140 | 140 | 145 | 155 | 220 | 115 | 130 | 80 | 139 | (1 |
| - | 85 | 125 | 125 | 85 | 65 | 130 | 185 | 155 | - | -• | -• | - | - | - | -• | -• | -• | -+ | -• | - | - | - | - | - | 119 | (|
| an | 69 | 73 | 77 | 66 | 68 | 116 | 128 | 121 | 123 | 141 | 144 | 119 | 116 | 125 | 114 | 117 | 130 | 127 | 138 | 117 | 117 | 107 | 102 | 99 | 109 | (37 |
| | (16) | (16) | (18) | (18) | (16) | (15) | (18) | (17) | (14) | (14) | (13) | (10) | (11) | (13) | (13) | (16) | (14) | (16) | (14) | (13) | (17) | (20) | (19) | (21) | | |
| | | | | | | | | | | | | | | | | | | | | | | | for Oa | , | [123 | |

POTENTIAL GRADIENT (reduced to open level surface) Mean values for periods of sixty minutes between exact hours

| 39 | ESKDAI | LEMUIR | | | | | | | | | F | actor 8 | 3. 41 (w | etre-1 |) | | | | | | | | | AUGUS | т 19 | 60 |
|-------|------------|-----------------|------|------|----------|-----------|------------|------------|------|------------|-----------|----------|------------|-----------|------------|-------|-------|-----------|-------|------------|-------------|-------------|-------------|------------|------|-------|
| | Hour (| 3. M. T. 1-2 | 2-3 | 3-4 | 4-5 | 5-6 | 6-7 | 7-8 | 8-9 | 9-10 | 10-11 | 11-12 | 12-13 | 13-14 | 14-15 | 15-16 | 16-17 | 17-18 | 18-19 | 19-20 | 20-21 | 21 - 22 | 22-23 | 23-24 | м | ean |
| | | | | | | | | | | | | its per | metre | | | | | | | | | | | | | |
| 1 | - | - | - | - | - | - | - | - | - | 60 | 125 | 200* | Z+* | Z±* | Z+ | Z-• | Z±* | Z-+ | Z+* | z- | - | - | - | - | 93 | , -, |
| 2 | - | - | - | - | 75 | 120 | 205 | 210 | 160 | 105 | 85 | 85 | 85 | 100 | 85 | 70 | 55 | 60 | 45 | -15* | | | | -+ | 103 | · / |
| 3 | -• | -• | | | -• | -• | | | - | -• | -• | -• -• | -• | -• | -• | - | | | | - | ~ | | - | - | - | (0) |
| 4 | - . | | | - | | | | | 95 | 60 | -• | | -• | | | -• | -• | | | | | -• | - | | - | (0) |
| 5 | -• | -• | | -• | | | -• | | 95 | 60 | 30* | 60+ | 80* | 35 | 35* | 20 | 45 | 100 | 110 | 115 | - | 110 | 155 | 155 | 91 | (11) |
| 6 | 155 | 135 | 180 | 185 | 115 | 100 | 110 | 120 | 125 | 125 | 115 | 110 | 105 | 105 | 110 | 105 | 115 | 135 | 120 | 100 | 110 | 25 | 45 | 40 | 112 | (24) |
| 7 | 130 | 45 | 50 | 35 | 35 | 60 | 50 | 80 | 90 | 110 | 75 | 70 | 105 | 125 | 140 | 120 | 125 | 125 | 115 | 105 | 110 | 85 | 60 | 45 | 87 | (24) |
| 8 | 40 | 45 | 45 | 45 | 30 | 30 | 60 | 135 | 105 | 95 | 100 | 75 | 130 | 75* | Z-+ | Z-+ | 130 | 215 | 205 | 130 | 60 | 60 | 60 | -40* | 90 | (20) |
| 9 | Zt* | Z-* | Z+* | Z±# | 55 | 85* | 65* | 165 | 180* | Z-• | Z+* | 170* | 175 | 170 | Z+* | Z+* | Z+* | -30* | 75* | 115 | 85* | 35* | 30 | 35* | 118 | (6) |
| 10 | 25* | 30 | 55 | 75 | 120 | 150 | 265 | 405 | 260 | 170 | 110 | 95 | 105 | 110 | 80 | 90 | 95 | 100 | 105* | 180 | 125 | 70* | 100 | 85 | 134 | (21) |
| 11 | 135 | 135 | 105 | 80 | 70 | 80 | 155 | 135 | 90 | 75 | 85 | 135 | 120 | 110 | 145 | 140 | 85 | 170 | 145 | 130 | 85 | Z-* | Z-* | Z-* | 115 | (21) |
| 12 | 90 | 85 | 60 | 175 | 135 | 100 | 110 | 165 | 135 | 140 | 130 | 145 | 145 | 165 | 140 | 110 | 100 | 80 | 30 | 75 | 90 | 115 | 105 | 65 | 112 | (24) |
| 13 | 55 | 40 | 30 | Z* | 45 | 50 | 85 | 70 | 170 | 180 | 170 | Z-* | 2-+ | Z-+ | Z-• | Z± * | Z+* | Z±# | Z-* | Z-+ | Z-+ | Z-0 | 75 | 120 | 91 | (12) |
| 14 | 95 | 65 | 45 | -15* | 120 | 105 | 255 | 210 | 135 | 135 | 125 | 145 | 170 | 130 | -55* | 15* | Z-+ | 90+ | 110+ | 110* | 135 | 100 | 120 | 135 | 131 | (17) |
| 15 | 95 | 85 | 80 | 95 | 110 | 80 | 125 | 130 | 100* | 115 | 125 | 110 | 130 | 125 | 90* | 110* | 120 | 130 | 130 | 145* | 130* | 110 | 100 | 105 | 111 | (19) |
| | | | | | 4.50 | | | | Z± * | 7-4 | Z-+ | 95* | | 100 | 105 | | 105 | | | | | | 125 | | | (10) |
| 16 | 50 | 120 | 185 | 185 | 150 | 130 | 115 | 60* | 100* | Z-+ 100 | Z-• | Z-+ | 1100 | 125 | 105 | 105 | 105 | 120 | 115 | 125 Z+• | 110 | 110 | 135 | 115 | 123 | (18) |
| 17 | 90 | 105 | 110 | 90 | 80 -• | 75 -• | 70 ~• | 140 | 135* | 160 | 95* | 150+ | 135 75* | 80 Z-+ | -30 | Z-• | Z-+ | 50* | Z-* | | 105 | ~~ | 1.60 | 170* | 87 | (12) |
| 18 | | | | - | - | - | | | 125* | 130* | | 110 | | _ | Zte | Z-+ | 75* | 95 7-1 | 70 | 90 | 125 | 70 | 160 ~20* | | 110 | (7) |
| 19 | 165 | 115 | 145 | 145 | 125 | 120 85 | 180 155 | 130 180 | 135 | 95 | 135 90 | 90 | 120 | Z~+ 90 | 60* 100 | Z+ • | Z±* | Z-* | 65* | 115* | 175* 160 | ~85* 115 | 130 | 30* 130 | 135 | (11) |
| 20 | 15 | 110 | 100 | 105 | 85 | 63 | 133 | 100 | 133 | 93 | 90 | 90 | 100 | 90 | 100 | 125 | 130 | 150 | 150 | 145 | 100 | 113 | 130 | 130 | 113 | (24) |
| 21 | 110* | 50* | 70* | 25* | Z-* | Z+• | 60+ | Z * | 60* | 105* | 70* | Z+* | 185• | 160* | 185* | 195* | 100* | 200* | 340 | 210* | 130* | 80* | 60* | 55* | 340 | (1) |
| 22 | 45* | 85* | 210* | 120* | 280* | 95* | 175* | 160* | 195* | 220* | Z-* | Z±* | Z-* | Z+• | Z-# | 275* | 190* | 250* | Z-+ | Z-* | Z± * | 125* | 240* | 225* | - | (0) |
| 23 | 210 | Z-* | Z-* | 180 | 185 | 185 | 190 | Z±* | 160* | 180 | 180 | 305 | 220 | Z- | 180 | 195 | 155 | 115 | 85* | 130* | 180 | 105 | 145* | 190 | 185 | (16) |
| 24 | 185 | 170 | 115 | 120 | Z+ * | 190* | 175* | 145* | 145 | 145 | 135 | 110 | 65* | 70* | 25* | -30* | 150* | 40* | 115* | 185 | Z-* | Z±* | Z±* | Z± * | 146 | (9) |
| 25 | Z±* | Z± | Z±* | Z±* | Zi* | Z+* | Zt* | Z-* | Z± • | Z-* | Z+* | 240 | 170* | 105* | 70* | 150* | 130* | 110* | 155* | Z-+ | 155* | 145* | 160 | 110* | 200 | (2) |
| 26 | Z±* | Z-+ | 130 | 120 | 95 | 115 | 200 | 205 | 175 | 185 | 145 | 115 | 110 | 120* | 150 | Z* | 190* | 140* | 100* | 35 | 35 | 110 | 125 | 45 | 123 | (17) |
| 27 | 50 | 15 | 70 | Z-+ | Z-+ | Z-* | Z-• | 295* | 290* | -5* | 25* | 130 | 110 | 130 | 130 | 130 | 90 | Z-* | Z± * | Z±* | 95 | 145 | Z-* | 85* | 100 | (11) |
| 28 | 125 | Z-+ | 115* | 200 | 90* | -115* | 25* | 225* | 145* | 200 | 115 | 105 | Z-* | Z±# | Z+* | Z-* | 190* | 95 | 110 | 150 | 85 | 135 | 200 | 150 | 139 | (12) |
| 29 | 215 | 170 | 170 | 150 | 100 | 75 | 105 | 115* | - | - | - | - | - | - | - | - | - | - | -+ | -+ | -* | -* | - | - | 141 | (7) |
| 30 | | - | - | - | - | - | - | - | 135 | 125 | 105 | 100 | 115 | 105 | 110 | 115 | 120 | 85 | 60 | 75 | 105 | 85 | 85 | 40* | 102 | (15) |
| 31 | 105 | 160 | 140 | 125 | 80 | 95 | 105 | 150 | 120 | 100 | 110 | 105 | 90 | 85 | 55 | -60 | -80* | -85* | -75* | 5 | 105 | 100 | 45 | 45 | 89 | (21) |
| Mean | 111 | 96 | 101 | 124 | 95 | 97 | 141 | 164 | 138 | 127 | 119 | 125 | 126 | 112 | 107 | 97 | 105 | 118 | 125 | 110 | 107 | 99 | 105 | 102 | 115 | (399) |
| E-611 | (18) | (17) | (18) | (17) | (19) | (18) | (18) | (16) | (15) | (21) | (19) | (19) | (18) | (16) | (14) | (13) | (14) | (15) | (14) | (16) | (16) | (16) | (18) | (14) | | |
| | | | | | | | | | | | | | | | | | | | | | | | for 0a | | [108 | (2) |

Daily, monthly and annual means are computed excluding hours with precipitation and, of course, all indeterminate entries. The number of hours or days used in computing each mean is shown in round brackets. Entries in square brackets are means for Oa days (see Introduction) and the figure in round brackets is the number of days used in computing this mean.

| 39 | ESEDAL | EM UIR | | | | | | | | | Fact | tor 8:3 | 8 (met | re ⁻¹) | | | | | | | | | SI | EPTEMBI | ER 19 | 60 |
|------|--------|---------------|-----------|------------|------------|------------|------------|------------|------------|------------|-----------|-----------|------------|--------------------|------------|-------------|-------------|------------|-------------|-------------|-------------|-------------|-------------|-----------------|-----------|--------------|
| | Hour C | .M.T. 1-2 | 2-3 | 3-4 | 4-5 | 5-6 | 6-7 | 7-8 | 8-9 | 9-10 | 10-11 | 11-12 | 12-13 | 13-14 | 14-15 | 15-16 | 16-17 | 17-18 | 18-19 | 19-20 | 20-21 | 21-22 | 22-23 | 23-24 | N | je an |
| | | | | | | | | | | | | its per | | | | | | | | | | | 100 | | | |
| 1 | 25 | 25 | 45 | 65 | 50 | 55 | 85 | 115 | 115 | 150 | 135 | 95 | 35* | 5* | 30* | 70* | 105 Z* | 85 200* | 70 200* | 70 130* | 90 120* | 85 70* | 100 95 | 125 115 | 85 174 | (20) |
| 2 | 170 | 200 | 205 | 105 | 160 | 130 | 195 | 290 | 245 | 110* | 90* 95 | 5* Z+* | -5* Z±* | 125* Z-* | 70* Z±* | 120* Z+* | Z±* | Z~* | 200+ Z+ | 170 | 160 | 125 | 115 | 260 | 162 | (11) (16) |
| 3 | 145 | 185 | 180 | 195 | 145 | 155 | 180 150 | 180 245 | 170 200 | 125 140 | 95 85 | 200 | 120* | Z+* | Z-* | 95* | 155* | 100 | 70 | 75 | 50 | 70 | 55 | 50 | 125 | (19) |
| 4 | 170 | 195 75 | 130 80 | 115 155 | 130 125 | 150 115 | 195 | 190 | 165 | 180 | 125 | 120 | 120 | 125 | 165 | 115 | 120 | 120 | 150 | 175 | 225 | 135 | 120 | 105 | 135 | (24) |
| 5 | 45 | 15 | 80 | 133 | 123 | 113 | 193 | 190 | 103 | 100 | 143 | 120 | 120 | -20 | -00 | | | | -00 | | | | | | 1 | , , |
| 6 | 85 | 85 | 65 | 75 | 90 | 90* | 130* | 130* | -+ | | -* | | -+ | -* | -* | | -* | | | -* | -* | -* | ~* | -* | 80 | (5) |
| 7 | | | | - | - | - | - | _ | 100 | 150 | 165 | 185 | 155 | 120 | 110 | 120 | 100 | 135 | 150 | 160 | 170 | 135 | 115 | 105 | 136 | (16) |
| 8 | 90 | 80 | 70 | 75 | 90 | 105 | 185 | 260 | 105 | 135 | 115 | 70* | 130* | - | - | 14- | 160 | 165 | - | 175 | 125 | 125 | 100 | 160 | 119 | (11) |
| 9 | | | -• | -* | -• | | -+ | 235 | 275 | 155 | 185 | 185 | 205 | 185 | 175 | 145 | 160 145* | 165 90* | 155 125* | 175 110* | 135 180* | 135 185* | 125 190* | 160 210* | 174 | (17) |
| 10 | 235 | 150 | 95 | 105 | 105 | 105* | 85* | 135 | 150 | 165 | 155 | 125 | 115 | 135 | 150 | 140 | 145* | 90+ | 125* | 110+ | 100- | 103* | 190+ | 210 | 140 | (14) |
| 11 | 215* | 215* | 250* | 305* | 240* | 155* | 270 | 235 | 210* | 250* | 220 | 175 | 145 | 115 | 125 | 140 | 125 | 135 | 130 | 115 | 105 | 105 | 55 | 0 | 137 | (16) |
| 12 | 5 | 45 | 20 | 15 | 30 | 15 | 40 | 65 | 55 | 80 | 100 | 100 | 130 | 125 | 140 | 140 | 105 | 125 | 150 | 135 | 165 | 170 | 95 | 70 | 88 | (24) |
| 13 | 40 | 30 | 70 | 40 | 80 | 110 | 120 | 130 | 145 | 155 | 140 | 95 | 115 | 120 | 170 | 170 | 170 | 160 | 135 | 125 | 55 | 25 | 10* | 15* | 109 | (22) |
| 14 | -20* | -15* | 0+ | -5* | 5* | -120* | -315* | -215* | -215* | -295* | ~370* | ~390 | Z-* | Z-* | 195* | 180* | 140* | 190* | 230 | 170 | Z - | Z-* | 80* | -70* | 200 | (2) |
| 15 | 80* | 85* | Z-• | Z-* | Z+• | Z+• | -10* | 15 | 85 | -15* | Z±* | 115 | 165 | 140 | 115 | Z-* | 95* | 95 | 50 | Z+ | 55 | 80 | 65 | 55 | 86 | (12) |
| 16 | 40 | 30 | 45 | 50 | 30 | 30 | 30* | 0+ | 45 | 80 | 90 | 80 | -180* | -85* | Z+* | Z±* | Z±* | 120* | 90* | 150* | 75* | 80 | 165* | 15* | 55 | (11) |
| 17 | 165* | 75* | 110* | 205* | 125* | 100* | 150* | 115* | 110* | 130* | 165* | 130* | 120* | 235* | 190* | 175* | 170 | 90* | 120* | 55* | 10 | - | - | - | 90 | (2) |
| 18 | - | - | - | - | - | - | - | - | - | 190 | 200 | 180 | 160 | 140 | 110 | 75 | 85 | 130 | 75 | 55 | 90 | 35 | 25 | 50 | 107 | (15) |
| 19 | 70 | 40 | 40 | Z-+ | Z+* | Z-* | Z±* | Z±* | Z-* | Z-+ | Z-+ | -5* | 140 | 110 | 145 | 125 | 90 | 165 | 205 | 250 | 260 | 245 | 250 | 235 | 158 | (15) |
| 20 | 175 | 155 | 115 | 120 | 100 | 55 | 30 | 105 | 100 | 135 | 185 | 105 | 170 | 105 | 150 | 155 | 175 | 95 | 70 | 60 | 55 | 55 | 50 | 45 | 107 | (24) |
| 21 | 65 | 65 | 60 | 55 | 45 | 50 | 50 | 75 | 90 | 135 | - | - | - | - | - | - | 170 | 115 | 35 | 20* | 45* | 80* | 70* | 25* | 78 | (13) |
| 22 | 15* | 45* | 65* | 50* | 45* | 55* | 135* | 220* | 125* | 140* | 165* | 170* | 110 | 110 | 130 | 145 | 135 | 165 | 160 | 145 | 135 | 135 | 130 | 70 | 131 | (12) |
| 23 | 65 | 85 | 80 | 80 | 80 | 85 | 85 | 110 | 105 | 110 | 130 | 135 | 125 | 130 | 140 | 135 | 135 | 175 | 215 | 205 | 195 | 140 | 105 | 120 | 124 | (24) |
| 24 | 90 | 80 | 65 | 60 | 120 | 115 | 205 | 220 | 210 | 175 | 170 | 175 | 185 | 165 | 155 | 160 | 155 | 160 | 175 | 230 | 215* | 240 | 160 | 105 | 155 | (23) |
| 25 | 50 | 30 | 30* | 105 | 135 | 65 | 80 | 110 | 160 | 135 | 155 | 175 | 160 | 165 | 175 | 165 | 170 | 120 | 90 | 95 | 145 | 100 | 90 | 75 | 120 | (23) |
| 26 | 80 | 85 | 105 | 85 | 60 | 50 | 45 | 50 | 55 | 70 | 90 | 90 | 100 | 125 | 110 | 110 | 90 | 110 | 95 | 90 | 0 | -15 | 5 | 5 | 70 | (24) |
| 27 | 5 | 55 | 195 | 50 | 40 | 50 | 60 | 55 | 55 | 65 | 75 | 95 | 110 | 60 | 70 | 85 | 130 | 100 | 65 | 70 | 70 | 70 | 70 | 65 | 74 | (24) |
| 28 | 65 | 30 | -40 | -35 | -35 | -10 | 30 | 65 | 80 | 95 | 130 | 145 | 165 | 110 | 105 | 175 | 65 | -30 | -5 | -10 | -35 | -25 | -5 | -20 | 45 | (23) |
| 29 | -10 | -10 | -15 | -20* | -25* | -5• | -85* | Z-+ | Z-+ | Z-* | Z-* | Z-* | 85* | 25* | -15* | 50 | 105 | 140 | 135 | 95 | 90 | 35 | 10 | 70 | 58 | (12) |
| 30 | 55 | 55 | 55 | 65 | 45 | 50 | 80 | Z+ | Z- | Z-* | Z-* | 120* | 115 | 90* | 115 | 70* | -50* | -15 | -20* | 95 | 65 | 15 | 30 | - 10 | 54 | (15) |
| | 80 | 80 | 79 | 79 | 81 | 76 | 116 | 144 | 129 | 131 | 137 | 136 | 142 | 127 | 134 | 131 | 128 | 123 | 118 | 125 | 104 | 95 | 85 | 93 | 110 | (489) |
| Mean | (22) | (22) | (21) | (20) | (20) | (18) | (18) | (20) | (21) | (20) | (20) | (19) | (19) | (18) | (19) | (18) | (20) | (21) | (22) | (22) | (22) | (23) | (22) | (22) | | |
| | | | | | | | | | | | | | | | | | | | | | | Mean | for 0s | days | [121 | (5)] |

| 39 | ESKDAI | EMUIR | | | | | | | | | Fact | or 8·39 | (metr | e ⁻¹) | | | | | | | | | | ОСТОВ | ER 19 | 60 |
|----|--------|---------------|------|------|--------------|------|-------|--------------|------|-------|-------|---------|-------|-------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|------|
| | Hour (| G.M.T. 1-2 | 2-3 | 3-4 | 4-5 | 5-6 | 6-7 | 7-8 | 8-9 | 9-10 | 10-11 | 11-12 | 12-13 | 13-14 | 14-15 | 15-16 | 16-17 | 17-18 | 18-19 | 19-20 | 20-21 | 21-22 | 22-23 | 23-24 | м | (ean |
| _ | | | | | | | | | | | vo. | Its per | metre | | | | | | | | | | | | | |
| 1 | 25 | 60 | -30 | -40 | -40 | Z-* | Z-• | 35* | 70 | 15 | 75 | Z-+ | Z+* | 30 | -20 | 45 | -5 | -40 | -95* | -105* | -95* | ~70* | -60 | -80 | 0 | (1 |
| 2 | -95 | -65 | -70 | -65 | ∸75 * | -95• | -135* | -170* | Z-* | Z-* | Z-* | Z-* | 145* | -95* | 240* | 230 | 235 | 235 | 150* | 185* | 40* | -255* | Z* | -40+ | 58 | (|
| 3 | Z-* | Z-* | Z-* | Z-* | Z-+ | Z±* | Z+* | Z+* | 160 | 190 | 130 | 135 | 95 | 85 | 110* | 130* | 140 | 120 | 140 | 120 | - | - | - | - | 131 | (1 |
| 4 | - | - | _ | - | | - | Z-+ | Z-* | Z-+ | 105* | 100 | 90 | 80 | 80 | 80 | 85 | 55 | - | - | - | - | - | - | | 81 | (|
| 5 | - | - | - | - | - | - | - | - | | | - | 125 | 65 | 105 | 95* | 60* | Z±* | Z+* | 140* | Z-* | Z-* | 65 | 95 | 135 | 98 | (|
| 6 | 105 | 90 | - | - | - | -+ | -+ | - | 115 | 145 | 115 | 95 | 95 | 100 | 130 | 70 | 70 | 50 | _ | - | _ | _ | _ | - | 98 | C |
| 7 | - | - | - | - | - | - | - | - | - | 30 | 45 | 95 | 70 | 60 | 35 | 50 | 35 | 40 | 50 | 60 | 50 | 45 | 25 | -15* | 49 | Ò |
| 8 | 0 | -15 | 20 | 45 | 80 | 50 | 105 | Z-* | Z-+ | 220* | 215* | 115 | 105 | 90 | 125* | 95* | 125* | 145 | 135* | 155 | - | - | - | - | 75 | Ċ |
| 9 | | -+ | - | - | - | - | - | -+ | -+ | | -* | | -* | | -* | * | - | - | - | - | - | - | - | - | - | |
| 0 | - | - | - | - | - | - | - | - | | | -+ | - | - | -* | - | 75 | 90 | 55 | 65 | 90 | 180 | 170 | 120 | 165 | 112 | |
| 1 | 145 | 135 | 135 | 105 | 110 | 170 | 135 | 150 | 250 | 270 | 215 | 210 | 190 | 160 | 175 | 160 | 165 | 215 | 240 | 255 | 265 | 225 | 150 | 145 | 182 | (|
| 2 | 160 | 155 | 145 | 120 | 85 | 96 | 90 | 110 | 145 | 180 | 225 | 230 | 215 | 180 | 190 | 140 | 125 | 195 | 135 | 155 | 185 | 165 | 75 | 65 | 149 | ì |
| 3 | 55 | 50 | 55 | 55 | 75 | 75 | 55 | 65 | - | - | - | - | - | _ | - | _ | | -* | _ | | | | 15 | 15 | 51 | ì |
| 4 | 25 | 15 | 15 | 15 | 15 | 15 | 15 | 20* | 15 | 10 | -40+ | 10* | 40 | 75 | 105 | 70 | 40 | 40 | 30 | 30 | 35 | 15* | 20* | 25* | 34 | ì |
| 5 | 25* | 40 | 55 | 30 | 40 | 50* | 45 | 50 | 50 | 75 | 80 | 105 | 155 | 155 | 125 | 105 | 105 | 65 | 85* | 45 | 40 | 40 | 40 | 25 | 70 | Ò |
| 6 | 15* | 20* | 20 | 15 | 15 | 10 | 15 | 40 | 40 | 50 | 55 | 25* | 55 | 70 | 80 | 55* | 40* | 55 | 30 | 15 | 15 | 25 | 30 | 30 | 35 | (|
| 7 | 40 | 30 | 35 | 40 | 40 | 30 | 25 | 30 | 30 | 25 | 40 | 80 | z | 145 | 140 | 80 | 120 | 150* | 15* | 70 | 75 | 125 | 95* | 25* | 63 | ì |
| 8 | - | - | | | -* | -* | -* | -* | -* | | -* | - | 180 | 145 | 210 | 185 | Z+* | Z-* | 195* | 210 | 255* | 115* | 125* | 75 | 167 | ` |
| 9 | Z+* | 125* | 195* | 200* | 280* | 280 | 195 | 155* | Z-* | Z-* | 215* | 115 | 30 | 115* | 55* | 115 | Z-* | Z-* | Z-+ | Z±* | Z-* | Z-* | Z+ | Z+ | 145 | |
| 0 | Z- | 110 | 100 | 80 | 40 | 70* | 25* | 50* | 50* | 15* | Z-* | Z-* | -30* | 60* | 80* | 90* | 40* | 15* | 30* | 35* | 30* | 50* | 25* | 15* | 83 | |
| 1 | 20* | -30 | 30 | Z-* | Z-* | Z-* | 100* | 165* | 115* | 115* | 195 | 155 | 125 | 175 | 195 | 215 | 135 | 70* | 5* | -50* | 30* | -140* | -95* | -15* | 133 | |
| 2 | 65* | 80* | 80 | 0* | -15* | 15* | 55 | 75* | 40* | 50* | 80* | 75 | 70* | 50* | -5* | 70 | 70 | 55* | 55* | 55 | 55 | 45 | 15* | 25* | 63 | |
| 3 | 15 | 25 | 25 | 30 | -25* | Z-* | Z-* | Z-* | Z-* | -30* | 25* | 30* | 25* | 120* | 75* | 135 | 160* | 85* | 40* | 160 | 155 | 145 | 150 | 155 | 99 | |
| 4 | 155 | 135 | 55* | 35* | -* | - | -+ | -* | - | ~* | | -* | -* | | - | -* | ~* | - | - | | | -* | -* | -+ | 145 | |
| 5 | - | - | - | - | - | - | -+ | | - | - | - | -+ | -* | -* | - | | - | - | - | - | -* | -* | | -* | - | |
| 6 | - | - | - | - | - | - | - | - | 30 | 15 | 50 | 50 | 135 | 160 | 100 | 145 | 215 | 115 | 30* | 35* | 240* | 245* | 195* | 170* | 101 | (|
| 7 | 125* | 120* | 110* | 70* | 80* | 75* | Z-* | Z-* | Z-* | -305* | -320* | -300* | -220* | -200* | ~155* | -105* | Z-* | -35* | Z+* | Z+* | Z+* | 15* | -55* | -90* | - | • |
| 8 | -110* | -80 | -85 | -100 | ~90 | -95 | -85 | -60 * | Z-* | Z-* | Z-* | Z-* | 215* | 275 | 280 | 295 | 250 | 215 | 240 | 205 | 235 | 195 | 175 | 160 | 117 | (|
| 9 | 120 | 135 | 180 | 125 | 80 | Z-* | Z-* | Z±* | -20* | -15* | 150* | Z-* | 110 | 160 | 145 | 115 | 170 | 200 | 225 | 260 | 235 | 275 | 215 | 160 | 171 | ì |
| 0 | 160 | 160 | 170 | 150 | 225 | 170 | 140 | 140 | 120 | 155 | 145 | 130 | 115 | 105 | 120 | 95 | 45 | 120 | 175 | 125 | 165 | 105 | 135 | 165 | 139 | Ċ |
| 1 | 85 | 40 | 40 | 45 | 45 | 40* | 40* | 20* | 70* | 70* | 105 | 70 | 60 | 55 | 70 | Z-* | 135* | 95* | 95* | 30 | 190 | 260 | 295 | 265 | 110 | (|
| | 71 | 55 | 51 | 40 | 51 | 80 | 66 | 84 | 93 | 97 | 113 | 117 | 107 | 121 | 127 | 124 | 114 | 114 | 133 | 120 | 134 | 135 | 104 | 106 | 99 | (3 |
| an | (14) | (18) | (18) | (16) | (14) | (10) | (12) | (7) | (11) | (12) | (14) | (16) | (18) | (20) | (17) | (20) | (18) | (16) | (10) | (17) | (14) | (14) | (14) | (14) | | |

The potential gradient is reckoned as positive when the potential increases upwards. The symbol Z indicates either that the trace fluctuates rapidly so that estimation of a mean value is impracticable, or that the trace is limited by the range of the instrument (see Introduction): and the suffix +, - or ± indicates that the mean value is plainly positive, plainly negative, or indeterminate in sign. The occurrence of precipitation of any sort is indicated by an asterisk. Round brackets round any hourly mean indicates that the record during that hour is somehow imperfect.

| IOIENIIAI | GEVELLE | (reduced to open rever surrace) |
|-----------------|------------|-----------------------------------|
| Mean values for | periods of | sixty minutes between exact hours |

| 39 | ESKDAI | LEMUIR | | | | | | | | | Fac | ctor 8 | 82 (met | re ⁻¹) | | | | | | | | | | NOVEMB | ER 1 | 960 |
|------|---------------|--------------------|-------------|------------|------------|------------|-------------|------------|------------|-------------|----------------------------|--------------------|--------------|--------------------|-------------|------------|-------------|-------------|--------------------|------------|---------------------|--------------------|-------------|--------------|------------|-------------|
| | Hour (0-1 | G.M.T. 1-2 | 2-3 | 3-4 | 4-5 | 5-6 | 6-7 | 7-8 | 8-9 | 9-10 | 10-11 | 11-12 | 12-13 | 13-14 | 14-15 | 15-16 | 16-17 | 17-18 | 18-19 | 19-20 | 20-21 | 21 - 22 | 22-23 | 23-24 | , | Mean |
| | 25.5 | | 100 | | 100 | ~~- | | | | | | ts per | | | | | • | | | | | | | | | |
| 1 2 | 275 255* | 245 295* | 180 165• | 125 85* | 120 Z±* | 85* Z+* | 110* Z-* | Z-+ 95+ | 20* -* | 30 * | 25* | -35 * | -40 | -30* | - | | | - | _ | - | _ | _ | -* | -* | 189 | (5) (0) |
| 3 | - | 495 | - | - | | | -* | - | - | | Z-+ | Z±* | Z±• | Z±* | Z-+ | Z-* | Z-* | Z-* | Z-+ | Z-+ | Z-+ | 45* | 80 | 85 | 83 | (2) |
| 4 | 120 | 70 | 135 | 90 | 100 | 125 | 125 | 65 | 75* | 135 | 85 | 155 | 95 | 155 | 205 | 180 | 180 | 240 | 35* | Z-* | Z-+ | -* | - | - | 133 | (17) |
| 5 | - | | - | - | - | - | - | - | - | - | - | - | - | -+ | - | - | - | - | - | - | - | - | 210 | 170 | 190 | (2) |
| 6 | 110 | 155 | 120 | 60 | - | - | - | - | 45 | 85 | 165 | 240 | 220 | 235 | 165 | - | - | - | - | _ | _ | - | _ | - | 145 | (11) |
| 7 | - | - | - | - | - | - | - | - | 105 | 155 | 145 | 100 | 115 | 125 | 115 | 100 | 75 | 60 | 40 | - | - | - | - | - | 103 | (11) |
| 8 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | (0) |
| 9 | - | - | - | - | Ξ. | | | | | | | 135 | 65* | Z-+ | Z-* | Z+ | 145* | 110* | Z-* | Z±* | 170* | 170* | 255 | 165 | 185 | (3) |
| 10 | 170 | 125 | 100 | -45* | Z-* | Z-* | Z-* | Z-* | Z-+ | Z-* | Z-+ | 230* | Z-• | Z+• | Z+* | Z+ | 2+* | 310 | 330* | 255 | 265 | 195 | 190 | 85* | 201 | (8) |
| 11 | 15* | 60 | 100 | Z-* | Z-* | Z-* | 45* | Z-* | Z+* | Z±* | Z-+ | -160* | -185* | -165* | ~155* | -135* | ~130* | -105* | -190* | -185* | Z - | Z- | z - | Z± | 80 | (2) |
| 12 | Z | Z+ | Z+ | Ζ± | Z± | Ζ± | Z±* | Z±* | +40* | -45* | 10* | -5 | Z- | 25 | 55 | -20 | -20+ | Z-+ | Z±* | Z+* | Z+* | Z±* | Z±* | Z+* | 11 | (4) |
| 13 | Z±* | Z - | 185 | 250 | 210 | 190 | 175 | 195 | 195 | 245 | Z+* | Z±* | 165 | 190 | 225* | 170* | 50* | Z-+ | Z+* | Z-* | Z-* | 295 | 170 | 140 | 200 | (13) |
| 14 | 145 | 115 | 160 | 145 | 165 | 155 | 160 | 135 | 230 | 230 | 180 | 240 | 220 | 185 | 235 | 265 | 220 | 215 | Z±* | Z±* | Z+* | 125 | 185 | 255 | 189 | (21) |
| 15 | 170 | 110* | 115 | 110 | 135 | 145 | Z+* | 200* | 155* | Z±* | 145* | 240* | Z+* | Z±* | Z+* | 170 | Z-+ | Z - | 135 | Z-* | Z-* | Z-* | Z-* | 105* | 140 | (7) |
| 16 | 125* | 110 | 115 | 95 | Z - | Z-* | Z-* | 90 | 135 | 175 | 155 | 170 | 160 | 155 | 220 | 190 | 235 | 90 | 235 | 235 | 245 | 260 | Z-+ | Z-• | 171 | (18) |
| 17 | Z-* | Z-* | Z-* | Z-* | Z-* | Z-* | 365 | 455 | 260 | 310 | 400 | 250 | 240* | 240 | 260 | 335 | 405 | 595 | 340 | 215 | 315 | 535 | 475 | 455 | 365 | (17) |
| 18 | 430 | 385 | 360 | 320 | 355 | 485 | 490 | 510 | 340 | 240 | 240 | 240 | 240 | 225 | 155 | 145 | 205 | 185 | 205 | 185 | 265 | 245 | 235 | 225 | 288 | (24) |
| 19 | 215 | 175 | 310 | 240 | 315 | 415 | 455 | 545 | 580 | 510 | 330 | 325 | 190 | 175 | 195 | 215 | 205 | 205 | 330 | 310 | 310 | 205 | 250 | 260 | 303 | (24) |
| 20 | 210 | 220 | 180 | 155* | 150 | 225* | 190 | 175 | 235 | 255 | -5• | -80* | 265* | 165* | 135 | 170 | 260 | Z+* | 185* | 70* | Z-+ | Z±* | Z-+ | Z-* | 198 | (11) |
| 21 | -255* | -155* | -30* | 195 | 235 | 225 | 225 | 110* | 220 | 240 | 275 | 265 | 250 | 260 | 220 | 255 | 290 | 145 | Z-* | Z-* | Z-* | Z-* | Z-* | 60 | 224 | (15) |
| 22 | 140 | 110 | 185 | 140 | 125 | 150 | 100 | 80* | 110* | 130 | 125 | 75* | 155* | 150 | 150* | 90* | 185 | 190* | 170 | 140 | 85 | 40 | 70* | 110* | 132 | (15) |
| 23 | 85* | 195 | 205 | 165* | 165* | Z-+ | Z-+ | Z-+ | 15* | 75* | 90* | 110 | 120 Z-• | 125 | 190 Z-• | 250 | 235* | 320* | 310 | 305 | 325 | 300 | 225 | 175* | 222 | (12) |
| 24 | 80* | Z− + 275 | Z-* | Z±* | 80° | 85* 160 | Z-• 205 | Z-* 175 | Z-* 155 | 215 185 | Z±* 175 | Z-* 195 | 190 | 155* 190 | 150 | Z±* 160 | Z~* 140 | Z-• 130 | Z-* 125 | 20* 155 | 155 * 250 | 75 * 305 | 100* 260 | 100* 220* | 215 197 | (1) (22) |
| 25 | 190* | 2/5 | 260 | 245 | 245 | | | | | | | | | | | | | | | | | | | | | |
| 26 | 280 | 250 | 215 | 165 | 135 | 190 | 245 | 365 | 315 | 235 | 195 | 125 | 155 | 170 | 155 | 100 | 100* | 170* | 225 | 165 | 110 | 85 | 100 | 100 | 185 | (22) |
| 27 | 75 | 85 | 80 | 70 | 100 | 110 | 130 | 95 | 90 | 70 | 85 | 115 | 140 | 150 | 225 | 215 | 190 | 240 | 265 | 345 | 300 | 310 | 265 | 260 | 167 | (24) |
| 28 | 155 | Z+* | 10* | Z~* | Z-* | 100 10# | Z-+ Z-+ | Z-* Z-* | 2−• 70• | 85* 40* | 70 + 75 + | <i>Z</i> − 120• | 160* 260* | 185 290* | 210 250* | 150 95* | 160 135* | 180 125* | 160 Z− + | 155 Z-• | 175 20* | 210 75* | 180 70* | 100 40+ | 163 62 | (13) |
| 29 | 100 100* | 50 105 | 95 100 | 30 70* | 35 100* | 150* | 205* | Z-* | Z-* | 145* | 200* | 125* | 25* | 60* | Z-* | Z-+ | Z-* | Z-+ | Z-* | Z-* | Z-* | 75. | Z-* | Z-+ | 103 | (5) (2) |
| " | 1004 | 103 | 100 | 70 | 100 | 130 | 200 | _ | - | - 15 | 200 | | | • | _ | - | • | - | ~ | ~ | - | • | | | 100 | (4) |
| - | 185 | 161 | 168 | 152 | 173 | 204 | 239 | 255 | 223 | 213 | 197 | 177 | 174 | 173 | 181 | 180 | 212 | 216 | 212 | 224 | 240 | 239 | 220 | 190 | 197 | (331) |
| men. | (14) | (17) | | | (14) | (12) | | (11) | | (16) | (13) | (15) | (13) | (17) | (16) | (16) | (13) | (12) | (12) | (11) | (11) | (13) | (14) | (12) | | ,, |
| | | | | | | | | | | | | | | | | | | | | | T | Mean | for 0s | days | [229 | (5)] |

| 39 | ESKDA | LEMUIR | : | | | | | | | | Fact | or 8·87 | (metro | e ⁻¹) | | | | | | | | | | DECE MB | er 1 | 960 |
|--------|--------|---------------|------|------|---------|----------|-------------|----------|----------|------|-------|----------|----------|-------------------|-------|-------|---------------|-------|-------------|-------|----------|----------|--------------|---------|------|--------|
| _ | Hour (| G.M.T. 1-2 | 2-3 | 3-4 | 4-5 | 5-6 | 6-7 | 7-8 | 8-9 | 9-10 | 10-11 | 11-12 | 12-13 | 13-14 | 14-15 | 15-16 | 16-17 | 17-18 | 18-19 | 19-20 | 20-21 | 21-22 | 22-23 | 23-24 | | Mean |
| | | | | | | | | | | | vo. | lts per | metre | | | | | | | | | | | | | |
| 1 | Z-* | Z-* | Z-* | Z-* | Z-* | Z-* | Z-* | 70* | Z±* | Z±* | Z+* | Z-* | 405* | 450 | 385 | 40* | Z+* | 160* | 285 | 245 | 220 | 225 | 195 | 180 | 273 | (8) |
| 2 | 240 | 225 | 230 | 265 | 240 | Z* | 120* | 125 | - | | - | - | i | -• | -• | - | - | - | - | -* | -• | | -+ | -* | 221 | (6) |
| 3 | -* | -+ | -* | -+ | -* | | -• | | 20 | 25* | Z-* | 15* | Z-+ | Z-* | Z-+ | Z-* | Z±* | Z±* | Z±* | Z±* | _ | 70 | Z-* | Z-* | 70 | , |
| 4 | Z-* | Z-* | Z-* | 25* | Z+* | 5* | 90 | Z-* | 85* | Z-* | Z++ | 85* | 65* | Z-* | Z-* | Z+* | Z~* | Z±* | Z±* | Z-+ | | 100 | Z±* | Z±* | 98 | |
| 5 | Z-* | Z±* | Z+* | Z±* | Z+* | Z-+ | Z±* | Z-* | Z±• | Z±• | Z-• | Z±• | 135 | 155 | 210 | 315 | 365 | 445 | 415 | 385 | 350 | 360 | 240 | 175 | 296 | (12) |
| 6 | 175 | 90 | 150 | 325 | 260 | 325 | 290 | 300 | 280 | 200 | 215 | 235 | 270 | 245 | 270 | 330 | 295 | 190 | 180 | 165 | 155 | 180 | 125 | 100 | 223 | (24) |
| 7 | 130 | 110 | 80 | 95 | 85 | 85 | 70 | 80 | 105 | 135 | 145 | 185 | 235 | 160 | 115 | 115 | 150 | 180 | 150 | 165 | 80 | 95 | 175 | 255 | 133 | (24) |
| 8 | 255 | 235 | 180 | 130 | 115 | 110 | 125 | 90 | 80 | 70 | 70 | 70 | 155* | 140* | 165 | 170 | 190 | 190 | 170 | 150 | 135 | 105 | 85 | 55 | 134 | (22) |
| 9 | 50 | 45 | 55 | 55 | 55 | 100 | 115 | 140 | 150 | 165 | 120 | 45 | 225 | 230 | 260 | 265 | 410 | 440 | 250 | 310 | 335 | 275 | 270 | 155 | 188 | (24) |
| 10 | 160 | 10 | 105 | 115 | 15 | 85 | 95 | 110 | 110* | 90 | 100 | 50* | 100 | 180 | 165 | 155 | 175 | 140 | 175 | 175 | 165 | 130 | 115 | 85 | 122 | (21) |
| 11 | 100 | 85 | 75 | 90 | 80 | 115 | 85 | 85 | - | - | - | - | i - | 90 | 80 | 110 | 160* | 195* | 25* | -160* | | 30* | Z-* | Z-* | 90 | (11) |
| 12 | 385 | 185 | 320 | 495 | 445 | 220 | 225 | 140 | 85 | 140 | 170 | 180 | 160 | 125 | 130 | 220 | 200 | 205 | 200 | 225 | 275 | 175 | 205 | 125 | 218 | (24) |
| 13 | 100 | 100 | 80 | 90 | 70 | 65 | 90 | 100 | 185 | 205 | 210 | 225 | 125 | 190 | 230 | 220 | Z+* | Z+* | Z-* | 450 | 460 | 470 | 505 | 530 | 224 | (21) |
| 14 | 375 | 265 | 195 | 350 | 320 | 255 | 290 | 160 | 155 | 135 | 145 | 100 | 75 | 100 | 200 | 195 | 245 | 195 | 200 | 220 | 210 | 195 | 170 | 140 | 204 | (24) |
| 15 | 175 | 140 | 115 | 115 | 140 | 125 | 130 | 210 | 215 | 340 | 255 | 250 | 200 | 170 | 255 | 230 | 160 | 195 | 205 | 210 | 225 | 190 | 250 | 120 | 193 | (24) |
| 16 | 40 | 140 | 110 | 125* | -45* | 50* | 115* | 155* | 170* | 245* | 195* | 235* | 335* | 345 | 450 | 445 | 500 | 550* | 485* | 605* | | 135* | 240* | 275* | 290 | (7) |
| 17 | 215* | 220* | 280* | 210* | 160* | 185* | 230* | 310 | 275* | 380* | 395* | 365* | 435 | 370* | 390* | 515 | 280* | 285* | 215* | 330* | | 210* | 210* | 225* | 420 | (3) |
| 18 | 215* | 235* | 275* | 315* | 140* | 290* | 255 | 265 | 190 | 190 | 155 | 215 | 185 | 175 | 225 | 295 | 240 | 210 | 280 | 390 | 380 | 340 | 250 | 205 | 247 | (18) |
| 19 | 175 | 155 | 115 | 160 | 265 | 245 | 190 | 165 | 225 | 210 | 185 | 190 | 115 | 150 | 250 | 235 | 260 | 355 | 390 | 400 | 415 | 605 | 545 | 435 | 268 | (24) |
| 20 | 275 | 265 | 265 | 255 | 200 | 215 | 185 | 180 | 235 | 215 | 190 | 215 | 225 | 265 | 355 | 400 | 405 | 375 | 335 | 250 | 240 | 200 | 230 | 245 | 259 | (24) |
| 21 | 235 | 270 | 260 | 265 | 180 | 200 | 165 | 165 | 165 | 135 | 180 | 180 | 215 | 210 | 145* | 140* | 165 | 300 | 305 | 240 | 250 | 220 | 175 | 185 | 212 | (22) |
| 22 | 225 | 160 | 150 | 115 | 100 | 115 | 145 | 165 | 155 | 140 | 100 | 135 | 215* | 175 | 170 | 195 | 235* | 225* | 125* | 25* | 30 | 115 | Z-* | 130* | 141 | (17) |
| 23 | Z-* | 120* | 125* | 70* | 65* | 90* | 160* | 30* | -115* | 25* | Z-* | Z-* | 55* | 45* | 225* | 335 | 325 | 315 | 225 | 50 | 225 | 285 | 350 | 255 | 263 | (9) |
| 24 | 230 | 270 | 260 | 195 | 125 | 110 | 125 | 135 | 250 | 260 | 210 | 205 | 175 | 210 | 290 | 310 | 440 | 595 | 625 | 495 | Z+* | Z±* | Z-* | Z-* | 276 | (20) |
| 25 | Z±* | 1,55* | 100* | Z±* | 140 | 160 | 180 | 125 | 175 | Z-* | Z-* | 175* | Z-* | Z-* | Z-* | Z±* | Z-* | Z-* | Z-* | Z-* | Z-* | Z-* | Z-* | Z-+ | 156 | (5) |
| 26 | Z-* | Z-* | Z±* | -5* | Z-* | Z±* | Z±* | 115 | 120 | 140 | 195 | 165 | 120 | Z-* | 75 | 130 | 100 | 160* | Z-* | Z±* | Z±* | Z-* | 140 | 135 | 136 | (10) |
| 27 | 150 | 160 | 130 | 95 | 100 | 80* | 85* | 80 | 95 | 165 | 125* | 170* | 180 | 175 | 135* | 180 | 265 | 285 | 290 | 260 | 365 | 295 | 190 | 170 | 191 | (19) |
| 28 | 95 | 100 | 105 | 150 | 70 | Z-* | Z±* | Z±* | Z-+ | Z-* | Z-* | 195 | 400 | 315 | 380 | 545 | 765 | 820 | 59 0 | 690 | 745 | 730 | 570 | 400 | 426 | (18) |
| 29 | 260 | 185 | 145* | 375 | 495 | 735 | 785 | 645 | 515 | 640 | 690 | 770 | 670 | 180 | 95 | 135* | 385* | 485 | 490 | 295 | 245 | 230 | 155 | 35* | 447 | (20) |
| 30 | Z-* | Z-* | Z-* | 115* | 50* | Z-* | 195* | 585 | 615 | 440 | 430 | 385 | 395 | 335 | 275 | 100 | 230 | 400 | 455 | 260 | Z-* | Z±* | Z±* | Z-* | 377 | (13) |
| 31 | 130 | 200* | 280 | Z+* | Z±* | Z±* | Z-* | 155 | 155 | 155 | 155* | 85* | Z-* | Z-* | Z-* | 250 | 255 | 300 | 235 | 315 | 230* | 150* | 160 | 215 | 217 | (12) |
| Ma an | 189 | 160 | 163 | 197 | 175 | 199 | 191 | 193 | 207 | 209 | 209 | 219 | 232 | 210 | 236 | 261 | 292 | 331 | 307 | 288 | 267 | 254 | 243 | 208 | 228 | (490) |
| Mean | (21) | (20) | (20) | (19) | (20) | (16) | (19) | (24) | (20) | (20) | (18) | (18) | (20) | (22) | (21) | (24) | (21) | (20) | (21) | (22) | (21) | (22) | (21) | (20) | | |
| | | | | | | | | | | | _ | | | | | | | | | | | Mean | for 0a | days | [200 | (8)] |
| Annual | 102 | 93 | 92 | 92 | 94 | 111 | 118 | 127 | 127 | 133 | 139 | 141 | 143 | 141 | 143 | 142 | 146 | 146 | 145 | 138 | 133 | 131 | 121 | 110 | 125 | (5368) |
| Mean | (234) | | | | | | | | (210) | | | | | | | | | | | | (230) | | | | | , |
| , | (201) | , 200 / | `/ | | <u></u> | <u> </u> | | <u> </u> | <u> </u> | | · | <u> </u> | <u> </u> | / | / | , , | · · · · · · · | · | ,, | ·/ | <u> </u> | <u> </u> | ` | ` ` ` | [1 | 251 |
| | | | | | | | | | | | | | | | | | | | | l | Annual | mean | for Oa | days | 11 | 25] |

Daily, monthly and annual means are computed excluding hours with precipitation and, of course, all indeterminate entries. The number of hours or days used in computing each mean is shown in round brackets. Entries in square brackets are means for 0a days (see Introduction) and the figure in round brackets is the number of days used in computing this mean.

40 ESEDALEMUIR

| | JAN | IUARY | PEB | RUARY | M | ARCH | A1 | RIL | ! | MAY | J | UNE |
|---|-----------|--|------------|--|------------|--|-----------|--|------------|--|-----------|--|
| | Character | Duration of negative potential gradient | Character | Duration of negative potential gradient | Character | Duration of negative potential gradient | Character | Duration of negative potential gradient | Character | Duration of negative potential gradient | Character | Duration of negative potential gradient |
| *************************************** | 1 | hr. | | hr. | | hr. | | hr. | | hr. | | hr. |
| 1 | 2ъ | 5 · 1 | 2c | 6 · 1 | 2c | 11.1 | 2a | 5.7 | 0a | *** / | 1a | 0.3 |
| 2 | (0a) | - | 2b | 10.1 | 2c | 3.9 | 2b | 15.5 | la | 2.0 | 1a | 2.2 |
| 3 | 1a | 1.6 | 2c | 11.6 | 2c | 11.7 | 2c | 15.7 | 1a | 2.2 | 1a | 0.3 |
| 4 | 2b | 5 · 2 | 2c | 6.8 | 1a | 0.9 | 2a | 4.4 | (1a) | - | 0a | |
| 5 | la la | 0-1 | 0a | • • • | 1a | 1.3 | 2c | 6.8 | la | 2.8 | (2b) | |
| 6 | 14 | 0 · 1 | 1. | 0 · 2 | 1a | 0.1 | 2c | 8.5 | 0 e | ••• | 1a | 0.1 |
| 7 | 0a | | 1.0 | 0.5 | (0a) | ••• | 1b | 0.5 | (la) | - | (2c) | - |
| 8 | 1ь | 1 · 2 | 1a | 0.2 | (1a) | - | 1b | 0.5 | (1b) | - | (2b) | - |
| 9 | 1= | 0.3 | 0a | ••• | 2 a | 3.5 | 2c | 9.0 | 2a | 3.7 | 1a | 0.7 |
| 10 | On | ••• | 2b | 5.8 | 1b | 1.4 | 2c | 15.5 | 2a | 3.8 | 1a | 0.3 |
| 11 | 2b | 3.1 | 16 | 0.5 | 2b | 3 · 1 | 0a | | 1a | 1.3 | (2b) | - |
| 12 | 2. | 9.8 | 1c | 2.5 | 2a | 3.0 | 2c | 9.8 | 2b | 5.0 | (2c) | - |
| 13 | 1ь | 2.0 | 16 | 1.4 | 2b | 4.7 | 2b | 5.7 | 2c | 8.3 | (2c) | - |
| 14 | 16 | 2.5 | 1b | 0.4 | 1b | 2 · 2 | 2c | 4.7 | 1ь | 2.3 | Ìa | 0.6 |
| 15 | (10) | 0.9 | 0Ь | | 2 b | 5·7 | 1c | 2.9 | 0a | ••• | (1b) | - |
| 16 | 0. | | 16 | 0.6 | 2b | 3.8 | 1a | 0.2 | la | 0.1 | 1b | 0.9 |
| 16 | Oa. | | 16 | 0.1 | 1a | 2.6 | 0a | | la | 0.4 | (1a) | - |
| 18 | 2c | 9.7 | 2c | 4.4 | 1b | 1.1 | 18 | 0.2 | la | 0.9 | 18 | 0.6 |
| 19 | 2c | 6.7 | 1c | 0.9 | 16 | 2.9 | la | 0.7 | 1a | 0.5 | Oa | |
| 20 | 0b | | lc | 2.1 | 10 | 0.6 | la la | 1.3 | le | 0.5 | 1. | 0.1 |
| | 1 | | | | la | 0.1 | | 0.3 | Oa. | | 0e | |
| 21 | 2b | 12.3 | 0b (0a) | | 18 | 0.1 | la Oa | 0.3 | la | 0.2 | Ua 1a | 0.1 |
| 22 | 2b | 14-1 | | () | 18 | 1.2 | Oa. | | 2c | 7.2 | 1a 1a | 0.1 |
| 23 | 2b 1b | 6·0 2·6 | (0a) 2c | 3.9 | 18 | 0.1 | la | 1.9 | la | 0.5 | (0a) | 0.1 |
| 24 25 | ia ia | 0.1 | 2c 2c | 14.4 | Oa | 0-1 | la la | 0.3 | la | 1.4 | la | 0.5 |
| | | | | | _ | | - | | | | _ | |
| 26 | (Om) | - | 2c | 6·1 | 1= | 0.2 | 10 | 0.2 | la | 0-6 | 1a | 0.3 |
| 27 | (1=) | - | 1c | 2.6 | Oa. | ••• | 1a | 0.9 | 1ь | 0.6 | 1a | 2.1 |
| 28 | 1b | 2.7 | 1ь | 2.9 | 10 | 0.3 | 1. | 0.1 | 0a | ••• | 1a | 0.6 |
| 29 | 1.0 | 1.1 | 2c | 6.6 | 1a | 0.3 | 1a | 0.5 | la . | 1.0 | 0a | |
| 30 | 16 | 2.7 | | | 1a | 2 · 2 | 1a | 2·2 | (0a) | - | 1a | 0.6 |
| 31 | 2c | 11.4 | | | 2 b | 8.3 | | | 1a | 0.3 | | |
| Total | - | 101 · 3 | - | 90.7 | - | 76·8 | - | 114.0 | - | 45.6 | - | 10.4 |
| No. of | - | 28 | - | 29 | - | 30 | - | 30 | - | 27 | - | 21 |
| Mean | _ | 3.6 | - | 3.1 | • | 2.6 | - | 3.8 | - | 1.7 | - | 0.5 |

| | J. | ULY | AU | GUST | SEPI | EMBER | 001 | TOBER | NOV | ember | DEC | EMBER |
|-------------------|-----------|--|------------|--|-----------|--|-----------|--|-----------|--|-----------|--|
| | Character | Duration of negative potential gradient | Character | Duration of negative potential gradient | Character | Duration of negative potential gradient | Character | Duration of negative potential gradient | Character | Duration of negative potential gradient | Character | Duration of negative potential gradient |
| | | hr. | | hr. | | hr. | | hr. | | hr. | | hr. |
| 1 | 1a | 0.7 | (2c) | - | 1= | 0∙6 | 2b | 13.7 | (2b) | - | 2c | 6.9 |
| 2 | (1b) | - | (1a) | - | 1b | 1.2 | 2b | 14.6 | (2b) | - | (2c) | - |
| 3 | (la) | - | (1a) | - | 2c | 3.5 | (2c) | - | (2c) | - | (2c) | - |
| 4 | la | 0.9 | (1m) | - | 1b | 0-4 | (2b) | - | (2b) | - | 2c | 8.0 |
| 5 | 2b | 3⋅7 | (Oa) | - | 0a | ••• | (2b) | - | (1a) | - | 2c | 4.9 |
| 6 | (2b) | - | 1a | 0.5 | (2b) | - | (la) | - | (1a) | - | 0a | • • • |
| 7 | (2a) | - | 1a | 0.1 | (1a) | - | (1a) | - | (1a) | - | Oa. | |
| 8 | 0: | | 1b | 2.2 | (1a) | - | (2b) | - | (1a) | _ | Oa. | |
| 9 | 1b | 2·1 | 2c | 5.7 | (1a) | - | (1a) | - | (2c) | - | On. | • • • |
| 10 | 2b | 6.7 | 1. | 0.2 | `Oa´ | ••• | (1a) | - | `2c´ | 7 · 2 | 1a | 1.1 |
| 11 | 1a | 0.8 | 1b | 1.3 | 10 | 0.5 | On | ••• | 2c | 16.8 | (2b) | - |
| 12 | 1b | 0.5 | 1b | 0.2 | la | 0.1 | Om | | 2c | 12.5 | 0a | |
| 13 | 2b | 3.5 | 2c | 7.1 | l is | 0.2 | (la) | - | 2c | 4.3 | 16 | 0.3 |
| 14 | (2c) | - | 1b | 2.6 | 2b | 11.6 | la | 1.0 | 1b | 1.2 | 1a | 0.1 |
| 15 | (2b) | - | 1a | 0.1 | 2c | 4.0 | 0a | | 2c | 5.1 | 1a | 0.1 |
| 16 | (la) | _ | 1ь | 0.8 | 2b | 6.0 | On | ••• | 2b | 3.5 | 1a | 1.6 |
| 17 | (2b) | _ | (2c) | - | (1a) | 5.0 | 1b | 0.2 | 26 2c | 5.1 | 0a | |
| 18 | (2c) | _ | (2b) | _ | (0a) | _ | (1b) | - | 0a | | 12 | 0.5 |
| 19 | (2c) | _ | 2b | 4.0 | 2c | 5.2 | 2c | 7.7 | 0a | ••• | le | 0.1 |
| 20 | 1a | 0.8 | 0a | *** | Oa | 3.2 | 2b | 3.9 | 2b | 5.3 | 0a | |
| | | | ! | | 1 | | | | | | | |
| 21 | 2b | 3.6 | 1b | 1.5 | (1a) | - | 2b | 5.5 | 2b | 5.8 | 0a | ••• |
| 22 | 2b | 3.5 | 2c | 3.5 | la la | 0.3 | 1. | 2-1 | la | 0.2 | 1Ь | 0.6 |
| 23 | la la | 0.1 | 1b | 1.4 | la | 0.1 | 2b | 4-1 | 1b | 2.7 | 2ь | 3.9 |
| 24 | 1a | 0.3 | 2b | 3.1 | la | 0.1 | (2b) | - | 2c | 6.8 | 1b | 1.6 |
| 25 | 16 | 1.0 | 2c | 5·3 | 0a | ••• | (1b) | - | 0e | ••• | 2c | 9.8 |
| 26 | 1b | 1.5 | 1ь | 1.6 | la | 1.7 | (1a) | - | 0a | ••• | 2c | 6.3 |
| 27 | 0a | • • • • | 2c | 5.7 | 1a | 0.2 | 2b | 14.7 | Oa. | ••• | 1a | 0-1 |
| 28 | 1a | 0.3 | 2b | 3.9 | 2a | 8·1 | 2b | 10.6 | 2c | 3⋅8 | 2c | 4-1 |
| 29 | 1ь | 0.9 | (1a) | - | 2b | 10.0 | 2ь | 3.7 | 2b | 3.7 | 1a | 0.4 |
| 30 | 2c | 4.5 | (1a) | - | 2ъ | 4.0 | 1a | 0.3 | 2c | 7.9 | 2c | 6.6 |
| 31 | (1a) | - | 2 a | 4.7 | | | 1b | 1-7 | | | 1c | 1.9 |
| Total | | 35·4 | - | 55·3 | - | 57 · 8 | • | 83.8 | | 91 · 9 | | 58·9 |
| No. of aysused | | 20 | - | 22 | - | 23 | - | 18 | - | 21 | - | 28 |
| Mean | - | 1.8 | - | 2.5 | - | 2.5 | - | 4-1 | - | 4.4 | - | 2.1 |

Annual values: Character 0 1 2 No. of days used 57 180 129 Duration: Total 821.9 No. of days 297 Mean 2.77 hr.

KEW

| 41 | KEW OR | SERVAT | ORY | | | | | | | | F | actor 4 | ·58 (m | etre ⁻¹ |) | | | | | | | | | JANUAI | ty 19 | 50 |
|----------------------------|----------------------------------|-----------------------------------|---------------------------------|-----------------------------------|------------------------------------|----------------------------------|----------------------------------|-----------------------------------|------------------------------------|------------------------------------|------------------------------------|--------------------------------------|--------------------------------------|----------------------------------|------------------------------------|-----------------------------------|-----------------------------------|-----------------------------------|-----------------------------------|----------------------------------|----------------------------------|----------------------------------|------------------------------------|-------------------------------------|---------------------------------|--------------------------------------|
| | Hour C | .M.T. 1-2 | 2-3 | 3-4 | 4-5 | 5-6 | 6-7 | 7-8 | 8-9 | 9-10 | 10-11 | 11-12 | 12-13 | 13-14 | 14-15 | 15-16 | 16-17 | 17-18 | 18-19 | 19-20 | 20-21 | 21-22 | 22-23 | 23-24 | M | ean |
| | | | | | | | | | | | vo | lts per | metre | | | | | | | | | | | | | |
| 1 2 3 | 70* 375 70 | 35* 445 270 | 85* 445 185 | 85* 350 15 | 105* 405 70 | 55* 360 15 | 105* 220* 105 | Z±* 360* 155 | Z±* -440* 175 | Z±* Z±* 140 | 185 385* 245 | 140 515* 385 | 295 465* 270 | 195 435* 270 | 290 585* 350 | 350 665* 325 | 280 385* 175* | 255* 420* 225* | 195* 270* 360 | 115* 595* 295* | 265 630* 325* | 295 80* 280 | 350 45 155 | 360 -10 105 | 273 302 197 | (11) (8) (20) |
| 4 5 | 140 195 | 210 225 | 195 200 | 125 195 | 165 140 | 295 95* | 365 125* | 410 150* | 420 105* | 505 280 | 500 335 | 405 475 | 365 575 | 335 560 | 315* 525 | 305 385 | 295 435 | 290 * 490 | 225 * 435 | 385 455 | 365 435 | 335 365 | 280 220 | 225 280 | 315 360 | (21) (20) |
| 6 7 8 9 | 270 195 770 420 410 | 290 630 535 445 200 | 305 995 550 445 410 | 325 1130 420 490 430 | 335 1050 245 490 385 | 445 1315 715 550 455 | 420 1275 700 605 515 | 475 1190 645 655 525 | 525 805 855* 795 575 | 475 615 350 550 665 | 465 605 210 665 805 | 225 410 420 710 645* | 490 645 435 665* 700* | 575 665 375 700* 620 | 710 515 325 575* 420 | 560 405 385* 665 420 | 570 735 500 715 515 | 350 665 195 585 475 | 315 630 325 665 655 | 255 560 0 700 525 | 265 420 105 805 445 | 290 15 185 805 280 | 265 15 25 785 125 | 195 945 195* 560 70 | 391 685 382 624 451 | (24) (24) (21) (21) (22) |
| 11 12 13 14 | 0 -185* 560 560 -80* | -75* -35* 210 375 -45 | -175* 0 465 175 15* | -90 55 585 70 0* | -185 95* 435* 15 225* | Z±* 270* 665* 25 350 | | 35* 410 665* 325* 665 | 85 645* 505* 385* 715 | 125 665 525* 255 895 | 175 700 785* 245* 840* | 155 630 895* 280* 825 | 175 735 840* 85* 840 | 350 725 615* 15* 795 | 245* 855 365* 35* 825 | 475* 830 805 125* 685 | 200* 910 475 185* 475 | 490* 1065 645 35* 315 | 735 825 910 -20 245 | 535 735 805 0 455 | 640 840 140 -10* 410 | 655 700 575 35* 665 | 395* 490 700 -165* 490 | 280* 615 805 -130* 435 | 258 635 591 154 551 | (13) (19) (13) (10) (19) |
| 16 17 18 19 20 | 405 140 165 265 195 | 270 0 -75 210 175 | 335 225 35 220 155 | 335 280 35 235 140 | 350 280 140 280 125 | 305 305 -80 265 140 | 125 295 35 280 200 | 125 290 125 270* 405 | 155 420 115 80* 490 | 85 265 95 -35* 525 | 35* 315 245 -75* 475 | 70 435 315 430 490 | 185 505 315 420 420 | 245 505 375* 395 505 | 225 375 335* 475 505 | 175 295* 295 465 500 | 45 125* 410 350 665 | -10 -330 420 265 585 | -20 0 325 Z±* 455 | 70 -355 315 Z±* 665 | -55 55 375 130 105* | -200 105 325 210 Z±* | -35 350 210 305 Z±* | 45 350 220 245 Z±* | 140 245 198 303 391 | (23) (21) (22) (18) (20) |
| 21 22 23 24 25 | 195* 125 70 -20* 265 | -100* 155 55* 130 155 | -20* 55 70* 195 245 | -10* 130 70* 150* 265 | -145 140 105 -300• 255 | -55* 60 105* Z-* 280 | -75* 105 140 Z-* 385 | 85* 175 155 -145* 365 | 500* 155* 185* -45 700 | 575* 225* -185* 10 965 | 605* 245 -185* 0* 1015 | 385* 265 -130* -385* 875 | 245 175* -275* -185* 830 | | 195* 130 -185* 105 595 | 290 280 0* 55 615 | 210 270 195 10 465 | 195 290* 85 -190* 420 | 175 235 235 -365* 295 | 150 155 195 Z- 115 | 85* 125 -45* 35* 185 | 150 70* 70* 140 95 | 220 70* -20* 225 80 | 165 55* 60 295 210 | 165 166 138 112 433 | (10) (16) (9) (10) (24) |
| 26 27 28 29 30 | 685 315 Z±* -175* | 840 350 Z±* 70 -130* | 925 255 Z±* 85 55* | 815 315 125* 140 35* | 490 340 2-• 195 140 | 655* 335 Z±* 220 140 | 525 420 155* 290 175 | 465 490 295* 405 185 | 375* 560* 140* 585 245 | 155 685 15* 685 255* | 95 715 -20 560 235* | 295 690 -80 475 295 | 490 630 -35 385 130 | 175 665 -25 405 165* | 105 575 55 505 280 | 140 Z±* 105* 490 265 | 60 Z±* 140* 525 350 | 290* Z±* 0* 525* 350 | 535 Z±* 105 405* 360 | 620 Z±* 115 105* 395 | 455 -295 55* 45* 405 | | 420 -475* -185 55* 270 | 290 -185* -275* 80* 220 | 430 432 -10 376 265 | (21) (15) (9) (16) (17) |
| 31 | 210 | 165 | 140 | 105 | 95 | 80* | 125 | 175 | 210 | 265 | 220 | 315 | 325 | 350 | 350 | 350 | 385 | 350 | 280 | 270 | 360 | 395 | 435 | 350 | 271 | (23) |
| Mean | 296 (23) | 260 (24) | 302 (24) | 287 (24) | 236 (25) | 325 (20) | 343 (23) | 404 (21) | 410 (17) | 421 (22) | 417 (21) | 402 (24) | 420 (23) | 448 (21) | 413 (22) | 420 (23) | 410 (24) | 414 (18) | 377 (24) | 338 (24) | 313 (22) | 309 (24) | 260 (24) | 306 (23) | 353 | (540) |
| | | | | | | | | | | | | | | | | | | | | Mean | for se | lected | l quiet | days | [333 | (9)] |

| 41 | KEW OF | BSERVAT | ORY | | | | | | | | Fac | ctor 4 | 49 (met | re ⁻¹) | | | | | | | | | 1 | PEBRUAF | Y 19 | 60 |
|------|-------------|-------------|-------------|-------------|-----------------------|-------------|-------------|-------------|-------------|-------------|--------------|-------------|-------------|--------------------|-------------|-------------|-------------|-------------|-------------|---------------|-------------|-------------|-------------|-------------|------|-------|
| | Hour (| | | | | | | | | | | | | | | | | | | | | | | | | |
| | 0-1 | 1-2 | 2-3 | 3-4 | 4-5 | 5-6 | 6-7 | 7-8 | 8-9 | 9-10 | 10-11 | 11-12 | 12-13 | 13-14 | 14-15 | 15-16 | 16-17 | 17-18 | 18-19 | 19-20 | 20-21 | 21-22 | 22-23 | 23-24 | M | ean. |
| | | | | | | | | | | _ | vol | ts per | metre | | | | | | | | | | | | | |
| 1 | 385 | 280 | 255 | 275 | 315 | 210 | 150 | 115 | 325 | 0 | 45* | -295 | 140 | 255 | 55* | 175* | 350 | 105* | -145* | 0 | 115 | 265 | 130 | 300 | 188 | (19) |
| 2 | 440 | 460 | 440 | 350 | 160 | 290 | 220 | 245 | 335 | 255* | -90* | 140* | 325 | 265 | 275 | 175 | 240 | 245* | 210 | 160 | 125* | 160 | 60* | 70 | 268 | (18) |
| 3 | 115 | 70 | 55 | 45 | 10 | 80 | 105* | -20* | 125* | 125* | 125* | -100* | 140* | 105 | 160 | 300 | 220 | 310* | 345 | 360* | 315* | 275 | 255 | 240 | 163 | (14) |
| 4 | 200 | 0+ | Z+* | 195 | 195 | 210 | 290 | 405 | 530 | 495 | 495 | 485 | Z+* | Z±* | Z±* | 385* | 385 | 325* | Z±* | -20* | 420 | 385 | 440 | 405 | 369 | (15) |
| 5 | 300 | 345 | 280 | 360 | 350 | 530 | 600 | 755 | 860 | 915 | 530 | 350 | 615 | 625 | 580 | 430 | 20 | 385* | 280 | 265 | 245 | 300 | 150 | -20 | 420 | (23) |
| 6 | 325 | 95 | 460 | 855 | 800 | 335 | 335 | 280 | 500 | 650 | 275 | 300 | 160 | 325 | 245 | 280 | 230 | 125* | 90* | 650 | 720 | 465 | 460 | 430 | 417 | (22) |
| 7 | 350 | 350 | 315 | 335 | 175 | 160 | 230 | 290 | 335 | 405 | 485 | 495 | 460 | 460 | 450 | 460 | 495 | 565 | 545 | 545 | 615 | 635 | 685 | 625 | 436 | (24) |
| 8 | 605 | 565 | 495 | 420 | 440 | 605 | 685 | 775 | 880 | 905 | 845 | 775 | 740 | 730 | 590 | 670 | 720 | 685 | 825 | 740 | 730 | 580 | 495 | 475 | 666 | (24) |
| 9 | 385 | 265 | 310 | 280 | 245* | 265* | 385* | 720 | 915 | 950 | 860 | 790 | 755* | 545* | 600* | 755* | 670 | 775 | 705 | 670 | 635 | 615 | 600 | 705 | 638 | (17) |
| 10 | 670 | 695 | 600 | 325 | 220 | 210 | 245 | 46 0 | 510* | 530 | 790 | 880 | 940 | 705 | 650 | 450 | 430 | 350* | 500 | 495 | 450 | 460 | 420 | 315 | 520 | (22) |
| 11 | 310 | 230 | 385 | 565 | 280 | 220 | 230 | 440 | 530 | 460 | 580 | 500* | 420* | 310* | 460* | 335 | 60 | 360 | 590 | 345 | 520* | 495* | -130* | -185* | 370 | (16) |
| 12 | 240* | 310* | 380* | 350 | 350 | 430 | 555 | 685 | 940 | 860 | 1020 | 890* | 680 | 695* | 635* | 775 | 715 | 650* | 680* | 430* | 545* | 495* | 385* | 450* | 669 | (11) |
| 13 | 460* | Z+* | Z±* | Z±* | Z±* | Z±* | Z±* | 230 | 565 | 720 | Z±* | Z±* | Z±* | Z± | 670* | Z±* | 600* | 715 | 775 | 580* | 335 | 405 | Z±* | Z±* | 535 | (7) |
| 14 | Z±* | Z±* | Z±* | 25* | 70 | 35 | 80 | 300 | 325 | 300 | 350 | 350 | 385 | 345 | 370 | 360 | 350 | 415 | 565 | 370 | Z+* | Z±* | -20* | 160* | 311 | (16) |
| 15 | 150 | 315 | 350 | 335 | 500 | 520 | 520 | 590 | 580* | 405 | 650 | 530 | 460 | 395 | 420 | 440* | 570 | 625 | 670 | 825 | 625 | 530 | 460 | 245 | 486 | (22) |
| 16 | 195 | 325 | 325 | 290 | 335 | 335 | 405 | 420 | 635 | 615 | 555 | 460 | 450 | 385 | 350 | 370 | 475 | 670 | 520 | 510 | 485 | 495 | 315 | 450 | 432 | (24) |
| 17 | 315 | 275 | 460 | 325 | 380 | 530 | 535 | 680 | 880 | 1055 | 835 | 600 | 465 | 420 | 440 | 420 | 460 | 600 | 615 | 720 | 845 | 600 | 685 | 705 | 577 | (24) |
| 18 | 650 | 485 | 230 | 160 | 300 | 55 | 35 | 335 | 570 | 625 | 485 | 280 | 385 | 350 | 345 | 385 | 360 | 335 | 315 | 335 | 440 | 300 | 300 | 280 | 347 | (24) |
| 19 | Z±* | Z±* | 55 | Z± | Z± | 255 | 315 | 370 | 385 | 360 | 420 | 385 | 405 | 395 | 405 | 460 | 450 | 580 | 1020 | 775 | 935 | 900 | 670 | 510 | 503 | (20) |
| 20 | 345 | Z±* | Z±* | Z±* | 125* | 130* | Z±* | Z±* | -10* | -260* | Z-+ | Z-* | 315* | 475* | Z±* | Z±* | 150 | 530 | Z±* | 300* | 695* | 565* | 600* | 565* | 342 | (3) |
| 21 | 265 | 315 | 350 | 290 | 275 | 290 | 310 | 325 | 465 | 510 | 475 | 510 | 530 | 465 | 380 | 345 | 290 | 175 | 415 | 640 | 740 | 985 | 1200 | 970 | 480 | (24) |
| 22 | 685 | 315 | 140 | 210 | 265 | 315 | 335 | 485 | 545 | 670 | 685* | 685* | 640 | 485* | 495* | 315* | 495* | 370* | 140* | -55* | 70 | -20* | 35* | -85* | 390 | (12) |
| 23 | -295* | -200* | -515* | -625 | ∽ 755 * | 20* | 35* | 70* | 230* | 195* | 385 | 380 | 440 | 405 | 345* | 385* | 420* | 495 | 555 | 625 | 605 | 545 | 685 | 440 | 505 | (11) |
| 24 | 245 | 405 | 475 | 535 | 545 | 405 | 460 | 535 | 740 | 615 | 315 | 195 | 125 | 125 | 185* | -185* | ~370* | -265 | 90 | 105 | 95 | 105 | -100 | -35 | 272 | (21) |
| 25 | -35* | 20* | 70* | 70* | -370* | -185* | -185* | 20* | Z±* | Z±* | -265* | -10* | 90* | 45* | 240 | 385 | 530 | 580 | 755 | 845* | 140* | -75* | -75* | 125* | 498 | (5) |
| 26 | 55 | 95 | 125 | 140 | 165 | 220 | 265 | 385 | 670 | 660 | 530 | 495 | 385* | 275* | 210* | 265 | -140* | 90* | -315* | -460 * | -230* | 20* | 55* | 90* | 313 | (13) |
| 27 | 90* | 140 | 95 | 55 | 55 | 90 | 125 | 160 | 210 | 265 | 245 | 255 | 255 | 245 | 245 | 230 | 280 | 315 | 380 | 450 | 405 | 300 | 360 | 200 | 233 | (23) |
| 28 | 200 | 175 | 160 | 130 | 95 | 90 | 105 | 140 | 175 | 230 | 165 | 160 | 230 | 245 | 230 | 245 | 195 | 325 | 275 | 350 | 360 | 315 | 230 | 315 | 214 | (24) |
| 29 | 315 | 335 | 310 | 210 | 140 | 125 | 95 | 200 | 335 | 405 | 395 | 310 | 265 | 255 | 310 | 300 | 265 | 230 | 185 | 175 | 140* | 195 | 165 | 160 | 247 | (23) |
| | | | | | | | | | | | | | ļ | | | | | | | | | | | | | |
| Mean | 341 (22) | 311 (21) | 303 (22) | 306 (23) | 279 (23) | 273 (24) | 310 (23) | 413 (25) | 550 (23) | 567 (24) | 531 (22) | 414 (21) | 433 (21) | 375 (20) | 371 (18) | 382 (20) | 371 (24) | 458 (19) | 506 (22) | 464 (21) | 493 (20) | 446 (22) | 430 (20) | 371 (21) | 404 | (521) |
| | | | | | | | | | | | | | | | | | | | | Mean | for se | lected | louiet | days | [440 | (10)] |

The potential gradient is reckoned as positive when the potential increases upwards. The symbol Z indicates either that the trace fluctuates rapidly so that estimation of a mean value is impracticable, or that the trace is limited by the range of the instrument (see Introduction): and the suffix +, - or ± indicates that the mean value is plainly positive, plainly negative, or indeterminate in sign. The occurrence of precipitation of any sort is indicated by an asterisk. Round brackets round any hourly mean indicates that the record during that hour is somehow imperfect.

41 KEW OBSERVATORY

-290 -380

355* 430*

85 135 370

(28) (27)

-230

135 120

-365

-230 -285

455*

(27)

-345

355*

355 300

(27)

105 -125

-290

-195

7+*

380 720

(27) (25)

-255

360* 335

(27) (25)

MARCH 1960

12-13 13-14 14-15 15-16 16-17 17-18 18-19 19-20 20-21 21-22 22-23 23-24 0-1 1-2 2-3 3-4 4-5 5-6 6-7 7-8 8-9 9-10 10-11 11-12 Mean volts per metra 175* (15) 40* 150* -204 185 (22) 150* -35* 120* (20) 4 5 (24) -25 -35 (24) 7 -60 -175 595 (24) -80 -25 -3354 7-7.10 7+4 7+ 7+4 7.±4 (16 615* 455* Z±4 Z±• Z±• (17) Z±4 Z± 12 (14) 7.±* 7.±* 260* 295* 245* 150* Z± 555* Z±* Z±* (20) Z±• 7+* 7-+ -90 (19) 355* (21) 15 420* (18) (21) (24) (23) (24) (24) (24) (24) 23 -95 (24) (24) 25 -55 -80 -175 -220 -285 (24)

370*

Z±•

670* 840 520

(25)

100 145

370*

50* 570*

(25) (28)

245*

-95 -90

620*

815 880

(29) (26)

-35 -195

170*

540 590

-90 -195

435* 370*

366 307

(27)

(27)

-290 -285

320* 320*

(25)

60*

90*

(27)

275*

273 257

(26) (27)

35* 100*

75 145

(26)

Mean for selected quiet days [350

100*

225*

-93

(24)

(20)

(7)

(0)

(15)

(24)

(628)

(8)]

POTENTIAL GRADIENT (reduced to open level surface)
Mean values for periods of sixty minutes between exact hours

-90

405*

7++

530 670

360 401

-275 -265

0 145

285*

Z±+ 505+

(24)

-105

(22)

40 170

50 110

830 705

(26)

Z±+

(25)

| 41 | L KEW | OBSERVA | TORY | | | | | | | | Facto | or 4·44 | (metr | e ⁻¹) | | | | | | | | | | APR | IL 19 | 960 |
|------|-------------|---------------|-------|------|------|------|-------|------|------|------|-------|---------|-------|-------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|--------------|
| | Hour 0-1 | G.M.T. 1-2 | 2-3 | 3-4 | 4-5 | 5-6 | 6-7 | 7-8 | 8-9 | 9-10 | 10-11 | 11-12 | 12-13 | 13-14 | 14-15 | 15-16 | 16-17 | 17-18 | 18-19 | 19-20 | 20-21 | 21-22 | 22-23 | 23-24 | , | lea n |
| | | | | | | | | | | | vol | ts per | metre | | | | | | | | | | | | | |
| 1 | 145 | 285 | 105 | 120 | 240 | 485 | 655 | 465 | 355* | 365 | 400 | 380 | 190 | 140 | 200 | 270 | 275 | 270 | 260 | 260 | 225 | 70 | 110 | ~80 | 254 | (23) |
| 2 | 10 | 95 | 95 | 140 | 205 | 240 | 260 | 270 | 285 | 250 | 275 | 275 | 270 | 275 | 310 | 320 | 305 | 295 | 270 | 205 | 145 | 105 | 70 | 80 | 210 | (24) |
| 3 | 120 | Z-* | Z-* | Z-* | Z±* | Z±* | -450* | ~35* | 335* | 225* | 225 | 295 | 215 | 190 | 205 | 140 | 00 | 70 | 275 | 355 | 365 | 310 | 275 | 235 | 218 | (15) |
| 4 | -125 | -215 | -250* | 95* | 155 | 225 | 370 | 460 | 485 | 365 | 335 | 275 | 310 | 225 | 235 | 235 | 275 | 345 | 370 | 330 | 435 | 415 | 200 | 175 | 267 | (22) |
| 5 | 175 | 165 | 35 | 105 | 110 | 140 | 140 | 190 | 240 | 175* | 190• | 105* | 130* | 175* | 285* | 310 | 335 | 365 | 345* | 200* | 190 | 305 | 310 | 165 | 205 | (16) |
| 6 | 295 | 275 | 215 | 205 | 155 | 140 | 215 | 240 | 235 | 275 | 310 | 275 | 250 | 130* | -505* | -700* | -440* | -180* | 250* | 225* | 365 | 310 | 415 | 270 | 261 | (17) |
| 7 | 275 | 355 | 310 | 240 | 205 | 270 | 250 | 435 | 435 | 345 | 320 | 310 | 310 | 305 | 275 | 250* | 180* | ~395* | -305* | Z±* | Z±* | 205* | 305* | 190 | 302 | (16) |
| 8 | 205 | 140 | 120 | 130 | 70* | 155 | 240 | 240* | 320 | 345 | 285 | 275 | 205 | 225 | 235 | 215 | 250 | 270 | 275 | 400 | 520 | 435 | 440 | 330 | 273 | (22) |
| 9 | 345 | 320 | 225 | 175 | 175 | 190 | 240 | 105* | Z±* | 235* | 155* | 140* | 215 | 225 | 200 | 140 | 175 | 205 | 275 | 465 | 615 | 570 | 500 | 415 | 298 | (19) |
| 10 | 260 | 225 | 130 | 95 | 70 | 70 | Z±* | Z±* | 85 | 120 | 175 | 175 | 175 | 175 | 120 | 175 | Z± | 190 | 180 | 120 | 95 | 95 | 85 | 105 | 139 | (21) |
| 11 | 105 | 95 | 50 | 95 | 120 | 165 | 270 | 285 | 270 | 235 | 240 | 240 | 205* | 165* | Z±* | 225 | 190* | 225 | 240 | 190 | 120 | 180 | 240 | 235 | 191 | (20) |
| 12 | 250 | 200 | 205 | 205 | 205 | 310 | 390 | 400 | 370 | 215 | 200 | 175 | 60 | -190* | ~80* | 85* | 70* | 80* | 130* | 0 | 85* | 140 | 70 | 35 | 202 | (17) |
| 13 | 15 | 0 | 50 | 70 | 85 | 105 | 145* | 140* | 110* | 155 | 140* | 140* | 175 | 200 | 140 | 130 | 155* | 35* | 175* | 335 | 425 | 425 | 345 | 275 | 183 | (16) |
| 14 | 200 | 175 | 175 | 155 | 180 | Z±* | 260 | 330 | 295 | 240 | 270 | 225 | 225 | 240 | 205* | 215* | Z±* | 205 | 240 | 250 | 260 | 295 | 225 | 225 | 233 | (20) |
| 15 | 240 | 225 | 190 | 175 | 200 | 205 | 205 | 205 | 225 | 215 | 190 | 205 | 190 | 155 | 240 | 260 | 285 | 240 | 225 | 250 | 380 | 380 | 270 | 275 | 235 | (24) |
| 16 | 275 | 35 | 50 | -70 | -10 | 200 | 460 | 710 | 545 | 370 | 270 | 295 | 240 | 200* | 180 | 190 | 235 | 250* | 320 | 425 | 560 | 590 | 570 | 500 | 315 | (22) |
| 17 | 400 | 365 | 355 | 295 | 225 | 205 | 260 | 295 | 250 | 275 | 260 | 205 | 225 | 205 | 205 | 200 | 205 | 310 | 355 | 400 | 500 | 485 | 640 | 520 | 318 | (24) |
| 18 | 400 | 225 | 240 | 260 | 260 | 260 | 240 | 205 | 275 | 310 | 275 | 330 | 270 | 225 | 175 | 175 | 175 | 180 | 180 | 215* | 240 | 330 | 485 | 330 | 263 | (23) |
| 19 | 155 | 85 | 60 | 80 | 50 | 45 | 45 | 85 | 205 | 175 | 190 | 225 | 215 | 260 | 295 | 275 | 215 | 200 | 205 | 180 | 85 | 50 | 35 | 45 | 144 | (24) |
| 20 | 105 | 155 | 140 | 110 | 130 | 235 | 365 | 405 | 345 | 260 | 275 | 275 | 250 | 260 | 260 | 250 | 260 | 310 | 415 | 465 | 295 | 345 | 275 | 270 | 269 | (24) |
| 21 | 240 | 215 | 240 | 310 | 270 | 320 | 630 | 690 | 755 | 675 | 485 | 400 | 365 | 355 | 335 | 275 | 250 | 425 | 345 | 295 | 165 | 120 | 50 | 105 | 346 | (24) |
| 22 | 85 | 70 | 85 | 110 | 70 | 140 | 190 | 270 | 225 | 240 | 235 | 225 | 225 | 175 | 215 | 250 | 270 | 270 | 225 | 215 | 235 | 35 | 155 | 120 | 181 | (24) |
| 23 | 175 | 165 | 155 | 175 | 85 | 130 | 225 | 270 | 200 | 180 | 415 | 510 | 425 | 310 | 275 | 370 | 425 | 440 | 380 | 335 | 275 | 320 | 295 | 10 | 273 | (24) |
| 24 | -35 | 45 | 45 | 10 | 15 | 70 | 140 | 215 | 260 | 270 | 275 | 225 | 225 | 165 | 175 | 165 | 215 | 50 | 130 | 80* | 25 | 165* | 145 | 85 | 133 | (22) |
| 25 | 105 | 190 | 205 | 175 | 70 | 50* | 225* | 345* | 345* | 370* | 330* | 310* | 355* | 335* | 435* | 165* | 415* | 665* | 465 | 415 | 355 | 240 | 365 | 165 | 250 | (11) |
| 26 | 130 | 205 | 270 | 250 | 330 | 335 | 535 | 500 | 365 | 390 | 310 | 240 | 250 | 270 | 205 | 85* | 285* | 95* | 745 | 720 | 655 | 685 | 120 | 330 | 373 | (21) |
| 27 | 365 | 500 | 590 | 405 | 425 | 345* | 685 | 625 | 415 | 355 | 345 | 335 | 295 | 305 | 295 | 305 | 305 | 275 | 285 | 390 | 450 | 605 | 630 | 450 | 419 | (23) |
| 28 | 435 | 400 | 345 | 365 | 415 | 485 | 535 | 555 | 615 | 305 | 345 | 305 | 260* | 215* | 295* | 330 | 305 | 260 | 200 | 260 | 380 | 275 | 240 | 215 | 360 | (21) |
| 29 | 285 | 275 | 225 | 225 | 250 | 345 | 440 | 530 | 580 | 605 | 405 | 435 | 355 | 365 | 510 | 440 | 485 | 460 | 485 | 460 | 390 | 485 | 570 | 440 | 419 | (24) |
| 30 | 205 | 270 | 275 | 225 | 240 | 380 | 580 | 560 | 370 | 345 | 405 | 330 | 295 | 270 | 200 | 165 | 145 | 110 | 95 | 130 | 155 | 200 | 240 | 200 | 266 | (24) |
| Mean | 195 | 191 | 185 | 173 | 176 | 225 | 339 | 383 | 346 | 303 | 297 | 286 | 247 | 240 | 238 | 242 | 257 | 260 | 298 | 314 | 318 | 314 | 289 | 224 | 262 | (627) |
| | (30) | (29) | (28) | (28) | (28) | (26) | (26) | (24) | (25) | (26) | (26) | (26) | (26) | (23) | (23) | (24) | (21) | (23) | (25) | (25) | (28) | (28) | (29) | (30) | [207 | (9)] |

Daily, monthly and annual means are computed excluding hours with precipitation and, of course, all indeterminate entries. The number of hours or days used in computing each mean is shown in round brackets. Entries in square brackets are means for selected quiet days (see Introduction) and the figure in round brackets is the number of days used in computing this mean.

| 41 | KEW OF | REEVA | TORY | | | | | | V | | | tor 4·3 | 6 (meti | re ¹) | | | | | | | | | | W | Y 19 | 60 |
|-----|--------|-------|------|------|------|------|-------|------|----------|------|-------|---------|---------|-------------------|-------|-------|-------|-------|-------------|--------|--------|----------|-------------|-------|---------|-----|
| 7 | Hour (| | | | | | | | | | | | | | | | | | 10.10 | 10.00 | 20. 21 | 21 22 | 22.22 | 22.24 | | |
| - 1 | 0-1 | 1-2 | 2-3 | 3-4 | 4-5 | 5-6 | 6 - 7 | 7-8 | 8-9 | 9-10 | 10-11 | 11-12 | 12-13 | 13-14 | 14-15 | 15-16 | 16-17 | 17-18 | 18-19 | 19-20 | 20-21 | 21-22 | 22-23 | 23-24 | | ean |
| | | | | | | | | | | | vol | ts per | metre | | | | | | | | | | | | | |
| ı | 120 | 35 | 50 | 75 | 60 | 120 | 220 | 175 | Z+* | 210* | 245 | 175* | 230+ | 305 | 205 | 260 | 195 | 255 | 285 | 175 | 210 | 100 | 175 | 170 | 172 | (20 |
| : | 145 | 110 | 70 | 15 | 40 | 40* | 505* | Z±• | Z±* | Z±* | Z±• | 280* | 160* | 120* | 95 | 100 | 150 | 175 | 170 | 220 | 285 | 235 | 260 | 220 | 153 | (15 |
| | 150 | 125 | 100* | 110 | 110 | 175 | 280 | 370 | 365 | 280 | 245 | 210 | Z± | Z±* | Z±* | Z±* | Ζ± | 245* | 125 | 135 | 345 | 370 | 345 | 260 | 235 | (17 |
| 1 | 245 | 135 | 205 | 280 | 170 | 255 | 255 | 185 | 295 | 340 | 255 | 185 | 185 | 210 | 150 | 145 | 170 | 205 | 245 | 315 | 270 | 340 | 210 | 205 | 227 | (24 |
| | 175 | 170 | 205 | 210 | 205 | 220 | 305* | 440* | 455* | 390 | 260 | 210 | 230 | 235 | 220 | 205 | 195 | 145 | 150 | 210 | 255 | 100 | 50 | 235 | 204 | (2 |
| l | 170 | 185 | 125 | 150 | 135 | 235 | 315 | 585 | 560 | 340 | 260 | 235 | 210 | 205 | 185 | 170 | 160 | 135 | 120 | 125 | 150 | 85 | 95 | 170 | 213 | (2 |
| ı | 150 | 60 | 100 | 95 | 160 | 100 | 135 | 220 | 395 | 380 | 220 | 170 | 150 | 125 | 110 | 100 | 100 | 230 | 175 | 100 | 40 | 50 | 10 | 85 | 144 | (2 |
| . 1 | 135 | 205 | 125 | 75 | 35 | 75 | 160 | 175 | 295 | 255 | 170 | 160 | 145 | 100 | 135 | 170 | 170 | 195 | 230 | 125 | 145 | 100 | 25 | 70 | 145 | (24 |
| | 120 | 160 | 260 | 220 | 205 | 270 | 415 | 775 | 845 | 745 | 540 | 405 | 205 | 185 | 170 | 150 | 95* | 70+ | 425 | 475 | 100 | 100 | 145 | 185 | 323 | (2 |
| - [| 135 | 170 | 160 | 170 | 150 | 125 | 340 | 585 | 585 | 640 | 565 | 525 | 475 | 515 | 540 | 505 | 475 | 405 | 285 | 220 | 135 | 185 | 235 | 160 | 345 | (2 |
| - 1 | 110 | 75 | 75 | 70 | 135 | 170 | 340 | 515 | 355* | 525* | Z+* | Z±* | Z±* | Z±* | 640* | 515 | 610 | 540* | 305* | Z±* | Z±* | Z±* | Z±* | 230 | 259 | (1 |
| | 285 | 245 | 175 | 235 | 210 | Z±• | Z±• | Z±• | 85 | 95• | 40* | 315* | 220 | 340 | 295 | 450 | 455 | 345 | 340 | 425 | 600 | 590 | Z±* | Z±* | 331 | (1 |
| | Z±• | 120 | Z±• | 15* | Z±• | Z±• | Z±• | Z±* | Z±* | Z±* | Z±* | 75* | 230 | 255 | 255 | 235 | 260 | 260 | 270 | 270 | 455 | 450 | 425 | 330 | 293 | (1 |
| | 235 | 230 | 255 | 255 | 245 | 220 | 280 | 320 | 340 | 220 | 205 | 150 | 185 | 185 | 175 | 175 | 195 | 210 | 255 | 345 | 430 | 450 | 370 | 475 | 267 | (2 |
| | 330 | 295 | 175 | 125 | 125 | 100 | 75 | 205 | 305 | 625* | 235* | 100* | 205* | 220 | 175 | 230 | 260 | 255 | 260 | 270 | 295 | 345 | 280 | 185 | 225 | (2 |
| - 1 | 195 | 185 | 205 | 150 | 110 | 125 | 280 | 415 | 490 | 505 | 415 | 390 | 340 | 285 | 270 | 255 | 255 | 255 | 295 | 330 | 305 | 245 | 255 | 280 | 285 | (2 |
| - (| 145 | 120 | 185 | 160 | 110 | 255 | 390 | 370 | 395 | 530 | 525 | 405 | 390 | 355 | 315 | 295 | 285 | 320 | 320 | 395 | 370 | 370 | 450 | 390 | 327 | (2 |
| ı l | 305 | 345 | 285 | 195 | 195 | 150 | 340 | 430 | 405 | 490 | - | 405 | 285 | 355 | 405* | 355 | 425 | 390 | 355 | 380 | 390 | 295 | 295 | 255 | 333 | (2 |
| , 1 | 175 | 175 | 185 | 135 | 150 | 235 | 355 | 355 | 405 | Z±• | Z±* | Z±• | Z±* | Z±* | Z±* | 285* | 210* | 120* | Z±* | 285* | 145 | 205 | 205 | 220+ | 227 | (1 |
| 1 | -45* | 150* | -15+ | 135* | Z±• | Z±• | -280* | Z±• | 355* | 320* | 340* | Z±• | Z-* | Z-+ | Z-* | Z±* | 585* | 500* | 475* | 505* | -200+ | -225* | -60* | 15* | 0 | (|
| ì | -10* | 120* | 425 | 205 | 185* | 2300 | 160 | 330 | 340 | 260 | 260 | 245 | 315 | 210 | 255 | 160 | 345 | 355 | 260 | 355 | 405 | 330 | 405 | 380 | 300 | (2 |
| ì | 220 | 195 | 170* | 150 | 160 | 145 | 150 | 160 | 150 | 145 | 150 | 100 | 100 | 120 | 110 | 110 | 110 | 175 | 170 | 175 | 185 | 255 | 260 | 220 | 162 | (2 |
| | 170 | 205 | 100 | 110 | 195 | 220 | 380 | 455 | 390 | 255 | 185 | 160 | 150 | 185 | 170 | 175 | 210 | 195 | 285 | 255 | 220* | 205 | 125 | 95* | 217 | (2 |
| . | 35* | 70 | 135* | 100 | 100* | 425 | 505 | 550 | 500 | 430 | 380 | 355 | 285 | 305 | 285 | 280 | 260 | 255 | 230 | 260 | 195 | 145 | 125 | 85 | 298 | (2 |
| - | 100 | 170 | 125 | 220 | 270 | 175 | 260 | 320 | 320 | 205 | 160 | 160 | 125 | 170 | 205 | 170 | 205 | 175 | 170 | 175 | 260 | 255 | 185 | 195 | 199 | (2 |
| | 210 | 260 | 205 | 185 | 230 | 245 | 260 | 365 | 315 | 260 | 260 | 230 | 175 | 185 | 245 | 255 | 255 | 205 | 185 | 185 | 245 | 270 | 280 | 260 | 240 | (2 |
| · l | 205 | 150 | 135 | 125 | 150 | 145 | 210 | 345 | 270 | 255 | 205 | 135 | 120 | 255 | 255 | 230 | 175 | 185 | 185 | 185 | 185 | 150 | 195 | 145 | 191 | (2 |
| 3] | 110 | 220 | 320 | 245 | 235 | 285 | 185 | 255 | 260 | 255 | 255 | 210 | 125 | 135 | 95 | 95 | 145 | 220 | 260 | 285 | 305 | 295 | 235 | 365 | 225 | (2 |
|) (| 305 | 230 | 195 | 205 | 220 | 210 | 245 | 220 | 185 | 210 | 185 | 185 | 150 | 160 | 150 | 145 | 120 | 145 | 160 | 185 | 70 | 150 | 135 | 85 | 177 | (2 |
| ١ ١ | 95 | 100 | 85 | 70 | 75 | 255 | 370 | 315 | 370 | 340 | 305 | 315 | 305 | 305 | 305 | 280 | 235 | 270 | 205 | 70 | 85 | 85 | 40 | 75 | 206 | (2 |
| ١ | 100 | 100 | 40 | 60 | 40 | 95 | 220 | 315 | 340 | 260 | 365 | 365 | 305 | 245 | 245 | 235 | 235 | 270 | -10 | 0 | -45 | 75 | 75 | 60 | 166 | (2 |
| 7 | 179 | 171 | 172 | 152 | 153 | 193 | 274 | 358 | 368 | 347 | 288 | 257 | 225 | 237 | 216 | 230 | 246 | 240 | 229 (28) | 237 | 243 | 236 (29) | 210 (28) | 214 | 234 | (6: |
| _ | (27) | (28) | (26) | (29) | (27) | (26) | (26) | (26) | (25) | (23) | (23) | (23) | (24) | (26) | (26) | (28) | (27) | (26) | (48) | | | | <u> </u> | | | |
| | | | | | | | | | | | | | | | | | | | | l Mean | for s | electe | d quiet | davs | i 241 | (|

| 41 | KRW O | BERVAT | ORY | | | | | | | | Facto | r 4·17 | (metre | · 1 | | | | | | | | | | JU | E 19 | 60 |
|-------|------------|---------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|--------------|
| | Hour (| 3.M.T. 1-2 | 2-3 | 3-4 | 4-5 | 5-6 | 6-7 | 7-8 | 8-9 | 9-10 | 10.11 | 11.12 | 12-13 | 13-14 | 14.15 | 15.16 | 16.17 | 17.19 | 19.10 | 10.20 | 20-21 | 21-22 | 22.23 | 23.24 | 14 | ean |
| -+ | 0-1 | 1-2 | 4-3 | 3-4 | 7.3 | | <u> </u> | | <u> </u> | | | ta per | | | 47.43 | 13 10 | 10-17 | 17-10 | 10-19 | 13-20 | | | | 23 27 | | |
| 1 | 40 | 50 | 50 | 65 | 65 | 100 | 190 | 165 | 200 | 245 | 265 | 265 | 255 | 265 | 280 | 560 | 555 | 295 | 115 | 75 | -70 | 35 | 35 | 50 | 173 | (24) |
| 2 | 40 | 40 | 35 | 40 | 35 | 25 | 75 | 180 | 200 | 280 | - | | | - | - | - | - | 315 | 230 | 255 | 200 | 180 | 130 | 200 | 145 | (17) |
| 3 | 130 | 130 115 | 115 | 140 115 | 200 130 | 245 125 | 280 280 | 395 320 | 470 470 | 575 480 | 610 530 | 545 345 | 535 270 | 530 330 | 480 | 445 165 | 445 | 365 180 | 365 180 | 345 | 265 | 150 130 | 200 125 | 230 50 | 341 221 | (24) |
| 4 | 200 40 | -170 | 100 -10 | 65 | 85 | 175 | 40 | 130 | 230 | 150 | 90 | 75 | 65 | 85 | 205 90 | 100 | 165 100 | 115 | 130 | 215 15* | 85 175 | 180 | 140 | 115 | 95 | (24) (23) |
| 6 | 100 | 100 | 105 | 105 | 85 | 85 | 90 | 115 | 105 | 85 | 100 | 115 | 130 | 100 | 60* | 35• | 60* | 115 | 115 | 175 | 230 | 200 | 215 | 165 | 125 | (21) |
| 7 | 165 | 115 | 60 | 65 | 75 | 90 | 190 | 200 | 230 | Z±* | Z±• | Z±* | Z±* | 205 | 190 | 155 | 175 | 190 | 245 | 245 | 320 | 315 | 255 | 165 | 183 | (20) |
| 8 | 85 | 100 | 130 | 1150 | 100* | 115* | 85* | 50* | 80* | 60* | 90• | 150* | 85* | 130* | -10+ | 130* | 165* | 200 | 225 | 230 | 240 | 280 | 225 | 165 | 188 | (10) |
| 9 | 115 | 100 | 115 | 100 | 100 | 100 | 115 | 100* | 125 | 165* | 165* | 165 | Z±• | Z± | Z±* | Z±* | 180 | 130 | 165 | 205 | 315 | 295 | 230 | 190 | 161 | (17) |
| 10 | 150 | Z±• | Z±• | Z±• | Z±• | Z±• | Z±• | Z±+ | 415 | 330 | 245 | 230 | 165 | 180 | 150 | 180 | 140 | 165 | 165 | 180 | 225 | 180 | 190 | 190 | 205 | (17) |
| 11 | 165 | 155 | 165 | 130* | 65* | 165* | 65* | 85* | 35* | 130 | 175* | 225 | 240 | 240 | 200 | 175 | 165 | 165 | 200 | 230 | 255 | 230 | 305 | 265 | 206 | (17) |
| 12 | 270 | 205 | 180 | 180 | 130 | 125* | 115* | 105 | 175 | 165 | 150 | 130 | 115 | 105 | 100 | 130* | 150 | 215 | 225 | 240 | 100* | 225 | 290 | 265 | 181 | (20) |
| 13 | 215 | 180 | 165 | 175 | 190 | 200 | 230 | 345 | 280* | 230* | 225 | 200 | Z±• | Z±* | Z±• | Z±* | 200 | 180 | 180 | 205 | 265 | 280 | 330 | 305 | 226 | (18) |
| 14 | 205 | 140* | 140 | 130 | 150 | 165 | 240 | 270 | 270 | Z±* | Z±• | Z±* | Z±* | Z±* | Z±• | Z±* | Z±* | Z± | 315 | 290 | Z+ | 315 | 380 | 345 | 247 | (13) |
| 15 | 225 | 150 | 180 | 175 | 125 | 165 | 255 | 330 | 365 | 305 | 240 | 200 | 200 | 165 | 165 | 175 | 155 | 165 | 205 | 230 | 330 | 405 | 415 | 340 | 236 | (24) |
| 16 | 215 | 190* | 155 | 130 | 130 | 200* | 295* | 365 | 395 | 290 | 245 | 240 | 245 | 215 | 215 | 215 | 190 | 180 | 165 | 245 | 265 | 245 | 180 | 240 | 227 | (21) |
| 17 | 125 | 165 | 150 | 180 | 200 | 265 200 | 330 125 | 315 215 | 270 340 | 280 315 | 340 320 | 320 | 265 | 270 | 290 | 280 | 280 | 200 | 150 | 165 | 180 | 155 | 125 | 100 | 225 | (24) |
| 18 | 100 125 | 100 85 | 130 165 | 125 225 | 130 165 | 150 | 190 | 265 | 280 | 255 | 240 | 320 215 | 245 180 | 140 130 | 200 130 | 255 155 | 200 140 | 240 140 | 230 155 | 150 180 | 140 105 | 75 100 | 200 | 125 150 | 193 170 | (24) (24) |
| 19 | 215 | 230 | 230 | 230 | 265 | 255 | 340 | 455 | 430 | 420 | 365 | 345 | 280 | 295 | 315 | 315 | 295 | 280 | 280 | 125 | 200 | 155 | 165 90 | 50 | 269 | (24) |
| 21 | 50 | 35 | 35 | 35 | 50 | 100 | 150 | 280 | 405 | 420 | 460 | 505 | 435 | 390 | 480 | 460 | 390 | 355 | 280 | 280 | 280 | 280 | 255 | 180 | 275 | (24) |
| 22 | 100 | 65 | 85 | 130 | 200 | 230 | 245 | 240 | 295 | 330 | 295 | 295 | 290 | 245 | 280 | 245 | 245 | 245 | 200 | 255 | 215 | 100 | 75 | 35 | 206 | (24) |
| 23 | -50 | 10 | -35 | 65 | 290 | 415 | Z±* | Z±* | Z±+ | Z±* | 90* | 180* | 150* | 180* | 190* | Z±* | Z±• | Z±* | 165 | 190 | 230 | 230 | 205 | 100 | 151 | (12) |
| 24 | 165 | 150* | 75 | Z±• | Z± | 215 | 430* | 230 | 470 | 380 | 395 | 200 | 50 | 295* | 180* | 105* | 190* | 180* | 380* | 415* | 180* | 180* | 0 | 15 | 200 | (11) |
| 25 | 35 | 15 | 180 | 265 | 280 | 245 | 175 | 180 | 200 | 150 | 105 | 115 | 115 | 175 | 230 | 215 | Z±• | Z±* | 395 | 130 | 150 | 140 | 150 | 140 | 172 | (22) |
| 26 | 105 | 125 | 65 | 85 | 105 | 190 | 165 | 130 | 165 | 200 | 180 | 180 | 165 | 180 | 165 | 140 | 100 | 130 | 200 | 200 | 175 | 165 | 130 | 75 | 147 | (24) |
| 27 | 60 | 25 | 115 | 90 | 85 | 75* | 100* | 180 | 240 | 200 | 265 | 230 | 190 | 215 | 200 | 240 | 205 | 130 | 180 | 180 | 165* | 75* | 85 | 85 | 160 | (20) |
| 28 | 75 | 105 | 50 | 50* | 115 | 215 | 370 | 420 | 460 | 380 | 340 | 315 | 240 | 200 | 165* | 130 | 215 | 230 | 175 | 200 | 165 | 200 | 230 | 165 | 227 | (22) |
| 29 | 200 | 130 | 100 | 205 230 | 230 225 | 305 265 | 380 315 | 390 330 | 330 365 | 245 295 | 225 280 | 215 230 | 215 240 | 180 215 | 180 | 200 | 155 | 175 | 150 | 150 | 180 | 180 | 230 | 245 | 216 | (24) |
| 30 | 115 | 125 | 175 | 230 | 443 | 403 | 313 | 330 | 303 | 493 | 400 | 230 | 240 | 413 | 225 | 200 | 175 | 150 | 130 | 155 | 140 | 200 | 230 | 175 | 216 | (24) |
| Me en | 126 | 96 | 111 | 134 | 148 | 189 | 217 | 262 | 304 | 288 | 283 | 249 | 223 | 220 | 227 | 238 | 218 | 202 | 204 | 204 | 202 | 201 | 194 | 164 | 202 | (613) |
| | (30) | (26) | (29) | (25) | (26) | (24) | (22) | (25) | (26) | (24) | (23) | (25) | (23) | (23) | (21) | (21) | (23) | (26) | (29) | (28) | (26) | (28) | (30) | (30) | | |
| | | | | | | | | | | | | | | | | | | | | Mean | for s | elected | quiet | days | [218 | (10)] |

The potential gradient is reckoned as positive when the potential increases upwards. The symbol Z indicates either that the trace fluctuates rapidly so that estimation of a mean value is impracticable, or that the trace is limited by the range of the instrument (see Introduction): and the suffix +, - or ± indicates that the mean value is plainly positive, plainly negative, or indeterminate in sign. The occurrence of precipitation of any sort is indicated by an asterisk. Round brackets round any hourly mean indicates that the record during that hour is somehow imperfect.

Factor 4.72 (metre⁻¹) 41 KEW OBSERVATORY

| 41 | KEW OF | BSERVA | TORY | | | | | | | | Fac | ctor 4 | 72 (me | tre ¹) | | | | | | | | | | រូប | LY 19 | 960 |
|------|--------|---------------|------|-----------------|------|------|------|-------|------|-------|-------|--------|--------|--------------------|-------|-------|-------|---------|---------|-------|--------|---------|-------|-------|-------|--------------|
| | Hour (| G.M.T. 1-2 | 2-3 | 3-4 | 4-5 | 5-6 | 6-7 | 7-8 | 8-9 | 9-10 | 10-11 | 11-12 | 12-13 | 13-14 | 14-15 | 15-16 | 16-17 | 17 - 18 | 18 - 19 | 19-20 | 20-21 | 21 - 22 | 22-23 | 23-24 | , | <i>l</i> ean |
| | | | | | | | | | | | vol | ts per | metre | | | | | | | | | | | | | |
| 1 | 185 | 125 | 140 | 125 | 135 | 205 | 525 | 535 | 425 | 305 | 250 | 240 | 215 | 185* | -20• | 150* | 180 | 115 | 80 | 135 | 160 | 125 | 180 | 185 | 218 | (21) |
| 2 | 230 | 215 | 100 | 160 | 180 | 80 | 140 | 230 | 455 | 490 | 420 | 305 | 170 | 140 | 140 | 140 | 135 | 115 | 125 | 275 | 180 | 80 | 45 | 35 | 191 | (24) |
| 3 | 25 | 25 | 20 | 20 | 10 | 20 | 70 | 195 | 225 | 215 | 215 | 170 | 105 | 90 | 80 | 90 | 80 | 90 | 80 | 115 | 150 | 180 | 180 | 150 | 108 | (24) |
| 4 | 115 | 90 | 70 | 60 | 90 | 125 | 160 | 140 | 185 | 225 | 225 | 185 | 170* | 150* | 170 | 105 | 140 | 70 | 160 | 150 | 125 | 105 | 180 | 160 | 138 | (22) |
| 5 | 90 | 90 | 125 | 100* | 25* | 60* | 170* | 195• | 250 | 185* | 215 | 215* | 285* | 285 | 265* | 230* | 185* | 215* | 195 | 180 | 250 | 305 | 285 | 205 | 202 | (11) |
| 6 | 205 | 180 | 135 | 135 | 150 | 180 | 230 | 285 | 285 | 250 | 225* | 230 | 195* | 185* | 205 | 180* | 180 | 170 | 105* | 135 | 185 | 230 | 205 | 180 | 198 | (19) |
| 7 | 140 | 125 | 90 | 125 | 150 | 195 | 285 | 305 | 305 | 285 | Z±* | Z++ | Z±* | 230* | 215 | 195 | 140 | 180 | 105* | 180 | 90* | 135 | 105 | 125* | 186 | (17) |
| 8 | 70+ | -100* | -20* | 35* | 35* | 10* | 285* | -145* | 25* | -220* | 170* | 100* | -25* | 390* | Z±* | Z±• | 305 | Z±* | 160 | Z±+ | Z±* | 70 | 105 | 160 | 160 | (5) |
| 9 | 125 | 100 | 205 | 215 | 170 | 265 | 275 | 425 | 385 | Z±* | Z±* | 275* | 250* | Z±• | 250* | 250* | 250 | 225 | 240 | 150 | 320 | 340* | 265* | 230+ | 239 | (14) |
| 10 | 230* | 180* | 170* | 135* | 140* | 180* | 185* | 160* | 150* | 140 | 185* | 180* | 185* | 230 | 185 | 375 | 285* | Z± | 80* | 185 | 215 | 215 | 205 | 160 | 212 | (9) |
| 11 | 150 | 135 | 140 | 115 | 125* | Z±* | 185 | 215* | 20* | 150* | 90* | Z±• | 45* | Zt* | Z±• | Z±• | Z±• | Z±• | 105 | 55 | 150 | 195 | 225 | 240 | 154 | (11) |
| 12 | 230 | 215 | 215 | 225 | 240 | 275 | 340 | 390 | 390 | 365 | 275* | Z±* | 305 | 340 | 125 | Z±+ | Z±• | Z±• | Z±+ | 420 | 340 | 340 | 285 | 250 | 294 | (18) |
| 13 | 250 | 250* | 215* | 185* | 160* | 125* | 185* | 170* | 230* | 195* | 2150 | 265* | 180* | 215* | 185* | 205* | 215* | 225* | 260* | 250 | 285 | 320 | 195* | Z±• | 276 | (4) |
| 14 | Z+* | 225 | 260 | 265 | 265 | 275 | 330 | 410 | 390 | 340 | 375 | 275* | 285* | 275* | 330 | 260 | 250 | 195 | 285 | 320 | 355 | 410 | 385 | 365 | 315 | (20) |
| 15 | 320 | 295 | 285 | 250 | 285 | 295 | 375 | 390 | 375 | 275* | 320 | 275 | Z±* | Z±• | Z±• | 260* | 305 | 285 | 230 | 250 | 250 | 250 | 195 | 195 | 286 | (19) |
| 16 | 250 | 275 | 240 | 195 | 205 | 275 | 340 | 375 | 305 | 250 | 215 | 215 | 205 | 180 | 215 | 230 | 310 | 295 | 305 | 355 | 320 | 205 | 105 | 195 | 253 | (24) |
| 17 | 80* | -75* | -55* | -55* | Z±* | Z±* | Z±* | -20* | 100* | 185* | 250* | 260 | 195 | 195* | 170 | 185 | 185 | 205 | 230 | 250 | 225* | Z±* | Z±• | 215 | 211 | (9) |
| 18 | 205 | 170 | 135 | 125 | 150 | 195 | 195 | 340 | 310* | Z±• | Z±• | Z±* | 225* | 35* | 240 | 225* | 250 | 265 | 275 | 275 | 260 | 185 | 225 | 185 | 216 | (ì7) |
| 19 | 185 | 205 | 250 | 250 | 215 | 240 | 305 | 365 | 260 | 305 | 105* | Z±* | Z± | Zt* | Z±• | Z±• | Z±• | Z± | Z±• | Z± | 455 | 365 | 215 | 250 | 276 | (14) |
| 20 | 240 | 240 | 230 | 305 | 320 | 410 | 410 | 480 | 425 | 420 | 320 | 355 | 365 | 345 | 365 | 340 | 365 | 375 | 310 | 320 | 260 | 320 | 195 | 215 | 330 | (24) |
| 21 | 215 | 185 | 70* | 125 | 135 | 160 | 230 | 310 | 275 | 230 | 215* | 70 | 215 | 230 | 260 | 135 | 230 | 230 | 215 | 205 | 225 | 230 | 240 | 250 | 208 | (21) |
| 22 | 240 | 225 | 180 | 205 | 285 | 365 | 425 | 410 | 340 | Z±* | Z±* | Z±• | Z±• | Z±• | Z±* | Z±• | Z± | Z±• | Z+ | 305 | 305 | 400 | 355 | 205 | 303 | (14) |
| 23 | 160 | 125 | 150 | 140 | 160 | 230 | 295 | 365 | 365 | 355 | 265 | 250 | 240 | 215 | 170 | 150 | 180 | 230 | 195 | 205 | 285 | 320 | 345 | 310 | 238 | (24) |
| 24 | 330 | 320 | 260 | 265 | 390 | 390 | 320 | 310 | 285 | 260 | 225 | 180 | 115 | 150 | 180 | 125 | 150 | 260 | 240 | 330 | 355 | 365 | 265 | 180 | 260 | (24) |
| 25 | 150 | 195 | 215 | 215 | 230 | 250 | 265 | 285 | 310 | 305 | 305 | 265 | 240 | 230 | 215 | 225 | 240 | 215 | 260 | 275 | 330 | 295 | 340 | 295 | 256 | (24) |
| 26 | 240 | 215 | 260 | 230 | 265 | 305 | 385 | 375 | 435 | 400 | 285 | 260 | 260 | 230 | 215 | 170 | 170 | 215 | 250 | 340 | 455 | 285 | 285 | 295 | 284 | (24) |
| 27 | 305 | 275 | 250 | 250 | 260 | 320 | 410 | 455 | 355 | 390 | 320 | 265 | 260 | 230 | 185* | 285 | 180 | 180 | 355 | 340 | 295* | 345* | 320* | 250* | 299 | (19) |
| 28 | 115* | 70* | 80* | -65* | 205* | 140* | 185 | 215 | 195* | 215* | 215* | 250 | 250 | 230 | 240 | 250 | 225 | 230 | 285 | 260 | 250 | 230 | 215 | 135 | 230 | (15) |
| 29 | 150 | 125 | 135 | 115 | 105 | 125 | 195 | 240* | 320* | 340* | 250* | 230* | 250 | 265 | 275 | 275 | 275 | 285 | 295 | 265 | 250 | 310 | 365 | 310 | 230 | (19) |
| 30 | 185 | 180* | 185 | 180 | 180 | 205 | 285 | 345 | 320 | 310 | 215* | 180 | 160 | 185 | 225 | 265 | 205 | 180 | 225 | 250 | 355 | 435 | 390 | 375 | 256 | (22) |
| 31 | 340 | 310 | 250 | 250 | 345 | 320 | 320 | 320 | 305 | 240 | 180 | 160 | 135 | 115 | 160 | 140 | 140 | 160 | 195 | 225 | 355 | 410 | 435 | 345 | 256 | (24) |
| | 202 | 187 | 181 | 182 | 205 | 238 | 288 | 344 | 336 | 308 | 276 | 229 | 217 | 217 | 209 | 207 | 211 | 207 | 221 | 241 | 275 | 261 | 243 | 224 | 237 | (556) |
| Mean | (26) | (25) | (25) | (25) | (24) | (24) | (26) | (24) | (22) | (19) | (15) | (18) | (17) | (17) | (21) | (19) | (24) | (23) | (24) | (29) | (27) | (28) | (27) | (27) | | |
| | | | | | | | | | | | | | | | | | | | | Mean | for se | lected | quiet | days | [233 | (10)] |

| 41 | KEW O | BSERVAT | TORY | | | | | | | | Fact | or 4·55 | (metre | - 1 - 1 | | | | | | | | | | AUGU | ST 19 | 6 0 |
|------|-------------|---------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|--------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|--------------|-------------|-------------|-------|------------|
| | Hour (| G.M.T. 1-2 | 2-3 | 3-4 | 4-5 | 5-6 | 6-7 | 7-8 | 8-9 | 9-10 | 10-11 | 11-12 | 12-13 | 13-14 | 14-15 | 15-16 | 16-17 | 17-18 | 18-19 | 19-20 | 20-21 | 21-22 | 22-23 | 23-24 | , | le an |
| | | | | | | | | | | | vo. | lts per | metre | | | | | | | | | | | | | |
| 1 | 250 | 215 | 215 | 285 | 320 | 230 | 160* | 185 | 250 | 185 | Z±* | Z±• | 225* | 265* | 250 | 425 | 285 | 215 | 265 | 250 | 180 | 295 | 320 | 355 | 262 | (19) |
| 2 | 265 | 195 | 230 | 225 | 140 | 215 | 355 | 425 | 425 | 320 | 250 | Z±• | Z±* | Z±• | Z±* | 105 | 160 | 170 | 80 | 80 | 135 | 160 | 90 | 70 | 205 | (20) |
| 3 | 70 | 70 | 55 | 90 | 125 | 185 | 215 | 275 | 285 | 250 | 195 | 160 | 140* | 180 | 150 | 140 | 140 | 150 | 195 | 180 | 195 | 180 | 195 | 150 | 167 | (23) |
| 4 | 185 | 195 | 215 | 185 | 205 | 225 | 285 | 375 | 400 | 340 | 240 | 230 | 250 | 265 | 260 | 240* | 195 | 180 | 135 | 125 | 125 | 135 | 140 | 230 | 223 | (23) |
| 5 | 150 | 185 | 170 | 185 | 265 | 90 | 250 | 570 | 615 | 515 | 480 | 535 | 340 | 310 | 275 | 285 | 275 | 250 | 265 | 250 | 140 | 100 | 180 | 80 | 282 | (24) |
| 6 | 80 | 10 | 70 | 105 | 100 | 170 | 265 | 305 | 410 | 295 | 250 | 205 | 150 | 140 | 160 | 215 | 230 | 215 | 160 | 105 | 45 | 55 | 80 | 105 | 164 | (24) |
| 7 | 135 | 90 | 105 | 90 | 90 | 90 | 125 | 140 | 140 | 125 | 105 | 125 | 160 | Z+ | Z± | Z± | Z± | Z±* | Z±* | Z-* | 160* | 170 | 230 | 205 | 133 | (16) |
| 8 | 140 | 150 | 160 | 140 | 135 | 150 | 285 | 305 | 355 | 320 | 345 | 355 | 265 | 305 | 260 | 240 | 205 | 180 | 180 | 180 | 150 | 285 | 295 | 265 | 235 | (24) |
| 9 | 185 | 170 | 135 | 160 | 160 | 240 | 355 | 465 | 375 | 240 | 260 | 250 | 215 | Z±* | 205 | 170 | 195 | 215 | 215 | Z±* | 295 | 305 | 355 | 365 | 251 | (22) |
| 10 | 305 | 275 | 275 | 240 | 285 | 320 | 410* | 470* | 265* | -• | -• | -• | -• | -• | | -+ | -• | 295 | 225 | 185* | 195 | 140 | 215 | 160 | 244 | (12) |
| 11 | 240 | 170 | 275 | 310* | 365* | 375* | 285* | 505* | 535* | -35* | -195* | -240* | -110+ | 285* | ~260* | Z-+ | -415* | -315* | -295* | -460* | -140* | -65 * | -140* | -155* | 228 | (3) |
| 12 | -35* | 90* | 180* | 185 | 225 | 320 | 465 | 615 | 605 | 515 | 400 | 410 | 320 | 285 | 240 | 260 | 215 | 230 | 195 | 205 | 180 | 185 | 180 | 170 | 305 | (21) |
| 13 | 170 | 180 | 140 | 185 | 195 | 225 | 275 | 425 | 400 | 355 | 275 | 260 | 215 | 160 | 160 | 185 | 170 | 140* | 70* | 55* | 135 | 115 | 230* | Z±* | 222 | (19) |
| 14 | -35* | -460° | 55* | 20* | -100* | -20* | 160 | 250 | 240 | 240 | 260 | 205 | 170 | 160 | 180 | 180 | 170 | -10 | 330 | 390* | 355 | 425 | 400 | 340 | 254 | (16) |
| 15 | 310 | 295 | 250 | 230 | 215 | 250 | 285 | 425* | 355 | 310 | 305 | 275 | 230 | 195 | 215 | 205 | 205 | 205 | 250 | 205 | 185 | 215 | 230 | 225 | 245 | (23) |
| 16 | 230 | 215 | 240 | 285 | 320 | 320 | 390 | 500 | 390 | 295 | 285* | 0• | 90* | 230 | 225 | 230 | 195 | 185 | 160 | 125* | 150 | 170 | 180 | 205 | 256 | (20) |
| 17 | 160 | 35 | 60 | -20 | 70 | 80 | 355 | 390 | 390 | 390 | 310 | 225 | 170 | 140 | 160 | 180 | 215 | 195 | 160 | 195 | 305 | 425 | 390 | 240 | 217 | (24) |
| 18 | 275 | 260 | 225 | 260 | 225 | 265 | 215 | 225 | 285* | 305* | 305* | 355 | 230 | Z±* | 535* | Z+• | Z+* | -35 | 425 | 295 | 410 | 435 | 265 | 205 | 267 | (17) |
| 19 | 135 | 90 | 215 | 205 | 250 | 305 | 465 | 455 | 385 | 310 | 275 | 250 | 185 | 195 | 180 | 180 | 140 | 135 | 100 | 80 | 160* | 140* | 185* | 205 | 226 | (21) |
| 20 | 195* | 140* | 105* | 125* | 140 | 195 | 275 | 250 | 285 | 275 | 240 | 230 | 195 | 205 | 140 | 160 | 125 | 150 | 215 | 285 | 320 | 285 | 275* | 265* | 221 | (18) |
| 21 | 260* | 250 | 285* | 225 | 215 | 250 | 250 | 285 | 285 | 250 | 230 | 195 | 170 | 180 | 180 | 170 | 195 | 215 | 265 | 240 | 260 | 250 | 285 | 250 | 231 | (21) |
| 22 | 240 | 215 | 170 | 215 | 240 | 250 | 285* | 265* | 310* | Z±• | 345 | 265 | 240 | 250 | 265 | 305 | 285 | 285 | 275 | 260 | 285 | 265 | 305 | 285 | 262 | (20) |
| 23 | 260 | 225 | 250 | 225 | 285 | 320 | 365 | 385 | 345 | 345* | 275* | 275* | 265* | 265* | 240* | 215* | 105* | 260* | 320* | 435 | 455 | 400 | 385 | 330 | 333 | (14) |
| 24 | 295 | 310* | 285* | 285* | 240* | 230* | 275* | 285* | 265* 400 | 260* 400 | 260 330 | 260 320 | 260 275 | 250 265 | 275 230 | 260 205 | 265 | 275 | 275 | 250* | 205* | 205 | 240 | 180 | 254 | (13) |
| 25 | 195 | 215* | 240 | 250 | 250 | 285 | 320 | 385 | | | | | | | | | 185 | 205 | 250 | 305 | 385 | 390 | 390 | 310 | 294 | (23) |
| 26 | 385 | 305 | 345 | 305 | 230 | 225 | 215 | Z± | Z± | Z± | Z±* | Z±* | Z±* | Z±* | Z±* | 260 | 390 | 265 | 355 | 390 | 355 | 340 | 305 | 355 | 314 | (16) |
| 27 | 425 | 400 | 260 | 230 | 265 | 320 | 390 | 550 | 425 | 365* | Z±• | 265 | 230 | 215 | 195 | 205 | 205 | 230 | 250 | 310 | 330 | 305 | 265 | 240 | 296 | (22) |
| 28 | 230 | 205 | 195 | 185 | 180 | 180 | 180* | 275 | 305 | Z±* | Z+ | 215 | 170 | Z±* | 160 | 180 | 180 | 160 | 180 | 260 | 285 | 320 | 340 | 305 | 225 | (20) |
| 29 | 265 | 230 | 240 | 215 | 195 | 205* | 250* | 230* | 215* 330 | 225° 320 | 180* 295* | 265* 260 | 250 230 | 265 250 | 250* 215 | 285 195 | 285 | 345 | 340 | 320 | 355 | 310 | 265 | 250 | 276 | (16) |
| 30 | 215 | 205 | 195 | 195 | 195 | 260 | 285 | 285 | | | | | | | _ | | 150 | 265 | Z±* | 295 | 265 | 225 | 275 | 285 | 245 | (22) |
| 31 | 160 | 185 | 205 | 215 | 230 | 310 | 425 | 545 | 525 | 425 | 310 | 305 | 320 | 285 | 285 | 275 | 230 | 180 | 180 | 310 | 330 | 320 | 260 | 230 | 294 | (24) |
| Mean | 221 (27) | 191 (25) | 197 (26) | 196 (27) | 205 (28) | 232 (27) | 303 (24) | 369 (24) | 372 (24) | 318 (21) | 283 (20) | 268 (23) | 228 (23) | 225 (21) | 212 (23) | 220 (25) | 211 (26) | 206 (26) | 228 (26) | 242 (23) | 252 (27) | 256 (29) | 261 (27) | 236 (28) | 245 | (600) |
| | | | | | | | | | | | | | | | | | | | | Mean | for se | lected | quiet | days | [243 | (10)] |

Daily, monthly and annual means are computed excluding hours with precipitation and, of course, all indeterminate entries. The number of hours or days used in computing each mean is shown in round brackets. Entries in square brackets are means for selected quiet days (see Introduction) and the figure in round brackets is the number of days used in computing this mean.

41 KEW OBSERVATORY Factor 4.65 (metre⁻¹) SEPTEMBER 1960

| 1 220 240 198 100 120 120 120 120 120 120 120 120 120 | 41 | KEW OF | PERAVI | ORI | | | | | | | | | | | | | | | | | | | | | | | |
|---|-------------|--------|----------|-------|------|------|------|------|------|-------|-------|-------|---------|-------|-------|-------|-------|-------|-------|-------|-------|--------|--------|-------|-------|------|-------|
| 1 220 220 195 175 140 175 225* 295* 295* 295* 290* 245* 220* 395 375* 72** Z1** Z1** Z2** Z2** Z2** 280* 220* 235 225 220 255 220 255 221 235 235 235 235 235 235 235 235 235 235 | | Hour C | 3. M. T. | | | | | | | | | | | | | | | 1. 1. | 17 10 | 10 10 | 10.00 | 20 21 | 21.22 | 22.22 | 22-24 | | la an |
| 1 220 220 195 175 140 175 225° 295° 290° 245° 220° 395 375 225° 245° 245° 245° 245° 245° 245° 245 | | 0-1 | 1-2 | 2-3 | 3-4 | 4-5 | 5-6 | 6-7 | 7-8 | 8-9 | 9-10 | 10-11 | 11-12 | 12-13 | 13-14 | 14-15 | 15-16 | 16-17 | 17-18 | 18-19 | 19-20 | 20-21 | 21-22 | 22-23 | 23-24 | M | ean |
| 1 220 220 195 175 140 175 225° 295° 290° 245° 220° 395 375 225° 245° 245° 245° 245° 245° 245° 245 | | | | | | | | | | | | VO. | lts per | metre | | | | | | | | | | | | | |
| 2 280 238 210 200 220 225 245 252 270 225 245 265 270 245 410 255 255 245 24 | | 220 | 220 | 105 | 175 | 140 | 175 | 2250 | 205# | 290+ | 2450 | | - | | Z±* | Z±* | Z±* | Z±* | Z±* | 280* | 220* | 235 | 225 | 220 | 265 | 224 | (11) |
| \$\frac{4}{4}\$ \begin{array}{c c c c c c c c c c c c c c c c c c c | | | | | | | | | | | | | | | 26.5* | 245* | 255* | 280* | 255* | 245* | 305 | 270 | 255 | 245 | 210 | 275 | (15) |
| 4 0 | - | | | | | | | | | | | | | | | 255 | 225 | 265 | 325 | 445 | 535 | 575 | 560 | 535 | 490 | 361 | (14) |
| \$\begin{align*} \begin{align*} \begi | 3 | | - | | | | | | | | | | | | | | Z±* | Z-* | 125 | 245 | 340 | 395 | 430 | 350 | 315 | 326 | (19) |
| 6 270 220 245 265 270 325 435 480° 375° 420° 435° 350° 325° 350° 325° 405° 315° 315° 420° 405° 350° 360° 220° 215° 215° 225° 225° 225° 325° 340° 335° 350° 325° 350° 325° 350° 325° 350° 325° 325° 325° 325° 325° 320° 321° 325° 320° 321° 325° 320° 321° 325° 320° 321° 325° 320° 321° 325° 320° 321° 325° 320° 321° 325° 320° 320° 325° 320° 320° 325° 320° 320° 325° 320° 320° 325° 320° 320° 320° 325° 320° 320° 325° 320° 320° 325° 320° 320° 325° 320° 320° 320° 325° 320° 320° 325° 320° 320° 325° 320° 320° 320° 325° 320° 320° 320° 320° 320° 320° 325° 320° 320° 320° 320° 320° 320° 320° 320 | - | | | | | | | | | | | | 375 | 365 | 385 | 365 | 385 | 280 | 315 | 295 | 280 | 280 | 350 | 325 | 335 | 341 | (24) |
| 0 270 270 285 270 285 270 365 350 455 435 350 455 435 350 350 350 350 350 350 350 350 350 3 | 3 | 333 | 140 | 103 | 173 | 223 | | 0.0 | 5-5 | | | | | | | | | | | | | | | | | | |
| 7 195* 185* 220* 225* 265* 365* 350* 455* 435* 335* 405* 350* 350* 315* 325* 290* 265* 290* 225* 265* 280* 340* 350* 315* 325* 290* 265* 290* 225* 265* 280* 340* 350* 315* 325* 290* 265* 290* 225* 265* 290* 225* 265* 290* 220* 265* 245* 270* 270* 280* 290* 295* 270* 220* 185* 200* 175* 195* 210* 235* 245* 280* 270* 315* 315* 335* 315* 340* 277* (280* 290* 290* 290* 270* 295* 210* 235* 245* 280* 225* 315* 335* 345* 315* 340* 277* (280* 290* 290* 290* 270* 295* 315* 385* 375* 365* 315* 335* 315* 340* 277* (280* 290* 290* 290* 270* 2 | 6 | 270 | 220 | 245 | 265 | 270 | 325 | 435 | 480* | 375* | 420* | 435* | 350* | | | | | | | | | | | | | | (7) |
| 8 305 235 195 195 245 270 270 280 305 295 295 305 280 295 295 290 290 270 295 315* 385 375 365 315 305 293 (2 245 290 235 210 235 265 325 325 350 280 305 315 265 245 225 225 210 235 245 280 325 350 335 315 340 277 (2 311 290 220 265 245 270 270 270 280 290 295 270 220 185 200 175 195 210 255 245 220 290 420 375 315 361 270 270 280 315 280 315 340 277 (2 313 105 280 210 265 125 315 490 780 780 780 780 780 780 780 780 780 78 | | 195* | 185* | 220* | 225* | 265* | 365* | 350* | 455* | 435* | 335 | | | | | | | | | | | | | | | | (15) |
| 9 363 195 195 195 245 290 235 210 235 265 325 325 325 326 305 315 280 305 315 285 245 225 210 235 245 280 325 350 335 315 340 277 (2 11 290 220 265 245 270 270 270 280 290 295 270 220 185 200 175 195 210 255 245 225 225 245 260 305 315 350 335 315 340 277 (2 12 315 295 245 295 245 245 265 340 475 545 500 505 420 360 315 350 365 280 225 140 105 85 155 155 300 (2 13 105 280 210 265 125 315 490 780 760 675 545 480 445 455 430 435 305 280 235 125 200 305 315 245 367 (2 14 225 220 175 245 265 155 295 280 165 140 60 10° 155 60° 155 165° 55° 70° 10° 10° 265° 315 280° 280 210 10° 10° 265° 315 280° 280° 210° 140 200 200 270 490 595 535 475 385 270 265 225 210 210 220 290 335 210° 35° 55° 225 2280 165 140 60 10° 155 60° 155 165° 55° 70° 10° 10° 265° 315 280° 280 281 165 140° 10° 265° 315 280° 280° 210° 140 200 200 270 490 595 535 475 385 270 265 225 210 210 220 290 335 210° 35° 55° 225 2280 20 175 195 210 210 220 290 335 210° 35° 55° 225 280° 313 (1)° 195 175 195 210 225 270 295 360 395 315 255 235 245 280° 280 280 280 280 280° 295° 35° 455 456 45 85 220 210 210 220 290 335 210° 35° 55° 225° 225° 230° 315 315 260° 225 210° 210° 220° 295 360° 480 545 315 255 225 290 (2 18 220 195 125 70 70 95 80° 220 265 295 315 315 280° 225 257 270 255 335 140° 85° 140° 165 125 125° 165° 90° 70° 10° 195° 10° 10° 155 200° 200 140 165° 365° 245 270° 210° 200 125° 138° 140° 140° 140° 140° 140° 140° 140° 150° 140° 140° 150° 140° 140° 140° 140° 140° 140° 140° 14 | 8 | 350 | 315 | 325 | 360 | 315 | 315 | 335 | 350 | 375 | 420 | | | | | | | | | | | | | | | | (24) |
| 11 290 220 265 245 270 270 270 270 280 290 295 270 220 185 200 175 195 210 255 245 220 290 420 375 315 261 (2 3 15 295 245 245 245 245 245 265 340 475 545 500 505 420 360 315 350 365 280 225 140 105 85 155 125 300 (2 1 3 105 280 210 265 125 315 490 780 760 675 545 480 445 455 430 435 305 280 225 125 200 305 315 245 245 245 220 175 245 265 155 295 280 165 140 60 10° 155 60° 155 165° 55° 70° 10° 10° 10° 265° 315 280° 204 (1 15 235° 210° 140 200 200 270 490 595 535 475 385 270 265 225 210 210 220 290 335 210° 35° 55° 235° 280° 313 (1 17 195 175 195 210 225 270 295 360 395 315 255 235 245 245 280 395 315 280° 225 210 170 220 290 335 210° 35° 55° 235° 280° 313 (1 195 210 225 270 295 360 395 315 255 235 245 245 280 280 280 280 280 270 295 360 480 545 315 255 225 210 220 225 270 270 255 335 140 85 85° 195 220 225 270 270 255 335 140 85 85° 140 125 200 225 270 270 255 355 140° 165° 125° 125° 165° -90 70° 10° 10° 155 200° 200 140 165° 365° 245 270 210 200 125 138 (1 195 210 225 270 295 360 385 315° 255 235° 345 485 280° 225 255 270 270 255 335 140 85 85° 140 125 200 225 270° 270 270 255 335 140 85 85° 140 125 200 225 270° 270° 275 345 140° 10° 10° 10° 10° 10° 10° 10° 10° 10° 1 | 9 | 365 | 235 | 195 | 195 | 245 | 270 | 280 | 305 | 295 | 295 | 305 | 280 | 295 | | | | | | | | | | | | | (23) |
| 112 315 295 245 295 245 295 245 265 340 475 545 500 505 420 360 315 350 365 280 225 140 105 85 155 125 300 67 140 105 285 315 245 245 245 245 245 245 245 245 245 24 | 10 | 245 | 290 | 235 | 210 | 235 | 265 | 325 | 350 | 280 | 305 | 315 | 265 | 245 | 225 | 225 | 210 | 235 | 245 | 280 | 325 | 350 | 335 | 315 | 340 | 277 | (24) |
| 112 315 295 245 295 245 295 245 295 265 340 475 545 500 505 420 360 315 350 365 280 225 140 105 85 155 125 300 67 140 105 285 315 280 210 225 220 175 245 265 155 295 280 165 140 60 104 155 660 155 165* 55* 70* 10* 10* 265* 315 280* 204 (1 15 235* 210* 140 200 200 270 490 595 535 475 385 270 265 225 210 210 220 290 335 210* 335* 250* 235* 280* 313 (1 15* 175* 195* 210* 125* 200 305 315* 225* 220 175* 175* 195* 210* 225* 270 270* 305 315* 225* 230* 313 (1 15* 175* 195* 210* 125* 200* 305 315* 255* 235* 280* 313 (1 15* 175* 195* 210* 125* 270* 295* 360 395 315* 255* 235* 245* 280* 280* 280* 280* 270* 295* 360* 480 545* 315* 225* 220* 210* 220* 290* 335* 140* 85* 85* 195* 220* 294 (2 1 15* 175* 195* 10* 125* 5.5* 5.5* 5.5* 5.5* 5.5* 5.5* 5.5* 5 | | | | | | | | | 200 | 200 | 205 | 270 | 220 | 102 | 200 | 175 | 105 | 210 | 255 | 245 | 220 | 200 | 420 | 375 | 315 | 261 | (24) |
| 13 | | | | | | | | | | | | | | | | | | | | | | | | | | | (24) |
| 14 225 220 175 245 265 155 295 280 165 140 60 10* 155 60* 155 165* 55* 70* 10* 10* 265* 315 280* 280* 280* 280* 155 235* 210* 140 200 200 270 490 595 535 475 385 270 265 225 210 210 220 290 335 210* 35* 55* 235* 280* 280* 313 (1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 | | 7 | | | | | | | | | | | | | | | | | | | | | | | | | (24) |
| 15 235* 210* 140 200 200 270 490 595 535 475 385 270 255 225 210 210 220 290 335 210* 35* 55* 235* 280* 313 (1 16 | | | | | | | | | | | | | | | | | | | | | | | | | | | (14) |
| 16 | | | | | | | | | | | | | | | | | | | | | | | | | | | (17) |
| 17 195 175 195 210 225 270 295 360 395 315 255 235 245 280 280 280 270 295 360 480 545 315 255 225 290 (2) 18 220 195 125 70 70 95 80° 220 265 295 315 315 280 225 255 270 270 270 255 335 140 85 85 140 125 202 (2) 20 22 22 23 20 210 225 195 125 125 105° 140 150 0 -35° 10° -10 -120 21° 89 (2) 22 23 35 95 140 165 125 125 -165° -90 70° 105° 195° 10° 155 200° 200 140 165° 365° 245 270 210 200 125 138 (1) 22 360° 305° 280° 295° 360° 295° 335° 465° 430° 335° 340 280 280 280° 305° 280° 295° 360° 295° 335° 465° 430° 335° 340 280 245 315 315 315 360 405 365 270° 155 -45° 225° 105° 309 (1) 23 360° 305° 280° 295° 360° 210° 225° 375 350 350 365 290 335 290 295 315 335 325 290 360 265 350 475 385 338 430 365° 245 130 335 385 480 350 315 270 305 305 315 315 315 335 305 375 445 410 430 430 410 395 351 (2) 25 385 385 410 420 365 245 130 335 385 480 350 315 270 305 305 315 315 315 335 305 375 445 410 430 430 410 395 351 (2) 28 290 295 175 165 185 295 410 505 500 575 525 360 335 265 295 265 255 20 210 305 210 255 245 385 315 265 385 (2) 299 265 175 165 185 295 410 505 500 575 525 360 335 265 255 260 305 305 375 245 195 410 405 315 265 385 (2) 299 265 175 165 185 295 410 505 500 575 525 360 335 265 295 265 255 280 305 305 315 315 315 315 315 315 315 315 315 31 | 15 | 235* | 210 | 140 | 200 | 200 | 270 | 490 | 595 | 535 | 475 | 385 | 270 | 205 | 225 | 210 | 210 | 220 | 290 | 333 | 210 | 33* | 33* | 233* | 200- | 313 | (1/) |
| 17 | 16 | 7+0 | 7+0 | -125# | 1750 | -350 | 7++ | 7:10 | 7.10 | -1550 | -145* | 140* | 140* | 315* | 195* | 295* | 435* | 315* | 225 | 395 | 435 | 405* | 85* | 195 | 220 | 294 | (5) |
| 18 | | | | | | | | | 360 | | 315 | 255 | 235 | 245 | 280 | 280 | 280 | 270 | 295 | 360 | 480 | 545 | 315 | 255 | 225 | 290 | (24) |
| 95 85 55 55 25 25 45 45 85 820 210 225 195 125 125 105* 140 150 0 -35* 10* -10 -120 2±* 89 (2 22 21 350 35 95 140 165 125 125 -165* -90 70* 105* 195* 10* 155 200* 200 140 165* 365* 245 270 210 200 125 138 (1 21 70 35 85 105 140 225 350 335 335 335 335 335 335 335 335 340 280 245 315 315 315 360 405 365* 245 270 210 200 125 138 (1 22 360* 305* 280* 295* 360* 295* 335* 465* 430* 335* 340 280 245 315 315 315 315 360 405 365 270* 155 -45* 225* 105* 309 (1 23 70* 70* 55* -80* 165* 200* 210* 225* 375 350 350 365 290 335 290 295 315 325 290 360 265 350 475 385 380 (1 24 430 305 270 210 255 95 235 420 455 490 475 385 280 255 265 255 220 210 305 210 325 150 35 315 285 (2 2 360* 420 365 245 130 335 385 480 350 315 270 305 315 315 335 305 375 445 410 430 430 410 395 351 (2 2 3 360* 420 365 245* 130 335 385 480 350 315 270 305 315 315 335 305 375 445 410 430 430 410 395 351 (2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 | | | | | | | | | | | 295 | 315 | 315 | 280 | 225 | 255 | 270 | 270 | 255 | 335 | 140 | 85 | 85 | 140 | 125 | 202 | (23) |
| 20 | | | | | | | | | | | | | 225 | 195 | 125 | 125 | 105* | 140 | 150 | 0 | -35* | 10* | -10 | -120 | Z±* | 89 | (20) |
| 21 | | | | | | | | | | | | 105* | 195* | 10* | 155 | 200* | 200 | 140 | 165* | 365* | 245 | 270 | 210 | 200 | 125 | 138 | (15) |
| 22 360° 305° 280° 295° 360° 295° 335° 465° 430° 335° 340 280 280° 295° 315 315 315 360 405 365 270° 155 -45° 225° 105° 309 (1 2 3 3 70° 70° 55° -80° 165° 200° 210° 225° 375 350 350 365 290 335 290 295 315 325 290 360 265 350 475 385 318 25 360 420 365 245 130 335 385 480 350 315 270 305 305 315 315 315 335 305 375 445 410 430 430 410 395 351 (2 2 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 | | - | | | | | | | | | | | | | | | | | | | | | 20.54 | 4000 | ~ | 2== | (10) |
| 23 | 21 | 70 | 35 | | | | | | | | | | | | | | | | | | | | | | | | (19) |
| 24 430 305 270 210 255 95 235 420 455 490 475 385 280 255 265 255 220 210 305 210 325 150 35 315 285 (225) 360 420 365 245 130 335 385 480 350 315 270 305 305 315 315 335 305 375 445 410 430 430 410 395 351 (227) 315 270 295 245 280 305 405 385 420 525 420 385 385 430 430 440 490 420 480 490 420 480 495 665 445 385 315 484 (227) 425 175 165 185 295 410 505 500 575 525 360 335 265 255 280 305 360 430 -10 245 210 255 245 325 310 (229) 330 435 350 140 80 -35 -20 290 435 410 505 50 524 224 455 420 385 315 315 325 325 320 325 325 325 320 325 325 325 320 325 325 325 320 325 325 325 320 325 325 325 320 325 325 325 320 325 325 325 320 325 325 325 320 325 325 325 320 325 325 325 320 325 325 325 320 325 325 325 320 325 325 325 325 320 325 325 325 325 320 325 325 325 320 325 325 325 325 320 325 325 325 325 325 325 325 325 325 325 | 22 | 360* | 305* | 280* | | | | | | | | | | | | | | | | | | | | | | | (10) |
| 25 360 420 365 245 130 335 385 480 350 315 270 305 305 315 315 335 305 375 445 410 430 430 410 395 351 (2 26 385 385 410 420 430 475 560 675 735 645 605 505 445 480 490 430 490 420 480 405 605 445 385 315 484 (2 27 315 270 295 245 280 305 405 385 420 525 420 385 385 430 430 465 490 525 430 435 410 405 315 265 385 (2 28 245 175 165 185 295 410 505 500 575 525 360 335 265 255 280 305 360 430 -10 245 210 255 245 325 310 (2 29 265 175 155 140 130 225 385 405 22* 22* 455 420 735 22* 22* 490 375 245 195 410 340 365 490 455 343 (3 30 435 350 140 80 -35 -20 290 435 410 505 22* 22* 22* 455 420 735 22* 22* 490 375 245 195 410 340 365 490 455 343 (2 30 436 430 430 450 430 450 430 450 430 430 450 430 430 450 430 430 450 430 450 430 450 430 450 450 450 450 450 450 450 450 450 45 | 23 | 70* | 70* | 55* | -80• | 165• | 200* | | | | | | | | | | | | | | | | | | | | (16) |
| 26 385 385 410 420 430 475 560 675 735 645 605 505 445 480 490 430 490 420 480 405 605 445 385 315 270 315 270 295 245 280 305 405 385 420 525 420 385 385 430 430 465 490 525 430 435 410 405 315 265 385 (2) 28 245 175 165 185 295 410 505 500 575 525 360 335 265 255 280 305 360 430 -10 245 210 255 245 325 310 (2) 29 265 175 155 140 130 225 385 405 21* 21* 455 420 735 21* 21* 490 375 245 195 410 340 365 490 455 343 (2) 30 435 350 140 80 -35 -20 290 435 410 505 21* 21* 21* 455 420 735 21* 21* 490 375 245 195 410 340 365 490 455 343 (2) 30 435 350 140 80 -35 -20 290 435 410 505 21* 21* 21* 185* 85* -110* 2-* 21* 175* 545 640* 21* 210* 395* 480 301 (1) 30 21* 31* 300 21* 31* 31* 300 21* 31* 31* 31* 300 21* 31* 31* 300 21* 31* 31* 31* 300 21* 31* 31* 31* 300 21* 31* 31* 31* 300 21* 31* 31* 31* 300 21* 31* 31* 31* 300 21* 31* 31* 31* 31* 300 21* 31* 31* 31* 31* 31* 31* 31* 31* 31* 3 | 24 | 430 | | 270 | 210 | | | | | | | | | | | | | | | | | | | | | | (24) |
| 27 315 270 295 245 280 305 405 385 420 525 420 385 385 430 430 465 490 525 430 435 410 405 315 265 385 (22 28 245 175 165 185 295 410 505 500 575 525 360 335 265 255 280 305 360 430 -10 245 210 255 245 325 310 (22 28 265 175 155 140 130 225 385 405 21* 21* 455 420 735 21* 21* 490 375 245 195 410 340 365 490 455 343 (22 385 350 140 80 -35 -20 290 435 410 505 21* 21* 21* 21* 25* 28* 85* -110* 2-* 21* 175* 545 640* 21* 210* 395* 480 301 (1 | 25 | 360 | 420 | 365 | 245 | 130 | 335 | 385 | 480 | 350 | 315 | 270 | 305 | 305 | 315 | 315 | 335 | 305 | 375 | 445 | 410 | 430 | 430 | 410 | 395 | 351 | (24) |
| 27 315 270 295 245 280 305 405 385 420 525 420 385 385 430 430 465 490 525 430 435 410 405 315 265 385 (22 28 245 175 165 185 295 410 505 500 575 525 360 335 265 255 280 305 360 430 -10 245 210 255 245 325 310 (22 28 265 175 155 140 130 225 385 405 21* 21* 455 420 735 21* 21* 490 375 245 195 410 340 365 490 455 343 (22 385 350 140 80 -35 -20 290 435 410 505 21* 21* 21* 21* 25* 28* 85* -110* 2-* 21* 175* 545 640* 21* 210* 395* 480 301 (1 | 26 | 205 | 205 | 410 | 420 | 420 | 475 | EEO | 675 | 735 | 645 | 605 | 505 | 445 | 480 | 400 | 430 | 400 | 420 | 480 | 405 | 605 | 445 | 385 | 315 | 484 | (24) |
| 28 245 175 165 185 295 410 505 500 575 525 360 335 265 255 280 305 360 430 -10 245 210 255 245 325 310 (22) 265 175 155 140 130 225 385 405 Z±* Z±* 455 420 735 Z±* Z±* 490 375 245 195 410 340 365 490 455 343 (23) 243 350 140 80 -35 -20 290 435 410 505 Z±* Z±* Z±* 455 85* -110* Z** Z±* 175* 545 640* Z±* 210* 395* 480 301 (13*) Mean 276 229 211 209 205 239 340 407 379 395 366 341 314 297 288 310 296 296 300 315 314 303 283 300 299 (56*) (24) (25) (25) (25) (24) (25) (25) (23) (22) (23) (22) (23) (24) (22) (23) (24) (22) (23) (24) (22) (23) (24) (24) (25) (25) (24) (25) (25) (25) (25) (25) (25) (25) (25 | | | | | | | | | | | | | | | | | | | | | | | | | | | (24) |
| 29 265 175 155 140 130 225 385 405 Z±* Z± 455 420 735 Z±* Z±* 490 375 245 195 410 340 365 490 455 343 (22) 380 435 350 140 80 -35 -20 290 435 410 505 Z±* Z±* Z±* 185* 85* -110* Z** Z±* 175* 545 640* Z±* 210* 395* 480 301 (1) 301 (| | | | | | _ | - | | | | | | | | | | | | _ | | | | | | | | (24) |
| 30 435 350 140 80 -35 -20 290 435 410 505 Z±* Z±* 185* 85* -110* Z-* Z±* 175* 545 640* Z±* 210* 395* 480 301 (1 Mean 276 229 211 209 205 239 340 407 379 395 366 341 314 297 288 310 296 296 300 315 314 303 283 300 299 (56 (24) (25) (25) (25) (24) (25) (25) (25) (23) (22) (23) (23) (24) (22) (23) (24) (22) (23) (24) (24) (25) (25) (26) (26) (26) (26) (26) (26) (26) (26 | | | | | | | | | | | | | | | | | | | | | | | | | | | (20) |
| Mean 276 229 211 209 205 239 340 407 379 395 366 341 314 297 288 310 296 296 300 315 314 303 283 300 299 (56 (24) (25) (25) (25) (25) (25) (23) (22) (23) (22) (23) (24) (22) (23) (24) (22) (23) (24) (24) (25) | | | | | | | | | | _ | | | | | _ | _ | | | | | | | | | | | (12) |
| Mean (24) (25) (25) (24) (25) (25) (23) (22) (23) (22) (23) (24) (22) (23) (24) (22) (23) (24) (24) (25) (25) (26) (27) (28) (28) (29) (29) (29) (29) (29) (29) (29) (29 | 30 | 435 | 350 | 140 | 80 | -33 | -20 | 290 | 733 | 410 | 303 | 21 | 2.1 | 103 | 83. | 110- | | 21 | 1/3 | 545 | 040 | 2,1 | 410 | 333 | 100 | 001 | () |
| (24) (25) (25) (24) (25) (25) (23) (22) (23) (22) (23) (24) (22) (23) (24) (24) (25) (25) (26) (27) (28) (28) (29) (29) (29) (29) (29) (29) (29) (29 | | 276 | 229 | 211 | 209 | 205 | 239 | 340 | 407 | 379 | 395 | 366 | 341 | 314 | 297 | 288 | 310 | 296 | 296 | 300 | 315 | 314 | 303 | 283 | 300 | 299 | (563) |
| Mean for selected quiet days [290 (1 | ME AL | | | | | | (25) | (23) | (22) | (23) | (23) | (22) | (23) | (24) | (22) | (23) | (22) | (23) | (24) | (24) | (22) | (23) | (24) | (24) | (24) | | |
| | | L | | | | | | | | | | | | | | | | | | | Mean | for se | lected | quiet | days | [290 | (10)] |

POTENTIAL GRADIENT (reduced to open level surface)
Mean values for periods of sixty minutes between exact hours

| 1 2 3 4 5 | 360 80° Z±° 195 385 420 350° | 350 140 2±* 140 280 350 | 2-3 265 195 85* 210 225 | 3-4 295 155 175* 195 | 4-5 175 175 210° | 5-6 130 255 | 6-7 | 7-8 | 8-9 | 9-10 | 10-11 | 11-12 | 12.12 | | | | | | | | | | | | | |
|-----------------------|--|--|--|----------------------------------|---------------------------|-------------------|------|------------------|------------------------------|-------------|-------------|------------|----------|-------|----------|----------|----------|-------|---------|---------------|----------|--------|----------|-------|------|---------------|
| 2 3 4 5 | 80* Z±* 195 385 420 350* | 140 Z±* 140 280 | 195 85* 210 | 155 175* | 175 | | | 545 | | | | | 12-13 | 13-14 | 14-15 | 15-16 | 16-17 | 17-18 | 18-19 | 19-20 | 20-21 | 21-22 | 22-23 | 23-24 | M | le a n |
| 2 3 4 5 | 80* Z±* 195 385 420 350* | 140 Z±* 140 280 | 195 85* 210 | 155 175* | 175 | | | EAE | | | vol | ta per | metre | | | | | | | | | | | | | |
| 3 4 5 | Z±* 195 385 420 350* | Z±• 140 280 | 85° 210 | 175* | | 255 | | 545 | 525 | 280* | Z±* | 385* | 410* | 420* | 480 | 410 | 465 | 490 | 595 | 550 | 80* | 55* | -130* | 25* | 390 | (15) |
| | 195 385 420 350* | 140 280 | 210 | | 2100 | -55 | 220 | 235 | 280 | 315 | 315 | 305 | 315 | 335 | 335 | 315 | 315* | 315* | -110+ | -535* | 150* | 195* | 80* | 105* | 268 | (14) |
| | 385 420 350* | 280 | | 195 | 410 | 255* | 270* | 270* | 140* | 255 | 265 | 270 | 225 | 210 | 210 | 245 | 225 | 225 | 410 | 475 | 435 | 340 | 280 | 225 | 286 | (15) |
| | 420 350* | | 225 | | 210 | 220 | 220 | 420 | 480 | 490 | 435 | 435 | 295 | 315 | 340 | 340 | 350* | 210* | 350 | 295 | 385 | 420 | 405 | 420 | 328 | (22) |
| 6 | 350* | 350 | | 225* | Z±• | 115 | 175 | 220+ | 305 | 350 | 295* | 280* | 235* | 255* | 280 | 270 | 290 | 405 | 535 | 570 | 505 | 490 | 410 | 410 | 353 | (17) |
| 7 | 350* | | 405 | 360 | 325 | 340 | 405 | 515 | 605 | 560 | 405 | 325 | 325 | 305* | 290* | 265* | 295* | -75* | 445 | 395 | 335* | 305* | 500* | Z±* | 412 | (15) |
| | | 350+ | 245* | -260* | 185* | 280* | 365 | 420 | 570 | 575 | 560 | 515 | 535 | 525 | 475 | 480 | 385 | 280 | 315* | 365* | 395 | 360 | 395 | 315 | 447 | (16) |
| á | 315 | 235 | 245 | 315 | 350 | 155* | 70* | -330* | 195* | 255 | Z±* | Z±* | Z±* | Z±* | Z±* | -375* | Z±* | -175* | Z±* | Z±* | 365 | Z±* | Z±* | 490* | 297 | (7) |
| او | Z±+ | Z±* | Z±• | Z±* | Z±• | -220* | Z±* | Z±• | -275* | Z-* | Z-* | Z-+ | 105 | 60 | 175 | 140 | 80 | 45* | -20* | 15 | 45 | 165 | 165 | 175 | 113 | (10) |
| 10 | -30+ | -100 | -75 | -65 | 0 | -75* | -35* | 0• | 25* | -90* | 85* | 130 | 85* | 85* | -145 | 15* | -90* | 55* | 150 | 210* | 295 | 315 | 350 | 255 | 121 | (10) |
| ., 1 | 195 | 35 | 155 | 295 | 265 | 265 | 335 | 430 | 525 | 515 | 420 | 385 | 350 | 295 | 325 | 315 | 280 | 335 | 360 | 265 | 280 | 235 | 95 | 140 | 296 | (24) |
| 11 | 165 | 165 | 175 | 270 | 155 | 155 | 255 | 430 | 595 | 595 | 545 | 515 | 420 | 365 | 340 | 340 | 325 | 385 | 420 | 385 | 225 | 35 | 93 | -20 | 302 | (24) |
| 13 | 140 | 255 | 315 | 305 | 290 | 315 | 525 | 665 | 755 | 665 | 700 | 515 | 365 | 325 | 385 | 500 | 480 | 445 | 290* | 295* | 375 | 290 | 245 | 225 | 413 | (22) |
| 14 | 265 | 315 | 305 | 305 | 350 | 340 | 280 | 350 | 535 | 445* | 410* | 490 | 420 | 410 | 480* | Z±* | 140* | 595* | Z± | Z± | 105 | 280 | 245 | 200 | 325 | (16) |
| 15 | 185 | 80 | 70 | 35 | 80 | 130 | 175 | 210 | 305 | 385 | 365 | 365 | 385 | 270 | 335 | Z±* | Z±* | 290 | 395 | 445 | 420 | 360 | 350 | 290 | 269 | (22) |
| | | | | | | | | | • • • | | | | | | | | | | | | | | | | | |
| 16 | 225 | 290 | 255 | 155 | 245 | 225 | 245 | 185 | 185 | 210 | 235 | 270 | 245 | 270 | 350 | 295* | 405 | 125 | Z±* | 155 | 475 | 405 | 395 | 315 | 267 | (22) |
| 17 | 105 | 245 | 290 | 585 | 605 | 675 | 645 | 690 | 780 | 745 | 760 | 475 | 455 | 395 | 455 | 480 | 475* | 315* | 295* | 225* | 235* | 255* | 295* | 335* | 524 | (16) |
| 18 | 335* | 325 | 340 | 350 | 365 | 335 | 335 | 435 | 430 | 395 | 340 | 295 Z±• | 245* | 290 | 325 | 375 | 340 | 235 | 430 | 435 | 405 | 435 | 410 | 395 | 365 | (22) |
| 19 | 350 | 270 | 140* | Z±* | 165* | 85* | 305* | 385 350 | 455 * 545 * | 365 365* | 270* 315 | 290* | Z+* | 55* | 115* | 185 | 295 | 410 | 55* | 185* | 265* | -75* | -350* | Z±* | 323 | (7) |
| 20 | Z-* | -625 ° | -405* | 125* | 85* | 245 | 255 | 350 | 343* | 303* | 313 | 290- | , ,,, | 550* | 550* | Z±* | Z±* | Z±* | 225* | 80* | Z±* | Z±* | 85* | 55* | 291 | (4) |
| 21 | 35* | 105* | 140* | 130 | 125 | 140 | 265 | 455 | 475 | 385 | 545 | 735 | 825 | 805 | 770 | 805 | 630 | 715 | 685 | 715 | 700 | 630 | 735 | 685 | 569 | (21) |
| 22 | 700 | 685 | 620 | 465 | 235* | 155* | 155* | 35• | | -460* | 105* | 315* | 225* | 245* | 270* | 220* | 515 | 525 | 620 | 585 | 505 | 420 | 405* | 210* | 564 | (10) |
| 23 | 405* | 500* | 500* | 435* | 490+ | 445* | 280 | 455 | 525* | 435* | 455 | 525 | 480 | 465 | 430 | 475 | 475 | 385 | 385 | 405 | 340 | Z±* | Z±* | -20 | 395 | (14) |
| 24 | 280 | 225 | 335 | 290 | 265 | 225 | 245 | 325 | 315* | 365 | 350* | 245* | 225* | Z±* | Z±* | 280 | Z±* | Z±* | Z±* | Z±* | 70 | 225 | 55 | 200* | 245 | (13) |
| 25 | 255 | 270 | 225 | 225* | Z±* | Z±• | 165* | 280 ° | 155* | 305* | 335 | 280 | 295 | 305 | 350 | 350 | 335 | 385 | 420 | 405 | 490 | 420 | 305 | 125* | 339 | (16) |
| 26 | -30 | 290 | 85 | 435 | 225 | -45* | 70° | -460+ | Z-* | Z±* | Z±* | -275* | -350* | -405* | -330* | 140* | 225* | 315* | 225* | 475* | 340* | 45* | -350* | -200* | 20 | (5) |
| 27 | 35* | 25* | 25* | 45* | 85 | 95 | 115 | 165 | 220* | 290* | 335 | 340 | 280 | 295 | 365* | 385 | 405 | 360 | 475* | 595* | Z±* | Z±* | 435* | 475 | 278 | (12) |
| 28 | 325 | 385 | 265* | 395* | 385 | 445 | 560 | 655 | 585* | 420* | 85 | 210 | Z±* | 340 | 375 | 455 | 455 | 405 | 500 | 385 | 280 | 420 | 155 | 25 | 360 | (19) |
| 29 | 55 | 125 | -110 | 10 | -110 | -85 | 155* | 220* | -495 | Z±* | -220* | -370* | -790* | -590* | -660* | Z-* | Z-* | -790* | -425* | -495* | -275* | 130* | 95* | 185* | -19 | (6) |
| 30 | 265 | 210 | 265 | 155 | 175 | 70 | 70 | 60 | 225 | 360 | 365 | 325 | 295 | 385 | 405 | 420 | 335* | 85* | 0* | -35* | Z±* | Z±* | Z±* | 245 | 253 | (17) |
| 31 | 45 | 235 | 265 | 245 | 150 | 315 | 350 | 475 | 490 | 505 | 490 | 455 | 350 | 395 | 410 | 420 | 435* | 465* | 475* | 375* | 200* | 125* | 70* | 115* | 350 | (16) |
| | 248 | 262 | 230 | 252 | 222 | 236 | 297 | 403 | 474 | 436 | 413 | 389 | 367 | 353 | 353 | 380 | 376 | 376 | 447 | 405 | 355 | 347 | 294 | 264 | 336 | (469) |
| ean | (21) | (22) | (22) | (21) | (22) | (21) | (22) | (22) | (17) | (19) | (20) | (21) | (19) | | (21) | (21) | (17) | (17) | (15) | (16) | (20) | (18) | (17) | (18) | | |
| | ·/ | 1/ | <u> </u> | | <u> </u> | | | | <u> </u> | | <u> </u> | | <u> </u> | | <u> </u> | <u> </u> | <u> </u> | | · · · / | `` | <u> </u> | | <u> </u> | | / | |
| | | | | | | | | | | | | | | | | | | | | Mean | for se | lected | quiet | days | [341 | (8) |

The potential gradient is reckoned as positive when the potential increases upwards. The symbol Z indicates either that the trace fluctuates rapidly so that estimation of a mean value is impracticable, or that the trace is limited by the range of the instrument (see Introduction): and the suffix +, - or ± indicates that the mean value is plainly positive, plainly negative, or indeterminate in sign. The occurrence of precipitation of any sort is indicated by an asterisk. Round brackets round any hourly mean indicates that the record during that hour is somehow imperfect.

41 KEW OBSERVATORY Factor 4.46 (metre-1) NOVEMBER 1960 Hour G.M.T. 2-3 3-4 4-5 6-7 7-8 8-9 5-6 9-10 10-11 11-12 12-13 13-14 14-15 15-16 16-17 17-18 18-19 19-20 20-21 21-22 22-23 23-24 0-1 Mean volts per metre 165* 85* 200* 85* 175* 175* 315* 260* 295* 105* (3) 175* 880 870 1130 (20) (13) 315* 485* 355* 7++ 3 4 85* Z±* 250* Z±* 130* Z±* Z±* Z±4 Z±* Z± 295* Z±* 245* Z±• (16) 36.5 Z±4 Z±* Z±• Z±* 420* -65 -185 -230 (19) -275 -260 (24)(24) 70* -110 (24) (16) -665* 200* 25* -30 45* 50* 150* Z±• Z± (11) (12) 210* 270* Z±• Z±• 400* 460• Z±* 480* Z±* Z-* 165* 7++ 7+* -30+ 270* (15) 14 15 355* 435* 85* -30* (15)(21) 210* 7++ (21) -20* Z±* Z±4 (23) 295* 235* 295* Z±4 Ζŧ 7+0 7++ 670* 670* 7.30 7±+ 7+4 7+ 7+ (16) 385* -054 130* 400+ 36.50 (11) 355* 1.04 ~754 (17) 270* -185* -300+ -5004 -315* -240+ -220* -120+ (13) 260* 385* 105* 24 25 -155* 155* 7+* 7++ 280* 140* 7±* 280* (10) 455* 225* (20) -1404 425* -260 60* (14)245* (24)245* 450* 30 -454 130* 105* 210* 185* (12)429 (502) Mean (16) (19) (18) (20) (22) (14) (17)(17) (18)(19) (15) (23) (24) (25) (27) (26) (25) (27 (24)(21) (22) (23)Mean for selected quiet days [424 (8)

POTENTIAL GRADIENT (reduced to open level surface)
Mean values for periods of sixty minutes between exact hours

| 41 | KEW O | BSERVA | TORY | | | | | | | | Fact | or 4·20 | (metr | e - ;) | | | | | | | | | | DECEMB | ER 1 | 960 |
|---------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|-----------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|------|--------|
| | Hour | G.M.T. | | | | | | | | | | | 1 | | | | | | | | | | | | ١. | |
| | 0-1 | 1-2 | 2-3 | 3-4 | 4-5 | 5-6 | 6-7 | 7-8 | 8-9 | 9-10 | 10-11 | 11-12 | 12-13 | 13-14 | 14-15 | 15-16 | 16-17 | 17-18 | 18-19 | 19-20 | 20-21 | 21 - 22 | 22-23 | 23-24 | | Mean |
| | | | | | | | | | | | vo | its per | metre | | | | | | | | | | | | | |
| 1 | 115 | 90 | 65 | 50 | 40 | 50* | -80* | 155 | 325 | 400 | 360 | 365 | 325 | 295 | 295 | 275 | 295 | 300 | 270 | 65* | Z±* | Z±* | 260 | Zŧ | 238 | (18 |
| 2 | Z±* | 90* | 145 | 165 | 185 | 235 | 295 | 425 | 585 | 555 | 530 | 495 | 450 | 455 | 475 | 495 | 505 | 490 | 320 | 275 | 340 | 455 | 585 | 520 | 408 | (22 |
| 3 | 340 | 245 | -175* | 15* | ~50* | 0+ | -35* | 10* | -155* | -60* | 65• | 65• | 35• | −70 ◆ | -35* | -15* | ~35* | -60 | 35* | 35* | -70 | -70 | ~60 | -85 | 167 | (3 |
| 4 | -70* | -35* | -215* | -200* | -390* | -260* | 15* | -105* | -385* | -215* | 100* | 230 | 275 | 295 | 340 | 325 | 360 | 405 | 390 | 360 | 350 | 320 | 295 | 230 | 321 | (13 |
| 5 | 275 | 245 | 195 | 180 | 195 | 210 | 295 | 385 | 570 | 585 | 620 | 490 | 475 | 520 | 560 | 895 | 995 | 830 | 880 | 635 | 605 | 645 | 685 | 610 | 524 | (24 |
| 6 | 455 | 645 | 650 | 605 | 455 | 80 | 285 | 490 | 620* | 520° | 605* | -590* | 620* | 4550 | 850 | 850 | 775 | 715 | 865* | 830* | 740 | 685 | 760 | 700 | 617 | (15 |
| 7 | 490 | 540 | 780 | 790 | 405 | 115 | 260 | 425 | 505 | 650 | 635* | 595 | 480 | 455 | 520 | 570 | 605 | 530 | 400 | 465 | 455 | 440 | 570 | 505 | 502 | (23 |
| á | 520 | 490 | 335 | 320 | 340 | 335 | 235 | 100 | 520 | 710 | 765 | 660 | 560 | 295• | Z±• | Z±● | 130 | 630 | 405 | -130 | 385 | 65 | 365 | 465 | 392 | (19 |
| 9 | 360 | 50 | -695 | -750 | -765 | -385 | -50 | -140 | -260* | 340* | 425 | 295 | 450 | 505 | 455 | 490 | 490 | 630 | 725 | 700 | 635 | 765* | 530* | 165 | 179 | (20 |
| 10 | 165* | -225* | -200* | -105* | 105* | 130* | 40 | 75 | 165* | 310 | 130 | 220 | 145 | 210 | 195• | 255* | 115* | 140 | 325 | 365 | 405 | 425 | 400 | 400 | 275 | (11) |
| 11 | 400 | 285 | 255 | 255 | 185 | 230 | 295 | 365 | 440 | 670 | 455 | 425 | 425 | 430 | 475 | 450 | 375 | 320 | 260 | 505 | 555 | 800 | 780 | 805 | 435 | (24) |
| 12 | 630 | 180 | 360 | 505 | 425 | 475* | 230* | 260 | 440* | 635* | 0* | 320 | 145* | 295 | 455 | 555 | 335 | 465 | 700 | 540 | 505 | 340 | 300 | 360 | 434 | (16 |
| 13 | 325 | 270 | 165 | 390 | 325 | 440 | 740 | 560 | 735 | 440 | 620 | 495 | 440 | 495 | 530 | 455 | 850* | 1075* | 765 | 700* | 390* | 520 | 635 | 675 | 501 | (20 |
| 14 | 145 | 145 | 75 | 205 | 35 | 245* | 75* | 100* | 750* | 800* | 1025 | 915 | 780* | 650 | 360* | 145* | 40* | 65 | 165 | 325 | 235 | 205 | 130 | 10 | 263 | (14 |
| 15 | 50 | 35 | ő | 130 | 300 | 255 | 260 | 360 | 450 | 455* | 465 | 400 | 325* | 325* | 400* | 115* | 310 | 270 | 400 | 360 | 300* | 455 | 700 | 780 | 332 | (18) |
| 16 | 545 | 340 | 295 | 325 | 455 | 490 | 360 | 295 | 375 | 475 | 585 | 675 | 710 | 765 | 775 | 530 | 775 | 850 | 595 | 425 | 450 | 490 | 605 | 740 | 539 | (24 |
| 17 | 430 | 620 | 520 | 570 | 555 | 515 | 555 | 650 | 675 | 635 | 650 | 670 | 715 | 570 | 515 | 455 | 425 | 400 | 260* | 260 | 275* | 195* | 165* | 170* | 547 | (19 |
| 18 | 165* | 245* | 130* | 100* | 115* | 235* | 340* | 375* | 650* | 505* | 360* | 490 | 375 | 230 | 220* | 285* | 325* | 455* | 65* | 10* | 0* | -25* | 145* | 815* | 303 | (2 |
| 19 | 710 | 620* | 295* | 15* | 230* | 100* | -165* | 65* | -420° | -835• | -765* | Z-• | -155* | 275* | 455 | 560 | 560 | 620 | 760 | 715 | 825 | 775 | 580 | 365 | 621 | (10 |
| 20 | 140* | -45* | -350* | -435* | -590* | -25* | 40* | 0• | 115* | -175* | 660* | Z±• | Z±* | Z±• | Z±* | Z±* | Z± | 100 | 455 | 455 | 260 | -235* | -45 | -45 | 197 | (6) |
| 21 | -260 | -35* | -260* | Z-* | Z±* | Z-* | 90• | 55 | 245 | 360 | 415 | 425 | 405 | 425 | 36 0 | 430 | 295 | 145 | 275 | 255 | 320 | 440 | 115 | 80 | 266 | (18 |
| 22 | -35 | 115 | 230 | 140 | 170 | 255 | 295 | 310 | 405 | 495 | 610 | 585 | 620 | 620 | 635 | 760 | 540 | 430 | 360 | 520 | 455 | 375 | 560 | 850 | 429 | (24 |
| 23 | 475 | 490 | 455 | 390 | 390 | 375 | 295 | 360* | 400* | 430* | 520* | 325* | 325* | 155 | 325 | 415 | 230 | 195* | -50* | 0* | 165* | -385* | Z±* | Z-* | 363 | (11 |
| 24 | -95 | -35 | 210 | 205 | 115* | 55* | 65* | 295* | 425* | 480 | 585 | 295 | 415 | 505 | 365 | 400 | 260 | 360 | 425 | 425 | 230 | 185 | 270 | 195 | 289 | (18) |
| 25 | 270 | 270 | 210 | 430 | 375 | 405 | 340 | 245 | 390 | 390 | 415 | 465 | 605 | 490 | 480 | 555 | 540 | 450 | 450 | 375 | 425 | 195* | 115 | 105 | 382 | (23 |
| 26 | 105 | 65 | 100* | 90* | 50* | -35* | -85* | Z±• | Z±• | Z±• | 285 | 390 | 405 | 400 | 490 | 560 | 710 | 710 | 585 | 630 | 585 | 515 | 475 | 390 | 456 | (16 |
| 27 | 300 | 310 | 295 | 245 | 220 | 230 | 220 | 50 | 145 | 490 | 630 | 580 | 585 | 620 | 620 | 715 | 790 | 870 | 995 | 960 | 980 | 930 | 945 | 1010 | 572 | (24 |
| 28 | 840 | 750 | 605 | 480 | 365 | 365 | 285 | 65 | 230 | 300 | 75* | -385* | Z-* | Z-* | Z±* | 390* | 530 | 540 | 50 | 490 | 520 | 300 | 245 | 490 | 414 | (18) |
| 29 | 295 | 195 | 245 | 285 | 205 | 285 | 360 | Z± | 725 | 735 | 980 | 945 | 585 | 630 | 855 | 570 | 765 | 765 | 800 | 715 | 585 | 635 | 765 | 545 | 586 | (23 |
| 30 | 530* | 455* | 50* | 295* | 205* | 185* | 155* | 210* | 255* | 360* | 780* | 630 | 310 | 540 | 700 | 715 | 710 | 825 | 805 | 700 | 750 | 715 | 945 | 920 | 713 | (13 |
| 31 | 970 | 775 | 765 | 580 | 605 | 580 | 610 | 750 | 880 | 815 | 750 | 670 | 555 | 530 | 505 | 555 | 585 | 775 | 685 | 685 | 650 | 650 | 685 | 715 | 680 | (24) |
| ean | 331 (24) | 309 (23) | 280 (22) | 295 (22) | 260 (21) | 279 (18) | 314 (19) | 285 (18) | 482 (17) | 530 (17) | 588 (19) | 532 (22) | 469 (22) | 465 (22) | 523 (23) | 547 (23) | 532 (24) | 500 (26) | 509 (26) | 480 (25) | 510 (24) | 494 (23) | 489 (26) | 463 (27) | 440 | (533) |
| | | | | | | | | | | | | | | | | | | | | Mean | for se | lected | quiet | days | [414 | (9) |
| nua i Jean | 242 (305) | 223 (299) | 216 (297) | 216 (297) | 215 (297) | 246 (279) | 304 (279) | 370 (276) | 408 (265) | 404 (254) | 387 (254) | 354 (268) | 329 (263) | 326 (259) | 328 (267) | 337 (274) | 331 (274) | 338 (278) | 342 (294) | 329 (293) | 334 (297) | 319 (305) | 299 (303) | 279 (309) | 309 | (6786) |
| | | | | | | | | | | | | | L | | | | | T. | nnua I | | for sel | acted | miet | dave | | 318] |

Daily, monthly and annual means are computed excluding hours with precipitation and, of course, all indeterminate entries. The number of hours or days used in computing each mean is shown in round brackets. Entries in square brackets are means for selected quiet days (see Introduction) and the figure in round brackets is the number of days used in computing this mean.

42 KEW OBSERVATORY

| | JAN | UARY | FEB | RUARY | MA | RCH | AF | TRIL |) | WY | J | UNE |
|--------------------|-----------|--|-----------|--|-----------|--|-----------|--|-----------|--|-----------|---|
| | Character | Duration of negative potential gradient | Character | Duration of negative potential gradient | Character | Duration of negative potential gradient | Character | Duration of negative potential gradient | Character | Duration of negative potential gradient | Character | Duration o negative potential gradient |
| | | hr. | _ | hr. |
| 1 | 1 | 0.7 | 2 | 3⋅9 | 1 | 0.7 | 1 | 0.7 | 1 | 0.4 | 1 | 0.8 |
| 2 | 1 | 2.0 | 1 | 1 · 3 | 1 | 0.2 | 1 | 0.3 | 1 | 1.0 | - | - |
| 3 | 1 | 0 · 5 | 1 | 2 · 4 | 1 | 1.3 | 2 | 6.2 | 1 | 2.7 | 0 | 0.0 |
| 4 | 0 | 0.0 | 1 | 2 · 5 | 1 | 0.7 | 1 | 2.2 | 0 | 0.0 | 0 | 0.0 |
| 5 | 0 | 0.0 | 1 | 0.7 | 1 | 1.0 | 1 | 0.2 | 1 | 0.2 | 1 | 2.5 |
| 6 | 0 | 0.0 | 1 | 0.5 | 2 | 3.7 | 2 | 4.2 | 1 | 0.2 | 1 | 0.3 |
| 7 | ĭ | 1.1 | Ō | 0.0 | 1 | 2.0 | 1 | 2.4 | 1 | 0.4 | 1 | 1.8 |
| 8 | i | 1.5 | ŏ | 0.0 | l i | 0 · 2 | 0 | 0.0 | 1 | 0.2 | 1 | 0.7 |
| 9 | ō | 0.0 | ő | 0.0 | 2 | 7 · 5 | 1 | 0.3 | 1 | 0.3 | 1 | 2.0 |
| 10 | ŏ | 0.0 | Ŏ | 0.0 | 1 | 1.6 | 1 | 0⋅8 | 0 | 0.0 | 1 | 2.0 |
| 11 | 2 | 6.1 | 1 | 1.8 | 1 | 1 · 2 | 1 | 0.2 | 1 | 2.7 | 1 | 0.1 |
| | 2 | 2.2 | 0 | 0.0 | 1 | 0.3 | i | 2.3 | 2 | 3.0 | î | 0.3 |
| 12 | 1 | 0.6 | _ | - | l i | 2.6 | î | 1.2 | 2 | 5.0 | î | 1.0 |
| 13 | 2 | 4.3 | 2 | 3.5 | i | 0.5 | i | 0.7 | ō | 0.0 | 2 | 4.3 |
| 14 | - | 2.6 | í | 0.2 | Ô | 0.0 | ō | 0.0 | 1 | 0.4 | ō | 0.0 |
| 15 | 1 | _ | _ | | 1 | | | | _ | | | |
| 16 | 2 | 4.3 | 0 | 0.0 | 1 | 2 · 2 | 1 | 1.6 | 0 | 0.0 | Ō | 0.0 |
| 17 | 2 | 3.3 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 |
| 18 | 1 | 2 5 | i | 0.7 | 0 | 0.0 | 1 | 0.1 | 0 | 0.0 | 1 | 0.5 |
| 19 | 1 | 2 · 3 | 1 | 1 · 9 | 1 | 0.2 | 1 | 0.2 | 2 | 4.5 | O . | 0.0 |
| 20 | 1 | 1 · 5 | 2 | 8.0 | 0 | 0.0 | 0 | 0.0 | 2 | 11.4 | 0 | 0.0 |
| .21 | 2 | 5.0 | 0 | 0.0 | 1 | 0.1 | 1 | 0.2 | 1 | 1 · 2 | 0 | 0.0 |
| 22 | 1 | 0 · 2 | 2 | 3 · 2 | 1 | 1 · 5 | 1 | 0.2 | 0 | 0.0 | 1 | 0.4 |
| 23 | 2 | 8 2 | 2 | 6·3 | 0 | 0.0 | 1 | 0.6 | 0 | 0.0 | 2 | 5.6 |
| 24 | 2 | 11.4 | 2 | 4.8 | 1 | 0.2 | 1 | 2.1 | 1 | 0.3 | 1 | 2.4 |
| 25 | ō | 0.0 | 2 | 10.0 | 2 | 5·4 | 1 | 0.4 | 0 | 0.0 | 1 | 1.6 |
| 26 | 0 | 0.0 | 2 | 4.9 | 2 | 15-4 | 1 | 0.8 | 0 | 0.0 | 1 | 0.1 |
| 27 | 2 | 6.8 | i | 0.1 | 2 | 13.1 | Ô | 0.0 | ő | 0.0 | i | 0.6 |
| 28 | 2 | 8.7 | i | 0.0 | 2 | 6.7 | ŏ | 0.0 | ő | 0.0 | î | 0.4 |
| 29 | i | 2.2 | 1 | 0.1 | 2 | 7.9 | ŏ | 0.0 | i | 0.1 | ô | 0.0 |
| 30 | i | 1.5 | • | • • | î | 0.7 | 0 | 0.0 | î | 0.2 | ŏ | 0.0 |
| | - | _ | | | · - | · | | • • | - | i i | • | • • |
| 31 | 0 | 0.0 | | | 1 | 0.5 | | | 1 | 1.9 | | |
| Total | - | 79 · 5 | - | 56 · 8 | - | 77 · 1 | - | 27 · 9 | - | 36 · 1 | | 27 · 1 |
| No. of ays used | - | 31 | - | 28 | - | 31 | _ | 30 | - | 31 | - | 29 |
| Mean | - | 2.6 | - | 2.0 | - | 2.5 | _ | 0.9 | - | 1.2 | - | 0.9 |

| | | TULY | JA. | CUST | SEI | TEMBER | oc | TOBER | NO | EMBER | DEA | EMBER |
|-------------------|-----------|--|-----------|--|-----------|--|-----------|--|-----------|--|-----------|---|
| | Character | Duration of negative potential gradient | Character | Duration of negative potential gradient | Character | Duration of negative potential gradient | Character | Duration of negative potential gradient | Character | Duration of negative potential gradient | Character | Duration o negative potential gradient |
| } | | hr. | | hr. | } | hr. | | hr. | | hr. | | hr. |
| 1 | 1 | 0.4 | 1 | 0.8 | 1 | 1 · 2 | 2 | 3.0 | 1 | 2.8 | 1 | 2.0 |
| 2 | 0 | 0.0 | 1 | 1.9 | 0 | 0.0 | 1 | 1.4 | 1 | 0.7 | 1 | 0.6 |
| 3 | 0 | 0.0 | 0 | 0.0 | 1 | 0.1 | 1 | 1.4 | 1 | 3.0 | 2 | 12.4 |
| 4 | 0 | 0.0 | 0 | 0.0 | 1 | 2.4 | 0 | 0.0 | 1 | 2.0 | 2 | 7.8 |
| 5 | 1 | 0.8 | 1 | 0.3 | } 0 | 0.0 | 1 | 0.4 | 2 | 4.8 | 0 | 0.0 |
| 6 | 1 | 0.3 | 1 | 0.2 | 0 | 0.0 | 1 | 0.8 | 1 | 2·1 | 1 | 1.4 |
| 7 | 1 | 0.6 | 2 | 3.5 | 1 0 | 0.0 | 1 | 1.0 | 0 | 0.0 | 1 | 0.2 |
| 8 | 2 | 6.4 | 0 | 0.0 | 0 | 0.0 | 2 | 6.0 | 1 | 1.6 | 2 | 4.0 |
| 9 | 1 | 0.5 | 1 | 0.4 | 0 | 0.0 | 2 | 10.8 | 1 | 2.6 | 2 | 6.3 |
| 10 | 1 | 0.3 | - | - | 0 | 0.0 | 2 | 8.3 | 2 | 4.8 | 2 | 3.8 |
| 11 | 2 | 3.3 | 2 | 12.5 | 0 | 0.0 | 1 | 0.1 | 1 | 1.7 | 0 | 0.0 |
| 12 | ī | 2.9 | 1 | 0.4 | 1 | 0.1 | 1 | 1.0 | 2 | 4.2 | i | 0.6 |
| 13 | i | 0.7 | 1 | 1.1 | 1 | 0.1 | i | 0.2 | ī | 1 · 2 | ī | 0.1 |
| 14 | 1 | 0.3 | 2 | 4.0 | 1 | 0.1 | 1 | 1.2 | ī | 1.1 | ī | 2.1 |
| 15 | 1 | 1.1 | 0 | 0.0 | 1 | 1 · 2 | 1 | 0.2 | 1 | 1.9 | 1 | 0.8 |
| 16 | 1 | 0.1 | 1 | 0.4 | 2 | 6.4 | 1 | 0.8 | o | 0.0 | 1 | 0.1 |
| 17 | 2 | 6.9 | 0 | 0.0 | l 0 | 0.0 | 1 | 0.3 | _ | - | 0 | 0.0 |
| 18 | ī | 1.2 | 1 | 1.0 | 0 | 0.0 | l ō | 0.0 | 1 | 2.3 | ĭ | 1.6 |
| 19 | 2 | 4.1 | 1 | 0.1 | 2 | 4.3 | 2 | 3.0 | ī | 0.1 | 2 | 6.4 |
| 20 | 0 | 0.0 | 0 | 0.0 | 2 | 3.4 | 2 | 4.8 | ĩ | 2.0 | 2 | 12.8 |
| 21 | 1 | 0.2 | 0 | 0.0 | 0 | 0.0 | 1 | 0.3 | 1 | 1.4 | 2 | 5.3 |
| 22 | 2 | 3.8 | 1 | 0.1 | 1 | 0.6 | 1 1 | 2.6 | 2 | 5.4 | ī | 0.8 |
| 23 | ō | 0.0 | 1 | 0.4 | 1 | 0.8 | i | 0.5 | ī | 0.9 | 2 | 4.3 |
| 24 | ŏ | 0.0 | 0 | 0.0 | 1 | 0.9 | i | 2.7 | ī | 2.3 | ī | 1.3 |
| 25 | ŏ | 0.0 | Ö | 0.0 | 0 | 0.0 | ī | 0.6 | 2 | 6.7 | ō | 0.0 |
| 26 | 0 | 0.0 | 2 | 3.3 | 0 | 0.0 | 2 | 10.8 | 1 | 0.8 | 1 | 2.8 |
| 27 | ŏ | 0.0 | ī | 0.6 | lõ | 0.0 | ī | 1.2 | 2 | 5.9 | ô | 0.0 |
| 28 | ĭ | 0.8 | i | 1.3 | ĭ | 0.6 | i | 0.6 | Ó | 0.0 | 2 | 5.0 |
| 29 | ô | 0.0 | ō | 0.0 | l i | 1.5 | 2 | 16.5 | i | 0.8 | í | 0.2 |
| 30 | ŏ | 0.0 | ĭ | 0.1 | 2 | 5.8 | 2 | 3.8 | i | 0.3 | i | 0.3 |
| 31 | 0 | 0.0 | 0 | 0.0 | _ | | ī | 0.6 | • | 0.5 | Ô | 0.0 |
| | | | | | | | | | | | | |
| Total | | 34.9 | - | 32.6 | | 29.5 | | 84 · 9 | | 63-4 | - | 83.0 |
| ¥o. of ys used | - | 31 | - | 30 | _ | 30 | - | 31 | - | 29 | - | 31 |
| Mean | - | 1 · 1 | - | 1.1 | - | 1.0 | - | 2.7 | - | 2.2 | - | 2.7 |

Annual values: Character 0 1 2
No. of days 100 192 70

Duration: Total 632'8 No. of days 362 Mean 1'75 hr.

ELECTRICAL OBSERVATIONS, UNDERGROUND LABORATORY, WILSON METHOD Mean value for periods of twenty minutes about 14h.30m.

F = Potential gradient, unit 1 v.cm. $^{-1}$ i = Air-earth current, unit 10^{-10} amp. cm. $^{-9}$ λ + = Conductivity due to positive ions, unit 10^{-10} ohm. $^{-1}$ cm. $^{-1}$

| _ | | JANUAR | Y | 1 | FEBRUAR | ev [| | MARCH | | I | APR I | L | 1 | MAY | | 1 | JUNE | : |
|---------|---------|---|---------|---------|---------|-----------|---------|---------|---------|--------|--------|-------|---------|---------|---------|-----------|--------|---------|
| | F | i | λ+ | F | i | λ+ | F | i | λ+ | F | i | λ+ | F | i | λ+ | F | i | λ+ |
| 1 | ••• | ••• | • • • • | | | | • • • | | | | | | | • • • • | ••• | | | |
| 2 | • • • | | • • • | | | • • • • | 2.55 | 107 | 42 | | • • • | | | • • • | • • • | 4 · 48 | 272 | 61 |
| 3 | • • • • | • • • | • • • | 1 | | | 3 · 21 | 146 | 45 | | | | | • • • | • • • | | | • • |
| 4 | 3.90 | 120 | 31 | 1 | | [| 4 · 53 | 127 | 28 | 2 · 35 | 119 | 51 | 1.51 | 99 | 66 | | | |
| 5 | 5.03 | 179 | 36 | 6.13 | 179 | 29 | • • • | | • • • • | | • • • | ••• | 2.03 | 171 | 84 | • • • • • | • • • | • • |
| 6 | 6.59 | 237 | 36 | | | | • • • | | | | | | 1.91 | 159 | 83 | • • • • | • • • | • • • |
| 7 | • • • | • • • | • • • | • • • • | • • • | • • • • | 4 · 27 | 233 | 55 | 2.73 | 137 | 50 | } | • • • | • • • | 3 · 39 | 259 | 76 |
| 8 | • • • | | • • • | 5.65 | 239 | 42 | 5.11 | 221 | 43 | 2 · 25 | 124 | 55 | | • • • | • • • | | • • • | |
| 9 1 | • • • | • • • | • • • | | | • • • • • | • • • | • • • | • • • | | • • • | • • • | 1 · 58 | 140 | 89 | 1 · 22 | - | - |
| 10 | ••• | • • • | • • • | | • • • | | 4.80 | 266 | 55 | | • • • | • • • | 5 · 24 | 249 | 48 | 1.61 | 137 | 85 |
| 11 | 2.02 | 144 | 71 | | | | • • • • | | • • • | | • • • | • • • | | • • • | ••• | • • • • | | |
| 12 | | • • • | • • • | | • • • | • • • • | • • • | • • • | • • • | 1 | • • • | • • • | | • • • | | | • • • | |
| 13 | • • • | | • • • | | | | • • • | • • • | • • • | 1.55 | 134 | 86 | 2.35 | 198 | 84 | 0.82 | 95 | 116 |
| 14 | • • • • | • • • | • • • | | | | • • • | • • • | • • • | | • • • | • • • | ••• | • • • | • • • | • • • • | • • • | • • • |
| 15 | 8 · 38 | 126 | 15 | 4-14 | 152 | 37 | 6 · 87 | 215 | 31 | | • • • | • • • | | • • • • | ••• | 1 · 71 | 250 | 146 |
| 16 | | | | 3.53 | 187 | 53 | | | | | | • • • | 2 · 53 | 197 | 78 | 1.92 | 157 | 82 |
| 17 | | | | | | | 5 · 18 | 153 | 30 | | • • • | • • • | 2.79 | 200 | 72 | 2.90 | 144 | 50 |
| 18 | 2.76 | 93 | 34 | 3.08 | 147 | 48 | 2.96 | 126 | 43 | | | • • • | | | | | | |
| 19 | 4.64 | 168 | 36 | 3 · 78 | 151 | 40 | | • • • | • • • | 2.90 | 154 | 53 | { · · · | • • • | • • • • | | • • • | • • • |
| 20 | 5.52 | 141 | 26 | | • • • | | • • • | • • • | • • • | 2.47 | 162 | 66 | | • • • | • • • | 3∙05 | 232 | 76 |
| 21 | • • • | | | | • • • |] | 3 · 51 | 141 | 40 | 3 · 29 | 225 | 68 | | • • • | | 4.69 | 289 | 62 |
| 22 | • • • | | | | • • • | { | 6 · 59 | 206 | 31 | 2.19 | 142 | 65 | 1 | • • • | • • • | | • • • | |
| 23 | • • • | | • • • | | • • • | • • • | 7 · 03 | 211 | 30 | 1 | • • • | • • • | 1.50 | 285 | 190 | | • • • | • • • |
| 24 | • • • | | | 2 · 17 | - | - 1 | • • • | | | | | • • • | 2.77 | 161 | 58 | | • • • | |
| 25 | 6.29 | 118 | 19 | • • • • | • • • | • • • • | • • • | • • • | • • • | | • • • | • • • | 1.95 | 152 | 78 | | • • • | • • • • |
| 26 | | | | | | | | | • • • | | • • • | | 2.43 | 198 | 81 | • • • | | |
| 27 | • • • | | • • • | | • • • | •••• | • • • | • • • | | 2.83 | 209 | 74 | 2 · 26 | 172 | 76 | • • • | • • • | |
| 28 | 0.40 | 21 | 53 | | · · · | | • • • | • • • | • • • | | • • • | • • • | | | • • • • | | • • • | |
| 29 | 4.85 | 147 | 30 | 3 · 13 | 184 | 59 | • • • | • • • | | 4 · 49 | 232 | 52 | 1 | | • • • • | 1 · 74 | 112 | 64 |
| 30 | | ••• | | | | j | • • • • | | • • • | | • • • | • • • | 2.78 | 185 | 67 | 2 · 17 | 157 | 72 |
| 31 | • • • | | | | | 1 | 5 · 51 | 191 | 35 | | | | 2 33 | 135 | 58 | | | |
| Mean | 4 · 58 | 136 | 35 | 3 95 | 177 | 44 | 4 · 78 | 180 | 39 | 2.71 | 164 | 62 | 2.40 | 180 | 81 | 2 · 47 | 191 | 81 |
| vo. of | | 11 | 11 | 8 | 7 | 7 | 13 | 13 | 13 | 10 | 10 | 10 | 15 | 15 | 15 | 12 | 11 | 11 |
| /s used | 11 | | | | | | | | | L | | | 1 | | | | | |
| | JULY | | | AUGUST | | | 8 | EPTEMBE | :R | T | остовы | | T , | OVEMBE | R | | FCEMBE | R |
| 1 | F | i | λ+ | F | i | λ+ | , | 1 | λ+ | F | i | λ+ | F | i | λ+ | F | i | λ+ |
| 1 | | • | | | | | | | | | | | | | | 2 · 87 | 132 | 46 |
| . i | | | | | | [| 1 - 71 | 109 | 64 | | • • • | | 3 · 28 | 133 | 41 | 4.72 | 98 | 21 |

| | | JULY | | | AUGUST | • | | E PTE ME | ER | Į | OCTOBE | R | | NOVE MEDI | !R |] | DECEMBE | R |
|--------|--------|-------|-------|----------|--------|-----------|---------|----------|-------|--------|---------|---------|----------|-----------|-------|---------|---------|-------|
| | F | i | λ+ | F | i | λ+ | , | i | λ+ | , | i_ | λ+ | F | i | λ+ | F | i | λ+ |
| 1 | | | | | ••• | • • • • | • • • • | | | | | | | | • • • | 2 · 87 | 132 | 46 |
| 2 | | | | | | | 1 - 71 | 109 | 64 | | • • • | | 3 · 28 | 133 | 41 | 4 · 72 | 98 | 21 |
| 3 | · | | • • • | 1.43 | 170 | 119 | | • • • | | 2 · 31 | 158 | 68 | | • • • | • • • | | | • • • |
| 4 | 1 · 51 | 132 | 87 | 2.64 | 172 | 65 | | • • • | | 3.40 | 115 | 34 | 4.62 | 159 | 34 | | • • • | |
| 5 | 2 · 25 | 131 | 58 | 2.42 | 187 | 77 | 3.31 | 151 | 46 | | • • • | • • • • | 1 | • • • • | • • • | 5 · 54 | 139 | 25 |
| 6 | | | | | | | | • • • | | | • • • | | 1 | • • • | • • • | | | • • • |
| 7 | 1.92 | 123 | 64 | | | • • • • } | 3.99 | - | - | 4.75 | 127 | 27 | 5.63 | 161 | 29 | | • • • | • • • |
| Ŕ | | | | 2.64 | 187 | 71 | 3.06 | 101 | 33 | | • • • | • • • | | • • • | • • • | • • • • | • • • | • • • |
| 9 | | | |] | | | | | • • • | | • • • | • • • | 4 · 44 | 101 | 23 | 5 · 34 | 82 | 15 |
| 10 | | | • • • | | • • • | | | • • • | • • • | 1 | ••• | • • • | 7.80 | 198 | 25 | | • • • | • • • |
| 11 | l | | | | | | | | | 3.09 | 122 | 39 | \ | • • • | | | | |
| 12 | l | | | 2 · 22 | 130 | 59 | | • • • | • • • | | | | 1 | | | | • • • | • • • |
| 13 | | | | 7 | | | | | | 4.00 | 138 | 35 | | | • • • | | • • • | |
| 14 | 3.64 | 216 | 59 | | | | | | • • • | 1 | | | 4.76 | 124 | 26 | | | |
| 15 | 3.04 | | | 2 · 36 | 129 | 55 | | • • • | • • • | | • • • | • • • | 6. 22 | 167 | 27 | | • • • | • • • |
| 16 | | | | | | | | | | | | • • • | 4.13 | 119 | 29 | 7.53 | 115 | 15 |
| 17 | | | | | | | | | • • • | 4.66 | 193 | 41 | 1 | | • • • | | • • • | • • • |
| 18 | 2.71 | 136 | 50 | l | | | | | • • • | 3.66 | 186 | 51 | 7 · 59 | 126 | 17 | | | |
| 19 | 1 | | | 1.90 | 105 | 55 | | | · • • | | • • • • | • • • | | | • • • | 4.50 | 114 | 25 |
| 20 | 3 · 35 | 163 | 49 | 1 | | [| ••• | • • • | • • • | ••• | • • • | • • • | ••• | • • • | • • • | | | ••• |
| 21 | | | | | | | 2.80 | 124 | 44 | | | • • • | | | • • • | 3.45 | 101 | 29 |
| 22 | | | | 2.47 | 139 | 56 | 3 · 30 | 242 | 73 | | • • • | • • • | 5.14 | 89 | 17 | 7.29 | 158 | 22 |
| 23 | | | | | | | 3 · 20 | 124 | 39 | | | | 4 . 36 | 109 | 25 | | | |
| 24 | 1 | | |) | | | | | | | | | | | | | | |
| 25 | 2 · 22 | 104 | 47 | 2.20 | 116 | 53 | • • • | ••• | • • • | 3.71 | 215 | 58 | 1 | • • • | • • • | | • • • | • • • |
| 26 | | | | 2 · 57 | 204 | 79 | 4.75 | 188 | 40 | | | | | | | | | |
| 27 | 1.72 | 119 | 69 | | | | 4-17 | 137 | 33 | | • • • | • • • | 1 | | • • • | • • • • | • • • | • • • |
| 28 | 2.78 | 145 | 52 | | • • • | | 2.71 | 156 | 58 | 3.60 | 244 | 68 | 4 · 58 | 106 | 23 | | | • • • |
| 29 | 1 | | | | | | 3 · 28 | 225 | 69 | | • • • | • • • • | | | | 6.38 | 67 | 11 |
| 30 | | • • • | • • • | • • • • | ••• |] | • • • | • • • | ••• | | • • • | • • • | | • • • | • • • | 6.79 | 81 | 12 |
| 31 | | ••• | • • • | 2.69 | 137 | 51 | | | | 3.96 | 110 | 28 | | | | | | ••• |
| Hean | 2.46 | 141 | 59 | 2 · 32 | 152 | 67 | 3·30 | 156 | 50 | 3.71 | 161 | 45 | 5 · 21 | 133 | 26 | 5.44 | 109 | 22 |
| io. of | 9 | 9 | 9 | 11 | 11 | 11 | 11 | 10 | 10 | 10 | 10 | 10 | 12 | 12 | 12 | 10 | 10 | 10 |

Year: Mean No. of days used

3·60 157 132 129

52 129

44 KEW OBSERVATORY

Complete days only

| | Hour G.M.T. 0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 | | | | | | | | | | | | | | | | | | | | | | | | | |
|---------|---|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|------|----------|
| | 0 | 1 | 2 | 3 | 4 | - | - | 7 | - | 9 | | | 1 | | | | | | | | | | | 23 | i | No. of |
| | to | to | to | to | to | to | to | to | to | to | to | to | to | to | to | to | to | to | to | to | to | to | to | to | Mean | days |
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | | used |
| | | | | | | | | | | mi | lligr | ams pe | r cub. | ic me | tre | | | | | | | | | | | |
| Jen. | 0.13 | 0.12 | 0.12 | 0.11 | 0.11 | 0.11 | 0.11 | 0.13 | 0.15 | 0.16 | 0.20 | 0.18 | 0.19 | 0.19 | 0.17 | 0.17 | 0.18 | 0.19 | 0.19 | 0.20 | 0.23 | 0.20 | 0.17 | 0.13 | 0.16 | 19 |
| Feb. | 0.16 | 0.16 | 0.15 | 0.14 | 0.13 | 0 · 13 | 0 · 14 | 0 · 15 | 0.16 | 0.15 | 0.15 | 0.14 | 0.14 | 0 · 14 | 0 · 15 | 0.16 | 0.15 | 0 · 20 | 0.19 | 0.19 | 0.19 | 0.19 | 0.19 | 0.17 | 0.16 | 28 |
| Mer. | 0.12 | 0.12 | 0.11 | 0.12 | 0.11 | 0.11 | 0.12 | 0.14 | 0.14 | 0.13 | 0.13 | 0.13 | 0.14 | 0.13 | 0.13 | 0.14 | 0.15 | 0.16 | 0 · 18 | 0 · 18 | 0.18 | 0.18 | 0.15 | 0.13 | 0.14 | 29 |
| Apr. | 0.07 | 0.07 | 0.07 | 0.07 | 0.07 | 0.07 | 0.07 | 0.07 | 0.07 | 0.06 | 0.06 | 0.06 | | | | | | | | | | | 0.07 | | 0.07 | 28 |
| May | 0.06 | 0.06 | 0.06 | 0.06 | 0.06 | 0.06 | 0.07 | 0.07 | 0.07 | 0.07 | 0.07 | 0.05 | 0.05 | 0.06 | 0.06 | 0.06 | 0.06 | 0.07 | 0.07 | 0.07 | 0.07 | 0.07 | 0.06 | 0.06 | 0.06 | 31 |
| June | 0.05 | 0.05 | 0.05 | 0.05 | 0.06 | 0.06 | 0.06 | 0.06 | 0.06 | 0.06 | 0.06 | 0.05 | 0.05 | 0.05 | 0.05 | 0.05 | 0.05 | 0.05 | 0.05 | 0.05 | 0.06 | 0.06 | 0.06 | 0.05 | 0.05 | 25 |
| July | 0.04 | 0.06 | 0.05 | ۸. ۵۶ | 0.05 | 0.05 | 0.04 | 0.05 | 0.05 | 0.05 | 0.06 | 0.05 | 0.05 | 0.05 | 0.05 | 0.05 | 0.05 | 0.05 | 0.06 | 0.05 | 0.07 | 0.05 | 0.05 | 0.05 | 0.05 | |
| Aug. | | | | | | | | 0.06 | | | | | | | | | | | | | | | | 0.05 | 0.05 | 31 31 |
| Sept. | | | | | | | | 0.09 | | | | | | | | | | | | | | | 0.03 | | 0.08 | 25 |
| Oct. | | | | | | | | 0.11 | | | | | | | | | | | | | | | 0.12 | | 0.11 | 23 |
| Nov. | | | | | | | | | | | | 0.08 | | | | | | | | | | | 0.10 | | 0.09 | 30 |
| Dec. | | | | | | | | 0.13 | | | | | | | | | | | | | | | 0.20 | | 0.18 | 31 |
| ъс. | 0 14 | 0 43 | • | ٠ | • | ٠ | 0 11 | 0 13 | 0 44 | 0 10 | 0 10 | 0 10 | 0 10 | V 10 | 0 19 | 0 23 | 0 24 | 0 20 | 0 27 | 0 2/ | 0.23 | 0 24 | 0.20 | 0.17 | 0.10 | 31 |
| Year | 0.09 | 0.09 | 0.09 | 0 · 09 | 0.09 | 0.09 | 0.09 | 0.09 | 0 · 10 | 0.10 | 0 · 10 | 0.10 | 0.10 | 0 · 10 | 0 · 10 | 0 · 10 | 0 · 11 | 0 · 12 | 0 · 12 | 0 · 12 | 0 · 13 | 0 · 12 | 0.11 | 0.10 | 0.10 | 330 |
| Winter | 0.13 | 0 · 12 | 0 · 11 | 0 · 11 | 0 · 11 | 0 · 11 | 0 · 11 | 0.12 | 0 · 13 | 0 · 14 | 0 · 15 | 0.15 | 0.15 | 0 · 15 | 0 · 15 | 0 · 16 | 0 · 17 | 0 · 19 | 0 · 19 | 0 · 19 | 0 · 20 | 0 · 19 | 0 · 17 | 0 · 14 | 0.15 | 108 |
| Spring | 0.00 | 0.09 | 0.00 | 0.00 | 0.00 | 0.09 | 0.09 | 0.11 | 0-11 | 0.00 | 0.00 | 0.09 | 0.10 | 0.00 | 0.00 | 0.09 | 0.10 | 0.11 | 0.13 | 0 · 13 | 0.13 | 0.13 | 0.11 | 0.00 | 0.11 | 57 |
| Ob. TUR | | . 0, | , | , | , | , | . 03 | | | , | , | 5 59 | " 10 | . 03 | , | . 03 | 0 10 | | V 13 | 0 13 | 0 13 | 0 13 | 0.11 | 0.09 | 0.11 | 3/ |
| Autumn | 0.10 | 0 · 10 | 0 · 10 | 0 · 09 | 0.09 | 0.09 | 0.09 | 0.10 | 0.09 | 0.09 | 0.09 | 0.09 | 0.09 | 0.09 | 0 · 09 | 0.09 | 0 · 10 | 0 · 11 | 0 · 11 | 0 · 11 | 0 · 11 | 0 · 11 | 0.11 | 0.11 | 0.09 | 47 |
| Summer | 0.06 | 0.06 | 0.05 | 0.05 | 0.06 | 0.06 | 0 · 07 | 0.06 | 0.06 | 0.06 | 0.06 | 0.05 | 0.05 | 0.05 | 0.05 | 0.05 | 0.05 | 0.05 | 0.06 | 0.05 | 0.07 | 0.06 | 0.05 | 0.05 | 0.05 | 118 |